

Michael E. Krauss

**Eyak Grammar**



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# Eyak Grammar

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Edited by  
Kevin Baetscher and Gary Holton

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## Editors' Introduction

In 2009 Michael Krauss asked me (Gary) to help him write a grant to complete his Eyak “trilogy”—the Grammar, Dictionary and Texts which would serve as the definitive reference on the Eyak language, whose last speaker, Marie Smith Jones, had passed away one year earlier. I had been working at the Alaska Native Language Center for nearly a decade, focusing on Dene (Athabaskan) language documentation, but I still had only a passing familiarity with Eyak—a kind of daunting fascination such as a Germanic scholar might have for Gothic. Eyak was the key to understanding Dene prehistory, but yet in my mind it remained vague and mysterious and somehow unapproachable. Nevertheless, we wrote the grant, and the trilogy project was launched.

Although the grant officially had three prongs corresponding to the Boasian trilogy, to Krauss' it was always about the grammar. This was reflected directly in the budget, which allocated nearly 90% of the funds for grammar work. This allocation seemed reasonable, as a manuscript dictionary and volume of texts had already been “published” in manuscript form forty years earlier (Krauss 1970b,a), and a selection of texts had been further edited for publication by the Alaska Native Language Center (Krauss 1982). In theory, all that was necessary to produce an updated dictionary and texts for the trilogy was to convert the existing materials to electronic format and then add additional materials collected since 1970. (In practice, this has proved to be much more difficult, with the perhaps ironic result that the grammar is now appearing in print before the other two parts of the trilogy are complete.) In contrast, the grammar was an almost entirely new undertaking, requiring a consolidation and synthesis of a life's work on the language. Prior to drafting this grammar Krauss had published just one 20-page article on the language (Krauss 1965a), in addition to bits of information contained in a series of four articles on Na-Dene appearing in the *International Journal of American Linguistics* (Krauss 1964, 1965b, 1968, 1969). Instead, most of Krauss' observations on Eyak grammar filled the pages of a set of hanging file folders roughly three linear feet in extent, which he referred to as the “ledger” (Krauss 1966a). Compiled between 1965 and 1969, the ledger serves as a concordance for all elicited and textual data, facilitating the statistical comparisons found in the grammar.

Work on the grammar began in early 2000s, not long after Krauss' retirement from the Alaska Native Language Center, and was stimulated in part by research for Krauss' *A history of Eyak language documentation and study*, prepared for a Festschrift for Frederica de Laguna (Krauss 2006). Thoroughly researched and meticulously written in the Krauss tradition, that *tour de force* provided the most comprehensive history of everything ever said about the Eyak language by outsiders, as well as brief biographies of all of the speakers remaining when Krauss first began working with the language in 1961. This article also serves as the basis for the Introduction to this grammar. Building on that monumental effort, Krauss poured the same care and scholarship into his effort to compile a descriptive grammar, with the aim to create a single volume which captured everything that he knew about the language—and everything that could ever be known. This work was well

underway, having reached perhaps two hundred pages, when Krauss approached me about writing a grant to complete the trilogy. The main motivation for seeking grant funds was to be able to hire an editor to assist with grammar writing. Beginning in 2011 we advertised for a postdoctoral fellowship dedicated to the grammar. We even went so far to interview candidates at the Linguistic Society of America annual meeting in Portland in January 2012. But finding a suitable candidate was not an easy task. Krauss sought two qualities in an editor, and these two qualities often seemed to be in conflict. He sought first someone with the philological skill and linguistic drive to immerse themselves in a now-sleeping language, and second, someone with the strength of spirit necessary to tinker with Krauss' magnum opus. These two qualities are not often found together. We left Portland without an editor and focused on other parts of the trilogy. Krauss continued to expand the grammar draft, and I would occasionally compile the draft documents into a PDF file for archiving. But only minimal editing was done.

A turning point came in 2015 when I moved to the University of Hawai'i and was able to recruit PhD students to assist with the project. In Fall 2016 I shared the grammar manuscript with Kevin Baetscher, a polyglot who had worked previously with Salish languages and had some familiarity with Tlingit, a distant relative of Eyak. Baetscher delved into the manuscript with a passion, quickly coming to terms with some of the intricacies of Eyak morphology, to the point that he was able to ask Krauss informed and insightful questions about the manuscript. It was clear during this time that Krauss was impressed by Baetscher's work, as reflected in Krauss' remarks in an email message to Baetscher:

“You did a tremendous job... You did exactly what I hoped, by both the degree and way you went into it. I think I see also there were some issues in getting used to my style, including format, e.g. my using bold for Eyak, on which you may have changed your opinion. Much of my style or format is due to technical incompetence, especially demotion to footnote. I also appreciate your comments about organization and approach to things, as well as your specifics and format details.” (Michael Krauss email to Kevin Baetscher, January 7, 2017)

What began as simple formatting changes—creating tables, organizing examples, adjusting headings, etc.—quickly progressed to more substantive editing, including corrections of typographical errors in the Eyak forms and comments on the analyses. Thus began an extended process of edits and comments on the manuscript. The reviewing process worked as follows. Baetscher divided the manuscript into manageable chunks of 50-100 pages in length. For each of these he provided extensive comments as annotations in Microsoft Word. Krauss then reviewed the comments, replying within Baetscher's annotations. Often, Krauss' replies to Baetscher's suggestions were terse and easy to implement. Where Krauss replied “no” or “stet” we simply left the original unchanged. Where Krauss replied “yes” we implemented the suggested change.

Our guiding principle throughout the editing process has been to maintain Krauss' “voice” as an author.



Much of the remaining disagreement between author and editors reflects differences of style which can be attributed to changes in the practices of grammar writing over the years. One recurring topic of discussion was the use of interlinear glossing, to which Krauss was initially opposed. Over time, he changed his mind somewhat, acknowledging that glossing improves the readability of the grammar. On this issue, a compromise was reached, that glossing is provided when deemed relevant for the topic in discussion. To not break Krauss's style of a continuous text, Baetscher used in-line glossing in the English translations when the length of the example allowed it, only using the standard three-line interlinear glossing if examples were too unwieldy. Other points of disagreement reflect idiosyncratic and potentially misleading uses of terminology and notation. For example, Krauss writes the emphatic enclitic as *q'*- in order to indicate that it may be followed by a suffix, whereas we have written *=q'* in order to more clearly indicate that this is an enclitic, not a prefix. Krauss also operated in a linguistic tradition prior to the introduction of standardization, such as the Leipzig glossing conventions, preferring to instead more cryptic and minimalist forms, e.g., *Nc* for "Neuter conditional."

One major point of disagreement between Krauss and the editors regarded the formatting of Eyak examples. In the original manuscript these were presented in a traditional "run-on" format within the paragraph rather than broken out in a separate numbered list, as befits the modern standard for reference grammars. This point was debated extensively, with Krauss at first agreeing to the modern format but never entirely satisfied with the results, complaining about "too much white space." Krauss consulted his peers on this issue, all of whom concurred with the editors and advised in favor of the modern approach to example numbering, so in the end Krauss reluctantly agreed to proceed, though his reservations were never hidden. Just five days before his passing, while in hospital, Krauss dictated an email to the editors containing further instructions for finishing the trilogy. There he wrote: "Grammar needs to be revised, leaving out example numbers and diction there too." As this statement makes clear, Krauss' objection was not just to the numbering itself, but also to the way the presentation of examples altered the original flow of the run-on text.

Ultimately, the objection was not about format but rather about the nature and purpose of linguistic description. Krauss objected to the way in which the modern example presentation format facilitates what he referred to as "drive-by typology," in which examples are extracted out of context and misrepresented without full knowledge of Eyak language structure. From Krauss' perspective, it was better to make users read through the text, thus providing some assurance that the reader understood the analysis. Krauss made no secret of the fact that he expected the grammar to be read as a novel, from cover to cover.

Thus, one of the most difficult editorial decisions we have made is the decision to retain the modern example presentation. Our justification is twofold. First, we strongly believe that the numbered presentation of examples is more readable and accessible for modern grammar users, both researchers and language learners. We very much hope that this will bring a wider audience for the grammar, and help ensure that Eyak has a rightful impact

on our knowledge of human linguistic diversity. Admittedly, accessibility was never a central goal for Krauss. Rather, Krauss saw his primary audience as Dene specialists, whom he imagined to have entrée into the manuscript by virtue of their existing knowledge of Dene morphology and descriptive traditions. Our second reason for retaining the modern presentation was more pragmatic. By the time of Krauss' final request to leave out the example numbering, it was no longer possible to simply undo the changes to the original run-on presentation. The manuscript had been extensively revised, reformatted, and corrected, so that any attempt to recreate the original run-on style would risk further diminishing the author's voice.

In March 2018 we began the process of migrating the grammar manuscript to L<sup>A</sup>T<sub>E</sub>X, in order to facilitate formatting of examples, numbering, cross-referencing and especially standardization. The original manuscript had been drafted using Microsoft Word without any use of styles or any explicit document structure. Since the manuscript had been compiled over a period of more than a decade, numerous formatting inconsistencies had been introduced; reconciling these and resolving the intended reference of a cross reference sometimes proved challenging. The conversion process was initiated by Holton and completed by University of Hawai'i PhD student Christian Mortenson, whose assistance in the project during Fall term 2018 was vital. We have attempted to remain faithful to the intent of Krauss' original document organization, with one major exception. As originally conceived, the grammar contained a single "Morphology" chapter, consisting of perhaps 80% of the total manuscript. In order to make this material more accessible and decrease the amount of hierarchical structure in the grammar, we have divided Morphology into 15 separate chapters, essentially promoting each of the sections within the original to the status of chapter. Krauss was ambivalent about this change, mostly concerned that it would require too much effort to implement.

Following the passing of Dr. Krauss on August 11, 2019 we have been in the rather daunting position of having to proceed with editorial work without Krauss' guidance. In some ways this has freed us to resolve some of the more trivial formatting and layout decisions, but in other cases we have been challenged to infer the original intent of the author. Only where the author's intent was clear did we make corrections or amendments. This includes obvious typographical errors, both in the English as well as the Eyak examples. In cases where the text was unclear but the original intent could not be determined, we have chosen to leave the original unchanged. We leave it to future philologists to unravel those mysteries.

A notable exception to this policy concerns three editorial tasks explicitly assigned to Baetscher in an email dictated by Krauss on August 6, 2019, shortly before his passing:

"I have hundreds of improvements I would have liked to make on the grammar. They are on loose sheets and yellow pads on my desk at North Hill [Krauss' residence in Needham, Massachusetts]. If

you can make any of them out, so much the better. But they're probably mostly unintelligible."

"There are two prominent grammar items, however, that obviously need attention. The repetitiveness in the phonemic statement, such as it is. I trust you can fix that."

"However, at the very end of the syntax I never came to the needed conclusion on the copular sentences and phrases, as you know. Unless you can figure something out, I have to say we can't come to a conclusion as to their origin or function."

We very much regret that Dr. Krauss is not with us to see this Grammar in print. To say that this publication represents his life's work is a gross understatement. Though Krauss devoted much of his career to campaigning for the documentation and preservation of all of the world's marginalized and endangered languages, Eyak was always closest to his heart. Moreover, the grammar of Eyak colored much of the way he thought about language and linguistics. As a result, he poured much of himself into the manuscript, striving to create the most complete and comprehensive record of the language. Perhaps for that reason the grammar was always destined to be an unfinished work-in-progress during Krauss' lifetime. We hope that now it can serve as a fitting tribute to that life.

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Gary Holton and Kevin Baetscher  
Honolulu, Hawai'i  
March 15, 2020



# Acknowledgments

Michael Krauss passed away before drafting a proper acknowledgments section, necessitating that this section be extrapolated from a telegraphic list of acknowledgements which appeared appended to a later draft of the introductory chapters, as follows:

“Eyaks FdL Li Austerlitz Jane Donlay Irene Jeff Molly Gary Guillaume Kevin Kaplan, Karl Bergmann”  
“NSF grants, 1961 1963-65 fieldwork. MIT 69-70, Ken Part of big NSF grant tho no funds. Current NSF grant for finishing dictionary, texts, grammar, Anna K.; Hoijer Haas Jacobs Haas Hale Ramos”

Here we attempt to interpret this list and the roles of these people in relation to Krauss’ Eyak work.

It is significant that the Eyak People (“Eyak”) appear first on Krauss’ list, for there is little doubt that Krauss’ lifelong passion for the Eyak language was driven at least as much by his respect and admiration for the Eyak people as it was by his love of Eyak linguistics. This included especially those Eyak who served as his primary language assistants over the years—but also their descendants, with whom he interacted regularly, especially as the Eyak language revitalization movement began to grow over the past decade.

Frederica de Laguna’s (“FdL”) contribution to Eyak language documentation is discussed extensively in the Introduction to this volume (§3.3.4), as well as in an article written for de Laguna’s *Festschrift* (Krauss 2006). Krauss attributed to de Laguna the rediscovery of the Eyak language and people, the existence of which had been forgotten by American academics, in spite of extensive documentation conducted by Russians in the 18th and 19th centuries. His admiration for de Laguna’s scholarship was evident in his discussion of the history of Eyak research. Reflecting on the body of Eyak archival materials housed at the Alaska Native Language Archive, Krauss wrote: “It is an interestingly unanswerable question, how much of this would exist today, were it not for Frederica de Laguna” (Krauss 2006: 213).

Li Fang Kuei was the only other linguist to work with Eyak between de Laguna and Krauss, and his appearance on Krauss’ telegraphic list of acknowledgements reflects Krauss’ gratitude for this work. Krauss notes (§3.3.7) that Li even allowed him to photocopy all of his Eyak notes—a generous and unusual offer in an era when scholars rarely shared unpublished materials. Robert Austerlitz (§3.3.8) spent only a single field season working with Eyak, as part of a 1960 National Science Foundation grant which Krauss had received to initiate a basic survey of Native languages in Alaska. Approximately half of the audio recordings of Eyak language now housed at the Alaska Native Language Archive were made by Austerlitz during summer 1961.

Several people on the list of acknowledgements were colleagues of Krauss’ at ANLC: Irene Reed, Jeff Leer, and Larry Kaplan. Leer is cited extensively in this grammar as a source for information on Tlingit and on Proto-Dene and Proto-AET reconstructions.

Three additional scholars are mentioned in the second line of Krauss' telegraphic acknowledgments: Harry Hoijer, Mary Haas and Melville Jacobs. Krauss communicated extensively with Hoijer during the early 1960s regarding Dene (Athabaskan) languages, but it is not clear how much of this correspondence involved Eyak. The extent of Krauss' communication with Haas and Jacobs about Eyak is likewise unknown though a study of Krauss' correspondence at the Alaska Native Language Archive might illuminate this.

The initial compilation of the dictionary and texts was undertaken during Krauss' 1969–70 sabbatical leave spent at Massachusetts Institute of Technology, where he had gone to learn what the emerging field of generative linguistics could contribute to the documentation of Alaska Native languages. Though this quest was ultimately in vain, Krauss became close friends with MIT linguist Kenneth Hale (b. 1934, d. 2001).

Elaine Ramos (née Abraham) (b. 1929, d. 2016) collaborated with Krauss in his research on the Eyak of Yakutat. Though born and raised Tlingit, Ramos had a strong affinity for Eyak language and culture, recalling times when Eyak was more widely spoken along the Gulf Coast of Alaska. Her daughter Judy Ramos continues to be actively involved in Eyak language efforts.

Guillaume Leduey began learning Eyak as a teenager in France, after hearing news of a language which had only one remaining fluent speaker (Marie Smith Jones). Beginning in 2010 Leduey became a principal collaborator and protégé of Krauss, taking on primary responsibility for the ongoing revision and update to the manuscript dictionary (Krauss 1970a). During his dictionary work Leduey compiled numerous examples which have been incorporated into the grammar. In addition, Leduey has extensively proofread the manuscript, correcting numerous errors in the Eyak transcriptions. Leduey continues to support Eyak language efforts, developing learning materials and teaching language classes.

Krauss' first wife Jane Lowell Krauss (b. 1942, d. 2003) accompanied him to Cordova in the early 1960s and probably influenced his thinking about the language more than we know. Molly Lee married Krauss in 2007 and was with him throughout the process of writing this grammar. Not only did she provide moral support and encouragement along the way, she was instrumental in resolving many of the editorial conflicts which arose.

Krauss developed a correspondence with Chris Donlay while the latter was a student at University of California Santa Barbara. Donlay's work on intonation and discourse phenomena represents some of the only modern linguistic research on Eyak. This work is discussed in the grammar in the sections on intonation (§5.3) and enclitics (§27.2).

Kevin Baetscher's work with the grammar editing has already been noted in the Editors' Introduction above. However, the extent and depth of this work cannot be overstated. In addition to all of his work on formatting, Baetscher meticulously reviewed all Eyak forms in the grammar, drawing on his knowledge of Eyak phonology and phonotactics to identify and correct thousands of typographical errors and mistakes. These errors could not easily have been caught by another reviewer, and given that there are no remaining speakers of the language, only a curious philologist might in future identify

such mistakes. Baetscher's work is thus critical to ensuring that this grammar forms an enduring and accurate record of the language.

In 2001 Karl Bergmann digitized all of the Eyak documents at the Alaska Native Language Archive, under an Administration for Native Americans grant to Eyak Preservation Council. Though initially skeptical (but tolerant) of this work, Krauss came to greatly appreciate the digitization efforts as the grammar project progressed. Not only did electronic access make it easier for him to read the archival documents, he also saw new possibilities for dissemination. Bergmann's efforts were a spark which eventually led to digital access to Alaska Native language materials which Krauss had been accumulating since 1960.

Funding for initial fieldwork on Eyak was provided by a National Science Foundation grant in 1961. Funding for production and editing of this grammar was provided by National Science Foundation grants OPP-1003160 and OPP-1642783. And none of this would have been possible without the support NSF Arctic Social Sciences program officer Anna Kerttula, whose undying faith and patience allowed this project to finally come to completion.

This exhausts Krauss' telegraphic list of acknowledgements. To this should probably be added University of Hawai'i at Mānoa graduate student Christian Mortenson, who assisted with the initial conversion of the manuscript from Microsoft Word to  $\text{\LaTeX}$ . I can think of many others whom the author would have wanted to acknowledge were he here to write this section, but it is not the role of the editor to speculate. Instead, I will indulge in an acknowledgement of my own in the form of a sincere thank you to Michael Krauss for entrusting this project to Kevin and me and for sharing his knowledge and his humanity. It has been both an honor and a privilege to have worked with Mike and this grammar.

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Gary Holton (for Michael Krauss)







Part I: **INTRODUCTION**



# 1 INTRODUCTION TO THE GRAMMAR

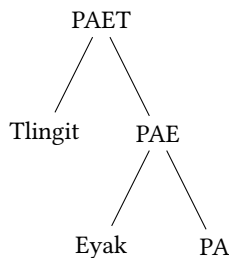
The Eyak language (ISO 693-3 *eya*) was once spoken across the Gulf Coast of Alaska from Cordova to Yakutat. The ecological niche occupied by Eyak incorporates the massive Copper River Delta; the world's largest piedmont glacier; and some of the highest peaks in North America. Eyak plays a unique role in the linguistic prehistory of Alaska, for it is just as closely related to the neighboring Ahtna (Dene or Athabaskan) language as it is to geographically distant Navajo in the desert Southwest United States (Krauss and Golla 1981). In terms of genealogical classification, Eyak is intermediary between the Dene languages as a whole and the Tlingit language (Fig. 1.1). Consonant correspondences between Eyak and Proto-Athabaskan are largely regular, supporting a reconstruction of Proto-Athabaskan-Eyak (PAE), intermediate between Proto-Athabaskan (PA) and Proto-Athabaskan-Eyak-Tlingit (PAET).

Like its Athabaskan relatives, Eyak grammar is characterized by a highly complex templatic verb morphology consisting of a stem preceded by numerous prefixes tightly bound by complex morphophonemics. Discontinuous verb morphology is pervasive, so that verb morphemes may determine the choice of stem variant or the shape of another morpheme at a distance.

The Eyak lexicon is highly divergent, and there is evidence of extensive contact with the non-Athabaskan languages Unangan (Aleut) and Sugpiaq (Birket-Smith and de Laguna 1938; Leer 1991a). Perhaps half of Eyak stems have PA cognates, while there are almost no lexical resemblances between Eyak and Tlingit stems (other than obvious loans).

It is altogether clear that the origin of the name “Eyak” is the local Chugach name of the Eyak village site near the mouth of the Eyak River on Eyak Lake at Mile 6 Copper River Highway, in Chugach *Igya’aq* [‘iʔya:q].<sup>1</sup> In Yupik languages *igyaraq* or *igy’aq* has

**Figure 1.1:** Position of Eyak within Proto-Athabaskan-Eyak-Tlingit (PAET).



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<sup>1</sup> Chugach (sometimes “Chugach Yupik” or “Chugach Eskimo”) refers to the variety of the Alutiiq or Sugpiaq or Pacific Gulf Yupik language (ISO 639-3 *ems*) spoken in Prince William Sound and the Kenai Peninsula.

the basic meaning ‘throat, gullet’, and also very commonly, ‘outlet of a lake into a river’. Not surprisingly, it is therefore also commonly found as a place-name elsewhere in Alaska, e.g., Igiugik in that very position on Lake Iliamna (where the orthographic <u> represents schwa [ə] and the second <g> represents the uvular fricative). The Eyak Indian adaptation of the name is predictably [iːjaːq].

The first non-Russian spellings of the name were written <Ihiak> (Petroff 1884), <Iggiak> (Jacobsen 1884), but by the time of the Americans, it was already <Eyak> (Abercrombie 1900, Allen 1887). Harriman, as we have seen, also wrote <Eyak>. The local English became [ˈijæk], a partial spelling pronunciation. I have also heard it pronounced [ˈejæk], still more of a spelling pronunciation (cf. ‘eye’), but only in some academic circles, e.g., from Harry Hoijer in the 1960s, who may well have gotten it from Sapir.

Harriman’s “Eyak language” may only have been his spontaneous phrase and/or it might, by 1899, already reflect some established local English usage. Certainly, that local usage was so by 1930, and by that time, Cordova was also the only place left where the Eyak language was spoken. For that reason, it was entirely natural and logical for the expedition to use that name, especially being still unaware of the earlier extent and knowledge of the people and language.

As described in more detail in §2.1.3, it is ironical in this history that it was the Chugach name which became the definitive academic name for the Eyak Indian people who made their “last stand” at that site, to be (re-)“discovered” there by de Laguna as such—at such a late point in their history, and at such an extreme point in their distribution. Currently, the “Eyak (Village) Corporation” is over 90% Chugach, for two reasons. First is the near-disappearance of Eyak Indians, and second, the partial depopulation of the Chugach Prince William Sound villages, with urbanization of those people at Cordova. By now there is a new question locally of who the “Eyaks” really are. “Eyak (Village) Corporation members” is factually definable, but “Eyaks” is now becoming ironically ambiguous.

## 1.1 Conventions

The less than (<) and greater than (>) symbols are used to indicate “derived from” and “derives to,” respectively, in two senses. The first sense is etymological, in the standard comparative linguistics usage, e.g. *’u-* < PAE *\*’wə-*. Included here are also morphophonemic constrictions, e.g. *-iGi’* < *-GA-’e’*. The second sense is grades from etymological to literal translation of figurative or metaphorical language. This includes fixed metaphors such as *k’uleh* ‘rain’ < ‘something is happening’, and literal translations of deverbal nouns, such as those in (1).

(1)

*yAX dA’a’ch’Xyu:* ‘dangerous animals’ < ‘they walk about, roam’

*d-a:X ’in-LA-xi’ts’* ‘woodpecker’ < ‘indeterminate object is drummed on by head’

*qe'yiLteh* 'whale' < *qa' yiLteh* 'lies inert up out'

The > symbol may also be used to indicate a less common usage, e.g. *o-ch* 'toward' > 'until', indicating the use of the postposition *o-ch* in the sense of 'until' rather than the more ordinary sense of 'toward'.

## 1.2 Organization of the grammar

The basic organization of this grammar is in three major section: phonology (Chapters 4–7), morphology (Chapters 8–22), syntax (Chapters 23–27); but these divisions are by no means clear-cut. The phonology section includes most of the morphophonemics. Much of what could be considered to be syntax, especially that below sentence-level, is dealt with in the morphology section. Negation (Chap. 24) is covered in the section on syntax but includes significant discussion of morphology. What is covered on a discourse level, i.e. especially use of enclitic particles, constitutes a major subsection of the syntax. Since Eyak, like Athabaskan and Tlingit, is a highly polysynthetic language, the morphology itself takes up by far the largest portion of the grammar.

This grammar has been written over a period of more than a decade (2006–2017), at a leisurely pace, after what may be considered a gap of 37 years since my intense period of work with Eyak (1963–1969). Put most positively, this has allowed for ample slow mulling, and the many faults of the grammar itself cannot be blamed on lack of time.

## 1.3 Priorities

Even during the most intensive period of fieldwork, although grammar was of course a constant concern, and the subject of an early sketch (Krauss 1965a), a real first priority was in fact lexicon for comparative purposes. My own previous work 1961–63 had been Comparative Athabaskan, and my decision to concentrate on Eyak fieldwork (since 1963) was due to the urgency given its impending extinction, and to the comparative position and importance of Eyak. The greatest challenge for the comparison was clearly the lexicon, so optimum coverage of that was first priority; the morphological cognation with Athabaskan, and even with Tlingit, was far more obvious than was cognation for the bulk of the lexicon. Texts were second priority, given again the urgency for fieldwork, the lack of otherwise spontaneous speech (especially conversation), the virtual tradition of leaving syntax to discovery from transcribed text, and of course the cultural value of the texts themselves, not to mention other responsibilities and the size of the whole task including the grammar.

That left grammar to a lower priority, somewhat in terms of optimum coverage in the fieldwork and especially in terms of order of write-up. The 1970 typescript dictionary (Krauss 1970a) and texts (Krauss 1970b) were thus as much as I could do before

other concerns, as noted in §3.3.10.1, including statewide responsibilities for the Alaska Native Language Center and the battles for that, which preempted time for major efforts with Eyak. After my retirement, in stages 2000–2003, health and other issues delayed resumption of Eyak until 2006. Those issues included the shift in priorities at the Alaska Native Language Center away from documentation, so that I had to enlist separate NSF support to see any further such work in Alaska, and to secure the future of the Alaska Native Language Archive. By 2006 the only Eyak speaker was Marie Smith-Jones (§3.3.10.5), then 86, in Anchorage, in the last two years of her life and by then with limited capacity for language work. There was almost no time to develop or prioritize a list of grammatical questions from the writing process 2006–2007 and actually take them up with Marie.

There is no question that there was some loss of grammatical detail because I was not able to concentrate on Eyak grammar in the late 1960s, or even the 1970s, and that had to wait until virtually all questions that arose in the writing of the grammar which require further information from a speaker had become unanswerable. It must also be true that the intervening 37 years did not make my memory of the language or my mind itself any sharper. The interval did, I believe (or rationalize), provide two partial compensations. One has been some distance or perspective, some mulling and maturation, to step back and “see the forest for the trees,” structure in the detail that seemed overwhelming 37 years ago, given other responsibilities. The other compensation was decisive, partial retirement and time to do the job.

In terms of sheer size, I am greatly surprised to find that the grammar equals or even exceeds that of the Eyak dictionary. One reason for that is that I set no restrictions on either time or space, but rather put priority on completeness and detail. Another is that I put more priority on clarity than succinctness or formality, i.e. priority on narrative explicitness or even repetition over abbreviation. A third reason may well be that the polysynthetic nature of the language itself put more weight on the grammar, especially on derivational morphology, the largest section of the grammar by far, proportionately, than on the lexicon. A fourth reason, about which more below, is that a significant proportion of the grammar, perhaps 20%, is given to philological consideration of the data in the given closed Eyak corpus; i.e. consideration of questions that arose in the compilation of the grammar instead of straight answers to those questions, no longer available from the field at this late date.

Again, the style of this grammar is narrative reference, descriptive (and sometimes historical-comparative), and neither formal nor theoretical. Given the multidimensionality of the grammar as opposed to the necessary linearity of the writing, I have made no goal of never writing the same information twice, but have allowed such repetition in different contexts wherever that contributes to clarity. Though the basic organization should be clear, I have not been able to or even attempted to make such absolute boundaries that e.g. nothing syntactic or nothing morphophonemic appears in the morphology. Insofar as such information is not where it might be expected, e.g. morphophonemics special to a specific type of morpheme, or syntax internal to nominalizations or special to certain derivations,

that should be looked for in the appropriate cross-referenced parts of the morphology.

Certainly not trivial is the statement here that though no grammar can be written without linguistic theory, the immediate goal of this grammar does not include theory itself or adherence to any particular theory that has a title or name, personal or otherwise. Any explicit information on the theoretical background of this grammar would have to be gleaned from the biographical information in §3.3.10.1. To this I should add that the strong historical-comparative background often used as explanation in this grammar should be seen as a debt to Sapir. The principles guiding or shaping this grammar I hope are derived maximally from the structure of the Eyak language itself. The closest I can come to a tradition in which one might identify this work is that this grammar is a part of a full-scale Boasian trilogy, grammar, texts, lexicon, which I consider myself very fortunate to complete once in my lifetime, of Eyak, after all very much a language of the American Pacific Northwest.

## 1.4 Comparative-historical approach, philology

I am aware that perhaps the largest proportion of this book's users will be persons concerned with Athabaskan. Though essentially or primarily descriptive-synchronic, the grammar is also highly historical-comparative, for two reasons. First, my own training and approach are historical-comparative; my personal view of language is that it is most interestingly explained by history, both by internal reconstruction, and by comparison insofar as information is available. Second, before any extensive work with Eyak, my own experience was already fieldwork and comparative work with Athabaskan. That continued of course to have a profound influence on my work with Eyak. Accordingly, I have added comparative remarks with Athabaskan wherever inspired to do so, though not systematically, only incidentally. These comparisons are no doubt in the hundreds throughout the grammar, and can be found as labeled with the word Athabaskan, PA or PAE, mostly not just Navajo or Minto, etc. Perhaps even more important than the parts of this grammar explicitly compared with Athabaskan are parts not so compared, where it may be found in fact that comparable data exist or may be found to exist in Athabaskan that have not yet been noted there. For example, though there seems to be no note of or literature on them in Athabaskan, there are hints that forms comparable to Eyak "deverbalizations," i.e., nominalizations deleting all conjugation markers, subject pronouns and classifiers (!) of a verb theme (viz. §18.13), may also exist in Athabaskan. In this grammar, exceptionally, in connection with the "directive" verb derivation, there is a whole five-page disquisition on that in Athabaskan (§15.9), in part because Athabaskan clearly has that derivation just as importantly as does Eyak, but there is no account of it approaching that for Eyak in extent or detail. That disquisition was written in the hope that comparably full descriptions of the 'directive' may be done for Athabaskan. The chapter on qualifiers (Chap. 16), on the other hand, is so very long because Eyak

has a far more elaborate system of qualifiers than does Athabaskan, for which there is a subsection of discussion (§17.2). Other sections, moreover, are fuller than those written for any Athabaskan, so far as I know, e.g. classifiers (Chap. 11) and especially preverbals (Chap. 16), though Athabaskan has systems for those of comparable complexity. Though there are no disquisitions in this grammar (other than that on the directive) on such closely comparable parts of Athabaskan grammar, I do hope that this grammar may motivate and help such work in Athabaskan. I do indeed hope and expect that this Eyak grammar may be importantly helpful in advancing our understanding of Athabaskan grammar.

I should note at this point that the main source for further comparative work with Eyak, on both the Athabaskan and Tlingit sides, is still the work of Jeff Leer. It might be said that my Eyak work keeps up with Leer's through the 1980s, but not since. That includes especially his unpublished *Comparative Athabaskan Dictionary*. This crucial work certainly would cast comparative light on both Eyak lexicon and Eyak grammar, but consultation with that or with Leer since the 1980s is not consistently reflected in the Eyak work. Some explanation or rationalization is due for the fact that the comparative value of this work is seriously compromised or limited by the fact that it so one-sidedly considers Athabaskan almost to the exclusion of Tlingit. This is partly due to the fact that my own fieldwork before the Eyak had been on Athabaskan and not Tlingit. Second, Athabaskan is in most respects much closer to Eyak than Tlingit is, though in 1969 I published a monograph focusing on the classifier prefixes in the Athabaskan, Eyak, and Tlingit verb, in which Tlingit sheds more light than Athabaskan or even Eyak (Krauss 1969); that part of the verb prefix complex is where the relationship of those languages is by far the closest. Tlingit also plays a major role in the reconstruction of Athabaskan-Eyak-Tlingit sonorants, as shown in (Krauss and Leer 1981). Such close or direct relevance of Tlingit is rather exceptional, however. There seems to be far less obvious cognation in the lexicon, or, for example, in the verb prefix complex to the left of the conjugation markers, between Eyak and Tlingit than between Eyak and Athabaskan.<sup>2</sup> In this grammar, I consider Tlingit most seriously as the main source of loanwords in Eyak, with results of great importance for the prehistory of Eyak and Tlingit, as detailed in §2.1.1 on prehistory, and in §18.15 on loan words.

Partly as a result of this historical-comparative approach, I have gone so far as to use the symbols > and < instead of any arrows going either way, deliberately making no distinction between historical and synchronic rules. Much of the time the distinction, insofar as there is one, will nevertheless be obvious, or even explicit, with the origin

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<sup>2</sup> After the early 1980's, in any case, I had to concentrate my energies more broadly on the Alaska language situation, language endangerment, and ANLC administration. I thus failed to keep up with Leer's work with Tlingit, becoming increasingly less competent at this stage to include proportionate comparative consideration of Tlingit. This was no less so as I resumed work on Eyak after my retirement, feeling that after the 30-year interval I had to be lucky to finish the grammar before I die. There is every reason that Tlingit should be appropriately included in the comparison, and first priority is now for Leer and his successors to pursue that work.



labeled e.g. PAE and asterisk, or sometimes the status of the rule might be specified as etymological or historical. Some of the time, however, the distinction in the area of internal reconstruction, in which I freely indulge, between synchronic transparency and diachronic opacity is indeed unclear or arbitrary, an important gray area, where I consider my ambivalent use of > and < to be highly appropriate.

At the same time, I use the asterisk ambivalently for an entirely different reason, merely the two current traditional uses, the older for unattested historical reconstructions and newer for disallowed synchronic forms. The use should be virtually always clear from context, we may hope. For unattested questioned forms I have used asterisk with question mark, or sometimes only preceding question mark, inconsistently.

In addition to the historical-comparative side of this grammar, also as part of my own background, there is a significant philological aspect to it, the ancient art of philology operating at two levels. One is the principle of fully exploiting all previous documentation of Eyak. All such work is described in detail in the General Introduction (Chap. 3). That adds about two centuries to the time depth of this account and some to its geographical extent (including the area of Yakutat). In both these respects Eyak is much more remarkable for its uniformity than its variation, I judge (viz. §2.2). For the earlier sources, the philological challenge is in the recognition of the forms from their spelling, all legible enough, but none even beginning to approach phonological adequacy until Harrington in 1940 (§3.3.5). Almost all the work of that period, however, is lexical rather than grammatical.

The second philological level, far more significant here, is at that of the inadequacies of my own fieldnotes, given that during the writing of nearly all this grammar, there were no native speakers of the language still alive to answer questions that arose. For some questions it was possible to approach an answer statistically from the data at hand. For others, I simply had to say that the necessary data were lacking. As noted in §1.3, a significant portion, perhaps 20%, is added to the volume of this grammar in philological or statistical speculation, for lack of data that earlier would have been available from living speakers, or, to be more exact, might have been available from them.

I did have the virtue of conscientiously posing all unanswered questions of which I became aware, quite explicitly, throughout this grammar, with even brutal honesty. However, I did not have the virtue of marking unanswered questions in some uniform way. As during most of the writing I had tried to avoid first person writing, in fact on some misguided principle, not just to avoid blaming myself for the shortcomings of my fieldwork. I used instead passive phraseology such as “this was not tested, not elicited, not checked, not adequately/systematically/aggressively/well investigated/checked/tested,” or “never tested,” “question not asked” etc. Even more unfortunately, I also forswore adding “unfortunately” or “alas,” which I had started doing, as I feared that such might have been too unpleasantly repetitive, perhaps to appear on almost every other page. Therefore, it will take a certain amount of work to make a full list of all the questions that must presumably remain forever unanswered about Eyak grammar. Without the actual list, I might guess

and hope that it would number not too much more than one or two hundred unanswered questions.

## 1.5 Exemplification, listing, glossing

The matter of exemplification and listing needs some discussion here. While it is typical for a grammar to list on a selection of examples for a particular phenomenon or category, I have made a point of providing full listing of the attested membership of closed or unproductive categories throughout this grammar, and I have also tried to make an explicit distinction between closed and open, productive and unproductive categories. A kind of border may be set around one hundred, an arbitrary round figure or limit, below which an attempt is made to fully list all examples of a particular derivation or paradigm. For example, there are 90-some verb themes attested with the “directive” derivation, limited in principle where intrinsic, i.e. for verb themes attested only in the directive, where the directive is thematized (lexicalized); and limited only by semantics where extrinsic or productive. All of this is detailed in relevant section on the directive (namely, §15.9). Likewise, there are about 100 verbs attested in the Neuter imperfective paradigm, about 70 of which belong intrinsically to the Neuter imperfective theme category of stative verbs, and about 30 of which are attested in the Neuter imperfective by three types of derivations, limited only by semantics, all of which are fully listed in §14.7. Further, the category of Inceptive perfective (“progressive”) statives, which seem in common to reflect the notion of isometric pressure, is attested in only about 40 themes, all listed in semantic subcategories in §14.9. At the other end of the scale, Active imperfective verbs is the largest, most open-category of verb themes, numbering at least in the hundreds; this is listed only by examples (§12.1.3). Likewise, verbs of locomotion, though fewer, are listed only by example (§14.3.1), while postural (§14.3.2) and classificatory verbs (§14.3.3) are fully listed, as those are fewer each than ten. The number of monosyllabic unpossessed stem-nouns is of course limited by the size of the corpus or by the language at any stage, in principle, and could be counted in the lexicon, a few hundred. The number of possessed nouns is smaller, limited to anatomical and part nouns, and kin terms; the latter two categories are fully listed in §18.5.1, but the anatomical is not because of its number. The nouns that are found both possessed and unpossessed, about 30, are especially interesting and problematical, all treated in detail in §18.8, with several unanswered questions due to inadequate data, and so occupy an inordinate portion of the space given to nouns. The two most highly productive sets of derivational morphemes, qualifier prefixes and preverbals, both highly combinatory as well, are fully listed (Chap. 11 and Chap. 16, respectively), including their combinations, though of course the complete corpus of their occurrence or attestation is covered separately in the lexicon. Minor categories, e.g. adjectives (Chap. 19), adverbials (Chap. 21), interjections (§21.3), numerals (Chap. 20), are small enough to be fully listed.

At the same time, there is the independent variable of categories that may be open in principle but which happen to be sparsely attested due to what I have called obsoles-

cence. These are the *s*-optative inflectional paradigm (§13.22), the cautionary prohibitive (§24.2), and the gerund (§18.13.1), part of a complex and collapsing system of deverbalizations (§18.13). All of these may be open categories in principle but some types that number under twenty attestations or examples are fully listed nonetheless. The same situation obtains for some enclitics and enclitic combinations treated in the syntax chapter, but there the sparseness of attestation (e.g. of =*duh*) may be due not only to apparent obsolescence within the grammar, but obsolescence of the language itself, particularly of conversational Eyak. This part of the language, discourse, is the most poorly documented (viz. §3.3.10.8).

The source for the examples or data is not generally identified in this grammar. I justify this on the ground that this grammar is derived by analysis from the documentation on paper and sound recordings, as the generalized result of that analysis. This lack of specification is possible because of the very uniformity of the language, at least that as spoken by all speakers from whom I have data, and because all previous data was checked with those speakers (viz. §3.3.10). Almost no variation was observed, as noted in §2.2, and all variation noted is also carefully described in the grammar, almost all in the phonology. (Much of that is free variation, trivial and fairly uniform across all speakers even, and that is explicitly standardized or left inconsistent, especially in some reduced vowels.) Stem variation, on the other hand, is indicated by a tilde (cf. §7.3). In principle, all the documentation for source in terms of speakers can be found in the lexicon, for all six speakers I worked with, as is identification of all earlier sources themselves, though native speakers were not in sources predating 1930.

Two types of source identification are lacking in the lexicon. First is reference to the field notebook number and page number thereof, in which each attestation is to be found, i.e. precise transcription, date, preceding and following context. The second is multiple attestations from the same speakers of the same item. Thus, if an item is attested from Lena, Marie, and Anna, it will be marked LMA in the lexicon, but not LMMA if it is attested twice from Marie in the original notebooks. (Such multiple attestation, however, is clearly documented in the 1966 ledger, described in §3.3.10.8, which is relevant especially where I resorted to statistics of attestation.) Textual attestations are fully identified by speaker, text number, and sentence number in the lexicon, though not original notebook and page number. In the grammar these are likewise not so identified, on the same principle, that the grammar is based on generalized analysis of the documentation on paper and in sound recordings. However, where it seemed appropriate in the grammar, I did mention the speaker by name, often where there was any question or conflict, or especially often where the data came from text, either for context or where spontaneity seemed relevant, in which case “in text” or e.g. “in text from Anna” is specified.

There are a few places where I have allowed myself to cite forms that may in fact not be attested on paper or sound recording, which I myself have “constructed.” These can only be entirely routine forms of which I am absolutely certain, only the simplest inflections of frequent items, such as *sini:k* ‘my nose’, or perhaps *'anh qe'L Ga:L* ‘the woman is walking along’, at most, where I demonstrate a simple pattern for which fuller inflection of the

same verb might not be in the actual notebooks.

It is important to qualify further the above on source labeling, to explain that both text and elicitations after 1965 were not included in the ledger (Krauss 1966a) and dictionary (Krauss 1970a), but this grammar is most directly derived from texts after 1965. The supplementary texts and notes, post-1970, i.e. under 20% percent of my own data, are not routinely listed, as were those from the 1960s. Of course anything relevant to the grammar was carefully used, anything new to the lexicon was added thereto, and all the texts since were edited and added to the corpus. Reference to the newer material in the grammar where relevant is explicit with Marie's or Lena's name and date or notebook and page number.

As noted in §3.3.10.8, the 1966 ledger, a virtual concordance, by stem, of the entire main corpus, served not only as the direct source of the 1970 dictionary, but also of this grammar, especially the morphology. This was because in that concordance visual scanning could be done of the grid to the right of the forms listed therein, including columns for symbols for all affixation (for the verb specifically: qualifiers, classifier, conjugation, person and number for subject and object, mode-aspect, directive, person and number for subject negation, derivational suffixes). This very conveniently obviated almost any need to go back to the original notebooks. In this connection, however, some of the free variation especially in the transcription of reduced vowels in the original notebooks may not be fully duplicated. I also add, with satisfaction, that some further scanning of the 1970 corpus became possible at the latter stages of writing this grammar from the digitization of that by Guillaume Leduey, where e.g. epenthetic /A/ before the plural enclitic =yu: (§6.17.2) became possible for morphophonemics, likewise copular -A- with demonstratives as opposed to reductions thereof (§27.10).

All glossing is in single quotes, for the most part as is found in the original notebooks and ledger. That is not necessarily in exactly the English offered by the speaker, but my own most convenient or appropriate interpretation thereof. That often varied either by synonymy or multiple English glosses, and those reflected are selected in the grammar as convenient or appropriate. Occasionally a more literally quoted original gloss is given in double-quotes, in a few colorful or problematic cases. Also, I have taken the liberty, it might be said, to use the symbol > or < between two English glosses to take the place of the word, in the sense 'becomes idiomatically' (>) and 'literally' (<), which I consider nicely justified.

The pesky problem of glossing into English human third person singular pronouns I have crassly solved, given my advanced age, in pure sexist fashion, with a default male, and even 'He caught the fish. She cooked the fish. He ate the fish.'

The matter of glossing in the sense of current "best practices" is another matter entirely. Justified or not, my style in writing this grammar is lacking entirely in morpheme-by-morpheme glossing, though the grammar is certainly adequate for that. All Eyak forms

of course have English glosses, but in the syntax, a relatively small part of the grammar, there are not always even word-for-word glosses in phrases or sentences, as if the reader is expected to be able to find enough in the grammar for that level to be transparent. The same is expected at the morpheme level in the morphology. This expectation is in part because Eyak morphophonemics is relatively simple, especially compared to Athabaskan, hardly ever simplifying consonant clusters, for example. In a few places, where morpheme-by-morpheme analysis is not fully transparent but relevant to the discussion, explicit analysis is provided by the narrative along with the English glossing, somewhat more clumsily than would be provided by interlinear morpheme-by-morpheme glossing with abbreviations. Further, even in the morphology, much of the time such glossing is not only unnecessary given the transparency along with the discussion, but also irrelevant, as so many of the Eyak forms are merely listings of the membership of the category under discussion. In other words, I have deemed such glossing unnecessary or irrelevant for anyone reading the relevant text at all, and probably for any serious student of Athabaskan or Tlingit. Admittedly, that might leave some extra work to the responsibility of some users, to glance at the relevant discussion, e.g. for a theoretician unfamiliar with Athabaskan or Tlingit. However, I have so far presented the work in my own style of thought and presentation, run-on and with highly topical commentary right along with any particular Eyak items in a listing as they come up in the discussion of a category.

## 1.6 Evaluation, critique

The structure of Eyak is both grand and intricate, as is that of any language. At the same time, the writing of a grammar of it goes far beyond the merely mechanical or even scientific. Like any grammar, Eyak is one *où tout se tient*,<sup>3</sup> leakily, to be sure, and as I see it, also a dynamic historical hodgepodge, moving from one state to another. Above all, grammar is a product of the human mind, as is also the description of it, so that the job of writing it is as much of an art as it is a science.

As a critic or judge of my own art, perhaps the most obvious and important thing to say, beyond the issues of accuracy and completeness, is that I have found myself consistently valuing formal patterns over semantic ones. These are of course often cross-cutting patterns. In the morphology, which is most of Eyak grammar, I have even found myself explicitly pointing this preference out where it comes to major matters of judgement. The most important example is probably in the way I have constructed or described the system of conjugation and mode-aspect (Chap. 12), the basic structure of the intricate Eyak verb. Likewise the inner structure of Eyak preverbals (Chap. 16). A non-exception virtually “proving” my rule is that I tried, too early in the writing of the grammar, to construct a category of “instrumental” within the nominals, only to find myself having to undo that,

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<sup>3</sup> Paraphrasing Meillet (1903: 407).

given the formal structures that seemed to team up to override such a semantic category. Again, in such egregious cases, there is comment in the text about this, but in retrospect here I note that form outweighing semantic content is an inescapably consistent pattern for me throughout.

Before taking up what I judge might be called downright shortcomings of this grammar, I mention two things this grammar is obviously not intended to be, namely pedagogical or a grammatical sketch. First, it is rather the opposite of a grammatical sketch, which still needs to be done, as the “Preliminary Sketch” I wrote in the summer of 1964 (Krauss 1965a) certainly needs replacement.<sup>4</sup> The gray area of importance for prominence, moreover, is significantly expanded with the complications of philology often expanding disproportionate space.

Also almost needless to say is that this is no pedagogical grammar. However important, pedagogy is entirely tangential here. Not even a champion linguist could learn to speak fluent Eyak from this grammar. For such a goal, obviously, teaching materials would be needed. This grammar should indeed provide the basis for the creation of those materials, but effective teaching materials could be competently produced only by persons with appropriate special training and/or talent, not to mention time and presumably financial support. That essentially involves the Eyak community, and has started to become a real issue, almost miraculously, as described at the end of §2.1.3.

I am only too aware of shortcomings in this grammar. For one thing, I had no illusions in 1963 about the myth (blamed on Bloomfield) that documentation of a language should not be tainted with deliberate planned elicitation, but rather, for the sake of authenticity or spontaneity, documentation should be left to chance, until presumably everything shows up. That one should have a lifetime immersed in a living language, so that data for a complete grammar and lexicon would present themselves, was completely out the question for Eyak, a classic case of salvage linguistics, which required the opposite approach. In fact, given the limitations both on my time and on time for the language, the work of documentation had to be highly prioritized. As has been noted in §3.3.10.8 and §1.3, lexicon was prioritized over grammar largely because of comparative needs, for discovering cognation, notably more challenging for the lexicon than the grammar, with both Athabaskan

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<sup>4</sup> In this connection, or feeling this need, I entertained the notion of going beyond providing as much generalization as possible, even summaries, evaluations and retrospects in this grammar, but also of providing some kind of visual “contour” of importance, by demoting some matters of detail by printing them in smaller type. (An egregious example of such would have been the discussion of which verb themes get ‘D-element’ (§11.3) in the classifier when with indeterminate object, a question complicated also by inadequate field data. This subject takes up four more pages than it might have had to, complete with statistical analysis, if we had adequate field data, making an ideal choice for demotion to smaller type.) I abandoned any such notion, predictably soon, however, becoming swiftly overcome with the wish for more than one size of smaller type or different font.

and Tlingit. Also included in those sections is a kind of evaluation of the cost of that prioritization, in terms of the questions that arose in the writing of the grammar that must be left unanswered by the data of the corpus, which is now closed. I have at least been careful not to cover up those holes. I might even add here that the number of questions is small enough that given just a good week or so now, ideally with Lena, the better part of those questions could be answered, or at least found to be unanswerable, and outnumber the new ones that would pop up. At any rate, this is what I sadly imagine, as an attempt to evaluate the loss, or cost of that prioritization. Or arrogantly imagine.

Further, I find myself explaining at the level of sentence syntax, which I claim to be a lesser subject than the morphology in the structure of Eyak, that actual Eyak speech performance greatly underuses its hypothetical syntactic structures (§25.1); further, that those structures themselves appeared to be in a state of dissolution, perhaps not due to the obsolescence of the Eyak language. One of the reasons for the priority on the text part of the trilogy was indeed due to the lingering tradition of leaving especially the syntax level to chance, for that to be discovered some day in the texts (*viz.* §3.3.10.8). In any case, coverage of the Eyak syntax may be somewhat faultier than that of Eyak morphology. Syntax is also somewhat less fully organized than the morphology, in that significant aspects of syntax below sentence level are dealt with piecemeal in the morphology. However, it is so labelled there and in the subheadings there and Table of Contents, and is referred to in the syntax, including whole separate sections on negation and interrogatives in the morphology. At the same time, an entire chapter within the syntax deals with the rather prominent system of clitics, verging on discourse function.

At the phonological level, I have done no acoustic investigation, or analysis in terms of distinctive features. The latter may be due to more influence from Martinet than from Jakobson in my training in the 1950s (see §3.3.10.1). In any case, both such studies can still be done, the acoustics from tape recordings, even though those are not of the best quality for that purpose.

With regard to semantics in the grammar, I have already noted above that I have consistently valued form over semantic content in much of the morphological analysis, pushed perhaps to an extreme in the analysis of the internal structure of preverbals (Chap. 16).

There remains also a certain amount of indefiniteness in the treatment of lexicalization or what is often termed as thematization of verb affixes, perhaps also in the use of the term. Most importantly for the verb there is the issue of what is a verb base in Eyak, *i.e.* in the degree to which preverbals together with the verb theme may be considered to be lexicalized, therefore to be covered in the lexicon organized by stem and theme, as a lexeme. The question of what is a verb base, verb theme with preverbals, or verbal lexeme with preverbals, with a role in the grammar, is left as a wide gray area covered in the Eyak lexicon (*viz.* §10.1). That issue is important for comparison with Athabaskan. In

Athabaskan, (often discontinuous) strings of verb prefixes, including what are preverbal in Eyak (Chap. 16), are far more developed, far more lexicalized as a domain, than in Eyak. Such linkages are indeed dealt with as they occur in Eyak grammar. But, as duly noted in the text here, those linkages are far fewer in Eyak than Athabaskan. At the same time, Eyak qualifiers and combinations thereof are so far developed beyond what they are in Athabaskan, including noun classification, that they take up a major chapter of this grammar (Chap. 16). In fact, use of qualifiers in Eyak goes well beyond the verb, as they are prefixed also to nouns and postpositions.

Further, there remains perhaps, as an example of unanswered questions about lexicalization, that about verb relativizations as possessed nouns (§18.12): for example, ‘my teacher’ being ‘he who teaches me’ was verified, but the perhaps more fully lexicalized ‘he who is more powerful than I’ for ‘my chief’ was not checked.

There are internal incompletenesses in the 1966 ledger on which the morphology is based, in that it does not include the three smaller Russian vocabularies (1810, 1812, 1820, viz. §§3.2.6–3.2.9) which I discovered in 1990, the data itself from Harrington 1940, Li 1952, Austerlitz 1961, or any of the post-1970 data (elicitations or text, viz. §§3.3.5–3.3.8). Again, however, the three Russian vocabularies are to be included in the lexicon, for the record, and certainly anything new from post-1971; the 1940–61 data, though significant in extent, had been carefully exploited in full for re-elicitation in the field where not otherwise clearly recognizable. Lack of that in the ledger can affect only some of the statistics of preference, but only in a minor way.

As for the syntax, I had not gone back to my original 1963–5 fieldnotes until I was writing that section, in 2013, when I was indeed reminded that the ledger was not quite complete for those notes in that there were a few pages in them that were elicited exclusively for syntactic purposes, with nothing of interest for morphology or lexicon, as mentioned in the syntax chapter. A larger proportion of the notes from after 1970 had been elicited specifically for syntax, so the syntax was written with the review of the original notes, ledger, and those later notes, therefore on what I judge is as complete a basis we can or do have for it.

The post-1970 material which is still the least fully exploited is the 1980 notebook from Marie to improve our understanding of the verb theme category system, mainly checking verbs for use and meaning of Active imperfective versus Inceptive perfective (Chap. 14). Fuller use of that material could still enhance both the grammar and lexicon. That is in fact the only portion of the data at hand that I have not fully used.

All the data that we have on Eyak are, we may hope, securely preserved at the Alaska Native Language Archive at the Rasmuson Library of the University of Alaska Fairbanks. This is so not only of the linguistic material, but also, as noted in §2.3, exceptionally, also historical materials from the Russian and American periods that I have collected. This is certainly a crucial resource for further research on Eyak.



## 2 THE EYAK LANGUAGE

### 2.1 History of the Eyak language

This subject is divided into two subsections, at the approximate date of 1800, as recorded Eyak history begins. Before 1800 is considered prehistory, during which Eyak was only a spoken language. After 1800 we consider the history of Eyak as a spoken language, the history of Eyak as a written or recorded language to be considered in great detail in Chap. 3. The account here of the history of work on the Eyak language is disproportionate to that of the history of the Eyak people. We may hope that a fuller account of that may also be written some day.

#### 2.1.1 Eyak language prehistory

We preface the history of the Eyak language with some discussion of what we know of its prehistory. We know that Eyak is genetically related to Athabaskan and to Tlingit. Hence, I limit this discussion to the prehistory of Eyak as related to Tlingit and Athabaskan, something like the last 4,000 or 5,000 years. It is supposed that by then the common ancestor of these languages was in North America, perhaps in or near what is now the Yukon Territory, somewhere inland, as the last known group to have crossed from Asia, not counting Inuit-Yupik-Aleut. We also know from both its vocabulary and grammar that Eyak is more closely related to Athabaskan than to Tlingit in most respects. In fact, as shown in Krauss (1973), from lexicostatistics with the Swadesh 100-word list, Eyak is equidistant to all Athabaskan, as e.g. both Ahtna and Navajo show 32% cognation with Eyak on that list. According to the glottochronological approach, whatever its value may be, it is probably safe to say that this implies that Eyak must have split from Proto-Athabaskan (PA), rather cleanly, something like 3,500 years ago, give or take some 500 years. The location of the PA homeland is hardly certain, but a reasonable guess might be in the interior somewhere near the Alaska-Yukon border north or northeast of what we know historically to be Eyak territory on the coast towards the Yakutat end. Because of its linguistic difference from Eyak and Athabaskan, we can use glottochronology to guess that Tlingit separated from Proto-Athabaskan-Eyak (PAE) something like a thousand years before the Athabaskan separated from Eyak, say 4,500 years ago, give or take 500 years or more. Tlingit therefore had more time to emerge onto the coast before Eyak did. Further, we know that Tlingit dialect diversity is by far the greatest at the very southern end of historically known Tlingit territory, starting at Tongass, south of Ketchikan, greatly diminishing toward the north. Yet the difference between the Tongass and Yakutat extremes is still not enough to impede mutual intelligibility, any more than the difference between American and British English, for example. This clearly implies that Tlingit cannot have spread as far as Yakutat more than 500 years ago, say, maybe much

less. Tlingit oral tradition agrees, it happens, that Tlingits emerged onto the coast at the southern end. It seems quite clear also that Eyak emerged onto the coast not only later than Tlingit, but also north of Tlingit. Having virtually no dialect diversity, Eyak either was always a small group with a small territory, or is but a small remnant of what was one a more populous and more widespread language group. No better known is when and where Eyak emerged onto the coast, or became a neighbor to Tlingit there; how long and how widely on the coast Eyak has lived, between say 500 and 3,500 years. This leaves a wide gap in time and space, with 500 miles between Ketchikan and Yakutat, and 3,000 years.

In stark contrast to such a gap is the tiny breadth of what we know historically about Eyak. We know that ca. 1800 Eyaks lived at Yakutat, were expanding into the Copper River Delta, and were rapidly becoming absorbed by Tlingit expansion at Yakutat. The only Eyak tradition we have about their (pre-)history was elicited (or extorted) by me from Anna, that the Eyaks came from the interior down the Copper River, appreciating especially the eggs on the barrier islands at the delta. That account, however, may have been influenced or entirely shaped by what Anna, a perceptively creative artist, knew or thought of modern Eyak geography. That route would have to be at the very northern extreme of the space the Eyaks ever occupied on the coast, during the very latest period of their history. Anna's view then should be taken as a humanistic explanation rather than a historical one. This is especially so in view of the huge prehistory gap, the difficulties of navigating the Copper River, and alternative routes, for which we must include documented capability of Eyaks and Ahtnas to cross glaciers on foot—and this is not to mention the limitations of oral tradition, or the 250 miles to Yakutat, let alone the 500 more miles to Ketchikan.

When the Eyaks emerged onto the coast is just as much of a mystery as where. Concerning both questions, and rereading the introduction to Krauss (1982), I am reminded that my thinking has evolved. In 1982, I speculate that Eyak may “never” have been a large nation, of more than a few hundred, which the size of their historical territory might have allowed. I emphasized that Eyak culture was more land-oriented than that of its ocean-going neighbors, the Chugach and Tlingit, and less dependent on sea-mammal hunting. I speculated that Eyak spent a long period isolated from Athabaskan in some inland pocket, perhaps neighboring Ahtna. This was suggested also by two linguistic clues. One is that the Ahtna word for Eyaks is surprising, *danggene*, meaning ‘uplanders’ (*da-ngg-* being cognate with Eyak *dA-LAG* ‘upland’ from stem \*-nəG-), quite the opposite of what we should expect from modern geography. The other surprise is that the Eyak preverb *li*’ basically meaning ‘into closed end of a space’ (cognate with Athabaskan \*ni’, meaning the same) happens to be, unexpectedly, also the word for ‘downstream’ in Eyak.<sup>1</sup> An explanation for that might be the Copper River itself, which flows very swiftly down from Ahtna into Eyak territory through a canyon between two glaciers that at times were joined above, certainly

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1 That is, in Cordova Eyak. We do not have it attested for Yakutat Eyak. The *li*’ ‘downstream’ might merely be a homophone, but in that case of no known origin.

a challenge to navigation. These two strange items, plus the fact that what is historically known of Eyak culture is more oriented toward land than are the more seagoing Tlingit and Chugach cultures, might indeed suggest an inland pocket prehistorically for Eyak, even if it is difficult to imagine where that pocket might have been. More could perhaps be understood with study not only of the history of the area(s) in question, but especially of the prehistoric geology, geography, glaciology, as we can be certain that the land itself has gone through many major changes in how it has allowed or supported human life and travel through the ages. Further support of this hypothesis is that Eyak habitation on the coast seems to have been confined—or mostly so—to the mainland, not the islands.<sup>2</sup>

Austerlitz in 1961 must have been intrigued by the question of Eyak arrival on the coast. Having taken a special interest in Eyak biota terms in his fieldwork, he also tried to see how many and which kind of terms from coastal as opposed to interior species were unanalyzable monosyllables and were morphologically more complex neologisms (viz. §3.3.8). This was a beginning for study that needs further research, though fraught with complications such as re-assignment and diffusion, as well as geological and environmental change, and change in biota distribution.

As noted just above my thinking about Eyak prehistory has evolved since 1982. Perhaps more correctly, it has expanded, significantly, in another direction, toward the south. Eyak is genetically related to Tlingit as well as to Athabaskan, though with still less cognate vocabulary with Tlingit than with Athabaskan, implying at least another millennium for time-depth of separation of Tlingit from Proto-Athabaskan-Eyak, say 4,500 years or more. It is a crucial point for this prehistory, however, that internal diversity within the Tlingit language is so clearly at the very southern end of Tlingit territory, especially between Tongass and Ketchikan, and at the same time that mutual intelligibility between Ketchikan and Yakutat Tlingit is so remarkably easy, over a distance of 500 miles. This must limit the expansion of what we know of Tlingit to the last few hundred years.

At the same time, the emergence of Tlingit to the coast originally so far south might suggest a homeland for PAE-Tlingit somewhat further to the south, were it not that 4,500 years allows for literally continental distances. This chronology and geography leaves moreover a lot of empty room between what we know of Eyak and of Tlingit on the coast. Perhaps the huge part of the Tlingit vocabulary not yet found cognate with Eyak or Athabaskan is from a substratal language or languages that occupied the coast between

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<sup>2</sup> For example, when Georg Steller with Bering investigated Kayak Island in Controller Bay in 1741, the deserted village he found was evidently Chugach (Birket-Smith and de Laguna 1938: 345–352). When Seton-Karr (1887) visited it in 1882, the population of the island was Tlingit. Because of this, my Alaska Native language map, Krauss (1974) and Krauss (1982), simply leaves Kayak Island out. In the Alaska Native Language Center revision of that map (Krauss et al. 2011), Kayak Island is shown as Eyak, no doubt an unintentional error. More perspective on the composition of Eyak culture could doubtless be provided especially by the work of Birket-Smith and de Laguna (1938), but it seems more likely that the history of this composition belongs more to the later part of Eyak coastal prehistory, discussed in §2.1.2.

Eyak and Tlingit. It seems at least equally possible that there was no such substratal language, and Eyak, or something like Eyak, instead occupied much or even all of the distance between Yakutat and Ketchikan. In that case, what we know of Eyak is but a tiny relic of a once much larger nation. This idea was the increasingly strong suspicion of Frederica de Laguna in her last days, as mentioned in §3.3.4.4. She mentioned that to me, and spoke more of this to her student and literary executrix Marie-Françoise Guédon, who told me she took notes, and from whom we wait to hear more. If what is known of Eyak today is but a tiny relic of what it once was, that could explain the remarkable linguistic uniformity of Eyak through time and space between the historical extremes of Yakutat and Cordova, 250 miles apart. See further on this in §2.2.

Certainly it would be interesting to know where and when Eyak and Tlingit met again after a separation of some millennia. The simplest explanation for Tlingit dialect geography as just noted above is that it came from the PAE-Tlingit homeland in the interior to the coast at the southern end. We can probably add that the Tlingit arrival at the coast happened some time between, say safely, 4,000 (or more) and 1,000 years ago. Further comparative research might reveal more about the time of that meeting, especially by evaluation of what is cognate as opposed to what is diffusional between Tlingit and Eyak. It is certainly so far not obvious, either, that Eyak and Tlingit share anything of otherwise unknown substratal lexicons.

Some answer to the question of when and where Tlingit and Eyak met on the coast can be found in the loanwords from Tlingit in Eyak. The very southernmost known dialect of Tlingit, Tongass, now extinct, had a system of non-tonal glottal vowel modifications (denoted “stigmata”), which is startlingly isomorphic with that in Eyak, while in all the rest of Tlingit between Tongass and Eyak that system has become tonal instead. The last speakers of the Tongass dialect, Frank Williams (1890–1979) and his wife Emma Williams (1898–1998), in Ketchikan, were noticed ca. 1966, by Jeff Leer, who did the crucial documentation we have of their speech. Two of the three special Tongass vowel modifications or stigmata, “clipped” (glottalized) and “sustained” (long), have fallen together in Northern Tlingit as high tone, so that from Northern Tlingit high tone, one cannot predict whether the Tongass version of the same item will have clipped vowel or sustained vowel, whereas from Tongass one can predict the Northern (high tone). If it turns out that even some of the loans in Eyak from Tlingit consistently have the same vowel modification, clipped/glottalized or sustained/length, in a given loanword, that has to mean that the Eyak-Tlingit contact on the coast at least began with a pretonal Tlingit dialect like Tongass. It will be shown in detail below (§18.15.1 on Tlingit loanwords) that, seen together, there is a set of at least five to seven such decisive items, in which the Eyak precisely matches the Tongass, explainable only through direct contact of Eyak with a pretonal form of Tlingit like Tongass. This raises and leaves open, very widely open, the question of how far south of Yakutat and how long before 1800 Tlingit and Eyak first met on the coast—not in terms of dozens or years and miles, but in terms of centuries and hundreds of miles. We have no historical record,

nor evidence of Eyak place-names, south of the Yakutat area.<sup>3</sup> We may perhaps learn more from archeology or genetics, but what linguistic evidence we have strongly suggests that the attested Eyak is but a small northernmost remnant of what Eyak must once have been along the coast. From the data we must in any case directly conclude that whatever speech there may have been on the coast between historical Eyak and pretonal Tlingit must have been a variety of Eyak and/or Tlingit, and/or of something else, genetically related or not, that had a system of vowel stigmata like that of Eyak and Tongass Tlingit, to allow the transmission of these decisive forms.

So far as I know, archeology does not yet shed light on these vast gaps in what we know other than to confirm what is already otherwise known historically. As for genetics, I am not aware of any relevant studies, or that any Eyak DNA was sampled during the lifetime of any full-blooded Eyaks. The closest for genetics that I am aware of is Schurr et al. (2012). This confirms deeper difference of Tlingit from Haida, some lesser internal Tlingit differences, with Yakutat differing from Hoonah, in the direction of Athabaskan (so perhaps to Eyak, but with no sampling from Eyak itself, only some part-Eyak-connected individuals, perhaps, at Yakutat).

We have considered two seriously different views of Eyak prehistory, that the Eyaks were a small group long pocketed inland somewhere north of their known bit of coast in the area of Yakutat, or that they were once a much larger nation that occupied at least for centuries a much larger stretch of coast beyond Yakutat to the south. Since we are dealing with gaps of millennia and hundreds of miles, however, these two views are not mutually exclusive. The scope of our ignorance leaves plenty of room for both.

### 2.1.2 Late prehistory

We now move to the subject of later Eyak prehistory, and to our ignorance on a radically smaller scale: geographically the coast from Yakutat to Prince William Sound, and in time to the last few centuries, perhaps only the last three. The borders of Eyak are moving north at both ends. Especially valuable now to our understanding is the documentation we have of place-names. First, unsurprisingly, the place-names we have of clear Eyak origin stretch from the Cordova lip of Prince William Sound to just beyond Yakutat. Yet within that Eyak range we also have Chugach and Tlingit place-names, and these not only meet but even

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<sup>3</sup> Leer (p.c. 2017) points out an apparent major exception, Chilkat (130 miles further southeast), the same as that for Bering River Village, in Eyak *djiLqah*, Tlingit *jilkáat*, which he considers to be of Eyak origin; cf. Lower Tanana Athabaskan *dret* 'platform cache', Eyak *djiL* 'platform'. The *qah*, however, is not easy to identify here, not appearing to be Eyak. It also seems probable that Eyak *djiL* is a diffusion from Athabaskan, as a cognate to that should be \**gwAL* in Eyak instead of *djiL*, so that the name for Chilkat to the southeast could be a separate diffusion from Athabaskan.

overlap, at least from the Copper River Delta to Controller Bay. That would seem to leave (less than!) no room whatever to themselves for Eyak.<sup>4</sup> That implies we are looking at a situation that could not have lasted many centuries.

Beside place-names, however, contact between Eyak and Tlingit must have probably begun well to the south of Yakutat and well before 1800, as by loanwords from Tlingit into Eyak (viz. §2.1.1). Similarly, we can see in the Eyak loanwords from Chugach (viz. §18.15.3), second only to the Tlingit ones in number, that there is also some evidence, more modest, of multi-level contact in the Chugach direction. The Chugach loans appear to be mostly recent, and many are of Russian origin, so dating from the contact period. Some however, especially *gu:djgALAG* ‘eagle’, and above all *dAXunh* ‘person, Eyak person’ (cf. modern Chugach *taru* ‘man’), are documented in Yakutat Eyak as well, implying diffusion some time before the contact period. Quite significantly, *dAXunh* was the very ethnonym for Eyak in Malaspina’s 1791 vocabulary from Tlingits at Yakutat (Malaspina 1885), and, as noted below, must even have come from an earlier form of that special term than is attested in Chugach. Moreover, there is the evidence of Eyak presence and/or significant knowledge of Eyak on the part of the Chugach (Anderson in 1778, Walker and Strange in 1786, at Prince William Sound, resp.) with Eyak that still sometimes had /n/ for modern Eyak /l/. (See §§3.1.1 and 3.1.2 for these vocabularies, and Eyak language prehistory below for Eyak *n-l* variation.) This is clear evidence of Eyak contact with their “traditional enemies,” the Chugach, some time before the advance of Eyak occupation beyond the Copper River Delta to Prince William Sound, though that advance is thought to date to the early 19<sup>th</sup> century. One might well guess that it was that very occupation which turned the Chugach into the Eyaks’ “traditional enemies.” For full data on Chugach loans, including Russian loans through Chugach, see §18.15.3.

Finally, there are far fewer loanwords in Eyak from Ahtna, their Athabaskan neighbor in the Interior, even than from Chugach. These are mostly biota terms, apparently of differing time depth of diffusion that is difficult to interpret, and difficult in some cases to distinguish from broader diffusions. These loans from Ahtna do not imply intense Eyak communication with the Interior, given especially the tendency of some biota terms to diffuse, somehow independently of the distribution of the biota themselves. Eyaks were reported to be quite reluctant to participate in expeditions up the Copper River into

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4 At its western end, that overlap starts in the Copper River Delta (most strikingly Eyak *'AnAXAnAG* ‘Alaganik’, which is itself an “overlap.” The original name is Chugach *alarneq* ‘switchback (in river)’, hence the English, with /l/ as in Chugach instead of /n/. The Chugach /l/ is /n/ in the Eyak version of the name, even though Eyak also has the same phoneme /l/. This can only be because the name is a loan from Chugach into Eyak not directly, but evidently through Tlingit, which has no /l/, and replaces /l/ of other languages with /n/. In the other direction, the overlap of Chugach and Tlingit place-names stretches from the Copper River Delta to the east at least through Controller Bay (e.g. *kAnAG* ‘Kanak Island’ is from Chugach *keneq* ‘fire’).

Ahtna territory, and were hardly middlemen in Ahtna-Russian trade or contact. Rather, the Ahtnas instead would come down to the coast to trade with Russians, that being the main occasion for Ahtna contact with the Eyak, whom the Ahtna still called *danggane* ‘uplanders’, even after the Copper River Railroad connected Ahtna and Eyak by 1911. It certainly would appear from recent prehistory, perhaps even in history until 1911, that there was far less contact between the Eyaks and their closest linguistic relatives in the interior than there was between the Eyaks and their coast neighbors on either side. Data for Ahtna loans also are included in §18.15.5.

### 2.1.3 History of Eyak as a spoken language, 1800 to present

Between ca. 1800 as the beginning of the documented history of Eyak, and the year 2008, the number of Eyak speakers fell from that equal to the number of Eyaks down to zero. This decline happened in three distinct phases. This first documented phase was roughly the 19<sup>th</sup> century. During that century the Eyak language was being replaced by Tlingit, progressively from south to north, first at Yakutat and probably Kaliakh. That part of the history is described in §3.2, especially in connection with Rezanov (§3.2.5), as it happened precisely at the time of Rezanov’s work at Sitka that the Tlingits attacked the Yakutat Eyaks, in the winter of 1805–1806. This attack precipitated the decline of Eyak at Yakutat, which became extinct there perhaps well before the middle of the century. Veniaminov’s estimate of 150 Eyaks and 150 Tlingits at Yakutat ca. 1830, as noted in §3.2.11, was certainly wrong by that time for Eyak, but a guess of 100 for the year 1800 might not be far off. We have a 1794 census of Kaliakh (or Tattleia?, see Purtov-Kulikalov in §3.2.1) of 72. We do not know much about the fate of Kaliakh village. From de Laguna (1972: 101), we can gather the village had been abandoned long enough that little physical trace of it was left by 1900. The Kaliakh villagers may have been some of the people then at Yakataga for a while, but soon dispersed to Yakutat (as well as Bering River Village), some possibly still speaking Eyak, so it is unclear how much or how long that may have renewed the life of Eyak at Yakutat. At the opposite end, Eyak-Alaganik, an Eyak population of 200 in the year 1800 might be a good guess. That was where Eyak was expanding into or toward Chugach territory, or at least had plenty of contact with the Chugach, as can be seen through Eyak admixture in British vocabularies of 1774 (Anderson) and 1786 (Walker 1982) from Prince William Sound itself (viz. §§3.1.1, 3.1.2). For Bering River, the Eyak-speaking population is hardest to guess, possibly 100. This would give a grand total of possibly 450 Eyak speakers at the beginning of the 19<sup>th</sup> century, before the impending loss of Yakutat Eyak. We have nothing but prehistorical speculation to guess whether that 450 is merely a remnant of what Eyak once was, or is in fact the peak of the Eyak-speaking population ever. The first phase of historic Eyak decline was basically the decline of the Eyak-speaking population by assimilation to Tlingit, through the 19<sup>th</sup> century, from 450 to perhaps 275 speakers.

Eyak continued to be spoken at Eyak and Alaganik, and at Bering River Village through the 19<sup>th</sup> century. But by its end, the expansion of Tlingit had made Bering River

Village at least bilingual, including some families monolingual or dominant in Tlingit. Not canneries, but coal and oil in 1902 brought industry, Whites, and the port town of Katalla, peaking at a population of 5,000 in 1907. Many Yakutat Tlingit seasonal workers also came to the area, up to 300 at a time. The last surviving Eyak speakers from Bering River Village were George Johnson and Mike Sewak. Except for Sewak, Bering River Village was deserted before 1930. Several others who had come to Yakutat from there ca. 1912 may have had some memory of Eyak still in 1960, especially George Johnson's wife Anna, born 1888 (see Text 69), but Susie Abraham (1901–1993), with whom I also worked, was sent to Chemawa 1911–1915: she certainly remembered hearing some Eyak as a child, but could not understand it.

As for the village of Eyak itself, even before the industry at Bering River Village, canneries began near Eyak by 1889, seasonally bringing hundreds of Whites and Asians (first Chinese), all male. At first these canneries did not hire Natives at all, but they depredated the salmon and Eyak food supply, and brought severe social disruption, as well as disease. The Whites had their alcohol, and opium ("Grade A" and "Grade B") was regularly supplied to the Chinese. The Eyaks were plied with both by the cannery crews, especially for access to their women. The effect on the Eyaks was disastrous, and their population dropped from something like 200 in 1885 to perhaps 60 by 1905 (in living memory of the 1960s, as best I could ascertain).<sup>5</sup>

Already in 1883 Norwegian artifact collector Jacobsen (§3.3.1) reports that the Eyak village of Alaganik in the Copper River Delta was at least bilingual Eyak and Tlingit, and that Tlingit was also widespread at Eyak itself. The population at Alaganik was in close touch and largely interchangeable with that of Eyak Village. Alaganik suffered some kind of epidemic in the early 1890s, and was deserted by the turn of the century or before, the survivors having moved to Eyak or Eyak Lake.

Eyak Village at the mouth of Eyak River by the eastern end of Eyak Lake may not have lasted much longer as such than did Alaganik. It was perhaps also abandoned by the end of the century, the Eyaks having moved to the west end of the lake, by what is now Cordova. We have no image that I know of, of that main village of the Eyaks, from which they now take their name.

The terminal history of Alaganik is inadequately known as well. By about 1890 Charles Rosenberg had opened a trading post there, which lasted to 1930. In 1885 the Allen Expedition stopped at Alaganik. Their photographs included a good view of the village, which survives in lithograph form, included in Krauss (1982). There is also an undated photograph of an "Old Russian trading post, Alaganik, Alaska" by an unnamed photographer, which shows two older-style cabins in the foreground, possibly the two mentioned by Allen, no persons (Browne and Dole 1910: facing page 1484). There is also

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<sup>5</sup> The literature for this period is good. The opium supply and costs thereof is documented in published reports of the cannery industry itself (reference lost). Official fisheries reports by Jefferson Moser 1899 and 1902 describe the industry at Cordova in some detail, including appalling fishing practices. U.S. Census reports of 1880, 1890, and 1900 give population figures for Whites, Natives, Asians.



a very interesting photograph taken by E. A. Hegg from a steamer, of a village at a river's edge, of several log houses of a more recent type, most in good repair, several persons including men making a boat. This is labeled "Alaganik 1908," but the label cannot be correct. There is no railroad in sight, by then at least in construction. I was told more than once there was "nobody at Alaganik in 1908," except for a railroad stationhouse and Rosenberg's trading post. There are photographs of the post, different from anything in Hegg's. Hence that photograph must be of Bering River Village in 1908, valuable as the only image we have of that. The people in it are probably at least as much Tlingit as Eyak. Rosenberg may have kept something like a journal, as Birket-Smith and de Laguna (1938: 21) suggests, which was preserved at the Cordova Magistrate's office (Cloes's?) as of 1933. Recent efforts to find that journal in Cordova at the Forestry Service and Post Office have so far failed.

At the same time as the canneries near Eyak brought catastrophe to the remaining Eyak population at Cordova-Alaganik, ironically they also stopped cold at the end of the 19<sup>th</sup> century the advance of the Tlingit language replacing Eyak, so preserving for some years that last pocket of Eyak at Cordova. For example, Lena was born 1902 at Cordova. Lena's father could speak Tlingit, but Lena could not. The end of Tlingit expansion thus allowed transmission of Eyak at Eyak (Lake) for one more generation, before English instead of Tlingit replaced Eyak. That generation, Lena, born 1902, Anna, born 1906, Sophie, born 1911, Marie, born 1918, is what allowed the documentation here of most of what we have of Eyak (viz. §3.3.10).

The second phase of the loss of Eyak language was the first twenty years of the 20<sup>th</sup> century, by the end of which time the transmission of Eyak to children had ceased. By about 1900 not only Alaganik but also Eyak Village had been abandoned, and the last Eyak community was by Eyak Lake near what was to become Cordova. In addition to the canneries there, the Copper River Railroad for transporting copper from the Interior was begun in 1906 at Cordova and finished in 1911. In 1908 the town of Cordova incorporated and began its first school.

Up to that time, most children in the area had been Native. They must have been decreasingly Eyak and increasingly Chugach, as many Chugach families had been attracted by the growing economy there. During the early 20<sup>th</sup> century, a number of Native children were sent from Cordova to Chemawa boarding school for Native Americans at Salem, Oregon, some at a very young age. Many never returned. It is impossible to tell from a cursory examination of Chemawa records how many children there were Eyak. It is likewise impossible to know what was the motivation or procedure for this in each case, voluntary or involuntary on the part of parents or children, presumably "well-meaning" on the part of those responsible. In any case, this deportation certainly contributed significantly to the disappearance of Eyak-speaking children for about the first twenty years of the century—this from a dwindling Eyak population suffering severely from grim social conditions of Cordova in the first place. Galushia Nelson, born 1889, de Laguna's guide, interpreter, and main source of information in 1930 and 1933, must have been one of the first to be sent, and also one of the few such Eyak children who came back.

Lena identified for me some of those children on the 1938 genealogical table who never came back, but who presumably spoke Eyak at least until they were sent to Chemawa: the three sisters Anna, Lucy, and Emma Saxton, born about 1900, 1903, 1905, respectively, and Nikolai Nelson, born also in that period.

Carlson (1983) on the history of schools in Cordova is revealing. Territorial school opened there in 1908, but Carlson was told that “In the early days when school started in the fall, some of the [Native] children would come, sit on the steps of the school but wouldn’t be allowed to attend unless their fathers were white” (Carlson 1983: 143). In fact there was no school for Natives in Cordova until the Bureau of Indian Affairs opened one there in 1923, fifteen years later. It opened its doors to about forty pupils, one third of whom reportedly could not speak English. Possibly a record could be found, but by that time the great majority or those children must certainly have been Chugach. Lena, Anna, and even Sophie, then twelve, were beyond elementary school age. Marie, five years old in 1923, may have been the only Eyak-speaking child to attend that school (viz. §3.3.10.5).

The deplorable social conditions for Eyaks at Cordova through that time, including no school, turn out, again ironically, to have been a blessing at least for the Eyak language. If the 1908 territorial school had required them to attend, or even allowed them to attend, Eyak children would certainly have been prohibited from speaking their language. Or if there had been no delay in providing a segregated BIA school, the result would certainly have been the same, severe punishment, what we would call today physical and emotional abuse, for speaking Eyak. Marie remembered that well.

That delay of fifteen years between 1908 and 1923 permitted those four Eyak girls to grow up continuing to learn Eyak from their parents. All known Eyak children born before 1923 learned and (and kept) the language, and none born after that did. Granted, the numbers are few, but that is tragically so to begin with by 1920, especially as we are now dealing with very few Eyak-to-Eyak couples still having children. The last such marriage may have been that of Galushia and Anna Nelson, married in 1918; none of their children became an Eyak speaker. Further, it was probably a rule or close to that, that mixed marriages did not transmit Eyak to children. Among the last few children of full Eyak blood, beside Galushia and Anna’s, were Nick G. Nelson (1924–2005, son of Gus and Mary Nelson), and Evaline Dude Navarro (1928–2004, daughter of William and Mary Dude). Both ended up living in Juneau. According to my contact with them, neither could understand Eyak, let alone speak it. Those two and Marie, incidentally, must have been the last three Eyak Indians of full blood, all of whom died in the first decade of this century.

Lena, Marie, and Anna all spoke of Eyak children who they claim could speak some Eyak, perhaps because, beyond wishful thinking for the occasion, they had sometimes said a few words to such children and the children may have repeated them. No such claim proved verifiable even in the 1960s. I have tried hard to find that Marie was not the last child ever to learn Eyak, but this is evidently the case.

The third phase of the loss of Eyak language is 1920–2008, during which no more children learned Eyak and all remaining speakers died. This may in turn be divided into two

parts, first 1920–1961, during which some kind of routine conversation in Eyak continued, until the death of Minnie Stevens on January 25, 1961, after which no spontaneous Eyak conversation regularly took place. As of 1920 Eyak speakers around Cordova may still have numbered over twenty. Again, 20<sup>th</sup>-century Eyak history is subject of further research. Study of U.S. censuses and local church, police, court records, perhaps newspapers that I overlooked, also the 1938 genealogical chart, and notes scattered throughout my field notes, on speakers and death dates, ages, might enable the assembling of a fair chart of those Eyak speakers and their passing.

By 1960 the only “elder” speaker was “Grandma Stevens” and very probably the only people left in Cordova who were regularly speaking Eyak with her were two. One was her younger daughter Marie. The other, also of special importance, was Lena Nacktan, who had been recently divorced and returned to Cordova, and who especially enjoyed talking with Minnie, partly even to “brush up” her Eyak, as Lena told me (*viz.* §3.3.10.4).

The six speakers remaining in 1961, after Minnie’s death and my first visit, with Austerlitz, to Cordova, were not in much position to speak Eyak with each other. As noted in §3.3.10.5, Marie and Sophie, though sisters, did not have a warm relationship, and their alcoholism did not help. In fact, Lena and Marie had little relationship. Sewak was in the hospital, isolated, mostly deaf and blind. Anna Nelson Harry and George Johnson were both at Yakutat, both married to Tlingits and speaking Tlingit, but English with their children, and had little occasion to speak Eyak with each other, or of course with anybody in Cordova. The deaths of Sewak in 1970, Lena 1972, George Johnson 1977, Anna in 1982, and Sophie 1992, left Marie alone for 16 years, until she too died, on January 21, 2008, four months short of her 90<sup>th</sup> birthday. Marie’s death in 2008 marked the end of this latter part of the last phase of the decline of Eyak as a spoken language, extended to 47 years by Marie’s improbably long life.

At this point we need to take on the subject of Eyak as a community as well as Eyak as a language, to consider its future. During the 1960s as the most intense period of fieldwork for documenting the language, the work was necessarily pure salvage linguistics, essentially on the part of one linguist, with whom all six remaining speakers did their best to contribute. It was classic ‘lone wolf’ work, to use the current term in documentary linguistics. Cooperative work with the ‘Eyak-speaking community’ was out of the question because there was no such community. Further, even if there had been such a community, social conditions and attitudes in 1960’s Cordova, Alaska, were still quite predominantly assimilationist: schools and education at the “frontier” were for the spread of English and Civilization. The Eyak Indians were just a few mixed-heritage families, tolerant of my efforts to record the language, but with no interest in turning back to their past or developing an organized Eyak Indian community.

Times were changing dramatically, however, with the decline in the 1950s of colonialism and of racial segregation in the U.S., and liberalization came to Alaska not very far behind. The Alaska Federation of Natives was founded in 1966, and the Alaska

Native Land Claims Settlement came in 1971. That established the regional corporations in 1972, including the Chugach Corporation for the Cordova and Prince William Sound region. (Note that that was the same year the Alaska Legislature passed the first Bilingual Education bill, allowing and even mandating, where children still spoke them, the use of Alaska Native languages in the schools, and establishing the Alaska Native Language Center at the University of Alaska in Fairbanks.)

In 1973 the Eyak Village Corporation was founded for the Cordova area of the Chugach Corporation. Given simply the demographics of the Native population of the area, the 326 shareholders of the Corporation were 90-some percent Chugach, not Eyak Indians, and its board of directors was entirely Chugach. It is explicitly part of the Corporation's self-description that the name "Eyak" of the Corporation came at the suggestion of Chugach leader Cecil Barnes Jr. "to honor the area's Eyak natives who had as a group been decimated by disease and poverty as a result of the development of Cordova by peoples of European descent." This statement certainly invites speculation on Barnes's motivation behind this naming. Few Cordovans of any background understand that "Eyak" is in origin a Chugach name for a village that was once Chugach. Cecil Barnes Jr. (1930–1984) grew up in Cordova, of mixed parentage, mother Chugach, speaking English only, but he certainly knew that the Eyak Indians, "traditional enemies" of the Chugach, had not only a unique identity but therewith also a special "appeal" that would be advantageous to the corporation.

Around Cordova many do not have a clear concept of aboriginal demographics, history, or identity, not even whom the usual names "Aleut" as opposed to "Chugach" for (non-Indian) Natives of the area refer to, let alone "Eyak." Since the Chugach of the Eyak (Village) Corporation now call themselves "Eyak" as well, the question locally of who is an Eyak has become more confused than ever. As described in more detail below, is further irony in this history too, that the name was the Chugach name which became the definitive academic name for the Eyak Indian people who made their "last stand" at that site, to be (re-)discovered" there by de Laguna as such—at such a late point in their history, and at such an extreme point in their distribution. Currently, the "Eyak (Village) Corporation" is over 90% Chugach, for two reasons. First is the near-disappearance of Eyak Indians, and second, the partial depopulation of the Chugach Prince William Sound villages, with urbanization of those people at Cordova. By now there is a new question locally of who the "Eyaks" really are. "Eyak (Village) Corporation members" is factually definable, but "Eyaks" is now becoming ironically ambiguous.

It should also be noted that there remains no federally recognized Eyak Indian tribe, nation, or entity. Only the Eyak Village Corporation, of which Eyak Indians constitute a small minority, is so recognized.

The Eyak Village Corporation of course acted in the interests of its vast Chugach majority of stockholders, for example in logging the forests of what had been Eyak Indian use. In 1989 came the blow of the Exxon Valdez oil spill. That year, Dune Lankard, grandson of Lena Nacktan, with Californian conservationist Carol Hoover, began the work of what in 1993 became the *Eyak Preservation Council*, the first Eyak Indian organization in modern

times. The primary purpose of the Council was to protect the Eyak Indian environment, which was at odds with the interests of the vast Chugach majority of the Eyak Village Corporation shareholders. With the passage of time, however, and thanks to the foresightful suggestion of Cecil Barnes Jr.—whatever its motivation—the interests of both groups are now converging.

This brings us to a new part of the history of the Eyak language itself, which would hardly have been imaginable in the 1960s, while I was doing the main fieldwork on it. About 1990, journalist and videographer Laura Bliss Spaan of Anchorage became a friend of Marie there, taking a special interest in her as the last speaker of Eyak. This was partly with the aim of making an audiovisual record of Marie, including footage of her working on the language with me. The 1990 museum Repatriation policy brought back to Cordova from the Smithsonian Institution the skeleton of an unidentified Eyak man, who was then reburied at the Nirvana Park cemetery there, with some ceremony, including a prayer in Eyak by Marie, on August 22, 1993. Then in June 1994 the Eyak Preservation Council succeeded in stopping the logging of Eyak land, with festivities that included Dune Lankard planting a spruce sapling on that land, with Marie saying a prayer in Eyak, and with Frederica de Laguna and me among those assembled. That whole occasion amounted in fact to a kind of potlatch festivity, and an assertion of Eyak Indian identity. The first such since about 1912, this “potlatch” was significant in what was turning into a continuing Eyak history. It was filmed by Laura and published as *More than Words* (Spaan 1995).

About 2002 Guillaume Leduey (1989-) of Le Havre, France, still a young boy, took an interest in Eyak language and made contact with the Eyak Preservation Council and Laura. She looked him up on a visit to France in 2009 and brought him on his first visit to Alaska in 2010, when he began studies with me. In 2011–2012 Laura received grants from the Alaska Humanities Forum and the National Geographic Society to continue Eyak work, which included filming me explaining the Eyak sound system and writing system, how to use the 1970a dictionary, and some basic grammar, both for the record and for practical purposes for anyone wishing to learn Eyak or to use the extant materials.

By 2013 the Eyak Language Revitalization Project was founded under the Eyak Preservation Council, with which Laura obtained major funding from the Administration for Native Americans, with Jenna May as Project Director or community coordinator. Jenna is the granddaughter of Sophie Stevens Borodkin (§3.3.10.6). The purpose of the Project is to develop a set of pedagogical materials, hold community workshops for adults and children, and begin to revitalize Eyak as a living language. The basic resources for the language have to be the transcriptions and sound files from the Eyak corpus described in Chap. 3, including a practical orthography directly based on those used in the corpus. Deriving appropriate pedagogical resources from this corpus, grammar, dictionary, texts,

no matter how adequate they may be for linguistics, is no small task for Leduey as language teacher and Laura as materials and media designer.<sup>6</sup>

Coordinating a community of learners is no small task for Jenna either. There are probably something over one hundred persons who would recognize themselves to be of part Eyak Indian blood today, in Cordova, Anchorage, thirdly in Yakutat, elsewhere in Alaska and scattered farther, who might have some positive interest in their Eyak heritage. Though almost all of these are of less than half quantum of Eyak blood, that heritage by now may be felt to be a matter of pride. Much work remains even to make a full list of such people and to bring them together in any sense, especially as so many are scattered outside the Eyak Village or Chugach Corporation area. A most encouraging development made under Jenna's leadership is that during 2016, with the Administration for Native Americans grant, Eyak language workshops have been held in conjunction with the Chugach Corporation's Summer Chugach Culture Camp at Nuchek on Hinchinbrook Island, attended also by Chugach. This amounts to the Chugach Corporation's recognition that its heritage comprises two peoples with two languages, proudly including the "decimated" one in whose honor the Corporation has chosen its name.

It is therefore my privilege to say, as I finish my Eyak work, that the Eyak language is not extinct, but by current parlance "dormant" or "sleeping," or even "awakening." We may now hope that Eyak may have a future as a spoken language of a people, to some degree that is unknowable, in principle open-ended.

In sum, despite the sad history of Eyak, I see it as nothing short of a miracle that even the extant documentation of Eyak was possible, without which no revitalization would be thinkable. First, Tlingit was about to finish swallowing up the relic that Eyak had become. Then came the horrors of cannery and railroad Cordova, including however the racist exclusion from school that also spared the Eyak children from punishment for speaking their own language, 1908–1923. That allowed Lena, born 1902 (§3.3.10.4), and Anna, born 1906 (§3.3.10.2), with superb complementary talents, who became the main contributors to this record of the Eyak language. This miraculous survival might well have gone unnoticed, had there not been the 1930 Danish-American expedition (§3.3.4.1) outfitting in Cordova for Prince William Sound archeology, including Frederica de Laguna, who got tipped off by Assistant Magistrate H. B. Cloes that the Eyaks were not an Chugach-Tlingit mixture, as was the accepted academic opinion of them, in spite of the thorough published Russian-period work, much of it in German, and on color map. The history is as ironic as it is miraculous.

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<sup>6</sup> See <http://eyakpeople.com>

## 2.2 Eyak dialectology

”Eyak dialectology” is a remarkably small subject. Full mutual intelligibility is unquestionable. The only question is whether any diversity ever documented in Eyak is even dialectal. All sources and all speakers are remarkably uniform, even between the extremes in space and time of Yakutat 1805 and 20<sup>th</sup>-century Cordova, 250 miles and 160 years apart. Over this time, we have significant documentation from at least six Eyak speakers during the Russian period, including three from Yakutat (where local Eyak became extinct during that period). With nine more Eyak speakers during the American period the total is fifteen. This uniformity can clearly be seen in the abundant data in my own fieldnotes from the last six of these speakers, so much so that I judged identification by speaker irrelevant for most of the examples cited in the grammar, only the sources older than my own data being regularly so marked. The uniformity is so striking that in phonology, even the complex variation in the reduced vowels shows no obvious differences between the speakers. In grammar, what variation there may be in what is considered acceptable usage comes down more to what might be called personality. More than once Lena said “I suppose Anna could say that, but I wouldn’t.” This comes to the level of “matters of taste,” at the edges of Eyak grammar, Lena recognizing herself as conservative or “careful” and Anna as liberal or “creative.” Where there are genuine differences between even Marie and her sister Sophie, it is clearly a matter of one happening better to remember or have more control e.g. of certain obsolescent Active imperfective uses of motion verbs, or *s*-optatives, the whole language being of course obsolescent to begin with.

Between the four women and the two men, the men were both “rustier” in Eyak and much more influenced by Tlingit than any of the women. Of the women, only Anna could speak Tlingit at all, having learned it in Yakutat, starting in her thirties. On the other hand, the men learned Tlingit as children, and had both spoken Tlingit almost to the exclusion of Eyak, for fifty years in the case of Sewak, thirty years in the case of Johnson. Sewak as a source is regularly so marked, likewise Johnson where relevant. The reason for this difference between the men and women is purely biographical. It happens that the men were both born and spent their childhood in Chilkat (Bering River Village), instead of Cordova, where all four women were born and raised. Differences between the men and the women accord much more with degree of Tlingit influence than anything else, implying that there was no significant or detectible underlying dialect difference between the Eyak of Cordova and that of Chilkat, or men’s dialect different from women’s.

It is true that there is one consistent phonetic difference between Mike Sewak and all documented 20<sup>th</sup>-century speakers, his Tlingit mid-[e] quality for the low front vowel, as opposed to the [æ] of all the others, including George Johnson, also of Chilkat and also a speaker of Tlingit much more than Eyak. Sewak’s first language was Tlingit; he learned Eyak as a second. This therefore cannot be considered a geographical difference, but must reflect only that there must have been at Chilkat quite an amount of variation in degree of influence of Tlingit, and assimilation to Tlingit, among the Eyak speakers at Chilkat in the 19<sup>th</sup> and early 20<sup>th</sup> centuries. This reflects a complex history of population

mixture there, including many migrants from Yakutat itself, who must have spoken no Eyak. That [e] vs. [æ] difference might well have been geographically dialectal, however, in the Yakutat dialect of Eyak documented by Rezanov (§3.2.5), who regularly writes that with Russian graphemes for /e/, i.e. <e> and <э> (palatalizing or not, respectively). If the lack of any low front vowels transcribed with Russian /a/ (palatalizing <я> and non-palatalizing <a>) in Rezanov proves total that might well be considered an indication of just that difference.<sup>7</sup> In the Anonymous Yakutat vocabulary dated 1810 (§3.2.6), however, that vowel was often raised, often written with the Russian symbol for /i/ (и), even in between two uvulars, e.g. икихъ (<ikix">) for *yAqe:X* ‘tomorrow’, but the record looks confusing: Of 44 instances of what should be Eyak /e/, 20 are transcribed with symbols for Russian /e/, and 14 show Russian /i/, but 10 show Russian /a/. The best explanation must be mixture, instability, and probably awareness and ambivalence about Tlingit influence. We return to this ambivalence especially in connection with *n-l* variation further below in this section, and in §6.3.4.

More important for comparative purposes might be the difference that Sewak in some cases preserves distinctively labialized front velars obstruents, as in his *'i:nsiLgwehGL* ‘I’m lonesome’. This is certainly also under the influence of Tlingit, which has a stable contrast between labialized and non-labialized velars (also for uvulars), lost or mostly lost in Eyak. However, such distinctive labialization is partially preserved, to a varying extent, in the Eyak of other speakers, including George Johnson. (For ‘I’m lonesome’ Johnson had *'i:nsiLgwahGL*, though with irregular vowel correspondence or variability.) There are labialized velars reflected in the Russian vocabularies, especially those from Yakutat, sometimes in items where such are not attested in modern Eyak, deserving of further research. Though Tlingit influence obviously plays a (conservative!) role here, retention of distinctive labialization is more complex than simple dialect geography, as discussed at length in §4.3.3.

Of Athabaskan, Eyak and Tlingit, Eyak alone denasalized the one sonorant that had no non-nasal counterpart, the coronal \*n, creating sonorant /l/.<sup>8</sup> The basic Eyak rule is that /n/ denasalizes to /l/ before a (non-nasal) vowel. First, however, /A/ [ə] has elided between /n/ and a coronal obstruent, /n/ becoming length and nasalization, and VnAnV has become V:nV. But then in nAC<sub>[-coronal]</sub> and nVC<sub>[-nasal]</sub>, /n/ has become /l/. That also keeps a contrast

7 Rezanov quite consistently writes Eyak /e/ (open front) with Russian symbols for /e/ (mid front), palatalizing or not. So far one possible exception has been noted, in Тасукльаттиля <Tasukl'tattilia> ‘shalis’ ‘you’re making a (rowdy) noise’, for *da' suhgLdah di:leh* ‘you’re giving one a pain with your noise (oral action)’, where the stem -ля <-lia> has palatalizing <я>, as usual for Russian hearing after /l/, probably also trailing off, verging on reduced (and raised in Russian), therefore not a strong example.

8 Athabaskan developed voiced fricatives, including voiced /l/ from \*L, though \*l remained fricative rather than sonorant in some languages. Tlingit /n/ turned into [l] in the speech of a few people, who according to James Crippen (p.c. 2017) were to be found mainly or only in the northernmost “Gulf” Tlingit dialect area, which could thus be an effect of Eyak influence.



between segmental /l/ and /n/, and makes alternation between /l/ and nasalization a major issue in Eyak morphophonemics (viz. §6.3.4).

The point here is that it appears from two of the three Russian vocabularies from the Copper River end of Eyak territory (Khromchenko 1823 [§3.2.9] and Furuhjelm 1861 [§3.2.14], but not from Wrangell 1839 [§3.2.10]), that there is a significant proportion of instances of /n/ instead of /l/, whereas both Yakutat (1805, 1810, 1812) and modern Cordova Eyak have almost always /l/. In fact, statistical analysis (see below) shows /n/ for /l/ about six times more frequently in two of the Copper River vocabularies than in the Yakutat ones. This may reflect a geographical variation, dialect difference, at that time, however minor. This is also especially interesting, ironic even, in view of geography and expanding Tlingit influence, that /n/ is less prevalent at the Yakutat end where Tlingit (having /n/ only) is strongest. Such surprising geography requires an explanation. One such is that the Eyak denasalization of /n/ to /l/ might have begun at the southeast end and was moving northwest, hence was less complete still at Copper River than at Yakutat when documentation began. Perhaps more likely, however, is a sociolinguistic explanation. In view of the great probability that Eyak speakers were acutely conscious of *n-l* variation especially in the context of identification of /n/ with Tlingit, it seems at least as likely that the difference in the rate of /n/ for /l/ was idiolectal, sociolinguistic at least as much as geographical.

To keep this discussion at all proportionate within the relatively small issue of Eyak dialectology overall, I shall forgo lengthy philological documentation, presenting the data in abbreviated form in 1, merely phonemic transcription of most of the original forms here, with bold <n> where that is modern /l/. For original transcriptions and sometimes inaccurate glosses, see the Dictionary.

(1) /n/ for modern /l/ in early documentation

a. Walker and Strange (1786):

*k'uneh* 'rain'

b. Khromchenko (1823):

*ne:L* 'hair(s)'

*qAnahqa'ga'* 'four'

*nAxah* '[grizzly] bear'

*xu:* [ʼu]lah -*nah* *qe'xwneh* 'I love him'<sup>9</sup>

*q'a:nA qe'L* 'girl'

c. Furuhjelm (1861):

*ne:L* 'hair(s)'<sup>10</sup> (as Khromchenko)

<sup>9</sup> "Correcting" *o-lah* 'about o' to *o-nah*, and with *-neh* for the verb stem *-le'* 'have emotion'.

<sup>10</sup> Furuhjelm also has <Inell> for 'beard', which might be *\*?'ine:L* 'your hair(s)'. A possessed form of this stem was accepted by Marie, but rejected by Lena, and is otherwise unattested; or <Inell> might be otherwise unattested *\*?'ine:L* 'face-hair' with anatomical qualifier *l-*, correctly with *n-* (< *nA-n-*).

- qAnahqwa'ga* 'four'<sup>11</sup> (as Khromchenko)  
*k'unAX* 'i:tinhih' 'chief'  
*sinAXe:'nah* 'my partner' (man speaking)  
*nAGAdAq'a'L* 'axe'  
 <Khalilna> 'young', i.e. *q'a:li Lina:*, modern *q'a:l Lila:* 'man in his prime'  
*dAGnah qAXah* 'trout-moon'  
*ts'a:tl'gya' nahG* 'infant' < 'inhabits moss-cradle'  
 <Ashtliakanalte> 'that', which must be read '*anhsh tla'Xa'nah?* 'is he a Tlingit?'  
 <Nakhtanah> 'star', most likely for *yAX dAna:X* 'it moves about'

The very first instance of /n/ for modern /l/, however, antedates the Russian period, in Walker and Strange's 1786 Prince William Sound Chugach Yupik vocabulary (Walker 1982): *k'uneh* 'rain', whatever may be made of that. Then Khromchenko, Copper River 1823 (§3.2.9), has at least six instances of sixteen with /n/ instead of /l/. Wrangell (1839), strikingly, has no instances of /n/ out of 17 for /l/. But then Furuhjelm 1861 again has the same high rate as Khromchenko of /n/, probably only 9 of 26 instances with modern /l/. Taking Khromchenko 1823 and Furuhjelm together, we have /n/ instead of /l/ in 15 of 42 instances (36%), in striking contrast to Wrangell (0 of 17).

The three Yakutat vocabularies show a far lower rate of /n/ than these two of three from Copper River. The smallest, "Baranov" 1812 (§3.2.7) shows no /n/ of 13 /l/, 10 of which are probably copied from 1810, so 1812 may nearly be judged as a non-source here. By far the largest source is Rezanov (1805). We can estimate from the five other vocabularies that about 16% of the 1128 entries have prevocalic /l/, i.e. ca. 180 instances, and of these 12 have /n/ instead /l/, a mere 6.7%. Of these 12, 8 cluster in two morphemes: passive *sLiniL* 'made' (of bone, iron, brass, stone) four times, perfective stem of an irregular verb, and four times in the qualifier prefix *lAXA-*, *nAXAt* 'its' 'hail' twice, *nAXAsAq'Ats'L* 'squinted', *nAXAsAXALinh* 'he's drunk'. Another is O-'*LA-ne:-G* 'believe O', with negative suffix -G on the stem *-le(?)*, also irregular and with *LA-* classifier. Two more are specially related to nasalization: *qa:na't* 'our/human tongue' (cf. O-*L-'na't* 'lick O') and *qa:tsin'nAyAq'd* 'inside of our/human neck'. The last is in what may well be a nicely diagnostic doublet *na:Ltah* 'сумка (<sumka>) (bag, purse)' along with *la:Ltah* 'мешокъ (<mieshok">) (bag)', the former probably smaller and/or finer; the identifiable Eyak meaning is in the *-L-tah* part, 'bag'; the *la:-* has no identifiable meaning, but the *na:-* variant thereof may well accord with higher prestige for Tlingit. As for the 1810 Yakutat vocabulary (§3.2.6), with Eyak then approaching extinction there, that is replete with Tlingit loans; yet it has an even lower rate of /n/ for /l/ than Rezanov (1805), only one /n/ in 34 instances, prefixal

11 The metathesis of labialization in *qAlahqa'g(w)a'* is only possible from Tlingit influence, as Eyak has no /qw/. Furuhjelm has this form for the highest numeral 'one thousand' (!), along with *qAlahqwa'ga'* for 'four', perhaps implying—if we try to give this some meaning—that Tlingits count higher!

in *nALch(inhinh?)* ‘A is smelling B’s face’. That is more than matched, however, with two cases of exactly the reverse, /l/ instead of /n/. One is in *акунътляга* <akun”tliaga> ‘big river’, i.e. *’a:n-gu:n-’LAYA*, the <t-> here for ‘, instead of expected *’a:n-gu:’nAYA*, modern *’a:ngu:’nAw* (as *-Vn-’nV-* regularly becomes *-V:’nV-*). Even more interesting is in the second such term in the 1810 vocabulary, precisely copied in 1812, <tatsu ilAgA> ‘скот (<skot>) (cattle)’, which must be read *dAts’uh-’i:(n)-’LAYA* ‘that big thing (*l*-class) which is sucked (on)’, obviously a neologism for an animal with a large udder.<sup>12</sup> In this ‘cattle’ term, the *i-* for the *l-* noun class qualifier (cf. *l-* class for *ts’u:* ‘female breast’), unlike the *gu:n-* for *gl-* class, does not explicitly show nasalization, but this merely means that the denasalization rule before /n/ may have been applied. The significance of these two items is that we have in the same morpheme, *-’LAYA* ~ *-’nAYA* ‘big’, this same /l/ instead of /n/. This substitution has to be an analogical innovation, in fact an overcorrection for what must have been felt by the Eyak speaker as Tlingit influence, so clinging pointedly to Eyak /l/ instead of (even correct Eyak) /n/.

These data seem to support an explanation that at both ends Eyak speakers were quite aware that the *l/n* opposition had a connection with Tlingit influence and prestige, and that there was ambivalence about Tlingitization. The Yakutat 1810 speaker (§3.2.6) wanted to make a point of what was Eyak in spite of Tlingit prestige (cf. above on the 1810 phonetic variation on the low front vowel), while two of the three Copper River speakers used more /n/ in fact because of that prestige, as Tlingit was rapidly becoming fashionable there. Except for Wrangell (1839) with no /n/ for /l/, definitely at Copper River, this does not necessarily preclude validity of the hypothesis that *n > l* also had geographic dialectal basis, moving northwest, nor does it answer the question of the degree to which the /n/ for /l/ was retention of \*n or was reversion to /n/.

The unrounded velar sonorant of Yakutat Tlingit, attested also in Yakutat Eyak, at least as a variant of /w/, is also evident at least in Furuhjelm, the last of the three Russian vocabularies from the Copper River end, showing that that variation was not geographical.

In morphology no dialectal variation has so far been noticed except that the use of *s-* optative is more frequent in Rezanov (1805), especially with *d-* interrogatives, but note one instance also in Furuhjelm 1861 (see §12.3.3.4 for *s-* optative). Likewise, the gerund with prohibitive, e.g. ‘no spitting’, is much more frequent in Rezanov than in modern Cordova, but Rezanov rather frequently tried to elicit negative imperatives. It is true at the same time that neither *s-* optative nor gerund with prohibitive was frequently elicited for modern Cordova Eyak. Further, the directional postposition *o-ch’a’* is much more common for *o-ch’* in Rezanov than in modern Eyak, but that too is only a matter of frequency.

<sup>12</sup> The Russian word *копова* ‘cow’ is included in the 1810 list, with no response, as if unknown, though commonly a loan from Russian elsewhere in Alaskan languages. Not in Yakutat, however, as the Eyaks as well as the Tlingits evidently had far more interest in the resources of the ill-fated Russian plantation there (1795–1805) than in the Russian language.

Documentation from Yakutat is hardly enough to conclude such uniformity for syntax, but if there was such difference, it would more probably be due to the evident instability of modern Cordova syntax, itself perhaps all attributable to the time difference between 1805 and 1965. Most notable otherwise is the case, in a sense syntactic, of the emphatic enclitic =*duh* (§27.5), much more frequent in Rezanov than in modern Cordova Eyak, but evident also in Furuhielm's 1861 Copper River vocabulary.

Practically no differences have been noticed in semantics or lexicon either. The most striking exception noted, perhaps the only one documented, is Yakutat 1805 *-wAt'* for 'stomach' (in Rezanov 1805), attested in Cordova only as *wAt'* 'vomit', with no memory of the meaning 'stomach' (cf. PA *\*-wət* 'stomach'). Even the Chugach loans, to take *gu:djgALAG* 'eagle' and the remarkable case of *dAXunh* '[Eyak] person' (Malaspina 1791 at Yakutat; see §3.1.4) for examples, are the same in Yakutat 1805, and are yet another sign of lexical uniformity throughout what is known of Eyak.

Statements by de Laguna (§3.3.4) that there was dialect differentiation within Eyak (of 1930's Cordova) are almost certainly incorrect. They must be due to need for explanation for the inescapable fact that her own transcriptions and those of her colleagues were so inconsistent. Note e.g. her statement, "The sometimes striking variations [in transcription] between the words given by these two men [Galushia Nelson and Old Man Dude] may suggest dialectic differences" (Birket-Smith and de Laguna 1938: 555).

What is most remarkable is certainly the virtual absence of dialectal differences, and instead a very high degree of uniformity over both distance and time between the Eyak of Yakutat and of Cordova. This has to indicate a rather shallow time-depth of the historically known geographical distribution of the Eyak language. As discussed in §2.1.1, to the extent that this is true also of Tlingit, in which dialect diversity is clearly at the southern end, it follows that the simplest explanation would be that Eyak was once much more widespread over what is historically Tlingit territory. Even though there may be no trace of Eyak place-names much south of Yakutat, again, if there ever was much dialect diversity within Eyak, even different Eyak languages, it was to the south in what is now Tlingit territory. Of Eyak dialectal diversity then, what survived long enough to be documented was only the northern extremity, with practically no internal diversity remaining in that remnant pocket not yet given over to the advance of Tlingit.

The only previous comment other than de Laguna's on the subject of Eyak dialectology is one archival manuscript page in Krauss (1966b), listing *inter alia* the subjects of the status of labialized velars, phonetics of /e/, legitimately, but also others, e.g. status of reduced vowel contrasts, which, as noted above, probably do not deserve to be called dialectal in any geographical sense.

There may be a trace of earlier dialect mixture in modern Cordova Eyak, sure enough *l ~ n* alternation in a few forms, notably *-gunAGAG* 'hip' consistently with *gunA-* instead

of expected *gula-* ‘hip area’ qualifier prefix; *gunux-ts’e* ‘gut-skin parka’, where the first element is conceivably as in the preceding, though more probably a disyllabic stem, with normal /n/; further *xa:nih* ‘old salmon’, if not a loan from Athabaskan, with unexplained retention of /n/; and last *’AnAXAnAX* ‘Alaganik’ from Chugach *alarneq* ‘switchback in river’, though most probably through Tlingit, or from Tlingit influence.

Anna’s text 68 on Eyak History and Language (Krauss 1970b), on people who talk Eyak “backwards” (*q’e:yAXAch*) (Krauss 1982), must be fanciful in any literal sense, and may well be in some degree her response to my insistent checking with her if she had ever heard a variant dialect of the language. The examples she gives are lexical differences, e.g. *sAqe:G* ‘(man’s) son’ for ‘(woman’s) son’, *ya:X Xdl-L-shuh* ‘put out the fire’ for ‘light a fire’, and it is possible that *q’e:yAXAch* itself might be better translated as ‘contrarily, perversely’ than literally ‘backward’. Anna is referring to people she met in Yakutat, but it is unclear whether she is referring to people who had moved there from Bering River or, conceivably, from Kaliakh. Such has to have been her creative sensitivity to my difficulty in believing Eyak could be so uniform, and my need to evaluate de Laguna’s comment about “dialectic differences.”

## 2.3 Eyak in the Alaska Native Language Archive

As of 1960, when I came to Alaska, significant work on Alaskan languages had already been done, some of it in various repositories, especially Russian, or in private hands, but there was nothing like an archive or collection of that work as such. From the very beginning I made a point of finding it, getting copies by available technologies, to include full use of it in further documentation of Alaskan languages, and to develop an archive of all such material, published or not, including manuscripts of publications, for fuller or more accurate copy of early data. At first this project involved written materials almost exclusively. Documentation in the form of sound recording amounted to far less in 1960, but of course that then grew very rapidly in proportion. Digitization started to become a major modality in the 1990s. In 1960 the total amount of extant material, still scattered, might have been five linear feet on paper. Both then and now the Eyak section was and is a small but disproportionately large part of the archive.

By 1961 the archive was one bookshelf in my office, by 1972 a big bookcase. In 1972 my office became the Alaska Native Language Center, as a special add-on to the University of Alaska Fairbanks (UAF) by act of the State Legislature, which made no mention, however, of preserving the results of the Center’s work in an archive. The growing Center was then moved three times to different buildings, in the last of which the archive occupied a whole wall of my office. Then in 1986 the Center ended up back in its original building as several offices, with a whole room for the archive itself, a spacious former “language laboratory,” which we converted to 900 feet of open shelving, and a study room. In those heydays, the shelf space was rapidly filling. In 2000, the Center’s space was preempted by the UAF

administration, and the Center was moved again, but to inferior space especially for the archive. Administratively, the archive was still only an informal entity within the Center, and I retired as Director of the Center.

In 1999 Gary Holton had joined the Center, and took an active interest in the archive. During 2001–2008 he managed to develop the archive stepwise into its own administrative entity, with its own budget lines. In 2009, given the shift in the Center’s priorities and the issue of appropriate space for the archive, the archive was separated administratively from the Center, and moved physically to the Rasmuson Library of UAF, under the administration of the deans both of the Library and the College of Liberal Arts. In February 2012 the archive was officially designated the “Michael E. Krauss Alaska Native Language Archive,” at a ceremony attended by university and state officials. Today, the Alaska Native Language Archive (ANLA) is a unit of the Alaska and Polar Regions Collections and Archives within the Rasmuson Library. Holton served as ANLA Director until his departure from UAF to the University of Hawaii in 2015. Then Siri Tuttle of ANLC assumed the role of Interim Director, a position which was made permanent in 2016. ANLA has office and workspace on the Library’s second floor, with ample shelf space and workspace on the first floor. That has the advantage not only of space quantity, but also security far superior to anything the Archive had before. That also entails, however, being two or three floors below ground level, movable compact shelving, and direct access only for ANLA or Library personnel.

ANLA is considered a “legacy archive,” because of its now venerable base on paper and tape sound recordings, from the years I presided over it 1960–2000. For that the Archive officially even bears my name. It has since gone through profound change not only physically and administratively, but also through technology. Already in the 1990s some researchers had begun taking fieldnotes on their computers, and publication or the like had started to be online, as more and more materials relevant to Alaska Native Languages began to appear on the Internet, if not primary data. Most importantly for the public, ANLA’s “legacy” resources started to become more widely accessible, through Holton’s direction of ANLA, with priority for the digital scanning of its resources. By now, at least 90% of ANLA is scanned and accessible on the Internet. The description and cataloguing of ANLA’s holdings is another matter, to be taken up below, in connection with the Eyak section.

This provides for the background the Eyak section of ANLA, which is, as noted, a small but disproportionately large part of it. In 2006 the Eyak section filled about 18 linear feet of written material. All the Eyak material previous to mine, i.e. Anderson 1778 to Austerlitz 1961, filled most of the top-most, three-foot long shelf. The contents of that are, in fact, well accounted for or described in summary in §3.3.9, and in more detail in §§3.1–3.3.8. The next three feet included my field notebooks, 18 in number, and the original typed text and dictionary up to 1970, filling eight heavy-duty spring binders for the dictionary and three for the texts. The next four feet contained the reduced texts and dictionary, the 1982 *In Honor of Eyak* draft and derivative material, but also about 35 manuscript files, mostly not mentioned so far, studies by me of various aspects of Eyak grammar,

phonology, verbal affixes—done mostly between 1963 and 1969. Those materials, to 1980, are well catalogued and described in the published catalogue (Krauss and McGary 1980). The main Eyak work since then has been my writing of the grammar, which started with paper data organization, but has been basically composed on computer without paper. The rest of the shelving was occupied mostly by files of material for Eyak history rather than language. In this respect the Eyak section is exceptional for the Archive, in that I also collected—though did not catalogue—not only all linguistic material I could find for a given language, but in the case of Eyak also all the historical material. That is, material not necessarily containing anything about the language, partly because of my special interest in Eyak but also because such material is relatively limited. That historical part is in seven substantial files: 1783–1789, 1790–1799, 1800–1867, 1868–1879, 1880–1889, 1890–1899, and 1900–. This is a major source for anyone interested in Eyak history, a large part of which is Russian.<sup>13</sup> The last three feet was occupied by my 1966 ledger-concordance file. There are also slip-file boxes, microfilm reels (especially Harrington, Austerlitz, as well as print-outs thereof), tape recordings, video recordings, some correspondence, and photos.

As noted in §2.1.3, the Eyak Preservation Council was founded in 1993. One of its early contributions for the project was to have the archived Eyak material digitally scanned, making that the first part of what was to become ANLA so treated. That work was patiently and devotedly done by Karl Bergman. The record of Eyak was thus the first part of the archive to be scanned, by a dozen years.

The entire Indian languages sector (about 40%) of the archive to 1980 was catalogued in Krauss and McGary (1980). This publication was organized according to the physical arrangement of the archive itself. That arrangement is first by language, with a two-letter designation, EY for Eyak. Under that, for each language the organization is basically chronological, authors not ordered alphabetically but chronologically, according to the year they are first known to have done the work for the language. Thus Krauss for Eyak is 1961, Austerlitz is also 1961. The designation for my Eyak work is EY961K (dropping off the thousands digit, which I considered redundant), Austerlitz's EY961A. All of Austerlitz's Eyak work is therefore shelved and catalogued before Krauss's, in that sense or to that degree alphabetically.<sup>14</sup> Then all the work attributed to a given author is arranged

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13 For most of the 20<sup>th</sup> century of Eyak history there is only one file. This must be blamed on the fact that, ironically enough, it would seem, the 20<sup>th</sup> century is by far the most poorly documented period of Eyak history. What was left of Eyak was confined by then to the Cordova and Bering River area. There were newspapers at Cordova and even at Katalla. Unfortunately there is nearly no mention of Eyaks in any of those papers, perhaps with the exception of someone (Irish name) “caught again selling liquor to the local aborigenes,” and one jeering note on Galushia's Nelson's failed suicide attempt (references lost). The main additional sources, still needing investigation, would be especially local police and court records, and St. Michael's Orthodox Church records. Note again Birket-Smith (1935) for a revealing account of the Eyaks' situation at the time. Twentieth-century Eyak history remains a major subject for further research.

14 A further defect of that is merely “mechanical,” that the whole basic order of presentation is doubly garbled or violated by the computer. My brilliant omission of the “redundant” first millennial digit from

chronologically also, so something I did on Eyak in 1963 is designated EY961K1963, or EY961K1963a, etc., if there is more than one item in a year. Nearly all the work I had done on Eyak before 2006 had been done before 1980, so the 1980 catalogue publication is still important, together with the history published here, some of which appeared in Krauss (2006), in memory of Frederica de Laguna.

This brings us to the current online ANLA catalogue, as it is through that that the Archive may be accessed most widely by the public (<http://www.uaf.edu/anla>). Much of the work specifically for that catalogue, including the Eyak, was done by an assistant archivist at the Rasmuson Library. She did follow the basic organization described above, and kept the designations of the work already done, but she did not consult me in the work, or the 1980 catalogue, or have skills with Russian. That catalogue is thus done without regard for what was available for an understanding of the archive contents, especially the Eyak. In 2015 Wendy Camber and I did some intensive work toward improving the online Eyak catalogue, but it remains to be seen what will come of that. It is my hope that the present Introduction can help with the current deficit of the online catalogue for Eyak.

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the designation has now put the work of anyone starting in the year “000” in front of anyone’s starting in “805”, reversing the millennia. Further, for someone interested in EY, it has placed in front of that any work tangentially or partly or even incidentally concerned with Eyak, e.g. any such work catalogued for AT (Ahtna) or CA (Comparative Athabaskan), a large category, shelved ahead of EY, thanks to the alphabet. It remains to be seen what can be done about that; meanwhile the user has to see through it.



## 3 HISTORY OF EYAK LANGUAGE DOCUMENTATION AND STUDY

An earlier version of part of this chapter appeared in the journal *Arctic Anthropology* (Krauss 2006), in a volume dedicated to the memory of Frederica de Laguna (cf. §3.3.4). The broader point of that earlier article was that Eyak is an egregious example in the history of science, of how its progress can be halting and even retrograde. De Laguna was certainly a key figure in the history of the study of Eyak, even in the history of Eyak itself. The stunning point here is that the Russians knew impressively well about Eyak, and had published extensively on the language. Within three years after the sale of Alaska to the United States (1867), American science had completely lost track of all previous work on Eyak, and then had even managed to become totally unaware of the existence of Eyak itself. This includes the Boas group soon so active on the Northwest Coast, though Americans such as Gallatin and Gibbs earlier were quite aware of the Russian work on Eyak, which by 1862 included even a precise published color map!

The earlier version of this paper highlighted the role of de Laguna. Eyak may well have remained in oblivion, through its very extinction, had not de Laguna stumbled upon it in 1930 at Cordova, while outfitting for Chugach archaeology.

### 3.1 The Pre-Russian period, 1778–1791

The Russians' first direct contact with Alaska Natives in Alaska was Gvozdev at the Diomedes and King Island in 1732; Bering's first landfall, on Kayak Island in 1741, without direct contact, was just offshore from Eyak territory. However, the Russians apparently did not approach Eyak territory again for another forty years, until the 1780s, and did not establish installations near it until the 1790s. In the meanwhile, 1778–1791, at least seven foreign expeditions made significant contact at the extreme ends of Eyak territory. Four of those left information relevant to the Eyak language, two English at the Prince William Sound end, Anderson in 1778 and Walker and Strange in 1786; one English (Colnett in 1788) and one Spanish (Malaspina in 1791) at the Yakutat end. They wrote down Native Alaskan words including some Eyak, or noticed Eyak as being different (Colnett). The Eyak words at Prince William Sound, 1778 and 1786, were an admixture in formal Chugach vocabularies, not recognized as Eyak by the transcribers, and that at Yakutat was an Eyak ethnonym in addition to a formal Tlingit vocabulary. Here we shall deal only with those sources, not with those several more that may have had direct or indirect contact but show no evidence with Eyak language data or recognition of Eyak as a separate language from Chugach and/or from Tlingit.

### 3.1.1 Anderson 1778

William Anderson (1750–1778) was James Cook’s surgeon and naturalist on the *Resolution* in Alaska. This young Scot, not yet thirty and dying, was certainly one of the great lights on that momentous expedition. Modest, agreeable, diligent, Anderson was a most loved and esteemed member of that illustrious crew. His ethnographic and linguistic skills were outstanding, as were his medical and naturalistic. By the time the expedition reached Prince William Sound, mid-May 1778, Anderson knew he was near death from the tuberculosis that had consumed him for a year. His journals end two weeks after the expedition left Prince William Sound, and he died at sea, August 3. The last of Anderson’s three journal books from that expedition is lost, most unfortunately, and all we have left of it is what was taken from it by editor Douglas for Volume II of the published *Voyage* (Cook 1784). This includes, on pp. 375–376, a “Vocabulary of Prince William’s Land,” a list of 25 entries. Of these, the last eight are numerals, not from Prince William Sound, however, but from Cook Inlet Tanaina Athabaskan – presumably unbeknownst to the editor. This short vocabulary thus has the first words ever written of Alaskan Athabaskan (as well as of Alutiiq and probably Eyak). The expedition reached Cook Inlet about one week before Anderson ceased to write, so those numerals must be his very last fieldwork. Of the remaining 16 words on the list, ten are identifiable uniquely as Chugach Yupik, two could be either Yupik or Eyak, and three are not identifiable as Yupik but could well be Eyak. The best example might be “*Akashou*, What’s the name of that?”, probably Eyak *’a: k’e:’shAw* ‘he/she/it maybe?’ or *’anh k’e:’shAw* ‘he/she maybe?’, meaning roughly ‘Do you mean him/her?’, hardly a poor response, given no common language. The year 1778 seems rather early for Eyak to be in evidence in Prince William Sound, as the Eyak takeover of even the Copper River Delta from the Chugach may not have begun until the early 19<sup>th</sup> century (cf. §§3.2.5, 2.1.3). If the words were not from Eyaks directly, it could well be that the Chugach were using some Eyak words they knew, in order to communicate better with the English, especially since they must have known that the ships had come from the Eyak direction.

The only manuscript source or version for this vocabulary is Admiralty ms. 55/113, f. 60, a clerk’s copy of a comparative Inuit-Yupik-Aleut vocabulary, which for “Sandwich [Prince William] Sound” includes only the Tanaina numerals plus <Aa><sup>1</sup> for “Yes, or Aye” (which could be Yupik or Eyak) and <Akā’shou>, glossed “What call you that?” It is thus an independent source from that published, and for some reason very partial. Of course it raises still further questions as to what was in the lost Anderson journal, of which perhaps only this hodgepodge remains. Hence, it is quite unclear just how accidental the potential Eyak entries were.

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1 Here and throughout this chapter angle brackets indicate the transcription used in the cited sources, *not* Eyak practical orthography. In particular, uppercase letters <A, G, L, X> refer to the use of capital letters in the original source transcription, not to phonetic equivalents [ə, l, q, χ], respectively.

### 3.1.2 Walker and Strange 1786

Eight years after Anderson with Cook, two more enterprising Scots, now from the British military in India, sailed to Prince William Sound, where they also took down a Prince William Sound vocabulary. The expedition, private though loosely associated with the British East India Company, was organized and led by James Strange (1753–1840) under the military command of Alexander Walker (1764–1831) in the *Experiment* and *Captain Cook*. Inspired by Cook's 1884 *Voyage*, their expedition, though basically commercial, also had scientific goals, and had also put in at Nootka, where they had collected a much larger Nootka vocabulary, before sailing to Prince William Sound. They were in the Sound from August 29 to September 16, 1786. Both men kept journals, but neither was published until the 20<sup>th</sup> century. Strange's appeared in 1928 and 1929 (reset, vocabulary pp. 54–57 in both printings; Strange 1928, 1929). Walker's vocabulary was not published until 1982 by Robin Fisher (nicely, with informative apparatus and background; Walker 1982: 156–160). Unlike the unfortunate case of Anderson, we also have at least five manuscripts including the vocabulary, though still not the original one.<sup>2</sup>

Though ordered differently, Walker's and Strange's Prince William Sound vocabularies are basically alike. Both men were highly accomplished, but Strange was more the entrepreneur and businessman, while Walker had a very lively interest in ethnography and linguistics, and during his decades in India collected hundreds of Sanskrit and Persian manuscripts. It is therefore quite probable that the original of the Prince William Sound vocabulary (as well as that of Nootka) was entirely or mostly the work of Walker. Strange, in any case, was quite aware of the vocabulary's value, so included a version of it also in his report.

Most of the 120 entries are clearly identifiable as Chugach, but there are eight which are much more probably Eyak, and not identifiable as Chugach, or hardly so. These entries are scattered in Strange (S), but—very significantly—six of them are clustered consecutively toward the end in Walker (W). An example of the non-clustered in Walker are W <Konee>, S <Hoonee> (S 1929, but S ms. <Koonnee>) 'to rain', modern Eyak *k'u'leh*, from older Eyak \**k'unekh* 'rain', suggesting significantly earlier contact between Chugach and Eyak; the closest possible Chugach for that form would be *qaniq* 'snow'. An example of the clustered entries is W <Esh-est-esh>, 'ho. you. do you hear', cf. S <Esht-est-esh> 'Ho! you! do you hear? calling to one.' This cannot be read as Chugach at all, but as Eyak *'i:shd*, *'i:shd*, *'i:sh*, where *'i:sh* is *'i:=sh*, the 2s independent pronoun with the interrogative enclitic, i.e. 'You?'

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<sup>2</sup> For Strange we have three ms. copies: Tamil Nadu Archives, Madras, number not given (from which the 1929 publication presumably comes); British Library, India Office, Home Misc. 800, ff. 158r?-160r?; both are "true copy from the original" signed by Strange; and Archive of British Columbia, F8 S8, pp. 15-19. For Walker we have mss. 13776-13781 at the Scottish National Library, of which at least two include the vocabulary, 13778, ff. 90v-92v, and 13780, ff. 113r-114v. Walker himself states the original is lost. Walker (1982) is from the more fully prepared 13780, but the vocabulary is from 13778, presumably being closer to the original.

cf. standard modern Eyak *'i:shuh* ‘Hello’, literally ‘Is it you (sg)?’; the *'i:shd* is not attested as such in modern Eyak, but cf. *'i:=sh=d=uh*, roughly ‘I wonder if it’s you (sg), could it be you (sg)?’, possibly truncated. They both also have (W and S) <Agalshou> for ‘What is that?’ probably in an attempt to reelicit Anderson’s <Akāshou> ‘What call you that?’ as they must certainly have had a copy of Cook (1784), with the result *k'e:'[-d]* and *AY-*, *'AlshAw* (where <Y> is a velar approximant [ɥ] about to become a [w]), thus, roughly, ‘How?/Wha—?’ and ‘[you mean] tha—, this?’ with truncations, giving a pretty vivid picture of these attempts at communication. Without going further into linguistic detail, suffice it to say that possibly Anderson 1778 and even more possibly Walker-Strange 1786 had even an Eyak subsection in their lost original Prince William Sound vocabularies, or of course Chugach speaking Eyak, though there is no evidence they knew they were getting more than one language there.

However, if this were all we had, the forms are too few, and the correspondence between the forms and meanings too vague, for us so far to know, without the subsequent record, that there ever was an Eyak language—perhaps only that there was some strange admixture in Prince William Sound Yupik at the time. Also of course the spellings are far too deficient for us to discern phonetically whether the Eyak words were spoken by Eyaks or by the Chugach.

### 3.1.3 Colnett 1788

The last British source, of a new kind, is James Colnett (1755?–1806) in the *Prince of Wales*, who had been in Prince William Sound for a month, sailed thence to Yakutat, and stayed there a week, June 3–9, 1788. His journal from that voyage was only recently published (Colnett 2004). De Laguna (1972: 128–32) quotes from the manuscript, about Yakutat (here quoted from Colnett 2004):

“At this place appears to commence a different Nation from those residg to the North...& I believe belong to different tribes, as there was a Variation also in their Language, several counting numbers not with the same name & when ask'd where resided pointed different ways.”

Colnett thus observes that there is more than one language at Yakutat. Moreover, he seems to imply, perhaps, that neither is the same as what he heard in Prince William Sound, of which he had even written a short vocabulary. De Laguna adds: “Unfortunately no [Yakutat] vocabularies are given.” If there had been even a few numerals, we not only would have our first evidence that the other end of Eyak territory was Yakutat, but we already would also have had our first written direct proof that Eyak was different from both Tlingit and Chugach—though that might hardly have changed our history without being published.

### 3.1.4 Malaspina 1791

We do not know for certain that there were Eyaks at Prince William Sound before Russian penetration, except insofar as we can tell from Anderson (cf. §3.1.1) and Walker-Strange (cf. §3.1.2). At the other end of known Eyak territory, however, we have plentiful evidence that Yakutat Bay was still partly Eyak. Just before Russian infiltration of Yakutat, we still have one more “pre-Russian” contact and source for Eyak language in Yakutat too: the major Spanish expedition of the *Descubierta* and *Atrevida* led by Alessandro Malaspina (1754–1810), an able Italian in Spanish service. Malaspina’s expedition, the most ambitious the Spanish ever dispatched to Alaska, was clearly intended as Spain’s response to Capt. James Cook and his scientific accomplishments. Malaspina anchored in Yakutat Bay for ten days, June 27 to July 6, 1791. After his return to Spain, he was writing up the expedition results, 1794–1795, but ran afoul of Spanish politics. He was imprisoned 1795–1803, his papers were seized, and the results of his Alaskan voyage were long suppressed.

Finally, in 1885, a report appeared that included a Yakutat vocabulary. A “Vocabulario del idioma [Puerto] Mulgrave,” appeared in *Viaje Politico-cientifico alrededor del Mundo – desde 1789 a 1794* (Malaspina 1885: 349–51). Unfortunately, this is a nearly pure Tlingit wordlist, of 126 entries, written in Spanish alphabetical order, with the addition of 26 numerals. Of the 126 words included, well over 100 can be clearly identified as Tlingit, and virtually none of the remainder appear to be Eyak. One might wonder at the absence of Eyak admixture, given the still-prominent presence of Eyak at Yakutat in 1791. However, from the introduction to the vocabulary, the explanation is all too clear. The 1885 version is as follows:

“En la formacion del corto Diccionario que aqui se agrega, no nos hemos tampoco apartado del metodo lento y reflexivo, que nos habiamos propuesto: muchos Oficiales han formado por si un Diccionario separado, y confrontados estos no se ha admitido voz alguna, la cual no tuviese la sancion general o no descubriese de donde dimanaba una o otra contradiccion.”

[In compiling the short vocabulary added here, we still did not depart from the slow and thoughtful method we intended; several officers compiled a separate vocabulary by themselves, and comparing those, not a single word was included which did not meet general approval or where the source of any remaining discrepancy could not be discovered.] (Malaspina 1885: 149)

This standardization surely could have been no trivial task. Insofar as the officers were truly working separately rather than looking intently over each other’s shoulders, the chance that any two would come up with the same words independently—and even the same spelling of them—had to be infinitesimal indeed, given no common language and the vast differences between Spanish and Tlingit or Eyak sound systems. They were in any case mightily striving that their collective result should be correct, authentic, official, standardized, pure Yakutat Tlingit language, cleansed of deviant impurities that they took

such pains to reject. The probability that much of what was rejected was Eyak is of course very high—perhaps even whole lists of the greatest interest for Eyak were thus lost.<sup>3</sup>

The Malaspina expedition is not quite a total loss for Eyak, however. The captain of the *Atrevida*, Antonio de Tova Arredondo, reports that on approaching Yakutat again on July 25, from the West, they met and traded with a canoe headed toward Yakutat: “his language differed somewhat from that of the natives of Port Mulgrave” (Ortiz 1943: 161). Wallace Olson (pers. comm. 2/12/2002) reports a Bauza ms. account of the same contact, more detailed about his language, as follows:

“Era un joven de buena statura, y de fisionomia muy semejante a los de Mulgrave: el idioma parecia no ser el mismo; pues no contestaba a varias palabras que se le dijeron en aquel; parecia habil, y manifesto muchas complascencias en los regales que se hicieron.”

[He was a young man of good stature, and his outward appearance was very similar to those of Mulgrave; his language did not appear to be the same, since he did not respond to the various words which were spoken to him in that (language); he seemed clever and showed a much pleasure in the gifts that were given to him.]

Though we may never find record of any words written down from him, the accounts do indeed suggest his language may have been Eyak. It is of course unlikely that he knew no Tlingit, but, insofar as the Spanish were presumably reading off their Yakutat vocabulary we know, one can easily imagine their pronunciation from their woefully deficient transcription was so poor that the words could have been unrecognizable even to a Tlingit, let alone to an Eyak. For these and other accounts of that encounter, which vary on the man’s language from “the same as” or “similar to” that of Port Mulgrave, to “different,” see (Olson 2002), p. 371 (Malaspina, “same”), 418–9 (Viana, “differed somewhat”), 430–1 (Bauza above), 446 (Bustamante y Guerra, “similar”), 459–60 (Tova Arredondo above). No standardization here!

However, we do indeed have one Eyak word nevertheless from the Malaspina expedition, found frequently, routinely, throughout the Malaspina Yakutat journals, namely the ethnonym for the people themselves, *Tejunenses*, *Tejuneses*, *Tujuneses*, or *Tejunes*. With the Spanish endings removed, that clearly has to be the Eyak *dAXunh*. There the Eyak /d/ corresponds exactly to Spanish /t/, Eyak short indistinct schwa /A/ gets written, unsurprisingly, with an <e> or <u>, Eyak /X/ (a voiceless back velar fricative) is very close to Spanish /j/, and Eyak /unh/ (a nasalized /u/, followed by h-like aspiration)

<sup>3</sup> It therefore became a high priority to search archives, to find any “pre-purified” Malaspina Yakutat wordlists. My search, mainly 1978, 1991–1993, revealed no fewer than nine ms. versions of that Yakutat vocabulary. (Spanish Naval Archives, Museo Naval, Madrid: mss. 95 ff.118v–121v and 348–349v; 289 ff. 32–35v and 72–72v; 425 ff. 155v–157v; 633 ff. 82–83v; British Library, Bauza Collection, ADD. 17.631, p. 30–31, 32–33, and 34–35, copied at Bancroft Library, M-M 525, Microfilm 131.) Sadly, these are all only the same “purified” vocabulary, with but minor variations, relevant only to the early documentation of Tlingit, not of Eyak. (Other much shorter vocabularies from that expedition at Yakutat have also been found, so far from Suria and Bauza, at other repositories, but both these too are Tlingit only.)

is fairly close to Spanish /un/. In short, <Tejun> or <Tujun> is the very most likely result of any attempt to write *dAXunh* in Spanish. That Eyak word means ‘person, people’ (as opposed to animals), or ‘Eyak(s)’ (as opposed to other peoples). The word *dAXunh* is itself unanalyzable in Eyak; it is probably a diffusion from Yupik *taru* (where /r/ is a voiced back velar fricative), meaning ‘person’, usually shamanistically; that is relatable moreover to Eskimo forms which have an /n/, *tanru-*, *tarnu-*, hence probably the nasalization in Eyak; perhaps also thus relatable even to Aleut *tayaru-* ‘man’.<sup>4</sup> This is ironically also the only “Eyak” word in the entire “purified” Malaspina Yakutat Tlingit vocabulary. There it is listed, under *N-*, as “*Nombre de la Nacion o Tribu,*” and is spelled in the manuscripts <Tejunne> or <Tejunue>, usually with an accent, acute or grave, on the final <e>. The variation between the second <n> and <u> is certainly from inversion of a letter, we cannot tell which, the segment <ne> or <ue> not being recognizable either as either Eyak or Tlingit; it must derive from the Spanish versions of the ethnonym shown above, especially the variant with <ne>. The interpretation “[Chief] June’s people” (cited in de Laguna 1972: 144) may well be inspired by Spanish *de*(!). It cannot be justified by any prefix *de-* or the like in Eyak or Tlingit. It remains a mystery, though, how or why this one single basic Eyak word was given as the very definitive name of the people that the Spanish worked so unfortunately hard to get a “pure” Yakutat Tlingit vocabulary from. It is of course no less ironic that the term so definitive of ‘Eyak (person)’ is apparently a loan from the Eyaks’ *supposedly* traditional enemies, the Chugach, to the west. The fact that that definitive usage is documented at Yakutat itself in 1791 implies a more complex and deeper relationship between Eyak and Chugach than might be expected, especially insofar as *dAXunh*, with nasalization, has to come from Yupik with *-n-* as in Siberian Yupik *taghnu-*, modern Chugach *taghu*.

### 3.2 The Russian Period

Malaspina’s 1791 expedition is the end of the pre-Russian period of our history. By 1792 a Russian post was established at Nuchek in Prince William Sound, which lasted peacefully into the American period. Soon after Nuchek, at the other end of Eyak territory, at Yakutat in 1795, the Russians also asserted their presence, much more ambitiously, as a veritable colony. The history of that was short, ten years, but nasty, and for the Eyaks especially fateful. After 1791 information on Eyak and Eyak language is all of Russian origin, until well after the sale of Alaska. Moreover, all the rest of that documentation of Eyak seems to be from the Yakutat end, until about 1820, at which point Eyak was disappearing there. For more on the terminal history of Yakutat Eyak see §2.1.3.

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<sup>4</sup> Editors’ note: we retain Krauss’ use of the term “Eskimo,” as this chapter deals primarily with historical sources which predate the modern hyphenated alternative “Inuit-Yupik-Aleut.”

### 3.2.1 Purtov and Kulikalov 1794

The year before the colonization of Yakutat itself, Egor Purtov and Demid Kulikalov (?–1806)—neither perhaps a very savory character—were leading a sea-otter hunting fleet of 500 two-hatch baidarkas from Kodiak toward Yakutat, stopped at Yakataga, and made a personal visit, May 31 to June 5, to the nearby Kaliakh River village, then still all or mostly Eyak. There are published references to their stay and the fact that they made a census there (Tikhmenev 1863: 82, Tikhmenev 1979: 162–3, de Laguna 1972: 161–3, Grinev 1993: 75–6), and at Yakutat. The manuscript source including the censuses themselves, not published, is at the Русский государственный архив древних актов *Russkii gosudarstvennyi arkhiv drevnikh aktov* (RGADA), фонд 1605, Опись 1, Дело 352, ff. 12–17v. The Kaliakh census (a “копия (Копи́я)”) lists the names and ages of heads of families, their wives, of their sons and daughters, and in some cases status as hostage or prisoner (slave). The Kaliakh list includes 83 such names, including eleven from “Yakutat Bay” (where “circumstances did not permit a full census”). The Yakutat (Akhoi River Village) census itself lists 112. Personal names are very difficult to interpret to begin with, having no meaning shown, if any, being often of foreign origin (here especially Tlingit), and for this period being also very deficiently transcribed. Still, a few names from Kaliakh can be interpreted as Eyak with some confidence, e.g. Елькунтъ <El’kunt’> is ‘*ALku:n’d* ‘grab it!’ (referring to a 25-year old man), Шия <Shiia> is *shiyah* ‘bad/cute’ (a six-year-old girl), and Кийнъкъш <Kiin-ksh> is *k’i:nk’sh* ‘dry salmonberries’ (a 20-year-old wife). Many of the rest also look like they could well be Eyak names, but a good number look more like Tlingit or Chugach. Some Yakutat Bay and Akhoi River names look like they could be Eyak too, but far fewer in proportion, not surprisingly, than at Kaliakh. In this connection, it should be noted that of the Eyak names remembered even from Cordova in the 20<sup>th</sup> century, a fair proportion were opaque, or were of Tlingit or Chugach origin. Thus our first Russian source of Eyak, the Purtov-Kulikalov 1794 Kaliakh census, from or near the Yakutat end, is recognizable as *partly* Eyak, our first such source. But it is in the most problematical realm, of personal names, so that little Eyak linguistic information can be gathered from it so far, even from a list now of 72 or more entries.

I obtained somehow only the last six leaves, ll. 12–17v of the RGADA ms. Leaf 12 appears to be an addendum to the narrative, and 12v–17v are census lists. The leaf-numbering, incidentally, appears to be in a later hand than that of the ms., itself a “копия (копи́я)”.

On ll. 12v–13 is the census of Татлея (*Tatleia*), (chief Сальтъху [*Sal’t’khu*]), done in “May,” no day date. *Tatleia*, a village for which somehow also 72 names are listed, is otherwise unknown. It is an Eyak village that Grinev figures to be in or near Controller Bay, where the expedition spent the period of ca. May 26–29. However, it is not clear what contact, if any, the expedition could have had with the Eyaks, sufficient to allow such a census. From the version of their report in Tikhmenev (1863: 60–67), the local Eyaks avoided any such contact, and no mention of *Tatleia* or a census is made in the Tikhmenev version of the narrative. Until we see the missing pages of the RGADA ms. narrative,



it is unclear whether there is any mention of *Tatleia* or Сальтъу (<Sal't'khu>) or that census there, except for the actual presence of that census at the beginning of the censuses section itself, ll. 12v–13. The Tikhmenev version does mention finally real contact in the Kaliakh area, which they reached May 31. The contact climaxed there June 3, including a “census of all families” at Kaliakh (chief Цкекъ [<Tskek">]) and the Eyaks' agreement to the proclamation that they were subjects of Russia. The proclamation is on l. 12.

However, in the RGADA ms. there is the census of *Tatleia* (ll. 12ob–13, as mentioned) but definitely no census or list of names from Kaliakh. The next list, l. 13v, is that of Akhoi River village (chief Кышлхъ [*Kyshlx*]). The rest of the censuses, ll. 14–17v, are Yupik from the north side of Alaska (peninsula) and Bristol Bay, one dated 1793, in the same copyist hand, but presumably having nothing to do with the Purtov-Kulikalov 1794 expedition.

Grinev understandably states that Purtov and Kulikalov took a census at Kaliakh just as they had at *Tatleia*, perhaps also from the RGADA ms. narrative, but he does not note that the Kaliakh census is missing. Indeed, from the Tikhmenev version of the narrative, it does not appear possible that they could have gotten any Eyak census before the Kaliakh contact. They would have had no reason to omit note of such a success, and there is only one census from that general area in the RGADA ms. One might therefore think the *Tatleia* and Kaliakh censuses are somehow one and the same. However, the actual *Tatleia* one has chief Сальтъу (*Sal't'khu*), with date “May”, while the purported second one, Kaliakh, has chief Цкекъ (*Tskek*) and date June 3.<sup>5</sup> The resolution to this question, if there is to be any, will have to wait until we can see the missing pages of the narrative in RGADA ms., ll. 6–11v.

### 3.2.2 Shelikhov 1796

We now come to a new and altogether different kind of contribution to the history of the study of Eyak, Shelikhov's 1796 map, the first (ethno-)linguistic map of Alaska we know of. Entrepreneur Grigorii Ivanovich Shelikhov or Shelekhov (1748–1795) was basically a founder of the Russian-American Company, though he spent only two years himself in Alaska, establishing the headquarters on Kodiak, 1784–1786. The year after his death somehow this map attributed to him appeared. We know at least two basic versions of this map, one with eight small detail insets along the bottom and a long legend set off by a scalloped border, and a second without the insets and the same legend set off by a tree and vegetation figure. It is entitled “Карта морская северо-восточной Азійи, и северо-западной части Америки? *Karta morskaiia severo-vostochnoi Aziii, i severo-zapadnoi chasti Ameriki?*” [Maritime map of northeast Asia and the northwest part of America?], with a lengthy legend not informative about the map itself. This map is memorable for Alaska especially in two ways. It includes on Seward Peninsula and Norton

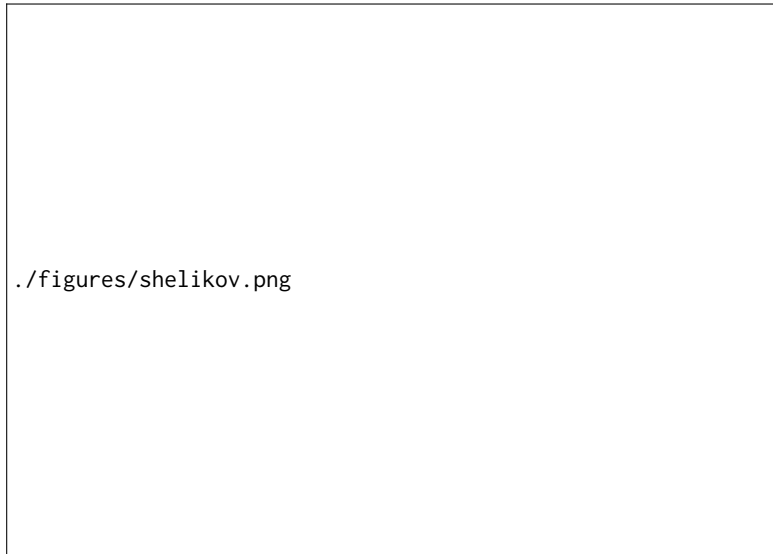
<sup>5</sup> In any case it is hardly excusable that in writing the history I forgot the list is from *Tatleia*, not from Kaliakh, as I had clearly annotated on the photocopy I have of ll. 12–17v.

Sound (and beyond) over fifty of the eighty Inupiaq place-names gathered by Ivan Kobelev from an elder on Diomedede in 1779 and first published in 1783. Most originally, however, and relevant here, it includes ethnolinguistic borders along the Pacific coast of Alaska, dividing that clearly into five sectors labeled as follows: КО-НЯ-ГИ (<KO-NIA-GI>) across the Central Yupik area, on the Alaska Peninsula, and Kodiak, respectively (= Yupik), then КЕ-НАЙ-ЦЫ (<KE-NAI-TSY>) along the west side of Cook Inlet (= Tanaina), ЧУ-ГА-ЧИ (<CHU-GA-CHI>) over Prince William Sound, then УГА-ЛАХ-МИО-ТЫ (<UGA-LAKH-MIU-TY>) right where it belongs, between Prince William Sound and Yakutat (= Eyak!), and КО-ЛЮ-ЖИ (<KO-LIU-ZHI>) beyond (= Tlingit). The scallop version lacks the label Кенайцы (<Kenaitsy>) itself, and has Eyak as УГАЛАХ-МИОТЫ (<UGALAKH-MIUTY>) (*Ugalakhmiut*). Aleut is not labeled. It seems that Shelikhov was very naturally interested in producing for officialdom a map recognizing the distinct Native peoples of his colony, perhaps especially the newer part—Aleut being a given, so not labeled. Shelikhov evidently assembled the map from information gathered especially during 1783–1788, including information from Nagaiev and Zaikov in 1783, and Izmailov and Bocharov in 1788 (for details see especially de Laguna 1972: 112–38). Their reports must have made it clear to Shelikhov that the *Ugalakhmiut* was a distinct group of some kind, though it is not so clear to what extent the distinction was based on language itself. Shelikhov was in any case not making a distinction between languages and peoples.

The name *Ugal(i)akhmiut* (with many variants) clearly comes from Chugach *Ungalarmiut* ‘those who live to the East’ (more generally in Eskimo ‘those who live to the left [as one faces the ocean]’). It means just that in the Chugach area, and could therefore refer to people of any language, including fellow Chugach who live e.g. on Kayak Island, or of course Eyak. The real Chugach name, at least in the 20<sup>th</sup> century, for the Eyaks specifically was *Qiggwanat*, literally “those to be raided, raidables” (p.c. Jeff Leer), a name that never got into the literature. *Ugal(i)akhmiut*, with the Russian plural -ы (-у) often (redundantly!) added, became the standard “official” Russian name for Eyaks. Later we see also the Russified equivalent of that, plural Угаленцы (*Ugalentsy*). The original Chugach *Ungalarmiut* is accented on the second and third syllables, so allows for much variation in the transcriptions of the first syllable, which often appears as <A>, or even as nothing. The variants with <A>, e.g. Агаленцы (<Agalentsy>), sometimes lead to confusion with *Aglurmiut* (Russian spelling Аглегмют <Aglegmiut>, <Agliogmiut>) of Bristol Bay, not related. With the initial syllable completely absent, the lip-rounding from the /ng/ preceded by /u/ remains, with resulting <Wallamute>, etc. (See especially Birket-Smith and de Laguna 1938: 328–340, documenting the variants of this name.)

Shelikhov’s map shows conclusively that the Russians by 1796 had defined Eyak (language and/or people) quite clearly. His map itself, though, was never published until the 20<sup>th</sup> century. The scallop variant was first published in Efimov 1964: map no. 184, but the tree variant was published before that, in Andreev (1948: 378–9); also the Alaskan

**Figure 3.1:** Shelikov’s 1796 map of Alaska (Shelikhov and Pierce 1981).



part was published as endpaper in the English translation of Shelikhov by Richard Pierce (Shelikhov and Pierce 1981), reproduced here as Fig. 3.1.<sup>6</sup>

After Shelikhov, all Russian maps that show Native groups clearly include Eyak as distinct. The first such may be from 1802, engraved, with the same group names and lines clearly shown (see e.g. Postnikov 2000: 197–200, 409); it was used by A. von Humboldt (von Humboldt 1811: 347–9). In 1821 Berkh published a map of Alaska (and Canada), including those names, without the lines (see Efimov 1964, Map no. 190). After that there is a virtual profusion of such maps, even of all North America, in French, German and English, from 1822 at least to 1875. This includes an American one of 1867, very clearly showing <OOGALAKMUTE> along the Copper River to Yakutat. A particularly important map of that era was Albert Gallatin’s color map of North America published in 1836 with his ground-breaking classification of Indian languages (Gallatin 1836). (See §3.2.8.) The

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<sup>6</sup> From the literature it appears, somewhat unclearly, that there are at least four versions of this map in Russian archives: 1) that published in Efimov (1964), with scrollwork and cartouches, held in the Moscow Центральный [Государственный] Военно-Исторический Архив (<Tsentral’nyi [Gosudarstvennyi] Voенно-Istoricheskii Arkhiv>) (Фонд VUA, Дело 23461); 2) that published in Andreev (1948), with tree, no cartouches (same archive, no number given; that partly published in Shelikhov and Pierce (1981) and here), but then Andreev (1948: 389) mentions another copy there “without cartouches;” 3) that held in the St. Petersburg Центральный Картографический Производство Военно-Морского Флота *Tsentral’nyi Kartograficheskii Proizvodstvo Voенно-Morskogo Flota* (Фонд Старинных Атласов, Портфель 4, No. 1301, possibly with scrollwork and artouches, not published; and 4) that held in the St. Petersburg Public Library, Manuscript Division (Map No. 1306, a copy by Korzhavin), not published. I have personally seen only the last, not with color, but it is possible that any of the others are with color.

Russian-American Company issued in annual reports 1844–1859 versions of a map of Alaska with those names, obviously still derived ultimately from Shelikhov 1796, some even omitting Aleut. See also Verman’s map in Tikhmenev (1863), discussed separately in §3.2.15.

### 3.2.3 Tarkhanov 1796–1797

Our next known source after Purtov-Kulikhalov of actual Eyak language data, happens to come from the very same spot as theirs, Kaliakh, two years later. Geologist Dmitrii Tarkhanov (life dates unknown), who had helped build the Russian fort at Yakutat, started from the new colony October 7, 1796, walking along the coast to and up the Copper River, with Native companions, including Eyak speakers, through Eyak territory.

Tarkhanov’s journal lay long forgotten at the St. Petersburg Public Library (Manuscript Division, Сборник Q.IV.311) until attention was drawn to it by Grinev (1987). It has not yet been published as such.<sup>7</sup> The part of its 67 pages that concerns us most here is for Tarkhanov’s lengthy stay at Kaliakh, November 27, 1796, to February 4, 1797, including an exploration of the Kaliakh River January 3–18. On pp. 28–30 of the journal Tarkhanov gives the names and description of five tributaries to the Kaliakh, four of which are identifiable easily enough as Eyak, especially because they are not proper names of specific tributaries, but in fact generic Eyak terms: 1. Чах <Chakh> is *ch’a:x* ‘muddy/silty water’, 2. Кац <Kats> is *q’Ats* ‘slough’, 3. Лак <Lakh> is *LAG* ‘ashore, up from shore’, and 4. Икалаки <Ikalaki> must be *’a:n-gALA-kih* ‘small river’, where *кала* <kala> is the expected class-mark *gula-* for anything liquid (cf. §17.10.7.2), *-kih* is ‘small’ (cf. §19.10), and initial И <I> is a mistake for /a/, for *’a:n-* (with long nasalized /a/) ‘river’, given that cursive Cyrillic И and А are very easy to confuse in copying, much like English cursive *a* and *u* are, depending on how much the top is closed. 5. Кастые (<Kastye>) is not clearly identifiable. In addition, Tarkhanov adds one noun, сак (<sak>) for *sa:g* ‘eulachon, candlefish’, which is the same in Eyak and Tlingit, and writes several times in various spellings the name of the Kaliakh itself, *GALyAX* (where /G/ and /X/ are back velars), literally ‘the lowermost of a vertical series’. These seven forms from Tarkhanov are the last addition we have to the Eyak documentation of the 18<sup>th</sup> century—not too spectacular a contribution from the man who must have heard incomparably more Eyak than any other European of the time. Tarkhanov’s manuscript does include, however, a *brief* ethnographic description of the Kaliakh Eyaks, leaves 35v–38, the first of its kind.

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<sup>7</sup> I examined it in 1988 and 1990, when I obtained a photocopy, with the help of Nikolai Vakhtin.

### 3.2.4 Davydov 1802–1806

Personable Gavriil Ivanovich Davydov (1784–1809) was an intrepid young naval officer and keen observer of Alaska Native life. He made two trips to Alaska in rapid succession, the first to Kodiak, where he wintered November 1802 to June 1803, then traveled back to St. Petersburg. On his second trip, even more adventurous, along with Rezanov (see §3.2.5), by summer 1805 he was back in Kodiak for a month (July 21 – August 20), then Sitka (August 25 – October 15), then Kodiak again and back to Sitka (November 7 – February 26, 1806). He thence accompanied Rezanov on his famous trip to California, and was back in Sitka June 9 – July 27. This shows that Davydov evidently never came near Yakutat or Eyak country on either trip.

We have his journal for the first trip, but not for the second. Volume I of his published account (Davydov 1812, 1977) contains his journal for the first trip, and Volume II is all (very valuable) ethnography of Kodiak. To that volume, two vocabularies are most mysteriously appended, without any information on date or place. The first vocabulary is Yakutat Tlingit, the second is Tanaina Athabaskan, and there is no Kodiak. It must be that Davydov did this work with displaced speakers of these two languages, at Kodiak or Sitka or both. There could have been such speakers at either place. Rezanov definitely did his six vocabularies (see §3.2.5), including these two languages, in Sitka, and Davydov too could have done his there on that second voyage. But he could have done them at Kodiak just as well, where he had more time, leisure and perhaps inclination, than on the second voyage. Perhaps favoring that possibility is the fact that his Tlingit vocabulary is clearly from Yakutat, entitled Словарь наречій народов, называемых Колюзжами, обитающих между заливом Чугачою и Якутатом “*Slovar’ narietchii narodov, nazываемыkh Kolozhami, obitaiushchikh mezhdz zalivom Chugachoi i Yakutatom* [Vocabulary of the dialects of the peoples, called Kolozh (Tlingit), living between Chugach Bay and Yakutat].” Such a title appears to offer great promise of a bilingual Eyak-Tlingit vocabulary. Alas though, the vocabulary is only bicolumnar, the first column labeled Рускія *Ruskіia*, the second Колюзжская *Koliuzhaskaia*, not accordingly with the promising title (including even different spelling for the ethnonym, Колож- <Kolozh-> and Колюзж- <Koliuzh->), and every single entry of this substantial 317-word list is Tlingit.

Finally, though, to the seventh-to-last entry, for ‘dog’, Tlingit *keitl*, transcribed Кетль (<Ketl’>), is added in parentheses, по Якут. хаува (*po lakut. xauva*) (“in the Yakut[at language] хаува”), i.e., that the specifically “Yakutat” (i.e., Eyak) word for ‘dog’ is *XAwa*. This exceptional entry is made either because this Yakutat speaker was more or less monolingual or dominant in Tlingit, but added the Eyak in this case because it was one of the few Eyak words he knew, so could not resist adding, or that with this exception the bilingual intention promised by the title somehow got sadly changed. I have not found reference anywhere to Davydov’s manuscript papers, if they still exist. In any case, this 1812 publication gives us the first-ever printed Yakutat Eyak word we have. It is, though—very significantly—by no means the last. Data on Eyak through 1804 is indeed fragmentary, accidental or incidental, but this is indeed about to change.

### 3.2.5 Rezanov 1805

To set the stage for the magnificent contribution to our history made by Nikolai Petrovich Rezanov (1764–1807) we need now to provide some broader perspective on the five “official” Alaska languages as shown on Shelikhov’s 1796 map (§3.2.2). The Russians took Alaska’s Native languages very seriously, not only as objects of scientific study, but they also recognized them quite naturally as a positive or at least practical asset to their colony. They were not something to be suppressed, but to be used, even cultivated. It is therefore not really so surprising that the Russians considered those languages important to define more or less officially, even. They knew Chugach and Kodiak were very similar; they may even have known that Kodiak and Chugach were more similar to each other than Kodiak was to the Central Yupik of the *KO-* part of the name on Shelikhov’s map. Yet they still chose to divide what they knew of Yupik in this way, for some reason, probably geographical. With the early help of the British, Spanish, and even French (for Tlingit), by the time Rezanov came to Alaska in 1805 there were already ten substantial wordlists for Aleut, another ten for Alutiiq (five for Chugach 1778–1791, then five more for Kodiak), and eight for Tlingit, so that for all three (or “four”) of these languages there were explicitly hundreds of words written down. For Eyak, though, there was nearly nothing, only the few mostly accidental scraps or crumbs, noted above, that it takes our linguistic retrospect to identify them. Perhaps with the one exceptional Davydov word; anything more than that had in fact been tossed out, by Malaspina and maybe Davydov too.

Between adventures before in Japan, and later in California, imperialist Rezanov came to Alaska, on an inspection tour of his (deceased) father-in-law Shelikhov’s colony. This was part of the first Russian round-the-world voyage sponsored by scholarly Count Nikolai Rumianstev, Tsar Aleksandr I’s cousin and Minister of Commerce. Rezanov, *Kammerherr* (Chamberlain, Plenipotentiary) to the Emperor, was obviously competent and ambitious. After the Aleutians and Kodiak (see Davydov in 3.2.4), Rezanov spent an increasingly uncomfortable six months in Sitka from August 25, 1805, to February 25, 1806, when he left, understandably, for his California venture. It is clear that during his stay in Sitka he wrote his Alaska language dictionary.<sup>8</sup> The title of the dictionary reads:

Словарь уналаскинскаго, кадьякскаго, кинайскаго, колюжскаго, угаляхмутскаго и чугацкаго языков, по Российскому Алфавиту собранный двора ЕГО ИМПЕРАТОРСКАГО ВЕЛИЧЕСТВА действительным, Камергером, Санктпетербургских ИМПЕРАТОРСКОЙ Академии Наук и

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<sup>8</sup> This work is preserved in the Manuscript Division of the St. Petersburg Public Library, Manuscript Division, Fond 7 (Fond Adelunga), Опись 1, дело 139. This file contains three manuscripts, Rezanov’s original, and two fair copies. One of the fair copies is very neat, and I used the copy in that of Rezanov’s introduction in order to decipher or establish the intent of latter portions of his introduction in the original, which are obscured by extensive revisions. The vocabularies themselves are fully legible in the printout of the microfilm we have of the original, with very few exceptions of a letter or two. For the first summer in the field I had only Radloff’s 1857 publication (see 3.2.12) of Rezanov to work with, and after that also the original in microfilm printout.

вольнаго Экономическаго общества членом и кавалером, Николаем Резановым, во время путешествия его по Алеутской гряде и Северо-Западному берегу Америки 1805го года [Dictionary of the Unalaska (Aleut), Kodiak, Kenai (Tanaina), Koliuzh (Tlingit), Ugaliakhmut (Eyak) and Chugats languages, collected in the Russian Alphabet by the true Chamberlain of the court of HIS IMPERIAL MAJESTY, by official Chamberlain, member of the Saint-Petersburg IMPERIAL Academy of Sciences and Free Economic society and cavalier, Nikolai Rezanov, at the time of his voyage along the Aleutian archipelago and Northwest coast of America of 1805.]<sup>9</sup>

We have Rezanov's letter of transmittal of this work to the officers and stockholders of the Company, dated November 6, 1805, first published in Tikhmenev (1863: 215–6). Here Rezanov expresses his disgust that the priests (who had been sent to Kodiak since 1794) were neither learning the languages for their prayers and sermons, nor making a dictionary of them as they were supposed or even commissioned to do. He therefore took the burdensome task on himself, he writes, in hopes that the dictionary would be used in the American schools and by Company personnel, perhaps also in Russia for science.

In sheer size alone this is quite a substantial work, containing six parallel vocabularies averaging ca. 1,150 entries, ca. 7,000 items in all. Moreover, this was apparently done not during the six months Rezanov spent in Sitka, but entirely during the first two months only. The date of the letter of transmittal is November 6, 1805, but the date at the end of his introduction in the fair copy sent is October 29, and it must have taken some of that time for the scribe to make that copy. The maximum time for the work had to be significantly less than the 64 days between August 25 and October 29. If Rezanov had 50 days for it, his pace would average 23 entries per day, times six for each column, ca. 140 words per day. If done very efficiently, five hours a day would have allowed over two minutes per word. It is clear that Rezanov spent a good part of those first two months on his dictionary.

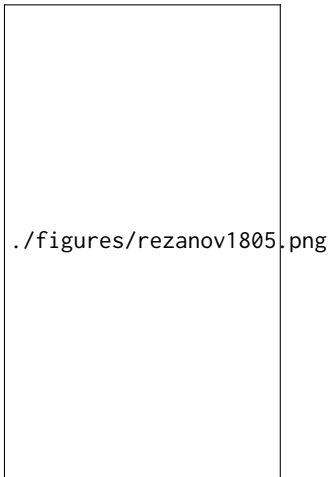
The appearance of the “rough” original or closest-to-original is quite puzzling. It is neat enough throughout, fully legible, but on close examination, there is a progression from very neat on the first pages to somewhat less neat towards the last, the parallel columns across the page quite uniformly following that progression, with a tendency to slant upwards from left to right. Thus the pages must clearly have been written in that order, all six columns across, rather than each language separately down each column, no column being neater than another. Rezanov must have worked with all six different language speakers together, lined up, working across the page for each entry, a spectacle that one should perhaps not put past Rezanov! Otherwise the original is not that, but a copy from earlier notes, working down the list with each speaker alone—which would seem a more reasonable procedure—and the results then copied, in Rezanov's own hand, it appears, into parallel columns across the page. Some doubt is cast on this latter explanation

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<sup>9</sup> A fair copy ends instead, after Rezanov's name “в пользу в новой Части света обитающих --- 1805 Году. На Северо-Западном берегу Америки, в порте Ново-Архангельском.” (<v pol'zu v novoi Chasti sveta obitaiushchikh — 1805 Godu. Na Severo-Zapadnom beregu Ameriki, v porte Novo-Arkhangel'skom.>) [for the use of the inhabitants of the new world — 1805. On the Northwest coast of America, at Port New Archangel (Sitka)].”

by two matters. One is the extra time the copying from the original fieldnotes into the parallel columns would take, but another is that in each column there are corrections, on each page, revisions that Rezanov could have made only with the speaker present. Does this mean that Rezanov had time to check the whole recopied combined version over with the speakers to make corrections on it? Moreover, the fact that the fair copy dated October 29, 1805, has in it the corrected forms (and not the crossed-out ones) shows that the corrections had also been made before October 29, not at leisure after that.

**Figure 3.2:** Close-up of Rezanov (1805) showing first few Eyak entries.



The Eyak column will provide a good example for the phonological quality of Rezanov's transcriptions (see Fig. 3.2). These are woefully inadequate, yet rather good for their time on the part even of what might be called linguists of those days in dealing with Native American languages. For example, the Inuit-Yupik-Aleut languages distinguish (only!) two dorsal stops, velar /k/, as opposed to uvular /q/, which the writers of course failed to distinguish. However, Eyak (likewise Tlingit and Tanaina) distinguishes in fact not just two but six dorsal stops, velar and uvular, but also plain and aspirated and glottalized at each of these two positions. In Eyak these are written here <g, k, k'> for the velar, and <G, q, q'> for the uvular (§4.1). These six are of course written by Rezanov all alike as <κ>. All the other stops (including affricates) are likewise distinguished for the same manners of articulation, e.g. /d, t, t'/, /dz, ts, ts'/, written only as τ, ι (t, ts), etc. Eyak further has phonemic vowel length, aspiration and glottal stops, e.g. /a:, ah, a', a:'/, not distinguished by Rezanov, a full series of lateral affricates and a voiceless lateral fricative, mostly confused, and nasalization of vowels was only erratically noticed (§4.3). All this of course makes Rezanov's Eyak (and Tlingit and Tanaina) very difficult to interpret



even where the translations are reasonably accurate; Inuit-Yupik-Aleut is somewhat less difficult.

Nevertheless, Rezanov's transcriptions, within these very serious limitations, are still rather good for their time. At least for the Eyak he comes about as close as one can, within those strict limits of the Russian sound system and alphabet. The very first two entries are good examples: Russian бабка (<babka>) 'old lady, grandmother', Rezanov writes Eyak каакен (<kaaken>), for *qa:k'inh* 'our (paternal) grandmother'; then for Russian бабка повивальная (<babka povival'naia>) 'midwife' he writes Eyak хукухтеяш (<khukukhteiaш>), for *xu:qu'xdAyahsh*, which in fact means 'I [emphatic] am going to have a baby', relatable perhaps for what the speaker understood of the Russian, but not so clearly as the preceding. There are many entries just as problematic as 'midwife', some worse. Another type of pitfall is the speaker's hearing of the Russian, e.g. for Russian люди (<liudi>) 'people' the Eyak is тыц (<tyts>), for *t'its* 'ice', which in Russian is лёд (<liod>), the vowel misheard. Still, taking Russian Шчекотно (<Shchekotno>) 'tickly' as a nice example of an item not easy for a non-Eyak ear to hear clearly, Rezanov's Eyak хуильхахчи (<khuil'khakhchi>) is not a bad effort for *xuyALXa'Xch'inh* 'he is tickling my hand'. Rezanov's form here not only gives a vivid picture of how the work was being done with gestures, but his degree of precision in spelling also implies a plausible archaism, for generic tickling. (Modern Cordova Eyak apparently requires derivative suffixes specifying whether the act is repetitive or not in one spot, -g or -X between the stem-final -ch' and the human singular enclitic =inh.)

While Rezanov's vocabulary is not rich e.g. in local flora-fauna, or items and concepts special to Alaska Native culture, it is rich in Russian items such as muskets, musketballs, cannons, anvils, pieces of 18<sup>th</sup>-century clothing, or vodka (кажьальцеяць-кая <kakh'al'tseiats'-kaia>, for *qa:xa' Lts'iya'ts' giyah*, meaning approximately 'water which is at the ultimate stage of decomposition on us', in this case more an *ad hoc* description than established usage, perhaps). Though there is often more than one form of a verb, there are no conjugations, and though often there are phrases, from which a little syntax could be deduced or recognized, e.g., the vodka case. There are no texts of any kind. From Rezanov alone we could have little idea of Eyak grammar, but we would certainly have in a sense a very significant part of the Eyak lexicon, more than enough for a good philologist to determine not only the distinctness of Eyak from any other language, but also its genetic position as not itself Athabaskan, but a separate branch coordinate with Athabaskan, and perhaps distantly related to Tlingit (§2.1.1).

Rezanov appends a draft introduction to the work, addressed to the officers and stockholders of the company. Then he continues:

"Aside from the usual labor of composing any dictionary, I also had to explain to those uneducated peoples the meaning of each word, adapt to their concepts, listen carefully to the pronunciations, and finally to check several times. Many things unknown to them before the coming of the Russians they have adopted generally from our language, others they have deformed by endings [not Eyak, but Inuit-Yupik-Aleut], but the Koliuzh or Kolosh have a language fuller than the others and their own names

for all European things, which their trade with the English and the Americans has permitted them to see.” (my translation)

Rezanov thus emphasizes the care he took, and takes special interest in the practical need for developing new terminology, even revealing also, in a nice way, some of his frustration that the Tlingits quite decisively were much more receptive to Anglo-American culture than to Russian. He then goes on to give a brief statement about each language. (He recognizes that Chugach and Kodiak are very similar.) About the *Ugaliakhmut* he writes that they “constitute a small nation living near Yakutat or Bering Bay. Their language is entirely different from others, though they have borrowed some words from the *Koliuzh* contiguous with them,” a statement not implying anything about genetic relationships. He firmly places the Eyak he got at the Yakutat (= Bering Bay) end. He closes with the hope that the originality of the work will merit the attention of the learned, but even more that it will be of practical educational benefit to the colony and its clergy, to the honor of the Russian Company.

Rezanov’s placement of Eyak at Yakutat or nearby (possibly then Kaliakh) virtually proves that the speaker at Sitka was not from the Copper River end; else the placement would presumably have at least to include reflection of that. It therewith also proves abundantly to us that Eyak dialect variation, at least that surviving to 1805, was minuscule. What differences there are between Rezanov’s 1805 Yakutat and 20<sup>th</sup>-century Cordova can almost all be attributed to the passage of time as well as, or rather than, geographical difference in dialect. In fact some of those phonological differences are also attested in early transcriptions from the Cordova area a few decades later. One lexical item comes to notice, however: Russian Брюхо (<Briukho>) ‘belly, paunch’, каротт <kagott> for *qa:wAt*’, as a possessed anatomical noun, ancient cognate to Athabaskan \*-wət’ with the same meaning. However, no Cordova speakers could remember it that way, knowing the stem only as unpossessed *wAt*’ meaning only ‘vomit’, thus perhaps a (rare) example of a difference that could not be explained by time. For further on Eyak dialectology, see §2.2 below.

The autumn of 1805 was fateful for the history of Eyak language work. Rezanov’s dictionary put Eyak documentation at the same level as the other “official” Alaska languages, whether or not its small population justified the work also for practical or scientific purposes. Rezanov’s dictionary far surpassed all the previous lexical work in any of those languages, and was not in turn itself to be surpassed, except by Veniaminov for Aleut and Tlingit only, until well into the 20<sup>th</sup> century.

That same autumn of 1805 was also fateful for the history of Eyak. About the very same time in August as Rezanov was arriving in Sitka, the Natives of Yakutat destroyed the Russian fort and colony there, pillaged it, and massacred the colonists. The Yakutat Eyaks clearly played a prominent role in the event. Not long after that, the Yakutat or nearby Tlingits, presumably because the Eyaks had gained the better part of the booty, proceeded in turn to massacre the Yakutat Eyaks. (This second massacre may have happened while Rezanov was still at Sitka, but the news even of the first massacre did not reach him there

until February 1806, by which time his dictionary work was long done.) According to de Laguna (1972: 79, 73–227, 270), Grinev (1988), Grinev (1989: 5), Grinev (2005: 46), it may have been mainly the Tlingits of Dry Bay just to the south of Yakutat rather than those of Yakutat who killed many of the Yakutat Eyaks. First, those Tlingits made an unsuccessful attack on the Eyak fort *k'udALtl'ihXL* on the Situk River in winter 1805–6, then a successful attack on them at a sealing camp in upper Yakutat Bay, perhaps in spring 1806. That clearly sped the decline of Eyak at Yakutat and the northward advance of Tlingit. In any case, the Eyak language was not to survive much longer at Yakutat itself. We still have two more vocabularies from Yakutat a few years later (see §§3.2.6 and 3.2.7), but by 1820 our Eyak documentation comes from the Cordova end only.

Rezanov died in Krasnoyarsk in March 1807 on his way back from California and Alaska. His rough dictionary manuscript very fortunately survived, and is now at the St. Petersburg Public Library, as noted above. It has 68 leaves, in which there are 67 six-column-wide facing-page spreads of vocabularies. In that same file is the fair copy probably sent October 6, 1805 from Sitka to St. Petersburg, and another fair copy, less neat. How they got to that library from Sitka and/or Krasnoyarsk is not yet traced, but according to Blomkvist (1975), Rezanov's Alaskan dictionary was at one time a "crown-jewel" of the Rumiantsev collection.

Of the six columns, the first contains the Russian, plus, interlinearly, the Chugach, evidently because the Chugach came as something of an extra. It is also listed last on the title page, the only disagreement with the order in the five columns following: Aleut, Kodiak Alutiiq, Tanaina, Tlingit, and last Eyak. As noted, the average column contains about 1,150 entries, and the Eyak is close to that, with 1128 entries filled out. Only about 50 items are left blank for Eyak, 14 of those higher numerals.

Some explanation of the fact that this stunning work was never published as such is called for in this history. For all his strengths Rezanov was certainly also, as noted, an effete and devious man, not to mention arrogant and imperious, so has had his share of detractors. A recent instance is the late Russian-Alaskan scholar Lydia Black, who did not believe Rezanov personally could have done the work, in spite of the rough manuscript and introduction in his handwriting, and other evidence. She believes instead that Rezanov must have gotten someone like Monk Gideon, priest and educator at Kodiak, to do the work and then appropriated it to himself. We have Rezanov's original manuscript. His handwriting is unmistakably different from Gideon's. However, in her discussion of Rezanov's letter of November 6, 1805 in her translation and edition of Gideon's journal, *The Round the World Voyage of Hieromonk Gideon 1803–1809*, Black states as follows:

"Another difficulty is presented by Rezanov's reference to linguistic work. It is known that Gideon undertook translations into Alutiiq (the translation of the the Lord's Prayer survives). It is also known that under Gideon's guidance a comparative dictionary of the Alaskan languages and grammar of the Alutiiq languages were being compiled."

"None of these works have survived. Or did they? Rezanov, whose dictionary of Alaskan languages is known to linguists, and is very much appreciated, arrived at Kodiak 28 July 1805, leaving for Sitka 20th August from where he mailed the completed seven-language dictionary of several hundred entries by

November 6th. If he did compile such a dictionary, and did not appropriate the work of the clergy and their students, as seems possible, this was, indeed, an incredible achievement, not to be duplicated by modern trained linguists.” (Black 1989: 101)

This last is clearly a reference to me and my appreciation of Rezanov’s work, which I no doubt expressed personally to her more than once. She was distinctly more appreciative of my appreciation of the Russian work, even if it might have been Rezanov’s, than of whatever a linguist like me could do. The “comparative dictionary of the Alaskan languages and grammar of the Alutiiq languages” is a confused reference to the dictionary and grammar of Kodiak Alutiiq project, under Gideon’s guidance in progress at that time, the work especially of student Paramon Chumovitskii. This work is apparently lost. See the extensive file on this at the Alaska Native Language Archive (Gedeon and Chumovitskiy 1806).

Directly derived from Black is the discussion, including confusions, with the concluding statement “This dictionary is in reality largely the work of Gideon,” by British journalist Owen Matthews (2013: 221), in his popular *Glorious Misadventures: Nikolai Rezanov and the Dream of a Russian America*.

Far more consequential to the fate of Rezanov’s dictionary, outliving Rezanov, was the enmity, abhorrence, and even cruelty he inspired in his shipmates and officers on the ill-fated Japan adventure on the way to Alaska. These included for example the captain, Kruzenshtern. After the voyage, this able, affable and increasingly influential officer published an important account of the voyage, discreet about Rezanov, and also a compilation of vocabularies, which minimizes or hardly includes Rezanov’s work (Krusenstern 1813, or Krusenstern in German). Kruzenshtern was an admirer of Davydov (§3.2.4); the compendium is in part a tribute to and lament for his friend, not for the despised Rezanov. So it is hardly a surprise that Kruzenshtern’s Alaskan vocabularies are based on Davydov’s, and include from Rezanov only the equivalents to Davydov’s, namely 171 Tlingit items and 218 Tanaina. Rezanov’s dictionary was (and is still) in the Adelung collection.<sup>10</sup> Krusenstern (1813: x) does include a comment by Adelung on Rezanov’s dictionary, calling it “an extremely valuable collection of about 1200 words in the six so far known major languages of the inhabitants of New-Russia, viz. Unalaska, Kenai, Chugaz, Ugalaechmut, and Koliusch? still unpublished?” (Krusenstern 1813: xxx). Nothing of the Eyak is included, presumably because Davydov (1812) did not include such. With Rezanov dead, and practical or educational Native language policy in the colony at a low ebb (until the arrival of Veniaminov in 1823, cf. §3.2.11), Rezanov’s dictionary was virtually forgotten or ignored. True, it is hard to say whether the published book could have been realistically useful or practical, especially for the three Indian languages for which the spelling itself is so woefully deficient. In any case, of the six vocabularies, only two were ever published as such, but in German by academics, the Eyak (in Radloff 1857, see also §3.2.12) and the Tanaina (Radloff and Schiefner 1874)).

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<sup>10</sup> Now *Fond Adelunga* at the St. Petersburg Public Library; see §3.2.8 below.

In 1954, Knut Bergsland, distinguished scholar of Aleut in Norway, managed to get a microfilm copy of the original manuscript, and it is from him that I got further copy in time to use during the intensive period of my Eyak fieldwork. About 99% of Rezanov's Aleut forms can be accounted for in Bergsland's 1994 Aleut dictionary (Bergsland 1994). The Alutiiq dictionary work by Jeff Leer can account for something approaching Bergsland's success now for the Kodiak and Chugach; Leer's work with Tlingit may approach the level with Alutiiq. I managed to interpret perhaps better than 97% of the Eyak, the unidentifiable portion being mainly parts of entries. James Kari's work has identified 80-some percent of the Tanaina.

### 3.2.6 Anonymous 1810

We can only date this vocabulary to within the range late 1808 to late 1811. Because we know it preceded Baranov (1812) (§3.2.7), the cover letter for which is dated February 20, 1812, the latest date for this would probably have to be late 1811. The list includes Bodega Miwok of California. We know that the earliest major contact with Bodega Miwok was Kuskov from December 15, 1808 to August 2, 1809. Baranov was back in Bodega Bay November 1811, but not long, as he soon established Fort Ross slightly north of Bodega, in Kashaya Pomo territory. That makes 1809 the likeliest year by far for Bodega Miwok. The Eyak list itself would therefore have to be done between late 1809 and late 1811, so we arbitrarily pick 1810.

Ivan Aleksandrovich Kuskov (1765–1823), a long-time and important Company official, was the leader of the California expeditions, and may be the author of the Bodega and one or more of the Alaskan vocabularies in the compendium. However, the handwriting, uniform throughout, is in a hand different from Kuskov's, and not signed by Kuskov (or dated), so it is safest to leave the authorship anonymous—the only instance of that in this history.

This never-published manuscript is at the St. Petersburg Public Library, where I unexpectedly discovered it in 1990.<sup>11</sup> The title page reads *Словарь обитающих народов в ведении Америко-российских Компанийских Занятий Состоящих Slovar' obitaiushchikh narodov v vedenii Ameriko-rossiiskikh Kompaniiskikh Zaniatii Sostoiashchikh* [Dictionary of the resident peoples under the authority of Russian-American Company business]. It is on 34 pages, with Russian plus three languages on the left and three more on the right, very much in the same format as Rezanov (1805), in parallel columns, and about half as long, with 481 numbered Russian entries plus 161 unnumbered (= 642), in an order not alphabetical but vaguely topical. The columns are not as uniformly or equally well filled in for the different languages, unlike Rezanov, or with the same ink or quill, but down through the pages it is quite uniform and neat and with relatively few corrections, spottily, so is

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<sup>11</sup> Fond 7 (Adelunga), Опись 1, дело 146

unproblematically a copy of earlier manuscripts. Though similar in format to Rezanov, it is not derivative thereof, but consists of primary data throughout.<sup>12</sup> The first column is the Bodega Miwok, the next Fox Island Aleut, then Kodiak Alutiiq, then Sitka Tlingit, then “Слова жителей Берингова залива (<Slova zhitelei Beringova zaliva>) [Words of the residents of Bering Bay],” i.e. Yakutat Eyak, then Kenai Tanaina. Here again the “official” languages, now including Californian Bodega Miwok, and not the Chugach (redundant, as too close to Kodiak?). The Bodega Miwok has (470 + 28 =) 498 items, the fullest for the numbered part, in the first column, showing the rest were probably done after that, Aleut has 560 and Kodiak 555, i.e. much more past the numbered part, Tlingit ca. 450, Tanaina 318, and Eyak only 285. Presumably, the work was started in California, then the rest was done in Sitka, first with Aleut and Kodiak, then Eyak and Tanaina last. In some ways it complements Rezanov, e.g. is richer in fauna-flora, ca. 140 such items.

Not only the label but also the content of the Eyak column clearly shows this vocabulary is from Yakutat. One sign of that is that it too has ‘belly’ as *кавват* <kavvat> (cf. Rezanov *каротт* <kagott>) for *qa:wAt*’, the one item that is specifically Yakutat and not Cordova Eyak.<sup>13</sup>

More interestingly still, it shows that Yakutat Eyak, at least for this speaker—and by then there may not have been many such left—was in a far more advanced state of assimilation to Tlingit than that of 1805 in Rezanov (1805), perhaps only five years earlier. This is especially evident in that of the 285 words in that list, at least 41 are new Tlingit loanwords. These are new items or concepts, which, if present in Rezanov (1805) as Eyak neologisms, are now replaced by Tlingit (14 items, for ‘brass’, ‘rigging’, ‘mast’, ‘cannon’, ‘pistol’, ‘gunpowder’, ‘bullet-lead’, ‘cloth’, ‘tobacco’, ‘smoking-pipe’, ‘cloth blanket’, ‘mirror’, ‘scissors’, ‘paper’). Further, even for traditional Native items, for which we naturally have good Eyak words, this list now shows still more loans from Tlingit (27 items, for ‘trout’, ‘octopus’, ‘clam species’, ‘flea’, ‘crane’, ‘loon’, ‘owl species’, two berry species, ‘hemlock’, ‘shield-fern’, ‘bracket fungus’, ‘mountain-goat’ or ‘sheep fat’, ‘whale blubber’, ‘birch-fungus punk’, ‘seine’, ‘dipnet’, ‘deer or caribou fat’, ‘arrow’, ‘quiver’, ‘comb’, ‘earthquake’). This must be a clear sign that Eyak was rapidly giving way to Tlingit at Yakutat in 1810.

12 There appears to be one startling exception. For *кривой или одиночкой* *krivoi ili odinokhkoï* ‘one-eyed’ this vocabulary has Eyak *исытлуктль* <isytlkutl’>. The only reading of this, for known Eyak, must be *’i:nsAlk’u:dl* ‘you wiped his face, A wiped B’s face’. Rezanov has the same, with insignificantly different spellings, twice, for ‘blind’ and for ‘one-eyed’. It is hard to believe this is pure coincidence. Either there is/was a specific Eyak lexical item for ‘one-eyed’ (‘blind’ is different), not documented since, or this one item shows that the author of the 1810 vocabulary had some kind of access to Rezanov, of which it is otherwise entirely independent, except for the similarity in format. It is unlikely that anyone has tried to elicit an Eyak term for ‘one-eyed’ since 1812, but at the same time it seems unlikely that Eyak had such a term, especially one with *s*-perfective morphology.

13 This exceptional item is probably not to be compared with the item for ‘one-eyed’, for two reasons. First, the Eyak spelling is different, and second, there is a clear Athabaskan cognate with the same meaning, *\*-wət* ‘belly’.

### 3.2.7 Baranov 1812

The preceding was still not the end of Yakutat Eyak documentation—quite. At the same time I unexpectedly found the Anonymous multiple vocabulary, I also found in the same holding at the St. Petersburg Public Library a document closely related to Anonymous (1810), but later and shorter, with the library title “Ситхинский Язык, матерялы собранные А.А. Барановым 1812 (<Sitkhinskii Iazyk, materialy sobrannye A.A. Baranovym 1812>) [Sitka language, collected by A. A. Baranov, 1812],” and on the document a title and transmittal page in German, to the effect “Language of Sitka, Ben[jamin] Cramer has the Honor to deliver the word[list]s ordered for State Councillor von Adelung from Sitka Island (Baranov 1812). The contributions have not yet been delivered from Kodiak, but as soon as they arrive (?), i.e. not before October or November, B. C. will have the Honor of presenting them to Herr Councillor. February 20, 1812.” It is six leaves long, and for three languages, the last half for Alutiiq, the first half for Tlingit and Eyak combined. The first two pages are a printed form, first for the Lord’s Prayer, the second with seventy numbered Russian words, plus 16 numerals, with space to fill in the target-language equivalent. The Lord’s Prayer is filled out for the Tlingit but not for the Eyak. The wordlist is filled out with both Tlingit and Eyak squeezed in the space, in the same handwriting, different from that for Alutiiq. The numerals are on an attached tab, evidently because some of them are too long to fit on the form. The close relationship of this work and that of Anonymous (1810) is obvious, in that for Eyak 38 of the 70 numbered words and 6 of the 16 numerals are identical to those in the 1810, identically spelled, but 32 are different in having a variant spelling for the same word, and 6 have an altogether different or partly different word. The words that show the great increase in Tlingit loans in 1810 are not the types that come into play in this much shorter basic vocabulary.

We do know that there is a Tlingit Lord’s Prayer attributed to Baranov in *Mithridates* (see §3.2.8). The handwriting could be Baranov’s, and the collection title attributes the document to him, so the label here accepts that attribution. This work, like that of 1810, now involves resident Company officialdom. Especially interesting in this connection also is the reference to Adelung in the cover page, and the printed questionnaire form itself, certainly connected with Adelung’s 1816 publication, and the beginning of published academic literature explicitly including Eyak words, and showing Eyak as a separate language (see §3.2.8 below).

### 3.2.8 *Mithridates* 1816 and Gallatin

This source (*Mithridates* 1806–1817) is named for the title of the publication rather than the authors, because it is not clear which of the authors is/are responsible for the inclusion and treatment of Eyak, from Rezanov, the first publication of any of that. The authors are leading men of the time, Johann Christoph von Adelung (1732–1806), and Johann Severin Vater (1771–1826); also involved are Christoph’s nephew Friedrich von Adelung (1768–

1843), and both brothers Wilhelm (1767–1835) and Alexander von Humboldt (1769–1859). King Mithridates VI (132–66 BC) of Pontus was famed, among other things, for speaking twenty-some languages, and this was not the first or last time a book meant to be a kind of encyclopedia of all the world’s known languages was named after him. This one though is by far the largest, some 3,000 pages, published in German in Berlin, 1806–1817, in four volumes. Volume III is itself issued in two volumes, three parts, Parts 1 and 2 in the first volume, 1813, and Part 3, that for North American languages, is in the second volume of Volume III, published 1816 (*Mithridates* 1816).

This whole compendium was truly a great and famous work for its time. The elder Adelung died already in 1806, and Vater finished writing Volumes II–IV, with input from the Humboldts. Some of the older Alaskan material had been collected by the elder Adelung, but more, including presumably Rezanov’s data, must have been collected by his nephew Friedrich, who also spent his later years at St. Petersburg, and must have had good access to manuscripts on the languages of Russia’s dominions. Hence also the name of the collection in which it is found, Fond Adelunga, at the St. Petersburg Public Library,

*Mithridates* (1816: 218–29) has a goodly section on Tlingit, comparing vocabularies, including Rezanov and then, pp. 228–38, a section on Eyak and Tanaina, quoting Rezanov’s short statement about the separate identity of Eyak—now in print, in German—on p. 229, “*dass seine Sprache eine, von den uebrigen durchaus verschiedene sey* [that their language is one altogether different from others].” On pp. 230–238, 30 words of *Ugaljachmutzi nach Resanoff*, all now written in German transliteration of Rezanov’s Russian, are then compared with Tanaina, followed by grammatical comments exemplified by 25 more Eyak words, then a comparison of 14 Tanaina, Tlingit, and Eyak pronouns, then of 21 Tlingit and Eyak nouns, then comments on Eskimo-Tanaina contact, including two more Eyak forms, 117 or 10% of Rezanov’s Eyak list in all. Of course the transcriptions are inadequate to begin with, and the grammatical and comparative work is primitive indeed. Nevertheless, we have a crucial statement and some evidence of the status of Eyak now in print in German in 1816, in a very well known prestigious work. See Radloff 1857 (§3.2.12) for the next and greatly amplified stage of this public information in German.

The distinguished Swiss-American Albert Gallatin (1761–1849), friend of Alexander von Humboldt as well as of Thomas Jefferson, in his classification of American languages (Gallatin 1836), begun in 1823, of course uses *Mithridates* (1816) and Rezanov (1805) for his Tanaina and Tlingit, but not his Eyak, so only mentions it in (Gallatin 1836: 14). He also has *Ugaljachmuzi* on his 1836 color map (see mention of that under Shelikhov 1796 in §3.2.2), but has no comment on its separateness. This is the beginning of publications in English, even a truly basic American one, showing Eyak as a separate language.



### 3.2.9 Khromchenko 1823

We now come to the period when new Eyak data come from Russians at the Copper River end of Eyak territory, as the Yakutat end is disappearing or gone. The first such wordlist was the third that I unexpectedly found in 1990 in the Adelung collection of the St. Petersburg Library (Khromchenko 1823). This manuscript is the work of Vassilii Stepanovich Khromchenko, or Khramchenko (1792–1849). He was in Alaska as a naval officer in the Russian-American Company 1820–1825, and took down five Eskimo vocabularies in 1821–1822. Since partial parallel copies of these are included in this work, the earliest date for the rest here is probably 1823, and latest 1825. The manuscript is undated, but it is clearly a copy of Khromchenko's work in a disciplined scribal hand, not Khromchenko's. We have copies of Khromchenko's Eskimo manuscripts from the Perm' library, but not the rest. This manuscript is in two sections, the Eskimo and Indian, in parallel columns, of Russian plus four languages: *Tynsnakoan* (Ahtna), *Ugalents*, *Sitka-Khan*, and *Innon* (Indians of Rumiantsev Bay, i.e. Bodega Miwok).

The Ahtna and Eyak columns are intimately related, in fact jumbled together in such a way as to suggest that they are from one and the same speaker, whose stronger native language is Eyak, and second, weaker, is Ahtna. The parallel columns have 102 Russian words, 71 of which are filled out for the Ahtna and 91 for Eyak. Careful check shows, however, that with Eyak duplicated for Ahtna (29 cases), and switches, sorted out, there are 96 Eyak items and only about 42 Ahtna. The speaker(s) knew the 12 numerals asked for in Eyak but not the Ahtna. There are no Tlingit loans. Obviously the Eyak is Copper River dialect, even though the title page implies they live “near Bering [Yakutat] Bay.” This first Copper River Eyak list is adequate to confirm that that dialect shows no surprising features different from what we expect for the time and place. The spellings are often garbled, probably more again in the copying.

### 3.2.10 Wrangell 1839

Ferdinand Petrovich von Wrangell (1796–1870), of Baltic nobility, distinguished naval officer who had already traveled extensively also in the Arctic, served as governor of Alaska in 1830–1835. As man of letters and science, he wrote invaluable reports on Alaska and its peoples, translated into German, edited and published by his friend von Baer in 1839 (Wrangell 1839). This date is taken for this entry, but almost certainly the language work was done in 1830–1835. No manuscript of the language work has so far been located.

We have a statement about the Eyak from Wrangell himself, that they are a small tribe of 38 families, living in a bay east of Kayak Island in winter, and in summer at the east of Copper River delta. They are similar to and related to the Tlingits; their language is different, but genetically related. In the immediately following statement on the Ahtna, Wrangell includes a comparative table of eleven words to show genetic relationship between Ahtna, Eyak, and Tlingit. Two of these are in fact perfectly valid cognates for

Ahtna and Eyak: ‘sky’ <Ja-at> and <Ja-a> (*yaad* and *ya-[-q’-d]*), and ‘blood’ <Tell> and <Tedlch> (*del* and *dAL*), the first such ever shown for Athabaskan-Eyak (Wrangell 1839: 96–9). The book also includes a fold-out table, facing p. 258, entitled “*Vergleichende Woerter-Sammlung aus 8 Sprachen der Bewohner von Nordwest-Amerika, von dem Contre-Admiral von Wrangel* [Comparative table of 8 languages of the inhabitants of Northwest America, by Vice-Admiral von Wrangell],” in parallel columns, Aleut, Kodiak Alutiiq, Chugach Alutiiq, Eyak, Tanaina, Ahtna, Copper River Kolchan [Tanacross!], and Sitka Tlingit, altogether 97 items, with 81 filled out for Eyak. The statement and Ahtna-Eyak-Tlingit comparison part was also published in the original Russian in 1839—and in 1853 also in French—but the big table was published only in the von Baer (1839) book, though in the original Russian transcription, for all the languages. That was the first Eyak vocabulary ever printed as such.

Wrangell’s Eyak vocabulary was also included in Radloff (1857) (see §3.2.12). Editor von Baer discusses Gallatin (1836) and the map extensively, including genetic relations with Gallatin’s newly defined [Northern] Athabaskan and Tlingit-Eyak-Ahtna-Tanaina-Ingalik-Kolchane [Tanacross], albeit vaguely (Wrangell 1839: 283–9).

### 3.2.11 Veniaminov 1840

Ioann (Ivan) Evseevich Veniaminov (1797–1871), later (St.) Innokentii, had spent ten years in the Aleutians, when in 1834 Wrangell called him to Sitka, where he remained to 1838. It was probably during that period that Veniaminov formed his ideas about Alaska’s languages generally. He was no doubt the most remarkable European—in good company—who ever set foot in the colony. Language was by no means the least of his many interests and accomplishments, so his statements on that certainly were not liable to escape notice.

Veniaminov came to St. Petersburg 1839 to oversee publication of a number of his works, written in Alaska. Four publications with overview of Alaskan languages, including Eyak of course, were printed in 1840 (Veniaminov 1840), and one more in 1846 (Veniaminov 1846). According to Veniaminov (1840), his three volumes of “notes” on the Aleutians and more, Volume III.v, the *Ugalentsy* live near Mt. St. Elias (Yakutat), no more than 150 persons, as of 1834. Veniaminov reports that Alaska has six languages: Unalaska, Kad’iak, Kenai, Yakutat, Sitkha, and Kaigan, i.e. Aleut, Yupik, Athabaskan, Eyak, Tlingit, and Haida, a sophisticated breakdown (1840: III.139). “Yakutat speakers are no more than 300 souls, and they too [like Aleut] have two dialects.” We have no evidence that Veniaminov was ever near Eyak territory, and his knowledge of it is a bit vague. It does not appear that Veniaminov had seen Wrangell (1839) or other such literature, but reflects rather his own Alaskan knowledge and contacts. Here, clearly enough, he is referring to Eyak in two names, *Yakutat* and *Ugalentsy*, as two dialects of one language, each of 150 souls. He is aware that Yakutat had two languages, Tlingit and “Yakutat” Eyak, but his information there is badly out of date in that the Eyak language at Yakutat was no longer spoken by 150 souls, half the population there, but rather by 1840 was very possibly quite

extinct. These statements are exactly repeated in Veniaminov (1846). In Veniaminov (1840: III.143), the above outdated interpretation is clearly confirmed: “The Yakutat language is spoken by [some of] the inhabitants of Yakutat and further to the West, and it is divided into two dialects, Yakutat and Ugalents, the number of speakers of both dialects is not more than 300 souls.” In Veniaminov (1846: 44–5) he points out that of the six Alaskan languages, Yakutat is the smallest, specifying 150 speakers each for the Yakutat and Ugalents (dialects).

These sources were then published in German in 1842 and 1849, in French in 1853, and republished in Russian in 1857 and 1887. Veniaminov thus does not add to the linguistic data on Eyak, but adds significantly, in three languages, to the published literature on the separate identity of Eyak.

In 1841 Sir George Simpson was in Sitka, where he learns that Tlingits live to “near Mount St. Elias; thence to Prince William Sound is another language” (Simpson 1847: 89), demonstrating that we have this information in a prestigious English-language publication, common knowledge, printed also even in English, indirectly from Veniaminov or before.

### 3.2.12 Radloff 1857

Leopold Radloff (Lev Fedorovich Radlov; 1818–1865) was a Russian working in St. Petersburg and publishing there, but who wrote and published in German, hence the spelling of the name. He was a гимназия Latin and Greek teacher, administrator, museum curator. In the last decade of his short life, he worked extensively on Tlingit, including a year, 1862–1863, with an elderly Tlingit speaker brought to St. Petersburg from Alaska for the purpose. He published on Haida, Tanaina (from Rezanov (1805)), and on Eyak: “Ueber die Sprache der Ugalachmut [On the language of the Ugalachmut]” (Radloff 1857). This is a 57-page monograph, the first publication ever entirely about Eyak. The first twenty pages are Radloff’s introduction, and the rest is Rezanov’s Eyak, alphabetized by German, though (wisely) keeping the original Cyrillic Eyak transcription. The work is done rather carefully and accurately, except in that for some reason sixty of Rezanov’s original entries are dropped. It includes not only most of Rezanov, but also Wrangell’s (1839) material, which after all was the only explicitly Eyak material thitherto in print—not counting Davydov’s хайва for ‘dog’. Thenceforth no one could say that primary Eyak data were lacking, as there were over 1,000 words of Eyak in print as of 1857, in German, the main European language of science.

Of Radloff’s grammatical introduction, the first four pages are his discussion of the position of Eyak, i.e. its genetic and diffusional relationships to other languages. He concludes clearly that Eyak is not genetically related to Eskimo, but it is to “Kenai” in the narrow sense (Tanaina), though indirectly, with Ahtna and Kolchane (Tanacross, from Wrangell (1839)) as intermediate, and somehow perhaps also to other Alaskan Athabaskan (“Kenai” in the broader sense) and (the rest of) Athabaskan itself, as the whole extent of

that was known by 1852. Radloff also concludes that Eyak is genetically related to Tlingit, but also diffusionally related, just as Wrangell (1839) had said (§3.2.10). Radloff attempts to fine-tune these relationships, but cannot add significantly to previous understanding of the position of Eyak.

The remaining sixteen pages of Radloff's introduction are poor discussions of Eyak sounds and grammar. It does not appear that the man had any idea that the transcriptions he is dealing with are so woefully inadequate. This was perforce the case with any transcriptions of these languages made by Europeans, the sound systems of which are so profoundly different from European ones, and have so many distinctions that escape European ears. The mid-nineteenth century was an exciting period for a thriving new linguistics, centering on Indo-European, and on the precise and regular system of sound-correspondences between its different branches and different languages. Linguistics was therewith developing into a precise science, and was discovering the relationship between languages, some over surprising distances, e.g. between English or Latin and Sanskrit. It was therefore quite natural, that the same should be aspired to with Native American languages. However, these languages were not written by native speakers, but rather by Europeans who could not hear or transcribe accurately their complex sound systems so different from European. Transcriptions then available were thus vastly inferior to the European ones, underdifferentiated, overdifferentiated, inconsistent, too vague and impressionistic for the kind of rigor achievable in Indo-European. Therefore progress in determining relationships between American languages lagged decades behind the achievements in Indo-European. Radloff's attempts at extracting any Eyak grammar from the material had of course had paltry results. Radloff did manage to recognize the noun-prefix *si-* 'my', and even for 'our(/human)' <ka-> (i.e. *qa-*), but even the 1s subject of a verb (usually *x-*) is beyond Radloff to identify. In the end, one has to say that Radloff's main contribution to Eyak was to make Rezanov's vocabulary available in print, in German, in the first publication, ever, on Eyak itself.<sup>14</sup>

### 3.2.13 Buschmann 1855–1863

Radloff was not the only man of his time publishing in German on Eyak. Johann Karl Eduard Buschmann (1805–1880) was a Berlin librarian, friend of the von Humboldts, who worked with them in Mexico and on Aztec. At the same time, he made a "hobby" of Athabaskan, and his publications of the period 1854–1863 included five discussions of Eyak. Two of these are before Radloff (1857), and once he was in touch with Radloff, the three after 1857 show the difference.

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<sup>14</sup> An original manuscript for Radloff's publication is in the Russian Academy of Science Archive, St. Petersburg. I examined it briefly there in 1990 and concluded it was not likely to contain anything not in the 1857 publication.

The first (Buschmann 1855: 233–5) cites *Mithridates* (1816), Gallatin (1836), Wrangell (1839), and Veniaminov (1840), but cannot add to those. The second (Buschmann 1856: 253, 260–319), repeats the previous statement, citing the same authors, and adds a major comparative table of 260 items as (insofar) found in Athabaskan languages (narrower sense): Chepewyan, “Tahkali” (Carrier), Kutchin, Sussee, Dogrib, Tlatskanai, Umpqua, Navajo, T[J]icorilla; the “Kinai” (broader sense, i.e. Alaskan Athabaskan, minus Kutchin): Kinai, “Atnah”, Ugalenzen, “Inkilik” (Koyukon), “Inkalit” (Ingalik), “Koltschanen” (Tanacross); and “Koloschen” (Tlingit). Hence Eyak belongs somewhere in the “Kinai” branch of this three-branched family.

His third publication (Buschmann 1859: 683–89) summarizes the history of Eyak language studies up to then, adds Radloff’s (1857) rendering of Rezanov (1805), received April 22, 1858, but does not do much with it. It further critiques *Mithridates* (1816), suggests comparisons between Athabaskan-Kinai-Tlingit and Aztecan, compares the Rezanov data from *Mithridates* (1816) and from Radloff (1857). Such unproductive enterprises as comparing Aztecan with Athabaskan-Eyak-Tlingit were attractive partly because Buschmann had been in Mexico and studied Aztec. They were also attractive because phonological precision was so lacking that any languages that had, for example, frequent <tl> at the end of words, as did Eyak and Aztec, were fair game for comparison. Proof of genetic relation, especially at so long a distance, would be exciting, and a feather in the linguist’s cap. In fact, William Wadden Turner of the Smithsonian had just done just that in 1852, by showing Apache-Navajo related to Athabaskan far to the North.<sup>15</sup>

In the fourth treatise, Buschmann (1860: 513–5, 541–81), Buschmann has had time to appreciate Rezanov for what he adds to the available data, and even goes so far as to say that Eyak shows “*erstaunlich Fremdheit* [astounding foreignness]” to all Athabaskan languages, without going so far as to conclude that Eyak is a separate coordinate branch with the Athabaskan family. A “systematic” comparative table follows, including perhaps 600 Eyak items. Regular sound correspondences or gain in rigor are not reflected therein.

In his fifth and last discussion of Buschmann (1863: 232–5), Buschmann, using Rezanov from Radloff (1857), reasserts the specialness of Eyak and tries crudely to fine-tune more exactly its position by showing I (17 cases) where Eyak has a comparable word to that in Athabaskan generally, II (22 cases) where Eyak has a comparable word to one or more in Athabaskan, and III (27 cases) where Eyak has one or more words for an item that has nothing comparable to it/them in Athabaskan.

Beyond Buschmann, the Englishman Robert Gordon Latham (1812–1888), might be mentioned as an example of Europeans beyond Germany as derivative sources, who discussed the linguistic position of Eyak, often with data, yet again in well-known publications in English.

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15 ANLA, CA851T1852.

### 3.2.14 Furuhjelm 1862 and Gibbs

We now come to the sixth and last Russian Eyak vocabulary, transitional to the American period (§3.3. In fact this vocabulary was requested by an American, and appeared only in American publications. Johan Hampus Furuhjelm (1821–1909) was the second-last governor of Russian America, 1859–64. George Gibbs (1815–1873) was an American lawyer, geologist, naturalist, ardent philologist, and Smithsonian officer, who had spent 1848–1860 in Oregon and Washington, collected Indian vocabularies there and worked with vocabularies at the Smithsonian. He had already corresponded with Furuhjelm’s predecessor Voevodskii since 1856, and with Furuhjelm since 1859, especially about Alaskan languages and vocabularies of them. Furuhjelm himself showed a lively interest himself in that subject. On June 30, 1861, Gibbs wrote Furuhjelm that he now needed especially “a vocabulary of the Iacoutat, one which you mention as differing from the Kolosh, but which I had confounded with it” (Gibbs et al. 1856-1864). Furuhjelm received that request March 30, 1862, and replied April 23, 1862, “I send you annexed vocabularies of Iacoutat and an Indian language. The last one [the latter] was spoken by an Indian tribe inhabiting 20-30 years ago the country round about Ross, California. The words have been written down after the dictation of two old Indian women, who, married to Russians, followed their husbands to Sitka, when Ross was evacuated [1841]” (Furuhjelm 1862b). I had earlier thought that that Eyak vocabulary must have been done by Abbot Nikolai Militov during one of his summer visits of that period from Kenai to Copper River, but unless such a thing had been at hand in Sitka, given the dates of the letters, Furuhjelm’s obvious personal interest in the subject itself, and the story of the California vocabulary, it appears most likely, after all, that the Eyak vocabulary too was done in April 1862 at Sitka, indeed perhaps by Furuhjelm himself.

The vocabulary is on a six-page Smithsonian “Comparative Vocabulary” form of the time, 180 words, sent by Gibbs, with 161 words filled in (Furuhjelm 1862a). Just as those letters from the Russian Governor are written in an elegant English language and hand, the Eyak vocabulary is written on the form in an elegant Latin alphabet transliteration of a Cyrillic original that has not come down to us. This is clear e.g. from the first entry ‘man’, <Lilia> for *Lila:*, where the <ia> reflects the original Russian vowel letter <я>. A nostalgic entry is ‘thou’, <Ishu> for *’i:shuh* ‘is it you (sg)?’ (also “Hello,” cf. Walker and Strange 1786 in §3.1.2). Aside from the improbability that there were any Yakutat Eyak speakers still left at Yakutat in 1862, let alone at Sitka, there is further suggestion that the Eyak speaker was from Copper River in the entry for ‘town village’, <Tchiish>, which is clearly *chi:sh(g)*, meaning ‘gravel’, probably a reference to the site at the Cordova end of Eyak Lake, in fact, as in the place-name *chi:shg qi’ k’u:Leh*, literally, ‘where there is gravel’.

On February 17, 1868, President Andrew Johnson called for information about what was still called “Russian America,” and on May 27 a suggestion was made to send an expedition including Gibbs for the ethnology: “As language remains one of the readiest, and perhaps the most certain mode of tracing affinity among the races of men, it is particularly desired to collect accurate vocabularies of a sufficient number of words in

common use? The most important tribes remaining are those extending from Copper River along the coast to Cape Fairweather, especially those known as Ugalentses?” (Henry 1868: 193), prose surely from Gibbs. Already having a “Iacoutat” vocabulary since 1862, Gibbs still considered Eyak an especially important language for further investigation.

Gibbs was in touch with William Healy Dall (1845–1927), a most prestigious US specialist in Alaska. In his illustrious tome *Alaska and its Resources*, Dall presents a short 37-word comparative table of Alaskan languages, including as one of the Tlingit dialects a column for Yakutat, and next to that, as one of the Athabaskan (“Tinneh”) languages or “dialects,” a column for “Ugalentsi.” The “Tinneh” one is from Wrangell (1839) (Dall 1870: 550–1). The “Yakutat” one is said to be from Gibbs, but it is in fact, deplorably, a mixture of Tlingit and Eyak, with 25 items of the 36 filled in from a Taku Tlingit vocabulary gathered by William Fraser Tolmie in 1836 on a Smithsonian 60-word form of the time.<sup>16</sup> For the items not on the Tolmie list, Dall fills in with 11 words from the Furuhjelm-Gibbs Eyak list. One can only guess what possessed him to do that. Unfortunately, between the eleven Eyak words in that mixed “Tlingit” column and the Wrangell (1839) Eyak under “Tinneh” in the next, there are only two words even partly the same. These are, with Dall’s respelling of Wrangell (1839), <Yakulkutzku> and <Yakutschk> for ‘small’ (Eyak *ya:kuts’g*), and <Khutak> and <Hoo-oo> for ‘I’ (Eyak *xu:[=du]=g*) for ‘I (too)’. This is surely not enough left for Dall to notice that his “Yakutat Tlingit” and “Ugalentsi Tinneh” are—or were—the same language. On January 20, 1873, Gibbs writes Dall,

“I have your book on Alaska [1870], but had not read it carefully? As you do not expect to meet with the Kutchin and Tinne again, will you endeavor to enlist some of your friends out there in the making additional vocabularies of the tribes you have not heretofore reached, as also of the northern tribes of the Thlinkitt family. The vocabularies published in your work do not fill the Smithsonian blank and consequently are not entirely suitable for comparison with the others, though they establish the relationship....”<sup>17</sup>

Here Gibbs is obviously responding in a very diplomatic way to his friend (“My Dear Dall,”) about his dissatisfaction with Dall’s treatment of the vocabularies. In his last letter to Dall, February 26, 1873, by now quite ill, Gibbs writes, “I should be very glad however to do up the North West Coast tribes of Indians proper, and any vocabularies of the northern tribes of the Thlinkits, such as the Chilkat, I should like.” This no doubt includes the Yakutat and Ugalents just beyond. Six weeks later Gibbs was dead.

Gibbs’s Eyak from Furuhjelm 1862 was first fully printed finally four years after Gibbs’s death, in Dall (1877: 122–33), as the first “Tlingit” dialect in a sort of comparative Tlingit vocabulary of five parallel columns, without question or comment that the Yakutat invariably sticks out like a sore thumb as different from the rest. For instance, the first item,

<sup>16</sup> ANLA, TL836T1850.

<sup>17</sup> Smithsonian Institution Archives, Record Unit 7073, Dall papers, Box 10, Folder 41; Dall had been to interior Alaska on a telegraph line expedition 1865–1867 and gotten several Athabaskan vocabularies himself.

‘Man’, is <lilia - ka - kah - kah - kha>, i.e. Eyak *Lila:*’, Tlingit *káa*. It would seem unlikely that Gibbs, after all the trouble he had taken, would have allowed Eyak to be dealt with so shoddily, but by then it was too late. The American confusion over Eyak and the loss of all information about the position of the language for sixty years, until 1930, was well under way. Dall is much to blame for that.

### 3.2.15 Verman 1863

Fedor Karlovich Verman (Wehrmann) was in Alaska 1854–1861 as a naval officer. Petr Aleksandrovich Tikhmenev (1820s–1888) worked in St. Petersburg as the Company historian 1857–1863, when he published a two-volume definitive history of its affairs (Tikhmenev 1863). In that is published a most remarkable color map entitled “Карта туземных наречий на Алеутских островах и северозападном берегу Америки, с карту, составленной состоящим на службе Российско-Американской Ко. Капитан-лейтенант. Верманом 1863г (<Karta tuzemnykh narietchii na Aleutskikh ostrovakh i severozapadnom beregu Ameriki, s karty, sostavlennoi sostoiaschcim na sluzhbie Rossiissko-Amerikanskoi Ko. Kapitan-leitenant. Vermanom 1863g>). [Map of native languages on the Aleutian Islands and northwest coast of America, from a map compiled by Russian-American Co. servant Captain-Lieutenant. Verman, 1863].”<sup>18</sup> It was clearly Verman, not Tikhmenev, who compiled the information, so this last Russian statement on the position of Eyak belongs to Verman. Aleut is blue, Eskimo is red-pink, Tlingit is brown, with a lighter brown for the Yakutat dialect thereof, and the fourth category, “separate languages,” in fact Athabaskan-Eyak, are Kolchan (far interior Athabaskan) in yellow, Ahtna in light green, Kenai (all around Cook Inlet) in purple, thus showing more than the modest title promises, with two varieties of interior Athabaskan. Eyak itself is in its own different color, gray. With amazing precision, Eyak is right where it belonged in 1863 along the coast, not from Yakutat, but now from about Kaliakh to about the mouth of the Copper River, with division lines as well as color.

This map is far from alone at the time in showing Угаленц (<Ugalents>) as a separate entity, ever since Shelikhov 1796. However, in view of the originality, language boundary lines, and color, of this map explicitly of Alaskan *languages*, it is here treated separately. It is not only the Russian-America Company’s final statement on languages, but it draws as dramatically clear a picture as can be of the position of the Eyak language.

<sup>18</sup> An original, not seen, is reported in the Archive of the Russian Geographical Society, St. Petersburg, Разряд III, Опись 1, No. 232.



### 3.2.16 Summation of Russian Period

Russian maps from 1796 to 1863 invariably showed *Ugalents* as a separate group or language, with geographic accuracy, as one of the “official” or “major” languages of Alaska, even though they recognized Eyak also as the smallest such group by far. From the beginning all Russian statements recognize Eyak as not Eskimo and not Athabaskan or Tlingit, but as related to Tlingit and Athabaskan, and this with increasing accuracy of detail, especially in later years in German publications. Maps and such statements were spilling over also into English. The six Russian vocabularies of Eyak were all on some kind of columnar multilingual form, generally without relation to each other or cumulative study. Two appeared in German publications (Rezanov 1805, ca. 1,128 words, and Wrangell 1839, 81 words) and the last (Furuhjelm, 161 words) in American publications (Dall 1870, 1877), where it was sadly misrepresented.

### 3.2.17 Eyak names in church and other records

There is one type of documentation that overlaps both the Russian and American periods, Eyak personal names mostly in Russian Orthodox records, but also in U.S. Census records and even business ledgers. Eyak names in the Orthodox Church records start the Kodiak metrical records for 1843 and 1844 (including a total of fourteen “Ugalents” names). From 1846 to 1870 these names come from the Kenai mission records (about 300 instances of about 180 different names). Then there seems to be a gap, 1871–1893, and then another group appears, from Nuchek, 1894–1907, containing both vital statistics and confessional records (a total of about 380 instances of 150 different “Agalents” names from Eyak and Odiak and some from Katalla). The corpus of course spans the Russian and American periods, as the Orthodox Church by no means abandoned Alaska in 1867. Note that these sources cover only the western end of Eyak, with nothing towards Yakutat, which was never missionized by the Russians, but of course the western end had become home to most or all of what remained of Eyak speakers. As mentioned in connection with Purtov-Kalikov 1794 (§3.2.1, personal names in inadequate orthography are very difficult to identify, let alone interpret. However, copies of all this material are included at the Alaska Native Language Archive (ANLA) for Eyak, with excerpting of the Eyak names by me, and identification of perhaps a quarter of them. Their ultimate historical value is yet another matter. Finally, the *Index to Baptisms, Marriages, and Deaths in the Archives of the Russian Orthodox Greek Catholic Church of Alaska* (1954–1973) includes Eyak personal names from 1843 to 1893 under Kenai, which may help fill the 1871–1893 gap. In addition to the Church records, there are some Eyak names in the U.S. Census records for the area, especially 1900, and in the Nuchek Alaska Commercial Company ledgers, but after about 1900 nearly all names used for Eyaks in such records are of European origin.

### 3.3 The American Period

The very first American mentions of Eyak after the purchase were not wrong about the language; e.g. distinguished geodesist and astronomer George Davidson (1825–1911) writes on November 30, 1867: “The natives inhabiting the coast between Yakootat and Prince William Sound are called Oogalentz, and number about thirteen hundred [!] souls [which sounds like Veniaminov, but with thirteen for three]. They have their own language?” (Davidson 1868: 293). By 1870, however, Dall was already confusing matters, ignoring or forgetting that the Eyaks had their own language, increasingly through 1885 giving the impression that they were some kind of Eskimo-Tlingit mixture. He was joined by several others, e.g. Petroff, Abercrombie, Emmons, Swanton—though not by Bancroft and Powell, who, like Gallatin (1836), mention Eyak and quote sources, but do not make misleading speculations or conclusions.<sup>19</sup> The first—and for 96 years the only American ethnolinguistic map of Alaska in color—was that dated 1875 and published with the 1880 Census Report (Petroff 1884), showing “Oogalakmute” as a mixture of green-red for Eskimo-Thlinkit, now restricted to the Cordova area. This unfortunate confusion is painfully chronicled by Frederica de Laguna in Birket-Smith and de Laguna (1938: 327–37). For further reading on that see Johannsen (1963), which indiscriminately lists derivative sources, including even opinion statistics. There is also a 1964 typescript and manuscript file by me “On Eyak history and history of Eyak study” showing much more on how Dall confused things (Krauss 1963). Above all see Hodge (1910: 862–3) for an eloquent epitome of the confusion. Rather than repeat or elaborate that or Petroff’s 1875 map here, we shall confine ourselves to the two exceptional mentions of Eyak, which are in fact holdovers from the previous period, which we might call “German.”

During the early American period, an intrepid 19-year old French traveller visited Alaska, a collector of artifacts and information, including especially linguistics, Alphonse Louis Pinart (1852–1911). In 1871–1872 Pinart travelled through the Aleutians and Kodiak, and was later in Sitka. In Pilling’s *Proof-Sheets* Pinart claims a “Vocabulary of the Yakutat.” (Pilling 1885: 1043). Many of his papers have been lost, but it is possible that his vocabulary, perhaps Eyak, never existed, or that the claim referred to the copy he made of Wrangell’s Eyak vocabulary published in 1839, one of several Russian vocabularies of Alaskan languages Pinart copied in 1873 in St. Petersburg.

Actual American documentation of Eyak begins ironically with the famous Harriman Expedition of 1899 (see §3.3.3). Its learned members, including Dall, remained oblivious to Eyak. We now know, however, that at Cordova Harriman himself made a cylinder phonograph recording of what he was the first on record to call “the Eyak language.” This deed remained forgotten for a century, and the cylinder might never be found. We return to Harriman in §3.3.3 after account of two more Europeans who contributed to this history after the American takeover.

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<sup>19</sup> For Bancroft, not otherwise mentioned here, cf. ANLA item CA874B1883.

Another way of looking at this 1883–1930 period, following the “German,” with the exception of Harriman and another German, Krause (§3.3.2), might be to call it the “Scandinavian.” This would be a part of what obtains for Alaskan languages generally, that the main contribution, by far, to the study of Alaskan languages for most of a century, 1867–1960, was made by Scandinavians. In this context it is no coincidence that we begin here with Jacobsen (§3.3.1) and end with Frederica de Laguna on a Danish expedition under Kai Birket-Smith (§3.3.4, which was a decisive event for all the history of Eyak and Eyak studies since.

### 3.3.1 Jacobsen 1883

Johan Adrian Jacobsen (1853–1947) was a Norwegian seaman and entrepreneur, who spent 1881–1883 traveling widely in Alaska and collecting artifacts for the Berlin Ethnology Museum. He spent July 28 – August 11, 1883 in Eyak country, at Eyak, Alaganik, and Cape Martin, buying artifacts and making observations. His artifact acquisition lists contain some Native words for the artifacts, e.g. seven Eyak words from Eyak village, but those from Alaganik and especially Cape Martin are Tlingit instead. Thus Jacobsen is a minor source of Eyak language data. His journals however, written in a sort of German heavily influenced by and mixed with Dano-Norwegian and English, are of significant interest for language also. For instance, of Eyak village he writes, inimitably,

“in Iggiak Villag, zwischen das Kopfer River und Prinz Williams Sound am ein Lake belind – sprechen ein eigne Sprache sollen von ein Inlands treib sein – sind jetzt mit Eskimo und auch Thlinket intermarried und die meisten verstehen die beide Sprachen.”

[in Eyak Village, between the Copper River and Prince William Sound, situated on a lake – speak a language of their own, must be from an inland tribe – are now intermarried with the Eskimo and also Tlingit, and most understand both languages (Eyak and Tlingit?)]

This accords with his comment on Alaganik, where the people “sind verwandt mit die Indianer aus Iggiak – sprechen das Iggiak und Thlinket Sprache – scheint aber mehr zu der letztere Stam gehoerend? [are related to the Indians from Iggiak, speak Iggiak (Eyak) and Tlingit – but seem to belong more to the latter tribe].”

These statements imply that at Eyak they were already Eyak-Tlingit bilingual, likewise at Alaganik, but there Tlingit was already dominating, as the words in his artifact lists show. This is good evidence how far assimilation to Tlingit was progressing in 1883. However, six years later, after the establishment of the canneries in that last Eyak stronghold, in spite of the resulting disorder and its disastrous effect on the Eyaks, the assimilation to Tlingit was evidently arrested and even reversed. The last speakers of Eyak in the 20<sup>th</sup> century in Cordova did not speak Tlingit, only Eyak and English. Ironically, that tragic disorder thus might well have prolonged the survival of the Eyak language enough to have made a crucial difference for the last-minute academic salvage of Eyak culture and language.

In his journal for July 28, 1883, arriving at Eyak, Jacobsen writes:

“These people must speak an entirely different language [from the Chugach]? Their language is the most inconceivable gibberish [unbegreifbare Gibbel] I have ever heard.”

Jacobsen was no academic, but a well-traveled man, who had heard many languages, and who was making only first-hand observations. His journals were edited and published first in German (Jacobsen 1884), then in Norwegian in 1887, and finally in English in 1977, a good summary quote from which is:

“these people are of another type, different from the Eskimo and the Tlingit, and their language also differed to such a degree that my interpreter could not understand a word of it. I also realized that I had never heard a language so unintelligible?” (Jacobsen 1977: 207).

Jacobsen’s journals and lists remain at the Hamburg Ethnology Museum. Obviously, published or not, Jacobsen’s information on Eyak had no effect on the reverse progress of Eyak studies.

### 3.3.2 Krause 1885 and Boas

Aurel Krause (1848–1908) and his brother Arthur (1851–1920), on an expedition for the Bremen Geographical Society, spent some five months in Tlingit country December 12, 1881 – May 14, 1882, especially in the Sitka and Chilkoot-Klukwan areas. The results were published by Aurel Krause in Jena, 1885, in what is widely considered an irreplaceable classic on Tlingit (Krause 1885). It takes serious account of the preceding academic literature, including that on groups neighboring Tlingit. In that, Krause reviews the literature on Eyak (Krause 1885: 323–25). He notes from Wrangell that “their language is supposed to differ from the Kolushan but to have the same roots.” He further states that,

“Dall’s opinion that the Ugalenzen belong to the Innuït not only contradicts Wrangell and Veniaminov, but also disagrees with the linguistic research of Radloff, whose results cannot be doubted. He claims that the Ugalenzen are actually an independent people, however related to the Tlingit. ‘Even though the Ugalachmut,’ says Radloff, ‘through their geographical location and the description of their customs by Wrangell, show themselves to be related to tribes which belong to three different linguistic groups, namely the Kadjaken and the Tschugatschen (Eskimos), the Anahs, and Athapascan people belonging to the Kinai, and finally the Kolushans, their language shows little relationship to the first two. It can be stated with certainty that there is no relationship between the Eskimo dialect and Ugalachmut.’

However Radloff found among the one thousand one hundred recorded words of Ugalachmut from the vocabularies of Resanof about forty which bear phonetic and structural resemblance to Tlingit words.” (Krause 1956: 218–19)

This information published in German in 1885 should certainly have caught the notice of American scholars, most of whom were supposed to read German in those days.

Franz Boas was right then spending his last year in Germany, 1885–1886, redefining himself as an anthropologist. He was even spending time at the Berlin museum working with Jacobsen’s Alaska collection and must have had significant personal contact with Jacobsen. One might well wonder how Boas seemed to remain utterly unaware of Eyak, given Jacobsen’s first-hand experience with the Eyaks and their language, and his published statement on its distinctiveness (Jacobsen 1884). It is even more ironic that Boas, who was soon to make his second field trip to the Northwest Coast, 1886, and to study Tlingit first in Victoria, 1888, evidently did not then notice, or perhaps ever notice, that clear statement of Krause (1885), or any of the literature leading to it. In spite of Boas’s extended career with Tlingit, including a remarkable grammar of it in 1916–1917 (Boas 1917), there is no record of Boas’s ever taking note of Eyak. Did he doze through those pages of Krause? This fateful lapse is especially uncharacteristic and unfortunate, considering how high a value Boas placed on salvage fieldwork, on languages nearing extinction. His own heroic work on Tsetsaut in 1894 (Boas 1924), and Chemakum in 1890 (Boas 1892) are fine examples. During the Jesup Expedition years, 1897–1902, one might especially have expected some such attention, from Boas’s direction of those, but in fact Alaska was basically skipped, supposedly on the grounds that it had been relatively well covered e.g. by Nelson in Beringia and Krause in Southeastern Alaska. So Eyak was ignored in scientific literature for sixty years.

### 3.3.3 Harriman 1899

The next episode in this ironic history is in an entirely different category, the “Harriman cylinder.” In the summer of 1899, the very middle of those sixty years, Edward Henry Harriman (1848–1909), a powerful railroad magnate and financier, chartered a luxury ship, the *George W. Elder*, for a combined vacation and scientific cruise to Alaska. This crass tycoon invited along family members, including 8-year-old Averell Harriman, plus twenty-some of America’s scientific and artistic elite, e.g. the naturalist-conservationist writers John Burroughs, John Muir, George Bird Grinnell (closest to an ethnologist of the group), C. Hart Merriam, our foremost Alaska expert Dall (see §3.2.14)—both Merriam and Dall were vocabulary-writers, but not on this trip—plus photographer Edward S. Curtis, vocabulary-writer only later. In short, although the luxury cruise produced a remarkable wealth of published scientific data, Alaska Native languages were evidently beneath the dignity of any of this genteel and cultured crew, with the notable—but forgotten—exception of the tycoon himself. Harriman had bought the most expensive and spectacular phonograph of the time, a Columbia Graphophone Grand, with a six-foot horn, and outsize five-inch diameter cylinders. (The machine cost \$300, equivalent to over \$87,000 in 2017 dollars; the cylinders cost \$5 apiece, \$145 in 2017.) Those cylinders did not play longer than the usual 2.5-minute cylinder, but played louder. As the ship approached, a landing Harriman would blare rousing music on his toy, to entertain and impress the assembled. What is less well known is that Harriman used the machine also to record Alaska Native song and speech.

At a meeting on cylinder restoration at Sapporo, Japan, in 1985, which I attended, Anthony Seeger, then of the Indiana University Archive of Traditional Music, brought along two Harriman cylinders then on loan there, especially to find if anyone could identify its language. As he played one, I am very proud to have guessed that it sounded like Tlingit played backward. Seeger reversed the cylinder on the mandrel (not tapered). The cylinder indeed proved to be Tlingit, one of those made as described in Goetzmann and Sloan (1982: 92), at the Governor's Mansion at Sitka, June 17, 1899, at a formal reception hosted by Governor Brady. One cylinder is of Tlingit song, and one is of speech by two Tlingit men (followed by one by Brady). The Tlingit speech is a routine fine specimen of proud Tlingit oratory. The sound quality is such that it is perfectly easy to transcribe (transcription first by Leer in 1985, then by Dauenhauer and Dauenhauer (1990: 156–81, 325–7)).

Harriman's ship stopped at Yakutat for some time. "North of Yakutat Bay no Indians were met with, all the natives seen from that point onward being Aleuts or Eskimo" says our ethnographer Grinnell (Grinnell 1901: 185). Then for June 24–28, 1899, the ship was at Orca cannery near the present Cordova, for repairs.

In 2001 my enquiry at the Indiana archive revealed that in the box in which the Tlingit speech was found was the typewritten label:

"COLUMBIA GRAPHOPHONE RECORD. Made in Orca, Alaska, June 27, 1899 – Story by two Indians of a man drowned from Steamer Wildcat. Gift of Estate of Mrs. Mary E. Harriman, May 1934."

Also on a slip in the box is typewritten:

"Record No. 11. Made in the Dining Saloon of the George W. Elder at Orca Station, Alaska. In the Eyak language. This is a speech by two Eyak Indians who give a vivid description of a white man drowning from the Steamer 'Wildcat' at Orca, Alaska, about 4 month previous. The man, who was cleaning fish, fell overboard head first and during the interval in which they were putting a boat over for him he threw up his hands in despair and sunk. His body has not been recovered."

The typewriting in both is clearly later copy from what must have been Harriman's own hand, at least the latter slip. There are expressions such as "4 month previous" and "and sunk," which reflect more the language of the tycoon than of the elite. The use of the phrases "Eyak Indian" and especially "Eyak language" is, it must be realized, probably the first ever in the history of written English, 31 years ahead of its time. Harriman was just spontaneously using those phrases to label Indians he knew were from the village of Eyak, and their language.<sup>20</sup>

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<sup>20</sup> I made efforts to locate any more of the Harriman cylinders (e.g. the Indiana archive, Heye Museum, Smithsonian, National Museum of the American Indian, Arden House). There must have been ten cylinders before "Eyak No. 11," and an unknown number after it—the cruise was less than half over at Orca—and those outsize cylinders would be quite noticeable in any collection. All my efforts to locate any such cylinders have so far met with failure.

The centennial of the Harriman Expedition was well observed, with much publicity. There was even a

As far as we know, no note was made of the Eyak language for thirty more years. There was one possible sort of exception, a local effort, which Lena remembered in 1963. When they were young, probably around 1920, Paul Eli (or Paul Alec) and Lena tried to write down Eyak once, using the English alphabet. He had so hard a time, he gave up. He was part Aleut, part Eyak, spoke a few words of Eyak, but did not pronounce it right. Lena last heard (1960) that he was in Seattle. There is a Paul Eli in the 1930 Cordova census, age 45, and in 1940, Native, age 60.

### 3.3.4 Frederica de Laguna

Frederica de Laguna had been a Ph.D. student under Boas at Columbia since 1927, went to Greenland in the summer of 1929, and was finishing her dissertation that year on Eskimo and paleolithic art (published 1932–33). Her Greenland trip put her especially in touch with Danish ethnographers. In 1930 she was planning to go to Alaska as an archeological assistant to Kai Birket-Smith, originally to the Shumagins, but they changed their plans to go instead to Prince William Sound, the southeastern limit of Alaskan Eskimo territory. It is not clear that they knew anything at all about Eyak at that point, or had even heard of it. At most it would have been the confused garble in the 1910 *Handbook* (see §3.3.4.1). Boas himself was presumably no better informed on Eyak than that, either, in spite of all the preceding so pointedly chronicled here. De Laguna further notes (de Laguna 1996: 68): “My own professor, Franz Boas, who had heartily approved my trip to Greenland, was less enthusiastic when I informed him of my plans for Alaska and warned me, on the basis of his own experience, that I would have to move a lot of shelly midden material to find only a few specimens.” Obviously, the plan was strictly for Alaskan Eskimo archeology, and about even that Boas was unenthusiastic.

#### 3.3.4.1 Expedition of 1930

At the last minute, ill health forced Birket-Smith to cancel, but de Laguna went anyway, with her geology student brother Wallace, to a survey for Eskimo archeological sites in Prince William Sound and Cook Inlet. They arrived at Cordova June 27, 1930.

“I learned from Mr. H. C. Cloes, the U. S. deputy marshal in Cordova, that there were members of four linguistic groups (or tribes) in Cordova: the Chugach of Prince William Sound, Atna Athabaskan from the Copper River, Tlingits from Southeastern Alaska, and the Eyak. ‘Those Eyaks are altogether a different breed of cats from the others,’ Mr. Cloes said, ‘Don’t let anybody tell you different.’

Did Mr. Cloes’s vehement statement refer to the ‘official’ opinion expressed in the *Handbook of North American Indians North of Mexico* (Hodge 1910: 862) that the Eyak were a small group of Chugach

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reenactment. No attention whatever was given to the matter of cylinder recordings. Great-grandson David H. Mortimer, Harriman family historian, very kindly checked for me on that (p. c. September 2005), even asking his aged mother, but no trace or memory of those cylinders, except the Tlingit, has yet been found.

who had been so strongly influenced by the Tlingits as to be recognized as part of that nation? This information was based on information furnished by William H. Dall in the 1870s.

My curiosity was aroused, although I did not fully understand the implications of this emphatic statement. Few people outside this part of Alaska had ever heard of the Eyak, but Birket-Smith and the Russians, who zealously collected vocabularies from all the tribes that they encountered, were well aware that these natives formed a distinct group?" (de Laguna 2000: 36–7)

Since this disclosure was news to de Laguna in 1930, and there had been no note of Eyak in their plans, it is doubtful that Birket-Smith should be cited as being as well informed as the Russians had been on Eyak, and even de Laguna's mention of the Russian awareness in this connection is obviously from her much later (2000) retrospective point of view. It is a nice coincidence, however, that she likewise now blames Dall for much of the confusion, a point I probably never discussed with her.

The de Lagunas must immediately have followed Cloes up, meeting the key figure Galushia Nelson, who was to be their chief guide and interpreter—also in 1933—to take them on a tour July 1–2 to Alaganik, then old Eyak Village, and Eyak Lake, for house sites. For this I have copy of twelve small notebook pages from 1930, and one loose page of Eyak vocabulary possibly from that summer. The expedition left for Prince William Sound on July 5, and may have been back to Cordova for as much as a week before leaving for Cook Inlet August 20. They apparently tried to make a bit more contact with Eyak before August 20, e.g. finding Old Chief Joe “aloof.” They realized that the remaining Eyaks were few, and deserved further investigation. Not the least reason for this was understanding that Eyak culture and *language* was distinct from any other (Chugach, Tlingit, Ahtna). In fact Frederica thereupon came to the hypothesis that Eyak was an Athabaskan group from the interior that had come down the Copper River to its mouth. This hypothesis was evidently first published in the *Cordova Daily Times* of September 9, 1933, in a report she sent the local newspaper at the end of the major 1933 return expedition, and then in *The Archaeology of Cook Inlet* 1934:

“I reached the conclusion that the Eyak ... are an Athabaskan-speaking people who have pushed down the Copper River to its mouth, separating the Eskimo of Kayak Island from their neighbors in Prince William Sound. This hypothesis, formulated in 1930, has been supported by the results of our ethnological studies in 1933.” (de Laguna 1934a: 156)

In other words, it was not until some time after the 1933 expedition that de Laguna explicitly understood the real position of Eyak, that it was not what might be called “just another” Athabaskan language.

We have a letter from de Laguna to Boas September 19, 1930, at the end of her Cook Inlet survey.

“... I am very anxious to do some linguistic work with you. I did not know how little I knew until I tried to write down the names of old places. I would like to devote a lot of time to taking dictation if there is to be any Indian around the University. I would like of course to make the work have a particular bearing on the various languages which I have encountered here: Prince William Sound Eskimo, ‘Eyak’, which



sounds something like the little Tlingit which I hear[d] on the way up, and Cook Inlet Athabaskan. The Museum will probably send me back here next summer and I was thinking of staying longer and trying to do so[m]e ethnological work among the Eyak or 'Egiaq' as they call themselves. There are only five women and seven men left, and they all live in Cordova. The oldest man, Chief Joe, is said to know many stories, but so far I have not won his confidence. One of the other men [Galushia Nelson], who speaks English well, but his own language rather poorly, has promised to help me, so I have no doubt I could learn a lot from the old man."

We do not have Boas's response, but from this it is clear de Laguna had a strong interest in following up the Eyak, and doing a decent job with the language.

"Aloof" Old Chief Joe, oldest [?] of the Eyaks (1871–1931), said to know many stories, died that next winter. We have the good fortune, however, that young Anna Nelson, Galushia's wife, had learned a lot of his stories, some of which we have in English in Birket-Smith and de Laguna (1938). We moreover have several hours of those in the form she much later told them to me in Eyak (published in Krauss 1982 and Krauss 1970b).

### 3.3.4.2 Expedition of 1933

Whatever her intentions or priorities, the summers of 1931 and 1932 de Laguna returned only to Cook Inlet for further archeology there, without Birket-Smith, who remained ill. In any case, her primary purpose was still Eskimo archeology, even in summer 1933, when she finally returned to Cordova. Birket-Smith had recovered, and the expedition now also included a graduate student from the University of Washington, Norman Reynolds, along with de Laguna's brother Wallace, and her mother Grace. The 1933 priorities are clear at least from Birket-Smith's published plans and reports. First we have his "Plan for an arkæologisk expedition til Alaska sommeren 1933" (Birket-Smith 1933), where he explains that Pacific Coast Eskimo archeology is needed to understand the development of Eskimo culture at that extreme, where it deviates (*afviger*) archeologically and linguistically from the rest of Eskimo due to the substrata of older cultures there. He mentions Tlingit and Aleut, but no Eyak at all, in this expedition to be carried out with Miss de Laguna, based at the "little town" of Cordova, as though she had never mentioned her 1930 discovery there of Eyak to him—a puzzle. Then in his "Preliminary Report," we have the following:

"Da vi den 27. April kam til Cordova, var det endnu halvt vinter, og det var alt for tidligt at tage fat paa udgravningerne. Vi benyttede da den foerste tid til sudiet of de saakaldte Eyak-indianere... Det 11. Mai flyttede vi ud?"

[When we came to Cordova April 27, it was still half winter, and much too soon to undertake excavations. So we used that first period to study the so-called Eyak Indians? May 11 we moved on?] (Birket-Smith 1933: 191–2)

Birket-Smith later writes the following, making the expedition's real priorities quite clear:

"On April 27<sup>th</sup> we arrived in Cordova in Prince William Sound and immediately started an ethnological investigation of the few surviving Eyak Indians. As soon as the weather permitted, however, we left for the shell heap Palugvik?" (Birket-Smith 1953: 1)

De Laguna dates that departure May 14 (de Laguna 1956: ix), but the *Cordova Daily Times* reports it on May 11. Thus their main session with Eyak lasted at most fifteen days—and subtracted from that must be the time during that period spent on outfitting and arranging for Prince William Sound Eskimo archeology. According to the *Times*,

“The party outfitted in Cordova after spending some time here in preliminary work. Five tents, camp stoves, several hundred pounds of food, cataloguing books and personal effects comprised the equipment for a month or more of work which Miss de Laguna and her companions expect to put in on Hawkins Island.”

The lack of any mention of the Eyak work may reflect the expedition priorities or the *Times*’s perennial silence on Eyak, or both.

The amount of time with Eyak after that in summer 1933 is still less clear. Birket-Smith returned to Cordova first, August 6, and left August 14 (*Cordova Daily Times*, August 7 and 14). All we know is that his week included a jaunt up the railroad to Chitina and back. The rest of the party returned from Prince William Sound August 25 to Cordova; Frederica de Laguna and Norman Reynolds did some more Eyak ethnography there, and left September 9, but that period included a boat trip along the East shore of Prince William Sound “exploring several sites and collecting Eskimo and Eyak folk tales” (de Laguna 1956: xxx). Therefore, aside from the Eyak tales on the boat, the sum total time for Eyak ethnography was less than three weeks.

Throughout, their main informant and interpreter was Galushia Nelson (1889–1939). As a boy, he had been taken (abducted?) to Chemawa boarding school in Oregon, from 1902 to 1912. For more on him see Birket-Smith (1935: 89–94), Birket-Smith and de Laguna (1938: 8–10), and Krauss (1982: 15–7). Given his personality and love of his people, he was an ideal interpreter in both senses of the word, but at the same time, because of his absence, age 12–22, his active command of the Eyak language was somewhat limited or faulty, according to later memory. Galushia’s wife Anna also played a crucial role (Krauss 1982). Other informants were Old Man Dude and Johnny Stevens.

### 3.3.4.3 Published and Archival Results

The published 1933 expedition results for Eyak were the following. First was Frederica de Laguna’s report to the *Cordova Daily Times*, printed the day of her departure, a good column and a half long, about a quarter of which is about Eyak:

“[...] It has always [!] been believed that they were originally an offshoot of the Chugach Eskimo, who became absorbed by the Tlingits? Their language is certainly neither Eskimo nor Tlingit. Though it is too soon for us to make a definite statement, we think that the Eyak are a branch of the great Athabaskan nation of the interior [...]”

The next publication was Birket-Smith’s “preliminary report on the Danish-American expedition to Alaska,” in Danish (Birket-Smith 1933), 50 pages, about five of which are about Eyak: “[...] there are now only 11-12 adults left in the tribe, and if anything was to

be salvaged of their past, we had arrived at the very last minute? The language is a kind of Athabaskan.”

Next de Laguna published two pages about Eyak ceremonial paddles she had gotten for the University of Pennsylvania Museum (de Laguna 1934b). There she remarks, in connection with her Athabaskan hypothesis, that “they do speak Athabaskan, but theirs is a very divergent dialect.” Which is a key point to which we shall return in §2.1.1.

In 1935, Birket-Smith published his *Guld og Groenne Skove* [Gold and Green Forests] for Danish popular consumption about the expedition (Birket-Smith 1935). About one tenth of the book gives an account of their findings on Eyak, and also some especially interesting revelations about the situation and treatment of the Eyaks in 1933 Cordova, giving a much more intimate glimpse of that than the main joint publication Birket-Smith and de Laguna (1938) does. I have made an English translation of that subsection of the Danish book, with the feeling that it deserves to be more widely known.<sup>21</sup> The chapter ends with a crucial new understanding of the position of the Eyak language, to which we shall return below. This new understanding is likewise included in Frederica de Laguna’s 13-page “Preliminary Sketch of the Eyak Indians...” (de Laguna 1937).

The archival results from the expedition(s) are very unfortunate, in that most of the fieldnotes or papers of Birket-Smith, Norman Reynolds, and Frederica de Laguna herself, it seems, have been lost. From Birket-Smith all we have is two pages of thirty Eyak words and names as copied by L. L. Hammerich out of an original text of twenty pages, probably done in the 1950s.<sup>22</sup> It was sadly confirmed by the Ethnographic Museum in Copenhagen and by his son to me that Birket-Smith had destroyed all his ethnographic notes in his old age. I was also in touch with Norman Reynolds’s widow in 1985, and ascertained that his boxes from his ethnography days in Alaska contained only books and no papers. All that is left from him is a total of 24 pages in his hand among the six small notebooks from the de Laguna collection. In the mid 1960s de Laguna had kindly sent me photocopies of all the notebooks that contained Eyak linguistic material, she said, even bits thereof. That collection consists of twelve pages from the 1930 Alaganik trip, no language content; six small notebooks from 1933, 122 pages in her hand, plus, interspersed, the 24 mentioned in Reynolds’s, and five larger notebooks, 83 pages, all in her hand. There must have been more. The materials in de Laguna’s files were somehow split into two collections. Part was taken by Robert Leopold to the Smithsonian National Museum of Anthropology’s National Anthropological Archives (NAA). That part was soon well catalogued. I paid a visit to the NAA to examine it all. None of the Eyak notebooks are there. The other part was taken by de Laguna’s literary executrix Marie-Françoise Guédon to Ottawa. So far none of the Eyak notebooks have been found in that part either, though a complete inventory of those materials has not been done yet, so there may yet be some chance of finding some of them. It would be ironic indeed if all that is left of the 1930 and 1933 Eyak notebooks are what

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<sup>21</sup> ANLA ms. EY933B1935.

<sup>22</sup> ANLA ms. EY933B1933.

she made copies of for me. It also appears that there may well have been field journals or diaries kept during the 1930 or 1933 expeditions still in her possession in 2000, but those too may have disappeared.

Guédon told me there were no field journals, but this evidently must not have been the case. De Laguna had told me (vaguely) in the 1960s that at Cordova a “game warden” tipped her off about the Eyaks in 1930. Much later, in de Laguna (2000) she wrote that it was the “Assistant Magistrate H. B. Cloes” who tipped her off. The precise style of that identification, including even middle initial, must come from a written notation in something on like a journal still among de Laguna’s papers in 2000.

One further archival source to mention here is the extensive correspondence between de Laguna and me over four decades, discussing Eyak history and language, now to be found in my correspondence files at the ANLA.

The major result of the Eyak part of the expedition is Birket-Smith and de Laguna’s joint work *The Eyak Indians of Copper River Delta, Alaska* (Birket-Smith and de Laguna 1938). Of its 591 pages, 80 are folktales, 36 are “Critical Analysis of Previous Writers on the Eyak,” 101 are a comparative “Analysis of Eyak Ethnology” (mostly by Birket-Smith), leaving exactly half the book, pp. 17–242 for “Description of Eyak Ethnology.” Given the format of the pages, ca. 1,700 character-count, that might not be much more than 100 pages in an average larger format. It is also virtually the last work ever done on Eyak ethnography—not so for Eyak language, fortunately.

#### 3.3.4.4 Linguistic results

Birket-Smith and de Laguna (1938) book does include, aside from words and phrases throughout, an appendix on the language. That Appendix played a crucial role in this history. It contains some phonetics on two pages, an Eyak vocabulary of not much more than 500 entries, nine pages of grammar and phrases, and seven pages on kin terms (from Anna Nelson). Not all, but most, of the remaining archival material in de Laguna’s hand or in Reynolds’s is here, but there is more here than in what we have of the notebooks too. We also have a typescript version of that Appendix very much refined from the notebooks, preparatory to the printing, probably datable to 1934, prepared by de Laguna, 41 pages. “All words were obtained from Galushia Nelson, except those [31 in number] marked ‘Dude,’ which were obtained from Old Man Dude.” The published texts are all in English, but even the phrases and titles of the texts in Eyak provide the very first samples of the language more than a word or two in length. (The notebooks include a few short texts in Reynolds’s hand, but those, the very first written down in the language, were never published.) The Appendix also presents the very first attempts at Eyak verb paradigms, possessive prefixes, etc. The transcriptions are significantly better than those of the previous century. De Laguna had had training from Boas, and Reynolds training from Boas’s student Melville Jacobs. Written in a phonetic script for the first time, as anthropologists were taught to do in those days, the 1933 transcriptions, using <?>, <q>, <x>, <’> for glottal stop and glottalization, <c> for /sh/, and the like, gave the impression of much greater accuracy and

credibility than they truly deserve, as they may be wrongly heard as often as right. Noting the inconsistent or variable results in their “scientific” transcription, between speakers and between transcribers, led them to believe in far greater variability than the language truly had, even to the point of believing they were dealing with more than one dialect. There were at least two things I was never able to convince Frederica de Laguna about. First, that her own transcriptions were fully as good as Norman Reynolds’s, even though I had a clear basis for comparison from those pages of fieldnotes. Second, that a “phonemic” transcription could be of as much value as a phonetic one, and could even demand a greater degree of understanding and rigor. Possibly also third, that attested dialectal variation within Eyak was minimal, even considering Yakutat, which she only became aware of later, after 1949—she could hardly have been aware of or misled by the Veniaminov statement, of a “Yakutat” and Ugalents dialect, discussed in §3.2.11.

We have an undated letter from de Laguna to Boas, evidently April or May, 1935:

“Here are the Eyak notes and vocabulary [probably the typescript]. You may keep them all summer? We will publish the vocabulary as an appendix to this report [eventually 1938].”

She continues with recommending Reynolds for a follow-up investigation. We also have a crucial letter from Sapir to Boas, April 26, 1935.

“Enclosed is Miss de Laguna’s manuscript on Eyak. Please return it when you are through with it as I have promised to give her a statement about it. I think you will find it interesting.

As far as I can make it out it is nearer to Tlingit than to Athabaskan though it has quite a number of words and forms that are reminiscent of Athabaskan. It may turn out to be either a very divergent Tlingit dialect that has been influenced by Athabaskan or else an independent division of a linguistic group that includes Tlingit, Athabaskan and itself. It would be an important language to investigate in either case?”

Sapir then wonders where money might come from, and prefers it should be for someone “who already knows something of Tlingit and Athabaskan.”

It is thus difficult to see whether de Laguna had first addressed Boas or Sapir about Eyak. Birket-Smith’s *Guld og Grønne Skove*, with a foreword dated April 1935, concludes the Eyak section with the following:

“This, one is tempted to say ‘microscopic’, tribe of eleven twelve persons speak their own language, which is so different from the neighboring tribes’ that it is altogether unintelligible to them. Never in all my days have I heard such a fireworks of four-five hissing, spluttering, lisping and exploding consonants piled tight together as in the Eyak language, and it was not therefore without difficulty that we managed to write down a vocabulary. But it paid off! After our return we showed it to two men whom one might well call the most expert on North American Native languages, Professors Boas and Sapir both decided unanimously that we are dealing not just with a new language, but an altogether new language branch, possibly distantly related to Athabaskan and Tlingit. It seems so interesting to them that now they want to send an American expedition to study the Eyak language itself, before it is too late. Our discovery really opens whole new perspectives for the ethnography of that region.” (Birket-Smith 1935: 102, my translation)

Birket-Smith's report has been very swift, the same month as Sapir's letter. De Laguna's appears in her 1937 "Preliminary Report," much less dramatic:

"The vocabulary which Norman Reynolds and I collected has been examined by Dr. Boas and Dr. Sapir. The latter reports that the phonetic system is suggestive of Tlingit, and the language itself may be a new dialect [*sic*, i.e. branch] of the Na-Dene group, coordinate with Athabaskan on the one hand and Tlingit on the other." (de Laguna 1937: 64)

Sapir may have gotten or given this impression because he was intimately expert with Athabaskan, far less so with Tlingit, so that he was more deeply struck by its difference from the Athabaskan he knew than by its difference from Tlingit.

Finally, in the chronology of this revelation, one is left wondering about de Laguna's use of the phrase in her much earlier note about the paddles, published January 1934, that Eyaks "do speak Athabaskan, but theirs is a very divergent dialect," which foreshadows the 1935 Sapir revelation, without explanation, considering that her hypothesis at that time was that Eyak was (part of?) Athabaskan. In any case, however ironically, American scholarship was catching back up with the Russian, at least at the Copper River end—not that anyone was seeing it that way, of course.

We have good student notes by both Stanley Newman and Mary Haas for Sapir's course on Comparative Athabaskan at Yale, starting January 28, 1936. From these it is possible to reconstruct Sapir's lectures in some detail. The initial lecture, including mention or listing of the relevant languages, seems to include no mention of Eyak (or Tlingit) at all. By then, near the end of his life and energies, far from the loftier interests of the beginning of his career, e.g. Na-Dene, even Sino-Tibetan, Sapir was far more preoccupied with Comparative Athabaskan at most, more in fact Navajo itself. At the 1984 Sapir Centenary Conference in Ottawa, I remember de Laguna's surprise that I had nothing to say about Sapir and Eyak. By that time, Mary Haas had explained to me, it was hard to get Sapir to teach a course even in Comparative Athabaskan itself, let alone anything beyond that. "His heart wasn't in it," said Mary. (For a full account of Sapir and Athabaskan, see Krauss 1986.)

Ironically also, the *magnum opus* on Eyak, the joint Birket-Smith and de Laguna (1938), came out with no mention whatever about any revelations on the genetic position of the Eyak language, from Sapir or anyone else. It also showed no awareness that Eyak was or had been spoken much east of Copper River or Controller Bay. That latter ignorance shows that the authors had still not acquired any real knowledge of what the Russians had published on the Eyak language, in spite of the historical section of the book. Possibly the printing chronology of Birket-Smith and de Laguna (1938) was such that the 1935 Sapir revelation came too late, though not too late to be included in de Laguna (1937).

Nothing came of the proposed follow-up. De Laguna continued to recommend Reynolds. Boas and Sapir were polite, but they kept stipulating that the work be done

by someone trained in Athabaskan and the like. Mary Haas (then Swadesh), at the time a student of Sapir's at Yale, was nominated:

“One very urgent piece of new field work has turned up that ought to be tended to. It is an investigation of the Eyak, a tribe which seems to be intermediate between Tlingit and Athapascan, the knowledge of which would be of the greatest importance for an understanding of the relation between these languages. If this can be done, we should entrust Mrs. Swadesh with the work. The amount needed for the field work is estimated at \$1000 to \$1500.” (Boas 1936: 745)

But it was the Depression, and Mary Haas told me furthermore that she was advised that “Cordova was no place for an unaccompanied lady to go.” Sincere attempts to have Reynolds go as her assistant also came to nothing.

Much then intervened, including Sapir's death, Boas's death, World War II. Though de Laguna did not directly return to Eyak, she evidently soon found she could not get away from it. As soon as she began her work on Tlingit at Yakutat in 1949, she discovered that Eyak had been there too, before Tlingit. She therewith began to develop a far broader perspective on Eyak geography and prehistory. This comes to light in her three-volume masterpiece on Yakutat, de Laguna (1972), and is made very clear in her *Handbook* chapter on Eyak (de Laguna 1990). Thus, finally, Russian knowledge is regained, though still without the full realization that the Russians had all this clearly published in black and white, even color.

De Laguna's thought was never static, always in motion. This certainly was no less true of her thought about Eyak. Before April 1930, what little she knew was at most (1) the American confusion about Eyak, as some kind of mixture at Cordova; but more probably, the expedition knew nothing about Eyak at all. After that, she believed (2) that Eyak was a separate Athabaskan language that had come downriver to Cordova, then (3) somehow that Eyak was an especially divergent Athabaskan language, then (4) from Sapir in 1934 that Eyak was an intermediate branch of Na-Dene between Tlingit and Athabaskan; then, in a new direction, (5) that Eyak had been the language of the coast at least as far as Yakutat. A few months before her death in 2004, I visited her for the last time, and she alluded to new ideas, including (6) that Eyak was once a far more widespread language still, of a once far more powerful people. During the very last weeks of her long life, she spoke extensively to Marie-Françoise Guédon of these ideas, who took notes on them. It now remains for her to pass de Laguna's last thoughts on Eyak on to us, as well as the final results of the search for her Eyak notebooks.

Finally, I now see that that purely chance encounter in 1930 was much more than an episode in de Laguna's career, but also a bridge or redirection, from her work with her Danish colleagues on Eskimo to her work with Northwest Coast Indians, especially Tlingit. Indeed, her most extensive work was Yakutat Tlingit, neighbors directly on the other side of Eyak.

### 3.3.5 Harrington 1940

John Peabody Harrington (1884–1961) had already spent 33 years famously recording Native languages of the American West by the time he came to Yakutat to work with George Johnson, and he was already familiar with Tlingit since 1939, from contact with two speakers in Seattle. George Johnson was born 1891 at Bering River Village, with Eyak presumably as his first language, but Tlingit surely soon as a second. We do not have the date of his moving to Yakutat, but Johnson told me he had probably not spoken Eyak for 30 years (i.e. since 1910) before Harrington came to work with him. One can easily see from the Harrington material that Tlingit was Johnson’s dominant language in 1940, much steadier than his Eyak. (For more on George Johnson see §3.3.10.3.)

We have an excellent account of Harrington’s work with Johnson in Elaine L. Mills’ guide to the Harrington papers at the NAA (Mills 1981, Volume I.8-14). She notes that Harrington wanted to bring Johnson to Seattle, but ended up having to go to Yakutat, where he stayed May 12 to June 14, 1940, working eight hours a day with Johnson (Johnson told me “about six”). There is no question of Harrington’s interest in Tlingit, and in fact he ended up writing a paper on comparative Athabaskan and Tlingit, his “Navajo of the North” (Harrington 1945), published finally in 1945—in which Eyak does not figure at all. (What few comparative remarks Harrington makes in the article show that he had no idea whatever of real comparative method, e.g. the rigorous methods that had been established so well in linguistics by then to show genetic relationships, e.g. through regular sound correspondences as opposed to vague surface resemblances.)

It seems probable that Harrington’s reason for working with Johnson was that Johnson was bilingual with Eyak, not any other reason, except that the Yakutat Tlingit dialect would be covered at the same time, presumably—as it should be—a minor factor. The material Harrington got from Johnson is predominantly Tlingit, the Tlingit normally given first (“Y”), then the Eyak equivalent (“C”), if any. The latter is often missing, or merely noted or dismissed as “= Y.”, while the former is perhaps never missing. One cannot tell that Harrington was disappointed or frustrated that he was getting less Eyak, and less good Eyak, than Tlingit, or, from this material, just what was the nature of Harrington’s interest in Eyak as such. Here it is just an accompaniment, where available, to the Tlingit.

It is obviously dangerous to play guessing games on a psyche like Harrington’s, but he apparently lost interest in, or gave up any plans for, using Eyak comparatively, hence never published on it. He was of course a good sleuth for finding last speakers, but never seems to have considered going to Cordova, where he had to know that there were of course several more speakers, or working with Anna Nelson(-Harry), who had recently moved to Yakutat. The only printed mention of Eyak we have from Harrington is in the *Smithsonian Annual Report* for 1941:

“Dr. Harrington proceeded in May to the study of Atchat, or Eyak Tribe, which was found to have occupied the entire eastern half of the Gulf of Alaska, a stretch of coast 150 miles long, extending from Prince William Sound in the west to Lituya Bay in the east. This tribe has earlier been called Ugalentz and Eyak, but the real name of the tribe has never been known, Atchat, meaning ‘on this



side' or 'opposite,' referring to location on the Gulf of Alaska and opposite the islands. This language also proved to be closely related to the Navaho, and, as might be expected, more closely related to the languages of British Columbia and the Navaho than is the island language." (Stirling 1940: 51-52)

De Laguna might well have agreed, at the end of her life, that Eyak was once spoken as far to the southeast as Lituya Bay. That, incidentally, is not 150 miles from Prince William Sound, but more like 400 miles. Harrington is right that Eyak is related to Canadian Athabaskan and Navajo more closely than is Tlingit ("the island language"?), but that is hardly new. As for the supposed ethnonym "Atchat," see below at the end of this subsection on Harrington.

Definitely, Harrington's interest in either language was overwhelmingly lexicon. He transcribed no texts, and got very little into the grammar. He took a very broad interest in the natural history, especially flora and fauna, and in placenames. His notes are full of local lore of many kinds, including current salmon prices, but could hardly be considered disciplined linguistics or ethnography. Harrington did have an excellent ear, however, and from the first, he was transcribing both the Tlingit and the Eyak in his own idiosyncratic but essentially adequate writing system. He was far from infallible, so made frequent mistakes, but his writing performance is good enough that the mistakes are at least definable. The Harrington transcriptions are thus in fact the first approaching adequacy for Eyak ever. If they were the last we had of Eyak, we could at least verify what we had hypothesized philologically from the earlier transcriptions we have of Eyak.

In terms of quantity, there may be some 1,500 Eyak items in this corpus, so in this respect too, Harrington surpasses all previous Eyak work. In terms of sheer paper bulk, on the other hand, since Harrington had the habit of taking a new sheet of paper, often foolscap size, for each new word, the number of microfilm frames listed for the collection by Mills is for at least 3,547 sheets of paper. One section of 221 pages is exceptional in a way, a rough typescript draft entitled "Southern Peripheral Athapaskawan (*sic*) in Alaska and Canada," supposedly authored "By John P. Harrington and Robert W. Young." Late in 1939 Harrington had traveled in Canada with Robert Young, working on Sarcee, Carrier, Sekani, Beaver, Chipewyan, with a view towards comparative Athabaskan. The Tlingit and Eyak were certainly to be connected with that, but the 221 pages we have show no sign of any such comparison or of Robert W. Young. All that is present is fauna and flora information and terminology from Tlingit and Eyak. By far the longest part, 89 pages, is a disquisition on salmon, most of that with no Tlingit or Eyak at all, the rest of fauna on 77 pages, flora on 31 pages. This document is incomplete. There are at least 20 pages more in the original as made widely available in microfilm, with Mills' 1981 commentary book. Throughout the whole typescript there are about 374 Tlingit and 238 Eyak terms. Harrington's Eyak from George Johnson must, moreover, be used with care, as Johnson's Eyak was so rusty, and Harrington's approach and judgment such that the Eyak forms are too often contrived or forced translations of the Tlingit.

Harrington was not any kind of "mainstream" linguist, needless to say, and his career was such that his work or data were hardly shared with his contemporaries. De Laguna

became aware of it only when George Johnson told her about it in 1949. She never saw it until I sent her copies, as it was being prepared in the 1960s for microfilming.

Harrington calls Eyak “Atchat” in his reports to the Smithsonian, which he there claims to be the thitherto unknown ethnonym for them in their language. There is nothing in his notes we can see about such a term. By far the most likely source for that name must be *’a:nch’ahd* ‘from here’, as in [‘speech] from here’, which is not at all ideally chosen for Eyak. It must be a partial calque from Tlingit *yáat kwáan* ‘Eyaks’ < ‘here-people’. The missing Eyak length, nasalization, glottalization, and aspiration, together, are well below standard for Harrington, so there may be another hand at play here, including some kind of Anglicization, including <tch>. He recognizes that the language has been called “Ugalenz” and “Eyak”, certainly having seen Birket-Smith and de Laguna (1938), but claims he has discovered its true name, meaning, he says, ‘on this side’ or ‘opposite’, however an unlikely combination. This must obviously have been forced from Johnson. Moreover, the contrived nature of the name is not only typical evidence of Harrington’s aggressiveness in eliciting or contriving of forced translations. It is also highly typical of his need to be original, mysterious, along with his virtually paranoid secretiveness.

### 3.3.6 Hoijer 1946

Harry Hoijer (1904–1976) wrote the introduction to *Linguistic Structures of Native America*, a book that included his own grammatical sketch of Chiricahua and Li’s of Chipewyan (Hoijer 1946). In that introduction Hoijer (1946: 12) provides an interesting and quaint statement, which is all we have that represents the state of knowledge about Eyak among knowledgeable Americanist linguists during the period from 1938 until Li’s fieldwork in 1952 (§3.3.7). Hoijer’s statement might have come from some vague awareness of Birket-Smith and de Laguna (1938), but more likely from what Hoijer somehow had heard in 1934 or later from Sapir (who died in 1939). Hoijer’s entire statement:

“Eyak. A recently [!] discovered language spoken by about 200 [!] people on the Copper River delta in Alaska. Its classification is as yet uncertain, but it may turn out to be a link between Athapaskan and Tlingit.” Hoijer (1946: 12)

In fact, by 1946 Eyak was remembered by 10–12 people there. (Harrington’s 1940 work, in spite of his 1941 statement in the *Smithsonian Annual Report*, was presumably unknown to Hoijer. It certainly was still unknown to de Laguna and to Li and Austerlitz when they did their fieldwork.)

### 3.3.7 Li 1952

Fang-Kuei Li (Li Fang Kuei, Li Fanggui; 1902–1987) first came to the U.S. in 1924. As a student of Sapir’s at Chicago, his 1927 M.A. thesis was a study of Sarcee verb stems

from Sapir's 1922 field notes, published in Li (1930b). (The Sarcee had made Sapir tone-happy, and Sapir was pleased to have a tone-sensitive bright young "Chinaman" working for him.) In summer 1928, while Sapir was working on Hupa in California ("no tones!" confesses Sapir), Li worked nearby on Wailaki and Mattole (no tones either). Li's 1930 Ph.D. dissertation was on Mattole. In 1929, looking especially for more Athabaskan tone, and of course counting on Li's ear, Sapir sent Li north to Chipewyan and Hare. Li came back with data showing tone alright, but that Chipewyan tone was the reverse of what Sapir expected from what he had found in Sarcee (1922), Kutchin (1923), and Navajo (1926). I believe that the result, between the already revered Sapir and the deferent discreet young "Chinaman" was the opposite of fruitful, but rather that the study of Athabaskan syllable nuclei became taboo, and, in any case, Li returned to China in 1929. Li's last Athabaskan paper (brilliant), was "Chipewyan Consonants" (Li 1933)—not vowels!. That was the end of Li's Athabaskan career. After that Li made an enormous lifetime contribution to the study and classification of Chinese and Thai languages. He returned to the U.S. in 1949, and remained in Seattle until his retirement in 1969, when he went to Hawaii.

From her first summer at Yakutat in 1949, de Laguna must have realized that Eyak had been there—and was still there, or again there, in the sense that two Eyak speakers originally from Bering River Village (George Johnson) and Cordova (Anna Nelson Harry) now lived there. In preparation for a much wider investigation there in 1952, she took the initiative to enlist Fang-Kuei Li from Seattle to work on the Eyak language. She got a grant from the Wenner-Gren Foundation to support Li for that, separately, but in connection with her large Yakutat Tlingit project.

Li spent about six weeks in Yakutat and then Cordova, June to July 1952. In 1965 Li kindly allowed me to make photocopies of all his Eyak notes. We have two notebooks from George Johnson, 41 pages and 22 pages of length, then one from Anna Nelson Harry, of 42 pages, and then one from Minnie and Scar Stevens in Cordova, 24 pages. The Johnson notebooks contain about 750 words and phrases, and six texts, Anna's about 700 words and phrases and one text, and Stevens's about 480 words and phrases. Li's materials thus then constituted not only the most extensive Eyak lexicon, but also included seven texts, most from George Johnson, the first (not counting the few brief attempts by Reynolds in 1933) we have for Eyak. Throughout, especially with Anna, there are, moreover, the beginnings of verb conjugations, going at least a step beyond Harrington and Rezanov in the direction of exploring Eyak grammar. The transcription throughout is fairly good, at the level of Harrington, though e.g. usually writing <q'> for /k'/.

The language of the Johnson texts is rather halting or "stiff," especially at first, but limbers up somewhat in the later ones. The notebook from Anna is the first work with her, not counting her 1933 kin terms and "background" contribution, prompting her first husband Galushia (see §3.3.4.4). Li's work with Minnie and Scar Stevens, mother and father of Sophie and Marie, is the only documentation we have directly from them.

In addition to the notebooks, we also have from Li his file-slips. These are about 1,200 three-by-five-inch slips that have been photocopied and shingled onto about 140 pages, containing about 2,000 Eyak words and phrases. These are largely, but not entirely,

copied from his notebooks. The material on the slips and not in the notebooks is additional conjugation of the verbs. The slips are organized alphabetically by the stem of the word. This thus begins to be an organization of his data into an inventory, or dictionary of Eyak, and is something of a standard part of the results of good linguistic fieldwork in the best tradition of the day.

Li's only publication from this work is the four-page article comparing the instrumental noun suffix *-L* in Athabaskan and Eyak (Li 1956). Li concentrated rigorously on the suffix, but treats us to a number of insightful comments:

“a few words may be said about the relationship of Eyak to Athabaskan, as their relationship has not yet been clearly stated. In vocabulary, Eyak differs tremendously from Athabaskan in general ...A fair number of words can be directly compared with the Athabaskan ...Regular phonological correspondences can be obtained from such comparisons.” (Li 1956: xxx)

Li does not, however, take the time to make those correspondences explicit.

Li (1956) further notes that “Eyak is not a tonal language.” On the top of his first page of his notes from Johnson, Li has marked “1. check tones.” He then proceeds dutifully to write tone-marks throughout all his Eyak notes, in spite of the obvious conclusion he must soon have come to, that Eyak has no distinctive tones. He must have taken the trouble out of extreme caution for his debt to posterity, especially in view of Sapir's enthusiasm for tone in this language family.

“On the whole it seems to me that while Eyak is definitely related to Athabaskan, it cannot be considered as one of the Athabaskan languages. Perhaps Sapir's Na-Dene group may be said to have definitely two members, Athabaskan and Eyak, what other members may eventually be included will remain to be worked out.” (Li 1956: 47)

Here Li is distancing himself from Sapir in questioning whether even Tlingit is genetically related to Athabaskan-Eyak, let alone Haida. Further, any question whether it was Krauss or Li who finally made clear the position of Eyak with regard to Athabaskan should herewith be definitively answered. Except that we already have from de Laguna, Eyaks “do speak Athabaskan, but theirs is a very divergent dialect” (cf. §3.3.4.3), and more to the point, we have of course the whole story published in detail from the Russian period.

This brief Eyak interlude was the only time Li came back to, or near, the Athabaskan phase of his distinguished linguistic career. Here too, we have de Laguna to thank for getting Li to do it.

### 3.3.8 Austerlitz 1961

Robert Paul Austerlitz (1923–1994) had a multilingual childhood in Hungarian-Romanian Transylvania and came to New York in 1938. His training and career were at Columbia University, but his interest and experience were very broad in real languages, most especially Finno-Ugric-Uralic, and in Giliak (or Nivx) from Sakhalin, which work he did in

Japan in the 1950s. Eyak was thus to be documented by yet another distinguished linguist, this time on something of a “lark.” Unlike Li though, Austerlitz had no particular experience in any languages related to Eyak.

It was through me that Austerlitz worked on Eyak. I had come to the University of Alaska, Fairbanks, in the fall of 1960, and promptly began efforts to establish work with Alaska Native languages. By spring of 1961, I had obtained funding for basic survey and documentary work from the National Science Foundation, with a generous grant of \$38,000 (in 1961 dollars, of course). I circulated a poster, featuring a woodcut of an Eskimo fishing through the ice, to recruit fieldworkers for the program, expenses paid plus \$60 a week (token) salary. In April 1961 Austerlitz responded, thinking of Aleut. By May Austerlitz and I were corresponding about Athabaskan; in July Catharine McClellan, disciple and colleague of de Laguna’s, who had worked with her in Yakutat, strongly suggested Eyak to Austerlitz and by the end of that month he wrote me that he was “sold on Eyak.” Reviewing that correspondence, I am reminded that I was merely happy to have Austerlitz to do anything, and cannot take the credit for the decision that Austerlitz work on Eyak.

I insisted that Austerlitz get immediately in touch with Li, who responded helpfully and, on his way to Alaska, Austerlitz spent August 17–20 in Seattle, conferring with Li. August 20–22 Austerlitz was in Yakutat, August 22<sup>nd</sup> to September 19<sup>th</sup> he spent in Cordova, then September 19–22 he was again in Yakutat, so he really had about one month in all for the field study of Eyak. He managed to work briefly with Anna Nelson Harry in Yakutat at both ends of his trip, but most of his time was spent in Cordova, working with Lena Saska Nacktan and Marie Smith.<sup>23</sup>

From Austerlitz’s work with Anna Nelson Harry, Marie, and Lena, we have about 600 notebook pages with perhaps 4,000 elicitations, including a fair amount of duplication. The largest part is vocabulary, and for this Austerlitz made considerable effort on systematic flora-fauna work, which is perhaps his most important contribution. Austerlitz also attempted to go into the grammar to some extent, perhaps a bit more than did Li, but with much less background for it. He also got a small amount of elicited text, but it is rather artificial as it consists mostly of translation from English. The quality of Austerlitz’s transcription is perhaps not quite so good as Li’s, again because he had not had the previous experience with Athabaskan that contributed to Li’s accuracy.

Finally, we also have a six-page, dittoed handout from a linguistics class taught by Austerlitz at Columbia, dated Oct. 10, 1961, consisting of a phoneme inventory, basic verb conjugations, a three-line text, a list of 48 animal names (mostly mammals), and statistical analysis of biota terms (monosyllabic, polysyllabic, loans; 173 fauna, 68 flora). Austerlitz recognized that Anna Nelson Harry had outstanding talents, and for a while entertained hopes to return to Yakutat at Christmas-time 1961, but other priorities intervened, and Austerlitz could not continue with Eyak.

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<sup>23</sup> More on the Eyak speakers in §3.3.10.

The phoneme chart in Austerlitz's handout is far more advanced than reflected by his fieldnotes themselves. For example, it is only toward the end of his notes, ca. p. 115, that he notes "[t] and [d] interchangeable!" It is correct to infer from this that Austerlitz's transcription includes much over-differentiation. He had mediocre grasp on the system as such, and even allowing for the over-differentiation, probably most velars vs. uvulars, and even plain vs. aspirate vs. ejective are probably incorrectly identified more often than correctly (see §4.1). Likewise V' as opposed to Vh, vs. V: as opposed to V (and perhaps never V:') (see §4.3). Like Li, on the other hand, Austerlitz also uses accent marks to transcribe pitch, rather (or relatively) well, though he may have recognized pitch as non-phonemic. As are Li's, his transcriptions are therefore useful as a record for Eyak prosody, relatively neglected by me, especially for recognizing disyllabic stems.

Austerlitz also made the first tape recordings of Eyak that we have, perhaps the first ever made. Those tapes were all retrieved from Daniel Abondolo, his literary executor, in London. They are now digitized, perhaps fifteen minutes in length, mostly from Marie, a bit from Lena and Anna. Almost all is of vocabulary, fewer probably than 200 words, virtually no new information. There is no spontaneous text, even from Anna, but only an earnest attempt to construct a text, by translating a few simple sentences from English sentence by sentence, with Marie. Austerlitz was clearly determined to get Eyak text, but both Marie and Lena must have been reluctant to record spontaneous text, as they were two years later for me, though they were willing and able to dictate some traditional text for me to transcribe. It is harder to explain why Austerlitz did not get any text recorded from Anna. The Austerlitz tapes are valuable mainly as sound record of native speakers Marie, Lena, and Anna reciting vocabulary.

### 3.3.9 Summary of Work before Krauss

Here we pause to take stock of the totality of the work on Eyak through Austerlitz. The period 1778–1867 is quite remarkable both for the number of primary and secondary sources. The primary sources include six formal vocabularies, one of which is 1,128 words long, and the secondary sources, including important maps, statements, and studies of the data, are adequate to show the geographical distribution of Eyak, its dialectal uniformity, its genetic position and, in woefully inadequate transcription, a very poor picture of perhaps 15% of its vocabulary, and practically no grammar. Frederica de Laguna essentially began the resumption of Eyak language work. Harrington, Li, and Austerlitz all finally transcribed better, but still with many mistakes. Since none worked long enough to start learning the language or its system to hear it with consistent accuracy, none made much headway into Eyak grammar, or got good quantity of text in it. There had been no steady progress, nothing building on previous work. Thus, even the accumulated lexicon is heavily duplicated, such that a skillful collation of the total, if any heroic philologist were to attempt that, might at best be found to represent somehow 30% percent of the vocabulary of the language. Only a small fraction of that could be considered clearly represented, given

the variation or fuzziness from the frequency of mishearing. That problem, especially with verbs, which are highly inflected and derived, would have been exacerbated by the opacity necessarily resulting from near total lack of grammatical analysis.

### 3.3.10 Personnel in Eyak documentation 1961–2007

Since Austerlitz, Eyak language work has been done by me together with the six remaining speakers. Having begun Eyak work in 1961, intensively in 1963, in 1970 I made available in typescript a nearly full lexicon and full texts, but continued only minor fieldwork. Finally in 2006 I began writing the present Eyak grammar. At the same time, and especially as Marie Smith-Jones, the last Eyak speaker died, in 2008, a new movement has grown, involving the goal of Eyak language revitalization, and Eyak descendants as a community. That new development is described in §2.1.3. The present section deals with myself and the six remaining speakers as of 1961, and our linguistic work since then, through to and including the writing of the grammar.

This work, committed to the best documentation and description of Eyak we could produce, in the form of a grammar-lexicon-texts trilogy, has necessarily been a classic case of salvage linguistics. Spontaneous conversation or use of Eyak ended with the death of Minnie Stevens in March 1961, as noted in §2.1.3. Also, the times and the situation of Eyak survivors was such that there was virtually no Eyak community either, to take any interest in Eyak language work at the time.

The situation was not such that I could work with the speakers together as any sort of group, either, or that I was not clever enough to bring that about. On the other hand, I did have an optimal working relationship with each of the speakers individually, making high priority that they understood optimally the purpose of my questions. It was joint work with a common goal at least in that respect.

#### 3.3.10.1 Michael Krauss

I, Michael Krauss, was born in Cleveland, Ohio, in 1934 and raised there, until I went to the University of Chicago in 1950. I have always gravitated toward the cause of minority and endangered languages. My training in linguistics, 1953–1956, most notably with André Martinet at Columbia and Paris, was at the very end of a “classical period.” Indo-European and the description (documentation) of American languages as Boas, Sapir, and Bloomfield had done, were still important, before all of that was eclipsed by the Chomskyan redefinition of linguistics. I never did have, however, a course in anthropology or any training for fieldwork. My strengths and training were phonology and morphology, much less syntax or anything like discourse. Inspired by Edouard Bachellery at Paris, I took to Celtic, and spent a profoundly formative period, 1956–1957, with Gaelic on Inis Meáin, Ireland. A fellowship at Harvard followed, where there was significant Gaelic expertise in the custodial staff, and also a Celtic department that did two things: it rubberstamped

my dissertation, and prevented me from straying down the street too much to MIT. I then spent two postdoctoral years, 1958–1960, on Iceland and the Faroe Islands. The marginal survival of Gaelic and the spectacular strength of both Icelandic and Faroese also had an important effect on my approach to language.

By then it was clear to me that my priorities were much more to use linguistics for the benefit of endangered languages than to use endangered languages for the benefit of linguistics, and Alaska was certainly a place to do that.

The University of Alaska hired me from the Faroes to come to Fairbanks, as a Visiting Professor, on Carnegie Foundation money, to establish new disciplines, in this case linguistics. The offer was irresistible to me, given my experience and agenda. My “bread and butter,” however, I found, was teaching French and heading a department newly organized as “Linguistics and Foreign Languages.” Alaska Native language work was welcomed, but that was to be supported by National Science Foundation (NSF) grants, and NSF indeed came through. During the 1960s, it was still too early to agitate with any success for Native language rights, bilingual education, or for any but subterranean work to alleviate the suppression of Alaska Native languages in school or society. At the same time, though, the need to document those languages before they (necessarily) disappeared was obvious and recognized.

Under those clear conditions, given both that Eyak was much closer to extinction than any other Alaskan language, and given its key genetic position between Athabaskan and Tlingit, Eyak was of the highest academic priority, by far. It was of course at the other end of the scale socially, except in the all-important symbolic sense that even the smallest of nations matters—or, if not, where do we draw the line? The Eyak case was even exceptional, in that not only was the language disappearing, but so was the Eyak community itself.

I had Austerlitz doing the Eyak work on the 1961 grant, and among others, two very competent workers, Irene Reed and Martha Teeluk, working with Yupik, Alaska’s largest and strongest language group, while I myself began my career with Athabaskan at Minto, fatally near Fairbanks. I also visited the fieldworkers, including Austerlitz in Cordova, where I met Marie Smith and Lena Saska Nacktan. With them I made my first few Eyak transcriptions, especially to establish or confirm some key basic sound correspondences between Eyak and Athabaskan. In 1962 I continued my Athabaskan fieldwork, a statewide survey to define more exactly Alaskan Athabaskan languages. By 1963, however, I realized that the urgent Eyak work was not going to be done by Austerlitz or anyone else with the experience I by then had with Athabaskan, so I determined to commit myself to Eyak, on a long-term basis.

That long-term basis necessarily had its limitations. I was married, with children, and during the 1960s I was obligated full-time for the academic year to teaching French and linguistics in Fairbanks and developing the Department of Linguistics and Foreign Languages (to include, however, Alaska Native Languages, starting with Central Yupik). My time for Eyak was restricted to summer for fieldwork and “spare time” during the academic year for workup, of dictionary and texts, and planning. By 1972 the political work had established the beginnings of Alaska Native Language rights in schools and the



Alaska Native Language Center at the University with statewide responsibilities, of which I was Director. I was no longer teaching French or Linguistics, but the directorship was twelve months a year, and left still less time for Eyak.

My primary Eyak data, in the form of field notes, spanned the period 1961 to 2007, 47 years. These years need, however, to be classed into three phases: 1) Intensive, 1963–1965; 2) occasional or intermittent, 1971, 1972, 1980, 1987; and 3) epilogue, 1993–2007. We shall return to the chronology after an account of the Eyak speakers then still alive. Needless to say, I investigated as thoroughly as possible to find all remaining speakers of Eyak, following all leads, not only in Cordova and Yakutat, of course, but also anywhere I heard of any possible speakers (Anchorage, Fairbanks, Juneau, Seattle). In the 1960s there were still in fact altogether six, as follows: Anna Nelson Harry (§3.3.10.2) and George Johnson (§3.3.10.3) at Yakutat; and Lena Saska Nacktan (§3.3.10.4), Marie Smith (§3.3.10.5), Sophie Borodkin (§3.3.10.6), and Mike Sewak (§3.3.10.7) in Cordova. All but the last two have been mentioned as having worked already with previous contributors. Sophie, again, was the older sister of Marie, and Mike Sewak (pronounced [si:wək]) was from Bering River Village. By 1963 Sewak was blind and mostly deaf, living in the Cordova hospital, speaking mostly Tlingit and English, with very partial recall of Eyak.

Here I have the pleasure to say that every one of these persons sympathetically understood the purpose of preserving as good as possible a record of the Eyak language and worked obligingly to the very best of their ability with me to that end. Looking back at that record, I consider myself exceedingly fortunate in that regard, among others, to have been in the right place at the right time in order to preserve as much as has proved possible at such a late date, thanks to the good will of every single person who remembered any of the Eyak language. As a result, I was able to carry out his fieldwork with extreme efficiency and luck.

### 3.3.10.2 Anna Nelson Harry

Anna Nelson Harry was born at Cordova in 1906, and died in Juneau in 1982. Her mother was murdered when she was about five. Lena reported that Anna lived with her father at his camp at Simpson Bay for some years, isolated and under stern conditions. In 1918, at the age of twelve, she was married to Galushia Nelson, lived and worked in canneries in Cordova. In 1933 she played a very important role with the Danish-American expedition, especially in their folklore and language work (see §3.3.4.2). Her outstanding contribution especially to what we have of Eyak oral literature must no doubt be due to the fact that she had much more than an ordinary interest in such culture. Anna's texts show great natural talent at storytelling and narrative composition. It may be that she learned a lot of that skill as well as the stories, from Old Chief Joe, who was reputed to be a good storyteller (Birket-Smith and de Laguna 1938: 245). However, Anna could never have had much experience or practice narrating in Eyak during her lifetime to anyone who could understand or appreciate such, unless to an audience older than herself. As for narrating to or tape-recording to a linguist, I was the first and only linguist who elicited texts from her,

except for her experience thirty years earlier, “prompting” in Eyak her husband Galushia’s texts in English for the 1933 expedition.

Galushia Nelson died in 1938, and soon thereafter Anna moved to Yakutat, where she made for herself a new life, and married Sampson Harry, a Yakutat Tlingit. Of all the remaining Eyak speakers, she seemed to be the most fluent still, the only one who seemed truly most comfortable speaking Eyak. In fact, she took the most initiative to speak Eyak conversationally with me. I remember with great pleasure getting over the hump of beginning to converse and work in Eyak with her. She also had a highly creative style, and even spoke with verve in Eyak. That creativity included an ability to take something like poetic liberty with the language, to etymologize imaginatively, or even answer questions that way when I pushed the edge, for instance giving ‘hot cocoa’ glibly as ‘eagle soup’. See *In Honor of Eyak: The Art of Anna Nelson Harry* (Krauss 1982) for more about her life, her literary art, and her wisdom. Because she was full of such vitality, and also because she had become rather deaf (and would not accept a hearing aid, so that one had to shout), it was difficult to get her to sit still for long, or go over grammatical questions. On the other hand, I could ask her to tell a particular story, and perhaps the next day she would sit down and thoughtfully tell it, with a far-away look, yet onto a tape recorder, being the only one who was comfortable doing that. It is from her that we have perhaps 90% of the connected text preserved in Eyak. As noted above, she had worked with the 1933 expedition, Li, and Austerlitz. I worked directly with her in 1963, 1965, 1971, and 1972. In 1971, as I was walking out of Anna’s house for the last time, she muttered to herself—as if to teach me a lesson—“*te’ya’ XAsiyah*,” which caused me to wheel about. The same, but with final *-L,te’ya’ XAsiyahL* would mean ‘I ate a fish,’ but the context hardly allowed for that and what I heard notably lacked that final consonant. Such could not be accounted for by the Eyak grammar, all of which I thought I knew by then. I asked Anna what she had just said, and taking out a frying-pan, Anna confirmed that I had heard alright, saying that the phrase spoken in exactly that way meant something like ‘I think I’ll (cook myself and) eat a fish.’ Lena in Cordova later confirmed that she had heard such speech, that some old people used to talk that way, and cautiously came up with some further examples of that type of verb conjugation. That confirmed a whole “new” obsolescent Eyak conjugation, explaining three puzzling items, moreover, in Rezanov (1805). That conjugation is now named now the “s- optative.” Something cognate to that is starting to turn up now also, marginally, in Athabaskan as well (Leer p.c. 2015).

### 3.3.10.3 George Johnson

George Johnson, in Eyak *diyAG*, was born at Bering River Village, April 1891, and died at Yakutat, February 1977. He spent his youth at Bering River Village and Katalla, and must have moved to Yakutat ca. 1912. Eyak was certainly his native language, probably along with Tlingit. Though quite rusty in Eyak, not having spoken it regularly since before he was twenty, or for half a century as of 1963. See further under §3.3.5 for more on him and his Eyak. By 1963 he was already a grizzled veteran of linguistic work with both

Harrington and Li (see §3.3.7). A highly practical and modern man, with a toy-breed dog in his lap, not one to be preoccupied looking backwards; it is remarkable that he was as obliging as he was, during fishing season, to sit with me. I remember Johnson protesting that he had “taught Harrington all I knew.” That was no doubt at least in part a reflection of Harrington’s reputed practice of inculcating that very point, lest any other linguist might later seek data from any of his sources. (I should have asked Li if Johnson said the same thing to him.) I worked with Johnson for a few hours, only in 1963. His wife, Anna Johnson (1875–1964), was also from Bering River Village, who had moved to Yakutat ca. 1890. The couple spoke Tlingit together, but Anna had spoken some Eyak as small girl, and perhaps still remembered or understood some (see Text 59.4). As I sat with her husband, she clearly was interested, even made a few remarks to him, but I could not get her to speak Eyak.

#### 3.3.10.4 Lena Saska Nacktan

Lena (Elena) Saska Nacktan, in Eyak *GAyu*, was born in Cordova, July 4, 1902, and died March 1, 1972. There was probably no school for her to attend regularly in Cordova.<sup>24</sup> She said she spoke only Eyak until she was nine or ten, having a fairly traditional upbringing. She remembered potlatches from that period. She also remembered restraints in talking to members of the same sex and moiety, but that Gus Nelson eventually told her “We’re all dying off anyway, so we may as well give up the old way.” Her mother died in 1915, her father in 1919. She presumably worked in canneries until 1918. She married three Chugach men: Sam Zellinoff, with whom she had two children who survived childhood, Pete Saska, which whom she had five children, and Ponte Nacktan, whom she divorced and moved back to Cordova in 1954. In spite of a gap, nearly half of her life, Lena was not only older than Anna, Sophie, and Marie, but in important ways was especially conscious of her Eyak identity as opposed to Tlingit. She observed that “everything we have is Tlingit,” blankets or weapons the Eyaks made were Tlingit style, and all the songs she had heard were Tlingit. When I was asking her about clans and clan names, she complained indignantly, “I know the clans are important and all that, but the Tlingits, when you meet a Tlingit, that’s the *first* thing they want to know about you!” Lena was probably the most important of all the Eyak speakers for me during the intensive fieldwork phase, for both lexicon and grammar. Though still babysitting grandchildren, she seemed to have the most time, was not herself affected by alcoholism, and above all was endowed with almost inexhaustible patience. It seems she had taken deliberate pains to keep up or refresh her Eyak with Minnie Stevens, sharing a certain kind of interest in, or value for, the language, even for its actual structure.<sup>25</sup> There were many special rewards in working with her. For example, when I must have slacked off and asked a question that could be considered redundant, she said in effect, “you should be able to figure that one out yourself by now.” At the same

<sup>24</sup> This is confirmed by her granddaughter Pam Smith (p.c. 2017), who reports that Lena attended school “one day, didn’t like it, and quit.”

<sup>25</sup> See §2.1.3 for more on the transmission of Eyak as a spoken language.

time, after a whole day of conjugating verbs or the like: “When I was a kid learning this language, I certainly never thought some day I’d be sitting in a hotel room all day long going over this stuff.” But with her it was possible to go over the long lists of questions I had prepared during the intervening academic year, e.g. checking derivational possibilities of verbs.

Lena could be perfectly objective or detached. A phrase such as “I died yesterday” would be no problem for her to translate. There was one lapse, when I was investigating vowel length in negative future open verb stems, and “I won’t bring you water” came up, and she replied that one could not say that in Eyak as “we Eyaks would never refuse to bring someone water.” When Lena got peeved, which had to have been often, even that was productive as she would come up with relevant and colorful Eyak expressions such as *’a’d silAqahyAq’d ’Ash k’ule’ggga’ ’Adu’xdAgAwih* ‘I sure feel like someone’s reaching all the way across the inside of my head (with probing questions).’ She was meticulous about authenticity: “Now put that down with a question mark because I’m not sure it’s right,” with a glance at the paper to make sure the question mark was there. She was the perfect partner and counterbalance to Anna: “Yes, Anna might say that, but I wouldn’t.” With her I went over all but the latest of Anna’s taped texts, with great care and patience, e.g. even helping to fill out truncated sentences or words, i.e. what a momentary abandoned intention had been on the tape.

At first, sometimes Lena could not remember even a relatively basic word, such as ‘navel’, and would feel bad about it: “I’ll think about it and it might come to me,” and the next day, “All night I couldn’t sleep and finally it came to me, *k’uji’tl’g*.” Later on, as her recall deepened, profoundly, with reference to some kind of white sheet fungus found in rotting trees: “When I was a little girl, I remember that stuff, and I didn’t know the name of it, maybe could use it for doll-clothes. There was this old man, used to sit on the pier. I was afraid of him, but I asked him about it, and he told me ‘The old people used to call that —’ It’ll come to me,” and next day, “All night I couldn’t sleep, but then I remember what he called it: *La*: or *La:n*,”—something that might not have been heard for a century already in 1965.

Toward the end of the intensive fieldwork period, I was calculating that I had salvaged or resurrected a very large proportion of the Eyak vocabulary left in living memory. I had tried my best to not only write down what lexicon was offered, e.g. randomly in texts, but also to get as much as possible through guided elicitation, of two types. The first was semantically guided elicitation, by subject, for example asking systematically for all body parts, bird species, or sewing-stitches, at least as a stimulus, allowing for freer associations and tangents, but eventually working back to the list. A second type was elicitation guided both semantically and phonologically. A first and most obvious subtype of that was checking previous Eyak data. By 1963 I had a copy of all the data noted above in this long history, including by 1964 also Li’s and Austerlitz’s notes (see §§3.3.7 and 3.3.8, respectively). The earlier materials, poorly transcribed, that had not been accounted for, could be re-elicited by “can you think of anything that means something like X, that sounds anything like [\_\_\_\_\_]?” so that by suggesting both a meaning and sounds somehow

resembling the word, one might be able to reconstruct what had been faultily transcribed in the earlier efforts. In this way, especially with Lena, given her patience and her discipline, it was possible to resurrect 97% of Rezanov (1805), and achieve a still better percentage than that with the more modern sources where unclear. A second subtype of such elicitation was from lists in cognate languages, i.e. Athabaskan, by going through a Chipewyan or Hupa or Navajo stem-list or dictionary, making the expected changes according to the known sound-correspondences and asking if Eyak had anything sounding like the result, meaning anything like what was shown in Athabaskan. Again, especially with Lena, since about one-third of Athabaskan stems have cognates in Eyak, often that was a relatively efficient way to find new Eyak vocabulary.<sup>26</sup>

Finally, one last method of elicitation had not been tried, a kind of desperate method, guided purely by sound, i.e., systematically going through all potential stems by the permissible order of permissible sounds that the language might allow, in order to look for allowable or canonic sequences not yet attested as words or parts thereof: “do you have any word that sounds like X (meaning anything)?” This of course involves many thousands of possibilities, as if systematically going through English, getting to *g-d* (*god, good, goad, guide, gad, goosed?*, plus all other phonologically canonic sequences of *gVd*), in Eyak necessarily adding some very versatile affixes to help the many thousands of forms being tested to sound more like real nouns or verbs. With Lena, whose integrity was absolute, I offered a bonus for each new stem so discovered, and with a week of such tedious work, Lena came up with about fifty new Eyak stems, all of very low frequency. Only with Lena could this have been attempted. It is certainly fair to say that the largest part of the grammar and vocabulary, and verification, came from Lena.

### 3.3.10.5 Marie Smith Jones

Marie (Maria) Smith Jones, in Eyak *'udAch'k'uqAXA'a'ch'*, was born May 14, 1918, and died January 21, 2008. She was the youngest and the last speaker of Eyak. She was the daughter of Scar Stevens (ca. 1880–1956) and Minnie Stevens (1885–1961). She may have been the only Eyak-speaking child ever to attend the BIA school for Native children in Cordova, though it is noted in Enge (1993) that she said there were two other Eyaks at school with her.<sup>27</sup> Marie then worked in Cordova canneries, starting at the age of twelve. (She had quit school in fourth grade, according to her daughter Ramona Curry (p.c. 2017), “because a teacher told her she would never be an airplane pilot.”) She married William Smith in 1948 and had nine children with him, seven of whom survived childhood. The first linguist to

<sup>26</sup> The point that Eyak is not Athabaskan, but coordinate with it, means that Alaskan Athabaskan is, in principle, no closer to Eyak than Navajo is. It is a pity, however, that in the 1960s we had no full list or dictionary for Alaskan Athabaskan we could use, especially that of Ahtna, against which to test that conclusion.

<sup>27</sup> It is hard to guess from the Birket-Smith and de Laguna 1938: 25–6 list of Eyaks and geological table who those schoolchildren might have been. In any case no other children who might have spoken Eyak were alive in 1963.

work with her was Austerlitz (§3.3.8). In some ways, in part because her English was the best of all the living Eyak speakers, she was the best to work with for anyone beginning to study Eyak. By her own account, however, her Eyak was more limited to household conversation, which she kept up with her mother until her death in 1961. She considered what is conventionally referred to as “deep talk” beyond her. After 1961 she used or spoke Eyak mainly with Austerlitz and me as she did not speak frequently with her older sister Sophie (§3.3.10.6). Her relationship with her sister was problematical. Both had problems with alcohol. Age, however, was good to her. In 1970 she quit drinking and in 1973 she moved from Cordova to Anchorage. After Sophie’s death in 1992 Marie wore the mantle of “last speaker” with grace and dignity. I worked with her in 1963 especially, also in 1964 and 1965, then again in 1980 to do some checking of verb theme classes (a last major gap in the understanding of Eyak verbs). For the last twenty years of her life, she and I met or telephoned a few times a year, but the relationship was mainly personal, and by the end, late 2007, talk about the language could happen only a minute or two at a time.

Marie died at her home in Anchorage in 2008, as the last native speaker of Eyak. This was widely recognized as an event of worldwide significance, for example in the *Economist* (February 7, 2008). An outstanding piece of literature on Marie is “The Fighting Eyak” by Marlee Enge, in *We Alaskans (Alaska Daily News)* (Enge 1993).

Given the chronology, both because of her education and because of the long time I had to have meetings with her after the intensive period in the 1960s, I was able to teach Marie to read Eyak, to some degree, in the 1980s. This was using the technical typescript alphabet of the 1970 texts. We thus have a broadcast videotape of her telling her Raven and Salmon text, where she appears in fact to be reading from that text, and a later audiotape from a Japanese reporter of her doing the same. Comparison of her original dictated text and the transcription of her on the tapes showed that she must have practiced, and that her reading on the second tape was significantly closer and improved over the first. I cannot avoid speculating on what good it might have done if in the 1960s I had tried to teach Anna or Lena, or especially Marie, some level of literacy in Eyak, however remote the possibility under the conditions of that time.

In her position as last speaker, Marie was often approached by the press and media. She had no delight in publicity, but was reasonably accommodating. She undertook well the significance of her position. She made an appearance at the United Nations in New York on May 24, 2002, at a session of the Permanent Forum on Indigenous Issues. She was brought there by Ronald F. Barnes of Tununak, a Yupik activist, then of the Indigenous Peoples and Nations Coalition, based in Geneva. Reporters were invited to interview her, and reports or media records may exist. I was unaware of the event, and Marie never spoke of it to me.

In this same role, and directly relevant to this history, she was also in demand to speak Eyak for the media or public events. Here too she was reasonably accommodating, in spite of the fact that she had spoken only conversational Eyak, and hardly even that since 1961. The record we have on audiotape and videotape, starting 1993, is the only sound record we have of spontaneous text from her. Three of the four such records are

prayers. As there certainly was no Orthodox liturgy in Eyak, and I never asked her about praying in Eyak, we do not know to what extent prayer in Eyak was a new genre for her in her old age or whether she had had any habit of private prayer in it. (Note that we have such or the like also from Anna, sung.) Two prayers, on videotape, are from the events of the 1993 reburial, and 1994 reclamation potlatch, described in §2.1.3. There is one audiotape (ca. 1995) of Marie speaking on the importance of teaching Eyak children about their history and identity. The last such recording, a videotape of Marie opening a climate change conference in Anchorage with a prayer in Eyak, September 24, 2005, is the last spontaneous Eyak we have on record, and is all we have for the 21<sup>st</sup> century. Guillaume Leduey (§2.1.3) and I together have transcribed, translated, and annotated these four recordings as a final chapter to Eyak texts, a total of just under five minutes in quantity. The nature of her spoken Eyak in these recordings, including the difficulties we had with it, are naturally of significant interest.

In addition to those, we have an audiotape made by a Japanese reporter in the 1990s and a videotape made by Laura Bliss Spaan for 1992 KTUU-TV Anchorage Channel 2 broadcast of Marie retelling her Raven and Salmon text as dictated to me in 1963, using my 1970 transcription as a guide. The differences between the 1963 transcription and her readings or retellings of it, one more practiced than the other, are also of significant interest.

### 3.3.10.6 Sophie Borodkin

Sophie (Sophia) Stevens, in Eyak *tAnAGAmā*, was born in 1911 in Cordova, and died there in 1992. She was Marie's elder sister, by seven years. She would have been twelve years old by the time the school her sister went to was opened. Instead, she was sent to work in the Cordova canneries at age eight and a half, and married first in 1924, at age thirteen, to William Sato 33 years her senior. They were still married in 1936, but she subsequently had three married names, Allen, Fields, and finally Borodkin. Like Marie, she suffered from alcoholism until later in life. The contrast between her childhood and Marie's, Marie being the "baby," may well have contributed to the tension between the sisters.

Sophie was largely bypassed by both Austerlitz and me, in part because there were speakers easier to work with in Cordova in the 1960s. Austerlitz advised me that because of her condition at the time it was hopeless to try to work with her. On June 14, 1971, I made my first few notes with her, again briefly in 1978 (about verb theme categories, significantly), and 1982. However, in 1987, I spent a productive week working with her in Cordova. She had a certain amount of new vocabulary, and seemed able to come up with some basic but infrequently used forms of verbs (q.v. §15.4). Finally, working with Sophie, I learned also, or rather confirmed for myself, that every remaining speaker of a language in a situation like that of Eyak is potentially the source of important new information and insight.

### 3.3.10.7 Mike Sewak

Mike Sewak was born in July 1881 at Bering River Village and died in Cordova in May 1970. He spent most of his life in the Bering River area, was still there according to the 1930 census, and may have been the last to leave it for Cordova. His name came up only when, after considerable insistent inquiry in 1963, Lena was moved to say, “maybe Mike Sewak still knows some Eyak.” Sewak was glad to be approached, and tried his best in spite of being not only quite blind, but fairly deaf as well, living at the Cordova hospital.

Bering River Village was already thoroughly bilingual Eyak-Tlingit, if not dominantly Tlingit-speaking by 1902, when oil fields and the port town of Katalla began to develop nearby. After the disintegration of Katalla in 1912, and Bering River being surely by then more Tlingit than Eyak, there would have been little occasion for Sewak to speak Eyak. Sewak was able to speak words or phrases, but what Eyak he could speak had two traits that made his Eyak more different, closer to being a different dialect, than that of any other speaker, including George Johnson. His full vowel /e/ in Eyak was more like Tlingit (or European) [e] than everyone else’s (which was much more open [æ]), no doubt because Eyak was his second language. Perhaps most important is that Sewak had two separate consonants, a /g/ and a /gw/ that were consistently distinguished in his speech, as in Tlingit, whereas in the speech of all other modern Eyak speakers, those two originally different sounds were no longer distinguished. It is not clear, however, whether Sewak still distinguished them exactly as they had been in the old language, whether a given word had /g/ or /gw/; however, since Tlingit still clearly distinguishes them, under that influence Sewak may have kept or somehow reinstated that distinction in what he remembered of Eyak. It is clear that Tlingit was Sewak’s first language and that Eyak was in fact his second, which he picked up as a child in Bering River Village, speaking it with what amounted to a Tlingit accent. He himself said that he “picked up” Eyak by playing with children (i.e. likely meaning not from his parents), and from visits to the Copper River. Marie and Lena remember him speaking Eyak with Minnie Stevens, but “he didn’t talk right.”

In 1963, 1964, and 1965, I visited Sewak at the Cordova hospital. I managed to elicit perhaps 500 words from him, especially, of course, those with the consonant distinction in question. One of the last visits is hard to forget. Sewak answered some question with “sila’t’ yitl’a’dz,” i.e. ‘my tongue is \_\_\_’, which I had to take to Lena to understand: “Oh yes, that’s a word I haven’t heard in years. It means ‘stiff’.” In the very act of complaining to me that he felt tongue-tied, Sewak salvaged another Eyak stem (probably a good cognate, to boot, with \*-tl’Edz in Athabaskan meaning ‘hard’).

### 3.3.10.8 Chronology and Results of Krauss’s Eyak Work

The first intensive phase of my Eyak work began in 1963, when I determined to make that commitment myself, and ended in 1969. During that entire period, I had full-time teaching and administrative responsibilities at the University of Alaska, now called the University of Alaska Fairbanks, for the full academic year, with only the summer for lengthy absences. My Eyak research, as had been my more general projects of 1961–1962, was funded entirely



by the National Science Foundation throughout. The period can be subdivided into 1963–1965, during which I combined ideally productive fieldwork during the summers, with workup and preparation for the next field season during my “spare time” in the winters. A fairly clear record of that can be found in my field notebooks, annual reports, and proposals to NSF. Reviewing the reports and proposals not only reassures me that a decent record of that history remains, which is not necessary to detail here, but it also reminds me how lucky I was in those days to work as productively in the field with these Eyak speakers as I did. I am profoundly grateful to them.

The goal of that work was to document and describe the Eyak language. At that time it was, implicitly, to produce a scientific set of publications, in the form of the (Boasian) trilogy: grammar, lexicon, and texts. Since language science or linguistics was in that American tradition a branch of anthropology, the texts served a double purpose: first, as a record of the oral literature of a people, or “folklore,” beliefs, so that legends were a top priority. Secondly, and especially since so much of linguistics at that time was still partly an outgrowth of the study of ancient languages, deriving grammars from corpora that were of necessity only written text, the corpus of legends also served as a source for grammar as well as lexicon. This was especially so for syntax, which was often virtually ignored in grammatical study. For example, Sapir’s extensive and profound studies of Athabaskan, were almost exclusively phonology and morphology. It may have been understood that syntax was important, but that was left, perhaps mystically, to be derived some day from texts, if abundant enough. Other kinds of text, e.g. narrative other than legendary, or conversation would be nice to have, but legends were the top priority, serving two purposes.

Another important goal was comparative, both to link Athabaskan with Tlingit and to provide perspective for Comparative Athabaskan, which itself was another major preoccupation of my work at the time. An early goal was to establish Athabaskan-Eyak phonological correspondences, written up first in Krauss (1964).<sup>28</sup> The comparison was further elaborated in Krauss (1965b). Another comparative goal was lexical, especially to collect the best Eyak stem-list possible. Much of the work at that period went toward this end, including e.g. routinely trying to get the least-derived verb themes possible, to isolate optimally the meaning of the stem.

That first summer, June 27 – July 9, and July 28 – August 19, 1963, was spent in Cordova and Yakutat, with Lena, Marie, Sewak, Anna, and George Johnson; the second, June 6 – August 14, 1964, was spent in Cordova, with Lena, Marie, and Sewak; and the third, May 26 – July 3, was spent in Yakutat and Cordova, with Anna, Lena, Marie, and Sewak. This amounts to a grand total of barely four months in direct field contact with Eyak. The days averaged between five and nine hours of actual fieldwork time. This was only

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<sup>28</sup> This publication is marred by serious typographical errors; IJAL editors felt “Alaska was too far to send proofs.”

possible because of the good will of the speakers, on the one hand—most especially Lena’s patience, and because I had spent all the available time during the intervening months of the academic year preparing the materials. This included putting every single word onto a secondary file of ledger sheets organized by stems, showing all the inflectional and derivational details of the verbs, classification of nouns, etc., constituting a virtual concordance of the entire corpus, including all occurrences of each word in the texts, by text number and sentence number, as well as in the notebooks. By the end of the third summer there were twelve notebooks containing about 1,600 pages, about 500 of those being texts, and 1,100 pages containing up to 25,000 elicitations. In addition to the texts, mostly from Anna and reviewed with Lena, that last summer consisted mostly of long days with Lena going over the prepared enquiries very systematically in order to fill out the noun-classes and derivational potential of the verbs for the lexicon. By that time over 1,200 stems and affixes of the language had been identified and clearly described, a score similar to that of the average well-documented Athabaskan language, in spite of the limited resources of Eyak.

Adding together the number of hours working with the speakers shows a total of about 800, maximum, or about 100 8-hour “(work-)days” with actual Eyak speech. That is by no means a realistic figure as a quantity measure for fieldwork. Such a figure should no doubt be more than doubled considering the time devoted to preparation and planning of the elicitation agenda, and, analysis and processing of the data. The data, moreover, include the results of all previous work on Eyak, and even the comparative benefit from work on related languages needs to be factored in to some degree. In view of this, it would appear that any effort to quantify the work of that intensive period of Eyak and 800 of field contact-hours would require multiplying that into terms of years of “exposure.”

Granted, the Eyak corpus we have as a result is somewhat different from that we would have from years of “exposure.” The coverage of lexicon is probably much better than that expected even from years of “exposure.” Likewise the grammar, or at least the morphology. The big question is how much was missed because of the near absence of spontaneous conversational text, but, as explained, such conversation was no longer available in Eyak as of 1961. (The idea of arranging and recoding “spontaneous” conversation in Eyak did indeed occur to me. Marie and Lena were both shy of the tape-recorder, and were not friendly to each other. My talents as a social engineer were limited, as were my finances for arranging visits to or by Anna or George Johnson in Yakutat, especially during the busy summer fishing season. I cannot recall whether such an arrangement between Anna and George in Yakutat was considered or rejected. For whatever reason, there was evidently no demand for such on the part of Eyak speakers, and I lacked the initiative to push sufficiently for such.)

I myself had the talent and desire to learn to become fluent in Eyak conversation, had done so with other languages, and was beginning to be able to converse some in Eyak, especially with Anna, who was the only speaker who seemed actually to prefer speaking Eyak, or trying to speak Eyak with me. However, the fact that all the Eyak speakers were fluent in English, that there was otherwise no Eyak conversation to be heard, so no natural

“immersion,” and the press of time for other Eyak linguistic fieldwork priorities, learning to carry on the fieldwork in Eyak myself seemed like an impractical luxury under the circumstances. Documentation of conversational Eyak is a casualty of that. In retrospect I have often wondered if that position was a mistake, especially since conversation is of such high priority in language revival. As in the case of Hebrew, however, weakness in the documentation of spontaneous conversation, along with the need for lexical expansion, did not make revival of the spoken language impossible.

The sum-total of connected Eyak narrative text was decent though not abundant, about the length of the Books of Genesis, Exodus, and Leviticus together, or of the Four Gospels.<sup>29</sup> Nevertheless, by the end of eliciting that text corpus, an average of a dozen pages would go by without new or unexplainable forms showing up, suggesting that getting more new text was not going to be a very productive way of getting better coverage of the lexicon itself—though coverage of possible Eyak oral literature was, of course, another matter.

In view of all this, in summer 1966 I decided to draw the line, not to return to Eyak fieldwork. Instead, having ledgered the third summer’s results (now a file of 4,000 sheets), I began composing the Eyak dictionary from that. In 1964–65 I had published a twenty-page sketch of the grammar (Krauss 1965a). I then felt that the dictionary and texts, as prepared in that second part of the intensive period from 1966 to 1969 along with the ledger, did readily provide the information necessary for someone, with a start from the 1965 sketch, to construct a rather full detailed grammar of Eyak, whether I lived to do that myself or not.

In 1966 the priority was therefore to prepare a typescript of a dictionary and full corpus of Eyak texts for publication. In order to include completely all the forms in the texts in the dictionary, I first typed all those texts, numbering 80 (including variant versions), on a typewriter with specially designed characters for the relatively technical alphabet I was then using. These include the one brief text in Reynolds’s hand from 1933 (§3.3.4.2), the eight from Li in 1952 (§3.3.7), the three from Austerlitz in 1961 (§3.3.8), and the rest dictated to me by Lena (27), Marie (14), and Anna (1). The largest part by far, however, are those from Anna on tape: 24 texts, altogether about 6.5 hours of speech. The total contribution from Anna is over 70% of the text corpus in Krauss (1970b). The sequence

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<sup>29</sup> In the original 2006 version of this history, I had made the serious error of estimating the text corpus to be only the length of Genesis. Recalculation shows that the total Eyak text corpus, i.e. including supplementary texts (adding about 13% to the earlier total), shows a count of ca. 450,000 to 500,000 characters in the English translation alone. That character count is similar in size to the total character count (in European language translations) of the first three Books of Moses, or of the Four Gospels, or about 10% the size of the whole Bible. This is a significant correction to the statement on p. 210 of Krauss (2006). Not including the supplementary texts of course does not account for such an underestimate. In length, the Eyak recorded corpus totals nearly seven hours.

within Krauss (1970b) is arranged by and divided into the categories of Raven Cycle (pp. 66–222), Animal Tales (pp. 223–441), Land Otters (pp. 442–76), Mythical Beings (pp. 477–543), Cautionary Tales (pp. 544–79), Legends of People (pp. 580–674), Wars (pp. 675–700), Witches and Shamans (pp. 701–26), and Miscellaneous Ethnographical (pp. 727–912). The format is double-spaced, with each sentence numbered; first the Eyak text, then the English, translated phrase by phrase as marked by comma or period, then fairly detailed footnotes for each text.<sup>30</sup> This work was done May 20 to December 10, 1966.

The lexicon was organized and first handwritten from the ledger and typed—perhaps the first third—by me, the rest by Irene Reed, during 1966–1969. The writing-out and typing was only ninety-some percent complete mainly with the exception of the verbs 'a '(sg) go', 'a'ch' 'pl go,' classificatory plural object verb stems, and various other items listed in the foreword to the typescript. It fully included all the then-known earlier Russian work, i.e., Rezanov, Wrangell, Furuhjelm, and also the 1933 material, but not explicitly Harrington, Li, or Austerlitz, although all of those had been fully checked.

The dictionary was typed double-spaced on approximately 3,900 pages, Eyak-to-English, technically organized, by stem. It was also provided with an English-to-Eyak index, on about 10,000 file-slips. I figured then and still believe that that dictionary includes well over 90% of the lexicon left in living Eyak memory as of the 1960s, perhaps in the high 90s—and as time went by, sadly, it necessarily became 100% in 2008. An estimate of the number of lexemes or entries is perhaps about 7,000 in a fairly strict sense, perhaps not a bad score for a language in the relic-like state of Eyak. Coverage of subjects like kin terms, for example, may be considered quite thorough. For fauna (217 terms) and flora (123 terms), for another example, it is still rich, but the speakers were all too aware of incompleteness and uncertainties that would have been far fewer if the work had been done fifty years earlier. We must certainly consider ourselves very lucky that Eyak therewith became one of the better-documented languages of North America, for what was left of it in the twentieth century.

I am sometimes tempted to compare that documentation with what we had of Hebrew, basically the Old Testament. For one thing, only the consonants were written in that language and the vowels had to be filled in. There was never any deliberate or systematic enquiry of vocabulary, e.g., biota names, or anatomy, while the language was still alive, but only whatever the Old Testament happened to mention (without explanation). Thus no dictionary and no grammar were available, only whatever happened to get mentioned. The Old Testament is a remarkable document to have included by chance so much of the language, enough actually to provide the basis, and inspiration, for the modern revival of Hebrew, now spoken by millions. The point here is that, in a real sense—technical,

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<sup>30</sup> The main editorial devices were parentheses, enclosing segments present on the tape that should be eliminated in the fully edited text, and square brackets enclosing segments not on the tape that need to be supplied in a fully edited text. Thus, reading in the parentheses and leaving out the brackets, one gets exactly what is on the tape, while reading in the brackets and leaving out the parentheses, one gets the fully edited text.

linguistic—Eyak is documented better than Hebrew was not so many years ago. That leaves in principle the technical possibility for reviving Eyak too, insofar as Eyak also might ever have the social resources.

Here may also be the place to note that the Eyak textual corpus is mostly preserved in sound recording, at least of Anna, as well as writing, a significant advantage that Eyak also has over Hebrew. At the same time, field linguists today would consider the fact that only those texts were tape-recorded and not the whole field sessions themselves a serious breach of “best practices.” A half-century ago, however, that technology was far less convenient, and sound recording in the field was mainly used for recording text, not elicitation. Still, even for its time, I see two shortcomings in my Eyak fieldwork. One is that I put low priority on high-quality sound equipment, but rather on economy and simplicity in that regard. That entails some loss for acoustic phonetics, and for some listening pleasure for Eyak descendants. None of my training had ever included field methods. A serious shortcoming in my notebooks is that no full record was kept of negative lexical results such as “we have no word for ‘beans’”

During my sabbatical at MIT 1969–1970, I had both the Eyak texts and dictionary materials photocopied, reduced basically four pages to one, double-sided, the texts thus down to 250 pages and the dictionary to 666, with 10,000 shingled slips for the English index to the dictionary ending on p. 760 (plus the German and Russian glosses for Rezanov (1805), ending on p. 782). That work was physically reduced to not much over a ream of paper, printed in fifty copies, which could be bound in a single portable volume (Krauss 1970a). Given that my personal goal was the documentation itself, preservation of the record, rather than publication as such, especially where the real need in the academic community was felt by a small number of persons and the number of those interested remaining in the Native community was also small, I felt that my specialized need was fulfilled, more or less, by the very limited form of Krauss (1970a). More complete publication had not only the roughly twenty dictionary pages missing, i.e. those still not typed up as of 1970, but subsequently soon also the additional Eyak material collected during the second “intermittent” phase of Eyak fieldwork. Even more decisive though was the rise of other priorities in Alaska Native language work for me, with the political work for Alaska Native Language rights, and the establishment of the Alaska Native Language Center in 1972.

By the late 1960s the political scene was changing for Alaska Native languages. In 1967–68 the Federal bilingual education bills had been passed and implemented. By this time at Fairbanks the subterranean movement to get Yupik into Alaskan schools had surfaced in the form of a course added to the University’s Yupik curriculum called “Yupik Language Workshop.” There “advanced composition” Yupik students were writing, in a newly designed practical orthography, drafts of schoolbooks to be used in schools attended by their younger siblings. There were still setbacks, but by 1970, while strident Krauss was 4,000 miles away at MIT (becoming in those days still more militant), Irene Reed’s diplomacy succeeded in persuading Alaskan authorities to experiment with Yupik in Yupik public schools. The success of that, and our increased work with Alaska legislators, led in

1972 to State legislation mandating Native language use in schools, and the establishment of the Alaska Native Language Center, with me as Director, in Fairbanks. Priorities of the new opportunities and obligations severely limited my time for Eyak for the 29 years I headed the Center. That postponed any further work on the dictionary, and any writing of the grammar.

Nevertheless, during what we may define as the second phase, there were occasional spells of activity in the further documentation of Eyak. Already in 1967, Constance Naish, scholar of Tlingit, had recorded on tape from Anna at Yakutat what I in 1971 transcribed as 14 pages of text. In 1971 I was able to return to Yakutat (June 9–12) for more fieldwork with Anna, which included fifty more pages of text. I then managed to check that with Lena in Cordova on June 13, my last session ever with her. The next year (June 14–18, 1972) I had what turned out to be my last meeting with Anna in Yakutat and recorded 82 more pages of text. For the final editing of that, without Lena, I was now on my own. In 1973, Jeff Leer and Karen MacPherson taped about forty more minutes of text from Anna in Anchorage, another thirteen texts, which I then transcribed. All told, these supplementary texts from Anna comprise roughly 30% of the total corpus in length.

Also during the period 1964–1981 I wrote about ten academic articles and monographs on Comparative Athabaskan-Eyak, in which Eyak figures prominently, of course. These can be found listed in my bibliography, Krauss (2005).

By 1980 it had become clear to me that probably the most severe shortcoming of my Eyak work was that I had neglected to define clearly the different classes of verbs in Eyak according to the basic criterion of which different conjugations are used with them according to whether they are active, motion, stative, etc. In the summer of 1980, May 2–29 in Anchorage, and June 16–19 in Fairbanks, I was able to go systematically through a large proportion of these with Marie, who helped significantly in filling in this gap.

In 1982, on the occasion of Anna's death, I published a volume of her stories in her memory, *In Honor of Eyak: The Art of Anna Nelson Harry* (Krauss 1982). That labor of love featured ten of Anna's most outstanding texts, edited from the tapes, first shown in double column, her Eyak on the left, phrase by phrase, with English translation of each in the column next to that, line by line, with footnotes and also looser English translation in ordinary paragraph format. I included a historical introduction to the whole, and an introduction to each section, philosophical and literary, as the whole point is that the way Anna told those tales is indeed highly philosophical and high literary art. As she told them in her maturity, these stories no longer have merely their traditional meaning, which would still be interesting enough to anyone who cared about Eyak; they are not merely suffused with her own personality, which is of course what gives traditional oral literature its artistic quality. In fact, this is a point that I did not present adequately in Krauss (1982), even though I had been pondering Anna's stories for years in efforts to understand them layer by layer. Since Eyak society was long almost gone, and Anna was a survivor who had taken refuge in Yakutat Tlingit society, she had a unique perspective on Yakutat, and on the world. The traditional Eyak forms and stories were now merely her raw material, with which she was—tragically—free to express her own vision. There was hardly any

traditional Eyak society to hear those stories as they were expected to be told. There was only Krauss, who could understand merely the language, and beyond that there were only the ages for her to speak the meaning to. Anna's art, then, transcends the original tradition altogether. At one level she is speaking to Yakutat and Tlingit, but at another level she is speaking to the world, as only Anna can from her Eyak perspective, about such matters as the fate of nations, or of good and evil. The book is offered in deep humility to the memory of Anna and to Eyak. By far the most informative and thoughtful review of that book appeared in Russia, in Russian, by Mikhail Chlenov, in *Sovetskaiia Etnografiia* 1985 (Chlenov 1985).

During the 1970s and 1980s I was preoccupied with the whole Alaska Native language situation, including the fundamental relationship with the same and related languages in the North, now especially Russia—a relationship that had been almost totally cut off by the Cold War. Finally, however, in June 1987, I was able to return to Cordova to work with Marie's sister Sophie, for the first substantial time. That too was a pure delight, just getting to know Sophie and to hear Eyak from one more person, including traits not heard from anyone else.

In 1990 I made a long visit to what was then still Leningrad, in part to visit Soviet archives there, which contain the bulk of the Russian period work done on Alaskan languages (cf. §3.2). There at the Leningrad Public Library I had the pleasant surprise to find three “new” Eyak language manuscripts, the Anonymous 1810, Baranov 1812, and Khromchenko 1823 vocabularies (see §§3.2.6, 3.2.7, 3.2.9, resp.). Virtually all the material in them could be fairly readily identified from the rest of our data, but they provide interesting continuity to this history between 1805 and 1839, with Eyak disappearing at Yakutat, and becoming more prominent in the Cordova area instead.

We now come to the third period of my work, a kind of epilogue in the history of Eyak fieldwork. With the death of her sister Sophie in 1992, Marie Smith Jones became the last speaker of Eyak. I remained in touch with Marie, visited her fifteen to twenty times during the period between 1992 and 2007, and often spoke to her on the phone. The relationship became, as noted, increasingly social and personal, and by the end, language work was quite limited.

### 3.4 Summary to 2006

At this point, I offer a summary with some further general perspective, some statistical, on that history to 2006, when I resumed the Eyak work, to write the present grammar.

That history can be divided rather neatly into four periods which are surprisingly distinct according to the nature of the primary data collection. These periods can be dated and labeled as follows: 1. 1778–1803 “Exploratory Incidental,” 2. 1805–1862 “Formal Russian Vocabularies,” 3. 1867–1933 “Ignorance/Incidental,” 4. 1933–2007 “Linguistic documentation.”

The first period, 25 years of initial exploration (Anderson 1778, Walker-Strange 1786, Malaspina 1791, Tarkhanov 1796, Davydov 1803, viz. §§3.1.1–3.2.4) produced records of one to eight Eyak words or phrases, essentially on an accidental basis. This is not counting the Purtov-Kulikanov 1794 census of personal names (§3.2.1). There are six sources in all, the first two from the Cordova end, the next four from the Yakutat. From external sources of this period, and those glossed forms, up to a dozen, we would know that Eyak was a separate language, but the data would be insufficient to determine anything more.

The second period, sixty years of Russian colonial contact (Rezanov 1805, Anonymous 1810, Baranov 1812, Khromchenko 1823, Wrangell 1839, Furuhielm 1862, viz. §§3.2.5–3.2.15) produced a remarkable record of no fewer than six known formal vocabularies of Eyak. The first three (1805–1812) are from the Yakutat end, as Eyak approached extinction there. The next three, and all work after that, are from speakers from the Cordova end. Rezanov (1805) was by far the largest, with 1,128 items, but the succeeding five total another 709, a grand total of 1,837, all of course with much duplication. The total of the three vocabularies from Yakutat is 1,497, Cordova only 348, but that is just as well, since all subsequent data are necessarily from the Cordova end exclusively. Documenting however poorly, perhaps up to 15% of Eyak lexicon, and practically no grammar, this was enough to identify very clearly the genetic position of the Eyak language.

The third period, 65 years of American neglect, produced nothing but confusion, ignorance, decimation of the population, and finally suppression of the language itself. The only documentation was foreign and incidental, Jacobsen 1883 (§3.3.1) and secondary German scholarship (§3.3.2), personal names in Russian Church records (§3.2.17), continuing since the 1840s. Exceptional is the American tycoon Harriman's 1899 phonograph cylinder (§3.3.3), and that was lost.

Finally, de Laguna's visits of 1930 and 1933 (§3.3.4), when the youngest Eyak speaker was already twelve years old, touched off the period of serious modern linguistic documentation of Eyak, by a series of four professional linguists. These were Harrington 1940 (§3.3.5), Li 1952 (§3.3.7), Austerlitz 1961 (§3.3.8), and Krauss 1961–2007 (§3.3.10). With Reynolds and Birket-Smith, de Laguna collected ca. 600 words and phrases from Galushia Nelson and Old Man Dude, and one short text. Harrington transcribed ca. 1,500 words from George Johnson. Li transcribed ca. 2,000 words (and 2,000 slips, largely overlapping total) from George Johnson, Anna Nelson Harry, Scar and Minnie Stevens, and eight texts from George Johnson. Austerlitz transcribed perhaps 4,000 words and phrases from Anna Nelson Harry, Lena Saska Nacktan, and Marie Smith, and one text. Thus by 1961, with overlap, perhaps 35% of remaining Eyak lexicon was documented, and something approaching that proportion of Eyak grammar was philologically decipherable. Finally, Krauss 1961–2007 transcribed ca. 30,000 words and phrases and ca. 100 texts, mostly from Anna, Lena, and Marie, but also from Sewak, Sophie, Johnson (viz. §3.3.10), completely checking the previous corpus and quadrupling it, including as much information as then feasible from living memory for a comprehensive grammar of Eyak as well as lexicon.

There was no cumulative study in the Russian wordlists (except in Baranov 1812 from Anonymous 1810). In fact, none of the primary sources, even post-Russian, are informed



by previous Eyak language work, or show any awareness of it. This was so even of de Laguna in her fieldwork. At that time, she honestly thought she herself had “discovered” the Eyak language. Li was aware of de Laguna only. Before myself, Li was also the only one informed by comparative Athabaskan. Austerlitz saw Li, but did not have his data (viz. §3.3.8).

As a note on the “purity” on the Eyak data, all of it may be considered to be pure Eyak, starting with Rezanov (1805), with even the loans, not many, to be considered naturalized. This cannot be said of the earliest sources, where the Eyak is itself an uncontrolled admixture (Anderson-Cook, Walker-Strange, in §3.1.1 and §3.1.2, resp.). The exceptions are Anonymous (1810) (§3.2.6) at Yakutat, where the Eyak is open-endedly infused with Tlingit “loans,” Khromchenko 1820 at Copper River (§3.2.9), where the Eyak is mixed or confused with Ahtna, and the Ahtna is mixed or confused with Eyak, not to mention the 1877 publication of Furuhjelm 1862 where Dall mixes the Eyak with Tlingit (§3.2.14). It should be noted, moreover, that all the Russian formal vocabularies except Furuhjelm’s are comparative vocabularies with several other languages, i.e. none are done for Eyak alone. That no doubt must have motivated both the investigator and speaker to take some care to avoid mixing languages.

In some ways, the history of Eyak documentation belongs more in the introduction to the dictionary than to the grammar, considering that virtually everything up to de Laguna is lexicon rather than grammar. Only starting with Li 1952 (§3.3.7) and Austerlitz 1961 (§3.3.8) is grammar at all proportionate with lexicon. Even my own work is more centered on lexicon than grammar, though after the “intensive” period, starting 1970, it is centered much more on grammar than on lexicon. My actual writing of the grammar began as Krauss (2006), the earlier version of the historical study, was published. (This was not sufficiently long before the death of Marie, last speaker, to make much difference for the grammar, as by then Marie was unable to work more than a few minutes at a time.) In any case, though the bulk of Krauss (2006) covered the period of lexical more than grammatical documentation of Eyak, this revised and extended history is here published with the grammar rather than with the dictionary.





Part II: **PHONOLOGY**



The subject of phonology is to be covered in four major chapters, first on basic phoneme inventory and phonemics, also of course orthography (Chap. 4); then prosody (Chap. 5); then morphophonemics (Chap. 6); and finally stem structure (Chap. 7). The system of phonemes is relatively complex, with relatively little allophony, such that the articulatory phonetics can be easily treated along with the presentation of the phonemes. Both because of this and because of the era in which the fieldwork was done, no acoustic phonetic investigation was done or felt necessary. Such a study is still possible from the sound files.

There is likewise no section on phonotactics as such, in large part because phonotactics follows rather simply from the phonemics and morphology, most of the morphophonemics being fairly simple. For example, there are (notoriously!) few constraints on consonant clustering. Basic phonotactic patterns are easily covered along with the presentation of the phonemics and morphophonemics. There is brief discussion of phonology special to prefixes and preverbal, covered more especially in Chap. 6 on morphophonemics. In fact, by the final subsection on morphophonemics, it will be seen that prefix structure is covered in full depth. Likewise, Chap. 16 covers the internal structure of preverbals in full depth. Phonotactics is then especially dealt with here in the long section on stem structure (§7.1), e.g. onset-coda constraints and frequencies; and in more complex shapes of stem and in stem-variation, a subject leading to morphology.

## 4 PHONEMES

The phonemes of Eyak fall into three distinct and systematic categories. Obstruents and sonorants constitute the consonants, which are the onsets and codas of the syllable, as opposed to vowels, which are the syllable nuclei. At the same time, obstruents are always voiceless, whereas sonorants and vowels are always voiced.

### 4.1 Obstruents

The obstruent system is presented in Table 4.1, showing five positions of articulation (labial, quite marginal; coronal, including affricates with three types of release; velar and uvular; glottal).<sup>1</sup>

As noted, all obstruents are voiceless. The top three rows in Tab. 4.1 are stops: plain stops, aspirated stops, ejective stops; the bottom row is fricatives. Affricates pattern quite systematically together with the stops rather than as a separate group, as is clearly implied by the structure of the table itself and its separateness from the table of sonorants

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<sup>1</sup> It is possible that an analysis of Eyak obstruents in terms of binary distinctive features might prove helpful in explaining some morphophonemics, however marginally. The subject may be addressed in certain connections therewith.

**Table 4.1:** Obstruent inventory, in practical orthography with IPA equivalents.

	labial	coronal				velar		uvular	glottal
<b>plain</b>	b	d	dl	dz	dj [t ]	g	gw	G [q]	' [ʔ]
<b>aspirate</b>		t	tl	ts	ch [t ]	k		q [q ]	
<b>ejective</b>		t'	tl'	ts'	ch' [t ']	k'		q'	
<b>fricative</b>		L [ʃ]	s	sh [ ]	x	xw	X [ ]	h	

(4.2). Therefore the term “stop” refers to affricates as well as non-affricates. The place of articulation of each series is considered self-evident from the symbols. Aside from the orthography, the only difference here from the table published in Krauss (1965b) is the inclusion of highly marginal and extrasystematic /b/, the one labial stop; this is rare, occurring only in some loans and interjections, themselves perhaps all loans. The four coronal series form a class separate from the others (velars, uvulars, glottals) mainly in connection with the important morphophonological alternation between the sonorant /l/ and nasalization of the preceding vowel (cf. §6.3).

The two glottals form a separate subclass. First they do not form the same kind of series as the other positions, with the four members as in most of the other series. Here are only stop and fricative or continuant, but these are at the same time intimately related to the features, aspiration and ejectivity, that distinguish the two sets of stops missing from the glottals. Then, both /ʔ/ and /h/ are found frequently both as syllable coda and as what may be called part of the vowel nucleus (called for Eyak the *STIGMA*) in syllables further closed by obstruents, i.e. as in CV'C, CvhC, discussed extensively in §4.3.

The best way of looking at the velars is dynamic or historical, that the labialized and non-labialized series have merged in the case of the aspirated and ejective stops, but may still contrast in the case of the plain stop and fricative. That contrast, however, is unstable and/or complex, related especially to the status of reduced vowel contrasts, itself a complex issue. This will be discussed in some detail further in §§4.3.2–4.3.5, the subsections on reduced vowel contrasts, in both stems and prefixes, and in a special excursus there on rounded and unrounded velar contrast next to full vowels, after initial presentation of the vowels.

Eyak represents the Proto-Athabaskan-Eyak (PAE) consonant system rather conservatively, preserving all the coronal series as such. As for the non-coronal obstruent series, PAE-Tlingit clearly had both non-labialized and labialized velars and uvulars. With these series Eyak is less conservative. Unlike Athabaskan, Eyak has largely merged the velars with each other. Athabaskan has never merged the velars with each other, but instead has fronted the labialized velars (except for the Tsetsaut with a PF-series) to the  $\tilde{C}^{wr}$ -series, which in most Athabaskan further merged with the  $\tilde{C}$ -series. For uvulars only traces of the labialization can be seen either in Eyak or Athabaskan. In Eyak the only trace may be in the verbal prefix for the future inflection  $qu' \sim qa' \sim qe'$ , reflecting  $*q^{w\partial'}$ ; cf. PA

pronominal prefix \*q<sup>wə</sup>- ‘place, event’ (§12.1.5). For \*g<sup>w</sup> also cf. Athabaskan \*-ge’d ~ \*-gʊd ‘poke’.

Highly isomorphic with the Eyak future prefix is the object prefix in the verbal derivation called directive, ‘u’- ~ ‘a’- where no other object prefix is present, reflecting \*’wə-’-. Eyak alone of PAE-Tlingit preserves outright the whole system of preglottalized sonorants, as will be shown in §4.2, including /’w/. Cf. Eyak third person oblique object and possessor prefix ‘u-, PA \*wə-, < \*’wə-; further, PA \*’-’etl’ ~ \*’-’utl’ ‘(pl) float’, also reflecting /’w/, whether one wants to call that a preglottalized labial sonorant (for Eyak), or labialized glottal stop (for pre-PA). Note Eyak \*’wA-’- > ‘a’- under CwA-’- > Ca’-, delabialization in §6.6.2, where -’- is tautosyllabic.

#### 4.1.1 Obstruent system and practical orthography

The present orthography is designed to avoid all symbols not found on standard keyboards. The top row follows the long Americanist tradition of using symbols that represent voiced consonants in English for consonants which are in fact altogether voiceless in Eyak, including even voiceless affricate releases misleadingly written <dl>, <dz>, <dj>, where at least <dz> could be written <ds>, and <dl> could be written <dL>. In fact the <l> of <dl> must not be confused with the <l> written for the lateral sonorant, written <l>, which is fully voiced; the <l> of the obstruent system orthography must be viewed strictly as part of the digraphic symbol for the plain (voiceless, unaspirated) laterally released affricate. In fact, that same choice is used for the second part of the symbols for the (also voiceless) aspirate and ejective members of the same series. At the same time, that same consistent policy is not used with the symbols for the release part of <dz> and <ts>, <ts’>. For <dj> with respect to <ch>, instead of <j> alone, in accord with still more fully Anglicized orthographies, the main reason is to make uniformly digraphic symbols for affricates.

These obstruents, forming a system this full, regular, and close to an areal norm for neighboring Indian languages (especially Tlingit and Ahtna Athabaskan), do not require an elaborate phonetic description. As noted above, they are all entirely voiceless, including the plain series (<dz>, <dj> etc.). The plain stops are therefore voiceless, unaspirated. The aspirated stops are just that, and <t, k, q> are not at all affricated. The ejectives are rather clearly ejective or glottalized, not subtly so. The fricatives have no voiced or ejective variants or counterparts, unlike the case in Ahtna and Tlingit, respectively. The point of apical contact in the coronals is neither notably dental nor alveolar. The alveolar (“s-type”) fricative and affricates contrast with the palato-alveolar (“sh-type”) ones about as in English and Tlingit, the latter being neither retroflex nor palatalized. The velars seem about mid-velar, all clearly contrasting with the uvulars.

There is one most important distributional gap: the aspirated stops occur only with a vowel immediately following, and only as stem-initial or prefix-initial, i.e. never in stem-coda, even when followed by a vowel. At the same time, since all stops are released in all positions, and the plain stops are voiceless, plain stops in final or pre-consonantal position

sound more or less aspirated, at least to an English ear. Thus, one might be tempted to write final /-d/ as <-t>, or final clusters /-dg/ or /-dgG/ as <-tk> or <-tkq>, since, being entirely voiceless, they do sound far more like the latter transcriptions to the English ear. However, in all these cases the stop proves to be plain and not aspirated with any vowel-initial suffix. Keeping the aspirate symbols in this position would introduce a pattern of “allomorphic” variation that is entirely gratuitous or extraneous, for the sake of impressionistic phonetics to fit the English ear. This has been done in some practical orthographies for Athabaskan and Tlingit, but will not be done for Eyak. It is not a matter of contrast neutralization here, but of major distributional restriction of the aspirated stops.

There is one relatively trivial contrast limitation of /s/, in the case of one frequent verbal prefix, named Active perfective *s-*, where optionally /s/ > /sh/ where the following verb stem has an obstruent of the CH-series in either stem-initial or stem-final position. This optional, but perhaps usual, shift should be considered just that, rather than neutralization, as the result seems consistently identifiable as one or the other. In this grammar the transcription of underlying normative *s-* and assimilated *sh-* may be inconsistent.

Undoubtedly the main complexity in Eyak obstruent phonetics and status of contrasts is the labialization of the velars. Since this question is intimately related to the complexity in the status of contrasts in the reduced vowels, discussion is reserved for §§4.3.3–4.3.4 on that subject, including even one philological instance (Rezanov 1805) of what must have been distinctive (coda) *-kw*'.

The orthography also avoids the use of any superscript symbols for the labialized velars, writing <gw> and <xw> with non-superscript <w>. There are few instances where <gw> and <xw> represent sequences of two phonemes, as opposed to single labialized velar phonemes, creating potential underdifferentiation in the orthography. This could happen only across what is plainly the juncture of two morphemes, or rather lexemes. One rare instance where that might begin to invite incorrect segmentation is *sahxwAlahyu*: ‘cockles spirits’, where knowing *-wAlahyu*: ‘spirits’ would disambiguate the spelling. More frequently we have the case of first person singular subject pronoun *x(w)-* in a verb immediately preceding stem-initial /w/ as in *GAxwe:L* ‘I am swimming along’. There, however, we use the convention of always writing just <x-> for that pronoun, at least in the grammar and dictionary, or of writing <xww-> if necessary. This convention may be considered vastly preferable to requiring superscripts, or even hyphens, for a practical orthography. Note likewise below, consistent with this principle, the use of <n> for nasalized vowels to avoid superscript <n> or tilde or subscript hook.

## 4.2 Sonorants

The sonorant phonemes of Eyak, shown in Tab. 4.2 are all always voiced, but function phonotactically as consonants rather than vowels.



**Table 4.2:** Sonorant inventory.

w	l	y
m	n	

The three places of articulation are meant not to coordinate with those of the obstruent table. For the labials, /b/ in the obstruent table is highly marginal, but this is not the case with /w/ and /m/ in the sonorants. The coronals /l/ and /n/ are not relatable to any of the coronal series, nor is /y/ with any of the obstruents. The labials and /y/ are relatable to /u/ and /i/ only in being selected, respectively, as the epenthetic sonorant before zero-onset stems to avoid vowel clusters. The non-nasal sonorants are synchronically relatable to the nasal ones. There is a synchronically very active relationship between /l/ and /n/. In this connection, see §6.3.

It might in fact well be argued that /l/ is merely an allophone of /n/ (as in the l-idiocets of Tlingit), denasalized before a vowel. It can be shown that many instances of VnV are from VnAnV, and Vl# is abundantly attested still as VIV# in Russian sources. VIC is only at a few obvious morpheme junctures. There is a contrast in #lV and #nV, which could be written #nnV (cf. Vnn# for the loans); the relative infrequency of #nV might be evidence that that too is from \*nAnV.

The relationship between /w/ and /m/, on the other hand, is almost exclusively historical, except possibly in one form. For this see also §6.2. There are also nasal allophones of /y/; for a possible palatal nasal as a phoneme, a contrasting nasal counterpart to /y/, see §4.3.1. See there also for special phonetics of stem-final /y/. The larger perspective on the contrastiveness of nasality in sonorants is complex or uneven, deepest in the labials, so shallow in the case of /y/ as to be strictly phonetic, and most complex in the coronals.

Maximally, there is also a velar nasal [ŋ], strictly in a few loans from Chugach Yupik. This is written <ng> in spite of the fact that the (rare) sequence of nasal vowel plus /g/ contrasts with it. This under-differentiation in the practical orthography is deliberately allowed, as the velar nasal is very rare, and the orthographic sequence <ng> too is uncommon. In the lexicon the velar nasal, never initial, is specified as such.

There are also philological traces of a velar non-nasal sonorant [uɣ], written here as <Y>. This sonorant is still to be found in the two geographically extreme dialects of Tlingit, Tongass and Yakutat, though with historical documentation between. The traces of it in Eyak are mainly in Rezanov (1805)'s transcriptions of Yakutat Eyak -'LAYA ~ 'big' (<-лега> etc.), and 1810 Yakutat -'a:YA- ~ 'long' (<-ара> [<aga>]), even Furuhielm (1862a) -sha:Y 'head' (<-shag>, probably from the Cordova end (cf. §3.2.14). This segment is always /w/ in modern Eyak, with the probable exception of -'le: in *te'ya'le:* 'king salmon'. For further account of this sonorant, see §4.3.2 on reduced vowel contrasts, -'LAw~ 'big' in the

dictionary, and (§18.15.1 on Tlingit loans. See further the §7.4.2 on “sesquisyllabics” for coda /Y/ in Russian sources.

The stem-onset unrounded velar sonorant /Y/ was also present in some 19<sup>th</sup> century Eyak, perhaps mainly in Tlingit loans such as *Yaa`w* ‘herring’. Further, however, note Rezanov (1805) атыҕахту (<atygaXtu>) for ‘shallow’, to be read *’a’d yiYa’q’-duh* ‘it’s very shallow indeed’, modern *-wa’q’*, not a loan. Note also Rezanov кароттъ <kagottъ> ‘belly’, \**qa-YwAt’* ‘human/our belly’ (in the Yakutat dialect of Eyak), where the stem-initial sonorant was surely rounded (cf. PA \*-wət’ ‘belly’). The Russian spellings must show that the velarity was still prominent. All other instances of stem-initials now /w/ were written <в> (<v>) or <у> (<u>), not <г> (<g>), implying /(Y)w/. The contrastive status of unrounded stem-initial velar sonorant was unclear or marginal. Another type of example is probably in the Anonymous (1810) vocabulary, Кааканъ (<Kaakanъ>) ‘deer’, a loan from Tlingit *guwakaan*, modern Eyak *qAwAka:nn*, but here probably *qAYAka:nn*. Perhaps the best interpretation is that under the influence of Tlingit Eyak at least at Yakutat had allophones of /w/ that lacked the rounding. The only obvious cognate for an Eyak /Y/ is PA \*-wət’ ‘belly’, leaving the origin of /Y/ unclear, except for Tlingit influence.

Taking /ng/ and /Y/ together one might claim that Eyak had a fourth pair of sonorants, non-nasal and nasal, at the velar place of articulation. However, since the /ng/ is strictly from Chugach loans, the issue arises that the pairing is merely coincidental. It is even questionable that the pairing was even contemporaneous, if the /Y/ was turning to /w/ as the loans with /ng/ were coming into Eyak, or was only temporarily an optional allophone of /w/ under Tlingit influence.

Just one step beyond the synchronic surface there is a whole set of contrastingly preglottalized stem-initial sonorants /’w, ’m, ’l, ’n, ’y/. However, moving already into morphophonemics, this glottalization or glottal stop segment disappears unless immediately preceded by a prefixal vowel, and is deleted in the orthography. That glottal segment is lexically part of the stem, there being in this case either one type of stem which may be seen as having a highly specialized two-consonant onset, where C1 is /’/ and C2 is R (a sonorant). Alternatively, preglottalized sonorants may be looked at as a set of unitary phonemes, as historically it appears they must have been.<sup>2</sup> In synchronic phonology, however, the preglottalized sonorants must correctly be seen as such clusters in every case. There is one important kind of exception, where ’R acts as a single phoneme, namely after a proclitic, as in *dA=’wAX* ‘just thus, still’.<sup>3</sup>

2 See further discussion in §5.1 on syllable definition. See also §7.4.3.2 on variation involving coda sonorants and disyllables for consideration of historical glottalized sonorants in coda position, far further evolved.

3 In this connection see e.g. the §4.3.5 on reduced vowel contrasts in prefixes, and §5.1 on syllable definition and structure.

It is clear that there have been recent changes in what now are sonorant-final stems, documented since 1805, by Rezanov and others in Yakutat Eyak (§3.2.5), where a specially reduced vowel once followed those sonorants. For this, see §7.4 on sonorant-final stems.

The category of sonorants is quite distinct from both obstruents and vowels in Eyak, distinct especially from obstruents. This is emphatically so even between the laterals, obstruent /L/ and sonorant /l/. The only real morphophonemic alternation even there is the deletion of stem-initial *l-* after prefixal *L-* seen in two verbs, *-le* ‘act’ and *-le’g* ‘move hand’, and several postpositions, there mostly optional. The apparent alternation of the gerund suffix, *-l* after vowels, and *-L* after obstruents, is probably analogical in origin, rather than phonological, a spread from the instrumental suffix *-L*.<sup>4</sup>

As noted above, by far the most important morphophonemic sonorant alternation is *l ~ n*, where /n/ not immediately followed by a vowel is realized as nasalization of the preceding vowel. (If followed by a vowel not itself nasalized, the /n/ regularly turns to /l/, which denasalization is itself the origin of Eyak /l/.) In this respect the sonorant segment alternates with a suprasegmental feature of a vowel, and this still highly active alternation takes up a major part of Eyak morphophonemics. Also, still transparently active is the epenthesis in an underlying sequence of two vowels in the case of a few stems with zero-onset: epenthesis of /y/ after prefixal /i/, and of /w/ after prefixal /u/, noted above. In a gray area of synchronic analyzability, however, are *y ~ i* and *w ~ u* alternations in prefixes (2s pronoun and Neuter/perfective, both *yi-* < \*ngyE-; third person pronoun *wA-* ~ \**u-*). Likewise in the demonstratives ‘*Aw* ‘that’, ‘*u:d* ‘there’, *XA-yA-* and *Xi:d* ‘yonder’, along with *l ~ n* in ‘*Al* ‘this’ and ‘*a:nd* ‘here’. More opaque are disyllabic sonorant-medial stems, some of which relate to monosyllables, and modern sonorant-final stems, which had following reduced vowel in 19th-century Russian transcriptions. Purely historical are glottal-onset stems with distinctive reduced-vowel timbre, e.g. *-’iL* ‘pour’ < \**-’nyəł*; reciprocal pronoun *’iL-*, cf. Athabaskan \**nəł-* or \**nyəł*. Such issues are discussed in some detail below, in the sections on pronouns (Chap. 9), reduced vowel contrasts in stem structure (§4.3.2), and generally in Chap. 6 on morphophonemics.

#### 4.2.1 Sonorant system and practical orthography

The sonorants /w, l, y, m, n/ present no problem for a practical orthography, not even what at some level could be considered preglottalized sonorant phonemes. Since the preglottalization disappears unless immediately preceded by a vowel, it is easy to treat them as consonant clusters, and including the /’/ where it is not heard; introducing a rule to delete it would be not only an unnecessary complication of a practical orthography, but also create arbitrariness in deciding whether a sonorant never attested following a vowel

<sup>4</sup> See §18.13.1 for the gerund, and §18.13.3 for the instrumental.

is “underlyingly” preglottalized or not. In fact, special effort was made to elicit such items with preceding vowel to determine preglottalization, but a number of undetermined cases remain, spelled without the apostrophe.

### 4.3 Vowels

There is no question in modern Cordova Eyak as to what is a vowel and what is not. No obstruent or sonorant functions as a vowel. Every vowel is a syllable nucleus. There are no diphthongs. All vowels must be separated by at least one consonant. A word may not begin with a vowel. If morphologically there is no consonant preceding the first vowel of a word, a glottal stop must begin it. Further, no word, at least in modern Cordova Eyak, may end in a reduced vowel. It might be said that no word can end in a vowel. Even if length (the stigma /:/) may be considered in any respect a consonant (along with the stigmata /' and /h/), it can also be shown that word-final /:/ is underlyingly /:h/, as shown further below in this subsection.

There is more than one way of looking at the Eyak vowel inventory. One is minimal, i.e. the four timbres of full vowel. At the other extreme, there is the maximal system, i.e. of syllable nuclei, which can number up to 31.

The four timbres of full vowel form a system that can be presented in the 2x2 diagram in Table 4.3. The top two are closed (high), the bottom two open (low). The left two are front spread, the right two back rounded. Phonetically, the closed vowels are more or less the cardinal values of [i] and [u]. However, the open vowels are not the cardinal values of [e] and [a], but /e/ is considerably more open, more like [æ] as in English ‘man’, and /a/ is that of [ɒ] as in English ‘dawn’, back and rounded, as contrasting with ‘don’ (in non-western American English). It is probably safe to say that there is no vowel that is phonetically open central unrounded [a] in Eyak

**Table 4.3:** Phonemic vowel inventory.

i	u
e [æ]	a [ɒ]

The one and only definitely attested variation from this pattern was for /e/ in the speech of Mike Sewak, native bilingual from Bering River, who long continued to live there, but who since 1912 had spoken Tlingit practically to the exclusion of Eyak (cf. §3.3.10.7). For him /e/ was consistently mid [e] as in Tlingit, differing in that way from all other Eyak attested with phonetic adequacy. George Johnson (§3.3.10.3), also originally of Bering River, also dominant in Tlingit and who, unlike Sewak, had lived in Yakutat since 1912, spoke Eyak with clearly open [æ] as in Cordova. It is unclear what the <e> of Rezanov (1805)’s transcriptions of Eyak from Yakutat was phonetically. Rezanov virtually

always wrote /e/ with the Russian symbols representing Russian /e/ (<е,э>), perhaps never with symbols for /a/. It may thus very well have been more closed like Tlingit /e/ than like Cordova Eyak /e/, or have become so by 1805. In the Anonymous (1810) vocabulary, however, /e/ was quite often written with the Russian symbol for /i/ (<и>), e.g. илага (<iłaga>) for 'e'łAwah 'weasel', яти (<iati>) for ya' Ade: 'sit!', even икихъ (<iķix">) for yAqe:X 'tomorrow', clearly showing phonetic to more closed [e] soon after Rezanov.

One ironic reason for the clarity of the four-vowel square in Eyak full vowels is that these vowels or even these clear timbres do not occur alone, without some modification, or stigma, to take the term first used by Jeff Leer for Tongass Tlingit (Williams and Williams 1978). The Eyak vowel modifications, or stigmata, are /:/ for length, /' for (post-) glottalization, and /h/ for (post-) aspiration. In the absence of these, the vowel becomes reduced.

The reduced vowel system forms the classic triangle, lax and somewhat more central or less extreme, for which the present orthographic symbols are <i, A, u> (Tab. 4.4). There are only three reduced vowels, and the contrast between these and relationship to the full vowels is a complex issue, highly secondary and/or morphologically determined. This will be discussed separately below, in the subsections on reduced vowel contrasts in stems (§4.3.2) and in prefixes (§4.3.5), and in connection with sonorants and with labialized and non-labialized velar obstruent onsets and codas §§7.2.3–7.2.4.

**Table 4.4:** Reduced vowel inventory.

i	u
A	

To continue with the vowel inventory itself, the three reduced vowels, and the four full vowels, with stigmata, are presented in Tab. 4.5. Note that the stigmata of length and glottalization can combine, i.e. V:ʼ is possible. Marginally, it could be seen that length and /h/ can also combine, thus in a sense creating a more symmetrical pattern. For one thing, it is fundamental that no sequence of two vowels is permitted in Eyak. Accordingly, actual V:h does occur, but only in adding an enclitic with zero onset or epenthetic -A- to a stem ending with V:, i.e. V:-V > V:hV.<sup>5</sup> Other than in forms like these, there is no clear phonetic [h] after the stigma /:/ . At the same time, however, in spite of the phonetics, it might be indeed correct to claim that no word ends in a vowel. Without having to claim that /:/ is a consonant, it may in fact be correct to claim that if nothing follows /:/, the underlying form has /h/ in the absolute coda that is no longer audible, as in *ta:* 'trail', for which *ta:h*

<sup>5</sup> There are three types of sources for this, highly specialized, e.g. *Xa:ne:-h=uh* 'eat it!'; *yi:n-h=inh* 'one who' < *ya:inh*, likewise plural *yi:n-h=inu*, with enclitics; *ta:-h-A*='a:w 'long trail', with epenthetic -A-.

is underlyingly the real form. The practical orthography in that regard is purely phonetic, and all words end in a consonant.

**Table 4.5:** Full vowel inventory with corresponding stigmata and reduced vowels.

reduced	full	stigmata				
i	i	ih	i'	i:	i:'	
A	e	eh	e'	e:	e:'	
	a	ah	a'	a:	a:'	
u	u	uh	u'	u:	u:'	

One type of neutralization needs to be noted, namely that of V: and V:' before ejectives. For example, with *'uma:* 'his mother' and *'uta:* 'his father' the nuclei or rhymes clearly contrast. However, they no longer contrast where those nouns become e.g. the object of the postposition *o-tl'* 'with o'. The vowel nuclei or rhymes in *'uma:tl'* 'with his mother' and *'uta:tl'* 'with his father' are in fact pronounced the same, with a glottal stop preceding the ejective. The forms are nevertheless written differently, given the transparent analysis. In unanalyzable stems, on the other hand, the convention is the simpler spelling CV:C'.

In fact, the neutralization of /'/ and zero before C' after /:/ should be seen as parallel to the neutralization of /h/ and zero before V after /:/, making the insertion of /h/ automatic in the environment V:\_V, as noted above. Again, to put it differently, there is binary pairing to begin with between /h/ and /'/, i.e. glottis open as opposed to glottis closed, for onset stop consonants, on the one hand, aspirated as opposed to glottalized or ejective, and for "full" vowels in V' as opposed to Vh, on the other. If then it is possible to have the sequence V:#, likewise V:#, in that sense, then V:# must be "equivalent" to V:h, which then appears phonetically as such in V:hV.

Also, as noted above, no (modern Cordova) Eyak word or stem can end in a reduced vowel. This difference between a full and a reduced vowel is that a reduced vowel has no stigma, while full vowels are followed by the stigmata /:/ and/or /'/, /h/. Since /'/ and /h/ are both definitely also consonants, which can serve alone as codas, and /:/ can be said also to serve alone as coda (with no audible /h/ following), the question could arise as to whether /:/ might also be considered an obstruent consonant, or at least whether /:/ is part of the coda rather than the nucleus. This question is further dealt with in Chap. 7 on stems, where stigma is treated as a special part of the stem, part both of nucleus and of coda.

There is at least one suggestion that /:/ can act like an obstruent, in deleting the initial /'/ of a following preglottalized sonorant stem-initial. In very nearly all instances, the sequence V:'RV remains stable, with no loss of /'/ . However, where the preceding V: is from the sequence of qualifiers *dA-lA-*, uniquely combining as *dla:-*, we have at least one clear case of deletion of /'/, from Anna in *k'uhdL dla:mahd* 'red berry species' (clearly remembered as such, though there is no record that she would have rejected *dla:'mahd*). Cf.

**Table 4.6:** Nasalized vowels with stigmata. (Note position of stigma with respect to nasalization marker <n>.)

inh	in'	i:n	i:n'
anh	an'	a:n	a:n'
unh	un'	u:n	u:n'

*k'uhdL* ‘moss’, and *la'mahd* ‘berry’.<sup>6</sup> Similarly, the ledger shows *ya'Xu: qu'XAdli:[']yah* ‘don't run!’ from Lena, with the /'/ explicitly supplied, in brackets. This short list is not complete, as I do remember encountering more such inconsistencies with *dla:-* ~ before 'RV (especially for the resonant /n/), evidently a sign, however marginal, of the stigma /:/ beginning to act as an obstruent. Another item, *?qa:'we:shGAshiyah* ‘our (maternal) grandfather’, would have been diagnostic. The stem is certainly *-'we:shG-*, but was not elicited with *qa:-*, the long vowel 1s prefix along with the reduced ones. According to the relevant data at hand, the form could have been either *qa:'w-* or *qa:w-*, though perhaps preferably *qa:'w-*.

There is one more distinctive feature operating on the vowels, namely nasalization. This nasalization, however, is neither a stigma nor any longer a segment, even though it is derivable from a segment /n/. It is realized as uniform nasalization of the vowel for the entire duration of that vowel. In fact, vowel nasalization is so clearly either exactly just that, or just as clearly a segmental sonorant consonant [n], that in the current orthography, both the nasalization and the segment are written alike as <n>. The rule specifying the realization thereof is that immediately followed by a vowel it is realized as segmental [n], with adjacent vowels not nasalized. Otherwise, i.e. followed by zero or any consonant, /n/ is realized as nasalization of the preceding vowel. None of the reduced vowels occur nasalized, nor do any of the full vowels with the timbre of /e/. The nasalized vowels in Tab. 4.6 thus total only 12, to add to the 19 non-nasalized vowels above, so totaling 31.

Note that in the present orthography, this suprasegmental /n/ is written preceding the stigmata /h/ and /'/, whereas it is written following the stigma /:/. Since /h/ and /'/ are listed as consonants, this convention has the convenience of following the rule that /n/ before consonants is nasalization, and avoids the problematical treatment of /:/' as such. More importantly, it also avoids the misleading image of <n:> as a lengthened [n]. In all previous orthographies vowel nasalization was written either with a tilde over the vowel or with a hook beneath the vowel, or with raised n (as in Birket-Smith and de Laguna 1938). It could be argued that at some level this new orthographic approach is non-phonemic or even misleading. However, the present approach is typographically much simpler, and even according with the digraphic approach to the affricates or labialized

<sup>6</sup> This appears as *k'uhdLdla:'mahd* in the dictionary, with speculation that *k'uhdL* ‘moss’ might here be treated as *d-* class. The ledger, however, shows *dla:mahd*, evidently “corrected” in the dictionary, without comment.

velars and/or ejectivity, on the one hand. On the other hand, it does indeed accord with some historical reality. It accords also with the extreme complementary distribution resulting from that history, which makes the unambiguous rules so very clear that both the segment and suprasegmental can so easily be written with <n>. <sup>7</sup> The only real problem arising from this is the transcription of a few loanwords, *k'uLdiya:nn* 'spruce grouse' from Ahtna, or *cha:nnwa:nn* 'Chinaman' from Tlingit (from Chinook Jargon from English). Such exceptional items show a non-nasal vowel and a segmental [n], here written ad hoc as <nn>. However, these few items, consistently pronounced as such without difficulty, could be considered to prove the strictly synchronic phonemic status of a contrast between the segmental and suprasegmental /n/. See also §6.3 on *l ~ n* alternations for the degree to which segmental occluded [n] may at some phonological level actually come from underlying /nn/.

One may well wonder why there is no nasalized /e/. There is a synchronic rule whereby open stems with /eh,e'/ (and /ah,a'/) become /inh/ before nasalizing enclitics for the third person human singular =*inh* and plural =*inu*. This rule, called unlaunting nasalization, treated in §6.1, may provide some indication. Further research of comparative nature on this is certainly in order. There are clear signs that show \*-en related to both the timbres /i/ and /a/. One such comparison, if valid, suggests that \*en became *in*., cf. Athabaskan \*xɛ's 'wart' and Eyak *si:ns* 'mould', with assimilation to coda of unstable onset. Cf. also Athabaskan \*-tse'e '(man's) daughter', Eyak *-tsi:ny*. See further on this in §7.2.3, especially with onset TS-series. It also appears, perhaps surprisingly, that PAE \*-en has become Eyak *-a(n)*, when not *-eh*. Cf. e.g. the Eyak nouns *gah* 'day', *xah* 'summer' and PA \*ʒ<sup>wr</sup>e:n 'day', \*ʃe:n 'summer', though cf. also PA \*ʒ<sup>wr</sup>a 'sun'. For Eyak *gah* 'day', however, note the allomorph *ge:lA-* or *ge:-* in *ge:lA'a:g* 'mid-day'. This same correspondence seems to be the case in the apparently ablauting verb stem *-e ~ -'an* 'see' as well, as in *GAX'eh* 'I see it', *dik' GAX'anhG* 'I don't see it', from PAE \*-'en.

#### 4.3.1 Nasal vowels and nasal sonorants

Elimination of nasal sonorants as such has been a historical characteristic of Eyak. For example, final /n/ has become nasalization of the preceding vowel, and prevocalic /n/ has regularly become /l/, e.g. Eyak *-le ~ 'act'* vs. Athabaskan \*-ni ~, Eyak *-la* 'subsist' vs. Athabaskan \*-na, Eyak *-la:X ~ 'eye'* vs. Athabaskan widely *-na:ɣ-~*. At the same time, there are still important alternations between /n/ and /l/ in synchronic Eyak morphophonology. Krauss (1965b) goes so far as to state "Were it not for loans, it would also be possible to eliminate m and n from the table. Where they occur in non-loans, they could be interpreted as w and l, respectively, followed by a nasalized vowel." This is not quite true for two synchronic reasons. First, in a strict sense it is required by late loans such as *k'uLdiya:nn*

<sup>7</sup> It is clearer even than in French, e.g. in that the adjacent vowels in Eyak necessarily become non-nasalized.



‘spruce grouse’ from Ahtna *el dyaani*, or *cha:nnwa:nn* ‘Chinaman’ from Tlingit. It is also required because of a later second special type of “umlauting nasalization,” to be described in §6.1. This nasalizes open stem vowels without nasalizing a sonorant onset.

First, however, we do have at least one obvious *w ~ m* alternation just below the synchronic surface in the following noun paradigm: *siya:n* [sijã:] ‘my mother’, *’iya:n* [ʔijã:] ‘your mother’, *’uma:* [ʔuma:] ‘his mother’. The first two have no final segmental [n] but rather only a nasalized stem-vowel and, it so happens, a fully nasalized /y/ in the onset, stem-initial position. This sonorant is nasalized to such a degree that perhaps most of the time the /y/ is realized as a fully occluded palatal nasal, written <ñ> or digraphically as <ny>. This could or should perhaps most realistically be written e.g. *sinya:n*, with the understanding that since the preceding reduced vowel cannot be distinctively nasal, the <ny> cannot be regarded as /n/ before a consonant but here, exceptionally, must be read as a nasal sonorant. This might raise the question of a possible phonemically nasalized counterpart of /y/, paralleling /m/ and /n/ for /w/ and /l/, respectively. However, there can be no contrast between the nasalized /y/ and non-nasalized /y/, since the following vowel remains nasalized after even the fully occluded /ny/, so the two are in complementary distribution.

The third person *’uma:* clearly requires the following explanation. The stem for ‘mother’ is vowel-initial, *-a:n*. The first two persons are morphophonologically *si-a:n* ‘my (*si-*) mother’, *’i-a:n* ‘your (*’i-*) mother’, and the third is *’u-a:n* ‘his (*’u-*) mother’ (cf. *sita:*, *’ita:*, *’uta:*, for ‘my/you/his father’, respectively). The first two have epenthetic /y/, by rule preventing any sequence of two vowels in Eyak, whereas the third person has epenthetic /w/, being preceded by /u/ instead of /i/. Being followed by a nasal vowel, the epenthetic /w/ of the third person becomes itself phonemically nasalized to /m/, therewith “absorbing” all the nasalization, so that both adjacent vowels become purely oral in *’uma:* ‘his mother’. (A purely historical parallel is *ma:* ‘lake’, for which cf. Athabaskan \*wə̀n, implying some pre-Eyak \*wAn, or \*wAn-A.) A crucial difference between the first two persons with nasal /y/ and the third with /m/ in ‘mother’ here is that while the vowels in *’uma:* become purely oral, those in *-i(n)ya:n* retain all their nasality. Given that the sequence of wVn is possible at least with nasal umlaut in *qa’winhinh* ‘he will swim’, not \**qa’mihinh* or the like, the question of synchronicity of the rule producing *’uma:* does arise.<sup>8</sup> For further details on nasalized variants of sonorants, including /w/, see §6.1.

There are further complications to the question of phonemic [ny] and the status of Eyak nasal sonorants in connection with ‘umlauting nasalization’ (q.v. §6.1). For the moment, however, the persistence of nasality in vowels adjacent to [ny], as opposed to the full “absorption” thereof by [m], is decisive for not admitting a phoneme /ny/ to the inventory, as noted already above. There are only a few other forms attested in Eyak with this

<sup>8</sup> An answer to that might have been found in the gerund of *gu-LA-a:n* ‘stand’, deleting the classifier with the result either *ʔguwa:n*, or perhaps better *ʔguma:*, but we have no record of any attempt to elicit the form.

orally occluded [ny], the stems *GAdA-q'Ayi:ny* 'fog', *k'Ayi:ny* 'other', and some forms ending with *-di:ya:n* 'sharp (of *d*- class)'. In the first two, which end with /y/, itself nasalized, i.e. with the last syllable wholly nasalized (by the /n/ before the sonorant consonant /y/), the first /y/ is also nasalized and perhaps usually occluded as [ny]. No clear etymology or cognates are known. As an underlying sequence /yi:/ is not otherwise attested, and modern timbre [e] with nasalization does not occur, a sequence such as /Aye:/ or even /Aya:/ might be hypothesized. Since there are no prefixes \*q'A- or \*k'A-, a disyllabic stem with medial sonorant /y/ must be understood. See §7.4 on the phonotactics of disyllabic stems for further discussion. For the forms ending with *-di:ya:n*, i.e. the Neuter imperfective forms of the stative verb '(*d*- class) be sharp', where the stem is itself *-ya:n*, the usual pronunciation is with the whole sequence /i:ya:/ nasalized, with leftward spread of nasalization. However, this is not usually with occluded [ny] for the stem-initial, except insofar as the form is lexicalized, especially in the two nouns *di:nya:n* 'stickleback' and *Xa:ngudi:nya:n* 'porcupine'. Those are most often pronounced with occluded [ny], both vowels nasalized, or even with the final vowel denasalized but the preceding vowel still nasalized, i.e. even [di:nya:]. Note also *Xi:nXinh* 'yonder person' with leftward spread of nasality, clearly from \*XA-yA-X-; cf. *Xi:d* 'yonder' < \*XA-yA-d, and *XA-yA-'u:-d* 'yonder'.

There is a small group of nouns with stem-final /-y/, the only fully stable one of these being *k'u:y* 'wind'. The rest all follow the vowel nucleus /i:n/, i.e. have rhyme /i:ny/. Two of these, *k'Ayi:ny* 'other' and *GAdA-q'Ayi:ny* 'fog', are already special and mentioned here, being disyllabic with medial /y/ nasalized by the rhyme /i:ny/. Here the instability of that rhyme itself needs to be mentioned. Sometimes, most conservatively, the /ny/ is realized as a nasalized /y/; sometimes it is realized with yet another phone, a velar nasal perhaps fully occluded, not a palatalized coronal. Least conservatively, at least *GAdA-q'Ayi:ny* 'fog' is realized instead *GAdAq'Anih* with the rhyme vowel shortened and denasalized, the medial /y/ replaced by /n/.

There are five more nouns (1) with stem-final /(n)y/, where /ny/ is pronounced as nasalized /y/ or velar nasal, in which the coda is particularly unstable. These all have coronal onset and vowel nucleus /i:/. It is not irrelevant that four out of these five have the onset /ts/. Cf. in this connection the very high proportion of stems with TS-series onset that have the vowel timbre [i] (§7.2.3), and also §7.3 on stems. In addition to that, though not mentioned there, is what is also a high correlation between such onsets and nasalization of the high vowel nuclei [i] and [u]. Those five nouns are presented in (1).

- (1) Nouns with stem-final /(n)y/, pronounced as nasalized /y/ or velar nasal

*Li:n(y)* 'kind of tough wood'

*tsi:n(y)* 'song'

*tsi:(n)(y)* 'mussel'

*tsi:((n)y)* 'man's daughter' (nearly as 'mussel', but not attested as ?*tsi:y*)

It is possible that at least in some of these, the /y/ is secondary, an innovation. For this, note especially *tsi:n(y)* ‘song’, and the well attested verb stem *-tsin* ‘sing’, to which the final /y/ must evidently be an addition, however old. For details of each, see the dictionary. See also (§7.4.2.3) on coda /y/, present and still followed by a reduced vowel, even in ‘song’ in Rezanov (1805).

### 4.3.2 Reduced vowel contrasts in stems

The subject of reduced vowel contrasts in Eyak is rather complex. From a historical-comparative point of view it appears that reduced vowels in stems may have collapsed, for the most part, into one, schwa, while developing differently in prefixes. For example, in stems like *diL* ~ *dAL* ‘blood’, there can be no contrast, whereas in prefixes, e.g. *sidahL* ‘I sat’ and *sAdahL* ‘you/it sat’, the contrast is crucial. For this reason, reduced vowel contrasts in stems must first be treated separately from those in prefixes, before trying to make statements about them together.

There appears to be a certain irony in this, that reduced vowel contrasts are weaker in stems, which are stressed, than in affixes, which are less so. This calls for explanation in secondary developments, which need to be identified.

Taking first stems and the /i/ vs. /A/ contrast, this appears to function only where the stem onset is /ʔ/, where the coda is a coronal obstruent, not dorsal (velar or uvular). There are barely any minimal pairs. In fact all such stems are listed in (2).

(2) Stems exhibiting the /i/ vs. /A/ contrast

ʔitlʔ ‘mountain’, O-ʔitlʔ ‘(beaver) dam O’

O-ʔiL ‘pour, spill O’, reciprocal prefix ʔiL-

ʔAd- ‘reflexive object pronoun’ (possibly ʔAL- as stem in ʔAL-dah ‘playing game’)

O-ʔAdz ‘impel O’

ʔAs ‘pot-like trap’

ʔAsh (preverb) ‘completely by, past’

LA-ʔAsh-g ‘sneeze’

ʔAl ‘this’ (proximal demonstrative)

ʔAw ‘that, the’ (distal demonstrative)

It might appear, from this limited array, that a lateral coda might determine /i/ over /A/, were it not for the probable stem ?ʔAL-. However, this can hardly be the case, given the phonetics with coronal onset, where /A/ instead of /i/ is more likely or frequent with the lateral series coda (TL), and /i/ instead of /A/ is much more likely or frequent with a TS or CH coda. The clear stable contrast after the onset /ʔ/ between /i/ and /A/ was surely checked, \*ʔitlʔ found impossible for ‘mountain’, and \*-ʔish impossible for ‘sneeze’.

The reason for the contrast, however, or some of it, may well be seen in the Athabaskan cognates \* $\text{-}\eta^{\text{v}}\text{ə}l$  for ‘spill, pour’ and \* $\text{-}\text{nə}l\text{-}$  for ‘reciprocal o’, though cf. Koyukon *atl* for ‘beaver dam’.

Other than with the onset /ʔ/, or with dorsals in onset or coda, /i/ and /A/ do not contrast in stems. In the rest, i.e. stems with coronal obstruents in both onset and coda, /i/ is much more frequent than /A/, especially with TS and CH, more than with T or TL, as noted already. Thus it is especially the vowel e.g. in ‘blood’ which may perhaps be *dAL* as often as *diL*. However, this is a simplistic way of viewing the facts, because even though there is no contrast in these stems, there is that contrast in the Eyak prefixes. There is the additional fact that in both the important languages in contact with and influencing modern Eyak, i.e. both Tlingit and English, the contrast between [ɪ] and [ə] is very important; in Yupik too. Therefore, it seems that instead of some reduced vowel between lax [ɪ] and [ə] quality most of the time, at least in “careful” or deliberate pronunciation, as in response to elicitation, the result seems to be “polarized” in such responses. The result is either [ɪ] and [ə], rather than something in between. In the dictionary (Krauss 1970a) such stem-vowels were written <i> and/or <ə>, with comments especially on frequency of one or the other. Variants are written out joined by lowered tilde, even, lending a status to such variation that is quite inappropriate to the present description. For details, see Krauss (1970a). Between coronals reduced /u/ ([ʊ]) is out of the question. This is made especially clear e.g. by a loan from Tlingit, Eyak *ts’its’* ‘harlequin duck’ from Tlingit *s’ús’*, where not only the ejective fricative /s’/ is rendered predictably by /ts’/, but also /u/ by /i/.

With uvulars in the onset and/or coda, the rule is /A/ always for reduced vowel, for simple phonetic or phonological reasons. It is better to say “phonological” reasons because there are two important exceptions, quite different in origin, nevertheless serving to create a phonemic three-way *i/A/u* reduced stem vowel contrast in uvular environment.

The first exception comes from special reduction of the vowel of the postposition *o-’e’*, which makes that postposition highly unstable phonologically in a number of derivations. For full details see the dictionary. Relevant here is that this instability creates two preverbs with distinctive reduced /i/ next to uvulars. One is *’AdiX* ‘in(to) building, from outdoors’, lexicalized from *’Ad-’e’-X* ‘(movement) in(to) vacant space of self’. This preverb has derivatives *’AdiXd* ‘(at rest) indoors’, *’AdiXdAX* ‘(movement within) indoors’, and *’AdiXich* ‘(movement) to indoors’. This last evidently shows also duplication of specially reduced underlying *-’e’-*, < \**’AdiX-e’-ch*. Another such preverb, though not etymologized as such in Krauss (1970a), is clearly *qid* ‘(falling) down off’, from \**qA-’e’-d*. Here the \**qə-* is from pronominal PAE \**q<sup>w</sup>ə-* ‘place, event’, for which cf. discussion of the origin of the future verbal prefix *qu’-* ~ (< \**q<sup>w</sup>A-’-*). Strong reinforcement for this etymology is the preverb *qi’* ‘place where’, itself not the same exception solely because of the retention of final /ʔ/, restoring full vowel status to the reduced /i/, here clearly also \**qA-’e’* < \**q<sup>w</sup>A-’e’*. This was not seen in Krauss (1970a) either. This postpositional *-’e’* being the sole origin of reduced /i/ next to uvulars in stems, there are of course no such verb or noun stems; cf. the regular reduced vowel in *XAtl’* ‘night’ (not \**Xitl’*) next to *O-L-Xe’tl’* ‘get dark, (night) fall’. There are apparently two noun stems, homophonous *Xihsh* ‘scar’ and *Xihsh* ‘spear head’, which

both have the frequent variant *Xish*. This is perhaps a recent development adding to the independent status of /i/ next to uvulars.

The other exception is -'uG-L 'heart'. This is clearly an instrumental or deverbalization with instrumental suffix -L, from the verb with stem -'u'G 'breathe, be alive', the vowel of which in -'uG-L 'heart' is obviously a reduction.<sup>9</sup> It is clear that Proto-Athabaskan and PAE had a full contrastingly labialized uvular series of obstruents, absent as such in Eyak; cf. e.g. *qi*' < \*qWA-'e' 'place where' above. However, given the clear contrasting status of /i/ vs. /A/ after the onset /'/, and the complete absence of any other Eyak stems with reduced /u/ next to uvular, it seems probable that the vowel in -'uG-L 'heart' is preserved more in connection with the onset /'/ than with the coda. For what it is worth, then, the three-way *i/A/u* stem-vowel contrast can be claimed more in connection with onset /'/ than with uvulars.

In stems with onset /w/, the status of reduced vowel contrasts is less clear. It appears that there is probably a contrast between /i/ and /u/ in that the stem *wut*' 'vomit' is always so transcribed, possibly by habit, but never transcribed \*?'*wit*'. Likewise, -*wus* 'non-linear expansion' is most often transcribed with <u>, sometimes <A>, never <i>. There are, on the other hand, at least three stems that are most often transcribed with <i>, -*witl*' 'be startled', but once -*wutl*'; *wiL* 'wedge', sometimes also *wAL* or *wuL*; -*widj* 'be ashamed', sometimes also -*wAdj*, -*wudj*. Also, equally, but not well remembered are -*wish* and -*wAsh* 'row (boat)', and -*wAd~* 'twitch (of head)', only so transcribed. Whether the vowel in the stem -*wug* 'grunt' may be determined by the onset (and/) or coda it is impossible to determine. There are no reduced vowel stems with onset or coda /y/, but only one such stem with zero onset and epenthetic /y/, e.g. *si-y-Ad-kih* 'my older sister', *'u-w-Ad-kih* 'his older sister'. This is also found transcribed perhaps most frequently with <yid> and <wud>, as determined by the epenthetic sonorant. Some instances, however, are transcribed <wid>, though none <yud>. Stems with reduced vowel and coda /w/ are few. One is the demonstrative stem *'Aw* 'that, the', never written \*?'*uw*, given probably that the onset is /'/, stabilizing /A/. Most interesting is -*lAw* ~ -*nAw* 'big'. For this cf. the verb -*li* 'be oversize', suggesting an original front vowel for the adjective, but which is no doubt randomly written <A> and <u> in the modern transcriptions. Cf. further the many Russian transcriptions of this, especially Rezanov (1805), most often <-лера> (<-lega>), showing the persistence of some kind of vowel following the sonorant, as is common for items now ending with a sonorant. If the <e> were meant to be read <ë> [io], as expected after [l], always heard as palatal by Russians, we would expect to find some transcriptions with <ю> (<iu>), not found, and/or some transcriptions with <в> (<v>) for the sonorant, rounded with the round stem vowel. That, however, is quite rare compared to <г> (<g>). Given that the <г> (<g>) is also usually followed by /a/, never /u/, it seems unavoidable that no labialization should be read in the Russian <-era>, but rather still a front reduced vowel and the same back unrounded velar sonorant /Y/ [u] as still found in Yakutat Tlingit. This sonorant is now

<sup>9</sup> See §18.13 for the instrumental.

completely gone in modern Eyak, as noted in §4.2. It is now always /w/. Note again also *te'ya'le*: 'king salmon', where *-le*: is probably from 'big', to be reconstructed as something like \*-'LAYA, with front stem-vowel. There is one documented historical change *A > i* in the first syllable of disyllabic stems with medial /y/, a change that may be general with coronal and velar onsets. This is documented e.g. in *ts'iyux* 'mosquito', transcription <Zaiuh> in Furuhjelm (1862a) 1862 implying *ts'Ayux*, and several transcriptions in Rezanov (1805), e.g. *кая* (<kaia>) implying *gAyah*, for modern *giyah* 'water'. After uvulars there remains a contrast, e.g. *GAyAG* 'we', exceptionally *Giyah* 'food'. There is also the minimal pair *GAts'AX* 'cloth' and *Gits'AX* 'copper', both now unanalyzable, though the first syllable is presumably prefixal. See §4.3.5 for the status of reduced vowel contrasts in prefixes. See §4.3.3 for those contrasts in connection with a velar onset.

It must be noted that there can be no stem with reduced vowel and no coda, i.e. with rhyme consisting solely of a reduced vowel. Also there are no suffixes or enclitics ending with a reduced vowel, so that no Eyak word can end with a reduced vowel or vowel without stigma. There is or was formerly one possible exception to this rule: stems of the form CV(:)RV, i.e. with sonorant /w, l, y, Y/, rather well documented in Russian sources as ending in a reduced vowel of variable timbre. Such stems in twentieth-century sources end with the sonorant, the final vowel having reduced to zero. For this specialized problem in full detail, see §7.4 on stems, subsections on stems with sonorant codas.

#### 4.3.3 Reduced stem vowel contrasts and the status of labialization in velar obstruents

Another set of reduced stem vowel contrasts arises in connection with the K-series of velar obstruents, i.e. /g, gw, k, k', x, xw/, where the two PAE series, non-labialized and labialized, have partly or largely merged. The degree of merger of the two velar obstruent series and status of reduced /u/ contrasting with /i/ and /A/ are intimately connected. The basic premise here is that the labiality or roundedness of the velar obstruent is transferred to the entire duration of the adjacent reduced vowel, creating /u/ contrasting with a non-rounded reduced vowel at the same time as that contrast is lost in the obstruent. Thus e.g. \*CEk'w (where E is the undifferentiated reduced vowel or schwa) > Cuk', while \*CEk' > phonetically Cik' in the absence of a uvular. It should be noted that the velars all remain mid-velars, neither back nor palatal, e.g. there is no y-like quality to the final in e.g. *-sik'* 'hiccough', and the vowel remains lax [ɪ] quality, never high or tense [i]. Likewise for *djig* 'exactly, just', *ts'ik'* 'plate', perhaps less distinctly so for *-t'ik'* in 'shoot with arrow', occasionally heard as *-t'Ak'* in Rezanov (1805), or from Anna in text. Note also *dik'* 'no, not', *dAk'* occasionally, especially Rezanov, unless there merely the non-palatalized quality of /d/ is meant. (This item is never \**duk'*, in spite of the possible etymology or analysis as Eyak *dA=k'u-*, with proclitic *dA=* 'selfsame' and negative prefix *k'u-*. For this cf. also the probable Athabaskan cognate \**du* 'not'.) At the same time, with former labialized velar coda, e.g.

*tux* ‘saliva’, the reduced vowel has a lax distinctively back round quality, [ʊ], with /x/ more or less rounded, literally so. Likewise the vowel in *-duk* ‘have hump’, *-tug* ‘swell’, *-tl’ug* ‘knead’, *-dzux* ‘stab’. There are some complications, however, especially philological, in *-tsug* ‘swell’, where Rezanov unexpectedly has *-цыккъ* (<-tsykk”>), implying *-tsig* or *-tsAg*, or something in between. We see the converse for *-dik* ~ *-dAk* ‘short’, where Rezanov has also *-duk*. Further, we have full modern variation in the enclitic =*dig* ~ =*dAg*, ~ =*dug* ‘also’. Note also *-dux* ‘drift’, where the two Bering River speakers Sewak and George Johnson (cf. §§3.3.10.7, 3.3.10.3) have also *dAx*, and where Rezanov has *tex* (<tex>). The vowel there is either perhaps best read as [io] (as in Cyrillic <ë>), implying something like *-dixw*, unless it represents expanded *-de:x*. We have the same problem with *-t’ux* ‘taut, hold tight’, transcribed by Rezanov also as *texъ* <tex”>.

With stem onset velars and reduced vowel there are likewise several stable contrasts between Ku- and Ki or KA-, e.g. the stem *-xut* ‘shoot with gun’ is attested over 150 times, including a dozen by Rezanov (1805), and the vowel is always /u/. The stem *-kuts*- ‘small’ is also attested abundantly, including over a dozen Russian transcriptions, always with /u/. There are another ten or so reduced vowel stems with a velar onset, far less well attested, always with /u/. In the same category, with occasional transcription <gwA->, especially in Russian sources, are *guts*- in ‘9’, and *-guG* ‘tell lie’, the latter, note, with a uvular coda. Likewise the Tlingit loan *-kus* ‘wash’, with *-kwAs* from Sewak and Johnson. Notably less stable, however, are *-xul* ‘roll’, also transcribed as *-xwAL* and *-xAL*; *-xudj* ‘hang on line’, also *-xwAdj* and *-xAdj*; and the stem in *sALk’ushL* ‘grebe’, also *-k’Ash-*. Still less stable is *k’ush-* (reduction of *k’ahsh* ‘foot’, <\*k’w’ahsh>), unstable specifically in one compound *-k’ush-dA-q’u* ‘calf of leg’, also *k’Ash* and even *-k’ish-*. Most unstable of all is *(-xutl)* ‘snow’, a reduction of *-xu’tl* ‘blow’, freely varying with *(-)xAtl*’ and *(-)xitl*’, also *(-)xwAtl*’ and even *(-)xwitl*’. Again, for greater detail on the incidence of the variation for the different sources, see Krauss (1970a). Here it should be noted, as also in connection with prefixal phonetics, that especially the labio-velar fricative may be realized with all degrees of roundedness or labialization, including very slight, which is still in contrast with absolutely unrounded /x/. Even absolutely unrounded /x/, though, is still not notably palatalized. For some reason, there are far fewer absolutely non-labialized reduced stem vowels with velar onset than there are with labialized vowels, perhaps only three: *-kid* ‘knock blueberries off bush’, *kidz* ‘eelgrass; twine’, *-xits*’ ‘drum’ (~ *-xi’ts*). Others are less stable, e.g. *-gil* ‘shrivel; sun’, occasionally, *-gAL*. Apparently still less stable are *-gis* ‘roast on stick’, *-gus* from Anna; and *-xAX* ‘empty, go out (of tide)’, as expected with a uvular coda, but also once *-xwAX* from Lena and Anna each.

Finally, there are stems with velar obstruents in both onset and coda, *-kug* ‘break’, *-k’ug* ‘have muscular cramp’, *gugsg* ‘louse’, *-k’igsh-* ‘plant species’, *-k’ik’sh-* ‘creak’. These should be expected to be maximally stable, the contrast maximally in the vowel, so having no variants attested with /A/, \*?KAK being perhaps impossible to produce in Eyak, though such elicitation was presumably never attempted. There are, however, two stems attested with onset /x/ and velar coda, *-x(w)ik*’ ‘draw spruceroot through teeth to peel and

flatten it', and *-x(w)ix* 'be white', where for some reason in both the final is absolutely non-rounded and the initial shows presumably the whole range from [x] to [x<sup>w</sup>].<sup>10</sup> This may only reflect in some way the predominance of, or preference for, rounded onset over non-rounded, as noted above.

It should be noted further that disyllabic stems with medial /y/ provide some further philological perspective here. As noted above, modern *giyah* 'water' in Rezanov (1805) is consistently transcribed to reflect *gAyah* rather than *giyah*. This shows clearly not only that CAyV- and CiyV- do clearly contrast, but also that there has been a change since 1805. The difference also has the effect on onset velars that the velar is closer to palatalized before /i/ than before /A/. This further implies that at least some instances e.g. of *xitl'* 'snow' must phonemically be transcribed still *xAtl'* rather than *xitl'*, unless the /x/ is as palatalized, fronted, as is the /g/ in *giyah*. The contrast is definitely in the vowels /A/ and /i/, and in the case of *giyah* there has definitely been a historical change. Another such change, after a coronal onset other than velar is *ts'iyux* 'mosquito', transcribed <Zaiuh> by Furuhjelm (1862a), clearly implying *ts'Ayux*, though Furuhjelm already has <Kia> for 'water'.

#### 4.3.4 Excursus: Contrast between rounded and unrounded velars next to full vowels

We begin this discussion with onset velars. As implied by Tab. 4.1, there is no contrast between rounded and unrounded aspirated and ejective stops, /k/ and /k'/. Given that there are no aspirated coda stops, this can only be shown for onset /k/ and /k'/. This was carefully checked in the case of *-ki:nX* 'weep', for example. There was no philological trace in any of the older documentation of a form like *\*-kwi:nX* or verifiable living memory of such a form, though that is where a trace of the rounded velar might be expected, if any should be found. For this cf. PA *\*-č<sup>wr</sup>eχ* 'weep', implying PAE *\*-kwenχ*. There is, it is true, one instance of onset /kw-/ in *-kwe:s*, expanded from *-kus* 'wash', itself a loan from Tlingit, but only in the speech of Mike Sewak, who was dominant in Tlingit (cf. §3.3.10.7). This expansion is otherwise regularly *-ke:s* for other Eyak speakers. There is at least one instance of implied initial aspirate in the stem *-kahL* 'bark (v.)' in the Anonymous (1810) wordlist from Yakutat, *кватль* (<*kvaatl'*>), evidently transcribed very carefully. This exact form is also attested by Li from George Johnson at Yakutat, himself also a speaker of Tlingit, dominant in Tlingit since 1930 (cf. §§3.3.10.3 and 3.3.7). Especially without comparative data, it is difficult to know what to make of this particular item. Likewise, *ka:shk'* 'humpback salmon' was pronounced *kwa:shk'* in Eyak by George Johnson; *kwáash-k'* is also the Yakutat Tlingit word for 'humpback salmon', and as such is more probably a loan from older Eyak to Yakutat Tlingit rather than the reverse. As such it is so presumably an indication of the

10 Cf. *k'ux(w)ix* 'bald eagle' in the excursus on the status of velar roundedness next to full vowels in §4.3.4.



relatively recent loss of /kw-/ as such in Eyak. See §§4.3.3–4.3.4) for the survival of /gw-/ and /xw-/ as such before /e:/, the expansion of reduced stem vowel. Contrasting with those, it is confirmation of the definitive loss of /\*kw-/ and /\*kw'-/ as such that in the expansion of *-kug* ‘break’ and of *-k'ug* ‘have muscular cramp’, for these only *-ke:g* and *-k'e:g* could be elicited, not an analogically expectable *\*-kwe:g* or *\*-kw'e:g*. (See §4.3.4 for one clear philological trace of /-kw'/ following a front vowel, in the discussion on stem-coda velars.)

On one occasion (notebook I, page 91) I very deliberately asked Lena if she had ever heard the stem form *\*?-kwi:nX* for ‘weep’. Her response was that Billy Dude used to say, just before he died, *xu: 'idehdah xkwi:nX* ‘I’m really crying’, which Lena considers a kind of “deep talk.” (The term “deep talk” is standard Eyak English for archaic speech of elders, of high prestige and difficult to understand.) The possibility that some such distinctive labialization might thus have survived is severely contaminated by the possibility that the labialization here may be due to rightward spread from the 1s subject pronoun *xw-* affecting the stem-initial /k-/.

With the velar plain stop and fricative on the other hand, the picture is significantly different. There is a clear contrast, at least optionally, between /g/ and /gw/ and between /x/ and /xw/. There is to begin with a regular clear contrast before a full unrounded front vowel, between /gwe:-/ and /ge:-/ and between /xwe:-/ and /xe:-/. This can be heard in the expanded allomorphs of stems with definitive round reduced vowels, *-guG* ‘tell lie’, expanded *-gwe:G*, and of *-xul* ‘roll’, expanded *-xwe:L*, even though there are also for these the variants *-ge:G* and *-xe:L*. Other than expanded verb stems with the sequence /-gwe:-/ or /-xwe:-/, there are a few notably labialized exceptions. One such exception for onset /gw-/ is the stem *-gwehG* in ‘be lonesome’ in the speech of Mike Sewak. The only other may be in the opaque noun for ‘seal’, *ge:Lta:g* ~ *ke:Lta:g*, probably itself of Eyak origin, which has the variant *gwe:Lta:g* in Rezanov (1805), Anonymous (1810) (unless those are *?kwe:Lta:g!*), and *gwe:Lta:g* for Sewak, and sometimes for Anna. For onset fricative /xw-/ there are also such exceptional stems, not supported by reduced /xu/, attested from Lena herself, *-xwehd* ‘fade’ and *-xwe't* in *k'u-(l-)L-xwe't* ‘grimace, sulk’, along with *-xehd* and *-xe't*. A third and most widely attested exception is the transparent nominalization ‘whistler’, i.e. ‘groundhog, marmot’, *dALAxwe:g* for Rezanov, Galushia Nelson, Sewak, George Johnson, Lena, Anna, and Marie, with the variant *dALAxwe:g* only for Lena and Marie. This item might be classed as onomatopoeic or imitative. However few and/or optional, the very existence or persistence of the still clearly labialized variants is in itself decisive that the merger between the labialized and non-labialized /g/ and /x/ is not quite complete. (The labialization of /x/ in *k'ux(w)i:x* ‘bald eagle’ may be from the prefix; but cf. *-x(w)ix* ‘white’, of which this is probably an expansion.)

The historical status of that labialization, however, especially where there is no support of /u/ in reduced stems, is questionable. Note e.g. *g(w)ah* ‘day’ and *ge:lA'a:g* ‘mid-day’, cognate with PA *\*ʒ<sup>wr</sup>e:n* ‘day’, where there is no Eyak variant *\*gwe:lA'a:g*. As noted in §3.3.10.7, Mike Sewak only remembered some Eyak and was unquestionably dominant in Tlingit. He had hardly spoken Eyak since 1912, was the only speaker with the Tlingit-

like mid allophone [e] of /e/ (cf. §2.2), and whose speech had a solid base in Tlingit with contrasting labialized and non-labialized velars. All the velars were tested with him, especially of course /g/ and /x/, wherever he could remember. The results were carefully noted, as reported also in the Krauss (1970a). For Sewak, ‘mid-day’ was nevertheless only *ge:IA'a:g*, not /gwe:-/, even though ‘lonesome’ was definitely *-gwehG*, and not *-gehG* as for all other speakers. As noted in §3.3.10.3, George Johnson also spoke more Tlingit than Eyak, but still had Eyak open /e/, like all the other Eyak speakers except Sewak. Johnson’s variant for ‘lonesome’ was *-gwahG*, and that variant is confirmed by Rezanov (1805), *-коакъ* <*-koak*>-, and Anonymous (1810) *-квак-* <*-kvak-*>. Those may somehow explain Sewak’s *-gwehG*, conceivably as a blend of the two established or definitely attested variants, *-gehG* and *-gwahG*, the latter with contrastively rounded onset /gw/, which is itself problematical.

Before the full stem vowel /a/, it might also be argued that there is a contrast between labialized and non-labialized /g/ vs. /gw/, and /x/ vs. /xw/, though this is *a priori* much less clear since full /a/ is itself a back rounded vowel. This possibility, like the labialization status of all velars, was rather carefully checked especially with Sewak as far as he could remember, and was also a priority with George Johnson. There is moreover variation in the early Russian transcriptions, including many in Rezanov (1805), generally written <ка, коа, ква, ко; ха, хоа, хва, хо> (<ka, koa, kva, ko; xa, xoa, xva, xo>). For details see Krauss (1970a). The results here are inconsistent, also especially in that they do not correspond to what might be expected from comparison with Athabaskan, or may even seem to show the opposite. Cf. e.g. *gah* ‘day’ above, no labialization, including Rezanov <ка->, Sewak also *gah*, whereas for ‘summer’ we have Rezanov *xoa*, Sewak also *xwah*, others *x(w)ah*, for which Athabaskan has \**xē:n*. (This is the reverse of the expected, unless Eyak ‘summer’ is cognate instead with PA \**s<sup>wr</sup>a* ‘sun’; Eyak ‘mid-summer’ is *xahLA'a:gd*, not /xē:-/.)

Before or after full stem-vowel with /u/, velars are rounded to some degree, but there does not appear to be any possibility of contrast in Eyak.

In stem coda there are some instances of /-xw/ after /e/, and instances, though only in Rezanov (1805), of /-gw/ after /e/. Thus we have *Le'xwtl'* ‘gallbladder, bladder’ from Sewak, Anna, and Lena, along with *Le'xtl'* from Lena and Marie; *Le'xwts'* ‘wart’ from Rezanov, *Le'xwts'L* from Anna, *Le'xts'L* from Lena and Marie; and *wehxw* ‘highbush currants’ from Anna only (all others including Rezanov and Sewak *wehx*). At the same time, for the plain stop, we have *-le'gw* ‘move hand’ only from Rezanov, several times, usually, others only *-le'g*, but the /-gw/ is supported by reduced *-lug*. For this cf. reduced *dAGALshugL* ‘curved knife’ and *-she'g* ‘bend’, but this is not attested in Rezanov, or from Sewak.

Much more remarkably, we have what evidently must be the representation of a unique contrastively labialized /kw'/ in the anomalous variant *-ni:kw'* for *-ni:k'* ‘nose’. We find this in in Rezanov’s *Каннеко* <*Kanneko*> ‘Ноздри’ (‘nostrils’) which can hardly be read as anything other than *qa:-ni:kw'* ‘our/human nose’. In all other sources this is *-ni:k'*, with no sign of the labialization, including Anonymous (1810) and Baranov (1812).

The modern sources all always have ejective /-k'/, so the Rezanov can hardly represent /-gw/, but evidently only /-kw'/.

After full stem vowel the contrast of codas /-g/ vs. /-gw/, and perhaps also /-x/ vs. /-xw/ appears to be perhaps somewhat clearer than it is in stem onset. We have such transcriptions as *La'gw* 'firewood' in Rezanov, from Sewak and Anna, Old Man Dude, along with *La'g* from Lena and Marie, similarly in *tle:qa:gw* 'twenty'. At the same time, there are many, i.e. most such stems, with coda /-g/ that is never transcribed to suggest labialization. For the fricative the contrast seems somewhat less stable, as in *ch'a:xw* 'silty water' from Rezanov and Sewak, otherwise *ch'a:x*, including Tarkhanov 1796! Note also *sahxw* 'cockles' from Anna and Lena, also from them and Marie *sahx*, and also Yakutat Tlingit *saa`xw*.<sup>11</sup> See Krauss (1970a) for further details throughout.

#### 4.3.5 Reduced vowel contrasts in prefixes

At least most syllabic prefixes are underlyingly open with reduced vowel. In fact perhaps all are so, or can be shown morphophonologically or at least historically to have been so. There are a number of prefix sequences which by more or less transparent morphophonemic processes will produce long vowels, i.e. CV:- or CV:n-, to be explained or dealt with mainly in Chap. 6. There are also two processes which produce CV'. One is easily explained by the morphophonemics of CV- plus prefixes of the underlying form 'i-. The other CV'- is perhaps better described as produced historically with the ' called *irrealis*, in the future inflection, the directive derivation, and certain Neuter conjugation prefixes (cf. Chap. 12). There is only one prefix with -Vh-, in the qualifier *'i:lih-* 'mentally', a unique outright incorporation of a verb theme 'wish, feel' with exact Athabaskan counterpart. Likewise, one subposition of the qualifier zone (cf. Tab. 10.3) shows incorporations of varying complex shapes, quite uncharacteristic of the rest of the verb prefix complex. There are no prefixes of the shape CV:(n)'- (or CVn'- or CVnh-).

In prefixes, reduced vowel contrasts are not at all the same as in stems, though the potential or rather inventory is the same, i.e. /i, A, u/. For one thing, the contrast between /i/ and /A/ is absolute, or mostly so. There is probably never any difficulty in deciding whether a given instance has /i/ or /A/, there being no instances in between, even in the case of free variation, whereas in stems there can often be some doubt. At the same time, there are many morphophonemic alternations between /i/ and /A/, and even, as noted, some free variation (in the proclitic *dA= ~ di=*, and in some lexicalized relativizations, for which see §14.4.1). However, the conditioning for the /i/ vs. /A/ contrast is not of some regular phonological origin, as it is in the case of the stems. In prefixes it is the presence of /i/ rather than of /A/-/A/ thus being the default unmarked reduced vowel—for specific

<sup>11</sup> Tlingit *saa`xw* 'cockles' is found only in Yakutat. It is not clear whether the Yakutat form is a loan from Eyak or the Eyak is a loan from an older Tlingit form retained in Tlingit only at Yakutat.

historical reasons, partly opaque. For example, there are two prefixes of the shape *si-*. The first such is the possessive or postpositional object 1s pronominal prefix, as in *sita:* ‘my father’, *siya:* ‘for me’ (with epenthetic /y/ before vocalic initial). This comes from what is reconstructed quite abstractly deliberately with dollar sign, as \*\$- by Krauss (1980b) for PA and PAE (cf. Eyak 1s subject pronoun *x-*), so is not fully explained. (And whoever can reconstruct that deserves a prize!) The other *si-* is the 1s subject pronoun with *s-* perfective, as opposed to *sA-* for 2s and 3, e.g. *sitahL* ‘I lie prone’, as opposed to *sAtahL* ‘you lie, he lies prone’, or *siyahL* ‘I went’ with epenthetic /y/ before vowel stem initial, as opposed to *sahL* ‘you/he went’. The distinctive vowel /i/ here, which is present also very widely in Athabaskan, is no doubt due to a (fully palatal) voiced variant of the \*\$- at some point in its evolution.

Another common source of /i/ in verbal prefixes is the perfective marker in positive Active and Neuter perfectives (PAE \* $\eta^y-$ ) with vocalic classifiers, thus *di-* and *Li-*, as opposed to *dA-* and *LA-*.<sup>12</sup> These also require vowel harmony in preceding prefixes of the shape *CA-*, where C is not uvular, to become *Ci-*, as in *q’e’ disdiliL* ‘he said again’ (cf. §§6.9–6.10). The quality of the prefix vowel in the Neuter *yiLeh* ‘is’ and the 2s *yiki:nX* ‘you’re weeping’ is no doubt of the same original phonological shape, homophonous.

There are at least five prefixes of the shape *i-*, definitively. One is the 2s possessive and postpositional object, also verbal direct object, all *i-*. Another is the direct verbal indeterminate object (cf. §9.1), and the third is one of the modal prefixes in imperatives, conditionals, and customary. A fourth is the unique *i-* of *i-le()* ‘feel, desire’, and a fifth is that in prefixal *i-s-* of many gerunds (cf. §18.13.1. Even though the /i/ of these may itself be deleted morphophonemically, it leaves its *i-* trace on preceding or following vowels.

More interesting phonologically is that the 2p direct verbal object is a stable *LAXi-*, with /i/ even after a uvular, *LAXiqe’-* with the future *qe’-* (§12.1.5), between two uvulars. This may well be analogical with 2s *i-*, in spite of 2p possessive and postpositional object *LAX-*, and 2p verbal subject *LAX-*, both without final /-i/ (cf. §9.1). This is in any case strong confirmation of the absolutely independent phonemic status of reduced /i/ in prefixes.

The status of /u/ as opposed to /A/ in prefixes is a different matter. Unlike that of /i/, it is completely dependent on preceding /’/, or adjacent velar. At the same time, however ironically, the vowel is definitively /u/, in that when expanded or full, the result is /u:/, not /a:/. Phonetically, in fact, after the velars /x, g, k’/ and before /x/ (1s verbal subject, the full range of variation between /u/ and /A/ occurs, freely. No spelling convention was established, the orthographic practice being thus quite inconsistent between <u> and <A>, perhaps occasionally even <kwA>. This may be even in copying, e.g. from the fieldnotes to the ledger, or especially from the ledger or fieldnotes to the grammar. What is consistent, on the other hand, is that the velars are always underlyingly “rounded,” at least in that they contrast with those that condition /i/ in stems, so that the reduced vowel in such prefixes

<sup>12</sup> See Chap. 11 for classifiers, and Chap. 12 for the conjugation classes.

is never /i/, but contrasts with that quite definitively. All velars in prefixes are therefore to be considered not unrounded, therefore at least underlyingly rounded. That includes even *k'*- of the indefinite pronoun possessor or postpositional object, or verbal subject or direct object (§9.1), whether written <*k'u*-> or <*k'A*->. The rest of the inventory is qualifier, or qualifier element, *gu*-, probably written <*gA*-> more often in combinations such as, *gALA*-, *gAdA*-, and *xu*-, 1s direct verbal object, perhaps almost always written as such. All of these, expanded, are regularly *k'u*-, *gu*-, *xu*-.

One purely historical exception, apparently, is the Eyak noun *k'iyat'* 'fish meat', probably lexicalized from indefinite possessor *k'u*- and a PAE stem *\*-ŋ<sup>y</sup>a't'* '(fish) meat', irregular, cf. Minto *-nod*. The *k'i*- is presumably because of the /y/ of *-ya't'* and lexicalization. Or conceivably the reverse, if the stem initial was zero and the prefix *\*k'i*- corresponding to Athabaskan *\*ky'ə-*, the indefinite possessor, rather than *\*<sup>wt</sup>ə-* as in the 1p subject, to both of which Eyak *k'u*- seems to correspond.

Also included here is the verbal subject *x(w)*-, which most often closes a syllable, so sometimes imparting a /u/ quality to a preceding /A/, hence *dAxleh* or *duxleh* 'I say', *Guxa:L* or *GAXa:L* or *GAXwa:L* 'I'm walking along' (in the last, unless superscript <*w*> is practical, the spelling is ambivalent or misleading). The labialization may be written once, either way, or not heard or not written at all. The point is that such can never be *\*dixleh* or *\*Gixa:L*. This correctly implies that there is a contrast even where the /x/ is preceded by a prefix with the vowel definitively /i/, as in *'ixleh* 'I wish'. This is certainly written <'ixleh> much more often than <'ixwleh>, so could be said to be underdifferentiated, unless we allow for different rules in prefixes from those in stems. The phonetic facts here are that /i/ is of course still /i/, and the /x/, though not always rounded, is at least not at all palatal or i-colored, lips not at all spread, but at least neutral, not left in the position for /i/, thus moving however little therefrom. Another detail about the "roundedness" of this /x/ can be heard in the perambulative, e.g. *yAX xda:X* 'I'm walking about', where in the sequence /Xxd/ (as opposed to *yAX da:X* 'you're walking about'), the /x/ is heard not only in the sliding of the fricative from uvular to velar (soft to hard palate). It is also heard, in fact perhaps more prominently, in at least some lip rounding between the /X/ and the /d/.

The other prefixal /u/ is after /' in *'u*-, third person possessive or postpositional object, cognate with Athabaskan *\*wə-*, as in *'uta*: 'his father', *'uq* 'on it', *'uwa*: 'for him, of them, etc.' with epenthetic /w/. This *'u* is completely stable, except that the last is usually heard and written [*'Awa*:]. This is so phonetically because there is no contrast between /A/ and /u/ before /w/, even in stems. Thus even e.g. in *'uwahd* 'for his sake' the [*'uw-*] is not clearly distinguishable from [*'Aw-*]. Orthographically, [*'Awa*:] is usually so written presumably because the meaning frequently ranges into lexicalization, not only partitive, e.g. *'Awa*: *k'uXAsiyahL* 'I ate some of it/them', but also contrastive, *du:sh 'Awa*: *sAsinhL* 'the cat died (not the others); the cat, however, died'. A presumably contrasting *'Aw-a*: 'for that, of those' would be distinguished by stress, on both syllables, in contrast to the preceding, stress only on the second syllable. Thus the usual spelling of <'Awa:> is a mistake, correctly *'uwa*:, to be consistent with an orthography distinguishing stems from prefixes.

Since there are only three reduced vowels contrasting in either stems or prefixes (or affixes), one might wonder how best to interpret the underlying nature of the schwa, given that at least in terms of timbre, the two high reduced vowels correspond to the two high full vowels /i, u/, and schwa corresponds therefore to both low vowels /a/ and /e/. Therefore schwa in stems could be considered to be and be written either (unmodified) /a/ or /e/, and be pronounced according to the rules above for /A/ in stems if not followed by /:/ or /h/ or /'/. There is in fact good reason to consider and write schwa in stems as <e>, given that when schwa in stems is expanded (in persistives and customaries, cf. §§15.4, 15.5) mostly to /e:/, never to /a:/; the only apparent reason for this is that schwa is underlyingly /e/ in stems. Such an orthography would even have the advantage of orthographically distinguishing many disyllabic (sonorant-medial) stems, where the reduced vowel of the first syllable is stressed, from sonorant-initial stems with prefixes of the form CV- with reduced vowel, which is necessarily unstressed. Thus disyllabic *XAw*: 'dog' with stress on the first syllable, would be distinguished from *XA-lah* 'around an area' by writing 'dog' *Xewa*; since schwa in stems is always written <e>, where the first vowel is always stressed. By the same token and at the same time schwa in prefixes could always be written <a> instead of <A>, not necessarily stressed. Such an orthography might be justified, no matter to what degree schwa in prefixes should be identified with the vowel /a/, whether to a lesser or greater extent than schwa in stems is to be identified with /e/. Certainly to a person learning to read and write Eyak, or more relevantly, to a learner of Eyak using the written word, or for the linguist, the requirement of being able to distinguish stems from affixes is crucial in the first place.

In prefixes the expansion of schwa or alternation of schwa with a full vowel, is no simple matter, the result being by no means always /a:/. One thing is simple, that whenever prefixal schwa is expanded or lengthened the result is never /e:/, but is /i:/ or /a:/, according to rules that do not favor one or the other as the underlying vowel. In other words, quite unlike the case in stems, prefixal schwa is never directly to be identified with /e/.

There is one simple rule, however, not in itself favoring any timbre, that before tautosyllabic /'/, invariably /A/ becomes /a/. This is in fact a fundamental identity that becomes clear before stems with initial preglottalized sonorants. These preglottalized sonorant onsets lose their /'/' after C or #, so show up as such only intervocally. Thus *s-* perfective prefix *sA-*, as in *sAtehl* 'lies prone', shows up as full-vowel *sa-* before e.g. underlying sonorant stem-onset 'y- in *sa'yahl* 'is involuntarily situated', the /'/' having become tautosyllabic in (*sA-'R-* >) *sa'R-*. Given this basic and simple rule, it should be argued that in prefixes (unlike stems), /A/ is underlyingly /a/ (rather than /e/), and could and should be written as /a/. This, however, raises another problem, the need to distinguish tautosyllabic /'/' in the future prefix *qa'-*, as in *qa'a'ch'* 'pl will go', from the sequence /qA'-/ as in *qA'a'ch'* '(emphatically) pl go' (with the plural prefix *qA-*), which would now also be written <qa'a'ch'>. Such an orthography would then require that *qa'a'ch'* '(pl) will go' be written <qa" a'ch'>, correctly so for the underlying form; cf. *qa'leh* 'will act'. Such a morphological spelling would certainly work. However, the current orthography will here be retained, for two reasons. First, all Eyak to this point has been written according to

the current principles, the advantages of the change are outweighed by a certain level at least of phonetic reality instead of phonemic. By far the most apparent phonetic difference between *qa'a'ch'* and *qA'a'ch'* is between the vowel of the first syllable, and the stress on both syllables instead of only the last, respectively. Any difference in the length of stem onset /ʔ/ is relatively trivial, and there are not two released glottal stops. It could of course be claimed that except for such sequences the current orthography is un insightful in the way it (over)differentiates /A/ from /a/. This fault is outweighed as just noted, and cannot be said of reduced /i/ and /u/, which are indeed written the same as full /i/ and /u/.

There is one other way, moreover, in which this appealing orthographic solution that /A/ = /a/ does not work completely. One pair of unique forms, the demonstrative adverbs *wAX* 'that way, thus' and *lAX* 'this way' provide interesting and perfectly relevant insight into the synchronic interpretation of the relation between /A/ and /a/. These two items correspond neatly to the basic demonstratives, distal or unmarked 'Aw 'that, the' and proximal 'Al 'this', historically as the object of postposition o-X 'in non-punctual contact with o'.<sup>13</sup> When preceded by the proclitic *dA*= 'selfsame', the demonstrative adverbial pair proves to be *-wAX* and *-lAX*, i.e. *dA'wAX*, *dA'lAX* 'just that very way, still so', 'just this very way'. The point here is that the proclitic has a special phonological property in that it does *not* become full *da*= as in \**da'wAX*, \**da'lAX*, but remains instead *dA'wAX*, *dA'lAX*. Thus we have seemingly a minimal pair, A'R, as opposed to a'R, as automatically in *sa'yahL* 'became involuntarily situated'. It is also at least etymologically clear, as noted above, that the two stems are from \*'AwA-X and \*'AlA-X, and that the forms with proclitics are behaving as though the original first /A/ of each were still there, the /ʔ/ thus still not "entirely" tautosyllabic. This behavior of *dA*= 'selfsame' is a major factor for allowing the existence of proclitics as a phonological category (cf. also §22.1). It would of course be possible to distinguish these two items as *da-'wAX* and *da-'lAX*, where the hyphen could be used as an orthographic device indicating the special property of the proclitic.

However, all things considered, it appears most practical—even most realistic—to retain /A/ as a "phoneme" rather than to equate it or write it with /a/ in prefixes, and at the same time with /e/ in verb stems, tempting as that may seem. It was also mentioned above that prefixal /A/ and /i/ alternated frequently with each other according to rules, and that they even alternated freely with each other under certain conditions. One of these is in the vowel of the proclitic *dA*= 'selfsame'; thus the preceding are also *di'wAX*, *di'lAX*. The others are in lexicalized nominalizations, presumably only between coronals, as in the instrumental *dide'L* 'lamp' < *dAde'L*, from the verb theme *d-de'* 'emit light', or *qi:yidich'an'k'* < *qi:yAdAch'an'k'* 'Dungeness crab' (< *qi:y-dA-ch'an'k'* 'toes clamber'). The question arises in the case of *di'wAX* and *di'lAX* as to whether that *-i'* might contrast with full *-i'* in stems such as *li'* 'downstream', or prefixes as in *q'e'sdi'yahL* 'became again involuntarily situated', or that same proclitic as in *di'dah* 'pretty well' < *dA='i-dah*, where

13 Cf. also 'u:d 'there' and 'a:nd 'here', the same with o-d 'in punctual contact with'; i.e. presumably \*'AwA- and \*'AnA- plus -d and -X, with differing results.

'i- is a stem, 'i-dah 'well'.<sup>14</sup> Though this matter was never investigated, it seems unlikely indeed that there is any such contrast, except however, in the prosody, if *di'*wAX and *di'*LAX have unaccented first syllables. Equally important is the fact that there is a second source of verbal prefix syllables closed with glottal stop and therefore stressed, beside those of the future mentioned above (*qu'*-~), and 'u'- ~ 'a'- ~ of the directive (partly related, each with what may be termed irrealis 'i-). This second such source is from prefixes of the shape 'i-, also mentioned above. When these follow a prefix of the shape CA-, forming the sequence CA-'i-, this surfaces as Ci'-, and when they follow indefinite *k'u-* or classifier *gu-*, the result is *k'u'*- and *gu'*-. It is indeed conceivable that such contracted sequences could occur immediately preceding a stem beginning in -'V-, particularly in the case of the modal 'i-imperative (§12.3.2.1), for example. Though it is unlikely that there happens to be such a form in the corpus, the result should be Ci''V- or Cu''V-, insofar as such a sequence would be stable. (Cf. reduction of CV''V in §6.15.) Unlike the common case of morphological qa''V-, written qa'V- as noted above, the phonological difference between these and Ci'V- and Cu'V- should be mainly, if not exclusively, that the first syllable of Ci''V- and Cu''V- is stressed, but that of Ci'V- and Cu'V- not stressed. Differences in the phonetics of the timbre of the /i/ and /u/, or the length of the glottal stop might be trivial by comparison, or even absent. As noted above in the case of orthographic qa'V- and qa'V-, though the length of the glottal stop may not be noticeable or distinctive, the phonetics of the full *qa-* and reduced *qa-* certainly are, along with the different stress pattern.

Given the possibility, then, albeit hypothetical, of what should be written Ci''V- and Cu''V-, while qa''V- remains qa'V-, the current orthography is inconsistent, unrealistic. It is even inadequate, for not showing stress somehow, at least in the case of the first syllable, reduced but stressed, of disyllabic stems, unless that is written <e>, as considered above. That would specify the stress in many cases, e.g. *XAWa*: 'dog', written <Xewa:>, but it would still not specify the initial stress in *giyah* 'water' as opposed to *q'e'* *sdiyahl* 'went back'. Conceivably 'water' could be written <geyah>, which very interestingly would also represent exactly what is attested in Rezanov (1805)'s *Кая* <Kaia>! Likewise Furuhielm (1862a)'s <Zaiuh> 'mosquito', *ts'eyux*, now *ts'iyux*, not any longer \*[ts'Ayux]. Thus again, we have the principled phonological reality of those differences, plus the case of *dA'*wAX and *dA'*LAX, discussed above. Additionally, we have the plain practical considerations of the already extant literature in the current orthography plus the need to know what is a stem and what is a prefix. These factors are herewith considered to outweigh those favoring a change in orthography, to write qa''V- and /a/ for schwa in prefixes, /e/ for schwa in stems, and/or marking stress. It appears that there are, however marginal, some conflicting realities in the interpretation of Eyak phonology.

At the same time, at least the dictionary necessarily specifies the stress by the very form in which the disyllabic stems are entered as such. Further information on stress is to be found §5.2.

14 Cf. §21.1.1 for adverbial formation.



#### 4.3.6 Vowel system and practical orthography

The spelling of the four full vowel timbres resists the temptation of spelling the two low vowels favoring commonest English values, <a> for [æ] (as in English ‘hat’) which would then require the use of <o> for [ɔ], which may hardly ever be pronounced as open back in US American English, even eastern dialects, let alone western including Alaska.

It is true, of course, that <e> is even further from being pronounced as open front in English or Eyak, so in fact the decision on writing those vowels was originally made in 1963 favoring comparative values with most Athabaskan and with Tlingit, even more than continental European values, as for the closed vowels /i/ and /u/. The practical orthography for the vowels is in fact an evolution from my orthography in my field notes starting in 1963, with highest value placed on ease of writing with ordinary American English keyboards. This includes the evolution of writing length with colon instead of raised dot. I resisted writing length by doubling the vowel instead, especially because <ee> for long front open vowel appears so misleading from English. It is therewith ironic that the practical orthography currently used in the Eyak community revitalization program does in fact use vowel doubling instead, including <ee>. (That orthography differs from the one here in one more way, by omitting word-initial apostrophe for glottal stop.) The other stigmata /h/ and /ʔ/ are unproblematic, including writing no /h/ where it is not heard after length, which is almost always, except the rare cases where it is followed by a vowel.

Vowel nasalization is a less simple matter. I had always written that with a tilde, but strict avoidance of anything not on standard keyboards forced the choice of <n>. This proved easy to do, entailing one simple rule, <n> is pronounced as nasalization of the preceding vowel, except where immediately followed by a vowel. The example of French is hardly a direct benefit, but has advantages as a linear segment not only for practical purposes, but also in the understanding of the very important *n* ~ *l* alternations in the morphophonemics (§6.3). According to rule the <n> is written before the stigmata /ʔ/ and /h/, which are also glottal obstruents. With stigma /:/, on the other hand, of dubious status as a consonant, <n:> would appear to represent a lengthened [n], so nasalized V: is always written <V:n>.

To the discussion above of the status of nasal contrasts in sonorants, it might be argued here on the spelling for nasal vowels the actual status of /n/ itself in modern Eyak changed, actually contrasting. First, there are loanwords that have consonantal /n/ in final or preconsonantal position. Rather than change the writing of nasalization, those are written <nn>, as in *'Ami:nn* ‘Amen’ from Russian, and *ka:nnli:* ‘cannary’ from English. Second, there is the recent loss of final reduced vowels after /l/, as in *q'a:lA* > *q'a:l*, creating a direct contrast finally as well as that contrast word-initially and intervocalically. Though these on balance have at least given cause to recognize a phonemic contrast between /n/ and /l/ in modern Eyak, that still remains superficial enough to allow quite easily the use of <n> for vowel nasality.

The current choice of <A> to represent schwa is a complex matter. In the past I always wrote and typed it with the schwa symbol <ə>, excluded here. The other two reduced

vowels /i/ and /u/ (phonetically [i] and [u]) are simply represented by <i> and <u> with no stigma. Schwa, on the other hand, is a reduction of the two open vowels, mainly underlying /a/ in prefixes and /e/ in stems (cf. §4.3.5). There is no reduced /e/ or /a/ as such, not followed by tautosyllabic stigma /ʔ/ or /h/, in a sense, with two complications for /a/. One is with (ʔ)wAX 'thus' and (ʔ)lAX 'this way' preceded by the proclitic dA= 'selfsame', which remain dAʔwAX, dAʔlAX, treating the preglottalized sonorants as a single segment, contrasting with e.g. sA-ʔyahL > saʔyahL 'became situated' quite regularly. Also the sequence -ʔ-ʔ- quite regularly becomes -ʔ-, so qaʔ-ʔaʔchʔ > qaʔaʔchʔ '(pl) will go', which is not written <qaʔaʔchʔ>, would contrast with qaʔaʔchʔ '(specifically) pl (usitatively) go'. The contrast is superficial or marginal, but easier to spell as heard rather than underlyingly. In stems, on the other hand, schwa regularly expands to /e:/, so it is tempting indeed to write it there as <e> with no stigma, if we want to distinguish stem from affix in spelling rules. Instead of dealing with these complications, or writing <e> for schwa in prefixes also, I decided to go with the phonetics or surface level, a single symbol for the schwa that I had been writing and typewriting. For better or worse, I decided on <A> also used in the community orthography.

## 5 PROSODY

Prosodic phenomena in Eyak are not highly distinctive. For this reason, relatively little attention was paid to prosody in Eyak fieldwork. Here only an impressionistic summary is offered, with special attention to some minor questions that may remain unanswered.

### 5.1 Syllable definition and structure

Syllables in Eyak can be directly counted by the number of vowels, one syllable per vowel. There are probably no whispered vowels in normal discourse, i.e. all vowels are voiced, and all obstruents are voiceless. There is never any doubt as to whether a vowel is present, even where sonorants, the only voiced consonants in Eyak, are concerned. The only exceptions to this are in the old Russian manuscripts (§3.2), where some kind of final reduced vowel was written after coda sonorants, discussed in §7.4.2 on “sesquisyllabics,” all deleted in modern Eyak. Thus at least in modern Eyak the differing outcomes of historical *-AwA-*, for example, are quite clear. First, in the highly irregular *dA'wAX* (~ *di'wAX*) ‘still, that very way’, there is no trace of the etymological schwa of *\*(dA=)'AwAX*. Likewise, the synchronic contrast between *'AlAk'ah* ‘out of bed’ and *'Alk'ah* ‘away from this’ is quite stable. Even where there may be free variation or inconsistent results e.g. in the presence or absence of epenthetic *-A-*, as in *'AX'Akih* ‘small boat’, *'AXAkih* ‘canoe’ (never *\*'AXkih*), or in *-lah-G-A-yu:* ‘inhabitants of’, or *'a:w-A-yu:* ‘rude’, there is never any question as to whether the schwa is present or absent in a given form.

There is one morphophonological rule which is sensitive to syllable count, the epenthesis of (*'*)*A* before adjectives suffixed to nouns, which is added if the noun word is monosyllabic, otherwise not. Thus we have *'AX-'A-t'u'* ‘many boats’, *Xa'tl'gL-'a-'lAw* ‘big club’ (*A > a/\_'C*, cf. §4.3.5), but *k'u-djehX-lAw* ‘big ears’. Likewise for disyllabic stems *ts'iyux-lAw* ‘big mosquito; crane fly’, *ch'iyat'l'G-lAw* ‘big frog’ (not *\*ch'iyat'l'G-'a-'lAw*). Sonorant-final nouns, formerly “sesquisyllabic” are especially interesting in this connection. For these we have e.g. *k'u:ya-'lAw* ‘big wind’ and *xi:la-'lAw* ‘great shaman’. Here the second vowel is probably not to be considered epenthetic as it is missing the glottal stop onset as in *Xa'tl'gL'a'lAw* ‘big club’. In those two nouns it may be better interpreted as a survival of the old final vowel. I made an attempt to elicit *?k'u:y'a'lAw* for ‘big wind’, rejected by Lena, but *?xi:l-'a-'lAw yiLinhih* ‘he’s a great shaman’ was accepted by both Lena and Marie. Cf. *wa:w-'A-t'u'* ‘many herring’, where *wa:w* is a loan from Tlingit, and *k'uyAXa:wAw* ‘picture’, also a loan from Tlingit but not monosyllabic, where the syllable-counting rule is working in the ordinary way. There are complications with the rules for this epenthesis. The most interesting one in the connection of syllable counting is that in pejorative epithets, we can get e.g. *djehX-lAw* ‘big-ears!’, with no epenthesis on a monosyllable. Since the anatomical noun *djehX* is necessarily possessed, one can say that there is a rule for epithets as a grammatical class which deletes the possessive prefix of such

nouns, applied after the adjective is suffixed. This interestingly classifies the epenthesis at what may be a theoretically problematical level.

Placement of syllable division is mostly unproblematical. All Eyak syllables must begin with a consonant. (There are morphemes which begin with a vowel, but vowel sequences are all avoided by epenthesis or elision.) It is probably also correct to say that no Eyak morpheme (of Eyak origin and historically a single morpheme) begins with more than one consonant, with the exception, in a sense, of stems beginning with 'R. Such stem-initials could in another (mainly historical) sense be considered glottalized sonorants, single consonants. From a modern phonological point of view, however, syllable division almost conclusively defines them as two consonants, given that the preglottalization survives only if the glottal stop is directly preceded by an underlyingly reduced vowel (cf. §4.2). If the 'R is word-initial, or is preceded by a consonant (that includes sonorants, and the glottals /ʔ/ and /h/ as stigmata of a full vowel), the /ʔ/ is invariably deleted, so that only one consonant can begin the syllable. If, on the other hand, the 'R is preserved as such by following a reduced vowel, then the /ʔ/ closes the preceding syllable, with the rule  $A > a/ \_ 'C$  (cf. §4.3.5), the R being the one and only one onset for the following syllable. Thus e.g. -'ya 'be situated', transitive O-L-'ya, is *sALyahL* 'situated it', but *sa'yahL* 'it is situated'. The unique failure of this rule to apply to the *dA'wAX* forms mentioned above (§4.3.5), and the level at which that form is still \**dA'AwAX* so close to the surface but is at the same time only two syllables, is a very interesting problem for Eyak phonology.

Eyak syllables may be closed with more than one consonant. Some stem-morphemes have clusters of two coda obstruents, and Eyak is notoriously lacking in a phonological limit on how many obstruents may be further suffixed. An item such as *dik' 'ixsLXa'Xch'XLG* 'I didn't tickle you' could be said to end with a cluster of six obstruents. Accordingly, in *dik' 'uwa: 'ixsLXa'Xch'XLGinh* 'I didn't tickle you for him', since all syllables must begin with one and only one consonant, the last word should be syllabified *'ixsL.Xa'X'chXL.Ginh*. In other words, the place of syllable division must be before the last consonant of a consonant cluster.

There can be no sequence of two vowels at the phonological surface of Eyak. Preventing this are rules such as epenthetic glottal stop in *qa:'a:* 'for us', /y/ and /w/ in *siya:* 'for me' and *'uwa:* 'for him'; underlying schwa is deleted immediately before stem vowel, as in *GA-a:-L* 'is walking along' > *Ga:L*. There is one other epenthesis, /h/ before the vowel-onset enclitic =*uh* 'it' exclusively for imperatives, thus e.g. *'A-te:-uh* 'handle it!' > *'Ate:huh*. This was also noted in §4.3. It could thus be argued, or this may imply, that no word synchronically can end in a vowel, as even final V: could be considered to end in inaudible /h/. (The only exception may have been still in the Russian transcription of words now ending in sonorants. See §7.4.2 on "Sesquisyllabics.")

It is therefore quite clear that all Eyak syllables must consist of at least CV. Syllables that consist of nothing more than that are by definition light, open with reduced vowel, no stigma. Stems cannot take such simple shape, only affixes (i.e. only prefixes or non-final suffixes, the latter very few). Such syllables are the very lightest, so are the least likely to attract any stress, with the notable exception of the first syllable of disyllabic

stems, as stems are by definition stressed. See §5.2 and Chap. 7 for further on this. Heavy syllables are all those that consist of more than CV, i.e. all syllables with a full vowel (vowel with a stigma, i.e. /:/ tautosyllabic /'/, or /h/), or syllables closed with one or more obstruents. There may of course be phonetic degrees of heaviness, i.e. the more stigmata /:/) and/or coda obstruents the heavier, which no doubt accord with syllable duration, and possibly also phonetic degree of stress. (The conceivable maximum is the hypothetical *dik'* 'ixsLXa'Xch'XLG 'I didn't tickle you', CVCCCCCC.)

## 5.2 Stress

As no instrumental or acoustic investigation has yet been made on the phonetic nature of Eyak stress, we have so far only the impressionistic observation that stress is heard as the usual rise in pitch and energy or intensity of especially the voiced segments of the syllable, especially the vowel nucleus. *A priori*, since Eyak is not a tone language, but does have vowel length, stress is much more likely to entail a rise in pitch than an increase in duration of the vowel nucleus. Such does indeed seem to be the case.

For the prediction of placement of phonetic stress or stresses in a word, syllable weight is obviously most important phonologically. There is also the effect of intonation contours on at least the pitch, especially of the final syllable, as apparently all or most intonation contours are falling. There is one other factor complicating somewhat this otherwise relatively simple phonological picture, stress on light initial syllable of disyllables pronounced in isolation, in a corpus which must have of necessity a disproportionately large number of forms elicited in isolation. Such forms will get stress on light first syllables not only if they are disyllabic stems, like *Xawa*: [ˈχəwə:] 'dog' (consistently), but also at least sometimes if they are prefix plus stem not clearly analyzed, e.g. *k'uleh* [k'ʊləh] 'rain' < 'something is happening', *lixah* [ˈlixʷəh] 'grizzly bear' < *l-xah* 'grow', *qAXah* [qʰəχəh] 'moon' < *qA-Xah* '?. To the extent that these are fully analyzable, however, e.g. *sAsinhL* 'died', then the first syllable may never be stressed even in isolation. Even the most opaque disyllables, if in running text, or even just further suffixed, will lose the initial stress.

For intonation contours themselves, see §5.3. As regards the effect of intonation on the phonetics of stress, however, the following may be noted here. Certainly in single word utterances—which also, as response to elicitation, make up a disproportionate share of the corpus—it is clear that word-final syllables, so also sentence-final syllables, characteristically have lower pitch, being at the end of falling intonation contours. In the following, the vowel with the highest pitch or prominence is written with an acute accent mark. Where penult and final syllable are both heavy, there is a markedly lower pitch on the final, higher on the penult, so e.g. *ch'i:leh* 'raven', *dí:ya* 'salt', *té'ya* 'salmon', *sá'yahL* 'became situated', *dik'* ... 'á't'u:G 'is not (so)'. This may even be the case when the penult is light, e.g. *síya:n* 'my mother', *yíLeh* 'is', *síyahL* 'I went', *sÁdahL* 'sat', *disíyahL* 'I got lost', which then may sound like they have the same pitch contour as disyllabic

stems, e.g. *gíyah* ‘water’, *ts’íyuh* ‘black bear’, *ts’íyux* ‘mosquito’, *ch’íya’tl’G* ‘frog’, *k’ushíyah* ‘something bad’. However, this final pitch lowering disappears e.g. with (-)da:X ‘and’ (itself a postpositional stem) added where the heavy final is transparently the stem, so then *sAdáhL da:X*, *dAléh da:X*, *siyáhL da:X*, but probably not in *gíyah da:X* or even *ch’íya’tl’G da:X*.

As implied above, there is a contrast in stress between disyllables that are clearly light prefix plus stem and those that are not clearly such, i.e. disyllabic (sonorant-internal) stems. There was some attempt to test how stable this contrast actually is in the field, but insufficiently and with inconclusive results: e.g. *XÁwa:* ‘dog’ as opposed potentially to *’uwá:* ‘for him’, *k’umá:* ‘a mother’, or in non-final or non-isolated position, e.g. *XAwa:dzu:* ‘good dog’ as opposed to *k’uma:dzu:* ‘a good mother’. It does indeed seem, however, that the contrast between *k’umah* ‘sea lion’, *’gíyah* ‘water’, or *’XAwa:* ‘dog’, on one hand and *k’u’ma:* alone, on the other, or in e.g. *’Aw ’XAwa: sAsinhL* ‘that dog died’ and *’anh k’u’ma: sAsinhL* ‘that mother died’ is phonological as well as morphological, however unsure or marginal the contrast.

Complications from other factors can easily obscure the picture. For example, in *si’chu:-shiyah* ‘my (maternal) grandmother’ the stress and intensity on *-chu:* is certainly greater, higher, than that on the first syllable of the disyllabic stem of the adjective *-shiyah* ‘bad’ (here lexicalized as in a clearly affectionate use). Likewise in *’XAwa:shiyah* ‘bad dog’ the expected accent on the *-shi-* also seems absent or equally overshadowed, though here the adjective is presumably not lexicalized. Perhaps this impression is only because the strongest stress or pitch peak of the intonational curve is on the first stressed syllable, and the open reduced *-shi-* therefore has an especially low prominence as the second or third of a sequence of stressed syllables. The inadequate investigation of these complications in the fieldwork leaves some questions of detail on stress.

Another sign that stem-stress is contrastive could be heard e.g. in the quality of the first vowel in *’lixah* ‘grizzly bear’, more definitely *lix-* than *lAx-* because of the polarization or *i/A* contrast before */x/* especially in stems, and what seems to be the clear reinterpretation of the form as *lix-ah* as though *lix-* were or is the stem instead of the original morphological segmentation *lA-xah*, usitative ‘it grows’. A noun like *dAXunh* ‘person’, on the other hand, though opaque, probably a loan from Chugach Alutiiq (cf. §3.1.4), remains deuterotonic, since an obstruent cannot be stem-medial. Prefixes of the shape *dA-* are extremely common; though there is no stem *\*-Xunh*, hence *dAXunh* cannot be reanalyzed.

Where the medial consonant of a disyllable is a sonorant, however, reanalysis can indeed happen, as in the case of prototonic *k’iya’t’* ‘fish meat’, < *k’u-ya’t’* with *k’u-* indefinite possessor assimilating to the */y/*. Cf. PA *\*-ɬʷat’* ‘fish meat’ or the like. Likewise *k’iya’* ‘to landing-place’, functioning as preverb, probably from *k’u-* indefinite object of *o-ya’* ‘into concavity’. Another such may be *k’uleh* ‘rain’, very probably < *k’u-leh* ‘something is happening’, if indeed that has become—more than lexicalized—now stressed as a disyllabic sonorant-medial noun. It appears we have no phonographic recording of this item. However, it is our good fortune that both Li (§3.3.7) and Austerlitz (§3.3.8)

usually wrote accent marks or even contours, impressionistically. For pitch we have eight transcriptions of *k'uleh* from them which show one syllable of higher pitch than the other. From Li we have six, of which three with the first syllable higher, three with the second syllable higher. In Austerlitz the first is higher in one case, the second even, though with the second falling at the end. From these minimal statistics, all forms pronounced in isolation, we can only conclude that those statistics may indeed show inconsistency as to whether *k'uleh* is being treated as a disyllabic noun or lexicalization, or is being treated still as a relativization.

The data for this information comes from the work of Guillaume Leduey (§2.1.3), who kindly searched the Li and Austerlitz notes for *k'uleh* 'rain', presumably a lexicalization, and two disyllables, *giyah* 'water' and *XAwa:* 'dog', not lexicalizations, for comparison. For *giyah* he found eight instances in Li, all with the first syllable shown as having a higher pitch. For *giyah* in Austerlitz, Leduey found three instances, one with the first syllable higher, one with no accents but double vowel in the first, probably implying accent there, but the third is *giyah xdAlah* 'I'm drinking water' with accent on the *-yah*. The overall picture certainly shows the stress on the first syllable, 10 for 10 in isolation, though not in the one sentence with *giyah* as the object of a verb.

For *XAwa:*, on the other hand, the results are interestingly different. In Li, Leduey found five instances. In the one in isolation the first syllable is high, the second high falling. The other four are all in connected syntax, with the second syllable higher than the first, falling or not. In Austerlitz he found eleven transcriptions for *Xawa:* or the pitches or accents thereof, seven in isolation. Of those seven, one has a higher accent on the first, four are unmarked or even, three have higher accent (falling or not) on second. In phrases, none has higher on first, three are even or unmarked, one has higher on the second. There seem to be two factors at work. One is that being syntactically connected to following material, as also in the case of *giyah* 'water', the pitch of the second syllable is higher than it would be in isolation, which must include some element of phrase-final intonation. The second factor is that the CV: allows a higher peak before falling than does CVh, given the duration of voicing. Probably, it is significant that there are any instances of higher or even equally high pitch peak on the schwa in an utterance of the structure CACV:, to bear out the distinct impression I myself had of a distinctive stress on the first syllable not only of *giyah* but even of *XAwa:*, at least in isolation.

We may have additional support for this in the Russian sources (§3.2). None of the Russian sources uses accent marks. However, there are signs even here that the disyllabic stems were prototonic. *XAwa:* 'dog' is attested in all Russian vocabularies except Khromchenko, in six sources, including Davydov's one word, and four times in §3.2.5. In all ten instances the first syllable is represented as <xa->, never <xo-> or <xy->. This strongly suggests that these Russian transcribers were hearing stressed [ə], rather than unstressed reduced vowel, which if unstressed would probably be heard at least sometimes as colored, rounded, by the following /w/.

There may be yet another phonological factor at play in the phonetics of stress or prominence, evident in longer stretches of opaque or stemless sequences of syllables, all of equal weight, closed or open, namely some kind of footing, trochaic or iambic, or alternate syllable stress. Such sequences are not abundant. Two tetrasyllabic open reduced strings come to mind, *GA' LAXA, lAXah* 'tadpoles' and *'ugA' LAXA, de:L* 'its spine'. These contradict each other at least in that the former is iambic, the latter not. It appears, in fact, that both have first stress and highest pitch on the first syllable of the qualifier *-LAXA-*. This is at the very least an identifiable and plausible morpheme in both, 'ball, granular' (cf. §17.10.10, clearly identifiable in turn with the stem *-la:X* 'eye', hence the initial stress in both, though alternating syllable stress could be operating right of that. Definitely, further research on stress is needed and could be done from tapes.

Possibly the clearest suggestion of footing, also trochaic rather than iambic, is the unusual sequence of four heavy syllables, the totally opaque *'tle:shXa, shi:shXa* 'dragonfly', a loan from Tlingit *kaashaashxáaw* (Tongass *kaa`shaa`shxáa`wu*). The Eyak stresses seem fairly clear, and happen to be the reverse of the Tlingit, seeming to make the Eyak stresses all the more essential. This is by no means confirmed in the opaque trisyllables *q'ah di'lah* 'goodbye', *ts'i:ntl" Ga:leh* 'heron', of Eyak origin, or *de:qi:dGa:G* 'jaeger', another loan from Tlingit, unless there is an improbable rule of alternate stress counting leftward. Opaque *ni:ga:dAsh:* 'kingfisher' and *'ke:Lta:g ~ 'ge:Lta:g* 'seal' would complicate the rules still further.

Where there is some degree of morpheme identity, albeit in lexicalizations, the stress falls simply on stems and heavy syllables, as in *'qe'yiLteh* 'whale' < *qa' yi-L-teh* 'it is (essentially to be found) lying dead up out (of water)'. About that transparent is *'tse:le:Xquh:(?)* 'octopus', lit. '(pl) stay under rock', where *-le:X-* < *-lA-yAX-* (cf. §17.10.4).

Finally, we take the case of a string of five reduced-vowel syllables, *'u'ch'A,XAL,yAXdAX* 'through its underarm'. The *-ch'AX-* may be a stem and/or second syllable, in fact open, of an iambic foot, and is certainly the first so highest-pitch stressed syllable; *-XAL-*, connective vowel plus *L-* prefix to *o-yAX* 'under o', is closed; and *-dAX* is a *-d-X* postposition final, suffix, but closed with the lowest pitch or stress.

Even insofar as the impressionistic use of oversimple slash has real validity for the phonetic facts of degree of stress, it is clear that the details are not simple, especially when the effects of the intonational contours are factored in. For a better account of this, further research should consider instrumental acoustic analysis of the available data. For that, there are not only the sound files of Anna's texts, but also accentual notations throughout Li's fieldnotes (§3.3.7), and to a lesser extent also Austerlitz's (§3.3.8). Even then, there remains the issue of variability, never explicitly tested.

### 5.3 Intonation

Eyak is not a tone language, nor does it have distinctive pitch or contrastive pitch accent. It has intonation, of course, but I have not studied it as such. Sources for the examina-



tion of intonation are the audio recordings of Anna, some video also late from Marie, and from accent markings especially throughout Li's notes (§3.3.7). Austerlitz (§3.3.8) also sows tone contours some of the time, for word-length stretches. Li obviously had an acute ear for tone, was looking for it, found none, but continued marking for pitch, more consistently than Austerlitz, over longer stretches. Those markings deserve study, Li's perhaps more than Austerlitz's, for intonation. Intonation/breath groups are implied by both the line division in Krauss (1982) and by the comma and period use in the Krauss (1970b) text transcriptions. It appears that there is nothing complicated or distinctive-sounding in the Eyak intonation curve. Emphasis and yes-no interrogative are marked by the enclitic marker system, especially the =*q'* emphatic or focus particle series, and =*sh* interrogative series, rather than by English-like stress and pitch phenomena. In other words, again, Eyak phonology makes minimal use of prosodic distinctiveness. The distinctiveness or contrasts in Eyak are mainly segmental. Pitch and energy are highly predictable from the segments. Length or grade of vowels is contrastive, so defined outside of prosody and not notably affected by it; there are no distinctively geminate or long consonants.

I have the rare privilege of being able to cite here other recent work on Eyak. Some time after first writing the preceding paragraph—which I will let stand—I received from Chris Donlay, of the University of California Santa Barbara, a copy of his 24-page unpublished paper, “An Analysis of Intonation Units in Eyak” (Donlay 2009).<sup>1</sup> The results, in short, are that we came separately to very nearly the same basic conclusion, that all Eyak intonation units are falling. (There is of course a tautological weakness in this conclusion, that intonation units, as defined by comma and period in the transcription, are in part themselves defined by taking the falling intonation as the end of an intonation unit. However, there are other factors, such as pause, “reset,” possibly breath, and especially also syntax, taken into account in defining intonation units.)

Here I shall cite Donlay's paper in more detail, especially for what it adds to the above. Donlay made a careful acoustic study of the intonation. He took the recording of one text, Anna's “Lake Dwarves,” as transcribed in Krauss (1982). (This is the more highly “edited” version, false starts, etc. left out.) Nearly 9 minutes long, the text contains 86 sentences. In these, about 75% of the intonation units (IUs) were specifically assigned one of four types. Put differently, 263 IUs were identified but 49 (18.6%) of these were excluded from the analysis. About half of the excluded were disfluencies, false starts, “vocalized pause,” etc., and half (i.e. at most 10%) were complicated by unclear unit boundaries.

Donlay's four IU types were falling, rising-falling, level, and level-falling, considered in that order. None are rising. The main differences in these types is in how they start. Though Donlay treats the last two partly together, I shall treat the three falling types together, with the level type somewhat apart. This treatment is further supported by the

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<sup>1</sup> It is clear that in 2009 he had no knowledge of any draft of this section on Eyak prosody, and that at the time the above was written, I had no knowledge of his work on Eyak intonation.

distinctively low “Mean Syllable Count” (1.20, in his table on p. 5) of the only non-falling type, the level type. The mean syllable counts for the three falling types are all 3 to 4 times higher: 3.42 for falling, 4.81 for rising-falling, and 4.16 level falling. Probably the best summary of that picture is that the longer the IU (the more syllables in it), the more the pitch contour resembles an arc.

To go into a bit more detail, for the three types of falling, i.e. whether the fall is immediate or begins with a rise, or a level, is connected with the degree to which the first syllable is stressed, since stress and (higher) pitch are at least partly connected. That Donlay had not seen any draft of this prosody section is clear in part because he is under the impression (pp. 19, 21) that Eyak has “no lexical stress,” and that no statements on syllable structure or syllable weight statements had been made (p. 22). Eyak has stem-syllable stress, including stress on the first syllable of disyllabic stems. As noted, Eyak in a weak sense has lexical (at least morphological) stress, and heavy-syllable stress, i.e. has no stress or least stress on open syllables with reduced vowel. Very probably, with this information some correlation between the three types of falling IUs and stress would be found. Donlay notes particular inconsistency with demonstratives as first syllable. These are to be defined as stems, albeit marginally, thus not to be considered reduced open-syllable prefixes or proclitics. As noted above, several factors can define even prefix syllables as heavy, such that some level of stress is likely to appear very soon in an IU. Also the first stressed syllable gets high pitch in an IU. Therefore the peak of the pitch-arc is almost always at least close to the left end of the IU. The details of the start of the IU must therefore be strongly correlated with the weight of the first syllable or so. The only non-falling IUs are the level ones. These are the least frequent, 5% in the table on p. 5. They are three to four times shorter in duration than the rest on the average, so must verge on “unfinished,” or at least seen as lacking time for the normal fall.

As many or most IUs are also in a connected sequence of IUs, between breaths, Donlay comments interestingly on the longer downward trends of IU pitch in a section, which he calls “declination” (p. 16).

Donlay’s paper ends with a section on “Motivation,” where he examines the connection between the four contour types and first “pragmatic meaning,” negative for *wh*-questions. Syntax also is ruled out as motivation on the grounds that the peak can be on a postposition, those being “function” rather than “content” words—a point I fail to understand. He then turns to phonology and lexical stress. Not fully understanding stress placement as explained here, he misses an important point, I believe. Finally he turns to the “phrasal level” and syllable structure, where all he has to go by is a cross-linguistic statement on syllable weight. He correctly concludes that the avenues to explore further are Eyak syllable structure on one hand, pragmatics on the other. In the present section of this grammar, at least the syllable structure or weight (including stress) are now better described, leaving though the pragmatics for further research.

## 6 MORPHOPHONEMICS

Eyak morphophonemics, relatively speaking, especially in comparison with Athabaskan, is not a vast subject, but only a medium-sized one, especially because Eyak phonotactics hardly limits obstruent clusters. Eyak morphology is therefore rather conservative and transparent phonologically.

### 6.1 Umlauting nasalization

Umlauting nasalization is perhaps the most spectacular morphophonemic rule in Eyak. This is a specialized process whereby the vowel nucleus of verb stems or stem-variants closed only by /ʔ/ or /h/ become nasalized, and those with the timbres /e/ or /a/ are shifted to /i/. (Those with the timbres /i/ or /u/ are merely nasalized.) This happens only when the enclitics =*inh* ‘human sg’ or =*inu*: ‘human pl’ are immediately suffixed to such stems. Thus, e.g., we have the forms in (1):

(1) Umlauting nasalization with enclitics =*inh* and =*inu*:

a. From *'Aw qa'sheh* ‘it will kill it’:

*'Aw qa'shinh=inh* ‘he will kill it’

*'Aw qa'shinh=inu*: ‘they’ll kill it’

*GAshin'=inh* ‘kill him!’

*GAshin'=inu*: ‘kill them!’

But *'Aw shAsheh-L=inh* ‘he killed it’

b. From *qa'shah* ‘will dig’:

*qa'shinh=inh* ‘he will dig’

*qa'shinh=inu*: ‘they’ll dig’

*'uXa' GAshin'=inh* ‘dig by him!’

*'uXa' GAshin'=inu*: ‘dig by them!’

But *shAshah-L=inh* ‘he dug’

This nasalization, with shift of the two open vowels /e/ and /a/ to /i/, is isolated, being the only process operating so clearly also on only those two vowels as a class. It not only raises them both but fronts the /a/ to /i/, so is given, somewhat abstractly, the name ‘umlaut’, being so clearly motivated by the /i/ timbre of the vowel-initial suffixation. A better name might be ‘-in- assimilation’. However isolated, it is nevertheless a very striking and prominent process, and very frequent. This high frequency is especially because =*inh* and =*inu*:, originally only relativizing enclitics, are in all attested modern Eyak very frequently attached to the verb. This happens when a third person human is non-overt, i.e. pronominalized, as subject, object, complement, or even possessor or object

of postposition. This subject is treated at length in Chap. 25 and Chap. 27. The striking stem-vowel shift at the same time thus creates a notable amount of homophony, as exemplified by *qa'shinhinh* above, both 'he'll kill' and 'he'll dig' (not to mention also hypothetical stems *-shih*, *-shinh*, and *-shanh*).

Umlauting nasalization may be considered occasionally optional, in stems of the form CV:(') only, e.g. 'Aw'a'q'e':*inh* 'he's trying it' (surely also 'Aw'a'q'i:n'*inh*), 'u: ya' 'ALte:*hinh* 'lay him there!' (surely also ya' 'ALti:*nhinh*).

It is also of special interest to note that this umlauting nasalization contrasts significantly with the older nasalization process mentioned in §4.3.1 in connection with the status of phonemic contrasts between nasal and non-nasal sonorants.<sup>1</sup> The umlauting nasalization creates sequences that can come only from that process. For example, from this process and labial sonorant stem onset we have *qa'winh=inh* 'he'll swim', which does not become \**qa'minh=inh*, contrasting with *qu'lAdAminh=inh* 'he'll come to harm' (cf. *sAweh-L=inh* 'he swam', 'i:nsdima'-L=*inh* 'he came to harm'). Here /w/ and /m/ are followed by a nasalized vowel and also remain in stable contrast before that nasalized vowel. Likewise, with the coronal sonorant stem onset /l/ (historically itself from /n/, there being no stems left of the form nVh or nV'), we have extremely frequent forms such as *dAlinh=inh* 'he says', 'he is drinking' (cf. *dAleh* 'says', *dAlah* 'is drinking'). The /l/ may of course be somewhat nasalized, but not at all notably so, and it certainly does not change or revert to /n/ before the nasalized vowel.

Most importantly, with sonorant stem onset /y/, we have e.g. *qa'yinhinh* 'he'll be situated', *q'e' 'idiyinhinh* 'let him go back' (cf. *qa'yah*, *q'e' 'idiyah* without the suffix), where the latter /y/ is in fact of epenthetic origin (-a '(sg) go'), as it is in *siya:n* 'my mother'. These cases of /y/ followed by a nasal vowel contrast quite clearly with the /y/ in e.g. *si(n)ya:n* 'my mother', with /y/ so strongly nasalized that it usually becomes occlusive palatal sonorant [ɲ] as described in §4.3.1. The /y/ with the umlauting nasality may well be somewhat nasalized, but not nearly to the degree it is in *siya:n*, and the preceding vowel is not nasalized at all.

This notable contrast raises again the question whether the more nasalized and usually occlusive palatal nasal sonorant is to be considered a phonemically contrasting nasal counterpart to /y/, as in *sinya:n* 'my mother', *q'Anyi:ny* 'fog' and lexicalized *di:nya:(n)* 'stickleback'. The answer is still no, because of the following single parallel form, the kin term *-ch'an'win'inh* '(man's) sister's husband'. This form has the unique phone [ŋ<sup>w</sup>] for the /w/, fully nasalized /w/ with a strong, almost occluded or perhaps sometimes fully occluded, velar nasal. Notable here also is that the preceding vowel *an'* is fully nasalized. Rather than call this phone a contrasting nasal sonorant to be found in one single lexeme, we have the possibility of interpreting this as the allophone of /w/ both

<sup>1</sup> It will be seen further in §6.3 that there is indeed a relationship of nasalization as a realization of the coronal (front) /n/ with the vowel /i/ specifically, in connection with the rules pertaining to the pervasive alternations between /l/ and /n/ in Eyak morphophonemics, the latter seen also as nasalization.

followed and preceded by nasal vowels. This form is morphologically opaque, certainly a lexicalization, yet certainly not a loan. First, it is clear that *-(')win'inh* can be only the result of umlauting nasalization on a relativized verb. Since there are otherwise no stems of the form *-win'* or even *-wi'*, the stem must be an otherwise unidentifiable *-we'* or *-wa'*. The segments preceding, *-ch'an'*, cannot be identified as such either. However, disregarding the nasalization, the postpositional phrase *o-ch'a'* 'to(ward) o', the expanded form of *o-ch'* 'to(ward) o', is plausible indeed, the whole meaning 'he who V's (*-we'/-wa'*) toward o'. At the same time, since the form is clearly lexicalized, we have the same change as in lexicalized *di:nya:(n)* 'stickleback' (from *di:ya:n* 'it (*d*-class) is sharp'), with the nasalization spreading back to the preceding vowel, so also *o-ch'an'win'inh*. The nasalization in both forms is not phonemic in the sonorants themselves, but merely the phonetic effect of the nasalization on both sides of the sonorants /w/ and /y/. In these lexicalizations, the nasalization has spread leftward beyond the sonorants onto the preceding vowel, and is so written. The effect of vowel nasalization on both sides of the coronal sonorant /l/, on the other hand, is a different matter, where *l > n*, to be taken up in §6.3.

## 6.2 *w ~ m* alternation

Though there is only one actual or possibly synchronic case of *w ~ m* alternation in Eyak, this is worth mentioning here because of the solid parallel with the other sonorant pair *l ~ n*, and with /y/ and its nasalized allophones discussed in §4.2 and in §6.1 on umlauting nasalization. We have the stem *-a:n* 'mother' requiring epenthetic sonorant /y/ after 1s possessed *siya:n* and 2s possessed *'iya:n*, with more or less heavily nasalized /y/. With 3<sup>rd</sup> person possessor, the result is *\*uwa:n > 'uma:*, where the epenthetic sonorant after /u/ is regularly /w/, but the nasalization changes the phoneme /w/ to /m/, and the nasalization of the *-a:* is therewith absorbed. In view of the umlauting nasalization above, which would allow *-wa:n*, *'uma:* would not be "regular." Arguments that *'uma:* could be derived by regular morphophonemic process can certainly be made in view of the *l ~ n* alternations described below. Otherwise the relationship between /w/ and /m/ is purely historical. E.g. *ma:* 'lake' is cognate to PA *\*wən(ə)*, transparently so in view of *'uma:*, and of the *l ~ n* alternations discussed in §6.3 below. There is no coda /m/ in Eyak, however. (The disyllabic verb stem *-gAmi'* 'taste' in the negative imperfective can optionally be *-gAmG*, but this must be a late development.) It is probable that /m/ is purely secondary as a phoneme. Stems with /m/ onset might well all be the result of *\*wVn-*.

## 6.3 *l ~ n* alternations

Though Eyak /l/ is well known to correspond with Athabaskan /n/, and comes from PAE *\*n*, there is nevertheless a clear synchronic contrast between the two coronal sonorants, as can be shown in such pairs as *ne:tl'* 'first, soon', *le:L* 'hair'. This is further shown by the purely

synchronic pair *k'uLdiya:nn* (with oral vowel and sonorant segment /n/) 'grouse' (highly irregular, a loan from Ahtna), and *siya:n* (with nasalized *a*) 'my mother'. Further still, we have *q'a:l* 'now' and *'ists'a:nl* 'strength'; *ya:nu* 'underwater, underground' and presumable *ya:lu* 'through a hole in a thing'. In the present orthography, except for loans, every <n> is pronounced as nasalization of the preceding vowel, unless itself directly followed by a vowel, in which case it is pronounced as sonorant segment [n]. In that case neither the following vowel nor the preceding vowel, if present, is nasalized. Otherwise stated, <n> stands for nasalization of a preceding vowel except where itself directly followed by a vowel (i.e. not followed by C or a word boundary).

However, alternations between the sonorant /l/ and nasalization and the sonorant [n] are very basic to Eyak phonology. This alternation develops from the denasalization of PAE \*n to Eyak *l*, the general rule, which is blocked in specific environments, by which \*n becomes nasalization of the preceding vowel. The sonorant phoneme /l/ in Eyak is merely the denasalization of sonorant [n], voiced like all sonorants. The lateral sonorant is not to be considered as a voiced version of voiceless lateral obstruent fricative /L/ at all, all obstruents in Eyak being voiceless. (Cf. Tlingit, which has five lateral obstruents, /dl, tl, tɬ, L, L'/, but no voiced obstruents, and no voiced /l/ whatever, however ironically, except in some dialects, where [l] is merely a denasalized variant of /n/.)

The data of the rule  $n > l / \_ V$  might be relatively recent. As noted above in §3.1.2, in the the 1786 Walker and Strange vocabulary from Prince William Sound we see *k'uneh* instead of *k'uleh* 'rain', and in §2.2, detailed discussion of nV- ~ IV- alternation is shown in Russian vocabularies (1805–62) both in Yakutat and Cordova-area Eyak.

There is a general rule, now historic, that  $n > l / \_ V$ , though there are some exceptions in word-initial and stem-initial position, the reasons for which are by no means transparent. One reason might be, in some cases, that #nV- < \*#nən-, to be considered later. For the moment, we shall not consider those exceptions. Again, the current orthography used in this grammar writes vowel nasalization as VnC, i.e., nasalization of preceding vowel where /n/ is followed by C, where C means anything but a vowel, i.e. obstruent, sonorant, /'/, /h/, or #. Moreover, in VnV, neither vowel can be nasalized. No reduced vowel can be nasalized. Also, no /e/ can be nasalized, i.e. all nasalized *e > i*.

Another tempting "solution" might be to write [l] as <n>, always to be pronounced [l] before a vowel, as nasalization before space or C, and always to write [n] as <nn>, on neither side of which a vowel can be nasalized. The phonemic status of <nn> would be the only problem, in that some (not very many) words, i.e. syllables, would begin with that pair of consonants, and a very few would end with it. In <VnnV> it might indeed be at least etymologically correct. In any case, there should be ordering of the rules: first  $n > l / \_ AC_{[-cor]}$ , then deletion of /A/ in  $nAC_{[+cor]}$ , then suprasegmentalization of /n/ in nC or n# to nasalization of preceding vowel with compensatory lengthening of that vowel if no stigma is present, then denasalization of a vowel adjacent to (segmental) /n/.

One further rule is quite evident. Where no vowel precedes underlying  $nAC_{[+cor]}$ , the result is *'i:nC\_{[+cor]}*. This we have quite regularly e.g. *lAxah* (> *lixah*) 'grizzly bear', but *'i:nLxAwah* 'red ribbon seaweed'. The motivation for this *i:n* must be the basic relationship

between coronal consonants and the /i/ corner of the vowel triangle, more than anything specific to Eyak. The synchronic picture still presents a problem with the contrast between /n/ and /l/. In word-final position the problem is trivial, both with *siya:n* ‘my mother’ and *k’uLdiya:nn* ‘spruce grouse’, as opposed to e.g. to *q’a:l* ‘now’ and *xi:l* ‘shaman’. As noted, the latter two were followed by some kind of reduced vowel at least into the 19<sup>th</sup> century. Word-internally there are contrasts, of course in loans, e.g. *AnAXAnAG* ‘Alaganik’, which is of Chugach origin, *alaRnaq* ‘switchback in slough’, ironically through Tlingit, which, having no voiced /l/, regularly replaces that with /n/. Another example is no loan, *-gunAGAG* ‘hip’, where the *-gunA-* is clearly the qualifier *-gula-* in the sense of ‘hip area’. This form has apparently been so long lexicalized, opaque, with no known meaning for *-GAG*, that it failed to undergo the *n > l* rule. There obviously was a period in Eyak history when the non-nasal and nasal sonorants were allophones of the same phoneme. That must have had some relationship with contact with Tlingit, which lacks the opposition (generalizing /n/ and /w/), and/or the genetic relationship. In any case, for the synchronic picture the contrast is unavoidable.

This contrast is particularly unavoidable with stem-onset /l/ and /n/. We have e.g. the case of *ne:tl’* ‘first, soon’ and *le:L* ‘(strand of) hair’, where the stem is word-initial. Very possibly these are from *\*ne:ntl’* as opposed to *\*ne:L*, as parallel to the origins of the *w ~ m* alternation discussed in §6.2. In the case of non-initial stems, however, there are two possible origins for *-n-* onset, both *\*-nVn-* and *\*-nA-nV-*. The latter, in particular, will be discussed at length in the subsections §6.3.3 and §6.3.4.

Again, the very basic rule  $n > l / \_\_ AC_{[+cor]}$  concerns the alternation  $VIAC \sim V:nC$ , the latter where C is coronal (obstruent or sonorant). This was not explicitly formulated until recently, with the writing of this grammar, and not during the main fieldwork period. The reason for the long delay is because the rule was largely obscured by analogy, working optionally but extensively in some verb prefixes, and in several class-marks before postpositions. This extensive analogy works mainly one way, producing  $-IAC_{[+cor]}$ , only occasionally  $-nC_{[-cor]}$ , and never produces  $-n:C_{[-cor]}$ , where C is uvular. This rule is exemplified in §6.3.2.

That last point was always clear, but the whole basic picture did not become clear until the formulating of the chapter on nouns, spring 2010. There analogy has no basis for operation, and with a corpus of about thirty nouns with *l-* qualifiers or qualifiers including anatomicals ending in /l/ (i.e. *gl-*, *Gl-*, *Xl-*, *qi:l-*, *ti:l-*, *ku:l-*, *Xu:l-*, *ch’Al-*) the pattern proved quite regular, with but one questionable and easily explained exception (*-l-ch’u:ch’* ‘soft part of cheek’).

### 6.3.1 ‘Aw and ‘Al plus -X plus -d

The two basic demonstratives ‘Aw (distal, unmarked) and ‘Al (proximal) form a small system, albeit only of two members, obeying very much the same morphophonemic rules

as shown above, regarding the feature plus/minus coronal. This is only with regard to the two postposition-finals  $-X$  ‘non-punctual contact, motion within area’ and  $-d$  ‘punctual contact, at rest’. As shown in §4.3.5 and §5.1, the two demonstrative pronouns have to be reconstructed as  $'AwA-$  and  $'AnA-$  rather close to the surface. Thus, with uvular  $-X$ , we have  $(dA=)'wAX$  ‘thus, that way’,  $(dA=)'lAX$  ‘this way’, whereas with coronal  $-d$  we have  $'u:d$  ‘there’,  $'a:nd$  ‘here’. The prosodically or phonotactically anomalous  $dA'wAX$  and  $dA'lAX$ , with proclitic  $dA=$  ‘selfsame’, not  $*da'wAX$  or  $*da'lAX$ , can only be explained as  $dA'AwAX$  and  $dA'AlAX$  somehow very close to the surface.

The point that these two demonstratives form a “system” in this way is supported by what comes close to a third demonstrative with the locational  $Xi:d$  ‘yonder’,  $Xi:ch$  ‘toward yonder, away’,  $Xi:nXinh$  ‘yonder person’ with nasality spread, clearly from  $Xi:X=inh$ . The third form is obviously lexicalized, evidently so failing to obey the plus/minus coronal rule, as it is certainly from  $XA-yA-X-$ ; cf.  $XA-yA-'u:d$  ‘yonder’, which does accord with it.

### 6.3.2 $l \sim n$ in verb prefixes

The fully or freely inflecting verb prefix complex includes several prefixes which would determine  $l \sim n$  alternations, e.g. inceptive  $GA-$ , which always conditions  $lA$ . The coronals, on the other hand, Active perfective  $s-$ , classifiers  $L-$ ,  $LA-$ , and  $dA-$ , which “regularly” condition  $-n-$ , very often fail to do so. We have many doublets, elicited in checking for this rule with Lena, cf. (2).

(2)  $l \sim n$  alternation in verb prefixes

$Xu' i:nsAliL = Xu' lAsAliL$  ‘moon got full’

$Xu' i:nsAxahL = Xu' lAsAxahL$  ‘it’s full grown’

$xulAsALxahLinh = xu:nsALxahLinh$  ‘he raised me’

$xuku:nsAgu'k'Linh = xuku:lAsAgu'k'Linh$  ‘he punched me in the belly’

$ku:lisiLgu'k'Linh = ku:nsiLgu'k'Linh$  ‘I punched him in the belly’

In the last pair of (2) note  $li \sim :n$ , where the  $-li-$  is from a very late or superficial rule of vowel harmony with the following  $si-$ . In the following conjugation from Marie,  $'i:sALyahL$  ‘he got old’,  $lAsALyahL$  ‘you got old’,  $lisiLyahL$  ‘I got old’, there appears to be a contrast between 3 and 2s, even though 2s subject pronoun with  $s-$  perfective is definitively zero, homophonous with 3. The contrast must be only apparent, as there is no reason to believe there would have been any real reason to object to switching them or making them both the same. Taking a frequently attested form for a statistical example,  $o-k'ah l-ta$  ‘forget o’, which we have 18 times in  $s-$  perfective, we have “regular”  $'i:nsAtahL$  or  $'i:nsitahL$  14 times (including five from Anna in text), and “analogical”  $lAsAtahL$  or  $lisitahL$  four times (once from Anna in text). For no clear reason we have the opposite effect in  $l-L-gehG$  ‘be lonely’, an  $s-$  perfective stative, where we have ten instances of  $lAsaL-$  or  $lisiL-$ , and only



one of *'i:nsAL-*, from Rezanov (1805). Even so, it does not seem reasonable to claim that the choice has become at all lexicalized. Nor do any of the speakers or sources seem to show significant statistical difference in preference.

Along with many “irregular” verbal forms like *xulALxa:g* ‘is raising me’, *lAdAxa:g* ‘it’s being raised’, with *lA-* before classifier coronals, we also get *lA-* before coronal stem-initials in verbs (if not in nouns), e.g. *GALAtinhinh*, *GALAtah* ‘lives’, along with *GA:ntah*. Consistently “irregular” is the case of *li'X l-le* ‘smile, laugh’, the most frequent theme with *l-* ‘facial’ and *l-* stem-initial, always *li'X lAlinhinh* ‘he is smiling’, for example, never *li'X \*?'i:linhinh*, not tested. Note, however, the gerund thereof, *li'X 'i:ni* ‘smile, laughter’, with that remarkably regular outcome of *\*nA-ne:-n*, rather than *\*?lAle:l* (though cf. *'Ale:l* as gerund of *le*). Another fairly common analogical form, reverse of the preceding, is *-n-* instead of *lA-* before the velar *x-* ‘T’, as in the examples in (3).

(3) Examples of *-n-* instead of *lA-* before *x-*

*dik' li'X 'i:nxslilG* ‘I did not smile’ (along with *dik' li'X lAxslilG*)

*'idah Ga:nxLAlah* ‘I’m clearing ground’, *'idah Ga:nxLilil* ‘I cleared ground’

*'u:ch' ya:nxdsi'yahL* ‘I got stuck there’ (along with *'u:ch' yAlixdsi'yahL*), *'u:ch' ya:nxdi'yahL* ‘I’m stuck there’ (Neuter perfective)

*q'Ats'ya' 'i:nxLi'AdzL* ‘I fell into a slough’

*Ga:nxdsi'a:GL* ‘I got weak from old age’

*tl'a'q' 'i:nxdsi'ahL* ‘I hurt myself bad’

*'Adti:(n)sdi'ehL* ‘I put a shawl on’

It is possible that the frequent *s-* perfective is a factor, but even the two exceptions have following coronal (and vocalized) classifiers, so most other persons would also regularly have *-n-*. In addition to the *-n-x-* exception, however, we also have *-n-y-* in two items from Lena, *'uyAq' yAX k'ugu:(n)'yahL* ‘he has diarrhea’ (‘something liquid in him is involuntarily situated downward’, apparent Neuter perfective, for expected *k'uguli:'yahL*), and *lu: k'ugu:n'ya:* ‘there is a big September tide’, usitative Active imperfective, for *k'ugula'yah*). In addition to the last form, possibly a nominalization, we have the pair *k'u:nduh* ‘unfleshed skin’ from Lena, and *k'ulAduh* ‘act of fleshing a skin’ from Rezanov (1805), which appear to be a minimal pair. The form from Lena must have come merely coincidentally, not in connection with Rezanov, and we do not have a record of cross-checking. Unlike in *lu: k'ugu:n'ya:* ‘there is a big September tide’, where the *k'u-* is the subject, making the form a relativization, in the latter pair the *k'u-* is probably the object, so the form is probably a verbal noun or gerund. However, being a derivation of a known verb theme, the *k'ulAduh* could still be considered an insignificant variant in a verbal form rather than an exception or truly irregular noun, and the difference in meaning may well be only apparent from the vagaries of faulty fieldwork, the semantics not having been carefully enough checked.

There is one exceptional instance where Ku:-n- > Ku:n- fails, in *xi:nsdik'in'tL* ‘my face got scratched’ from Lena. Here, evidently, the identity of the vowel in Ku- is lost and the “default” rule \*nə > i:n/\_\_[+cor] operates instead.

One puzzling form is *'idAxa:g* (= *lAdAxa:g*) ‘plant’, clearly the relativization of passive repetitive *l-dA-xa-g* ‘O is being raised, caused to grow’, as in *lAdAxa:g* ‘it is being raised’, *qi'k'u:ndAxa:g* ‘garden, place where something is raised’. The expected variant of *lAdAxa:g* is *'i:ndAxa:g*, leaving no explanation for *'i-* instead of *'i:n-*, other than analogy with the frequent prefix string *'idA-*, not to mention that a clear explanation is lacking as to why absolute initial *nA* > *'i:n/#*\_\_[+cor], specifically with the vowel /i/. (For Athabaskan there is a perfectly clear explanation of verb prefix *i ~ n* alternations, from PA(E) \*ɨʏ or nasalized *y*, but the Athabaskan cognate of the Eyak /n/ in question is coronal \*n, not the palatovelar.)

The rule that *nA* > *'i:n/#*\_\_[+cor] also needs to be extended to include at least *'Ad* ‘reflexive’ and *-u*’ of ‘future’ and ‘directive’, i.e. probably any C, along with /#\_\_ in the environment. An example with reflexive is *yAX 'Adi:nLAla'Xinh* = *yAX 'AdlALAla'Xinh* ‘he is is pouting, going about making faces’. Examples with /' \_\_ of the future and directive are very common, but in these cases, where no syllable intervenes between the *nA-* and the stem (usually *LA-* or *dA-* classifier), application of the rule is blocked by a preceding rule which expands the *-lA-* to *-li-* (along with *-dA-* to *-di-*, etc.). However, even with *LA-* or *dA-* classifier, the rule is usually not applied, resulting almost always with *-u'lA-* or *-u'li-*, rarely *-u'i:n-*, though the latter is definitely acceptable, and is even attested spontaneously. From Lena we have the examples in (4).

(4) Examples of the rule *nA* > *'i:n/#*\_\_

*'udahd 'u'lisitahLinh* ‘I heard him’ (but also *'udahd 'u'i:nsitahLinh*)

*ya'Xu: yAX qu'i:ndAla'X* ‘don’t make faces!’ (uttered spontaneously)

*qa: yAX qu'i:nLAminhinu:* ‘they’ll get us hurt’

*si'uGL lah qu'i:nda'yah* ‘my heart will beat fast’

*'Adqu'lAxdAtah* ‘I’ll smoke fish’ (but also *'Adqu'i:nxdAtah*, now analogically even before *-x-*)

Note further here, also in §15.9, that in the directives, a third outcome is very common, that the *l-* qualifier, called “weak *l*”, is deleted altogether (5).

(5) Deletion of “weak” *l-* qualifier

*'udahd 'u'sitahLinh* ‘I heard him’ (along with *'u'lisitahlinh*, *'u'i:nsitahLinh*)

*'iLt'a'X 'u'liditahL* ‘it is folded’ and *'iLt'a'X 'u'ditahL* (Neuter perfective)

*'udahd 'u'liditah* and *'udahd 'u'ditah* ‘its sound is heard’ (Neuter imperfective),

*'udahd qu'dAtah* ‘its sound will be heard’ (but *qu'lAdAgah* ‘it will be known’)

Along with *dik' 'udahd 'u'lAstahLG* ‘he didn’t hear it’ would presumably be *dik' 'udahd 'u'i:nstahLG*, but there might well be a limitation in this case on deleting the “weak *l*”

altogether to avoid *dik' 'udahd \*?' 'a'stahLG*, not tested. The issue of “weak *l*” is taken up at great length in the discussion of the *l*-qualifier in §17.10.4.

### 6.3.3 Qualifier *l* ~ *n* with postpositions

To discuss the outcome of *l* ~ *n* in qualifiers with postpositions, we must distinguish between non-syllabic postpositions, consisting of a single consonant which becomes a syllable coda, and postpositions which themselves constitute a syllable. For the syllabic postpositions themselves we need also to distinguish those which begin with *l*- from those which begin with another consonant. Those which begin with *l*- will be discussed separately further below, along with other types of stems which begin with *l*-.

As shown in the subsections above, we see the plus/minus coronal rule working in such a way that with uvular *-X*, we have demonstrative (*dA=*)*wAX* ‘thus, that way’, (*dA=*)*lAX* ‘this way’, whereas with coronal *-d* we have *'u:d* ‘there’, *'a:nd* ‘here’. While this is so with areal *-X* and punctual *-d* as demonstrative finals, it is not so simple with the actual non-syllabic postpositions *o-X* ‘areal contact with o’, *-d* ‘punctual contact with o’. Nor is it so simple with the three other non-syllabic postpositions, *o-ch* ‘to o’, *o-tl* ‘with o’, *o-q* ‘on o’.<sup>2</sup>

These five non-syllabic postpositions seem to fall into three classes in combination with noun-class marking qualifiers *l*- or those ending in /*l*/, in a way that seems partly unrelated to the distinction [+/- cor] that is basic elsewhere. Here the only two of the five that behave exactly alike are *o-tl* ‘with o’ and *o-q* ‘on o’. All five are alike with no qualifiers, e.g. 1s *sid*, *sich*, *sitl*, *siq*, *siX*. However, they differ with non-*l* qualifiers in the first place, e.g. with qualifier *d-*, into two classes, *-dAd*, *-dAch*, but *-da:tl*, *-da:q*, *-da:X*, the last three requiring lengthening of /*A*/ to /*a:*/, the first two not, in an unexpected way that corresponds neither to [+/- cor] nor to [+/- ejective]. With *l*-class-mark these five separate into at least two classes, but in a different way, basically *-a:nAd*, *-a:nAch*, *-a:na'tl*, *-a:na'q*, *-a:nAX*, now with *-X* joining *-d* and *-ch*, as opposed to *-tl* and *-q*, still not in accordance with the distinctive features.

This is further complicated by some variation: somewhat less frequently, *-i:nAd*, *-i:nAch*, *-i:nAX*, also *-AlAd*, *-AlAch* attested, probably to be considered analogical, but not surprising, considering the complexity of the situation. There may be further real differentiation, however. For example, with *gl*-class-mark, along with the expected pair, *-gu:na'tl* and *-gu:na'q*, we have attested *-gulAd*, *-gu:nch*, *-gu:nAX*, most probably only by chance. The last two might be by the basic rule with [+/- cor], the first might be analogical; all inadequately investigated. With *ti:l*- and *qi:l*- we do not have *o-d* attested, but the rest are *-t/qi:nAch*, *-t/qi:nAX* (*-t/qi:na'tl*, *-t/qi:na'q*); likewise with *dl*- (*dA-lA-* > *dla:-*), those are *-dli:nAch*, *-dli:nAX* (*-dlina'tl*, *-dli:na'q*).

<sup>2</sup> It is different again with syllabic postpositions, including especially those beginning with *l*- and with zero consonant, to be treated in the following subsection.

What is clear here, aside from the probably analogical types like those with *-lAd*, all five postpositions entail long vowel plus *-nA-*, or *-na'*- before *-tl'* and *-q'*, which is the same as, homophonous with, the result of *\*-V-nA-nV-* > *\*-VnnV-* > *-VnV-*, as in e.g. *si:nah* 'around my head' < *\*si-nA-nah*, cf. *silah* 'around me'. We likewise have *si:nAX* < *\*si-nA-nAX* 'beyond my head', cf. *silAX* 'beyond me', and *si:nAX* (*si-nA-X*) above. These comparisons could shed some light on possible analogical origins for the complexity, including especially that for *o-q'*, for which cf. *si-la'-q'* 'on/over/covering me', so *'itl'a:na'q'* 'on a mountain', though that hardly explains *-a:na'tl'* semantically.

The question still remains as to the variation *-a:- ~ -i:-* in the long vowel before *-:n-*, e.g. in *-a:nAd ~ -i:nAd*, and especially the obligatory shift in (*d-ALA-* >) *dla:- > dli:-*, so *-dli:nAd*, not *\*-dla:nAd*, for which the motivation is not obvious. In this connection, note also the expansion of qualifiers from *CA-* to *Ci:-* between future *qu'*- (also directive '-') and verb stem when no vowel intervenes; also the rule that absolute initial *\*nA > 'i:n/#\_C*, etc., in verbs, already mentioned above. There is moreover an optional expansion  $\emptyset > i:/C\_C$  with reciprocal *'iL-*, in the cases of *'iLd > 'iLi:d*, *'iLtl' > 'iLi:tl'*, *'iLX > 'iLi:X*, but not *'iLch' > \*'iLi:ch'*, according to Lena (no record for *'iLq' > \*?'iLi:q'*). This is in any case yet another pattern in subgrouping the five non-syllabic postpositions to add to the complexity. This type of  $\emptyset > i:$  shift, plus e.g. *-ti:nAX*, could easily account for the analogical *-i:-* variants mentioned above.

Finally, there is one postposition with zero-initial, *o-a:* 'for o; part of o (partitive)', e.g., *siya:* 'for me', *'uwa:* 'for it; part of it'. We do not have that attested with *l-* qualifier as such, but very probably the class-mark "particle" used with numerals in counting classified nouns should also be identified with the postposition in the partitive sense, e.g. *la'dda:shdu:lihG* 'two tables' (*d*-class). So likewise with *l*-class mark *la'da:na:ch'iyyahd* 'two hats' (*l*-class), and *la'ddli:na:dla:XA'i:nd* 'two buttons' (from Marie, though we also have *Lin:hGdla:na:tsa:* 'one stone' from her, probably less correct).

This same complexity does not apply to *l*-type class marks with syllabic postpositions, even when those begin with the same consonant and are probably extensions of basic, non-syllabic, e.g. *o-da'* 'arriving at o', *o-Xa'* 'in relation to o', *o-ch'ahd* 'from o', as well as other postpositions not so derived, e.g. *o-t'a'* in shelter of o', *o-ta:s* 'over across o', *o-qa'* 'among o', *o-ga'* 'like o'. With those *l ~ n* comes closer to following the basic rule with regard to presence of a coronal than it does with verbs. The most common exceptions are some occasional instances of *-(A)lA-* before a coronal, some of which are shown in (6).

- (6) *-(A)lA-* before a coronal
- a. With *'itl'* 'mountain', including special compounds:
    - 'itl'a:nsinh* 'behind a mountain'
    - 'itl'a:ntl'in'ts'* 'summit of mountain'
    - place names *'itl'a:ndahd* and *'itl'a:ndAya'd*
    - 'itl'AlAqe'L* 'mountain-woman'

'itl'a:nt'a:X 'inside a mountain'

'itl'AlAt'a' 'behind a mountain'

'itl'LAta:s 'across over a mountain'

- b. With postpositions *o-dAG* 'above o' and *o-dahd* 'pressed against o, touching o':

*si:ndAGd*, *silAdAGd* 'above my head'

'u:ndahd 'against his head' (also 'ulAdahd)

There is further complexity in the outcomes of *l ~ n* before postpositions beginning with the sonorant /l/, due to the fact that *\*-VnA-nV- > \*-VnnV- > -:VnV-*, so not *\*-V:nIV-*. As noted above, we shall postpone further discussion of these postpositional instances, in order to include them with the discussion of *l*-initial stems and the *l ~ n* alternation more generally also in nominal, verbal, and adjectival instances.

### 6.3.4 *l ~ n* qualifiers plus *l ~ n* (syllabic) stem-initials

There are about 35 stems with stable or invariable initial /l/ (two of those with 'l), about twelve stems with stable or invariable /n/ (two of those with 'n), and about eight stems attested with the alternation *l ~ n* (one of those with 'l ~ 'n). Minor grammatical categories, e.g. interjections, without prefixes, show no alternations, and even show minimal pairs, such as *lah* 'here (it is)!', *nah* (obscene insult, from Galushia Nelson only). The major categories, of verbs, nouns, adjectives, and postpositions are of special interest, however, in the different ways they show this distribution of invariable /l/, invariable /n/, and *l ~ n*. A statistical summary of these three, in the order just mentioned (*l:n:l-n*) is as follows: verbs 13:3:0, nouns 10:3:2?, adjectives 0:0:2, postpositions 5:2:5.

For the *verbs*, the *l ~ n* rule appears to be blocked by analogy. True, we do not have many verb themes with l-IV attested, and this issue was never actively investigated. However, one, *li'X l-le* 'smile, laugh', is amply attested, and seems entirely resistant to the alternation, 1s *lAXleh*, 2s presumably *li:leh*, and 3 *lAleh*, *lAlinhinh* (not *\*??'i:neh*, *\*??'i:ninhinh*, or *\*??'i:leh*, or *\*??'i:nleh* etc.). The 2p, incidentally, is *la:lAXleh*, by another general rule, extending *lA-*, preventing variation of 2p *lAX-*. The one quasi-exception, also noted above, is the gerund, *li'X 'i:ni:*, spectacularly "regular", < *\*nA-ne:-n*, unavoidable and/or surviving as lexicalized. Further, the *lA-* of this theme should more probably tend to allow *l ~ n* stem-variation than would a transparent class-mark or anatomical qualifier. The *lA-* is very probably the anatomical 'head, face', so 'act *li'X* with face' is not entirely opaque. At the same time, there is no attested *\*?li'X le*, with *li'X* 'movement in back end of closed space', though there are a few instances of *l-le* referring to facial expression, in addition to phases of the moon (*l*-class). The *lA-* here might best be termed "thematized." Further, then, we could make a tenuous distinction between lexicalization and "thematization" of an affix, where the latter refers to some degree of partial lexicalization.

Verbs with stem-initial /n/ are of special interest. They are *LA-'nik'* 'crawl', *li' O-LA-'ni:q'* 'swallow O' (an indirect reflexive, with *o-li'* 'to the back of closed space of self'), and *O-L-'na't'* 'lick O'. All three are with glottalized initial, surely of special significance, though some of the laterals are *-l'* too, e.g. *dA-'lits'* 'be wet', *-li'* 'be oversize'. The stem for 'swallow' could be etymologized as *\*-ni(:)nq'*, but for 'crawl' as *\*-'nink'* one has to wonder why there is no lengthening.

Even more problematical here is *O-L-'na't'* 'lick O', because, uniquely, it varies with the possessed anatomical noun *-la't'* 'tongue'. Whatever historical process produced that one such alternation in Eyak is now altogether unclear, but that, together with the fact that the only other verbs with stem-initial /n/ have glottalized /n/ may well be a clue to the solution of part of the puzzle.

(The same proportions or relations seem to hold for labial sonorants: there are twenty verb stems with initial *w-*, and only one with *'w-*; there is one verb with initial *'m-* but also one with initial *m-*. The coronal sonorants initial to verb stems have a proportion glottalized comparable to that in the case of the labials. Cf. next paragraph for nouns.)

Turning now to *noun* stem-initials /l/ and /n/, of the ten noun stems with initial *l-*, four (including *-la't'* 'tongue') definitely have plain initial /l/, five are not attested with preceding vowel, some of which could therefore have underlying or historical initial /l/. However, only one, *-lahs* 'intestines', definitely has initial /l/. For that cf. Tlingit *naa's* 'intestines', possibly a cognate, or a loan (though Tlingit has no glottalized sonorants, making the Eyak /l/ then harder to explain). The three that begin with *n-* all have non-glottalized /n/, and are possessed anatomical nouns all semantically related, namely *-ni:k'* 'nose'; *-ni:ch'* in *-ni:ch'-d-L-xa'ch'-L* 'septum of nose' (*-ni:ch'* 'knot') together with *-ni:ch'-d-L-gahG* 'sticky substance which turns pink when chewed' (*-ni:ch'* 'gum'); and *-ni:sq'* 'nostril'. These must somehow all be irregular derivatives of *-ni:k'*, the latter perhaps from *-ni:k'-yAq'* 'inside of nose'. Given the long vowel, the initial nasal could be explained as from something like *\*-nənk'*. At the same time, these could perhaps even more easily be explained as *< \*-nə-ni:k'*, etc., with (*\*-nə- >*) *l-* qualifier 'head, face'; cf. further Athabaskan *\*-nə-chən-g* 'nose' *<* 'face-smell-repetitive'.

There are two items that might be considered nouns which have alternating *l ~ n* initial. The first is perhaps a lengthened version of the second. Both appear both possessed and unpossessed, unpossessed as subject or predicate with postpositional phrase. One is *(-)la: ~ na:* in *k'u-la:-G* 'other person, stranger', *o-tl' la:* 'cross cousin of o', *o-ka' la:-G* 'traveling companion of o', and *o-kuwa' na:-G* 'relative' (cf. *o-ka' la:-G*; here unique nasalizing variant of *o-ka'?*). The other is *(-)lah ~ -:nah*, plural *-lah-GA=yu:*, most widely used as 'inhabitant(s) of, -er(s)', almost certainly a nominal form of the very basic verb *-la* 'live, move, camp, subsist (in area)'. It should probably not be considered verbal, at least in lacking the appropriate relativizer, i.e. not being *-linhinh*, *-linhinu:*. This stem has three attested forms as *-:nah*. Two are with postpositional phrases: *GA-L-qa' i:nah* 'middle(most) of a set of siblings'; kin term *-lAXe:nah(GAyu:)*, 'wife's sister's husband' *<* *o-lAXa:n' i:nah* 'partner opposite o', where elided *-i:-* umlauts *-a:n'*; and thirdly *ya:nahGAyu:* 'Ahtnas',

**Table 6.1:** Combinations of adjective *-lAw* ~ *-nAw* ‘big’ and *l*-type classifier.

Noun-class	Forms
<i>gl-</i>	<i>-gu:’nAw</i>
<i>ti:l-</i>	<i>-ti:’nAw</i>
<i>qi:l-</i>	<i>-qi:’nAw</i>
<i>dl-</i>	<i>-dli:’nAw</i>
<i>ku:l-</i> ‘belly’	<i>-ku:’nAw</i>
<i>Xu:l-</i> ‘tooth’	<i>-Xu:’nAw</i>
<i>Gl-</i> ‘land area’	<i>-Ga:’nAw</i>

**Table 6.2:** Combinations of adjective *-luhd-g* ~ *-nuhd-g* ‘few’ and *l*-type class mark.

Noun-class	Forms
<i>l-</i>	<i>ya:’a:nuhd</i> and <i>ya:lAluhdg</i> (analogical)
<i>gl-</i>	<i>ya:gu:nuhdg</i> ‘few people’ (Here with special <i>gl</i> -class mark for humans, used only with this adjective <i>-luhd-g</i> ~ <i>-nuhd-g</i> and <i>-t’u</i> ‘many’, as in <i>k’ugu:nt’u</i> ‘many people!.’)

partly opaque, possibly from *yA:-nah-*. There is otherwise no noun of the form *’i:nV-* or *:-nV-* (or *’i:lV-* etc.), that would have come from *\*nA-nV-*, though there are postpositions fitting that description, for which see below.

(Comparing those now with noun stems with labial initial sonorants, eight stems can be shown to begin with /w/, four more cannot be found with preceding vowel, some of which could therefore have underlying /’w/, but only one definitely has /’w/, *-’we:sh-G-* ‘maternal grandfather’. The only regular noun with initial /m/ at all is *ma:* ‘lake’, but cf. PA *\*wən*. The others are special items: *’Amah*, vocative for ‘mother’, and *ma:*, child’s word for ‘food, feed’. There could thus be a parallel again here, as partly with the verbs, that the only source for regular non-glottalized initial nasals is *\*RVn*. Possibly, also, glottalized initial nasals are significantly more in verbs than in nouns.)

The category of *adjective* is of special interest in its way, having only two members with initial /l/, but both fully alternating with /n/, one *l* ~ *n*, the other *l* ~ *n*. For the latter we have very well attested *-lAw* ~ *-nAw* ‘big’, and for the former, *-luhd-g* ~ *-nuhd-g* ‘few’, less well attested.<sup>3</sup> In both these, the alternation works with full regularity, even across the glottalization in *-lAw* ~ ‘big’. With *-lAw* ~, most instances referring to *l*-class nouns show *-a:’nAw*, with occasional variant *-i:’nAw*, and (Marie only) *-la’lAw*. The attested forms are presented in Tab. 6.1. With *-luhd-g* ~ ‘few’ we have, with *l-*, only the three forms in Tab. 6.2.

<sup>3</sup> This implies that /’n/ is here still to be considered a unitary phoneme, coronal; the rule would not apply before ’V.

Each of these has an associated verb, with related stem *-’li’* ‘be oversize’, and *-luhd-g* ~ *-lu’d-g* ‘be few, too few’. However, we have no attestations of either with *l*-type class-marks directly before the stem, only e.g. *da: guli:lu’dg* ‘we are too few’ (Neuter imperfective), *dAXunhyu: ’u:d gulAGAluhdgL* ‘people are becoming few there’. The theme *-’li’* is likewise Neuter imperfective, so it is doubtful that any form with either stem immediately preceded by *l*-type qualifier could have been elicited with these as verbs. Clearly the stem initial remains non-nasal, not analogically /n/ with *gl-* qualifier not immediately preceding.

The category of *postpositional* stems with initial *l* ~ *n* appears to be the most complex. However, the key is evidently a distinction between the basic types of *l*-qualifiers: noun-class marks, on one hand, and on the other anatomical ‘head, face’, and thematic/lexicalized. Here the noun-class marks remain “analogically” IA-IV, whereas the others come out *-:nV-*, *#’i:nV-*. For five of the postpositions, attested only with *l*-initial, no *l*-type qualifiers are attested, either because of semantic limitations, as in the case of *o-leh* ‘year passes for o’, or because evidently no deliberate attempt was made to elicit forms with *l*-qualifier, in the cases of *o-li’* ‘into closed end of o’, *o-lehd* ‘because of o’, *o-lAG* ‘upland from o’. In the case of *o-lu’qa:* ‘in quest of o’ we have only a noun-class qualifier, resulting in *o-lAlu’qa:*

We do have one postposition for which this issue was deliberately investigated, *o-lah* ‘around, about o’, with Lena, and with fairly clear results: *tAGLIAlah* ‘around a hammer’, *k’utahti:Alah* ‘around a skin’, *tsa:dla:lah* ‘around a rock’ (and “apparently not” *\*’-a:nah*, *\*-ti:nah*, *\*-dli:nah*). However, we clearly do have (*’i*)-*nah* with *l*-anatomical in *si:nah* ‘around my head’, *’i:nah GAwe:g* ‘put a headband around your head’, *’i:nah we:gL* ‘headband’ (Galushia Nelson, with zeroed out reflexive P).<sup>4</sup> Not surprisingly, then, a less obvious or more “thematic” or possibly lexicalized use of *l*- ‘head(?)’, is *’u:nah ’ixleh* ‘I respect him greatly’ < ‘I have emotion around his head’.

This distinction between the results with noun-class marks as opposed to anatomical or thematic *l*-qualifiers, made clear with *o-lah*, seems to hold for the rest. With *o-LAX* we have no examples with *l*-noun-class mark, but with *l*-anatomical thematized we have *o-l-LAX k’u-d-’ya* ‘something is *d*-situated beyond / too much for o’s head’ as in *si:nAX k’udAGA’ya:L* ‘I’m having a hard time’, *’i:nAX k’uda’ya:k’* ‘you are tormented’ (customary), and in *si:nAX yAX da:Xinh* ‘he’s walking angrily around me, won’t talk to me’. Likewise, with *o-la’-* (with various finals, *-d*, *-X*, *-ch*, *-q*) ‘draped over, covering o (e.g. as clothes)’, not attested with *l*-noun-class mark, but clearly *-:na’* with *l*-anatomical in *’i:na’d qa’ GAdAta’* ‘take it (dress) off (up over your head)’, indirect reflexive, so clearly with zero oblique or postpositional object, homophonous with what 2s would be. Also, with *o-lu’* ‘through hole in o’, we have no example with *l*-noun-class mark, but a fairly frequent preverb shows this

<sup>4</sup> These last two show, incidentally, the homophony between *\*’i-nA-nah* ‘around your head’ and *\*Ø-nA-nah*; thus, presumably making the first into the usual indirect reflexive, and 1s, ‘I’m putting a headband on’ would be *’i:nah GAxdAwe:gL*.



as *-nu*’, *ya:nu*’ ‘underwater, underground, below a surface’. This is clearly to be segmented as *yA:nu*’. For the *yA*- here cf. the cases of *-nahd* and *-na:*’ below.

Uniquely irregular is the postposition *o-lahdz* ‘forward of *o*’. For one thing, relatively trivial, it has the variant *-lahs-* with *-d* final, as in *XAlahsd* ‘area far out front, out to sea, outside of Alaska, Seattle’. Much more “radically,” with *l*-qualifier, it takes not the expected form *\*-nahdz*, but instead *-ndz*, eliding the entire syllable nucleus. One such derivative, with thematized diminutive *-kih*, is the kin term (*’i*)-*ndz-kih* ‘woman’s brother (older or younger)’, as in *si:ndzkih* ‘my brother’, *’u:ndzkih* ‘her brother’, *qa:’i:ndzkih* ‘our brother’. The other derivative of *-lahdz* ~, also with zero oblique or postpositional object, is *’i:ndzi*’- ‘bow of canoe’, including or compounded with *-i*’, a reduced form of *o-’e*’ ‘(vacant) place of *o*’.

Finally, we have the two postpositions always with initial nasal, *-nahd* and *-na:*’, the latter, uniquely, not lengthening the preceding vowel. The first is by far most often attested in the preverb *ya:nahd* ‘down flat covering a surface’, very common in derivations of *ya:nahd -ta/tah* (verb and noun) ‘covering, rug, tablecloth, sheet, bedspread’ etc. The analysis is obviously *\*yA-nahd*; cf. *ya:nu*’ above and *yAna:*’- below. Otherwise *-nahd* is but sparsely attested: *’i:nahd* *’iLitahLinh* ‘he is keeping it covering his head’, again an indirect reflexive, with zero oblique or postpositional object, Neuter perfective causative, here apparently with explicitly anatomical ‘head’. Another instance is *’itl’a:nahd sdixutl’L*, glossed ‘snow slid down the mountain’, though the form appears more exactly to mean ‘it snowed covering the mountain’. As in *ya:nahd*, this does not necessarily suggest the ‘top’ or ‘head’ of the mountain, but evidently the whole mountain, as *’itl*’ ‘mountain’ is very consistently itself *l*-class. That may then also have suggested the association with snow sliding down in the field-gloss. The only further attestation of *-nahd* is in the standard type of month-name, *’u:nahd* ‘in the month of it’, here evidently with quite a different meaning, itself unclear (see below), and perhaps entirely because *qAXah* ‘moon, month’ is an *l*-class noun.

The only other postpositional stem with *n*-initial is *-na:*’- with *-d*, *-ch*’, *-X* finals, especially common in *yAna:*’-*d* etc. ‘down below, on the floor/ground’, without the /*n*/ lengthening the preceding vowel; cf. *ya:nahd* and *ya:nu*’ above, < *yA:nV-* < *\*yA-n-nV-*. The other attestations are *-na:*’- < *\*-n-na:*’, in *’itl’a:na:*’-*d* etc. ‘up on hillside, mountainside’, *’Aw’a:na:*’*d* ‘up on it (mountainside)’, *ya:na:*’*d* ‘up on a mountainside’, or with zero object, *’i:na:*’*d* ‘up on a mountainside, hillside, steep place’, in any case all objects of *l*-class, i.e. *’itl*’ ‘mountain, hill’ (*l*-class).

The key form here is *yA-na:*’-, without the lengthening nasal, calling for a different explanation of the /*n*/. That can be found in a parallel with the several other postpositions and preverbs that are part of the basic preverbal system, with extension sets on non-syllabics *o-d*, *o-X*, *o-ch*’, also *l*- (< *n*-) and *y*-, so e.g. *o-da*’, *o-ch’a*’, *o-Xa*’, *o-la*’, *ya:*’ *o-dahd*, *o-Xahd*, *o-ch’ahd*, *o-\*lahd*, *o-yahd*; *da:n*’, (*o*-)*Xa:n*’, *o-\*la:n*’, *ya:n*’. For full treatment of these see Chap. 16 on preverbals, and Krauss (1970a). For the present purposes of specifically explaining the phonology of *-na:*’- cf. *ya:n*’ ‘down to the ground, surface’, *Xa:n*’

‘finishing, stopping’. Here clearly *\*na:n’* > *na:’* quite regularly, not *\*-la:(n)’*, hence the non-lengthening nasal in *yA-na:’-d*; also e.g. *’i:na:’d* < *\*nA-na:n’-d*.

To explain *-nahd*, not only do we clearly have *\*-nA-nahd*, but it is also possible that the origin of *\*-nahd* itself could be *\*-n-Ahd*. Cf. the privativity at least in (o-)*yahd* ‘out of o’s hand, out to sea’ and above all *’iLihd* ‘apart from each other’, where *-ihd* itself is a postposition, *o-ch’ahd* ‘from o’. Cf. *o-ch’* ‘to o’, PA *\*o-ch’-An* ‘to o’, *\*o-ch’-ən* ‘from o’, and the most recent point made by Leer (xxxx: ref) that at least some instances of Eyak Vhd come from *\*Vnd*, in connection with Dene-Yeneseic. See also *-ahd* privative in Chap. 16.

#### 6.4 Denasalization by *n*; *-n’-A-* > *-’lA-* etc.; *-ny-*; *-nl-*

There is a very basic rule that vowels adjacent to [n] become denasalized, their nasality absorbed by the /n/. Conversely, it could perhaps also be said, at least insofar as the [n] is from *\*VnAnV* > *\*VnnV* > *VnV*, that the adjacent vowels never become nasalized in the first place. By “adjacent” is meant both preceding and following vowels, though there are complications in defining preceding “adjacent” in connection with intervening stigmata /’/ and /h/, to be noted here below, in the presentation of further details to the basic rule. One interesting sign of the status of the denasalizing rule is in the verbal enclitic =*inu*: ‘human plural’, clearly composed of =*inh* ‘human singular’ plus *-nu*: ‘human pl’ This, though beginning with non-nasalized /i/, still entails umlauting nasalization, e.g. in *linhinu*: ‘pl humans act, *linhinh* ‘sg human acts’, cf. *leh* ‘(sg) acts’; likewise *ya*: ‘thing’ plus that enclitic (exceptionally) becomes *yi:nhinu*. This shows, in two ordered steps, that the first syllable of the enclitic was nasalized =*inh*, as it nasalizes and umlauts the stem vowel, then loses its nasalization, in that order.

The behavior of nasalized vowels in open numeral stems directly before *-nu*: ‘human pl’ is of some interest here, though inconsistent and inadequately investigated in the field. In the ledger we have seven instances of (-)*ts’i:n*, in *ts’i:n* ‘six’, *q’Adits’i:n* ‘seven’, *la’dits’i:n* ‘eight’. It so happens that in all three instances from elicitation, two from Lena, one from Marie, the *-i:-* remains nasalized, whereas in all four instances from text, the *-i:-* is written denasalized, three from Anna, one from Lena. Very probably there is some inconsistency, but at the same time these statistics do not correspond exactly to the phonetic reality in all cases, but reflect at least to some extent mere habit or copying carelessness on my part. Further research into the fieldnotes and sound files would be needed for better statistics. The other numeral is *ch’a:n’*- ‘five’, for which we have only two instances with *-nu*:, both elicitations and both *ch’a:n’nu*: ‘five people’, from Lena and Marie, keeping the stem-vowel nasalization.

If *ch’a:n’-nu*: represents a pattern, that is not repeated in the case of *-’nAw* ‘big’ (otherwise that would become *-’lAw*), which very consistently shows non-nasalized vowel, *V:’nAw* when preceded by *\*-V-nA-*, the *l-* qualifier. I.e. *\*-VnE’nV-* invariably > *\*-Vn’nV-* > *-V:’nV* across the apostrophe, *-a:’nAw* or *-i:’nAw*, *-u:’nAw*. There could be the difference that in this case, the apostrophe belongs to the following stem, not the preceding one, hence

the denasalization rule working across the apostrophe. A strong example of denasalization, however irregular, is in *o-LAXe:'nah* 'o's partner', clearly from *o-l-Xa:n'-'n-nah* 'person in position opposite/the length of o headwise'. Here somehow the whole syllable *-i-* of *-i:nah* is elided, having the double effect on *-Xa:n'* of denasalizing it, across the /'/, and umlauting /a:/ to /e:/. Cf. e.g. *GALqa'i:nah* 'middle(most) one (of siblings)'.

## 6.5 Denasalization across ' and h; ny and nl

Another type of development, regular enough to be clear in at least four items, probably two more in a related way, is metathesis of nasal with following glottal stop or /h/ and denasalization to /l/ before vowel, across morpheme boundary. This is synchronically clear in *tsi'lahL* 'pillow; comb'. For this cf. PA \*tsi'al 'pillow' and Eyak *-tsin* 'nape', requiring this explanation, even synchronically. The *-lahL* as such has become a stem in the verb 'comb hair', but the Athabaskan shows that it is probably in origin the classificatory verb *-'a* with *-L* suffix.

Another such item is the kin term *-qa'-LA-'ehd* '(woman's) sister-in-law', transparently the compound of *-qa'* 'husband' and *-'ehd* 'wife', where the *-LA-* can only be explained as epenthetic /A/ with the /l/ from this rule. Though there is no synchronic nasal in Eyak *-qa'*, such might be imputed, and this is confirmed by PA \**-qəŋ*' 'husband'.

A synchronic example with /h/ instead of glottal stop is another kin term *-k'inh-LA-kih* '(woman's) son's child', predicted by the structure of the reciprocal kin term subsystem for all four grandparents, with grandchildren as grandparent term plus diminutive *-kih*. Thus here *-k'inh* 'father's mother' plus *-kih*, with epenthetic /A/ preceded by /l/, though in this case the nasalization remains in *-k'inh-* for some reason. (A possible Athabaskan cognate for *-k'inh* may be \**ç<sup>wr</sup>ən* 'woman'.)

Another possible instance may be in *ge:-LA'a:g* 'noon', clearly somehow from *gah* 'day' and *-a:g* 'mid', 'noon', where there is also no expectation of any qualifier morpheme *-LA-*, but some related development of /l/ with the epenthetic /A/. This can only be explained by comparison with Athabaskan, \**ç<sup>wr</sup>e:n* 'day' as cognate to Eyak *gah*, where the Eyak is some kind of reduction or truncation of the PAE (cf. Eyak *xah* 'summer', PA \**še:n*). Surely this relates to the Eyak *gah* ~ *ge:-*, and explains the /l/ as in the preceding. Though the record does not show this explicitly, I definitely did at least check with Lena for a hypothetical \**?xe:LA'a:g(d)* for 'midsummer'. I must evidently have done this twice, once with the response *xah ya:a:gd*, obviously *ad hoc* 'summer, the middle', and on the other occasion, *xahlA'a:gd*, which must either be correct, and/or analogical with 'noon', at least confirming no memory for \**xe:LA'a:g(d)*.

One further item of this sort might be *'a:li'LX* 'headwaters'. This looks like it must be from *'a:n* 'river' plus postposition *o-li'* 'into closed end of o', but does not explain the denasalization of *'a:n*. (Or the *-LX*, but cf. *o-wa:-LX* 'following, according to o'). This might in fact be better explained, however, with *'a:n* as object of *o-'e'* 'place of (absent) o' in yet another of its allomorphs, here with initial *l-* by the same rules as the preceding.

Finally, we have *-lAXe:'nah* 'relative, friend', clearly from *\*-nA-Xa:n'-nah*, with postposition *o-Xa:n'* 'full length of o' and *l-* qualifier 'head', 'opposite o', plus what is otherwise *-lah* 'one who stays'. The denasalization of *-XA:n'* is by the development described here, but the fronting of the vowel is from the sequence *\*-nA-nah* created by the metathesis *-n'- > -'n-*. Cf. also metathesis of labiality, *-w'- > -'w-*, in §6.6.2 on *\*CwA'-* in the future and directive.

Also in connection with *-nu:* we have denasalization across preceding stigma /h/ in the case of the human singular demonstrative *'anh* and that reduced as attached to the enclitics *=q'* 'focus', *=sh* 'yes/no interrogative', *=d* 'interrogative emphatic', in *'ahnu:*, *q'uhnu:*, *=shuhnu:*, *=duhnu:*, from *'anh* and *=unh*. The denasalization is at least routine but may not be fully consistent, e.g. maybe less so in *q'uhnu:* than in *'ahnu:*. However, spelling is standardized to reflect denasalization. The same process is implied in the verbal enclitic *=inu:*, surely *=inh-nu:*, with both denasalization and loss of /h/.

Here must be the best place to mention that the origin of *-nu:*, the human demonstrative pluralizer and human plural suffix or enclitic to numerals, must be originally in the human singular verbal relativizing enclitic *=inh* plus the suffix *-yu:* 'plural'. This is the very general pluralizer or collective, e.g. *ya:* 'thing', *ya:yu:* 'things' (explicitly plural), *dAXunhyu:* 'people, Eyaks'. Though by unique phonological change, it seems almost certain that the origin of the *-nu:* suffix is in the human singular *=inh*, *-anh*, *=unh* plus this *-yu:*. This must be by a unique development *-nhyu: > -nyu: > -nu:*. Other sequences of *-Vnh-yu:* do not change.

Another possible origin for *-yu:*, which would not require such unique explanation for *-nu:*, is that *-yu:* itself is segmentable as *-y-u:*, where the *=u:* is the plural enclitic and *-y-* is epenthetic after an enclitic *\*-i*, as found in PA for non-human relativizer. For that Eyak has zero, but cf. human singular relative enclitic *=inh* (PA *\*-ən*), and *-ih* suffix to numerals, human or otherwise, *LinhG-ih dAXunh* 'one person', *la'd-nu: dAXunh-yu:* 'two persons', but also *k'u-la:-G-ih* 'different, other', plural *k'ula:GAyu:* 'other people'.

Referring to the verbal prefix *AN-*, discussed in §6.7 and to the two prefixes *yi-*, second person singular subject and *yi-* of e.g. the Neuter and optative further discussed in §6.9, here I mention the rule that *-V-AN-yi-*  $\rightarrow$  *-V:nli-*. This seems to work at least routinely or preferably, though *-V:nyi-* is not an unusual result. Thus optative *da:yileh* 'he may say', but *Xa:nliyah* 'he may eat it', at least preferably to or more frequent than *Xa:nyiyah*. It is hard to see this in any sense as *-VnyV-*  $\rightarrow$  *-VnnV-*  $\rightarrow$  *-VnlV-*, but rather only as *y > l/n\_\_*, hardly a natural rule. The obscurity of the phonetics here may of course be related to the obscurity of the nature of the *N-* of *AN-*, and perhaps also in the origin of the *yi-*, known to have been alveopalatal *\*ɲ<sup>y</sup>-*, orally occluded or not. Equally plausible might be the strictly synchronic "logic" that somehow *y > n/n\_\_* and *n > l / \_\_V* is possible, as we know. The *y > n/n\_\_* does have some support in the origin of *-nu:*. I.e. /ny/ is an unstable sequence in Eyak, as we have seen elsewhere, including also the phonetics of *-Vny#*, sometimes velar

nasal, *siya:n* ‘my mother’, palatal nasal.

Finally, it should be noted here that the sequence *-n-l#* stably occurs in open-stem gerunds with nasal stem-vowel, e.g. *O-tsin* ‘sing O’, gerund with *-l* suffix *tsi:nl* ‘singing O’, and *-ts’an* ‘strong’, gerund *-ts’a:nl*. Especially interesting here is the gerund *li’X* *’i:ni:* ‘laughing, laughter’, for which cf. *li’X l-le* ‘laugh, smile’, not the expected *?li’X lA-le:l* or perhaps *\*’i:ne:l*. The *’i:ni:* has to be reconstructed *\*nA-ne:-n*. Here the absolute initial *\*nA-* became *’i:-* before a coronal, and where *-ni:* has to be reconstructed *\*-ne:-n*, where the nasality of the suffix preserves the nasality of the onset and changes the */e:/* to */i:/*. That */i:/* is then denasalized by being adjacent to the */n/* onset. The *-n* suffix is the original form of the gerund suffix not otherwise *-l*.

## 6.6 Combinations and expansion of reduced vowels in verb prefixes

There are at least five quite distinct morphophonemic processes affecting reduced vowels in verb prefixes. All are treated in the morphophonemics subsections of the sections on the relevant inflections or derivations involved in verb morphology (Chap. 10), in some detail and with exemplification. Here, instead, a summary and more general principles will be presented, more of a conspectus.

### 6.6.1 CV+’i-

Shown first, and simplest to describe, is the sequence of verb prefix CA- and Cu- plus a prefix of the basic shape *’i-* in absolute word-initial position. There are at least four of these, but only three are relevant here, *’i-* indeterminate object (*’ida-* in most directives, cf. §9.1), and *’i-* of Zone D position 1, which occurs in some imperatives, conditionals, and customaries (cf. §§12.3, 15.5). Thirdly, there is the *’i-* unique to the theme *’i-le()* ‘wish’. (The 2s object *’i-* is not relevant here as it can itself occur only in verb-initial position.) The rule is simple enough, CA-’i- > Ci’- by /A/ taking the quality of /i/ and deletion of the second vowel. The CA- is always a qualifier and the *’i-* always of position D1. In the case of Cu-, the C is always a velar, *g-* or *k’-*, both of which can conserve labialization, i.e. *k’u-* indefinite, or *gu-* qualifier, both showing here that the vowel is distinctively /u/, the syllable not to be seen as KwA-. The *’i-* in the case of *k’u-* can be either the indeterminate object of position D1, or the *’i-* unique to the theme *’i-le()* ‘wish’. The rule here is simply Ku-’i- > Ku’-, /i/ being deleted. In both results a reduced vowel becomes full, with stigma /’/. Schwa becomes /i/, not /a/, because it takes on the timbre of the elided /i/. The glottal stop proves to be an essential segment of the *’i-* prefix and is preserved. (This is unlike the case of initial glottal stop of some prefixes, ’A- and in some cases *’i-*, where the glottal stop or the whole prefix may delete.) Exemplification and details are shown in the mor-

phononemics subsections that treat the relevant prefixes.

For further discussion of the 'i- prefix(es), particularly the origin thereof, see §6.7.1 on the possible relationship between the verb prefix AN- and 'i-.

### 6.6.2 Delabialization of \*CwA-

Eyak has the phonological restraint disallowing the sequence \*Cv'C, where v is a reduced vowel nucleus preceding coda glottal stop, tautosyllabic /'/; the following C is any consonant, sonorant as well as obstruent. The outcome is that the reduced vowel must become the corresponding full vowel,<sup>5</sup> and accordingly, /A/ becomes /a/. In fact, /A/ may have been the only reduced vowel of verbal prefixes (as discussed in §4.3.5) at the period when Eyak still had contrastingly labialized dorsals, i.e. uvulars as well as velars, and glottal stop (as alternative interpretation of preglottalized sonorant /'w/). Therefore CwA- > Cwa-/\_\_'C, and the labialization was then lost, e.g. \*qwa-' > qa', \*k'wa-' > k'a', \*'wa-' > 'a'. If not followed by tautosyllabic glottal stop, then CwA- > Cu-, creating contrast between reduced vowels, here /A/ and /u/, in prefixes.

This rule, involving PAE schwa following PAE \*qw- and \*'w- plus schwa, followed by tautosyllabic glottal stop, has to be considered partly historic, synchronically opaque, insofar as it involves \*qw- and \*'w-, the former of which is otherwise lost as such in Eyak. The PAE \*q<sup>w</sup>ə- 'areal, event' is obvious as \*q<sup>w</sup>ə- in PA, and must be cognate to Eyak qu'- ~ qa'- ~ qe'- 'irrealis event'. In the directive, where non-third person prefix on object position in the verb is lacking, 'u- is supplied before the irrealis '-', resulting in full 'u'- ~. That 'u- is cognate with PA \*wə-, evidently from PAE \*'wə-, third person P prefix, in most Athabaskan kept in other persons as well, immediately following the appropriate P prefix. (The future varies further, as a kind of umlaut on schwa, as qe'- where it follows the 'i- object prefixes, either the second persons, singular 'i- or plural LAXi-, or the indeterminate object 'i-, even across the directive 'ida'-, by analogy.) The u'- ~ a'- rule for both future and directive is clearly that a'- is required when no syllable intervenes between it and the stem, i.e. in pre-stem syllable. This rule is blocked, however, when 1s prefix x(w)- intervenes in the future, but usually not in the directive. This difference must be considered a trivial detail in comparison with the profound similarities between the future and directive.<sup>6</sup> Exemplification and details may be found in the morphophonemics sections of the relevant prefixes, especially under future (§12.1.5) and directive (§15.9).

5 This rule does not apply where Cv is a proclitic; hence proclitic dA= 'selfsame' and demonstrative adverb 'wAX 'that way' or 'LAX 'this way' remain, uniquely, dA'wAX 'that very way', dA'LAX 'this very way', not \*da='wAX, \*da='LAX.

6 It is also true that in allegro speech with 2s subject, qu'yi- often becomes qi'yi-, which has to be considered a very late or superficial change.

There is an important and interesting alternative to the CwA- > Ca'- delabialization rule where no syllable intervenes before the stem, by what appears to be the epenthesis of -wA- to provide the intervening syllable. The epenthetic -wA- has its origin in the labialization of the CwA- prefix. Thus instead of the usual *qa'leh* 'will do', 'a'Xah 'is telling of it', or C [*dik'*] *k'a'Le:G* 'C does not exist, not something is C', the result may be *qu'wAleh*, 'u'wAXah, or C [*dik'*] *k'u'wALe:G*, respectively. This alternative is less frequent in the corpus than is the Ca'- variant, but presumably always possible. The third form, C [*dik'*] *k'u'wALe:G* 'C does not exist', in fact might occur only once in the corpus, in a supplementary text from Anna, and the only instance where the glottal stop is from negative Neuter instead of future or directive.<sup>7</sup> This late-noted form is of considerable significance, however, in showing that the delabialization rule and also its alternative operate where the irrealis ' is of Zone D and the \*CwA- is of Zone A, exactly as they do in the future and directive, both prefixes are of Zone B (cf. §10.2). Both rules are therefore basically phonological, rather than some property of the future and directive, in spite of the fact that the future and directive do share at least one important property, expansion of qualifier vowel where no syllable intervenes between that and the stem, /u/ to /u:/, and, with no clear phonological motivation. /A/ to /i:/, q.v. §6.6.3.

In the case of the first person subject, where the x(w)- blocks the rule for /u'/ to /a'/ always in the future, and optionally in the directive, we have instances e.g. of 'u'wAXah 'I'm telling of it' as well as 'a'xXah. We have no instances of e.g. wAX?qu'wAxleh 'I'll do so' in the corpus, but this may be only because such was never tested. We happen to have also one non-verbal form where the same rules appear to have operated. That is the nominal *gu'wALwahg* 'tribesman' as in *sig'a' gu'wALwahg* 'of my tribe', lit. 'like me tribesman'. The stem does not otherwise occur, as this was certainly tested. The form must include virtually a reduplication of the postposition o-gwa' 'like o', i.e. *gu'wA-L-wahg*, where (o-)gwa'- > *gu'wA-*, exactly as in the verbal delabialization alternative.

### 6.6.3 Expansion of qualifier vowel in pre-stem syllable in future and directive

The vowel of any qualifier, or last vowel of disyllabic qualifiers, if preceded by future or directive, must be expanded in pre-stem syllables, /A/ to /i:/ and /u/ to /u:/. The /u/ is merely lengthened, which proves, incidentally, that e.g. *gu-* (< \*gwA-, where gw- still has at least nearly phonemic status) has really become underlyingly *gu:-*; e.g. *qu'gu:xdah* 'I'll chase it'. It seems clear that no morpheme has been added. For example, when a syllable intervenes, e.g. +D or vocalized classifier (viz. §11.3), the qualifier vowel is not expanded. For example, *dAleh* 'says', *qu'di:leh* 'will say', but *q'e' qu'dAdAleh* 'will say again'. It seems

<sup>7</sup> This one attestation is itself in an ill-formed utterance edited out, Raven Cycle III, sentence 47, *GAdAq'Anih k'u'wALe:G* 'there is no fog', clear on the tape and clear intention, but with no *dik'*. The very enunciation of the form, however, I take as proof of its existence, acceptability, and believe it and others like it could have been elicited, or might yet show up in the corpus.

the expansion is somehow phonologically connected to the combination of preceding *qu'*- or *'u'*-, i.e. ' , and no syllable before intervening before the stem. At the same time, however, that expansion still takes place if an extra syllable intervenes between the ' - and the expanded syllable of the qualifier, i.e. of a disyllabic qualifier, where the morphological factor that a disyllabic or even polysyllabic qualifier (the only type of verbal prefix that can be more than monosyllabic) is treated as a monosyllable for this rule, the motivation for which is not clearly explained phonologically in the first place. Thus e.g. *qu'lAXi:x'ah* 'I'll place it (berry)'. One might be reminded of PAE \**nə-* > *'i:n-* in absolute initial position before coronals (cf. §6.3.2), but that involved both nasalization and coronals, whereas this expansion operated in connection with any consonant position, e.g. *qu'qi:qeh* '(pl) will go by boat'.

This rule is in fact quite special in being phonologically opaque. At the same time it all the more pointedly suggests an important relationship between the future and the directive, however disparate their synchronic function in the verb system seems to be.

The result in the case of zero consonant stem-onset is also of some interest here. In *-a* '(sg) go', 'will go' is *qu'wah*, and 'he will go' is *qu'winhinh*, not *qa'ah/qa'inhinh*, which would be from *qa"ah/qa"inhinh*. Of special interest is that with qualifiers, *d-a* 'lose way, get lost', and *O-X-a* 'eat O', the future is *qu'di:wah* 'will lose way', and *qu'Xi:wah* 'will eat it'. From a purely phonological point of view, one should expect \**qu'di:yah* and *qu'Xi:yah*, with epenthetic /y/ after *-i:-* instead of /w/. Unless some kind of stem-onset "weak w" is to be posited for both these stems, which manages to appear only in this environment, or somehow the opaque *A > i:* rule is ordered after the relatively transparent epenthesis of *-w(A)-*, both highly unlikely, then *qu'di:wah* and *qu'Xi:wah* have to be interpreted as analogical with *qu'wah* interpreted as *qu'-wah*.

## 6.7 Verbal prefix AN-

The verbal prefix that is here symbolized *AN-* belongs to position D1, a conjugation marker. Earlier in the grammar it had been written as <A>. This prefix is represented by essentially four allomorphs. In absolute initial position it is 'A-, where the glottal stop is secondary. After a syllable with reduced open vowel, *AN-* becomes length, or length plus nasalization, under certain conditions, described in the following paragraph. Otherwise, *CA+AN* > *Ci:/\_\_(L-)P*, i.e. where no syllable intervened before the stem. The rules for this allomorphy are not completely explained by other known rules. Because of this complex allomorphy, the nasalizing element is not represented by the usual /n/, but more abstractly by capital <N>. The <A> of *AN* is obvious, because of the absolute initial 'A-, and at least the /a:/ allomorphs, from *A-A*. Morphologically, this prefix is the Active conjugation marker found in verb prefix position D1, in the Active imperative, Active optative, some Active conditional, Active desiderative, and optionally with the Active imperfective customary. In the sections for all these mode-aspects (Chap. 12), and



customary derivation (§15.5), description and exemplification is presented. Here a more general allomorphy and explanation is attempted.

Several rules are needed to account for the allomorphy of AN- in non-initial position. 1. If the preceding vowel is /i/ (of 2s object, indeterminate object) or /u/ (*gu*-qualifier, *k'u*-indefinite) the result is lengthening, 'i:(n)- or *Ku:(n)*-. 2. If the preceding vowel is /A/ and the AN- is in not pre-stem syllable, the result is *Ca:(n)*-. (The intervening syllable is either a vocalic classifier or 2s subject or Neuter *yi*-, or 2p subject *lAX*-.) 3. If the preceding vowel is /A/, and the AN- is in pre-stem syllable, the result is *Ca:(n)*- or *Ci*- (no nasalization) depending largely on the nature of the preceding consonant, *Ci*- if C is coronal, *Ca:(n)*- if not. Perhaps the most notable result is the *Ci*-, if in pre-stem syllable and preceded by a coronal (i.e. always *d*- or *l*-).

Quite possibly, we might be dealing here in principle with something like PAE \* $\text{ə}\eta^y$ -, i.e. a nasal which imparts /i/ or /y/ quality under certain circumstances. This reconstruction for both PA and PAE has been discussed at length in Krauss and Leer 1979. It is present in denasalized form as /y/ in the perfective and 2s subject prefixes *yi*-, reconstructed PAE \* $\eta^y$ i- for both in Eyak, a heavily sonorant-denasalizing language. (The \* $\eta^y$  is a palatovelar nasal, orally occlusive or not, non-occlusive being nasalized /y/.) There is a special temptation to see it this way in the case of singular Active imperative, which might then have overt 2s pronoun, as does the plural, but the Inceptive 2s imperative also lacks the 2s pronoun, and that pronoun is certainly not present in the other mode-aspects with AN-. Moreover, there is no trace of nasalization from the prefixes reconstructed as \* $\eta^y$ i-, and no trace as /i/ in the *di*- and *Li*- classifiers with perfective \* $\eta^y$ -. (For an extended discussion of the results of AN+*yi* (<\* $\eta^y$ i-), i.e. preferably -V:nli-, see §6.4.)<sup>8</sup>

There is considerable complexity in the allomorphy of the *Ca:(n)*- result, both in the nasalization, hence the parentheses, but also in the choice of vowel /a:/, depending largely on whether the preceding consonant is coronal. The one thing that can be shown without exception is that if the result is /i:/, the /i:/ is never nasalized. The rest is to be seen somewhat as statistical, there being varying frequencies of exception. Probably the clearest or closest to consistent are syllables with uvular onsets, *qA*-, *XA*-. The result is almost always *qa:n*-, *Xa:n*-, usually with the nasalization.<sup>9</sup> Exceptions like *Xi*- in this environment are quite rare. Velars do not come into play here, the relevant prefix results being *k'u:(n)*-

<sup>8</sup> There is indeed a phonemic contrast between e.g. segmental /n/ and nasalization, as shown in §4.2, however marginal, as the two are in almost complete complementary distribution. There was a tradition of writing Eyak nasalization with a diacritic (tilde or hook or superscript n). In designing a highly practical recent orthography there is a temptation to write nasalization with a capital <N>, as capital letters are used importantly to distinguish other phonemes. Not using <N> for nasalization, it turns out, is useful in that it allows for the use of <N> to represent in the grammar the nasal element in this particular prefix, which may in fact be a phonological element which is unique to this prefix.

<sup>9</sup> In this connection, I can remember Lena with the imperative *Xa:ne*: 'eat it!', from O-X-a 'eat O', and the look on her face that I should have no surprise at such a perfectly regular form; cf. *Xa:nxiyah* 'I should eat it'.

and *gu:(n)*-. The palatal *yA*- is very usually *ya:(n)*-, probably also nasalized more often than not. The coronals *dA*- and *lA*- are usually *da:(n)*- and *la*:-, the *da:(n)*- less often nasalized, the *la*:- perhaps never nasalized. These last two, however, are occasionally *di*:- and *li*:- instead of *da:(n)*- and *la*:-, less rarely than the preceding is *yi*:-. Exceptions to the rule *Ca:(n)*- with intervening syllable, *Ci*:- there are rare but possible. The point is that *Ca:(n)*- vs. *Ci*:- rules are certainly real, but somehow shallower and/or less rigidly observed, than are other rules for prefix vowels. Again, for details and exemplification see the sections on the mode aspects involved in Chap. 12 (and the customary in §15.5). Note particularly the subsection on morphology of the optative (§12.3.3).<sup>10</sup>

Looking at the details of frequency of nasalization with *Ca:(n)*- there is for some reason a correlation between type of onset consonant (C) and frequency of nasalization, e.g. *Xa:(n)*- having by far the highest frequency, *da:(n)*- the lowest, not counting *la*:-. However that may be, one should not be tempted to conclude that somehow the nasalization is a property of the preceding prefix, e.g. somehow \**XAN*-. The reasons for that are at least two: linearity requiring metathesis with the following /A/, and the need to explain the statistical correlations in any case.

Yet another allomorph of *AN*- is after ' of the directive, where *AN*- is zero. E.g. the Active imperative 'a'Xe: 'tell it!', not \*'u'AXe:, and probably not \*?'u'wAXe:; cf. 'a'Xinhinh 'he's telling it'. Another case, at least optionally, is after /h/ of qualifier 'i:lih-, e.g. *yAX* 'Adi:lihLa'ye: 'think about it!' which Lena prefers to Marie's *yAX* 'Adi:lih'ALa'ye:.

### 6.7.1 Possible relationship between *AN*- and 'i-

The discussion above, particularly the probable history of that as PAE \*əŋ<sup>y</sup>-, leads very temptingly to a consideration of the verbal prefix or prefixes of the shape 'i-, discussed above, i.e. the second person and indeterminate object prefixes, the prefix that occurs in imperatives, conditionals, and customaries, and lastly the 'i- unique to the theme 'i-le(') 'wish'. The relative phonological stability of that, both /i/ quality thereof, though the vowel is reduced, and the persistence of the initial glottal stop, not from the usual initial epenthesis, is phonologically remarkable.

Likewise, 'i- is somewhat remarkable morphologically. As will be shown in the chapter on morphology, there are pervasively three conjugations (Active, Inceptive, Neuter). However, in some cases there are four, the 'i- paradigms being the "extra" conjugation, as e.g. in imperative.

All this leads to the speculation, at least, that 'i- and *AN*- are related, or that 'i- is in some respect, at least historically, a variant of *AN*-. Etymologically, at least, then 'i-

<sup>10</sup> The Active optative combines *AN*- and *yi*- with considerable complexity resulting. Along with the case of the Active imperative, much of the complexity and statistics for frequency of nasalization were noted in connection with the Active optative. That was first described in the writing of that subsection, which is left as such, and to which reference is made herewith.

could easily be seen as  $*'ɨ^y-$ . Further, that might be  $*'-ɨ^y-$  or even  $*'ɨ^y-'$ . The  $*-ɨ^y-$  is to be identified of course with the  $-N$  of  $AN-$ , the  $/A/$  (or  $*ə$ ) deleted or elided, and the glottal stop segment conceivably connected to irrealis  $'-$ . Granted, this could at one extreme be taken as pure speculation. It is certainly plausible, however, from both Eyak phonology and morphology, so possible to probable historically. At the opposite extreme, it might even be considered to belong in Eyak morphophonology.

There are, on the other hand, Athabaskan prefixes of the shape full constricted  $i-$ ,  $< *i'$ -, e.g. in negative perfective, semelfactive, first person plural verb subject pronoun (with  $D$ -classifier), in the same prefix position as Eyak  $'i-$  ~ (as in  $-i'$ ). It is certainly tempting to connect these phonologically, though the semantics seem to present considerable challenge.

## 6.8 'A- ~ Ø

This prefix appears as 'A- only in verb-initial position, and specifically as 'A- only in negative  $s-$  perfectives, e.g. *dik'* 'AsLXa'tl'LG 'did not club it'; cf. *sALXa'tl'L* 'clubbed it'. In the Neuter imperfective negative, because of following irrealis  $'-$ , the prefix takes the shape 'a', by entirely regular rule, as in *dik'* 'a'LAts'anhG 'is not strong'; cf. *Lits'anh* 'is strong'. However, if e.g. a  $d-$  qualifier precedes, the result is zero for this prefix, as in *dik'* *dAsLXa'tl'LG* 'did not club it ( $d$ -class), *dik'* *da'LAts'anhG* '( $d$ -class) is not strong'. In both cases, not only is the glottal onset gone, but the vowel must be considered that of the qualifier, not that of the prefix, though also modified to  $/a/$  in the second case, Neuter, also by the  $/$  stigma.

As noted in §12.1.5) on the future and in §15.9 on the directive, the irrealis  $'-$  is fairly clear in the quite distinctive phenomena shared by the future and directive, both of Zone B. That same morpheme in Zone D, however is less obviously related. It would certainly be noticed only by a linguist, but the connection is virtually inescapable in the interpretation of e.g. Neuter imperfective negative directive *dik'* 'u:la'Lga:G 'doesn't know it'; cf. 'u'li:Lgah 'knows it'. The apostrophe is not "moved" (from Zone B to Zone D in the negative); it belongs in both places, but duplication is avoided by replacement with  $/:$  in Zone B in the negative. This can only be motivated by the all-important absolute morphological rule forbidding duplication of any prefix morphemes, shown here to operate even non-contiguously. The rule is certainly not phonological, as e.g. *te'ya* 'fish' is perfectly allowable; but 'u'-la-' not. This is very striking and clear historically. For synchrony, however, it poses an interesting question.

It should be noted also that there are a few instances of analogical spread of this absolute initial 'A- in repetitives, strictly in negative repetitives, e.g. from Lena, *dik'* 'ich' 'Axle'ggG 'I'm not bothering you' along with regular *dik'* 'ich' *xle'ggG* of the same meaning. More instances are cited in §15.3 treating the repetitive.

There is one other prefix that needs to be identified with this 'A- ~ Ø-', namely the *i-* ~ 'a'- of the comparative negative Neuter.

The 'i- is initial in positive comparative Neuters, or Neuter perfectives, e.g. *o-ga'* 'ixit'eh 'I am like o', *o-ga'* 'i:teh 'is like o' or 'i:'yahL 'is situated', 'ixi'yahL 'I am situated'. This is quite different from the 'i- prefixes discussed above, which keep the glottal stop and impart /i/ quality to preceding /A/; see §6.6.1. It is much better to see this as 'A-, the same morpheme as above, or at least as underlyingly homophonic to it. The reason that it takes the form 'i- is simply that 'A- undergoes vowel harmony with the following vowel, immediately following or not, which vowel is always /i/ of the positive Neuter, as in *o-ga'* 'ixit'eh 'I am like o', 'i:t'eh 'is like o' (< 'A-yi-t'eh, see below). This works even across syllabic 2p subject pronoun -LAX-, though presumably only by analogy, e.g. *o-ga'* 'ilAXit'eh 'you pl are like o'. When preceded by another prefix, e.g. qualifier *l-*, this prefix is simply deleted, e.g. *li'X* *lixit'eh* 'I'm smiling' (< 'am facially'), *li'X* *la:lAXit'eh* 'you pl are smiling'. The vowels of the first verb syllable are those of the qualifier only.

Since this prefix is deleted in the presence of any prefix preceding Zone A, B or C, or Position D1 (cf. §10.2), it is therefore in complementary position with any of those. If for no reason other than its function as conjugation marker or resembling that, it is certainly to be assigned also to position D1, rather than A (direct object), B (future, directive), or C (qualifier).

The 'a'- variant is the 'A- in initial position followed by irrealis '- of Zone D (no -yi-) following the 'A- in negative Neuter imperfective and perfective, in Neuter optatives, conditionals, desideratives, as in *dik'* 'a'Le:G 'is not', etc. In *dik'* *da'Le:G* '(wooden) is not', for example, the *da-* is the *d-* qualifier and the 'A- is zero.

## 6.9 CV+yi-

The rules for combination of CV of any verb prefix plus *yi-*, either of 2s subject or positive Neuter *yi-*, are quite simple, summarized in (7). Examples are given in (8).

### (7) Morphophonemics of CV plus *yi-* combination

Cu-yi- > Cu:-

Ci-yi- > Ci:-

CA-yi- > Ci:-

### (8) Examples of CV plus *yi-* combinations

C *k'u-yi-Leh* > *k'u:Leh* 'something is C, C exists'

'i-yi-gah > 'i:gah 'you are dancing'

GA-yi-we:-L > *Gi:we:L* 'you are swimming along'

LAXA-yi-XAL > *LAXi:XAL* 'is drunk'

In the last three items of (8) *GA-* is the Inceptive perfective conjugation marker of Position D1, *LAXA-* is a qualifier of Position C4, and *'i-* is indeterminate direct object of Position A, all with the same result, whether the *yi-* is 2s or positive Neuter.

When the *yi-* is preceded by /' / or /h/, stigma or consonant, the *yi-* remains. Thus e.g. future *qu'yiweh* 'you will swim', directive *'u'yiXah* 'you are telling it', *o-ga' 'i:lihyit'eh* 'is mentally like o' (where the usual comparative Neuter *'A-* is  $\emptyset$ ). To identify the instances of *yi-* in these forms, it must be remembered that 2s subject *yi-* is  $\emptyset$ - in positive Neuter imperfectives and perfectives, all *s-* perfectives, optatives, imperatives, and with all vocalic classifiers. Neuter and optative *yi-* is seen as *i-* in all vocalic classifiers, thus *di-*, *Li-*, but with  $\emptyset$ - preceding the classifier.

## 6.10 Vowel harmony

There is one pervasive rule of vowel harmony, that any *CA-* > *Ci-/\_\_(C)Ci-*, provided that no C involved is uvular or stem-initial. Examples are shown in (9).

### (9) Vowel harmony

#### a. Examples with harmony:

*'A-x-i-t'eh* > *'ixit'eh* 'I am'

*dA-si-li-L* > *disilil* 'I said'

*q'e' dA-s-di-li-L* > *q'e' disdilil* 'I said again'

*dA-Li-ts'anh* > *diLits'anh* 'd-class is strong'

#### b. Blocked by uvulars:

*LAXA-xi-XAL(-L?)* > *LAXxiXAL* 'I'm drunk'

*XA-si-y-ahL* > *XAsiyahL* 'I ate it'

*qAdiLikugX* 'it (stick) is brittle'

This rule does not apply across stem-initial, as *dA-sA-li-L* > *dAsAlil* 'said'. As pointed out in §6.8, the *'ilAXit'eh* < *'A-LAX-i-t'eh* 'you pl are' must be egregiously analogical, to operate across *LAX-*.

It so happens, coincidentally, that there are no verb prefixes of the simple form *CA-* to the left of qualifier position C4, at least that are not uvular-initial (*qA-* of C2, *XA-* and *GA-* of C3) (cf. §10.2 for verb prefix zones). This leaves only syllables of the shape *yA-*, *dA-*, and *lA-* of the last syllable of C4, of C5, C6, and C7. The most frequent combination of these by far is *dA-lA-*, which regularly becomes *dla-*, removing it from this rule, though creating further issues, to be discussed in §6.13. That leaves only *yA-dA-* and *yA-lA-* for further consideration for vowel harmony, stretching leftward beyond one syllable. The results here seem inconsistent or unclear. The directive Active perfective stative theme *O-'y-l-ta* 'expect O' is the most frequently attested or elicited. At least some of the time it is transcribed e.g. *'u'yilisitahL* 'I expect it', *xu'yilisditahL* 'I am expected', but at least

some of the time such themes are transcribed with *-yAli-*, *-yAdi-*. The problem is further complicated by the fact that *y-* has such a strong phonetic influence on unstressed schwa as to severely compromise the distinction between schwa and reduced /i/ in the first place. It is of special interest in this connection to see the rule order between vowel harmony and *\*nA > :n/\_\_[+cor]* in the case of analogical *'u'ya:xitahLinu:* 'I expect them' (from Lena, with her frequent denasalization) along with *'u'yilixitahLinu:*. We also have from Lena the pair *'u'yAliditinhinu:*, and *'u'ya:ditahLinu:* 'they are expected'. The first variant here is either analogical or the vowel harmony, operating first, blocks the *\*nA > :n* rule, and the second variant shows the reverse.

## 6.11 Vowel fronting

Beside the fronting just discussed as vowel harmony, and that described above as nasal umlaut, and the somewhat unusual progressive fronting in future *\*qWA-'* after *i-*, there is some fronting of /a/ in compounds or nominalizations where /a/ is followed by *'i-*, as described also in §6.15. Such occurs sporadically before *y-* also, notably in *te'ya* 'fish' < *ta'-ya* 'water-thing', *qe'yiLteh* 'whale' < *qa' yiLteh* 'lies inert up out', dramatically in *tse:le:Xquh* ~ *tse:le:Xquh* 'octopus' < *tse:-lA-yaX quh* '(pl) stay under rock', *yAqe:X* 'tomorrow', presumably from *\*yAqah-yAX* 'before dawn'. A more complex example is *-lAXe:'nah* 'relative, friend' shown above, < *\*nA-Xa:n' nah* > *-lA-Xa:'nA-nah*; for this cf. *GALqa'i:nah* 'middle sibling' where *#nA-nV- > #'i:nV-*, creating the vowel that fronts that of *-Xa:'*.

There are at some instances of high vowel fronting as well, /u/ > /i/. This happens optionally in more rapid speech with second person singular future, *qu'yi-* 'you will' > *qi'yi-*, very frequently, and in one other item, as so far noted, *li:ya* 'beach food', almost certainly from *\*lu:-ya* 'tidebeach thing'. Further, there are two instances of this with reduced /u/ in historical indefinite *k'u-* direct or prepositional object, probably in the preverb *k'iya* 'to landing-place', < *k'u-ya* from *o-ya* 'into concavity', and certainly in *k'iya't* 'fish meat', cf. PA *\*-ŋ'a't* 'meat of P (fish)', obviously due to influence of the following palatal sonorant in lexicalization.

In addition to the usual progressive or anticipatory assimilation, as mentioned above is the unusual progressive assimilatory fronting of the vowel in the future prefix *qu'- ~ qa'-* (< *qWA-'*) of verb prefix Zone B to *-qe'*, when that is preceded in Zone A by the object prefixes for 2s *'i-*, 2p *lAXi-*, and indeterminate *'i-*. This is clearly motivated by the /i/ timbre of the prefix vowel. However, the fronting of the future prefix vowel still occurs with the *'ida'*-form of the indeterminate object prefix as is regular in the directive derivation, *'ida'qe'*,

in spite of the intervening *-da'*, which should be expected to block the rule. This can only be explained by analogy, as noted also in the subsection on verb prefix Zone B (§10.2.2).<sup>11</sup>

## 6.12 Morphophonemics for 'i:lih-~

The morphophonemics of the unique qualifier 'i:lih-~ are special to that, so belong perhaps best under 'i:lih- (§17.10.1), where they are described in detail, so only summarized here. Given the C1 position of 'i:lih-~, and that it combines with no other qualifiers except a following *qA-*, only Zone B and A are involved (cf. §10.3). With 'Ad- reflexive of A, only initial '~, insofar as it is real, is dropped, thus 'Adi:lih-. With CV- of /A/, is object, (')i:lih- > -:lih-, thus e.g. with 1s object the result is *xu:lih-*. With future of B, *qu'*- or \**qwA'*-, the result is *qe:lih-*.

Since this prefix ends with /h/, uniquely for all verb prefixes, there are some unique result with the prefixes of Zone D. Most importantly, the *yi-* of Neuter and 2s is preserved as such before (*L-*)stem. As noted above here the 'A- ~ Ø- of the Neuter perfective and comparative Neuter imperfective is zeroed out, leaving *yi-*. This preservation of *yi-* is special to 'i:lih-, but based on the general point that between reflexive 'Ad- of Zone A and the subject prefixes of Zone D, there are no prefixes that end with a consonant other than the glottals, /h/ of irrealis ' and /h/ of 'i:lih-.

## 6.13 Morphophonemics of the qualifier combination *d+l* (> *dla:-* ~)

The combination of two most common qualifiers *d-* plus *l-* uniquely produces *dla:-* instead of \**dAlA-*, as noted in Chap. 17 on qualifiers, no doubt because of homogeneity and the existence of a phoneme /dl/, with which this *dl-* is homophonic. In verbs this may be considered basically *dla:-* as in the *s-* perfective *dla:-sA-*, all *dla:GA-*, *dla:-* with vocalic classifiers and before (*L-*)stem. In a combination preceding the prefixes discussed above here, however, this qualifier combination acts like *dLA-*. Thus in future and directive in pre-stem syllable, the *dLA-* expands to *dli:-*. Likewise, immediately followed by *yi-* of the 2s subject and of Neuters, the result is *dli:-*. With *AN-* of Active imperatives in pre-stem syllable, the result is *dli:-*, whereas in Active optative, the result is *dla:-*, there being always another syllable, with /i/ in pre-stem. Likewise with prefix 'i- of Position D, the combination acts like *dLA-*, with the result *dli'*-. (Thus we have a minimal pair *XAdli'ya'* 'run (don't walk)!' vs. *XAdli:'ya:'* 'run (somewhere)!'.)

Since examples of *dLA-* plus 'i- are hardly abundant, a few are presented in (10).

<sup>11</sup> One exception has been noticed in the corpus: *ya'Xu: 'u'e:X 'ida'qu'di:Lqe'dX* 'don't ask about it', elicited from Lena.

(10) Examples of *dIA-* plus 'i-

'u'ihX XAdli'yinhinh 'run after him!' (from Marie, probably better: -yin'inh)

'u:dAX gAdli'sha' 'dig a drainage ditch along there!' (from Lena)

'uka:XAch' 'i'XAdli'xyah da:X 'I was just about to catch up to him and ...'

dALich'a' qAdli:L'eh 'you are always fooling people' (2s Active imperfective, usitative, Anna in text)

dA'u:d qa' XAdla:li'yinhinh 'OK let him run away' (Active optative, with sequence *dIA-AN-yi-*, from Lena)

Perhaps rarest of all are examples of *dIA-* followed by /'/, thus *dla'*-. The first is written *dik' dIa:xL'ehLG* 'I don't have it hidden', from Lena, which almost certainly should be corrected to *dik' dIa'xL'ehLG*, or conceivably *dIa:'-*, in accordance with all other instances of negative Neuter (perfective).

Evidently quite rare also is what must very probably be correctly transcribed *dIa'ya:g* 'it's leaning over slowly' (i.e. 'bit by bit') from Marie, an Active imperfective repetitive, transcribed in fact very deliberately with a micron over the <a>. Here this is written and specified as <a> because of the tautosyllabicity of the /'/ from the stem-initial -'y-. The Active imperfective is, because of the repetitive, an Active derivation, i.e. a derivation which requires shift to Active conjugation.

The behavior of the *dIa:-* qualifier combination is somewhat complicated preceding postpositions, particularly the five non-syllabic, preceding syllabic postpositions that themselves have stem-initial *l-*. We know the etymology is \**dA-nA-*, which has a precise cognate in Athabaskan \**də-nə-*. It should therefore perhaps not be surprising that in some respects, though only in connection with these postpositions, the combination seems to exhibit further nasalization to the right, as though to compensate for the loss of nasalization in *dl-*. With two of the non-syllabic postpositions the *dIa:-* becomes *-dlinA-*, i.e. *-dli:nAX* and *-dli:nAch'* (so presumably in *-dli:nAd*), but the result is *-dli:na'* in *-dli:na'tl'* and *-dli:na'q'*. (Neither coronality can explain this, nor, because of *-dli:nAch'*, can ejection. The *l-* qualifier alone presents similar problems, but there also alternations between *-i:nA/a-* and *-a:nA/a-*.)

The *dIa:-* remains such before most syllabic postpositions, including also *o-q'* 'on o' when followed by a vowel, apparently epenthetic, to permit this, as in *dIa:q'Aya'* 'mountain goat' < 'thing on *dl*-class (rocks)', *dIa:q'Adqa'* 'porcupine's hole', probably from \**dIa:q'dAqa:*. Postpositions with onset *l-* after *dIa:* entail some complications, however, presumably from the former nasal on both sides. Here evidently, as distinction is made between *dIa:-* as a noun class-mark and the *dl-* as thematic with *l-* anatomical in origin. As class-mark we have only one example, *tsa:dIa:lah* 'around a stone', lacking special development, perhaps analogical. As in the case of *l-* qualifier alone, where *dl-* is anatomical or thematic, the result is *-dli:nV-*.



For *dla:-* with adjectives with onset *l-*, we have only the case of *-lAw* ~ ‘big’, where *dla:-* is *dli:-*, in *tsa:dli:’nAw* ‘big stone, rock’ from both Lena and Marie. This may be different from the case with *l-* qualifier, *-a:’nAw* as well as *-i:’nAw*.

There are occasional instances of loss of preglottalization of stem-initial sonorants immediately after *dla:-* qualifier, e.g. in *yAX XAdla:ya:X* ‘running’ (gerund of *-’ya*), or *k’uhdLdla:mahd* ‘berry species’ (< *k’uhdL-d-la’mahd*, lit. ‘moss-berries’).

## 6.14 Consonant morphophonemics

A most striking characteristic of Eyak is its extreme paucity of consonant morphophonemics, given its large consonant inventory and polysynthetic nature. Eyak therefore allows for a large variety of consonant clusters. Changes at word-internal morpheme juncture are very limited. One type of such is the loss or deletion of suffixal fricative immediately following identical stem-final fricative, as in *GA-xuL-L* > *GAXuL* ‘it is rolling along’. This evidently applies also where followed by vocalic enclitic, e.g. *GALxuL=inh* ‘he is rolling it along’, even though the possibility of an optionally contrasting *?GALxuLLinh* was evidently not checked. The two other such potential simplifications or deletions are *-X-X* in perambulates (§15.7) and Neuter imperfective ‘liability’, and *-sh=sh* interrogatives §27.3, which presumably both also become single */X/*, */sh/*.

The same does not apply to sequences of two identical fricatives in stem onset, however, as shown in (11).

- (11) Clusters of equal consonants in onset

*GAXxuL* ‘I’m rolling along’

*dik’* ‘AssinhLG ‘it did not die’

*dik’* ‘AxssinhLG ‘I did not die’

*dik’* ‘AshshehLG ‘you didn’t kill it’

The *x-* ‘1s subject pronoun’, and *s-* (or *sh-*) of the *s-* perfective negative are the only such possibilities, not counting *L-* classifier.

No verbs with stem onset *L-* and classifier *L-* are attested. The only common verb with stem-initial *L-* is *-Le’* ‘be’, and the causative of that is suppletive *O-LXa’*. Possible */LL/* was not aggressively tested, and the few instances with vocalic classifier are *dA-L-*, not *LA-L-*, indicating either an absence of original */LL/*, or that such have lost that classifier.

On the other hand, perhaps the only stem initial consonant alternation in Eyak is the combination of prefixal *L-* and stem-initial sonorant *l-*, where *sometimes Ll > L*. There are two verbs in which this change is obligatory. One is the very basic and somewhat irregular *-le* ‘act, do, happen’, causative transitive *O-Li* ‘act on, process O’ (with irregular Active and Neuter perfective *-liL*, *-LiL*; Inceptive perfective *-le:L*, *-Li:L*). However, where the classifier is vocalic, the *l-* stem onset in the transitive remains, so e.g. passive Active

perfective *sLilL*, *sdilL*, Inceptive perfective *GALAl:L*, *GAdAl:L*. The other such stem is irregular *-le'g* 'move hand', where with *L*-classifier *L-le'g* becomes *Lu'g*, and reduced *L-lug* becomes *Lug*. With all other *l*-initial verb stems there is no change in /L/, even optional.

The same change *Ll > L* occurs *optionally* with some *l*-initial postpositional stems, after the /L/ in *'iL-*, reciprocal object of postposition, and in *o-GA-L-* 'extreme of series of o'. Thus e.g. *'iLli'* or *'iLi'* 'deep inside each other', *GALli'd* or *GALi'd* 'the one deepest inside', likewise with *o-lah* 'around o', *o-la'* 'down over o's head', *o-lu'* 'through hole in o', *o-lahdz* 'forward of o', but not *o-LAG* 'above o', *o-LAX* 'beyond, more than o'. The exact phonological conditioning preventing deletion of /l/ in the last two, or how carefully these were checked, is not entirely clear.

It should be emphasized that the *Ll > L* changes above are the only signs of laterality connecting the obstruent /L/ and sonorant /l/. The sonorant /l/ is historically and morphophonemically connected with the sonorant /n/ and nasality, with which it alternates. Those alternations constitute a major section of Eyak morphophonemics. The only other possible connection between /l/ and /L/, on the other hand, might be the gerund suffix *-l* to open stems and suffix *-L* to closed stems. The latter might be of entirely different origin, however, connected instead to instrumental *-L*. For more on this see the sections §18.13.1 on the gerund, §18.13.2 on the verbal noun, and §18.13.3 on the instrumental.

Another set of consonantal morphophonemic changes are at morpheme junctures of /d/ plus coronal fricative or /l/, with resulting affricate /dl, dz, dj/. These are probably all optional at stem coda, especially *dL > dl*, as optionally e.g. in the instrumental *XahdL* 'sled' (*O-L-Xahd* 'drag O lengthwise'), in which the /d/ is released as such. This form can also be realized as *Xahdl*, with the coda stop released laterally. This is probably less frequent or not acceptable with interrogative enclitic, e.g. *Lanhd=sh* 'smoke?', probably not also *\*?Lahndj*, not tested. Such questions can arise with reflexive direct object marker *'Ad-* and *L-*, *s-*, *sh-* in verb prefixes, e.g. *'AdshdishehLsh* 'did he kill himself?', also *'AdshshdishehL*. This was not tested, but it is probable that /d-L, d-s, d-sh/ at least remain a possibility (as opposed, however unstably, to /dl, dz, dj/). It also appears that *'Ad-* plus sonorant may remain stable, as e.g. in *'Ad-la:LAXe:* 'paint your face!', written in 1970 orthography with the sequence <dl>, not with <λ>, and specified as /d.l/ with released /d/, and fully voiced sonorant /l/, not an affricate, by Lena (notebook IV, p. 125).<sup>12</sup> On the other hand, though, *'Ad-* plus *dla:-* qualifier combination does regularly become *'Adla:-*, as e.g. in *'Adla:sLi'ehL* 'sneaked', reflexive of *O-dl-L-'e* 'conceal O'. This is from *'Addla:-*, even though there is no simplification of sequences of identical stops, /dd, gg, GG/, at least at coda morpheme juncture. Finally, in connection with prefix *'Ad-*, initial *'-* of directive *'u-* deletes, thus *'Adu'* in directive reflexive, which corresponds to Athabaskan conjunct. This contrasts interestingly with the reciprocal *'iLu'*, which is the only form for the reciprocal

<sup>12</sup> Any Eyak orthography using digraphs for affricates in this case becomes inherently inadequate in this detail. That could of course be avoided by use of hyphen or period, but such has not been the practice.

object, necessarily preverbal as far as is known, while its historical origin must be exactly analogous to the reflexive 'Adu'.

One other instance of such simplification is at stem onset with prefixal -V' and onset -'V, e.g. *qa'-'a'ch'* > *qa'a'ch'* '(pl) will go', where as noted in the discussion of reduced vowels (§§4.3.2 – 4.3.5), that the orthography distinguishes that from *qA'a'ch'* '(emphatic pl) go' by the different symbol for reduced preceding vowel. This alone is of course not the only reason for using a special symbol for schwa, which is both reduced /a/ and /e/. The issue is a complex one, discussed largely in the phonology section on vowels (§4.3), but with implications also especially for prosody.

One fricative suffix deletion is not strictly phonological. The -X of the perambulative occurs as such only in the Active imperfective (and in gerunds), e.g. *yAX xdAwe:X* 'I'm swimming about', likewise negative *dik' yAX xdAwe:XG* 'I'm not swimming about', gerund *yAX 'iswe:X* 'swimming about'. This -X is otherwise deleted even where no other suffix competes, e.g. Inceptive imperfective *yAX qu'xdAweh* 'I'll swim about', or as often happens, *yAX qu'xdAwe:*. The variant with lengthened vowel implies that the -X is optionally present at some point in the derivation but later deleted. For further discussion, see §15.7 on the perambulative derivation.

There is one further fricative change, optional assimilation of the perfective verb prefix *s-* to *sh-* before stem with onset or coda obstruent of the CH-series (/dj, ch, ch', sh/), as e.g. in *shA-shehL* or *sA-shehL* 'killed it', *shA-'a'ch'L* '(pl) went'. Frequency of such assimilation no doubt corresponds at least in part to speed of utterance. There may be no variants with fricative of intermediate quality. The reverse does not normally occur even in sandhi, e.g. *'Ash sahl* 'went entirely across' does not become *\*'As sahl*.

Note also, phonotactically, that there are no Eyak stems combining TS- and CH-series in onset and coda.

There are traces of a much older or at least very different TS~CH alternation in the single pair *-ts'an'* 'strong' and *-ch'a:n-G* 'weak', and probably likewise *'ishguG* 'lie, untruth' as opposed to *'is-* as the normal gerund prefix. Perhaps also *'ishta:lA-* in 'once upon a time'. For this cf. Tlingit with pejorative TS > CH shift.

At a far shallower level we have some deaffrication of the coda, evidently limited to *dz* > *s* followed by /d/ in at least two forms, *gehsdah* 'poor thing', adverbial, from *-gehdz* 'be poor', and *o-lahdz* ~ *o-lahs-d(-)* 'in front of o'.

### 6.14.1 Anomalous *gu-k-a:*

Utterly anomalous is the sequence of *gu-* qualifier plus the postposition *o-a:* that goes with numerals for classified nouns, probably to be identified with *o-a:* ~ 'for o, of o', and with the epenthetic *-a-* or augment *-a-* that occurs in postpositions with final *-q'* or *-X*. That

postposition *o-a*: ~ has zero onset with personal pronoun possessive prefix of the form CV- with reduced vowel, with appropriate epenthetic /y/ or /w/, e.g. *k'uwa*: 'for something', *'uwa*: 'for him', but epenthetic /'/ otherwise, e.g. *qa:'a*: 'for us', *'il'a*: 'for each other'. However, with numerals and class-mark qualifier *gu*- 'filament-like', the result is not *\*gu'a*, or *\*guwa*, or *\*ga*; cf. *da*: for this with *d*-qualifier. The result with *gu*-, instead, is *gu-k-a*, with epenthetic /k/! Likewise in postpositional phrases *o-gu-k-a-q*', *o-gu-k-a-X*. This is totally without parallel in Eyak, without any clear phonological motivation. Conceivably, the motivation is lexical, namely the noun *-gu-ka*' 'tail (of bird)', always with *gu*- (intrinsic) qualifier, which corresponds to PA *\*-ke*' with the same meaning. That *-ka*: is entered in the dictionary as such, as possibly related to the stem *-ka*', but must certainly be seen as containing *o-a*:. This item is discussed further in Chap. 16.

#### 6.14.2 Glottal stop sequences

One especially important word-internal sequence of two glottal stops occurs with the Future prefix allomorph *qa'*- immediately followed by glottal onset stem, *-V*. The rule here is *qa'-V > qa'V*, i.e. " > ", with single ambisyllabic glottal stop, neither doubly released nor distinctively geminate, but with stressed full vowels on either side. This contrasts with *qa'V*, where *qa*- is open and unstressed. In fact this sequence, more than anything else, creates the contrast between full /a/ and reduced /A/. Without that sequence, or if that sequence were written *qa"V*, the need for writing those two vowels differently would not exist, as they are in complementary distribution (cf. discussion in §4.3.5). Indeed, as noted above, if a sonorant follows instead of a vowel, as with the stem *-ya*' 'be situated', preceding CA- prefixes become Ca-, so e.g. *sA'ahL*, but *sa'yahL*, both 'is in position'.

### 6.15 "Sandhi"

In a somewhat different category, there are occasional observations of sandhi-like minor consonant and vowel changes, neither extensive nor systematic. To some extent these must be related to speech-tempo, these deserve further research in the sound recordings of the language. More evident, however, at the present stage of our knowledge of Eyak phonology, are anecdotal observations of such minor changes in connection with lexicalization. Perhaps most common is deletion of /'/ next to another /'/, or after ejective obstruent. E.g. *sitl'a:ch'inh* instead of *sitl' 'a:ch'inh* for 'my would-be seducer', lit. 'he who persistively [says] "comes with me"'. This highly expressive form very evidently is a lexicalization, with "words run together." Likewise with many color terms, routinely *o-gu'i:t'eh*, *o-gA'i:t'eh* 'like o (in color)' from *o-g(w)a' 'i:t'eh*. Here the sandhi is written in the text transcriptions by umlaut over the vowel of the postposition, because the vowel is often fronted by the closely following /i:/. The same reduction is frequently found in the proverb *ya*' 'completely, to a point of rest' with Active imperative 'A-, as in *ya' 'Ade*: 'sit

still!’ > *yA’Ade*. It is unclear how widely this may happen with other preverbal. We have one instance *sikā’ ’iya* ‘come with me!’. Such reduction may be restricted mainly to the items just referred to. There may be no attested reductions with other such preverbal, e.g. *qa’* > *\*?qA-*.

In these cases, also prosodic change is to be expected. E.g. a preverbal is a word and should have a stressed vowel, as even in *sitl’* ‘with me’. However in *sitl’a:ch’inh* ‘my would-be seducer’ as lexicalized above, where *si(tl’)-* has become purely prefixal, that accent is lost.

Another example, not subject to prosodic change, is what sounds like *dAq’a:gda:tl’AX* ‘steamboat’, clearly from *dAq’a:g-da:tl’* ‘AX’ ‘boat with fire (*d*-class)’. In fact, probably all sequences of ejective plus ‘V in compounds become C’V, especially with epenthetic -(‘)A- (cf. §6.17), where the variant -A- is presumably automatic, e.g. *Le’t’Akih* ‘little box’, presumably never realized as *\*?Le’t’Akih*.

Closely related to the above, shown as “umlaut” is phonemic change in certain lexicalizations, e.g. *qe’yiLteh* ‘whale’ and *te’ya* ‘fish’, where *-a’y-* > *-e’y-*, and differing degrees even of loss of ‘i- in *-Xa’i-le* > *-Xe’le* and *qa’ ’i-le* > *qe’le*, q.v. under the stem *-le(’)* in the dictionary. Further *qe’gu:l* ‘thunder(bird)’ < *qa’ ’i-gu:l* and *qe’xu:tl’* ‘porpoise’ < *qa’ ’i-xu:tl’* These are of course phonologically motivated, but strictly in lexicalized forms.

At the opposite end of the scale of lexicalization, related to speech tempo, might be mentioned e.g. fronting of /a:/ to or toward /e:/ before ‘i- as in *da: ’i:’a’ch* > *de: ’i:’a’ch* ‘let’s go’, highly superficial though potentially “phonemic,” potentially written with umlaut. Somewhere in the middle is adverbial *’idehdah* ‘quite well’, which can have no other origin than repeated *’idah ’idah*.

There are a number of inter-word coincidences of uvulars across word boundaries where it is not clear e.g. that /XX/ contrasts with /X/, e.g. *ya:X XAdla:sAq’ahL* ‘it burned up’, which may well not contrast clearly with *\*ya: XAdla:sAq’ahL*, though if anything is interposed the /X/ on each side would be heard. Far more significant is the apparent deletion of -G in *dik’ ’Aw q’A’Aw* ‘that’s not it’, negative of *’Aw q’A’Aw* ‘that’s it’. Cf. *dik’ ’AwG* ‘not that’. Here the expected negative suffix -G as in *\*dik’ ’AwG q’A’Aw* is deleted, i.e. here *-G* >  $\emptyset$  /  $\_ q$ , specialized but routine and confusing. See further in Chap. 24 on negation. Similarly, the sequence /G q/ of emphatic 1p independent pronoun together with the possessive pronoun ‘our (own)’ *\*GAyAG qa:* is regularly realized *GAyAqa:*. These reductions are presumably by no means evidence of regular obligatory sandhi rules, but rather involve some degree of lexicalization, along with e.g. speech tempo, as noted above.

A very common deletion and contraction is in the sequence *’ahnu: ’u-* > *’ahnu:-*, where *’ahnu:* is the 3p human demonstrative and *’u-* is the 3<sup>rd</sup> person possessive or postpositional object. There has been no consistent policy on showing this, i.e. more often than not, it is written *’ahnu: ’u-* instead of as *’ahnu: [’u-]* i.e. written as underlyingly without editorial device, even when realized as *’ahnu:-*. Thus e.g. surface *’ahnu:ta:’ shAshehL*, even though

representing underlying *'ahnu: 'uta: 'sashehL* 'they killed his father' so underlyingly, it may stand written the same as *'ahnu:ta: 'sashehL* 'killed their father', where 'their father' has to be the object, and the subject could even be 'it (the bear) killed their father'. Likewise *'ahnu:lAX 'isAL 'anhL* could represent either *'ahnu: [ 'u]lAX 'isAL 'anhL* 'they saw it' or *'ahnu:lAX 'isAL 'anhL* 'it saw them'. This seems highly disconcerting, at least to the learner of Eyak, yet it seems as basic to Eyak as e.g. the homophony of *him* and *them* in normal spoken English.

Note also, that there is a minor or very trivial amount (relative to Athabaskan!) of what might be called sandhi between a few preverbals and verb word initial. For this see §16.12.

## 6.16 Structure and morphophonemics of prefixes and of preverbals

Much of the phonology particular to prefixes has been dealt with above, especially the status of reduced vowels (§§4.3.2–4.3.5). Further comments are in order here. First, the main exception is one set of prefixes, namely qualifiers particularly of the subposition C1 and C4 (cf. Chap. 10), as several of the C4 qualifiers are in fact incorporated stems, and C1 *'i:lih* is a whole verb theme. Except for those, prefixes have no full vowels other than V-, and even that is secondary, as explained in §6.6. All instances of Vh (exclusively with *'i:lih*) and V' (exclusively with irrealis '- and 'i-, which might be related to irrealis) are likewise secondary and explained in §6.6). The only nasalized vowels are also so explained. Moreover, reduced vowels other than /A/ are discussed further in §4.3.5. Insofar as those can be explained as secondary, that leads to the conclusion that at some level, with the exception of 2p prefix *lAX(-i)-*, the incorporated stems in the qualifier zone, all (syllabic) prefixes are or were originally CA-.

The other exceptions to this are all personal pronouns. Both those of the shape *'i-* have initial glottal stop, which allows reduced vowel contrasts (cf. §6.6.1). At the same time, the second person singular object, *yi-* ~ as subject, plainly involves PAE *\*ŋʷ*; indeterminate object *'i-* may well involve *\*ŋʷ*, as noted, or at least speculated, in §6.7.1. The second person plural, *lAX(-i)-* is altogether exceptional. The reflexive *'Ad-* is literally a borderline case as prefixal to the verb, sometimes preverbal, and is probably an innovation as object of postpositions. Reciprocal *'iL-* is prefixal only as object of postpositions, another such exception. The prefixes with rounded vowel /u/ are only with PAE labialized velars as onset or from *\*wə-*. Likewise, both *yi-* prefixes of Zone D are obviously derived from *\*yə-* < *\*ŋʷə-*. Most problematical is the 1s possessive prefix *si-*, and that is clearly connected to the problematical nature of the PAE consonant representing first singular in PAE, reconstructed *\*\$*. That deliberate abstraction is to account for what in Eyak is *si-* (~ *i-*

, i.e. *si-* with *s-* perfective), as well as *xw-* subject, *xu-* object, *xu:* independent, equally problematical in Athabaskan (\*š ~ \*x/g).

There are very few Eyak prefixes of the shape C-, non-syllabic. In fact aside from irrealis '̄, these are only 1s subject *xw-*, the *L-* classifier as such, and also perfective *s-*. The *L-* classifier becomes syllabic only secondarily, when followed by the vowel of what was the *dA-* classifier (cf. Chap. 11). Likewise, *s-* perfective is *sA-* when immediately followed by what was PAE perfective marker \*ŋʷ(ə)-, though it is not easy to justify such an analysis from a synchronic point of view. For further on this issue, see extended discussion in §14.10 on the Active perfective.

In fact, in addition to the statement just made that “all (syllabic) prefixes are or were originally CA-” (except 2p and irrealis) the further claim may be made that all prefixes are or were fundamentally CA-, except that prefixes in Zone D of the shape (CA)F- lack the /A/ (F being a fricative). In other words, it may be more than a coincidence that all prefixes beginning with a stop consonant end with /A/ underlyingly, and that therefore the only prefixes that do not so end are those in Zone D which start instead with a fricative (perfective *s-*, 1s *x-*, *L-* classifier) or end with one (2p *lAX-*). This detail does not work for Zone A or Zone C, e.g. 1s object *xu-*, *XA-* qualifier. There may be in fact a phonological motivation, that fricatives in the zone closest to the stem do not take *-A-* nucleus.

There are also severe limits on the variety of consonants that may serve as prefix syllable onsets. These may be only /d, g, G, s, L, x, X, w, l, y/, i.e. plain stops (and not affricates), fricatives, sonorants (and probably not nasal sonorants). That excludes, each with one exception, all ejective stops and all aspirated stops (and all affricates as noted). Fricatives do so serve; lack of /sh/ and (original unrounded) /x/ may be fortuitous. Nasalized sonorants are also excluded; /n/ is either exceptional or secondary.

The exceptional aspirated stop is /q/ in two verbal prefixes. One is the onset of the future prefix for zone B, clearly from \*qʷə'-, cognate with PA \*qʷə- ‘area, event’, leftmost and pronominal in origin. The other is plurality emphasizing qualifier *qA-* of C2, cognate with PA \*qə- with the same function, still also leftmost and pronominal in Athabaskan, and once leftmost in anomalous Eyak *dik' udahd qu:la'ta:G* ‘they don’t hear him’. The ejective exception is *k'u-* indefinite, also leftmost and pronominal. The one affricate in prefixes, *dl-* in *dla:-*, is purely secondary from various transparent sequences of *d-l-*. The only prefixal instances of onset glottal stop are absolute initial, either replacing zero in *AN-*, or in 'A (~ Ø where non-initial), or in pronominal 'i-. The prefix *AN-* ~ with underlying zero onset cannot be realized as such, giving rise so some morphophonemic complexity, as shown in §6.7.

The phonological structure of preverbal is a specialized subject of some complexity. It involves e.g. variation in stem-vowel nucleus, especially the stigma, with finals *-q'*, *-X*, *-tl'*, i.e. augment in e.g. *o-da:q'* ‘on (d-class) o’, *o-da:X* ‘by means of (d-class) o’, *o-da:tl'* ‘with (d-class) o’, not \**-dAq'* etc., and behavior of *l-* qualifier, e.g. *-i:na'q'*, also *'a:na:-*. Much of this is not clearly motivated phonologically, or is not explained by rules shown here. Much of it is fraught with analogy. Some of this, especially with regard to the asyllabic postpositions, has been covered here, as it relates to the morphophonemics more generally. However,

since so much of this is special to preverbals, this subject is covered in Chap. 16 on preverbals rather than here, in addition to §6.3.3 above.

The structure and morphophonemics or variation in prefixes and in preverbals are nevertheless simpler than they are in the case of stems of verbs, nouns, and adjectives. That subject is covered next below in a much longer section of its own.

## 6.17 Epenthetic -A-

Prediction of epenthetic -A- is a complex subject, as it depends on factors at multiple levels: phonological, morphological, and evidently also lexical. All three may as well be discussed here, even though it involves issues that require concern with parts of the morphology. Indeed, this account was written after most of the morphology was, and necessarily makes frequent reference to parts of that chapter.

### 6.17.1 Epenthesis in noun plus adjective

At the phonological level, epenthetic -A- is quite special, prosodic, in that rules for its appearance are fundamentally sensitive to syllable count. The epenthesis occurs when another stem is attached to a monosyllable. First, (12) shows combinations of noun plus adjective and gives only a few examples of the basic phonological rule: epenthesis after monosyllables, but not after polysyllables.

(12) -A- epenthesis

- a. Epenthesis after monosyllables:

*'AX-'A-kih* 'small boat'

*sahs-'a-'lAW* 'big sea-otter'

*ta:-hA-'a:w* 'long trail'

*we:gshg-A-shiyah siXa'* 'my old ulu'

- b. No epenthesis after polysyllables:

*shAlAG-kih* 'small clam'

*Ga:ndich'ich'g-kih* 'little songbird'

*ts'iyux-lAW* 'big mosquito; crane fly'

*ch'i:leh-kuts'g-shiyah* 'Little Old Raven'

*k'uch'AX-'a:w* 'long wings'



At the outset it is already evident that we have also to deal with allomorphy of the epenthesis, i.e. *-ʼA-* ~ *-hA-* ~ *-A-*.<sup>13</sup> The *-hA-* allomorph is by far the most specialized, occurring only after CV:, attested perhaps only with the stem *ta:* ‘trail’ in *ta:-hA-ʼa:w* ‘long trail’, *ta:-hA-dikʼ* ‘short trail’, *ta:-hA-tsidzg* ‘narrow trail’, and *ta:-hA-wAX* ‘wide trail’. This *-hA-* is easily explained by the same rule that requires *-h-* after long vowels followed by vowel-initial enclitics, e.g. in *Xa:ne:-h=uh* ‘eat it!’, *yi:n-h=inh* ‘one who’ < *ya:-* plus *=inh*, thereby preventing any sequence of two vowels.<sup>14</sup> That no other instances of this allomorph of epenthetic *-A-* are attested may well be due to the combination of two factors: the scarcity of unclassified monosyllabic nouns of the shape CV:, and a lack of systematic testing on the few of these that were decently remembered, e.g. presumably also with the monosyllabic stem *cha:n* ‘bait’.

By far the most allomorphic variation is between *-ʼA-* and *-A-*. This also was not systematically tested, but one pattern does emerge, that *-ʼA-* is the more common in nouns plus adjective, at least certain adjectives except insofar as the form is lexicalized. We have thus one nice verified minimal pair, definitive, *ʼAX-ʼA-kih* ‘small boat, model boat’, as opposed to lexicalized *ʼAX-A-kih* ‘canoe’. (We even have *ʼAXAkihkih* ‘small canoe’, presumably also ‘model canoe’, violating the basic rule against repetition or duplication of morphemes, so verifying full lexicalization.) For example out of over 53 monosyllabic nouns with *-(ʼ)A-ʼlAw* (> *-(ʼ)aʼlAw*) ‘big’, all but three are attested only with *-ʼaʼlAw*, not *-aʼlAw*, including even nine with ejective coda, e.g. *Leʼtʼ-ʼaʼlAw* ‘big box’. To that subgroup belong two of the three exceptions, *dja:qʼaʼlAw* ‘big bullhead’ and *xitlʼaʼlAw* ‘big expanse of snow’. The only other is variable, *LanhdʼaʼlAw* or *LanhdaʼlAw* ‘big smoke’. Of 13 monosyllabic nouns with adjective *-tʼuʼ* ‘many, much’, in 20 instances, including six with ejective coda, all had *-ʼA-* epenthesis only. One, *gud* ‘bit; dime’ had two of *-A-* as well as two of *-ʼA-*.<sup>15</sup> Another, the adjective *-dzu:* ‘good’ behaves likewise, *-ʼA-dzu:* with all four attested monosyllabic nouns, *xahʼAdzu:* ‘nice summer’, *xAtlʼAdzu:* ‘nice snow’, *se:LʼAdzu:* ‘nice evening’, *ya:nʼAdzu:* ‘good medicine’.

Not all adjectives seem to take the *-ʼA-* allomorph, however. A case in point must be *-ʼa:w* ‘long’, as shown in (12) with *ta:* ‘trail’, along with *-wAX* ‘wide’, *-tsidzg* ‘narrow’, and *-dikʼ* ‘short’. It so happens that the only monosyllabic noun with which these adjectives are attested is *ta:*, except for one other item, *kʼaʼtʼ-A-tsidzg* ‘Narrow Island’, a Yakutat area place-name. That item is some confirmation, perhaps, that these adjectives take *-A-* instead of *-ʼA-* but *kʼaʼtʼ* ‘island’ has ejective coda and is apparently a loan from Tlingit. Other regular adjectives are not attested at all with monosyllabic nouns.

13 The /a/ quality is due to the general phonological rule that  $A > a / \_ \_$ , cf. §4.3.5.

14 For this *-h-*, cf. also §4.3.

15 That *gud* is a loan from Tlingit from English through Chinook Jargon should not be a factor, one would think.

Classified monosyllabic nouns, which require a qualifier as class-mark, are thus no longer monosyllabic when another stem is attached, as an adjective, e.g. *lis-dA-t'u* 'many trees', or *lis-dA-qa* 'among trees', to include here noun plus postposition. However, *l*-class-mark (only) does optionally allow epenthesis to precede, thus the examples in (13):

(13) Optional epenthesis with *l*-class nouns

- 'itl'AlAt'u' 'many mountains' (presumably also 'itl'(')a:nt'u', 'itl'(A)lAt'u')
- 'itl'lAkuts'g (etc.) 'little mountain'
- 'itl'a:nta:s, 'itl'lAta:s (etc.) 'over a mountain'
- 'itl'AlAyAq'd 'inside a mountain'
- 'itl'AlAqe'L 'mountain woman' (a compound)
- tAGLAlA-kih 'little hammer'
- tAGL'AlALte' 'hammer handle'
- ch'iyahd'AlAKih 'little hat' (epenthesis after disyllable!)
- ch'iyahdLAgA' 'like a hat' (in contrast to above)

Limited as the documentation in part is, especially for some of the allomorphic details, there is no doubt that the epenthesis itself after monosyllables is a basic productive phonological rule. However, it is far from an absolute rule, not only in that phonological sequences without such epenthesis are indeed phonologically possible, but in that counterexamples are frequent, with various types of lexicalization or special categories. It may be that such variability is possible only with the two "irregular" adjectives, *-kih* diminutive, and *-shiyah* ~ pejorative, the other adjectives being far less productive in lexicalizations and special categories.

Thus for the diminutive we have the monosyllables with and without the epenthesis in (14).

(14) Monosyllables with diminutive *-kih*

## a. Without epenthesis:

- ya:-kih 'payment', lit. 'little thing', lexicalized
- tl'la:-kih 'cross-cousin' (vocative)
- qe:ts'kih ~ qAts'kih 'child' (vocative)
- si:ndz-kih 'my brother' (woman speaking) (< si:-ndz-kih, a possessed noun irregularly monosyllabic)
- sahdX-kih 'a little while ago' (adverb)
- 'u:d-kih 'would that' (adverb)

## b. With epenthesis:

- k'u-yahsh-A-kih, a cat's name, lit. 'little (woman's) child'
- sALsi'L-a-kih, a dog's name, lit. 'little rotten'

*sAqe:ts'-A-kih* 'child'

*'Anahsh(-?)A-kih* 'pleasure'

Note that in all the cases with epenthesis, the allomorph is not *-'A-*, but *-A-*, that found in the lexicalizations, as in *'AXAkih* 'canoe'. At the same time, we have several instances, at least six, of *-'ehd'Akih* 'dear wife', all with *-'a-*, giving the impression that in kin terms, where in some cases *-kih* is fully lexicalized (as in *si:-ndz-kih*), the basic epenthesis rule is abandoned in non-lexicalization; cf. *si-'ahd-A-shiyah* 'my father's sister' in the next paragraph below. Note also, as noted with *l*-class nouns, that the *l*-class-mark can itself be preceded by glottal-initial epenthesis, as in *ch'iyahd-'A-lA-kih* 'little hat', but not e.g. in *tAGL-A-lA-kih* 'little hammer'.

For the pejorative *-shiyah* ~, itself a variable disyllable, the epenthesis has special complications, and was not investigated fully enough to establish any clear pattern. Given *we:gshgAshiyah siXa* 'my old ulu', unless all uses of *-shiyah* are to be considered lexicalizations, it would seem only that the allomorph *-'A-* is not to be expected. This "irregular" adjective is also used with grandparental kin terms, where its meaning must be virtually the opposite of pejorative, respectful: *-chu:-shiyah* 'mother's mother', *-k'inh-shiyah* 'father's mother', *-uh-shiyah* 'father's father', *-'we:shG-A-shiyah* 'mother's father'. In these kin terms no epenthetic is expected because all forms require a possessive prefix syllable. The corresponding vocatives, however, are *chu:-shah*, *k'inh-shah*, *'uh-shah*, and *we:shG-A-shah*, where the first three break the monosyllable rule, unless one can say that the prefix was present but is deleted by a late rule. In any case, the *-'we:shG-* term is different from the rest, and that must be because its final obstruent is uvular, as will be seen below for the epenthesis in other morphological environments. There are counterexamples also of epenthesis after polysyllables, at least, interestingly, with some kin terms where the meaning is not lexicalized but at least somewhat pejorative, e.g. *'uyahsh-A-shiyah* 'her kid, brat', and *'u'ehd-A-shiyah* 'his "old lady"'. Note, however, *si'ahd-A-shiyah* along with *si'ahd* 'my father's sister', not necessarily pejorative, according to Lena, vocative *'ahdshah* or *'ahd-A-shiyah*; cf. *-'ehd-'A-shiyah* above.

Further, we have the reverse of polysyllables with epenthesis, another source of monosyllables without epenthesis. This is attested in two epithets, a special category, usually pejorative. These may consist of a possessed anatomical noun with possessive prefix deleted, thus monosyllabic, plus adjective without epenthesis. Such are *djehX-lAw* 'big-ears' and *Ge't'lAw* 'big-body', both from Anna.

### 6.17.2 Epenthesis in compounds

Noun compounds are a somewhat limited field in Eyak, for which see §§18.10.1–18.10.2. The basic rule of epenthesis after monosyllables does seem to apply there: thus *sanh-A-si:nL* 'socks' < 'fluff-boots', *Le:sk'-A-yahd* 'lumber house', *qahdl-A-yahd* 'bark house', *ta'xts'-A-*

*yahd* ‘bark house’, *gu:nn-A-tsa:* ‘gold nugget’. There are no items attested with epenthesis after polysyllables, with the one exception *qa:la:X-A-giyah* ‘human eye-water’ (not ‘tears’) in a reading, with Marie, of Rezanov (1805) калляхегея (<kaliakhegeia>) ‘слезы’ (‘tears’; first /e/ non-palatalizing); such exception may be due to final uvular and following velar. Perhaps a better reading may be *qa:-lAXA-giyah*, with anatomical qualifier (reduction of *-la:X*). Note Rezanov *dAga’q’L-i-xwa’ch* ‘neckerchief’ (twice), after disyllable, with epenthesis, and that phonetically /i/, perhaps as expected, between coronal and velar. However, there seem also to be counterexamples after monosyllables, without epenthesis: *Le’Lq’-tsi’lahL* ‘down pillow’, *kihdz-k’uXehL* ‘coarse twine’, *sahx-dAXunh* ‘cockles-person’, *dza:nt’-ch’iyahd* ‘skunk-cabbage hat’, *qe’L-sAqe:ts’Akih* ‘girl’, lit. ‘woman-child’, *’u’tl’-qe’L* ‘driftwood-woman’. In these, though, all but the last are polysyllabic at least in the second component.

If the second component of a compound is a possessed noun, on the other hand, the rules seem different. There is no epenthesis with kin-terms: e.g. ‘John’s father’ would presumably be *dja:nn-ta:*, and we have *thlu:dj-qa* ‘king (at cards)’ < ‘klootch’s (Chinook Jargon for woman’s) husband’, likewise *du:s-ta:* (by confusion, ‘ace’s husband’), *djiL-yAqhyu:* ‘shelves’, lit. ‘offspring of platform’. At the same time, perhaps unexpectedly with possessed nouns, we also have *xa:s-A-Xe* ‘soap’, lit. ‘taboo grease’, *tanh-A-yahsh* ‘flotsam’, lit. ‘waves’ child(ren), *’anh-A-yahsh* ‘tidal debris’, lit. ‘land’s child(ren)’, *sahxw-A-yahsh* ‘small cockle species’. Here though, at least in the latter two cases, the *-yahsh* may be viewed as lexicalized unpossessed noun rather than a kin term, and in the case of *-Xe* the anatomical term likewise, even though the unique possessed form is retained.

The plural *-yu:* morpheme of perhaps unique status, probably an enclitic in origin but behaving more like a stem also with respect to epenthesis, never shows the epenthesis after polysyllables, e.g. *dAXunh-yu:* ‘people’. The one regular exception to this is that after the human singular suffix *-G* e.g. in *’i:ya:GdAlah-G* ‘Eyak villager’, there is always the epenthesis, *’i:ya:GdAlah-G-A-yu:* ‘Eyaks’. For this, cf. below the epenthesis in phrasal nouns with preverbals ending in uvulars (§6.17.3). After monosyllables, in 14 instances of 15 the epenthesis occurs, usually *-A-* rather than *-’A-*. Thus the forms in (15).

(15) Monosyllables with plural *-yu:*

*t’ik’LAyu:* ‘arrows’

*duxLAyu:* ‘deadfalls’

*sahxwAyu:* ‘cockles’ (twice)

*’AXAyu:* ‘boats’ (three times)

*che:yAyu:* ‘quantities of tea’

*we:shAyu:* ‘fishracks’

*ka:wAyu:* ‘cows’ (from English)

In two instances, *lis'Ayu*: 'trees' and *tl'i:Ayu*: 'bearspears', we have the glottal-initial allomorph; motivation in the first is unclear, but the second requires either glottal stop or *-h* as with *ta*: 'trail' above; why not *-h* is unclear. In one case we have both *q'e:shk'yu*: and *q'e:shk'Ayu*: 'bluejays' from Anna in the same text; that *q'e:shk'* is a loan from Tlingit and that Anna learned Tlingit as an adult may or may not explain the irregularity.

Finally here we have the form *-ya*' 'thing', which at least in origin may be the possessed allomorph of *ya*: 'thing', but which is attached to preverbals, sometimes with epenthetic *-A-*. Its occurrence is somewhat limited, but includes some very frequent items. There is only one item with *-ya*' after a monosyllable, of shape other than CV' or with uvular coda, *yahd-A-ya*'- 'boat' < 'out to sea thing', with the expected epenthesis. If the monosyllable is of the shape CV', however, there is no epenthesis. Thus *te'ya*' 'fish' < *ta'-ya*' 'water thing' is a basic item. We lack further items attached to a monosyllable of the shape CV' in any of the above types to establish a rule whether we should expect the epenthesis there. Another item, *li:-ya*' 'beach food' is almost certainly from *lu:-ya*' 'tidebeach thing', not *\*?lu:Aya*' or *\*?lu:hAya*' for some reason, however obvious phonologically. Almost all the rest of the items listed in the dictionary with this *-ya*', about a dozen, are predictable. Either they lack the epenthesis because they are both polysyllabic and end with *-CV'*, e.g. *-tsin'da'ya*' 'tip; lesser part', or they end with a uvular, monosyllabic or not, *XAdAGaya*' 'God' < 'thing above', *GALt'a:Xaya*' 'undermost thing; underwear', *dla:q'Aya*' 'mountain-goat', lit. 'thing on *dl*-class (rocks)'. The one unpredictable item here is the place-name *GALahdzAya*', lit. *GA-L-lahdz-* 'forwardmost'; motivation for the epenthesis is unclear.

There is, however, the possibility that what looks like epenthesis in *GALahdzAya*' is really or historically a reduction of *o-'e'* '(vacant) place of *o*', phonologically the most variable of Eyak morphemes, and frequent component of complex preverbals. The *-A-* in this case, in the position *dz\_\_y* might be considered indistinguishable from reduced /*i*/, and cf. the case of *'AdiX* 'indoors', plainly from *'Ad-'e'-X* 'non-punctually in (vacant) place of self'. Further reduction of /*i*/ may well be the explanation of yet other unexpected instances of epenthetic *-A-*. In fact, epenthesis of *o-'e'* itself might be the explanation of a number of complex preverbal forms. For these see e.g. *dAGe'X* 'motion above' instead of possibly and most simply expected *\*dAG-X* or *\*dAG-A-X*, given *dAG* 'above', q.v. Chap. 16 on preverbals. Note further *-yAq'AGi'ya*' 'entrails', from *o-yA'q'-A-Gi'-ya*' 'thing inside *o*', where *-Gi'-* is itself to be explained as *-e'* with *GA-* qualifier; for this, described at length, sometimes even incorporated into verbs, see *G<sub>3</sub>* in §17.10.5.

### 6.17.3 Epenthesis in complex preverbals and phrasal nouns

This brings us to *-A-* epenthesis in the structure of complex preverbals. For one thing, preverbals may combine without epenthesis, and postpositions, like possessed nouns, are attached to nouns or other postpositions, even monosyllabic ones, without epenthesis.

The monosyllable rule is thus not at play here. The environments requiring epenthesis in complex preverbals mostly involve uvular codas in one way or another. After uvulars *-d* finals are attached without epenthesis: e.g. *o-yAq'd* ‘inside of o’, *'AdiXd* ‘at rest indoors’, *XAdAGd* ‘at rest above’, but *-ch* finals require it: *o-q'Ach* ‘onto o’, *o-yAq'Ach* ‘into o’, *XAdAGAch* ‘toward above’, likewise *o-q'Ach'ahd* ‘from on o’, *o-yAq'Ach'ahd* ‘from in it’, etc. Note, however, the epenthetic vowel in *'AdiXich* ‘to indoors’, which may either be vowel harmony, or what might be called “*-e*’-spread” (§4.3.2). There is no general rule for such epenthesis with uvulars; e.g. ‘to Eyak’ would be *'i:ya:Gch*’, ‘from Eyak’ *'i:ya:Gch'ahd*.

After uvulars, with preverbal *-X* final the epenthesis is more complex. Instead e.g. of *\*o-dAG-X* or even *\*o-dAG-A-X* we get *o-dAG-e'-X* ‘(movement within area) upstream, up inlet’, likewise with *o-LAG* ‘upland of o’. In other such cases though, we get instead *-d-A-X*, as in *o-yAq'dAX* ‘movement inside of o’, *'AdiXdAX* ‘movement indoors’, i.e. a combination of *-d* final followed by *-X* final, with its own epenthesis. This is also like the case of the demonstrative adverbs, *'u:dAX* ‘movement along there’ and *'a:ndAX* ‘movement along here’. Those “sesquisyllabic” demonstrative stems show a tendency to require or preserve a post-sonorant vowel much more before *-X* than before *-d*, as in *'AwA-X* > *wAX* ‘thus; that way’, *\*'AlA-X* > *lAX* ‘this way’, as opposed to *\*'AwA-d* > *'u:d* ‘there’, *\*'AlA-d* > *'a:nd* ‘here’. There is certainly no general rule for epenthesis in *-C-X*, as can be seen in *sahdX* ‘long time’, but such seems indeed to be the case inside preverbals. There in fact it may work on both sides of *-X*; e.g. *o-yAX-A-ch* ‘into under o’, *o-yAX-d-A-X* ‘movement (within area) under o’; cf. also the directional of unclear meaning *yAX-e'X* ‘northwestward’?.

Given this much, we may now try to explain nicely two lexicalizations. One is *Lanhd-A-yAX-A-yahd* ‘smokehouse’. The first *-A-* appears to be epenthesis before a postposition where such is not expected. The apparent meaning, apparently ‘house under smoke’ shows that this must be a reduction of prefixal pronoun *'u-*, in lexicalization from the noun phrase *Lanhd 'uyAX yahd* ‘smoke under it house’, i.e. a house which has smoke under it, rather than the reverse. The second *-A-* is genuinely epenthetic, after a preverbal ending in uvular, compounded with the head noun *yahd* in lexicalization. The second example is *dzanhd-A-yAX-A-ta*: ‘Milky Way’, clearly understood as ‘(under) snowshoe trail’. This too appears to have two epentheses, but since we know *dzahnd* ‘snowshoe’ is *d*-class, the first schwa must reflect original *dzanhd-dA-*, with *d*-qualifier, not epenthesis; the second epenthesis is as in the previous example, with lexicalization of the noun phrase *dzanhd-dA-yAX ta*: ‘trail (which is) under snowshoes’. This latter case, however, allows the suggestion that the *-A-* is a further reduction of *-e'*, especially as the postposition *o-'e'* is often used for ‘trail’, e.g. *si-qi:dla:GA-'e'* ‘my track, series of my footstep markings’ (including complex combination of four qualifiers).

Confirming this kind of epenthesis in lexicalized phrasal nouns, we may have a fine example in *xut'LyAq'Atsa*: ‘musket-ball’, lit. ‘stone in rifle’ from Rezanov (1805). His peculiar spelling *хотликаца* <*xotlikatstva*> might represent *xut'LyAq'Ats'tsa*; however, with *-ch* assimilated to */ts/*, not verified, if *o-yAq'Ach* ‘into o one after another’ is

permissible in this verbless context. Lexicalizations with this type of epenthesis are probably an open class, cf. further (16).

(16) Epenthesis in lexicalized phrasal nouns

*XAdAGAdAya'L* 'fish-drying rack' and *k'udAGAdAya'L* 'smoking rack', < o-*dAG* 'above o', *dA-ya'L* 'placing of *d*-class pl objects'  
*'iLdAGAla:Ltah* 'sewing-bag' < 'one bag (*la:Ltah*) above (-*dAG*) another ('*iL-*)'  
*yAda'q'Axwa'ch'L* 'bracelet' (Rezanov) < 'a fastening (*xwa'ch'L*) on (-*q'-*)  
 hand-front (*yA-da'-*)'

Another most probable instance is o-*dAG-A-leh* 'mind' < o-*dAG* 'above o', and *-leh* 'act', a verbal noun.

#### 6.17.4 'A in deverbalizations

There does appear to be at least one preverbal with *-LX* final, o-*wa:LX* 'following o, according to o'. This is at least paralleled by '*a:li'LX* 'headwaters', probably from '*a:n* 'river' and o-'*e'LX*, without epenthesis.

With CA- qualifiers and the non-syllabic postpositions o-*X* and o-*q'* the result is -Ca:*q'* and -Ca:*X*, which one may see as related to the epenthesis with uvulars. This, however does not explain the same with o-*tl'*, -Ca:*tl'*.

Within preverbals there is also epenthesis with at least some velars, e.g. the ones in (17).

(17) Epenthesis with velars in preverbals

*ya:'a:g-A-ga'* 'approximately half'  
*ya:'a:gAch'* 'toward the middle'  
*ya:'a:gdAX* 'down the middle, in half'  
*XAla:g-yAX-A-ga'* 'enough (to last) for winter' (note: epenthesis in the second juncture but not in the first)  
 o-*q'-A-k'ah* 'away from on o'  
*sidALyAX-A-k'ah* 'away from in front of me'  
*si-'e'-d-A-k'ah* 'away from my place' (cf. *si'e'k'ah* 'id.')

*'a:nd-A-k'ah* 'away from here'  
*'u:d-i-k'ah* 'away from there'

Note that the last, '*u:d-i-k'ah* 'away from there', possibly shows high-vowel harmony, or perhaps rather another trace of o-'*e'* instead.

### 6.17.5 Metathesis of *-q'-dA-*, and the possibility of double epenthesis

In three obviously related forms, all with following stem *-qa:*, we have what must originally be *-q'-dA-qa:* becoming *-q'Ad-qa:*, such that in Krauss (1970a), there was listed a stem *-q'Ad-* of unknown identity. This can no longer be allowed as such. Speakers were reluctant to assign a meaning to the stem *-qa:* itself, but given the meaning of the lexemes in which it occurs, it clearly has something to do with 'hollow, den' and/or 'space'. One of these forms is *dAq'Adqa:* 'animal's den in prone hollow tree', either *dA-* indeterminate object or *dA-* qualifier for missing object of *d*-class, e.g. 'tree', as object of *o-q'* 'on o', plus *dA-qa:*. Another is *dla:q'Adqa:* 'porcupine's hole', as preceding, but with *dl-* qualifier combination for missing object of *dl*-class, e.g. 'rock'. Most important is *yAq'Adqa:* 'hollow tree' from both Lena and Marie, who both are noted to have pronounced this first as *yAq'dAqa:*, later settling on *yAq'Adqa:*. This certainly implies the same possibility for the other two items. There is in fact an adverb *dA-qa:* 'occasionally, vaguely, partly', the etymology of which might be an expansion of *o-qa'* 'among o', q.v. Chap. 16 on preverbals. The relation between this adverb and *-dA-qa:* here, if any, is unclear. It is also unclear whether in fact the *yAq'*- is to be identified with any of the *yAq'* preverbals or should somehow be analyzed as *yA-q'*- with *y-* qualifier, as for 'hand' and/or 'dig, hollow out' (as in the verb *y-le*). The *-dA-* here of *-dA-qa:* may well be preverbal-final *-d*, plus epenthetic *-A-*, thus *-q'-d-A-qa:*. Given all the semantic obscurity, the motivation for the metathesis in connection with the uvular preverbal is quite clear or strong.

There are at least two deverbalizations with compounded preverbal ending in uvular that might show double epenthesis, in *XAdAGAdA'a'L* 'high steep place', from *XAdAG* 'area above', *-a'* '(sg) extend'; and *k'udAGAdAya'L* 'smoking rack'. In both the *dA-* would either have to be identified as *d-* qualifier, difficult to explain especially in the first case, or the second *-A-* is reduced for the 3<sup>rd</sup> person object of the verbs, also unlikely in the first case. Perhaps most likely there is epenthesis on either side of the *-d-*, from both *-G-d > -GAd*, and from compounding, different for some reason from the result with *-q'-d-q-*.

### 6.17.6 Post-sonorant non-epenthetic *-A-*

Definitely an archaism is *'AlAk'ah* 'up out of bed; uncovering' (q.v. in dictionary) with the *o-k'ah* 'away from o' preserving the post-sonorant vowel of the fully lexicalized proximal demonstrative pronoun object *'Al(A)*; modern 'away from this' must presumably be *'Alk'ah*. Several other items preserve post-sonorant schwa in a similar way, cf. (18).

(18) Preservation of post-sonorant schwa

*q'a:-lA-lah* 'person in prime of life', lit. 'now subsisting' (q.v. in dictionary under *q'ah ~*)

*k'u:yA-yahsh* 'very slight breeze', lit. 'wind's child'



*xi:la-'lAw* 'great shaman'

*'ish-ta:-lA-q'Ama'* 'once upon a time' (cf. *'ish-ta:* 'long ago', where *'ish-* is probably a pejorative form of the gerund prefix, stem unidentified, but probably with *-l(A)-* gerund suffix, and *-q'Ama'* unidentified disyllabic stem)

*ya:'a:g-A-gA-da:(-?)lA-ya'* 'middle finger' < *ya:-'a:g-A-* 'mid' with epenthesis next to velars, *-gA-* < *gu-* qualifier or *o-ga'* 'like o', and then unidentified *-da:(-?)lA-*, plus *-ya'* 'thing'

These forms are not instances of epenthesis, but preservation of post-sonorant vowel.

### 6.17.7 "Epenthetic" *i-*

With certain nouns denoting humans, what appears to be an epenthetic *i-* replaces *A-*, at least with adjectives. A fairly complete listing is given in (19).

(19) Apparent epenthetic *i-*

*dAXunh'i'lAw* 'big person'

*dAXunhishiyah* 'bad person'

*dAXunhikih* 'little person' (fairly regularly, but also *dAXunhkih*)

*qe'L(°)ikih* (but also *qe'L(°)Akih*, without clear distinction)

*qe'Li'lAw* ~ *qe'L'a'lAw* 'big woman'

*qe'Likuts'gkih* 'little girl'

*Lila:'i'lAw* 'big man'

*LAni:'i'lAw* 'big boy'

*LAni:'idzu:kih* 'nice little boy'

*sAqe:ts'i'lAw* 'big child'

Except for one instance of *qe'L'ikih*, glottal initial allomorph is absent. Here clearly the monosyllabic rule for *A-* is not at play for *i-* epenthesis, and the /i/ may instead be suffixal in origin. A possible source may be the *-ih* as in *k'u-la:-G-ih* 'other person' (pl *k'ula:GAyu*, interestingly). This may be the same as or homophonous with the suffix *-ih* to numerals, e.g. *LinhG-ih* 'one' (person, or abstract). At the same time, note *k'u'Lituhi'lAw* 'big lazy lout', presumably from *k'u'Lituh=inh* 'he's lazy', and the male personal name *ya'Xu'sahLi'lAw*, presumably *ya'(X?) Xu' sahL=inh* 'he went ... perfectly', implying denasalized /i/ from human singular relative enclitic =*inh*. The origin(s) of this segment /i/ remain(s) unclear.

### 6.17.8 Synopsis for epenthesis

In sum, the rules for epenthesis are first and foremost phonological, in part prosodic, and different depending on morphological environment. They are, accordingly, not general phonological rules, and there is significant deviation and unpredictability, where degree of lexicalization is a significant factor, as are analogy and free variation, such that complete description becomes a lexical matter.

There are at least two major variables. One is the presence as opposed to the absence of epenthetic /A/. The other is allomorphic variation thereof,  $A \sim 'A \sim hA$ . A third variable might be considered the choice of *i*- instead of *A*-.

Dealing with all this in reverse order, *i*- is only with adjectives after certain nouns denoting specifically humans. Otherwise the vowel is *A*-, preceded by *h*- perhaps only with adjectives following unclassified monosyllabic nouns of the form CV:, *ta*: 'trail' being the only attested such noun. The allomorph *'A*- is the norm only with certain adjectives following monosyllabic nouns, those adjectives being perhaps mainly *-lAw* 'big' and the diminutive *-kih*, but not always insofar as the form is lexicalized. After a monosyllabic noun, before the rest of the adjectives, and before unpossessed nouns in noun compounds, the norm seems to be *A*-. Especially with the adjective *-shiyah* 'bad', pejorative but lexicalized with reverse meaning in some kin terms, this norm is violated or reversed in lexicalizations.

Presence of epenthetic  $A \sim$  is a basic rule after monosyllabic nouns with adjectives and in noun compounds if the second noun is unpossessed. This norm is violated both ways, absent after monosyllables, present after polysyllables, especially in lexicalization, and special categories, e.g. vocatives and epithets.

In complex preverbals there is also epenthesis, with different rules, not having to do with monosyllables, but rather with uvular obstruents and perhaps to the same extent with velars. There are fewer morphemes involved, of course, and the rules apply quite regularly, as opposed to the preceding environments; moreover, the epenthetic takes only the form of *A*-. For details see §§6.17.3–6.17.5. Since one or more of the many allomorphs of the postposition *o-'e'* 'in (vacant) place of o' is clearly attested separating uvulars in complex preverbals, e.g. *dAG-e'-X* '(movement) above', it is indeed possible that at least some of this epenthesis is further reduction of *e'*- to *A*-.

In lexicalization of a noun phrase, becoming a phrasal noun, where a noun head is preceded by a postposition ending in a uvular, such epenthesis may take place, e.g. *dza:nd(-d)AyAX-A-ta*: 'Milky Way', lit. 'trail under snowshoes'.

Finally, there is a segment of the form *'A*- in (third person) object position of some deverbalizations that is difficult to identify, and which may be epenthetic *'A*-, but which also could be an allomorph of *'u*- and zero object, in a complex and insufficiently attested class of forms. This is described in full detail in §18.13.4.1.

## 7 STEM STRUCTURE AND VARIATION

The term *STEM* in Eyak corresponds to both “root” and “stem” in Athabaskan. The term “root” is not used for Eyak, stem being used both for the basic form and for any particular variant or allomorph thereof. The reason for this is that variation in stem-form in Eyak, compared to that in Athabaskan, is relatively limited and transparent, describable or explainable in terms of suffixation and/or vowel gradation/modification. With very few trivial exceptions, there is no obstruent consonant variation. This important fact is also the reason that in order to juxtapose possibly related stems maximally, the linear order of the dictionary is not at all alphabetical, but phonological, first according to onset, then coda, and then vowel nucleus only after those. This section deals with the phonological nature of the stem, so is included in the phonology part of the grammar.

Morphologically, the stem can be identified and described as follows. With the exception of compounds involving possessed nouns and postpositions, or adjectives, each word has one stem and only one stem. Except for a small set of about a dozen possible suffixes and enclitics, and combinations thereof, the stem is the final morpheme of each analyzable word. Except for enclitics, the stem is also the final syllable of the word.

Most Eyak stems, 92%, are monosyllabic, so have one vowel. Disyllabic stems as such are treated in a separate section (§7.4), and stems that are closed by clusters of two obstruents, which have their own patterns, are treated as such in a final section (§7.5).

### 7.1 Stem structure

Phonologically, the stem can be described as follows. Given that all syllables have one and only one vowel, most stems are monosyllabic. The exceptions are five postpositional stems (*o-d* ‘in punctual contact with o’, *o-tl* ‘with o’, *o-ch* ‘toward o’, *o-q* ‘on o’, *o-X* ‘by means of o, in moving contact with o’) which are asyllabic, and a minority (8%) of syllabic stems which are disyllabic. Disyllabic stems all have one intervocalic sonorant (/w, m, l, n, y/). All stems have stress, and disyllabic stems have stress on the first syllable. There are no zero stems in Eyak (though there are some zero affixes or allomorphs of affixes).

One way to describe monosyllabic stem structure is that nearly all such stems are of the shape CVC(C). The exceptions are eight stems with zero initial (five verbs: *-a* ‘go’, *-a* in ‘eat’ (*-X-a*), *-a* in ‘be of size’, *-a* in ‘hate’ (*o-li* ‘*i-d-L-a*’), *-a-n* in ‘stand’, two kin term nouns: *-a-n* ‘mother’, *-Ad* ‘(man’s) sister’, and one postposition: *o-a* ‘for o’). These zero onsets predictably entail epenthetic /y/ or /w/ or /ʔ/ as onset, or elision with verb prefixes of the form CA-. There are in addition a number of stems with onset sonorant that may alternate with zero (“weak” onset /y/ in the classificatory verb *L-(y)a* for inanimate plural subject or object, and several with “weak” initial /l/ which becomes zero after *L*-classifier or *’iL*-reciprocal). In all other cases, the stem onset is a single consonant, any obstruent except /h/, or any sonorant. In the case of sonorant, the onset may be consid-

ered morphologically to include the “preglottalized sonorants” or clusters (/’w, ’m, ’l, ’n, ’y/). Phonologically, however, the /’/ is not actualized and not written unless preceded by a vowel, in which case the /’/ becomes the coda of the preceding syllable.<sup>1</sup> With these exceptions or complications, the onset of any stem is a single consonant.

Importantly, in terms of information flow, it should also be noted that stem onset, being phonologically any single consonant (except /h/), is also the position or single segment in a word where the largest set of phonemic contrasts is to be heard. The stem onset is thus an information peak and phonologically prominent, the stem being stressed (on first syllable of disyllabics). However, the basic phonological nature of Eyak is still such that that peak does not detract from the number of contrasts that can be heard in stem coda, unlike the case in so much of Athabaskan.

The onset of monosyllabic stems is immediately followed by the single stem-vowel or nucleus, symbolized here by V. That V may consist of a reduced vowel (/i, A, u/) which itself must be followed directly by coda consonant. (There are a few exceptions, perhaps only two, stems of the form CV where V is reduced, though always suffixed with CV-. One is the stem of the adverb *’idah* ‘well, OK’, where *-dah* is the regular productive adverbializer (§21.1), leaving reduced open stem *-’i*; that same morpheme is probable at least historically in *’ida’ya:lAX* ‘too much’ and *’ida’ya:’u’X* ‘too little’, probably from *’-da* ‘to an appropriate degree’, lit. *’i-* ‘good, OK’ *o-da* ‘(arrival) right in front of o’, *ya:* ‘thing’, as object of *o-lAX* ‘beyond o’, or *o-’u’X* ‘short of o’; perhaps also in *’ida:* ~ *’idA-* ‘to such a degree that’. Another stem with reduced V is *Li-* in *Li-dah* ‘constantly’, *Lich* ‘always’, *Li’q* ‘all’, *Lich’a:d* ‘one side’; cf. *LinhG-* ‘one’, of which *Li-* may be a truncation, unless that was analyzable as *\*Li-nG*.)<sup>2</sup>

If the nucleus is a full vowel (/i, e, a, u/), it must include a mark or be followed by a “stigma” (/h, ’, :, :’/; where /:/ and /:’/ are neutralized before C’). Probably also to be considered part of the stigma is nasalization, especially since no reduced vowel can be nasalized. Even though the nasalization is to be heard throughout the entire vowel segment, the nasalization is written as <n> after the vowel. With respect to the other stigmata, the <n> is written after /:/ but before /’/ and /h/. That <n> is to be pronounced as nasalization of the preceding vowel, unless the <n> is itself directly followed by a vowel. (In that case *both* the vowel preceding that <n> and following it become denasalized). If no further coda segments follow the stigma, then the stigma segment itself may be considered the coda. In that way all stems can be symbolized CVC(C), and even CV: can be included in CVC, if /:/ is also treated a consonant. However, this is in fact not the way stem phonology has generally been treated even in this grammar. The stem has been seen partly as CV(C(C)), and a distinction is made instead between “variable open stems” (essentially

1 History and details are discussed in §4.2.

2 The form *Li* does not appear in the 1970 dictionary.

CV and CV-) and “invariable open stems” (CVh, CV', CV:, CV:'), on the one hand, and “closed stems” on the other. Closed stems, incidentally, are almost all invariable, but there is a small group of nine closed stems that vary morphologically between CVhC and CV'C with a clear vestige of predictability. See §7.3.4 on variable closed stems. This is a highly significant vestige of a stage at which Eyak must formerly have had a greater degree of variation in the stem nucleus than is anywhere attested, except in Athabaskan and Tlingit.

Beside this is another dimension to variation in stem vowel nuclei, namely what might be called ‘gradation’, i.e. expansion and reduction. Expansion is the shift of any vowel nucleus to V:, to be found with full regularity in the two verb derivations persistent and customary. Reduction, on the other hand, is a lexical matter, where full stems are related to reduced stems, e.g. *-Xe'tl'* ‘be dark’, *XAtl'* ‘night’, verb and noun. There is also the combination of expansion and reduction, e.g. a stem with this maximum of variability by gradation: most basic *-xu'tl'* ‘blow’; expanded persistent *-xu:tl'*; reduced *(-)xAtl'* ~ ‘snow; be blown along’; and customary of ‘be blown along’ with reduced vowel expanded, *-xe:tl'*. See §7.3.5 on reduction and expansion, as well as other types of stem vowel nucleus variation. Gradation is thus easily defined for closed stems. For open stems there is only reduction, and expansion is problematical, as described below.

For the coda, C(C) can best be described as one or two obstruents. A small minority of stems have the cluster-coda, 61 certain or regular instances, plus about 14 more or less regular or questionable ones where the second obstruent might be suffixal in origin. A whole special subsection below (§7.5) is devoted to these cluster coda stems, showing the constraints in distribution of the obstruents involved. (It should be noted that there as well, identifiable suffixes, including sequences of up to three obstruents, can become part of the phonological coda, but are not morphologically part of the stem.)

The single-obstruent coda may consist of any obstruent except the aspirate stops (including aspirate affricates). Aspirates contrast with plain stops only immediately before a vowel. Being necessarily released coda stops seem to sound like aspirates to an English-dominant ear, but when followed by a vowel (suffix) they prove always to be plain, unaspirated, and are so written. Again, if basic stem shape is taken to be CVC(C) instead of CV(C(C)), then stigma /h/ and /' / and even /:/ have to be included as obstruent coda as well as stigma components. This may perhaps appropriately leave a bit vague the degree to which the stigma may be part of the coda. Here is also implied that monosyllabic full stems have not only onset, nucleus, and coda (C(C)), but also stigma, which may be considered part of the coda as well as part of the nucleus.

Disyllabic stems have the same rules or description for onset, stigma, and coda, including coda clusters of two obstruents, e.g. *qAmAXch'* ‘rotten spot in ice’. However, disyllabic stems have a more complex nucleus, consisting of two vowels separated by a sonorant, /w, m, l, n, y/ (not accompanied by glottal stop). A small but significant minority of stems are of this shape, about 80, as noted. Further, there are about 14 more stems (not counting a few Tlingit loans) that in modern Eyak are sonorant-final. These do not fit the patterns of either open or of closed or obstruent-final stems, and show clear evidence of

having recently still been followed by a vowel, especially in the Russian-period sources. Accordingly these stems too are treated at some length in their own subsection (§7.4.2), devoted to disyllabic (sonorant-medial) stems and sonorant final stems, “sesquisyllabics”. There is also a certain amount of variation between disyllabic and monosyllabic stems, almost entirely on a lexical basis. This variation itself will be taken up in the accounts of disyllabic stems, and of stem variation.

## 7.2 Statistical analysis of stem structure

Beyond the basic possible stem shapes as listed above, there are patterns of a statistical nature which reveal relationships, some synchronic, some historical, between the phonological segments of the stem (onset, vowel nucleus, stigma, coda). The following sections will deal first with “simple” stems, i.e. monosyllabic stems, with single-obstruent coda if any. After the basic onset and coda statistics, and those of onset-coda relations, then those between onset and nucleus timbre, then those between stigma and coda will be discussed.

### 7.2.1 Number of stems altogether and for each onset and coda

Counting only analyzable native Eyak stems, i.e. not affixes, clear loans, unanalyzables, there is a total of about 1003 different documented stems. The approximate nature of this count is mainly from two problems. First, there is the indefinites inherent in semantics in the case of homophones and phonologically “relatable” stems, where “relatable” also involves indefiniteness in distinguishing synchronic and etymological relatability. Second, there is considerable arbitrariness in segmentation of certain types of stems, especially the preverbal, as explained at length in Chap. 16.

Tables 7.1 and 7.2 present a picture of the number of stems with each obstruent, sonorant, /ʔ/ and zero as onset. Preglottalized sonorant onsets are listed along with the sonorants, not with /ʔ/. Labialized and non-labialized velars are listed together, because of the instability of the contrast. Subtotals are also shown for plain stops, aspirated stops, ejective stops, and fricatives, for each row of obstruents, and each column of series by place of articulation. Subtotals for all obstruents and for all sonorants are shown. Adding to these the glottal stop and zero onset stems (8 in number) the grand total of stems is 1003, as noted. It should be remembered that the counts are hardly exact, rather somewhat arbitrary, considering the uncertainty factors just mentioned. Much more importantly, these statistical tables are meant to give some basic impression of the numbers involved, especially relatively speaking among the individual onsets and classes of onsets. Relatively speaking in casual comparison with total tallies of lists of documented “roots” for Athabaskan languages, 1003 identifiable native Eyak stems is in itself probably not a bad score either. Certainly it is not a bad score for any Athabaskan language if

all (phonologically and semantically) connectible roots are combined as they are here, especially for any such language documented from only six surviving speakers.

**Table 7.1:** Counts of stems by obstruent onset, with subtotals by manner and series (place of articulation). Numbers indicate total number of stems containing the indicated obstruent as onset.

	T	TL	TS	CH	K	Q	'	Total
<b>plain</b>	d (53)	dl (3)	dz (14)	dj (19)	g (44)	G (47)	' (72)	252
<b>aspirate</b>	t (28)	tl (4)	ts (37)	ch (21)	k (34)	q (61)		185
<b>ejective</b>	t' (25)	tl' (30)	ts' (49)	ch' (36)	k' (32)	q' (54)	226	
<b>fricative</b>		L (24)	s (34)	sh (27)	x (38)	X (66)	h (0)	189
<b>Total</b>	106	61	134	103	148	228	72	852

**Table 7.2:** Counts of stems by sonorant onset, with subtotals by nasality and place of articulation. Numbers indicate total number of stems containing the indicated sonorant as onset.

	labial	alveolar	palatal	Total
<b>-nasal</b>	w/'w (36)	l/'l (51)	y (37)	124
<b>+nasal</b>	m/'m (5)	n/'n (12)		17
<b>Total</b>	41	63	37	141

By far the most striking figures are the extremely low numbers of stems with *dl-* and *tl-* onsets. This is hardly a surprise, however, in comparison with Athabaskan, which has long been known also for the same marginality of the same two lateral affricates, as an areal phenomenon, noted in the literature at least since Jacobs (1954). For comparative perspective, it should be remembered that the velar series here represents two PAE series, \*K and \*K<sup>w</sup>, corresponding to PA front \*K and \*Č<sup>wr</sup>, respectively.

One further such table will be added here. Given the near complete stability of stem codas as well as onsets, at least for obstruent-closed stems, Tab. 7.3 shows the number of stems closed with single obstruents, basically according to the same structure as in Tab. 7.1 and 7.2, minus of course the aspirated stops.

If we add the total (64) of all the regular and irregular cluster-coda stems listed in §7.5 on clusters of two obstruents, this produces a total of 619 obstruent-closed stems, out of 1003, showing that 62% of all Eyak stems have obstruent codas. (The rest are “open” invariable stems, “closed” with stigmata /h/ or /ʔ/ or /:/. ) A somewhat detailed statistical table was made for the number of stems with each of the onset obstruents, sonorants, /ʔ/, and zero, with each of the single obstruents as coda. The purpose was mainly to see what correlations there might be between onset and coda series in terms of place of manner

**Table 7.3:** Statistics of stems by single obstruent coda, with subtotals by manner and series (place of articulation). Numbers indicate total number of stems containing the indicated obstruent as coda. .

	T	TL	TS	CH	K	Q	Total
<b>plain</b>	d (60)	dl (1)	dz (22)	dj (25)	g (30)	G (45)	183
<b>ejective</b>	t' (35)	tl' (31)	ts' (40)	ch' (30)	k' (38)	q' (33)	208
<b>fricative</b>		L (42)	s (38)	sh (31)	x (14)	X (39)	164
<b>Total</b>	95	74	100	86	81	117	555

of articulation. The table did not reveal much that was not already obvious in terms of series or place of articulation. Here, and perhaps also with other statistical tables, it may be hoped that some pattern(s) may yet be discerned that are not noticed at present.

### 7.2.2 Correlations in place and manner of articulation between onset and coda

Two significant principles are obvious. There are no stems combining the TS-series (/dz, ts, ts', s/) with the CH-series (/dj, ch, ch', sh/). Also, there are no stems combining the T-series with itself, a kind of reverse of the preceding principle. The reason for the first principle is commonplace, assimilatory. The reason for the second, dissimilatory, is less commonplace, but also shared with Athabaskan, as is the first. In Krauss (1964), it was pointed out that Proto-Athabaskan had clear constraints against combining \*TS and \*CH, and also against combining \*CH and the series newly reconstructed in that same article, front \*K<sup>W</sup> (a transcription still valid for PAE but better described as \*CH<sup>wr</sup> for PA). Further, for some reason, \*TS and front PAE \*K<sup>w</sup> (PA \*CH<sup>wr</sup>) could not combine where \*TS was the onset, but could where \*TS was the coda. The first part of this assimilatory constraint still obvious holds in both Athabaskan and Eyak, but the second part(s) for Eyak are obscured by the merger of PAE front \*KW with front \*K, unique to Eyak. There has apparently been no literature on the subject of these constraints or their implications since the follow-up in Krauss (1973), and more comparative work is needed.

The constraint against combining PAE onset \*T and and coda \*T may not have been enunciated in Krauss (1964) or Krauss (1973), but that still holds for Eyak (and presumably Athabaskan as well) if one looks beneath the surface, since it has been widely obscured by secondary or later developments or suffixations. Still, in Eyak, the only morphemes or possible morphemes with coronal non-affricate stops in both onset and coda are never e.g. noun or verb stems, but only preverbal, most obviously suffixed with *-d*, as in *o-dahd* 'next to with pressure against o'. Even this item fits a clear preverbal pattern of segmentation *o-d-ah-d* except for the semantics; for this see Chap. 16.

Study of the statistical table for combining classes of consonants in onset and coda did not reveal any further constraints or even statistically striking high or low frequencies. (Figures here and in succeeding paragraphs for onset-nucleus-coda relations are based



on an earlier count of stems, with somewhat different totals. In fact no two stem counts would result in exactly the same figures, given the uncertainties for what is a stem, and for what are the same stems. Any discrepancies in figures here, for these purposes, are presumably insignificant.)

For individual combinations (28 onsets and 17 codas = 476 possibilities total) there was a range of statistical frequencies, from zero (208 cases) to 8% of individual possible onset-coda combinations (1 case, GVG), not surprisingly, given the basic statistics. In onset, those range from stems with lowest /dl/ (3) to highest /X/ (66). In coda they range from lowest /dl/ (1) to highest /d/ (64, suspicious? some perhaps suffixal), second highest /X/ (51). Taking instead the series as individual groups, aside from the total absence of combinations of CH and TS, and of T with T, there is a range from a low for TL with TL (2 stems, hardly surprising) to a high for TS with Q (28 stems). Checking all combinations of K- and Q-series, we see 14 K-K and 23 Q-Q (i.e. 37 same-series) combinations, against 13 K-Q and 9 Q-K (i.e. 22 different-series) combinations, perhaps significant. However, it is significant only in that if a stem has a Q onset, it is 2.4 times more likely to have a Q coda than a K. Even that must also be qualified by the fact that there are only 81 stems with K coda altogether as opposed to 117 with Q.

Regarding manner of articulation, between plain, aspirate, ejective, or fricative onset, and plain, ejective, or fricative single consonant coda in terms of frequency of such combinations, Table (7.3) did reveal at least one tendency. For 11 of the 12 possibilities (4 onset types x 3 coda types), the frequency ranged between 29 and 46 stems. However 68 stems had ejective onset and ejective coda, enough out of line to suggest some tendency toward assimilation somehow between ejective onset and coda with some statistical significance. At the lower end were stems with aspirated onset and ejective coda (29), but stems with plain onset and fricative coda (30) or aspirated onset and fricative coda (30), or aspirated onset and fricative coda (31), or ejective onset and plain coda (32) were not significantly more infrequent. However, it is true that the highest frequency for a given onset manner was in each case the same coda manner, ejective for both onset and coda with 68 stems as noted, but also fricative for both (46) and plain for both (45), for what that may be worth. On the other hand, in terms of stop versus affricate, taken as a difference in manner, again the \*T-T constraint should be mentioned, in connection with the fact that there is no such dissimilative constraint for any other series, affricate or K-K or Q-Q.

Proportions of stems closed with one or two obstruents as opposed to open stems (with invariable or variable stigma) were also examined for different points and manners of articulation (including sonorants, /ʔ/, and zero) in onset. Of the 1003 stems, 619 were closed, so 384 were open, i.e. 62% and 38%, respectively. The figures here will be given in terms of percentage of stems so closed, first for individual onsets. Not counting onsets too infrequent for such statistical significance (*dl* 3/3, *tl* 1/4, zero 1/1/8), the range was quite wide, from 11/28 or 39% (/t/) to 18/19 or 95% (/dj/). The runners-up were 23/61 or 38% (/q/)

and 12/14 or 86% (/dz/). Third lowest and highest were 15/37 or 41% (/y/) and 33/41 or 80% (/w, m/). The rest are all between 51% (/d/) and 79% (/G/), probably not significantly far from the average of 62%. Place of articulation for obstruent series averages for closed are lowest T (53%), then Q (61%), K (66%), TL (67%), CH (73.5%), TS (74%); /ʔ/ had 72% closed, sonorants 63%. In this regard there is perhaps nothing noteworthy. Finally, in terms of manner of onset of articulation and (single or double) obstruent coda, all are very close to average: aspirate and fricative both 62%, plain 63%, ejective 65%, sonorants also 63%, as noted. The conclusion here is that there is no correlation whatever between manner of onset and openness or presence/absence of obstruent coda, with ideally uniform statistics. Those statistics for place of articulation of onset, on the other hand, appear to be significantly less uniform, perhaps somehow significantly.

### 7.2.3 Full vowel nucleus timbre and correlations with onset

This brings us to consideration of the stem nucleus and distribution correlations with onset and coda. (In identifying the timbres themselves there is the point that with nasalization the timbre /e/ is missing. Aside from this egregious constraint on \*-en, there are no other obvious limitations between full vowels and nasalization or, for that matter, full vowels and stigma.) The task of calculating statistical frequency of full vowel timbre and nasalization or full vowel timbre and stigma has not here been undertaken. There may be a range of frequencies in such correlations, but no principled differences seem obvious.

With reduced vowels, on the other hand, there is, to begin with, no stigma and no nasalization, but there is a very high degree of correlation between reduced vowel timbre and choice of onset and coda obstruents. These highly complex correlations are described at some length in §§4.3.2–4.3.5 above, which will not be repeated here.

Full vowel stems show some very interesting statistical properties in relation to onset. The full vowel stem corpus was examined, both open and closed stems, including also the small minority of disyllabic stems with full vowel in the first syllable and a few unanalyzables in which the first syllable looks like a stem. The total of such stems is 699, of the 1003. Thus ca. 70% of stems have full vowels, 30% reduced vowels (including disyllabics with reduced vowel in the first syllable). The figures are somewhat approximate, also for the figures on correlation between onset and vowel timbres, constituting the main part of the study. The few stems with basic variation in timbre or nasalization are listed as both. There is, in any case, no question about the validity of the general observations.

First is that the frequency of the four vowel timbres is itself significantly uneven. By far the most frequent is the timbre /a/ with in fact 50%, then /e/ with 20%, then /u/ and /i/ with 15% each. This means, for one thing, that the two open vowels, /a/ and /e/, are much more frequent than the two closed, /u/ and /i/, serving as the nucleus of 70% of full-vowel stems. We shall see, in fact, that this figure should be somewhat higher yet, say at least 75% as some significant proportion of the stems with nucleus /i/, especially nasalized /i/,

must come from /e/. Thus at least 5% should be deducted from the 15% portion of original underlying /i/.

This increased disproportionately low figure of original underlying /i/ can be shown as follows. First, the ratio of nasalized to non-nasalized stem nuclei is itself highly disproportionate. As we know, there is no nasalized /e/ whatever, a very prominent basic fact to Eyak vowel phonology. Stems with /a/ are 13% nasalized, stems with /u/ are 8% nasalized, while stems with /i/ are 42% nasalized! This striking disproportion is mostly in stems with TS-series onset, which alone have 39 of the 110 stems with /i/ timbre full vowel, or 35%, and 30 of those 39 are nasalized. (Of the /i/ timbre full vowel stems with other onsets, 13 of 71 such stems, 18%, have nasalized /i/.) For some reason, TSin is a highly favored phonological stem sequence in Eyak. At the same time, while 20% of full vowel stems overall have timbre /e/, and without the TS-series that figure is 22%, the proportion of TS-onset stems with vowel /e/ is only 5%. This strongly suggests that many instances of nasalized /i/ come from PAE \*en. Several comparisons with Athabaskan confirm this, e.g. Eyak *si:ns* ‘mold’, PA \*xε’s ‘wart’; Eyak *-tsi:ny* ‘man’s daughter’, PA \*-tse’e ‘man’s daughter’; with other onsets, e.g. Eyak *-ki:nX* ‘weep’, PA \*-č<sup>wr</sup>eχ ~ \*-č<sup>wr</sup>əχ ‘weep’; or internally, Eyak *-tle’X* ‘(fish) swim rapidly’, LAG *tli:X* ‘halibut’ < ‘swim ashore’; all with unpredictable nasality.

Reduced vowel timbres are naturally far more affected by surrounding consonants than are full vowel timbres, and Eyak is no exception, as noted in some detail. The statistics for full vowels are examined here, to show to what extent there may be some correlation also between full vowel and onset position of articulation. The following observations seem most relevant. The proportion of stems with vowel timbre /a/ is a striking 50%. The proportion of stems with that nucleus and with coronal onset should be the lowest, and is in fact so, but not by very much, 39%, as opposed to 50% with velar onset and again 50% with uvular onset. For some reason stems with sonorant onset, labial (61%), apical (67%), /y/ (79%), together 68%, have the highest proportion of vowel /a/. Glottal stop and zero onset have 62% /a/. These figures have some significance, but only part of that expected, 39% of /a/ vowel stems having coronal obstruent onset, as opposed to 50% of both velar and uvular obstruent. However, for sonorants and glottal stop and zero combined, i.e. stems without (oral) obstruent onset, the proportion, for some reason, is higher by an even greater margin, 65% with /a/.

Two more specialized observations may be made. One is that there are no stems starting with glides and the related high vowel, i.e. no \**yi* and no \**wu*. Second, perhaps more interestingly, is that stems with alveolar onset and /i/ vowel (Ti) are few and probably secondary. There are two with *di-*, but these are both preverbals, q.v., probably segmentable in origin. Perhaps less easily explained or discounted are noun *-tinh* ‘father’s brother’ and *-t’inh* ‘(man’s) sister’s child’, but these two kinship terms both have nasalized vowel, for which see above and at least for *-tinh*, cf. PA \*-ta’yə ‘father’s brother’ (and of course Eyak *-ta:*, PA \*-ta’ ‘father’.) There is also *ti:LA-* ~ *ti:n-* ‘skinlike’ as a qualifier prefix to verbs, an incorporated stem, for which cf. however *-tah* ‘skin’, and likewise discounted *ti:tl’* ‘dog salmon’, clearly a loan from Tlingit. Tlingit has sequences of Ti (p.c. Leer), but it seems

that PAE lacks the full-vowel stem sequence \*Ti, which thus may well at some point have existed but became affricated.

#### 7.2.4 Nucleus timbre correlated with coda and onset obstruent series

Stems with full vowel nucleus and single obstruent coda were also examined for correlation between vowel and obstruent series. This excluded cluster coda stems but included disyllabic stems with full vowel in second syllable. Of a total of 370 such stems, 73 (16%) had full vowel /i/, 89 (24%) had /e/, 164 (44%) /a/, and 59 (16%) /u/. These figures are not significantly different from those for full vowels above, correlated with onset series position of articulation, except perhaps only that the *e*-*a* ratio here is 24% to 44% here, 20% to 50% there, probably not significant. These add up to 68% open vowels /e/ and /a/ correlated with coda here, compared with 70% correlated with onset, even less likely to be significant. The profile of proportions of the different points of articulation for obstruent series correlated with coda and correlated with onset might be of some interest. Taking the profile of percentages of all full-vowel stems with obstruent onset, series by series, compared with the profile of those with obstruent coda, we get the distribution in Tab. 7.4.

**Table 7.4:** Proportions of full-vowel stems by obstruent series as onset and coda.

series	onset	coda
<b>T</b>	12%	20%
<b>TL</b>	9%	14%
<b>TS</b>	18%	17%
<b>CH</b>	12%	14%
<b>K</b>	19%	18%
<b>Q</b>	30%	21%

Note that the onset profile is more jagged than the coda profile, ranging from 9% (TL) to 30% (Q), while the coda profile ranges only from 14% to 21% (the same two series). This suggests *a priori* or generally that if there has been any interaction between nucleus and onset, and/or nucleus and coda, the interaction has been greater between the nucleus and onset. More specifically, the series that may differ significantly are T, TL, and Q. In the case of T, it has already been speculated that since Ti is absent or marginal, that may have been affricated. Also some coda plain /d/ may be suffixal in origin. For some (areal) reason, laterals are of low frequency in the onset (/dl/ and /tl/ in fact rare or marginal), but less so in coda. The most striking difference is in that though Q still has the highest frequency in coda, as it has in onset, it has that by what may be a significantly lesser margin in the coda.

This leads us now to examine the general frequency of the four full vowels to their frequency preceding the different coda obstruent series, and to compare those frequencies with those for the different onset obstruent series. The overall frequency of full vowels for all stems, including stems without obstruent coda (i.e., those in Tab. 7.4) was 15% /i/, 20% /e/, 50% /a/, 16% /u/. That is, 15% of stems contain full vowel /i/. Tab. 7.5 shows the percentage figures for each of those vowels broken down by onset-coda sequences, to be read, e.g., as 26% of TL-series onsets occur with full vowel /i/, whereas 8% of TL-series codas occur with full vowel /i/.

**Table 7.5:** Frequency of occurrence of (full) vowels by consonant series in onset (CV) and coda positions (VC). Numbers are percentages of onsets or of codas for a particular series occurring with the given vowel.

series	Ci	iC	Ce	eC	Ca	aC	Cu	uC
<b>T</b>	0?	20	23	18	36	20	28	22
<b>TL</b>	26	8	26	15	37	15	11	17
<b>TS</b>	42	18	5	24	42	14	11	17
<b>CH</b>	17	20	30	9	10.5	1.5	16	15
<b>K</b>	19	12	11	19	50	11	21	14
<b>Q</b>	6	22	24	15	50	26	20	15
<b>overall</b>	15%		20%		50%		16%	

Most obviously, these more detailed figures merely confirm that the range of percentages is always greater in the onset than in the coda. Onset range with /i/ is 0–42, /e/ 5–30, /a/ 10.5–50, /u/ 11–28; coda range with /i/ is 8–22, /e/ 9–24, /a/ 10.5–26, /u/ 14–22. Onset spread percentage 42, 25, 29.5, 17; coda spread percentage 14, 15, 15, 8, for /i, e, a, u/, respectively in both cases. These extremes by no means tend to involve repeatedly the same series. The highest coda spread is lower than the lowest onset spread, average 28 for onset, 13 for coda, simply confirming the general observation above, that interaction or relation of stem vowel with onset must be greater than with coda.

The greater detail here only seems to confirm the more general pattern, though certain specifics that did not show before may be of interest. Marginality of Ti is not at all shared by iT (20%); in all such notations, a stigma is of course to be supplied between the vowel and obstruent). That marginality of \*Ti may be related to the very high frequency of TSi (42%), not shared by iTS (18%); i.e. \*T > TS /\_\_i. Another striking figure is the very high frequency of Ka and Qa (each 50%), not matched by aK (11%) or aQ (26%). Qi (6%), but not Ki (19%), is of very low frequency, not matched by iQ (22%).

Comparing the percentages of full vowels overall totaling 699, including stems without obstruent coda, with percentages with obstruent coda, totaling 530, the result is /i/ 15–18, /e/ 20–19, /a/ 50–45, /u/ 16–18. The differences here only show that the vowel disproportions are somewhat lesser in the stems with obstruent coda, implying also that

the onset obstruent series have more effect on the vowel with no obstruent following it than with an obstruent following it.

### 7.2.5 Stigma and coda manner of articulation

Full-vowel stems have by definition a “stigma” in the nucleus following the vowel, namely, /h/, /ʔ/, /:/, or /:ʔ/. One should perhaps not expect any correlation between vowel timbre and stigma, but a count was made to check this. The count was made of all full-vowel stems, including the second syllable of disyllabics with full vowel, but not counting stems with variable stigma. The total, not surprisingly, came out nearly the same as the first count of full vowel stems, here 698, and the percentages for each vowel very nearly the same, essentially within 1% (maximum 2%, some of which may be closer to 1%, given two roundings). Those percentages, compared with the first count in parentheses are /i/ 14 (16), /e/ 19 (20), /a/ 52 (50), /u/ 15 (15). This not only helps evaluate the validity of the first count, but serves as a control for checking whether the four different stigmata have an effect on vowel timbre frequency. The 16 percentage figures for each vowel followed by each of the four stigmata are presented in Tab. 7.6, to be read as, e.g., 18% of stems with stigma /-h/ contain the vowel /i/.

**Table 7.6:** Distribution of stigmata across vowels. For each stigma, numbers indicate percentage of stems for having the given vowel.

	i	e	a	u
h	18	15	52	15
ʔ	10	20	54	16
:	16	23	48	14
:ʔ	0	22	70	7

These profiles mostly follow the general profile of full vowel frequencies, here 14–19–52–15, quite closely. In a sense, the most notable deviation is the figures for *ih* and *eh*, 18 and 15 as opposed to 14 and 19 for /i/ and /e/ overall, perhaps not significant. Except possibly for that, we see the general conformity to the basic consistent profile of frequency of the four vowels, unaffected by which stigma follows.

More significant by far is the other side of the picture, the frequency of the four stigmata themselves. Adding up the four vowels followed by /h/ is 30%, by /ʔ/ 33%, by /:/ 33%, and by /:ʔ/ 4%. In other words the “simple” stigmata /h/, /ʔ/, /:/ are of nearly equal frequency, /h/ being very slightly less frequent, by 3%. On the other hand, the more complex or least frequent stigma, /:ʔ/, is only 4%, not at all in the frequency category of the three “simple” or “major” stigmata. Considering that, the more jagged percentage profile for *i-e-a-u* percentages with /:ʔ/ can be seen to conform decently enough. (The absence of

*i:*' is in fact an artifact of stem analysis that can certainly be considered etymologically deep. For example, preverbal *di:*' occurs but is analyzed, and there are numerous instances of *i:* followed by ejective, where *i:*' and *i:* are neutralized.)

In fact, it is inherently likely that the connection between stigma and manner of articulation of final obstruents should be more interesting or obvious than any connection between timbre and stigma, especially given the role of glottal state (openness) or function in both. Along this line it has just been observed (again) that the contrast between V: and V:' is neutralized preceding ejective obstruent coda, so that e.g. *'uma:-tl'* 'with his mother' and *'uta:-tl'* 'with his father' rhyme exactly. Thus V:'C' is written as such only where a morpheme break is obvious, that being another reason for the absence of (contrasting) *-i:*' in the stem inventory.

Most important of all, however, is the absence of VhC' in the stem inventory, obvious from the beginning. The sequence VhC' is not lacking across morpheme boundaries, e.g. *lah-q'* 'in town', but its absence in the stem inventory is certainly significant. This indeed looks like a constraint against the sequence aspiration-glottalization. Certainly there is no sequence \*Vh' within a stem either. In fact, it appears that Eyak has deglottalized final obstruents in stems with aspirated vowel (/h/ stigma), as can be shown by such comparisons with Athabaskan as \*-zət' 'liver', Eyak *-sahd*, PAE or earlier \*-sənt'?. (This constraint applies only to the direct sequence \*VhC', not across coda clusters, e.g. Eyak *duhsk'* 'riverbank'.)

Thus there are important constraints between stigma and manner of articulation of coda obstruents. This is in stark contrast to the lack of correlation between nucleus timbre and stigma, and to the lack or weakness of correlation between nucleus timbre and coda obstruent position of articulation. It follows then that little or no correlation is likely to be found between nucleus timbre and coda obstruent manner of articulation. However, further examination of relations between stigma and coda obstruent manner of articulation is much more likely to be of interest.

Accordingly, a tabulation was made between the four different stigmata and the three manners of coda obstruent manners of articulation, plain stop (or affricate), ejective stop (or affricate), and fricative. We know already that there is no VhC' and no (contrasting) V:'C'. We also know already that the overall frequency of the stigmata is /h/ 30%, /'/ 33%, /:/ 33%, and /:'/ 4%. We do not know the overall frequency of the three manners. Therefore, we shall here count not only all obstruent coda stems with full vowel (including disyllabics with full vowel in second syllable), but also obstruent coda stems with reduced vowel (no stigma). This provides maximum information on the basic frequency of the three modes of articulation of coda obstruents. Since this requires a count through each coda obstruent in any case, Tabs. 7.7–7.9 shows each obstruent of each position series as such, rather than combining the series together to show only the manner totals. The first four rows show the counts for each stigma, the fifth that for no stigma (reduced vowel), the sixth line the total. The last column for each of the three manner groups is the subtotal for each stigma-manner combination. Tab. 7.10 shows the overall totals by manner.

**Table 7.7:** Number of stems by stigma type and coda consonant, plain stops/affricates.

stigma	d	dl	dz	dj	g	G	total
<b>h</b>	38	–	11	8	8	19	84
'	7	–	3	2	3	4	19
:	5	–	4	6	12	14	41
:'	2	–	–	–	–	–	2
–	12	1	3	19	9	12	56
<b>total</b>	64	1	21	35	32	49	202

**Table 7.8:** Number of stems by stigma type and coda consonant, ejective stops/affricates.

stigma	t'	tl'	ts'	ch'	k'	q'	total
<b>h</b>	–	–	–	–	–	–	–
'	11	17	25	13	17	16	99
:	10	5	10	6	10	8	25
:'	–	–	–	–	–	–	–
–	10	9	17	6	10	13	65
<b>total</b>	31	31	52	25	37	37	213

**Table 7.9:** Number of stems by stigma type and coda consonant, fricatives.

stigma	L	s	sh	x	X	total
<b>h</b>	11	14	10	2	11	48
'	12	6	–	1	6	25
:	11	5	11	3	12	42
:'	2	3	3	–	–	8
–	13	12	15	7	22	69
<b>total</b>	49	40	39	13	51	192

**Table 7.10:** Overall number of stems by stigma type and coda consonant, summarized by manner.

stigma	plain	ejective	fricative	total
<b>h</b>	84	–	48	132
'	19	99	25	143
:	41	25	42	132
:'	2	–	8	10
–	56	65	69	100
<b>total</b>	202	213	192	607



First a brief comment on the second recount here of full total single-obstruent coda stems. While the first grand total was 579, the number in Tab. 7.10 is 607, a difference of 28 or nearly 5%, a worthwhile lesson on the approximate nature of stem-counting. Obviously the counting was done in a more generous mood the second time. A large part of that difference can be accounted for in that the second time, the small number, 9, of variable closed stems (CVhC ~ CV'C) was counted twice, and what looked like valid stems in a certain number of unanalyzables, e.g. *tsi:ntl'-Ga:leh* 'heron' were counted as well. Those two factors alone may well explain half of the 5%. In any case, not numbers but proportions and patterns are what matters here.

Note that the totals for each of the simple stigmata in Tab. 7.10 are fairly even, /h/ and /:/ identically 132, and /'/ with 143 slightly higher, as opposed to the percentages with full stems including those without obstruent coda, 30–33–33 percent respectively. To make a direct comparison of those percentages of full stems with single obstruent coda here, i.e. subtracting the total of reduced stems throughout, that profile is 132 for /h/, 143 for /'/, 132 for /:/, each divided by 417, or 32–34–32 percent respectively. The evenness remains, this time with /'/ showing a bit higher frequency. However, in consideration of the fact that there are absolutely no stems of the form CVhC', one might expect the percentage of stems with /h/ stigma to lower and/or the percentage of stems with C' coda to lower, and neither happens.

If we look at the proportions of single obstruent codas with plain stop, ejective, and fricative, the grand totals are 202, 213, and 192, respectively; out of a grand total of 607, we have a percentage profile of 33–35–32. Taking the same figures for reduced stems, our control, without any stigma influence, we have 56, 65, and 69, or 29–34–36 percentage profile. To get a better contrast yet, subtracting the reduced stems from the first total figures, so 146, 148, and 123 respectively, of a 417, we get a third percentage profile of 35–35–29. That contrasts even more notably with the reduced-stem "control" profile 29–34–36. Though there are perhaps no spectacular differences, the main points appear to be the following. The proportion of stems with ejective coda holds at 34 or 35 percent whether the stem is reduced (no stigma) or full (/h/ or /'/). Also, with no stigma plain stop is least frequent, while with any stigma fricative is least frequent.

Looking more closely at Tabs. 7.7–7.9, especially in this "controlled" perspective, certain specifics stand out with special clarity. One is that ejective coda obstruents are still the most frequent of the grand total, 213 of 607, as opposed to 202 plain stops and 192 fricatives. This is in spite of their complete absence with stigma /h/, itself fully a third of the three simple stigmata. Partly accounting for this is that the particular (simple) stigma-coda configuration with the highest frequency of all the nine possibilities is '-C', 99 stems as opposed to an average of 45 for those nine, over twice that average. The configuration -hC' is zero, as noted, and -:C' is 49, about average. The simplest explanation might be that \*CVhC' > CV'C'. At the same time, however, the second most frequent such configuration is -hC (where C is plain stop), 84, also notably high. More comparative study with Athabaskan is needed, but it is clear that \*CVhC' > CVhC is at least part of that history. Examples are Eyak *-sahd* 'liver', PA *\*-zət*, and Eyak *-Gu(n)hd* 'knee', PA *\*gut*. There is

in any case very clearly some degree of uniformity in glottal state between stigma and (single) coda obstruent, to be seen also in that the least frequent permissible configuration is  $-^{\prime}C$  (where  $C$  is plain stop), 19, and the second lowest is  $-^{\prime}F$  (where  $F$  represents a fricative), 25. The other four permissible configurations are  $-hF$  48, and  $-:C$  41,  $-:C^{\prime}$  49,  $-:F$ , fall in the 40s. Note that stigma  $:/$  is evidently neutral, the three manners with that being relatively uniform, but the highest frequency of those three still with ejective coda. Thus, for some reason, ejective stop is clearly a favored coda manner with stigma, in spite of the impossibility of  $-hC^{\prime}$ , and statistically less significant, the lack of contrast between  $:C^{\prime}$  and  $:^{\prime}C^{\prime}$ , all written  $:C^{\prime}$ . Without stigma, i.e. in reduced stems, this is not the case: fricative is slightly favored over ejective, 69 over 65, plain stop 56.

Finally, looking still more closely, at individual members, of the particular configurations,  $-^{\prime}ts^{\prime}$  in 25 stems is for some reason apparently the favorite of the ejectives, and  $-X$  with 22 is the favorite of the fricatives, i.e.  $-AX$  with reduced vowel. However, the relatively high frequency of either of these is no match for the favorite plain stop coda  $-hd$ , in 38 stems, the most egregious standout. The correspondence with Athabaskan  $-t^{\prime}$ , loss of ejectivity as shown in the ‘liver’ and ‘knee’ cognates above is apparently part of the reason, but probably more important is that still more instances might well be segmented as suffixal in origin,  $-d$  or  $-hd$ . For this cf. Chap. 16 on preverbal, though perhaps no non-preverbal instances of such suffixation have been so far identified.

### 7.3 Stem variation

Variation in stem-initial or onset is highly limited, to epenthesis of  $/y/$  and  $/w/$  in zero (consonant) onset after  $/i/$  and  $/u/$  (see §4.2), respectively, and to stems with  $/l/$  or  $/n/$  initial (see §6.3), and some deletion of  $/l/$  after  $/L/$  (see §6.14). There are several types of variation in Eyak stems, i.e. in stem-rhymes, not including coda obstruents. Most are irregular, derivational. Only in verbs does Eyak have a regular system of stem variation. These stem variations all involve alternations in stigma, and they are of two basic types. One is on a strictly inflectional basis, alternation between  $/h/$  and  $/^{\prime}/$ , and also  $:/$ . The other type, more on a derivational basis, might be called gradation, i.e. alternation between  $:/$  and the other stigmata, including zero stigma, i.e. stems with reduced vowel. First considered will be regular verb stem variation, then further below the other types. The source of by far the most radical change in the shape of stems, which causes by far the most trouble in stem recognition is in fact “nasal umlaut” of open verb stems immediately followed by the enclitics  $=inh$  (human singular) and  $=inu:$  (human plural). This rule, changing the timbre of all  $/e/$  and  $/a/$  verb stem vowels to nasalized  $/i/$  in these cases, this making e.g.  $-linh(-inh)$  of all stems underlyingly  $-leh$  or  $-lah$ , is obviously late or “superficial.” However, it is anything but superficial to the learner. Nevertheless this nasal umlaut is not treated under stem variation here, but in §6.1 on umlauting nasalization. Note also that it applies in those few cases where these enclitics are attached to non-verbs, e.g.  $ya:$  ‘thing’,  $yi:nhinu:$  ‘people who’.

### 7.3.1 Inflectional stigmatic verb stem variation

This section deals with variation in the two main types of verb stems, those without coda obstruent (/h/ and /ʔ/ here not being considered obstruents), i.e. open stems, and those closed with (single) obstruent. Open stem variation is highly systematic and central to Eyak grammar, whereas closed stem variation is highly inconsistent and marginal to Eyak grammar, though in the past it must have been much more systematic and important. Nevertheless, the following presentation for the open stem variation is but half the length of that for the closed stem variation, because of the difficulties in establishing a pattern for that in the welter of philological detail and uncertainty. Derivational stem variation is mostly not discussed here, but rather in the chapter on morphology, under the respective derivations, some including obstruent suffixation. Two derivations, *persistentive* (§15.4) and *customary* (§15.5), involve gradation, i.e. expansion of the stem to CV:(C), discussed there, also below. One inflection, the imperative mode, especially in open verb stems, involves a set of complexities not discussed here, but under §12.3.2.

### 7.3.2 Variable open stems

There are three types of inflectional variable *open* stem variation, and one or perhaps more types of inflectional variable *closed* stem variation. The open stem variation types are quite regular and robust, but the closed stem variation is quite the opposite, now mostly irregular and vestigial. Also, the majority (ca. 699) of open verb stems are inflectionally variable, while only a tiny minority (9) of closed verb stems are (still) inflectionally variable. This inflectional variation involves largely alternation between stigmata /h/ and /ʔ/, but only the first of the three types of open variable verb stems also involves /:/.

This first type of variable open stem is abbreviated CV. This takes the stem-form CVh in unsuffixed imperfectives, optatives, and conditionals; and CVh-L in Active and Neuter perfectives, always with -L suffix. The stem takes the form CVʔ in imperatives except for Active and Neuter imperatives with lengthening and *e*-shift (to Ce:). In Inceptive perfectives, with -L suffix, the stem takes the form CV:-L; in desideratives, with -X suffix, CV:-X, likewise in the repetitive derivation CV:-g, and perambulative derivation when suffixed, CV:-X. (When perambulative is not suffixed, the stem may be Cvh or CV:.) In negative imperfectives, suffixed with -G, the stem is optionally CV:G or CVhG; here in the negative the optional length instead of /h/ is much more common than in the unsuffixed positive imperfectives where *is* was considered to be expressive or affective. The 38 members of this CV open verb stem class are listed in (1).

- (1) Verb themes with variable open stem CV.

- <i>de</i> in <i>d-LA-de</i> 'emit light'	- <i>Xe</i> 'pack on back'
- <i>da</i> '(sg) sit'	- <i>Xa</i> in -'- <i>Xa</i> 'tell'
- <i>te</i> '(sg) lie'	- <i>Xa</i> 'fleet move'
- <i>ta</i> classificatory	- <i>Xan</i> 'melt'
- <i>tl'i</i> 'bind'	- <i>Xan</i> 'meaty (mollusk)'
- <i>tsin</i> 'sing'	- <i>we</i> 'swim'
- <i>tša</i> in -'- <i>tša</i> 'buy'	- <i>le</i> in <i>d-dA-le</i> '(fire) sputter'
- <i>tša</i> in <i>l-LA-tša</i> 'stare'	- <i>le</i> ~ 'act, do'
- <i>tša</i> in <i>LA-tša</i> 'visible'	- <i>la</i> in <i>dA-la</i> 'drink'
- <i>siyu</i> ~ 'kill many'	- <i>la</i> 'subsist, camp'
- <i>she</i> 'kill'	- <i>la</i> 'turn face'
- <i>sha</i> ~ 'dig'	-' <i>ya</i> 'be involuntarily situated'
- <i>xa</i> ~ 'grow'	-' <i>e</i> 'marry, protect'
- <i>qe</i> 'go by boat'	-' <i>e</i> ~ -' <i>an</i> 'call'
- <i>qa</i> 'handle liquid in container'	-' <i>e</i> ~ -' <i>an</i> 'copy'
- <i>qa</i> 'bite'	-' <i>e</i> ~ -' <i>an</i> 'see'
- <i>qa</i> in <i>l-L-qa</i> 'dissuade'	-' <i>a</i> classificatory
- <i>qa</i> in <i>y-L-qa</i> 'dawn'	- <i>a</i> in <i>X-a</i> 'eat'
- <i>qu</i> '(pl) sit'	- <i>a</i> '(sg) go'
- <i>q'a</i> 'burn'	-( <i>y</i> ) <i>a</i> pl classificatory

Note that the membership in this class includes all open Motion theme stems, including all classificatory and postural as well as locomotion, but also includes Action theme stems. The list of these stems is not long, but it includes a large proportion of the most frequent and productive verbs stems in Eyak.

The second type of variable open verb stem is abbreviated CV', indicating that these stems must occur with a stigma following the vowel. This takes the form CVh in unsuffixed imperfectives, optatives, and conditionals; likewise in desideratives, with -X suffix, it takes the form CVh-X, with some exceptions of -CV:-X, mostly analogical. In all perfectives, suffixed with -L, it takes the form CV'-L, likewise in the repetitive derivation, CV'-g, and CV' in imperatives except Active with lengthening and *e*-shift, thus Ce:. In the perambulative derivation when suffixed it takes the form CV:-X, except sometimes CVh-X, probably analogically. In negative imperfectives, suffixed directly with -G, the stem is optionally CV:-G or CVh-G in the same way as for type one stem variation above, though

perhaps less often CV:-G than it is for type one. The 29 members of this CV' open verb stem class are in (2).

(2) Verb themes with variable open stem CV'.

-de' in <i>d-LA-de'</i> 'understand, learn'	-gAmi' ~ in <i>LA-gAmi'</i> 'taste'
-ta' in <i>Gl-ta'</i> '(sg) live'	-xa' 'be summer'
-tu' in <i>k'u'-LA-tu'</i> 'lazy'	-qa' in <i>(-')L-qa'</i> 'count'
-t'e' ~ 'be so'	-qu' '(pl) live'
-tl'e' 'cold'	-q'u' 'damp'
-ts'an' in <i>LA-ts'an'</i> 'strong'	-Xa' 'make be'
-si' in <i>L-si'</i> 'rot'	-Xan' 'swift'
-che' in <i>d-che'</i> 'hungry'	-Xawi' in <i>d-L-Xawi'</i> 'believe'
-chan' in <i>LA-chan'</i> 'smell'	-ma' <i>l-dA-ma'</i> 'ruin'
-sha' 'stingy' (~ <i>-shah</i> )	-la' in <i>l-LA-la'</i> 'be facially'
-ga' in <i>'i-ga'</i> 'dance'	-'li' 'big'
ga' in <i>l-dA-ga'</i> 'clear the hell out'	-yan' in <i>Xd-yan'</i> 'sharp'
-ga' 'tire'	'a' ~ 'extend'
-ga' in <i>-'(l-)L-ga'</i> 'know'	-a' 'be size'
-gAwi/~ 'feel'	-a' in <i>li' 'i-d-L-a'</i> 'hate'

Note that the membership in this class includes all Neuter imperfective stative theme stems, but also includes some Action theme stems. There is one highly interesting overlap between this second and the first class, in the verb stems *-ta'* '(sg) live' and *-qu'* '(pl) live'. It is somewhat unclear whether *-ta'* is or is not to be identified with the classificatory stem *-ta* for singular object, but it is entirely clear that *-qu'* '(pl) live' is to be identified with *-qu* '(pl) sit, stay'. As *-ta'* and *-qu'* are Action themes (not Neuter) in the second class, that gives this second class a kind of morphological status, or even the beginning of a segmentation and meaning to the (stigmatic) segments represented by the sign <'>.

The third type of variable open stem is abbreviated CV'(). This is a very small class, consisting of just two very important stems: *-Le()* 'be (complement)' and *-le()* 'have emotion, feeling'. These stems are essentially or usually CV' in all paradigms and with all suffixes, except in the most frequent paradigms. That is, *-Le()* is always *-Le'*, except for Neuter imperfective *-Leh* in the positive, *-Le:-G* or *-Leh-G* in the negative. With the stem *-le()* the variation depends partly on the theme. In the theme C O-'-LA-*le()* -*le'* 'think O to be C[omplement]', the positive Neuter imperfective is *-leh*, negative *-le:-G*, the stem being otherwise always *-le'*. In the theme *'i-le()* 'have feeling, desire' with irregular *'i-* prefix,

common but probably attested correctly only in Active imperfective (erroneously called Neuter imperfective) in Krauss (1970a), the positive is *'i-leh*, negative *'i-le:-G*. In themes \**qa* *'i-le* 'have emotion (welling) up out' > *qe'le* 'have care, love', attested in the full array of paradigms, the stem is essentially invariable *-le'*, though with some analogical forms with *-leh* in the Active imperfective. Note that *-Le(')* is a Neuter imperfective theme stem, and that *-le(')* is used in both Neuter imperfective and Action themes.

There is one open stem that varies uniquely between variable CV' type and invariable CV', *-a'* '(sg) extend' and *-L-a'* '(sg) extend comparatively'. The *L*-classifier is quite regular in the comparative derivation of dimensional adjectival verbs, but the invariable /'/ stigma here has no parallel, if for no other reason than there are no other open stem dimensional adjectival verbs. There are two such with closed and variable stem, *-cha'sh* 'thick' ~ and *-lu'd* ~ 'few'. These have /' already in the Neuter imperfective non-comparative as well as comparative, and the comparatives were elicited only late from Marie. Determining whether there was any difference between the comparative and non-comparative for these stems in any other mode-aspects would probably have been impossible.

Tab. 7.11 illustrates verb stem variants of the three types described above for five mode-aspects and the repetitive derivation, with minor simplifications.<sup>3</sup> The mode-aspects shown are: imperfective, active/neuter perfective (with *-L*), inceptive perfective (with *-L*), optative/conditional, and desiderative (with *-X*). The repetitive derivation occurs with *-g* suffix. Imperatives have their own complexity outside this system, described in §12.3.2; likewise expansion, to CV: in persistive and customary. Further, variation, largely free, between CVh-G and CV:-G in imperfective negatives, is not shown here. Only the stigma varies, and for maximum visibility only that is shown.

**Table 7.11:** Stigmata in variable open stem variation.

Stem type	ipfv	act/ntr.pfv	inc.pfv	opt/cond	des	rep
CV	h	h	:	h	h	:
CV'	h	'	'	h	h	'
CV(')	h/'	'	'	'	'	'

The third type CV(') in Tab. 7.11, with a membership of two (both important verbs), might be considered a variant of CV', with "irregular" Neuter imperfective CVh. The main difference between types CV and CV' is that the latter has /' in all perfectives and with *-g*, where type CV has /:/, except that Active and Neuter perfective is /h/, like the other "unmarked" variants with /h/. Such exception further suggests that those perfectives

<sup>3</sup> Type CV(') has *-h* in the Neuter imperfective only; Active and Inceptive imperfective have *-'*.

may be more recent paradigms due to spread of suffixal *-L* from the Inceptive perfective. The probable relative recency of the Active and Neuter perfectives with *-L* suffix is also discussed in §12.1.

### 7.3.3 Invariable open stems

In addition to these three types of variable open verb stems discussed in §7.3.2, there are also invariable open verb stems, of the form CVh and CV', i.e. without coda obstruent, the *-h* and *-'* here not being counted as coda obstruents. There are also verb stems of the form CV:', always invariable, but no verb stems of the form CV:'. (Verb stems derived from nouns of the form CV: become CV:' as verbs. See *ma:* 'lake', *chan* 'bait'.) Invariable CVh verb stems are very few, but were early quite noticeable in that the Inceptive perfective was not -CV:-L as in the first class of variable open stems, but instead remained -CVh-L. Thus, e.g. along with *sAsinhL* 'he died', 'he's dying' remains *GAsinhL*, not \**GAsi:nL*, in spite of the fact that we have *GAXsi:nL* 'I'm dying' along with *GAXsinhL* from Marie, and also Inceptive imperative *GAsin'* 'die!' from Lena. The last form, though analogical, has to be expected, given the standard -CV' for imperatives, and the fact that variable open stems of class CV (38 items, listed in (1) above), so greatly outnumber the invariable CVh, with but nine such stems. Of these, at least four of the list in (3) are in fact more unstable than *-sinh* 'die', so must be accorded dual or multiple membership, noted by <~> following the stem. For details, see Krauss (1970a). Note also the disproportionate number of stems, four, with vowel *-uh*.

#### (3) Invariable open stems with CVh

<i>-tuh</i> ~ 'lazy'	<i>-sinh</i> 'die'
<i>-t'uh</i> ~ 'scorn'	<i>-sanh</i> 'scrape'
<i>-tsah</i> ~ 'sharpen'	<i>-shuh</i> '(fire) go out'
<i>-ts'uh</i> 'suckle'	<i>-XAmah</i> ~ ( <i>-XAma</i> ~ <i>-XAma'</i> [!]) 'growl'

Invariable open stems of the form CV', on the other hand, are, relatively speaking, both more stable and more numerous than CVh. They number 28, easily found as such in the dictionary, nearly tying the number, 29, of the variable open stems of class CV'. See §7.3.5 for the question of expansion of invariable open stems, which were not investigated as such in the field.

### 7.3.4 Variable closed stems

As noted above, variable closed stems are very few, a total of nine. Comparative evidence, considering the important role of variation including constriction in Athabaskan verb

stems, closed as well as open, strongly suggests that variation in Eyak closed stems is but a vestige of what it once must have been in PAE. At the same time, however, another major factor in the difference between Athabaskan and Eyak in this respect, is that Eyak allows consonant clusters resulting from obstruent coda plus obstruent suffixes to remain as such, whereas those are limited to varying degrees in Athabaskan, with greatly increased morphophonemic complexity in stem-variation.

- (4) Variable closed stems.
- a. *-tl'ahdz* ~ 'rigid'
  - b. *-k'ahd* ~ 'sick; hot'
  - c. *-chahsh* ~ 'thick' (also adjective)
  - d. *-luhd* ~ 'few' (also adjective)
  - e. *-xahs* ~ 'fear'
  - f. *-k'uhd* ~ 'wipe'
  - g. *-tsuhd* ~ 'sleep'
  - h. *-Guhd* ~ 'strike with knee'
  - i. *-wahL* ~ 'hang suspended'

This closed verb stem variation in modern Eyak is strictly alternation between /h/ and /ʔ/ stigma, and strictly in stems with coda obstruent, plain stop or fricative. Three of the nine shown in (4) are fricative, *-L*, *-s*, and *-sh*, and five are plain stop, one *-dz* and four *-d*, evidently none dorsal. Of the nine, five are in fact Neuter imperfective stative (4a-e), and two of those five are also adjectives (4cd).<sup>4</sup> It is also in part due, however, to the basic approach or hypothesis here, that all nine can be reconciled as or attributed to a single set of variants.

Of the remaining four variable closed forms (4f-i), the first three are Action theme verbs, and the last is an Inceptive perfective stative. The clearest pattern is that the first four of the nine are always or almost always CV'C, not CVhC, in Neuter imperfective, *-tl'a'dz* 'rigid', *-k'a'd* 'sick; hot', *-cha'sh* 'thick', *-lu'd* 'few'. That is the main reason they were first considered the "regular" subclass, in spite of the insufficient documentation or sometimes otherwise inconsistent results.

For an example of the inconsistency, the Future for *-k'ahd* ~ 'sick; hot' appeared as *-k'ahd* in all four times attested, for *-tl'ahdz* ~ it was *-tl'ahdz* the one time attested, and there was no Future attested for *-luhd* ~ 'few'. So far this strongly suggests CVhC for Future. However, for 'thick' it was once *-cha'sh*, once *-chahsh*, and once *-chahsh* was actually rejected as "wrong." To that reaction significant weight must be granted, especially in a situation exhibiting inconsistency, and in the absence of any explicit rejection of CV'C. In

<sup>4</sup> The first four of these (4a-d) were once thought to be a special subclass, considered "regular" because greater regularity seemed evident in these than in the rest. That seemingly greater regularity was probably illusory, in part due to the lesser variety of paradigms they were attested in, including Neuter imperfective.



the fifth Neuter imperfective theme *-xahs* ~ ‘fear’, the Neuter imperfective stem is always attested as *-xa:s*, an expanded stem, here used quite uniquely in the Neuter imperfective (not switched to Active, irregularly), and apparently no attempt was made to elicit the expected *-xa’s* here. (For regular uses of expansion see below.) However, in the Future the stem for ‘fear’ is *-xa’s* all four times attested, yet another strong vote against CVhC. There are also the following attestations of Future with three of the remaining stems, *-Guhd* ‘knee’ three times but *-Gu’d* once, *-k’uhd* ‘wipe’ four times but *-k’u’d* six times, and *-tsu’d* ‘sleep’ many times, in principle always, as *-tsuhd* was in fact also explicitly rejected. Here again is a very strong vote for CV’C in Future, in spite of the inconsistency.

It should be noted that at the time of the fieldwork elicitation there was no hypothesis as to what variants belonged in what paradigms. At the same time, awareness of the problem is obvious in some cases, e.g. in that there are four elicitations of ‘will strike with knee’. In the “regular” four Neuter imperfective themes (4a-d) there is unsurprisingly no attestation of Active imperfective, but in two of the Action themes there naturally are: ‘wipe’ is once *-k’u’d* and once *-k’uhd*, but ‘sleep’ is many times *-tsu’d*, in fact almost always, as *-tsuhd* is actually rejected for the Active imperfective.

This much philology allows for a unifying simple hypothesis that all remaining Eyak variable closed stems have the stigma /’/ in the imperfective. This is obvious, quite consistent, in the Neuter imperfective, more probable (than /h/) in the Future, with much breakdown or analogy, and more probable than that also in the Active imperfective. Any other type of hypothesis would require attribution of variation type lexically to individual stems, where no other morphological or semantic patterns can be discerned.

A plausible contrast with the imperfective might of course be found in the perfective, suffixed with *-L*. The most frequently attested Action stem here is *-tsuhd* ~ ‘sleep’, and with this the main observation that could be made at first was that while stigma /’/ was acceptable everywhere, /h/ was acceptable only in perfectives. Even though the majority of Active perfective instances, ten, was *-tsu’d*, *-tsuhd* was attested for that five times, while with the Active imperfective the stem was *-tsu’d* all 22 times, and *-tsuhd* was twice explicitly rejected. This leads to the hypothesis that /’/ is in the process of becoming generalized, partly replacing /h/ even in perfectives. In Inceptive perfective the score was *-tsu’d* four times, but *-tsuhd* five times, in Neuter perfective *-tsu’d* once, tying the score, but still fitting the hypothesis. With another frequently attested Action item, *-k’uhd* ~ ‘wipe’ the Active perfective was *-k’uhd* six times, *-k’u’d* nine times, Inceptive perfective one each, the same pattern. With *-Guhd* ~ ‘knee’ the perfectives were Active *-Guhd* twice, *-Gu’d* twice, Inceptive *-Gu’d* once, and Neuter ‘kneel’ *-Guhd* four times, *-Gu’d* twice, totaling /h/ six times, /’/ five times. Taking up the Neuter imperfective themes, always CV’C in the Neuter imperfective except for the expansion in *-xa:s* ‘fear’, the perfectives with *-xahs* ~ were Active *-xahs* 19 times, once *-xa’s*, and once *-xa’s* explicitly rejected, Inceptive *-xahs* ten times, *-xa’s* four times (though with *-xa’s* allowed as alternative three more times). These and the same inconsistency on the rest of the Neuter theme perfectives clearly enough confirm the pattern of original /h/ stigma, with /’/ from the still rather solid Neuter imperfective encroaching.

Imperatives are less well attested. Given the general rule with open stems that CV' is quite general except in Active imperatives with expansion and *e*-shift, we might expect -CV'C also to dominate here. For 'sleep' in the Active imperative we have *-tsu'd* six times, and *-tsuhd* never, actually rejected four times, appearing to confirm that expectation. However, for 'knee(l)!' we have Inceptive imperative *-Gu'd* five times, but *-Guhd* three times. The only other theme with many imperatives is 'wipe', Active *-k'u'd* eight times, but *-k'uhd* three, and Inceptive *-k'uhd* explicitly preferred over *-k'u'd*, albeit that 'wipe' is quite thoroughly confused. Evidently the only other imperative closed variable stem in Inceptive for 'thick', both *-chahsh* and *-cha'sh* once.

Other paradigms are even more poorly attested. Conditionals are Inceptive *-tsu'd* 'sleep' twice, Active *-wa'L* 'hang', *-xahs* 'fear' once. Desideratives are *-tsu'd* 'sleep' Active twice, Inceptive four times. Optatives are all Active, *-wa'L* 'hang' once and *-tsu'd* 'sleep' twice with *-tsuhd* explicitly rejected, but then *-k'ahd* 'sick' once. This miscellany appears to agree with the imperatives, with a definite predominance of CV'C.

Looking now at suffixing derivations, (5) shows forms with -X perambulative and -g repetitive, number of instances in parentheses.

- (5) Variable closed stems with suffixing derivations, number of instances in parentheses.

*-wa'L-X* 'hang' (4)

*-k'ahd-X* 'sick' (1)

*-wahL-g* 'sway, rock' (14), *-wa'L-g* (4)

*-Guhd-g* 'knee' (2)

*-tsu'd-g* 'sleep, doze' (4) (but *-tsuhd-g* also deemed acceptable)

*-k'u'd-g* 'wipe' (2)

*-k'uhd-g* (1)

*-xahs-g* 'fear' (when not *-xa:s-g*) (2)

*-xa's-g* (1) (but also explicitly rejected three times)

*-k'ahd-g* 'sick' (1)

*-luhd-g* 'few' (4)

*-tl'ahd-g* 'rigid' (1)

With repetitive suffix CVhC-g definitely seems to predominate, 29 times, CV'C-g eleven times but also explicitly rejected three times. The repetitive seems to disagree with the perambulative, agreeing though with the /h/ stigma of the perfective, while the perambulative seems to agree with the imperfective /'/, and /'/ of the other mode-aspects.

In fact, if the perambulative statistics are allowed not to disagree with those for the repetitive, i.e. /h/ rather than /'/, then one could explain all the variation on a simple phonological basis, that all suffixed paradigms, those with -X perambulative

and -g repetitive go along with the perfective with stigma /h/ simply because they are suffixed with an obstruent. Otherwise the stigma in closed verb stems is /ʔ/, i.e. in imperfectives, imperatives and the other mode-aspects, which are not suffixed with an obstruent. The desiderative suffix -X can then be identified as a postposition (o-X), especially in consideration of the conditional usually being subordinated to (o-)da:X ‘if/when’; suffixation of -G negative, however, would probably present a problem for such phonology if likewise considered. In other words, the /h/ ~ /ʔ/ stigma alternation in variable closed verbs is very probably morphological, in fact inflectional, rather than phonologically or lexically based, as is that in variable open verbs.

Variable closed verb stem specifics seem to be /h/ stigma in perfectives (with -L), and in repetitives (with -g); the stigma is /ʔ/ in imperfectives, imperatives, probably the rest of the mode-aspects, including desiderative (-X), and in perambulative (-X). In any case, however, this closed stem variation does not resemble any of the open verb stem variation classes. It differs profoundly from the class CV in that imperfectives (and other mode-aspects except perfective) are CV'C instead of CVhC. It differs profoundly from class CV' in that the perfective (and repetitive) are CVhC instead of CV'C.

### 7.3.5 Expansion, status of stigma

One major process of gradation is that all closed verb stems can be expanded, whereby the entire stem vowel nucleus becomes V:. This process takes place in two derivations, persistent and customary. These are semantically related to each other, referring to repetition or plural acts, and both impose Active conjugation. The customary differs from the persistent in suffixing -k' to the stem and adding alternative Active imperfective prefixing, whereas the persistent has no suffix or prefix in the Active imperfective. For further details on affixation, and attestations of the persistent, see §15.5 on the customary and §15.4 on the persistent. In principle, all verbs could be attested in the customary, while attestation of verbs in the persistent is far less wide, partly because fewer were elicited, but also because persistent is no doubt less freely used.

All closed stems with full vowel, i.e. with any stigma expand simply to CV:C. That includes even stems of the form CV:'C > CV:C, for which the term ‘expansion’ may be considered a misnomer. Thus -ku:n'd ‘grab’ “expands” to -ku:nd-k' in the customary. Some serious attention was given in the field to the expansion of stems with reduced vowel, especially in view of the complex issue of the identity, overt or underlying, of reduced vowels. Very clear already was the rule that stems with uvulars preceding or following the vowel always expanded to /e:/, in the twenty or so cases attested. In the thirty-some other cases (without uvular) attested with expanded vowel, 13 have reduced /u/ from originally rounded velar onset or coda. Of those 13 stems, seven are attested with expanded /e:/ only, six with /e:/ or /u:/, and none are attested with /u:/ only. Of the four with reduced vowel /i/ and unrounded velar, three were expanded to /i:/ only, one to /e:/ or /i:/. Of the 14 with coronal onset and coda, hence variable *i* ~ *A* reduced stem vowel, six were attested

with expanded /e:/ vowel only, six with expanded /i:/ only, and two with both. Most of all these instances were elicited, not spontaneous, with varying levels or preference or confidence, in statistically minimal numbers. For details and actual stems see both the account in §15.5 on the customary and the dictionary. The only clear pattern to emerge is the general correctness or acceptability of /e:/ and the additional possibility of /u:/ with originally rounded velars, and /i:/ with unrounded velars and coronals, as noted. The probable conclusion to be drawn from this is that the reduced vowel distinctions are all secondary in one way or another, and that the expansions to another vowel than /e:/ are recent and analogical. Supporting that conclusion is the instance of *-xAtl' ~ -xutl' ~ -xilt'* 'be blown; snow', expanded *-xe:tl'*. This is itself the reduced form of full *-xu'tl'* 'blow' (expanded *-xu:tl'*). Here we have the expanded *-xe:tl'* from the reduction of *-xu'tl'*, which does not expand back to *-xu:tl'*. That proves, presumably, that expansion of reduced vowels to other than /e:/ does not reveal some underlying original vowel.<sup>5</sup>

One might question whether there are verb stems with vowel nucleus /e:/ which might be in fact persistive expansions of reduced vowel stems otherwise unattested. A check through for such does not reveal any over-abundance of stems of any kind with that vowel.<sup>6</sup> The check through stems with uvular series in onset or coda noted a modicum of verb stems, eight, potentially of such origin, of course, e.g. *-q'e:g* 'speak angrily', for which probably no attempt to elicit *\*?-q'Ag* (or e.g. *\*?-q'ehg*) was made in the field. The statistics confirm, however, that no goodly number of such verb stems was therewith missed.

For an ultimate ideal orthography, incidentally, this strongly suggests that all reduced stem vowels might well be written in some sense best with the symbol <e>, i.e. not only "upside-down schwa," but real underlying /e/, to be expanded to /e:/. Rounded velars, however, would then have to be written with additional /w/, unless <u> is allowed for the vowel. One other type of exception would have to be allowed, for the stems with initial glottal stop and with reduced vowel, stable *'i-* and *'u-*, i.e. *-iL* 'pour' and *-uG-L* 'heart' (cf. *-u'G* 'breathe'). Then *'AX* 'boat', and *'Ash* 'across', because the latter two stems are not verbs, would have to be written differently from the verb *-esh-* 'sneeze', even though the latter two are homophones. Alternatively, all stem-schwas could be written with the symbol <e>, as considered in §4.3.2 on the phonemics of reduced vowels.

Variable open stems become CV: with expansion in the persistive. For qualifications of this statement, however, see the section on the persistive (§15.4). The customary of open stems, variable or not, is inevitably *-CV:k'*, which can also be read *-CV:'k'*, so is of less interest. The persistive of invariable open stems, CVh and CV', potentially of more interest, was never investigated as such in the field. Expansion of CVh to *\*CV:h* is presumably im-

5 Further discussion is to be found in §15.5 on the customary, also even for disyllabic sonorant-internal stems, and for *-t'e' ~ -t'u'* and *-e' ~ -an* ablauts.

6 Only 24%, 89/370, of full closed stems had timbre /e/ to begin with, and of those with stigma /:/, 23% were /e:/, though stigma /:/ was 33% of all stigmata.

possible, and would have to become CV:. Persistent expansion of CV', on the other hand, presumably to CV:'. If the /'/ stigma is to be equated with coda, obstruent or not, would have been easier to investigate, given the greater number and stability than that of CVh. It so happens, however, that given the number of CV' verb stems, we have two pairs of stems CV' ~ CV:' that must represent just this expansion, *-ch'e' ~ -ch'e:'* 'defecate; rust, red' and *-Xe' ~ -Xe:'* 'grease, smear, paint'. See the dictionary for semantic details. Both are also related to nouns, *(-)ch'e' ~ -ch'e:'* 'feces' and *Xe: ~ -Xe'* 'rendered fat, seal oil', alternating uniquely for Eyak as unpossessed or possessed (though cf. PA and Tlingit). It is difficult (and unnecessary) to say, especially in the *ch'e'* pair, whether the noun is derived from the verb or the verb from the noun. It could perhaps be argued in the latter case that the verb *-Xe:'* is derived from *Xe:* and *-Xe'* from possessed *-Xe'*. See §7.3.6 on derivational stem variation for that. However, for *-ch'e' ~ -ch'e:'* there is no such noun pair, unless one posits a lost (or unelicited!) variant *\*?ch'e:* for 'feces' unpossessed, untested.

Given these two pairs of verbs, Ce expanded to Ce:' appears very likely to be an expansion in which the /'/ is acting as a coda obstruent by remaining in Ce:'. This is quite the opposite of the behavior of stigma /'/ in CV:C "expanding" to CV:C in the customary e.g. of *-ku:n'd ~ -ku:nd* 'grab'. This raises some question as to the status of stigma as part of the vowel nucleus, part of the coda, part of both, or even part of neither. The ambiguity of the status of stigma is further complicated by the incipient role of /'/ as a morpheme, q.v. in *-ta'* '(sg) live' and *-qu'* '(pl) live' noted above, and §7.3.6 below.

### 7.3.6 Derivational stigmatic stem variation

Expansion as described in §7.3.5 is a very regular process in verbs, entirely predictable in the customary, though less so in the persistent. Such expansion has been called derivational rather than inflectional, in that the persistent and even customary have been called derivations. The term derivational here, however, goes a step further, in the direction of what could be called lexical, at least in that the stem variation here labeled derivational is entirely unpredictable. It also involves relations between different grammatical categories, by no means just verb stem variation. However, this variation must still be called derivational, insofar as the relations are semantically obvious. Consideration here is reserved almost entirely to such obvious identities. In fact there seems to be a fairly clear distinction here, in that there is by no means a great gray area, borderline cases seeming in fact to be very few, as will be seen below.

It has been noted that many stems of one grammatical category, preverbals, have a highly distinctive phonological shape and highly problematical or rich potential of further segmentation or analysis. This sets preverbals somewhat apart from other categories. Verb stems also have one distinctive characteristic, their specific system of variations just described. Noun stems lack any system of variation. The two nouns *ts'Al ~ -ts'Alih* 'bone'

and *Xe:* ~ *-Xe'* 'fat, oil', possibly also *ya:* ~ *-(A)ya'* 'thing', are the only vestiges of stem variation for noun possession left in Eyak, still so highly active in Athabaskan and Tlingit.

One other difference between nouns and verbs is clearly noticeable. Noun stems may take the basic shape CV:, verbs may not. There may be as many as 22 noun stems of the shape CV:, listed in (6).

(6) Noun stems of the form CV:

<i>ta:</i> 'trail'	<i>Xe:</i> ~ <i>Xe'</i> 'grease' ( <i>Xe'</i> ~ <i>Xe:</i> )
<i>tl'i:</i> 'bear spear'	<i>Xa:</i> 'north wind'
<i>La:n</i> 'baleen'	<i>guXa:</i> 'stump'
<i>Lu:n</i> 'plant species (?)'	<i>Xu:n</i> 'tooth'
<i>tsa:</i> 'stone'	<i>ma:</i> 'lake'
<i>ts'u:</i> 'breast' (cf. <i>ts'uh</i> 'suck(le)')	<i>-la/-na:</i> 'person'
<i>cha:n</i> 'bait'	<i>ya:</i> 'thing'
<i>chu:</i> 'momo'	<i>ya:n</i> 'medicine'
<i>shi:(n)</i> 'creek'	<i>'a:n</i> 'river'
<i>GAma:</i> 'maggots' (~ <i>GAma'</i> )	<i>a:n</i> 'mother'
<i>qi:</i> 'foot' (~ <i>qe:</i> ?)	

Many or perhaps even all of these CV: nouns may come from PAE stems with final sonorant. Though verb stems may take the shape CV: in inflectionally or derivationally or expressively lengthened or expanded allomorphs, there are no verb stems that are basically of that shape. For example, an Inceptive perfective of the shape -CV:-L is possible. A possibly regular derivation might be that to make a verb out of a noun of the shape CV: is to suffix -, certainly attested in the stem *-ma:* 'make lake', certainly derived from the noun *ma:* 'lake', certainly cognate with PA \*wən 'lake'. Thus the perfective stem allomorphs *-ma:L*, i.e. *-ma:-L*, must definitely contain three morphemes. This is another example, incidentally, of stigma /' / or part of stigma /:' / as a morpheme. The regularity of this particular process is of course questionable, being so highly limited by the quantity of possible examples or elicitations. One other fairly certain example, however, is *ya:n* 'medicine' (free variant *ya:n'*), verb *-ya:n'* 'cure', even though the direction of derivation is less obvious, also to Eyak speakers—probably hence the noun variant *ya:n'*. Another example is *cha:n* 'bait', with verb *-cha:n'*, where Lena is noted as uncertain, offering also *-cha:n*, perfective *-cha:nL* along with *-cha:n'L*, but then in two other forms only *-cha:n'*, q.v. in dictionary entry. This item is probably complicated in relation to *-chan'* 'smell'.

One other example relating to CV: ~ CV:' might well be the two verb stems *-(y)a* ~ *-ya:*' in the two themes *-L-(y)a*, plural classificatory, highly irregular phonologically, and *-L-ya:*', plural actions, which looks very much like the persistive of the classificatory. The final /' /

would be motivated by the constraint against CV: verb stems. This conflicts, however, with the persistent CV: of motion themes e.g. *-we:* ‘swim’ interpreted as such from Sophie.

In addition to up to 23 noun stems of the form CV: there are over thirty of that form in other grammatical categories, for over fifty stems of the form CV:, but no verbs. Some of these are listed in (7).

(7) Miscellaneous stems of form CV:

<i>di:</i> PREVERB	<i>k'a:-dih</i>
<i>de:-</i> ‘what?’	<i>dAqa:</i> ‘occasionally’
<i>da:</i> ‘we’	<i>-lu'qa:</i>
<i>da:</i> ‘where?’	<i>'AXa:</i> EXCL
<i>da:</i> ‘near’	<i>wa:</i> PP
<i>du:</i> ‘who?’	<i>la:</i> EXCL
<i>'ish-ta:</i> <i>long</i> ‘ago’	<i>lu:</i> PREVERB
<i>tli:</i> ‘already’	<i>lA'e:</i> ‘different’
<i>tla: qi</i> ‘where?’	<i>'a:</i> 3s PRO
<i>dzu:</i> ~? ‘dzu’	<i>'a:n</i> ‘yes’
<i>ts'i:n</i> ‘six’	<i>'a:w</i> ‘long’
<i>ka:n</i> ‘abortion’	<i>'a:w-</i> ‘strange’
<i>k'e:</i> ‘how?’	<i>(')a</i> PP

The statistics for stems of the form CV: are strikingly different. The (non-preverbal and non-verbal) total may be as low as three, with the certain examples *-ta:* ‘father’, *-La:n* ‘thigh’, *-ts'a:* ‘umbilical cord’. Perhaps also *-dje:(L)* ‘yolk’, the numeral *ch'a:n* ‘five’ (cf. *-ch'Alih* ~ *ch'a:n-* ‘arm’). Then *-qa:* ‘part, kind’ may be preverbal, *-l-da:* ‘face’ probably is, *da:n* ‘obstacle’ and others (*Xa:n*, *ya:n*, *-na:*, *t'a:n-*, *'a:n*) certainly are preverbal and presumably segmentable, though conceivably bringing the total to 13. Also verb stems of the basic form -CV: are not lacking, in proportion. Beside the three or four derived items above, *-ch'e:* and *-Xe:* are mentioned in §7.3.5 as persistives of *-ch'e* ‘defecate’ and *-Xe* ‘grease’, for a total of five or six such derived stems. There are however four more, *-qa:* ‘holler’, *-q'e:* ‘try’, *-la:* ‘wet’, and *-a:n* ‘stand’, for which there are no stems of the form CV: from which they are semantically at all likely to be derived.

Finally, in connection still with CV: ~ CV: variation, one adverb *k'e'-sh* varying freely with *k'e:* ‘perhaps, approximately’ (cf. *k'e:-* interrogative ‘how?’) should be mentioned. Likewise the frequent and free “affective” or “expressive” expansion -CV: ~ -CV: in imperatives, described in section (§7.3.2). This could also be a factor in some forms considered persistent.

Very similar to the CV: noun ~ CV:' verb alternation are four more items: disyllabic *GAma*: 'maggot' and *-GAma*' 'be maggoty', likewise but more complex *q'Ama*: 'salmon roe' and *-q'u*' '(herring) spawn' (and noun *-k'ush-d-q'u*' 'calf of leg'), for which cf. also PA \**q'un*' 'roe'. In addition to these, two more pairs, *xah* 'summer' ~ *-xa*' 'be summer' and now in the realm of closed stems, but uniquely so, *se:L* 'evening' ~ *-se'L* 'be evening'. Whatever their specific differences, the noun does not have stigma /'/ but the verb does, or has -' type variation in the case of *xah* ~ 'summer'. Alternatively seen, all these have /:/ in the noun, /' instead in the verb, even the closed stem *se:L* ~ 'evening', and *xah* ~ 'summer' has /-h/ ~ /-'/ . In any case, we have at least the three noun ~ verb relations V: ~ V' ('maggot', 'roe', 'evening') pairs here, to add to at least the three ('lake', 'grease', 'medicine') cases above, to show what must be either the beginnings, or traces, of a pattern. To the closed *se:L* ~ 'evening' pair we might also add, or at least compare *-tle'X* 'fish swim fast' and *LAG tli:X* 'halibut' < 'fish swim fast ashore', possibly a nominalization, with vowel shift beside /' / ~ /:/.

Finally, for this type of stigma variation, there is the pair of nouns *Ge't*' 'body, torso', along with *Ge:t'-L* 'very reincarnation', where the latter with its suffixation looks like an instrumental deverbalization of an unattested verb stem, possibly an expanded version of that in *Ge't*'.

There is one other group, about twice the size of the preceding, of pairs of stems related by stigma variation, this by the other aspect of gradation, namely reduction. These are full-grade stems reduced necessarily by deletion of stigma, not possibly the reverse, which would require assignation of one of the four timbres, as /e:/ is assigned in the case of expansion of reduced vowels. The reduced stem here must therefore be derived from the full.

The largest single subgroup of these has full CV'C as verb and reduced CVC in a noun, six pairs (8).

(8) CV'C verb verb to CVC noun derivation

- ta'tl*' 'kick' > -*qi:-tAtl*' 'heel'
- xi'ts*' 'beat drum' > *G-xits*' 'drum'
- Xe'tl*' 'be dark' > -*XAtl*' 'night'
- Xe's* 'be infected' > *XAs* 'pus'
- 'u'G* 'breathe' > -*'uG-L* 'heart'
- xu'tl*' 'blow' > -*xAtl*' 'snow'<sup>7</sup>

Note that not only is the existence of such derivations unpredictable, but the meanings, though obviously related, are by no means predictable either. One further pair is perhaps

7 -*xAtl*' itself is also verb, 'snow; be blown by wind' with its own expansion *-xe:tl'*-, noted above, along with *-xu:tl'*, expansion of full stem.



notably closer to doubtful semantically, *-tl'in't* 'fart', *-tl'it'-g* 'clitoris'. However, this is also notable in that it may be the only really doubtful pair of this sort, there being little other grey area here; though cf. *-dAtl'* ~ *-du'tl'* below, with fairly clear historical connection.

There are two more pairs of this type where both members are verbs, both incidentally of the form *\*-Ce'gw* and reduction: *-she'g* 'bend', *dAGALAshugL* 'curved knife', where the noun is a nominalization of an Inceptive perfective stative verb; and *-le'g* ~ *-lug* 'move hand'. Precisely the opposite of the above, however, is *-y-q'a'ts* 'hand', *-q'Ats* 'bite, grip', where the full stem is nominal, *y-* 'hand', *-q'a'ts* 'grippers', the verb reduced. Another is, or was, evidently the verb *-dAtl'* 'harm, beat', connected to noun *-du'tl'* in *-IX-L-du'tl'-g-L* 'part of eye', *k'u-L-dAtl'-G* 'ptarmigan', in view of the Athabaskan verb *\*-døtl* 'shake', Minto verb *-dudl* 'clap (hands)', Minto noun *-nokh-dudl-a* 'eyelid'. A third probable opposite is reduced *-ts'ux* 'wear labret' and the noun *ts'u:x* 'barnacle', which could be considered an expanded stem, but may well be not verbal. Finally, there is the pair *-qe:ts'* 'child', very probably < *-qe:kuts'* 'little child' (cf. *-qe:-* '(man's) son', *-qe:-GA-yu* 'children'), with the vocative *qAts'*, which has to be the reduction of a recent formation, in a relation, vocative, which is not otherwise attested as involving reduction.

There is one possible or probable pair, both verbs, with Vh and reduced vowel nucleus, *-Gahdj* 'beat drum, shake rattle', and *O-L-GAdj* 'move O with end of stick', very often with the meaning 'paddle O (canoe)'. The semantics are somewhat puzzling, and here do not help in trying to determine any specific meaning of the reduction.

Another group, the only other of this type, is three anatomical nouns, two with /h/ and one with /:/, which are reduced as verb prefix position C4. qualifiers: *-djuhX* ~ *djAX-* 'ear', *-k'ahsh* ~ *-k'ush-* 'lower leg, foot', *-la:X* ~ *LAX-* 'eye', this last being the only instance of stigma /:/ ~ zero (reduced) alternation.

There are two preverbals which each have highly irregular reduced stem allomorphs. One is *lahdz* ~ *-ndz* 'forward', where the full form, especially according to Leer, would be from *\*nA-ndz* itself. The other is *tl'ah-* ~ *tl'A-* 'rump', looking routine enough, but which for Eyak, even an Eyak preverbal, seems unique.

The only other stem of this sort may be in *qe'gu:l* 'thunderbird'. This looks like a gerund deverbalization of a theme *\*qa' i-gu-*, which could not be elicited. If it is instead relatable to *qa' i-gwa'* 'break out dancing (with one's arms, and noise)', reduction of that stem could explain *-gu:l*. There is likewise the possibility that the stem here is that in *gah* 'day'; cf. *ge:LA-a:g* 'midday', PA *\*z<sup>wr</sup>e:n* 'day', here possibly a verb stem with *-l* gerund suffix, but reduced and somehow expanded *\*-gwA--l*, Rezanov (1805) Кекоуль (<Kekoul' > twice, Wrangell (1839) Каряуль (<Kagiaul' >). That would require the same prefixation however, *qa' i-*, of otherwise unattested verb 'daylight suddenly break out'. Conceivably even, *i-ga'* 'dance < V transitively at indeterminate O' and *gah* ~ 'day' are historically the same stem.

There are perhaps three more pairs that appear to be of an /h/ ~ zero stigma nature, but these are perhaps more free variation. One is the two homophones *Xi(h)sh* 'scar' and

*Xi(h)sh* ‘spearpoint’. The forms without /h/, though conceivably mishearings, might well be free variants made here allowable by the secondary contrasts due to the distinct norm of [A] for reduced vowel next to uvular as opposed to reduced /i/, i.e. thereby distinct [I], from the preverbal and uniquely variable stem *o-’e’* ‘(vacant) place of o’. To be explained likewise may be the stems heard as both *-kihd* and *-kid* ‘light snow’ and relatable meanings, here after non-labialized /k/.

### 7.3.7 Other types of stem variation

There are about six other types of stem variation, not counting variation in reduced vowel nuclei described in the file on phonology:

- i. ablaut in open stems
- ii. other vowel timbre variation
- iii. semantically based variation, between onset TS- and CH-series, ancient with but one clear unique survival
- iv. phonologically motivated variation in onset and coda obstruents
- v. variation from instability or uncertainty
- vi. variation between disyllables and monosyllables

The first five of these are discussed here, while the last is discussed in §7.4.1 below.

Ablaut or major opaque alternation in vowel nucleus timbre with gradation of PAE stems with sonorant in coda, lost as such but affecting nucleus timbre, is to be seen only in the following few verb stems. The stem *-t’e’ ~ -t’u’* ‘be so’ is unique, presumably a reflex of PAE *\*-t’ew*. This in original full grade loses the *-w*, and in original reduced grade shows *-t’u’* (< PAE *\*-t’Aw*), e.g. *’i:t’eh* ‘is’, *sAt’u’L* ‘became’, but also *qa’t’uh* ‘will be’, *dik’ ’a’tuhG* or *’a’t’u:G*, following the rules for variable CV’ verb stems (viz. §7.3.2). The same rules apply to a group of what appear to be three homophonic stems (given their semantic identity) of view, *-’e ~ -’an* ‘see, travel’, *-’e ~ -’an* ‘copy’, and *-’e ~ -’an* ‘name’. These can likewise be explained as from PAE *\*-’en* (cf. PA *\*-ən* ‘see’), reduced PAE *\*-’An*, modern unsuffixed *-’eh*, suffixed *-’anh-C* or *-’a:n-C*, following the rules for variable CV verb stems. Evidently the reduced *-’An* has taken the timbre identity /a/ (not /i/) after the /’/ onset, where, exceptionally, the three reduced vowels retain a contrast. One other somewhat similar case is possible in the comparison *-g(w)a’* ‘dance’, *-gu:l* in *qe’gu:l* ‘thunderbird’, but the labialization is in the onset, not coda. The case of the irregularity in the verb *-le ~ -(l)i-* ‘act, do’ may be more like timbre raising with original nasality. It is unique in the reduction of Active perfective to *-liL*, and transitive/causative basic timbre is *-(l)i-*, Active perfective *-(l)iL*, taking on timbre /i/ as in Inceptive perfective *-(l)i:-L*. Perhaps similarly, *-le’* ‘wish’ has the variant *-lih* in the preverb and qualifier *’i:-lih*.

Other variation in vowel timbre is sporadic, without clear historical motivation. Unique is *-tle'X* 'swim fast', *LAG tli:X* 'halibut', noted above. Perhaps the only other instance of *e ~ i* is *-gehdx ~ -gihdz* 'poor', in partial free variation. Slightly more common is *e ~ a*, mostly a matter of speaker preference—itsself quite rare! (cf. §2.2—in *-gehG ~ -g(w)ahG* 'lonely'; *-xe't' ~ -xa't'* 'grimace'; the preverbs *ye'X ~ ya'X* (cf. postposition *o-ye'X ~ o-ya'X* 'all o long'. Most interesting is *gah* 'day' and *ge:LA-'a:g* 'noon, midday', possibly also *qe'-gu:-l* 'thunderbird' corresponding perfectly to PA *\*ʒ<sup>wr</sup>e:n* 'day', PAE *\*gwen* (cf. *xah* 'summer', PA *\*še:n*, no confirmed Eyak *\*xe:LA'a:g* 'midsummer' and/or *'i-ga'* 'dance'), noted above.<sup>8</sup> (There are other such apparent alternations, but these are simple frontings of /a/ before /y/, some explicit, e.g. *te'ya'* 'fish' < *ta'ya'* 'in water-thing', some not, e.g. *yAqe:X* 'tomorrow' < *\*yA-qah-yAX* 'dawn-below'.

Beyond these, two very different cases of "wild" variation might be cited. One is a set of verb stems that might be seen together as *-wAd ~ -wihd ~ -wehd ~ -wahd* for various types of twitches. The other is the postposition *o-'e' ~ 'vacant place of o'*), figuring in so many preverbals, with such a wide range of allomorphs (viz. Chap. 16), as to have a major role in the complexity of phonemic contrasts for reduced vowels.

An outstanding feature of Eyak is the very high degree of stability in stem onset and likewise even in obstruent coda. That means that such variation is at a minimum, and is easily understood in terms of phonological context. There is one outstanding exception to this, highly vestigial, to be found clearly in only two or three pairs of stems, alternating consonants of the TS- and CH-series. The most revealing is the Neuter imperfective stative verb *-ts'an* 'strong' and (non-Neuter) *-ch'a:n-G* 'weak', clearly a thematic negative of 'strong', also in the speaker's opinion. (Cf. the unshifted *-ts'a:n-G* 'duck moult'.) This is by far the clearest Eyak evidence of a positive ~ negative valence for TS ~ CH. Others are adjectival, *-kuts'* 'little' and *-kuch'* 'littler', the latter found mainly in Rezanov (1805) and other Russian sources, no semantic difference attested, and perhaps *-tsidz* 'narrow' ~ *-djidj* 'very narrow'. Support for this ancient variation comes mainly from Tlingit. Other such variation, aside from obvious assimilatory allophony in the *s*-perfective prefix to stems (cf. §6.14), is attested in the adverbial *ts'id ~ ch'id* 'only', and *ti:LA-kihs ~ -kihsh* 'wild rhubarb'.

Phonologically motivated changes in onset and coda obstruents in Eyak are minimal, as noted. Where onsets are weaker, i.e. zero or sonorant, more or less regular processes take place, namely epenthetic /w/, /y/, or /' / for zero onsets, some /l/ and /y/ > Ø after *L*-classifier, and *w ~ m*, *l ~ n* in onset from nasal coda. There is no onset obstruent variation whatsoever, except perhaps in the *-tsidz ~ -djidj* 'narrow' pair noted above (still active in

<sup>8</sup> With respect to the missing nasalization in Eyak, it has to be remembered that Eyak is a highly denasalizing language at an early PAE comparative stage. Not only did PAE *\*n* > Eyak /l/, and PAE *\*ŋ<sup>y</sup>* > Eyak /y/ before vowels, but in some cases a coda nasal was deleted, e.g. 'trail' is PA *\*təŋ<sup>y</sup>-ə* but Eyak *ta*; in addition to the words for 'day' and 'summer' covered here.

Tlingit), and even in coda, only one trivial deaffrication is noted,  $dz > s/\_d$  in *gehs-dah* ‘poor thing!’ and *-lahs-d* ‘forward’.

The only other stop ~ fricative coda variation is in *-ts'a:nG* ~ *-ts'a:nX* ‘tan hide’, without clear phonological motivation. The only other deaffrication variation is in two of the four native stems with aspirated *tl-* onset: *tli:* ~ *Li:* ‘already’ and *tla:-* ~ *La:* ‘where?’, the former variation in a minority of instances, the latter rarely. (The others were tested and do not so vary.) Motivation may be found in the very rarity of the affricate onset. A reverse may somehow be found in the Eyak place name for Yakutat, *tla'Xa'*, thought to mean ‘beside the glacier’, related to Eyak *La'* ‘glacier’. That is *d*-class in modern Eyak, so ‘beside the glacier’ would now be *La'-dA-Xa'*.

In a small class of mere instability are five stems varying between ejective and plain stop coda: the verb *-qa't'* ~ *-qa'd'* ‘cook, boil’, and the nouns *-si:nt'* ~ *-si:nd'* ‘ribs’, *-ch'ich'* ~ *-ch'idj'* ‘bird’, *-e:ts'* ~ *-e:dz'* ‘dry fish meat slices’, and in the cluster *kAwAsk'* ~ *kAwAsg'* ‘paddle’. Perhaps the only instance of velar ~ uvular instability in a native Eyak form is *-q'a'k'* ~ *-q'a'q'* ‘choke’, conceivably imitative. More in this class of instability and imitativeness is the onomatopoeic verb *-ts'in'ts'* ~ *-ts'i'ts'* ~ *-ts'i:ndz'* ~ *-ts'idz'* ‘squeak, etc.’. Equally unstable are the two stems *-k'ik'sh-* ~ *-k'igsh-* ‘berry species’, and *-k'i:nk'sh-* ~ *-k'ingsh-* ~ *-k'in'k'sh-* ~ *-k'i'k'sh-* ‘dry/rash’ with cluster coda with plain ~ ejective variation also involving stigma. For details and speaker preferences see the dictionary.

More unstable or only partly remembered are two stems *-che:k'* ~ *-che'tl'* ‘be toothless’, and the disyllabic *-GAmAt'* ~ *-tl'AmAt'* ~ *-q'AmAst'* ~ *-q'Amas'* ‘twist, contort, etc.’. Finally, there are two disyllabic stems, *qAmAXch'* ~ *dAmAXch'* ‘rotten place in ice’, with Lena favoring the *d-* onset, and *'i:nL-xAwah* ~ *-tAwah* ‘red ribbon seaweed’ with Marie favoring the *t-* onset. The latter form is clearly a disyllabic allomorph of *-xa* ‘grow’, and both are much more likely to be disyllabics with labial sonorant after velar onset than after *d-* or *t-*, speakers perhaps no longer feeling this. This is further discussed in §7.4.1 on disyllabic stems.

It certainly seems remarkable that there is so little variation attested in native Eyak stems due to instability or uncertainty. This may perhaps be attributed to a combination of circumstances, including survival of only one Eyak dialect, data from few speakers, and relatively short period of decline of language use. There were apparently never any semi-speakers. Some loanwords, on the other hand, are less stable, especially those that do not conform to Eyak stem structure, e.g. *Gu:djgAlAG* ~ *gu:djgAlAG* ‘eagle’, or the extreme *tle:shXa:shi:shXa:* ~ ‘dragonfly’, for which see §18.15.

## 7.4 Disyllabic and sonorant-final stems

There are at least two types of Eyak stem that are more than monosyllabic, both involving rhyme sonorants. First are the disyllabics, with medial sonorant /w, m, l, n, y/ between the

syllables, the second syllable being open or closed with an obstruent or obstruent cluster. Second are modern monosyllabics, ending with the non-nasal sonorants /w, l, y/ (not /m/ or /n/), which in 19<sup>th</sup> century Russian vocabularies of Eyak could or usually did end with some kind of reduced vowel following, possibly to be considered former “sesquisyllabics.”

### 7.4.1 Disyllabics

Eyak stems are monosyllabic, with the exception of about 80 stems that are disyllabic with a medial sonorant. The first syllable is CV- where C is an obstruent (possibly excluding /ʔ/), and V is a reduced vowel, predictably affected by the medial sonorant, which may be any of /w, m, l, n, y/. That at least many of these stems are monomorphemic in origin is clear both from internal and comparative evidence. Internal evidence is from internal alternations such as *-XAwa's* ~ *-Xa:s* ‘itch’, *-shiyah* ~ *-shah* ‘bad’, *-ch'Alih* ~ *-ch'a:n-* ‘forearm’, and external is from comparisons such as *q'Ama:* ‘roe’ with PA \*q'un'; *ch'iyahd* ‘hat’ with PA \*ch'əχd; *kAna's* ‘wolverine’ with PA \*(nəł-)č<sup>wr</sup>in's < PAE \*kwen's. These are discussed at some length in Krauss and Leer (1981: pp. 93–97, 124–142). They will be fully listed and reconsidered here.

One important point becomes rather evident here, that disyllabic stems seem in modern Eyak to have become a kind of alternative standard stem shape, which is even somewhat productive. With medial sonorant originating from different sources, both onset and coda, they may well have been in the process of becoming increasingly acceptable as a stem shape. In the 1960s and 1970s these were called “broken stems” in the literature, perhaps an appropriately picturesque term from a phonological point of view, but ‘disyllabic’ will do just as well. Depending on what is counted as an Eyak stem, especially in unanalyzables, diffusions, interjections, some preverbs, the number of these disyllables centers in the 80s, ca. 8% of Eyak stems.

In spite of their still small proportion, examples can be shown of their “productivity.” There is a clear historical reason that stems with medial labial sonorants /w/ and /m/ are still overwhelmingly more frequent where the onset is dorsal, K- or Q-series, presumably from original \*Kw and \*Qw now lost as such. However, medial labial sonorants are evidently starting to spread to stems with other types of onset, as can be seen in the variant *'i:nLtAwah* ‘red ribbon seaweed’ from Marie, consistently, insistently. All other speakers had *'i:nLxAwah*, clearly from the theme *l-Lxa* ‘grow’. Having lost track of the origin of the stem, *-tAwah* is now a perfectly acceptable stem form for Marie. Another example of the same configuration but of very different origin might be *dAma'* ‘suckle!’ (to baby), an interjection. This could be analyzed *dA-ma'*, where *dA-* could be one of about three prefixes, and *-ma'* could be a diffusion ‘eat!, nurse!’ (to baby). Eyak instead has no *ma'* by itself, but only this form, which could be seen even as favoring a disyllable.

Note further from the preceding and following, that the full array of codas is at the end of the second syllable of disyllables. The second syllable can be open (variable and invariable), a full vowel with single obstruent coda or clusters of two obstruents according

to the rules for such clusters (see §7.5), or a reduced vowel with single obstruent or cluster. It cannot have a final sonorant, except for two stems of the form CAyi:ny. See likewise further below for monosyllabic stems with final sonorant /w, l, y/. Disyllabic stems are found in nouns, verbs, and preverbals.

Here follows a full listing of disyllabic stems, with minimal glosses, but with related monosyllables and/or Athabaskan cognates, starting with medial labials *w/m*, then *l/n*, then *y*.

#### 7.4.1.1 Medial labials

This approach, first medial labials, and phonological order with coronal onsets first, inevitably brings up first the other more “exceptionally” configured disyllables with medial labial, starting with coronals instead of dorsals. These are first *dAmAXch*’-L ‘rotten spot in ice’, variant of *qAmAXch*’ with the same meaning, q.v. below, which Lena is certain she has heard; and *djAmAdj-A-kih* ‘chatterbox’, legendary and epithet, evidently onomatopoeic. In principle, the medial nasals have their origin in a nasal as part of the coda, though such an explanation is presumably not necessary in these two cases just noted. Lastly in this class is *dzAwAL* ‘gillnet’, but with no explanation as for the preceding, conceivably from a lost labialized coda velar, though there are no other attested examples of such loss, or from a compound, the latter part of which was *\*-wi:n*’L ‘snare’. Unquestionably, this one item is the most challenging to explain. In addition to *dAmAXch*’ as a mere modern variant of what must have been the older *qAmAXch*’, there is Marie’s *:i:nLtAwa:* from *:i:nLxAwa:* noted above. Further, there are items such a *dAw’a-d* ‘quickly, hurry!’, *o-dAwa:* ‘pending o’, which might synchronically be seen as disyllables, depending, presumably, on stress. However, there is little doubt that the latter two examples are to be analyzed *dA-* plus preverbal morphemes.

The first two stems coming up next in the order mentioned above are part of a special class, open variable verb stems of the second type, CV’, *-gAwi’* ~ ‘feel’ and *-gAmi’* ~ ‘taste’. These are special in that the vowel *-i’* may be deleted under certain circumstances. Perfective of both is regularly *-gAwi’L* and *-gAmi’L*, repetitive is *-gAwi’g* and *-gami’g*, but (positive) imperfectives of *-gAwi’* are sometimes *-gAw*, and negative imperfectives of both are *-gAwihG* and *-gamihG* but also sometimes *-gAwG* and *-gAmG*. Semantically, both are themes of perception, and are very possibly related to *-ga’* ‘know’. There is a third verb of this class, formally, and probably semantically as well, *-XAwii’* ‘believe, agree; have good luck’, perfective *-XAwii’L*, imperfective *-XAwih* or *-XAw*, Active imperative *-XAw*. For this, cf. postposition *o-XAw* ‘simultaneous with o, even with o’, and preverb *Xu’* ‘correct, finished’, with probable original meaning ‘coincide with’, but perhaps now in the semantic class of perception, formal class *-CV’*.

The complete list of items with medial labial is presented in (9).

- (9) Disyllabic stems with medial labial

-g*Awi'* ~ 'feel', -g*Ami'* ~ 'taste', *XAwi'* 'believe, agree; have good luck' (see discussion above)

*gAwa'ts'* 'fucus', possibly < *g-wa'ts'*, cf. -*g-wa'ts'* 'mesentery', stem -*wa'ts'* with *g*-qualifier

*gAmAG* 'soft mud'

-*kAmah* 'belly', cf. *ku:n* ~ *ku:la*- 'belly, thick part' qualifier, and PAE \**kan*, \**kən* 'belly, base'

*kAwAsk'-L* 'canoe paddle'

*k'Amah* ~ *k'umah* 'sea lion', conceivably < *k'u*- indefinite, stem -*mah*

-*k'Awahdj* 'nail', cf. PA \* $\text{-}\check{\text{c}}^{\text{WR}}\text{ə}^{\text{WR}}$  or \* $\text{-}\check{\text{c}}^{\text{WR}}\text{ə}^{\text{WR}}$

-*XAwah* in *'i:nLxAwah* 'red ribbon seaweed', cf. *l-L-xa* 'grow', PAE \**-xa* (see -*tAwah* variant above)

*GAma:* 'maggots', -*GAma* 'be maggoty', PA \**Gun*

-*GAmAd*- in *-qe:s-gu:n-L-GAmAd-L* 'ankle', cf. conceivably -*Gu(n)hd* 'knee', but PAE \**-gunt*

-*GAmAt'* ~ 'twist', barely remembered, wildly variable, cf. next

-*GAmAts'* 'twist', cf. -*GAts'* 'twist', PAE \**-cəts'*, cf. also *Ge:ts'* 'spruce-roots'

-*GAmAk'* 'be round'

-*q'Ama* in *'ish-ta:-LA-q'Ama* 'once upon a time'

-*qAmAXts'* '(top) spin'

*qAmAXch'* 'rotten spot in ice' (also variant *dAmAXch'* noted above), cf. on phonological basis alone *k'u-L-quhXch'-L* 'lamp chimney', no analysis (!), but same onset, coda cluster, labiality

*q'Ama:* 'salmon roe; kidney', cf. -*q'u* '(herring) spawn', PA \**q'un* 'roe'

-*XAwi'* ~ 'believe' (noted above)

*XAwa:* 'dog' (cf. next)

-*XAmah* ~ '(dog) growl', also -*Xan*, cf. PA \**-γwən* 'growl', -*XAmah* in *'i:nLXAmah* 'bracket fungus'

-*XAwa's* ~ -*Xa:s* 'itch', cf. PA \**-yes* 'itch'

-*XAwAX* 'older brother', cf. PA \**-unəγə*, Tlingit *húnxw*, irregular and difficult to reconstruct fully, but with onset assimilation of /h/ or zero to Eyak -*X*- again clearly favoring disyllabic configuration. Also the nasality has disappeared without changing the /w/ to /m/

Note further, that in every one of these disyllables with medial labial, the vowel of the first syllable is /A/, and that the vowel of the second is either /A/ closed with obstruent, or is full, with timbre /a/, except for the three perception verbs with *-i' ~ zero*.

Finally, to be included here are variants of two nouns probably including postpositions, one disyllabic *-kuwa'*, the other *-gu'wA-*, and related prefixal morphophonemics in future and directive verbs. The possessed noun *o-kuwa'na:G* 'kinsman' is very probably to be analyzed *o-kuwa'-na:-G* 'person (going) along with o'; cf. the postposition *o-ka'* '(going) along with o', where that stem has a disyllabized variant. Note further the unpossessed noun *gu'wALwahg* 'tribesman' as in *sig'a' gu'wALwahg* 'of my tribe, tribesman like me', to be analyzed *gu'wA-L-wahg*, with a stem that does not otherwise occur. It is very likely that *gu'wA-* here is from *o-gwa'* 'like o', with a variant *-gu'wA-* instead of *\*?-guwa'*. Cf. further the variants *qu'wA-* and *'u'wA-* (instead of *qa'* and *'a'*, where no syllable intervenes before the stem) in the future and directive verb morphology, treated in §6.6.3. It is clear that the future and directive prefixes are from PAE *\*q<sup>w</sup>ə'-* and *\*'wə'-* respectively.

#### 7.4.1.2 Medial coronals

The disyllables with medial coronal *-l-* or *-n-* are about as numerous as those with labial, but their structure is less uniform. The coronal onsets outnumber the dorsal ones, but only somewhat, but it is difficult to see the *-l-* or *-n-* as originating from a specific feature of the onset as in the case of the medial labials. A conceivable exception might be the three *-l-* with laterals as onset, but the routine origin of Eyak /l/ is *\*n*, and /n/ or nasality from /n/ is routinely from *\*n* in coda. Therefore, the origin of medial coronals must at least most of the time be from the coda, unlike the case of medial labials. This is demonstrably the case shown by variation and comparison, even where the result is CAIV- or CAnV-, again, it may be supposed, from some principle that some "evolutionary target" in Eyak is CARV-, or even CARa-. Concrete demonstration is the unique pair, unpossessed *ts'Al* 'bone', possessed *-ts'Alih*, hardly grammatical any longer in Eyak. At the present stage of comparative work it would appear, perhaps surprisingly, that PAE *\*-en* has become Eyak *-a(n)*, when not *-eh*, rather than *-in*. Cf. e.g. the Eyak nouns *gah* 'day', *xah* 'summer' with cognate PA *\*ž<sup>wr</sup>e:n* 'day', *\*še:n* 'summer', though cf. also *\*š<sup>wr</sup>a* 'sun'. For *xah* 'day', however, note the allomorph *ge:lA-* or *ge:-* in *ge:lA'a:g* 'mid-day'. This same correspondence seems to be the case in the apparently ablauting verb stem *-e ~ -'an* 'see' as well, as in *GAx'eh* 'I see it', *dik' GAx'anhG* 'I don't see it' from PAE *-'en*. See further under §7.4.2.2 on coda /l/ in this connection. Another pair, the possessed noun *-ch'Alih* 'forearm' and the qualifier *-ch'a:n-d-* 'forearm' show a similar relation, probably also related to the numeral *ch'a:n'* 'five'. A further very probable cognate with Athabaskan is *-GAla'* 'shoulder', PA *\*-gan'-ə* 'arm', leaving more than one problem, how the glottal stop(s) and suffixation match, and Eyak reduced vowel, but fitting the "target" pattern. (Cf. e.g. PA *\*q'un'* 'roe', Eyak *q'Ama:* and *-q'u'* above). Likewise problematic, or worse, is the comparison of Eyak *-dAleh* 'horn, antler' and PA *\*-de'* 'id.'. (This is probably a false comparison, more likely *dA-* classifier and verb stem *-le ~, q.v.* in Chap. 18.) Further, Eyak *XAla:g* 'winter' and PA *\*χəy* seem to



be related, and Leer has suggested a radically different but plausible explanation of PAE \*χax- or \*χəy- plus Eyak -lA-'a:g 'mid', the Eyak result or reduction fitting the pattern in any case. A thoroughly beautiful cognate, on the other hand, somehow is Eyak *kAna*'s 'wolverine' and PA \*nə-ł-č<sup>wr</sup>in's 'wolverine', certainly with cognate stem, Eyak fitting its pattern.

A listing of the rest of the coronal medial disyllables follows. The three lateral onset items do not specifically suggest onset origin of medial -l-: -tl'Ala' '(water) be stale; tire (of food)', -Xu:n-L-tl'Ala' 'gums' < 'tooth-binding' cf. -tl'i 'bind', PA \*-tl'u, PAE \*-tl'iw, so that -tl'Ala' development cannot easily be connected with PAE sonorant \*-w; *Lila*:' 'male, man', certainly related to *LAni*:'-kih 'boy', probably from \**LAni*:n- with nasal umlaut, the original vowel nucleus altogether unclear. A good proportion have TS- and CH-onset, beside -ts'Alih 'bone' and -ch'Alih 'forearm' mentioned above: ts'Ala' 'potted smoked salmon roe' and k'u-dA-ts'Ala' 'kettle, pot', possibly related; ya-djAlah 'rainbow' < 'sky-?'; djAlahG 'root of Kamchatka lily'. With dorsal onset, beside *kAna*'s and *XAla*:g mentioned above, are the following; -gAlid, possible stem in otherwise unanalyzable *Ge*:L-gAlid 'horned owl'; GALAG, one of three cries of Raven (others GA:G and GAYAG), of course imitative, fitting the pattern; q'Ala:k 'shirt'; XAlah 'stump', possibly < XA-lah; qAla' preverb 'beat up'; GAnuh 'duck'; qAnuh preverb 'openly, in view'; q'Ale' preverb with imperatives or exclamation of urgency 'now!', cf. adverbial group q'ah 'already', q'a:l 'now'. These last, along with several other preverbs or interjections with medial /y/ make up a perhaps disproportionate group of miscellaneous preverbals, including some with rhyme -uh.

In addition there are a number of forms with initial 'A- which may be either prefixal or the first syllable of interjections or similar forms, unanalyzable, especially with medial /n/: 'Anuh 'prepubescent penis' (cf. GAnuh and qAnuh), 'Ani:djih 'punishment', 'Ani:k'eh 'boo!', 'ALAX 'gimme!', 'AnahshA-kih 'fun, pleasure', 'Ana:shah 'flower'.

### 7.4.1.3 Medial /y/

Disyllables with medial /y/ are slightly more numerous than those with medial w/m and l/n, and as is the case with medial l/n as opposed to those with medial w/m, onset coronals somewhat outnumber those with onset dorsal obstruents. Further, all the coronal onsets are of either the TS- or CH-series, five and nine items respectively, such that the origin of the /y/ might appear to be connected with the onset in at least those cases. This hypothesis is interestingly problematical, however, especially because several of the Russian transcriptions do not imply the -iyV- as found regularly in modern Eyak, but instead an unexpected but unmistakable -AyV-, as most strikingly in Furuhjelm (1862a) <Zaiuh> 'fly' for modern ts'iyux 'mosquito'. After Cyrillic <ts> one does expect /y/ instead of /i/ for an *i*-like vowel, but hardly /a/, unless a distinctly more open and less front vowel is represented. Rezanov (1805) has цѣухъ <tsyux> twice for 'fly' and 'mosquito', which is therefore ambivalent, for ts'Ayux or ts'iyux. For the modern sequence ch'iya- Rezanov has -чѣйя (<-cheiia->, with non-palatalizing <e> and short <i> (consonantal /y/) followed by <ia>) and -чѣя (<-cheia->) 'for -ch'iya' 'master', and чѣятъ (<cheiat>), чѣят- (<cheiat-

>) for *ch'iyahd* 'hat', that is all four times specifically an *e*-type vowel rather than /i/, suggesting some difference from the modern vowel. The same also in -чeяxтъ (<-cheiaxt">) for *-ch'iyAq'd* 'abdomen'. For modern *-shiyah* 'bad', on the other hand, Rezanov has four times -шия (<-shiiia>), Furuhjelm <-shia>, which has to be taken as ambivalent, given that normal Cyrillic spelling does not allow the phonetic sequence *shy*. Overall, these transcriptions strongly suggest a vowel of distinctly non-*i* quality between the TS- or CH-onset, in fact /A/ contrasting with /i/, pointing away from an origin for the medial /y/ in some feature of these onsets.

This conclusion is strikingly confirmed by the Russian transcriptions of modern *giyah* 'water', the only disyllabic with medial /y/ and dorsal onset well enough attested there: Rezanov (1805) has *кая* (<kaia>) four times, *кайя* (<kaiia>, first <i> short <i>) once, *кея* (<keia>) twice, *кеа* (<kea>) once, Wrangell (1839) *кая* (<kaia>) twice, but Furuhjelm (1862a) in this case as <kia> twice, reflecting the modern vowel. This again points strongly away from the hypothesis that the modern *-iy-* emanates somehow from the "non-rounding" (i.e. palatalization) of the dorsal.

An alternative hypothesis is definitely to be seen in *k'iyat'* 'fish meat' for which cf. PA \**-ŋ'at'* 'id.' with problematic sonorant onset correspondence, but almost certainly from earlier Eyak \**k'u-ya't'* '(fish) meat of something'. The preverb *k'iyat'* '(boat) coming to land' (note also use however, with 'pour') might thus also be explained as from *k'u-ya'* 'into something'. Hypothetically, then *giyah* 'water' could come from an earlier \**gu-yah* with *g-* qualifier, thus explaining three of the five disyllables of the form KiyV-. The other two are 'A-*giyah*, a vocative kin term, and *-giyiL* 'bewitch', much less easily explained.

Of special interest is the correspondence between Eyak *ts'iyux* 'mosquito' and PA which is not only \**ts'ix* but also \**ts'ux*, implying perhaps PAE \**ts'iwX*. The labial is not from coda \**-xw* as might appear to be the case, since no Athabaskan reflects PA \**-š<sup>wr</sup>*, and there is moreover the constraint that no PA or Eyak stem can combine onset of the TS-series and coda of (Eyak) Kw, (PA) Č<sup>wr</sup> series. Eyak disyllabic *-iyu-* is moreover well attested otherwise, e.g. in *ts'iyuh* 'blackbear' (no Athabaskan cognate noted). Another instance is *-siyu* ~ *-su* 'kill pl', well attested but highly unstable, customary sometimes *-si:k'*; a detailed account is given in the dictionary entry. Note also the preverb *qAyuh* 'belligerently' and interjection *XAYuh* 'quick! do something!', and two nouns *tl'e:yu* 'hemlock' and *ts'e:yu* 'wild celery turned to wood', of a special small class of disyllables with long first vowels, for which see below.

A complete list of medial /y/ disyllables is presented in (10).

(10) Medial /y/ disyllables

*ts'iyux* 'mosquito' (see discussion above)

*ch'iyahd* 'hat' (see discussion above)

*-ch'iyAq'd* 'abdomen' (see discussion above)

*-shiyah* 'bad' (see discussion above)

*giyah* 'water' (see discussion above)

- k'iyat'* 'fish meat' (see discussion above)
- '*A-giyah*, a vocative kin term
- giyiL* 'bewitch'
- ts'iyuh* 'blackbear'
- siyu* ~ -*su* 'kill pl'
- qAyuh* 'belligerently'
- XAyuh*, interjection 'quick! do something!'
- tl'e:yu* 'hemlock'
- ts'e:yu* 'wild celery turned to wood'
- ts'iyats'* 'putrefy'
- siyAq'* ~ -*siya'q'* ~ -*sa'q'* 'belch', in highly unstable variation for which see the dictionary entry, PA -ze:q' ~ -zəq'
- chiyah* 'dentalium'
- chiyah* in *k'u-n-chiyah* 'scissortail'
- ch'iyatl'G* 'frog', cf. PA \*ch'əχtl' 'id.', cf. also *ch'iyahd* 'hat', PA \*ch'əχd above
- ch'iyak'* 'sting, smart', cf. probably PA -ch'ik' 'id.'
- shiya* 'be exhausted'
- shiyah* 'dig pl', persistive of -*sha* 'dig', unique derivation ("expansion"), see further below
- Giyah* 'food', probably another unique derivation, cf -*a* 'eat' with *Gi-* prefixation
- GAyAG* 'we', independent pronoun, and '*uyAG* ~ 'they'
- GAyAG*, one of Raven's three cries, along with *GALAG* and *Ga:G*
- q'Ayanh* 'homeland'
- '*Ayanh*, interjection 'poor thing!'
- '*Aya:* 'so-and-so'
- k'Ayi:ny* ~ *k'inh-* 'other, different'
- q'Ayi:ny* 'fog'

Beginning with 'A-, if these are to be included, are '*Ayanh* 'poor thing!'; '*Aya:* 'so-and-so', cf. *ya:* 'thing, something or other'. Difficult to interpret is '*uyAG* ~ '*AyAG* 'they', independent pronoun, latter variant more common, '*u-* perhaps secondary, analogous with '*u-*, 3<sup>rd</sup> person pronominal prefix, and cf. *GAyAG* 'we', independent pronoun.

Finally, there is the special phonological set of two, *k'Ayi:ny* ~ *k'inh-* 'other, different', not *k'i-*, and *q'Ayi:ny* 'fog', both with the medial /y/ strongly nasalized along with the second vowel, but still definitively /y/ in conservative realization. Since several instances

of *-i:n* are seen to become *-i:ny*, and these two would be the only instances of /y/ in both medial and coda position, these must most probably be from CAyV:n, the V: having undergone nasal umlaut, so from \*CVya:n or \*CVye:n.

This still leaves the origin of these Eyak forms and most of the rest with medial /y/ far from adequately explained.

#### 7.4.1.4 Disyllabic stems with long first vowel

One other small group of apparently monomorphemic disyllabic stems was mentioned in §7.4.1, with long vowel in first syllable, *tl'e:yu* 'hemlock' and *ts'e:yu* 'wild celery turned to wood'. To these should be added probably *tsi:ye* 'industrious person' and perhaps *di:ye:X* 'Calm Weather', though the latter may be an expansion of a stem *-yAX* 'train, discipline'. Two others with *di:-*, *di:ya* 'salt water' and *di:yAX* 'not yet' are probably from *dA-'e'-ya* 'in a body of water of absent indeterminate object', and 'before absent indeterminate object', respectively. One other *-xi:ya'X* 'chin' might be from *o-xah-ya'-X* 'non-punctually in o's eating range'. The interjections *'a:yanh* 'poor thing!', cf. *'ayanh* 'id.', and *'a:ya:n*, exclamation of disgust, might be counted here. There are none of this type with first vowel long and medial labial or nasal, but there are at least two (bird names) with the syllable *-leh*, *ch'i:leh* 'raven', and *ts'i:tl'-Ga:-(?)leh* 'heron' These are impossible to analyze, except that *-leh* is an extremely frequent verbal form, e.g. *le* ~ 'act', though no meaning can be assigned to *ch'i:-(?)* or *ts'i:tl'-Ga:-(?)*. There happen to be, in addition to *-n-dAleh* 'horn, antler' noted above, two more such *-leh* disyllables in unanalyzables, but these are both less likely to be monomorphemic, *Ga:-(?)g(w)A-(?)leh* 'fish species', and what is perhaps best analyzed as *-dAG-A-leh* 'mind' < 'activity above'?. In fact, historically genuine disyllabics with long first vowel are few, so few even that the choice of vowel might be seen as related to the consonants involved, e.g. /i:/ with coronals as in the words above, thus *ch'i:l-*, *ts'i:ntl'-*, *tsi:y-*; but *tl'e:yu*, *ts'e:yu* for some reason; and *Ga:-*."

Disyllabics generally remain difficult to explain, both in terms of what triggers the development itself, and choice of what sonorant is triggered (except that labials are scarce or absent except with velar and uvular onsets, from proto-labialized dorsal, it is presumed). That monosyllabicity of stems is the norm remains assumed, both typologically and from the fact that a close study (Krauss and Leer 1981) of PA disyllabic stems shows that these do not correspond to Eyak ones.

The degree to which this Eyak stem-disyllabicity can be further explained will be taken up below in connection with actual variation between monosyllabic and disyllabic stems. First, however, there remains the issue of sonorant codas in modern Eyak monosyllabic stems, which we can see, mainly in 19<sup>th</sup>-century Russian vocabularies, had some kind of vowel following that sonorant, with marginal modern variation related to that.

The marginal modern variation is of two types. One is variation between no vowel following the sonorant, and obvious traces of some vowel following it both in the modern language and much more evidence of such in the Russian sources.

The other variation is truncation of the sonorant in verbs. This is attested in only three cases, two adjectives ending in modern *-w*, and one (verbal?) noun ending in *-y*, which have a related verb from which the sonorant is deleted. These appear to be highly important relics, pointing to a stage of Eyak and PAE when there were significantly more stems with sonorant coda. These three cases are likewise discussed below, under the subsections on coda /w/ and /Y/ (§7.4.2.1), and coda /y/ (§7.4.2.3).

#### 7.4.2 “Sesquisyllabics” and sonorant codas in Russian sources

The demonstratives *'Aw*, *'Al*, also *-Ay-* and *-shAl-*, need to be considered here, along with other CVR stems, and the 19<sup>th</sup> century transcriptions of those with final vowel following the sonorant. First we have the demonstrative alternations in the lexicalized or fossilized forms in (11).

(11) Demonstrative alternations in lexicalized and fossilized forms

*'AwA-'ah-dah* ‘thank you’

*'AlA-k'ah* ‘out of bed’

*'AlA-sh-gahX* ‘would that’

*-'wAX* ‘thus, that way’ (< *\*'AwA-X*), *-'lAX*, ‘this way’ (< *\*'AnA-X*)

*'u:d* ‘there’ (< *\*'AwA-d*), *'a:nd* ‘here’ (< *\*'AnA-d*)

*XA-yA-'u:d* ‘yonder’, *Xi:d* ‘yonder’ (< *\*XA-yA-d*)

*XAshlAX* ‘closer’ (< *\*XA-shAnA-X*), *XAsha:nd* ‘closer’ (< *\*XA-shAnA-d*)

Clearly, the *dA* = ‘selfsame’ proclitic in *dA='wAX* and *dA='lAX*, phonologically unique in creating the sequence *dA'RV-* instead of *da'RV-* shows how close to the surface the first /A/ of *'AwA-* and *'AlA-* remains. These demonstratives also show the prior rule that suffixed *-X* retains the second vowel as /A/. This is related to the rules for epenthetic /A/ next to uvulars in complex preverbals, but not an instance of such, as we have other evidence of the post-sonorant schwa. With suffixed coronal, on the other hand, the second /A/ is elided, with the results *'u:d* ‘there’, *'u:ch* ‘thither’, *'a:nd* ‘here’, *'a:nh* ‘hither’. The same rules apply to *XA-shlAX* ‘(movement) close by’, *XA-sha:nd* ‘(at rest) close by’, *XA-shan:ch* ‘toward close by’. The same applies to *XA-yA-'u:d* and *Xi:d*, *Xi:ch*, but not to *Xi:nXih* < *Xi:Xinh* (< *\*XA-yA-X-En*), perhaps because with the enclitic *=inh* the syllabification becomes /Xi:Xinh/, though that is inconsistent with /XAYa.'u:d/. It should be noted that in modern Eyak, *'Aw* and *'Al* are synchronically without final vowel, so e.g., presumably, *'Aw-X* ‘in (moving) contact with that’, *'Aw-d* ‘in (punctual) contact with that’, *'Al-X*, *'Al-d* ‘in (punctual) contact with this’.

As noted, 19<sup>th</sup>-century Russian vocabularies of Eyak amply show that stems now ending in sonorants /w, l, y/ then had a vowel following the sonorant. There are in fact

six such primary sources, all described in some detail in §3.2: Rezanov (1805), Anonymous (1810), “Baranov” (1812), Khromchenko (1823), Wrangell (1839), and Furuhjelm (1862a). Those will be abbreviated here by the year dates.

#### 7.4.2.1 Coda /w/ and /Y/

The data are as follows, first for stems now ending in modern /w/, 19<sup>th</sup>-century medial /w/ and /Y/. Only the relevant segments of the original transcriptions and corrected glosses will be cited here. The larger philological context is of course interesting and often challenging. For demonstrative 'Aw 'that', the most likely instance is modern 'AwA'ahdah 'thank you', probably to be analyzed 'AwA-'ah-dah, with unidentified stem -'ah- and possible survival of the demonstrative as 'AwA-. Cf. demonstrative 'AlA- below. These descriptions apply also to the following.

By far the most instances are of -'lAw 'big': Rezanov (1805) -ляга (<-liaga>) (six instances), -лега (<-lega>) (two instances), -люга (<-liuga>) (one instance), with the /l/ heard consistently as palatal, Cyrillic <e> either as *ie* or *io* (ë), so six to eight instances without rounding, one to three with, always velar sonorant, and always final -A; Anonymous (1810) -ляга, -лава, -льга, -лага (<-liaga, -lava, -lyga, -laga->), and 1812 the first two likewise, probably copied from 1810; Wrangell (1839) -лере (<-lege>); Furuhjelm (1862a) <-liaga>, and <-lian>, transliterated from missing Cyrillic original, where <n> is a misreading probably not for <гъ> or <въ>, including hard sign, but probably a vowel, hardly Cyrillic <и>, but Latin <u> probably from another missing intermediate manuscript. Clearly the stem -'lAw had final -A at least through 1862, when the first instance perhaps without final vowel also appears. We do not know what to make of the 1839 final <-e>, in -лере (<-lege>) (where the first <e> might be read ë, i.e. “io”). The stem might have started to become monosyllabic by 1862. There were variants without any rounding, i.e. [ʔlɛɥə], [-ʔlɛɥə], at least to 1862.

Similar phonetics appear to apply to -'a:w 'long', less well attested: Rezanov (1805) <-aya> (two instances), <-ay-> (two instances), Anonymous (1810) <-ara>, Khromchenko (1823) <-ay>; no later instances. The loss of final -A may be earlier than in -'lAw 'big', and the labialization more prominent and/or happening sooner.

It is not clear why -sha:w 'head (of hair)' shows a different history from the preceding, unless it is a phonologically irregular loan from Tlingit *shá* 'head' (with reduced vowel): Rezanov (1805) <-шаре> (<-shage>), Anonymous (1810) -шаги (<-shagi>), 1812 -шаги (<-shagi>), Furuhjelm (1862a) <-shag>. Final vowel is high front, [-ʃa:ɥɪ] [-sha:YI], and there is no labialization through 1862, even as the final vowel is gone. The only other final -w is definitely a loan from Tlingit, *wa:w* 'herring', from Tlingit *Yaa`w*: 1805 <gagu>, perhaps to be read disyllabic *Ya:YU*, or conceivably monosyllabic *Ya:Yw*, but somehow the velarity remains unusually prominent, and/or Rezanov cannot bring himself here to use Cyrillic <y> except for a distinct syllabic pulse, though he has done so e.g. for -'a:w 'long' discussed above.

From this it does indeed appear that in the 19<sup>th</sup> century Eyak had a stem-coda velar sonorant that could be unrounded, normally followed by what might have been three potentially contrasting reduced vowels, *-A*, *-I*, and *-U*. Before *-U* the sonorant was rounded, but before *-A* rounding was variable, not contrastive. In modern Eyak all velar sonorants are rounded.

Note further that there is variation between coda *-w* from *-Y* and zero in both these stems considering the two clearly related verbs *-li* 'be big' (cf. also *-le*: ~ *-ne*: 'big'), and *-a* 'extend'. Though such variation is limited to these two stems, it is of obvious historical significance, if not synchronic. See further discussion of this variation in *tsi:ny* 'song' and *-tsin* 'sing' under the discussion of coda *-y* in §7.4.2.3.

### 7.4.2.2 Coda /l/

For the demonstrative *'Al* we have more distinctive documentation than for *'Aw*, namely Rezanov (1805) <али, али-, але, але-> (<ali, ali-, ale, ale->), consistently with high front reduced vowel, [ʔəli]; the same may be in three color terms in Anonymous (1810), ending in яли, ели, елли (<iali, eli, elli>), 'this (is) C' where C is complement, unless those are instead to be read *yiLeh* 'it is C'; then, however, 1812 тейтууль (<teituul>) 'what is that?', probably *de:Aw* *'Al* 'what is this?'; finally Furuhjelm (1862a) <alshu> 'today', evidently *'Alshuh* 'this one?', showing the final vowel gone. This demonstrative still in the form of *'AlA-* probably survives in two otherwise not fully analyzable items, *'AlAshgahX* 'would that, I wish that', and *'AlAk'ah* 'out of bed'. The first must be *'AlA-sh-gahX*, perhaps something like 'this I wish', the second *'AlA-k'ah*, with what is probably *'AlA* 'this' as the postpositional object of *o-k'ah* 'way from o'.

Especially interesting is Rezanov (1805) цыля (<tsyliya>) 'bone', modern unpossessed *ts'Al*, possessed *-цали* (<-tsali>), modern *-ts'Alih*, where this unique echo of the PAET possessive suffix, the modern contrast  $\emptyset \sim -ih$  appears to be represented as <a ~ i>, even though *'Al* is <али, але>. The only other instance of *-A* is Khromchenko (1823) хия (<xilia>), Wrangell (1839) хилла (<xilla>) 'shaman', modern *xi:l*. Another instance of [-i] is Rezanov (1805) кале- (<kale->) 'now', modern *q'a:l*, and Furuhjelm (1862a) <khalilna> 'young', modern *q'a:l Lila:* 'young man', or *q'a:lAlah* or *q'a:lilah* 'young man, in prime of life' where the reduced vowel itself is still preserved as in 1862. Relatively well attested is *qe'gu:l* 'thunder, lightning' (also 'thunderbird', probably from 'sudden dance', originally the gerund *qa'ig(w)AwIV* of *qa'\**'i-g(w)aw' 'dance up out'), modern *qa'ig(w)a'* 'suddenly start dancing': Rezanov (1805) кекоуль, кагяуль (<kekoul', kagiaul'>), Anonymous (1810) ккакулу (<kkakulu>), Wrangell (1839) карауль (<kagaul'>); here the final vowel <y> of 1810 is colored by the preceding, otherwise gone, and the original *-a-* vowel of the stem is still showing. The only other form with final *-l* is a loan from Tlingit: Rezanov (1805) хуль (<xul'->) 'sale', modern *hu:l* < Tlingit *hoon*; 1810. Here again all three variants [i, ə, u] of the final vowel are attested, but it is difficult to determine what the potential contrasts were, if any. This is particularly a problem in 'bone', the only remaining instance with a

syllabic possessive suffix, modern disyllabic *-ts'Alih*, “sesquisyllabic” non-possessed *ts'Al*, “sesquisyllabic” *ts'Al[A]* in Rezanov (1805), with contrastive status of final vowel unclear.

Further survival of the post-sonorant vowel is probably to be seen in modern *xi:la'lAw* ‘great shaman’, which could be segmented still as *xi:lA-'lAw* (where *A > a/\_C*). Alternatively, it might be seen as *xi:l-a-'lAw*, along with *xi:l-'a-'lAw*, with epenthetic *-(')A-*, also attested for ‘great shaman’ (cf. 18). However, the former interpretation is far preferable, because epenthesis of *-'A-* with *-'lAw* is far more frequent than that with *-A-*, implying that disyllabic *xi:lA-* plus *-'lAw* is far more probable than *xi:l-A-'lAw*.

There is evidence also that the *-l* suffix to open stems in the deverbalization called gerund (§18.13.1) was followed by a vowel. The evidence is only in the general fact that that *-l*, necessarily from *\*-n*, does not result in nasalization of the stem-vowel, but also in at least one instance where the gerund is the object of *o-ya'X*, where epenthesis is not expected. The example is *k'utsi:nlAya'X yaX da:Xinh* ‘he’s walking about singing’, to be segmented *k'utsi:nlA-ya'X*.

See further §7.4.2 on “sesquisyllabics” and §6.17.6 on non-epenthetic *-A-*.

### 7.4.2.3 Coda /y/

We have only three items from this early literature showing coda *-y*. One is Rezanov (1805) *кѣ-уя* (<*k*”-uia>) (three instances), *кою-* (<*koiu-*>), *кѣ-оя-* (<*k*”-oia->) (one instance each), Khromchenko (1823) *күя*, *күе* (<*kuiä*, *kuie*>) (two instances each), Furuhjelm (1862a) <*kiui*>, modern *k'u:y* ‘wind’. Note, however, also modern *k'u:ya'lAw* ‘big wind’ (rather than *\*?k'u:y'a'lAw*), and *k'u:yaYahsh* ‘very slight breeze’ < ‘breeze’s child’, showing still the disyllabicity of *k'u:ya-*, rather than an epenthetic, *-A-*, by the same reasoning as for *xi:lA-* just above. Another such item from the Russian period is Rezanov (1805) *цѣя* (<*tsyä*>), Anonymous (1810) *цѣи* (<*tsyä*>), modern *tsi:y* ~ ‘mussel’. The third is Rezanov (1805) *цѣя* (<*tsyä*>), modern *tsi:ny* ‘song’, *цѣях-* (<*tsyäiax-*>) [*tsj:ye:ya'ʔχ*] ‘while singing’. Here too are all three reduced vowels [ɪ, ə, ʊ]. The [ʊ] is because of the preceding stem-vowel /u:/, the apparent “vowel harmony” after intervening *-y-* being a sign of how trivial the quality status of the final reduced vowel may have been. Final <*и*> after a vowel can be read syllabic [j], so all the forms here can be read with final vowel not dropped.

One of these, *tsi:ny* ‘song’ is related to a verb the stem of which is without the *-y*, *O-tsin* ‘sing O (song)’. It is tempting to see the *-y* as suffixal, or even as a phonological extension of the vowel, especially in view of the variation *tsi:ny* ~ *tsi:n* ~ *tsinh*. This variation might of course be influenced by the verb stem, and/or the variation in *tsi:ny* ~ ‘branch’ and *-tsi:ny* ~ ‘(man’s) daughter’. For all this variation see the dictionary. However, since in both instances from Rezanov (1805) the form clearly ends with <*-я*>, the *-y* cannot simply be a modern Cordova innovation. The instances with modern *-w*, *-a:w* ~ *-'a'* ‘long ~ extend’, and *-'lAw* ~ *-'li'* ‘big’ above certainly seem to support the interpretation that the sonorant is deleted in the verb, unless one claims that *-w* (<*-Y*>) is determined by stem vowel /a/,



**Table 7.12:** Tokens of reduced vowels in sesquisyllabics.

	i	e	a	u	∅	Total
w	0	0	2	4 (8)	0 (4)	10
Y	1	2	13	1	0	15
l	3	3	3	1	6	16
y	1	3	6	1	0	11
Total	5	8	24	7-10	7-11	

and -y is determined by /i(n)/. Rezanov's usual spelling -лега (<-lega>), and front vowels of -'li' and -'le: for 'big', as shown above, argue against that claim.

#### 7.4.2.4 Summary on final (post-sonorant) vowel

The contrast status of reduced final vowels [ɪ, ə, ʊ] in these "sesquisyllabics" is unclear. The whole range is attested after all three sonorants /w, l, y/. In fact even Cyrillic <e> is also attested after each sonorant. A statistical summary of the philological results of the 55 noted incidences (Tab. 7.12) may be of some interest, by vowel transcription of /i, e, a, u, ∅/, after /w, Y, l, y/, respectively.<sup>9</sup>

That is, there are 44-48 instances of RV, and 7-11 of R#. Some observations of statistical significance are (A) that some final vowel is much more frequent than zero, at least four times more so; (B) by far the most common final vowel is -A, more than the rest combined; (C) there was definitely an unrounded velar sonorant /Y/ (as in some Tlingit, including Yakutat), probably of phonemic status, though perhaps marginally so; possibly, also (D) that, especially if the velars /w/ and /Y/ are combined, the final vowel tended to disappear sooner after /l/ than after the other sonorants.

The status or nature of phonemic quality or timbre contrasts in reduced vowels is much more complicated or unstable than is that in full vowels. See §§4.3.2 and 4.3.5 for details. There are no stems with reduced vowel and no coda consonant (obstruent or sonorant), or stigma (/h/, /ʔ/, or /:/:). That also means no stem or word may end with a vowel (without stigma), i.e. no stem or word may end with a reduced vowel. Quite possibly, the final vowels after sonorants dealt with here may be an exception to this rule. They may have survived into the 19<sup>th</sup> century as a final reduced vowel, highly unstable as to quality, more so even than the other reduced vowels. Stems of the form CVRV or CV:RV might be labeled for this period as "sesquisyllabic," i.e. with some sort of specially reduced final syllable vowel. They are transcribed in Krauss (1970a) as <CV(:)RV...>, where the <...> is for unidentified stigma, but these were perhaps indeed final reduced vowels.

<sup>9</sup> There is some uncertainty whether to consider <Vu> as VwU or as Vw.

### 7.4.3 Variation involving coda sonorants and disyllables

There are different kinds of variation involving coda sonorants, in addition to the historical one discussed in §7.4.2, and phonological variation particularly involving the sonorants and nasality, mentioned in §6.3. I.e., there are alternations between coda sonorant and zero, and between disyllables (not “sesquisyllables”) and monosyllables, to be discussed here.

Before moving on to that, there are two aspects of variability in coda sonorants that are evident in modern Eyak but that can be explained or addressed only historically.

#### 7.4.3.1 CV(n)(h)C

First, there is a much deeper or more ancient type of variation in nasality. Note, *-Gu(n)hd* ‘knee’, consistently nasalized in Anna’s speech only. This may be a mere idiosyncrasy, or it may be the only trace of a hypothetical nasal in PAE, which especially Leer might therewith reconstruct for PAE *\*-Gʊntʰ*, to explain the /h/ stigma, PA *\*-Gʊtʰ*.

The same would explain the nasalization in Eyak *Lanhd* ‘smoke’ consistently for all speakers, of which there is no trace in PA *\*læd*, though the Eyak implies PAE *\*lænd*. The survival of nasality itself before the /h/ in Eyak then must be inconsistent, as in the case of *-sahd* ‘liver’ (no *\*-sanhd* attested), PA *\*-zətʰ*. That may accordingly be reconstructed PAE *\*-səntʰ*, supported by Yeniseian (!) *sen*, the Eyak /h/ now being the only trace of the nasal on the North American side. This seems like a good hypothesis to explain some instances of /h/ stigma in Eyak, but certainly not all. Remaining for further research, including comparative work, is a thorough study of all stems for status of nasalization, especially connected with /h/ stigma.

#### 7.4.3.2 CV(R)(ʻ)

Second, there is the variation between presence in coda of sonorant, of glottal stop, and of neither. In fact, the problematical status of coda sonorants may be partly connected with the fact that Eyak still shows reflexes of a contrast between plain and glottalized onset sonorants (still /ʻw, ʻm, ʻl, ʻn, ʻy/ as well as /w, m, l, n, y/) in stem onset. Thus PAE may well have had the same contrasting set in coda. Eyak partially preserves the onset contrast, lost in Athabaskan, while the opposite is so in the case of coda sonorants, widely preserved in Athabaskan, lost in Eyak (see Krauss and Leer 1981). An important principle is that Eyak may preserve the /ʻ/ or the sonorant, but not both (at least not contiguously), and perhaps sometimes neither.

At the same time, the reconstruction of PAE stems with these sonorant codas also involves suffixal *\*-ə* and/or *\*-ʻ*. Such suffixation, as in Athabaskan noun possession, is completely lost in Eyak, with only traces left in *Xe: ~ -Xeʻ* ‘seal oil’, *tsʻAlih ~ -tsʻAl* ‘bone’.

Under these conditions, taking up coda nasals first, it is unclear whether Eyak *ma:* ‘lake’, derived from *\*wa:n*, is exactly cognate with PA *\*wən* ‘lake’ or PAE(?) *\*wənə* with locative (?) suffix, likewise Eyak *ta:* ‘trail’ with PA *\*təŋʻ* or *\*təŋʻə*. Clearly Eyak *xi:l(V)*

'shaman' is cognate with PA \*(də-)yən-ən 'he who sings medicine song', though the rules are unclear. Likewise very probably -*GAla*' 'shoulder' with PA \*-ɢan'-ə' 'arm', and certainly PA \*qʷn' 'fire' with Eyak *qu*'- ~ *qu:n*- ~ *qu:lA*-. Cf. further PA \*-yʷ' 'tooth' but Eyak only *Xu:n*- ~ *Xu:lA*-, a qualifier prefix. The comparison of Eyak *q'Ama*: 'salmon roe' and -*q'u*' 'calf of leg' and 'herring spawn' (verb), with PA \*q'un' 'salmon roe' is certainly another piece of this puzzle, beside that of disyllabicity, to be taken up again below.

At least as problematical and with fewer data are other coda sonorants. There are two or three adjectives that have uniquely retained /w/. One is the adjective -*a:w* 'long', certainly relatable to -*a'* 'extend' and -*a*' 'extend comparatively', where there is no other trace of the -w than in the adjective. This is parallel to -w or -Y in -*lAw* 'big', -*li*' 'be too big', with reduction of nucleus in the adjective. A possible third adjective is -*dzu*: 'good', probably cognate with -*dzu*' 'annoy' (for semantics cf. -*shiyah* 'bad; dear little old'), where the adjective may reflect \**dzuw*('), cognate with PA \*-zu- 'good', however irregularly. Cf. here further Eyak -*Xu*' 'fur', PA \*-ya', Tlingit -*xaaw-ú*, where the Tlingit explains the vowel correspondence. Likewise PA \*ta: 'in water' (preverb), PA \*tu: 'water', but cf. e.g. Galice *tAmA*, Eyak *ta*' (preverb) only, implying similar correspondences involving coda /w/. Another set of pairs of this type is *qAw* 'clearing' and *qih* 'meadow, clearing', and the preverbals o-*XAw* 'simultaneous with o' and *Xu*' 'complete, right', probably also -*Xawí*' 'believe', again bringing up disyllabics.

There are no final nasal sonorants as such, except however in a few loans, e.g. *k'uldiya:nn* from Ahtna. For the spelling, see §4.2. The vowel is not nasalized. The form is perfectly stable. I.e. the phonology has evolved to allow this easily, though it remains quite rare. An English loan of this type is *ke:nnli*: 'cannery'. Also in this connection is the negative imperfective of -*gAmi*' 'taste', -*gAmG*, evidently quite secondary. Finally, *xa:nih* 'old salmon' is evidently a diffusion, perfectly stable or canonical, with suffixal -*ih*; the stem itself is not disyllabic, *xa:(n)*, usual Eyak -*xa* and disyllabic -*xAwah* 'grow'.

The morphological status of coda -l is questionable. Unquestionably it is a suffix in gerunds, but also in *q'a:l* 'now' (cf. e.g. *q'ah* 'already'). In the demonstrative 'Al(V-) it is part of the stem; *xi:l* 'shaman' is interestingly problematical; see §7.4.2.2.

The only stigma that may precede a sonorant in the same stem is length, /:/; there can be no VhR or V'R without morpheme boundary. The only thinkable exception, perhaps, is the preverb *qa'ni*: ~ *qa'nu*: (latter variant probably analogical, with human plural suffix -*nu*:) 'into a fight', if not from *qa'-ni*: where *qa'* is 'up out' and the verb stem is -*le* ~ 'act', hence 'act up out, suddenly'; cf. then *qAla*' 'beating up', *qAyuh* 'belligerently', and -*qu:(l)*- 'fierce'. This *qa'ni*: would then be some kind of unique survival. The relationship in phonology to the other two preverbs remains utterly opaque, such being our understanding of the disyllabic preverbs.

#### 7.4.4 Variation between disyllables and monosyllables

It remains to list (or relist) here the rest of the variant sets showing variation between disyllables and monosyllables, at various levels of transparency, cf. (12). Some are nominal and qualifier, not counting the nasalization alternation CV:lA- ~ CV:n(-).

(12) Remaining sets varying between disyllables and monosyllables

*-kAmah* ~ *-ku:n* ‘base, belly’

*q’Ama:* ‘roe; kidney’ ~ *-q’u* ‘(herring) spawn’ (i.e. noun ~ verb)

*-ts’Alih* ~ *ts’Al* ‘bone’ (possessed and unpossessed noun)

*-ch’Alih* ~ *-ch’a:n-d-* (latter qualifier) ‘forearm’

*gAwí* ~ *-gAw* ‘feel’, *-gAmí* ~ *-gAm* ‘taste’, *-XAwí* ~ *-XAw* ‘believe; etc.’<sup>10</sup>

*q’ah* ~ *q’a:l* ‘already ~ now’ and *q’Ale’* ‘now!’ (i.e. adverb ~ interjection)

*o-ka* ‘along with o’ (postposition) and *-kuwa’-na:-G* ‘relative, friend’

*-xah* ‘grow’ (verb) and *’i:n-L-xAwah* ‘red ribbon seaweed’, difficult to classify

*k’Ayi:ny* ~ *k’inh-* ‘different, other’

*-sha* ‘be stingy’ (verb and adjective), almost certainly related to *-shiyah* ‘bad; etc.’, itself monosyllabic in *-shah* for vocative kin terms and in adverbialized *k’u-sha:-dah*

Perhaps less archaic and irregular, and more revelatory, at least semantically, are three verbs that show both monosyllabic and disyllabic stem, relatable to some difference in meaning. The open variable stem *sha* ~ ‘dig’ has the variant *-shiyah*, attested only in the Active imperfective, specifically with the meaning ‘dig pl’. This has to be construed as the persistent, not otherwise attested with open stems except perhaps in expanded motion stems, like *-wa:* ‘swim by insistence’, only from Sophie, and questionable. This one item could imply that instead of expansion as of closed stems, persistent triggers disyllabification in open stems, here *a > iya* with onset *sh-*. Unfortunately there are no further data to support this, the closest being *-she* ‘kill sg’ and *-siyu* ‘kill pl’; for this there is the *s ~ sh* alternation, the latter variant pejorative, the clearest trace of which is *-ts’an* ~ *-ch’an* ‘strong’ ~ ‘weak’, semantically reversed, and no clear parallel in *e ~ iyu* to *a ~ iya*.

There are only the two other verbs with stems varying between monosyllabicity and disyllabicity, both closed stems: *-GAts’* ~ *-GAmAts’* ‘twist’ (cf. PA \*-gəts’) and *-XA:s* ~ *-XAwaw’s* ‘itch’ (PA \*-yes). Neither of these pairs was explicitly investigated in terms of persistivity in the field. It is clear enough from the data in the dictionary entries, however, that *-GAts’* includes the less extreme types of twisting, *-GAmAts’* the more extreme, so perhaps the disyllabic is the persistent. In the case of *-XA:s* ~ *-XAwaw’s* ‘itch’, though, the

<sup>10</sup> For these three perception verbs cf. *-ga’* ‘know’ and the preverbals *o-XAw* ‘simultaneous with o’ and *Xu’* ‘correctly’

monosyllable *-Xa:s* is both formally the expanded variant and means the more persistent itching, as opposed to the merely ‘full’ disyllabic *-XAwa*’s. Thus even with these three verbs we still fail to arrive at any clear explanation of the function of the disyllabic.

## 7.5 Stem-final CC clusters

The system of morpheme-internal stem-final obstruent CC clusters given in Krauss (1965a) needs to be revised. The 1965 article listed only velar/uvular fricatives /x, X/ plus ejective coronal affricates /ts', ch'/, and velar/uvular stops /g, k', G, q'/ plus coronal fricatives /s, sh/, without including laterals. These two groups need to be expanded to include the laterals: thus /x, X/ plus /ts', ch', tl'/, and /g, k', G, q'/ plus /s, sh, L/. In addition, a third group needs to be included as part of the canonic native pattern of such clusters: coronal fricatives /s, sh, L/ plus non-affricate ejective stops /t', k', q'/. Two possibilities of these are not attested, /shq' and /Lt'/, but the lack of at least /shq' appears quite fortuitous. There is one instance also outside that system, /Xk'/, but the lack of any /Xt', Xk', xt', xk', xq'/ raises question about the canonicity of /Xk'/.

The issue of these clusters is of importance for comparative PAE, and also of course for Eyak, e.g. in being (the?) one place where a distinction is made between affricates and stops in patterning. The basic pattern is dissimilatory with respect to stop versus fricative, thus stop plus fricative or fricative plus stop. Further in terms of manner, if fricative plus stop, the stop is ejective, not plain. In terms of place of articulation, the pattern is also dissimilatory, partly: dorsal stop plus coronal fricative or dorsal fricative plus coronal stop, i.e. dorsal plus coronal. If the first element of the cluster is coronal, however, a different principle applies: that first element must be a fricative, not a stop (or affricate), and the second element must be an (ejective) stop that is not an affricate, i.e. /t', k', or q'/. Here uniquely, affricates pattern differently from non-affricate stops. This then allows a limited combination of coronal plus coronal (/st'/ etc.). A further possibility, dorsal plus dorsal (fricative plus stop) is attested in the one case of /xk'/, but lack of any other dorsal fricative plus dorsal (ejective) stop leaves that part of the pattern in question. Tab. 7.13 lists the instances for all possibilities of each of these cluster groups.

**Table 7.13:** Exhaustive list of admissible coda consonant clusters. Lack of examples for a cluster indicates the (probably fortuitous) inadmissibility of that cluster.

Cluster	Examples
xts'	<i>ta'x'ts'</i> 'special treebark, tree sp.' <i>Le'x'ts'-L</i> 'wart'
Xts'	<i>LA-gAXts'</i> 'be sticky' <i>la'X'ts'-L</i> 'star'
xch'	–

Xch'	<p><i>dAmAXch'-L ~ qAmAXch'-L</i> 'rotten spot in ice'  <i>-Guhd-XA-L-chAXch'-L</i> 'kneecap'  <i>-qAmAXts'</i> '(top) spins'  <i>-IXd-qAmAXts'-L</i> '(child) stares at someone'  <i>k'u-L-quhXch'-L</i> 'lamp chimney'  <i>O-L-XA'Xch'-g/X</i> 'tickle O'  <i>GA-LA-XA'Xch'-L</i> 'dimple'</p>
xtl'	<i>-Le'xtl'</i> 'urinary bladder, gallbladder'
Xtl'	<i>GAXtl'</i> 'swan'
gs	<i>gugs-g</i> 'louse'
k's	—
Gs	<i>LA-GAGs-g</i> 'curl; get numb in extremities'
q's	<p><i>-yA-L-tsaq's-g-L</i> 'fingers'  <i>O-L-tsaq's-g</i> 'cut O into fringes'  <i>d-dA-si:nq's-g</i> '(dog) whines, whimpers'  <i>sa:q's-g</i> 'dulse' (cf. Tlingit <i>laak'ásk</i>)</p>
gsh	<p><i>ch'ugsh-g</i> 'skunk cabbage roots'  <i>k'igsh-g</i> 'plant' sp.  <i>dla:X-k'igsh-g</i> 'berry sp.', var. <i>k'ik'sh-</i>  <i>q'Ama:-IA-k'i:ngsh-g</i> 'dry salmon roe'  <i>LA-k'i:ngsh-g</i> '(scab) dries'  <i>IXd-LA-k'i:ngsh-g</i> 'sth. be wrong with eyes'  <i>k'ahgsh-g</i> 'scab', <i>LA-k'ahgsh-g</i> 'have scab'  <i>-k'i:ngsh-</i>, see <i>-k'igsh-</i>  <i>we:gsh-g</i> 'ulu knife'</p>
k'sh	<p><i>k'ik'sh-g</i> see <i>k'igsh-</i>  <i>k'i:nk'sh-g</i>, <i>k'in'k'sh-g</i>, <i>k'i'k'sh-</i>, see <i>k'i:ngsh-</i>  <i>d-LA-k'ik'sh-g</i> 'squeak', var. <i>-k'i:nk'sh-</i>, <i>-k'in'k'sh-</i>, <i>-k'i'k'sh-</i></p>
Gsh	<p><i>-dla:X-t'e'Gsh-g</i> 'unripe berries'  <i>dIAGsh-g</i> 'dirt, mud'  <i>-GAGsh-g</i> 'be lopsided, flared'  <i>LA-GAGsh-g</i> 'limp'  <i>q'AGsh-g</i> 'gristle'(?)  <i>LA-q'AGsh-g</i> '(pelt) dries'  <i>IAXA-L-q'AGsh-g</i> 'dogwood berries'</p>
q'sh	<i>LA-Gi:nq's-g</i> 'squeak'

	<p><i>Ge'q'sh-g</i> 'earwax'  <i>O-L-yAq'sh-g</i> 'pry O (mollusk) open'  <i>O-IXd-L-yAq'sh-g</i> 'rub O's eyes'</p>
gL	<p><i>xa:gL</i> 'work', <i>dA-xa:gL</i> 'work'  (perhaps some unrecognized)</p>
k'L	<p><i>k'e'k'L</i> 'mink'  <i>cha'nik'L</i> 'funny'  (perhaps some unrecognized)</p>
GL	<p><i>djahGL</i> 'needle'  <i>O-djahGL</i> 'sew O'  <i>ts'AGL</i> 'graphite' (Yakutat Tlingit <i>ts'akl</i>)  <i>dAdzahGL</i> 'cane'  <i>-dAXAGL</i> 'gunwhale'  (perhaps some unrecognized)</p>
q'L	<p><i>-ga'q'L</i> 'throat, neck'  (perhaps some unrecognized)</p>
st'	<p><i>t'ihst'</i> 'devils club'  <i>gust'</i> 'flames'  <i>ka:st'</i> 'storm, blizzard'  <i>kAle:st'</i> 'cross' (&lt; Tlingit <i>kanéist</i>, cf. Eyak <i>tsALK'</i> 'squirrel')</p>
sht'	<p><i>ch'isht'</i> 'fly eggs'</p>
Lt'	<p>–</p>
sk'	<p><i>duhsk'</i> 'fallen(?) riverbank'  <i>Le:sk'</i> 'plank'  <i>kAwAsk'-L</i> 'canoe paddle', <i>kAwAsk'</i> (Rezanov, Anna)</p>
shk'	<p><i>duhshk'</i> 'snipe, shorebird'  <i>IA-GAshk'-L</i> 'post, pole'  <i>kushk'</i> 'Steller's jay'  <i>ka:shk'</i> 'humpback salmon'</p>
Lk'	<p><i>-IAXAdA-L-t'ahLk'</i> 'eyelashes'  <i>-IXd-LA-t'a'Lk'</i> 'flutter eyelashes', <i>-G-LA-t'a'Lk'</i> 'flutter wings'  <i>GI-dA-tsa'Lk'</i> 'peck at ground', <i>Ga:n-tsa'Lk'</i> 'sparrow'  <i>-ts'ahLk'</i> throb', <i>-gu-L-ts'ahLk'</i> 'tailbone'  <i>tsALK'</i> 'squirrel' (cf. PA *tʰsa:ləŋ; Tlingit <i>tsálk</i>, cf. 'cross')</p>
sq'	<p><i>qehsq'</i> 'moonlight'  <i>-IA-wahsq'</i> 'temple (of head)'  <i>-ni:sq'</i> 'nostril'</p>

shq'	–
Lq'	<i>Le'Lq'</i> 'down feathers' <i>xan'Lq'</i> 'very'

Reviewing these three main groups, particularly the expansion of the system since 1965 to include laterals, results appear mixed for the first group, but good for the rest. In the first group, dorsal fricatives plus ejective affricates (coronal), there is only one item for each of the new possibilities: *-xtl'* in *-Le'xtl'* 'bladder' certainly belongs, but *-Xtl'* in *GAXtl'* 'swan' is a diffusion.

In the second group, dorsal stops plus coronal fricatives, perhaps some more KL items could be added to the list of examples, up to now wrongly considered to have "thematized" *-L* suffixes, for which the corpus needs to be re-examined. We do have at least one kind of strong confirmation of the validity of KL clusters in the repetitives of 'sew', *-dja:GLg*, and customary *-dja:GLk'*, where the segmental order shows the *-L*-treated definitely as part of the stem.

The third group, dorsal fricatives plus ejective stops, clearly needed to be recognized in the first place. The laterals, especially because of *-Lk'*, certainly belong. Though final clusters *-S-d*, *-S-g*, and *-S-G* do indeed occur across morpheme boundaries, it is interesting that in diffusions where *-sd* and *-sg* might be expected, we have *kAle:st'* 'crucifix' and *tsALk'* 'squirrel' instead, confirming that *-st'* and *-sk'* are canonical stem-finals, definitively required (!), *-sd* and *-sg* being permissible only if morpheme boundary intervenes. Note also Hupa *Le:sch'*, Eyak *Le:sk'* 'plank' in both languages, perfect cognates, not possibly a diffusion, implying < PAE \**tesk'* 'plank', a cluster rarity possibly implying even the same cluster principle.

Only about 61 items are listed, for 27 possible clusters, given the system as now defined. Considering that, and the "popularity" of e.g. /Xch', gsh, Lk'/ (5 apiece), the lack of any instances of /xch', /k's/ and /shq'/ seems almost certainly fortuitous, and that of /Lt'/ perhaps so also.

It is interesting to note what restrictions there are on vowel stigmata with the cluster types. With /X/ plus /ts', ch'/, there are six reduced (including three disyllables, here only) and five V', but one /hXch'/ in that strange *k'u-L-quhXch'-L* 'lamp chimney', and no V: at all. With back stops plus front fricatives there are mostly reduced (11) and long vowels (9), including one Vhg, and only one V' before /G, k', q'/ each. Most surprising is the third group, where in spite of the ejective stop, most common is Vh, nine instances (4 of V:, 5 of reduced), and four of V' (2 of V'Lq', 2 of V'Lk'). (Not included is *q'e:shk'* 'jay', strictly a loan from Tlingit; cf. Eyak *k'ushk'*.)

There seem to be tendencies or rules to add a third "euphonic" consonant to these clusters, but not to those which include a lateral: *-L* to clusters of the first type, so *-xts'L*, *-Xts'L*, *-Xch'L*, and one of the third, *-shk'L*; and most definitely to add "euphonic" *-g* to all items of the second type, so *-gsg*, *-Gsg*, *-q'sg*, *-gshg*, *-k'shg*, *-Gshg*, *-q'shg*, this latter probably



more of a rule than a tendency. That does not weaken the argument for the structure of these clusters, though it does raise one more question about the laterals.

It would be interesting to find cognates for more than the following four of these with Athabaskan. Cognates are well attested for *-Xa'Xch* 'tickle' and *we:gsh* 'ulu', where C2 is reflected, and for *ch'isht* 'fly eggs', where C1 is reflected; for *Le:sk* 'plank' cf. Minto *-lEsr* and Hupa *Le:sch* (!) cited above. Diffusions (4) are *tsALk* 'squirrel', Athabaskan \**tsə̀ləy*, Tlingit *tsálk*, and *GAXtl* 'swan', Tlingit *gúkl*'.

Some of the fricative plus ejective stop cluster items are diffusion or loans, e.g. *ka:shk* 'humpback salmon', Yakutat Tlingit (only) *kwáash-k*.<sup>11</sup> Interesting in its own way is *kAne:st* 'crucifix', from Tlingit *kanéist*, from Russian *крест* (<*krest*>), but in Eyak with *-t*' to conform with the cluster pattern.

There are a number of stems that end in ejective affricate followed by *-G* that look like they could have unanalyzable clusters, at least five such, which could match the cluster series combining coronal fricative plus ejective uvular stop. These are given in (13):

(13) Stems in ejective affricate plus *-G* with possibly unanalyzable clusters

*chi'iyá'tl'G* 'frog' (cf. PA *ch'əχtl'*)

*tl'e'tl'G* 'salmonberry sprout'

*tsi:tl'G* 'seaweed species?' (cf. *ts'i:(n)tl'Ga:leh* 'crane, heron')

*-l-tl'i'ts'G* 'crown of head' (twice from Lena, once from Anna, *-G-d* from Anna, *-Ø-d* from Marie)

*-t'e'ts'G* 'grip (handle)' (also part noun resembling the preceding)

*k'uLdAtl'G* 'ptarmigan' (thematic negative?)

There is at least one very widely used suffix of the form *-G*, that for the negative, perhaps in *qi:dAqe:tl'G* 'barefoot', which otherwise might belong here, though possibly to be analyzed *qi:-dA-qe:-tl'-G*. Another form, *qAts'LG* 'male salmon' strongly suggests metathesis from unattested *q'Ats'GL*. Note however, further *-G* suffixes in *'ehd-GXAWa:* 'female dog', *'ehd-G-A-yu:* 'relatives on wife's side', *-lah-G-A-yu:* 'inhabitant(s)'.<sup>11</sup>

There are likewise a good number of forms ending in ejective affricate plus velar *-g*, which would match the coronal fricative plus ejective velar series of clusters. These, however, are even more suspect than *-G* of being mere examples of a thematized suffix, specifically *-g* repetitive, very often thematized, even with nouns, especially with the connotation of 'fineness' (q.v. in Chap. 15 on verb derivations). Examples are *tl'Ach'g* 'snot; gelatin', *tsin'tl'g* 'ashes; soot', *ts'a'tl'g* 'drop', *-ts'a'tl'g* 'drip', *-djitl'g* 'navel'.

<sup>11</sup> This form appears in the Yakutat Raven clan name *Kwáashk'ikwáan*, but it is cited as the independent form *kwáash* in Leer 1973.

In these two groups  $-tl'G$  stands out, possibly  $-ts'G$ , suggesting ejective affricate plus back plain stop as another group, though  $-ch'G$  is lacking. Those ending in  $-g$  are plentiful enough, given the free use of  $-g$  'repetitive' on nouns as well as verbs (§15.3.1), and the difficulty of distinguishing such suffixation from CC stem-final. A few of the better candidates, especially non-verbs, are listed. It is also true that thematized  $-g$  is much more common on stems ending in front C than back C *a priori* for the same reasons behind the cluster patterning, only one member ejective, one front with one back for groups one and two, i.e. no back-back or front-front. This affricate plus  $-G/-g$  would form the third such group.

There are two items with unique cluster types. One is  $t'AXs \sim t'AXgs$  'cottonwood, which must be a loan from Athabaskan, perhaps PA  $*t'\text{ə}\chi s$ , not Ahtna  $t'AghAs$ .

There is another, however,  $-ts'ehXk'$  'inner side of pelt', which appears to be authentically native Eyak, suggesting that there might have been more CC's of the XK' type, dorsal plus dorsal, just as the fricative plus ejective stop group with  $-t'$  allows coronal plus coronal. Thus, hypothetically, either the first and third groups in Tab. 7.13 could be combined, so any fricative plus any ejective, stop or affricate. Alternatively, the subgroup implied by  $-ts'ehXk'$  could be combined with the third, so any fricative plus any ejective stop, as done in the maximal table (Tab. 7.14). With the present minimal system, not counting the group implied by  $-tl'G$ , and only 61 examples, just a spotty 4 of 27 possible clusters lack examples, easily fortuitous. The  $-Xk'$  subgroup expansion would add only one example but five more clusters lacking examples, as listed at the outset, so then 9 lacking examples of 33, the five more all of one subgroup, dorsal fricative plus dorsal ejective stop. The  $-tl'G$  group expansion would add four to a dozen examples, but two clusters lacking examples out of six, so then a total of six out of 33; however, the status of any  $-ts'g$  and  $-tl'g$  items has to remain questionable, and the lack of  $-ch'g$  and  $-ch'G$  seems suspicious.

Overall, in any case, minimum or maximum, the pattern of stem-final CC clusters remains quite distinct from random combinations of obstruents, or clusters resulting from suffixation. At the same time, in addition to the ambiguity created by the freedom of suffixing  $-g$  repetitive, it needs to be noted that that freedom is only partial, as there is a definite lack of free or thematic suffixing of  $-g$  to back stops and fricatives except in specifically derived repetitives. This trait has to be added to the principles of Eyak "euphony", involving contrasting distinctive features noted above in the addition of "euphonic"  $-g$  and  $-L$  to CC clusters, which have already their own such constraints.

Finally, there is a group that might appear to be clusters of coronal obstruent plus  $/X/$ , consisting of  $sahdX$  'long time',  $-qe'dX$  'ask',  $-qahdzX$  'cough',  $-ch'i'ch'X$  'be rough'. The last four are verbs where the  $-X$  is or at least may be deleted with further obstruent suffix added, perfective  $-L$ , customary  $-k'$ , repetitive  $-g$ , but not negative  $-G$ . The  $-X$  remains otherwise throughout, quite unlike the  $-X$  of the perambulative. The  $-X$  of the perambulative can indeed be thematized or added without preverb  $yAX$  (§15.5.4.7) and  $D-$  in the classifier (Chap. 11) in at least some cases, e.g.  $O-L-Xa'Xch'-X$  'tickle O', where it can be deleted







Part III: **MORPHOLOGY**



## 8 INTRODUCTION TO THE MORPHOLOGY

Given that Eyak is a polysynthetic language, it should be no surprise that by far the largest portion of the Eyak Grammar should be that on morphology, and that the organization of that part should be the most complex.

### 8.1 Morphological categories, order of presentation

Eyak has morpheme types that conform to the general linguistic terms *STEM* (or *root*), *AF-FIX* (both prefixes and suffixes), and *CLITIC* (both proclitics and enclitics). In Eyak the word is well defined, and the word classes conform to the general linguistic concepts of pronouns (independent, prefixal, enclitic), verbs (highly complex), and nominals. The last consists of nouns, fundamentally much less complex than verbs, and nominalizations that are derived from verbs. It also has other such classes, relatively minor, as adjectives, adverbs, numerals, interjections. Further, though, Eyak has two major morpheme classes that are specific to its polysynthetic and genetic type. One is preverbals, including both preverbs and postpositions, phonologically separate words that precede the verb, with internal complexity of their own, in a well developed system. The other is qualifiers, prefixes that are not only of the verb word (cf. Chap. 17), but are also prefixed to nouns, postpositions, and adjectives. The qualifiers are so elaborately developed in Eyak that account of them constitutes nearly a fifth of the entire morphology; that portion might have been closer to a quarter if an important class of them were not so well covered in the dictionary (Krauss 1970a).

By far the most complex part of Eyak morphology is in the verb, just as is the case in Athabaskan. Verb morphology will accordingly take up most of the Morphology, indeed the largest part of the Eyak grammar. Moreover, since a large proportion of Eyak nouns are deverbalizations and relativizations of verbs, i.e. are derived from verbs, the verb morphology will precede the noun morphology, even though the noun morphology is otherwise of course much simpler. As noted, the largest part of Eyak verb morphology is that on the qualifiers. However, unlike the case in Athabaskan, the qualifiers are, as just noted, not confined to use in the verb word, but are also prefixed to postpositions, likewise to nouns, where they play an important part in noun morphology itself (i.e. not just in nouns derived from verbs). This is another reason to treat verbs and qualifiers before nouns, in order to relate the qualifiers in verbs to those in nouns.

First of all to be treated, however, are the pronouns, which can be seen as a system of sorts, as an important part of that system is of course involved in the personal inflection of the verb.

Under the morphology of the verb word itself, first to be taken up will be the basic organization of the verb word or verb theme, in terms of the four *ZONES* of the prefix complex and their composition. First to be described is the zone closest to the stem,

Zone D: the section on pronouns already covers the subject pronoun prefixes of that zone (along with the pronouns of the leftmost zone and preverbals, including all object pronouns). Thus first in Zone D follows the entire subsection on the classifiers. Next in that Zone D are the conjugation and mode-aspect prefixes. These involve the basic organization of the entire system of Eyak verb paradigms, in several subsections, including overviews and consideration of problems in the analysis, not least of which is the Future (or Inceptive imperfective), the prefix for which is part of Zone B). These subsections are followed by those on the uses of these paradigms in the classification of Eyak verb themes (action verbs; three kinds of motion verbs; four kinds of stative verbs). Zone C is for the qualifiers, to be dealt with after the verb word and preverbals. Therefore next and finally, as related to conjugations and mode-aspects, is the subsection on verb derivations, most of which involve also modifications of the stem and/or suffixes thereto, or special prefixation (directive, the prefix for which is in Zone B).

Next follows the chapter on preverbals (preverbs, postpositions, some pronouns), in several subsections. Though these are separate words from the verb word, they are closely related to the verb word, immediately preceding it, forming verb bases with it. They may even determine choice of conjugation, to some degree, especially in the imperative mode.

As noted above, following all the other sections on the prefixes of the verb word, and following even the preverbals, is the massive section on the qualifiers, which occupy Zone C in the verb word. Such size is because the qualifiers constitute a complex system, which is a world unto itself in Eyak, far more than in Athabaskan. Also, as noted, qualifiers are prefixed not only to verbs in Eyak, but also to adjectives, postpositions, and nouns. For that reason in particular, the chapter on qualifiers is separated from those on the verb (and preverbals), so to come between those and the section on nouns or nominals.

Chap. 18 on nominals is divided into nouns proper, and nouns derived from verbs. There are cross-cutting classes of nouns proper, those with and without qualifiers, possessed and non-possessed, those with *L-* prefix and/or *-L* suffix. Nouns derived from verbs are divided into nominalizations (relativizations of verbs), and deverbalizations, involving the deletion of all Zone D prefixes (gerunds, verbal nouns, instrumentals, acquisitionals).

The morphology concludes with four sections on the minor grammatical categories adjectives, numerals, adverbials, and interjections. Negatives are discussed in Chap. 24, and interrogatives in Chap. 23.

## 8.2 Constraint against duplication of prefixes

There is one strong principle that needs to be mentioned here, as it runs through the whole of Eyak morphology, the constraint against duplication of prefixes. Even where a given prefix has more than one reason for appearing, it appears only once. In the verb theme *O-dA-la* ‘drink O’, *dA-* is the thematized or lexicalized classifier, so *dAlah* ‘it is drinking it’. The passive of that, itself requiring the *dA-* classifier, cannot be *\*!dAdAlah*, but is still



only homophonous: *dAlah* ‘it is being drunk’. This is mentioned in Chap. 11 on classifiers. The relativization *'uX k'uqu'wAshehyu*: ‘hunting-gear’ must be parsed ‘those with which someone will kill something’. Here both subject and object prefix are a single indefinite *k'u-*, q.v. §10.2.1. Likewise, there may easily be more than one motivation for a given qualifier, especially a frequent one with multiple uses, but only one such may appear. This is amply demonstrated in the chapter on qualifiers, including a whole subsection on the matter. Further, prefixes including the (pre-?)Eyak irrealis marker, *'*, which occurs both in prefix Zone B (both Future and directive), and in Zone D (Neuter negatives and imperative), exhibits traits which suggest non-duplication. This is so even at the distance from each other, Zone B to Zone D, and though the identity of that marker may be considered highly marginal from a synchronic point of view. This comes up of course in the discussions of future, directional, Neuter negative, etc.

Further, the principle of non-duplication applies beyond morphology, at least in the chapter on negatives (Chap. 24) as a constraint against double negatives, to which a subsection is devoted in that chapter.

It is also mentioned in §10.3 on verb suffix sequences, where it appears not to apply in the case of thematized negatives (e.g., ‘be blind, deaf’). However, lexicalization and hierarchical constituency intervenes in such cases. The same applies to apparent exceptions to regular ordering of qualifiers.



## 9 PRONOUNS

Eyak pronouns are of the following types:

1. Personal pronoun prefixes.
  - (a) Verb subject
  - (b) Verb object
  - (c) Noun possessor and object of postposition (o, or P).
2. Independent personal pronouns.
3. Demonstrative pronouns and related enclitics.

The grammatical categories involved in personal pronouns are person and number. Positively marked for such (non-zero) are only first and second persons. (Inclusivity/exclusivity does not enter into play, nor do any distinctions within third person, such as gender or obviative.) Number is singular and plural, but applies only to first and second person, not third, except in independent and demonstrative pronouns. Included in person here are also the concepts of reflexive, reciprocal, indefinite, and indeterminate. Demonstrative pronouns and enclitics distinguish human/non-human. Non-human demonstratives distinguish distal or unmarked from proximal, but not number, and human demonstratives distinguish singular from plural, but not proximal/distal.

The question of grammatical number might conceivably come up in connection with certain verb stems. These are all Motion verbs, i.e. locomotion, postural and classificatory. However, these are so few, around a dozen, that the matter of number here is to be considered lexical. See in the lexicon the stem-pairs *te* and *tu'ch* 'lie prone'; *ta*, 'a, and *L-(y)a* classificatory; *da* and *qu* 'sit', *ta'* and *qu'* 'live'; *Xdl-'ya* and *l-qu* 'run'; 'a and 'a'ch' 'go'; *g-LA-a:n* and *g-LA-'a'ch* 'stand'; and *ya:* 'pl actions'.

### 9.1 Personal pronoun prefixes

Verb subject and object appear in two verbal prefix zones, leftmost and rightmost (Zones A and D; see subsection on verb zones below), and also as preverbals (left of verb word altogether). Appearing thus in three very different positions, they are certainly a miscellany from a morphological point of view. Third person in the sentence can also be represented in enclitics to the verb stem, often giving the impression of personal verb conjugation in yet a fourth position and manifestation.

It must be emphasized that the term *prefix* is used very loosely here, in that the markers for (direct and oblique) 1p object *qa:*, 1p subject *da:*, and reciprocal (direct and oblique) object 'iLu' and 'iL-, and sometimes reflexive object 'Ad, are also included here, for the purpose of filling out the personal pronoun system. They are not prefixes but stems, stressed, which occur separately as preverbs, or compounded (*qa:-*, 'iL-) with possessed nouns or

postpositions as oblique object, as will be shown by the spacing in the table below.

Verb subject personal pronoun prefixes are 1s *x-* ~ *i-*, 2s (*y*)*i-* ~ *--* ~  $\emptyset$ -, 2p *LAX-* appearing in Zone D.; indefinite *k'u-* appearing in Zone A ; and 1p *da-* appearing as a preverb. The Zone D morphophonemics are as follows. The *i-* allomorph of 1s is only with positive *s-* perfective, following *s-*; otherwise it is always *x-* (preceding *s-*) in Zone D. The 2s is *yi-* only in absolute initial, or following the glottals /'/, /h/; otherwise *A-yi-* becomes *i-*; *u-yi-* becomes *u-*; *AN-yi* becomes *V:n-*. However, with all *s-* perfectives, or syllabic classifiers following, 2s is  $\emptyset$ -. The 2s *yi-* is also deleted in all positive Neuters and optatives, which has homophonous *yi-*, which is never deleted. (I.e., it is at least simpler to say the positive Neuter and optative prefix is never deleted, since only the *yi-* of the 2s is otherwise deleted anyway.) Thus probably more often than not, 2s is homophonous with third person (always  $\emptyset$ -). It should therewith be noted that in negative Neuters with  $\emptyset$ - or *L-* classifier with 2s, the result is *-a'-yi-*.

Verb object personal pronoun prefixes are 1s *xu-*, 2s *'i-*, 2p *LAXi-*, indefinite *k'u-*, indeterminate *'i-* ~ *'idA-* appearing in prefix Zone A. The first three are obviously related in phonological shape to their subject pronoun counterparts of Zone D. 1p *qa-* appears always as a preverb. The reflexive is *'Ad(A)-* ~ *'Adu-* appearing in prefix Zone A; the non-directive, *'Ad(A)-* appears in Zone A and problematically also as a preverb, *'Ad. Reciprocal 'iLu'* is apparently always a preverb. Indefinite *k'u-* object is homophonous with *k'u-* subject also in Zone A. See §9.3 for further notes on the reciprocal and reflexive object pronouns.

Prefixes for noun possessor or object of postposition (P or o) are the same for nouns and postpositions, except that there are more items as object of postposition than as possessors of nouns. Serving as both are 1s *si-*, 2s *'i-*, 3(sg/pl) *'u-*, 1p *qa-*, 2p *LAX-*, indefinite *k'u-*, and reciprocal *'iL-*. The third person *'u-* is quite general, for 3s and 3p, including reflexive for nouns (as in English). The following are used with postpositions only: indeterminate *dA-*, and reflexive *'Ad-* ~  $\emptyset$ . Deletion of reflexive *'Ad-* is very common with postpositions especially in the so-called “indirect reflexive” (cf. §11.3.2) verbal construction with postpositions as preverbs.

Two major comments on third person *'u-* are in order here. One is that its meaning is quite general, not only ‘his/her/its/their’. It also makes no distinction for different third persons, including reflexive, so can have the same three meanings as ‘his’ in ‘he told him to paint his house’. Second, in the directive derivation (cf. §15.9), *'u-* serves also a third person direct object pronoun, and also as filler with 1p direct object.

Tab. 9.1 presents the pronominal prefix paradigm according to person and function: S subject; O object; P possessor of noun; and o object of postposition.<sup>1</sup> Allomorphy for the directive is ignored in the table; that is described in §15.9. Most items are identical in columns P and o. For more on the preverbal pronouns see Chapters 16 and 25, and for more

<sup>1</sup> Note in particular that P does *not* represent a postpositional object.

on the reflexives and reciprocals, there is more in subsection §9.3, as well as in Chapters 16 and 25.

**Table 9.1:** Personal pronoun prefixes: Subject (S), Direct Object (O), Possessor (P), Postpositional object (o), with summary of patterns. Differing letters in the summary column indicate suppletion (see text for further explanation).

	S	O	P/o	summary
<b>1s</b>	<i>x-</i> ~ <i>i-</i>	<i>xu-</i>	<i>si-</i>	aAb
<b>2s</b>	<i>yi-</i> ~ $\emptyset$ -	<i>'i-</i>	<i>'i-</i>	aAA
<b>3</b>	$\emptyset$ -	$\emptyset$ -	<i>'u-</i>	aab
<b>1p</b>	<i>da:</i>	<i>qa:</i>	<i>qa:-</i>	abB
<b>2p</b>	<i>lAX-</i>	<i>lAXi-</i>	<i>lAX-</i>	aAa
<b>indef</b>	<i>k'u-</i>	<i>k'u-</i>	<i>k'u-</i>	aaa
<b>indet</b>		<i>'i-</i>	<i>dA-</i>	-ab
<b>refl</b>		<i>'Ad(-)</i>	<i>'u</i> <i>'Ad- ~ <math>\emptyset</math>-</i>	-ab/A
<b>recip</b>		<i>'iLu'</i>	<i>'iL-</i>	-aA

A brief explanation of the vertical alignments in Tab. 9.1 is given here, to be followed in detail throughout the morphology. Column S has three vertical alignments to show the different positions of the prefixes in the verb complex specified above, and Column O has two, both with zero in a middle position. The reflexive is also in a middle position in column O, because of its inconsistent status as prefix and preverb. Leftmost in Subject column 1p *da:* is a preverb, preceding the verb word. Indefinite *k'u-* is leftmost in verb prefix Zone A; the others are in Zone D. Objects 1p *qa:* and reciprocal *'iLu'* are preverbs, reflexive *'Ad* is in Zone A or is preverbal, and preceding *k'u-* subject. All but indeterminate and reflexive are the same as possessor of noun and object of postposition; indeterminate does not occur as possessor; reflexive as possessor is the same as third person, as object of non-syllabic postposition is *'Ad-*, and with syllabic postpositions is most often zero.

The allomorphy for 1s and 2s subjects is explained in detail for each throughout the verb morphology, here summarized: 1s is *x-* except with *s-* (Active) positive perfective and zero or *L-* classifier, where the result is *si(L)-*; 2s is *yi-* in absolute initial or following *'-* or *-h-* with  $\emptyset$ - or *L-* classifier, CA-*yi-* > Ci-; Cu-*yi-* > Cu- (cf. §6.9) with  $\emptyset$ - or *L-* classifier, but is always zero with *dA-* or *LA-* classifier and in all *s-* (Active) perfectives.

The rightmost column in Tab. 9.1 is a summary of the resemblances across the columns for each of the nine person classifications, for synchronically relatable versus suppletive variation or allomorphy. The first (leftmost) or subject is represented by the symbol “a”, the next also by “a” if identical, if suppletive it is represented by the symbol “b”. If a next item is relatable but varies in any way from a preceding item, it is represented by a capitalization of the letter symbol for the preceding item. Note that the first five persons begin with the symbol “a” for the subject, and the last four persons, not occurring as subject, all begin with hyphen. Only one person, the indefinite, has identical symbols in all three columns,

and that is because the prefix *k'u-* is not only identical in form, but also occurs in the same leftmost prefixal position as both object and subject. Further, only two persons have all three columns with the same letter, 2s and 2p. 1s synchronically must be considered suppletive, though from a deep etymological point of view all the forms might be seen as related. No persons have more than two different letters, i.e. more than two unrelated forms.

This invites comparison with Athabaskan. The 1s *x(u)- ~ si-* relates and adds to the complexity in Athabaskan that I deliberately symbolized with opaque dollar sign (\*\$) for PA and PAE (see Krauss 1980b). The 2s *'i-* must be cognate with Athabaskan, PAE \* $\eta^y\text{-}$ ; cf. stem O-*'iL* in 'pour O', PAE \* $\eta^y\text{-}$ . The 2p likewise, PAE \*(nə) $\chi^w\text{-}$ . For third persons the *'u-* and PA \**wə-* are from PAE \**wə-*, but Eyak has no clear cognate for PA \**yə-*.

For 1p there is no single morpheme we can reconstruct, so that was evidently absent as a category. The preverbal *da:* as 1p subject might be cognate with Athabaskan \**da:* 'distributive', or \**dəne:* 'person' (cf. *ta:* 'trail', PA \* $tə\eta^y\text{-}$ ); the *qa:(-)* as 1p direct or postpositional object (O or o) might be cognate with Tlingit *káa* 'person'.<sup>2</sup> The Eyak *k'u-* indefinite as subject is directly cognate with PA \* $\text{č}^w\text{-}$  (e.g. modern *tr'ə-*, *ts'ə-*, < PAE \* $k^w\text{-}$ ; see Krauss 1964), indefinite or 1p as subject in leftmost conjunct position in Athabaskan. As shown in §4.1, Eyak is the only language in the family that has merged the dorsal obstruents, PA having fronted the PAE \* $k^w\text{-}$  to \* $\text{č}^w\text{-}$ . What has happened in the case of the Eyak indefinite *k'u-* is that the rounded \* $k^w\text{-}$  has been generalized in the merging of the dorsals, as shown now in the vowel, so that corresponds also to the Athabaskan \* $k^w\text{-}$  indefinite or impersonal, S, O, or P(/o). Thus for P, e.g. Eyak *k'u-djehX* 'an/something's ear', Minto *ch'e-dzegh-a*. Eyak *qa-djehX* means both 'our ear' and 'a human ear'; in Minto 'our ear' is *dena-dzegha*. For S/O *k'u-dAlah* 'it is drinking something; something/someone is drinking it' or, presumably, even 'something/someone is drinking something' (by non-duplication rule), likewise for all these meanings Minto *ch'e-denwn*; cf. *tr'e-denwn* 'we're drinking it', *ch'e-tr'e-denwn* 'we (*tr'e-*) are drinking something (*ch'e-*)'. For Eyak indeterminate O *'i-* there are two cognate Athabaskan candidates, PA \**yə-*, implying PAE \**yə-*, or the indefinite \* $k^w\text{-}$ , semantically better, perhaps, but phonologically unique for the loss of dorsal closure, though cf. \* $\eta^y\text{-}$  > *'i-*. The indeterminate prepositional object (o) marker *dA-* and the segment in indeterminate direct object (O) in directives, *'i-dA-*, may well be the same, but not cognate with Athabaskan reflexive P/o \*\**də-*, more likely cognate with Eyak reflexive O *'Ad(A)-*. The reciprocal *'iL-* must be cognate with PA \**nəł-*, even if there is no evidence that PA was \*\* $\eta^y\text{-}$ .

Some further comments on the semantics of these pronouns are in order, particularly on the possessives. As shown just above, 1p *qa:-* may be translated not only as 'our', but sometimes also as (indefinite) 'human', as in *qa-ni:k* 'a (human) nose' (as opposed to

2 For the whole category cf. modern use in Franco-German impersonal *on* (< *homo*) and *man* as 1p, likewise \**dəne:(-)* in some Athabaskan.

another animal's nose), as often found in wordlists. Likewise, *qa*: as object pronoun may also be used to distinguish human from animal, as in the lexicalized nominalization *qa: Xinh=inu*: 'cannibals' < 'they (human) who eat humans < they (=inu:) eat (Xinh-) us'. The definitively indefinite possessive and subject and object pronoun *k'u-* applies, on the other hand, to both human and animal.

At the same time, it is clear from the texts that where we would use 1p possessor in English, at least with kin terms, Eyak uses 1s, e.g. *si-ta:* 'my father', spoken even by one sibling to another in reference to their common father. It so happens that *qa-ta:* 'our father' is also used for 'God' as in prayer, but this late development is obviously not the reason for the use just mentioned.

The difference between indefinite and indeterminate is the following, aside from the fact that *k'u-* is both subject and object, whereas *'i-* is object only. It might be considered, in fact, that indeterminate subject is like a passive, taking *dA-* or *D-* element in the classifier.<sup>3</sup> The indefinite prefix refers to something or someone specific but unspecified. E.g. as subject of intransitive *k'u-sAsinhL* 'something died, someone died' as subject of transitive, *k'u-tsinh* 'someone is singing', as object *k'u-tsinh=inh* 'he (=inh) is singing something', likewise *k'u-Xah* 'something, someone is eating it', *k'u-Xah* 'it is eating (something)', *k'u-Xinh=inh* 'he (=inh) is eating (something)' or 'someone, something is eating him (=inh)'. In these particular transitives, for whatever reason, no indeterminate object is attested, probably none possible. However, in the case of *O-kus* 'wash O', for example, we have the clear contrast of indefinite *O* in *k'u-kus=inh* 'he is washing something (specific)' as opposed to *'idA-kus* 'he's doing the wash, laundry'. Not only is the use of the indeterminate here purely at the lexical level, needing to be specified in the lexicon, but so is the use of the *dA-* classifier (or *D-* element) with the indeterminate object. This apparent inconsistency was studied to some extent in the field, and is covered at some length in Chap. 11. There is also the issue of the uniquely derived allomorph *'ida-* (< *'i-dA-*) of the indeterminate object prefix in the directive derivation, discussed in §15.9 on the directive, especially Group 8 of the directive (§15.9.2.8). There are also some examples of the contrast there, e.g. *O-'l-Xa* 'tell of O', *'ida'-Xa* 'tell a story' (note  $\emptyset$ - classifier, unlike 'do laundry'). Some uses of the indeterminate object are fully thematized, semantically opaque, as in *'i-ga* 'dance'. Note also that verbs with indeterminate *O* are treated as intransitive, in that the iterative preverb *q'e'* 'again, back' consistently requires the *D-* element in the classifier, as though the verb were detransitivized. Some verbs also with *k'u-* indefinite object may also take the *D-* element in the classifier with *q'e'* again, back' as though detransitivized. This is inconsistent, and perhaps predictable to the extent that the *k'u-* is thematized or lexicalized, again a lexical matter.

The same contrast exists between indefinite *k'u-* and indeterminate *dA-* as object of postposition, e.g. *k'ut'a* 'it's stuck on/behind something (specific)' and *dAt'a sa'yahL* 'it's

<sup>3</sup> See §§11.1 and 11.3 for explanation of the *D-* element.

Table 9.2: Independent personal pronouns.

	Singular	Plural
1	<i>xu:</i>	<i>GAyAG</i>
2	<i>'i:</i>	<i>lAXi:</i>
3	<i>'a:</i>	<i>'uyAG ~ 'AyAG</i>

stuck'. This indeterminate of course does not suggest that the subject is stuck on nothing, but only that the oblique object is not something specific, rather that it is totally generic.

## 9.2 Independent personal pronouns

The independent personal pronouns presented in Tab. 9.2. Interestingly, these are the only type of pronoun that shows the full set of distinctions for first, second, and third persons, all both singular and plural. Note that 1s, 2s, and 2p, the three personal pronoun prefixes that appear in zone D, and which show clear phonological relation between subject and object allomorphs, are the three that also show phonological relation here. In fact they are the same as the object pronoun prefixes with lengthening of the final vowel: *xu-* ~ *xu:*, *'i-* ~ *'i:*, *lAXi-* ~ *lAXi:*. The other three, 1p, 3s and 3p, all have an entirely different unrelated form for an independent pronoun, i.e. 1p, 3s and 3p having nothing to relate to, as they are represented  $\emptyset$ - on the verb. In other words, this system of six independent personal pronouns is partly unrelated to that of the dependent personal pronouns in membership as well as form.

Also, there is accordingly no independent version of *k'u-*, but only the separate lexemes *dA'u:dAXya:kih* 'something' and *dA'u:dAXyi:nhinh* or *dA'u:dAXyi:nkih* 'someone'. These are transparent lexicalizations, from *dA-[[ 'u:-d]-X]-ya:-kih*, *-ya:-inh(-kih)*, i.e. *dA-* (REFL), *'u:-* distal or unmarked demonstrative, punctual final *-d* compounded with non-punctual final *-X* (cf. Chap. 16, *ya:* 'thing' *-kih* diminutive, i.e. 'some little thing right along there'). 'Someone' is the same, with the verbal enclitic *=inh* for human singular attached here to 'thing', with optional diminutive. For the indeterminate, reflexive, and reciprocal object pronouns, there is nothing that could be considered independent pronouns at all.

One use of these pronouns is as emphazier with possessive pronouns, e.g. the examples in (1). Others are contrastive (2).

- (1) Independent pronouns in combination with possessive pronouns for emphasis

*xu: sini:k'* 'my nose'

*'i: 'ini:k'* 'your nose'

*'a: 'uni:k'* 'his nose'

*GAyAG qa:ni:k'* > *GAyAqa:ni:k'* (elided) 'our noses'

*lAXi: lAXni:k'* 'your (pl) noses'



'AyAG 'uni:k' 'their noses'

(2) Independent pronouns for contrast.

*xu*: 'uwa: 'I however', 'as for me'

'a: 'uwa: 'he on the other hand'

a. As complement to the verb:

'i: *xiLeh da:X* 'if I were you'

*xu*: *da'li:Lxah* 'you have me (e.g. to depend on)'

b. Or, with enclitic articles,

'i:k'a' wAX 'a'yileh 'you please do so'

'i:shuh 'hello' (lit. 'Is it you?')

Note further the distinction between 'a: 'uqa' 'her husband' and 'anh 'uqa' 'that husband of hers, her husband', where 'a: refers to the possessor, and the demonstrative/determiner 'anh refers to the possessed noun. For such possession, see further in Chap. 25 on syntax.

Note that LAXi: and LAXi- for 2p appear to be a composite of LAX- (see Tab. 9.1 above) plus what is at least nearly homophonous with 'i: ~ 'i- for 2s. In that connection, the form in Furuhjelm (1862a) is especially interesting: <Liahshu> 'ye', which must certainly be read LAXshuh or LAXshAw 'you (plural)?', with the 2p independent pronoun lacking the /i:/. This is confirmed in a way by LAXi: LAXdug 'you (pl) too' from Lena, again LAX- as an independent pronoun, though also with enclitic, again suggesting LAX(-) alone as an earlier form of the independent pronoun. The presence of the /i:/ in the direct object pronoun seems more problematic, however, in that 2s O pronoun prefix is the same as 2s P and o pronoun prefix.

### 9.3 Notes on reciprocal and reflexive

The similarities and differences between the reciprocal and reflexive pronouns are of some interest. As oblique objects they are both simple 'iL- and 'Ad-. As object of (syllabic) postpositions they differ in that the reflexive may often be deleted in an indirect reflexive construction (cf. §11.3.2) with the verb, while the reciprocal of course may not be deleted. As possessors of anatomical or kinship nouns the reflexive is attested only in elicitation, but the status of that in actual use is questionable, as the norm certainly appears to be third person 'u-, 'one's own N' or 'another's N', quite ambiguously, just as in English. As object of postpositions in possessive construction, the reflexive pronoun choice is as with the noun itself. Thus for 'he killed his own dog', XAWa: 'uXa' shAshehLinh is probably preferred to XAWa: 'AdXA' sdishehLinh. And 'uni:k' 'uwa: sAk'in't'Linh 'he scratched his nose' is probably as ambiguous as in English.<sup>4</sup> See Chap. 11 for more on the use of the D-

<sup>4</sup> The status of 'Adni:k' ('Ad'a:) sdik'in't'Linh for 'he scratched his (own) nose' is uncertain.

classifier element with reciprocal and reflexive oblique objects. With the reciprocal there is a distinction in this regard as to whether the reciprocity refers to the subject or the object, whereas for the reflexive the subject and object are necessarily coreferential.

As the direct object of the verb, the reciprocal is always attested as preverbal *'iLu'*. The *-u'* segment is almost certainly somehow from the *'u'*- object of the third person postpositional object prefix in the directive derivation of the verb. This strongly suggests that perhaps a reciprocal directive verb might yet have been elicited of the prefixal form *'iLu'* instead of the (attested, once or twice) preverbal *'iLu' 'u'*-, seemingly almost redundant. An excellent possibility might have been *\*'iLu'(li)Liginhinu*: 'they know each other; they who know each other, acquaintances', and negative thereof *\*'iLu:la'LAga:Ginu*-. This, however, was not tested until too late and too inexpertly with Marie, for her to grasp the question.

The preverbal or prefixal status of the reflexive *'Ad(-)* is quite different from that of the reciprocal. With the directive (cf. §15.9), the reflexive is always the prefixal combination *'Adu'*-, as in *'Adu'(li)Liginhinh* 'he knows himself, is sensible, smart'. The possibility of *\*?'Adu'* as a preverb was tested and rejected, e.g. *\*?'Adu'shunh (li)Ligah* 'is he sensible?', unless the question was not posed with sufficient skill. (Conceivably, it might have been accepted if it had been posed to Anna, who was much more "liberal" with the language.) At the same time, though, *'Ad* is definitely attested as a preverb, necessarily so in a few themes, e.g. *'Ad-gAwi* 'feel', and otherwise optionally so, as in *'Adsdishel-shunh* with *'Ad*- as prefix to encliticized verb word, or *'Ad-shunh sdishel* with *'Ad* as preverb, encliticized, preceding verb word, both 'did he kill himself'. We even have *'Ad* preceding another preverb, *q'e'* 'again', in *'Ad q'e' xsLitsAXL* 'I cut myself again', late from Marie (March 1, 2006), presumably alternative to *q'e' AdxsLitsAXL*. This implies that e.g. *'Ad da: q'e' sditsAXL* 'we cut ourselves again' is also possible, with *'Ad* separated by two preverbals from the verb.

Note also that *'Ad-* as conjunct to the verb also has two allomorphs, as e.g. in *'AdAdAkus* 'wash yourself, also *'Ada:dAkus*, where the latter implies the allomorph *'AdA-* for the reflexive. Further *'AdA-* occurs as a proclitic to nouns, in the sense 'real N' or 'N *par excellence*', as in *'AdAlis* 'spruce' (*lis* 'tree'). See §22.1 on proclitics.

## 9.4 Demonstratives and locationals

Demonstrative pronouns are third person only, of course, distinguishing proximal (markedly so), *'Al* 'this/these', and distal (or unmarked), *'Aw* 'that/those/the', for inanimate or non-human only, not distinguished for number. For reference to human, on the other hand, there is no proximal/distal distinction, but instead a singular/plural one, *'anh* 'he/she/him/her' and *'ahnu*: 'they/them (human)'.

These demonstrative pronouns have the reduced allomorphs *=Al*, *=Aw* ~ *=uh*, and *=unh*, *=uhnu*-, and even the combinations *=nhAw*, *=unhAl*, which are attached to the enclitics *=q'*, *=sh*, *=d*. These are extensively treated in Chap. 27. The pair *=unh* and *=uhnu*:

is also related to the verbal enclitics, human singular =*inh* and plural =*inu*-, originally functioning only as relativizers. Cf. also ?*uh*, here seen as an allomorph of =*Aw*, and the imperative enclitic object =*uh*, further discussed in Chap. 27.

**Table 9.3:** Full and reduced forms of demonstrative pronouns.

	full	reduced
proximal	' <i>Al</i>	= <i>Al</i>
distal	' <i>Aw</i>	= <i>Aw</i> ~ = <i>uh</i>
human sg	' <i>anh</i>	= <i>unh</i>
human pl	' <i>ahnu</i> :	= <i>uhnu</i> :

Simple examples of demonstrative use are presented in (3).

(3) Demonstratives in phrases

'*Al* *XAwa*: 'this dog; this is a dog'

'*Aw* *XAwa*: 'that dog, the dog; it/that is a dog'

'*Aw* *XAwa:yu*: 'those dogs, the dogs; those are dogs'

'*anh* *dAXunh*: 'this/that person; the person; he/she is a person'

'*ahnu*: *dAXunhyu*: 'these/those persons; they are persons'

The two fundamentally or syntactically different glosses for the phrases in (3), are different phonologically also, though spelled the same. In the first glosses the demonstrative is phonologically proclitic to the noun to which it is attributed, unstressed, whereas in the case of the second glosses, the demonstrative is a stressed independent pronoun. In the chapter on syntax these pairings are treated as homophones, at least in writing, if not in the spoken language—depending in fact on the audibility of the proclitic vs. independent stress contrast. Thus e.g. '*Aw* *XAwa*: *shAshehL* can be read (or heard?) either as 'it/that killed a dog', where '*Aw* is independent pronoun subject, or read (or heard?) as 'it killed the/that dog', with zero subject and '*Aw* as determiner or proclitic attribute to the object 'dog'. This homophony or quasi-homophony of all demonstratives can add significantly to ambiguity in syntax, adding to the many reasons for treating these pronouns together with their reduced and non-reduced forms as enclitics to the enclitic particle series =*s*, =*q*'-, =*d*, which themselves are so intimately related to syntax as to be treated in (Chap. 27) as a large component in the chapter on syntax.

Reduced proximate =*Al* is often associated with first person, e.g. *xu*: *q'Al* '*a:nd* 'it's me here', *de:dAl da*: *qu'Xi:wa*: 'what shall we (have to) eat?'

As noted in the phonology, there is significant evidence that stems ending in sonorants in modern Eyak earlier had a vowel after the sonorant. This evidence is found both in early sources, especially Rezanov (1805), and in certain fossilized modern forms with '*AwA*- and

'*ALA*-. This is reflected also in the two pairs of demonstrative adverbials or preverbals *wAX* 'that way, thus' and *LAX* 'this way', and in the demonstrative locationals.

'*u:d* 'there' and '*a:nd* 'here' are more transparently than opaquely from '*AwA*- and '*ALA*- plus preverbal finals *-X* and *-d*, respectively, by phonological rules that are perhaps as synchronic as they are diachronic. When these are preceded by the proclitic *dA*= 'selfsame', we have phonologically unique *dA'wAX* and *dA'LAX* 'that very way, still' and 'this very way', which are definitely not \**da'wAX*, \**da'LAX*. These two unique forms—the only “proof” that /*A*/ and /*a*/ are different phonemes (cf. §4.3)—come close to implying synchronic *dA-'AwA-X* and *dA-'ALA-X*. Such would be the only explanation for the sequence *dA'wV*- /*dA'IV*- instead of *da'wV*- /*da'IV*-.

# 10 VERB MORPHOLOGY

## 10.1 Introduction to Verb Morphology

In Eyak as in Athabaskan and Tlingit, by far the most complex part of the morphology is the verb, both in inflection and in derivation. It may be estimated that half the bulk of this entire grammar is verb morphology. We begin with a succinct overview.

Not counting person and number, Eyak verbs are inflected for the grammatical categories of *mode-aspect* and *conjugation* (Tab. 10.1):

**Table 10.1:** Verb inflectional categories.

Mode-aspect	imperfective aspect (IPFV)
	perfective aspect (PFV)
	conditional aspect (COND)
	imperative mode (IMP)
	optative mode (OPT)
	desiderative mode (DES)
Conjugation	Active (ACT)
	Inceptive (INC)
	Neuter (NEUT)

The combinations of mode-aspect and conjugation choice in the present grammar produce necessarily 18 basic or systematic paradigms, plus certain extrasystematic paradigms, inflected for person and number.

Eyak VERB THEMES consist of a single stem plus zero to a small number of affixes that are by definition lexicalized together with the stem constituting a lexical item. These themes fall into a number of THEME CLASSES, according to the conjugation and mode-aspect they choose. These classes can be given a kind of semantic label, as in Tab. 10.2:

**Table 10.2:** Verb theme classes.

Action	(the largest class)
Motion	Locomotion (largest)
	Postural (limited)
Stative	Classificatory (limited)
	Neuter imperfective stative (limited)
	Inceptive perfective stative (limited)
	Active (or s-) perfective stative (largest)
	Neuter perfective stative

It is not practical to distinguish fully the membership of the last two theme classes, Active and Neuter perfective statives, which seem to overlap in a very large proportion of cases, such that these two are treated together, as distinguishable only or mainly on a cline.

There are several types of DERIVATIONS, thematic or productive, that apply to Eyak verb themes, in one or more areas of the verb-prefix complex. For instance, from right to left, (i) for valence in the classifier: valence- or transitivity-raising, *L-* in causative, intensive, instrumental; and/or the reverse, valence-lowering, the *D-* effect, i.e. vocalization of classifier, for passivization, detransitivization, reciprocity, reflexivity, (re)iteration; (ii) in the qualifier zone, e.g. *'lih-* 'mental', plurality, noun class, anatomical, and/or more or less thematic marks, a vast system treated in the longest section of the grammar (Chap. 17) on qualifiers; (iii) *'-* directive, usually thematized; and of course (iv) a great number of preverbals (preverbs or postpositions or direction/location, adverbials), many of which may affect choice of conjugation, especially in the imperative and other modes.

There is a special group of derivations that suffix or affect (i.e. choose allomorph of) the stem itself, and which also choose or impose conjugation. The largest subgroup of these, action derivations, choose the Active conjugation:

- (1) Derivations which choose Active conjugation
  1. repetitive (suffix *-g*, very often thematized or lexicalized);
  2. *γAX*-perambulative (preverb *γAX*, *-X* suffix in imperfective only, *D-* classifier);
  3. persistent (expansion of stem-vowel, often thematized);
  4. customary (as preceding, plus *-k'* suffix; not thematizable, and no perfective);
  5. usitative, on motion verbs (no affix, simple Active imperfective),
  6. *qAXA-* in qualifier, "emphatic plurality";
  7. many nominalizations.

Three other such derivations choose Neuter imperfective, all highly specialized:

- (2) Derivations which choose Neuter imperfective
  1. liability (suffixing *-X*),
  2. anatomical resemblance (converting certain noun-stems),
  3. "expressive" stativization (of limited productivity).

There is one main derivation, the progressive, choosing Inceptive perfective, but is very widely applicable, emphasizing locomotion/durativity, on action verbs, e.g. 'weep one's way along, weep as a long process'. Applied to stative verbs, its meaning is transitional, 'is becoming, starting to be'.

Negation can be used on all verb mode-aspects except in the imperative, and its use in optative is quite marginal. Instead of negative imperative there are prohibitives and cautionary, one type with negative *-G* suffix on verb stem. There are a few thematized

negatives (-G suffix only), in forms such as ‘blind’, ‘deaf’, ‘numb’, and ‘weak’. Negation will be treated also, and mainly, in a chapter of its own (Chap. 24). Likewise interrogatives (Chap. 23).

In addition to many nominalizations or relativizations of verbs, there are also different types of deverbalizations (verbal nouns, gerunds, acquisitionals, instrumentals) derived from Eyak verbs, all of which delete all prefixes of the zone of prefixes immediately preceding the verb stem. Nominalizations (relativizations and deverbalizations) will be treated in subsections of their own under Chap. 18.

Probably most stems are attested basically for one morphosyntactic class or another, but a fair proportion is found in more than one class. As noted, there are two basic derivational processes, nominalization, whereby any verb can be converted into a noun or nominal, relativization, and deverbalization. To a far lesser extent, nouns, i.e., noun stems, can be converted to use as verb stems, by a much less regular process, in about 100 attested instances. These are treated in the subsection on Verbs with stem from nouns in Chap. 11 on Classifiers below. (For phonological variation in verbalization of noun stems of the form CV: see §7.3.6.) Nearly all adjective stems have corresponding verb stems (with some interesting phonological differences, for which see Chap. 19 on Adjectives below, and the subsection on Variation involving coda sonorants and disyllables under Stems in the Phonology (§7.4.3). There are a few cases, perhaps only four, of preverbal stems used in verbs, all or most derivatively so, for which see Chap. 16 on Preverbals.

### 10.1.1 Treatment of verb morphology in this grammar

Though a major shortcoming in my original fieldwork was the very partial record-keeping of negative responses, it should be emphasized here that a routine practice was to try to get minimal themes or bare stems from Lena. This was done of course in order to isolate as much as was possible the meaning of each stem. Systematic attempts were made to elicit forms with zero classifier and/or zero qualifier, or e.g. no directive, or no -g repetitive. Thus, if no such forms are attested, one can generally assume that they could not be elicited.

In Eyak, evidently more than in Athabaskan, the function of preverbals can hardly be called thematic. Just as preverbals are phonologically less closely bound to the verb word than are the Athabaskan disjunct verb prefixes, to which they correspond, they seem to be semantically less closely bound as well. They are written separate, with space, as opposed to their Athabaskan counterparts, and their semantics are generally clear enough that they are not normally to be considered thematic or thematized. At the same time, though, the Eyak dictionary then has multiple preverbal “homophones,” including e.g. five for *ya'*, and four for *yAX* (see, e.g., §16.10.4). In other words, rather than as opaque thematics, Eyak preverbals can generally be seen in semantic groupings of sometimes up to five unconnectable meanings.

Verb theme class is not assignable to the stem itself, but only to the theme. Of course the more productive stems, e.g. classificatory *-ta* ‘longish S be in position / handle longish O’, are likely to occur in themes of more than one class, but even some more specialized stems can do so as well, e.g. *-’yahG* ‘be distressed’, discussed below in Chap. 14 on verb theme classes.

### 10.1.2 Verb theme, verb word

The Eyak verb consists of two major parts, the verb word itself, and the preceding preverbals. There is always one and only one verb word in a verbal clause, and zero, one, or more preverbals. As noted, the verb word corresponds to the conjunct portion of the Athabaskan verb, and the preverbals correspond to the disjunct prefixes of the Athabaskan verb.<sup>1</sup> The division between Eyak preverbals and the Eyak verb word, with relatively trivial exceptions, is even clearer than the division between Athabaskan disjunct and conjunct prefixes. Also the order of Eyak preverbals is less definite than the order of Athabaskan disjunct prefixes, with almost no morphophonemic interaction. The order of prefixes in the Eyak verb word is very strict, as in Athabaskan conjunct prefixes, though there too, the Eyak is more transparent, with significantly less morphophonemic interaction.

This strict linear order of prefixes in the Eyak verb word shows in itself an internal structure that is best divided into four zones, each with its own semantic and morphological function or functions.

The verb word consists of one stem, sometimes suffixed, and the prefixes described in the account of verb prefix zones, which follows below. Immediately preceding that in sentence syntax are the PREVERBALS (preverbs, postpositions, some pronouns), but those are almost all always clearly separate from the verb word. The few exceptions are thoroughly described in the morphophonology, for those preverbals that may combine phonologically with the verb word, and reflexive personal pronoun, which may be phonologically both preverbal and prefixal.

The basic lexical entry for verbs is the VERB THEME. The verb theme consists of the stem and the essential prefixes, which are lexicalized and so THEMATIC to the stem. Such prefixes include the classifier basic to the theme, and much of the time also a qualifier (see Chap. 11 and Chap. 17). Preverbals (preverbs and postpositions) generally elaborate on the theme, with more or less semantic transparency, to form what might be called the verb base. Such, however, are generally considered a single lexeme under the theme, and are so listed in the dictionary.

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<sup>1</sup> See Kari (1975) for the disjunct boundary in Athabaskan.



Verb themes are cited as the stem with thematic prefixes hyphenated. The following abbreviations are used. Leftmost, if the theme is transitive, is O for the direct object; then qualifier (without /A/, e.g. *d-* for *dA-* qualifier), then classifier (not abbreviated, unmarked for zero, *L-*, *LA-*, and *dA-*, which is thus distinguished from *d-* for *dA-* qualifier). Themes that are attested in only a single instance may often be cited and glossed as the actual instance, not abbreviated, whereas themes that are attested multiple times are cited in abbreviation just described. Some verb themes have thematized suffixes to the stem, especially often the repetitive *-g*. These are included in the abbreviation of the theme.

### 10.1.3 The concept of verb base

In Eyak the VERB BASE is a theme plus preverbals or transparent derivational affixes, and/or even certain inflectional affixes, which change the “meaning” of a verb in such a way as to make a lexeme, enough in principle to make a dictionary entry or sub-entry. This is a much grayer area, of course, and, ironically, is a lot less “basic” than “theme” or “thematic” is. For example, *o-ch* ‘*o-ta* ‘move O to o, handle O toward o’ glossed as ‘give o O’, or *ya’X O-ta* ‘move O up’ glossed as ‘lift O’ may be called bases (i.e., lexemes) mainly because English has equivalent lexemes ‘give’ and ‘lift’. Such issues were skirted, it may be said, in the dictionary, by the device of numbered paragraphs for themes with different preverbals, rather than by showing them as separate sub-entries or themes. In that sense, separate verb lexemes are not defined as such in the dictionary format.

However, verb theme class plus preverbal may in some cases define conjugation choice, especially in imperatives of motion verbs, relating to the telicity of the preverbal. At least in this secondary way, the verb theme plus preverbal, or verb base, is more than a semantic concept defining lexemes, but also a morphological one in relating to conjugation choice. The usefulness of the concept of verb base is to be considered for that purpose especially, however residual it may be in Eyak by comparison with Athabaskan. Though the issue of conjugation choice is given much attention throughout, the concept of verb base is no doubt deserving of more study as such than it is given in this grammar.

## 10.2 Verb prefix zones

The four verb prefix zones will be labeled alphabetically A, B, C, D, left to right, to be taken up in that order. The term ‘position’ is kept as generic, still loosely usable both in the sense of zone, or subposition within zone. The four zones, in short, are the following. A. Object, with problematic details on indeterminate *’i(dA)-* and indefinite *k’u-*, their relative positions. B. Directive, and future *qu’- ~*. C. Qualifiers, including mental classifier *’i:lih-* and plurality emphazier *qA-*. D. Conjugation markers, Subject, Classifiers and the Neuter or perfective marker PAE *\*ŋ<sup>y</sup>i-* or *yi- ~*. Zones A and B each have a maximum of two subpositions, Zone C has seven subpositions. Zone D has three, complicated because of

overlappings and metatheses. There are of course morphophonemic interactions between subpositions and between zones. An alternative numbering to the present, though a somewhat artificial one, might be linear for subpositions, thus A1-2, B3-4, C5-11, D12-14. I.e. it could be said on a purely linear basis that there are 14 prefixal positions in the Eyak verb word itself (not counting preverbals!), but such a numbering or linearized perspective is not proposed here. The distribution of prefixes across the zones is illustrated in Tab. 10.3.

### 10.2.1 Zone A

Zone A is inflectional, mainly for direct object pronoun prefixes (but not including all direct object pronoun prefixes, and including one subject pronoun prefix). Those are the five following: 1s *xu-*, 2s *'i-*, 2p *LAXi-*, *k'u-* indefinite, *'i(dA)-* indeterminate. It does not include 1p direct object (which is preverbal *qa-*), and it does also include *k'u-* indefinite as subject (as well as object).

When *k'u-* indefinite is subject and any of the preceding object pronouns (other than the indeterminate *'i-*) is present, *k'u-* becomes preverbal as indirect object of the postposition *o-d*, thus *k'u-d*, as in *k'ud xusAk'in'tL* 'something scratched me'. If, however, indeterminate object *'i-* is present, *k'u-* and *'i-* co-occur in Zone A, in that order, with the result *k'u'-*, as in *ku'gah* 'someone is dancing' (cf. *'ixgah* 'I'm dancing'). Because of this it might be said that Zone A has two subpositions. On the other hand, this description can be said to fail with the indeterminate object in the directive derivation, where that takes the combined form *'ida'-* (< *'i-dA'-*), as that evidently may combine with *k'u-* in either order, *k'u'da'-* or *'ida'k'u-*, within Zone A: we have one instance of Anna in text with the order *k'u'da'-Xa* 'someone tell story', but 11 of *'ida'ku'-Xa* (7 from Lena, 1 from Marie, and 3 also from Anna in text; also *'ida'k'u'-ehdz* 'someone hold potlatch' from Lena). The first and exceptional form I called erroneous in Krauss (1970a), but note that the repetition on the *'-* in all the 13 forms is analogical. I evidently failed to investigate this problem as such in the field, either for preferences or omission of "redundant" *'-*. Such optional or inconsistent order is might best be considered characteristic of two prefixes co-occurring that belong in the same subposition of a zone, as also e.g. qualifiers co-occur in subposition 3 of Zone C, q.v. below.

It is not at all clear why the one combination of indefinite subject and indeterminate object is allowed. Though the possibility of the same treatment as with other objects, *\*k'u-d 'i-(dA)-* may not have been tested, it is probable that the alternatives attested are evidence that for some reason this description is complete. Though there may be no record of it in my fieldnotes, I certainly must have tested the combination of *k'u-* indefinite subject together with the other four direct object pronouns, e.g. *\*k'u-xu-* or *\*xu-k'u-*, and these were rejected.

Since *k'u-* serves in Zone A uniquely both as subject and object pronoun, the possibility of their co-occurring arises. This was never tested, but it is almost certain that the result is a single *k'u-*, on two grounds. One is given above in §8.2 as the constraint

against duplication of prefixes. The other is a semantically probable concrete example, the relativization *'u-X k'u-qu'(-L)-sheh=yu*: 'weapons, hunting-gear' (< 'those things by means of which ('u-X) someone (k'u-) will (qu'-) kill (-sheh) something (k'u-)', not 'someone will kill it' or 'he will kill something'). Very much in keeping with this form still functioning as a relativization, inflection of this form for possessor is still by subject, as attested in text for first and second person singular.

The combination of *k'u-* subject with reflexive *'Ad-* also occurs, always in the order *'Ad-k'u-*. The status of *'Ad(-)*, however is ambivalent, a phonologically and morphologically preverbal as well as part of the verb word. It can easily be considered preverbal preceding *k'u-*, rather than multiplying subpositions within Zone A, though the written convention is consistently *'Adk'u-*.

### 10.2.2 Zone B

Zone B is complex functionally, having acquired an inflectional as well as derivational role. The complexity here involves diachronic layering.

Zone B is essentially the leftward home of the uniquely mobile irrealis prefix *'-*, which is also one of the prefixes which may occur in Zone D (in Neuter optatives, imperatives, negative imperfectives and perfectives). The irrealis prefix may occur alone in Zone B. Three other morphemes may also occur there, but not without being followed by the irrealis. These are *\*qwA-*, *'u- ~*, and *dA-* (labeled here at inconsistent levels), to be taken up in that order.

The asterisk for *\*qwA-* is literally historical in that Proto-Athabaskan-Eyak had labialized uvulars (as well as velars), whereas Eyak does not. Explanation of the synchronic variation in reflexes of the combination *\*qwA-'*, otherwise written and glossed as *qu'*-future, i.e. *qu' ~ qa' ~ qe'*- obviously requires this reconstruction. Perfect cognates for this are Proto-Athabaskan *\*q<sup>w</sup>ə-* 'place, event' pronominal prefix and even Tlingit (one of the few such cognates in this part of the verb prefix complex for Tlingit), *k<sub>u</sub>* 'weather, area'. The Athabaskan *\*q<sub>w</sub>ə-* has a tendency to migrate rightward, where it is often seen as a qualifier, as does Athabaskan *\*tə-* of the same position, involved in the Athabaskan future. In Eyak this *\*qwA-* prefix is considered part of Zone B rather than Zone A simply to keep the complexity it adds out of Zone A, so that can remain purely pronominal, especially since in verbs *\*qwA-* occurs exclusively in combination with following *'-*.<sup>2</sup> The phonological reconstruction is in view of the fronted allomorph *qe'*- when preceded by *i-*, the allomorph *qa'*- when no syllable intervenes between it and the stem, or it precedes *x-* 1s subject, *qe'*, otherwise *qu-*. This historical combination *\*qwA-'*, for *qu' ~*, may hardly be transparent synchronically, but such analysis is needed to get anywhere beyond the synchronic surface of Eyak grammar. The *qu' ~* of Zone B is freely used in all verbs in

<sup>2</sup> For other reflexes of *\*qwA-* in Eyak see *qi'* 'place where' and *qid* 'down off' under Chap. 16 on preverbs and *qAlahqa'ga'* 'four' under Chap. 20 on numerals.

all attested Eyak with the meaning future (immediate or otherwise), inflectionally. It thus fits into the inflectional system with the label Inceptive imperfective ('beginning not accomplished'), even though it appears two zones to the left of Zone D, where the rest of the mode-aspect prefixes are to be found, and with which it is in strict complementary distribution. The semantics of \**qwA-*'- 'event-irrealis' coming to mean 'future' are in any case quite transparent, 'event not realized'.

Simplest, at least to start with, is Zone B filled with ' irrealis alone, directly following the object pronouns of Zone A, O-'. That is the mark of the directive verb derivation. That derivation is treated in full detail in §15.9, more fully than in any description so far for any Athabaskan language, where it is also widely present. In fact, I have singled out this derivation to append a full-scale comparative Athabaskan treatment of it, as a demonstration of what Eyak can add to our understanding of Athabaskan. I had earlier (Krauss 1965a) called this derivation "semitransitive," and for Athabaskan it has more recently been called "directive" by Leer, so also here, and sometimes "conative" (Rice 2000, especially from Koyukon, where, uniquely, it has become fully productive with that meaning).

Directly combining ' with the prefixes of Zone A, the result is of course 1s *xu'*, 2s *'i'*, 2p *lAXi'*, indefinite *k'u'*. Where no syllable intervenes before the stem, *xu'* and *k'u'* become *xa'* and *k'a'*, implying \**xwA-*' and \**k'wA-*'-; cf. *qu'* ~ *qa'* of the future. For third persons, otherwise zero in Zone A, the prefix *'u'* ~ is supplied, thus *'u'*. If no syllable intervenes before the stem, this has the allomorph *'a'*, thus to be reconstructed as \**'wA-*, no doubt cognate with the third person o/P pronoun of Athabaskan and Eyak. For the reflexive the result is *'adu'*, fully conjunct, never preverbal, whereas for the reciprocal, the result is *'ilu'* *'u'*, the *'ilu'* perhaps always remaining disjunct preverbal, though its origin must have been like that of *'adu'*.

Though there are many thematic uses of the directive, for which see §15.9, the most productive and presumably basic meaning is 'action directed at O', as opposed to 'action on O', e.g. *xu'sAta'tl'Linh* 'he kicked at me (maybe missed)' as opposed to *xusAta'tl'Linh* 'he kicked me'. This also provides all-important semantic explanation for the use of the 'irrealis' as the mark of the directive.

A further complication in the directive arises in connection with the indeterminate object *'i'*. In one special group of directives only (see §15.9.2.8 below), the result is the expected *'i'*. In all others, however, the indeterminate object is *'ida'*, to be analyzed *'i-dA-*', with the insertion of an underlying morpheme *dA-* (rather than as a phonologically inexplicable allomorph of *'i'*). Thus e.g. *'u'siXa'L* 'I told of it', but *'ida'siXa'L* 'I told a story'. Decisive support for this analysis is the unique theme C *da'-Xa'* 'have C', from C O-'*Xa'* 'cause O to be C', uniquely the suppletive causative of C *-Le()* 'be C', the one and only theme with the *dA-*'- lacking *'i'*. Though in no case is the surface form of this morpheme *dA-*, since it always has syllable coda ', definitively the irrealis of the directive, it is to be identified here as *dA-*. In §15.9 on the directive there is speculation on the origin of the *dA-*.

Given the inflectional role that has developed for *qu'* ~ 'future', it follows that that and the directive can be combined, further complicating the makeup of Zone B. That combination is always in the order of directive preceding future, as in (3), as expected, inevitably, with two incidences of the irrealis in the same zone, possibly violating the constraint against duplication of prefixes described above in §8.2.

- (3) *'i'qe'xta'tl'*  
*'i'-qe'-x-ta'tl'*  
 2S-DIR-FUT-1S-kick  
 'I'll kick at you'

Where the O is third person, however, the result may be the expected *'u'qa'ta'tl'inh* 'he'll kick at it', but far more often than not, that is instead simply *qa'ta'tl'inh*, for explicitly directive meaning, homophonous with the non-directive *qa'ta'tl'inh*. This may be seen more as a result of the non-duplication constraint, or resistance to duplication, than a collapse of the distinction.

In fact, there appears to be a very interesting manifestation of this very restraint in the directive when the irrealis appears in Zone D as in in Neuter negative imperfectives and perfectives, q.v. under Zone D below (§10.2.4). For example, the theme 'know O' is *O-'l-L-ga'*; 'I know (it)' is *'u'lixilGah*, Neuter imperfective. The negative of that, however, is not *\*dik' 'u'la'xLga:G*, but *dik' 'u:la'xLga:G*, where the irrealis mark of the directive in Zone B must shift to *:-*; likewise *dik' 'i:la'xLga:G* 'I don't know you'. There is no phonological motivation whatever for this, as sequences of CV'CV' are entirely routine, e.g. *te'ya'* 'fish'. The motivation must be the morphological constraint, here operating on the irrealis even between Zone B and D. This seems highly ironic while at the same time the irrealis can now occur as *-'* twice in Zone B in future-directive combinations. Such inconsistency must call for an explanation in the diachronic layering of Eyak grammar.

Yet another complication arises in Zone B with the prefix *dA-* in the combination future directive with indeterminate object. The fronted allomorph *qe'-* of the future is regular where prefixal *i-* precedes (2s *'i-*, 2p *LAXi-*, indeterminate *'i-*). That is so also where *'-* intervenes, *'i'qe'-* etc. That also includes, however, directive indeterminate object with *-dA'-*, thus *'ida'-qe'-* instead of *\*'ida'-qu'*, though the intervening *-da'-* should be expected to block the purely phonological fronting rule.

Finally, note also in the morphophonemics (§6.6.3) the identity of 'future' and directive irrealis prefix in that, where no syllable intervenes before the stem, the schwa vowel of qualifiers of Zone C is lengthened to *i:*, as in both directive *'u'li:eh* 'is calling it' and 'future' *qu'li:xah* 'will grow' (cf. passives *'u'lAdA'eh* 'is being called', *qu'dAdAxah* 'will be raised'). No phonological motivation for this rule is evident, a unique property shared by the directive derivation and 'future' inflection of Zone B.

The prefixes of Zone B are both derivational and inflectional in modern Eyak. Historically, however, it can be seen that they are morphologically and semantically related, both containing an ancient irrealis prefix *'-*.

The derivational prefix in Zone B is essentially  $\prime$ - alone, for the derivation here called the *directive* (earlier, Krauss 1965a called “semitransitive”, and corresponding to what in Athabaskan has also been called “directive”, though sometimes “conative”). Full description of this is found in §15.9. Combined with any of the prefixes of Zone A, the result is  $xu\prime$ ,  $\prime i\prime$ ,  $lAXi\prime$ ,  $k'u\prime$ ,  $\prime ida\prime$  (in some cases  $\prime i\prime$ , for themes referring to two relative motions). Otherwise, i.e. for objects represented in Zone A by zero (3s/p, 1p), in fact the majority of the time in the Eyak corpus,  $\prime u\prime$  appears in Zone B. If no syllable intervenes between  $\prime u\prime$  or  $k'u\prime$  or  $xu\prime$  and the stem, the /u/ surfaces as /a/, thus  $\prime a\prime$ ,  $k'a\prime$ ,  $xa\prime$  occur instead. This implies labialized onset followed by an ancient or underlying schwa vowel nucleus, thus  $\prime wA$ -,  $k'wA$ -,  $xwA$ - for these prefixes, followed by tautosyllabic irrealis  $\prime$ -, regularly opening schwa to /a/.

Though very often thematized to opaque meaning, the Eyak directive is still also well preserved in its original meaning: “strike at object and miss or maybe miss”. Hence also then the use of the irrealis prefix. (In Athabaskan the *u*- often spreads, and the meaning also, hence the label ‘conative’.)

The inflectional prefix in Zone B is  $qu\prime$ , which marks future. This is now classified as inflectional, functioning as the “Inceptive imperfective,” alone in Zone B, along with all the other conjugation and mode-aspect prefixes in Zone D far to the right. A major innovation in Eyak, this Future prefix, is not only far out of place, unlike the rest of the mode-aspect prefixes it is also freely used with any verb theme, and with the same future meaning. As part of the modern conjugation and mode-aspect system, however, it is in strict complementary distribution with those prefixes of Zone D, never co-occurring along with any one of them.

This  $qu\prime$ - prefix has two other major allomorphs. One is  $qe\prime$ - following  $\prime i$ - either of 2s or indeterminate object, or, no doubt analogically, following  $\prime ida\prime$ - for indeterminate object in the directive. It is also  $qe\prime$ - following  $k'u\prime$ - or  $xu\prime$ - (<  $k'u\prime\prime i$ -,  $xu\prime\prime i$ -), presumably regular by rule order. The motivation is of course phonological, fronting (of less stable vowel, presumably schwa) by assimilation to the  $\prime i$ -.<sup>3</sup> The other major allomorph is  $qa\prime$ -, by exactly the same /u/ > /a/ rule as in the case of the directive with no syllable intervening before the stem (blocked by following 1s subject in Zone D,  $qu\prime x$ -, not  $*qa\prime x$ -). This has to be explained as ancient labialized onset with schwa vowel nucleus followed by tautosyllabic  $\prime$ - which opens the schwa to /a/. The onset should therefore be reconstructed as  $*qw$ -, i.e. the prefix was etymologically  $*qwA$ -.<sup>2</sup> Though there is no other prefix  $*qwA$ - immediately apparent in the Eyak verb word proper, there is a perfect Athabaskan cognate  $*q^w\text{ə}$ - in what could be considered exactly the same prefix position. In fact that same  $*q^w\text{ə}$ - ‘place, event’ is to be found in every Athabaskan language, together somewhere with the direct object pronoun or somewhat rightward of that, so that it is often classed as a qualifier. The

3 Note, however, one instance lacking the aforementioned analogy: *ya'Xu: 'u'e:X 'ida'qu'di:Lqe'dX* ‘don't ask about it’, from Lena, cited 1970 as “probably incorrect”.

semantic correspondence is also so excellent as to explain the original meaning of Eyak ‘future’ as ‘event irrealis’, i.e. ‘event not realized’. For further reflexes of this pre-Eyak \**qWA-* in Eyak, note the etymologies of the Eyak preverbs *qi* ‘place where’ and *qid* ‘down off’ (\**qWA-*’*e*’ and \**qWA-*’*e*’-*d*) in Chap. 16 on preverbals, and probably in the 1970a lexical entries *qu*’- and *qu*’*L-* (probably \**qWA-*’*i-*, \**qWA-*’*i-L-*, originally verbal prefixes where *i-* marks an indeterminate object); also the first morpheme of the Eyak numeral *qA-lah-qa*’-*ga*’ ‘four’, as object of postposition *o-lah* ‘around o’, and with *-qa*’-*ga*’ ‘each of [the four fingers, not thumb]’ < ‘among o - like o’. All these instances have \**qWA-* in positions exactly where \**q<sup>w</sup>ə-* would be expected in PAE.<sup>4</sup>

Another important and unique trait common to the directive and future is that with a qualifier of Zone C of the form *CA-* and no syllable between that and the stem, the vowel of the qualifier is expanded to *Ci-*, not for any phonological reason that is at all clear on the surface. Thus, e.g. *’u’li:’eh* ‘is calling it’, *’u’li:x’eh* ‘I’m calling it’, but *’u’lAdA’eh* ‘it is called’; likewise *qu’di:leh* ‘will say’, *qu’di:xleh* ‘I’ll say’, but *q’e’ qu’dAdAleh* ‘will say again’.

There is one other important relation between the directive and future in Zone B. The two may co-occur, always in the order directive-future, thus *’i’-qe’-x-L-t’ik* ‘I’ll shoot at you (maybe miss)’. Therefore it can correctly be said that Zone B has two subpositions, or perhaps even four, counting the *irrealises* simplistically. However, it should very significantly be noted that the *’u’*- replacing zero in the directive is optionally deleted in the future. Thus ‘I’ll shoot at it’ is either *’u’qu’xLt’ik* or simply *qu’xLt’ik*, the latter homophonous with *qu’xLt’ik* ‘I’ll shoot it’. A survey of the corpus in fact shows that in more spontaneous Eyak the deletion is by far the more frequent. There is no reason that such deletion or haplology should be phonologically motivated. At the same time there is a strong morphological reason in Eyak to delete one of the *irrealis* prefixes insofar as both are still identifiable as such. This is the strong Eyak principle of non-duplication, already noted above that two identical prefixes can be realized only as one.

### 10.2.3 Zone C

Zone C is derivational *par excellence*, occupied by qualifiers. It consists of no fewer than seven subpositions, transitively ordered (such that if *x* precedes *y* and *y* precedes *z*, then *x* must precede *z*). Though the qualifiers occur most extensively in verbs, they do also occur prefixed to nouns, adjectives, and preverbals (both postpositions and preverbs). For this reason they are treated in their own section of the morphology outside that for the verb,

<sup>4</sup> The Athabaskan future is composed of \**tə-Gə-*, where the \**Gə-* corresponds to the Eyak *GA-* of Zone D, and the \**tə-* is left of the qualifier zone, often considered in fact the leftmost qualifier, identified with \**t-* ‘forward’. The \**tə-* of the future is therefore also in a position closely corresponding to the Eyak *qu*’-, as is the \**q<sup>w</sup>ə-* ‘place, event’. Conceivably the \**tə-* as well as the \**q<sup>w</sup>ə-* could be cognate, if somehow \**qW-* > *t-* (cf. Greek, also Eyak *o-qa*’ ‘among o’, Athabaskan \**-ta*’).

and this section is by far the longest in Eyak grammar. Here only the briefest summary is provided, and reference for all detail is categorically made to Chap. 17 on qualifiers.

There are at least eighteen different qualifier prefixes, ranging in frequency from extremely common to extremely rare. Some are highly specialized semantically, some highly polysemic, meanings ranging from fully transparent to fully opaque. These prefixes may occur in combinations, of up to four, in at least sixty different attested combinations. These combinations also range semantically from transparent to opaque. The semantic functions of the qualifiers seem basically to be three: noun-classificatory, anatomical, and thematic (lexically part of the verb itself). Some qualifiers have multiple functions.

The first two subpositions in Zone C are specialized, each for a single prefix which, unlike the rest, occurs only in verbs. Subposition C1 is for the single prefix *'i:lih-* 'mentally' (§17.10.1), in origin clearly a form of the verb theme *'i-li(')* 'have emotion', actually incorporated into the verb word. As such this is a radical departure from the rest of Eyak grammar, yet ancient, with its exact cognate in Athabaskan.

Subposition C2 is likewise for a single prefix *q-* 'plurality emphazier', specifying plurality of subject, object, or sometimes also action. This prefix is essentially optional, so too is derivational rather than inflectional, with its exact cognate in Athabaskan \*qə-. In Athabaskan \*qə- fits with the object pronoun prefixes, also indirect object pronoun prefixes, unlike Eyak *q-*—except in one single instance in the whole Eyak corpus, where *q-* precedes the (*'*)*u-* of a directive (of Zone B), q.v. under *qA-* in §17.10.2.

Subposition C3 has three qualifiers, *G-* (§17.10.5), *X-* (§17.10.6), and *g-* (§17.10.7). The first two are thematic (derivational with more or less opaque semantics), the last partly noun-classificatory ('filament-like'). These three also form a special class, having uniquely in common that they may also occur in combinations of qualifiers further to the right, after C4 qualifiers. At least *G-* and *g-* may themselves combine with *X-* in the same subposition (e.g. *X-* thematic in 'eat', *g-* noun-classificatory for 'grass'), in either order, cf. §17.10. This is in fact characteristic of qualifiers in the same subposition.

Subposition C4 includes the majority of the qualifiers, at least nine of the eighteen. These are mostly of more complex phonological shape (than *CA-*), and in fact, unlike the rest, can be synchronically and/or comparatively identified morphologically and semantically as incorporated noun stems, some with reduced vowel. Some occur only or mainly with *d-* (of C6.) or *l-* (of C7). Qualifiers of C4 are *ti:-l-* 'skin', *qi:-* (usually with *d-*) 'foot', *qi:-lA-* 'rope', *ku:n-* 'belly', *Xu:n-* 'tooth', *djAXA-* 'ear', *lAXA-* 'eye; granular', *k'ush-* (usually with *dA-*) 'leg', *ch'a:n-d-* 'forearm', *tsin'-* 'neck, head; confusion'. These are of course reminiscent of Athabaskan noun-incorporation into the verb word. The Athabaskan process is quite different from Eyak, however, in that it takes place in the Athabaskan disjunct section of the verb word, corresponding to the Eyak preverbal, and involves a much freer selection of nouns in Athabaskan than in Eyak.

Subposition C5 is occupied only by the qualifier *y-*, highly thematic, but also with the anatomical meaning 'hand'; note the combination *qi:-y-* 'toes'.



Subposition C6 is occupied only by the qualifier *d-*, highly thematic, and also noun-classificatory. Along with *l-* (of C7), *d-* is the most frequent of qualifiers, and is described in the qualifier chapter as having over 15 identifiable “meanings,” including e.g. ‘oral noise’.

Subposition C7 is occupied mainly by the qualifier *l-*, highly thematic, but also both noun-classificatory and anatomical ‘head’. This is functionally the most complex of all the qualifiers, even though it is described in the qualifier chapter as having “only” ten thematic “meanings.” Moreover, *d-l-* is the most frequent of qualifier combinations, phonologically resulting in *dla:-* ~, very often having its own thematic function, itself also further combining in opaque three-qualifier combinations, e.g. *XAdla:-* ~, *gudla:-* ~. At the opposite end of the frequency scale is *s-* also of subposition C7, rare, found only in 7 forms, meaning unidentifiable. This is assigned to subposition 7 if only because it combines after *d-*, but is not attested in combination with *l-*, so does not need a subsequent subposition. Athabaskan has the exact cognate, also rare, and in rightmost subposition.

#### 10.2.4 Zone D

Zone D includes three types of prefixes: conjugation markers, subject pronouns, and classifiers. The first two are inflectional, though the conjugation markers can also be used in some derivations. The classifiers are essentially derivational at two levels, lexical or thematic, and valence raising or lowering. A major chapter Chap. 11 is devoted to the classifiers, so only categorical reference is made to them here, especially for the functions of the classifiers, not further dealt with here.

Zone D can be divided into at least three subpositions, insofar as this is useful, as these subpositions correspond only partially to the three types of prefixes that occur in this zone. This situation is in fact complicated by metatheses, of two types. The number of subpositions could be increased, of course, by counting extra for these metatheses.

Subposition D1 is the only subposition to be occupied by only one type of prefixes, unaffected by metathesis. It is occupied by the conjugation markers *GA-*, *AN-* ~, *'i-* ~, or *'A-* ~, each with multiple functions (see Chap. 12), mutually exclusive, and always preceding the subject pronoun prefixes. Additionally, *-'* ‘irrealis’, appears after *'A-* ~ in Neuter negative imperfectives and perfective, and all Neuter conditionals, imperatives, desideratives.

Subposition D2 includes (some of) the subject pronoun prefixes, namely 1s *x-*, 2s *yi-* ~, and 2p *LAX-*. It is perhaps best to include here also the conjugation marker *s-* along with these subject pronouns, for two or more reasons. The conjugation marker *s-* belongs functionally in the same class as *GA-* etc. of subposition D1, with which it is mutually exclusive, but it is definitely ordered in a subsequent subposition, as e.g. it always follows 2p *LAX-* and much of the time *s-* follows 1s *x-*. At the same time, however, with 1s *x-* and non-vocalic classifier ( $\emptyset$ - or *L-*), the result is not *\*xsA-* but *si-*, synchronically opaque but where the difference (*sA-* > *si-*) is certainly manifest after the *s-* and not before, hence the result of a morphological metathesis. I.e., instead of expectable *\*x-sA-*, we have *si-*

exactly as in Athabaskan, presumably < PAE \*s- plus \*\$- 1s and \*-ɪʷə- in some order which voiced the \*\$, resulting in /i/, preserving (only) the palatal qualities of both voiced consonants. Moreover, with 2s *yi-* and *s-*, the *yi-* is always deleted, possibly implying the same subposition for both, or at least that *s-* cannot literally ever “follow” 2s *yi-*, as it does 2p *LAX-* and sometimes 1s *x-*. One could, of course, assign *s-* to its own subposition “D3”, counting an additional subposition for metathesis with at least 1s *x-*.

Here though, in the minimal counting, subposition D3 is assigned instead to all the classifiers ( $\emptyset$ -, *L-*, *dA-*, *LA-*) and, necessarily, also to the inflectional (modal-aspectual) *yi-* element. In some sense it could be argued that this subposition could be further subdivided into as many as three sub-subsections in the case of the classifier allomorph *Li-*, as *L-dA-yi-*. I.e., the classifier is still transparently *L-* plus *dA-* from a semantic point of view still synchronically, if no longer transparently from the phonological point of view (as Leer would have them, definitely in that order). The *yi-* element is clearly manifest in the /i/ timbre of the classifier vowel instead of /A/, following the *d-* or *L-*. On the other hand, in the absence of the *dA-* in the classifier, i.e. with  $\emptyset$ - or *L-* classifier, the *yi-* element is manifest *before* the (*L-*) classifier, as *yi-* in absolute initial or after /h/ (though only attested after *’i:lih*), thus *x-yi-* > *xi-*, *LAX-yi-* > *LAXi-*, *CA-yi-* > *Ci-*, *Cu-yi-* > *Cu-*. Again, rather than assign a definite order between classifier and *yi-* element and consider now this kind of metathesis about half the time, these prefixes are here all simply assigned to the same subposition D3.

It is clear, as noted, that there is no order overlap between D1 and D2, the two being totally distinguishable subpositions, insofar as such subdivision is considered useful. Within D2 the *sA-* and first person metathesis was noted. Between that D2 and D3 again there is no metathesis. Within D3, however, there are these two orders throughout between the classifier and the *yi-* element. It could thus even be argued that D3 could be its own “Zone E”, especially given the separate function of the classifiers, quite different from the conjugation prefixes of D1 and D2. However, given especially that the classifiers overlap completely with modal-aspectual (*y*)*i-* so closely associated with the conjugational inflection, and that the *dA-* classifier especially in passives functions as indeterminate subject (§11.3.1), it may be better argued that D1-2 and D3 show sufficient unity to be considered a single zone. It should be added that Zone D shows striking unity in that that whole zone is deleted in deverbalizations, i.e. in gerunds, verbal nouns, instrumentals, and acquisitionals. Inclusion of the classifiers in that deletion is particularly remarkable, some of which are even lexically assigned, entirely thematic, is reason enough in itself to consider Zone D a unity at an important level, in spite of the diverse functions of its components.

Within D2 *s-* is in its own box to show that it precedes *LAX-*, and *x-* and *yi-* when *dA-* is present in D3 or *A-(-)* ‘negative’ is present in D1; otherwise *s-* precedes *x-* and *yi-* subject pronouns. Within D3 *L-* must precede *dA-*, deleting the /d/ when they combine, and *yi-* is in its own box to show it precedes *L-* when *dA-* is absent, and replaces the /A/ of *dA-* when *dA-* is present.

**Table 10.3:** Verb prefix zones (allomorphs not indicated).

A	B1	B2	C1	C2	C3	C4	C5	C6	C7	D1	D2	D3
xu-	qu-'	('u)-'	'i:-	qA-	GA-	ti:-	yA-	dA-	IA-	GA-	x-	
'i			lih-		XA-	tsin'-			sA-	AN-	yi-	L- dA-
lAXi-					gu-	djAXA-				'i-	lAX-	
'i-						ch'a:n-				'A-	s-	yi-
k'u-						ku:n-						
'Ad-						k'ush-						
						qi:-						
						Xu:-						
						lAXA-						

### 10.3 Verb suffix sequence

Though Eyak is primarily a prefixing language more than a suffixing one, the number of suffixes to the verb stem in particular is not inconsiderable. The suffixes involved are relatively few, and are all non-syllabic obstruents in form. These may combine in interesting ways, however. In fact Eyak phonology is remarkable, especially compared to Athabaskan, in that these suffixes combine quite straightforwardly, transparently, in ways limited only by morphology, not by phonology. Further, these suffixes combine of course in a definite morphological order. This order will be described here, in connection with the inflections and derivations that are to be treated in Chapters 11 and 15 below.

First, it should be understood that this suffixation does not refer to any of the variation or gradation of the stem nucleus described in Chap. 7 on stems in the Phonology, even though that too is connected with verb inflection and derivation.

A sequence of four suffix positions is needed to account for this verb-stem suffixation. These four positions do not constitute a system as such, e.g. of four different types of suffixes, but the four are rather what is necessary to allow for all the combinations of suffixes that are attested, or are likely to be possible.

A total of eight suffixes is involved. Of those eight, three happen to be of the form *-X*, which will require some explanation. The four suffixes of position 1, suffixed first to the stem, are *-g* 'repetitive', *-X<sub>1</sub>* 'perambulative', *-X<sub>2</sub>* 'thematic', and *-G* 'thematic negative'. The two suffixes of position 2 are *-k* 'customary' and *-L* 'perfective'. The only suffix of position 3 is *-X<sub>3</sub>* 'desiderative', and the only suffix of position 4 is *-G* 'negative'. These can be shown in tabular form as Tab. 10.4.

The only phonological rule involved here affects the two fricatives, *-L* and *-X<sub>1-3</sub>*. All such suffixes have zero allomorphs immediately following stems ending with the same fricative, i.e. *-L-L* > *-L*, *-X-X* > *-X*.<sup>5</sup> These are also written as single fricatives. There is

<sup>5</sup> This phonological rule does not apply to stem onsets in the case of *x-x-*, e.g. *GAXa:L* 'I'm walking along', as opposed to *GAXxa:L* 'I'm growing'.

Table 10.4: Verb suffix sequence.

Suffix slot 1	Suffix slot 2	Suffix slot 3	Suffix slot 4
-g	-k'	-X <sub>3</sub>	-G
-X <sub>1</sub>	-L		
-X <sub>2</sub>			
-G			

no such constraint with stops. E.g. *-she'g* 'bend' plus repetitive *-g* is *-she'gg*, with two releases, that plus customary is *-she:ggk'* with three, and that plus negative is *-she:ggk'G*, with four releases. Likewise, a form like *dik' k'uxLch'a:q'GG* 'I'm not deaf' would definitely be allowable in Eyak; cf. the following.

The constraint against duplication of prefixes mentioned in §8.2 does not apply to suffixes, quite. The negative suffix *-G* in suffix position 1 and suffix position 4 is the same morpheme, except that in position 1 it is thematized, lexicalized, whereas in position 4 it is the regular negative suffix. Thus e.g. *k'uGA'a:nGinh* 'he's blind' is derived directly from *O-G-'e* ~ 'see O' by thematic suffixation with *-G*, without the regularly required *dik'* 'no, not' as in the sentence *dik' k'uGA'a:nGinh* 'he doesn't see anything'.<sup>6</sup> The negative of 'blind' has been verified as *dik' k'uGA'a:nGGinh* 'she's not blind', with a combination of the two negative suffixes. This could be considered a violation of the doubling constraint regarding prefixes (cf. §8.2), and also even of the constraint against double negatives. It could equally well be considered that such a form does not violate either constraint, in that the two suffixes are at different grammatical levels, one a lexicalized derivation of limited productivity, the other regular fully productive as an inflection.

This question arises also in the case of the derivational suffix for the repetitive, *-g*, which has a full range of degrees of thematization, e.g. *L-'Ash-g* 'sneeze (once or repeatedly)', where the *-g* is thematized. We do at least have record that even 'sneeze once' is *LA-'Ash-g*, that *\*LA-'Ash* is unacceptable for 'sneeze once'.<sup>7</sup>

There are two suffixes of the form *-X* in position 1. One of these, *-X<sub>1</sub>* is for the fully productive derivation *yAX* 'perambulative', present as *-X* only in the Active imperfective and negative thereof (*-X-G*). In all other mode-aspects its allomorph is zero (by morphological rule, not phonological), though it often leaves a trace in the open stem vowel lengthening that goes with it, e.g. *yAX xdAwe:X* 'I'm swimming (about)', *yAX qu'xdAwe:* 'I'll swim (about)' For further examples and details see §15.5.4.7 on the *yAX*-perambulative. The reason for assigning this suffix also to position 1 is that we have

<sup>6</sup> This is attested in at least eight other such themes, for which see §24.1 on the thematic negative.

<sup>7</sup> The fieldwork was aggressive enough for that, but still not aggressive enough, or otherwise faulty in not fully recording negative responses, that we have no record of an attempt to elicit *\*?LA-'Ash-g-g* 'sneeze repeatedly, sneeze on and off', such that the resultant form would be marked (again) for repetitive. Chances are that Lena would have rejected such a form, because both instances of *-g* could occur only in the same position, unlike the case of the two types of negative *-G*.

sufficient attestation of it in combination with the repetitive derivation, with the result that only one of the two suffixes is allowed, always *-g* and not *-X*, with very rare exceptions. For this see §15.3.2.11 on combinations with the repetitive, and §15.7.4 on combinations with the perambulative.

The second suffix of the form *-X* (*-X<sub>2</sub>*), also of position 1, is quite rare, totally unproductive, and has no clear function or meaning. Also in stark contrast to *-X<sub>1</sub>*, *-X<sub>2</sub>* has no zero allomorph in otherwise unsuffixed mode-aspects, e.g. in Future or imperative. However, it is often zero or deleted, though not always, when followed by a suffix of position 2, as in *xusALXa'Xch'Linh* 'he tickled me', *dik' xusLXa'Xch'XLGinh* 'he did not tickle me', both from Lena, here ironically deleted in the lesser pileup of obstruents. Since, when not zero, it precedes *-L* perfective of position 2 (*-X*)*L*, it is assigned to position 1. This is not at all surprising, that suffixes which are thematized and closest in meaning to that of the stem should be in position closest to the stem. The verb stems and themes with which *-X<sub>2</sub>* is attested are few indeed: (O)-*ch'i'ch-X* in 'be rough' and 'scrub O', O-*qe'd-X* in 'ask about O' (cf. O-*qe'd* in 'buy O'), *-qahdz-X* in 'cough', O-*Xa'Xch'-X* in 'tickle O'.<sup>8</sup> Because of its rarity and lack of evident meaning, there is a certain temptation to consider *-X<sub>2</sub>* a component of some set of coda clusters, but that is precluded already by the *-Xch'-X* of 'tickle', unless we start to allow for coda clusters of three obstruents within the stem itself. That interpretation is further rendered unlikely by (1) the variety of stops and affricates preceding that *-X*, (2) by its frequent irregular deletion in combination with other suffixes, (3) by the existence of O-*qe'd* 'buy' along with O-*qe'd-X* 'ask about O', and (4) by its alternation with repetitive *-g* in 'tickle', where an origin related to perambulative *-X* is in fact suggested. Cf. also postposition and preverbal final o-*X* 'in non-punctual contact with o, movement within area'.

The two suffixes of position 2 are relatively unproblematic and invariable in form, function, and position. The derivational *-k'* of the customary is well attested following e.g. repetitive *-g* repetitive, and preceding negative *-G*, *-g-k'*, *-g-G*, *-g-k'-G*. Likewise, the inflectional perfective suffix *-L* is well attested following repetitive *-g* and preceding negative *-G*, thus *-g-L*, *-L-G*, *-g-L-G*. Though perhaps never aggressively tested, since both customaries and perfectives are both quite frequent, no combination of them is attested and such combination is much more likely to be impossible than absent in the corpus by chance. Accordingly, *-k'* and *-L* are put in the same suffix position.

The only suffix of position 3, inflectional *-X<sub>3</sub>* 'desiderative', is less well documented in combination with other suffixes, yet adequately to show that it follows not only repetitive *-g* but also follows customary *-k'*, so *-g-X* and *-k'-X*, also that it precedes *-G* negative, *-X-G*.

<sup>8</sup> See the respective dictionary entries for each of these for all that is attested of this suffix, and for the other combinations it enters into with suffixes, including where it is deleted in such combination and where it is not deleted. The results differ somewhat with each of the themes, probably due less to any further patterning than to less than full systematic investigation of all variant possibilities.

That is sufficient to show that it requires its own position, so position 3. Accordingly, -G 'negative' has been shown to follow all other prefixes, including -X<sub>3</sub> 'desiderative'. It is thus alone in position 4.

It remains only to add that enclitics may further be attached to the verb word. These enclitics are all syllabic except for one that sometimes is not (=sh, see next paragraph), and are of two types. The first type, and first attached to the stem and suffixes are the two human relativizers =inh (singular) and =inu: (plural). These have gained a much wider use than as relativizers only, and they are treated extensively Chap. 25. Likewise the non-human relativizer, which is Ø-. There is also a third such enclitic, also vowel-initial, =uh 'non-human object', enclitic to imperatives only.

A second set of enclitics may be attached to the verb word, suffixes, or even the enclitics just mentioned. These are =sh(=uh) ~ 'yes-no interrogative', =d=uh ~ 'wh-interrogative', and =q'=uh ~ 'focus enclitic'. Only the =sh(=uh) ~ is sometimes non-syllabic. They may be attached to the verb only when the verb is the only word or constituent of the sentence, or where the verb phrase is treated as the first constituent of the sentence. For these, see Chapters 25 and 23, where they are treated in detail.

# 11 CLASSIFIERS

Rightmost in the prefix complex, Zone, D3, along with modal-aspectual *yi-* are the prefixes known as *classifiers*. Use of the classifiers is a complex subject, so entailing a long and weighty subsection, involving several other elements of the verb, which will be described only after this long discussion (Chap. 12).

We continue the use of the term *classifiers* out of habit and tradition, and to connect with previous literature. At the same time we acknowledge that the term is a serious misnomer, as fully so in Eyak as in Athabaskan. So in retaining the term “classifier” here, we shall at least explore the possibility of giving the classifiers something to classify, namely basic verb themes by something connected to voice or valence. I.e. after looking at the most predictable or regular uses of the classifiers, we may try to establish classes of verbs or of verb themes classified by the classifiers, according to what classifier is assigned to the most basic form of a theme.

During fieldwork it was a priority to determine just this, the most basic form of a theme, i.e. to elicit minimally affixed forms for verb stems, for verb themes, to strip those down to their most basic meanings, and maximally identify therewith also what is derivational. The present study can aim, thanks to that fortunate quality of the fieldwork, to distinguish as clearly as possible the thematic uses of the classifiers from the derivational uses. Certainly an attempt was made routinely to elicit  $\emptyset$ - classifier. (This did reveal a dozen or so cases where zero was possible instead of the usual classifier, but only in the Active perfective, for some reason.) Evidently some attempt was also made, though much less consistently than for  $\emptyset$ -, to elicit other classifiers than those attested with a particular verb stem. This can be seen with the note in the dictionary on *-’a’q’* ‘be sunburned’, that that stem could not be elicited from Lena with either *L-* or *LA-*. However, there was certainly more effort to elicit stems with zero classifier than stems with classifiers other than those most easily elicited or found.

Classifiers are strictly verb prefixes, definitively. They remain in nominalizations of verbs that are relativizations, but in nominalizations that are deverbalizations, classifiers, along with all prefixes of Zone D, are prominently absent, in fact deleted.

It is true that there is a prefix *L-*, immediately before the stem, to many nouns and postpositions, but no such *LA-* or *dA-*. We therefore conclude, in accordance with the definition of classifier, that there is insufficient reason to identify this *L-* prefixed immediately before the stem in nouns and postpositions as the *L-* classifier, though it is homophonous with that and is in the same position. It could of course be claimed that this contrasts also with  $\emptyset$ - in that position, and that only the *dA-* classifier (combined with  $\emptyset$ - and combined with *L-*) is absent in those nouns and postpositions. Granting that, the claim could be rephrased that the classifier element *L-* (and  $\emptyset$ -, absence of *L-*) can occur

Table 11.1: Classifier morphophonemics.

	∅-	L-	dA-	L-dA-
-y	∅-	L-	dA-	LA-
+y	yi-	yi-L-	di-	Li-

also with nouns and postpositions, but somehow that not the whole classifier “system” including *dA-* can so occur.

## 11.1 Classifier morphophonemics

As shown in Krauss (1969), the Eyak (and Tlingit, formerly also Athabaskan) classifiers, in the prefix position immediately preceding the stem, are composed of three elements or components, essentially *dA-*, *L-*, and *(y)i-*. The third, called the *yi-* element, has nothing to do with voice or valence as do *L-* and *dA-*, but has its origin in  $*\eta^y\text{ə-}$ , present in positive (not negative) perfectives and in optatives. That *(y)i-* is as such in a different inflectional category from the *dA-* and *L-*, which are strictly components of the classifiers. The *yi-* element combines with *dA-* and *L-* in that it is manifest preceding the classifiers from which *dA-* is absent, i.e. as *yi-∅-*, *yi-L-*; and following the classifiers in which *dA-* is present, by changing the /A/ of the *dA-* to /i/.

Further, *L-* and *dA-* can combine. Leer (1991b) has helped by specifying that they originally must have combined in the order *L-dA-*. Given that the result in Eyak is always *LA-* (~ *Li-* with *yi-* element), Athabaskan also *lə-* (most of the time voicing to *lə-*, especially in  $-VI(\text{ə})-$ ), the only phonological change is simple loss of (partly) homorganic stop in  $*LdV- > LV-$ .

A useful abbreviation for the effect that *dA-* has in the rightmost four classifiers in Tab. 11.1 is “*D-*,” used in this grammar to identify or explain them more abstractly, particularly to explain the alternation between *LA-* and *Li-*, where only the vowel or vocalization or syllabification is left of *dA-*. Thus, in this grammar, *dA-* ~ and *LA-* are distinguished from *∅-* and *L-* sometimes as having *D-* (element), or as syllabic or vocalic classifiers, synonymously.<sup>1</sup>

The only further morphophonemics are quite trivial: *dA-* and *LA-* become *d-* and *L-* before vowel-initial verb stems, as just noted, whereas *di-V-* and *Li-V-* become *di-yV-* and *Li-yV-*, respectively. Thus *q'e' GAxdAwe:L* ‘I’m swimming back’, *q'e' xsdiwehL* ‘I swam back; but *q'e' GAda:L* ‘I’m walking back’, *q'e' xsdiyahL* ‘I walked back’. Interestingly, the weak *y-* of the plural classificatory *L-ya* is dropped in *L-y (> -La)*, but *LA-* (and *dA-*) retains the

<sup>1</sup> This usage must be clearly distinguished from “*d-* (or *D-*) effect,” strictly an Athabaskan process, where loss of schwa results in  $*d\text{ə-}$  plus fricative combining as affricate. In Eyak the classifier vowel never elides, except in the case of zero stem-initial, and then only in the case of *L(d)A-V-*.



/y/, hence *L**A**y**a*, *d**A**y**a*. Likewise, the stem-initial *l*- is lost in *le* ‘act, do’ immediately after *L*-, but not after *LA*- ~ *Li*-*LA* ~ *Li*.

In a few relativizations, *dA*- shifts to *di*- optionally, e.g. *qi:yidichanh* ‘spider’ (< ‘toes stink’) from and freely alternating with *qi:yAdAchanh*, especially between coronals; cf. likewise *dAde’L* from and alternating with *dide’L* where *dA*- is a qualifier. It may appear that this is variation between Active and Neuter imperfective, but in fact this trivial shift or free variation is not a property even of classifiers.

There is the combination of *dA*- and *L*- classifier, as shown above, but of course no overt duplication of *dA*- or *L*- classifiers. For example, given the *dA*- in *O-dA-la* ‘drink O’, as in *’anh sdilahL* ‘he drank it’, the passive would still be *sdilahL* ‘it was drunk’; even hypothetical *’uwa: q’e’ k’usdilahL* ‘more of it was drunk’, hypothetically or covertly with three *dA*- classifiers, would still have only one *dA*-. Likewise, given *L-si’* ‘rot’ and *sALsi’L* ‘it’s rotten’, *siLsi’L* ‘I caused it to rot’ and hypothetical *’anh sid sALsi’L* ‘he made me cause it to rot’ covertly with two and three *L*- classifiers would of course still have only one *L*-.

## 11.2 Classifier system and order of presentation

The traditional view is that there are four classifiers including  $\emptyset$ -, so in Athabaskan zero, *d*-, *L*- and *l*-, where it is recognized that  $\emptyset$ - is to *d*- as *L*- is to *l*-, and, at least since Krauss (1969), that *l*- derives from *lə*- (< \**l*-*də*-). The classifier system can thus be shown to consist of only two morphemes not counting  $\emptyset$ -, also not counting the *yi*- element (shown to be \**ŋ*<sup>y</sup>*ə*- since Krauss and Leer 1981), since that is part of an altogether different system, namely mode-aspect. The *yi*- element, however, was shown in Krauss (1969) to be in exactly the same verb prefix subposition as the classifiers. The *yi*- element thus appears after subject pronouns but before *L*- (and in place of  $\emptyset$ -), e.g. *x-i-L-da:s* ‘I’m heavy’, but after or as part of the classifier with *D*- element, so entailing the \**L*(*d*)*A*- ~ \**L*(*d*)*i*- variation. Such sequence is obvious in Eyak (and Tlingit), but in Athabaskan is evident only very indirectly, in the morphophonemics of the prefixes of the zone corresponding to Eyak Zone D, and in the inexplicable stem-initial *y*- of “irregular” alternations in the verb ‘(sg) go’, e.g. Tanana/Minto *-o* ~ *-yo*.<sup>2</sup>

It is emphasized in this grammar that there are two properties operating in the choice of classifier, one having to do with voice/valence, and the other lexical, more or less purely.

<sup>2</sup> All Athabaskan languages show morphophonemic complexity in the reflexes of \**ŋ*<sup>y</sup>*ə*- where the classifier lacks the *D*- element, generally in the form of \**n*(*ə*)- ~ \**i*- (the *i*- with or without nasalization) where the subject pronoun is  $\emptyset$ -. Where the classifier is plus *D*-, on the other hand, there is no reflex of \**ŋ*<sup>y</sup>*ə*- before the classifier, and seemingly none after it either. However, that is because the reduction of the classifier vowel, if any, leaves no room for the /*A*/ vs. /*i*/ contrast, still overt there in Eyak. Thus, the only trace left of the *yi*- element after the plus *D*- classifier in Athabaskan is in the resulting epenthetic *y*-initial in the *s*-perfective stem of ‘(sg) go’.

The voice/valence function borders on being inflectional, or at least more or less transparently derived. I am thus reluctant to choose either label for it, preferring to say only it falls within that range, to be described in detail below. Skirting the problem of whether to define the voice/valence use of the classifiers as inflectional or as derivational, I will interchangeably use the terms “voice/valence”, “regular or productive”, and “(inflectional-) derivational” abbreviated “derivational” on the one hand, as opposed to “lexical”, “thematized”, or “thematic on the other. Both uses are ancient, as seen in the close correspondences in the derivational uses in Athabaskan and Eyak and even Tlingit (as shown in Krauss 1969), likewise in the thematic. A stunning example for the thematic is the use of \*d̥- in the transitive theme \*O-d̥-na ‘drink O’ in all three branches of the family, Athabaskan \*O-d̥-na-, Eyak O-*dA-la*-, and Tlingit O-*d-naa*-, perhaps unique for a transitive.

Further, classifiers combine not only multiple derivational uses, as noted, but also combine lexical and derivational uses. In combining of two like classifiers, the result is always the collapse into one copy of the classifier, as noted also above (§11.1). In combinations of *L-* with *dA-*, there are essentially two possible results, *L-dA-* > *LA-*, but *dA+L-* > *L-*, depending on the order of application. (A third result is unique to the passive in Eyak, where *L+dA-* > *dA-*, uniquely and optionally possible in the passive, cf. §11.3.1.)

Multiple classifier combinations of various kinds are widely attested in Eyak, especially derivation on lexical, and some multiple derivations, but the latter by no means systematically.

As the classifier system is small but at least bi-dimensional (*L-* and/or *dA-* ~) on the one hand, derivational or lexical on the other, order of presentation is not a simple matter. I have chosen first to deal with the “derivational” use (or “regular or productive”) first, then the lexical uses. For the derivational part, I choose to deal first with the use of the *dA-* ~ classifier, then the *L-*.

### 11.3 Regular processes entailing use of the classifier *dA-* (or *D-*)

The classifier *dA-* can correctly be described as a valence-reducing morpheme. The degree to which these processes are derivational as opposed to inflectional is in many cases unclear or borderline. Some of these processes, certainly regular and productive, e.g. perambulative, have been definitively classed as derivations. I use the abstract notation *D-* to indicate the effect that *dA-* has in combination with other classifiers (see above).

### 11.3.1 *D-* with direct reflexives, direct reciprocals, and passives

Treated first will be use of *dA-* classifier (including *dA-* in combination with *L-*, > *LA-*). Presupposing transitives, all direct reflexives (marked by *'Ad-*) and all direct reciprocals (marked by *'iLu'*) require *dA-*. Thus, from *O-she* 'kill O', *shA-sheh-L=inh* 'he killed it' (with the perfective markers *s(A)- sh(A)-* and *-L*, and the 3s human enclitic *=inh*), we have *'Ad-sh-di-sheh-L=inh* 'he killed himself' and *'iLu' sh-di-sheh-L=inu*: 'they killed each other'. From *O-L-dAtl'* 'hurt O', *sA-L-dAtl'-L=inh* 'he hurt it', we have *'Ad-s-Li-dAtl'-L=inh* 'he hurt himself' and *'iLu' s-Li-dAtl'-L=inu*: 'they hurt each other'.

The passive also requires *dA-*, effectively replacement of the subject with *dA-*, thus *sh-di-sheh-L=inh* 'he was killed', *xu-s-di-sheh-L* 'I was killed'. The subject is in effect removed, and not normally specified as in the English by-phrase. Note that the Eyak passive is also in this regard completely different from the English, and at least from some Athabaskan, in that the patient, object of the transitive, remains the object of the verb; it does not become the subject.

In transitive themes with underlying *L-* classifier in the non-passive, that *L-* plus the *dA-* can be the expected in the passive (*L-dA-* >) *LA-*, as in *s-Li-dAtl'-L=inh* 'he was hurt', *xu-s-Li-dAtl'-L* 'I was hurt'. However, optionally in passives, the *L-* part of the combined classifier in the passive can be deleted, resulting in *s-di-dAtl'-L=inh* 'he was hurt', *xu-s-di-dAtl'-L* 'I was hurt', with equal frequency and no difference at all in meaning. I.e., apparently all passives with *LA-* classifier can be switched to *dA-*.

More complex passive forms are of course possible, including preverbals, and/or qualifiers, very often nominalizations: e.g. *tsa:-dli:nA-X xu'-li-s-di-ts'AX-L* 'my head had a stone thrown at it' < 'my (*xu-*) head (*li-*) was (*-L*) pelted (*ts'AX*) at (*-X*) with a stone (*tsa:-*)' (with noun-classifying qualifier *-dli-na-*, directive *O-'*, and anatomical qualifier *s-*), *qi' k'u-dA-ts'AX* 'smithy < 'where (*qi*) something (*k'u-*) is pounded (*ts'AX*)' (Rezanov 1805), *d-a:X 'i:n-LA-xi'ts'* 'woodpecker' < 'indeterminate object (*d-*) is drummed (*xits*) on (*-a-X*) by head (*'i:n-*)', *'Ad-γAX dla:dAle:X* 'bicycle' < 'with (*-tl'*) self (*'Ad-*) wheels (*dla:-*) are acted (*le:*) upon about (*γAX + -X*)'. Such forms are explained in connection with preverbals (Chap. 16) and qualifiers (Chap. 17) further below.

### 11.3.2 *D-* with indirect reflexives and reciprocals

In transitives with postpositional phrases where the object of the postposition is the same as the subject of the verb, Eyak can have the indirect reflexive, which also requires the *dA-* classifier. Thus, e.g., *o-sa' O-(L-)'a* 'put O in o's mouth', *'u-sa' s-i-L-'ah-L=inh* 'I put it in his (*'u-*) mouth'; however, in the case of *si-sa' s-i-L-'ah-L* 'I put it in my (*si-*) mouth', with same subject and object of postpositional phrase, optionally, but preferably, this becomes *'Ad-sa' x-s-L-?'i-'ah-L* with the reflexive pronoun *'Ad-*. Here, also preferably, the reflexive pronoun *'Ad-* is deleted, with the result *∅-sa' x-s-L-?'i-'ah-L* 'I put it in my (own) mouth',

$\emptyset$ -*sa' qu'-x-dA-'ah* 'I'll put it in my (own) mouth'. Likewise, *'u-sa' qa'-inh=inh* 'he'll put it in his mouth', but where 'he' and 'his' refer to the same person, the preferred form is e.g. *sa' qu'-dA-'inh=inh* 'he'll put it in his (own) mouth', *sa' s-Li-'ah-L=inh* 'he put it in his (own) mouth'. This indirect reflexive is a common derivation in Eyak, and Athabaskan as well, and is at the origin of many preverbs derived from postpositions with zero oblique object. It applies of course to causatives, as in *y-a:q' x-LA-ki:nX=inh* 'I'm making him cry' < 'I am causing him to cry (*ki:nX*) on (*-a:q'*) my own hand (*y-*)', with zero object in *oya:q'* 'on o's hand'.

The same process entailing *dA-* classifier works in the case of indirect reciprocals, but only where the subject and the indirect object of the postposition are the same, e.g. *'iL-sa' s-L-i-'ah-L=inu*: 'they put it (the same thing or same sort of thing) in each other's (*'iL-*) mouth'. However, as is often the case with Eyak postpositional phrases, the reciprocal can also refer to the object of the postposition alone, thus here e.g. 'one in the other's mouth' hypothetically 'he put them (e.g. glasses) in one another's mouth' *'iL-sa' sA-L-'ah-L=inh* (definitely not *\*'iLsa' sLi'ahLinh*). Thus, for real examples, *'iL-yAq' sA-L-'ah-L=inh* 'he put them one inside (*-yAq'*) the other (*'iL-*)', *'iL-yAX qa'-inh=inh* 'he'll put them one under (*-yAX*) the other (*'iL-*)'; *'iL-t'a' si-L-ah-L* 'I gathered them together', but *'iL-ch' k'u-s-L-iyah-L* 'they gave each other (*'iL-*) some things (*k'u-*)'. Likewise, even *'iL-yAq' 'i-'e'dz* 'sit with legs crossed', a transitive *O-'e'dz* 'act on O with foot', detransitivized to mean 'move foot' with indeterminate direct object *'i-* (see §11.3.6), but still without *dA-*, since meaning is 'move feet with respect (only) to each other'.

In very late fieldwork with Marie, I managed to elicit a nice minimal pair, cognate exactly to minimal pairs I had elicited in Koyukon Athabaskan, for the case of two mothers walking toward each other each carrying a baby on her back. This was for distinguishing the purpose (A) of the mothers' meeting each other, or (B) of the babies' meeting each other. Thus, with the postpositional phrase *'iL-ch'* 'toward each other' and the theme *O-Xe* 'carry O on one's back', in case (i), where the purpose is for the subjects to meet, we have *'iL-ch' GA-dA-Xe:L=inu*: 'they<sub>x</sub> are going toward each other<sub>x</sub> with them<sub>y</sub> on their back', as opposed to case (ii), *'iL-ch' GA-Xe:L=inu*: 'they<sub>x</sub> are carrying them<sub>y</sub> on their back toward each other<sub>y</sub>'. I confirmed in Koyukon a third possibility, that the mothers are approaching each other in order for each to see the other's baby. Presumably the *dA-* should also be expected for that, since the reciprocity at least includes the subjects. The question can still presumably be answered for some Athabaskan, but not for Eyak.

There is what seems to be an egregiously exceptional use of reflexive pronoun *'Ad-*, in that it seems usable as a pure preverb, without taking any *dA-*, as attested in two transitive or transitivized themes. One is the transitive theme *O-gAwi' ~ 'feel O*, e.g. *'Ad 'ixgAwih* 'I feel you', not *\*'Ad 'ix-dA-gAwih*. The other is *'Ad O-lX-L-xa:s-* 'scare O', cf. *lX-LA-xa:s-* 'be afraid' (a Neuter imperfective stative; see "middles" below §11.6.3), e.g. *'Ad xu-lA-XA-s-?A-L-xahs-L* 'he scared me' (not *\*'Ad xuLAXAsL-i-xahsL*). There is no *dA-* in these transitives even though the preverb must indicate some kind of reflexivity. In the second the meaning

is ‘S causes O to fear self (S)’, rather than ‘S causes O to fear self(O)’, while in the first the direct reflexivity is not at all clear.

### 11.3.3 *D-* with perambulatives

The only derivation that imposes *dA-* on both transitive and intransitive themes, quite exceptionally, is the perambulative, ‘(move) about, here and there, randomly with no destination’. This requires the Active conjugation, with the preverb *yAX*, and *-X* suffixed to the stem in the Active imperfective (only). Thus e.g. *GAwe:Linh* ‘he’s swimming (along)’, perambulative *yAX dAwe:Xinh* ‘he’s swimming (about)’, *GAXL’e:dzL* ‘I’m moving it (along) with my foot’, *yAX xLA’e’dzX* ‘I’m moving it (about) with my foot’. For further discussion of the perambulative, see §15.7.

There is a much more restricted perambulative with the preverb *lah* ‘around’ and the theme *-’ya* ‘be involuntarily situated’. This requires *dA-* in the intransitive, e.g. *’anh lah da-’ya:X* ‘the earth (*’anh*) is quaking’, and as expected in the causative reflexive, *lah ’Ad-yA-x-La-’ya:X* ‘I’m waving my hand (*y-*)’. However, unlike the usual perambulative with *yAX* above, this does not take the *dA-* in the transitive: *lah dA-x-L-ya:X* ‘I’m shaking it (tree)’.

For a parallel to this pattern, with *dA-* in the intransitive, but not in the transitive, cf. the indirect reflexive, with the *’Ad-* reflexive pronoun deleted from the postpositional phrase. Here, cf. *o-lah* ‘around o’ and the preverb *lah* ‘around’. These are not homophonous by chance. The preverb *lah* is clearly derived from the postposition *o-lah* with deletion of the reflexive pronoun *’Ad-*, thus ‘around self > around’, still requiring *dA-* in the intransitive. A significant proportion of preverbs can in fact be shown to be derived from postpositions in this way, in Athabaskan as well as Eyak. This very probably includes the Athabaskan cognate of *o-lah* > *lah*, namely *\*o-na* ‘around o’ > *na* ‘around self’ of the iterative, requiring *dA-* classifier in the same way. See more on this in Chap. 16. A careful distinction was shown above between indirect reciprocals that take *dA-* in the transitive, and that do not. This would not apply in the same way to reflexives, because it is uncertain whether the corpus contains or could contain any indirect reflexives where the reflexive object is the same as the direct object, e.g. *\*ǰhe* wrapped it around itself (*’Ad-*)*lah*. In fact, for such the norm seems to be the reciprocal, e.g. *’iL-(l)ah*, rather than the reflexive, as noted above in the subsection on indirect reflexives and reciprocals.

For some further discussion of *D-* classifier in this connection, see §15.7 on the perambulative verb derivation, especially §15.7.7 on the *lah* perambulative.

### 11.3.4 *D-* with iterative *q’e’*

The Eyak counterpart, not cognate, to the Athabaskan iterative *\*na* is *q’e’* ‘back, again, some more, in turn’. This preverb requires *dA-* in all intransitives, unlike its Athabaskan

counterpart, where in some languages the classifier \*də- is evidently lacking, e.g. in Tanaina, cf. Berez and Gries (2009). Eyak examples are: *siyahL* ‘I went’, but *q’e’ xsduyahL* ‘I went back, went again, went another distance, I in turn went’, in the last instance not even requiring the same subject, just a repetition of the same locomotion. From the gloss ‘went another distance’ (e.g. walked a mile, took a rest, then walked another mile), the *q’e’* requiring *dA-* in the intransitive also does not have to refer to repetition or reverse repetition of the same trajectory, if the same subject is involved. (Note, however, that the Eyak repetitive derivation, q.v. §15.3, does not in itself impose any *dA-* classifier.) In the transitive, then, *q’e’* does not trigger *dA-*, as in the examples in (1).

- (1) Transitive verbs with *q’e’* do not trigger *dA-*

O-*L-tl’i* ‘transport O in boat’

*q’e’ siLtl’ihL* ‘I took it back (etc., by boat)’, or o-*ch’ O-(L-)ta* ‘give O to o’

*sich’ q’e’ GAta’* ‘give it back to me!, give it to me again!, give me another one!’

One exception to this is noted, however. The theme O-*X-a* ‘eat O’, does indeed regularly take *dA-*, even though it is necessarily transitive: *q’e’ Xadinhinh* (< *q’e’ X-dA-a=inh*) ‘he’s eating it again, eating another one’.<sup>3</sup> The reason may well be connected to the zero stem initial, though other zero stem initials do not show this irregularity.

As mentioned above, there is no sign of intransitives with *q’e’* ever lacking classifier *dA-*, nor are there instances of transitives with *q’e’* with the *dA-* triggered, but for this one consistently exceptional case of O-*X-a* ‘eat O’. (Cf. the reverse, unique thematic *dA-* in the transitive O-*dA-la* ‘drink O’, even without *q’e’*.)<sup>4</sup>

The preverb *q’e’* looks like it might well have the etymology \*o-*q’-’e’*, a compound postposition with o-*q’* ‘on o’ and o-*’e’* ‘in place of absent o’, so approximately, ‘onto place vacated by self’. Thus, instead of the hypothetical indirect reflexive, *q’e’ xsdiyahl* ‘I went back onto the place I’d vacated’, \**siq’e’ sahLinh*, to mean something like ‘he went into the place I’d left’ was tested late with Marie. This rang no bell for her or made no sense to her, even though she understood what was being tested, but this does not necessarily invalidate such an etymology. In this connection, however, cf. Athabaskan \*o-*q’e’* ‘want of o, in exchange for o’.

3 However, there is no record of trying to elicit this form without *dA-*.

4 It is true that I never tested aggressively or routinely for the possibility of such exceptions. In any case, it is clear that such exceptions could not occur with anything like the statistical frequency, or probably semantic pattern, as Berez and Gries (2009) found in Tanaina narrative.

### 11.3.5 *D-* with covert reciprocals

Intransitive verbs take *dA-* with all indirect reflexives and indirect reciprocals. See (2) for just a few of the many attested examples.

(2) *D-* with covert reciprocals

'*Ad-e'd x-di-Leh* 'I'm at home'

'*Ad-lah tsin'-dA-dA-linh=inh* 'he's talking (*dA-leh*) about (*-lah*) himself ('*Ad-*') (with *tsin'* - 'neck')

'*iL-ch' GA-dA-'a'ch'-L=inu*: 'they're walking ('*a'ch*') toward (*-ch*') each other ('*iL-*)'

Most interesting, however, early from Lena, carefully recorded, is the minimal pair *sida'X sahL* 'he approached me, came to me' (*O-da'-X* 'motion in area immediately in front of me') and *sida'X sdiyahl* with exactly the same translation, even though there is no overt reciprocal pronoun. The latter I would have to call a covert indirect reciprocal. Here Lena explained the difference as being that in the first case the speaker is stationary, whereas in the second the speaker is also moving toward a third person, as notated complete with simple diagram in my notebook. This was never followed up. This single example, however, is certain evidence of a covert indirect reciprocal, and evidence that the example could presumably have been multiplied with forms such as '*uda'X xsdiyahlinh* 'I approached him (and he approached me)', '*ich' GAxdeqe:L* 'I'm boating toward you (and you toward me)', conceivably even *\*??'ilah tsin'dAxdAleh* 'I'm talking about you (and you about me)', if such could extend beyond motion verbs.

In this connection, note also further under §11.5 how this covert reciprocal may explain that *qAyuh* 'belligerently, for a fight' requires the *dA-* classifier as well as the *L-*.

Covert reciprocals evidently exist in at least some Athabaskan, even in transitives. Such have to be recognized not as covert indirect reciprocals but as direct ones. E.g. Tanana (Minto) *nontnenghedje'iL* 'I'll see you again' is 1s with voiced syllabic *le-* classifier, meaning 'I'll see you again (and you'll see me)'. This contrasts clearly with *nonteghedL'iL* 'I'll see you again (though you may not see me)'. The classifier has the *D-* element not because of the iterative *no-*, which in transitives does not trigger *D-*, effect, but because of covert direct reciprocity. It so happens that Eyak 'see O' is highly irregular, being transitive only in the Active imperfective *O-G-'e ~*, e.g. '*iGAX'eh* 'I see you', where the *G-* is a qualifier, not a conjugation marker. This was never investigated, but a covert reciprocal 'I see you (and you see me)' of the form *\*??'iGAXdA'eh* seems highly unlikely. Other mode-aspects of 'see O' in Eyak all have the same stem, but, uniquely, a suppletive (locomotion) theme, *O-LAX 'i-L-'e ~* 'look; sightsee along, travel along', detransitivized with indeterminate object '*i-*, and *o-LAX* 'beyond o'. Thus 'I'll see you again (whether you see me or not)' is '*LLAX q'e' 'i-qe'-x-LA-'eh*, with classifier *dA-* (evident in *LA-* as the combination of *L-* and *dA-*) already because of *q'e'* in this detransitive. 'I'll see you' (though you may not see me) is '*iLAX 'iqe'xL'eh*. Again, a kind of colloquial 'I'll see you (and you'll see me)' *\*?'iLAX 'iqe'xLA'eh* without the *q'e'* was evidently not tested, but seems less likely to be disallowed, because of

detransitivization. The question is further complicated because it is unclear to what degree covert reciprocals are possible in verbs other than motion class, and also that the suppletive theme for ‘see o’ also can mean ‘travel’. This is obviously an area worth investigation in Athabaskan.

### 11.3.6 *D-* with detransitivization with indeterminate direct object *'i-*

One of the most problematic and inadequately documented spots in Eyak morphology is the choice of plus or minus *dA-* in connection with verbs detransitivized with the indeterminate direct object pronoun *'i-*. Treatment of this, necessarily philological, takes up about half the space of this subsection, yet leaves us with so poor an ability to predict the choice of plus or minus *dA-* that the choice could indeed appear to be mainly lexical. It seems hardly credible, however, that a matter as specific or limited as this could in any language be left to lexical memorization. It remains unknowable to what degree better fieldwork with the remaining Eyak speakers could have answered the question.

The process involved here that (sometimes!) triggers classifier *dA-* is detransitivization of transitive verb themes with the indeterminate direct object pronoun *'i-* (~ *'idA-* in the directive). The difference between this indeterminate direct object and the indefinite direct object *k'u-* is that indefinite refers to a specific object not defined or named, whereas indeterminate means “no object in particular,” with emphasis instead on the verbal action itself. Thus e.g. indeterminate would be “shooting (a gun, bullet, arrow),” with no reference to a specific target, while indefinite would be “fishing (e.g. with particular kind of hook or tackle)” with no reference to catching a specific fish. Cf. section on personal pronoun prefixes above (§9.1). It is of course understandable that this process detransitivizes the transitive verb, as demonstrated e.g. by the regular appearance of *dA-* classifier with *q'e'* ‘again, some more’, which of course does not (usually) appear with a transitive verb if the direct object is not the indeterminate.

This detransitivization with indeterminate direct object remains perhaps the most problematical gap in Eyak morphology, in that the appearance of *dA-* classifier with it is quite inconsistent and unpredictable to begin with, and the variability was never systematically or aggressively investigated. Apparently no testing was ever done to determine the degree of variability, to see if forms without *dA-* could also have acceptable variants with *dA-*, or forms with *dA-* could also have acceptable variants without. All that can be done now is to examine the corpus and see if there are significant statistical patterns. We have about 55 criterial examples for this purpose of themes with indeterminate object. (For criterial examples, we must ignore themes already with underlying *dA-*, or those with the perambulative, for example, which are fairly common but introduce *dA-* in themselves, e.g. ‘go about V-ing’ or ‘V about’. These often by their nature take the indeterminate object.) Of these ca. 55 criterial examples, 23 seem to take the *dA-*, 27 seem not to take it, and 5 attest some variability.



The 22 attested as taking *dA-* are the ones in (3) and (4), the largest number of which, 17, quite clearly remove the specific object of the activity. These are presented in (5).

- (3) Themes with indeterminate objects attested with *dA-*, no specific object
- 'iLAdux* 'he was trapping with deadfalls' < *O-L-dux* 'trap O in deadfall'
- 'i:nxdAdu* 'I'm fleshing skins' from Marie only (better presumably *'iLXdAduh*) < *O-l-duh* 'flesh O (skin)'
- da:X 'i-dA-(~LA)-ta* 'stretch skin' < *O-(L)-ta* 'handle sg inanimate O'
- 'i-dA-tsaHg* 'tell legend' < *O-tsaHg* 'tell legend of O'
- 'iLAts'a:ginh* 'he's bailing' (water out of boat) < *O-L-ts'a:g* 'ladle O'
- siqi:dla:GA'e'X 'iGALAchAn'L* '(dog) is tracking me' < '(dog) is smelling along in my footsteps' < *O-L-chaN'* 'smell O'
- 'iGa:nxdAshah* 'I'm digging the in the ground' < *O-sha* 'dig O'
- 'idAki:shk'* 'he dipnets, goes dipnetting' (customary) < *O-kihsh* 'catch O in dipnet'
- 'i-l-LA-k'a:'sh* 'go handlining' < *O-l-L-k'a:'sh* 'catch O with handline'
- lah 'ixsLiGADjgL* 'I stirred it' < *O-L-GADj-g* 'move O with stick'
- 'i-dA-XAma'* 'growl (of dog)' < *O-XAma'* 'growl at O (of dog)'
- 'ahnu:qa'* 'Aw *'i:nLAXa:tl'k'* 'he takes a club to them' (customary) < *O-l-L-Xa'tl'* 'club O on head'
- 'i-dA-we'ts'* 'weave' < *O-we'ts'* 'weave O'
- 'i-dA-ye's* 'take food home from potlatch' < *O-ye's* 'take O (food) home from potlatch'
- 'i-d-LA-yAq'sh-g* 'open mussels' < *'i-d-L-yAq'sh-g* 'open O (mussel)'
- 'i-dA-kus* 'do laundry' < *O-kus* 'wash O'

The remainder, presented in (4), refer to action toward and/or missing the object.

- (4) Themes with indeterminate objects attested with *dA-*, object partially affected
- sich' 'isdita'tl'Linh* 'he kicked at me' < *O-ta'tl'* 'kick O'
- 'uch' 'ixsLiku:n'dL* 'I grabbed at it' < *O-L-ku:n'd* 'grab O'
- 'ulAXAXa:X 'ixsLiku:n'dL* 'I missed it (catching ball)' < *O-L-ku:n'd* 'grab O'
- o-ch' 'i-dA-xu'tl'-g* 'blow at o' < *O-xu'tl'-g* 'blow on O'
- o-ch' 'i-dA-q'Ats'* 'snap at o' < *O-q'Ats'* 'bite O'

The remaining three, presented in (5), evidently refer to activity leading to the production of O:

- (5) Themes with indeterminate objects attested with *dA-*, object produced

*'ilAdAda:ts'k'inh* 'she picks grass for basket designs' (customary) < *O-l-da'ts'*  
'make O (basket design)'

*'i-LA-Xe:'* 'render fat' < *O-L-Xe'* smear fat/paint on O'

*'i-LA-ts'e'ts'* 'make berry mash' < *O-L-ts'e'ts'* 'grip O with tongs'

At the same time, forms derived in the same way with indeterminate direct object, likewise detransitivized, but with no *dA-* classifier, i.e. with  $\emptyset-$  or *L-*, are even more numerous than those with *dA-*. For these 27, again the largest group, namely the 20 presented in 6, is those simply removing the specific object of the activity, constituting apparent minimal pairs with the preceding:

- (6) Themes with indeterminate objects attested without *dA-*, no object object

*da:X 'iGALts'AX* 'throw it against something' (Lena 4 times in-text) < *O-L-ts'AX*  
'strike O'

*'i-ts'uh* 'suckle (a baby)' < *O-ts'uh* 'suck (on) O (of baby)'

*'i-ch'u'* 'steal' < *O-ch'u'* 'steal O'

*'ilgiyiL* 'witch' nominalization < *O-L-giyiL* 'hex O'

*'ida'lixilgah* 'I know some things (that I don't like to talk about)' < *O-'l-L-ga'*  
'know O'

*'i-kahL* 'bark (of dog)' < *O-kahL* 'bark at O (of dog)'

*'i-Guhd* ~ 'kneel' < *O-Guhd* ~ 'knee O'

*'ida-'L-qa'<sup>5</sup>* 'count (abstractly)' < *O-'L-qa'* 'count O'

*o-'e:X 'ida-'d-L-qe'dX* 'ask about/after o' < *O-'d-L-qe'dX* 'ask O (person)'

*'i-L-q'e's* 'be thick (of fog)' < *O-L-q'e's* 'crowd O'

*'i-q'a* 'burn (of fire)' < *O-q'a* 'burn O'

*'i-L-q'a* 'make/light a fire' < *O-L-q'a* 'ignite O'

*'ida-'Xa* 'tell story' < *O-'Xa* 'tell of O'

C *da-'l-L-Xa'* 'have C' < *O-'l-L-XA* 'make O C'

*'i-L-Xa'tl'* '(clock) ticks, strikes hour' < *O-L-Xa'tl'* 'club O'

*'i-L-wAt'* 'vomit' < *O-L-wAt'* 'vomit O'

*'i-'e'dz* 'move foot' < *O-'e'dz* 'act on O with foot'

*'ida-'ehdz* 'have potlatch' < *O-'ehdz* 'invite O'

*'ida-'l-'e~* 'call people names' < C *O-'l-'e~* 'call O C'

<sup>5</sup> This form is highly contrived, but accepted by Lena.

'*i-e* 'marry (of man)' < *O-e* 'marry O (of man)'

'*uq*' '*iGAtl'i:*' 'wrap them up!, put wrapping on them!' < *O-tl'i* 'bind O'

Note that a goodly proportion of items in (6) is semantically quite analogous to the preceding major group with *dA-* classifier, with no clear pattern of meaning to account for the difference in classifier.

The remainder of this group are the seven items in (7):

(7) Remaining themes with indeterminate objects

'*uyaX lah* '*iqeXi:xtah* 'I'll stir (in) it' < *O-X-(L-)ta* (cf. 'stir' in 3 and 4)

*o-sa*' '*i-L-ts'in'tl'-g* 'slap o on mouth' < *O-Lts'in'tl'-g* 'slap O'

*o-sa*' '*i-gu'k*' 'punch o in mouth' < *O-gu'k*' 'punch O'

*siku:nLch*' '*AyAq*' '*isAgu'k'Linh* 'he punched my in the belly' < *O-gu'k*' 'punch O'

*o-yAq*' '*i-xu'tl'(-g)* 'blow on o!' < *O-xu'tl'* 'blow on O' (8 instances)

*o-ya'-ch*' '*i-xu'tl'-g* 'blow on o (in bowl)' < *O-xu'tl'* 'blow on O'<sup>6</sup> (for these five cf. the subgroup above 'V at O')

*sitl'* '*iGAXAwa'sL* 'it itches me' < *O-XAwa's* 'itch O' (similar to preceding).

Again, this subgroup also semantically resembles its analogue with *dA-* classifier above. Cf. e.g. '*idAXAmah* 'growl' and '*iLkahL* 'bark', the first with *dA-*, the second without, along with many others with despecified objects, some inexplicably with *dA-*, others without.

Beside the two apparently consistent categories above, themes that are attested as taking *dA-* when detransitivized with indeterminate object, and those which are not, there is a much smaller third category, five themes that are attested both ways. For *O-l-t'ik*' 'shoot O with arrow' we have eight such instances, five of which are with *dA-*, and three of which are without *dA-*. The forms without *dA-* are listed in (8) as (a-c), and the forms with *dA-* as (d-h):

(8) Instances of *O-l-t'ik*' 'shoot O with arrow' with and without *dA-* classifier

'*uXa:X* '*isiLt'ik'L* 'I shot and missed it with arrow'

'*uch'a:q*' '*isiLt'ik'L* 'I shot and got a direct hit on it with arrow'

*ya'X* '*ixLt'ik'g* 'I shot a arrows (up in the air)'

*ya'X* '*ixLAT'ik'g* 'I shot arrows (up in the air)'

'*u:ch*' '*iqexLAT'ik'g* 'I'll shoot arrows there'

'*u:ch*' *ya'X* '*ixLAT'ik'g* 'I shot arrows up there'

<sup>6</sup> Cf. the subgroup above 'V at O' (4).

'ulu' 'Ash 'ixsLit'ik'L 'I shot a hole through it with an arrow'

'u:dAX 'Ash 'isLit'ik'Linh 'he shot an arrow by there'

For O-*L-xut*' 'shoot O with gun' we have the largest number of instances of detransitivation with indeterminate object, 26 altogether, including forms consistently without *dA*- (9ab), consistently with *dA*- (9c), and variably with or without *dA*- (9de).

- (9) Instances of O-*L-xut*' 'shoot O with gun' with and without *dA*- classifier
- a. o-*dAXa:na'q'(d)* 'i-*L-xut*' 'shoot o in the back' (4 instances)
  - b. 'Awcha:q' 'isAL*xut*'L 'got a direct hit'
  - c. o-*ch*' 'i-*LA-xut*' 'shoot at o' (5 instances)
  - d. 'i-*L-xut*' (once) and 'i-*LA-xut*' (6 instances) 'shoot gun (at nothing in particular)'
  - e. O-*Xa:X* 'i-*L-xut*' (4 instances) and o-*Xa:X* 'i-*LA-xut*' (6 instances) 'shoot o and miss'

The total count without *dA*- is 10, and with *dA*- 16, a pattern similar to the one for O-*l-t'ik*' 'shoot with arrow'. More interesting, apparently, might be some pattern with the different postpositions. Both instances of o-*ch'aq*' 'direct hit on o' are without *dA*-. All seven instances of o-*ch*' 'at, toward o' are with *dA*-. This accords, incidentally, with all five instances of o-*ch*' above, all in the first group, with *dA*-. With no postpositional phrase, meaning simply 'shoot (arrow, bullet)' at nothing in particular, the results are mixed, two without *dA*-, one with, for 'arrow', but one without, six with, for 'bullet'. For 'shoot and miss' the results are one without for 'arrow', four without and six with for 'bullet'. Two more themes attested as variable have far fewer instances. For O-'*Adz*' 'spear O' we have *ya'X* 'i'*Adz*' 'throw spear up in air' without *dA*-, and both *sita:s k'u'sA'AdzL* and *sita:s k'u'sdi'AdzL* 'someone threw a spear (arcing) over me (missing me)', and for O-*L-t'a'q*' 'catch trout with hook' we have both 'i-*LA-t'a'q*' 'go trout fishing' (7 instances), but once *k'u'LAGALt'a'q*' 'go trout fishing!' (from Lena, incorrect in using both indeterminate object and indefinite object, but clearly still with no *dA*-). These examples add mainly to the evidence that detransitivization can vary in the same theme as to whether it triggers *dA*- or not, though we are left with sorely little idea of how much they can so vary. In fact, a fifth such theme was noted above, from O-*xu'tl*' 'blow on O', which belonged mainly in the second group, *qa*' 'i-*xu'tl*' 'spout, blowup out (of whale)', o-*yaq*' 'i-*xu'tl*' 'blow into o' (10 instances), o-*ya'-ch*' 'blow into o (in bowl)' (once), but o-*ch*' 'i-*dA-xu'tl*'(-g) 'blow at', which confirms that at least some postpositional phrases may determine whether *dA*- is triggered.

(Some time after drafting the preceding, in the Alaska Native Language Archive file EY1961K1966-9 was found one sheet in pencil, much later Xeroxed double-sized, entitled "Vocalization of classifier with indeterminate O." This was a listing for a much earlier study of this exact subject. While drafting the preceding, I had lost track of this earlier one. It is therefore of some interest to see how my present research results compare with those

almost 50 years old. Rather than simply revise the preceding accordingly, I choose here to append it, as an example the variability of statistical results in “naked-eye scanning” of non-digitized corpora by the same person but widely separated in time. I have not checked to see if I found new items not found in the earlier study, but there were several in the old not found in the present study. The total of these was a maximum of eight items, two of which are legitimate examples of non-vocalization, not adding *dA-*. These are *sich' ya'X 'isAtuxLinh* ‘he spit at my face’, i.e. ‘he spit upward at me’, and *wAX 'ida 'dishiLch'a:q'L* ‘that’s how I heard (it)’.

Of the rest, 5 are more or less legitimate examples with *dA-* added: *'uX 'iqe'xLAtl'a'g* ‘I’ll spot up’ from what was incorrectly entered in the dictionary as *'uX 'iqe'xtl'a'g*, so glossed, explained < ‘I’ll spot indeterminate O in contact with it’, which seems semantically dubious. The ledger (Krauss 1966a) shows *'uX 'iqe'xtl'a'g* with  $\emptyset$ -classifier, tentatively corrected in red pencil with inserted *LA-* classifier, and checked with red pen implying correction verified by Lena. The most likely gloss for that, however, should probably be ‘I’ll write with it’. Another such is *ya' 'ixL Ach'u:ch" gk'* ‘I (CUST) crumple things up’, probably correct, the *'i-* not that often used with the customary, but indeterminate O, since the *LA-* must reflect indeterminate O. Likewise, in *'ahnu:qa' 'Aw ['i:nLAXa'tl']* ‘he takes a club to their heads’, from Lena in text 33.20 footnote, the verb presumably supplied by Lena in the process of editing, , < ‘clubs among them on the head’ must have indeterminate O included in *'i:n-* in order to explain classifier *LA-*. In *'u:da' 'ixsdich'an'k'L* ‘I clambered to there’ from Lena, we do not have an underlying theme attested without the indeterminate O, which must mean or, if not elicitable, must have meant ‘move by clutching O’, but which must legitimately be such a derivation. Finally, we have one instance of *sich' 'isdikahL* ‘it (dog) barked at me’ from Marie, while at the same time we have many instances of *O-kahL* ‘(dog) bark at O’ and over ten instances of detransitivized *'i- $\emptyset$ -kahL* ‘(dog) bark’ with  $\emptyset$ -classifier, including from Marie. This last usage from Marie is under probable influence of English, and perhaps only a lapse, rather than a sure sign of variability. The last item in the earlier study not in the present is *'i-d-Li* < *'i-d-L-le* ‘carry on O (activity)’, commonly attested, but cf. also intransitive *'i-d-le* ‘(activity) happen, be carried on’, an irregular form where neither *'i-* nor *-d-* can correctly be considered what they look like (indeterminate O, *d-* qualifier).

Adding in all these items but the very last from the older study to the present would change the total of examples which add *dA-*, which do not add *dA-*, and which are variable in that respect, from 22, 27, 7, to 26, 29, 8, respectively; totals increase from 56 to 63.)

Finally, there is yet a very small fourth group, of apparently two themes with fully thematic *'i-* indeterminate object, which are not attested without this intrinsic *'i-*, such that the exact meaning of the stem cannot be fully isolated. The best documented of these is *'i-ga'* ‘dance (stationary, mainly with hand movements)’, for which we have many instances, but none with *dA-* unless from *q'e'*, etc. There are homophonous stems, but none semantically close enough to be identified with this *?ga'*. The second certain example is *'i-tsi:ndz* ‘dream’ (‘dream of O’ is highly derived *O-'IX-L-tsi:ndz*), twelve instances, none

with *dA-* (except perambulative). Despite the tiny number of such themes, the consistency with which these two both appear without *dA-* may be significant. A possible third example of this type might be *'i-le'* 'have feeling, wish', very productive and abundantly attested, but with such complexity, not only morphophonological but also semantic, as to be too abstract to include at this level. These two clear examples, and the absence of the reverse, i.e. of any such themes with the *'i-* and with *dA-*, together suggest that verbs detransitivized with indeterminate direct object without *dA-* are somehow less derived than those with *dA-*.

(There are other traits of the indeterminate object grammatical category that need to be described in the description of that category, e.g. "empty" indeterminate object in certain intransitive verbs, but those traits are not cited here, as unrelated to classifier choice.)

This issue was revisited late with Lena, June 13, 1971, too briefly and superficially, in six themes. Two themes explicitly show both plus and minus *dA-*: *'ixLdux* and *'ixLAdux* 'I go trapping', for which only the latter form was seen above, and *'iqe'xye's* and *'iqe'dAxye's* 'I'll bring food home from a potlatch'. These increase from five to seven the themes attested both ways, and subtract one theme from the plus *dA-* only category. Two more themes merely agree with the main corpus, *'ixdAta'tl'* 'I'm kicking', as before, perhaps meaning *dA-* is required, but without record of rejecting *\*?'ixta'tl'*, and *'ilAxLAt'a'q'* 'I'm trout fishing', likewise, also without record on *\*?'ilAxLt'a'q'*. Given the context, however, these do imply the alternatives were unacceptable. This is especially clear from the last, *'iqe'xch'u'* 'I'll steal', explicitly rejecting *\*'iqe'xdAch'u'*. This small sample does seem to confirm at least that there are some themes for which *dA-* is required with an indeterminate object, and some for which *dA-* is unacceptable, on a basis which cannot be grammatically predicted.

### 11.3.7 *D-* with detransitivization with indefinite object *k'u-*

In addition to detransitivization with indeterminate direct object, there may be a few instances (10) of indefinite direct objects that do the same, at least to the extent that *dA-* then occurs with *q'e'* 'again'.

#### (10) *D-* with indefinite object

with *k'u-d-L-ch'a:q'* 'hear (something)'<sup>7</sup> *dA'u:ch'ahd dik' 'uwa: q'e'*

*k'u-du-x-LA-ch'a:q'-G=inu:* 'since then I don't hear any more of them' (Anna in text)

*q'e' k'u-dA-LA-ch'a:q'=inh* 'again he heard something' (Marie in text)

with *k'u-GA-'e ~* 'see (something), have sight':

<sup>7</sup> Possibly the indefinite direct object *k'u-* is thematized in this form. It is so entered in the dictionary.

*dik' q'e' k'uGAdA'a:nGinh* 'he couldn't see anymore' (Anna in text)

*dik' q'Aw q'e' k'uGAdA'a:nG* 'not that you'll regain your sight' (Anna in text)

There may be a few more cases of *k'u-* taking *dA-* or *LA-* classifier, e.g. the Neuter imperfective directive *k'u-'LA-t'uh* 'be lazy', e.g. *k'u'xLit'uh* 'I'm lazy', depending on the order of which is first thematized, the object or the classifier (as a "middle"). See also otherwise unexplained *dA-* classifier in *k'u-'Xdl-dA-a* 'stagger' in section (11.3.8) below.

(In any case, the *k'u-* is far less frequently thematized than is the Athabaskan indefinite pronoun prefix *\*k'ə-*.—Whether this prefix is counterpart or cognate to Eyak *k'u-* is an interesting question. Athabaskan has both *\*k'ə-* 'indefinite' and *\*č<sup>wr</sup>ə-* for 1p, indefinite, French *on*. Eyak *k'u-* < *k'wA-* corresponds more regularly to PA *\*č<sup>wr</sup>ə-* than to *\*k'ə-*, but may in fact be cognate to both, as noted in §9.1, comparative part in prefix pronouns)).

### 11.3.8 D- with errative 2 and 'stagger'

Errative 2 is seen in the combination of the qualifier *l-* and the classifier *dA-*, thus *l-dA-* stem 'V in error, V with adverse consequences', e.g. *l-dA-a* '(sg) get lost, go amiss, get stuck somewhere' < *-a* '(sg) go'. The errative forms are described and listed in Chap. 17 on qualifiers, mostly in the section on qualifier *l-*, specifically *l-*<sub>6</sub>, also combined with further qualifiers under *d-l-* and *y-l-*, in twenty or so themes (§§17.10.4.7 and 17.10.18.2). This is perhaps the most spectacular example of linkage between derivational prefixes of different prefix zones in Eyak, where the combination of a qualifier and a classifier is semantically opaque, not clearly identifiable with any other use of either *l-* or *dA-*. In fact this is one of the very few "prefix strings" in Eyak so far noted, as compared to many in Athabaskan, and which at the same time has its cognate in Athabaskan. This of course raises and leaves open the question as to what degree PAE had such "strings": whether Eyak lost most of them, or whether Athabaskan developed most of them. See e.g. Rice (2000: 154) for some discussion of the Athabaskan errative.<sup>8</sup>

As these erratives are not listed in one place in the qualifier chapter, they are listed together here. This derivation is intrinsic to one theme alone *l-dA-ma'* 'go wrong, be ruined, fail, come out badly', causative *O-L-ma'*, further derived by qualifier: *dl-dA-ma'* 'misspeak, say something wrong, poorly, with unfortunate consequences', *y-l-dA-ma'* 'wander into unfortunate situation'. To the rest of the themes, ca. two dozen, with which it is attested, it is extrinsic. Here, only the errative and resulting gloss is given. For further information, see the dictionary, where all are listed, though in a few cases, the errative derivation or probable identity or origin as such may not there be recognized, as for the forms in (11):

<sup>8</sup> Note also the qualifier-classifier combination *d-LA-* in "onomatopoeia" in both Athabaskan and Eyak, though less in Eyak than in Athabaskan. This is discussed below in the subsection on derivations with *L-* plus *dA-*, §17.10.4.7.

(11) Erratives with *D-*

*dl-dA-da* ‘(sg) run short of food’, causative *O-dl-L-da* ‘starve O’, causative reflexive  
 ‘*Ad-dl-LA-da* ‘to fast’, *dl-dA-qu* ‘pl run short of food’, *O-dl-L-qu* ‘starve pl O’

*l-dA-te* ‘eat one’s fill’ (possible errative); *l-dA-chahd* ‘(supply of food, fuel) run out’

*l-dA-ga* ‘beat it, clear the hell out!’, *ya’ dl-dA-ga* ‘shut up!’; *l-dA-k’ahg* ‘play  
 (sedentarily, with toys)’ (possible errative)

*qehX l-dA-xa* ‘grow clogged’ *dl-dA-xa* ‘egg grow into chick’

*l-dA-GAts* ‘get twisted, wrenched’, *lah l-dA-GAmAts* ‘wrench neck, get crink in  
 neck’; *dl-dA-q’e’s* ‘(horizontal surface) tilt’

*o-ch’ yl-’ya* ‘wander to o and get stuck there’

*o-ya’ l-dA-’Adz* ‘fall victim to o’

*l-dA-’a* ‘be all used up; die off’, causative *O-l-L-’a* ‘use O all up, kill O off’, *tl’a’q’*

*l-dA-’a* ‘get badly hurt’, causative *tl’a’q’ O-l-L-’a* ‘hurt O badly’, *O-dl-L-’a* ‘use O  
 (money) all up’

*l-dA-’a’ch’* ‘pl get lost, into misfortune’, *l-dA-a* ‘(sg) get lost, into misfortune’, *yAq’*

*l-dA-a* ‘(sg) be startled’

*O-’l-LA-tsa* ‘discountenance O’, *O-’l-dA-’e-* ‘discountenance O’

Many more no doubt could have been elicited, but there was insufficient investigation of the productivity of this derivation in the field. Only late, with Marie, where it seemed ordinary action verbs could not be used this way, as Marie rejected \**l-dA-ki:nX* ‘weep mistakenly, with adverse consequence’, \**l-dA-le* ‘misdo’, \**dl-dA-le* ‘misspeak’.

There appears to be one more combination of qualifier plus classifier, the “prefix chain” *k’u-’Xdl-dA-*, with the stem *-a* ‘go, walk (sg)’, as in *k’u’XAdla:GAXda:L* ‘I’m staggering feebly (from old age)’, attested as such only once, from Lena. Even though the gloss does not specify ‘walking along’ as opposed to ‘walking about’; i.e. it is not likely that I failed to hear or failed to write preverbal *yAX*, i.e. that the *dA-* classifier was because of a missed perambulative derivation. (The theme is otherwise attested only with the perambulative derivation, which itself requires *dA-* classifier.) Checked in the original 1965 notebook (IX.115), the form is followed by the notation “[Lena] not able to explain [the prefixation fully].” Cf. *dA-* classifier with thematized *k’u-* in section (11.3.7) above.

## 11.4 Regular processes entailing the use of the classifier *L-*

It is true in an important sense that while *dA-* classifier lowers valence, *L-* classifier raises valence. However, *dA-* and *L-* classifiers not only coexist but can also combine, thus *L-dA- > LA-*, by the simple phonological process of loss of an apical stop after a partly homorganic



fricative. By no means are *L-* and *dA-* simply the antithesis of each other. It follows then, that derivations that add *L-* and derivations that add *dA-* are not only quite different, in fact they are unrelated to each other. A full listing of the derivations that add *L-* classifier follows.

### 11.4.1 Causative

The derivation that most predictably adds *L-* to nearly any verb, in fact replaces any other classifier with *L-*, is the causative. Both intransitive and transitive themes can be causativized, with the added meaning ‘cause to V’. This gloss is here used as an abbreviation not only for ‘cause to’, but a larger range of meaning, especially in the semantic direction of ‘allow to, let’. Intransitives such as S-stem ‘S V’ causativize to O-*L-*-stem ‘(new) S causes O (old S) to V’ which is simple enough. Transitives such as O-S-stem causativize to (o-d) O-S-*L-*-stem ‘(new) S causes the V-ing of (new) O (by o (old S))’, which is perhaps less simple. The main exception is the verb *C Le’* ‘be C’, which cannot be causativized, i.e. \**C O-L-Le’*, or rather, the causative to which is the completely suppletive *C O-’l-L-Xa’* ‘cause O to be C’, to be treated further below in this section.

First causativization of intransitives will be exemplified. Documentation of this is far too extensive for any listing, as the dictionary may well include a causative for the majority of intransitive verb themes. Starting with Ø- classifier themes, (12) shows causative derivations from *-a* ‘(sg S) go (on foot)’.

(12) Causative derivations from intransitive stem *-a* ‘(sg S) go (on foot)’

*’a’q’ siLahLinh* ‘I made him go out, sent him outside’

*’a’q’ q’e’ siLahLinh* ‘I sent him back out’ (not *’a’q’ q’e’ \*xLiyahLinh*)

*’a’q’ xusALahLinh* ‘he sent me out’

*’a’q’ (q’e’) xusLiyahL* or *xusdiyahL* ‘I was sent (back) out’ (passive of the above)

A fine example of this causative with indirect reflexive is *ch’a:X sLi’a’ch’L* ‘he<sub>x</sub> made them help him<sub>x</sub>’, from o-*ch’a:X -’a’ch* ‘pl go to aid of o’. Sometimes the glossing suggests a meaning somewhat different from the intransitive, but this may in fact be illusory, as e.g. intransitive (*ya’*) *sAdahLinh* ‘he sat (still, quietly), stayed (put)’ and causative (*ya’*) *siLdahLinh* ‘I made him sit (still), sat him (still), made him stay (put), I made him behave’. The last gloss of the causative, which may not be recorded for the intransitive, is almost certainly a mere effect of translation. Another good example may be *-lah* ‘camp, subsist’, where the causative O-*L-lah* is most often glossed ‘save, rescue’ or even ‘abduct’, the sheer range of which points back to the meaning of the intransitive. In the small minority of cases presented in (13) there may be an additional or replacive meaning to the causative.

(13) Causatives with replacive or additional meaning

*-tle'X* 'swim rapidly (of fish)', causative *O-L-tle'X* 'cause O forcefully to move through or over water' (including 'push canoe', 'skip stone')

*-sinh* 'die', *O-L-sinh* 'anaesthetize O'

*-xehd* 'fade'

*O-L-xehd* 'strain, filter O'

More importantly, in the case of at least one animal call verb (prefixes cognate to what have been called "onomatopoeia" for Athabaskan), *d-LA-ts'u'ts'* 'call (of weasel)' (itself from *-ts'u'ts'* 'suck'), we have the semantically irregular *O-d-L-t's'ts'* 'call O (weasel, with sucking sound), unless it is better, simply, to call that a different theme. In the case of what might be called the few suppletive pairs with respect to transitivity, most especially *-kug* 'break', we have *O-L-kug* 'cause O to break in some indirect way (e.g. shamanistically)', as opposed to the usual *O-chich* 'break O (with direct physical force)'. In the classic case of "suppletive" *O-she* 'kill O' and *O-L-sinh* 'cause to die' (< *-sinh* 'die'), the latter is clearly documented with the semantically unpredictable meaning of 'put O into deep sleep, anaesthetize O'.<sup>9</sup>

As noted above, causatives of intransitives with basic thematic classifiers other than Ø- also take *L-* classifier, as e.g. *dA-Gu* 'be warm', causative *O-L-Gu* 'warm O'. Those in turn take reflexives and passives then with (*L-dA-* >) *LA-*, thus causative reflexive 'warm self' *'Ad-LA-Gu*, causative passive 'be warmed' *O-LA-Gu* or *O-dA-Gu*, since all passives optionally can delete the *L-*. Likewise *LA-dlahG* 'explode', *O-L-dlahG* 'cause O to explode', *O-LA-dlahG* or *O-dA-dlahG* 'O be caused to explode', *LA-GAGs-g* 'be curly', *'i-qe'-li-x-L-GAGs-g* 'I'll curl your hair', *'Ad-lu-x-LA-GAGs-g* 'I'm curling my hair'.

Finally, it is also possible to causativize transitive verbs, generally, in principle, though of course a smaller proportion of transitive verbs is found causativized on the corpus than of intransitive verbs. However, as briefly noted above, the subject is new, the causer, while the object of the transitive verb remains the object. The original subject, if still included overtly in the sentence, becomes the indirect object (o) of the postpositional phrase *o-d*. Cf. the examples in (14).

(14) Causativized transitives

*O-X-a* 'eat O', well attested as in *te'ya' XAsiyahL* 'I ate a fish', causative *o-d*  
*O-X-L-a* 'feed o O', as in *te'ya' sid XAsALahLinh* 'he fed me a fish'

*O-dA-la* 'drink O' (note *dA-* classifier in theme), in *gi:wa: xsdilahL* 'I drank beer',  
 causative *o-d O-L-la* 'give o O to drink', *gi:wa: sid sAllahLinh* 'he gave me beer to drink'

<sup>9</sup> This is without record of whether causative *O-L-sinh* can also mean 'cause O to die' or not. It seems likely that that question must have been asked, but perhaps without suggesting it might be allowable considering sufficiently indirect or shamanistic means.

O'-*(l)-L-ga'* 'know', in *sid 'Aw'u'-s-?A-L-ga'-L* 'Lena taught it to me' (from Lena), *si-d k'u'-li-:-Lga'ginh=inh* 'my teacher' (most often with the repetitive, 'he who repeatedly causes me to know something')

O-*d-LA-de'* 'understand O's speech', in *si-d dA-s-?A-L-de'-L* 'he taught me it (word, speech)', usually repetitive, *tsin'-?dA-le:-l si-d d-i:-L-de'-g* 'teach me to speak!'

Reflexive (indirect) and passive of these causatives are also attested: '*Ad-qu-'dA-x-LAde'-g* 'I'll practice it (speech)' (< '*Ad-d qu-*'), *di-'dah xu-dA-dAde'-g* 'I'm (intermittently) fairly well understood'.

Exceptionally, we have at least one well documented theme where the direct object of the underlying theme O-*L-e* 'protect O' appears to become the object of o-*d* and that which is being caused to protect becomes the direct object in o-*d O-L-e* 'cause O to protect o', e.g. '*Aw 'id qu'XL'eh* 'I'll put it (e.g. blanket) over your shoulders'. In an apparent further irregularity, what could be the corresponding indirect reflexive of this, we have '*Aw Gu'L 'Ad qu'xdA'eh* 'I'll put that blanket over my shoulders' and several further instances supporting this same construction. Here, however, the *L-* is missing from the classifier, consistently *dA-* instead of *LA-*. The '*Ad* cannot be the direct object, that being the overt '*Aw GuL* 'the blanket, so '*Ad* must be read '*Ad-d*, as postpositional object of o-*d*.

We have a causative of a transitive detransitivized with indeterminate object at least in the case of thematized '*i-ga'* 'dance', *xu:Lgah* 'make me dance!', '*ALgah* 'make him dance!' from both Lena and Marie. This does not follow the semantic pattern of the preceding, as here the original subject has become the object. Possible \*?'*ud 'iLgah* for this meaning, according to the above, was not tested. This pattern is repeated, moreover, in the causative O-*L-ts'uh* 'nurse O (baby)', '*anh Lts'uhinh* 'she's nursing him', causative of '*i-ts'uh* (baby) suckle', < O- *ts'uh* (baby) suck (on) O', rather than \*?'*anhd 'AdLats'uhinh* 'she is making him suck on herself', which was not tested.

Another semantic irregularity is in the causative reflexive of a hypothetical intensive (see §11.4.2) O-*L-ch'ich* 'elbow O out of position' of O-*ch'ich* 'elbow O', from Lena in '*AdXsLich'ich'L* 'I have my hands on my hips, elbows out'. These few examples are instances of some semantic irregularity or complexity in the causatives of transitives.

The causative reflexive shows in fact the most semantic complexity, in addition to the basic 'cause self to V', for which we have many examples, of course. To give just one productive example of the literal meaning, from *-dje:dj* 'be (pleasantly) surprised, impressed, astonished', we have '*AdLA-dje:dj* 'cause self to be impressed, be proud, brag'. Less well attested is the special meaning, namely 'pretend to V, V self-benefactively (especially with ulterior motivation)', there being an element of deception in any case. There is one case in which this derivation must have little meaning, in the verb *d-guG* 'tell lie', where '*AdLA-guG* seems to mean the same thing. Otherwise e.g. intransitive *xki:nX* 'I'm weeping', causative *xLki:nXinh* 'I'm making him weep, causing him to weep, allowing him to weep', passive *xuLaki:nX* or *xudAki:nX* 'I'm being made to weep, etc.'; so causative reflexive '*AdxLaxiki:nX* 'I'm making, letting myself weep', but also 'I'm pretending to weep,

weeping alligator tears, weeping manipulatively (it being irrelevant whether I'm actually weeping or not)'. We have at least some further examples of this, one being *'AdsLisinhL* 'it is playing dead' (including *GAdAgIL 'AdsLisinhL* 'the sun is eclipsed, the sun is "playing dead"' as Lena remembers Minnie Stevens said), and evidently *'AdGALaQu:L* 'they (fish) were floating on surface (expressly to be taken)' from Marie in text (< *LA-qu* 'pl sit, swim on surface'). This device is used with consummate art by Anna in one of her Raven Cycle texts where Raven and his wife quarrel over his philandering. Here she uses the verb *O-'e* '(man) take wife, undertake providing for mate', once detransitivized with indeterminate (!) object, *'i-'e* '(man) marry (etc.?!)', but with several masterful uses of *'Ad-LA-'e:-k*' in the customary plus causative reflexive, 'only pretend to philander and/or really only do it in order to (pillage to) provide for his dear wife'.

On the other hand, we have examples also of still other idiomatic meanings of the causative reflexive, e.g. from Marie, *'AdxLitehL* 'I'm lying (for a short rest)' and *ya:n* *'AdxLitehL* 'I'm lying down on bed (not in it)' Neuter perfective, presumably not a highly precise or definitive gloss; but also *ya* *'Adqu'xLiteh* 'I'll lay me down for a while (to rest)' from Lena. Further, *'Adqu'xLatsu'd* 'I'll doze, nap', from *-tsu'd* ~ 'sleep'. Further, perhaps more back in the direction of 'pretend' is *'Ad-d-LA-k'a't* 'flap wings' from *d-L-k'a't* '(sg) fly'. It would appear that the semantic functions of the causative reflexive were not well investigated, even though it was potentially still a productive derivation.

The causative reflexive can be applied to transitives as well as to intransitives, as shown above in the case of *O-'e* '(man) marry O'. Transitive causative reflexive further raises the question of object of the reflexivity, 'S cause self(S) to act on O' or 'S cause O to act on self(O)', and even 'S cause O to act on self(S)'. According to the order of application of derivations involving classifiers, whatever the semantic complications, 'I made him wash himself', if at all possible, might be *??\*'Ad-d siLkusL=inh* or *??\*'Ad-siLkusL=inh*. 'I made myself wash (myself)' (also 'I pretended to take a bath, etc.')

might presumably be *'AdxsLikusL*. However, that *'AdxsLikusL* (or *\*?!'AdxsLikusL=inh*) might conceivably mean also 'I made him wash me'. There is very probably no such form in the corpus and no record of any attempt to elicit such. Eyak has postpositional resources for 'by my order', 'with my permission', 'because of me'. Thus presumably *?idAxah xusikusL=inh* 'he washed me at my command' must be acceptable or preferable, perhaps also indirect reflexive *?('Ad-)dAxah xusdikusL=inh*. Cf. above indirect reflexive *ch'a:X sli'a'ch'L=inh* 'he made the, help him' above.

In fact, just like English, Eyak does not distinguish carefully between various third persons (e.g. the three readings of 'his' in 'he told him to paint his house'). On the one occasion I remember testing this, I was not able to elicit clear results in trying to distinguish 'A causes B to kill B', 'A causes B to kill A', 'A causes B to kill C'. This was with Lena, a patient grammarian. The attempt was greeted, moreover, with notably less enthusiasm than usual, for the probable reason that no such grammatical distinction exists

in Eyak, even though both Tlingit and Athabaskan, in very different ways, do make such distinctions.

### 11.4.2 *L-* with intensives

After causativization, the main or most productive derivations adding *L-* to the classifier with any regularity or transparency are intensives, the postpositional phrase *o-X*, and the subclass of verbal nouns called acquisitionals.

Intensives affect only transitives, and only themes that do not already have *L-*, namely zero. (The few transitives with *dA-* are not attested with this derivation.)

The meaning of the intensive is ‘act on O to such a degree that O is significantly displaced and/or its physical condition or shape is significantly changed’. This derivation was definitely noted in the field at some point, but its potential was not systematically or aggressively enough investigated. The number of these clearly attested, ca. 23, is not too large for them simply to be listed here. In each case, the underlying theme can be assumed as O-stem; where the meaning of the underlying theme is not clear from the intensive, it will be cited:

(15) Intensive forms with *L-*

*O-L-ta'tl'* ‘displace or deform O by kicking, kick O out of position, shape’

*O-L-tAGL* ‘deform or drive O by hammering’

*O-L-tl'i* ‘transport O (some distance) by boat’ (< *O-tl'i* ‘tie O’, see also below)

*O-L-dja'tl'* ‘drive O (stake); stake O (tent)’ < ‘chisel O’

*O-L-dzu:x* ‘poke O out of position’

*O-L-tsu:X* ‘push/thrust O out of position’

*O-L-tsinhG* ‘carry O some distance in fingers’

*O-L-dja:t'* ‘move O out of position by prying’

*'Ad-LA-ch'an'k'* ‘move self some distance by clambering’ (cf. *'i-dA-ch'an'k'* ‘clamber’)

*O-L-sha* ‘dig and remove O’

*O-L-shiya* ‘dig and remove pl O’

*O-L-shish* ‘sip O up’ (< ‘sip on O’)

*O-(L-)gu'k'* ‘displace/deform O by punching’

*'iLqa'* *O-l-(L-)ga:G* ‘mix O together with water (so transforming it)’

*O-L-xu'tl'* ‘move O by blowing on it’

*O-L-xihsh* ‘split O into e.g. shingles, kindling’

- O-*L-GAmAts* 'move O by twisting'  
 O-*L-GAdj* 'move O with (end of) stick, paddle O (canoe)'  
 O-*L-GahG* 'chop O, splitting it'  
 O-*L-qAtl'* 'slide O some distance'  
 O-*L-le'g* 'move O with hand' (< 'touch O')  
 O-*L-'Adz* 'launch O some distance'  
 O-*L-'e'dz* 'move O with foot' (< 'act on O with foot')

Especially in the case of those referring to significant displacement, there is of course often a preverbal specifying the kind of displacement.

### 11.4.3 *L-* with postpositional phrase *o-X*

Another semantic group or subgroup here refers to 'acting on O so fastening O in place', which bridges the gap between the pure 'intensives' above and the group taking *L-* with the preverbal (postpositional phrase) *o-X* 'in (non-punctual) contact with o'. This, in fact, is one of the two major meanings of that postposition. (It so happens that the other major meaning of that postposition 'by means of o' also adds the classifier *L-*, for which see §11.4.3.) We have at least five themes showing this derivation, i.e. themes not already with classifier *L-*, but with  $\emptyset$ -classifier, which then take *L-*, the *o-X* specifying the indirect object to which the direct object is immobilized or affixed. This raises the question whether this derivation might still be considered a subgroup of the intensive above. Relatively well attested is O-*tl'i* 'tie, bind O' > *o-X* O-*L-tl'i* 'tie, bind O to o'. Compare this to *o-ch'* O-*tl'i* 'tie, bind O to o', showing that addition of *L-* is connected specifically to the presence of the postposition *o-X*; cf. also the pure intensive, derived locomotion verb O-*L-tl'i* 'transport O (some distance) by boat' above. These minimal pairs strongly suggest that this derivation is not a subgroup of the intensive. Another example is O-*xa'ch* 'tie knot in O, tie O (with knot)' > *o-X* O-*L-xa'ch* 'tie O to o (with knot)', for which cf. *o-q'* O-*xa'ch* 'tie O (on)to o (with knot)'. Another such item well attested in the dictionary is O-*k'Awahdj* 'nail O, drive O (nail)', O-*L-k'uwahdj* 'fasten O by nailing', which usually is used in combination with the postposition *o-X*. There are no instances of *o-ch'* with O-*k'Awahdj* 'nail O', but one without *o-X* and *L-*, namely 'AwXa:n' *yAX GAlk'Awahdj* 'nail it down along its whole length'. Note also O-*djahGL* 'sew O' and *o-X* O-*L-djahGL* 'sew O to o', but apparently also *o-ch'* O-*L-djahGL* along with *o-ch'* O-*djahGL* 'sew O to o', implying that these might indeed be treated as a subgroup of the intensive. Finally, we have O-*Xa'ts* 'sew O loosely' and O-*L-Xa'ts* 'fasten O by sewing loosely'.

There may be miscellaneous derivational uses of this type with certain intransitives: e.g. *gehs-dah-X 'anh dA-GA-L-dza:nts'-L=inh* 'he was begging him pitifully', with an adverbial phrase as the object of *o-X*, and cf. *d-dA-dza:nts'* 'implore'; or *o-X 'i:lih-LA-'a:t'* 'fall

madly in love with o', cf. *d-dA-'a:t'* 'be scarce; wail, bawl'. These two items, for example are both emotionally colorful, but neither has been adequately investigated.

The dictionary entry for o-*X* is divided into two major meanings, the first of which, 'in (non-punctual) contact with o', is further subdivided into 1a.-f., i.e. six subdivisions, though not according to whether they add *L-* to Ø- classifier. Most important is subdivision 1a. of o-*X*, which includes 'glancing by o', as opposed to o-*d* 'in punctual contact with o', i.e. 'at one point and not moving'. In contrast with the above, not adding *L-* classifier to the verb, are a number of intransitive motion verbs, 'move by o in glancing contact'. There may be miscellaneous derivational uses of this type with some intransitives: e.g. *gehsdahX 'anh dAGALdza:nts'Linh* 'he was begging him pitifully', with an adverbial phrase as the object of o-*X*, above; or o-*X* 'i:lih-LA-'a:t' 'fall madly in love with o', cf. *d-dA-'a:t'* 'be scarce; wail, bawl'. There are likely still other figurative instances under o-*X*, such as (16b), which in this case requires the *L-* classifier shift.

(16) Figurative use of o-*X* 'in (non-punctual) contact with o'.

- a. *yAX dA-a:-X=inh*  
 about CL-walk-PROG=HUM.SG  
 'he's walking about'
- b. *dAL-gu:nA-X Xe'X yAX LA-a:-X=inh*  
 blood-NC-in.contact short.distance.outdoors about CL-walk-PROG=HUM.SG  
 'he has a bloody stool' < 'he's walking around outside with blood'

See further §15.9.2.8 for continuing treatment of intransitives with o-*X*.

This brings us first to the dictionary's o-*X* meaning of 2. 'by means of o', with transitives. This section is not subdivided by letters, unlike the previous, but does try to separate subgroups according to whether the o-*X* entails *L-*, providing perhaps fifty examples or textual reference numbers. It appears that here the appearance of the *L-* is significantly more optional than in cases like 'fasten O to o' verbs with o-*X* (see §11.4.3). A careful examination of all these, if possible, might show results as problematic as did the rather careful survey above for *dA-* in verbs detransitivized with indeterminate direct object 'i-. There are of course sufficient clear examples, perhaps especially under o-*X* O-(*L-*)*she* 'kill O by means of o', q.v. in the dictionary, where the variability was definitely examined to some degree with both Lena and Marie.

Another large set of examples, some dozens, can be found in instrumental relativizations, q.v. both in the dictionary under o-*X* (2.) and in §18.13.3. These instrumentals very often take the basic passive form 'u-*X* O-*dA-p* 'by means of it ('u-) O is V'd', in the usitative Active derivation, as in the examples in (17).

(17) Instrumentals with basic passive 'u-*X* O-*dA-*

- qa:Xu:nLAYah 'uX dAkus* 'toothbrush' < 'our teeth by means of it are cleaned'  
 'uX k'udAxa:sh 'carving-knife' < 'by means of it something is butchered'

'uX tsa: dla:dAGahG 'pickaxe' < 'by means of it stones are chopped'

In these passives the classifier is almost always *dA-* rather than *LA-*, with the rare exception 'uX k'uGALALAch'i'ch'g / 'uX k'uGanLACH'i'ch'g 'scrubbrush' < 'by means of it something (floor) is roughed up', rather consistently for some reason, even though the underlying theme may be passive *LA-* rather than *dA-*.

However, in the relatively fewer non-passive forms among these instrumental relativizations, we have (18).

(18) Non-passive instrumental relativizations

'uX 'Adk'u:nLak'u:d 'towel' (reflexive) < 'by means of it someone wipes own face'

'uX 'Adk'uLAWa'ts' (persistive) 'by means of it (willow boughs) someone slaps self (in steam bath)'

tl'ehd 'uX k'u'ldja:t' 'key' (non-reflexive!) < 'by means of it someone pries indeterminate object open'

'uX k'qu'xLsheh 'my hunting-gear' < 'by means of it I'll kill something' (likewise 'uX k'qi'yiLsheh 'your hunting-gear')

giyahX da: LAlah, opaque and irregularly but certainly < giyah 'uX da: LAlah 'water bucket' < 'by means of it we drink water' (< giyah da: dAlah 'we drink water')

It therefore appears that the obvious preference for dropping *L-*, not here but in the passive instrumental relativizations, must be confined for some reason to the usual pattern for just those relativizations.

Comparative work on *L-* with *o-X* needs to be done. There is to some extent an exact parallel to this at least in Tlingit, where 'act on O by means of o' entails the *L-* classifier, Tlingit *O-dj O-L-stem* (Story 1966.94).

The scope of the connection between *o-X* and *L-* does not end here for Eyak, but continues with intransitives, following up on the final items as in the dictionary under *o-X* (1). There are two or three other preverbals ending in *o-X* or preverbal-final *-X* that take the *L-* classifier, with intransitives, especially locomotion verbs. The first is *o-'e:X* 'looking for o', no doubt < *o-'e'-X* 'movement in) place of (absent) o' which also exists, not lexicalized. A full listing is provided in the dictionary, under entry 'e: (1), with careful details on the consistency with which the *L-* is added in the classifier, consistent to a significantly higher degree than with *o-X* 'by means of o'.

Then there is the preverbal (*o*-)ya:X, i.e. perhaps in every case to be interpreted historically at some level and still also in part synchronically as *y-X*, with *y-* anatomical 'hand', and *o-X* 'in (non-punctual) contact with'. The *-a:-* is phonologically quite regular with all qualifiers (*CA-*) plus *o-X* > *Ca:X* (cf. §6.17.4: *-X* morphophonemics). This, with a reflexive object of *o-y-X* with the reflexive object (*o*) deleted, is listed under *o-X*, taking the classifier combination *LA-*. With cross-reference in *ya:X* under *o-X*, this is also listed



in the dictionary as the opaque entry *ya:X* (3), with two transitive verbs, both as indirect reflexives, *ya:X O-LA-she* ‘(practically) kill O by beating badly (by means of own hand)’, *ya:X O-LA-kinhd* ‘swipe O’ < ‘displace O by own quick hand movement’.

Perhaps different etymologically somehow from the above, but still ending in *-X* and adding *L-* to the classifier, is the postposition *o-ya:X* ‘avoiding o, lest o (verbal clause) happen’. This is listed in the dictionary as the entry opaque *ya:X* (1). Here too, the *L-* is added with fair consistency; i.e. in six of seven examples with *L-*-less basic locomotion verbs, the *L-* is added. Examples are given in (19).

(19) Postposition *o-ya:X* with classifier in *L-*

*k'u:y ya:X siLqehL* ‘I boated to a place protected from the wind’

*siya:X sALahLinh* ‘he avoided me’ < ‘he went avoiding me’

*'iLya:X yAX LA'a'ch'X* ‘they’re (going about) avoiding each other’

#### 11.4.4 *L-* with acquisitionals

There is one more type of regular derivation adding *L-* to the classifier, not with any *o-X*, but in connection with the special type of verbal noun called the acquisitional (see §18.13.6). This type of verbal noun is not rare in occurrence, but is attested in only a few verbs, mostly, or perhaps definitively, with suffixed *-ch'L*. Here *-ch'* must surely be the postposition *o-ch'* ‘to(ward) o’ and the *-L* must be that suffixed to verbal nouns with stem ending in a consonant. Five open stems (20) are attested in the acquisitional with *-ch'L*.

(20) Open stems in acquisitional with *-ch'L*

*k'uqu'wAshe:ch'L* (and variants) ‘hunting’

*shug 'ule:ch'L* ‘picking strawberries’

*o-lAX 'i'a:nch'L* ‘seeing o’

*k'uwa:ch'L* ‘eating’

*k'ula:ch'L* ‘drinking’

Only one acquisitional stem, expanded as persistent, is attested with closed stem, *'uxe:t'ch'L* ‘shooting them (with rifle)’. These are all attested with intransitive verbs, locomotion, requiring with them quite consistently *L-* in the classifier, e.g., quite frequently, *k'uqu'wAshe:ch'L qu'xLah* ‘I’ll go hunting’. For further examples, see §18.13.6.

There is a certain number of less regular or marginal examples of the acquisitional or something resembling that. One such is *k'uqu'wAtsa:gL da: yAX LA'a'ch'* ‘we’re (going about) shopping’ from Lena. In this it appears either that *-ch'* is missing between the repetitive *-g-* and the *-L*, or there is another form of acquisitional, or an *-X* is missing (perhaps not heard) after the *-L*. In that last case a regular verbal noun would be the object of some *o-X* construction requiring the *L-* in the classifier of the main verb. In any case

the confusion is hardly surprising. In this connection, by almost the reverse analogy, note also from Lena *k'ushe'LX qu'xLah* 'I'll go hunting', a unique variant for that. Likewise also *yAX 'ixe:t'LX qu'xLah* 'I'll go shooting (about)'. Here I had thought the *-xe:t'LX* might be a metathesis for *-xe:t'XL*, gerund for perambulative 'shooting about', but it may have been merely a failure to produce (or hear) *-xe:t'XLX* in this *o-X* construction. We also have one transitive non-motion verb with what is certainly an acquisitional *k'uqu'wAshe:ch'L Lideh* 'he knows how to hunt', with acquisitional in the place of expected gerund *-she:l*, the main verb having basic *LA-* in any case.

#### 11.4.5 *L-* with comparative

The *comparative* is one other derivation requiring *L-* classifier, mostly limited in productivity to the comparative verbal forms of dimensional adjectives and comparative forms of verbs of extent. We have this derivation attested in ten such dimensional adjectives, e.g. *yidik* 'it's short', *o-ga' 'i:Ldik* 'it's as short as o', including comparative *'i-* in those Neuter imperfectives. Likewise e.g. *o-ga' 'i:L'a* 'it extends linearly like o, as far as o', less consistently *'i:Lsid* 'pl extend linearly', and sometimes *'i:LwAs* 'extend non-linearly, amorphously'. For full description and listing of these, see §12.1.7 (the file on Neuter imperfective). This derivation, with *L-*, incidentally, is quite widely attested also in Athabaskan.

In addition to these, there is at least one theme of a non-adjectival type that takes *L-* classifier with comparative postpositional phrases, *l-xa* 'grow', obviously because it is semantically related to dimension. Attested as obligatory with *o-LAX* 'more than o' and *o-ga* 'like o', it is also at least optional, *l-(L-)xa*, with certain qualifications, perhaps especially 'fully grown; old', q.v. under *l-L-xa* (2). This latter type probably points to a different type of derivation requiring *L-*, or perhaps intensity (cf. §11.4.2).

#### 11.4.6 *L-* with transitive classificatory verbs

There is one tiny class of two fundamental themes, where *L-* classifier is required under unique conditions in both members of this class. This is the two pure classificatory stems *-ta* and *-a* in the very basic intransitive, 'be in position', as opposed to the transitive forms *O-(L-)ta* and *O-(L-)a* 'handle O'. For these, *L-* occurs in Active and Neuter perfective only, and is absent in all other conjugations and mode-aspects. Thus the two perfectives e.g. Active *siLtahL* 'I handled it', and Neuter *'ixiLtahL* 'I'm keeping it in position', but Inceptive perfective *GAXta:L* 'I'm moving it', and non-perfectives *qu'xtah* 'I'll handle it', *GAXtah da:X* 'if I handle it' etc. This "irregularity" or "minimum regularity" (of two) is altogether unique in linking any classifier with conjugation or mode-aspect. These two transitives might on the other hand merely be considered irregular causatives, 'S causes O to be in position'. They could thus be in the same class as e.g. the also extremely productive pair *-ya* 'be

involuntarily situated', O-*L-*'*ya* 'S causes O to be involuntarily situated', except that the *L-* is missing in the non-perfectives and Inceptive perfective.

An interesting contrast with these is the basic pair *-le* ~ 'act, do', and O-*L-(l)i-* 'act on O', both with PAE stem \**-ne*, also of course extremely productive.<sup>10</sup> This pair differs semantically from the above in that the transitive can hardly be seen as a causative of the intransitive. Here we may have the purest case of *L-* raising valence, though perhaps a class of one.

## 11.5 Regular derivational use of combined *L-* and *dA-* (> *LA-*)

Finally, in addition to the reflexive causative, which transparently combines *L-* and *dA-*, it appears there also are a few constructions that appear consistently to add both *L-* and *dA-* to the verb, somewhat less transparently. One is found with the preverb *qAyuh* 'beligerently, for a fight'. Thus we have not only '*iLch*' *qAyuh GALA'a'ch'Linu*: 'they're going fighting-mad at each other', where the *dA-* part of the classifier would be expected in any case, but also quite regularly, *qAyuh GALAqe:Linh* 'he coming (by boat) for a fight'. See the dictionary under *qAyuh* for further examples. Even though several of the attestations do not imply that the approach to fight is mutual, perhaps the best explanation for the unique effect of *qAyuh* is that it requires the *L-* in any case, but has also come to require the *dA-* as further evidence of the 'covert indirect reciprocals' described in §11.3.5. There is no record of any attempt to elicit an explicitly non-reciprocal version of *qAyuh* without *dA-*, e.g. an attack on unprepared victims unable to resist, to determine whether the covert indirect reciprocal may not be completely lexicalized.

Two more somewhat productive derivations, specialized in a very different way, have in common that they both happen to take the Neuter imperfective, with the usual meaning 'inherent quality' thereof, rather than by any linkage between qualifier and specific conjugation or mode-aspect. One is the 'liability' Neuter imperfective derivation, attested in 17 themes, 16 of which are of the form *Li*-[stem]-*X* 'be V'ed easily', e.g. *LidAtl'X* 'is easily hurt', *Liq'utl'X* 'is easily broken, fragile', with *-X* suffix special to this derivation. There was no sufficiently broad attempt to elicit the full range of these, evidently the only one of these, underlyingly transitive, in which the classifier lacks *dA-* is the form *yiLqAtl'X* 'is slippery', i.e. 'causes to slip'. Given the statistics, however, it appears justifiable to consider the *Li-* forms with a passive-like meaning more likely to be basic, and the one *yiL-* the further derived one, i.e. *Li-* causativized to *yiL-*. For full description and listing see this

<sup>10</sup> The stems are irregular, intransitive Active and Neuter perfective *-li-L*; transitive likewise, but with onset *-l-* deleted immediately following *L-* (i.e. *-D*); Inceptive perfective *GA-le-L* intransitive, O-*GA-L-i-L* transitive.

derivation in §12.1.7 on the Neuter imperfective.

The other Neuter imperfective derivation involving both *L-* and *dA-* is ‘anatomical resemblance’, for which we have attested seven themes, with an anatomical noun serving as the verb stem, with the postpositional phrase *o-ga* ‘like o’ and Neuter imperfective verb starting with ‘comparative’ *i-*, e.g. *siɡa* ‘*iLini:k’inh* ‘he has a nose like me/mine’. Possibly the semantics of the *L-* part of the classifier is related to that of the *L-* in comparative adjectival or dimensional verbs and verbs of extension, for which see §11.4.5. For full description and listing see this derivation in the file on Neuter imperfective (§12.1.7).

Finally, as a transition to the next major section of this account of the Eyak classifiers, there is one more derivation of some limited productivity, involving a combination of qualifier and classifier *LA-*, namely *d-LA-*stem ‘V making specific sound’. This happens to be attested in about eleven themes in Eyak, which are listed in (21), and is cognate with Athabaskan *də-lə-*stem, sometimes called ‘onomatopoetic’ in the literature.

(21) *d-LA-*stem ‘V making specific sound’

<i>d-LAdzuhd</i> ‘sizzle’	<i>d-LA-xe:g</i> ‘whistle’
<i>d-LA-tsi:ndz</i> ‘squeak in high pitch’	<i>d-LA-Gi:nq’sh-g</i> ‘wheeze’
<i>d-LA-ts’a’tl’-g</i> ‘click, cluck’	<i>d-LA-Ge’q’sh-g</i> ‘squeak, creak’
<i>d-LA-ts’in’ts’-g</i> ‘squeak’	<i>d-LA-q’e:g</i> ‘shout angrily, make angry noise’
<i>d-LA-ts’u’ts’</i> ‘make sucking sound’	
<i>d-LA-k’ik’sh(-g)</i> ‘creak, pop’	<i>d-LA-XAX-g</i> ‘snore’

There is some connection between the *LA-* and intransitivity, and also of course the *d-* with noise, especially oral noise.<sup>11</sup> The prefixation seems intrinsic to most, but in the case of *d-LA-XAX-g* ‘snore’ the analysis is probably transparent: cf. *XAX-g* ‘fresh fish’, *LA-XAX-g* ‘(caught) fish quiver (still alive)’.

At the same time, there are themes with *d-LA-* that have nothing to do with ‘noise’, e.g. *d-LA-qahG* ‘fall’, or oral noise without *d-LA-*, e.g. *LA-qahdzX* ‘cough’, *-q’a:s-g* ‘make oral click in surprise’, cf. *d-LA-Gi:nq’sh-g* ‘wheeze’ and *LA-Gi:nq’sh-g* ‘squeak, creak’, and *d-dA-si:nq’s-g* ‘(dog) whimper, whine’, showing that the connection between *d-LA-* and the noises is far from fully predictable, rather only noticeable. This grouping should probably be considered one of the “subpockets” of partial predictability statistical correlation that Rice (2000: 167) refers to in her overview of Athabaskan classifier use, purely lexical as opposed to derivational.

<sup>11</sup> See further §17.10.3 on the *d-* qualifier, under meaning (3) ‘oral, noise’, especially where the *d-* is intrinsic to the theme. However, these are not even treated there as a special subcategory. They are only considered together here, as a vestige of a category much better attested in Athabaskan as such.

## 11.6 Thematic or lexically determined classifiers

Especially of the errative under *dA-* in §11.3.8, the two other derivations requiring *L-*, and all but the first requiring *LA-*, it could be said that these are transitional toward the classifiers that are lexically determined, something like “subpockets” in the lexicon where semantic groupings for classifier selection can be more easily noted. We shall return to this issue at large after noting one more specific type connecting  $\emptyset$ -classifier in some statives with the conjugation and mode-aspect Active perfective, to which this small group is severely limited, and then a brief statistical survey.

### 11.6.1 $\emptyset$ -classifier statives limited to Active perfective

The routine process of checking for minimally derived themes, with  $\emptyset$ -classifier if at all possible, especially with Lena in summer 1965, revealed a special group of such themes, which had very limited use. This limitation was the only one (aside from *O-(L)-ta*, *O-(L)-'a*) connecting conjugation and mode-aspect with classifier, namely that the  $\emptyset$ -classifier themes were limited strictly to the Active perfective (*s-* perfective) stative. Lena got the impression that these  $\emptyset$ -classifier forms derived from *L*-classifier stems were indeed permissible, possibly archaic or “deep talk.” None of these restricted forms was ever spontaneously attested. Certain examples number 11, listed here first with the form or theme restricted to the Active perfective, then that which is freely used. These all pair off with, i.e. were elicited from, themes attested with *LA-* and *dA-*. The largest number of these, the seven listed in 22, pairs off with themes with the *LA-* classifier:

(22)  $\emptyset$ -classifier statives from themes with *LA-* classifier

-*chehg* ‘rot’, *LA-chehg*

-*ch'u:ch* ‘be twisted, contorted’, *LA-ch'u:ch*’

-*sha't* ‘be pliable, soft, lose tone’, *LA-sha't*’

-*gAXts*’ ‘be sticky, adherent’, *LA-gAXts*’

-*GAmAk*’ ‘be round’, *LA-GAmAk*’

-*q'a:sh* ‘be stiff, rigid’, *LA-q'a:sh*

-*q'Ash-g* ‘(skin, leather) be dry, stiff; be rawhide’, *LA-q'Ash-g*

The second-largest number, the four listed in 23, pairs off with themes with *L*-classifier:

(23)  $\emptyset$ -classifier statives from themes with *dA-* classifier

-*xAX* ‘be empty’, *dA-xAX*

-*Xad* ‘come loose, apart’, *dA-Xad*

**Table 11.2:** Verb themes by type of classifier and transitivity, based on survey of forms in Krauss's (1970a) dictionary.

	$\emptyset$ -	<i>L</i> -	<i>dA</i> -	<i>LA</i> -	Total
<b>Intransitive</b>	147 (36%)	51 (13%)	85 (21%)	123 (30%)	406
<b>Transitive</b>	148 (51%)	133 (46%)	1 (0.3%)	8 (3%)	290
<b>Total</b>	295 (42%)	184 (27%)	86 (12%)	131 (19%)	696

*-la'* 'be hard, tough; difficult', *dA-la'*

*-li'ts'* 'be wet', *dA-li'ts'*

All these appear to be statives even in their form with *LA*- or *dA*-, except for *dA-Xad* 'come apart'.

There are two more  $\emptyset$ - classifier statives elicited in this same process that are likewise limited to Active perfective but which match up to transitives with *L*- classifier, i.e. were evidently elicited from such, in *-tsAX* 'be cut', from *O-L-tsAX* 'cut O', and *-giyiL* 'be a witch', from *O-L-giyiL* 'hex O'. There is one more such stative, *-t'a'dz* 'be impassible, obstructed', together with *dA-t'a'dz* of the same meaning and also restricted to the Active perfective, conceivably of the same relationship, or where the latter may be a passive of a theme otherwise no longer used.

### 11.6.2 Statistical survey

Rough statistics on very basic themes for thematic classifiers are calculated here. The whole dictionary (Krauss 1970a) was surveyed, but not later materials, as classifiers were never further studied for their own sake in later fieldwork. The survey here includes a total of ca. 800 themes to which the classifier is intrinsic, leaving out themes varying strictly by qualifier, or by directive, or other derivations that do not affect the classifier, e.g. repetitive, or verb theme class as defined by choice of conjugation and mode-aspect. After further subtraction of all themes described above as derived with *L*- and/or *dA*-, though not subtracting erratives for *dA*- or the last three "other derivations with *L*-" (because it is not clear whether they are really productive), the total number of such themes left is ca. 696. Dividing the total remainder into eight groups, by two for intransitive and transitive, and by four for the classifiers  $\emptyset$ -, *L*-, *dA*-, and *LA*-, the result is shown in Tab. 11.2:

Undoubtedly the first thing that leaps out is the rarity of *dA*- and *LA*- in transitives, to such a degree that each example of those deserves to be examined. This will be done further below (24)–(25). Transitives are almost all  $\emptyset$ - or *L*-, if anything  $\emptyset$ - may be a little bit more frequent for transitives than *L*-, certainly no less so. In intransitives,  $\emptyset$ - is nearly three times as frequent as *L*-, though *L*- is still not rare, but for some reason, with *dA*- present,

*LA-* seems significantly more frequent than *dA-*, almost 50% more so. I.e., for some reason, if *L-* is present in an intransitive, it is 2 ½ times more likely to be combined with *dA-* than to be standing alone.

Another way of looking at Tab. 11.2 involves ratios or percentages of each of the four classifiers in intransitive/transitive pairing: *Ø-* occurs equally frequent with intransitive and transitive stems (50%), *L-* significantly more frequent with transitives (72), while both *dA-* and *LA-* occur almost exclusively with intransitives.

These latter percentages can be or more less directly compared with those for Witsuwit'en in Hargus (2007:343): 71 intransitive vs. 29 transitive for *Ø-*, 46 intransitive vs. 50 transitive for *l-*, 88 intransitive vs. 12 for *d-*, 90 intransitive vs. 10 transitive for *l-* (corresponding to Eyak *LA-*). These results, however, are “more or less” accurate in that Hargus lacks information on what is included in the total to begin with. Her results are at least very similar, though less extreme, for the low rate of the cognates of *dA-* and *LA-* in transitives. Between *Ø-* and *L-* on the other hand, she shows a much higher rate of *Ø-* in intransitives than in transitives, while Eyak tends toward the reverse, and *L-* she shows only a little more frequent in transitives than in intransitives, while in Eyak *L-* is much more frequent in transitives than in intransitives. To the extent that her sample is textual, and/or that she does not discount derivatives, e.g. causatives, the comparison may hardly be valid.

We have some first statistics to compare from Navajo in Sapir and Hoijer Sapir and Hoijer (1967: 91–93). “Of approximately 2,000 zero class verb bases in our corpus, about 70 percent are intransitive and 30 percent transitive. Similarly, of the 1,100 L class verb bases, about 72 percent are transitive and 27 percent are intransitive.” Compare this to the corresponding Eyak ratios of 50% and 72% transitive, respectively. Eyak has a significantly larger proportion of transitive verbs that are *Ø-* class, but for the *L-* class verbs the proportion is exactly the same. Sapir and Hoijer continue, “The percentages are about the same for the D and I class bases [with regard to each other]: 36 percent [of each] are intransitive and 3 percent transitive.” Navajo *l-* corresponds with Eyak *LA-*, so this certainly agrees in principle with the Eyak, but it is of course puzzling in that 36 and 3 do not add up to 100%. Comparability is also problematic since we do not have any description of the 3,100 base (not theme) corpus for *Ø-* and *L-*, and the percentages for *D-* and *I-* are of an unspecified number.

Another comparison with Navajo, potentially very interesting, is available in Young and Morgan (1987: 118–26) (also Young et al. 1992: 884–5). This seems to be a combination of all (i.e. intransitive and transitive) bases out of a total sample of 380 listed and surveyed, showing *Ø-*, *l-*, *d-*, and *l-* classifiers by percentage: 41% *Ø-*, 28% *L-*, 13% *d-*, and 18% *l-* in Navajo. The comparison of this with the same combination shown in the four totals above for the 696 in Eyak is in fact quite stunning, especially insofar as the comparisons happen to be valid: 42% *Ø-*, 27% *L-*, 12% *dA-*, and 19% *LA-*, each of the four figures only 1% apart, i.e. the Eyak figures virtually identical with the Navajo!

As noted above, the transitives with *dA-* and *LA-* are so few that each deserves listing. The only absolutely certain example, mentioned in §8.2, of a transitive with *dA-* is O-

*dA-la* ‘drink O’. This, incidentally, might be considered the most remarkable cognate in all of Athabaskan-Eyak-Tlingit, Athabaskan \*O-də-nangw, and Tlingit O-*dA-na*, likewise unique or at least rare in Tlingit and Athabaskan as well as in Eyak. There are about four other themes in Eyak with *dA-* classifier that might be transitive, but in each of these the transitivity is at least questionable, not demonstrated, as there is no record of any attempt to elicit any overt object. These are presented in 24.

(24) Possibly transitive themes with *dA-*

?O-*dA-chidX* ‘be (make O?) nitty’ (-*dA-chidX* ‘be nitty’)

?O-*d-dA-’und-g* ‘lay egg (O?, on O?)’ (*d-dA-’und-g* ‘lay egg’)

?O-*Gl-dA-sha* ‘dig in ground (O?, for O?)’ (*Gl-dA-sha* ‘dig in ground’)

?O-*Gl-dA-sha’tl’* ‘sweep ground (O?)’ (*Gl-dA-sha’tl’* ‘sweep ground’)

However unlikely to be transitive, these are all listed as possibly so, without further investigation. They clearly fall into two categories, laying eggs or producing young (normally with *dA-* (see 29) §11.6.4); and acting on ground (with *Gl-* qualifier).

Those transitives with *LA-* number six to eight and are significantly less exceptional. The five in (25) are in fact certainly, verifiably transitive:

(25) Transitive themes with *LA-*

O-*LA-de’* ‘learn O’

O-’*LA-tsa* ‘stare piercingly at O’

C O-*LA-le’* ‘think O C’

O-’*lX-LA-xa:s* ‘fear O’

O-*LA-tsa* ‘O be fully visible’

o-*q’* O-*LA-le* ‘pay O for o’

C O-*LA-le’* ‘think O C’ might be considered a passive. Another theme has what looks like a thematized indefinite direct object *k’u-* in a directive (‘averseness’): *k’u-’Li-tu* ‘be lazy’, Neuter imperfective. One more is questionably transitive: *ta’* O-’*LA-tl’its’* ‘soak (O?) in water’. A number of themes might look like transitives with *L-* classifier but are in fact indirect reflexives with postpositional phrases homophonous to a preverb, where the reflexive object is deleted, e.g. *li’* O-’*LA-ni:q’* ‘swallow O’, where *li’* is o-’*li* ‘deep into closed end of o (self)’.

### 11.6.3 “Middle voice”

There is no regular or predictable use for the derivational process, whereby Ø- becomes *dA-* or *L-* becomes *LA-*, i.e. where *D-* classifier is added, e.g. for detransitivizing a theme, or what might be called a “middle voice” in synchronic Eyak grammar. (The term “middle” is here used in a narrow semantic sense, i.e. ‘acting for oneself’, not including predictable uses of *D-* as explicitly labeled above (§11.3) e.g. as reflexive, reciprocal, iterative.) At the same time, however, there are clear signs that such a process existed historically, or that there is



of course a strong relationship between intransitives and to transitives, or what might be called a middle voice. The statistical tendency for themes with *dA-* or *LA-* to be intransitive and/or semantically “middle-voiced” in valency is very clear, likewise confirmed in pairing between themes with  $\emptyset$ -/*L-* classifier and *dA-/LA-*, the latter with lower valence, to be found in the lexicon. Another obvious such type are forms such as *O-L-čan* ‘smell O’ and *O-L-gAmi* ‘taste O’, as opposed to *LA-čan* ‘(exude) smell’, *LA-gAmi* ‘(have) taste’. The former pair is not the causative of the latter pair, and there is no theme with  $\emptyset$ - classifier. It cannot easily be said that one is derived from the other, but only that the latter is a “middle”. A thorough listing and analysis of such pairings, and comparison with Athabaskan, would make a useful contribution, so should be considered for further research.

#### 11.6.4 Classifier in denominal verbs

A significant proportion of themes to which classifiers for some reason seem intrinsic includes stems that are essentially or primarily noun stems, here used in verbs themes with such verbal meanings as ‘be N-y, have N as physical attribute’, ‘make O (N)’, ‘use O (N)’, etc. Given that there is some complexity in deciding whether a stem is essentially nominal or verbal, the number of such themes could be seen to vary between 92 and 118. In principle, those most clearly nominal would be those with a concrete nominal meaning, when unaffixed, where the verb with that stem is affixed. At the opposite extreme, those most clearly verbal, so not treated here at all, would be stems that are verbs when minimally affixed, and when affixed, especially with *-L*, have a non-verbal meaning.

By far the most common type of the essentially verbal stems in question are nouns with suffix *-L*, which can be either gerund or verbal nouns, or *-L* instrumentals. In other words, where a noun is underived, has no *-L* instrumental or gerund suffix, and refers to a concrete object, while the verb has a non-zero classifier, the verb is most likely to be derived from the noun. Such examples are provided in (26):

(26) Denominal verb stems

*dA-da:sh* ‘to foam’ < *da:sh* ‘foam’

*dA-t’its* ‘freeze’ < *t’its* ‘ice’

*dA-Le’xts’-L* ‘have wart’ < *Le’xts’-L* ‘wart’<sup>12</sup>

*O-l-L-tse* ‘fatten O up’ < *-tse* ‘flesh’

*L-se’L* ‘become evening’ < *se:L* ‘evening’ (with stem variation)

On the other hand, the noun must be considered to be derived from the verb where the noun is consistently suffixed with *-L* in *O-gehg* ‘spear O (fish)’ > *gehgL* ‘fish spear’,

<sup>12</sup> The *-L* in this form is phonologically motivated after the cluster *-xts’*.

even though the meaning is concrete. Likewise *dA-Gu* ‘be warm’ > *Gu’L* ‘blanket’, even though the noun is concrete and the verb is affixed.

There are some cases where the direction of derivation is unclear, such as in of *-Ge* ‘be seasick’ and *Ge* ‘seasickness’, i.e. where it is unclear whether the noun is derived from the verb or the verb from the noun, even though the noun is abstract; likewise in the case of *LA-qahtsX* ‘cough’ and *qahtsX* ‘cough’ even though the noun is unaffixed and the verb is affixed, because *qahtsX* could well be a verbal noun, as it must be remembered that all verbal nouns (as well as gerunds, instrumentals) delete the classifier. In the case of *O-XuhL* ‘shovel O’ and *XuhL* ‘shovel’ there is also a question, because the latter may be suffixed or not suffixed with *-L*, given the rule that two successive /L/ in coda position are reduced to one (§6.14). In the case of *O-L-wa’ts’(-g)* ‘whip O’ and *wa’ts’(-g)(-L)* the question of directionality remains both because the *-L* instrumental suffix shows up inconsistently, i.e. may be analogical, and would delete the classifier in being derived from the verb. These examples serve to provide some notion of verbs clearly derived from nouns, as opposed both to the opposite and to questionable cases. The maximum number of verbs derived from noun stems in this way is about 120, of which perhaps 20 fall into the questionable category.

The largest semantic subgroup of these denominal verbs is intransitive, probably all Active perfective statives, ‘be N-y’, ‘be covered with N’, ‘have N as physical condition attribute’, presented in (27). Most frequent here is the classifier *dA-*, with 15 examples, followed by seven with *LA-*, which brings the total of nouns verbalized with *dA-* to 22. Then there are ten examples of denominal with  $\emptyset$ - classifier and three more with *L-* classifier.

(27) Intransitive denominal verbs with semantics ‘be N-y’, ‘be covered with N’, ‘have N as physical condition attribute’ attribute’

a. With *dA-* classifier:

*dA-tl’Adj* ‘be covered with wet snow’

*dA-Lu’ch* ‘have swelling’

*dA-Lexts’-L* ‘have wart’

*dA-tsug* (?) ‘have swelling’<sup>13</sup>

*dA-si:ns* ‘be moldy’

*g-dA-djehX* ‘(thread) get little loop’ (< *-djehX* ‘ear’)

*dA-cha’tl* ‘be black and blue’ (< *cha’tl* ‘blueberry’)

*dA-shAX-g* ‘be frosted’

*dA-gugs-g* ‘be lousy’

*dA-xu’ch* ‘(wood) be abraded, rough’ (< *xu’ch* ‘rough wood’)

<sup>13</sup> For the forms with question marks in parentheses, it is not entirely clear whether the verb is derived from the noun, or vice versa.

*dA-Xu* 'be hairy'

\**l-dA-le:L* 'have hair on head' > *'i:nsdile:L* 'merganser'<sup>14</sup>

*dA-t'its* 'freeze' (< *t'its* 'ice')

b. With *LA*- classifier:

*LA-dLAGsh-g* 'be dirty'

*LA-tl'its-g* 'be dirty'

*LA-gahX* 'be covered with pitch' (cf. *L-gahG* with the same meaning)

*LA-k'ahgsh-g* 'have scab, be rough' (cf. *L-k'ahgsh-g*)

*l-LA-qa't-g(-L)* 'have ringworm on face' (< 'patch')

*(l-)LA-q'AX* 'be fat'

*LA-Xihsh* 'be scarred'

c. With  $\emptyset$ - classifier:

*-ts'a* 'be muddy' (< *ts'a* 'alluvial mud' < Tlingit *s'A*)

*dl-ts'u:x* '(rock) be covered with barnacles'

*l-L-ts'u:x* 'have cyst on face'

*-chidX* 'be nitty'

*-cha:d* '(salmon) have hump' (< *cha:d* 'dorsal fin')

*gl-ch'a:x* '(water) be silty'

*-gAmAG* 'be covered with soft mud'

*qa' -k'ahG* 'get stuck with quills'

*qa' y-Gu'ts* 'hands be full of fish scales'

*qa' y-Xe:* 'hands be greasy'

d. With *L*- classifier:

*L-ch'ich'X* 'be rough' (< *ch'ich'X* 'shark')

*L-gahG* 'be sticky with pitch' (cf. *LA-gahG* with the same meaning)

*L-k'ahgsh-g* 'have scab' (cf. *LA-k'ahgsh-g*)

To the above can be added a few more semantic categories of intransitives, about 28 more examples (28). There are five with *dA*-, eight with *LA*-, ten with  $\emptyset$ -, and five with *L*-

(28) Other intransitive denominal verbs with various semantics

a. With *dA*- classifier:

*dA-da:sh* 'foam'

*dA-tl'Adj* 'congeal' (< 'gelatin, snot')

<sup>14</sup> The verbal base

\**l-dA-le:L* only appears in this noun form, but is not attested in verbal usage.

- dA-ka:st'* '(storm) rage'  
*dA-xAtl'* '(snow) fall'  
*dA-Gu'* (?) 'be warm' (< *Gu'* 'warmth')
- b. With *LA*- classifier:  
*S LA-du:ts'* 'snot dries on S' (poetic, song text)  
*LA-tsin'il'-g* 'make ashes'  
*LA-ch'u:ch'* 'be twisted, contorted' (cf. *ch'u:ch'* 'snail')  
*LA-gahG*  
*LA-qa:'* (?) 'yell'  
*LA-qahdzX* (?) 'cough'  
*LA-XAX-g* '(landed fish) quiver' < (*XAX-g* 'fresh fish meat')  
*gd-LA-XuhX* '(cloth) gather' (< 'worm')  
*dla:GALAwegshgL* 'kind of rock or stone slab' (< *we:gsh-g* 'ulu, (semicircular knife)')
- c. With  $\emptyset$ - classifier:  
*dl-tanh* '(wave) move' < *tanh* 'wave'  
*-chi:sh-g* 'be pulverized' < *chi:sh-g* 'gravel'  
*-guG* 'be deceitful' < *guG* 'lie, deceit'  
*qa'-gust'* '(flame) flare up' < *gust'* 'flames'  
*-ki:nX* (?) 'weep' < *ki:nX* 'tears, weeping'  
*-k'a'd ~ (?)* 'be sick, hot' < *k'a'd* 'sickness'  
*-Ge'* (?) 'be seasick' < *Ge'* 'seasickness'  
*-q'ahsh* 'choke on bone' < *q'ahsh* 'bone'  
*-Xa* 'travel in fleet of boats' < *Xah* 'war' (from Tlingit)  
*ya:nu'-wehs* (?) 'founder' < *wehs* 'swamp'
- d. With *L*- classifier:  
*L-ts'a'tl'-g* 'drip, leak' < *ts'a:tl'* 'cradle moss'  
*L-se'L* 'become evening' < *se:L* 'evening'  
*L-xa'* 'become summer' < *xah* 'summer'  
*L-Xe'tl'* 'become dark, (night) fall' < *XAtl'* 'night'  
*L-XAla:g* 'become winter' < *XAla:g* 'winter'

These are mostly Action class themes, with such meanings as 'act, move' or 'become'. There is one clear semantic subgroup, 'become (evening, night, summer, winter)', with some stem variation (cf. Chap. 6) and *L*- classifier. Only one item in this structural group seems to be semantically aberrant, *ts'a:tl'* 'cradle moss' > *L-ts'a'tl'-g* 'drip, leak'. There is also a larger proportion here of examples uncertain in directionality, or where the noun

is abstract enough to appear most like an unaffixed verbal noun, especially in the largest category, the ten with Ø- classifier *-guG* ‘deceit’, *ki:nX* ‘weeping’, *k’a’t* ‘sickness’, *-Ge* ‘seasickness’, *Xah* ~ ‘war’, i.e. half of that category. In this way, of the groupings in the order *dA-*, *LA-*, Ø-, *L-*, maximum and minimum (i.e. doubtful subtracted), the number of examples is 5-4, 8-7, 10-5, 5-1, respectively (i.e. with 4 of 5 in special semantic category). The totals here, especially of the minimums, would not greatly change the proportions of the previous subgroup, stative ‘be N-y’ etc.

Besides the interesting subgroup of four with *L-* mentioned above, another clear subgroup of seven is listed in §12.1.7 on Neuter imperfectives, or in §14.7.6.1 on the Neuter imperfective derivation labeled ‘anatomical resemblance’. This is composed of themes with stems from anatomical nouns, in the meaning ‘have N like o’, e.g. *si-ga* ‘*i:nLi-la:X=inh* ‘he (=inh) has eyes (*-la:X*) like (*-ga*) me (mine) (*si-*)’. These are all Neuter imperfectives with *LA-* classifier, i.e. presumably from underlying *dA-* plus *L-* as in comparative verbs or verbal adjectives of dimension.

There are two small subgroups here, probably clear semantically, but inadequately investigated for their transitive derivation. The first consists of five themes with intransitive *dA-* referring to laying eggs or giving birth (29).

(29) Intransitive *dA-* themes referring to eggs or birth

*dA-chidX* ‘(louse) lay nits’

*dA-ch’isht* ‘(fly) lay eggs’

*dA-q’u* ‘(herring; also salmon?) spawn’ ~ *q’Ama*: ‘salmon roe’ (cf. PA \*q’un’)

*dA-yahsh* ‘(woman; also mammal?) give birth’

*d-dA-’uhd-g* ‘(bird) lay eggs’

The clearest thing about these is that they form an intransitive semantic group with *dA-*. Clear also is that there are related transitive forms with *O-L-* that are not causatives, the most important of which is *O-L-ch’isht* ‘(fly) lay eggs on O’, raising the question, never asked, if there are other transitives with *L-* that mean ‘lay eggs on O’. The one other of these is *O-L-yahsh* ‘play with O (doll)’, from the secondary unpossessed *yahsh* ‘doll’, rather than the possessed kin term *-yahsh* ‘(woman’s) child’. We do not have any other transitive forms with these stems for ‘lay O (egg)’ or ‘give birth to O’, or ‘lay egg on O’. However, we do have *O-?dA-chidX* ‘be nitty’, and *dA-q’u* ‘get full of herring spawn’, which could in fact be passives of unattested *O-(L-)q’u* ‘(herring) spawn on O’ and unattested *O-(L-)chidX* ‘lay nits on O’. For the latter, cf. also *-chidX* ‘be nitty’.

The second such small group consists of only three verb themes that are also inadequately attested in transitive derivations, with stems also used as nouns, for bodily excretions: *-tse’q* ‘urinate’, *-ch’e* ‘defecate’, *-wAt* ‘vomit’, for which we lack any attestations for ‘V on O’, but only one related transitive *O-L-wAt* ‘vomit O’. The one clear pattern is Ø-classifier for the intransitive verb. For the missing ‘V on O’ one possibly instructive model might be *O-L-ku:nch* ‘fart on O’, cf. verb *-ku:nch* ‘fart’ and noun *ku:nch* ‘fart’. However,

to show the uncertainty of such a prediction, cf. *tl'in't* '(audible) fart' and the verbs *-tl'in't* intransitive, and a possible *O-tl'in't*, with Ø- classifier, 'fart on O', implied by this form as attested only in the meaning '(bee) sting O'. Cf. also the relatively well investigated *tux* 'saliva', *O-tux* 'spit on O', *O-d-tux* 'spit O', *d-dA-tux* 'spit', but also *da'd* *O-L-tux* 'spit on O's face', possibly an intensive. This configuration appears highly unpredictable, unexpected, especially the incidence of the qualifier *d-* 'oral' apparently making the difference between 'spit on O' and 'spit O', and the most highly derived or affixed being the intransitive *d-dA-tux* 'spit'. Yet the set of themes appears to be the most carefully researched, and turns out to be all too good an example of the unpredictability, complexity, or purely lexical determination of Eyak classifier use. It does appear that predictability of classifier use is "patchy" indeed, to pick a term that might compete with the "subpockets" quoted in Rice (2000).

To continue with the sample defined as denominal verbs, we move now to the transitives. There is a sizable semantic group 'make, install O (noun)', for which we have the 17 examples with *L-* classifier listed in (30).

(30) Transitive denominal verbs with meaning 'make, install O (noun)'

a. With *L-* classifier:

*O-L-duhdz* 'make O (porch)' (cf. *d-duhdz* 'porch')

*O-L-da'ts* 'make O (basket decoration)'

*O-L-tsaq's-g* 'cut O into fringes' (cf. *-y-L-tsaq's-g-L* 'fingers', even though this has *-L* suffix)

*O-L-ts'Ala* 'make O (potted roe)'

*O-L-sa* 'process O (cambim for food)'

*O-L-dju'k* 'make/install O (thwart)' (cf. *dju'k'-L* 'thwart, crosspiece', even though with *-L*)

*O-L-gush* 'make O (sand hillock)'

*O-L-ga:X* 'crush and put up O (*Viburnum edule*) for winter' (cf. *Gl-ga:X* '*Viburnum edule*')

*O-L-xahd* 'make O (spear head)'

*O-L-GAts* 'make O (dry salmon type)'

*O-L-GehG* (?) 'install O (hoop on keg)' (cf. *GehG* of unclear meaning)

*O-L-qa't'(-g)(-L)* 'install patch on O'

*O-L-XahL-g* 'make O (rattle)'

*O-L-Xa'L* 'make/install handle on O'

*O-L-we'L* 'make O into babiche, thongs'

*O-L-yahd* 'make O (house)'

*k'u-L-ma:* 'make O (lake)'

## b. With Ø- classifier:

O-*ch'u:ch* 'pinch O twistingly' for which cf. *ch'u:ch* 'snail'

O-*ga'ts* 'make O (step of stairway)' for which cf. *ga'ts* 'ladder, stairway'.

The form *k'u-L-ma:* in (30), is of special interest. It was elicited especially in order to determine the stem shape of a verb with noun stem of the form CV:. However, it is also the only item apparently with a thematized indefinite direct object, proving in itself transitivity, though with the more precise meaning 'make something into lake'. It is unclear how many more of these transitives could have been elicited with an indefinite direct object this way.

In contrast to the goodly number of transitive denominal verbs with *L-*, we have none such with *dA-* or *LA-*, and only two with Ø- classifier. These two are still enough to show that the choice of *L-* over Ø- classifier is not fully predictable even here, though very probably the absence of *dA-* and *LA-* is fully predictable.

There is another sizable semantic group of transitives, 'act with N on O', with up to 20 examples altogether. Of these, nine have *L-* classifier (31a), and perhaps eleven have Ø- classifier (31b).

## (31) Transitive denominal verbs with meaning 'act with N on O'

a. With *L-* classifier:

O-*L-tAL* 'drill hole in O' < *tAL* 'drill' (from Tlingit)

'*Ad-LA-dzahnG* 'pole self along' < O-*L-dzanhG* 'pole O along' (unattested)

O(-)-*L-ts'inhG* 'mark O' < *ts'inhG* 'alders'?

O-*L-XahL-g* 'shake O (rattle)'

O-*L-wAL* 'split O with wedge'

O-*L-we'L* 'snare, lasso O'

O-*L-wa'ts* 'whip O'

O-<sup>2</sup>-*L-na't'-g* 'lick O' < *-la't'* ~ 'tongue'

O-*L-ya:n'* 'cure O' < *ya:n(?)* 'medicine'

## b. With Ø- classifier:

O-*tAGL* 'hammer O' < *tAGL* 'hammer' (from Tlingit, cf. *tAL* 'drill' above, with *L-*)

O-*t'ahL* 'make love potion to charm O' < *-t'ahL* 'leaf'

O-*djahGL* 'sew O' < *djahGL* 'needle'

O-*cha:n(?)* 'bait O (hook)'

O-*ch'ich* 'elbow O'

O-*Guhd* 'knee O'

O-*q'Ats* 'trap O' cf. *-y-q'a'ts* 'hand')

O-*q'Adj* 'tie ribbon around O'

O-*XuhL* ‘shovel O’

O-*l-we:g* ‘put headband on O’

O-*tsi(n)ʼ-lahL* ‘comb O’s hair’

Some of these could perhaps be moved to the ‘install’ category above (30), but in any case, the choice in these between *L*- and  $\emptyset$ - must be considered highly unpredictable, beginning with the case of ‘hammer’ and ‘drill’, both loans from Tlingit.

There are also some minor semantic categories or miscellanea, e.g. possibly ‘remove O’: O-*L-Guʼts* ‘scale O (fish)’, O-*L-qʼAs* ‘split O in half, remove half of O’, possibly therewith O-*yeʼs* ‘take O (food) home from potlatch’; the highly derived O-ʼ*lX-L-dzi:ndz* ‘dream of O’; and at least two items that look like causatives of the group ‘be N-y’, for which the classifier of the underlying intransitives cannot be predicted: O-*L-tse* ‘fatten O up’ (< *-tse* ‘flesh’), and *qa*ʼ O-*L-Xu:ʼsh* ‘get O full of thorns’ (< *Xu:ʼsh* ‘thorn’).

Perhaps quite importantly, there is only one of these themes for which any possible variation is attested: O-*L-djiL* ‘make O (platform)’, and *disdidjiL* ‘platform cache’, (the latter attested only from Galushia Nelson in the 1930s), which might be a passive of ?O-*d-djiL* with  $\emptyset$ - classifier (and *d*- qualifier ‘wooden’), but this could as easily be from O-*d-L-diL* with *L*- classifier. There is one more item from a noun with stem-initial *L*-, homophonous O-*Lanhd* or O-*L-Lanhd* ‘smoke O’, for which a passive was elicited *sdiLanhd* ‘it’s been smoked’, which could again be from either. (Only attempted elicitation of ?*sLiLandL* could have answered the question.)

Nevertheless, lack of attested variation notwithstanding, it is clear that nearly all these themes derived from noun stems are very sparsely attested, not expressly investigated for variation at all, and very few are spontaneously attested e.g. in text. Therefore the caveat should still stand that we have no assurance that much more variability could have been elicited than we see here.

The purpose of selecting this sample of verb themes, those derived from nouns, was that such verbs might be more likely to reveal patterns of classifier choice than verbs with stems not attested in nouns, on the grounds that being overall a step more derived than verbs with stems not attested in nouns, they might show historically shallower or more transparent patterns of choice of classifier. Clearly, at least these verbs are fewer than the rest, at most 123, perhaps more like 100 certain examples, and of course they fall into far fewer semantic and formal categories.

For an overall statistical comparison between intransitives and transitives in this group with the four classifiers, we repeat Tab. 11.2 minus the number in this derived sample, including new percentages, leading to Tab. 11.3. This subtraction is done with the understanding that this will serve to emphasize any difference between the two sets of figures. Then below that, in Tab. 11.4 for comparison, the eight corresponding figures in this special sample are shown, also with percentages.

Comparing the percentages in Tab. 11.3 and Tab. 11.4, two differences stand out. First there is the increase in the incidence of *dA*- in the intransitive, 33% for the denominal verbs



**Table 11.3:** Verb themes by type of classifier and transitivity, based on survey of forms in Krauss's (1970a) dictionary, excluding denominal verbs.

	Ø-	L-	dA-	LA-	Total
<b>Intransitive</b>	127 (38%)	43 (13%)	60 (18%)	101 (31%)	331
<b>Transitive</b>	133 (54%)	103 (42%)	1 (0.4%)	8 (3%)	245
<b>Total</b>	260 (45%)	146 (25%)	61 (11%)	109 (19%)	576

**Table 11.4:** Verb themes by type of classifier and transitivity, based on survey of forms in Krauss's (1970a) dictionary, denominal verbs only.

	Ø-	L-	dA-	LA-	Total
<b>Intransitive</b>	20 (27%)	8 (11%)	25 (33%)	22 (29%)	75
<b>Transitive</b>	15 (33%)	30 (67%)	0 (0%)	0 (0%)	45
<b>Total</b>	35 (29%)	38 (32%)	25 (21%)	22 (18%)	120

over 18% in the rest, made up disproportionately by a loss in Ø-, 27% from 38%, much more than the loss in L- or LA-. Second, in the transitives, there is an increase in L- for the denominal verbs, here twice the number of those with Ø-, which was larger than L- in the rest; absolute zero from minute dA- and LA- is hardly a surprise. In other words, there is a significant replacement by dA-, especially of Ø-, in the intransitive, and replacement by L-, of Ø-, in the transitive. Given what we know quite generally about the valence raising effect of L- and valence lowering effect of dA-, this is precisely what we should expect in a sample of verbs this one step more highly derived in having verb stems from nouns than in the rest not so derived.

The extensive listing of ca. 800 themes in Krauss (1970a) showing the thematic classifiers will not be included here.

Further research could be undertaken to reach a better understanding of Eyak thematic classifiers. One project would be to take individual configurations of themes of varying valences with the same stem, like *tux* 'spit' above, to see what patterns can be found. Another project would be to check LA- and dA- in "middle" derivations, as there ought to be some dozens that are attested as so derived. That would help to address the question of how many "basic" LA- and dA- themes could be seen as middles or the like, then also the question of what analysis can be done with the remainder of the +D- themes. Another major question is the explanation of ±L- in both transitives and intransitives.

Obviously the other priority would be comparison with Athabaskan, especially the study of cognate themes. Given the example of O-dA-la 'drink O', perfectly cognate with both Athabaskan and Tlingit, one might expect a relatively high degree of agreement in thematic classifier in cognate verbs.



## 12 CONJUGATION AND MODE-ASPECT

A fundamental part of Eyak morphology is the organization of conjugation and mode-aspect.

As shown in the introductory chapter on the history of the study of Eyak, it can safely be said that though some verb paradigms had been documented, there was absolutely no consideration of Eyak verbs at this level previous to 1963. In fact, the first statements on this fundamental organization were made in Krauss (1965a), on the basis of my 1963 and 1964 fieldwork. That statement published in 1965 is of course incomplete, but it is here considered essentially correct as far as it goes, as still the best basic organization for the grammar yet seen, however problematic.

The 1965 statement is incomplete especially in that it includes no verb-theme classification, and does not include the conditional and desiderative mode-aspects, or the “extra(-systematic) paradigms,” or many of the derivations listed here. It does, however, lay out the basic organization, of the the conjugations on the one hand, and the imperfective and perfective aspects plus imperative and optative modes on the other.

It could, however, certainly be argued with some correctness that that organization is something of a hodgepodge, justified by mere “sophistry.” Nevertheless, after nearly fifty years, it still seems to be the best basic organization available given a strictly synchronic approach. Of course, not only do “all grammars leak,” but all grammars are in fact the result of historical development, and must be seen therefore as changing or moving from one state to another. Eyak is no exception. Further, during the course of writing this grammar, from 2006 to 2016, more history of the writing of Eyak grammar inevitably took place.

I have allowed some repeated discussions of the status or necessary nature of Eyak grammar to remain as I wrote them, even philosophizing on the subject, e.g. in the introduction to the subsection on the progressive in the section on verb derivations below (§15.8).

Eyak unquestionably has 20 or 21 different inflectional verb paradigms in a sense, considering both inflectional prefixes and inflectional suffixes to the stem. Given the relatively limited variety of prefixes and suffixes, however, it is clear that these 20 or 21 paradigms can be shown as the result or product of the conjugations and mode-aspects ( $3 \times 6$ , plus “extras”) of the combination of a much smaller number of affixes, forming a two-dimensional system. The three conjugations are Active, Inceptive, and Neuter, names here capitalized throughout by convention. The six mode-aspects are the imperfective, perfective, and conditional (aspects), and the imperative, optative and desiderative (modes). The difference between mode and aspect is not morphological or formal, but purely semantic. All mode-aspects have these three conjugations.

The main complications (“extras”) to this system of  $3 \times 6 = 18$  are that there is a fourth imperative (*'i-* imperative), and a fourth optative (*s-* optative). There is also what might be considered an extra Inceptive (cautionary prohibitive). The Inceptive imperfective (i.e.

Future) part of the basic system has a completely different prefix both in form and in prefix position, but this fits into the main count of 18.

Moreover, some of the prefixes, or what appear to be the same prefixes, seem to have different semantic effects in different mode-aspects, sometimes to a surprising degree. The system is seen as organized in a way that has significantly better unity or regularity in its formal respects than in its semantics. In other words, it could be said that much more weight in defining the system was assigned to formal rather than to semantic considerations.

At any rate, the messiness or the inconsistencies or complications certainly reflect historical facts, dynamics. That is, they certainly reflect a system in motion, from a past that can be further reconstructed by comparison with Athabaskan and Tlingit, toward a future that must presumably remain unknowable.

There is an essential relationship between conjugation and mode-aspect, or choice of paradigm, on the one hand, and verb theme class on the other. In fact verb theme classes are basically defined by choice and use of paradigm. For instance, Motion verbs like *'u:ch'* *GAXta:L* 'I'm moving it there' are inherently Inceptive perfective, while Action verbs like *te'ya'* *XAxah* 'I'm eating a fish' are inherently Active imperfective. This relationship with verb theme classes is included here. However, before detailing this, the system of verb theme classes itself, the basic semantic structure of the array of imperfective and perfective in the three conjugations as shown above needs to be described.

## 12.1 “Core” system of imperfective and perfective aspects

This system will first be described as a whole, including the morphophonemics of the prefixes. Then further below, with exemplification, each of the six paradigms of it will be presented as such, including the semantics.

### 12.1.1 “Core” system prefixes and morphophonemics

The core of this system, as established by Krauss (1965a) and which still is the best so far seen, is the three conjugations in the imperfective and perfective aspects (see Tab. 12.1).<sup>1</sup> This core, as noted, could be considered problematic, because of the partly inconsistent nature of its prefix morphophonology, especially what is called Inceptive perfective, but is

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<sup>1</sup> The 'A- of the Neuter forms appears, as well as the one of the negative Active perfective, only occurs in the absolute initial. This 'A- also appears in positive Neuter imperfective forms (not indicated in the table), but only in comparative forms. The *yi-* element in the Perfective negative combines as usual with a vocalic classifier (i.e. *dA-* or *LA-*), but in the absence of such appears exceptionally as a /A/ directly following the *s-* perfective marker.

**Table 12.1:** Core conjugation and aspect inflection, positive and negative.

		Active (act)	Inceptive (inc)	Neuter (neut)
Imperfective (ipfv)	positive		<i>qu'</i> -	<i>yi</i> -
	negative	-G	<i>qu'</i> - -G	'A- -G
Perfective (pfv)	positive	<i>s- yi-</i> -L	<i>GA-</i> -L	'A- <i>yi-</i> -L
	negative	'A- <i>s-</i> -L-G	<i>GA-</i> -L-G	'A- -L-G

strongly bolstered by the consistency in other mode-aspects. Imperfective and perfective are most basically distinguished in that the imperfective aspect is unsuffixed throughout and the perfective aspect has *-L* suffix. Active imperfective is the simplest, having no prefix (or suffix); Active perfective has (*-L* suffix and) *s-* prefix, so is also called *s-* perfective as well as Active perfective, synonymously. Inceptive imperfective uniquely has (*-L* suffix and) the prefix *qu'* ~, which occurs in a position far to the left of other conjugation prefixes, Zone B, instead of Zone D1, while Inceptive perfective has *GA-* prefix in D1. Neuter positive imperfective and perfective has *yi-* ~ prefixation and Neuter negative imperfective and perfective has ' (with *-L* suffix in perfective, zero in imperfective). Aside from the Inceptive imperfective *qu'* ~ prefix, all the other conjugation and mode-aspect prefixes are only in Zone D. Almost all the Zone D prefixes also recur in other mode-aspects. One could say that one exception is the zero of the Active imperfective, which is, not surprisingly, the least-marked paradigm semantically as well as morphologically.

The basic phonological details of these follow, not including for most purposes first and second person subject prefixes. For the pronouns themselves, see further in the subsections below (especially §13.3), as well as under (Chap. 9).

The *qu'* ~ for Inceptive imperfective is an abbreviation for an exceptionally variable morpheme which appears, as noted above, far to the left of the rest, in Zone B of the verb prefix matrix. This varies by umlaut to *qe'* when following prefixal *i-*, and is otherwise *qa-* (or *qu'wA-*) when no syllable (and no 1s subject prefix) intervenes between it and the stem. Otherwise, i.e. with vocalic classifier *dA-* or *LA-*, or 2s *yi-* or 2p *LAX-* subject, or with 1s subject *x-*, it is *-qu'*. This variability and relative complexity implies a pre-Eyak \**qwA-* ~. The phonological motivation of this variation should be clear enough, general Eyak loss of labialization in velar stops, schwa to /e/ after /i/, and schwa to /a/ before glottal stop. The segmentation, and identities of the \**qwA-* and ' are discussed in §10.2.2 on Zone B, and in the Chap. 6, as well as below in §12.1.5 on the Future.

The positive Neuter imperfective prefix is *yi-* of D3, in absolute initial with no vowel in the classifier (i.e. Ø- or *L-*), otherwise *CA-yi-* becomes *Ci-*, and *Cu-yi-* becomes *Cu-* (cf. §6.9). With *D-* element, i.e. vowel, present in the classifier, the classifiers *dA-* and *LA-* become *di-* and *Li-*, and if these latter classifier forms are preceded by *CA-*, this *CA-* becomes *Ci-* by vowel harmony. Thus e.g. *yiLeh* 'it is', *q'e' diLeh* 'it is again', *di:Leh* 'it (wood) is', *q'e' didiLeh* 'it (wood) is again'.

In some Neuter imperfective themes, i.e. in “comparatives” (cf. §14.7), a preceding 'A- ~ can be posited in absolute initial; this becomes 'i- in absolute initial by vowel harmony with *yi-* element following in D3, but otherwise deletes.

(1) Neuter imperfective themes

*o-ga' 'i:t'eh* 'it is like o'

*o-ga' q'e' 'idit'eh* 'it is like o again'

*o-ga' di:t'eh* 'it (wood) is like o'

*o-ga' q'e' didit'eh* 'it (wood) is like o again'

The negative Neuter prefix in absolute initial is 'a'- ~, from the same 'A- ~ plus '-'; otherwise CA'- > Ca'-. The examples in (2) are presumed, not necessarily attested.

(2) Neuter imperfective negative prefix

*dik' o-ga' 'a't'u:G* 'it's not like o'

*dik' q'e' 'a'dAt'u:G* 'it's not like o again / any more'

*dik' o-ga' q'e' da'dAt'u:G* 'it (wood) is not like o again / any more'

Taking up now the perfectives, in the positive Active imperfective with D-element, i.e. vowel, present in the classifier, the D2 prefix is not *sA-* but *s-*, and the classifier is *di-* or *Li-*. This is because the *yi-* element of D3 is also present, manifest after the classifier with the shift from /A/ to /i/ in its vowel. This absence of the schwa of the *sA-* with vocalic or syllabic classifier is ancient, exactly the same as in Athabaskan. Part—only part—of the complexity is that with a vocalic classifier the *yi-* element is present in Eyak in the vowel of the vocalic classifier, while with a non-vocalic classifier it is represented only by the schwa of *sA-*.

This is evident also from a comparative point of view. Athabaskan Inceptive perfective in '(sg) go back' is \**na-te'sdəya* and '(sg) go (away)' is \**te'zəya*, stem allomorph with initial *-y-*.<sup>2</sup> With a vocalic classifier the Eyak is exactly the same as in Athabaskan, *q'e' sdiyahl* 'it went back' with *di-* classifier and epenthetic *-y-*.

With non-vocalic classifier, however, the Eyak is not \**siyahL*, but absolutely consistent *sahl*, from a strictly synchronic point of view, with no overt trace of the *yi-* element. This is so not only in the third person, but even in 2s *sahl* 'you went', since with all Eyak *s-* perfectives the 2s subject pronoun is Ø-, as in the third person (cf. Chap. 9). At the same time though, there is the 1s form *siyahL* 'I went', where uniquely the subject pronoun *x-* is manifest in the vowel shift from *sA-* to *si-* following the *s-* instead of preceding it. (Cf. §10.2.4, Zone D, and cf. *q'e' xsdiyahl* 'I went back', where the *x-* appears before the *s-*.) The phonological origin of this *si-* is not entirely clear, but presumably reflects at least a voicing of an intervocalic /x/ which has lost any trace of labialization (cf. §4.3.4 for phonology of

<sup>2</sup> Krauss (1969) points out that the initial *-y-* of the stem reflects the *yi-* element.

/x/), in \*s-x-V-. It is possible that the /i/ vowel of the first person sequence *si-* is attributable entirely to the unrounded voiced velar fricative which then deletes. However, it seems at least equally likely that the distinct /i/ quality of that reduced vowel is attributable, at least in part, to a survival of the *yi-* element preceding the non-vocalic classifier. As such, however, it would be the only trace left in Eyak of the *yi-* element with *s-* perfective and non-vocalic classifier, except for the *-A-* in the *s-* perfective of all verbs with  $\emptyset$ - or *L*-classifier and with consonantal stem-onset. For more on this topic, see §14.10 below on the Active perfective.

As noted above, this subsection deals with only part of the complexity of the *s-* perfective morphology, i.e. positive *s-* perfective. The other part of that complexity is in the difference between the positive and negative *s-* perfective. The difference there is that the *yi-* element is present in the positive, but absent in the negative. Evidence for that is reasonably plain in Eyak, fully plain in Tlingit, and indirectly plain in Athabaskan. This will be taken up in stages in the subsections below.

In the Inceptive perfective (Ip), with D1 prefix *GA-*, there are no morphophonemic changes, other than the 2s *GA-yi-* > *Gi-*. There is no *yi-* element.

In the positive Neuter perfective there is always the D1 prefix *'A- ~ \emptyset-*, always with allomorph *'i-* in the positive because of assimilation to *yi-* element following, and always deleted when non-initial. The negative Neuter perfective prefixation is the same as the negative Neuter imperfective described above, with irrealis *'-*.

There is variation in the vowel stigmata of open variable stems. In stems of the form CV' (CVh in the imperfective) the stem becomes CV'L in all perfectives. However, in stems of the form CV (also CVh in the imperfective), the stem is CVhL in the Active and Neuter perfective, but is CV:L in the Inceptive perfective.

The variation in vowel stigmata of open stems (and of certain closed stems as well) is described in in §7.3 on stem variation.

It seems probable, especially in comparison with Athabaskan, that the CVh-*L* suffixation in the Active and Neuter perfective is historically analogical, the CV:-*L* in the Inceptive perfective alone being original. In fact, this spread or generalization of the *-L* suffix, from the Inceptive to also the Active and Neuter, may be seen as the basic point or principle for the recent historical development of the basic two-dimensional conjugation plus mode-aspect system of paradigms as recognized or seen in Krauss (1965a). For further discussion of open verb stem variation see §7.3, particularly in the discussion of the difference between the two main patterns of stigma-variation (§7.3.1 and §7.3.6), further suggesting relative recency of Active and Neuter perfectives with *-L* suffix.

### 12.1.2 Movement of the *s-* perfective prefix, and negatives

The *s-* perfective prefix is obviously central to an understanding of the Athabaskan-Eyak comparison in development of their conjugation and mode-aspect systems. Note further the conservative Athabaskan negative imperfective also with \**s-*, including even asyllabic *-s-*. Cf. PA \* $\text{ə-s-}\check{\text{c}}^{\text{wr}}\text{ə}\check{\text{y}}\text{-}$  ‘is not weeping’, Eyak *dik* ‘*Aski:nXLG* ‘did not weep’ (cf. *sAki:nXL* ‘did weep’).

The special metathesis seen in the first person *s-* or Active perfective *s-i-Le’-L* ‘I became’ (cf. *q’e’ xsdiLe’L* ‘I became again’) is still evident in much Athabaskan. In this, clearly, the reflex of the first person pronoun follows the *s-* perfective, which has to be explained historically as *s-x-yi-Le’-L*, i.e. *x-* (\* $\text{\$}$ -) plus *yi-* (\* $\text{\eta}^{\text{y}}\text{ə-}$ ) somehow collapsing into /i/. In fact, the cooccurrence of the *yi-* element with the *s-* perfective marker seems problematical, that being clearly present in the classifier vowel in *s-di-* and *s-Li-*, but otherwise (i.e. with  $\emptyset$ - and *L*-classifiers) apparently absent, at least as an /i/ quality vowel, in Eyak. This is so not only in third person *sA-(L-)*, but also in 2p *lAX-sA-(L-)*, and even 2s *sA-(L-)*.

With 2p *lAX-s-* and 1s *x-s-di-* and *x-s-Li-* we can see that the “norm” for order in Eyak (not Athabaskan) is subject pronoun preceding *s-*, whereas in the (positive) 1s with non-vocalic classifier the resulting *si-* is the “exception,” with the conjugation marker preceding the trace of the pronoun.

There is conceivably another interpretation of the first person *s-* perfective *si-*, that the pronoun precedes the *s-*, is deleted, and the *yi-* element, as preserved in *s-di-* and *s-Li-*, is also preserved in the 1s, while it is lost in 2s *sA-*, 2p *lAX-sA-*, and 3 *sA-*. This, however, seems to defy any phonological explanation. It should also be noted that the negative *s-* perfective has the affixation ‘*A-s-* with all four classifiers, and no *yi-* element, so the 2s and 3 forms are ‘*A-s-(L-)*, ‘*A-s-dA-*, ‘*A-s-LA-*, 2p ‘*A-lAX-s-* etc., and likewise 1s ‘*A-x-s-* etc. with the pronoun here too preceding the *s-*, in the absence of the *yi-* element. Possibly this could favor this second interpretation. In any case, it would certainly appear in modern Eyak that the subject pronoun precedes the perfective marker *s-*, but may metathesize to follow the *s-* in the 1s positive.

In the Inceptive perfective (in Eyak as in Athabaskan cognates), *GA-* precedes the subject pronoun in all cases, including all four classifiers, and negative as well as positive (cf. Tab. 12.2).

If we consider the *s-* perfective along with this clearly consistent Inceptive perfective set, we have two alternative interpretations. First, we must allow that the Inceptive perfective marker *GA-* and the Active perfective marker *s-* are in different positions within Zone D, Inceptive perfective *GA-* preceding the pronoun and Active perfective *s-* following it. Either that, or second, because of the complication of *si-* in the 1s positive *s-* perfective with  $\emptyset$ - or *L*-classifier (as in Athabaskan), where the *s-* is to the left of the pronoun, we allow that to outvote the first interpretation, so decide that the “norm” or underlying system is for the conjugation marker to precede the pronoun, with metathesis of *s-*,



**Table 12.2:** Inceptive perfective affixation.

	prefix	suffix
1s	GA-x-	-L
2s	GA-i- > Gi:-	-L
2p	GA- <u>I</u> AX-	-L
∅	GA-	-L

originally in the same position as *GA-*, preceding the pronoun, now to follow the pronoun in most cases, except 1s *si-*.

Only comparison with Athabaskan and Tlingit can cast any further light, necessarily historical, on this problem. Athabaskan has complications, but clearly has *s-* perfective, along with other conjugation markers (including  $\gamma\partial$ - < \* $\text{G}\partial$ -), preceding personal subject pronouns (1s, 2s, 2p). Tlingit likewise has the imperfective *ga-* and perfective *wu-* preceding the subject pronouns. Leer claims that Tlingit *wu-* is not only the equivalent of Athabaskan-Eyak *s-*, but that those are also cognate. It seems far more plausible, however, that Athabaskan-Eyak *s-* is cognate with the Tlingit *s-* that is an element of the whole Tlingit *s-* classifier series (along with e.g. the Tlingit *l-* classifier series, which is cognate to the Athabaskan-Eyak *L-* series). In this case, the *s-* classifier series would be a later development in Tlingit, the *s-* having “migrated” rightward from where it appears in Athabaskan and Eyak. In fact, the ambivalent position of the Eyak *s-* perfective, appearing both before and after the subject pronoun as described above, nicely shows Eyak as intermediate between Athabaskan and Tlingit, with *s-* in Eyak caught in the act of migrating rightward. With the rightward migration to the classifier position in Tlingit, the *s-* of course radically changes in function to classifier. A reverse migration, leftward, could presumably be posited as well. However, that seems less likely from a position of essential opposition of perfective to imperfective aspect, with the \* $\gamma\partial$ - in absolute complementary distribution with *s-* as in Athabaskan-Eyak. The *s-* then migrated furthest rightward to elaborate the classifier system in Tlingit. The synchronically active metatheses linking and complicating the order of prefixes in Eyak Zone D typically show Eyak in a historical position intermediate between Athabaskan and Tlingit. See further also Krauss (1965b, 1969) for comparative discussion. The explanation for \* $\text{s}\partial$ - ~ \* $\text{s}$ - reverse variation with  $\pm D$ - classifiers in Krauss (1969) as simply “prosodic” is incomplete, because of the evidence in the negative, that the perfective morpheme *s-* is indeed just \* $\text{s}$ -. The other factor is the *yi-* element, absent in negatives, present in positives. For detail, exemplification, and further discussion on the perfective prefix *s-*, see §12.1.4 on the Active perfective below.

It is perhaps no surprise therewith that the intermediate position of Eyak shows Eyak grammar as what might be considered a somewhat inconsistent hodgepodge, also to be seen in the following description of the semantics of Eyak (§§12.1.3–12.1.7) confined so far to the imperfective and perfective aspects.

### 12.1.3 Active imperfective

The Active imperfective, with no affixes, is expectably the least marked paradigm semantically, being default or generic: ‘is/was doing/happening’, i.e. ongoing at some time, not seen as finished. As Eyak is a tenseless language, it may also be used with reference to the past, and what matters is really the speaker’s point of view with regard to the act or event. Given that the Active imperfective has no affixes, it follows that the bare stem can be a whole verb word (and whole sentence), as in *ki:nX* ‘it is crying, wailing’. There is no “filler” affix as in most Athabaskan, and no need or possibility of such. An example paradigm is presented below as (3).

- (3) Basic Active imperfective conjugation of *-ki:nX* ‘weep, cry’

*x-ki:nX* ‘I am crying’

*yi-ki:nX* ‘you are crying’

*ki:nX=inh* ‘he/she is crying’

*da: ki:nX* ‘we are crying’

*lAX-ki:nX* ‘you (pl) are crying’

*k’u-ki:nX* ‘someone/something is crying’

Transitive *iGAX’eh* ‘I see you’, *xuGi:’eh* ‘you see me’, *da: lAXiGA’eh* ‘we see you (pl)’, etc. It is diagnostic of action verbs, i.e. verb themes of the action class, that the Active imperfective is used for what might be termed the unmarked mode/aspect. In fact, Active imperfective cannot be used for themes of any other class. Thus e.g. for the unmarked mode/aspect of a motion verb, Inceptive perfective must be used, thus *GAXa:L* ‘I am walking (along)’, *Ga:L* ‘it is walking (along)’, to the theme *-a:* ‘walk, go (sg)’. However, there are a number of derivations that convert a theme to the action class. Simplest of these, also without affix, is the usitative, especially common in nominalizations, e.g. *sich’a:X’inhinh* ‘my helper; he who goes to my help; he usitatively goes to my help’ (< *o-ch’a:X -a*). See further Chap. 14 on verb theme classes, and Chap. 15 on verb derivations.

### 12.1.4 Active or s- perfective

The Active perfective, or *s-* perfective has the Zone D prefix *s-*, and the stem suffix *-L*. Its basic meaning is ‘did, happened’, with the action or event seen as finished. However, as often used in derivation with stative verbs, this can also mean ‘still in effect’, as in *sidahL* ‘I sat’, therefore ‘I am/was/would be seated, I’m staying’, etc., *disiche’L* (‘I got hungry’, therefore) ‘I’m hungry’ etc. The complexities of the prefixation for this have been discussed above (§12.1.2).

The *s-* perfective (or Active perfective), may be used freely with all verb theme categories. It is therefore not diagnostic in the definition of verb theme categories.

There is an example of one special use of *s*-perfective in text from Anna, *dA'a:nd sidahL* ‘let me stay right here’, so glossed by Lena, as a sort of hortatory, rather than the expected ‘I’m staying/seated right here’. This might be a regular (unusual) use of the *s*-perfective (stative), or it might be an innovation from the obsolescent *s*-optative, *sidah*, q.v. in the section on optatives below (§12.3.3).

Two examples of Active perfective are given with both non-vocalic ( $\emptyset$ , *L*-) and vocalic (*dA*-, *LA*-) classifier, in both positive (Tab. 12.3 and 12.5) and negative (Tab. 12.4 and 12.5). Note that after the subject pronoun prefix all the persons are the same.

**Table 12.3:** Active perfective conjugation of *-ki:nX* ‘weep, cry’ (positive)

	$\emptyset$ - ( <i>L</i> -) classifier	<i>dA</i> - ( <i>LA</i> -) classifier
1s	<i>si-ki:nX-L</i> ‘I wept’	<i>q'e' xsdiki:nXLG</i> ‘I wept again/more’
2s/3	<i>sA-ki:nX-L</i> ‘you/it wept’	<i>q'e' s-di-ki:nX-L</i> ‘you/it wept again/more’
1p	<i>da: sA-ki:nX-L</i> ‘we wept’	<i>da: q'e' s-di-ki:nX-L</i> ‘we wept again/more’
2p	<i>lAX-sA-ki:nX-L</i> ‘you (pl) wept’	<i>q'e' lAX-s-di-ki:nX-L</i> ‘you (pl) wept again/more’
INDEF	<i>k'u-sA-ki:nX-L</i> ‘something/someone wept’	<i>q'e' k'u-s-di-ki:nX-L</i> ‘sth./s.o. wept again/any more’

**Table 12.4:** Active perfective conjugation of *-ki:nX* ‘weep, cry’ (negative)

	$\emptyset$ - ( <i>L</i> -) classifier	<i>dA</i> - ( <i>LA</i> -) classifier
1s	<i>dik' 'A-x-s-ki:nX-L-G</i> ‘I didn’t weep’	<i>dik' q'e' 'A-x-s-dA-ki:nX-L-G</i> ‘I didn’t weep again/any more’
2s/3	<i>dik' 'A-s-ki:nX-L-G</i> ‘you/it didn’t weep’	<i>dik' q'e' 'A-s-dA-ki:nX-L-G</i> ‘you/it didn’t weep again/any more’
1p	<i>dik' da: 'A-s-ki:nX-L-G</i> ‘we didn’t weep’	<i>dik' da: q'e' 'A-s-dA-ki:nX-L-G</i> ‘we didn’t weep again/any more’
2p	<i>dik' 'A-lAX-s-ki:nX-L-G</i> ‘you (pl) didn’t weep’	<i>dik' q'e' 'A-lAX-s-dA-ki:nX-L-G</i> ‘you (pl) didn’t weep again/any more’
indef	<i>dik' 'A-k'u-s-ki:nX-L-G</i> ‘sth/so didn’t weep’	<i>dik' q'e' 'A-k'u-s-dA-ki:nX-L-G</i> ‘sth./s.o. didn’t weep again/any more’

With preceding qualifiers there is prefixal vowel harmony with the *si-* of the 1s or with the *yi-* element following the classifier in the positive, and the *'A- ~* of the negative

is coalesced with the vowel of the qualifier (but crucially is preserved after the final consonant of the qualifier 'i:lih- 'mentally').

**Table 12.5:** Active perfective conjugation of *dA-leh* 'say' (positive).

	∅- (L-) classifier	dA- (LA-) classifier
1s	wAX di-si-li-L 'I said so'	wAX q'e' di-x-s-di-li-L 'I said so again'
2s/3	wAX dA-sA-li-L 'you/it said so'	wAX q'e' di-s-di-li-L 'you said so again'
1p	da: wAX dA-sA-li-L 'we said so'	wAX da: q'e' di-s-di-li-L 'we said so again'
2p	wAX da:-lAX-sA-li-L 'you (pl) said so'	wAX q'e' da:-lAX-s-di-li-L 'you (pl) said so again'
indef	wAX k'u-dA-sA-li-L 'sth./so. said so'	wAX q'e' k'u-di-s-di-li-L 'sth./so. said so again'

**Table 12.6:** Active perfective conjugation of *dA-leh* 'say' (negative).

	∅- (L-) classifier	dA- (LA-) classifier
1s	dik' wAX dA-x-s-li-L-G 'I did not say so'	dik' wAX q'e' dA-x-s-dA-li-L-G 'I didn't say so again'
2s/3	dik' wAX dA-s-li-L-G 'you/it did not say so'	dik' wAX q'e' dA-s-dA-li-L-G 'you/it did not say so again'
1p	dik' da: wAX dA-s-li-L-G 'we did not say so'	dik' da: wAX q'e' dA-s-dA-li-L-G 'we did not say so again'
2p	dik' wAX da:-lAX-s-li-L-G 'you (pl) did not say so'	dik' wAX q'e' da:-lAX-s-dA-li-L-G 'you (pl) did not say so again'
INDEF	dik' wAX k'u-dA-s-li-L-G 'sth./so. did not say so'	dik' wAX q'e' k'u-dA-s-dA-li-L-G 'sth./so. did not say so again'

As noted above, comparatively, the only trace of the *yi-* element with the non-syllabic classifiers is /A/, and even that is absent in the theme with the vocalic stem-onset -a 'go (sg)', Eyak *sahL* 'it went'; cf. however the Athabaskan cognates \*-zəya, \*-səya with the same meaning, with trace of the *yi-* at least in the -y- stem-initial (historically epenthetic), lacking in Eyak *sahL*. With the syllabic classifier variants *di-* and *Li-* in Eyak, however, regular in all positive Eyak *s-* perfectives, the *yi-* element with *s-* perfective is quite evident. It therefore seems much more likely that the *yi-* element was present in PAE with the positive *s-* perfective throughout, and was somehow lost as such in Eyak with non-syllabic classifiers (except somehow for in the first person singular, now *si-*, likewise in Athabaskan). The reverse, that the *yi-* element, PAE \*ŋʷə-, was not present with positive *s-* perfective,

and somehow became regular with the *D*-element classifiers, seems much less likely from a morphological point of view. In fact the very syllabicity in the allomorph *sA-*, where it occurs, must indeed be considered a survival of that *yi*-element. As noted somewhat differently above (§12.1.2), in the early 1960s and published e.g. in 1969, I had considered the “devoicing” of the Athabaskan \*sə- (\*s becomes \*z intervocalically) before \*də- classifier a “prosodic” matter, by surface rules similar to the behavior of French *e muet*, but that is very probably wrong, at least in terms of prosodic level. The basis for the complexity, if prosodic, needs to be explained in terms of morpheme order, with *yi*-preceding *L*-classifier, following with (*L*-)*dA-*. The PAE perfective prefix \*s- must have been non-syllabic, so simply \*s-. In other words, also, the vowel part of the syllabic allomorph of the Eyak perfective marker *s-*, is itself a remnant of the *yi*-element with the positive *s*-perfective. In some versions of an Eyak grammar that point might even be made to figure as a synchronic rule.

That non-syllabic *s-* is preserved as such not only before the syllabic classifiers, but also in the negatives, where no *yi*-element is allowed, in both Eyak and Tlingit. In Athabaskan that *s-* became the *imperfective* negative. Leer’s (2000) analysis of Athabaskan negatives is of significant interest here. There he suspects that the Athabaskan \*s- perfective was originally marked just by \*s-, without explanation, implying that \*sə- was a combination of \*s- plus \*ŋʷə-. He is also aware that \*ŋʷə- is conspicuously absent in negatives (likewise in Tlingit). He also shows systematically the morphophonemic differences between the Athabaskan \*s- perfective and \*s- negative, but is mysteriously silent about a possible identity or identity of origin between the Athabaskan \*s- perfective and \*s- negative. One reason may be that the negative marker \*s- somehow got switched to use for negative imperfectives instead of perfectives in Athabaskan. That surely is a distraction, but Leer is of course aware that in Eyak the two are inescapably the positive and negative of the same thing, Active or *s*-perfective.

There are two major pockets in Athabaskan where the old PA conjunct prefixal negative system is clearly preserved: Chilcotin, Carrier, Witsuwit’én, and in Alaska Lower Tanana, Koyukon, Deg Hit’an, Dena’ina, Ahtna. The most recent and most serious treatment of this negative system is Cook’s Chilcotin grammar. Cook (2013: 216–7) asks the question whether perfective *se-* and negative *se-* (imperfective) are “one morpheme,” and noting their mutual exclusivity, concludes they are indeed the same morpheme. Likewise, he concludes: “This mutual exclusivity suggests that there is only one and the same prefix (*se-*) with different functions” (Cook 2013: 498–9). This may be considered something of a radical statement for Athabaskan alone, without the Eyak comparison.

The most striking parallel is of course in the form least otherwise prefixed, third person zero classifier, e.g. Minto Tanana *ethtregha* ‘she is not weeping’ (with epenthetic initial *e-*, and nasalized specially-toned suffix *-a*). Cf. the Eyak cognate *dik* ‘*Aski:nXLG* ‘did not weep’ (*A-* is perhaps not cognate, nor of course are the suffixes). Not only are the stems cognate, Minto *-trekh* and Eyak *-ki:nX*, but most strikingly, Minto *th-* and Eyak *s-* are precisely cognate. That includes their lack of any vowel between the (voiceless) *th-* in Minto, *s-* in Eyak, and the stem-initial, i.e. the absence of any *yi*-element in the negative. The stun-

ning difference is that the Minto form means ‘is not weeping’, while the Eyak means ‘did not weep’, the regular negative of the *s*-perfective. This proves that it is the Athabaskan that has shifted the use of *s*-, from perfective to imperfective, in the negative.

There is still one more prefix *s*- of exactly the same position and with the same morphophonemics, insofar as it is attested: that of the obsolescent *s*-optative, for which see §12.3.3 on the optative mode.

Also to be noted here from a historical point of view is that the suffix *-L* in the *s*-perfective is not original, as it is not present in Athabaskan, which did have a perfective suffix, *\*-ŋ<sup>y</sup>*, evident in open stems. The Eyak perfective suffix here is instead probably a spread of *-L* from the Inceptive perfective *GA-\_\_\_ -L*, present in Athabaskan “progressive” *\*Gə-\_\_\_ -l*, the precise cognate to the Eyak. There is the further verb stem suffix *-l* (< *\*-l*) in Athabaskan negative perfectives, which could be a further source for the Eyak perfective suffix *-L*. In the synchronic Eyak system *-L* is in fact definitive for perfective, for all stems, open or closed. See further discussion of the spread of this suffix *-L* in §12.1.7 on the Neuter imperfective and perfective.

### 12.1.5 Future (Inceptive imperfective)

The Future, also referred to as the Inceptive imperfective, is most problematical as part of the core conjugation and mode-aspect structure we have for Eyak, especially in that the position it occupies in the verb prefix matrix, Zone B, is well to the left of all other conjugation mode-aspect prefixes, which occur in Zone D. Further, the phonology and morphology of the *qu’- ~* prefix is very different from all other conjugation mode-aspect prefixes; it is also variable, implying even two morphemes historically, *\*qWA-’-*. The Future is also freely used in all verb-theme classes. These traits clearly point to a relatively late origin for the Inceptive perfective as a member of the system. By “future” here is meant semantically anything from immediate to distant future, but of course still tenselessly, in that it could also mean ‘(in the past) was going to’ as well as ‘is going to’ or ‘will be going to’. The name or classification within this strictly synchronic system is justified semantically as referring to an act, event, or state the inception of which has not yet taken place. Cf. Inceptive perfective in §12.1.6.

The key justification for the present (already laid out in 1965) core verb system for a synchronic grammar of Eyak, with Inceptive imperfective of Zone B fitting into a pattern with five other prefixes of Zone D, is of course not only the semantics. It is the basic fact that the Zone B future prefix is in absolute complementary distribution with all the relevant prefixes of Zone D. There is no instance or trace in the corpus of any combination of

*qu'*- ~ and any of the conjugation or mode-aspect prefixes of Zone D.<sup>3</sup>

As explained in §6.6.2 on \*CwA- in the future and directive, the \*qwA- of the \*qwA-' prefix comes from the PAE \*q<sup>w</sup>ə- 'areal, event', still evident in Athabaskan, where it appears widely in the leftmost conjunct verb-word position as subject or direct object in its original meaning. (In Athabaskan \*q<sup>w</sup>ə- has widely also migrated to the right as a qualifier, sometimes called “gender” marker, e.g. for 'house'. In Athabaskan \*q<sup>w</sup>ə- also appears as object of postpositions, e.g. \*q<sup>w</sup>ə-ch'en' 'thence'.) The only other traces of PAE \*q<sup>w</sup>ə- in Eyak are of that origin, now preverbs, *qi*' 'place where', < \*q<sup>w</sup>-e' 'in place of (absent) o' and *qid* 'down off', the same with postposition-final -d. The marked /i/ timbre of the reduced vowel can only be of such origin. Note also probably the numeral *qAlahqa'ga*' 'four', < \*qwA-lah-qa'-ga', o-lah 'around o'. The segment /'/ of the Eyak future prefix is the unrealis, giving the prefix the meaning, clear at least etymologically, of 'unrealized event'.

The rules given in the morphophonemics for the future, including the variability of the vowel in *qu'*- (~ *qi'*-) ~ *qa'*- ~ *qe'*- (~ *qu'wA-*) are exemplified in the following (4):

(4) *qa'*- ~ *qe'*- (~ *qu'wA-*)

a. With Ø- or L- classifier and with no preceding 'i-

*qu'xki:nX* 'I'll weep'

*qu'yiki:nX* 'you'll weep' (allegro *qi'yiki:nX*)

*qa'ki:nX* 'it'll weep' (or *qu'wAki:nX*)

*da: qa'ki:nX* (or *qu'wAki:nX*) 'we weep'

*qu'lAXki:nX* 'you (pl) will weep'

*k'uqa'ki:nX* (or *k'uqu'wAki:nX*) 'someone/something will weep'

b. With preceding 'i-:

*'iqe'xgah* 'I'll dance'

*'iqe'yigah* (or allegro *'iqi'yigah*) 'you'll dance'

*'iqe'gah* 'it'll dance'

The relevant 'i- or i- prefixes are the indeterminate object and second persons singular and plural, so also e.g. *'iqe'xLxut*' 'I'll shoot you', *lAXiqe'xLxut*' 'I'll shoot you (pl)'. In the case of the indeterminate object in the directive derivation, where the object pronoun is *'ida'*- the future still takes the fronted allomorph, *'ida'qe'*-, where the fronting must be explained by analogy. Another complication for the future with Ø- or L- classifier is that all (final) /A/ vowels of the qualifiers of Zone C are expanded or converted to -i-. Thus *dAxleh* 'I say' in the future has the forms in (5):

<sup>3</sup> It is tempting to say that any such combination is inconceivable. Perhaps for that very reason, ironically, I have no record or memory of having tested such a possibility, which means therefore that scientific proof is lacking. It therefore can be stated only with a very high degree of confidence that such a combination is impossible.

- (5) Future forms of *dAXleh* ‘I say’  
*qu’di:xleh* ‘I’ll say’  
*qu’di:leh* (< *qu’dA-yi-leh*) ‘you’ll say’  
*qu’di:leh* ‘it’ll say’  
*qu’da:lAXleh* ‘we’ll say’.

With *dA-* or *LA-* classifier, the results are also with *qu’-* throughout, thus the forms in (6):

- (6) Future *qu’-* with the *dA-* or *LA-* classifier  
*q’e’ qu’xdAki:nX* ‘I’ll weep again’  
*q’e’ qu’dAki:nX* ‘you/it’ll weep again’  
*da: q’e’ qu’dAki:nX* ‘we’ll weep again’  
*q’e’ qu’lAXdAki:nX* ‘you (pl) will weep again’  
*q’e’ k’uqu’dAki:nX* ‘someone/something will weep again’, etc.  
*q’e’ qu’dAxdAleh* ‘I’ll say again’  
*q’e’ qu’dAdAleh* ‘you/it will say again’  
*da: q’e’ qu’dAdAleh* ‘we’ll say again’  
*q’e’ qu’da:lAXdAleh* ‘you (pl) will say again’  
*q’e’ k’uqu’dAdAleh* ‘someone/something will say again’, etc.

(With preceding *’i-* or *i-*, the *qe’* remains as such: *q’e’ ’iqe’xdAgah* ‘I’ll dance again’.)

The basic rule for the expansion or conversion of the CA of the qualifier to expand or convert to Ci: is that there be no syllable intervening between the qualifier and the stem. This therefore does not happen either if the classifier is syllabic *dA-* or *LA-* or the subject of Zone D is syllabic, namely 2s *yi-* or 2p *LAX-*. The phonological motivation for the expansion, precisely *-CA- > -Ci-*, and *-Cu- > -Cu-*, is not clear, but it is very essentially the same as that with another prefix of Zone B, the directive (*’u-*)-’- (from earlier *\*(’wə)-’-*), where the *’-* is also the irrealis. For this, including details and connected rules, see also §6.6.2 on *\*CwA-’-* in the future and directive, and §6.6.3 on expansion of the qualifier vowel, as well as §15.9 on the directive verb derivation, with very similar morphophonemic rules.

It may be of special interest to note here that the all-important verb for ‘hunt, go hunting’ is *k’u-she* ‘kill something’, but unless success is already achieved, in which case the Active perfective would be used, the usual form is the Inceptive imperfective ‘be going to kill something’. This even has a gerund with future prefixation, *k’uqa’she:l*, possible because *-qa’-* is in Zone B, not Zone D, all prefixes of which are delated in gerunds. Note likewise the relativized instrumental *’uX k’uqu’xLshehyu:* ‘my hunting-gear’ < ‘that with



which I will kill something’. Such use clearly reflects a highly correct amount of discretion in speech about hunting. See §§18.13.1 on gerunds and 18.13.3 on instrumentals.

### 12.1.6 Inceptive perfective

The Inceptive perfective has the Zone D prefix *GA-* and stem suffix *-L*. As noted in the phonology, open variable stems (i.e. stems of the form *-CV*) with Inceptive perfective suffix *-L* have lengthened vowel (becoming *-CV:-L*), and open variable stems (i.e. *-CV'*) add a glottal stop before the *-L* (becoming *-CV'L*); neither are *-CVhL* like the Active perfective. The Inceptive perfective presents none of the difficulties mentioned in connection with the Inceptive imperfective. It has the *GA-* in the regular Zone D1 prefix position for conjugation markers, and has the *-L* suffix, which has become definitive of the perfective. Further, the *GA-* is found in all the “Inceptive” paradigms except the imperfective, so defining the Inceptive conjugation. The problem here is that it is not always easy to see the same meaning for the *GA-* in all the other “Inceptive” mode-aspect paradigms. For the Inceptive perfective, however, the meaning can be seen clearly enough as that he “inception” of act, event, or state has taken place. Therefore the act or even is still going on, since only the inception has taken place. Therewith the Inceptive perfective is basic for Motion verbs. Since the position of *GA-* is unproblematical, personal inflection has minimal complications.

(7) Inceptive perfective with *-we* ‘swim’

*GAXwe:L* ‘I am swimming (along)’

*Gi:we:L* (< *GA-yi-*) ‘you are swimming (along)’

*GAwe:L* ‘it is swimming (along)’

*da: Gawe:L* ‘we are swimming (along)’

*GalAXwe:L* ‘you (pl) are swimming (along)’

*k'uGAwe:L* ‘someone/something is swimming (along)’

*q'e' GAXdAwe:L* ‘I am swimming back’

*q'e' GAdAwe:L* ‘you are/ it is swimming back, etc.’

The Inceptive perfective is thus expected as definitive of verb themes of the motion class for motion that is seen as going on (in any “tense”). Active imperfective with such verbs occurs only in derivations, such as usitative.

The Inceptive perfective is also prominent in derivations, particularly the “progressive,” specifying duration, continued motion, transition, or inceptivity. Thus with the action verb theme *-ki:nX* ‘weep’, Inceptive perfective *GAXki:nXL* means ‘I am weeping (along a way)’, or ‘I am weeping (in a process/act of some considerable duration)’, or, significantly, given the label “Inceptive perfective”, ‘I started weeping (as a process)’. See further on this

in §15.8. Further discussion is also found there of the justification particularly for the terminology “Inceptive perfective” and “Inceptive imperfective” for “progressive” and “future,” respectively.

### 12.1.7 Neuter imperfective and Neuter perfective

Most clearly seen morphologically and semantically as a unified conjugation is the Neuter. The main or essential difference between the imperfective and perfective morphologically is that the perfective stem has the suffix *-L*. Quite unlike the Active and Inceptive conjugations, the imperfective and perfective aspects of the Neuter have the same or very similar prefixation. Both imperfective and perfective Neuters have the conjugational prefixation (*'A*-)*yi-*. The non-comparative Neuter imperfective has the *yi-* only, while both comparative Neuter imperfectives and all Neuter perfectives have *'A-* as well. Negative Neuter imperfective and perfectives, and all Neuter conditionals, desideratives, imperatives, have (*'*)*a'*- (< *'A-*'-) instead, optative both *'A-*'- plus *yi-*. See also especially Chap. 15 on Neuter prefixes and problems of *yi-* and irrealis under §12.4.

Here follows a description of the surface results in the Neuter affix morphology, though such can also be found, differently organized, in Chap. 6, where those are presented for the individual prefixes involved. The positive imperfective has the prefixation (*'A*-)*yi-*. In the positive absolute initial (non-comparative) imperfective with non-vocalic classifier the prefix takes the form *yi-*, as in *yiLeh* ‘it is’. With preceding consonant this becomes *i-*, as in *xiLeh* ‘I am’. If a vowel precedes the prefix, the prefix appears as lengthening of that vowel., as in C *k'u:Leh* ‘something is C; C exists’, *di:Leh* ‘it (*d*-class) is’. With vocalic classifiers this prefix surfaces merely as /i/ as the vowel of the classifier (so *di-* and *Li-*), as in *q'e' diLeh* ‘is again’. In negatives, the *yi-* element of the Neuter prefix cannot occur. Instead there is *'A-* plus the irrealis *'-*, which becomes *'a'*-. Non-initially, the *'A-* drops but not the *'-*, and the preceding CA- therewith becomes Ca'-. The *-a-* may thus be identified with the *'A-*, to which the old irrealis marker *'-* has been added.

**Table 12.7:** Neuter imperfective paradigm for C-*Le*(*'*) ‘be C’ in the positive and negative.

	positive	negative
1s	<i>xiLeh</i> ‘I am’	<i>dik' 'a'xLe:G</i> ‘I am not’
2s	<i>yiLeh</i> ‘you are’	<i>dik' 'a'yiLe:G</i> ‘you are not’ <sup>4</sup>
3	<i>yiLeh</i> ‘it is’	<i>dik' 'a'Le:G</i> ‘it is not’
1p	<i>da: yiLeh</i> ‘we are’	<i>dik' da: 'a'Le:G</i> ‘we are not’
2p	<i>lAXiLeh</i> ‘you are’	<i>dik' 'a'lAXLe:G</i> ‘you (pl) are not’
INDEF	<i>k'uLeh</i> ‘sth./so. is’	<i>dik' k'a'Le:G</i> ‘sth./so. is not’

The *yi-* of the positive second person singular form is the Neuter conjugation marker, not the 2s subject pronoun, so identified because the *yi-* pronoun often deletes, but the conjugation marker does not. The indefinite form *dik' k'a'Le:G* is perhaps problematical morphophonologically; cf. e.g. *k'u:Leh* (< *k'u-yi-*) implying *k'u-* for the pronoun, whereas the negative *k'a'-* (not \**k'u'-*) implies *kw'A'-* for it. Cf. discussion of the vowel /u/ in §4.3.5; also §6.8 on the prefix 'A- ~.

With vocalic classifier, the personal inflection for the preceding, e.g. *C q'e' dA-Le()* 'be C again', becomes as in Tab. 12.8.

**Table 12.8:** Neuter imperfective paradigm for *C-Le()* 'be C' with *dA-* classifier in the positive and negative.

	positive	negative
1s	<i>xdiLeh</i> 'I am'	<i>dik' 'a'xdALe:G</i> 'I am not'
2s	<i>diLeh</i> 'you are'	<i>dik' 'a'dALe:G</i> 'you are not'
3	<i>diLeh</i> 'it is'	<i>dik' 'a'dALe:G</i> 'it is not'
1p	<i>da: di:Leh</i> 'we are'	<i>dik' da: 'a'dALe:G</i> 'we are not'
2p	<i>lAXdiLeh</i> 'you are'	<i>dik' 'a'lAXdALe:G</i> 'you (pl) are not'
INDEF	<i>k'udiLeh</i> 'sth./so. is'	<i>dik' k'a'dALe:G</i> 'sth./so. is not'

With preceding prefix, e.g. the qualifier *d-*, and non-vocalic classifier, the positive prefixation is as in Tab. 12.9.

**Table 12.9:** Neuter imperfective paradigm for *C-Le()* 'be C' with *d-* qualifier in the positive and negative.

	positive	negative
1s	<i>dixiLeh</i> 'I am'	<i>dik' da'xLe:G</i> 'I am not'
2s	<i>di:Leh</i> 'you are'	<i>dik' da'yiLe:G</i> 'you are not'
3	<i>di:Leh</i> 'it is'	<i>dik' da'Le:G</i> 'it is not'
1p	<i>da: di:Leh</i> 'we are'	<i>dik' da: da'Le:G</i> 'we are not'
2p	<i>dilAXiLeh</i> 'you are'	<i>dik' da'lAXle:G</i> 'you (pl) are not'
INDEF	<i>k'udi:Leh</i> 'sth./so. is'	<i>dik' k'uda'Le:G</i> 'sth./so. is not'

The 2p of the positive in Tab. 12.9 is merely a presumption, as apparently there is no appropriate form attested in the corpus (!, a possible alternative being *da:lAXi-*). However, the 2p of the negative is in this case confirmed by *dik' la'lAXLga:G* 'you (pl) don't know'.

There is a second or variant Neuter imperfective, same as the preceding, but with another prefix in Zone D1. This is treated in the morphophonemics section as underlying 'A- ~. This prefix has the allomorph Ø in all but initial position in the verb word (and after the qualifier 'i:lih-). More exactly, it has the allomorph Ø after a vowel. In the positive Neuters,

**Table 12.10:** Comparative Neuter imperfective paradigm for *o-ga' -t'e' ~ 'be like o'*.

	positive	negative
1s	<i>o-ga' 'ixit'eh</i> 'I am like o'	<i>o-ga' dik' 'a'xt'u:G</i> 'I am not like o' etc.
2s	<i>o-ga' 'i:t'eh</i> 'you are like o'	
3	<i>o-ga' 'i:t'eh</i> 'he is like o'	
1p	<i>o-ga' da: 'i:t'eh</i> 'we are like o'	
2p	<i>o-ga' 'ilAXit'eh</i> 'you (pl) are like o'	
INDEF	<i>o-ga' k'u:t'eh</i> 'sth./so. is like o'	

because these all have following *yi-*, by vowel harmony this 'A- never appears as such either, but always as 'i-. See §6.6.1 on this prefix.

The type of Neuter imperfective showing the prefix 'A- is called the “comparative” Neuter imperfective, as it occurs with Neuter themes that include one of the comparative postpositions *o-ga'* ‘same as o, like o’, *o-LAX* ‘more than o’, or *o-'u'X* ‘less than o’. These are either themes with dimensional adjectival stems, usually adding *L-* classifier, or themes with stem *-t'e' ~ 'be (like)'*. Thus the paradigm in Tab. 12.10.

Here the second person plural *'i-LAX-i-* is especially interesting, as the pronoun *LAX-* should certainly block the harmony on the initial 'i-, which we consider here regularly to be analogical. “Regular analogy” could indeed be considered a contradiction in linguistic terms, and here might synchronically indeed be proof that the prefix is no longer underlyingly 'A-. At the same time, however, there is still value in the identification with 'A-, hence the problem is of interest in principle for linguistics.

The prefixation in the negative of the comparative Neuter imperfective is identical with that of the negative of the non-comparative Neuter imperfective shown above, so e.g. *dik' 'a'xt'u:G* ‘I am not’. With preceding prefix, e.g. qualifier *d-*, the prefix sequence is *da'x-* 1s, etc., where the *da-* represents the qualifier *dA-*, plus the ' of the negative, thus the zero allomorph of the 'A-, which is either completely homophonous with the 'A- (~ 'i- ~ Ø-) of the Neuter positive or, more probably, to be identified with that.

The meaning of the Neuter imperfective is rather clearly stative ‘be so inherently’, e.g. *xichanh* ‘I am stingy’; or ‘be seen as so inherently’, to include e.g. *xik'a'd* ‘I am sick’ (perhaps an extension of its meaning ‘be hot’). In fact, the up to 70 verbs that normally occur in the Neuter imperfective constitute a verb theme class. Obviously what conditions are seen as inherent, by belonging to this class, are often of special semantic and cultural interest. For further on this see Neuter imperfective subsection under §12.1.7.

As noted, Neuter perfective prefixation differs from that of the Neuter imperfective only in that has essentially the same prefixation as Neuter imperfective, except that it always has the 'A- ~ of the comparative Neuter imperfective shown above. Therefore the suffix *-L* to the stem is what is definitive of the Neuter perfective. The Neuter perfective has no affixes unique to itself.

The suffixation with *-L* that thus distinguishes the Neuter perfective from the Neuter imperfective has very probably spread from the *-L* in the Active and Inceptive perfectives. This development is key to the definition of the modern Eyak verb inflectional system as a synchronic structure, as mentioned in §12.1.6 on the Active perfective. The *-L* in the Active perfective suffixation has probably spread from the *-L* in the Inceptive perfective, and perhaps also has the *-l* (< *-L*) in the Athabaskan negative perfective. It is the Active imperfective, Active perfective (minus *-L*), Inceptive perfective, and Neuter imperfective that have the closest cognation in Athabaskan. The Neuter perfective paradigm is uniquely in Eyak merely the product of the Neuter prefixation and the perfective suffixation, Neuter perfective thus appears to be the most recent Eyak paradigm to develop in this core part of Eyak grammar (along with Inceptive imperfective or future). In fact, without this development of Neuter perfective filling in the pattern, it would be hard, perhaps incorrect, to see the basic pattern as presented here. Especially vivid here is that Eyak grammar is inevitably a reflection of historical change.

It only remains to note here the semantics and use of the Neuter perfective. The meaning of this paradigm appears best defined as ‘be in a state for a period, term’, not permanently, or not necessarily permanently. Good examples are *k'a:dih 'i:Le'L* ‘he is lost, missing’, *'i:ndzi'd 'i:dahL* ‘he’s bowman’. These contrast with Active or *s*-perfective statives especially in that the latter views the state as having been achieved or reached as a state, without regard beyond that to duration, presumably open-ended duration. In fact, though it is used with themes that are not necessarily stative, the Neuter perfective complicates the verb theme class system by often forming stative themes, which overlaps with Active (*s*-) perfective statives to a rather large degree, thus forming a cline between statives that are always Active perfective, always Neuter perfective, and those which can be either with the whole range of frequency or preference, for which see §14.4 on stative theme classes. It therefore proved most practical to describe them together as such. The function and meaning of the Neuter perfective is treated in full detail in the combined subsection for those in §14.4.3 on verb theme classes.

The Neuter perfective meaning ‘be in state for a period’ makes it a third kind of perfective stative, along with the Active perfective stative ‘S is in state as result of process’, i.e. means ‘got into state and may (or may not) still be in it, got into open-ended state’, by far the most common of the three. Much less common than the Neuter is the Inceptive perfective stative ‘S is immobilized in non-changing state involving a process of pressure, resistance, standoff, distortion’, also a kind of stativization, along with ‘is getting into (such a) state’. The Neuter imperfective is an entirely different kind of stative from the three perfectives, an inherent state, no process involved.

We have an actual minimal pair for Neuter imperfective and Neuter perfective, in *la'q' yicha'sh* ‘it’s thick’ and *la'q' 'i:chahshL* ‘it’s thick’. The former means presumably ‘inherently (with no regard to time or duration)’, the latter presumably ‘currently (for some period)’, both as opposed to *la'q' shAchahshL* ‘it’s thick, it got thick (having become so as the result of a process).

A nice further example of the Neuter perfective, in fact with motion verbs, is with the preverbal *'iLLAXa:n'* 'in competition with each other', as in *'iLLAXa:n' 'i:ndiquhL* 'they're racing each other, they're in a running race', seen as a state for a time.

## 12.2 Excursus: verb theme classes

Because verb theme classes are defined in fact by the choice and use of the criterial imperfective and perfective paradigms defined above, and because choice of conjugation in the other mode-aspects to be presented in the subsections below on the other mode-aspects, a brief introduction to the verb theme classes will be presented here. Full account of verb theme classes is to follow in Chap. 14.

There are three major verb theme classes—action, motion, and stative—with three subclasses of motion themes—locomotion, classificatory, and postural—and four subclasses of stative themes—Neuter imperfective, Inceptive perfective, Active perfective and Neuter perfective.

Action themes are defined as those that take the Active imperfective as the “basic” or “unmarked” form, meaning ‘S is acting’. E.g. if one can say *xki:nX* ‘I am weeping’, *xdAlah* ‘I am drinking it’, or *GAx'eh* ‘I see it’, all Active imperfectives, as the subject (S) is actually weeping, drinking it, or seeing it, then those are action themes. Inceptive perfective in these cases would only be derivational, e.g. *GAxki:nXL* ‘I’m walking along weeping; starting to weep; weeping all day long’. For such see §15.8 on the progressive derivation.

Motion themes are defined by the use of the Inceptive perfective as the “basic” or “unmarked” form meaning ‘S is acting’ as S is acting. For locomotion themes one says e.g. *GAxwe:L* ‘I am swimming along’ as one is actually swimming along. For classificatory themes one says e.g. *'uch' GAXta:L* ‘I am carrying it thither’ (cf. *'u:d sAtahL* ‘it is in position there’). For postural themes one says e.g. *ya:nch' GAXda:L* ‘I am (in the motion of) sitting down’ (cf. *'a:nd sidahL* ‘I am sitting (seated) here’). Active imperfective in these cases would be only derivational, e.g. *'a:nd xdah* ‘I sit here, this is my sitting-place, this is where I sit usually’. For such see §15.2 on the usitative derivation. Choice of conjugation or conjugation prefix is complex and of some importance in each of the subclasses of motion themes, especially in the imperative, and to some extent in the optative and desiderative. This is far less so, if at all, with action themes.

Stative themes denote states or conditions, not actions, motions, or positions. They are defined and subclassed according to the use of Neuter imperfective, Inceptive perfective, Active perfective or Neuter perfective for ‘S is in state’ as S is actually in that state. Neuter imperfective themes seem to be for states seen as inherent, e.g. *xLits'anh* ‘I am strong’, *Santa Claus xiLeh* ‘I am (actually) Santa Claus’, but also *xik'a'd* ‘I am ill’. Inceptive perfective themes are an interesting small class, for states involving pressure, isometric balanced states, grimaces, e.g. *GAxLAXu'GL* ‘I am exerting myself’, *GAxLt'uxL* ‘I’m holding it’, *guGAXLa:n'L* ‘I’m standing’. Active perfective statives are for states seen as non-inherent which one has gotten into, e.g. *disiche'L* ‘I’m hungry’, *xsdigu'L* ‘I’m warm’. Neuter

perfective statives are for states or situations seen as temporary, e.g. *k'a:dih siLe'L* 'I'm lost'. Active perfectives are by far the most common subclass of statives, Neuter perfectives far less so, but the two seem so greatly to overlap that they are treated as a kind of cline, in the same subsection.

## 12.3 Conditional aspect, imperative, optative, desiderative modes

As shown above, only imperfective and perfective aspect use determines verb theme class. The remaining mode-aspects may be used in themes of any class. These are the conditional aspect; and the imperative, optative, and desiderative modes. Each will be taken up in some detail in the following subsections.

### 12.3.1 Conditional aspect

The conditional aspect is used for potential, hypothetical, or unrealized events or situations, as in English clauses introduced by 'if' or 'when', but not for realized events or situations.<sup>5</sup> The conditional has basically two syntactic uses. By far the more common is in clauses subordinated by the postposition *-da:X* 'and, if, when' (though that has been written preceded by a space as if it were a conjunction, which it is not). Taking up first here the Inceptive conditional, with the prefix *GA-*, we have *'a:nda' Gah da:X* 'if/when he comes here', as opposed to *'a:nda' sahL da:X* 'he came here and' or 'when he came here'; also negative *dik' 'a:nda' GahG/Ga:G da:X* 'if he doesn't come here'. The Inceptive conditional has in fact a wide range of conditional meanings, so also hypothetical or contrary-to-fact 'if he came/had come here'. In addition to non-realized situations or events, potential future or hypothetical, the Inceptive conditional can be used in the customary sense, 'whenever', so *'a:nda' Gah da:X 'ud k'uXAxLa:k'inh* may also translate 'whenever he comes here, I feed him'. Some other subordinating postpositions are possible, e.g. at least *o-ch'ahd* 'from o', *'a:nda' Gah-ch'ahd* 'after he comes here'; also perhaps *o-wahd* 'for the sake of', both from George Johnson and Anna in text, *xAtl' ya:n' dAGa'yah-wahd* 'for when the snow falls'. This latter is perhaps better seen as a nominalization of the verb phrase. For such nominalizations, see §18.13. Interestingly, the previous sentence is followed in the text by the same phrase subordinated instead by *da:X*, perhaps a correction, or clarification. For further information on the conditional aspect in sentence syntax, see Chap. 25 on sentence syntax, in which the conditional plays a major role of course in complex sentences.

<sup>5</sup> The conditional was earlier called "subjunctive" and is abbreviated "s" in Krauss (1966a) and Krauss (1970a).

In no instances of conditional, of course, can relativizing suffixes be used on the subordinated verb in the way that the human singular and plural relativizers =*inh* and =*inu*: have spread into non-relative use in non-subordinate mode-aspects. The only other attested use of the conditional is in fact in actual nominalization with such relativizers, e.g. 'AdiX *Ginh=inh* (*qu'xLxut*) '(I'll shoot) whomever comes in' or, where that suffix is Ø-, 'AdiX *Gah* (*qu'xLxut*) '(I'll shoot) whatever comes in', and from Anna in text, *GAqinh=inh* 'whoever goes (by boat)', *te'ya' 'u:da' dAG GALah* 'fish that swim up to there [are few]', *'uch' GAtah* 'whatever they give him'. For the most part, these relativizations hardly seem lexicalized. However, we do have, as noted above, from both George Johnson and Anna *xAtl' ya:n' dAGa'yahwahd* 'for winter', where 'winter' literally translates to 'for when snow falls'), which well may be considered a lexicalization. Probably to be added here is at least *qi' ya:nu' k'uGAdAteh* 'graveyard' (< 'place where anyone might be laid underground') and the place-name *XAtl'a'q' dla:GA'ah* 'area at the back end of which it (*dl*-class [stone?]) might be in position'. See §12.3.1.1 for Active conditional as relativized nominalization.

On 6-21-87 some late work was done with Sophie on the conditional, mainly a successful attempt to elicit relativized Active conditionals, along with relativized Inceptives. Thus, Sophie judged *sich' 'i:tah* (< 'i-yi-) *dik' qu'Xi:xahG* 'I won't eat what(ever) you give me' as "OK too," along with *sich' Gi:tah dik' qu'Xi:xahG* of the same meaning, i.e. Active conditional is actable with the same meaning as Inceptive conditional. Likewise, however, Sophie concurred that *sich' 'Atah dik' qu'Xi:xahG* 'I won't eat what(ever) he gives me' is "OK too, sounds good," along with *sich' GAtah dik' qu'Xi:xahG 'id'*. These are all good examples of conditionals as relativized nominalizations, but where there is no clear differentiation of the meaning between 'when' and 'just as S starts to' with either the 'i'-prefixed Actives or of course the AN-prefixed one. Sophie also offered on that occasion *dAde:d sich' Gi:tah da:X qu'Xi:xah* 'what(ever) (*dAde:d*) you give (*Gi:tah*) me (*sich'*) I'll eat (*qu'Xi:xah*); if/when you give me anything I'll eat it', which is presumably to be parsed as subordinated Inceptive conditional as a paraphrase or explanation of the nominalized conditional.

The Active conditional is inadequately documented, especially with regard to its prefix morphology, choosing usually 'i-, but sometimes AN-, the latter with unclear status. The Active conditional is so named because of this morphology, likewise the Inceptive, because of the prefix GA-. A most striking feature of the conditional aspect therewith is the semantics, that the meaning of the Active conditional, not the Inceptive, is 'when S begins to V', 'S begins to V and ...', or 'just as S was beginning to V (something else happened). In fact such terminology here might be considered a blatant misnomer, and a typical example of my tendency to give too much weight to morphology at the expense of semantics. See further below (this section) for a possible rationalization for the semantics. Thus we have *che:y 'ixshish da:X* 'just as I was about to drink tea, I was just starting to drink tea and...' (something happened, and my tea was not drunk, or presumably at least a significant portion of it was left in the cup), or also as expected, in the customary sense, 'whenever I start to drink tea...'. No postposition other than *da:X* subordinating the Active



conditional, or relativization of it, is attested, merely because this paradigm is of relatively low frequency and fully systematic informed elicitation of it never took place. There is no reason, however, to expect the Active conditional to be different from the Inceptive with regard to relativization or choice of subordinator.

Further, in instances such as *iLse'L da:X* 'as evening started to come on', *'iLXAla:g da:X* 'in autumn (i.e. winter began and)', often in text, we see that the Active conditional is used even where a process is sure to finish, but the verb refers merely to the onset of the process. The contrast still remains though, as in the minimal pairs *'iLXe'tl' da:X* 'before it gets dark; as soon as it gets dark' (i.e. 'when it begins to get dark') as opposed to *GALXe'tl' da:X* 'when it gets dark', *yi'Lqah da:X* 'at dawn, just as it starts to get light', or *yAGALqah da:X* 'when it gets good and light' (Lena).

Though there are instances of both Inceptive and Active conditionals with the repetitive suffix -g, e.g. *'u:ch' Axwe:g da:X* 'if/when I (start to try to) swim there' (Ac repetitive), there are no conditionals attested with the customary derivation, i.e. the customary is presumably precluded. In strong support of this claim is the fact, as noted above, that conditionals are freely used in the customary sense, which can be translated with 'whenever'.

There are also Neuter conditionals, with at least five instances attested, four with the verb *-t'e' ~*:

(8) Neuter conditionals

*'AnahshAkih 'i:lih'a'xt'eh da:X* 'I was just starting to be happy and (...)' (Lena)

*'uch' dla:XA'xt'eh da:X* 'just as I was looking at it' (Lena)

*wAX 'A'xLt'eh-ch'ahd* 'after I've kept them thus' (Anna in text)

*wAX 'i:lih'a't'eh da:X* 'when they feel like it' (Anna in text)

*dik' 'ida'yila:G da:X* 'if you don't hate' (Anna in text)

From the first two examples in (8), the meaning appears clearly to be like that in the Active conditional 'as soon as S starts to'. The third refers to keeping king-salmon slabs on a table under a weighted plank, in the context 'sometimes when I've left them there for one night, after I've kept them thus it is, I hang them up'. The fourth refers to custom, 'when they felt like it, they would go [from Eyak] to the mouth of the river to get seals'. The fourth could easily be 'whenever they began to feel like it', but the third is harder to explain and is the only instance that suggests the Neuter conditional might also have the same use as the Inceptive, as well as that of the Active, which it certainly has. Further, we also have an Inceptive conditional from a Neuter theme with *-t'e' ~* from Anna in text, *k'udzu:dah sidAGAleh siya: q'e' GAdAt'u: da:X* 'when (*da:X*) my (*siya:*) mind (*sidAGAleh*) becomes/has become (*GAdAt'u:*) (fully?) well (*k'udzu:dah*) again (*q'e'*)'.

The term "unrealized" might serve well for the purpose of rationalizing or justifying the terms "Active" and "Inceptive," given the above description of its use. Thus for the

Table 12.11: Conditional prefixation with subject prefixes.

	Inceptive cond.	Neuter cond.	Active cond.
1s	GA-x-	(')a'x-	'ix-
2s	Gi:-	(')a'yi-	'i:-
3	GA- <sup>6</sup>	(')a'-	'i-
1p	da: GA-	da: (')a'-	da: 'i-
2p	GAIAX-	(')a'IAx- (presumably)	'iIAx- (presumably)
indef	k'u-GA-	(')a'-	k'u-'i-

Active, it might be said “activity begun but not realized,” but for the Inceptive “(even the beginning not realized.” On the other hand, in the instances of nightfall and dawn, in the Active, as usual, the action is seen as a process of some duration, but only beginning, whereas in the Inceptive, though the action may be a process of some duration, it is viewed only as a whole, yet to take place.

Given this issue of (non-)realization, obviously related to aspect (cf. imperfective and perfective) much more than to mode, mood, or desirability (cf. imperative, optative, desiderative), clearly the conditional is much better classed as an aspect than as a mode, perhaps as a kind of subordinate imperfective. The choice of conjugation, relatively clear-cut and, as will be seen, so different from that in the three modes, is yet another way the conditional proves to be more like the aspects as well. For what it is worth, then, Eyak may thus be said to have three aspects and three modes, rather than two aspects and four modes. For further justification of the distinction between mode and aspect, and membership of each, see the discussion in the first paragraph of §12.3.4.2 on choice of conjugation in the desiderative, the last of the modes presented further below.

### 12.3.1.1 Morphology of the conditional

All open variable stems take the basic form CVh in the conditional, whether of the CV or CV' type. Occasional lengthening is possible, as in the case of *-t'u:* for *-t'e'*, probably expressive, and it occurs more often than not in the negative, where the form appears as *-CV:-G*, not *-CVh-G*. The only exceptions are the irregular *-Le(')* ‘be’ and *-le(')* ‘want’, e.g. *k'udzu: Gi:Le' da:X* ‘if you’re good’, *k'u'lAw 'iLe' da:X* ‘when it starts to get big’ (note shift of theme from Neuter stative to Active, in contrast to the other ‘be’, *-t'e' ~*, a shift which occurs in the other modes, as well), and *silah qe'yile' da:X* ‘if you love me’ (only attestation, Marie 2007).

The Inceptive conditional prefix is unproblematic, combining with the subject pronoun prefixes as shown in Tab. 12.11. Neuter conditional, as seen in the above attestations, is prefixed by *(')a'-* (< Neuter 'A- ~ plus irrealis '-) as in Neuter imperative and negative. The Active conditional prefix is most often *'i-* in absolute initial. Preceded by CV, the result is CV'-.

The prefixation with conditionals generally, including the Inceptive along with Active, is complicated by factors which bring in the use of AN-, as e.g. in Active imperative. Thus we have from Anna in text both *ya' GAdah da:X* and *ya' 'Adah da:X* 'if she stays', the latter influenced by *ya' 'Ade:* 'stay (stationary)!', with AN- replacing the Inceptive GA-. There are examples likewise with derivations that take the Active imperfective, e.g. *LinhGih XAtl' 'u:d ya' 'AxLah da:X* 'when I've kept (*ya' 'AxLah*) them there one night', which may be analogous to the customary, given the semantics. Instances from perambulative with  $\gamma$ AX- and repetitive are given in (9).

(9) Perambulative and repetitive derivations with conditional

a. With perambulative:

*yAX 'i:nxdAk'in't'* 'when I go around scratching (things)' (Marie, indeterminate object prefix 'i- lengthened)

*yAX 'AdAweh da:X* 'if you go swimming' (Lena, pointing out though that the stem cannot be lengthened, as would happen in the imperative)

b. With repetitive:

*'u:ch' 'Axwe:g da:X* 'if I try to swim there'

*da: qid 'Ada:LAqe:g da:X* 'just as we start to slide down'

*da:dAq'a:g da:X* 'as it starts to burn'

Thus these Active derivations seem to override the Inceptive and Active conditionals with the AN- prefix as in Active imperatives, at least optionally.

Beside cases where the motivation for replacement of 'i- by AN- is clear, as semantically logical ('start to'), there are instances of replacement specifically of the Active conditional prefix 'i- ~ by the AN- without those preverbals or Active derivations, all perhaps optional. E.g. Lena *'idi:xLAdah da:X* 'just as I was beginning to understand what you say' and *'ida:xLAdah* 'just as I understood a bit of what you say' (both presumably in a customary sense, in an attempt to speculate on a semantic difference); *GAdi'LAGu'* and *GAda:LAGu'* 'as it (place) begins to get warm', no difference noted. An instance from a Neuter is *'Awdahd 'u'la:dAtah* 'the sound of that began to be heard', from Anna in text which might have been *?'u'la'dAtah* (or *?'u:la'- ?*) if remaining Neuter, or, if becoming Active instead *?'u'li'-* (or *?'u:li'-?!;* but cf. *'u'li'xLgah da:X* 'just as I began to know him', Active from Neuter). Likewise, where the AN- prefix replaces the expected variant of 'i- after CA- with no syllable intervening before the stem, with the result Ci- as in the imperative, instead of Ci-', is found in at most three uncertain cases, *GAdi:tl'eh da:X* 'as it (place) starts to get cold';<sup>7</sup> especially interesting is (*gahG*) *di:'a'tl' da:X* 'if you chew (pitch)' from Anna in text, definitely 2s, in a customary sense, homophonous with Active imperfective, 'you're chewing pitch and...', but that is perhaps best understood as a confirmation of hypothesized 2s Active conditional, 'if you take to chewing pitch'. Another

<sup>7</sup> Fang-Kuei Li (§3.3.7) from a very rusty George Johnson in text, if not a mishearing for *GAdi'tl'eh*.

example, *dik' k'uXi:ya:G da:X* 'if you don't eat', from Marie, might well be 'if you start not eating anything' rather than Active imperfective. A nice instance of 2s with AN- is *dik' Xa:liya:G da:X Xi:ch' 'Ats'AX* 'if you don't eat it throw it away!' from Lena (probably not 'if you don't (start to) eat it'). Notebook X, p. 13, is a whole page of Active conditionals, with several instances of both types, 'i- and AN-, including three with repetitive (10).

(10) Active conditionals with repetitive

*GAda:dAGu'g da:X* 'if it gets warm' (along with *GAda:dAGu' da:X 'id'*)

*'idehdah q'e' da:dAq'a:g da:X* 'if it starts burning well again'

*'a:nch' 'Axwe:g da:X* 'if I try to swim here', but *'a:nch' 'ixweh da:X* 'if I swim here'

The page is without much care for the exact meaning, 'when' as opposed to 'just as S starts to', but it is likely that the last instance in (10) is 'just as I started to swim here'. The repetitives have AN- under the influence of the derivation that requires Active imperfective, perhaps analogically. It is in fact unclear whether the conditional with repetitive can take 'i-. Generally, however, it appears clear that 'i- is the regular Active conditional prefix, and that, at the stage of Eyak language use, AN- can replace both that and the Inceptive conditional GA-, probably with the meaning no longer distinguished.

### 12.3.2 Imperative mode

The imperative mode is of special importance and complexity in Eyak and Tlingit, while it is absent in Athabaskan. It therefore appears that Athabaskan has lost the imperative. Many of the questions taken up in this section were not addressed in an informed way during the main fieldwork period 1962–5, for instance verb-theme classes, or any correlation between postpositions or preverbs and conjugation choice, first pointed out for Athabaskan by Ken Hale in the late 1960s, as far as I know. This left in the dark much understanding of the Eyak imperative, in particular. To this must be added both the inherent complexity of the subject, and instability, variability and uncertainty of the remaining Eyak speakers in the terminal stage of the Eyak language. Given the nature and situation of the language, and the lack of informedness of the linguist, so that the elicitation of much of the data for this purpose was largely random, we must consider ourselves fortunate indeed to be able to piece together at this late date as decent a picture as follows here for the Eyak imperative.

Unlike Athabaskan, Eyak not only has singular and plural imperatives, but an elaborate system of them, more elaborate than its basic conjugation system for imperfectives and perfectives. The Eyak imperative contrasts are partly broken down, but careful analysis of the data can indeed reveal patterns. At least some of these are partly relatable to Athabaskan conjugation patterns, the choice of which is related to preverbals.

Eyak has three main conjugations for imperfectives and perfectives, Active, Inceptive, and Neuter, to which correspond the imperatives with the prefixes AN-, GA-, and 'a'-

(*'A- ~ plus 'i-*), respectively. At the same time, there is a fourth imperative, with prefix *'i-*. This was once tentatively considered a subtype of Active, then a subtype of Inceptive, if of anything, because of its two main uses, as follows. First, it is used especially with locomotion verbs, with “atelic” preverbals, along with and contrasting with Inceptive *GA-* used with “telic” preverbals. Second, it is used with Inceptive (*GA-*prefixed) stative verbs, an interesting fact not noticed before. However, for the present it is simply considered a fourth conjugation, called *'i-* imperative. The semantics do not clearly place it as a variant of one of the three otherwise established conjugations, so the morphology remains the basis for its classification as a fourth conjugation.

The following discussion will present first the morphology or morphophonemics of the imperative conjugations, then the choice of conjugation.

### 12.3.2.1 Imperative prefix morphology

As noted above, there are four prefixes instead of three for the imperative mode, to be taken up here in the order *GA-*, *'i-*, *'a'-*, *AN-*.

The Inceptive imperative prefix *GA-* does not vary at all. In the singular it is *GA-*, with no overt element for 2s, and in the plural it is *GALAX-*, with the usual 2p subject prefix *LAX-*. There is no effect on or from following classifiers or preceding qualifier or other prefixes.

The *'i-* imperative prefixation is 2s *'i-*, 2p *'iLAX-* in absolute initial position. This becomes *'-* following a vowel, i.e. *-u'i(LAX)-* becomes *-u'(LAX)-*, *-i'i(LAX)-* becomes *-i'(LAX)-*, and *-A'i(LAX)-* also becomes *-i'(LAX)-*. This last and most frequent rule (*-A'i- > -i'*), may have resulted in some mishearings or misidentifications with respect to some Active imperatives with the segment *-i-* in the same position (see §10.2) in earlier fieldnotes or manuscripts. In the ledger (Krauss 1966a) I had left unlabeled this prefix and its allomorphs, along with the *-i-* of the Active, not yet clearly distinguishing them.

The Neuter imperative prefix is simple as well, *'a'(LAX)-* in absolute initial position; it combines with a preceding vowel as *-a'(LAX)-*. All attested instances are from preceding /A/, but this would presumably apply also to preceding /u/, if such a sequence is or were possible, e.g. a causative with *xu-* 1s object or *k'u-* indefinite object. As is explained in §6.8, the prefix (*'*)*a'* is derived from *'A- ~ plus 'i-* irrealis.

The Active imperative prefix is *AN-*. As described in §6.7, in absolute initial position this is *'A-* for 2s, and *'ALAX-* for 2p. Following the vowel /A/ or /a:/ and with a syllable between it and the stem, the combined result is always /a:/, i.e. with the syllabic classifiers *LA-*, *dA-*, and/or *LAX-* 2p subject. With no syllable intervening, i.e. with 2s subject and  $\emptyset$ - or *L-* classifier, the result is generally /i:/, the main regular exception being qualifiers *XA-* and *LAXA-*, the results being generally *(-)Xa:-* or *(-)Xa:n-*, though the alternative *LAXi:-* is especially frequent. There are in fact occasional slips or lapses either way, which when questioned are usually rejected, or one is strongly preferred over the other, but this slight

variability is a sign of less than absolute status or depth of the rule.<sup>8</sup> After the vowel /u/ of 1s object *xu-* and indefinite *k'u-*, or the class-mark/qualifier *gu-*, the result is /u:/, sometimes nasalized. Because of the ambiguous position of the reflexive object prefix 'Ad- as preverbal or conjunct, an immediately following Active imperative can take the form of either 'AdA- or 'Ada:-, e.g. 'AdALAGu' or 'Ada:LAGu' 'warm yourself!'. With directives, a certainly imperative instance is *sitl' a'Xe:* 'tell me of it! (theme O-'Xa 'S tells of O)', where the imperative prefix is completely absorbed, and the third person object 'u-3 is opened to /'a-/, still distinct from the indicative 'a'Xah 'is telling of it' because of the vowel-shifted lengthened imperative stem -Xe: (see §12.3.2.2).

### 12.3.2.2 Imperative suffixes and stem-morphophonemics

There is one morpheme that is suffixed only to the imperative stem of the verb, =*uh*. It otherwise occurs only with the interrogative enclitics =*d* and =*sh*, and the topicalizing enclitic =*q*'. This =*uh* is optionally present for a third person non-human direct object of transitive imperatives, presumably with all conjugations. It is attested with proportionately greater frequency in the older sources, especially in Rezanov's (1805) description of the Yakutat dialect, e.g. 'ita'uh 'take it!'; in fact it was probably first noted in re-eliciting from Rezanov, and was perhaps becoming obsolescent at Cordova in the 20<sup>th</sup> century. Likewise for human singular and plural direct object (or also indirect object, or subject, unlike =*uh*), the enclitics =*inh* and =*inu:*, respectively, are used (in all mode-aspects, unlike =*uh*), with the usual nasal umlaut (see §6.1).

The variability of variable open stems is more complex in the imperative than in any other Eyak mode-aspect. Most fundamentally, except for Neuter, the imperative takes the form CV' for all variable open stems, both for stems of the CV and CV' type, in all conjugations, and even sometimes, at least optionally, for basically invariable stems of the form CVh, thus analogically, CV'. This fundamental simplicity is complicated by two factors, as follows.

First is lengthening of CV' to CV: either as expressivity, and/or as a property of the stem itself. Examples of expressivity are presented in (11), all of which could presumably show such variation vowel length.

- (11) Examples of vowel lengthening as expressivity

'iLqe:' 'take it by boat!'

XashLAX 'Ada:' 'sit closer!'

'idah ya' 'Adi:n'inu: 'make them behave! (make them sit still nicely!)

qa' GALyi:n'inh / qa' GALyin'inh 'wake him up!'

<sup>8</sup> In the 1960s I did not understand this rule and its laxity. (As noted above, some Inceptive 'i- imperatives of the form -i' may have been mistakenly transcribed or identified as Active -i:-.)

*xu:(n)Lla' / xu:Lla:'* 'save me!'

Statistics for this type in the corpus are such that the expansion probably does not occur in more than 10% of the instances with a given stem. With certain stems, however, the statistics are quite different. With the stem *-she* 'kill', for example we have 'Ashe:' 'kill it!' twelve times with expanded nucleus, (no *-she*), Inceptive *GAshē:* twice, and *GAshē'* once. In themes with *-tl'i* 'bind' we have 23 instances of *-tl'i:* in the Inceptive and seven in the Active, none of *-tl'i'*; but in locomotion themes with the meaning 'transport in canoe', with *'i-* Inceptive we have still five instances of expanded, but one short, *xu'tl'i'* 'take me in canoe!', i.e. only one instance in 36, no doubt analogical. With the stem *-le* 'act' we have 22 instances of expanded *-le:* and only five of *-le'* in the Active and *GA-* Inceptive, but both instances of the /'i/ are short, *'ile'*. Similarly, with the irregular transitive or causative of *-le*, *O-Li* (< *-L-le*) 'act upon O', we have 14 instances of *-Li:* and only two of *-Li'*. Finally, in the case of the vowel-initial stem *-a* (sg) 'go', the Active imperative is *'a:* and *GA-* Inceptive is *Ga:*, whereas *'i-* conjugation is *'iya'*, perfectly regular with epenthetic /y/, for some reason never expanded to *\*'iya:*, evidently, in the many dozens of instances we have in the corpus. This raises the question whether the long vowel might come from the initial underlying sequences *'A-a-*, and *GA-a-*. Because 2p subject *LAX-* is semantically excluded, we cannot get an answer from this. The one other such stem, exclusively in the theme *O-X-a* 'eat O', has a relevant Inceptive imperative *Xa:n' XAGa:* 'finish eating it!' with a long vowel, but the corpus lacks the decisive form with plural subject.

To the question of the degree to which these expanded CV:'-imperatives may be a property of the stem itself, with no further explanation within Eyak, there may well be some obvious comparative answers. For example *-tl'i* certainly is cognate with Athabaskan *-tl'u* of the same meaning 'bind', presuming something like PAE *\*tl'iw*, likewise perhaps '(sg) go' and Athabaskan or PAE *\*ha:w*.

The second complicating factor in imperative stem-morphophonemics is here called "e:-shift", where the stem basically takes the form of stem-initial plus long vowel /-e:/, i.e. -Ce:, clearly with underlying /-a/ and /-u/ shifted to /-e:/, perhaps also instances of /-i/ (and of course /-e/). This might have been called "umlaut" or "ablaut", but 'e:-shifted' is most descriptive, even though the shift is sometimes blocked, especially since a good explanation for the shift is lacking. (The /e:/ can be further "umlauted" to /i:n/ before the enclitics *=(h)inh* and *=(h)inu:*, cf. §6.1). It seems possible that this e:-shift may have come from some \*e-like suffix, but no such suffix is found with closed stems. It may be noted that expansion in the customary and persistive of reduced stem vowels very similarly results in /e:/, but this resemblance seems coincidental, as there is no reason to assume a reduced stage for the vowel of these imperative stems. It is unclear whether stems of the form *Ci* are shifted: *-tl'i* 'bind'; *O-Li* (< *O-L-le*) 'process, make O' on the other hand regularly appears as *-Le:*, but that is still clearly related to intransitive *-le*, as shown e.g. in the passive perfective *sLilil* 'was made'.

e:-shift in stems occurs only in Active and Neuter conjugations, never in Inceptive (with *GA-*), or *'i-*. It occurs in Active and Neuter stative themes, and most often of all in

action themes. In postural and classificatory themes it is found particularly and often only with the preverb *ya* 'to/in a state of rest', cf. (12).

- (12) *e*-shift in postural and classificatory themes with preverb *ya* 'to/in a state of rest'
- ya* 'Ade: '(sg) sit still!' (< -*da*)
- ya* 'AlAXqe: '(pl) sit still!' (< -*qu*)
- ya* 'Ate: 'lie still!' (< -*te*)
- ya* 'ALe: 'set them!' (O-L-(*y*)*a*)

With zero-initial stems *e*-shift cannot be found with -*a* '(sg) go', but it is quite frequent with O-*X-a* 'eat O', as *Xa:ne*: '(sg) eat it!', pl *Xa:(n)lAXe*: 'eat it!'. Apparently *e*-shift is also possible for locomotion themes, but two of the three such CV stems are -*we* '(sg) swim' and -*qe* 'go by boat'; -*a* '(sg) go' for some reason seems not subject to *e*-shift; cf. perhaps PA \*-*ha:w* with sonorant coda, but we do have *yAX* 'Ade: 'take a walk!', perambulative *yAX* -*dA-a*-(*X*). The behavior of the regular *dA-a* > *da*- shows that that sequence is reinterpreted as a stem -*da*, perhaps only thus allowing -*de*-, leaving unanswered the question of *e*-shift in open locomotion stems. The shift to /e:/ itself can sometimes be blocked, again presumably as a property of the stem itself, e.g. -*q'a* 'burn' shifts to -*q'a*; not \*-*q'e*; cf. Athabaskan \*-*q'an*, with a final sonorant. Furthermore, Eyak stems with nasalized vowel, e.g. Neuter stative '*a*'*Lats'a:n* 'be strong!', are never shifted.

Lengthened imperative stem-vowels are regular in fully variable open stems in the Active derivation (§15.7), CV:, and in many cases these can be shifted to Ce: as well, e.g. *yaX* 'AdAwe: 'go swimming', *yAX* 'Ade: 'take a walk!', *yaX* 'AdAqe: 'boat about!'. But Marie prefers *yAX* 'AlAXdAq: '(pl) sit about!', avoiding -*qe*: because of homophony with the preceding.

Shortening of *e*-shifted stems to Ceh also sometimes occurs, especially in Neuters, as will be shown in §12.3.2.3, as though to show that the truly distinctive feature of this imperative stem type, is the shift to /e/, rather than the length. The opposite may be true in the case of the perambulatives with *yAX*.

### 12.3.2.3 Variable open imperative stem types by conjugation

Here are summed up the variable open stem types that occur in the four imperative conjugations, with special attention to problematic or irregular stems or themes.

Simplest for form of variable open stem are the Inceptive imperative (or GA- imperative) and the '*i*-imperative. That these show the same stem shape is one of the reasons the '*i*- might best be classified with the Inceptive in the case of the imperatives.<sup>9</sup> All open

<sup>9</sup> See §12.4, where the '*i*- in the conditional aspect (and in customary) is discussed, not matching the '*i*-imperative semantically.



stems here take the basic form CV' (or CV:' in some special cases described above), and never show *e*-shift.

Neuter imperative variable open stem forms are the next simplest to predict, if only because we have relatively few of those attested. Such are attested only with Neuter stative verbs, of course, but by no means with all of those. Variable open Neuter stative stems are mostly of the CV' type. The only exception noted is the Neuter stative theme *o-dahd 'u'-l-ta* 'listen to o' (lit. 'has head against o'), for which we have four imperative attestations. In two of these, one each from Lena and Marie, the stem shows the form *te*; with the same *e*-shift as in Active imperatives noted above. We have two further instances, both from Lena, with stem-form *teh*, by a process which it is probably best to call shortening. Cf. the case of *-t'e' ~ 'be'*. In fact, most instances of Neuter imperatives we have are of the two irregular verbs with the meaning 'to be': *-t'e' ~* and *-Le(')*. The most are for *-t'e' ~ 'to be* (a certain way)', for which we have 37 imperative instances in the corpus through 1965, 19 with stem *t'e*: and 18 shortened to *-t'eh*.<sup>10</sup> For C *-Le(')* 'S is C' we have 11 instances of imperatives in the corpus through 1965, 8 of which are Inceptives, *GALe'*, 2 are Actives, *'ALe'* and *'ALe:*, and only one is Neuter, *k'udzu: 'a'Le:* 'be good!' (Lena). (For these contrasting incidences, cf. again the optatives). For the stem *-a'* '(sg) extend' we have 8 (causative) instances of Neuter imperative, all from Lena, and all except one with shifted stem *'e:/*, the other shortened to *'eh/*. We have at least two other individual instances of Neuter imperatives with variable open stems, *-ts'a:n'* 'strong', stem form *-ts'a:n*, with *e*-shift blocked as shown in §12.3.2.10, and *-ga'* 'know', stem form *-gah*. It is difficult to determine whether this *-gah* is a shortening of *-ga:* with blocked *e*-shift, or, more likely, an analogical "default" instance modeled on the imperfective, which occurs occasionally throughout the corpus, where a regular imperative stem-form does not exist or is no longer known. There is one other exception, with variable open stem *-da* '(sg) sit, stay', *'AwyAq' 'a'de:* 'wear/be dressed in that!', corresponding to Neuter perfective, e.g. *'uyAq' 'ixidahL* 'I'm wearing it' (Marie). This implies an inadequacy in or question about the theme-class system, which perhaps should allow an additional subclass for "Neuter perfective" themes.

From the above it is clear the Neuter imperative for variable open stems is never CV' (or CV:'), but seems, from the limited number of stems available, to be either Ce: or Ceh, in about equal measure, probably in free variation. Neuter imperative thus presumably requires *e*-shift with especially frequent shortening and/or analogy with imperfective, especially judging from the case of *-t'e' ~ 'to be'*.

There are no other verb stems that vary in the same way as *-t'e' ~ 'to be'*: positive Neuter imperfective and optative are *-t'eh*, Inceptive imperfective is *-t'uh*, all imperfective negatives are *-t'u:G ~ -t'uhG*, Inceptive imperative is *-t'u'*, and all perfectives are *-t'u'L*. Athabaskan has cognate *\*-t'e* (no final sonorant; but PAE presumably *\*-t'ew*). We cannot

<sup>10</sup> Only two others are Inceptive, *GAt'u'*, and none are Active; cf. §12.3.3 for the situation with optatives for this verb.

tell whether *-t'e:* is an *e*-shifted version of an underlying *\*-t'u:* or not. The fact that a free variant is *-t'eh* (rather than *-t'uh*) might suggest it is not, but cf. the definitely *e*-shifted Active imperative *-te:* from *-ta* 'move', and Neuter *-e:* from *-a* '(sg) extend', with occasional variants *-teh* and *-eh*, along with Neuter imperative *-t'eh*, as well as the instances of *-de:* and *-te:* from *-da* '(sg) sit, stay' and *-ta* 'move' cited above. It does indeed appear that Neuter imperative undergoes fundamentally *e*-shift, with frequent shortening.

The "defective" verb stem *-de:* in Krauss (1970a) is to be reinterpreted as *e*-shifted *-da* '(sg) stay', in *dAwa'd 'a'de:* 'hurry, a Neuter imperfective derivation.

It is in the Active imperative that we have the greatest variety of open variable stem forms. We have mentioned the following: basic CV', lengthened variant of that CV:', the *e*-shifted Ce:, with occasional shortened variant Ceh, of significantly lower frequency than occurs in the Neuters. It will be shown below that the choice between Ce: and CV' types, likewise the choice between Active, Inceptive, and 'i- imperatives, is correlated with both preverbals and with theme-classes, possibly also a property of certain stems. There appears to be a third Active imperative basic stem type, "default" CVh. One source of these is certainly basically invariable stems of the form CVh, even though these may also show analogical Inceptive imperatives CV'. Another source, however, may be "default" analogy with imperfective CVh, where a rule for imperative form is lacking, i.e. not known or not applied.

There appears to be no difference between the imperatives for open variable stems that are represented as CV (for which the Active, Inceptive and Neuter perfectives have the form CVhL, CV:L and CVhL, respectively), and those represented as CV' (all perfectives CV'L)—no difference other than that statistically predictable from the important fact that Neuter open variable stems are mostly -CV' and Active ones mostly CV. A case of Active CV' is O- 'L-qa' 'count O', for which we have from Lena "default" 'a'Lqah 'count it!'; Marie calls that "lazy," preferring 'a'Lqe.

#### 12.3.2.4 Choice of conjugation in the imperative

We now come to the choice of imperative conjugation, and with that, choice also of the two main types of Active, basic CV and *e*-shifted (both with variants); of the Inceptive GA-; and of 'i-. This too is a most complex matter, since, as far as that choice can be determined, it must be correlated with at least two factors, both that of theme-class and that of type of preverbals, combined. There are seven rather distinct theme-classes or subclasses, as noted above (sec:conj:excursus). There are a hundred or so preverbals, which seem to form something of a cline for what we shall call "telicity," with regard to actual attainment of a goal, as opposed to departure from a point, or to more abstract motion without reference either to goal or point of departure, "atelicity." Telicity can vary, moreover, for the same preverbal, according to different theme-classes or subclasses, e.g. classificatory o-ch' 'Ata' 'give it to o!' (not 'ita') but locomotion o-ch' 'iya' 'go to o!' (not 'a:'). Therefore the only workable approach is to organize the analysis first by theme-class or subclass, with the

factor of preverbals subordinated thereto. Order of presentation will be generally from the simpler to the more complex.

### 12.3.2.5 Stative verb imperative conjugation choice

The choice of imperative conjugation is relatively simple in stative verbs, especially as here the factor of preverbals is minimal. There are three or four subclasses of statives: Neuter (imperfective), Active (*s-* perfective) and Neuter perfective (on a cline), Inceptive (*GA-* only), to be taken up in that order.

Neuter verbs are of course inherently stative. Neuter imperfective (or in at least one case perfective) stative themes can take the Neuter imperative, and of course no other class of verbs takes the Neuter imperative. As noted above, however, by no means all Neuter imperfective themes take or prefer Neuter imperatives. Imperative instances are scarce in all statives in the first place. Often these imperatives of Neuter statives are Active or Inceptive, for the most part seemingly interchangeable or random, with, however, sometimes a hint or suggestion that the Active may mean or meant more ‘be so!’ while the Inceptive may mean or meant ‘become so!’, but this is no longer at all clear, any more than one or the other meaning is prevalent in the Neuter imperatives. A clear pattern for unclear reasons prevails with the two verbs which translate as ‘to be’: as noted above. With *-t’é’* ~ ‘to be (a certain way)’ we have by far the largest number of imperative instances, 38, of which 37 are Neuter, and only 1 is Inceptive, whereas with *C -Le’* ‘to be C’ we have basically the reverse, 9 instances, of which 5 are Inceptive, 2 are Active, only 1 is Neuter, and one *’i-*. This strange pattern prevails also for the optative in these two verbs (see below).

The Neuter perfective stative (a class not well attested in the imperative) which has been noted in Neuter imperative is *sidahd ’uu:la’te*: ‘listen to me!’, the directive *o-dahd ’u’-l-ta* ‘listen to o’ < ‘have hear directly against o’.

The imperatives (not abundant, often causatives) we have for Active or *s-* statives seem to prefer or require the Inceptive imperative.

- (13) a. With *dAshAche’L* ‘is hungry’:  
*dAGAche’* ‘be/get/stay hungry!’ (Lena, rejecting *\*di:che’* Active imperative)
- b. With *lAshAwAdjL* ‘is ashamed’:  
*lAGAwAdj* ‘be ashamed!’ (Lena, Marie)
- c. With *sa’li’ts’L* ‘is wet’:  
*GALLi’ts* ‘wet it!’ (Marie, Anna)
- d. With *sAla:L* ‘be wet’:  
*GALLa;* ‘wet it!’ (Lena, Marie)

See next below, and under §12.3.2.9 on postural verbs for *li’Lya’* ‘get old!’ instead of the expected *\*?lAGALya’*.

The class of Inceptive stative verbs is a small one, recognized late, and attested for only up to 40 verb themes, referring to roundness or hump; grimaces; to being straight, crooked,

aslant; or to holding, pressure, tension, strain. For these we have less small a proportion of imperatives, and these show a surprising but consistent pattern of preference for the 'i- imperative, e.g., the forms in table 12.12.

**Table 12.12:** Attestations of the 'i- imperative in Inceptive stative verbs

Imperative	Gloss	Attestations	Note
<i>di'ch'ehX</i> <i>dAGAch'ehX</i>	'open your mouth!'	10 3	attested by Lena, Marie, Anna attested by Lena, Marie
<i>di'dAgudj</i> <i>da:dAgudj</i>	'keep your mouth tight closed!'	2 1	Active
<i>k'uli'Lxe:t'</i>	'pout'		
<i>gu'La:n'</i> <i>guGALa:n'</i> <i>gu:La:n'</i>	'stand!'	10 6 4	
<i>'iLt'ux, -i'Lt'ux</i> <i>'ALt'ux, -:Lt'ux</i>	'hold O!'	10 3	Active; no instances of GA- Inceptive
<i>'iLAXu'G</i>	'strain to move it!'	5	attested by Lena and Marie plus one instance each of Active and GA- Inceptive

A strong preference for the 'i- imperative is thus the only clear pattern for Inceptive statives (38 instances of 'i- to 10 of GA-, 9 Active).

It does not seem clear here either whether preverbal or exact meaning has any effect on choice of imperative of any statives.

### 12.3.2.6 Motion verb imperative conjugation choice

We now come to the categories of non-stative verbs, action and motion. We shall deal first with the motion verbs, which themselves fall into three classes: locomotion, classificatory, and postural. These three classes include also by far the largest number of variable open stems of high frequency. Here therefore the choice of imperative is at its most complex, by far, including now also the factor of preverbals: Inceptive and 'i-, and also Active imperative, with all types of open variable stems shown above.

We start with motion subclasses, in the order locomotion, classificatory, and postural, as these are far fewer than action verbs, somewhat more predictable, and more revealing.

### 12.3.2.7 Imperative conjugation choice in locomotion verbs

Most revealing of all are the locomotion verbs, both by their semantic nature and variety of preverbals with which they so frequently occur. The most basic are e.g. *-a* '(sg) go', *-a'ch* '(pl) go', *-we* 'swim', *-qe* 'go by boat', *-Xa* 'go in plural boats', *-la* 'move/subsist', also

e.g. *LA-Ga't'* 'crawl', or the many that are derivatively locomotion, progressives, e.g. *O-Xe* 'pack O on back', *O-L-Xe'dz* 'pack O on shoulders', *O-qa* 'carry (< hold) O in teeth', *O-L-Xahd* 'drag O', *O-L-xuL* 'roll O', *-le'g* 'grope along' (< 'touch with hand'), *-da* 'move in sitting position' (< 'sit') postural, or even, presumably, *-ki:nX* 'weep along' (< 'weep'), progressive derivation of *-ki:nX* 'weep (in place)'.

Taking *-a* '(sg) go (on foot)', the three imperative forms are basically *'a:'* ('A- Active), *Ga:'* (GA-) and *'iya'* ('i-), the latter with expected epenthetic /y/. There are over 150 examples in the corpus, none with *e*-shift, except in *yAX 'Ade*: 'take a walk!', as expected in the *a*, a common Active derivation. By far the least common or most specialized of the three is the Active *'a:'*, rather than unattested *\*'e:*, though that specific possibility here was never checked (cf. §12.3.2.2). That phonologically irregular *'a:'* occurs most consistently with the postposition *o-k'ah* 'away from o' (often urgent or forceful), e.g. *'u:dik'ah 'a:'* 'get out of there!' (Rezanov 1805, and five times from Lena). We also have *'a:'*, less consistently, with *'u:ch'* 'thither', three times from Lena in text, but with that we also have *Ga:'* four times and *'iya'* five times from her and once from Rezanov. We also have the two instances of *sika' 'a:'* 'come with me!' and *qa:ka' 'a:'* 'come with us!' along with another dozen of *'i*-imperatives in motion verbs. If there was a difference in meaning, that was not checked. In any case, it appears that by far the most or only consistent use of the Active imperative is with *ook'ah*. Its occasional use with *'u:ch'* (in 3 of 13 instances) appears to be related to that with *o-k'ah* in the sense of 'away'. For some reason the most consistent use of the Active imperative is in this very specialized sense. It appears, however, rather less restrictedly in Rezanov (1805) (where it is clearly distinguishable as a reflection of *'a:'* rather than *'iya'* or *Ga:'*), attested there also in *XAshLAX 'a:'* 'come closer!'. There are two possible reasons for this instance. One is that it should be unsurprising that the conjugation choice we find in Rezanov, 160 years older than most of the data we have and from Yakutat instead of Eyak (cf. §3.2.5), should be rather different, especially in this least stable part of Eyak grammar. The other is that this *'a:'* also coincides with the expanded stem form, CV:?, perhaps in connection with the emphatic quality that both *o-k'ah* and *XAshLAX* seem to share (cf. *XAshLAX 'Ada:'* 'sit closer to me!', (11).

The vast majority of locomotion imperatives take GA- or *'i*-. Where there are no preverbals, the beginning and end of the locomotion are not specified, for this more "abstract" sense the regular choice is *'i*-imperative. Thus *'i*-imperative regularly appears with preverbals such as *o-ka'* 'along with', *o-lu'qa:* 'to fetch, in search of o', *o-a:* 'for o', *li'X* '(movement in area) downstream', *lAGe'X* '(movement in area) upland', *dAGe'X* '(movement in area) upstream', *o-ihX* '(along) behind o', *o-dALyAX* '(along) ahead of o'. Significantly also, note *'iya'* for 'walk (don't run)!', and *'iya' 'iya'* as interjection 'come on!', or 'go ahead and ...!'. The surprise, for a choice described so far for seemingly atelic situations is that with the very frequent postposition or preverbal-final *o-ch'* 'to o', the *'i*-imperative is also regularly used: e.g. 'come here/hither!' is always *'a:nch' 'iya'*. One might think that here *o-ch'* is considered to mean only 'towards (but not reaching) o' (and for telicity with locomotion verbs Inceptive imperative with GA- is otherwise the regular choice). But the 'toward' explanation does not seem correct and this trait is confined,

for some reason, to locomotion themes (e.g. classificatory verbs regularly take instead 'A- Active with *o-ch*', though that too is not the *GA*- Inceptive typically used with telic preverbals). The same uses of 'i- apply to other basic or derived motion verbs, mentioned in the preceding paragraph, thus the forms in (14):

## (14) Imperative in locomotion verbs

'ilAX'a'ch' '(pl) go!'	'iLXe'dz' '(sg) cary it on your shoulder!'
'iwe' '(sg) swim!'	'iLXahd' '(sg) drag it!'
'iqe' '(sg) go by boat!'	'iLxuL' '(sg) roll it!'
'ilAXXa', '(pl) go in boats!'	'ida' '(sg) move (in seat)!'
'ilAXla' '(pl) move camp!'	(presumably) 'iki:nX' '(sg) weep (your way) along!'
'iLAGa't' '(sg) crawl!'	
'iXe' '(sg) carry it on your back!'	'ile'g' '(sg) grope your way along! (since you are blind)'
'iqa' '(sg) carry it in your teeth!'	

Inceptive imperative with *GA*- is regular with the widest variety of preverbals, which can accordingly be defined as telic in some sense, of reaching a point. Thus e.g. with the preverbals in (15).

(15) Preverbals that require Inceptive imperative with *GA*-

*o-da* 'to (and reaching) o', *k'iya* 'landing ashore', *o-lu* ('Ash) '(completely) through hole in o', (*o-*) *li* 'into closed end (of o)', *ya:m* 'down (to rest on surface)', less obviously but still regularly, *'AdiX* 'in(to house)', *'a'q* 'out (of house), *o-ta:s* 'across (over)', *o-lah* '(completely?) around o', *qa* 'out (emerging)', *o-ya:X* 'avoiding o', *ya'd* 'out (of vessel)'

Besides these, many other preverbals with final *-d* 'punctual contact' (as opposed to *-X* 'non-punctual contact, movement within'), and even *'ALAk'ah* 'up (out of bed)', also occur regularly with Inceptive imperative with *GA*-.

**12.3.2.8 Imperative conjugation choice in classificatory verbs**

Classificatory verbs are a small distinct class, with in fact only four definite members: *-ta* 'elongated object', *-a* 'compact object', *-L-(y)a* 'plural objects', *-L-'ya* 'object(s) in container', and a few others in part, especially *O-(L-)te* 'handle living being'. We shall deal first with the more definite members. The precise nature of the objects involved in the first two of these is a complex matter dealt with in Krauss (1968) in some detail and not at issue here. Note that all classificatory verbs have the fully variable basic form CV. Unlike the locomotion verbs, many of which are basically intransitive, classificatory verbs are basically both intransitive, 'for object(s) to be in position', where they are like, or actually

are, *s-* statives, unlikely to be attested in the imperative mode, and also transitive, ‘handle object’, which is the reason for them to be treated here.

With classificatory verbs, we have four basic imperative forms, two Active, Inceptive, and *'i-*: Active with *e-*-shift, *AN-Ce*.; Active with basic imperative stem form *AN-CV*'; Inceptive *GA-CV*', and *'i-CV*'.

Active *e-*-shifted *'A-Ce*: is highly specialized and somewhat unstable, found with only two preverbs (16), and also in several other occasional unexplained instances, none consistent.

(16) Active *e-*-shifted *'A-Ce*:

- a. With *ya'* ‘to or remaining in a state of rest’ (with action verbs ‘completely’, telic)

*ya'* *'ALe*: (consistently, four times)

*ya'* *'Ata*: ‘set it!’ (Lena, *e-*-shift blocked this time to avoid homophony with *-te* ‘living being’?)

*ya'* *di:'e*: ‘set (egg)!’

*ya'* *di:Le:* ‘set them (eggs)!’

- b. With *yAX* perambulative ‘carry O around’:

*yAX* *'AdA'e*: (twice, once *yAX* *dA'a*.; with *e-*-shift blocked)

*yAX* *'AdAte*: (6 times, no *-ta*.)

*yAX* *'ALAye*: ‘carry them around!’

*yAX* *da:LAye*: ‘carry them (coins) around!’

*yAX* *'ALa'ye*: ‘carry it/them around in container!’

- c. Unexplained instances: *'Awch* *'Ate*: ‘take it to that!’ (Rezanov 1805, Lena: *'Awch* *'Ata*)

*'u:ch* *'gudi:te*: ‘steer boat thither!’ (Lena)

*ya'X* *'Ate*: ‘lift it’ (Lena, also *ya'X* *'Ata*)

*t'a'* *'ALAye*: ‘put them in your pocket!’ (indirect reflexive)

The *'i-* imperative *'i-CV*' is also rather specialized with classificatory verbs, for, unlike the case of locomotion verbs, it is not used with *o-ch*', but found mainly in the more abstract and atelic sense, with few occasional and inconsistent exceptions. Thus the examples in (17).

(17) *'i-* imperative *'i-CV*'

*'iLya'* ‘take it (potlatch food in container)!’

*'iLa'* ‘bring / take them!’

*'ita'uh* ‘move/handle it!’ (Rezanov 1805, twice)

*'iLt'a't* *'ita'(uh)* ‘hang it up!’ (Rezanov 1805, twice)

'iLt'a't 'iL'a'uh 'hang it up!' (Rezanov 1805, confirmed by Lena)

'iLq' qa:nch' di'La' 'stack them (logs) up on top of each other (logs)' (also 'ALa', Lena)

ya'X 'i'a' 'lift it! (Lena, "so I can put something under it"; also ya'X 'A'a', along with—and as opposed to?—GA'a')

Interestingly, it is possible that these inconsistent exceptions have in common the property of verticality or upwardness, thus motion at least without horizontal definition or telicity.

Active AN-CV' is most common with o-*ch*' 'to o' (whereas with locomotion verbs we have instead 'i-), still treating o-*ch*' differently from GA- used with telic preverbals. However, the meaning of the abundant instances we have of e.g. *sich*' 'Ata', *sich*' O-*i:ta*' 'give me O' clearly can only mean just that, hardly 'move O toward me!'; likewise with the other classificatory verbs -'a' (for compact object), -L-(y)a (for plural objects), and -L-'ya (object(s) in container). There are very few occasional instances of 'i- and GA- with o-*ch*', so these are perhaps either not impossible or are in error; no special meaning for them has been remarked. This basic Active imperative of the structure AN-CV' is also noted with some other preverbals, most notably o-*k'ah* 'away from o' (cf. locomotion verbs), ya'X '(lifting) up' (cf. also 'i- above), and yAX 'down(ward, not to bottom)'.

Inceptive GA- is used with by far the greatest variety of preverbals here. It is usual with clearly telic preverbals, such as the ones in (18).

(18) Telic preverbals that combine with Inceptive GA-

ya:n' 'down (to rest on surface)', li' 'in (all the way to end)', o-yAq' 'in(to enclosed o)', o-ya' 'into o (with broad opening at top)', Xu' 'correctly, straight', 'AdiX 'in(to house)', also 'ALAk'ah 'up out of bed', o-*k'ah l-ta* 'forget o' (< 'move head away from o'), qa' 'up out', and as alternate to several cases noted above, e.g. ya'X '(lifting) up', yAX 'down(ward)', 'iLt'a't 'hanging'

GA- is also used with the atelic preverbals with the final -X 'non-punctual contact with, movement in area of', thus *da:X 'iGAta*' 'stretch skin!', 'u:dAX GAta' 'take it along there!' (Rezanov 1805), o-la'X 'on(to person over head, as dress)'.

In sum, we note here the major differences in imperative conjugation choice between locomotion and classificatory verbs. 1. Classificatory verbs can take the action type *e*-shifted Active AN-Ce:, mainly with *ya*' 'state of rest', while locomotion verbs cannot, presumably for semantic reasons. 2. With o-*ch*' 'to o', locomotion verbs take 'i- imperative, while classificatory verbs take AN- Active, for unclear reason. (Transitivity difference is presumably not the reason, at least in that causativized locomotion imperatives still take 'i-, not AN-) 3. Classificatory verbs have far less use for 'i- than do locomotion verbs, not only because of point 2., but also because classificatory verbs have GA- rather than 'i- with a significantly greater range of preverbals, including those relatively atelic with -X final.



### 12.3.2.9 Imperative conjugation choice in postural verbs

Postural verbs (19) may be the smallest and least distinct subclass of motion verbs.

(19) Postural verbs

*-da* '(sg) sit, stay'

*-qu* '(pl) sit, stay'

*-te* '(sg) lie prone'

*-tu'ch* '(pl) lie prone'

Possibly, the rather abstract and highly productive *-'ya* 'be involuntarily situated' can also be included here.

In the Active conjugation of imperatives, the *e*-shifted form for postural themes *-da/-qu* 'sit' and *-te/-tu'ch* 'lie' is very common; *-da* and *-qu* 'sit' are very regularly so, thus *ya* 'Ade: and *ya* 'ALAXqe: are quite regular, and have the broad meaning of 'be seated, sit up, stay, sit still, behave!', *ya* 'Ate: also in the sense of 'lie (still)'. With *yAX*-perambulative, on the other hand, for *-da* '(sg) sit' we have *-de:* twice, but *-da:* once, and for *-qu* '(pl) sit' we have *-qe:* only once, shift-blocked *-qu:* 5 times (twice explicitly rejecting *-qe:*, homophonous with 'go by boat'). That gives a fair notion of the difference in status of rule order in *e*-shift and lengthening with *ya*' versus *yAX*-perambulative.

With other preverbals, *-da* and *-qu* have mostly *GA*- Inceptive, e.g. *ya:n* 'Gada' 'sit down!', likewise with *o-dad* 'by, in area of', *o-dahd* 'next to, touching o', *o-da:da* 'close to', *'i:ntsa'd* 'in bow of boat', *o-gutl'a'q'X* 'behind o in boat', *ya:nch* 'further down'.

These last two examples suggest a wide interpretation of telicity for *GA*- with posturals, more resembling classificatory than locomotion verbs, unsurprisingly. With bases referring to locomotion while in sitting posture, however, the results are very mixed, also unsurprisingly. E.g. with *XAshLAX* 'closer' and *XAyA'u:ch* 'further away, move over!', the corpus shows evidently never *GAda*', but no fewer than 5 forms: *'ida*', *'Ada*', expanded *'Ada:*', even *'Ade:* and *'Ada:*, anomalous and indicative of maximum confusion and puzzlement.

As clearly locomotion theme we have with stems *-da* '(sg) sit' and *-qu* '(pl) sit' the prefix string *O-gu-L-*, as in the examples in (20).

(20) Prefix string *O-gu-L-* with locomotion themes

*Xi:ch* 'gu:Lda' 'chase it away!'

*Xi:ch* 'gu:Lqu' 'chase them away!'

*'u:ch* 'gu:Lda' 'chase it thither!'

*gu'Ldin'inh* 'chase him!'

These thus take the *AN-CV* or *'i-CV* imperative forms. Likewise the locomotion theme *l-qu* '(pl) run', e.g. *'u:ch* 'li'lAXqu' or *'u:ch* 'la:lAXqu' 'chase them thither!'. These behave exactly as do basic locomotion themes.

The case of *-te* '(sg) lie prone' is essentially like that of *-da* '(sg) sit' and *-qu* '(pl) sit', with abundant instances of *ya* 'Ate: 'lie, lie still!', versus e.g. *ya:n* 'GAte' 'lie down, go to bed!', causative *ya* 'ALte: and *ya:n* 'GALte' 'put it to bed!', and even *XAYa'u:ch* 'Ate' 'move over (while lying)!'. The data on *-tu'ch* '(pl) lie' are too few to demonstrate its properties, but presumably it is like *-te* at least in these basic respects. However, with *-te*, we have not only the causative O-*L-te* 'make O lie', but two other themes, intransitive *-L-te* 'S lies comatose', a unique derivation, also present in Athabaskan, and O-*L-te* 'handle living being (sg/pl)', This actually is or is like a classificatory verb: *'iLte* 'carry it, handle it! (dog, pup)', *'u:da* 'GALte' 'carry it thither! (definitively telic, but *o-ch* 'ALte' 'give it to o' as is regular with classificatory verbs). In fact, we have four instances of transitive imperatives with no *L*-classifier as well as the same with the *L*-present or reinstated. The omission must probably be under the strong analogical influence of transitive classificatory verbs, which have no *L*-classifier except in the *s*-perfective, a peculiarity of Eyak, not in Athabaskan.

Finally, we have the extremely frequent and productive *-'ya* 'be involuntarily situated'. Among the many derivations of that is no doubt the intransitive *-L-'ya* and transitive O-*L'ya* 'handle O in container', already described in §12.3.2.8 as one of the classificatory verbs. Imperative data for the intransitive *-'ya* are insufficient to show that that is basically a postural theme, but it should be so classed, along with *-te* '(sg) lie prone' at least on semantic grounds, which should exclude it from both locomotion and classificatory. The imperatives we have for this are in three themes, all derivatives. One is *qa* 'GALyin'inh 'wake him up!', also *-yi:n'inh* with lengthened stem-vowel. Another is *'ulah* *yAX* 'Adi:lihLA'ye: 'think about it!' (lit. 'cause (LA-) yourself ('Ad-) to be mentally (*i:lih*- 'mentally') situated (*-'ya*) around (*yAX*) about it ('*ulah*!'). The third is, most puzzlingly, *li'Lya* 'get old!' (Lena) from *s*-stative *L-'ya* 'be/become old', where we should expect *GA*-imperative, not *i*-imperative, as is usual instead with *GA*-Inceptive statives, as noted under §12.3.2.5.

### 12.3.2.10 Imperative conjugation choice in action verbs

Action verbs, it will be remembered, have unmarked, i.e. zero, imperfective. It is in this largest and most heterogeneous category that the choice of imperative is the least predictable of all. However, the choice of prefix or conjugation is at least narrow, in that it is restricted to the *AN*-Active and *GA*-Inceptive, apparently never *i*-imperative, or, of course, Neuter. In the case of fully variable open stems, usually of the form *Ca*, moreover, the *e*-shifted stem-variant *Ce*: seems to be preferred.

Action verbs do share with motion verbs at least the tendency to require or prefer *GA*-imperative with telic preverbal, but there are many more exceptions or much more free variation than with motion or stative verbs. Moreover, the choice seems to be determined by other factors as well, i.e. not only particular preverbals but also particular verb themes, and perhaps style or urgency as well. Therefore choice is determined less or little by particular semantic subclass of verb, so that it does not seem useful to try to determine semantic subclasses of action verbs.

For example, verbs of oral communication, such as ‘say, tell, narrate myth, shout’, might seem to constitute a subclass, preferring AN- prefixation. We have numerous imperative instances of some, e.g. O’-Xa’ ‘tell (of) O’, 11 instances of Active -a’Xe; 6 of Inceptive -’GAXa’, but of *d-le* ‘say’, we have 9 of *dAGAlē*(:’) and only 2 of *di:le*; the reverse. That could be because the presence of a qualifier (*d*-thematic here) may prefer GA-, but also or more because the basic theme -*le* ‘act’ itself for some reason prefers Inceptive GA-imperative.

Another very basic action verb, also irregular and still partially the causative of -*le*, O-*Li* (< O-*L-le*) ‘act upon O’, has Active imperative, usually ‘a’*Le*: (itself quite irregular, looking like the rare but regular Neuter imperative of *-Le*(’) ‘be’, rather than the expected Active *e*-shifted imperative of O-*Li*, i.e. \*’*ALē*:). This theme is further irregular in seeming to prefer the reverse of the intransitive -*le*, the Active imperative rather than Inceptive, even with rather telic preverbals. Thus with *Xa:n*’ ‘to completion’, perhaps the most telic of all, we do indeed have the expected instances *Xa:n*’ *GALi*:’ ‘fix it!’ twice from Lena, and *Xa:n*’ ‘*idAGALi*’ ‘finish knitting!’; but with *Xu*’ ‘fully, straight, repaired, complete’, almost as definitively telic as the preceding, we have 17 instances of Active imperative, and only 2 of Inceptive. With less definitively telic preverbals, e.g. *o-ch*’ ‘to o’, even *ya*’ ‘to a state of rest; complete (disintegration, deformation)’, *o-ch’ahd* ‘from o’, there seems to be no predictability, whereas with *o-k’ah* ‘away from o’ the choice is perhaps always Active, as for locomotion verbs.

With probably more than 50% of action verbs without preverbals, also without regard to transitivity, the more usual imperative is the Active; taking themes for which we have possibly significant statistics: -*tsu’d* ‘sleep!’ the Active/Inceptive statistic is 18/4, *xu:Lla*’ ‘save me!’ vs. *xuGALLa*’ 4/1 (originally causative of -*la* ‘live, subsist’), O-’*L-qa*’ ‘count O!’ 12/3, O-*she* ‘kill O’ 12/4, ‘*i-ga*’ ‘dance’ 9/1, O-*X-a* ‘eat O!’ 25/0 (seemingly definitive, but see below), O-*dA-la* ‘drink O!’ however 4/6. Moreover, for O-’*tsa* ‘buy O!’ we have quite the reverse, 2/8, and, as noted above, *d-le* ‘say!’ 2/9.

In fact, for the theme O-*dA-la* ‘drink O’ the corpus contains a remarkable range of imperative forms: from Lena three instances of *GAdAla*’, none of ‘*AdAla*’, but one each of lengthened *GAdAla*:’ and ‘*AdAla*:’, 2 of *e*-shifted ‘*AdAlē*:’, one of that shortened ‘*AdAlēh*, one with that shift blocked, ‘*AdAla*: (from Marie; cf. Athabaskan \**də-na-*), and one of the “default” analogical (or shift-blocked and shortened?) ‘*AdAlah* (from Lena). I.e. of a possible total of 8 forms (not counting ‘*i*-imperative, or Neuter both, disallowed). In a corpus of only 10 instances of the imperative of ‘drink O’, we have 7 of the 8 possible forms attested! This is a dramatic instance of the complexity and variability in this part of the Eyak Imperative.

Unsurprisingly, with derivatively action bases or themes, e.g. with repetitive -*g*, persistive, customary, and perambulative *yAX*, the imperative norm is Active; thus *yAX* ‘*Ade*:/’*AdAwe*: ‘take a walk/swim!’.<sup>11</sup> There are counter-examples, however, especially

<sup>11</sup> Perhaps also \*’*yAX GAda*:/’*GAdAwe*’ ‘be walking/swimming about all day long!’ perhaps unacceptable, not tested.

where e.g. the repetitive with *-g* is thematized, as *da:LAXAXg* ‘snore!’, four instances, but *dAGALAXAXg* once, and even one instance of customary (never thematized) with Inceptive (!) imperative, *’ud k’uXAGALa:k’inh* ‘(just) feed him (something)!', in spite of the seemingly definitive choice of Active imperative in the non-causative ‘eat O!’—25 instances to 0.

Beside what seems to be this indeterminacy, and purely lexical (rather than semantic) properties, that present this rather chaotic picture or even breakdown of this aspect of Eyak grammar, there seems possibly to be one other factor determining the choice between Active and Inceptive imperative for action verbs. We have two hints of it from comments by Lena: in the case of *’Aw ’A’tse:* versus *’Aw ’u’Gatsa’* ‘buy that!’ Lena commented that *’Aw ’a’tse:* sounded “meaner” than *’Aw ’u’Gatsa’*, and once also in the case of one instance of ‘drink it!’ (statistic 7/4) she noted that *’AdAla:* would mean ‘drink it constantly’. Accordingly, in some instances, perhaps everything else being equal, the Active may have a stronger force of command, than does the Inceptive imperative, a point that certainly merits further inquiry.

It is hard not to consider that this degree of unpredictability in choice of conjugation as seen in Eyak imperative, especially action imperatives, reflects a breakdown in the system, especially in comparison with Athabaskan. Though Athabaskan has no imperative, it does indeed have a very elaborate system of conjugation marker choice, correlated with verb theme class and also preverbs or prefix strings. It is also hard not to remember how in the fieldwork of 1963-1965 in eliciting imperatives, one of the first and easiest forms to elicit, I would of course write down the first form the speakers responded with. Then, however, I would simply elicit the other choice, to ascertain if the other choice was “OK too,” Active *AN-* instead of Inceptive *GA-*, or the reverse. The response was rather regularly an utterance of that as “OK too.” This was done, however, without careful attempts to discern which was more “polite” or more “urgent” or the like. Possibly an examination of the notebooks to see which conjugation was offered first might reveal some pattern missed here. But for the most part it felt at the time that any pattern of choice had broken down, and/or did not exist.

### 12.3.3 Optative mode

The optative mode is freely and productively used in Eyak. Its meaning is rather general and wide, that the action, of course not accomplished, is anywhere from highly desirable to merely permitted, so e.g. ‘let S V, S should V, it’s okay if S V’s, would that S V’. It occurs both independently, with or without certain particles that require the optative, or in clauses subordinated by certain postpositions. For further details see §12.3.3.3. Likewise, whether Eyak correctly has a negative optative is considered in §12.3.3.5.

**Table 12.13:** Inceptive optative prefixation with subject prefixes.

	∅- / L- classifier	LA- classifier	dA- classifier
1s	GAXi-(L-)	GAXLi-	GAXdi
2s/3	Gi-(L-)	GALi-	GAdi-
1p	da: Gi-(L-)	da: GALi-	da: GAdi-
2p	GAIAXi-(L-)	GAIAXLi-	GAIAXdi-

**Table 12.14:** Neuter optative prefixation with subject prefixes.

	∅- / L- classifier	LA- classifier	dA- classifier
1s	'a'xi-(L-)	'a'xLi-	a'xdi
2s/3	'a'yi-(L-) / 'a'li(L-)	'a'Li-	'a'di-
1p	da: 'a'yi-(L-)	da: 'a'Li-	da: 'a'di-
2p	'a'lAXi-(L-)	'a'lAXLi-	'a'lAXdi-

### 12.3.3.1 Morphology of the optative

Of all the mode-aspects the optative has the most complex prefixation, always involving a sequence of (at least) two prefixes in Zone D, (at least) one in Zone D1, preceding the subject pronoun, and *yi-* following it in D3. The morphophonemics of these prefixes individually are described in Chap. 6 on morphophonemics, but the morphophonemics of those prefixes combined will also be discussed here to varying degrees.

Open variable stems, including *-CV'*, are all *-CVh* in the optative. The irregular *-Le'* 'be' and *-le'* 'want, think' are *-Le'* in the optative.

The optative prefixation involves at least two elements, the second of which is *yi-* (PAE \**ɪ*<sup>y</sup>*i-*), realized as the /i/ vowel after *L-* and *d-* in the vocalized classifiers, i.e. *Li-* and *di-* from *LA-* and *dA-*, and as *yi-* (and variants) preceding the classifiers *∅-* and *L-*.

The first element in Inceptive optative is the expected *GA-*, thus the combinations with the subject prefixes in (12.13).

The Neuter optative also has three prefixal elements, considering the irrealis ' as a morphological segment synchronically. The first element then of the Neuter in absolute initial is 'A-, combined with ' to result in 'a': thus the prefix combinations in (12.14), where initial glottal stop appears only in word-initial position.

The variants 'a'li(L)- in absolute initial and *Ca'li(L)-* elsewhere imply nasalization (as the /l/ has to be from /n/), so conceivably imply that the first element is AN- rather than 'A-, but the lack of any variants like \**Can'Li-* requires an explanation that 'a'li(L)- or *Ca'li(L)-* is analogical with the Active, shown as follows.

The first element of the Active optative is AN-, so the morphophonemics of the Active optative is by far the most complex. In initial position AN- is regularly 'i-, thus the forms in (12.15).

Table 12.15: Active optative prefixation with subject prefixes.

	∅- / L- classifier	LA- classifier	dA- classifier
1s	'ixi-(L-)	'ixLi-	'ixdi-
2s/3	'i:-(L-)	'iLi-	'idi-
1p	da: 'i:-(L-)	da: 'iLi-	da: 'idi-
2p	'ilAXi-(L-)	'ilAXLi-	'ilAXdi-

Table 12.16: Active optative prefixation with subject prefixes and CA-type qualifiers.

	∅- / L- classifier	LA- classifier	dA- classifier
1s	Ca:(n)xi-(L-)	Ca:(n)xLi-	Ca:(n)xd-
2s/3	Ca:yi-(L-) / Ca:li(L-)	Ca:(n)Li-	Ca:(n)di-
1p	da: 'i:-(L-)	da: 'iLi-	da: 'idi-
2p	Ca:AXi-(L-)	Ca:(n)AXLi-	Ca:(n)AXdi-

The 2p forms might seem to indicate that the first element has underlying vowel /i/, given that it should be exempted from vowel harmony with the following /i/ by the intervening syllable *LAX*-. As noted, however, this exemption is overruled by analogy. With the many CA-type qualifiers, the results are as shown in (12.16).

The nasalization never happens with *la*:- or *dla*:-, as the /l/ represents or “absorbs” the nasality.<sup>12</sup> For further details on the frequency of the nasalization after the various phonological forms in the qualifier more generally, see Chap. 6 on morphophonemics. That discussion largely duplicates the following, but the following is kept here as it was first described specifically for the Active optative.

The result of the combination *d-AN*- is rarely nasalized, probably only by analogy. However, after *X*- and *y*-, the result is much more usually 1s *Xa:nxi*-(L-), *Xa:nxLi*- etc., 2s and 3 *Xa:li*-(L-), *Xa:nLi*- etc. After the plural prefix *qA*- however, we seem to have no attestation of the Active optative without the nasalization. After the qualifier *gu*- (but not after *gula*-!), the result is regularly nasalized and the vowel labialized, thus *gu:n*-, *gu:l*- (not \**gu:(y)*- or \**ga*:-, \**ga:n*-). Likewise the result after object pronoun prefixes, thus the forms in (12.17).

After the ' of the directive in 2s and third person the nasalization appears, as in 'u'li-(L-) instead of ?\*u'yi(L-), but the first element otherwise completely disappears or is “absorbed,” thus 'u'xi-(L-), 'u'Li- etc.

The nasalization appears to be more a feature of the preceding prefixes than of the first element of the Active optative, in that it never shows after *l*- and *dl*-, but usually or always after other prefixes. The underlying form of the first prefix is particularly unclear,

<sup>12</sup> Though the /l/ in *dla*:- is voiceless, this is a secondary phonetic fact, as *dla*:- is composed of *d*- and *l*-, the latter of which is otherwise fully voiced.

**Table 12.17:** Combination of Active optative prefix *AN-* and object prefixes.

<b>1s</b>	<i>xu:n-</i> / <i>xu:l-</i>
<b>2s</b>	<i>'i:n-</i> / <i>'i:l-</i>
<b>2p</b>	<i>lAXi:n-</i> / <i>lAXi:l-</i>
<b>indef</b>	<i>k'u:n-</i> / <i>k'u:l-</i>
<b>indet</b>	<i>'i:n-</i> / <i>'i:l-</i>

except that it lengthens preceding reduced vowels, including /A/ to /a:/; in absolute initial position it is 'i-, where the glottal initial may well be secondary, quite probably also the /i/ quality of the vowel from umlaut (anticipatory assimilation, vowel harmony) and analogy; and after directive ' - it is absorbed except for nasalization of /y/ to /l/ (through \*n) when that appears in the following affix. Possibly it may at some level be or have been simply A-, though it never appears as such.<sup>13</sup>

### 12.3.3.2 Choice of conjugation in optatives

The choice of Neuter optative is *in part* determined by and limited to Neuter stative verb themes. E.g. with the theme *-t'é' ~ 'be'*, by far the most frequent optative is Neuter, in 25 instances, with only 2 of Active, none of Inceptive.<sup>14</sup> With the theme *-Le(')*, however, by far the most frequent optative is Active, in 27 instances, with only 1 of Neuter, 6 of Inceptive.<sup>15</sup> It is at the same time quite probable that the predominance of a given choice of conjugation is significantly exaggerated, doubled, by the fact that most instances were of course elicited, for morphological purposes but without control or inquiry for actual preference. Thus half the instances were merely the same for several instances in a row on the same occasion. Most revealing, in fact controlled for preference, are the 21 instances, all elicited, for the Neuter imperfective theme *LA-ts'an' 'be strong'*, *d-LA-ts'an' 'be strong (d-class); be expensive'*. The simple surface statistics for those optatives are Neuter 8, Active 6, Inceptive 8. However, 5 of the Neuter forms are in a row from Lena, and two more are from Lena with assurances that the form is correct, once from Marie. There are 7 instances from Lena, however, with Inceptive optative, with explicit comment, most significantly, on two occasions that she prefers the Inceptive, likewise from Marie on one occasion. Of the 6 instances of the Active optative, 4 are from Lena and 2 from Marie, without comment.

In fact, the most general pattern is that Active optative has become the routine or unmarked choice for almost any theme-class, even with telic preverbals in verbs of

<sup>13</sup> Conceivably the /i/ quality of the vowel might be underlying, as it appears in initial position, especially if it could be shown that /A+i/ more generally becomes /a:/ than /i:/. Demonstration of this does not seem at all likely; in fact the contrary seems much more likely from what we have seen in the imperative, where even /A+A/ can become /i:/, though only in a syllable directly before the stem (§6.7). In the optative this is moot, as the second element always constitutes an intervening syllable.

<sup>14</sup> Cf. the frequencies in the imperative for *-t'é' ~:* 38 Neuter, none (?) Active, 1 Inceptive.

<sup>15</sup> Cf. the frequencies in the in the 11 imperatives for *-Le(')*: only 1 Neuter, 2 Active, 5 Inceptive, 1 'i-.

locomotion or motion, and for some reason also *-Le(')*. However, Inceptive optative is often attested instead, e.g. with *Xu* 'correctly, straight', *Xa:n* 'finish, complete', *ya:n* 'down (to surface)', *ya:X* 'consumed', *ya* 'to bits', or at least as an alternative. In the following examples, the symbol [=] means both Active and Inceptive optatives are attested, with no preference or difference of meaning recorded. In some cases, however, Lena says Inceptive means especially 'become' as opposed to 'be' (Active optative)—with *-Le(')* 'be', *LA-ts'an* 'strong', *-k'in* 'skinny', *-xa* 'grow'—Marie says the same here. In many cases Lena merely prefers or finds Active optative more natural than Inceptive optative (e.g. *da: dla:yiL'eh* 'let's hide it' over Active optative *da: dla:Gi:L'eh*, but inconsistently, e.g. *da: 'Adla:Li'eh* [=] *da: 'Adla:GALi'eh* 'let's hide', with many more such instances not cited here).

Many stative verbs, though, do tend to use or prefer Inceptive optative, including some Neuter imperfective themes (but not all), e.g. *O-Li-de'* 'know O (skill)', *-Le(')* 'be', *d-ya* 'sharp', *Li-ts'anh* 'strong', *O-'l-L-ga'* 'know O', *C O-'le(')* 'think O to be C', *dA-la'* 'be tough'; also Neuter perfective *ya:n d-'ya* 'rain', *-a'* 'extend'; i.e. Inceptive optative is more common with Neuter imperfective (and Neuter perfective) statives. Likewise probably with Active perfective or *s*-statives, e.g. *d-che'* 'be hungry', more than with non-statives. The only *GA*- or Inceptive stative attested in optative was *d-dA-gudj* 'have mouth tightly closed' for which the only optative that seemed possible to elicit was Active *da:digudj*.

As historical explanation of the present situation, the optative has simplified or generalized mainly to Active, in part regardless of telicity in non-stative verbs. Inceptive optative, however, is or remains more frequent with statives, perhaps especially in the Inceptive sense 'become'. Neuter optative is on its way out, as is Neuter imperative, except almost always with *-t'e' ~*, while *-Le(')* 'be' has almost only Inceptive or Active. Active derivations, such as perambulative in *yAX D-P(-X)*, or customary in *-k'*, regularly show Active optative. Possibly further research on the data and frequencies, especially in basic locomotion verbs, may yet reveal some survival of older patterns, especially with telicity.

The present situation can best be explained as a process of change. Probably Inceptive optative had the sense of "become," inchoative, originally, used especially with statives, now partly spread to action verbs as telic, like the imperative, and Active with the meaning 'be' has also spread to statives, including Neuter, largely replacing the Neuter optative.

### 12.3.3.3 Syntax of optatives

Optatives can be used independently, quite simply, as in (21).

(21) Independent optatives

*da: 'i:'a'ch'* 'let's go'

*LAGi:Lminhinh* 'let him ruin it, I wish he'd ruin it' (< *O-l-L-ma'*)

*dA'u:d wAX 'a'lit'eh* 'let it be that way'

Such can also be nominalized, often to be lexicalized, as in (22).



## (22) Optatives in nominalizations

*k'uXa:nliyah* 'food' (< 'that which one may/should eat')

*Xa:ndiyah* < 'that which may/should be eaten',

*qa:da:X 'i:yihinh* 'priest' (< 'he who should go ahead of us')

There are also two enclitics used with the optative, or are perhaps better described as requiring the optative. One is *=k'a* 'please', q.v. in the dictionary, attached to the first constituent of a sentence, including the optative verb itself if that is the only word in the sentence, as in (23).

(23) Optative with enclitic *=k'a*

*'AdiLiGu'=k'a* 'go ahead and warm yourself'

*xu:yiLXAwiH=k'a* '(please) believe me' (but cf. following)

*yAX=k'a* 'idiyah' 'do take a walk',

*Gu'yAq'd=k'a ya' 'i:dah* 'do stay in the warmth'

This includes whole clauses subordinated by a postposition as first constituent, e.g. *Lich' qe'L 'AdiX Gah da:X k'a' 'u'e'ch'ahd gu:Liya:nk'=inh* 'always (*Lich'* when (*da:X*) a woman (*qe'L*) comes (*Gah*) in (*'AdiX*) you should stand *gu:Liya:nk'=inh* to make room (*'u'e'ch'ahd*) for her (*=inh*)'. As noted in the dictionary, the use of *=k'a* often shows politeness, translatable as 'please'. Note also that in the dictionary (Krauss 1970a) and texts Krauss (1970b) there was the convention that both the postposition *-da:X* 'when' and enclitic *=k'a* were written as separate words.

The second enclitic requiring the optative is *=shgahX*, certainly segmentable as interrogative *=sh*, and *-gahX*, conceivably to be identified with the stem *-ga'* as in 'know' and the desiderative suffix *-X*. Its meaning is more like 'would that, I wish that' than is that of *=k'a*. Its syntactic use is almost the same as that of *=k'a*, attached to the first constituent of a sentence. There are many instances such as (24):

(24) Optative with enclitic *=shgahX*

*Gi:qu'tl'shgahX* 'I hope it breaks'

*dAXunhkishgahX si'a:n' Gi:yah* 'would that some little (kind) person would come upon me'

*'ulAXshgahX da: 'iGi:L'eh* 'I wish we might see it'

There are probably no attestations of *=shgahX* attached to a preverb, however, perhaps only by chance, so e.g. *\*(?)yAXshahX 'idiyinhinh* 'I hope he's taking a walk' may be questionable. Starting an optative clause is an alternative to *=shgahX* alone as enclitic in the word *'AlAshgahX*. This is obviously *=shgahX* attached to the archaic form of the marked proximal demonstrative *'Al(A-)* (cf. §9.4), thus meaning 'this is to be wished'; e.g.

'AlashgahX xu'yAla:yitinhinh 'I hope he's expecting me', 'ALashgahX 'a:nda' Gi:yah 'I hope you come here'. For further on =shgahX see the dictionary entry on -gahX.

Another optative clause-initial is the form *k'a:dih* 'absent, lost' plus the postpositional phrase *'uda:X* 'different from it' meaning 'useless that', e.g. *k'a:dih 'uda:X 'ixiki:nX* 'it's useless for me to cry'. Likewise *k'a:di'da:*, from *k'a:dih* plus the subordinator or complementizer *'ida:* ~ 'how, to such a degree that', usually translatable as 'never', and often preceded by the intensifier *'a'd*, e.g. *'a'd k'a:di'da: 'a:nda' q'e' 'ixdiyah* 'I'll never come back here', interrogative *k'a:di'da:sh 'u:dAX 'ika' 'AdiX 'ixiyah* 'can I (n)ever go in there with you?'. For further information on these see the dictionary under *k'a:*.

The optative is also required in clauses subordinated by certain postpositions. Most common is *o-wahd* 'for the sake of o, in order to o', some examples of which are presented in 25:

(25) *o-wahd* 'for the sake of o, in order to o'

*gula:yitl'ehwahd* 'so it (water) will get cold'

*'AXAkih Xu' 'iXiLihwahd* 'so I can make a canoe'

*'uqa'da' q'e' 'idiyahwahd ki:nX* 'she's crying so she can get back to her husband'

For a full account, see the dictionary under *-wah* [sic]. The optative is attested as required with at least two other postpositions. One is *o-ch* 'to, toward; until', here only in the future, usually with *qi'* 'place where, time when', e.g. *qi' 'ixisinhch' qu'xdAxa:gL* 'I'll work until I die', q.v. in the dictionary under *-ch*, *qi'*. Most complex is the optative with *o-Xa'* and *'i-le(')* 'like to, want to, want O to', for which see the examples in (26).

(26) Optative with *'i-le(')* 'like to, want to, want O to'

a. *sahdX Gala:xitahXA' 'AnahshAkih 'ixleh*  
long 1s.live-COMP desired 1s.want  
'I want to live long.'

b. *dik' q'e' 'idiki:nX 'iXe'xle:-G*  
NEG anymore 2s.cry THM-1s-want-NEG  
'I don't want you to cry anymore.'

c. *'ich' 'ixitah 'uXe'xleh*  
2s 1s.give 1s.want  
'I want to give it to you.'

See further in the dictionary entries for *o-Xa'* and *'i-le(')*, and in Chap. 25. Under certain conditions with *o-Xa'* and *'i-le(')* the optative is an alternative to the desiderative, or is even hybridized with it, optative prefixes with desiderative *-X* suffixed to the stem, e.g.

(27) *dik' 'ixigahX 'ixle:-G*  
NEG 1sg.dance-DESID 1s.want-NEG  
'I don't want to dance'.

#### 12.3.3.4 *s-* optative

The *s-* optative might perhaps be classed as a second type of Active optative, since the same prefix *s-* (*si-* in 1s) occurs otherwise only in the Active perfective. It is in any case extrasystematic as a fourth optative, and has an interesting history in the study of Eyak grammar. It first was heard quite spontaneously, from Anna, late. The occasion in fact was just as I was leaving her house for the last time in 1971. At that point she said, as if to herself, “*te’ya’ XAsiyah*.” Such a form, prefix *s-* without perfective *-L*, made me stop in my tracks, to ask her what that meant. “I think I’ll eat a fish,” she explained. It was as though, as I departed, I was perhaps thinking I knew everything there was to know about Eyak, so she saw fit to show me how wrong I was. I then took that to Lena, who remembered, “Yes, I think I’ve heard old people talk that way.” Lena managed to come up with or approve a dozen further instances, mostly with long open stem-vowel. I then realized that that explained forms in Rezanov (1805) that had long puzzled me, and another in Furuhjelm (1862a) (all shown below). In a late session with Marie, 2006, she rejected such forms (“sounds goofy,” “sounds maybe like a Tlingit trying to talk Eyak”). Then however, Marie spontaneously uttered one herself: “*Li’q’ ya:yu: ’a:nda’ sAqah*” “[That dog] keeps bringing [carries in teeth (*sAqah*)] everything (*Li’q’ ya:yu:*) here (*’a:nda*)—all kinds of junk”, quoting someone she heard so saying, perhaps in the sense ‘has a mind to’.

As for the meaning of the *s-* optative, Marie’s quote would be the only other instance revealing such semantics, as in Anna’s ‘I think I’ll ...’ Most further instances include *’AlAshgahX*, = *’AshgahX*, or = *shgahX*, ‘I wish, would that’, usual with optatives. From that last session with Lena, June 1971, we have the sentences in (28).

(28) *s-* optative from Lena

*dA’a:ndshgahX ya’ sida*: ‘wish I could stay right here (*dA’a:nd*)’

*dA’a:ndshgahX ya’ sAda*: ‘wish he could stay right here’

*dA’a:ndshgahX da: ya’ sAqu*: ‘wish we could stay right here’.

Most instances are 1s or 1p. Though that one instance of 3p above was accepted by Lena, proposed forms *\*te’ya’ XAsa*: ‘he eat fish’ and *\*GAsu’ ’AshgahX XAsa*: ‘wish he could eat dryfish’ were rejected by her. Finally, from the last session with Anna, on June 17, 1972, we also have the sentences in (29).

(29) *s-* optative from Anna

*’AlAshgahX gi:wa: xsdila*: (or *xsdilah*) ‘wish I could drink beer’

*’AlAshgahX gi:wa: da: sdila*: ‘wish we could drink beer’

*’AlAshgahX XAsiyah te’ya’le*: ‘wish I could eat king salmon’

*’AlAshgahX che:y sishish* ‘wish I could drink/sip tea’

The vowel of open stems in most of these elicitations is long, very probably affective lengthening. Probably this obsolescent paradigm was more freely used in the first person than in the third. Second person was not tested; nor were interrogatives or negatives.

Further, as noted, we have what turn out to be at least four apparent *s*-optative forms from Rezanov (1805). The first is тучагукосета <tuchatukoseta> ‘to whom?’ (Russian кому?), almost certainly to be read either *du:ch’a’du(n)h k’usitah* ‘to whom shall I give something?’, or perhaps still better *du:ch’a’d ’uw[a:] k’usitah* ‘to whom shall I give some of it?’. The second is туахохленчиссета <tuakhokhlenchisseta> ‘to somewhere’, probable closest reading *dA’wAX wAX linhinhch’ sitah* ‘Accordingly, I should give it to him who does so’. The third is тачаткессе <tachatkesse> ‘никуда ((to) nowhere)’, probably to be read *da:ch’a’d qi’ siyah* ‘whither is the place I might go’ (though apparently not ‘where is the place to which I might go?’), where <-cse> represents phonetically something like [-’sye] for -’*siyah*, with verb trailing off. The fourth is кейде тате уситъ-а <keide tate usit’-a> ‘голосъ (voice)’, probably to be read *k’e:d ’idahd ’u’sitah* ‘how shall I hear (the sound of) you?’. These four items, all in something like Eyak interrogatives, support each other very nicely, and may at the same time well shed further light on the semantics of the *s*-optative, from a different dialect and/or era. However, since these *s*-optative verb forms were not recognized as such while the use they suggest with interrogatives could be further explored, it remains possible that this use of the *s*-optative did survive in modern Cordova Eyak. The ‘shall’ choice of auxiliary in glossing these forms is of course speculative and neutral; ‘might’ or ‘am I supposed to’, for example, might fit both at least as well.<sup>16</sup>

There is very probably yet another example in the Russian sources. We have in Furuhjelm (1862a) <stehuvaliaa> ‘warm’, among several badly garbled items with the stem *-Gu* ‘warm’. This can be interpreted as *sdiGu’wah lah* ‘behold, something for it to be warm with!’. In modern Cordova usage this could be the usual optative *’idiGu’-wah* or *GAdiGu’-wah* ‘wherewithal for it to be warm(ed)’, showing that the 1862 usage might have had also the same meaning as the usual modern optative. Cf. the use noted in §12.3.3.3 on the syntax of the optative with *o-wahd* (*-wah-d*). Furuhjelm’s source was almost certainly a Cordova area speaker, not Yakutat, where the language was then probably already extinct (cf. §3.2.14). In any case, the clear presence of even this many *s*-optatives in the Russian sources both at Yakutat and Cordova shows that the *s*-optative was probably more alive than at the terminal stages of the language.

In this connection note the use of the Active or *s*-perfective in Anna’s Octopus text, *dA’a:nd sidahL*, clearly glossed by Lena as ‘let me stay (right) here’, rather than ‘I’m settled here’. This use is probably not attested elsewhere in the corpus, but it is as though it might once have been *dA’a:nd sidah*, the *s*-optative now superseded by the *s*-perfective.

This *s*-optative is no doubt a significant relic, helping to show the superficiality of the structure of the present larger system of Eyak verb morphology, which was once something quite different. This is especially the case for the three conjugations in four of the six mode-aspects, as shown also, for example, by the extrasystematic *’i*-imperative

<sup>16</sup> In view of some of Lena’s and Anna’s later forms, the vowel of the final syllable in especially the first and third cases might of course be read V: rather than Vh.

forms which also do not fit into that system of three conjugations. At the same time, the 'i- as a mode-aspect verb prefix has a puzzling variety of uses or is a troublesome set of homophones. Likewise this s- optative, together with s- perfective, starts to present the same problem, strikingly homophonic even with the highly irregular 1s *si-*, and/or hinting of an earlier system quite different from the present one.

### 12.3.3.5 The question of negative optative

We have only a few instances of negative optatives, none spontaneously offered, but only from elicitation from Lena, on several occasions. For three of these instances Lena was gotten to utter, she commented that they “sound funny”, but in two others she repeated the forms and commented explicitly they “sound OK.” Perhaps only nine negative optatives are attested in Krauss (1966a). All but one are preceded by *dik'shghahX* or *'AlAshghahX dik'* ‘wish not’, and all have -G suffixed to the verb stem. Most importantly, with three of the instances Lena commented “sounds funny,” though at least once the form was explicitly double-checked, with Lena’s approval, “sounds OK.” There is in any case some doubt about the authenticity of the negative optative.

Of the 9 instances, 3 are Inceptive, all with the same action theme. Thus the sentences in (30).

- (30) Negative optative with *dik'shghahX* ~ *'AlAshghahX dik'* ‘wish not’

*dik'shghahX lAGAdimahG* ‘I hope nothing goes wrong with it’ (approved on re-checking)

*dik'shghahX 'Aw lAGi:LmahGinh* ‘I hope he doesn’t wreck it’

*'AlAshghahX dik' 'Aw lAGi:LmahGinh* ‘I hope he doesn’t break it’

All are with the usual positive Inceptive optative prefixation, and, except for the first, without comment on their correctness. There are three more with action themes with the usual positive Active optative prefixation, given in 31:

- (31) Action themes with positive Active optative prefixation

*dik'shghahX k'usha:dah GAla:yita:G* ‘I hope you’re not mean’, with the comment “sounds funny”

*dik'shghahX k'usha:dah GAla:lita:G* ‘id.’

*dik' xu:liqahG 'AwXe'xleh* “don’t looks like he gonna bite me” (‘I want that it not bite me’)

Two more are with Neuter imperfective stative themes, none with the usual positive Neuter imperfective prefixation, but instead with negative Neuter imperfective prefixation: *'AlAshghahX dik' qa: da'LAd:Ginu:* ‘I hope they don’t understand us’, *dik'shghahX a'xk'a'dG* ‘I hope I’m not sick’, with the comment, “sounds funny”. One seems to be with Inceptive conditional (!) prefixation: *'AlAshghahX dik' qa: dAGALAd:Ginh* ‘I hope he doesn’t understand us’, also with the comment, “sounds funny.”

The inconsistency of the prefixation here casts further doubt on the authenticity or correctness of the negative optative. In 6 of the 9 instances the prefixation is the same as in the positive optative, with the prefix *yi-* of position 3 of Zone D. This would make then the only instances in all attested Eyak of that *yi-* in a negative verb. The three instances of Neuter imperfective stative themes are inconsistent with that, and internally inconsistent as well. In two of those the *yi-* is absent, as in negative Neuter, and in the third the *yi-* is also absent, but the conjugation marker switches to *GA-*. Beside the comment three times that the negative optative “sounds funny,” Lena also offers that she prefers a different construction in its place, i.e. that *'ALAshgahX ya'Xu:* plus (positive) Inceptive imperfective (future) is far preferable. E.g. that *'ALAshgahX ya'Xu: qu'dALAdinhinh* ‘I hope he doesn’t understand us’ “sounds much better” than *'ALAshgahX dik' qa: dAGALAd:Ginh*.

### 12.3.4 Desiderative mode

The desiderative mode was called the “(X-)infinitive” in the ledger (Krauss 1966a), given that it is often translated into the English infinitive, as e.g. in *Xa:nxa:X sitl' dAlinhinh* ‘(he told me) to eat it’. In Krauss (1970a) the name was changed to “subjunctive”. Its meaning seems basically that the action or process of the verb is desirable, as will be seen below. In fact that meaning is not altogether clearly distinguished from that of the optative, with which it is also sometimes partly confused, as noted above, by the use of optative instead of desiderative prefixes. Both semantically and in terms of its prefixes, the desiderative is the least distinctive of the Eyak mode-aspects. However, the unique and defining trait of the desiderative is a suffix *-X* to the verb stem. There are several suffixes and a postposition of the form *-X*, but this desiderative *-X* cannot be identified synchronically with any of those. It follows the repetitive suffix *-g* and customary *-k'*, and precedes the negative suffix *-G*. Moreover, the desiderative suffix *-X* can by no means be classed as a subordinating postposition, at least because the desiderative may also occur independently in hortatory use, shown in §12.3.4.4. There, moreover, the human relativizers have also spread, not as nominalization: e.g. *GAsinhXinh* ‘let him die’, *'Aw q'e' GALte:Xinu:* ‘let them find it (animate, inert)’. Historically, it seems likely that this *-X* can be identified with the postposition *o-X* ‘in (non-punctual) contact with o, intimate relation with o, by means of o’.

#### 12.3.4.1 Desiderative stem and prefix morphology

The dominant pattern for open variable stems with suffixation of desiderative *-X* seems to be *-CV:X* with *-CV*, and *-CVhX* with *-CV'*. That makes this suffix, moreover, the only one that has this particular pattern of effect on open variable stems. Exceptions with *-CV:X* instead of *-CVhX* with *-CV'* are fairly common, however, e.g. *dAGAche:X* ‘that he be hun-

**Table 12.18:** Active desiderative forms.

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'Axtsu'dX	'that I sleep'
'Aw 'AxdAla:X	'that I drink it'
di:xLda'ch'X	'that I drown it'
k'u:xtsi:nX	'that I sing something'
xu:she:X	'that he kill me'
'i:gahX	'that he dance; that you dance'
qe'i:xle'	'that I care for him'
'Aw Xa:na:X	'that he eat it'
dik' Xa:nxa:XG	'that I not eat it'
Xi:ya:X	'that you eat it'
ya'X da:lAXLa:X	'that you (pl) lift them'
'uil' la:xdAk'ahgX	'that I play with him'
GAla:xdAshahX	'that I dig the ground'

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gry', 'u'GAtsa:X 'that he buy it'.<sup>17</sup> With *-t'é* ~ 'be', for some reason *-t'e:X* and *-t'u:X* are much more common than *-t'ehX* and *-t'uhX*. The reverse exception is either much rarer or unattested. The two exceptional stems *-Le()* 'be' and *-le()* 'want' in the desiderative are *-Le'X* and *-le'X*.

Neuter desiderative is prefixed by (*'*)*a'*, as in *li'X la'xt'ehX* 'that I smile', *k'ut'a' da'xLt'e:x* 'that I use it'. Inceptive desiderative prefixes are the usual *GA-* plus subject pronoun (cf. §9.1).

It is in the Active desiderative that we see by far the most complexity and instability. Here, as in the Neuter and Inceptive desiderative, there are no prefixes that are unique to the desiderative, as all are characteristic of other mode-aspects as well. The basic form seems to be *AN-*, combining with preceding *Ci-* or *CA-* to produce *Ci-* where no syllable intervenes before the stem, otherwise *Ca-*, and *Cu-* after *Cu-*. Examples of Active desiderative forms are presented in (12.18).

In directives, the prefix is zeroed out: 'Aw 'a'xLqahX 'that I count it', 'Aw 'a'le'gX 'that he take it'.

However, with motion verbs we also have instances of prefix *'i-* in the same preverbal environments where we find the *'i-* in the imperative: e.g. *dik' 'u:ch' 'ilAXqe:XG* 'that you (pl) not go there (by boat)', *ya'X di'lAXLa:X* 'that you (pl) lift them'. Further examples will be seen in §12.3.4.2 on conjugation choice.

In addition to the usual array of prefixes, Neuter (*'*)*a'*, Inceptive *GA-*, and Active *AN-*, found also in the imperative and (as first prefix of two) in the optative, desiderative forms with verb stem suffix *-X* are also found with the same prefixes as those of the Active

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<sup>17</sup> Throughout this section, glosses are routinely modified to begin with a neutral 'that' as a convention.

imperfective, i.e. zero, and Active optative *AN-yi-*. Examples and discussion of the status of these forms will be given in §12.3.4.2 (especially (36)).

### 12.3.4.2 Choice of conjugation in desideratives

Choice of conjugation in the desiderative mode is similar to that in the optative and imperative. This is yet another trait that distinguishes what might be considered the three modes, imperative, optative, and desiderative, as a class. The modes may be seen to be both semantically and morphologically different from the aspects, imperfective, perfective, and, possibly conditional, semantically sharing the commonality of command, wish, desire. Morphologically they share the same basic prefixes, Neuter (*'a-*), Inceptive *GA-*, Active *AN-*. Thirdly, they share more or less the same choice between those three conjugations driven or influenced by preverbal telicity, at least for motion verbs.

Neuter desiderative, not surprisingly, is attested only with Neuter stative verbs. Given the lack of systematic elicitation, it is in fact attested only with the basic theme *-t'e' ~ 'be'*, as in the examples given above. From other Neuter stative themes we also have Inceptive desideratives: *'u'LAGAxLgahX* 'that I know him', *dAGALAdexX* 'that he understand'. Active (*s-* perfective) stative evidently takes Inceptive *GA-* desiderative, in the same way as it takes the *GA-* Inceptive imperative, at least from the examples we have: *dAGAche:X* 'that he go hungry', *dAGi:che:X* 'that you be hungry'. Likewise, as we have *'i-* imperative *'iqa'* 'hold it in your teeth!' for the *GA-* Inceptive stative verb, so desiderative *'ixqa:X* 'that I hold it in my teeth'. Hence, choice of conjugation follows that for imperative.

Choice of conjugation in desiderative motion verbs is also much like that in the imperative, as shown in (32) and (33).

- (32) Desiderative motion verbs with Active *AN-*

*ya'* *'Ada:X* *'ilinhinh* 'he wants to be seated'

*ya'* *'i:da:Xsh* *'i:leh* 'do you want to be seated?'

*ya'* *'Aqu:X* 'that they be seated'

*yAX* *'AdAwe:X* 'that he swim (about)'

*yAX* *'i:LA'e:X* (or *'i:LA'a:nX*) 'that he travel (about)'

*'ich'* *'Axta:X* 'that I give it to you'

- (33) Desiderative motion verbs with telic preverbals and *GA-* Inceptive

*'a:nda'* *GAXa:X* 'that I come here'

*'u:da'* *GAwe:X* 'that he swim thither'

*'a:nch'* *'a'q'* *Ga:X* 'that she come out hither'

*ya:n'* *GAXda:X* 'that I sit down'



**Table 12.19:** Variation between Active and Inceptive for action verb themes.

Active	Inceptive	Translation
<i>'Aw yAX 'AxLchich'X</i>	<b>'Aw yAX GAXLchich'X</b>	'that I break it (completely in two)'
<b>'Axtsu'dX</b>	<i>GAxtsu'dX</i>	'that I sleep'
<b>'i:xgahX</b>	<i>'iGAXgahX</i>	'that I dance'
<b>'Aw 'AxdAla:X</b>	<i>GAxdAla:X<sup>18</sup></i>	'that I drink it'
<i>'Aw li:xLmahX</i>	<i>LAGAxLmahX</i>	'that I ruin it'
<i>'Aw Xa:na:X</i>	<i>XAGa:X</i>	'that he eat it'
<i>xu:she:X</i>	<i>xuGAshe:X</i>	'that he kill me'
<i>'AxLchanhX</i>		'that I smell it'
<i>'AxLku:n'dX</i>		'that I grab it'
<i>'utl' la:xdAk'ahgX</i>		'that I play with him'
	<i>wAX GAle:X</i>	'that that happen'
	<i>GAXLq'e'X</i>	'that I put the fire out'
	<i>da'LAGAXLXahX</i>	'that it get it'
	<i>dAXu'ya:X dAGAle:X</i>	'that he tell the truth'

Note that in the last example of (33) the second preverbal overrides the effect of the first. However, *ya:n' 'Axda:X* on one occasion with Lena was “OK too,” and on another was “also possible but not as good as *ya:n' GAXda:X*”. This variation shows that choice of conjugation here in desiderative, as in optative, was clearly somewhat laxer than in the imperative. Note also the reverse, from Lena without comment, *ya' GAta:X* ‘that he lie’, further demonstrating freer conjugation choice in the desiderative than in the imperative. Choice of ‘i- is also (more or less?) as in the imperative, cf. (34).

(34) Desiderative with ‘i- ‘u:ch’ *'ilAXqe:X* ‘that you (pl) go there by boat’

*'u:ch' 'ixwe:X* ‘that I swim thither’

*q'e' 'ixda:X* ‘that I go back’

*'ulAX 'i'xLA'a:nX* (also *'iGAXLA'a:nX*) ‘that I see it’

*ya'X di'xLa:X* (also *di:xLa:X*) ‘that I lift them’

*ya'X 'ita:X* (also *GAta:X, 'Ata:X*) ‘that he lift it’

Note one poetic instance, Raven’s hunting song from Anna in text, *k'u'xLte:Xsh 'ixleh* ‘do I want to carry something (animate, inert) (an indefinite distance)?’.

It is with action verb themes that we find the least predictability or greatest instability. Where there are telic preverbals this is the least so, predictably. Tab. 12.19 shows action verbs that are either attested both in the Active and Inceptive, only in the Active, or only in the Inceptive. Preferred forms are highlighted by boldface.

In this limited sample, where we do have judgments by Lena, we see that the Active is preferred more often than the Inceptive. For the pair *'Aw li:xLmahX ~ IAGAxLmahX* ‘that I ruin it’, she explicitly had no preference, and there are numerous other instances of

both Active and Inceptive where no meaning was distinguished. In other cases we have, perhaps by chance, the Active or the Inceptive only.

Strangely enough, we also have Inceptive desiderative from derivationally Active themes with repetitive *-g* (thematized or not), cf. (35).

- (35) Inceptive desiderative from Active themes with repetitive *-g*

*GAxLA'AshgX 'ixleh* 'I feel like sneezing'

*GALA'AshgXsh 'i:leh?* 'do you feel like sneezing?' (-*g* thematized)

*qa: GAqa:gX* 'that she (try to) bite us' (-*g* not thematized)

*GAxLda:sgX* 'that I weigh it' (-*g* thematized)

The *'i-* allowed in motion verbs is apparently not allowed in action verbs: proposed *\*li'xLmahX* 'that I ruin it' and *'Aw \*'ixdAla:X* 'that I drink it' were rejected by Lena. Likewise, with the one attested customary, we have Inceptive desiderative *qa: GAshe:k'X* 'that they kill us' from Anna (text 25, line 138).

There are at least nine instances (36) in the corpus of desiderative stems suffixed by *-X* with optative instead of desiderative prefixes (from Lena except where noted).

- (36) Desiderative stems with optative prefixes

*'ixiLda:sgX* 'that I weigh it'

*'i:qa:X* 'that (dog) carry it in its teeth'

*la:xiduhX* and *LAGAxiduhX* 'that I flesh it'

*ya' 'ixida:X* 'that I be seated'

*'i:xigahX* 'that I dance'

*ya' 'ixite:X* 'that I lie'

*'i:ligahX* 'that you dance'

*Xi:ch' da: 'i:'a'ch'X* 'let's go over there'

*Xa:nliya:X* 'that you eat it'

(Anna)

In Krauss (1970a) such forms were labelled "hybrid," and correctly judged to be "almost certainly incorrect." See §12.3.4.3 for semantic and syntactic motivation for such blends.

#### 12.3.4.3 Syntax of desideratives

There are two basic syntactic uses of desiderative: (A) subordinate to another verb, from which are cited nearly all the examples above, and (B) independent, i.e. hortatory, to be treated below.

Verbs attested as subordinating desiderative clauses are very few, but frequent. They are apparently only in the imperfective, perhaps by chance. They follow the subordinated desiderative clause, probably the syntactic norm. One is *o-tl' dA-le* 'S says to o (to do, that o should do)', often glossed as past, 'told o to':

- (37) *dAGALAdelhX 'itl' dAxleh* 'I told you to learn it'

*k'u:xtsi:nX sitl' dAlinhinh* 'he told me to sing something'

*'u:da' GAwe:X 'utl' dAxlinhinh* 'I told him to swim thither' (note that the *=inh* cannot be suffixed to the subordinated desiderative)

Most common of all is *'i-leh* 'S wants to', or, perhaps more precisely, 'S's state of mind is to', e.g. *ya:n' GAda:X 'ilinhinh* 'he wants to sit down', *dik' ya:n' Gaxda:X 'ixle:G* 'I don't want to sit down'. Where the subject of the main verb is different from that of the subordinate, the postpositional phrase *o-Xa'* 'for o, in close relation to o' is used, where the postpositional object (o) is coreferent with the subject of the subordinate clause, reinforcing the change of subject. Thus *Gi:she:X 'iXe'xlinhinh* 'I want you to kill him' (< *'i-Xa' 'i-x-leh-inh*) i.e. 'I want for you that you kill him', with the *=inh* referring to 'him' suffixed to the main verb, not the subordinate desiderative. For many more instances of the desiderative and details of this syntax, see the subentry *'i-leh* 5. in Krauss (1970a). See also Chap. 25 on syntax, where this whole subject is treated again, from a somewhat different perspective, in a section entitled "Complex sentences with subordinate clause in desiderative mode." The following subsections, *'i-leh* 6. and 7. show the use of the optative instead of the desiderative with *'i-leh*, and the "hybrid" forms listed above with desiderative suffix but optative prefixes.

Before considering the hortatory, it should be noted that there are also some instances (38) using the desiderative in more of an appositive or adverbial way than subordinative. For example, from Anna in text we have the following.

(38) Usage of desiderative as appositive/adverbial

*qa: GAqa:gX 'udAGAleh 'uwa: 'i:t'inh[inh]* 'her mentality [still wolflike] is to (try to) bite people'

*'AdAdAshe:X 'udAGAleh 'uwa: 'i:t'inh[inh]* 'AdAdAshe:X 'his mind was that he kill himself, that he kill himself'

*'idAGAleh 'iya: wAX 'i:t'eh 'AdAdAshe:X* 'your mind is that way, that you kill yourself'

A different kind of example, closer to or actually hortatory, or at least so glossed, is from Lena: *'Al 'idAxah 'iqa:X* 'tell it (dog) to carry this (in its teeth)' (*'i-dA-xah* 'by your oral order'), 'let the dog carry this in its teeth by your command'.

#### 12.3.4.4 Hortatory desiderative

While the vast majority of desideratives attested are subordinate as in §12.3.4.3, there were about ten instances of independent desideratives in the 1965-69 ledger, a usage called "hortatory." The exact meaning of this, and difference from the optative, can perhaps be better understood from the examples below. Two are from Anna in Raven's song, from inside the whale, Inceptives with telic preverbals: *sitl' yAq' GALAduxX* 'may it drift ashore with me (in it)' and *q'e' GALte:Xinu* 'let them (humans) find it'. Three more are Inceptives from Lena: *GAsinhXinh* 'may he die', *GAli:ta:Xinh* 'may he live' (stem-vowel long, perhaps distorted because sung), *Xa:n' k'uGALi:Xinu:* 'that they build something'.

The last is Inceptive with telic preverbal, and follows a sentence framed ‘tell them not to...’ with prohibitive, but this is still definitively hortatory, because of the enclitic =*inu*-, as in the three preceding examples, spread from original use as relativizer. Further from Lena are Active *dAXu’ ya:X di:le:X* ‘you should tell the truth’, *ya’X ’iLta:X* Lena’s father’s name, which she interprets as ‘let him lift it up’ (leaving the *L*- unexplained). Finally, we have from Lena *li:xa:Xinh* (also *LAGAxa:Xinh*) ‘may he grow up’, the Active form specifically noted by Lena as said when a child sneezes.

There were two desiderative forms in the 1962–5 corpus with no prefix as in the Active imperfective. In 1965 in connection with the usitative Active imperfective derivation *’u:d lAxah* ‘it (usually) grows there, it belongs growing there’ (i.e. ‘that’s its usual normal place to grow, where it should grow’), Lena had also offered *’u:d lAxa:X* ‘it grows there’. This form shows desiderative suffix but zero prefix as in the Active imperfective, without distinguishing the meaning from the usitative. In addition, there was Lena’s *dik’ sidAwahd le:XG* ‘I never get tired of it’. To interpret this, cf. *sidAwahd GAle:L* ‘I’m getting full of it (food)’, *o-wahd* ‘for the sake of o’, the thematic qualifier *dA-* here probably meaning ‘orally’, thus *sidAwahd* ‘filling me’. Thus literally ‘that it not fill me’ in a strong usitative or desiderative sense, ‘it shouldn’t/wouldn’t ever fill me’, might happen to get glossed ‘I never get tired of it’.

Finally in 1971 I had a last chance to follow this up with Lena, however hurriedly and unsatisfactorily: After confirming *sidAwahd GAle:L*, I then got her to say *sidAwahd le:X* ‘I get tired of it, it fills me’ (cf. *s-* perfective stative *sidAwahd sAliLinh* ‘I’m tired of him’), also causative *’idAwahd xLi:X* ‘I try to make you tired of it’. Lena then reconfirmed *’u:d lAxa:X* ‘they grow over there’ along with *li:xa:Xinh* ‘that he may grow’ and *LAGAxa:Xinh* with the same meaning. She further offered the forms in (39).

(39) Hortatory desideratives from Lena

*’u:ch’ la:Xinu:* ‘they’re ready to go (move, subsist) there’

*ya:n’ch’ xte:X* ‘I’m ready to go to bed’

*dik’ ya:n’ch’ xte:XG* ‘I’m not ready to go to bed’

*ya:n’ch’ da: tu’ch’X* ‘we’re ready to go to bed’

*’u:ch’ xa:X* ‘I’m anxious to go there’

She rejected a proposed Inceptive imperfective (future) *’u:ch’ \*qu’xa:X*, but then accepted the very type of form just rejected, [*\*?*]*’u:d qu’li:xa:X* ‘that they’ll grow there’. At the same time she rejected a proposed *\*?’u:d la:Xinu:* ‘that they subsist there’, which should be correct, unless that would be better with *’u:dAX* or *’u:ch’* for a motion verb.

Subsequently, the only relevant data are Anna in 1972 *’a:nch’ ’iLa:Xinh* ‘have him come here, a regular causative with the expected prefix, Marie’s 1980 rejection of *’u:d lAxa:X*, and Sophie’s 1987 *dAxu: ch’a:X ’Axda:X* ‘it’s up to me to help myself’ and *dAxu: ’u:ch’ ’Axa:X* ‘it’s up to me to go there’, both with expected prefixes.

It may thus be that the Ø-prefixes as attested in eight forms were used by or known only to Lena, from whom we also have 7 of the 10 forms with the expected prefixes. Note

further that the Ø-prefixes are attested also only in the hortatory desideratives, not in the relatively numerous subordinate desideratives.<sup>19</sup> Conceivably, the Ø- vs. AN- prefix may be a relic of an older grammar. Alternatively, an at least equally probable, if not in fact more probable, explanation is that the Ø- is a mere analogical extension of the Active imperfective, especially the usitative derivation with motion verbs, into the desiderative, in much the same way as the optative is most probably just such an analogical expansion (cf. §12.3.4.2). At the same time, the reverse could equally well be said, that the desiderative -X has spread analogically into the usitative, insofar as the glosses suggest the idea of proper or ordinary place for the subject to grow or subsist, for example.

If we combine the semantics of some of the hortatory desiderative glosses, such as ‘anxious to, ready to’, with that of the glosses for the subordinate forms, ‘told to, be of mind to, in mood to, feel like, should’, we can perhaps get a somewhat better idea of the seemingly subtle semantic difference between the desiderative and the optative. We may likewise get a better idea, in the opposite semantic direction, of the distinction of the desiderative from the Active imperfective usitative derivation, where there is a sense of right, propriety, appropriateness.

In view of this subtlety and complexity, and in pushing the limits of memory of Eyak at this terminal stage, it seems hardly surprising that we should see such analogy and blending between the desiderative and optative and usitative. Even \*?’u:ch’ qu’li:xa:X for ‘that they’ll grow there’, Inceptive imperfective (future) hortatory desiderative, might conceivably be grammatical. Given the state of Eyak, and the limitations of our knowledge, such questions must remain unanswered.

## 12.4 Prefixation pattern through mode-aspect

The emergent pattern, of three conjugations, Active, Inceptive, Neuter, in imperfective and perfective aspects, and the spread of -L to Neuter and Active perfective, certainly go together. This emergent pattern is strongly reinforced, at least formally, by the rest of the mode-aspects: conditional, imperative, optative, and desiderative. It is supported most powerfully by the optative, which has exactly the same three conjugations formally. The conditional, imperative, and desiderative are each formally the same three conjugations as well, but at the same time have an extra (“extra-systematic”) conjugation, different for each, presumably reflecting some older basic structures. The optative has a fourth conjugation, with the prefix *s-*, definitely obsolescent, while the conditional imperative and desiderative both have a fourth conjugation, with the prefix *'i-*, not obsolete, but used differently in each. The prefixation found throughout the three conjugations in the six mode-aspects

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<sup>19</sup> This problem was never systematically investigated, e.g. by trying to elicit any of the subordinates with Ø-prefix, or the Ø-prefix hortatory forms with AN- prefix, or aggressive questioning of differences in meaning.

has a certain formal consistency, such that there is no question which prefixes represent which conjugation, e.g. most conspicuously *GA-* is only in Inceptives, (*'A'*)<sup>20</sup> in Neuters, so that there is some principle that a given prefix must be restricted to a single conjugation. In that case, however, the semantics or usage of each conjugation in each mode-aspect is sometimes less fully or less consistently predictable or explainable.

First, in evaluating the validity of the basic two-dimensional system of three conjugations and six mode-aspects, it has just been pointed out that formally, morphologically, what distinguishes the perfective from the imperfective in all three conjugations is the presence of the suffix *-L*, which is the only marker of the Neuter perfective. In the Active and Inceptive conjugations, however, it is the prefixation as well which distinguishes perfective from the imperfective. Further, then, in all four other mode-aspects, the prefixation is relatively uniform. Specifically, that prefixation is *GA-* throughout those four for the Inceptive, formally the same prefix as for the as Inceptive perfective. For the Active conjugation it is *AN-* and/or *'i-* (different from both imperfective  $\emptyset-$  and perfective *s-*), and for the Neuter it is *'a'* (same as imperfective negative and perfective negative). The optative mode has some special further prefixation, the *yi-* element, to be reviewed in §15.5.4.3. The imperative has special stem variation, and the desiderative a special suffix.

At this point, the semantics of the three conjugations for each of the four mode-aspects beyond the imperfective and perfective will be examined, the conditional aspect first, then the three modes. This discussion will repeat or summarize information in the respective subsections on mode-aspects above.

The **CONDITIONAL** shares some semantics with the modes, but is perhaps best considered an aspect. In any case, formally the conditional conforms to the Active-Inceptive-Neuter norm of *'i/AN-GA-'a'* ~ prefixation (where *'i/AN-* is an abbreviation of (*'i-* ~ or *AN-* ~)). It has zero suffixation. However, the conditional has a distinction in meaning between the Active and Inceptive that is both clear and perhaps quite unexpected in comparison with that in other mode-aspects. For details of choice of conjugation, affixation and morphophonemics thereof, and syntax, see §12.3.1 on conditionals. The most common conditional is the Inceptive, e.g. (using hypothetical examples) *wAX GAleh da:X* 'if/when that happens'.<sup>20</sup> The Neuter conditional has accordingly the expected meaning, e.g. *wAX 'a't'eh da:X* 'if/when it is so'. It is the Active conditional which seems to have the unexpected meaning, *wAX 'ileh da:X* 'it was just beginning to do so (and stopped), just as it was beginning to do so (it stopped, did something else, something else happened)'. This clear meaning seems both highly marked and unexpected. The ironically clear reference to (interrupted) "inception" on the part of the "Active" conjugation rather than "Inceptive" might be a sign either of a rather different earlier system, or at least of less than ideal

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<sup>20</sup> Conditionals are most commonly subordinated by *da:X*, which is, by convention, written separately from the verb, unlike other postpositions as clause subordinators.

terminology in the present grammar. As noted in §12.3.1 on the conditional, the best terminology for conditional might be ‘unrealized’, so that the Active conditional meaning might be glossed ‘Action begun but not realized’, and the Inceptive conditional be glossed ‘Inception not realized’.—Perhaps more to the point is that the present grammar, however awkwardly, is based here on purely formal criteria, *GA-* throughout the “Inceptive” conjugation, overriding semantic criteria. Quite possibly, that *GA-* should be seen as more than one morpheme, even though from a historical or comparative point of view the answer is not very obvious: Inceptive *GA-* in Tlingit, and progressive *GA-P-L* in Athabaskan (\**γə-P-l*) and Eyak are fully cognate; note possibly also the qualifier *GA-* in Eyak and Athabaskan (\**γə-*), especially in ‘see O’, of highly abstract meaning.

The *imperative* mode differs from all other mode-aspects in at least three ways. First, it is used only for second person, singular with no pronominal mark at all, plural with subject pronoun *LAX-*. Second, it has no negative. (Instead, there are prohibitives, for which see Chap. 24 on negation. Third, the imperative has four contrasting prefixes instead of three, the fourth being *'i-* ~, as do also the conditional and desiderative, but the imperative has also by far the most complex rules for choice of those four prefixes, the choice partly correlating with preverbals. For details, see §12.3.2 on imperatives. The four prefixes for imperative are *'a-* for Neuter, *GA-* for Inceptive, *AN-* ~ for Active, and a fourth, *'i-* ~, which will also be called Active, so *AN-* Active and *'i-* Active. The justification for calling the *'i-* imperative also an Active imperative is the following. There is a prefix that is formally and semantically quite consistent for the Neuter, *'a-* ~; there is *GA-* which is formally if not semantically quite consistent for the Inceptive. There is then both *AN-* and/or *'i-* for the third, because these two show much more relationship to each other, being much more interchangeable with each other, than are either with the Neuter or with *GA-*.

Conjugation choice in imperatives is here briefly reviewed. At one point in the writing of this grammar, specifically in §12.3.2 on imperatives, the forms with prefix *'i-* were called “*'i-* Inceptive.” This was presumably because *'i-* proved to be the regular imperative prefix for the Inceptive stative verb themes. These are an especially interesting class of statives in *GA-P-L* perfective, highly marked semantically, with a relatively small membership, of forty-some themes. It is highly questionable, however, whether this association of this *'i-* imperative should be with the Inceptive conjugation rather than Active, favoring the semantics over form, though that is otherwise well justified. One point favoring this association with Inceptive is the fact that motion themes, where the Inceptive perfective, marked with *GA-*, is the norm for motion in progress (so also the “progressive” derivation), is apparently the only theme class in which the *'i-* imperative may occur at all. With motion verbs, the *'i-* imperative appears, perhaps most significantly, in locomotion and classificatory verbs, where the motion is most abstract or generic, least specified by preverbals, e.g. *'iya* ‘walk!, go!’ (i.e. ‘don’t run!’, or ‘go indefinite distance!’). Beyond this, though the *'i-* is also used in motion themes mainly with *o-ch* ‘to(ward) o’ in locomotion themes, e.g. *'a-nch* ‘*'iya*’ ‘come here!’, *sich* ‘*'iqe*’ ‘paddle to me!’, but not in classificatory themes, e.g. *sich* ‘*'Ata*’ ‘bring/give it to me!’, very abundantly attested (though *\*?sich* ‘*'ita*’

is not attested).—Again, strong support for associating the prefix *'i-* with *GA-* is also noted in the semantics of the “inceptivity” of the *'i-* “Active” conditional, discussed above.

Aside from the problematic *'i-* imperative, the other imperative prefixes are the “standard” *AN-* Active, *GA-* Inceptive, and *'a'-* Neuter. In motion verbs the *AN-* Active imperative is rather specialized, found mainly with *o-k'ah* ‘away from o’ and with *ya'* ‘to a point of rest, still’ < ‘completely’, hardly a clear semantic category. The *GA-* Inceptive imperative is most clearly associated with preverbals that, ironically, could be classed semantically as “telic,” e.g. *sida' Ga:* ‘come to me!’ (‘to a point right in front of me’), *sida' GAta'* ‘bring it to me!’. The *GA-* is also used for some reason with *o-ch'* ‘to(ward) o’ with classificatory and postural themes, e.g. *sich' GAta'* ‘bring/give it to me!’, though it is not so used with locomotion motion themes, e.g. *sich' 'iya'* ‘come to(ward) me!’ (not *\*?sich' Ga:* with *GA-*). This association with telicity is notably inconsistent semantically with the Inceptive label for *GA-* imperative, that being hardly an example of “inceptivity.” For the Neuter imperative, at least the fact that that is limited to Neuter themes is as expected. Thus, the comparative verb *-t'e' ~ 'be'* is attested 38 times with imperative, 37 of which have Neuter imperative (*'a't'e: ~*), and only one Inceptive (*GAt'u*). However, by no means all Neuter themes consistently take Neuter imperative. In fact C *-Le* ‘be C’ is attested 9 times, 5 of which are Inceptive *GALe'*, 2 are Active *'Ale*: 1 is *'iLe'*, and only 1 is Neuter *'a'Le*. Indeed, this is typical of Neuter themes, the imperative of which is usually shifted to Inceptive *GA-* or Active *AN-*.

Imperatives otherwise, i.e. imperatives of Active verb themes, are quite unpredictable. They are never Neuter or *'i-* imperatives, but there is no clear principle for predicting a choice between *GA-* Inceptive and *AN-* Active imperative. See Krauss (1970a) and especially the section above on imperative for details, and speculation. Elicitation for these shows that either can be used with any theme, with no clear difference in meaning. It appears either that any distinction between these is almost entirely lost historically, or that any rules for these was barely beginning to evolve—more likely the former, especially in comparison with Athabaskan.

Choice or use of conjugation in *optatives* is most like that for imperatives, not surprisingly. Here there is also a fourth conjugation, but this extra optative is the obsolescent *s-* optative, which is also formally unique in combining the *yi-* element of the other optatives with what has to be identified with the conjugation prefix *s-* ~ otherwise unique to the *s-* or Active perfective. In this way, then, the fourth optative prefix is similar to the fourth imperative in that it is also a second Active conjugation prefix, as is the imperative fourth, though a different prefix. For a full account, showing all instances of the *s-* optative, see §12.3.3 on optatives. Likewise, see that section for the other three optative conjugations, as well as a summary of historical shifts, spread of (*AN-*) Active and Inceptive, and narrowing use of Neuter as in the imperatives.

Choice of conjugation in *desideratives* is also similar to that in the two other modes, imperative and optative. Prefixation is basically *'i-* ~ (or *AN-*) for Active, *GA-* for Inceptive,



and 'a'- ~ for Neuter. What most sharply distinguishes the desiderative is suffixation of -X to the stem, probably from postpositional o-X, not to be confused with the -X of the perambulative derivation. For details see §12.3.4 on desideratives. Here too there are many of the same tendencies for choice of Active and Inceptive in stative and motion verbs as there are in imperatives and optatives, including some instances of 'i-Active, and the Neuter desiderative is perhaps entirely replaced except in the comparative 'be' theme, 'a't'ehX. In action themes there is only the AN- Active desiderative, and GA- Inceptive, the choice between which is evidently quite unpredictable or arbitrary.

### 12.4.1 Mode vs. aspect

Mode-aspect is a single inflectional category, quite clearly, but it can also clearly be divided into three modes ("moods": imperative, optative, desiderative) and three aspects (imperfective, perfective, conditional) on at least two bases. One basis is semantic, in that the aspects refer to different stages of realization, and modes to desirability of act/event/state. The other basis is different criteria for choice of conjugation: theme-class plus stage of realization for aspect, and theme-class plus preverbal telicity for mode. Stage of realization for aspectual conjugation-choice is much more clear-cut than is preverbal telicity for modal conjugation-choice. Morphologically the difference between mode and aspect affixes is only partly clear, or relatively insignificant or abstract. It is true that perfective with -L occurs only in aspect, likewise *qu'*- imperfective, while desideratives in AN- and -X occur only in mode. However GA- occurs in both mode and aspect, likewise *s-*~, 'i-~', 'A-~, ('*a'*-~), and *yi-*~, though the differences of meaning especially for GA-, 'i-, and ('*A-* in each are striking and hard to reconcile. Syntactically the difference between mode and aspect is also only of secondary importance. All six can occur independently, even conditional aspect and desiderative mode, as shown, though those two are usually subordinate.

Indeterminacy of conjugation choice in the modes is a serious problem. Telicity of preverbals is but a pale shadow of, much weaker than, stage of realization, in determining conjugation choice. Stative theme classes (usually without preverbals), q.v., and motion theme classes (more often with preverbals), q.v. do have relatively clear modal conjugation choice, but not action verbs (especially those without preverbals), where that choice is least clear of all, by far. Secondarily, i.e. within the modes, conjugation choice is clearest or most clearly dependent on theme-class and preverbals. This is especially so for the imperative mode, whereas it is less clearly so for the optative and desiderative. There the choice is more influenced by mere tendencies for generalization or spread of certain preferences between Active and Inceptive according to theme class, the Neuter being nearly lexicalized. Again, that leaves choice between Active and Inceptive imperative for action verbs without telic preverbals the most indeterminate of all.

### 12.4.2 Meaning of conjugation prefixes through mode-aspects and in derivations

Here the conjugation prefixes themselves will be discussed as a system for each of the conjugations, partly repetitive of the above, but in this particular perspective. There is a highly limited number of conjugation prefixes, nine to be exact, if we include Ø-. The rest are AN-~, 'i-~, s-~, qu'-~, GA-, 'A-~, ', yi-~, if (more or less) fully broken down. However, the cost of this economy is that most of these eight show a much greater number or range of meanings through the six mode-aspects and in derivations than might be expected from the terminology Active-Inceptive-Neuter conjugations. The following (§§12.4.2.1–12.4.2.4) is a survey of the variety of meaning through the mode-aspects, and then through conjugation-determining derivations, for each of these eight prefixes. The same prefixes of course also occur with the verb derivations, somewhat differently. Their use with those derivations will be shown in summary here as well. The derivations themselves are presented much more fully further below, in the subsections to which reference is made here below.

#### 12.4.2.1 Active prefixes (including 'i-)

The Active imperfective is the only unaffixed verb form, and it occurs, appropriately enough, along with zero suffix, in this least marked paradigm, semantically as well as formally.

The same zero prefix paradigm is also used in the usitative derivation, homophonic or identical with the Active imperfective. This derivation is the only way Active imperfective can be used with motion verbs. As such it has the meaning of usitivity, especially e.g. *'a:nd xdah* 'I sit here, here is my sitting place'. The usitative derivation is also very common in relativizations, e.g. *'uq' k'uteh* 'bed' (lit. 'someone lies on it'), *la'mahd* 'berry' (lit. 'it ripens'). This conjugational zero prefixation also occurs with all repetitives, all persistives, the multiple form with *qAXA-*, perambulative, and with some customaries (along with AN-~ and 'i-~, apparently with no difference in meaning). All these Active derivations have in common the idea of actions, events, or states that have some kind of recurrence, or that do not occur as a specific single act or as a single continuous movement or state. This use happens to resemble the usual use of English "simple present", in verbs like 'I eat', in something of a "generic" sense.

The prefix AN-, i.e. (')A-~ -(n)-, occurs in the (AN-) Active imperative, sometimes in the Active desiderative, occasionally also in the Active conditional but not as the norm. This AN- is also definitely the norm as the first element of the prefixation for the Active optative, but here it is followed also by the yi- element. Also, in this way, it can be said that the AN- is definitively the modal prefix in the Active modes (imperative, optative, desiderative), and not in the Active aspects (imperfective, perfective, conditional, though in the last there is some flexibility). This creates at least one formal difference between aspects and modes. Further, as noted above, the AN- imperative is used for motion verbs

in a rather specialized way, mainly with *o-k'ah* 'away from o' in locomotion themes and with *ya* 'to a state of rest' with classificatory and postural themes. For action themes, on the other hand, the *AN-* Active imperative is very general, along with *GA-* Inceptive, without clear distinction.

In derivations this *AN-* also occurs with the customary, and there only sometimes, along with zero and *'i-*, in apparent free variation, no difference in meaning noted. See also the subsection on Customary and conditional in §15.5.

The *'i-* Active, i.e., the active form prefixed by *'i- ~ 'i-*, occurs with what are called "Active" imperatives and "Active" conditionals. The term "Active" here might seem arbitrary, especially in view of the meaning in these main two uses. With Motion themes, the *'i-* imperative is found, as noted above, mainly in a spatially abstract sense, e.g. 'walk! (don't run!)', or 'go indefinite distance', and specifically with *o-ch* 'to(ward) o' in locomotion (but not other motion) themes. Surprisingly, *'i-* ("Active"!) imperative also proves to be the norm with *GA-* Inceptive perfective stative themes, 'be in state! (involving pressure, etc.)'. This consistency and pairing of *'i-* with *GA-* led to a temporary relabeling of *'i-* as an "Inceptive" prefix. The *'i-* "Active" imperative apparently does not occur (is not attested) at all in "action" themes. There seems to be no clear unity in these specialized uses of *'i-* in the imperative.

Equally surprising is that the "Active" conditional refers quite specifically to action, event, or state, just beginning, even for action themes. Thus, "Active" *che:y ixshish da:X* 'I was just beginning to sip tea and/when...', as well as *yi'Lqah da:X* 'it was beginning to dawn and/when', whereas "Inceptive" conditional means 'if/when' and not an actual beginning. This apparent contradiction certainly supported the relabeling of *'i-* as "Inceptive." This apparent further semantic disunity of the prefix *'i-* reduces the justification of the present grammatical structure to the purely formal identity of the prefix itself.

The only derivation with which *'i-* can be used is the customary. Of  $\emptyset-$ , *AN-*, and *'i-*,  $\emptyset-$  and *AN-* occur with about the same frequency, while *'i-* is much the least frequent. Again, the variation appears to be free, with no difference in meaning. However, it is of some interest that *'i-* can appear here at all, especially in connection with the question of direction of historical changes resulting in the current complexity.

Note that it can at least be speculated that there is an historical connection between the *AN-* prefix (< \*əŋʷ-), and the *'i-*, very possibly < PAE \*'ŋʷ. See the subsection on the possible relationship between *AN-* and *'i-* to be found in Chap. 6 on morphophonemics. The discussion is found there in spite the speculative status of the relationship. Such relationship between *AN-* and *'i-* could certainly help at least historically, in understanding the raggedness of the paradigm system. At the same time, it is duly noted that there are Athabaskan prefixes (e.g. negative perfective, semelfactive) with constricted /i/ which could easily be compared phonologically with Eyak *'i-*, but the semantic differences present a considerable challenge.

To summarize the long discussion above, the perfective, or Active perfective prefix *s-*, in positive perfectives, takes the form *sA-* with non-vocalic classifiers ( $\emptyset$ - and *L-*), and *s-* with vocalic, thus *sdi-* and *sLi-*, accompanied there by the *yi-* ~ element following the classifier consonant. In the negative perfective, however, in absolute initial position, the *yi-* (> /A/ except in 1s) disappears and 'A- ~ appears preceding, thus 'A-s(-*dA-*), 'A-s(*LA-*), CA-s(-*dA-*), CA-s(-*LA-*). In the *sA-* forms, the /A/ is rather clearly a reduction of *yi-* ~, so the prefix is basically *s-*.

The *s-* perfective can be used with any verb theme, to refer to action or event completed. With classificatory or postural themes it means both motion completed and state attained and indefinitely continued, open-endedly continued. It also can refer to a state attained and indefinitely continued with action verbs, or verb themes that are only attested as statives. Thus *s-* or Active perfective is the norm for a large class of stative verbs.

The prefix *s-* is "saved" from being the only mode-aspect prefix to have only one formal use, by appearing also in the *s-* optative paradigm. It differs from the perfective in lacking the perfective suffix *-L*. The *s-* optative becomes, like the 'i- ("Active") imperative, a fourth optative, which will also be labeled Active because *s-* perfective is the Active perfective. Considering the meaning of *s-* optative from the rather few attestations we have of it, there may be a sense of "indefinite desirability". As there is no clear difference in the use of Active and Inceptive optative, the *s-* optative cannot be said to be closer to either. In this way also extrasystematicity of the 'i- Active imperative is shared in the same way by the *s-* Active optative, forming a small class. A negative form of the *s-* optative is probably not possible, as the legitimacy of any other negative optative is itself questionable (cf. §12.3.3.5).

This *s-* prefix thus like all others of its position-class, has more than one use, so showing clear formal unity, though hardly semantic unity. It does not occur as a mark of any derivations. Again it should be noted comparatively that *s-* appears to have two conjugational functions in Athabaskan as well as in Eyak. While *s-* appears as a second kind of Active optative in Eyak, in Athabaskan it appears as the negative of imperfectives (also minus the *yi-*), though both of those must have evolved from the same PAE morpheme.

#### 12.4.2.2 Inceptive prefixes

The Inceptive imperfective, with prefixal *qu'*- ~, of Zone B instead of D1, is unique in its position class and in complexity of form and morphophonemics. It is evidently a recent development as part of a newly changed system, and has maximal freedom of occurrence. It is freely used as future for any verb theme class, and, also uniquely, can even occur in some gerunds. On the other hand, it is the only aspect and conjugation marker that has clear semantic unity and one single use, with only one meaning. It can accordingly be used with any derivation, including the customary. As noted, it is most probably a combination, historically, of PAE \*q<sup>w</sup>ə- 'area, event' and irrealis marker '.

The mark of all other Inceptives than the imperfective is *GA-*. The prefix *GA-* with suffix *-L* to the stem is the Inceptive perfective. This paradigm has a broad but well unifiable

meaning, referring to a process of some duration, or seen as of some duration. As such, it is the “norm” for locomotion verb themes, or any other theme so seen. Examples are given in (40).

(40) Inceptive perfective forms with locomotion verbs

*GAxwe:L* ‘I’m swimming (along)’

*LAGAxxa:L* ‘I’m growing’

*ich’ GAxta:L* ‘I’m (in the act of) giving it to you’

*ya:n’ GAxda:L* ‘I’m (in the act of) sitting down’

*GAXsinhL* ‘I’m (in the process of) dying’

*dAGAxLAqahGL* ‘I’m (in the act of) falling’

The last two phrases in (40) are definitely action themes, but by what is called the progressive derivation, they may appear in the form of Inceptive imperfective. Likewise *dAGAxche’L* ‘I’m getting hungry’, otherwise an *s*-stative theme, as e.g. *dishiche’L* ‘I’m hungry’, here with the “transitional” version of the progressive derivation. In fact, the progressive derivation has three distinct but related meanings, so instead of *xki:nX* ‘I’m weeping’ we have *GAXki:nXL* meaning ‘I’m moving along weeping’, ‘I’m in the process of weeping for an especially long time (e.g. all day)’, or thirdly, ‘I’m starting to weep’. In this last, instead of durativity, we distinctly have the notion of inceptivity, appropriate to that of the label “inceptive” itself. Thus, this paradigm, *GA-p-L*, is not only the exact formal cognate to the Athabaskan “progressive”, but also very close to that semantically. Associated with the notion of progression or duration might also be the special class of Inceptive perfective stative verbs, *GA-p-L*, referring to some kind of motion stopped or in equilibrium by pressure, e.g. ‘holding, bracing, angular position or curvature, grimace’. However, as noted below in §14.4.2 on this theme class, it became surprisingly clear that the associated imperative is *i*-“Active”, not *GA*- Inceptive. It is likewise clear that the imperative associated with the Inceptive perfective *Ga:L* ‘is walking along’ (as in *a:nch’ Ga:L* ‘is walking hither’), is *a:nch’ iya* ‘come here!’, not *\*?a:nch’ Ga:’*. At the same time, it is in imperative mode that conjugation choice is best preserved or clearly determined, and there the Inceptive imperative is chosen by telic preverbals—hardly an “Inceptive” trait! Likewise, the Imperative of Inceptive progressive stative themes, e.g. *GALAXu’GLinh* ‘he’s exerting himself’ turns out to be *iLAXu’G* ‘exert yourself!’ instead of *\*?GALAXu’G*. Such inconsistency in the use of *GA*- raises severe second thoughts about the unity of the “Inceptive” conjugation on any semantic basis.

The Inceptive conditional aspect, with prefix *GA*- only, is the norm for ‘if/when’, as quite distinct from the Active ‘start to V and...’, however “inceptive” that “Active” may sound! The three modes that employ the prefix *GA*- are *GA*- imperative (open variable stems -CV), *GA*- optative (requiring also the *yi*- element), *GA*- desiderative (with suffix -X). All three have similar use. Such use is by far the best defined, probably best preserved, with the imperative, as especially with telic preverbals (including *o-ch* ‘to(ward) o’ in

classificatory and postural themes, but not locomotion). Imperatives of action verbs, on the other hand, seem to vary freely between *GA*- Inceptive and *AN*- Active, as noted. The same patterns hold, basically, for the optative and desiderative modes, though there the Active and Inceptive seem to have spread somewhat more freely. In sum, the *GA*-*P-L* as Inceptive perfective (or progressive) seems to hold fairly well together semantically under the label “Inceptive,” but the *GA*- prefix alone in conditional aspect, and in the three modes as a group, does not hold together semantically at all.

One must of course consider the fact that the mark of the optative in Athabaskan is \* $\gamma^w\text{ə-}$ , presumably PAE \* $\text{G}^w\text{ə-}$ , that Eyak has a *GA*- optative, and that Eyak has lost the labialization of virtually all back velars, further suggesting that Eyak *GA*- may have more than one source. That would naturally help explain the inconsistency of the semantics or use of *GA*-. In fact more than one Eyak *GA*- seems already called for even without considering PAE \* $\text{G}^w\text{ə-}$ . An “underlying” Eyak \* $\text{q}^w\text{A-}$ , cognate with Athabaskan \* $\text{q}^w\text{ə-}$  place/event pronoun has been posited for the future prefix, on good phonological as well as semantic grounds, though that may be the only trace left in Eyak of such labialization. However, for an Eyak \* $\text{G}^w\text{A-}$  optative plus the required *yi-*, the result should probably be \**Gu-*, as in Athabaskan. However, that is never the case, it is always *Gi-*. It would be easy to allow for inconsistency or analogy here, but that is not supported by the fact that Eyak optative fits very well instead with the three-way conjugation pattern.

There are also three derivations involving negativity that prescribe the Inceptive conjugation. No negative imperatives exist. Instead of any negative imperative, the usual ‘prohibitive’ is the prohibitive adverb *ya’Xu*: ‘don’t!, let it not happen that V’ with the verb in the Inceptive imperfective (future), not limited to second person. Thus e.g. *ya’Xu: xuqu’yishe*: ‘don’t kill me!’, or *ya’Xu: ’Adqu’xdAshe*: ‘let me not kill myself!’. Another prohibitive, much less frequent than the preceding, is the ‘cautionary prohibitive’. This is likewise not limited to second person, starting with the adverb *q’ah* ‘already’ or that procliticized to *q’A-*, plus a unique paradigm with prefix *GA-*, without suffix *-L*, but instead with the negative suffix *-G*. This might be properly considered a 21<sup>st</sup> Eyak verb paradigm, a seventh Inceptive mode-aspect. (Extrasystematic, it is not a variety of imperative, which is limited to second persons. Otherwise, it might be considered a kind of negative derivation, but not clearly of any particular mode-aspect.) Thus e.g. *’Aw q’ah Gi:sehdG* ‘don’t trip over it!’ and *’Aw q’AXAGa:Ginh* ‘let him not eat it!’ are warnings to avert disaster. This extrasystematic paradigm lends significant support to the identification of the prefix *GA-* as Inceptive in meaning, lacking the perfective suffix *-L*, in a paradigm negating or ‘prohibiting the inception’ of the activity. A third Inceptive negative derivation, this Inceptive perfective negative, is regularly used with any negative in the construction *di:yAX ... -G* ‘not V yet’, e.g. *di:yAX ’u:da’ GAXa:LG* ‘I haven’t gone/gotten there yet’. For full details and description see Chap. 24 on negation. The meaning of negative is at least not at all incompatible with the notion of Inceptive (perfective or imperfective), ‘not start(ed)’.

### 12.4.2.3 Neuter prefixes

This brings us to the Neuter prefixes, the only one of the three conjugations in which the prefixation holds together throughout, both semantically and formally. All positive Neuters require *yi-* ~. Negative imperfective and perfective Neuters require (')*a'*- (< 'A- ~ plus irrealis '-) and no *yi-*, as do all conditional, imperative, and desiderative Neuters. The positive optative, on the other hand, requires both, *-a'-yi-*; this often takes the form *-a'li-*, probably by analogy with *AN-yi-* > *-a'li-*. The constancy of ('*a-*') of the negative Neuter imperfective and perfective and of the same in the other Neuters is indisputable. This is not only formally the case but semantically so as well, considering the irrealis or non-realization inherent in negatives, in the conditional “aspect,” and in all three modes, imperative, optative, and desiderative.

### 12.4.2.4 Problems of *yi-* and irrealis '-

Both *yi-* and ' - present special problems. They are also related in one weak way, in that they are mutually exclusive except in the Neuter optative. The history of *yi-* is clear, going back to PAE \**ɪʏə-*, denasalized as is characteristic of Eyak. This *yi-* is difficult to label because of its two rather different functions, both cognate with Athabaskan. It was understood or recognized rather late in Athabaskan (see Krauss 1969), as what is called *perfective marker*, accompanying conjugation prefixes to its left in perfectives, also as the *yi-* element in classifiers, and to be identified with the \**nə-* ~ \**i-* (< PAE \**ɪʏə-*) in neuter statives. It may also be shown to be part of the Athabaskan optative \**ɣwə-* plus length. In Eyak *yi-* ~ also shows all these functions.

First, Eyak *yi-* occurs with *s-* (Active) perfective, as shown at length in §12.4.2.1, either reduced to /A/ or as /i/ with vocalic classifier, but only with positive *s-* perfective, not negative. Second, it occurs in all positive Neuter imperfectives, the one place where it is the only prefix, and all positive Neuter perfectives (and comparative imperfectives) where it is preceded by 'A- ~ in D1. Third, it appears in all optatives (perhaps always positive?), including of course the *s-* optative.

These three functions of *yi-*, in two of three perfective aspects, all optative modes and all Neuter conjugations, are quite disparate. Further, *yi-* is precluded from negative in the conjugations, where it is replaced by irrealis, while in the Neuter optative mode irrealis and *yi-* co-occur. This may suggest that optative *yi-* may be a different morpheme in origin, and/or that there may be even three homophones here. The 2*s* subject pronoun *yi-* is certainly a homophone, the deletion of which in Neuter imperfective *yiLeh* ‘you are’ (also ‘s/he is), not e.g. \**yi:Leh*, must be because of the constraint against duplication of prefixes working overtime (cf. §8.2). In any case, with such disparate functions, it is so hard to label *yi-* that it is here left identified simply as *yi-*.

The problems with irrealis ' - are quite different from those with *yi-*. Semantic unity is clear enough, the labeling easy, as it refers to non-realization throughout the modes ([unrealized and] desired), aspects (future and negative Neuter), and directive derivation (only ‘aimed, directed at, maybe missed’, partial effect, etc.). It is formally easy to recognize

also, creating the only syllables that end in glottal stop in any prefixal position, beside 'i- ~ 'ʔ-, and entailing very similar variation in the vowels of the future and directive prefixes in Zone B. The problem begins with its occurrence so widely separated in Zone B and Zone D, yet which must be linked by the allomorphy of directives in Neuter negative, 'u:-Ca'- instead of 'u'-Ca'-. The fact that e.g. *te'ya'* 'fish' (CV'CV') is perfectly permissible phonologically invokes the rule of non-duplication of prefixes as the only explanation, even at a distance. That non-duplication or dissimilative rule works not only e.g. in *dik' 'u:la'xLga:G* 'I don't know (it)', producing a common favorite stretch 'u:la'-, but also in different stretches, e.g. *dik' 'i:la'xLga:G* 'I don't know you', or *dik' 'u:yAla'xtahLG* 'I wasn't expecting him', *dik' 'u:dla'xLta:G* 'I don't know (that house)'. It may also play some role, however, in the unique but fully verified *dik' 'ulah qu:la'ta:Ginu:* 'they didn't find out about it', with metathesis of 'u:- and qA-. The issue is discussed at length in subsections on the constraint against prefix duplication and Future above (§§8.2 and §12.1.5), and morphology of the directive and the qualifier qA- below (§15.9.1). It does of course raise a basic question in writing a synchronic grammar, here the degree to which irrealis is a morpheme.

### 12.4.3 Conspectus

The modern Eyak verb is of course a system in evolution, from something probably rather different, toward a system with three conjugations and six mode-aspects. All three conjugations show these six mode-aspects. There are two or three extrasystematic paradigms, or stragglers.

Only one conjugation, the Neuter, approaches complete formal consistency including the imperfective and perfective aspects, and has semantic consistency throughout. The Neuter tends however to be replaced by Active and Inceptive especially in the optative and desiderative modes.

The Inceptive conjugation has formal consistency in five of six mode-aspects, as defined by GA-, but has a completely different imperfective prefix, that being even in a very different position class, uniquely. The Inceptive prefix GA- then, so consistent formally, even in the optative, has startlingly poor semantic unity. One of its meanings in the perfective, the progressive derivation, surely a very old paradigm and cognate to the Athabaskan progressive, is 'start to', along with locomotion duration, transition, and station with pressure. The GA- perfective is different from the other two perfectives in not taking *yi-*, unlike the Athabaskan. The GA- conditional is merely 'if/when', even 'whenever'; cf., ironically, the Active conditional, which means 'just start to (and...)'. In the imperative mode (where conjugation choice is relatively well preserved for motion themes) the choice of GA- conjugation is associated with telic preverbal. With Inceptive (GA-) perfective stative themes ('pressure' etc.), and locomotion themes, choice of imperative is not GA- but 'i-. This not only casts severe doubt on the classification of the extra prefix 'i- as Active rather than Inceptive, but even severer doubt on the validity of the Inceptive conjugation as such semantically.



The Inceptive is also special to some negative verb constructions, including the cautionary prohibitive, which should probably be counted as an extra paradigm, an extra Future, *GA-* with negative suffix *-G*, or an extra mode-aspect. There the label “Inceptive” is also valid semantically.

The Active conjugation shows the least formal cohesiveness, with four different prefixes, three of which show up in more than one mode-aspect. Thus  $\emptyset$ - is the only prefixation that shows up in only one mode-aspect, the Active imperfective. The imperative and optative each have an extra paradigm. Along with the greatest variety of prefixes, two extra paradigms, the Active probably fits the least well into the evolving structure. It might be said that the Active also has the least marked meaning. Thus, unsurprisingly, it also has the least semantic unity. However, by including as Active all uses of the prefix *'i-* along with that of the *'i-*Active imperative, the Active intrudes egregiously into the semantic area of the Inceptive in serving as the usual imperative of the Inceptive perfective stative, stativity with pressure, and in the Active conditional having the meaning ‘start to and’. Again, the messiness from the extra *'i-* paradigms might be explained, or at least partly addressed by the possible relationship between *'i-* and *AN-*, noted already in §6.7.1, whatever the status of that relationship may be.

There is further discussion of the use of these prefixes in derivations in the final subsections of the subsection on the customary derivation (§15.5), particularly that on the Customary and conditional (§15.5.4.11).

The “core” system, imperfective and perfective each in three conjugations, is especially problematical in that the Future prefix *qu'-* is in an entirely different prefix position from the rest, in Zone B instead of D, and so clearly of a different type and origin. The unevenness of the rest, in terms both of consistency of form and use and raggedness with extrasystematic paradigms, fourth conjugation *'i-* and *s-*, add to the obvious issue of historical change. At the same time, those very traits, together with further advance in comparative study of Eyak with Athabaskan and Tlingit, may well lead to better understanding of their evolution.

This system of Eyak conjugations and mode-aspects, such as it is, based on form at the expense of semantics, must for the moment be left as such, with the hope that there will be future work on Eyak and that someone can find a better way to present it.

#### 12.4.4 Combination of *'a'* -and *GA-*

As a kind of footnote, the otherwise unthinkable combination of two conjugation markers, *'a'GA-*, is attested several times, perhaps often enough to be considered acceptable Eyak, however innovative. This combination is obviously made up of *'a'*- (< *'A-* plus irrealis *'-*) and Inceptive perfective or progressive *GA-*. Though I remembered duly transcribing such forms, I had dismissed them from the grammar as “bad” Eyak. In the later stages of writing

the grammar, however, with the corpus converted to database by Leduey, I asked Leduey to search for 'a'GA- and he was able to list no fewer than 11 attestations thereof (41), and that from all three of the main speakers, Lena, Marie, and Anna.

(41) Themes with Combination of 'a'- and GA-

*k'ulAX 'a'GAt'u'L* 'he starts to get rich' (from Anna in text)

*xutl'ga' 'a'GAt'u'L* 'it's turning white' (Lena)

*k'usha:dah 'a'GAt'u'Linh* 'he's getting mad' (Lena)

*Xe'lih 'a'GAt'u'Linh* 'he's getting uppity' (Lena)

*dA'a: 'Adla:Lixa:gga' 'a'GAda'L* 'he's getting big enough to take care of himself' (Lena)

*di:yAX q'Aw 'Awga' 'a'Gi:da'LG* 'you're not big enough yet' from Lena

*dAtli:shuh 'Awga' 'a'GAXda:L 'a* 'Am I big enough yet?' (from Marie, transcription 'a'GAXda:L surely to be corrected to -da'L)

*di:yAX q'Aw 'Awga' 'a'GAda'LG* 'it's not big enough yet' (from both Lena and Marie)

*di:yAX 'Awga' 'a'GALda:slG* 'it's not heavy enough yet' from Marie.

In addition we have one item with initial qualifier, *'ila'u'X la'GAda'L* 'it (hat) is getting too small for (over) your head' from Lena. These are from themes with only three stems, four with *-t'e' ~ 'be*', five with *dA-a' 'be of size*', and one with *L-da:s 'heavy*', all being exemplary Neuter imperfective (stative) themes, for which see Chap. 14 on verb theme classes.

By chance I subsequently noted six more examples, all with qualifier present. These six additional items, listed as (42), were all under the stem *-a' 'extend*', in another exemplary Neuter imperfective stative theme.

(42) Neuter imperfective stative themes with *-a' 'extend*'

*ki:nX 'u:nAX yAX guli:'a'L / gula'GA'a'Linh* 'a tear is starting to run down his cheek / cheeks' (Lena)

*'a:nch' gAla'GA'a'L* '(spilled milk) starts flowing hither' (Lena)

*qid gAla'GA'a'L* 'it's starting to run down off the edge (spilled water)' (Lena)

*'ida'GAL'a'L* '(wind) is starting to blow'

*k'u:y 'a:nda' 'ida'GAL'a'* 'let wind blow hither' (shaman's incantation)

*k'u:ydaG 'ida'GAL'a'L* 'wind too starts to blow'

Finally, a further search of the database by Leduey revealed still five more examples (43) from Lena.

(43) More combinations of 'a'- and GA-

*XAyA'u:ch' 'ida'GAL'a'L* 'it (smoke) is starting to go way over there'

*XAlahsdAch'ahd 'ida'GA'L'a'L* 'it (wind) is starting to come off ocean'

*Xa:li' 'ida'GAL'A'L* 'northwind is starting to come down'

*shi:da' 'ida'GAL'a:L* 'wind is changing to westerly (up creeks)'

*'iLta:s 'ida'GALA'a:L* 'winds are starting to cross'

It is of course fundamental to note that 21 of the 22(!) examples have the stem in the Inceptive perfective, with suffix *-L*, and *-CV'* as expected of *-CV'* stems, except for the blends. Johnson's second example, however, is especially interesting in having the stem of the optative, as expected given the gloss, or imperative, in any case without the *-L* perfective suffix.

As I had taken to consider these forms to be grammatical mistakes from terminal speakers, I did not explore the possible range of use of this combination of conjugation markers in the field, so just how widely these surely innovative forms might have been acceptable Eyak grammar will remain unknown. The three examples from George John are of further special interest because they add not only a fourth speaker, but because George Johnson was from Bering River Village, not Cordova. Moreover, he left that area for Yakutat in 1912, which somewhat extends the use of *'a'GA-* not only geographically but also in time back at least to 1912.

The last three additional examples (42) and all five in (43) are of the theme *'i-d-L-'a'* with indeterminate object marker *'i-* and *d-* qualifier for the movement of wind, smoke, fog, clouds; cf. also *'i-d-l-e ~* also for an event taking place, e.g. war, potlatch. At the same time, there is another prefix sequence producing high-frequency homophonous *'ida'*, indeterminate object plus irrealis *'-* for the directive verb derivation; see §15.9 on the directive. The directive unaccountably requires in most cases of indeterminate object what has to be the insertion of a *dA-* of unclear origin. It is possible that the eight examples with *'ida'* here are influenced or facilitated by the homophonous *'ida'*, just as they were no doubt not at first noticed because of it. There is no question, however, of the formal and semantic identity of these eight instances as the same combination *'a'GA- ~* as those in (41).

The motivation for this combination is in any case quite clear. The meaning in all 21 cases with Inceptive perfective *GA-* and a stem suffixed by *-L* is obviously the inceptive or transitional meaning of the progressive derivation. At the same time, this derivation is applied in every case here to a Neuter imperfective stative theme, which remains represented in these cases with the conjugation marker *'a'*, with lends the meaning 'progression to a state'. The remaining question is why the negative aspectual form or modal prefix form *'a'* preceding for the Neuter, rather than the positive aspectual *yi-* following the *GA-*? One answer might be that that combination already exists in the Inceptive optative *Gi-*, though the conjugation choice system has largely collapsed for the optative, so that has largely lost its inceptive meaning. The alternative *yiGA-* is presumably

excluded by the subpositioning in Zone D, *GA-* in D1 and *yi-* in D3. It is perhaps less clear, though, why the result here was not *GA'*- instead of *'a'GA-* ~.

Clear enough in any case, is that we have at least 22 examples of *'a'GA-* ~ in the corpus, from at least four speakers in natural speech; stable in form, and consistent in meaning. This innovation is by no means necessarily a symptom of the decline of Eyak, possibly having come about well before that decline. An analogous form in English might seem to be *it is widening*, or perhaps rather *I saw Mary and he there*, because the latter is currently becoming a norm, so it seems. There is certainly a significant lesson here, that even at this extreme late date in the history of Eyak and of the writing of its grammar, there is still more to discover.

Finally, considering that still other combinations of conjugation markers may exist in the corpus, reexamination of the theme *'i-d-L-'a'* for movement of winds, fog, smoke, clouds, revealed one instance of *k'u:y lu: 'ida'sAL'a'L* 'wind started to reverse direction' from Lena. This was immediately followed by *k'u:y lu: 'idAsALa'L* for the same, with my note "latter preferred." I.e. at least momentarily Lena combined the Neuter *'a'*- ~ with Active (*s-*) perfective. I presumably then suggested the regular Active perfective, which Lena considered better. There must be in any case far fewer examples of this combination than of *'a'GA-* ~, if any more at all. It must almost certainly be less acceptable, and it certainly helped to sound acceptable by the homophonous prefixes in the directive derivation with indeterminate object in Active perfective *'ida'-sA-*.

## 13 CONJUGATION TABLES

This is a problematic issue for an Eyak grammar. For some time I resisted construction of conjugation tables, for reasons stated in §13.1 below, which was originally at the end of the subsection above on verb suffix sequence, before discussing the classifiers. After receiving requests for such tables from close colleagues, however, I decided to address the challenge, in a limited way. Eyak does not need tables of irregular verbs, because Eyak hardly has what should be called irregular verbs, the few real irregularities being treated in the grammar and dictionary. However, regular verb conjugations are themselves complex enough that the output is not easily handled in two-dimensional tables. Given the situation, I have moved the rationale for the earlier decision now to include such tables to this point, left it in, to be followed by that for the reversal of that decision as discussed in the introductions to the tables and tables themselves.

### 13.1 Lack of paradigmatic tables in this grammar

Included here as a kind of excursus, is discussion of the issue for verbs of paradigmatic tables. Here the terms “paradigmatic tables” and/or “conjugation tables” are used interchangeably, but in contrast to the term “paradigm” itself. Paradigms do indeed exist in Eyak, and are discussed extensively. However, they have not been displayed in tabular form in this grammar, for several reasons. The full six-item (3 x 2) person-number system does exist, but only in the independent pronouns, not affixally, as shown above (Chap. 9). First, affixally, verb pronominal prefixes do not appear in a single position, but appear rather in two quite separate conjunct positions, and as preverbals as well. They thus appear only as the sort of hodgepodge they are, nothing like the simple system in which the variables are all in one place as e.g. in usual Indo-European. Second, what does show up affixally is far from the full six-item system of the independent pronouns. They include four additional items: the conjunct prefixal indefinite and indeterminate, plus the partly conjunct reciprocal and reflexive. (These latter two, moreover, entail the further complication of an extra element occurring the classifier position.) All this still does not include the enclitics, instead of prefixes, that show up in such an especially large proportion of third person items that it is likely to be taken, quite mistakenly, as part of verb conjugation for third person. The plurality marker or emphasizer is derivational, a qualifier, and not relevant to pronominal number. This apparent complexity in third person is the third and perhaps the most compelling reason for finding it inappropriate to present verb conjugation tables here. On the other hand, further study of what is the most effective method for presenting Eyak pedagogically to speakers of languages like Indo-European is certainly in order. That, however, belongs in another book.

With Eyak third person (zero) subject, there is an even higher frequency of occurrence of the human enclitics *=inh* (singular) and *=inu:* (plural) as enclitics after the stem (and

Table 13.1: Naïve conjugation table for 'to eat'.

	sg	pl
1	<i>k'uXAxah</i>	<i>da: k'uXah</i>
2	<i>k'uXi:yah</i>	<i>k'uXA AXah</i>
3	<i>k'uXah ~ k'uXinhinh</i>	<i>k'uXAh ~ k'uXinhinu:</i>

other suffixes). This gives what must best be called the illusion of a “conjugational suffix” for third person. This set of two enclitics, in origin only relativizers, is used for reference to a human non-overt direct object or pronominalized oblique object (possessor or object of postposition), or to a human non-overt subject. It is due to this expanded non-relative use of these enclitics, in verbs not subordinated to a postposition, especially for reference to a human non-overt subject, that makes this illusion so frequent (see §25.2.3).

Thus, one might be tempted, because of Indo-European and/or the six-item Eyak independent pronoun system, to set up the naive conjugation Tab. 13.1 to match the English “conjugation” for ‘I am eating’, ‘you are eating, etc.’, making even less sense than the English one, as in Tab. 13.1.

The translations are accurate, at least, but the usefulness of this table should be questioned even more for Eyak than for English. Even after carefully realigning to show more clearly what parts change and what parts do not, including hyphens for morpheme breaks, or undoing the English contractions, much still needs to be explained. Even the translation should show that the Eyak includes a direct pronominal object, ‘something’. Skipping over the English problems (2s = 2p, always; and he/she/it), and seeing the Eyak properly realigned so that the *-ah* (~ *=inh*) is vertically aligned, and the second person mismatch is understood, the Eyak still requires explanation. Aside from the differences in the (three) positions of what changes, the variation in third person still needs to be explained at some length. The fact that *k'uXah* can also mean ‘something’s eating it’, *k'uXihinu:* also ‘it’s eating them (human)’, and that there are further prefixes to this paradigm, has not been touched upon. It could certainly be argued that the issue of how to present Eyak paradigms would require embarking on a whole other new task. That would require the design of a pedagogical grammar of Eyak for speakers of English, after all the language in which the Eyak grammar itself is written.

We have here broached only one perfectly regular conjugation, albeit an open verb stem where the stem vowel is affected by nasal umlaut, hardly unusual. Though this verb is complicated by the indefinite object *k'u-*, and one should no doubt start with intransitive verbs instead, still confining the tables to purely inflectional categories, one would have also to confront inflection for direct object in transitives. Construction of a pedagogical grammar of Eyak is by no means a low-level task, even without the complications from the philological problems inherent here. One might also consider paradigm tables for possessed nouns and for postpositions. Considering the description of the personal pronouns above, however, two-dimensional tables apply there in such a limited way, to

1s/p and 2s/p only, as probably to be outweighed by the rest, such that simple listing is perhaps as good a presentation. Possibly a vertical listing should be considered for the pronouns, as opposed to what is initially done here. However, what is done here in narrative run-on style has at least the advantage of presenting the relationships or structure in the data. After that a table is attempted, as another approach, which still needs explanatory text. That table offered above would be somewhat ragged already, even without including the extra vertical alignments in order to show the different position in which the pronouns occur. Optimal pedagogy for Eyak is a remaining challenge.

## 13.2 Table of paradigms

Tab. 13.2 shows third person forms in all six mode-aspects of all three conjugations, the top two groups with  $\emptyset$ - classifier (or *L-*, to be supplied), the bottom two with *dA-* classifier (or *LA-*, to be substituted for *dA-*). The left two groups are with no qualifier, the right two with qualifier. Where negative forms show more change than suffixing *-G* to the verb word (with or without optionally changing open stem vowel stigma from /h/ to /:/), the forms are shown on extra lines for Neuter imperfective negative and Active and Neuter perfective negatives. The two extrasystematic paradigms, *'i-* imperative and *s-* optative, are shown as the fourth item. Footnotes are given below the table for alternative outcomes and/or explanations for prefixation that are not transparent. (A marginal exception throughout is that *di-*, the classifier variant of *dA-* is the combination of *yi-* and *dA-*.) Details are to be found in the text, likewise irregularities to specific verbs, further inflection for person, and derivations that can affect affixation.

Inflectional variation in stem is also shown in table (13.2), though only for maximally variable open stems, i.e. the open stem class CV, showing the variation in stigma /h/ ~ /:/ ~ /'/.

## 13.3 Personal inflection table

Tabs. (13.3–13.25) show all paradigms inflected for person, providing the essential information in a somewhat abbreviated and idealized or simplified way. All paradigms are shown, Active, Inceptive, and Neuter conjugations in the imperfective (IPFV), perfective (PFV), conditional (COND), imperative (IMP), optative (OPT), and desiderative (DES) mode-aspects; plus the two extrasystematic *'i-* imperative and *s-* optative paradigms. Because most Eyak negative paradigms simply require a preceding negative word *dik'* and the suffix *-G* at the end of the suffix string, negative paradigms are not always included in the table. In addition, however, because they also require changes in the prefixation, the Neuter imperfective negative, Active (*s-*) perfective negative and Neuter perfective negative paradigms are also shown.

Table 13.2: Inflectional variation for maximally open stems.

class	Active		Inceptive		Neuter		'i-imp, s-opt	
	-Q	+Q	-Q	+Q	-Q	+Q	-Q	+Q
IPFV	Ø-	Q-A-CVh Q-AdA-CVh	qh'-CVh <sup>e</sup> qh'-AdA-CVh	qu'Q-i-CVh <sup>b</sup> qu'Q-AdA-CVh	yi'-CVh <sup>e</sup> di'-CVh	Q-i-CVh <sup>d</sup> Q-idi-CVh		
IPFV	Ø-				'a'-CVh-G <sup>r</sup> 'a'-AdA-CVh-G	Q-a'-CVh-G <sup>r</sup> Q-a'-AdA-CVh-G		
NEG	Ø-							
PFV	Ø-	sA-CVh-L sdi-CVh-L	GA-CVh-L GAdA-CVh-L	Q-AGA-CV:-L Q-AGAdA-CV:-L	'i'-CVh-L <sup>f</sup> 'idi-CVh-L'	Q-i-CVh-L Q-idi-CVh-L		
PFV	Ø-	'As-CVh-LG 'AsAdA-CVh-LG	Q-As-CVh-LG Q-AsAdA-CVh-LG		'a'-CVh-LG 'a'-AdA-CVh-LG	Q-a'-CVh-LG Q-a'-AdA-CVh-LG		
NEG	Ø-							
COND	Ø-	'iA-CVh-L 'iA-CVh-L	Q-iA-CVh Q-iAdA-CVh	Q-AGA-CVh Q-AGAdA-CVh	'a'-CVh 'a'-AdA-CVh	Q-a'-CVh Q-a'-AdA-CVh		
IMP	Ø-	'A-CVc <sup>s</sup> 'AdA-CVc:	Q-i-CVc: <sup>s</sup> Q-adA-CVc: <sup>m</sup>	Q-AGA-CV' Q-Q-AGAdA-CV'	'a'-CVc: 'a'-AdA-CVc:	Q-a'-CVc: Q-a'-AdA-CVc:	'i-CV' 'iAdA-CVh	Q-i-CV' Q-iAdA-CV'
OPT	Ø-	'i-CVh' 'i'-AdA-CVh	Q-ayh-CVh' Q-adi-CVh	G-i-CVh GAdi-CVh	Q-Agi-CVh Q-AGAdi-CVh	Q-a-yi-CVh Q-a-AdA-CVh	sA-CVh sdi-CVh	Q-Asdi-CVh
DES	Ø-	'i-CV-X 'iAdA-CV-X	Q-i-CV-X Q-iAdA-CV-X	G-A-CV-X GAdA-CV-X	Q-AGA-CV-X Q-AGAdA-CV-X	'a'-CV-X 'a'-AdA-CV-X	Q-a'-CV-X Q-a'-AdA-CV-X	

- a** Or qu 'wACVh
- b** Q-: < Q-A by expansion, precise motivation not explained phonologically
- c** 'i: < 'Ayi in comparatives
- d** Q-i: < Q-Ayi
- e** 'a < 'A; also all other such Neuters
- f** Q-a < Q-A, i.e. from qualifier itself, unlike preceding; also all other such Neuters
- g** 'i: < 'Ayi; also thus when +Q
- h** Q-i < Q-A by harmony with following vowel; also in Neuter
- i** 'i < 'A by harmony with following vowel
- j** 'i' < Q-'i; also with dA-, in Active optative, and in Neuter conditional
- k** 'A < AN
- l** Q-i: < Q-A-AN; not i: but Q-a: after uvulars, sometimes nasal, especially after /X/; also in Active desiderative
- m** Q-a: < Q-A-AN; also in optative
- n** 'i: < AN-yi
- o** Or Q-a/li < Q-A-AN-yi, sometimes a 'li; by analogy with preceding
- p** Sometimes 'a 'li; by analogy with following



Unlike many Indo-European languages with inflection for all personal subject pronouns and relevant affixes in the same position in the verb word, Eyak does not have these all in the same position. Instead, Eyak has only three or four personal subject pronouns in Zone D: 1s  $x-$  ~  $'i-$ , 2s  $yi-$  ~  $\emptyset-$ , and 2p  $LAX-$ ; the third person (singular and plural with no difference) subject pronoun is  $\emptyset-$ , which could be said to be also in Zone D. Indefinite subject (and object) pronoun  $k'u-$  is in Zone A. The 1p subject pronoun  $da-$  is not in the verb word at all, but is a preverb separate from and preceding the verb word, so it written as  $da\#$  in the table, followed by a space, while the verb word itself is therefore always the same as in the third person subject. This table shows that the subject pronouns are in three different positions, two in the verb and one to the left of the verb word.

Essential also to these tables are the qualifiers and classifiers, because they interact with the subject pronouns and conjugation markers. For example, 2s is always  $\emptyset-$  with  $dA-$  (and  $LA-$ ) classifier; when a qualifier immediately precedes 2p  $LAX-$ , its vowel is always lengthened to  $/a:/$ , when 1s combines with the conjugation marker  $s-$  in the absence of  $dA-$  or  $LA-$  classifier, the result is  $si-$  instead of  $*xs-$ . The tables show these interactions at least in an idealized way. There is a certain amount of variation, partly by rule, e.g. that qualifier vowel  $/i:/$  is  $/a:(n)/$  after a uvular, partly by tendency, or free variation, e.g. in the nasality of  $/a:(n)/$ . All this is of course covered in detail in the text.

Here the classifiers are represented as  $dA- \sim di-$ , which stands for  $LA- \sim Li-$  as well. Likewise  $\emptyset-$  classifier stands for  $L-$  as well. The qualifiers are represented as  $Q-$ .

Though there is no variation in the stem connected to personal inflection, the stem is still represented as in the table of paradigms for conjugation and mode-aspect (this section), to show again the variation in maximally variable stems, open CV. No real stems are shown in any of the tables for two reasons. Though a few stems are attested in the actual Eyak corpus in goodly parts of the tables here, no stems are attested in all. Indeed, no single stem could likely have been found or elicited in all these tables because of the limitations imposed by verb theme classes on what paradigms a theme can use.

In fact, because of the polysynthetic nature of Eyak, with so many derivational possibilities, given especially the vast qualifier system, it would seem not realistic or useful to make fuller tables or listings than are presented here. That would be so even if a technology were available to make the appropriate multidimensional representation. The essence of the Eyak verb is in the grammar or rules, however variable or ragged, as represented in the text.

The tables are therefore limited to showing the personal subject inflection through all conjugations and mode-aspects, however arbitrarily, leaving out all derivations, e.g. customary, or classifier derivations such as passive or causative, or any specific qualifier derivations.

Also left out, though, is one part of verb inflection itself, personal inflection for object pronoun in transitive verbs. This is in part because personal object pronouns always immediately precede what is shown in the verb word as presented in these tables. Some object pronouns, however, as shown in §9.1, are preverbs, separate from and preceding the verb word, while others are conjunct, always leftmost in the verb word. Conjunct object

pronouns are 1s *xu-*, 2s *'i-*, 2p *lAXi-*, 3 in directives *'u-*, indefinite *k'u-*, indeterminate *'i-*, and reflexive *'Ad(-)*, sometimes preverbal. Always preverbal are 1p *qa:* and reciprocal *'iLu'*. There are of course morphophonemic interactions between the conjunct object pronouns and what may follow them, e.g. *i-qu'* becomes *iqe'*, all of course described in the text. To include tables for object pronouns would in principle require something like 161 instead of 23 paradigms, or 2786 forms instead of 398, septupling the present bulk. (Here is perhaps the place then to add that if we include classifier derivations such as passive, causative, or the combination causative reflexive (important, meaning not only 'cause self to do' but also 'pretend to do; do with ulterior motive') we approach 10,000 forms; if we include the derivations that further change the verb word itself, e.g. customary, repetitive, combinations of such derivations, we are in the hundreds of thousands; and the qualifiers, we reach the millions, before considering the preverbals!)

There is one other quite prominent element in Eyak that could easily give the impression of being personal subject inflection. Under the influence of Indo-European expectations, one might well elicit *xki:nX* 'I'm crying', *yiki:nX* 'you're crying', *ki:nXinh* 'he's crying', ... *ki:nXinu:* 'they're crying'; or *dAxlēh* 'I say', *di:lēh* 'you say', *dAlinhinh* 'he says' ... *dAlinhinu:* 'they say'; all quite correctly. This would give the impression that for third person singular and plural the subject pronouns (i.e., pronominal affixes) are *=inh* and *=inu:* in yet a fourth position (including its positions in *k'udAleh* 'one says' and *da:dAleh* 'we say'). This fourth position appears to be as suffix to the stem (which changes the vowel /e/ to /in/ of an open stem, by assimilation, a striking example of "nasal umlaut"). Such, however is a serious misunderstanding. The *=inh* and *=inu:* are enclitics that refer strictly to a human singular and plural, respectively, and which could be subjects but just as easily be direct object or even oblique object represented not overtly but by a pronoun in the sentence. For example, 'I say to him' is *'utl' dAxlinhinh*, 'I say to them' (humans) *'utl' dAxlinhinu:*, or even 'I say to their brother' *'uXAwAXtl' dAxlinhinu:*, 'I say to his brothers' is *'uXAwAXGAYu:tl' dAxlinhinh*. Further, 'I kicked him' is *sita'tl'Linh*, and 'I kicked their brother' is *'uXAwAX sita'tl'linu:*. This should dispel any illusion that these enclitics are personal subject pronouns that belong in these tables.

The personal subject inflection tables follow, showing for each paradigm first that with Ø- (or *L-*) classifier without qualifier, second Ø- (or *L-*) classifier with qualifier, third that with *dA-* (or *LA-*) classifier without qualifier, and fourth that with *dA-* (or *LA-*) classifier and with qualifier.

Table 13.3: Active imperfective conjugation.

	∅- classifier		dA- classifier	
	-Q	+Q	-Q	+Q
1s	x___ h	Q-Ax___ h	xdA___ h	Q-AxdA___ h
2s	yi___ h	Q-i:___ h	dA___ h	Q-AdA___ h
3	___ h	Q-A___ h	dA___ h	Q-AdA___ h
2p	IAX___ h	Q-a:IAX___ h	IAXdA___ h	Q-a:IAXdA___ h
indef	k'u___ h	k'uQ-A___ h	k'udA___ h	k'uQ-AdA___ h
1p	da:# ___ h	da:# Q-A___ h	da:# dA___ h	da:# Q-AdA___ h

Table 13.4: Future (Inceptive imperfective) conjugation.

	∅- classifier		dA- classifier	
	-Q	+Q	-Q	+Q
1s	qu'x___ h	qu'Q-i:x___ h	qu'xdA___ h	qu'Q-AxdA___ h
2s	qu'yi___ h	qu'Q-i:___ h	qu'dA___ h	qu'Q-AdA___ h
3	qa'___ h	qu'Q-i:___ h	qu'dA___ h	qu'Q-AdA___ h
2p	qu'IAX___ h	qu'Q-a:IAX___ h	qu'IAXdA___ h	qu'Q-a:IAXdA___ h
indef	k'uqa'___ h	k'uqu'Q-i:___ h	k'uqu'dA___ h	k'uqu'Q-AdA___ h
1p	da:# qa'___ h	da:# qu'Q-i:___ h	da:# qu'dA___ h	da:# qu'Q-AdA___ h

Table 13.5: Neuter imperfective conjugation.

	∅- classifier		dA- classifier	
	-Q	+Q	-Q	+Q
1s	xi___ h	Q-ixi___ h	xdi___ h	Q-ixdi___ h
2s	yi___ h	Q-i:___ h	di___ h	Q-idi___ h
3	yi___ h	Q-i:___ h	di___ h	Q-idi___ h
2p	IAXi___ h	Q-a:IAXi___ h	IAXdi___ h	Q-a:IAXdi___ h
indef	k'u:___ h	k'uQ-i:___ h	k'udi___ h	k'uQ-idi___ h
1p	da:# yi___ h	da:# Q-i:___ h	da:# di___ h	da:# Q-idi___ h

Table 13.6: Neuter imperfective negative conjugation.

	∅- classifier		dA- classifier	
	-Q	+Q	-Q	+Q
1s	'a'x___ hG	Q-a'x___ hG	'a'xdA___ hG	Q-a'xdA___ hG
2s	'a'yi___ hG	Q-a'yi___ hG	'a'dA___ hG	Q-a'dA___ hG
3	'a'___ hG	Q-a'___ hG	'a'dA___ hG	Q-a'dA___ hG
2p	'a'IAX___ hG	Q-a'IAX___ hG	'a'IAXdA___ hG	Q-a'IAXdA___ hG
indef	k'a'___ hG	k'uQ-a'___ hG	k'a'dA___ hG	k'uQ-a'dA___ hG
1p	da:# 'a'___ hG	da:# Q-a'___ hG	da:# 'a'dA___ hG	da:# Q-a'dA___ hG

Table 13.7: Active (*s-* conjugation) perfective.

	∅- classifier		dA- classifier	
	-Q	+Q	-Q	+Q
1s	si___ hL	Q-isi___ hL	xsdi___ hL	Q-ixsdi___ hL
2s	sA___ hL	Q-AsA___ hL	sdi___ hL	Q-isdi___ hL
3	sA___ hL	Q-AsA___ hL	sdi___ hL	Q-isdi___ hL
2p	IAXsA___ hL	Q-a:IAXsA___ hL	IAXsdi___ hL	Q-a:IAXsdi___ hL
indef	k'usA___ hL	k'uQ-AsA___ hL	k'usdi___ hL	k'uQ-isdi___ hL
1p	da:# sA___ hL	da:# Q-AsA___ hL	da:# sdi___ hL	da:# Q-isdi___ hL

Table 13.8: Active perfective negative conjugation.

	∅- classifier		dA- classifier	
	-Q	+Q	-Q	+Q
1s	'Axs___ hLG	Q-Axs___ hLG	'AxsdA___ hLG	Q-AxsdA___ hLG
2s	'As___ hLG	Q-As___ hLG	'AsdA___ hLG	Q-AsdA___ hLG
3	'As___ hLG	Q-As___ hLG	'AsdA___ hLG	Q-AsdA___ hLG
2p	'AIAXs___ hLG	Q-a:IAXs___ hLG	'AIAXsdA___ hLG	Q-a:IAXsdA___ hLG
indef	k'us___ hLG	k'uQ-As___ hLG	k'usdA___ hLG	k'uQ-AsdA___ hLG
1p	da:# 'As___ hLG	da:# Q-As___ hLG	da:# 'AsdA___ hLG	da:# Q-AsdA___ hLG

Table 13.9: Inceptive perfective conjugation.

	∅- classifier		dA- classifier	
	-Q	+Q	-Q	+Q
1s	GAx___ :L	Q-AGAx___ :L	GAXdA___ :L	Q-AGAXdA___ :L
2s	Gi:___ :L	Q-AGi:___ :L	GAdA___ :L	Q-AGAdA___ :L
3	GA___ :L	Q-AGA___ :L	GAdA___ :L	Q-AGAdA___ :L
2p	GAIAx___ :L	Q-AGAIAx___ :L	GAIAXdA___ :L	Q-AGAIAXdA___ :L
indef	k'uGA___ :L	k'uQ-AGA___ :L	k'uGAdA___ :L	k'uQ-AGAdA___ :L
1p	da:# GA___ :L	da:# Q-AGA___ :L	da:# GAdA___ :L	da:# Q-AGAdA___ :L

Table 13.10: Neuter perfective conjugation.

	∅- classifier		dA- classifier	
	-Q	+Q	-Q	+Q
1s	'ixi___ hL	Q-ixi___ hL	'ixdi___ hL	Q-ixdi___ hL
2s	'i:___ hL	Q-i:___ hL	'idi___ hL	Q-idi___ hL
3	'i:___ hL	Q-i:___ hL	'idi___ hL	Q-idi___ hL
2p	'ilAXi___ hL	Q-a: lAX___ hL	'ilAXdi___ hL	Q-a: lAXdi___ hL
indef	k'u:___ hL	k'uQ-i:___ hL	k'udi___ hL	k'uQ-idi___ hL
1p	da:# 'i:___ hL:___ hL	da:# Q-i:___ hL	da:# 'idi___ hL	da:# Q-idi___ hL

Table 13.11: Neuter perfective negative conjugation.

	∅- classifier		dA- classifier	
	-Q	+Q	-Q	+Q
1s	'a'x___ hLG	Q-a'x___ hLG	'a'xdA___ hLG	Q-a'xdA___ hLG
2s	'a'yi___ hLG	Q-a'yi___ hLG	'a'dA___ hLG	Q-a'dA___ hLG
3	'a'___ hLG	Q-a'___ hLG	'a'dA___ hLG	Q-a'dA___ hLG
2p	'a'lAX___ hLG	Q-a'lAX___ hLG	'a'lAXdA___ hLG	Q-a'lAXdA___ hLG
indef	k'a'___ hLG	k'uQ-a'___ hLG	k'a'dA___ hLG	k'uQ-a'dA___ hLG
1p	da:# 'a'___ hLG	da:# Q-a'___ hLG	da:# 'a'dA___ hLG	da:# Q- a'dA___ hLG

Table 13.12: Active conditional conjugation.

	∅- classifier		dA- classifier	
	-Q	+Q	-Q	+Q
1s	'ix___ h	Q-i'x___ h	'ixdA___ h	Q-i'xdA___ h
2s	'i:___ h	Q-i'yi___ h	'idA___ h	Q-i'dA___ h
3	'i'___ h	Q-i'___ h	'idA___ h	Q-i'dA___ h
2p	'ilAX___ h	Q-i'lAX___ h	'ilAXdA___ h	Q-i'lAXdA___ h
indef	k'u'___ h	k'uQ-i'___ h	k'u'dA___ h	k'uQ-idA___ h
1p	da:# 'Q-i-h	da:# Q-i'___ h	da:# 'idA___ h	da:# Q-i'dA___ h

Table 13.13: Inceptive conditional conjugation

	∅- classifier		dA- classifier	
	-Q	+Q	-Q	+Q
1s	GAX___ h	Q-AGAX___ h	GAXdA___ h	Q-AGAXdA___ h
2s	Gi:___ h	Q-AGi:___ h	GAdA___ h	Q-AGAdA___ h
3	GA___ h	Q-AGAdA___ h	GA___ h	Q-AGAdA___ h
2p	GAlAX___ h	Q-AGAlAX___ h	GAlAXdA___ h	Q-AGAlAXdA___ h
indef	k'uGA___ h	k'uQ-AGAdA___ h	k'uGA___ h	k'uQ-AGAdA___ h
1p	da:# GA___ h	da:# Q-AGA___ h	da:# GAdA___ h	da:# Q- AGAdA___ h

Table 13.14: Neuter conditional conjugation.

	∅- classifier		dA- classifier	
	-Q	+Q	-Q	+Q
1s	'a'x__ h	Q-a'x__ h	'a'xdA__ h	Q-a'xdA__ h
2s	'a'yi__ h	Q-a'yi__ h	'a'dA__ h	Q-a'dA__ h
3	'a'__ h	Q-a'__ h	'a'dA__ h	Q-a'dA__ h
2p	'a'lAX__ h	Q-a'Q-lAX__ h	'a'lAXdA__ h	Q-a'lAXdA__ h
indef	k'a'__ h	k'uQ-a'__ h	k'a'dA__ h	k'uQ-a'dA__ h
1p	da:# 'a'__ h	da:# Q-a'__ h	da:# 'a'dA__ h	da:# Q-a'dA__ h

Table 13.15: Active imperative conjugation.

	∅- classifier		dA- classifier	
	-Q	+Q	-Q	+Q
2s	'A-__ e:	Q-i:__ -e:	'AdA__ -e:	Q-a:dA__ -e:
2p	'AlAX__ -e:	Q-a:lAX__ -e:	'AlAXdA__ -e:	Q-a:lAXdA__ -e:

Table 13.16: Inceptive imperative conjugation.

	∅- classifier		dA- classifier	
	-Q	+Q	-Q	+Q
2s	GAdA__ '	Q-AGAdA__ '	GAdA__ '	Q-AGAdA__ '
2p	GAiAX__ '	Q-AGAiAX__ '	GAiAXdA__ '	Q-AGAiAXdA__ '

Table 13.17: Neuter imperative conjugation.

	∅- classifier		dA- classifier	
	-Q	+Q	-Q	+Q
2s	'a'__ -e:	Q-a'__ -e:	'a'dA__ -e:	Q-a'dA__ -e:
2p	'a'lAX__ -e:	Q-a'lAX__ -e:	'a'lAXdA__ -e:	Q-a'lAXdA__ -e:

Table 13.18: 'i- conjugation imperative.

	∅- classifier		dA- classifier	
	-Q	+Q	-Q	+Q
2s	'i'__ '	Q-i'__ '	'idA__ '	Q-i'dA__ '
2p	'ilAX__ '	Q-i'AX__ '	'ilAXdA__ '	Q-i'lAXdA__ '

Table 13.19: Active optative conjugation.

	∅- classifier		dA- classifier	
	-Q	+Q	-Q	+Q
1s	'ixi___ h	Q-a:xi___ h	'ixdi___ h	Q-a:xdi___ h
2s	'i:___ hi:___ h	Q-a:yi___ h	'idi___ h	Q-a:di___ h
3	'i:___ hi:___ h	Q-a:yi___ h	'idi___ h	Q-a:di___ h
2p	'ilAXi___ h	Q-a:IAXi___ h	'ilAXdi___ h	Q-a:IAXdi___ h
indef	k'u:li___ h	k'uQ-a:yi___ h	k'u:di___ h	k'uQ-a:di___ h
1p	da:# 'i:___ h	da:# Q-a:yi___ h	da:# 'idi___ h	da:# Q-a:di___ h

Table 13.20: Inceptive optative conjugation.

	∅- classifier		dA- classifier	
	-Q	+Q	-Q	+Q
1s	GAXi___ h	Q-AGAXi___ h	GAXdi___ h	Q-AGAXdi___ h
2s	Gi:___ h	Q-AGi:___ h	GAdi___ h	Q-AGAdi___ h
3	Gi:___ h	Q-AGi:___ h	GAdi___ h	(Q-A)GAdi___ h
2p	GAIAXi___ h	Q-AGAIAXi___ h	GAIAXdi___ h	Q-AGAIAXdi___ h
indef	k'uGi:___ h	k'uQ-AGi:___ h	k'u-GAdi___ h	k'uQ-AGAdi___ h
1p	da:# Gi:___ h	da:# Q-A-Gi:-___ h	da:# GAdi___ h	da:# Q-AGAdi___ h

Table 13.21: Neuter optative conjugation.

	∅- classifier		dA- classifier	
	-Q	+Q	-Q	+Q
1s	'a'xi___ h	Q-a'xi___ h	'a'xdi___ h	Q-a'xdi___ h
2s	'a'yi___ h	Q-a'yi___ h	'a'di___ h	Q-a'di___ h
3	'a'yi___ h	Q-a'yi___ h	'a'di___ h	Q-a'di___ h
2p	'a'IAXi___ h	Q-a'IAXi___ h	'a'IAXdi___ h	Q-a'IAXdi___ h
indef	k'a'yi___ h	k'uQ-a'yi-h	k'a'di___ h	k'uQ-a'di___ h
1p	da:# 'a'yi___ h	da:# Q-a'yi___ h	da:# 'a'di___ h	da:# Q-a'di___ h

Table 13.22: s- optative conjugation.

	∅- classifier		dA- classifier	
	-Q	+Q	-Q	+Q
1s	si___ h	Q-isi___ h	xsdi___ h	Q-ixsdi___ h
2s	sA___ h	Q-AsA___ h	sdi___ h	Q-isd_i___ h
3	sA___ h	Q-AsA___ h	sdi___ h	Q-isd_i___ h
2p	IAXsA___ h	Q-a:IAXsA___ h	IAXsdi___ h	Q-a:IAXsdi___ h
indef	k'usA___ h	k'uQ-AsA___ h	k'usdi___ h	k'uQ-isd_i___ h
1p	da:# sA___ h	Q-AsA___ h	da:# sdi___ h	Q-isd_i___ h

Table 13.23: Active desiderative conjugation.

	∅- classifier		dA- classifier	
	-Q	+Q	-Q	+Q
1s	'Ax___:X	Qi:x___:X	'AxdA___:X	Qa:xdA___:X
2s	'i:___:X	Qi:___:X	'AdA___:X	Qa:dA-Q:~X
3	'A___:X	Qi:___:X	'AdA___:X	Qa:dA___:X
2p	'AIAX___:X	Qa:IAX___:X	'AIAXdA___:X	Qa:IAXdA___:X
indef	k'u:___:X	k'uQi:___:X	k'u:dA___:X	k'uQa:dA___:X
1p	da:# 'A___:X	da:# Qi:___:X	da:# 'AdA___:X	da:# Qa:dA___:X

Table 13.24: Inceptive desiderative conjugation.

	∅- classifier		dA- classifier	
	-Q	+Q	-Q	+Q
1s	GAx___:X	Q-AGAx___:X	GAXdA___:X	Q-AGAXdA___:X
2s	Gi:___:X	Q-AGi:___:X	GAdA___:X	Q-AGAdA___:X
3	GA___:X	Q-AGA___:X	GAdA___:X	Q-AGAdA___:X
2p	GAIX___:X	Q-AGAIX___:X	GAIXdA___:X	Q- AGAIXdA___:X
indef	k'uGA___:X	k'uQ-AGA___:X	k'uGAdA___:X	k'uQ-AGAdA___:X
1p	da:# GA___:X	Q-AGA___:X	da:# GAdA___:X	Q-AGAdA___:X

Table 13.25: Neuter desiderative conjugation.

	∅- classifier		dA- classifier	
	-Q	+Q	-Q	+Q
1s	'a'x___:X	Q-a'x___:X	'a'xdA___:X	Q-a'xdA___:X
2s	'a'yi___:X	Q-a'yi___:X	'a'dA___:X	Q-a'dA___:X
3	'a'___:X	Q-a'___:X	'a'dA___:X	Q-a'dA___:X
2p	'a'IAX___:X	Q-a'IAX___:X	'a'IAXdA___:X	Q-a'IAXdA___:X
indef	k'a'___:X	k'uQ-a'___:X	k'a'dA___:X	k'uQ-a'dA___:X
1p	da:# 'a'___:X	da:# Q-a'___:X	da:# 'a'dA___:X	da:# Q-a'dA___:X



## 14 VERB THEME CLASSES

An account of the history of the study of Eyak verb theme classes is included here, because of its somewhat exceptional chronology. Verb theme classes were hardly considered as such in the intensive period of fieldwork, 1963–5, not in Krauss (1965b), and not in Krauss (1970a). In fact efforts to establish these began only in the later 1970s, and the only systematic fieldwork on it was done with Marie in Anchorage, May 27–29, 1980, and then Fairbanks, June 16–19, 1980, in ms. Notebook XVIII. During those seven days we did manage to get through most of the questions flagged in Krauss (1970a), with a view toward incorporating the theme class identifications into the final edition. These data and classifications have still not been incorporated into the dictionary.<sup>1</sup>

### 14.1 Eyak verb theme classes as a system

Eyak verb theme classes are both semantic and established on the basis of paradigm choice, specifically of the three conjugations in the imperfective and perfective aspects. These, the “core system,” were shown briefly in §12.1 as an excursus in the morphology of conjugation and mode-aspect, and again here. These two aspects and the three conjugations, Active, Inceptive, and Neuter, form a two-dimensional array of six combinations, or paradigms (see Tab. 12.1).

No verb theme class uses all six of these combinations, unless by derivation. All theme classes use only four or five of these paradigms. For the purposes here of defining the verb theme classes according to use of these paradigms, the INC.IPFV is of no use, because it can freely be used with future meaning and only that meaning, with any verb theme. Thus, according to use of the five remaining criterial conjugation plus mode-aspect combinations, or paradigms, ACT.IPFV, ACT.PFV, INC.PFV, NTR.IPFV, NTR.PFV, together with the semantics, we shall define the verb theme classes. The term “class” here is used throughout somewhat loosely in that the theme-class system can be presented as seven classes; or, far better in principle, as three classes, two of those with subclasses, as shown in (1).

- (1) Verb classes
  1. Action
  2. Motion
    - (a) Locomotion
    - (b) Postural

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<sup>1</sup> Description of the system and listings have been a long-term part of the task of writing the grammar, however, starting in February 2007, with additions and revisions at least in November 2007, January 2008, November 2010, May 2013.

- (c) Classificatory
- 3. Stative
  - (a) Neuter imperfective
  - (b) Inceptive perfective
  - (c) Active perfective
  - (d) Neuter perfective

The “system” is still not so simple as it may appear. There is moreover so much overlap between 3c. and 3d. that they are treated together as a cline. Moreover, 2b and 2c are both marked by very high frequency and productivity, and by the smallest memberships by far; and that also with overlap in themes with the stems *-te* ‘singular recline’ and *-’ya* ‘be involuntarily situated’.

Examples in this general introduction are kept here to the simplest. Some may not even be in the corpus, but are absolutely elementary, often cited as “presumably.” For details and much fuller documentation, see the subsections below (§§14.7.1–14.7.6.3) for each (sub)class of Statives. The memberships of 2b (Postural), and 2c (Classificatory) are so small that they are fully listed here below. The membership of Class 2a (Locomotion) is fairly large and predictable by the semantics. Finally, Class 1 (Action) is of course by far the largest. No attempt is made to provide special subsections for that class, beyond reference to the dictionary itself.

## 14.2 Class 1. Action themes

This is by far the largest class, as noted, and the least specialized. Subclasses for this might be constructed on a purely semantic basis, and/or according to choice of conjugation in the imperative if such could be determined. For the present, this cannot be easily shown to be a useful enterprise, due to the difficulty of determining that choice from the data. (This is to an even lesser extent demonstrable in modes other than the imperative.) It is of course probable that there was a clear system of subclasses, as is definitely still the case in Athabaskan, elaborately. Only study of a goodly corpus of spontaneous imperatives might have led to anything remotely comparable for Eyak. Such imperatives would also have to be without preverbs that themselves choose imperative conjugation. The imperatives we do have for Eyak had of course to be elicited. At the time elicitation was possible, however, the priority was to establish the morphology of imperatives itself, by eliciting alternative imperatives. This was done, admittedly, without adequately distinguishing shades of meaning or of preference. This obscures to some extent what might have been recoverable from imperative conjugation choice. In the absence of tape recordings of the fieldwork sessions, some indication might still be found by which of the imperatives is noted first in the original notebooks.

These action themes are defined by the use of ACT.IPFV as normal for ‘be doing, happening’. INC.PFV is used only derivationally, ‘carrying out action as a process prolonged through space or time’. NTR.IPFV cannot be used, except in the “liability” and “expressive stativization” derivations. Many further ACT.IPFV forms are derivative (usitative, -g repetitive, *yAX* perambulative, persistive, customary, qualifier combination *qAXA-*). The ACT.IPFV paradigm is itself the least marked, having no affixation. It is of course also therefore formally indistinguishable from the ACT.IPFV derivation with usitative meaning, especially frequent in relativizations, as denoting a generic action, perhaps not by coincidence. Distinguishing action themes from derived usitatives may be considered moot, as e.g. in French, though of course semantically appropriate for translation into English. An example ACT.IPFV *xLtsAX* ‘I’m cutting it, making a cut in it’ (generically, without regard to number or repetition or length of motions, type of object or instrument or result). In a usitative sense, it can be translated as ‘I cut it (as a rule)’. Derived from that is INC.PFV *GAXLtsAXL* ‘I’m cutting it (along)’ (in the process of making a long cut in it). Another example is ACT.IPFV *xqah* ‘I’m biting it’ (generically), and its INC.PFV derivation *GAXqa:L* ‘I’m holding it in my teeth’ (stative) or ‘I’m transporting it along in my teeth’ (locomotion). As explained, subdivisions of action class themes could certainly be established on a purely semantic basis, but any corresponding morphological distinctions would have the best chance to be found in choice of conjugation in the imperative. The limitations for investigating that have been described just above.

## 14.3 Class 2. Motion themes

The Active imperfective can be used only in usitative and other Active derivations. Instead of Active imperfective, given the semantic nature of motion verbs, for motion in progress, the underived norm uses Inceptive perfective for ongoing motion in all three motion (sub)classes.

### 14.3.1 Class 2a. Locomotion

This is by far the largest motion class, for movement of the subject from one place to another by any gait or means of transport. It refers by nature literally to movement over a space (rather than e.g. individual steps or strokes; cf. e.g. *-’e’hdz* ‘move foot’, *-le’g* ‘move hand’, which are action verbs). INC.PFV means ‘be in process of so moving’, so ACT.PFV ‘have so moved/arrived’, NTR.PFV ‘(having so moved) remain in place for some term’. This can include transitives, i.e. not only causatives, but ‘transport O’. Examples are in (2).

#### (2) Locomotion themes in the different conjugations

##### a. Base forms:

INC.PFV *GAXwe:L* ‘I’m swimming (along)’ (from one place to another)

ACT.PFV *siwehL* ‘I swam (from one place to another)’

NTR.PFV e.g. *lu: 'i:yahL* ‘he’s gone beachcombing’ (preverb *lu:* ‘tidal area’ plus

NTR.PFV of *-a* ‘(sg) go (on foot)’)

b. ACT.IPFV derivations:

persistive *xwe:* ‘(no thanks for boat ride offer, I insist that) I (continue to) swim (there)’

perambulative *yAX xdAwe:X* ‘I’m swimming (about)’

transitive *GAXXe:L* ‘I’m carrying it along on my back’

c. Strictly by progressive derivation:

*GAqa:L* ‘it’s carrying it along in its teeth’ < O-*qa* ‘bite O’

*'iGAXtl'i:L* ‘I’m transporting you along in boat’

ACT.PFV *'isitl'ihL* ‘I transported you in boat’

perhaps NTR.PFV *'ixitl'ihL* ‘I have you in my canoe on a trip (1 mile or 100 miles)’, < O-*tl'i* ‘tie, bind O’

The difference between action and locomotion themes is often complicated. To the extent that a locomotion theme specifies e.g. gait, the difference may be essentially statistical. An extreme case might be *-a* ‘(sg) go/walk’, where we have many instances of *GAXa:L* ‘I’m walking (along, going)’, and no instances of *?xah* ‘I’m walking (not running)’, not tested. E.g. that *'i-dA-ch'an'k* ‘clamber’ refers to actual locomotion as opposed to manner of motion is unclear. We happen to lack attestation of ‘is clambering along’, but if we had, that might be seen as a progressive derivation. The morphology, with indeterminate object, suggests action on an object rather than locomotion. Cf. *'i-LA-'e ~* ‘travel’, certainly a locomotion theme *par excellence*, it would seem, but note the simpler action theme O-*GA-'e ~* ‘see O’, which requires o-*LAX 'i-LA-'e ~*, literally ‘travel beyond O’, as suppletive theme in all but that Active imperfective. These clearly imply that *'i-LA-'e ~* ‘travel’ is in fact a progressive derivation ‘go along seeing’ of the action theme ‘see O’. The question then involves such potentially fuzzy semantic matters as definition of “theme” and “lexicalization”.

### 14.3.2 Class 2b. Postural

This is a highly restricted class of themes with the four or five verb stems presented in (3), inherently intransitive, of extremely high frequency themes, all but one highly productive.<sup>2</sup>

(3) Postural themes

*-da* ‘(sg animate) sit, stay’

<sup>2</sup> Possibly “positional” might have been a better term for this class than “postural.”

- te* ‘(sg animate) lie prone’ (also classificatory as transitive)
- tu’ch* ‘(pl animate) lie prone’ (least productive)
- qu* ‘(pl animate) sit, stay’
- ’ya* ‘be involuntarily situated’ (overlapping with classificatory).

The ACT.PFV is for ‘be in position; got into position’, INC.PFV for ‘be getting into position’, and NTR.PFV for ‘be in position for some term’. Here and elsewhere ‘for a term’ means for an unspecified amount of time, e.g. ‘be in jail’ in the NTR.PFV could be presumably for life or a one-hour term, but some period, whereas ‘be in jail’ in the ACT.PFV could be ‘went to jail (and may be staying indefinitely or already is out)’. Examples are in (4).

(4) Postural themes in the different conjugations

a. base forms

*sitehL* ‘I’m lying (am prone), I’ve gone to bed; I went to bed’ (ACT.PFV)

*ya:n’ GAxte:L* ‘I’m in the process of lying down, I’m getting into bed’ (INC.PFV)

*’ixitehL*, presumably e.g. ‘I’m bedridden, stuck in the hospital for some period’ (NTR.PFV)

b. derived forms with ACT.IPFV

*’a:nd xteh* ‘here is where I lie, sleep, this is my sleeping-place’ (ACT.IPFV usitative)

*’a:nd (’A)xte:k* ‘I lie here, I (customarily) go to bed here’ (ACT.IPFV customary)

*yAX xdAte:X* ‘I’m lying about’ (ACT.IPFV perambulative)

### 14.3.3 Class 2c. Classificatory

This highly restricted class, presented in (5), is of extremely high-frequency and productivity. These are regularly both transitive (so normally with animate subject) and intransitive (inanimate subject, each pair in that order).

(5) Classificatory themes

-*ta* ‘handle, move, place O (of certain shape, perhaps originally elongated); S (of that shape) bring in position’

-*’a* ‘handle, move, place O (of certain shape, perhaps roundish); S (of that shape) is in position’

-*L-(y)a* ‘handle, move, place plural O; pl S be in position’

-*L-qa* ‘handle, move, places O (liquid in container); S (liquid in container) be in position’

O-*te* ‘handle, move, place animate O’ (note that this overlaps with 2b.)

O-*L-’ya* ‘put O in situation’

In these ACT.PFV is for ‘handled, placed, moved O; S is in position; got in position’, INC.PFV for ‘be handling, moving, placing O; be moving; be getting into position’, and NTR.PFV for ‘have put O in position for a term, keep O in position; S be position for a term’. Examples are presented in 6.

(6) Classificatory theme *-L-(y)a* ‘(pl) be in position’ in different conjugations

a. In ACT.PFV:

*sALahL* ‘they (inanimate) are in position’

*siLahL* ‘I put them (inanimate) in position’

b. In NTR.PFV:

*’i:LahL* ‘they are in position for some time’

*’ixiLahL* ‘I am keeping them in position’

c. In INC.PFV:

*GAXLa:L* ‘I’m putting them in position’

d. ACT.IPFV derivations:

usitative *’a:nd Lah* ‘they belong here’, *’a:nd xLah* ‘I keep them here’

perambulative *yAX xLAya:X* ‘I’m moving them about’

## 14.4 Class 3. Stative themes

The Stative class cannot use the Active imperfective. There is little record of any attempts to elicit ACT.IPFV for stative themes, even in some derivative way. One such item we have on record as unacceptable is *\*xda’yahG* for ‘gives me a pain’; this is otherwise NTR.IPFV, for which see §14.4.1. Probably tested was *\*dAxcheh* for ‘I’m hungry’; this is attested as ACT.PFV, as shown in 14.4.3. Moreover, the total lack of any such to be found in the corpus is itself statistically significant. Statives are inherently or mostly intransitive. These are often translated in English with an adjective. Transitive statives are usually derived as causatives. There are four (sub)classes of statives, according to choice of Neuter imperfective, or any one of the three perfectives (Active perfective, Inceptive perfective, or Neuter perfective) for ‘be in state’. The four (sub)classes of stative fall nicely into the semantics specific to the paradigms according to which they are classified. See also the major subsections for each further below (§§14.7, 14.8, and 14.10).

### 14.4.1 Class 3a. Neuter imperfective stative

Up to 70 members are attested. NTR.IPFV is for ‘be in state’, though the gloss “state” here may detract from the essential meaning of inherence of quality, e.g. dimensional, if NTR.IFV. In contrast, ACT.PFV here is for ‘have become, became’, INC.PFV for ‘be becoming’; NTR.PFV is marginally attested for ‘have become and remain long-term’. Examples are presented in (7).

(7) Neuter imperfective statives

NTR.IPFV *dAXunh xiLeh* ‘I’m a person’

ACT.PFV *dAXunh siLe’L* ‘I became a person > I was born’

INC.PFV *dAXunh GAXLe’L* ‘I’m turning into a person’

NTR.IPFV *i’lixiLgah* ‘I know you’

ACT.PFV *i’lisiLga’L* ‘I got to know you’

INC.PFV *ilGgAxLga’L* ‘I’m getting to know you’

### 14.4.2 Class 3b. Inceptive perfective stative

This is the smallest most specialized class of statives. Up to 40 members are attested. ACT.PFV is only for ‘became’, INC.PFV for ‘be in state; be getting into state, becoming’, NTR.PFV (marginally attested) for ‘be in state long-term’. NTR.IPFV may be marginally attested. The meaning here has to do with pressure, grimace, roundness, curvature, etc. Several are transitive, e.g. O-L-’*t’ux* ‘hold O’, O-L-’*she’g* ‘bend O’. See further comments in §14.8. Examples are INC.PFV *GALAGAmAk’L* ‘it’s round, it was round; it’s getting round’, or ACT.PFV *sLiGAmAk’L* ‘it got round’.

### 14.4.3 Class 3c.-d. s- or Active perfective stative and Neuter perfective stative

These two are best treated together on a cline with much overlap. Perhaps the largest proportion is the overlap, but there are definitely some themes that are always or usually attested as Active perfective, and some, fewer, which are usually attested as Neuter perfective. Combined, this is by far the largest class of statives, with something like 135 members attested. NTR.IPFV cannot be used. States for this subclass seem to be less inherent, i.e. understood rather as the result of a process, than are states in Neuter imperfective statives. Examples are ACT.PFV *disiche’L* ‘I’m hungry, I was hungry; I got hungry’, *dAGAxche’L* ‘I’m getting hungry’. NTR.PFV was elicited, but only for *dixiche’L* ‘I’m long hungry, stuck hungering’; at the opposite pole are NTR.PFV *k’a:dih ’i:Le’Linh* ‘he’s lost, missing’, and *ka:dih sALe’Linh* being only for ‘he got lost, went missing’. For extensive listing, see §14.10.

## 14.5 Multiple membership vs. primary membership in verb theme classes

Some thought was given to the question of whether a given theme could have membership, basic or primary, in multiple theme classes, or whether a given theme belongs basically or primarily in a single class, so in others only by derivation. The answer appears to be not simply one or the other, but rather that some themes have one single or primary membership, some are such but commonly can be converted to other classes by derivation, and some might indeed have multiple membership without derivation. The issue is complicated by the power of allowing derivations that do not have morphology unique to them, e.g. especially the progressive derivation, which is formally identical to the Inceptive perfective paradigm. Distinguishing action and locomotion themes is particularly complicated in this regard, as noted in §14.3. The question is further complicated by the differing degrees of effort in collecting data. Most relevantly here, an especially great effort was made not of eliciting data in the field so much as in extracting as many instances as possible from the corpus which might belong to the class of Inceptive perfective statives. Maximal problems are thus of course entailed in dealing with a closed corpus, because of which there is no chance to consult for further information. The question of multiple membership of themes in classes thus comes up especially in connection with the Inceptive perfective stative. The reader is referred especially to the final subsections below of the section on themes for further discussion (§14.5). The reader is likewise referred to the subsection on Active and Neuter perfective statives (§14.10), which are in fact combined for this very reason of difficulty in defining certain class memberships. It can probably at the same time be said that the major classes of Action and Motion, and perhaps also Neuter imperfective stative are relatively clear-cut, compared especially with all three perfective statives.

A good instance of primary membership in Action class may be *O-qa* 'bite O', which would seem to be quite clearly action, and progressive only by derivation, 'transport in teeth', e.g. *GAXqa:L* 'I'm carrying it along in my teeth'. The same can become Inceptive perfective stative, 'hold in teeth', e.g. *GAXqa:L* 'I'm holding it in my teeth', only by what may have to be called yet another category of progressive derivation, meaning the same as that of the Inceptive perfective stative theme class. Certainly neither of these Inceptive perfectives should be taken as underived, from which action 'bite O' could be derived. In fact, the least marked class should perhaps as a rule be taken as the primary class (unless of course that occurs by usitative derivation, generally easy to identify). The verb *-sinh* 'die' might be considered a good candidate for dual membership, as action 'die' and stative 'be dead' (cf. the two translations of French *il est mort*, both 'he died' and 'he's dead'). The stative could be considered secondary or derived, at least in that action verbs cannot be derived from statives (cf. *d-che* 'be hungry', *-Le(')* 'be'). The reverse, stative from action, is attested, e.g. here 'be dead' from 'die', which, incidentally, appears also as Neuter perfective *'i:sinhL* as well as Active perfective. This is discussed in some detail in §14.10 on



Active and Neuter perfective statives. The question then arises, of course, of a derivation or derivational process, converting action verbs to perfective stative verbs. This applies not only to Active and Neuter perfective statives, but also, as will be seen in §14.8, to Inceptive perfective statives.

Neuter imperfective stative (not perfective), on the other hand, should as a rule be taken as the primary (sub)class, even though that raises (culturally interesting!) questions of what states are regarded as inherent as opposed to result of process. Though there are derivations that impose Neuter imperfective, these are specialized and limited enough not to raise questions. There are indeed some Neuter imperfective statives which are also found as Active and/or Neuter perfective statives. An interesting example is *o-γAX dA-'yahG* 'S dislikes o, o gives S a pain', attested only with *o-d-γAX* 'under o's speech, oral noise', attested also at least as Active perfective.<sup>3</sup> The same, with d-thematic qualifier (meaning number 14), *d-dA-'yahG* 'S aches; S longs to' is attested for some reason as Active and Neuter perfective stative, not as Neuter imperfective. It is not at all probable that the difference in theme class here is related to the presence or absence of the d-qualifier in these two themes, given the absence of such correlations with qualifiers quite generally in Eyak.

There is at least one instance of Neuter imperfective stative attested also as Inceptive perfective stative. Note in §14.7 on the Neuter imperfective that the dimensional theme *la'q' yitsidzg* and also *la'q' GALAtsidzL*, both mean 'it's thin', clearly Inceptive perfective stative (from Lena; this latter meaning checked, as well as routine transitional meaning an 'it's getting thin'). The exact difference in meaning was not checked with Lena, but presumably the Inceptive perfective meaning is more marked, seen as a state of balance of opposing forces, e.g. as being 'squeezed thin', rather than simply inherent 'is thin'. Again, this does raise the question of the need to define some derivation or derivational process converting verb themes from a primary class, especially action (Active imperfective) or Neuter imperfective stative to one or more of the perfective statives.

## 14.6 Comments on statives generally

Naturally enough, there is a fundamental contrast between NTR.IPFV statives and all three perfective statives. NTR.IPFV statives are for qualities seen as inherently stative, not expressing the result of a process. They are the only imperfective statives. They are mostly intransitive, but a few, e.g. *O-'l-L-ga'* 'know', *O-'l-LA-le(?)* 'believe', *C/O-'l-L-Xa/* 'cause O to be C' are transitive. Often they are dimensional, e.g. *cha'sh* ~ 'thick', *tsidzg* 'thin', *dik'* 'short', *LA-tsan'* 'strong'. In any case NTR.IPFV statives are to be seen not as the end result of a process. That is the realm of the perfective statives: there the usual or least

<sup>3</sup> One instance is misprinted with suffix *-L* in Krauss (1970a).

marked is ACT.PFV; that marked as end-result for a term is NTR.PFV; and least frequently or most marked, as a standoff, stativized or arrested process, balance, pressure, etc., is INC.PFV. Of course all statives can also occur in the Active perfective meaning ‘became’, and in Inceptive perfective meaning ‘becoming’, i.e. transitional, processive.

The three perfective statives, as noted, can all be seen as the result of a process as opposed to inherent qualities of the NTR.IPFV, e.g. dimensional verb themes. However, the reasons for the choice are not always obvious, i.e. the choice is not always predictable externally to the Eyak language: e.g. ‘warm’ is ACT.PFV whereas ‘cold’ is NTR.IPFV—perhaps because it is technologically easier to warm something than to cool it. Some ACT.PFV forms, are inherently the end result of a process, e.g. *d-che* ‘be hungry’, a case *par excellence*, or, for more obvious reasons *LA-tug* ‘swollen’, or several themes meaning ‘rotten’, e.g. *L-si*. It becomes interesting though, to consider why, e.g. *yik’a’d* ‘sick, in pain, feverish’ is seen as an inherent state whereas, say, *dAsAche’L* ‘is hungry’ is seen as result of a process, unless it is that one condition is easier to remedy than the other. Further, unlike NTR.IPFV statives, many ACT.PFV statives, about 40% in fact, are derivatives from nouns.

Perfective statives are perhaps all inherently intransitive. Many perfective statives have thematic *dA*- and *LA*- classifiers, i.e. start with *sdi*- or *sLi*-, so perhaps could look like passives or middles of a transitive, e.g. a causative, whether such a transitive is attested or not. As such, they could make an open category of ACT.PFV (or NTR.PFV) statives. However, at least some of these, where unambiguously attested, e.g. with 1s subject, are thus definitely not passives: e.g. *xSDiGu’L* ‘I’m warm’ (cf. passive *xusLiGu’L* ‘I got warmed’), *yAGAxLAdLAGshgL* ‘my hand is getting dirty’. Such could be considered middle-like derivations, but they are definitely not passives. A few are reflexives, so definitely derived from transitives, but those could also be considered thematized reflexives. There appears to be about the same variety of classifiers in NTR.IPFV stative themes, i.e. *L*- (not just for comparative dimensionals), *Li*- (e.g. *LA-tsan* ‘strong’), *di*-, as appears in the perfective statives. Thus probably Active and Neuter perfective statives are not literally an open category, but rather at least a somewhat limited one, with, as noted, about 135 attested members, plus perhaps the 40 Inceptive, as opposed to up to 70 basic Neuter imperfectives.

## 14.7 Neuter imperfective stative verb themes and derivations

The Neuter imperfective is a clearly defined class of stative verbs or verb themes, of limited membership. All Neuter imperfective themes are statives. The number of those attested may be counted as up to 70, depending on what is counted as a theme, as opposed to groups of further or differently derived themes. To those could be added perhaps another dozen that are implied by nouns that appear to be derived as nominalizations, including relativizations, from otherwise unattested Neuter imperfective verb themes. In addition to these, there are three derivational processes that can be applied, two to other verbs, and one to nouns, which produce Neuter imperfective verbs. These derivational processes are more or less productive, of course within semantic limits. They will be taken up at the

end of this discussion. Those attested add about 30 more Neuter imperfective verbs to the corpus, so totaling up to perhaps 100 items. Neuter imperfective themes are also rather productive as nominals in the form of lexicalized relativizations, e.g. *k'ulAX 'i:t'inhinh* 'chief, powerful person' (lit. 'he who is more (-LAX) than someone (*k'u-*), but especially what is currently semantic subclass 5, of items attested only as relativizations. A comprehensive list of lexicalized relativizations is provided in §14.10.5.

Open variable stems of Neuter imperfective verbs are always of the type CV', i.e. are CVh in the imperfective and always of the form CV'L with perfective suffix -L, or with repetitive -g or -X of liability derivations. (Such stems, CV', are not restricted to the Neuter imperfective theme category, but the Neuter imperfective does certainly account for a disproportionate number of such stems.) All three open invariable Neuter imperfective stems are of the form CV' (*t'u* 'many', *tsa* 'deep', *la* 'tough'), not CVh. Furthermore, Neuter imperfective themes account for a disproportionate number of variable closed stems, of the form CV'C ~ CVhC, and here the dominant pattern appears to be CV'C in the Neuter imperfective, and CVhC elsewhere, e.g. *cha'sh* ~ 'thick', *lu'd* ~ 'few', *k'a'd* ~ 'sick', *tl'a'dz* ~ 'firm'. From this it can be concluded that all open and/or variable stems of the Neuter imperfective theme class have allomorphs that can or must be CV', or that the only stems of the Neuter imperfective theme class that never take a nucleus of the form V' are obstruent-closed and invariable.

For Neuter prefix morphology see §12.4 on Conjugation and mode-aspect morphology, as well as the morphophonemics for *yi-* (§6.9), irrealis (§6.7.1), and 'A- (§6.8). Some exemplification of the prefixation with personal inflection will nevertheless be shown in the subsections below.

Unique to the Neuter imperfective stative class is the distinction between what might best be called "absolute" and "comparative," where the comparative is marked with the prefix 'A- (~ (> 'i- ~ Ø-)) of zone position D1. The dimensional subclass of those comparatives is further marked with the classifier L-.

Neuter imperfective themes are shown here only in the Neuter imperfective, but they are found in all mode-aspects and conjugations, except that in the imperfective aspect they are of course found in the Neuter conjugation rather than the Active. The apparent exceptions are not just a few nominalizations of \*t'ew 'be', of the form *t'uh*, but in fact more widely, all applications of the Active derivation called "usitative", which applies to these Neuter imperfective statives as well.

Neuter imperfective themes lend themselves rather well to semantic subclassification, as follows, and to morphological subclassification as well, especially in regard to dimensional verbs or verbs of extent. These will be presented below in §§14.7.1–14.7.6 as six numbered subclasses, the last subclass called Neuter imperfective derivations, presenting three such derivations.

## 14.7.1 Verbs of being, 'have'

There are two fundamental verbs translating 'to be', both cognate and parallel to their Athabaskan counterparts. The absolute 'to be' is in the construction C *yiLeh* 'S is C[omplement]', where C is a noun, noun phrase, or adjectival. The paradigm is presented in (8), and sentence examples are in (9).

(8) Paradigm of absolute C *yiLeh* 'S is C[omplement]'

a. Base forms:	c. Negative
2s/3 <i>yiLeh</i>	2s/3 'a'Le:G
1s <i>xiLeh</i>	1s 'a'xLe:G
2p <i>lAXiLeh</i>	2p 'a'lAXLe:G
b. Iterative	d. Negative iterative
2s/3 <i>q'e' diLeh</i>	2s/3 <i>q'e' a'dALe:G</i>
1s <i>q'e' xdiLeh</i>	1s <i>q'e' a'xdALe:G</i>
2p <i>q'e' lAXdiLeh</i>	2p <i>q'e' a'lAXdALe:G</i>

In this one verb for some reason the negative, quite anomalously, may lose the second glottal stop, thus becoming 'A- instead of 'a'- most of the time, at least in the third person, 'ALe:G instead of 'a'Le:G.

(9) Sentence examples of C *yiLeh* 'S is C[omplement]'

- k'udzu: xiLeh* 'I'm good/well'  
*dAXunh xiLeh* 'I am a person/human/Eyak'  
*John dAXunh yiLeh* 'John is a person etc.'  
 2s *dAXunh yiLeh* 'you are a person'  
*dAXunh lAXiLeh* 'you (pl) are persons'

An important use of this verb is with indefinite subject *k'u-* in the construction C *k'u:Leh* 'something is C, C exists', e.g. *Santa Claus k'u:Leh* 'there is a Santa Claus', negative *dik' Santa Claus k'a'Le:G* 'there is no Santa Claus', also idiomatically *'udAGAleh k'u:Linhinh* 'his sense exists, he's smart', *ts'iyux k'u:Leh* 'there are (lots of) mosquitos'. (Cf. also PA \*qu-:-le:-ɲ<sup>y</sup>, with 'area/event' prefix S instead of indefinite.) See Krauss (1970a) for a full lexical account.

The comparative 'to be' takes the positive imperfective form including initial prefix 'A-~, as shown in (10):

(10) Paradigm of comparative *'i:t'eh* 'S is'

a. Base forms:	2s/3 'a't'u:G (iterative q'e')
2s/3 'i:t'eh	'a'dAt'u:G)
1s 'ixit'eh	1s 'a'xt'u:G
2p 'ilAXit'eh	2p 'a'lAXt'u:G
b. Iterative	d. Negative iterative
2s/3 q'e' 'idit'eh	2s/3 q'e' 'a'dAt'u:G
1s q'e' 'ixdit'eh	1s q'e' 'a'xdAt'u:G
2p q'e' 'ilAXdit'eh	
c. Negative	2p q'e' 'a'lAXdAt'u:G

The stem, being from PAE \*t'ew, underwent ablaut to t'u', as evident in the negative forms. Instead of a Complement, this verb requires either an adverb, preverb, or a postpositional phrase, very often o-ga' 'like, as, equal to o'. Examples are given in (11).

(11) Sentence Examples of comparative 'i:t'eh 'S is'

k'e:d 'i:t'eh? 'how are you?

'idah 'ixit'eh 'I'm OK/fine'

wAX 'ixit'eh 'I'm that way, thus'

'a:nd wAX 'ixit'eh 'I live here'

xitl'ga' 'i:t'eh 'it's like snow; it's white'

xitl'ga' di:t'eh 'it (e.g. board, house, egg) is white'

dik' xitl'ga' q'e' da'dAt'u:G 'it (board etc.) is no longer white'

The same theme is also used in relativization k'uLAX 'i:t'ihnhinh 'chief' (lit. 'he who is more than someone'). See Krauss (1970a) for full lexical and morphological account, including ablaut pattern.

The absolute C yiLeh 'be' is exclusively intransitive, having no causative \*O-L-Le' (> \*O-Le'). Instead, suppletively, there is the directive theme C O-'l-L-Xa' 'S causes O to be C, S turns O into C, S makes O C(-y)'. As a transitive this is most frequently an action theme, but this theme is also found as Neuter imperfective especially in the sense 'S keeps O (as) C', e.g. 'Aw Le't' 'uq' 'isda'L 'u'lixilXah 'I keep that box as a chair'. This is especially frequent in reflexive causatives 'S makes self C; S makes self C (with ulterior motive); S pretends to be C', as in the two sentences presented in (12).

(12) 'Pretend to be', 'claim to be'

XAWa: 'Adu'liLiXinhinh 'he's pretending to be a dog, acting like a dog'

silAXa:ne: 'Adu'liLiXinhinh 'he claims to be my relative'

Also, as a transitive with indefinite object it is used to mean 'S causes C to exist', e.g. yAX 'iLA'a:nXinh 'u:dAX k'u'li:LiXinhninu: 'they have (keep someone as) a watchman there'.

For the comparative ‘be’, inherently intransitive, the causative is not suppletive, e.g. *da:na: ’ich’ wAX dixiLt’eh* ‘I owe you money’ (lit. ‘I keep money toward you’), or *ya:q’d wAX ’ixLit’eh* ‘I wear it on my wrist’ (indirect reflexive). It is especially frequent as reflexive causative, e.g. *k’usha:dah ’Adi:nLit’inhinh* ‘he’s making menacing faces, frowning’ (lit. ‘causing himself facially to be badly’).<sup>4</sup>

Irregular, i.e. morphologically unique, is C *da’-l-L-Xa’* ‘S has, gets, owns C’, with the same stem as the suppletive ‘cause O to be C’, but with what appears to be only *dA-* as object of directive, instead of *’i-da’-* (< *’i-dA’-*). This is like the usual indeterminate object of directives, uniquely without the indeterminate object prefix *’i-*. This behaves as an intransitive because (1) in the iterative with preverb *q’e’*, *LA-* classifier is used instead of *L-*, (2) instead of prefixal object personal pronouns, independent personal pronouns are used, and (3) if what is possessed (English O) is a classified noun, there is no corresponding class-marking qualifier in the verb. This abundantly proves it to be not direct object but Complement: e.g. *XahdL da’lixilXah* ‘I own a car’, *XahdL q’e’ da’liLiXinhinh* (not *\*da’dli:LiXinhinh*) ‘he has another car’, *i:da’lixilXah* ‘I have you (to depend on)’ (not *\*’ida’lixilXah*).

## 14.7.2 Dimensionals and verbs of extent

### 14.7.2.1 Dimensionals

There is one subclass of themes that occur in both absolute and comparative forms of the Neuter imperfective. These number about a dozen, and might best be labeled “dimensional.” Some pair off as antonyms. Full potential use in absolute and comparative was not systematically tested until late, with only Marie left. She rejected or could not verify some of the missing forms, so the system was already rather ragged, or had become so by the time it was fully investigated. The comparative forms take an *L-* (or *Li-*) classifier and basically the three comparative postpositional phrases *o-ga’* ‘like, as, equal to o’, *o-LAX* ‘more than, beyond o, and *o-’u’X* ‘less than, short of o’. Those of positive or greater dimension take of course *o-LAX*, e.g. *’Al ’AwLAX ’i:Lcha’sh* ‘this is thicker than that’, but those of negative or lesser dimension require *o-’u’X*, e.g. *’Al ’Aw’u’X ’i:Ltsidzg* ‘this is thinner than that’, more literally, ‘is thin short of that’. For the origin of the *L-* classifier in the comparative forms, cf. e.g. that in *l-L-xa* ‘grow (to comparative size)’, as opposed to *l-xa* ‘grow’, probably an extension of the “intensive” derivation that adds *L-* classifier to the verb theme. This *L-* in comparatives is of course cognate to that in Athabaskan.

Most of the stems for these themes also occur as adjectivals, i.e. can be suffixed to nouns, or are substantified by the prefixation of indefinite *k’u-* to those of positive

<sup>4</sup> In a class by itself, probably, is *l-LA-la’* ‘S be facially’, a comparative, e.g. *k’udzu:dah ’inLilinhinh qe’L* ‘pretty-faced woman’, *dik’ siga’ la’LAlah* ‘you don’t look like me (facially)’. See also §14.7.6, the Neuter imperfective derivation for Anatomical resemblance for further and related examples.)

**Table 14.1:** Dimensional Neuter imperfectives. Blanks signify not attested, i.e. rejected by Marie, though potentially not by all speakers.

Gloss	Absolute	Comparative	Adjectival
'long'			<i>k'u'a:w</i>
'short'	<i>yidik'</i>	<i>'i:Ldik'</i>	<i>ya:dik'</i>
'broad, wide'		<i>'i:LwAX</i>	<i>k'uWAX</i>
'wide, thick'	<i>yicha'sh</i>	<i>'i:Lcha'sh</i>	<i>k'uchahsh</i>
'narrow, thin'	<i>yitsidzg</i>	<i>'i:Ltsidzg</i>	<i>ya:tsidzg</i>
'very narrow, thin'	<i>yidjidjg</i>	<i>'i:Ldjidjg</i>	<i>ya:djidjg</i>
'big'	<i>yi'lih</i>		<i>k'u'lAw</i>
'little'	<i>yikuts'g</i>	<i>'i:Lkuts'g</i>	<i>ya:kuts'g</i>
'very little, tiny'	<i>yigut'g</i>	<i>'i:Lgut'g</i>	<i>ya:gut'g</i>
'many'	<i>?yit'u'</i>	<i>'iLit'u'</i>	<i>k'ut'u'</i>
'few'	<i>yilu'd</i>	<i>'i:Llu'd</i>	<i>ya:luhd(g)</i>
'deep'		<i>'iLitsa'</i>	
'shallow'	<i>yiwa'q'</i>		

valence/dimension, and by suffixation to or compounding with *ya:* 'thing, something' in the case of those of negative valence/dimension, e.g. *k'uchahsh* 'something thick', *ya:tsidzg* 'something thin'. In fact, the eleven stems of these dimensional Neuter imperfectives constitute most of the membership of the small grammatical category "adjectival." To these should be added only two others, *-dzu:* 'good', and *-shiyah* 'bad'. The latter is probably related to *-sha'* 'stingy' (see class 4 below), and is adverbialized as *k'usha:dah*. The only verb with a stem more or less clearly related to *-dzu:* is *-dzu:* (invariable) 'S improves somewhat', e.g. *GAXLAdzu'L* 'I'm improving (my lot) somewhat'.

This subclass, dimensional Neuter imperfectives, is presented below in Tab. 14.1, with forms for positive absolute, positive comparative, and substantivized adjective. Blanks signify not attested, i.e. rejected by Marie, though potentially not by all speakers.

See below for the basic verb of extension 'long', absolute *'i:ah* (stem *-a'*) and comparative *'i:L'ah* (stem *-a'*) '(sg) extend', with several important derivations, also Neuter imperfective. The adjectival *k'u'a:w* in the table is clearly related to this, implying PAE stem *\*aw*. For the final /w/, cf. adjective *k'u-lAw* 'big', verb *-li'* in the table above. Rezanov (1805) quite regularly spells the adjective <-лeгa> (<-lega>), where <e> might represent ("soft" l plus) [o], but more probably [e]. This is evident in the spelling of the medial sonorant as <ɾ>, which must represent back unrounded [ɯ], like that in Tlingit. This must be in contrast to the medial sonorant of 'long', which Rezanov regularly spells <aya> (<aua>). The verb and adjective for 'big' thus probably share a front vowel /e/ or /i/, from proto-stem *\*nəwɫ-*. However, the syllabic back rounded sonorant of 'long' might earlier also have been unrounded. This is dealt with in Chap. 4 on phonemes.

For *yicha'sh* 'wide, thick', *la'q'* *'i:cha'sh* is found more often, with preverb *la'-q'*, and prefixed *'i:-*, cf. verb 'extend'.

The comparative of ‘many’, *?yit'u*, was rejected by Marie, and rightly so in view of comparative, but later accepted (3-8-96); *?dit'u* or *?Lit'u* were not tested.

The adjectival *k'ut'u* ‘many’, is found in reference to humans requiring qualifier *gu:n* (< \**gA-nA*-), normally referring to liquids, here semantically quite irregular or unique.

The comparative of ‘deep’ *'iLitsa*’ is documented only in *'ida'ya:u'X 'iLitsa*’ ‘it’s too shallow’, from Lena. Cf. e.g. *GALAtsa'L* ‘it’s getting deep’, *'idah sLitsa'L* ‘it got to be the right depth’, implying that the verb must or can be a neutral ‘be of a depth’. The stem is clearly related to the preverb *tsa*’ (with allomorphs *tsi:n*, *tse*, *tsiya*) ‘downhill to shore’, probably related further to *-tsin* ‘nape’ (PA \*-tsi ‘head’), via the idea ‘ahead’. This *tsa*’ also functions as C in the construction *tsa' yiLeh* ‘it’s deep’ evidently much more common than the dimensional verb attested in ‘it’s too shallow’, a comparative with *'ida'-ya:-* with postposition *-u'X* ‘less than, short of’, here ‘not deep enough’; cf. *'ida'ya:lAX tsa' yiLeh* ‘it’s too deep’. Accordingly the adjectival substantive form here would have to be considered *tsa*’ ‘a depth, deep’, not suffixed to or compounded with nouns. Likewise for ‘shallow’ there is no attested adjectival, but there is the noun *wa'q* ‘shallow place’. In addition to the Neuter imperfective theme, there is also a theme with *LA*-classifier, *LA-wa'q* ‘be shallow’, Neuter perfective *'iLiwa'q'L* ‘it’s shallow’ (there being no Neuter imperfective like *'iLitsa*’). Thus we have both *GAwa'q'L* and *GALAWa'q'L* for ‘it’s getting shallow’, *sAwa'qL* and *sLiwa'q'L* for ‘it got shallow’, a parallel pattern for which is not attested for ‘deep’.

Note here the relation of Tab. 14.1, particularly the adjectival forms, with the grammatical class, adjectives, in Chap. 19 below.

#### 14.7.2.2 Verbs of extent

A small but productive subgroup of the dimensional are the three verbs of extent, all of which require the *'A-* ~ of Zone D1. The first two items in Tab. 14.1 above refer to linear extent, with basic  $\emptyset$ - classifier in the absolute, and *L-* classifier in the comparative. The third refers to non-linear extent, i.e. size, bulk. All three are neutral in valence, i.e. occur with both *o-lAX* ‘more than, beyond o’ and *o-'u'X* ‘less than, short of o’. To only the first, *'i-(L)-'a' ~ -'a'* ‘extend linearly’ does there correspond an adjectival, *-'a:w*, shown in 14.1 and explained in §14.7.2.1 above. For full lexical and morphological description of all three see the dictionary.

The very productive theme, *'i:ah* ‘S extends (linearly)’ (absolute), *o-ga' 'i:L'a* ‘S extends as far as o’ (comparative), *o-lAX 'i:L'a* ‘S extends beyond o’ (comparative), *o-'u'X 'i:L'a* ‘S extends short of o’ (comparative), applies primarily to singular subject, also however to plural, though perhaps not originally, or perhaps best, to a subject of unmarked number, in contrast to *'i:(L)sid*, which refers, markedly, to plural. Extent can be in any direction, from horizontal to vertical, straight or curved, and can apply to any type of subject or substance, so long as a definite linear extent is referred to, including thus waterflow, e.g. waterfall, river (therewith class-mark qualifier *gl-*), a streak (*Xd-*), even passage of time (*Gl-*), or distance overland (*Gdl-*), over water (*gdl-*). There are many further



derived themes with qualifier, and, in reference to (columns of?) smoke, and to wind, 'i-d-L-'a', with 'i- of Zone A (empty indeterminate object?), and d-qualifier.

The theme 'i:sid '(pl) extend (linearly)' (absolute), 'i:Lsid '(pl) extend (linearly)' (comparative). Though less frequent than the preceding, this is productive with e.g. qualifiers, and also in indirect reciprocals, e.g. in the relativization 'iLqa' XAdidi'ah 'corner of log cabin' (lit. '(pl) (logs) extend between each other'), and in 'iLlga' 'iLisid 'they're the same length'. However, this is not simply that with a suppletive stem, but rather is marked for plurality of subject, i.e. specifies more than one. As may be noted in the dictionary, there are some instances of this comparative in which the L- or LA- (Li-) classifier seems optional.

There is one more Neuter imperfective theme that could be considered to belong here semantically, but not morphologically, so its not included in the Tab. 14.1 above, because it has no corresponding adjective, and no Ø- ~ L- classifier alternation, but instead dA-. This is dA-a' '(non-linear) be of size', often with class-mark qualifiers, and often with regard to being of fitting size, e.g. *siyA'u'X ti:ndiyah* 'they (gloves) are too small for my hands' < 'are smaller than I hand-wise'.

### 14.7.3 Quality descriptives

A major subgroup of Neuter imperfective statives refers to non-dimensional inherent qualities, and differs morphologically from the dimensionals in not showing the comparative 'A-~ and L- classifier prefixation. Although the distinctive morphology of the comparative had not been recognized during much of the elicitation, there are sufficient examples, cited here, to show that these non-dimensionals indeed do differ as mentioned from the dimensionals in this respect. They also differ, as noted above, in lacking, generally, the adjectival form.

One item, which might semantically have qualified as a dimensional, but on all these accounts morphologically demonstrated not to be such, is *yiLda:s* 'it's heavy', e.g. in 'ida'ya:lAX *yiLda:s* 'it's too heavy', with ?'i:Lda:s first rejected by Marie, though later accepted (3-8-96). Likewise non-dimensional are *yitl'a'dz* 'it's firm, stiff'; *xishah* 'I'm stingy', *yishinhinh* 'he's stingy' (with probable relation, at least historically, to *k'ushiyah* 'bad', *k'usha:dah* 'badly'); *xiXanh* 'I'm fast (fleet-footed)', *yiXinhinh* 'he's fast'; *LigAXts* 'it's sticky'; *guli:tl'eh* 'it (liquid) is cold', *GAdi:tl'eh* 'it (place) is cold', *ida'ya:lAX GAdi:tl'eh* 'it (place) is too cold', *yitl'eh* 'it (e.g. fish) is cold'; *yik'a'dinh* 'he's sick, ill (any disease), is feverish', *yik'a'd* 'it's warm' (possible original meaning, and possible antonym for 'cold'). Cf. e.g. *dAsAche'Lih* 'he's hungry', an Active perfective stative form, showing that hunger is viewed as the result of a process, whereas illness is not. Note also *GAdidiGu* 'it (place) is hot', perhaps the single example of Neuter imperfective as opposed to over 30 instances of *GAdisdiGu'L*, *gulisdiGu'L* ~ *gu:nsidiGu'L* 'it (place, liquid) is hot', indicating that 'is hot' is more correctly viewed as the result of a process than an inherent state, in contrast to 'is cold'. This is perhaps to be expected, as heating is an earlier technology than refrigeration.

On the other hand, cf. *de:Gu* ‘steam bath’, with unanalyzable *de-*, which is very possibly from \**da-yi-Gu*, for which cf. e.g. *da-*(*d*) ‘where(?)’. Very productive is *liLilah* ~ *’i:nLilah* (< *l-LlA-la’*) ‘is facially’, e.g. *k’udzu:dah* *’i:Lilah* ‘you’re good-looking’ (see further in §14.7.6.1). One apparent pair of obsolete antonyms is very marginally attested: *di:Lch’ich’X* ‘it (board) is rough’ (Anna only), and *’i:Llits* ‘smooth cliff’ (place-name, Lena only).

One item, *L-qAtl’-X*, is problematic: *yiLqAtl’X* ‘it’s slippery’, *dik’ ’a’LqAtl’XG* ‘it’s not slippery’, *di:LqAtl’X* ‘it (expanse of ice) is slippery’, *GAlI:LqAtl’X* ‘it (ground) is slippery’, with suffix *-X* of unclear status. Cf. the action theme *L-qAtl’* ‘S slips, slides, rubs against surface’, causative *O-L-qAtl’*, both often derivatively locomotion, and occasionally also with suffix *-X*, not perambulative, but perhaps analogous with that and that of *L-qAtl’X* ‘is slippery’. The *-X* of *L-qAtl’X* ‘be slippery’, however, is not otherwise explained, unless by analogy to that of the “liability” derivation, or by being an otherwise unattested variant of that derivation, for which see further under §14.7.6.2.

There are three pairs of antonyms where the positive is a Neuter imperfective (with its own negative) paired with a thematized negative, i.e. with negative suffix *-G* but without negator *dik’* ‘not’. One is *XAdi(n)yanh* (with thematized qualifier *Xd-*) ‘it’s sharp’; also though the relativizations *di:(n)yanh* ‘stickleback (fish)’ and *Xa:ngudi(n)yanh* ‘porcupine’ (with anatomical qualifier *Xa:n-* ‘back’ and *gd-* ‘rump’); paired with thematic negative *XAda(n)’ya:nG* ‘dull’. A second is *dila* ‘it’s hard, firm; difficult’, *dik’ ’a’dAla’G* ‘it’s not hard’; paired with thematic negative *dAla’G* ‘it’s soft, flabby, disintegrating’, apparent Active imperfective, without negative Neuter prefix *’a’-*. The third is *LA-ts’an’* ‘be strong’, *xLits’anh* ‘I’m strong’, *dik’ ’a’x’Lats’a:nG* ‘I’m not strong’, *’ilAX xLits’anh* ‘I’m stronger than you’, *’Awga’ xLits’anh* ‘I’m that strong, strong enough, I’m as strong as that’ (comparatives confirming non-use of *’i-*), paired with thematic negative *xLach’a:nG* ‘I’m weak’ (also *dik’ xLach’a:nGG* ‘I’m not weak’). These are not only Active imperfective, with no negator and no negative Neuter prefix *’a’-*, but also show, uniquely, the shift of stem-initial /ts’/ to /ch’/. Such consonant shift is hardly found otherwise in Eyak, or generally in Athabaskan, but is characteristic in Tlingit pejoratives; cf. also probable doublet without such shift *Lats’a:nG* ‘moulting duck’. (There are possible traces of parallel /s/ to /sh/ in the gerund prefix *’is-* ~ *’ish-* in *’ishgahG* ‘lying, deception’. See §6.14 on consonant morphophonology.)

#### 14.7.4 Verbs of perception, aversion, etc.

This is the only subclass of Neuter imperfective statives that is basically transitive. Most members are also directive. Some verbs of perception, but not all, are Neuter imperfectives. Those of purely sensory perception are Active imperfective, such as sight, hearing, feel, taste, smell, but those of listening/heeding, knowledge, understanding, belief, are Neuter imperfective, five items in all.

One of special interest, is a clear derivation, from theme *l-ta* ‘S has head in position’ (from classificatory *-ta*), here directive with empty O, and with the postpositional phrase *o-dahd* ‘directly against o, with pressure against o’. This means ‘S listens to o’ (literally), and/or ‘S heeds o’, such that there could be a pair with e.g. hypothetical Neuter perfective *’udahd lixitahL* ‘I have my head against it’ and *’udahd ’u’lixitah* ‘I’m listening to it, hear it; I’m heeding it’. This is also as opposed to *dAxLcha:q’* ‘I hear it’, Active imperfective. The basic verb O-’-l-L-ga’, ‘S knows O’ is also a directive, but not derived, e.g. *’u’lixilGah* ‘I know (it)’, *’i’lixilGah* ‘I know you’, *dik’ ’ula’xLga:G* ‘I don’t know (it)’. No *\*O-l-L-ga’* could be elicited. Not directive is *xLideh* ‘I understand it, know how to do it’, *’idixLideh* ‘I understand you(r speech)’. Likewise not directive is O-d-LXAwí ‘S believes O, agrees with O’, d-qualifier ‘speech’ presumably thematized, i.e. < ‘what O says’. This theme is also attested in the Active imperfective, e.g. *’idixLXAwih*, also *’idAxLXAwih* ‘I believe you, agree with you’, with a semantic difference unfortunately not investigated. (This verb stem may be derived from a postposition, o-XAw ‘simultaneous with’, probably related to the preverb *Xu* ‘right, correct, finished’.) Another theme of belief is directive C O-’-LA-le(’) ‘believe/think that O is C’, e.g. *ts’iyuh xu’Lilinhinh* ‘he thinks I’m a bear’, sometimes with a verb phrase as C: *xdAxa:gL xu’Lilinhinh* ‘he thinks I’m working’. (One other directive theme, ‘S believes O’ is *dAXu’ O-’-l-L-Xa’*, e.g. *’i’dla:xiLXah* ‘I believe you’ is merely C O-’-l-LXa’ ‘keep O as C’, with additional qualifier *d-* ‘speech’ and *dA-Xu* ‘true, right, complete’ as C.)

The second clear subgroup of transitive Neuter imperfectives belonging here has in common the idea of aversion, fear, avoidance of O. These, like the preceding, are mostly directives, also as mental processes or attitudes toward O. Only three stems are involved, all with thematized derivational prefixes, in five basic themes. The one with only one theme is *k’u-’-LA-tu’* ‘lazy’, with thematized indefinite O, no doubt with the idea aversion to something’: e.g. *k’u’xLituh* ‘I’m lazy’, *’uch’ k’u’yixLituh* ‘I’m lazy about it’ (‘I’m manually lazy toward it’). The other two are attested only in parallel derived pairs, directive reflexive *’Adu-’-LA-* (with thematized indefinite O *k’u-* from unattested *\*O-’-L-*), and O-’-l-X-L- directive with thematic qualifier *lX-*. The first pair is with the stem *-k’i:nq’*, e.g. *’Adu’Lik’i:nq’inh* ‘he’s shy, modest, reserved’ and *xu’lAXLk’i:nq’inh* ‘he’s shy with me, observes proper (e.g. cross-sibling) avoidance behavior toward me’. The second pair is with the same stem as noun *xa:s* ‘taboo, strange, ominous, lucky thing’, e.g. *’Adu’Lixa:sinh* ‘he’s observing a taboo’, *xu’lAXLixa:sinh* ‘he’s afraid of me, fears me’. The qualifier *lX-*, in origin clearly a reduction of the noun *-la:X* ‘eye’, is very common as an anatomical qualifier referring to ‘eye’, and with semantic expansion thereof to ‘ball-like, berry-like, granular’ as a class-mark, occasionally also to ‘rain, fog’. Strictly verbal, beside these two, thematic *lX-* appears also in O-*lX-L-Gehd* ‘S jounces, dandles O (baby, pet)’ and above all in O-’-l-X-L-*tsi:ndz* ‘dream of O’ derived from *’i-tsi:ndz* ‘to dream’, noun *tsi:ndz* ‘dream’, and in *lX-XAL* ‘be drunk, dizzy’, q.v. following. Additionally there is the intransitive *lX-LA-Xa:s* ‘be afraid’, Neuter imperfective but with the unique irregularity of lacking the second /A/ after the qualifier, *lAXxLixa:s* ‘I’m afraid’ (not the expected *\*lAXAxLixa:s*), though the negative is the expected *dik’ lAXa’xLAXa:sG*.

Difficult to categorize is the apparently unique *IX-XAL* ‘S is drunk, intoxicated; dizzy’, intransitive, e.g. *LAXAxiXAL* ‘I’m drunk, dizzy’, *dik’ LAXa’xXALG* ‘I’m not drunk, dizzy’. Likely as not, this could perhaps best be explained as a Neuter perfective (stem coda and suffix sequence *-L-L* reduced to a single /L/). In any case, the thematized qualifier *IX-* is clear enough, but the inherent stativity, not seen as resulting from a process, is not clear, if this item is indeed a Neuter imperfective rather than a perfective (but cf. §14.7.6.3). The only other attestation of the stem, or perhaps a homophone, is that of the apparent adjectival in *tsa:LAXAL* ‘gravel’, with *tsa:* ‘stone’ (archaically *l-* class).

#### 14.7.5 Nouns from verbs otherwise unattested as Neuter imperfective

There are a dozen or more nouns in the corpus that appear to be nominalizations with Neuter imperfective verb morphology, from unattested themes, or themes otherwise unattested as Neuter imperfectives. All are problematic, and many may not be from Neuter imperfectives at all.

One of these is a diffusion of some kind: *ts’AXLiqa:tl’* ‘nagoonberry (*Rubus arcticus*)’, with unidentified *ts’AX-* and *Li-qa:tl’*, cf. Ahtna *dahts’enkaadle’* ‘nagoonberry’, but irregular as a diffusion; cf. also Minto *nekodle* ‘raspberry’, possibly from earlier PAE \*ŋʷə-qatl’ə.

Another is attested only as a complement: *di:tsin’G* ‘naked’, e.g. *di:tsin’G yiLinhin* ‘he’s naked’, implying *d-tsin’G* with *d-* qualifier, not usable as an intransitive. This is attested only as transitive *O-L-tsin’G* ‘undress O’. Neuter imperfective intransitive is semantically at least problematical, given the ambiguity of nakedness as an inherent quality.

Several are animal names, e.g. *du:xLideh* ‘crane’, for which Rezanov (1805) revealingly has *du:Lxideh*, cf. Tlingit *dóol* [dú:l], PA \*dəl ‘crane’, \*dələduł ‘make call of crane’ < PAE \*dəwl. The *-xideh* is otherwise not attested as such, but cf. also *xLideh* ‘I know how, understand it’, so perhaps originally imitative \**du:LxLideh*, with the sequence /LxL/ simplifying to /Lx/ or /xL/, or metathesis.

Another important animal term is *qe’yiLteh* ‘whale’, certainly from preverb *qa’* ‘up out’ and *-L-te* ‘dead, comatose S lies prone’, with *qa’* umlauted by *yi-*. This is quite probably Neuter imperfective by stativization derivation, q.v. §14.7.6.3 below, given that Eyaks did not aggressively hunt whales but took them in this state, dead and beached. Alternatively, it might be from usitative Active imperfective nominalization, *qa’ya’-L-teh*, by trivial /ya’ > yA > yi/.

Some forms are attested with prefixal *di-* preceding a coronal stem onset, trivially alternating with *dA-*, especially preceding or following a front stem vowel. The more frequent variant, *di-*, appears to imply Neuter imperfective with *di-* classifier, the *dA-* implying Active imperfective with *dA-* classifier or qualifier. Thus e.g. *XAdich’e:* and *XAdAch’e:* ‘red-tipped clam’, is possibly indeed a Neuter imperfective in origin (though qualifier or class-mark *Xd-* is more productive than *X-*). This may be so especially in view of

the following: *'inda: dich'e:* 'kingfisher' < 'face red'; from Anna only, 'kingfisher' being usually *ni:ga:dAshe:* or *ni:k'a:dAshe:* (and further variants), for Anna also, with further variants. For this cf. *-ni:k'* 'nose', Anna prone to folk etymology; note vowel and prosody parallel /i:-a:-V-e:/; cf. further Active perfective stative *sdich'e'L* 'it's rusted, red', from *-ch'e'* 'feces', expanded *-ch'e:*, not otherwise attested as Neuter imperfective. Two more instances with *di-* ~ *dA-* are doubtful. One of these is *qi:yidich'an'k' ~ qi:yAdAch'an'k'* 'Dungeness crab', with *dA-* from Mike Sewak only, perhaps the archaic original. The *qi-yA-* is the anatomical qualifier 'toes', in *'i-dA-ch'an'k'* 'clamber, move along clutching', with indeterminate object and *dA-* classifier, with vowel shift possible after /i:y/. This is a locomotion verb, almost surely with Active imperfective usitative derivation, hardly likely to be shifted to stative. Another is *dide'L* 'lamp' and Rezanov (1805) *dAde'L*, for which *dide'L* almost certainly is a vowel shift, *dAde'L* being the regular instrumentalization of *d-LA-de* 'emit light'. Further examples of this type are *qi:yidichanh* 'spider' (lit. 'smelly-toes', from Lena; cf. *qi:yidAchanh* 'daddy long-legs', from Marie; both are from *LA-chanh* 'emit odor'); likewise *Ga:ndichidjg* 'small birds', also, more originally but less often *Ga:ndAchidjg*, lit. 'pecks ground'.

Most difficult is *k'udi'lahG* 'chief of opposite moiety', which looks like pure Eyak Neuter imperfective, lacking condition for shift from *dA-* to *di-* classifier, with indefinite subject marked by *k'u-* from stem *-lahG*; there is, however, no known theme *dA-'lahG* or stem *-lahG*. If this is not from the Neuter imperfective of such a theme, otherwise unattested, another possible analysis would involve the common *-lah-G* 'inhabitant of' (from *-la* 'subsist', suffix *-G*), leaving *k'udi-* the problem. For that cf. *k'udi:q'* 'Chugach person', which is most probably from *k'u-dA-'e'-q'*, > *o-di:q'* 'in o's language', but the shortness of *-di-* in *k'udi-*, *q'ah-di'lah* 'goodbye' is not explained; see variable postposition *o-'e'* in Chap. 16 on preverbals.

There are a few problematical forms with initial *'i:-*, which is homophonous with Neuter perfective prefixation but missing the suffix *-L*, e.g. the man's name *'i:t'e'q'* 'man's name, cf. *'i:t'e'q'L* 'it's straight', and *da' 'i:t'its'* 'frozen salmon-roe put up for winter' (Lena, but later *'i:t'its'L*), cf. Neuter perfective *'i:t'tits'L* 'it's frozen'. More likely these are instead forms with initial *'i:n-* from qualifier *l-* that have lost the nasalization, both from Lena, who often denasalizes (cf. e.g. *'i:nLch'iyat'* 'rotten fish-heads', *'i:nLk'a't'* 'sea-urchin', often *'i:L-* for Lena), and *q'Ama:-lA-k'ingshg* 'dried salmon-roe (sac)' (*l-*class).

### 14.7.6 Neuter imperfective derivations

There are three derivational processes that produce Neuter imperfective verbs. One of these is derived from anatomical nouns, producing Neuter imperfectives of "anatomical resemblance." Two are derivations from verbs of other classes. The first and more frequently attested of these results in what are here labeled Neuter imperfectives of "liability," derived from action verbs. The third is of special interest, but was unfortunately recognized rather late and is somewhat marginally documented, labeled "expressive

stativization.” As they treat derivations, the following three sub-subsections are treated here only exceptionally, as they could well belong in the following major section below on derivations.

#### 14.7.6.1 Anatomical resemblance

There are examples in the corpus of Neuter imperfectives of “anatomical resemblance,” derived from seven anatomical nouns. These all show the comparative Neuter imperfective prefixation with vocalized classifier, thus prefixed by *'A* and *Li-* or *di-*, to the noun, and mostly the postpositional phrase *o-ga'* like *o'*. Some simple examples are presented in (13).

(13) Neuter imperfectives derived from anatomical nouns

*'iga'* *'iLisa'dinh* ‘he has a mouth like yours’

*sigā'* *'iLidjehXinh* ‘he has ears like mine’

*GAnuhga'* *'iLik'ahshinh* ‘he’s duck-footed’

*'AdLa'ni:q'Lga'* *'idiLa'ch'inh* ‘he’s voracious’ (lit. ‘he has a stomach like a seagull’)

*sigā'* *'iLini:k'inh* ‘he has a nose like mine’

*sigā'* *'iLila:Xinh* ‘he has eyes like mine’

Two forms include an anatomical prefix that is also part of the noun itself: *sigā'* *yiLiq'a'ts'inh* ‘he has hands like mine’, and *'Awla'e: yiLiq'ats'inh* ‘he has queer hands’, cf. *-yA-q'a'ts'* ‘hand’; *dAXunhyu:ga'* *'inLida:'* ‘owl species’ (‘it has a face like humans’, cf. *-nda:'* ‘face’). Synonymous to the latter is *dAXunhyu:ga'* *'inLilah* (lit. ‘it is facially like humans’), a basic Neuter intransitive descriptive (see under §14.7.4) with the same prefixation as here. Significantly, however, the *Li-* prefixation does not occur in *o-ga'* *'i:t'eh* ‘be like *o'*’ with anatomical qualifier prefixes: *sigā'* *qi:di:t'inhinh* ‘he has feet like mine’, *sigā'* *gudi:t'inhinh* ‘he has a butt like mine’.

There is one item in a class by itself, *l-LA-la'*, ‘be facially’, as mentioned just above in *dAXunhyu:ga'* *'inLilah* ‘owl species’ (lit. ‘it has a face like humans’). This is a Neuter imperfective stative with anatomical qualifier *l-* ‘head’ and also stem *-la'* perhaps also referring to ‘head’ (cf. postposition *o-la'*, probably with the same *l-* ‘head’ as initial element). This theme, frequently with *o-ga'*, is by no means always comparative. See Krauss (1970a) for full documentation.

Also in 1980 fieldwork with Marie, this anatomical resemblance derivation happened to be tested twice. Along with Neuter imperfective *sigā'* *'iLini:k'inh* ‘he has a nose like mine’ she offered Neuter perfective *sigā'* *'iLini:k'Linh*. On another occasion she offered Neuter perfective *sigā'* *'iLiLa'ch'Linh* ‘he has a stomach like mine’ and rejected the imperfective *\*?sigā'* *'iLiLa'ch'inh*. It is difficult to draw a conclusion from this, except that Marie may have a memory less clear of the derivation, or conceivably that the Neuter imperfective may be more natural or correct for her in the case of *-ni:k'* ‘nose’ for some reason than in the case of *-La'ch'* ‘stomach (internal organ)’. The productivity of this

derivation has natural semantic limits in the first place. It is of course likely that more than those attested are possible.

### 14.7.6.2 Liability

Here follows an extensive if not full list of derived Neuter imperfective “liability” themes, all derived from action verbs, both transitive and intransitive. It is quite probable that more could and should have been elicited. These all show classifier *Li-*, and a suffix *-X*, not clearly to be identified with any other *-X*; any open stem to which it is suffixed becomes CV<sup>2</sup>; this *-X* is sometimes deleted before negative *-G*, or in favor of thematic repetitive with *-g*, especially by Marie, but that may be mere lapse. The meaning of these derived themes is ‘S is liable to V, S V’s easily’. Accordingly, it will be noted, use of *qA-* ‘plurality’ is not uncommon, not with reference to the subject or object, but to potential plural acts or events.

Most, but not all, of the attested instances are from intransitives. They are listed in (14).

(14) Intransitive Neuter imperfectives of liability

*LidAtl’X* ‘get hurt’ (< *L-dAtl’*)

*qALidAtl’X* ‘it gets hurt easily’

*yixLidAtl’X* ‘my hand gets hurt easily’

*dik’ qa’LAdAtl’XG* ‘it doesn’t get hurt easily’

*LitugX* ‘it swells (by soaking up moisture) easily’ (< *LA-tug* ‘swell (by soaking up moisture)’)

*k’ah lixLita’X* ‘I’m forgetful’ (indirect reflexive from *o-k’ah l-ta* ‘forget o’ ‘move head away from o’)

*qi:nLidja’X, qAqi:liLidja’X* ‘it (rope) breaks easily’ (< (*yaX*) *O-dja* ‘jerk O (apart)’ with preverb *yAX* ‘apart’ deleted)

*Lisi:nsX* ‘it gets moldy easily’ (< *dA-si:ns* ‘become moldy’)

*Lisha’t’X* ‘it wrinkles easily’ (< *LA-sha’t’* ‘becomes pliable’)

*LikugX, qALikugX* ‘it breaks easily’

*qAdiLikugX* ‘it (stick) is brittle’ (< *-kug* ‘break’)

*Liki:nXinh* (< *-X-X*) ‘he cries easily, is liable to weep’

*dik’ ’a’xLAKi:nXG* ‘I’m no crybaby’ (< *-ki:nX* ‘weep’)

*LiqAts’X* ‘it’s liable to split, burst’ (< *-qAts’* ‘split’)

*Liq’u’tl’X* ‘it’s fragile, likely to break to pieces’

*dik’ ’a’LAq’u’tl’XG* and *dik’ ’a’LAq’u’tl’G* ‘it’s not fragile’ (< *-q’u’tl’* ‘break to pieces’)

*'i:nLima'X* 'S (e.g. motor) keeps breaking down' (< *l-dA-ma* 'go wrong')

*lixLiwidj* 'I shame easily' (< *l-widj* 'be ashamed')

*yAq' lixLiya'X* 'I scare, startle easily, I'm jumpy' (< *yAq' l-a* 'be startled, bewitched')

Only two such themes are attested from verbs that are essentially transitive. These have the passive meaning 'be easily V-ed', rather than 'be liable to V O': *yAX Lichich'X* 'it is easily broken, brittle' (< *O-chich* 'break O', a semantic quasi-suppletive transitive for *-kug* 'S breaks'), and *LiXa'Xch'Xinh* 'he's ticklish' (< *-ch'-X-X-*), also in *dik' 'a'xLAXa'Xch'XG* 'I'm not ticklish', and *dik' 'a'LAXA'Xch'gGinh* 'he's not ticklish' (Marie).

Problematical is *yiLqAtl'X* 'it's slippery' etc., entered under §14.7.3, not fully explained, with suffixation perhaps thematic as in the preceding. This derivation is not that here, however, i.e. the meaning is not 'liable to slip'... Very possibly this is a single example of a variant of this type of derivation, which was not further investigated. This *yiLqAtl'X* 'slippery' is clearly a non-passive variant, as suspected, of this derivation, and, it happens, the only such, 'liable to cause O to slip'.

Also, it appears that there may be no instances of these themes in anything but the Neuter imperfective. In fact, e.g. 'it's becoming fragile' or 'became fragile', though presumably possible, were never tested, so that we do not know whether this *-X* is deleted in such cases, as is the *-X* of the perambulative.

#### 14.7.6.3 Expressive stativization

The last Neuter imperfective derivation to be recognized, too late, is perhaps applicable in principle to any verb class. Its existence, however, had to be recognized from only three clear examples first noticed in the corpus, all from Lena. These are presented in (15).

##### (15) Neuter imperfective expressive stativization

*'AXa: 'Aw guli:Lts'unhinh* 'my, how he guzzles that!'

*'AXa: diLiXAXginh* 'what a snorer he is!'

*dik' da'LAXAXgGinh* 'he doesn't snore'

For the first form in (15) cf. e.g. (*ts'u: / che:y*) *guli:Lts'unhinh* 'he loves to guzzle it (milk / tea)', *O-ts'uh* '(typically infant) sucks O', action, but here in Neuter imperfective, with (redundant) class-mark qualifier *gl-* 'liquid', also *L-* classifier. For the second and third cf. Active imperfective *dALAXAXgih* 'he's snoring', with thematized repetitive. The 'snorer' example may be far less expressive than the 'guzzler' one, but there is in any case no other explanation for the clearly attested Neuter imperfective stativization than what might be called "poetic license," or expressive stativization. This Neuter derivation was not properly appreciated at the time of elicitation, so was not further investigated as such in 1963–5. Almost an exception with one deliberate elicitation in 1965 was *dALich' di:chininh* 'he's always hungry'. This was clear evidence that Lena, a "conservative" speaker, could allow herself such license, here allowing that hunger, seen ordinarily as the result of a process,



and a condition that in normal cases can be readily changed, can be exceptionally treated as inherent. Further examples might however be attested in some of the nouns discussed in §14.7.5, e.g. conceivably *qi:yidich'an'k* ‘Dungeness crab’, but especially *qe'yiLteh* ‘whale’. This choice of name for ‘whale’ might be a kind of pointed reference to ‘dead and beached’ as the only whale Eyaks could normally get.

Further examples found in the main fieldwork period then noted, numbering over a dozen, in the writing of this grammar evidently include three lexicalized relativizations (16).

(16) Neuter imperfective expressive stativization in lexicalized relativizations

*ya'X gudli: 'yah* ‘fountain’, lit. ‘liquid is—perpetually!—situated upward’

*'itl'a:ndahd 'igudli:Ltah* ‘Eyak River’ < ‘it (sure! [?]) keeps liquid (*gula-*) against (*-dahd*) mountain (*'itl'*)’

*sid k'u'li:Lga'ginh* ‘my teacher’, lit. ‘he (=inh) repeatedly (*-g*) causes (*L-*) me (*si-*) to know (*-l-L-ga'*) something (*k'u-*)’

The last of these, *sid k'u'li:Lga'ginh* ‘my teacher’, is quite exceptional for a repetitive Active imperfective derivation, itself from a Neuter imperfective, or it may be analogically from that, instead of expected Active imperfective (usitative or not) *sid k'u'lALga'ginh*. Also in the main corpus are two more (non-relativized) verbs that may well belong here. One is *yixa:s* ‘it itches [severely?, perpetually?]’, from both Lena and Marie, a Neuter imperfective of a persistent, doubly derived from an Inceptive perfective stative theme. From Lena also we have the two very expressive expressions presented in (17).

(17) Two expressive stative expressions from Lena

*'AdXa'd ya'X Litug q'A'Aw* ‘Suddenly (*'AdXa'd ya'X*) it's (=Aw) [alarmingly?] swollen (*Litug*)’

*Lich' 'udjAXAyAq' li' tsin'dixilinhinh q'A'anh* ‘I'm [perpetually (*Lich'*)] all the way inside (*-yAq' li'*) his (*'u-*) ear (*djAXA-*) speaking (*tsin'dixileh*) to that guy (=inh, =anh) (and he doesn't listen)’ (cited as Text 72.2.)

Finally, certainly to be mentioned here is what was listed in Krauss (1970a) as a separate stem, found only in the “defective” verb stem *-de:*. This should very probably be reinterpreted as a Neuter imperative allomorph of *-da* ‘(sg) stay’. This is attested only in the expression *dAwa'd 'a:de:* ‘hurry!’, with adverb *dAwa'd* ‘quickly’ and use of the verb theme that is perhaps semantically not obvious, even ironic, but legitimate (cf. *ya' 'Ade:* ‘sit still!, behave!’). The plural *?dAwa'd 'a'lAXqe:* was not tested. A presumable underlying *?dAwa'd yidah* ‘is in a hurry’ was tested late with Marie, with understandably uncertain results. The *'a:de:* must in any case be the corresponding morphologically regular imperative.

In 1980 the productivity of this derivation was further tested with Marie. She did not outright reject Lena's *gAli:Lts'uhinh* ‘guzzler’, but rather indicated merely that she had

never heard such a thing. Further, she could not decide that my proposed *?di:chinhinh* ‘he’s hungry’ or *?dixicheh* ‘I’m hungry’ is impossible to say, but rather merely considered that questionable, perhaps more because I did not add *(dA)Lich* ‘always’ or explain the exceptional or poetic possibility. In fact, she went on to accept at least five proposed forms (18) which must herewith be counted as further valid examples of this derivation.

(18) Expressive statives from Marie in 1980 (1)

*xigah* ‘I’m [perpetually] tired, exhausted’

*dixigah* ‘I’m [permanently] tired of talking’

*xiguG* ‘I’m a liar’

*sitl’ di:guG* ‘everything you say to me is a lie’<sup>5</sup>

*Lich’ yiLq’uh* ‘it’s always damp’, where the explicit *Lich’* ‘always’ as explanation makes the form more easily acceptable.

*Lich’ ’u:d qi’ k’u:Lq’uh* ‘damp place’ (‘place (*qi*)’ where something (*k’u-*) is damp there (*’u:d*) always (*Lich’*)).

For *Lich’ yiLq’uh* ‘it’s always damp’, the explicit ‘always’ as explanation makes the form more easily acceptable for Marie. Such explanation and perhaps practice made the derivation somewhat productive for her, so that she came up with the last example herself. On 5-29-80 Marie approved a few more examples (19).

(19) Expressive statives from Marie in 1980 (2)

*xu: ’Awa: xigah, ’ida’ya:LAX xigah* ‘I (for one, however) am tired, I’m too tired’ (from Active perfective stative, clearly expressive)

*yitl’eh* ‘it (e.g. fish) is cold’ (perhaps not expressive)

*Liduk’* ‘it’s humped’ (Active perfective stative, presumably not expressive, perhaps basic, cf. *sLiduk’L* ‘it’s humped’)

*GALADuk’L* ‘hill’ (otherwise unattested Inceptive perfective stative relativized as noun).

One must consider the possibility that under those circumstances, Marie was becoming “desensitized” to the use of this derivation.

At the same time in 1980, 20-some hypothetical Neuter imperfectives for perfective statives were tested and rejected by Marie, e.g. *\*lixiwidj* ‘I’m ashamed’, *\*dit’its’* ‘it’s frozen’. Her disapproval of these clearly confirms not only the characterization of Neuter imperfective as seen as referring more to inherent qualities as opposed to changeable states, but also the limitations of the use of the derivation “expressive stativization” to produce Neuter imperfective verbs.

5 For this, I have the notation “[possible] but not easy to say”

## 14.8 Inceptive perfective stative

The Inceptive perfective stative is the subclass of statives with the fewest members, given its relatively specialized meaning, themes with only about 40 stems so attested. By morphological definition, this class takes conjugation prefix *GA-* and perfective suffix *-L*, with open variable stem taking the shape CV:L for CV and CV'L for CV'. Along with this, another distinctive morphological characteristic of this class is in the imperative, usually and most correctly with the prefix *'i-*. By semantic definition, this subclass of perfective statives is distinguished as that which requires the morphological pattern *GA-P-L* with the meaning 'be in state'.

Of course then 'S is getting into state' would take the same, Inceptive perfective; 'got into state' is the Active perfective; and 'be state for a term' is the Neuter perfective. The imperative, however, as is well attested here, is for some reason consistently not Inceptive *GA-*, but the *'i-* imperative. However startling, this may be seen as consistent with the imperative of locomotion verb themes, *GA-P-L* for 'is going (along)' but *'i-* imperative for 'go (along)' most abstractly, without telic preverbals. It is relevant to note here that I was unaware of the correlation of *'i-* imperative with these during the fieldwork, but only discovered it late, perhaps in the process of grammar work. This shows that though this is a minor class, and one in which imperatives are inherently rather uncommon, yet a clear consistent preference in choice of imperative emerges from the notes, certainly not influenced by any expectation of *'i-*.

This subclass of statives seems to share the basic idea of pressure, immobilized with counteraction, energy against a barrier, tension, isotonicity. It is accordingly epitomized by verbs especially of holding, static curvature or its opposite, straightness, angularity, perpendicularity, and, more figuratively, grimaces, and in a couple of cases, even conditions that lead one to grimace. However, by no means all verbs that might be associated with ideas mentioned here are in this class. Many such verbs, meaning e.g. 'pinch', 'twist, wring', 'tighten' even static, e.g. 'is pinched', 'is tight', 'is twisted', are not so classed.

Inceptive perfective statives, as may be guessed from the preceding description, do not easily fall into discrete semantic subclasses. Nevertheless, an attempt, however arbitrary, will be made to do something of the kind here, merely to present the items in some reasoned order.

Of ca. 40 different stems involved in the themes of this class, a large proportion are attested also in themes not of this class. An assessment of the degree to which this classification is inherent, primary or derived, will be taken up at the end of this presentation.

Given that most elicitation of these forms was uninformed for the purpose, there remains some uncertainty in perhaps 15% of the examples cited here as of this class. This is especially so where the glossing leaves ambiguity whether an action or a state is to be understood, e.g. in the case of *yAGAxLAq'Aq'L* 'I'm making a fist' or *'AdGAXdAqa'L* 'I'm leaning'. Some cases are disambiguated by semantic probability, e.g. '(candle) is drooping', or by imperative attested with *'i-*. Such uncertainties are noted throughout.

## 14.9 Semantic subgroupings of Inceptive perfective statives

Perhaps most fundamental in a way are themes with the stem *-Xu'G*, theme *LA-Xu'G* 'exert self', e.g. *GALAXu'GLih* 'he's exerting himself, straining hard', *'iLAXu'G* 'exert yourself!'. Lena allows also imperative *'ALAXu'G*, but then rejects Active imperfective *\*xLAXu'G* for 'I'm exerting myself'. The stem is frequently expanded, persistent *xLAXu:G* 'I'm exerting myself (in plural acts)', an Active derivation. This can be further derived by durativization, as Inceptive perfective again *GAXLAXu:GL*, with some linguistic effort. However, confronted with choice, Lena greatly prefers *GAXLAXu'GL*. In any case, the frequency of expanded stem here could explain the prefixal inconsistency; the main use of non-derived Active imperfective with *LA-Xu'G* is *k'u:y LAXu'G* 'wind is blowing'. Note the semantics of indirect reciprocal with preverbal *o-t'a'X* '(movement in) behind, shelter of o': *'iLt'a'X GALAXu'GL* 'it's shrinking, contracting'. A stative reading of this is confirmed by *'iLt'a'X 'AdGAXLAXu'GL* 'I'm huddled, having shrunk myself down into my coat (from cold)'. Note further though that in contrast *dAXLAXu'G* 'I'm yelling (straining at the top of my voice)', with *d-* qualifier 'vocally', is Active imperfective, as is usual for verbs of vocal action, not Inceptive perfective.

One of the more frequently attested Inceptive perfective stative themes is *O-L-t'ux* 'hold O'. Examples of this theme are presented in (20).

- (20) Inceptive perfective statives with *O-L-t'ux*

*GAXLt'uxL* 'I'm holding it, hanging onto it'

*'iLt'ux* 'hold it!'

*ch'a' 'AdX GAXLAt'uxLinh* 'I'm holding him (baby) close (toward myself)' (indirect reflexive)

*'uX GuxLAt'uxL* 'I'm clinging to it'

All of the examples in (20) are perhaps originally from a causative: cf. intransitive *gudli:t'uxL* 'it's taut, pulled tight', a Neuter perfective stative theme; and *O-L-t'ux*, as in *'ALt'ux* 'pull on it!', *'Aw Lt'uxinh* 'he's pulling on it', a transitive action theme.

Another such group is based on *-le'g ~ -lu'g* 'act with hand' and transitive directive *O-'le'g* 'lay hands on O': *'iLu' ch'a' 'AdX GAdAle'gL* (or *GALAlu'gL*) 'they're holding each other close', and *xu'GAL(l)u'gLinh* 'he's holding onto me'.

Here, derived from action theme *O-qa* 'bite O', also belongs *O-qa* 'hold O it teeth', as in *GAqa:L* 'it's holding it in its teeth', and *'iqa'* 'hold it in your teeth!'. The exact same forms, by the progressive derivation, Inceptive perfective and imperative, mean 'it's carrying it along in its teeth', 'carry it in your teeth!'

Likewise we have *'Aw dla:GALts'e'ts'Linh* 'he (=inh) is holding it ('Aw) (hot rock: *dla:*) in tongs', By progressive derivation this could also mean 'he's transporting it (hot rock) with tongs'. These can be derived from the action theme *O-L-ts'e'ts'* 'crush, mash O', allowing probably for some semantic adjustment.

Basically intransitive and related to the preceding in semantic area is a group of themes, all Inceptive perfective statives, with stem *-q'e's*: e.g. *'u:d GAq'e'sL* 'it's stuck there (by crowding)', *'uyAq'(d) qi:dAGAxq'e'sL* 'my shoes are too tight' (lit. 'I'm foot-crowded in them'). Further derived but still Inceptive perfective stative, *'iGALq'e'sL* 'it (odor, fog) is thick', causative with indeterminate O ('causes tightness, crowds'). Note also *dla:GAdAq'e'sL* 'it (table, floor, boat) is not level, slants, lists' (pressure from subduction?), possibly a passive, and cf. some items in the following paragraph.

Another that might belong here is with stem *-q'a'q'* or *-q'a'k'* (stem form uncertain), attested only in *siyAq' qa:nch' dAGAq'a'q'L* 'I'm choking' ('inside me upward ...') and *sidAga'q'L dAGAq'a'k'L* 'I'm choking ('my throat ...'). For this cf. especially O-*q'a'* below. The glossing is somewhat ambiguous ('starting to choke?'), but classification is semantically probable.

Belonging here probably also is the verb in *'u:d GALdja:t'L* 'it (too heavy to move) is stuck there'. For this cf. Active O-*L-dja:t'* 'pry O, move O by prying'.

Next might come a series of examples that refer to straightness, verticality, perpendicularity, right angle or static deviation from right angularity. For this cf. also the two immediately preceding items, deviation from horizontal level, or choking (from tightness, or from sideways obstruction?).

Quite notable is that the theme for 'stand' (as a posture) is not postural, but definitely in this class: *gu-LA-a:n'* 'singular stand', and *gu-LA-'a'ch'* '(pl) stand' (with suppletive stem *-'a'ch'* '(pl) go'). E.g. *guGAXLa:n'L* 'I'm (in) standing (position)', *gu'La:n'* 'stand!', *guGALA'a'ch'Linu:* 'they're standing'.

Straightness but not verticality is the point of *GAt'e'q'L* 'it's straight, flat, level', often adverbialized or subordinated in *GAt'e'q'Lda:X* 'being in a straight line'.

A rather productive stem also specialized in this class is O-*q'a'* 'S places O at angle', e.g. *qAGAxq'a'L* 'I'm standing them up (e.g. books, perpendicular to their most stable or normal position)'. Evidently intransitive is *LAXAGAxq'a'L* 'I'm cross-eyed'. Reflexives (with 'Ad-) are *'u:dAX 'AdGAdAq'a'Linh* 'he's leaning there', *'AdLAGAq'a'Linh* 'he's got his head tilted'. Probable passives (with dA-) are *GAdAq'a'L* 'it (e.g. boat, chair) is on its side', and the relativizations *LAGAdAq'a'L* 'axe' (lit. 'its head is set crosswise'), and *dla:GAdAq'a'L* 'rock crevice (from rock set on side)'.

Here or above might belong *gAdla:GAwa'L* 'it's hanging suspended' (Marie 1980, along with usitative? *gAdla:wA'L*).

A reflexive causative is *'AdGAXLatl'ahdzL* 'I'm bracing, steadying myself (e.g. in tipping canoe or swerving car)' (perhaps also bracing self more generally against something). Cf. the intransitive Neuter imperfective *yitl'a'dz* 'it's tightly packed, firm, stiff'. Note herewith that the relativizations are frequent with Inceptive imperfective statives, and these do not become Active imperfectives by usitative derivation.

Less clearly belonging with the above semantically is the nominalization *GALAXa'Xch'XL* 'dimple' possibly passive at least in origin. Cf. unavoidably the action theme O-*L-Xa'Xch'*-

X ‘tickle O’, with the non-trivial semantic adjustment, possibly that dimples appear from grimacing caused by being tickled.

Note likewise the relativizations *dla:GAdAq’a’L* ‘rock crevice’ above; especially also *dAGAdAwa’L* ‘door’ and *GAdAwa’L* ‘curtain’, for which the semantic derivation is relatively clear, given the stem *-wa’L* ‘hang suspended’. Also *’u:d gudla:GALAWa’L* ‘it’s hanging there’, clearly showing an Inceptive perfective stative theme.

One theme that semantically could belong to this class but for which the uninformed elicitation suggests does not so belong, is Active perfective stative *lAshAq’AshL* ‘it’s lopsided, asymmetrical, bent out of shape’ (e.g. parallelogram instead of rectangle). This is also attested as *lAGAq’AshL* but glossed only as ‘it’s getting bent out of shape’. Cf. however also *gushAq’AshL* ‘you’re lame, you limp’ (not ‘you became lame’), an Active perfective stative example contraindicating membership here, and if so, helping to show the limitations of this class.

A large group is that referring to static curvature, seemingly the contrary of those preceding referring to straightness, but related by the notion of pressure or energy required to maintain the state. In several of these, the stem is attested only or primarily with this class of themes. The epitome thereof is probably *GALAGAmAk’L* ‘it’s round’. The causative of this, *xLGAmAk’* ‘I’m making it round’, unmarked for duration, i.e. not ‘I’m keeping it round’, is Active imperfective. Similar is *GAqe:L* ‘something oval, elliptical’. The stem is not clear (either *-qe:L* or *-qe*), used only as relativization or Complement: *GAqe:L yiLeh* ‘it’s oval’, *dAGAqe:L shdu:lihG* ‘oval table’. Another such is *dAGALAshugL* ‘curved knife for wood-carving’ for which cf. *disdishugL* ‘its end is bent upward’, presumably as explanation, from Marie only, rejected by Lena. The stem is almost certainly a reduction of that in *GAsh’e’gL* ‘it’s getting crooked’, indirect reflexive *ch’a’* *GAdAsh’e’gLinh* *dAXunh* ‘man who is getting bent over’, and *t’a’q’ich’* *GAsh’e’gLinh* ‘he’s “leaning” backward’. The causative *GAXLsh’e’gL* ‘I’m bending it’, is not disambiguated from ‘I’m holding it in a crooked shape’. The only unambiguous stative elicited is Neuter perfective *di:sh’e’gL* ‘it (arrow) is not straight’, so membership here is uncertain. Especially interesting is *XAdAGd ku:ndAGALa:L* ‘cocktail glasses, goblets’, which Lena explains as “their thickest parts are at the top.” This is a relativization, literally ‘at area above widest parts plural are in position’, Inceptive perfective, progressively. Similar but of much less certain membership, given the lesser likeliness of reference to an ongoing motion of ‘becoming curved’, is *yAX dAGALAsh’a’t’gL* ‘it (board) is sagging’ and *yAX XAdAGALAsh’a’t’gL* ‘it (candle) is drooping’, both with *yAX* ‘downward’. These contrast interestingly with *shLisha’t’gL* ‘it’s pliable’, *’i:nsLisha’t’gLinh* ‘his face is wrinkled’, both Active perfective statives.

Perhaps most closely related here are four items that belong together. A relativization only is *GALAduk’L* ‘hill, mound’, for which cf. *sLduk’L* ‘it has a hump, is humped’, Active perfective stative. Possibly with a stem of which the preceding could be a reduced form is *GAXLdu’k’L* ‘I’m squeezing it’, from Marie only, rejected by Lena, who instead uses Active imperfective *xLdu’k’*, imperative *’ALdu’k’* ‘squeeze it!’. A clear example of this se-

mantic class is *GALAguk'Lin* 'he's a hunchback', *GAXLAGuk'L* 'I'm a hunchback', for which cf. action theme *O-guk*, 'punch O', and instrumental deverbalization *gu'k'L* 'fist'. Almost certainly of this class also is *yAGAXLAq'Aq'L* 'I'm making a fist'. Though this was not itself disambiguated for stativity, Inceptive perfective stative is especially supported by the 'i- imperative closely corresponding to it, 'utl' *ya' yi'LAq'Aq'* 'hold it tight in your hand! ('make a fist with it!'). Note however the Active perfective stative *ya' yisLiQ'Aq'Lin* 'his hand is cramped closed' from Lena, and the Active imperfective *ya' yALAQ'Aq'inh* (with the same meaning!) from Marie. A crucial difference here may be that the Inceptive perfective is voluntary pressure, the Active items not. Note likewise the transitional progressive *yAGAXLAGAGsL* 'my hand is getting cold and numb', *qi:dAGAXLAGAGsL* 'my foot is getting cold and numb', with transitional glosses. Likewise *lisLiGAGsLin* 'his hair is curly', an Active perfective stative, with basic meaning perhaps 'curly'. This may imply both that the two preceding may also refer to curling, and are probably Active perfective statives.

About as large as the preceding but much more specialized, is a group referring to grimaces, related to it by the notion of curvature, distortion with pressure, very clearly here Inceptive perfective stative, even though a grimace presumably does not last long. The first 4 of the 6 stems here, moreover, are specialized in this class, rather than referring primarily to anything else, and for which no simpler clearly related themes could be elicited. Clearly such are the ones listed in (21).

(21) Inceptive perfective statives of grimacing

*dAGAdAgudjLin* 'he has his mouth tightly closed, teeth clenched, and/or lips curled inward'

*di'dAgudj* 'clench your teeth!' (with *d-* qualifier 'oral')

*k'ulAGALgu:nshLin* 'he's squinting', (transitive with indefinite O and *l-* qualifier 'facial')

*k'ulAGALxe't'Lin* (often *-xwe't'-*) 'he's grimacing, pouting with protruding lower lip (e.g. of child about to cry)'

*k'uli'Lx(w)e't'* 'pout!'

For the last, however, cf. *O-L-xut* 'shoot O with gun', *xut'L* 'rifle', the simplicity of which is highly anachronistic considering the date of gun technology. Such certainly invites wonder what the original meaning of *-xut* could have been. It could easily be the reduced form of *-x(w)e't'* 'make a grimace'. Cf. further *yixsLixut'gL* and *qi:dixsLixut'gL* 'the

skin of my hands/feet got white and shriveled or puckered from long immersion in water', from theme *LA-xut'-g*.<sup>6</sup>

Probably also primarily of this class is *dAGAch'ehXLinh* 'he has his mouth open', though the same gloss is attested with Active and Neuter perfective; the imperative though is consistently *di'ch'ehX* 'open your mouth!'. The picture here may be confused with the frequent thematically expanded stem *d-ch'e:X* 'yawn', an Active derivation. This itself is attested, perhaps mistakenly and only from Marie, as Inceptive perfective *dAGAch'e:XLinh* 'he's yawning', all with *d-* qualifier 'oral'. Here also certainly belong *Xu:ndla:GALAgihdjL* 'it (dog) is baring its teeth' with anatomical qualifier *Xu:l-* 'teeth'. Cf. however *LAXi:LgihdjLinh* and *LAXAsALgihdjlinh* 'something is wrong with his eye', Neuter and Active perfective statives, the exact meaning of which is but vaguely remembered. Less clear is *dAGAdAGAGshgL* 'his lower lip hangs loosely', obviously involuntary; cf. *'insAGAGshgL* 'it is misshapen, lopsided, flared', attested only as Active perfective, and *GALAGAGshgLinh* 'he's limping (along)', attested only as a locomotion theme.

The next two examples refer to anger or hostility probably including facial expressions if not grimaces: *xu'LAGALAtsa:Linh* 'he's staring me down, staring at me reprovingly, staring hard at me' (considered impolite), directive with *l-* qualifier 'facial'; cf. *O-'LA-tsa* 'O becomes faintly visible'. This is derived as directive of *O-LA-tsa* 'O becomes visible', which is attested only as a passive; it was not otherwise elicitable, and only as Active or Neuter perfective as stative. Of ambiguous status is *Lich' dAGAq'e:k'Linh* 'he's always getting mad', from Sewak. The gloss here, 'getting', is not to be taken too literally, especially given *Lich'* 'always' and Sewak's English. Other Inceptive perfectives of this theme are glossed only as 'getting', e.g. *sich' dAGAq'e:k'Linh* 'he's getting peeved at me', and a stative is in Neuter perfective, *sich di:q'e:k'Linh* 'she's peeved at me'.

The last subgroup of this series goes to what might be considered semantic extremes, still relatable to the preceding, in some sense, but in any case unquestionable as to membership in this class, given the morphology and stativity indicated by enough of the glossing. In fact at least the first 2 of the 4 stems involved (22) seem to belong exclusively or primarily to this class:

(22) Inceptive perfective statives of semantic extremes

*GALch'iyak'L* 'it burns, smarts'

*sini:k' siya: GALch'iyak'L* 'my nose is smarting'

*yAGAxLch'iyak'L* 'my hand smarts' (with anatomical qualifier *y-*)

*LAGAxLch'iyak'L* 'my face burns' (with anatomical qualifier *l-*)

<sup>6</sup> This theme was elicited only in Active perfective and glossed 'got shriveled', which might possibly also have been of Inceptive perfective class as stative, if not prevented by thematized repetitive *-g*, an Active derivation, as in 'wrinkled' above.



*lAXAGAxLch'iyak'L* ‘my eyes smart’ (with anatomical qualifier *lAXA-*)

Likewise, with sonorant-internal stem, is *GAXAwa'sL* ‘it’s itchy, it itches’, *qi:dAGAXXAwa'sL* ‘my foot itches’. This is often expanded in the persistent derivation, *-Xa:s*, so Active imperfective *qi:dAxXa:s* ‘my foot itches (persistently)’ but even that is also attested as *qi:dAGAXXa:sL*, with the same meaning. The preceding, however, is preferred by Lena. The theme transitivized with indeterminate O is still Inceptive perfective stative, *sitl' iGAXAwa'sL* ‘it itches (with) me’, *sitl' iGAXa:sL* ‘it’s itching me for a long time’ from Lena. These are Inceptive perfective stative instead of Active imperfective, i.e. doubly derived, from Lena without protest. Further along semantically, from Marie only, is *ya' GAdAXe'sL* ‘it’s infected’, but with unambiguous gloss, especially notable, considering the proverb *ya'* ‘to a state of rest, completion’, though the theme is also attested as Active perfective stative, *sAXe'sL* ‘it’s infected’.

An extreme but certain example must be the relativization *dAGALAdē:L ~ dAGAdAdē:L* ‘smelt, eulachon, candlefish’. Lena explains “because it’s transparent”, Marie “because it’s shiny.” Both also mean ‘flashlight’. At least the first variant is from the theme *d-LA-de* ‘emit light’, with thematic *d-* qualifier ‘fire, bright’. This theme is normally Neuter perfective as stative, *diLidehL* ‘it’s glowing, it (light) is on’, *dAGALAdē:L* ‘it’s starting to glow’, *disLidehL* ‘it flashed (once)’. The relativization is possibly a passive from a causative, especially as that would also explain the form with *dA-* classifier. Other related relativizations are Active imperfective usitative passive *dAdAdeh* ‘flashlight’, *yAX dALAdē:X* ‘flashlight’ (perambulative ‘it is caused to shine about’), and instrumental deverbalization *dide'L* (< *dAdē'L*) ‘lamp (aboriginal or modern)’. An explanation for the Inceptive perfective nominalization is by no means obvious even considering—or especially considering—all the foregoing. Conceivably, especially for ‘flashlight’, the progressive (Inceptive perfective) derivation might be invoked (‘light is made to shine moving along’).

Perhaps a disproportionate number—the nine in 23 or over 20% of the themes involved above—are attested only in nominalizations.

(23) Inceptive perfective stative themes attested only in nominalizations

*dAGALAdē:L ~ dAGAdAdē:L* ‘smelt; flashlight’

*GALAduk'L* ‘hill, mound’

*dAGALAshugL* ‘curved knife’

*GAqe:L* ‘oval’

*dla:GALAwē:gshgL* ‘kind of flat (ulu-shaped) rock’

*GALAXa'Xch'XL* ‘dimple’

*XadAGd ku:ndAGALa:L* ‘goblets’

*dAGALAWa'L* ‘door’

*GAdAwa'L* ‘curtain’

*LAGAdAq'a'L* ‘axe’ is not counted here (because of the attested Inceptive perfective verb *'AdLAGAdAq'a'Linh* ‘he’s got his head tilted’).

This number of lexicalizations where the verb is not attested in the Inceptive perfective and where the meaning not fully transparent or not fully predictable may attest to some age depth and even perhaps obsolescence of this class, including perhaps two examples of reduced stems found uniquely here: namely *-duk* ‘humped’ and *-shug* ‘bent’, for which cf. *-du'k* and *-she'g*. An even larger proportion of these, about ten, takes the classifier *LA-*, a matter that should be referred to the study of transitivity and valence.

The degree to which these Inceptive perfective statives are the exclusive or primary themes for items in the various semantic subgroups listed above might be an interesting question. Overall at most 50% are exclusively or primarily in this class, but certainly not those in the ‘effort/pressure’ and ‘hold’ subgroups, whereas in the ‘tight’ and ‘straight’ subgroups it is the opposite. The largest groups are mixed in this regard, especially ‘curved’, also ‘grimace’, but there 4 of 6 are exclusively or primarily Inceptive perfective stative. In other words, this class seems perhaps most to dominate in a highly specialized (“picturesque” or “emotional”) semantic area.

Finally, we also have from Lena *la'q'* *GALAtsidzgL* ‘it’s thin’ (checked as such; along of course with transitional ‘it’s getting thin’). This is evidently a minimal pair with Neuter imperfective dimensional *la'q'* *yitsidzg* ‘it’s thin’. The difference in meaning though was not checked. The pair presumably represents the state viewed differently, Neuter imperfective as inherent dimension, the Inceptive perfective denoting some kind of isometric balance. This pair is in any case an important instance of dual membership of a single theme in different classes.

Perhaps to be included as belonging here is *GAdAka:st'L* ‘there is a blizzard’, from Lena, presumably as opposed to ‘there is *getting to be* a blizzard. However strange semantically, this should not be dismissed as imprecision on the part of the speaker. Perhaps it should be taken instead as progressive, ‘a storm is moving along’.

It can be seen from this item that special effort was made to search the corpus for possible instances of this theme class, with such a highly marked and small membership.

Effort was also made to compare what was found with similar themes that are not Inceptive perfective. The result has been an especially large number of uncertainties, and/or multiple memberships. At the same time certain clarities emerged of a well-defined class. Not the least of these, given that I had no clear notion of verb theme classes during the main fieldwork period, was the revelation that these *GA-P-L* Inceptive perfective forms took *'i-* imperatives so consistently. That reward then also raises the problem of messy incoherence of the mode-aspect and conjugation prefix system.

To revisit this whole issue, and the relativizations *dAGALAdē:L* ~ *dAGAdAdē:L* ‘smelt; flashlight’, see §14.10.5 on relativizations and §15.8 on the progressive derivation.

## 14.10 Active and Neuter perfective statives

By far the largest category of statives consists of those that occur in the Active perfective and/or Neuter perfective. Again, these are quite distinct from the Neuter imperfective stative, which is distinguished especially by a meaning of inherent quality or state.

For states or qualities that are viewed as less inherent, as the result of a process, there are three perfective statives. Perfectives are all by definition marked with the suffix *-L*. The Inceptive perfective stative (1) has been treated separately. The Active perfective stative (2) or *s*-perfective stative, and Neuter perfective stative (3) are treated here together. The reason for treating Inceptive perfective stative separately and these last two perfective statives together is that the Inceptive perfective stative is relatively distinct and specialized, chosen especially by verb themes denoting states involving what may be seen perhaps most generally as ‘pressure, distortion’, as described in §14.8. The Active and Neuter perfective statives, on the other hand, overlap so much that it is easier or even necessary to treat them together. While there are themes that definitively seem to choose *s*-perfective and themes that seem to choose Neuter perfective, there are so many using both that it is better to treat both these perfective Statives together as two poles in some kind of cline, albeit an asymmetrical one. It could perhaps be put differently, almost as comparing apples and oranges, in that the Active perfective has a non-stative use, marking the attainment of a goal, therewith also reaching a state, whereas Neuter (perfective or imperfective) refers strictly to a state or quality in the first place.

At the outset, it should be acknowledged that the use of the Active perfective as opposed to Neuter perfective stative is not a subject that was systematically investigated in Eyak fieldwork. For many years, between the primary Eyak fieldwork in the 1960s until 2009, I had assumed the Active perfective was the “norm,” relegating the Neuter perfective stative to some marginal status, almost as a derivation. I had in 2008 even made a preliminary survey of the ledger corpus, listing perhaps a hundred Active perfective statives, without paying equal attention to Neuter perfectives also listed for many of the same themes. Those survey pages were lost, which may have been a blessing in disguise, as I was then forced to redo the survey, after having mulled over what to do with the Neuter perfectives, this second time surveying for both together. Allowing for great arbitrariness in counting what is a single theme, also in what is a stative, and possible uneven degree of thoroughness of coverage, the basic statistics are as follows. Out of perhaps 135 Statives of these two types, the largest number, approximately 50, was attested in Active perfective only. The smallest, 30-some, was attested in Neuter perfective only. A number in between, 40-some, was attested in both, but of course with varying degrees of frequency between the two. Had the choice been investigated more systematically in the field, the last (middle-size) number would certainly have been significantly increased at the expense of the other

Table 14.2: Active perfective and Neuter perfective in comparison.

Active perfective	Causative/ Transitive	Neuter perfective	Root
<i>sAdahL</i>	<i>siLdahL</i>	<i>'i:dahL</i>	<i>-da</i> 'sit' (or 'stay, behave')
<i>sAtehL</i>	<i>siLtehL</i>	<i>'i:tehL</i>	<i>-te</i> 'lie prone'
<i>sa'yahL</i>	<i>siLyahL</i>	<i>'i:LyahL</i>	<i>-ya</i> 'be/get in position' <i>-'a</i> '(sg, not in container) be/get in position' /
<i>sA(t/')ahL</i>	<i>siL(t/')ahL</i>	<i>'i:L(t/')ahL</i>	<i>-ta</i> '(sg inanimate) be in position'
<i>sALyahL</i>	<i>siLyahL</i>	<i>'i:LyahL</i>	<i>-L-'ya</i> '(sg inanimate in container) be in position'
<i>sALahL</i>	<i>siLahL</i>	<i>'i:LahL</i>	<i>-L-'a</i> '(pl inanimate) be in position'

two. More importantly though, the semantic factors determining the choice might have become clearer, or probably at least somewhat clearer. However, we shall see from the evidence we have that those factors are not all easy to identify.

#### 14.10.1 Basic function of Active perfective and Neuter perfective

In order to understand the factors that are easiest to identify, we should first review or compare the basic functions of the Active perfective and Neuter perfective more generally, as those are certainly relevant to the choice between the two in statives.

For one thing, the Active perfective is perhaps the most frequently occurring of all paradigms in the corpus, while the Neuter perfective is probably the least so, of the perfectives. That fact alone could well account for the frequency statistics noted above for this group of statives.

Most important is the difference in the meaning of the Active perfective and Neuter perfective. The Active perfective is very freely used in any verb theme class, to mean the accomplishment of the action or event denoted by the theme. With action themes the action is completed, with locomotion themes the goal has been reached or the motion concluded, with postural and classificatory themes the position has been reached, so that the result is the equivalent of a state, in effect a stative. Cf. the examples in the first column of Tab. 14.2.

These are all in effect statives. More exactly, they mean (tenselessly) 'be in position', or, at the same time, indistinguishably, '(somehow) got into position, has gotten into position (and may not be there any longer, or may, just as well, still be there, for how much longer being irrelevant)'. E.g. *sAdahL* translates to 'he is in sitting position' or 'he got into sitting position'. This is likewise so for the causative or transitive, 'I put O in position, have put it there' (where it may or may not remain). The Neuter perfective (NTR.PFV) on the other hand, has a much more marked meaning, (tenselessly) 'be in position' (and remain there for a period of time). The period of time may be open-ended, or perhaps short, but of some duration, not momentary. With Active perfective the focus is more on 'got or has gotten into position' (where S may or may not remain). With Neuter perfective the focus is on

‘be in position for a period of time’. Accordingly, the causative of the Neuter perfective may best be translated ‘is keeping O in position’, instead of Active perfective, where the focus is more ‘put or has put O in position’. By tenselessness, of course, the meaning in English can just as well be ‘was in position’, ‘was keeping O in position’, etc. With other non-stative classes of verbs, i.e. action and locomotion, the Active perfective is of course very freely used, as mentioned above. The Neuter perfective, however, is used in a limited way with locomotion, e.g. *lu: 'i:yahL* ‘he is gone to the tide-beach, is beachcombing’. For further instances of Neuter perfective statives from locomotion themes etc., including also action, see §14.10.3.

### 14.10.2 Active perfective pole

With this background, we may proceed to the use of these two conjugations in statives. Starting at the Active perfective extreme, there are a few stative themes that are very abundantly attested in the *s-* perfective. The best and strongest cases, arbitrarily exemplified here in 1s are *disiche'L* ‘I’m hungry’ and *sigal'L* ‘I’m tired’. Both of these are attested in dozens of instances, all Active perfective, without a single spontaneous Neuter perfective. When a Neuter perfective was therefore suggested, e.g. *dixiche'L* ‘I’m hungry’, *'ixiga'L* ‘I’m tired’, Lena’s response in both cases was “yes, *Lich' dixiche'L*, if I’m always hungry”, “yes, *Lich' 'ixiga'L*, if I’m always tired”. She included *Lich'* ‘always’ to make these easier for herself to say, but also once she allowed just *'ixiga'L* “I’m all tired out”. In other words, in any case, in these themes the Active perfective is clearly the unmarked form, the Neuter perfective clearly the marked.<sup>7</sup> Clearly, this proves some polarity. Though it is of course possible that each instance of Active perfective could or does also mean ‘I got / have gotten hungry/tired’, the absence of Neuter perfective here is significant. This is shown not only by the numbers but also by the limited and marked use of the Neuter perfective, as tested by very deliberate elicitation.

Less well proven examples are e.g. *sdiGu'L* ‘it (a thing) is warm’, *xsdiGu'L* ‘I’m warm’, *GAdisdiGu'L* ‘place is warm’, *gulisdiGu'L* ‘water is warm’, etc., attested over twenty times in the *s-* perfective. Only once is it attested in the Neuter perfective, namely a transitive (causative) reflexive, *'AdxdiGu'L* ‘I’m keeping myself warm’. That case is statistically just as clearly marked as the preceding, though perhaps not so clearly marked semantically. This example changes any semantic speculation that at this pole are particularly states of discomfort that can be relieved by routine means, but now rather seems to be non-inherent states that are not routinely long-lasting. Compare Neuter imperfective statives e.g. *xik'a'd* ‘I’m sick, feverish’, *GAdi:tl'eh* ‘place is cold’, denoting states that are more inherent, far less amenable to ordinary human control. It is thus relatively easy to understand the choice

<sup>7</sup> I did not test hypothetical *gahX ye'X dixiche'L* ‘I’ve been / I was hungry all day’, for example, which might also have confirmed another Neuter perfective.

between Neuter imperfective and Active perfective statives, compared to that between Active perfective and Neuter perfective statives, as we shall see.

A few more examples at or toward the Active perfective pole here follow. Of *dAsAL'ehdgL* or *disLi'ehdgL* 'is dry', there are about a dozen instances, none Neuter perfective. Of *sdili'ts'L* 'is wet', there are about eight instances, some of them glossed 'got wet'. Probably also to be counted here is *sAla:L* 'it got wet', *sila:L* 'I got wet, damp'. This raises the question of whether, in the absence of Neuter perfective instances glossed 'is in state' to contrast, Active perfectives which happen to be glossed 'got into state' should be counted as Active perfective statives just as well as those glossed 'is in state'.

Clearly on the Active perfective side, but less close to that pole, might be grouped several themes that refer to rottenness of various types and degrees. Most generic and frequently attested is that with stem *-si'*, *sALsi'L* 'it is rotten (spoiled, but not to an extreme or unrecognizable degree)', with eight instances glossed 'is rotten' (none 'got rotten'). For this we also have two in Neuter perfective, *'i:LLsi'L* 'is rotten', without comment indicating markedness. The two instances of 'got rotten (to extreme degree, unrecognizable)' are Active perfective *sALts'iya'ts'L*. 'rotten (of wood)' is Active perfective five times, *dishdichehgL*, twice glossed as 'is rotten', thrice 'got rotten', and twice Neuter perfective, once 'is rotten'; 'rotten (of fish buried in ground)' is once Active perfective, *sALch'iya'k'L* 'got rotten', once Neuter perfective, *'i:Lch'iya'k'wL* 'is rotten'. For 'rancid, bitter' we have once *lAXAsdiq'ihdjL* '(berries) got rancid, bitter', once *gu:nsdiq'ihdjL* '(butter) is rancid', both Active perfective. For 'moldy' we also have Active perfective only, *sdisi:nsL*, twice 'is moldy', twice 'got moldy'. For 'weak, tender, i.e. starting to decompose', we likewise have only Active perfective, *sdila'GL*, once glossed 'is', four times glossed 'got weak, etc.' (in origin a thematized negative of Neuter imperfective *dila* 'is strong, tough'). There seems to be little point in considering these individually, but if we take this group as a whole, statistically, we have 27 instances of Active perfective (14 glossed 'is', plus 13 glossed 'got'), as opposed to only 4 of Neuter perfective (all of course glossed 'is'). Such figures seem statistically significant, unless we subtract all instances glossed 'got' (or the equivalent), and likewise take into account the fact that Active perfectives are more frequent than Neuter perfectives in general, i.e. considering together all verb theme categories, not just statives. Considering the semantics, this group all denotes clearly irreversible conditions, so does not belong together with e.g. 'tired, hungry'. That raises the question whether that irreversibility can be associated or positively correlated with the fact that these statives seem significantly closer to the Neuter perfective pole than are e.g. 'tired, hungry'. A good counterexample is *l-L-'ya* 'old', where we have over 30 instances in *s*-perfective, e.g. *'i:nsALyahLinh* 'he's old', none in Neuter perfective.

This brings us to the case of 'dead, died', of only one degree and type, and presumably irreversible (reincarnation aside; see Birket-Smith and de Laguna 1938: 231–2). There are copious instances, at least 70, of the Active perfective *sAsinhL* 'died, is dead'. Of these, about 30 are in elicitation, 41 in text. Of those in text, 39 are glossed 'died' and only 2 'is dead', expectably enough, since the texts are narratives. Of the elicited instances, 17 are 'died' and 8 are 'is dead' (not counting 5 in nouns, glossed as 'dead people's N'). Compared then to

10 verbal instances of Active perfectives glossed ‘is dead’, there are 6 of Neuter perfective *'i:sinhL* (or the like) ‘is dead’, all in elicitations, and never glossed ‘died’. These 6 include the pair, with pluralizer *qA-*, *qi:sinhL* glossed ‘they’re dead! (surprisingly)’, *dik' qa'sinhLG* ‘they’re not dead! (surprisingly)’, from Lena. It appears that the surprising part is not the plurality, as the pair is accompanied by the same in Active perfective *qAsAsinhL* ‘they’re dead, they died’, *dik' qAsAsinhLG* ‘they didn’t die’, minus the “! (surprisingly)”. This would definitely seem to show the Neuter perfective as marked, but that may be contradicted by the frequency, still 4 other instances, of Neuter perfective *'i:sinhL* not so marked. In any case, for what it is worth, if we compare ‘is dead’ with ‘is rotten’ (all types), we have (not counting 5 nouns ‘dead people’s N’) 10 instances of Active perfective vs. 4 (unmarked) Neuter perfective ‘is dead’, and 14 Active perfective vs. 4 Neuter perfective ‘is rotten’. Thus ‘dead’ is about as close as or still less close to the Active perfective pole than ‘rotten’ is. Of course the statistics are especially complicated by *sAsinhL*, both ‘he died’, action theme class, and ‘he’s dead’, stative theme class, by coincidence precisely the equivalent to the ambiguity of French *il est mort*.

A few more details on *sinh* ‘die’ will follow here. This includes a few instances, idiomatically, of a radio or motor failing to function. ‘Stillborn’ is Neuter perfective *'i:sinhL da:X k'usALe'L* ‘is dead and was born’. Causative of ‘die’ means not ‘S kills O’, but probably ‘S causes O to die’, though this is not so attested. The causative is attested, however, as ‘S anaesthetizes O’, once in Active perfective *sALsinhL*, and in the passive *sLisinhL ~ sdisinhL* ‘S is/was anaesthetized’, 5 times in *s-* perfective, and twice in Neuter perfective *'idisinhL* ‘S is anaesthetized, in a deep sleep’. There are also two reflexive causatives, both Active perfective: *'AdsLisinhL* ‘he’s playing dead’ and *GAdAgil 'AdsLisinhL* ‘the sun is in eclipse (playing dead)’. These two might be added to the total of instances of Active perfective ‘is dead’, except that here the state is temporary, if that matters.

The largest number of examples in the corpus that are not cited in this chapter are over twenty items that are attested only in Active perfective. They are not cited here because they are attested only once or twice, i.e. in too few instances to be of any statistical significance, given the freedom of Active perfective use. (The number of examples attested in only Neuter perfective or in both perfectives not cited is under ten in both categories.).

### 14.10.3 Neuter Perfective Pole

At the opposite end of the cline are those themes that are found predominantly in the Neuter perfective and glossed ‘is V-ed’ or the equivalent, but of course are also found very readily in the Active perfective, not in any marked sense but routinely glossed ‘became V-ed’ or the equivalent. In this sense of markedness, the cline is not symmetrical, as noted. Statistically, instances of themes attested in Neuter perfective only or almost only in Neuter perfective should be expected to be far fewer than those at the Active perfective pole, and those attested only as Neuter perfective in only one or a very few instances can hardly be counted as statistically significant. That leaves only a few themes that are attested several

times exclusively or mainly in Neuter perfective. These are perhaps not fewer than those like *-che* ‘hungry’, *-ga* ‘tired’ at or toward the Active perfective pole. However, this must be only because virtually all appear to be derived from or based on very frequent motion (postural, classificatory, locomotion) or Neuter imperfective themes, rather than on themes with stems that are semantically more specialized, such as all those just mentioned above. Quite striking is the case of *k’a:dih ’i:Le’L* ‘is missing, lost’, from ‘be (Complement)’, perhaps the only theme with this verb attested in Neuter perfective, otherwise Neuter imperfective *yiLeh*, but never *\*?k’a:dih yiLeh*. ‘Got lost’ is of course *k’a:dih sALe’L*. The semantics may seem to allow indifferently for a temporary or permanent state, as for ‘hungry’ or ‘dead’, but must presume that ‘lost’ is an inherently temporary state, as opposed e.g. to English, where *lost* can even be a euphemism for *dead*.

Another case with statistically significant attestation in Neuter perfective is *’uyAq’ ’ixidahL* ‘I’m dressed in it, I’m wearing it’ from postural *-da* ‘(sg) sit, stay’. Note also Neuter perfective stative from action theme *’Awyaq’ ’iLi’e’dzL* ‘is wearing those as shoes’, lit. ‘in those is acting with feet’. These are semantically quite different from ‘be lost’, referring neither to an undesirable state, nor, presumably, to an open-ended period of time. Neuter perfective is especially well attested with postural *-’ya* ‘be involuntarily situated’, of which examples are given in (24), all also Active perfective *sa’yahL* for ‘became’:

(24) Neuter perfective with postural *-’ya* ‘be involuntarily situated’

<i>qa’ ’ixi’yahL</i> ‘I’m awake’	<i>Xa:n’ ’i:’yahL</i> ‘it’s ready/finished’
<i>k’ushiyah sila’X dixi’yahL</i> ‘I’m angry’	
<i>sila’X k’udi:’yahL</i> ‘I’m sexually excited’	<i>tl’ehd’ ’i:’yahL</i> ‘it’s open’
<i>ya:n’ di:’yahL</i> ‘it’s raining (coming down)’	<i>k’a’dya’ ’i:’yahL</i> ‘he’s crazy’

There are several examples of Neuter perfectives with the classificatory and postural stems. One is *’idahd’ ’u’lixitahL* ‘I hear you’, lit. ‘I have my head directly pressing against you’. For this cf. also *li:tahL* ‘has head in position’ with various preverbals. Likewise, with a different qualifier, *’it’a’ ’i:lihxitahL* ‘I’m depending on you’, for which cf. also postural *’it’a’ ’i:lihyiquhL* ‘we’re counting on you’. Likewise with a different qualifier *’i’yilixitahL* ‘I’m expecting you’.

With locomotion themes Neuter perfective seems to refer almost explicitly to a limited period, as in the examples in (25):

(25) Neuter perfective with locomotion themes

<i>’Awtl’ ’iLiAXa:n’ ’ixdi’a’ch’Linh</i> ‘I’m racing him’ (lit. ‘with ( <i>-tl’</i> ) him ( <i>’Aw</i> , = <i>inh</i> ) in competition with ( <i>-l-Xa:n</i> ) each other ( <i>’iL-</i> ) I am plural going ( <i>’ixdi’a’ch’L</i> )’)
<i>’iLq’ qa’ ’idi’a’ch’L</i> ‘they’re mating’ (lit. ‘on top of ( <i>-q</i> ) each other ( <i>’iL-</i> ) up ( <i>qa</i> ) plural are going ( <i>’idi’a’ch’L</i> )’)



*qa:qi:dla:GA'e' 'i:'a'ch'Linu:* 'they (=inu:) are following ('i:'a'ch'L) our (*qa:-*) track (*qi:dla:GA'e'*)'

*lu: 'i:yahL* 'he has gone beachcombing'

*dAtli: XAsha:nda' 'i:yahL* 'already (*dAtli:*) has come close (*XAsha:nda'*)'

Only one stem in action themes is well attested in the Neuter perfective, namely the most general of all, *-le* 'act, do' (26).

(26) Neuter perfective in action themes with *-le* 'act, do'

*Xu' li:liL* 'moon (*l*-class) is full'

*'utse'xah qi:liL* 'they're skinny' < 'they are at loss (*-xah*) of their ('*u-*) flesh (*-tse*)' (with plurality emphaziser *qA-*)

*qa' k'uyi:liL* 'someone dug (ditch)' < 'up/out (*qa'*) someone (*k'u-*) has acted with hands (*y-*)'

*k'udzu:dah 'i:lihyiliL* 'is in a good mood' < 'is mentally ('*i:lih-*) well (*k'udzu:dah*)'

*k'usha:dah 'iXa' 'i:lihxiliL* 'I'm disgusted with you' < 'I (*x-*) am mentally ('*i:lih-*) badly (*k'usha:dah*) toward (*-Xa'*) you ('*i-*)'

The largest number of Neuter perfective instances does seem to be with these very frequent stems with broad meanings, but there are some more specialized themes attested in Neuter perfective, e.g. *siyAq' qa' GAdli:q'ahl* 'I have heartburn', *siyAq' qa' GAdi:'la'GL* 'my tongue is coated' (cf. *siyAq' qa' GAdAsa'la'GL* 'my tongue got coated'), *diLiXahL* '(clam) is fat'. It seems clear that these fit the basic meaning of Neuter perfective, referring to a condition or state that is of some duration, but not inherent.

#### 14.10.4 Intermediate types

There are of course many instances of themes attested in both *s-* perfective and Neuter perfective, both glossed 'S is in state', mostly attested in too few instances to be of statistical value. Attested in five or more such instances are the forms in (27).

(27) Themes attested in Active and Neuter perfective, both glossed 'S is in state'

a. *o-a: didi'yahGL* 'aches o' (6x in ACT.PFV, 3x in NTR.PFV:

eg. *siyAq'd siya: didi'yahGL* 'hungry' in Rezanov (1805), lit. 'my inside (*siyAq'd*) aches me (*siya:*)'

eg. *Xe'X yAX xsdi'yahGL* 'I need to "go" [excrete] bad' < 'I need to go about (*yAX*) a short distance outdoors (*Xe'X*)'

b. *d-LA-ch'a:nG* 'cheap':

*disLich'a:nGL* 'it's cheap' (ACT.PFV 3x)

*diLich'a:nGL id.'* (NTR.PFV 2x)

- c. *l-L-gehG* ‘lonesome’:  
*lisiLgehGL* ‘I’m lonesome’ (ACT.PFV 6x)  
*lixilGegehGL id.* (NTR.PFV 5x)
- d. *ya’ ga’* ‘ruined’:  
*ya’ sAga’L* ‘it’s ruined’ (ACT.PFV 4x)  
*ya’ ’i:ga’L id.* (NTR.PFV 4x)
- e. *lX-XAL* ‘drunk’:  
*lAXAsAXAL* etc. ‘is drunk’ (ACT.PFV 4x)  
*lAXi:XAL* etc. *id.* (NTR.PFV 3x)

In these cases, though the glosses are the same, it may well be assumed that in the Active perfectives at least included if not emphasized is the notion that the subject go into the state, whereas in the Neuter perfective the emphasis is on the subject’s remaining in that state for a period.

There are many more instances of themes attested in both Active perfective and Neuter perfective, each only once or twice, with same gloss but presumably with the same basic semantic difference, cf. the examples in Tab. 14.3.

**Table 14.3:** Additional themes attested in Active and Neuter perfective.

Active perfective	Neuter perfective
<i>lAXAsALgeh dzL</i> ‘sth. wrong with his eye’	<i>lAXi:Lgah dzL</i> ‘sth. wrong with his eye’
<i>sdixAXL</i> ‘tide is low’	<i>’idixAXL</i> ‘tide is low’
<i>lAXAdAsAqAshLinh</i> ‘his eyes are wide open’	<i>lAXAdi:qAshLinh</i> ‘his eyes are wide open’
<i>’ich’ disiqe:k’L</i> ‘I’m peeved at you’	<i>sich’ di:qe:k’Linh</i> ‘he’s peeved at me’
<i>sALq’u’L</i> ‘it’s damp’	<i>’i:Lq’u’L</i> ‘it’s damp’ (Rezanov, 1805)
<i>’i:nsdima’L</i> ‘it’s ruined’	<i>’i:ndima’L</i> ‘it’s wrecked’ (both trans. by Lena)
<i>lisiwidjL</i> ‘I’m ashamed’	<i>li:widjL</i> ‘you’re ashamed’

### 14.10.5 Relativizations

Both Active perfective and Neuter perfective statives serve freely in nominalizations, i.e. relativizations, lexicalized to varying degrees. Here statistically it is clear that a goodly number, something like 11 of the 33, or one third, are in the Neuter perfective, compared with the general frequency of Active perfective statives outnumbering Neuter perfective statives.

Nominalizations from Active perfective statives are presented in (28).

(28) Nominalizations from Active perfective statives

*dAXhunhyu: k'inhda:d sAdahLinh* 'menstruant' (< 'she (=inh) who is sitting (sAdahL) in different place from (k'inhda:d) people (dAXhunhyu:)'>)

*sLit'its'L* 'rock candy' ('made into ice (t'its'L)')

*sditsugL* 'swelling, goose-egg'

*sALts'ahsL* 'semi-dry fish'

*sAsinhLinu:ya' XAwa:* 'moth' (< 'dead people's dog (XAwa:)', plus 4 other such nouns, 'dead people's N')>)

*sLi'mahdL* 'bread' (< 'it is baked'>)

*'i:nsdile:L* 'sawbill, cormorant' ('head ('i:n-) is haired')

*'AdsLi'yahL* 'giant' < 'has gotten self ('Ad=) situated, into situation'

*k'uch'ahd 'i:lihsa'yahL* 'amulet, that which gives good luck' (< 'is mentally ('i:lih-) situated from (-ch'ahd) something (k'u-)'>)

*disLi'ehdgL* 'pilot bread' (< 'has been dried'>)

There are several more listed in the subsection under §18.12.3, on lexicalized relativization of Active perfectives, of limited productivity, and partly specialized, especially modern foods.

Relativizations of Neuter perfectives, many lexicalized, are presented in (29):

(29) Relativizations of Neuter perfectives

*ts'a:tl'ya' 'i:dahLinh* 'infant' < 'he who is staying in (-ya) baby-basket (ts'a:tl')'

*k'utl'a'q' 'i:dahLinh* 'captain' (< 'he who is sitting in the stern')>)

*'Aw 'uyAq' 'i:dahL* 'his (present) clothes' (< 'that ('Aw) in (-yAq) which ('u-) he is staying')>)

*yAX dAxuLX qi' ya:nu' 'iditahL* 'well' (< 'where (qi) a keg (yAX dAxuLX) is being kept below surface (ya:nu)')>)

*dAyAx dla:ditahL* 'rainbucket' (< 'dl-class is kept under (-yAX) indeterminate object (dA-)'>)

*djAX k'uLitl'ihL* 'sun halo' (< 'something is earringed')>)

*sAsinhLinu: qi' ya:nu' 'idishahL* 'cemetery' (< 'where (qi) dead people (sAsinhLinu:) are buried beneath surface (ya:nu)')>)

*ya' 'i:qats'L* 'rags' (< 'that which is completely ripped up')>)

*qi' qa' k'uyi:liL* 'ditch' (< 'where (qi) someone (k'u-) has acted with hands (y-) up/out (qa)')>)

*'ahnu: [u]ch'a:X 'i:'a'ch'Linu:* 'his helpers' (< 'they ('ahnu:) who are helping him ('u-)'>)

Only one lexicalized relativization is attested in both, perhaps in part because alternatives were not tested: *lAXsdiXu'L* or *lAXAdiXu'L* 'peach' < 'hairy fruit'. This is from one of the many statives themselves derived from noun stems, for which see §14.10.6.

### 14.10.6 Active perfective and Neuter perfective statives derived from noun stems

A large proportion especially of Active perfective statives is derived from nouns, in the sense ‘S is N-y, full of N’. Here we are not dealing with lexicalized relativizations, as in §14.10.5), but merely stative verbs. Whereas above (§14.10.5), where there is a disproportionate number of nominalizations from these two types of perfective statives, a third are Neuter perfective, here, of a total of about 40 such statives are derived from nouns. Over half are attested only in Active perfective, only 3 are attested in Neuter perfective, and probably fewer than 10 are attested in both. I.e. for some reason Neuter perfective is much more favored in nominalizations derived from these two statives, and much less favored in statives derived from nouns. Given that elicitation for such forms was neither systematic nor motivated in favor of either perfective, the difference in Active perfective vs. Neuter perfective frequency between the two levels of derivation must be statistically significant.

The three statives derived from nouns which are or happen to be attested only in Neuter perfective are the ones in (30).

(30) Neuter perfective statives derived from nouns

*liLit'ishgL* ‘it’s slimy’ < *tl'ishg* ‘slime’

*qa* ‘i:gAmAGL ‘it’s all muddy’ < *gAmAG* ‘mud’

(*sa*) *k'udla:LiGa:nshLinh* ‘is mouth is bulging’, from *-Ga:nsh-* ‘lower half of face’

The 20-some statives derived from nouns that are or happen to be attested only in Active perfective are presented in (31):

(31) Active perfective statives derived from nouns

*sLit'its'L* ‘rock-candy’ (< *t'its* ‘ice’)

*yixsLit'its'L* ‘my hands are frostbitten’

*sLitl'its'L* ‘it’s dirty’

*yixsLiLe:xch'L* ‘I have a wart on my hand’

*'i:nsALts'u:xL* ‘has cyst on face’

*dla:sdits'u:xL* ‘(rock) has barnacles on it’

*sdisi:nsL* ‘it’s moldy’

*ya* ‘*sAchi:shgL* ‘it’s smashed to gravel’

*shdich'isht'L* ‘it’s flyblown’

*shdishAXgL* ‘it’s frosty’

*sdigugsgL* ‘it’s full of lice’

*qa* ‘*i:nsAk'ahGL* ‘(dog) has porcupine quills in its face’

*shlik'ahgshgL* 'it's scabby'

*qa' yisiGu'ts'L* 'my hands are full of fish scales'

*sAGe'q'shgL* and *sdiGe'q'shgL* 'it's clogged' (cf. *Ge'q'shg* 'earwax')

*ya' sdiGAmal* 'it's full of maggots'

*sAq'AgshgL* and *sLiq'agshgL* 'has dry skin' (< *q'Agshg* 'gristle')

*'Adi:nsdiwe:gL* 'is wearing a headband'

*'i:nsdile:L* 'sawbill, cormorant' < 'has hairs on head' (cf. *le:L* 'strand of hair')

Status as nouns of the stems of another few examples presented below in (32) is uncertain:

(32) Stems with uncertain status as nouns

*LAXAsiLxixL* 'I have white spot on eye (clouded cornea?)'

*dAsALxixL* and *disLixixL* 'egg is partly developed into chick' (cf. *-LAXALxixL* 'white of eye', *-dAxixL* 'white of egg'; *k'uxi:x* 'bald eagle')

*sdiXAGL* 'has fancy carvings' (cf. *-dAXAGL* 'gunwhale')

*siGe'L* 'I'm seasick' (an abstract stem of limited use, cf. *Ge'ga* 'Adu'xdAgawih 'I feel seasick')

*xdsiGu'L* 'I'm warm', *GAdisdiGu'L* 'place is warm' (< *Gu* 'heat; sweat')

*sa'li'ts'L* and *sdi'li'ts'L* 'it's damp' (< *li'ts* 'dampness')

One item may be derived from not a noun but a preverb: *si'a'q'L* 'I'm sunburned', *'i:nsi'a'q'L* 'my face is sunburned', cf. the preverb *'a'q'* '(motion) out (of house)', e.g. *'a'q' sahL* 'walked out'.

Probably fewer than ten statives derived from nouns are or happen to be attested in both Active perfective and Neuter perfective, cf. (33):

(33) Noun-derived statives attested in both Active and Neuter perfective

*qa' sAts'a'L* and *qa' 'i:ts'a'L* 'it's muddy'

*gu:nsAch'a:xL* and *guli:ch'a:xL* 'water is silty'

*shdich'e'L* (twice), and *'idich'e'L* (once) 'it's shitty'

*'Adshdich'e'L* 'it's rusty' (6 times)

*'AdAdiche:L* 'it's got lots of red spots' (once, Persistent)

*'i:nsLiq'aXL* 'it's fat, fatty'

*lisLiq'AXL* and *lixLiq'AXL* 'I'm fat'

*sdiXu'L* 'is hairy' (3 times), but *LAXAsdiXu'L* and *LAXAdiXu'L* 'peach'

*sLiXishLinh* (10 times, elicited because of uncertainty of stem-form) and *'liXishLinh* (once) 'he's scarred'

**Table 14.4:** Nouns referring to seasons and time.

Stem	Active perfective	Neuter perfective
<i>XAtl'</i> 'night'	<i>sALXe't'L</i> usually 'it got dark, night fell' (18 times, especially in text)	<i>'iLXe't'l'L</i> 'it's dark, quite dark' (twice), <i>Lich' qi'</i> <i>'i:LYe't'l'L</i> 'where it's always dark'
<i>se:L</i> 'evening'	<i>sALse'L</i> 'evening came' (once)	<i>'i:Lse'L</i> 'it's evening' (once)
<i>xah</i> 'summer'	<i>sALxa'L</i> usually 'summer came' (8 times)	<i>'i:Lxa'L</i> 'it's summer' (5 times), including once <i>Lich' qi'</i> <i>'i:Lxa'L</i> 'where it's always summer'
<i>XAla:g</i> 'winter'	<i>sALXAla:gL</i> 'winter came' (3 times)	

In any case, the semantic type of noun from which the stative is derived, or the nature or morphology of the derivation itself, does not appear to correlate in any way with choice between Active perfective and Neuter perfective.

One semantic group derived from (or related to) nouns referring to seasons and 'evening', 'night' shows rather clearly the semantic difference between the two perfectives in use and glossing. Such examples are presented in Tab. 14.4.

These statistics reflect the most basic pattern, where especially in narrative text Active perfective 'it became dark' etc. is expected to be more frequent than 'it is/was dark' etc. However, at the same time, especially in text, where the glossing is mostly the transcriber's, and to some extent also in elicitation, that glossing may also be chosen according to a pattern whereby *s-* perfective is arbitrarily or automatically and tautologically glossed 'became, got', and Neuter perfective is likewise glossed 'is'.

### 14.10.7 Overlap with Inceptive perfective stative

Compared with the overlap between Active perfective and Neuter perfective stative, that between either of those with Inceptive perfective stative is quite small. I.e. the Inceptive perfective stative is far more distinct from both active perfective and Neuter perfective statives than are the latter from each other.

Active perfectives, insofar as they are or happen to be glossed the same as Inceptive perfectives, with 'is', can presumably be just as well glossed 'became/got (and still presumably is or may be)', as with most of the Inceptive perfectives, for which an Active perfective is also attested and glossed 'became, got'. On the other hand, there could be some genuine overlap. We have such pairs in e.g. *LAGAq'ashL* 'it's bent at an angle; lopsided'; *yAGAxLAq'Aq'L* 'I'm making a fist, my hand is closed'; or *GAdAXe'sL* 'it's infected' (cf. *XAs* 'pus', reduced); *GAXAwa'sL*; *GAXa:sL* (latter persistent) 'it itches'; as opposed to *lAsAq'AshL*, *yixsLiq'Aq'L*, *siXAwa'sL*, *siXa:sL* 'I have an itch', etc. Further examples of

themes attested in both Active perfective and Inceptive perfective are noted in §14.8 on Inceptive perfective statives.

There are likewise two Inceptive perfective statives with Neuter perfectives similarly glossed, both interesting: *LAXi:q'a'Linh* 'he's cross-eyed' and *LAXAGAxq'a'L* 'I'm cross-eyed', cf. *GAq'a'L* 'it's set sideways'; *'Awdahd guLiya:n'Linh* 'he's leaning against it' < 'standing with pressure against it' and *sida:d guGALa:n'Linh* 'he's standing near me'. The latter pair is somewhat surprising. Inceptive perfective statives are relatively few and seem to refer especially to pressure, distortion. The form *gu-LA-a:n* 'stand, be standing' (along with *-t'e'q* 'straight', i.e. 'rigid') is a consistent but semantically somewhat tangential member of the Inceptive perfective stative verb theme class. In the case of *'Awdahd guLiya:n'Linh*, attested three times from Lena, the 'pressure' is a property of the preverbal *o-dahd* 'touching with pressure against o', so the Neuter perfective must surely reflect a markedly temporal aspect. This is by no means so clear in the preceding, *LAXi:q'a'L ~ eyLAXAGAxq'a'L* 'cross-eyed'. Inceptive perfective may reflect the longer-term and/or more stable state than the Neuter perfective, or that the Inceptive represents more the distortion and Neuter perfective stasis over a period of time.



## 15 VERB DERIVATIONS

Having in common that they add another dimension to Eyak verb morphology as so far described are eleven morphological processes, each with a clear meaning.<sup>1</sup> The eleven verb derivations are otherwise quite a miscellany. Of these eleven, ten require classification of a theme: six produce action themes, three produce Neuter imperfective stative themes (see §14.4.1). The six are the usitative, repetitive, persistive, customary, *qX*-qualifier, perambulative, producing action themes; one is progressive, producing motion themes; and three are liability, anatomical resemblance, and expressive stativization, producing Neuter imperfective themes. Only the directive does not specify theme class.

The morphological markings of the derivations are quite various. Three or four have no morphological marking of their own whatever, merely reassigning theme class (usitative, progressive, expressive stativization; anatomical resemblance makes verbs out of nouns). Two expand stem-vowel (persistive, customary). Four have suffixes (customary *-k'*, repetitive *-g*, perambulative *-X ~*, liability *-X*). Four have prefixation (*qX*- in the qualifiers; directive (*u*)-' in Zone B; customary has optionally *AN*- or *'i*- in Zone D). Two have multiple markings (liability *'i-Li-* < *'A-LA-yi-* in Zone D and suffix *-X*; perambulative has three markings, preverbal *yAX*, D-effect in classifier, and suffix *-X ~*).

These derivations may combine in many ways. Some combinations of two may be frequent, and further combinations are attested, up to at least three. There was no systematic attempt to elicit all possible combinations of derivations, but some account of them and of the more interesting issues that do arise in connection with them is given as appropriate below.

All the resultant affixal morphology, various constraints on what conjugations and mode-aspects may occur with each derivation, combination of derivations, is treated under each of the derivations below.

The directive is special in several ways; not governing conjugation or mode-aspect, having its marking in Zone B, and being very often thematized, in fact usually thematized. The directive is not only treated last, but even includes, quite exceptionally, a comparative study with its Athabaskan cognate.

Not treated here are verb derivations that involve qualifiers only, which are for Eyak the vast majority of derived verbs, q.v. in Chap. 17. Likewise derivations which convert verbs to nouns, dealt with in §18.12.

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<sup>1</sup> The three Neuter imperfective derivations have already been dealt with under §14.4.1 on the Neuter imperfective stative verb theme class; they belong, however, just as well in this major section.

## 15.1 “Prefix strings”

There are of course lexicalized combinations of derivational prefixes in the verb, especially within the qualifier zone. However, actual lexicalized interzone combinations of prefixes, a major component of what are called prefix strings as in Athabaskan, are not numerous in Eyak. An example of qualifier plus classifier is *d-LA-* for onomatopoeia, quite productive in Athabaskan, present in Eyak but probably less productive and partly less thematized, sometimes partly segmentable semantically as theme *LA-* stem with  $d_{-3}$  qualifier ‘oral noise’ added, q.v. under  $d_{-3}$  in §17.10.3, and further note §21.4 on Imitatives and poetics. A more thoroughly thematized example, a semantically opaque combination of qualifier and classifier, with an Athabaskan cognate, is *l-dA-* “errative 2”, q.v. under  $l_{-6}$  in §17.10.3. There is also a small group with fully lexicalized (or “empty”) indeterminate object ‘*i-* and qualifier *d-*: ‘*i-d-le* ‘activity take place’ and causative thereof ‘carry on activity’; ‘*i-d-L-a*’ ‘(wind, fog, cloud) move’; more complex is the directive type ‘*i-’-d-a* ‘go (with reference to two simultaneous locomotions)’, q.v. in §15.9 on directives (especially Group 8, §15.9.2.8). There is the relatively high frequency of lexicalized qualifier *l-* in directives, also obvious in Athabaskan (with qualifier *n-*). There is also the apparently unique case of preverbal plus qualifier, *ya* ‘completely’, which optionally can trigger *d-* qualifier. These combinations are treated in §17.10.

An extreme for Eyak is *k’u-’-Xdl-dA-a* ‘singular go staggeringly’ with lexicalized indefinite object, directive, triple qualifier, evidently requiring *dA-* classifier. This form must set a record for Eyak: it involves six prefixes within the verb word serving derivationally, in all four prefixal zones. Yet even this could be further derived quite easily, e.g. by adding customary, causative, and/or perambulative, involving suffixes, classifier prefix, and preverbals.

Perhaps the most important approach to “prefix strings” in Eyak is the very partial correlation, somewhat opaque, between telicity of preverb and choice of conjugation in the verb. This survives best in the imperative of motion verbs, treated in the section on conjugations above (§12.3.2.6). It does indeed seem like this trait is vestigial rather than incipient.

There is of course also a modicum of verb derivations in which certain preverbals require *dA-* classifier or *L-* classifier or both. That is not to be treated here, however, as such usage is not lexicalized and is covered fully in the section on classifiers above. This is true even of the relationship between indeterminate object and *dA-* classifier, however complex.

Aside from forms like these and the combinatory qualities, just mentioned above, of some of the verb derivations described in this section, discontinuous “prefix strings” so prominent in Athabaskan are notably less so in Eyak. This difference is of course exaggerated by the fact that in Athabaskan many of the preverbals have become attached phonologically to the verb word, as DISJUNCT PREFIXES, whereas in Eyak the preverbals generally remain phonologically separate from the verb word. Whether the relatively few Eyak prefix strings mentioned above are vestigial or incipient is an open question. In any

case it would appear that the picture for PAE must have been somewhere in between the extremes of Athabaskan and Eyak.

## 15.2 Usitative

Taking the morphologically simplest of the verb derivations themselves, the Usitative comes first, as this is an Active derivation with no morphological marking particular to it, limited to use in the Active imperfective. With motion and stative themes it is the only possible Active imperfective (without other derivational marking), as though converting or displacing such themes to action themes. Its meaning distinctively shows what may be called “usage,” hence the name. Thus we can have e.g. usitative postural *'a:nd xdah* ‘I sit here, this is where I sit, this is my (rightful) seat’, as opposed of course to Active stative *'a:nd sidahL* ‘I’m sitting here’, but also as opposed to customary *'a:nd xda:k* ‘I sit here (e.g. often, every Sunday)’. Its meaning may seem very close to that of the customary, but there is nonetheless this clear opposition in Eyak. This difference is frequently manifest in the fact that the customary is not used in lexicalized relativizations, nouns derived from verbs, whereas by far the most frequent use of the usitative is in such relativizations, as will be shown in §15.2.2.

Other names than “usitative” could have been chosen, including “normative”. In one sense best of all would have been “generic” if one chooses to emphasize the morphological unmarkedness of the Active imperfective.

### 15.2.1 Non-relativized use of the usitative

First follows a coverage of non-nominal use of the usitative. Clearly, the meaning differs from that of customary in that the latter implies discrete events, the usitative not, often best describable as a life-style, a norm or a right, as opposed to a what is implied by the label “customary”, not entirely appropriate. As such, the usitative sometimes is used particularly in reference to personality, mind-set, mentality, especially in themes with the prefix *'i:lih-* ‘mentally’. Exemplification will here be full, as usitatives are not too frequent in the corpus for such inclusion, except as relativizations.

Postural verbs particularly can take the usitative, cf. the examples in (1).

(1) Postural verbs with usitative

*'u:d xdah* ‘I sit there “all the time” (negative *dik' 'u:d xdahG* (not *\*xda:G*, Lena))

*'Ad'e'd xdAdah* ‘I stay home “all the time”

*tsa:dla:yAX dah* ‘it lives under a rock’

*te'ya'e'd xdah* ‘I live on fish’ and *te'ya'e'd da: quh* ‘we live on fish’

*'uqa'd dinhinh* ‘he stays/lives among them’

*lihXda:d ya' dinhinh* 'he minds his own business, stays still silent'

*dAda:dunh dik' dahG* 'there's nowhere he won't sit'

*'Aw Let'q' xdah* 'I sit on that box'

*'uwahd xdah* 'I sit/stay (waiting expectantly hoping) for it'

*'a:ndshuh sAqe:GAyu: quh* 'do the children sit here?'

*dik' 'u:d sAqe:GAyu: quhG* 'the children don't sit there'

*t'its'[da:q] q'A'Aw qu:, 'Aw ge:Lta:g* '[on] the ice it is, they sit/stay, seals' (George Johnson)

*'a:nd xteh* 'I lie here, this is my sleeping-place' and *dA'a:nd da: tu'ch'* 'we lie right here, this is our sleeping-place'

*'u:d Xa:'d Lteh* 'he keeps him (e.g. dog) outside there'

Themes with stem *-'ya* 'be involuntarily situated' are presented in (2):

- (2) Themes with stem *-'ya* 'be involuntarily situated'

*Xa:n' xyah* 'I'm all dressed up' (so translated by Lena, probably 'I'm a well-dressed person (by life-style?)' < 'I stay in a finished state')

*k'a'dya' xyah* 'I'm crazy' (< 'in mental illness')

*k'ushiyah sila'X da'yah* 'I'm an angry person' < 'evil comes down over me'

*'AddAxLa'yah* 'I'm medicine-singing' (< 'causing myself to be involuntarily situated, vocally' (idiomatic, perhaps also in mode-aspect))

*dik' 'uXa' da: q'e' k'uda'yahG* 'we don't bother them any more'

*dik' 'uXa' q'e' k'uda'yahG* 'they aren't bothered any more'

*k'ushiyah sila'X da'yah* 'I'm always getting mad' (so translated by Marie, 'I'm an angry person')

*qa'ni: da: Lyah* 'we fight' (also from Marie, as opposed to *qa'ni: da: 'i:'yahL* 'we are in a fight', Neuter perfective)

In addition to postural themes, classificatory themes are also found in the usitative (cf. 3), though more often in relativizations derived from them (for which see further below).

- (3) Classificatory themes with usitative

*'u:d tah q'A'Aw* 'it's there it belongs'

*dik' 'u:d tahG* (not customary *ta:k'G*, Lena) 'it doesn't belong there, that's not its right place'

*'a:ndshAl ditl'a'g 'iXa' tah* 'does your book belong here?'

*'a:ndshAl ditl'a'g 'iXa' yiLtah* 'do you keep your book here?' (causative)

*dik' qa:ch' k'u:ta:G* 'you don't give us anything' (evidently still in contrast with customary)

*sit'a' 'i:lihtah* and *sit'a' 'i:lihdAtah* '(child) depends on me' ('is mentally in shelter of me')

*dik' 'u:d lA'ahG* 'it (hat) doesn't belong there'

*'a:ndshAl ch'iyahd 'iXa' li:Lah* 'do you keep your hats here?'

*'a:nd q'Al ch'iyahd siXa' lAXLah* 'I keep my hats here'

*dik' 'u:d lAXLyahG* 'I don't keep my hats (in a box) there'

*'u:d lAXALyah* '(basket of berries) belongs there'

*'a:nd q'A'Aw lAXAXLyah* 'here it is I keep (container of) berries'

*'a:nd q'A'Aw lAXADayah* 'here it is berries (not in container) are kept'

Verbs translating English 'live' can accordingly also be found in the usitative (along with their underived theme class). Thus *-la* 'live, subsist nomadically, camp': *'a:nd da:* *la* 'we live/camp here' (cf. e.g. *'a:nch' da:* *GAAla:L* 'we're moving (camp) here'), *'u:d xlah* 'I camp there', and from Marie 1980 *xu: qi' xlah* 'my place' < 'place where I subsist'. Likewise (comparative) Neuter imperfective 'be', for which examples are presented in (4):

(4) Usitative derivations translating as 'live'

*'idah 'i:lihxt'uh* 'I have no cares; I'm a happy, satisfied person' (cf. *'idah 'i:lih'ixit'eh* 'I'm happy (at present)')

*dik' 'idah 'i:liht'u:Ginh* 'he's unhappy, he's an unhappy person'

*'anh dAXunh dik' 'AdAwi'Lga' 'i:liht'uhG* 'that guy's sure in no hurry!' ('does not be mentally like a turmoil' 'is very calm/unexcitable, as a life-style')

*qa: GAqa:gX 'udAGAleh 'Awa: t'uhinh* 'she has a mind to bite us' (of a woman, after living with wolves, 'her mind is to bite us repeatedly (desiderative)')

*'Aw dza:nt' ch'iyahdda:X k'ut'a' dAt'uh* 'that skunk-cabbage leaf is used as a hat'

*'i:ya:Gya'd q'e' wAX dAt'uhinu:* 'they lived at Eyak some more' (cf. *'a:nd wAX 'ixit'eh* 'I live here (at present), I'm living here')

*tsa'LdAkih 'uwahd wAX dALt'uhinu:* 'they use/keep a small knife for that'

*k'ut'a' xLt'uh 'I use it', dA'a:nd da: wAX t'uh* 'we live right here'

*wAX dAt'u:* '(it) is kept' (Anna as well as George Johnson in text, showing vowel lengthening in positive, as well as negative, where sometimes Marie but not Lena has lengthened vowel).

One instance of a Neuter imperfective suppletive causative of 'be' is noted: *du:duw tla'Xa'lahGayu:kuwa'na:G 'Adu'lALAXinhinu:* 'whoever make themselves a friend of Tlingits', relativized. Another is from Marie 1980: *ts'iyuh 'Adu'lAxLAXah* 'I am (make

myself be) a blackbear (e.g. in a play, that's my role)'. Also from Marie 1980 is *'u:d qa' ah* 'that's where it (sun) comes up', from Neuter imperfective *-a'* 'extend'.

We have at least a few usitatives from Active perfective statives. One is in *'iya:nXa' Lsih* 'your mother has a rotten vagina (insult)' from Galushia Nelson, lit. 'it rots with/on your mother'; cf. *sALsi'L* 'it's rotten'. Also from Sophie 1987: *dik' xsinhG* 'I'm not dead', i.e. 'I don't die, I'm not mortal' (as opposed to *dik' GAXsinhLG* 'I'm not dying').

Usitatives of locomotion themes are marginally but definitely attested in elicitations. One is *sich'a:X 'inhinh* 'my helper' < 'he who goes to my help', a relativization (the rest of which are cited below); also *Li'q' ya:yu:wahd ch'a:X dinhinh* 'he helps himself to everything', Lena in text 72.11, the same in indirect reflexive, highly affective about an impolite person. Most are in late (1987) elicitations only from Sophie Borodkin, as the sentences presented in (5).

(5) Usitatives of locomotion themes

*'u:ch' xah* 'I walk there (thither)'

*'u:ch' 'inhinh* 'he goes there on foot'

*'u:ch' xqeh* 'I go there by boat'

*'u:ch'sh yiweh* 'do you swim there?'

*'a:n, 'u:ch' xweh* 'yes, I swim there'

*k'e:duh 'u:ch' yit'uh* 'how do you get there?'

*'u:ch' da: 'a'ch'* 'we go there on foot'

*qa:qa' ah* 'he "belongs" with us, goes among us'

From Sophie also is a Neuter imperfective in usitative evidently used as a locomotion verb with an interrogative of manner, not otherwise so attested: *k'e:duh 'u:ch' lAXt'uh* 'how do you (pl) get there?'. There is even a minimal pair, or potentially so: *'u:ch' da: qeh* notated "cust[omary]", as opposed to *'u:ch' da: qe:* notated "pres[ent]"; i.e. 'we go there by boat', usitative, as opposed to 'we're going there by boat' (by our own preference, persistive). There was some confusion between the usitative and persistive in these forms, elicited only from Sophie, but the fact that she could use them at all, and with any degree of consistence, give probable validation to them (see §15.4).

Still further from Sophie, we have the transitive locomotion theme: *k'udAX GAXXe:LG* 'I can't pack it (carry it on my back)', with the explanation "maybe it's too heavy, or you're too weak", the usual Inceptive perfective, negative. This is as opposed to *k'udAX xXehG* 'I can't pack it', with the explanation "it's too heavy, or you just don't care, just don't like to, you're not saying why", i.e. categorical, matter of mind-set. Likewise then, usitative from a transitive Inceptive perfective stative theme: *k'udAX 'ixLt'uxG* 'I can't hold you ("just don't want to, making an excuse")', as opposed to *k'udAX 'iGAXLt'uxLG* 'I can't hold you (because I'm too weak)'. These exemplify a whole range of forms that are poorly documented, or not recognized as such in the corpus, elicited without the understanding

we now have, where usitative could be shown, contrasting with forms of an underlying non-action theme.

Usitative derivation from action themes is homophonous with the Active imperfective to begin with. Thus e.g. *'u:d tsu'dinh* 'he's sleeping there' has the potential to mean also 'he sleeps there, there is his sleeping-place'. More examples are given in (6).

(6) Usitative derivation from action themes

*qa: Lt'ik'inu:* 'they shoot us' (i.e. people shoot wolves, in the Wolf-Woman text from Anna)

*'AwX 'Adu'gudla:LA'inhinh* 'he hangs on to that' (< 'folds self')

*dAch' xtl'ih* 'I keep it tied (to indeterminate o)'

*'u:d da:X xLtl'ih* 'that's where I keep it (dog) tied up'

*ya'X 'AdguxLAtl'ih* 'I'm promiscuous (woman)' < 'I keep my (skirt-)hem tied upward'

*sid k'uLlinhinh* 'he (always) gives me something to drink'

From Marie 1980 we have, *xdAlah* 'I'm drinking it; I drink it (normally, lifestyle)' quite explicit about the two different meanings, in deliberate elicitation to confirm that the usitative is also applicable to action verbs. A further example from Sophie 1987: *dik' dALAQahGG* 'it doesn't fall' (e.g. the sun does not fall to earth), along with *dik' xsinhG* 'I don't die'. Far more usitatives from action themes are found in relativizations, treated in the next section, and likewise in §14.10.5 on relativizations below.

### 15.2.2 Usitative in relativizations

A large percentage of Eyak nominals are from relativized verbs in the usitative derivation. These are in fact the only type of nominals from relativized verbs that are not fully listed or counted in the statistics on nominals. There it is guessed that there are ca. 400 more or less lexicalized relativizations in the Active imperfective in the corpus, of which a large proportion are usitatives derived from themes that are not action themes.

Some small verb theme classes are particularly productive of such usitatives. Several are derived from postural themes, cf. (7).

(7) Usitative relativizations with postural themes

*sAqe:ts'Akih 'uyAq'd dah* and *sAqe:GAyu: 'uyAq'd quh* 'womb' < 'baby/babies stays/stay in it'

*tSa:le:Xquh* 'octopus' < *tSa:-lA-yAX quh* 'they stay (*quh*) under (-yAX) a rock (*tSa:*)', or possibly 'it (with many appendages) stays under a rock'

*GAkla:Lquh* 'lungs' < ? (Cf. *Gl-quh* 'plural be alive', *L-* causative)

*qi' teh 'uXa'* 'animal's den' < 'its ('uXa') place (*qi'*) where it lies (*teh*)'

*ta' Lteh* 'dead spawned-out fish' < 'it lies dead/inert in water'

*qi' ya:nu' k'uGAdAteh* 'grave' < 'where (*qi'*) someone (*k'u-*) is placed prone under the surface (*ya:nu'*) in the ground'

*'uq' k'uteh* 'bed' < 'someone (*k'u-*) lies (*teh*) on (-*q'*) it ('u-')

From -'ya 'be involuntarily situated' we have several usitative relativizations: e.g. *LAXALAtug 'uq' Xa:n'ch'* *LAXa'yah* 'table for rice (in church)', *la'q' LAXA'yah* 'old berries from last fall on bush', *yAq' gula'yah* 'bile', *listsin'da'X qAXa'yah* 'chickadees', *leh GAla'yah* 'year'.

Most classificatory themes with usitative derivation are found in relativizations (8).

(8) Usitative derivation in relativizations

*ya:nahd tah* 'rug, covering'

*a:nahd dAtah* 'grass mat' (Galushia Nelson, < 'is put as rug')

*Xahd 'uXAla'X li' dAtah* 'groove in shaft for weapon-head'

*'uq'Ach' da:X tah* 'stretching-frame'

*XAdla:tah dAkinh* 'latch-stick'

*sa' dA'ah* '(ball of leaf tobacco) kept in mouth (*sa'*)'

*sa' LAXAdA'ah* '(hard?) candy' < '(berry-like) kept in mouth'

*qi' lA'ah* 'place where it (hat) belongs'

From *L-(y)a* plural object classificatory we have the examples in (9):

(9) Usitative relativizations with plural object

*XAdAG dALAYah* 'fish-drying rack' < 'they (*d*-class?) are put up above (*XAdAG*)'

*qihda:q' LAXALAYah* 'cranberry species' < 'they (berry-like) are on (-*q'*) meadow (*qih*)'

*'uq'Ach' k'uqi:dALAYah* 'foot-stool' < 'one's feet are onto it with repeated motion' (still Active imperfective)

*ta:sGALah* 'belt' (derivation unclear, but cf. *o-ta:s* 'across over o')

*-Xu:nLAYah* 'teeth' (*-Xu:lA-* ~ *-Xu:n-* anatomical qualifier 'tooth')

From verbs translating 'be' we have the forms in (10):

(10) Usitative relativizations with 'be'

*'i:nda:q' wAX dAt'uh* 'mask' < 'it is kept on (-*q'*) face ('i:n-)

*qi' k'uch' k'udla:XAt'uh* 'movie-house' < 'where (*qi'*) one (*k'u-*) looks at (-*ch*) something (*k'u-*)'



*dAG lah* ‘rainbow trout, Dolly Varden trout’ < ‘they swim upstream (*dAG*)’

*li’ lah* ‘salmon trout’ < ‘they swim downstream (*li*)’

*si’ihX lah* ‘my younger sibling’ < ‘lives after me’

*sidALyAX lah* ‘my older sibling’ < ‘lives before me’

Even *lah* ‘town, village’ is the same kind of derivation, as is *-lah-G(-A-yu:)* ‘inhabitant(s) of’.

There are evidently some relativizations also from the Neuter imperfective *-’a’* ‘extend’, though most of these are interpretable with some difficulty, cf. (11):

(11) Relativizations from Neuter imperfective *-’a’*

*LanhdAyAq’ qa’ ’ah* ‘chimney’ < *Lanhd ’uyAq’ qa’ ’ah* ‘smoke (*Lanhd*) extends up out (*qa*)’ from in (*-yAq*) it (*’u-*)’

*yAX XAdAdA’ah* ‘candle’ < ‘(*Xd*-class) is made to extend downward’

*qa’ ’AdXALA’ah* ‘horseclam’ < ‘extends its (*’Ad-*) penis (*X-*) out (*qa*)’

*’iLX ’ulu’ k’uDA’ah* ‘end-to-end joint’ < ‘in contact with each other (*’iL-*) through hole (*-lu*)’ in it (*’u-*) something (*k’u-*) is made to extend’

Possibly usitative from Inceptive perfective stative is *gAdla:wa’L* ‘it’s hanging suspended’, from *Gadla:GAwa’L* ‘*id*.’ from Marie 1980.

However, as noted above, many more usitatives are to be found from a variety of theme classes, including action verbs. A few such simple examples are given in (12):

(12) Usitative relativizations

*lAXAdAdu’k’* ‘orange’ < ‘berry-like is squeezed’

*la’mahd* ‘berry’ < ‘it ripens, cooks’

*qa: Lyi:n’inh* ‘doctor’ < ‘he cures us’

*dAdAdeh* ‘flashlight’ < ‘is made to emit light’

*’uq’ k’uqAdla:xuL* ‘railroad track’ < ‘something plural rolls (along) on it’

*lixah* ‘grizzly bear’ < *lAxah* ‘it grows’

*ma:ya’d k’ulALxah* ‘pond lily’ < ‘something (*k’u-*) grows in (*-ya’d*) lake (*ma:*)’

For more usitative relativizations, from a variety of themes, see §18.13.3. The first stage of instrumentalization is relativization, for which a few dozen examples are cited, many from action verb themes.

### 15.3 Repetitive

The repetitive is an Active derivation, which turns verb themes into the action class. It is rather abundantly attested, in over 200 verb themes, in probably well over a thousand instances in the corpus. It is applied to all verb theme classes and mode-aspects, with varying semantic effects, and to varying degrees of thematization. Repetitive is attested not only in the desiderative (once), but also together with other derivations, such as progressive, customary (frequent), persistive and *yAX* perambulative. The repetitive is also attested in the Inceptive perfective instead of Active imperfective, but this is only with the progressive derivation, especially transitional, and locomotion themes especially where thematized.

The sole mark of the repetitive is the suffix *-g*. This can also be suffixed to some noun and adjective stems as well as to verb stems. This evidently makes the repetitive suffix the only one that can be applied more widely than to verbs alone. This works of course only to a limited degree, and only insofar as the suffixed form is considered to be underlyingly nominal instead of verbal. This will also be dealt with in §15.3.2.10, and again, perhaps to a lesser extent, in §15.4 on the persistive derivation.

#### 15.3.1 Morphology of the repetitive

There is no distinctive prefixation in the repetitive at all. The mark of the repetitive is suffixed with *-g* immediately to the stem. With variable open stems of the type CV, the result is always CV:g, and with variable open stems of the type CV', the result is always CV'g. With *-Le(')* 'be' and *-le(')* 'believe; want', the result is likewise *-Le'g*, *-le'g*. The suffix *-g* precedes all others, thus the repetitive-customary suffix sequence is *-gk'*, with desiderative *-gX*, negative *-gG*, customary negative *-gk'G*. In combination with perambulative in *-X* the *-g* replaces the *-X*, so clearly belongs to that same suffixal position.

Exceptions to the above are a few instances of analogical spread of absolute initial 'A- in negative repetitives, e.g. from Lena, *dik'* 'ich' 'Axle'ggG 'I'm not bothering you' along with regular *dik'* 'ich' xle'ggG 'id.'. Several more instances of such irregularity, probably all spontaneous, appeared with *dik'* and other negative words, cf. (13). Such analogical forms are less than extremely rare, understandably.

(13) Analogical spread of absolute initial 'A-

*dik'* 'ALAxu'tl'G '(bread) isn't rising'

*k'udAX* 'AxLku:n'dG 'I can't grab it'

*k'udAX* 'u:da' 'Axwe:gG 'I can't swim there'

*k'ude:dah* 'Awch'a:X 'Axa:gG 'I can't help it'

*k'ude:dahshuh* 'Awch'a:X 'ALAXa:gG 'can't you (pl) help it?' (cf. 1s xa:gG)

Beside the usual Active imperfective, documentation of the repetitive is fairly abundant in the Active perfective, imperative (with prefix AN-), optative, and Inceptive imperfective. The only instances of it in Neuter are where the repetitive is fully thematized, as all other themes are converted to the action class, as expected. In one case, the Neuter imperfective is in fact a Neuter (expressive stativization) derivation applied to the Active theme: *'AXa: di:LiXAXginh* 'my, what a snorer he is'.

Instances of repetitive in the conditional happen to be sparse, perhaps only six, of which the five presented in (14) take the Active prefix AN-:

(14) Repetitive in the conditional

*GAda:dAGu'g da:X* 'if/when it (place) gets warm'

*da: qid 'Ada:LAqe:g da:X* 'when we (otters) start sliding down'

*'idehdah q'e' da:dAq'a:g da:X* 'when it gets burning well again'

*'a:nch' 'Awe:g da:X* 'if he tries to swim here'

*'u:ch' 'Axwe:g da:X* 'if I try to swim there'

However, one other example uses GA- conditional: *Li'q' ya:yu: yAXGAXLats'itl'g da:X* 'when I slap everything around' (Marie in text). This example, also the only instance where the -g is fully thematized, leaves it unclear whether the AN- conditionals might be Active conditional 'just as it starts to...', or whether the repetitive prefers or normally requires the conditional to shift from GA- to AN-, perhaps the latter. The one instance of desiderative does not require such a shift: *GAXLda:sgX 'ixleh* 'I want to weigh it'.

Examples of repetitive in nominalizations, in gerunds, and in combination with other Active derivations, customary, persistent, yAX perambulative, and Inceptive perfective progressive or transitional will be given later, in §§15.3.2.9 and 15.3.2.10.

### 15.3.2 Semantics of the repetitive

The semantic effects of this derivation fall into a rather complex set of categories, to be outlined below. The suffix -g, which characterizes the repetitive verb derivation, occurs somewhat more widely than in that derivation, as noted. First, there are forms, including nouns and adjectives, in which it seems to have no meaning, or a meaning not directly associated with the notion of repetition.

#### 15.3.2.1 Phonological motivation with -CC coda stems

In one class of forms the repetitive with -g has no semantic basis but only a phonological or "euphonic" one. That class is stems with CC cluster codas consisting of g, k', G, q' plus s, sh, a total of 21 such stems, largely nouns but including some verbs and verbs derived from such nouns. For a full list see §7.5.

### 15.3.2.2 Suffix *-g* and “fineness” for nouns and adjectives

There are over twenty nouns (15), some with verbs derived therefrom, not with final clusters, but to which the same *-g* without any repetitive meaning is suffixed. As can be seen in (15), this *-g* is optional for some nouns, and some nouns are further suffixed by an (optional) *-L*.

(15) *-g* suffixed nouns without repetitive meaning

a. Always with *-g* (?):

*tl'Ach'g* ‘snot’

*gu:ntl'Ach'g* ‘jellyfish’

*tsin'tl'g* ‘ashes’

*-dja'tl'g* ‘navel’

*chi:shg* ‘gravel’

*'i:nLxi:shg* ‘red abalone’

b. With optional *-g*:

*wehsg* ‘soft ground, tundra’ (Lena) ~ *wehs* (Rezanov and Lena)

*we:shg* ‘drying rack’ (4 instances from Lena) ~ *we:sh* (6 instances, from Lena, Marie, Galushia Nelson)

c. With further suffix *-L*, sometimes optional:

*GanhdgL* ‘spruce needle’ (Lena, Marie, Anna) ~ *Ganhdg* (Lena, Anna) ~ *Ganhd* (George Johnson only, rejected by Lena)

*shAXgL* ‘frost’, with verb *dA-shAXg* ‘become frosted’

Some nouns have optional *-g* and a corresponding verb from, e.g. *tl'its'g* ~ *tl'its'* ‘dirt’ and *sdtl'i'ts'gL* ~ *sdtl'i'ts'L* ‘is dirty’; or *tl'Adjg* ~ *tl'Adj* ‘slush’ and *sditl'AdjgL* ‘is gelatinized’, along with *gu:ntl'Adjg* ‘jellyfish’ and *-gutl'Adjg* ‘tailbone’.<sup>2</sup>

At the same time, there is a clear pattern in the small class of Eyak adjectives, that most of those of negative valence, those which take *ya:-* instead of *k'u-*, also require thematized suffix *-g*. At the same time, those of positive valence never do, thus *ya:tsidzg* ‘narrow’, *ya:djidjg* ‘very narrow’, *ya:gut'g* ‘tiny’, *ya:kuts'g* ‘small’, *ya:lu'd(g)* ‘few’. Only the last is sometimes missing the *-g*, and *ya:dik'* ‘short’ is the only one that never has it, for reasons that are not clear, perhaps (weakly) phonological. (For these, in comparison with positive-valence adjectives, see 14.1 in §12.1.7 on Neuter imperfectives. Note that with these as Neuter imperfective verbs, the *-g* remains in *yitsidzg* ‘narrow’, *yidjidjg* ‘very narrow’, *yikuts'g* ‘small’, but not in *yilu'd* ‘few’.)

<sup>2</sup> It might be argued in these cases that neither the nouns nor the verbs seem to refer to massive or hard things or substances, rather the opposite, small, soft, fine. That may remind one of the fact that the definitive Eyak diminutive suffix is *-kih*, but there can be no synchronic relation, as this never loses the aspiration of the /k/, while the *-g* always remains unaspirated when followed by a vowel.

In sum, it must be recognized that there is a significant group of forms with suffix -g in which there is no reference to repetition at all, but rather to what might be best described as “fineness” in the semantics of the repetitive. This is after all a related concept, in that the Eyak repetitive refers of course more easily to finer movements rather than to massive ones.

### 15.3.2.3 Semantically regular repetitive with verbs

The largest single category for the semantics of the repetitive is its entirely non-thematized use, where it marks specifically repetitive meaning as applied to verbs that do not otherwise refer to repetitive actions or events. These show the core meaning of the repetitive, namely relatively rapid repetition on a single occasion, as opposed to customary or persistent. (Customary is repetition on separate occasions, at some kind of interval, long-term literally custom. Persistent is deliberate discrete repetitions, or action on objects “one after another”.) Repetitive is relatively rapid repetitions, or less deliberate, “intermittent, on and off, sometimes, often, in spells”, even “once in a while”, also often translated as “keeps doing”, perhaps the most frequent gloss of all. The glossing is various, and was not systematically tested. The general meaning is rather broad, but can be characterized as a range including the idea of less deliberate, less regular or less discrete, including also potential rapidity, i.e. smaller movements, thus connected with the preceding category of “fineness” noted above. The range of meanings includes other ideas as well, e.g. “try to”, or causative/transitive with certain processes. These will be taken up separately as special categories below, in addition to various categories of thematized uses.

This largest single “regular” category is nevertheless attested in perhaps only 70-some verbs in the corpus, only a plurality within the larger range, perhaps in a third of those to be presented in this account as a whole. The less “regular” or less predictable uses of the repetitive is that important, quite unlike the case with the customary, for example. Examples follow in (16), some very prosaic, some poetic or idiomatic.

#### (16) Semantically Regular repetitives

*dAXLade:g* ‘I understand it (speech) intermittently, understand bits’ (cf. *dixLideh* ‘I understand (speech)’, Neuter imperfective)

*dALAd:g* ‘(light) flashes repeatedly, on and off’, *dik’ dAsLAd:gLG* ‘(light) didn’t flash’ (cf. *diLidehL* ‘(light) is shining’, Neuter perfective)

*xda:g* ‘I keep moving/scooting/sidling (while in sitting position)’, *ya:nch’ da:g* ‘(motor) keeps quitting’ (cf. *ya:n’ sAdahL* ‘sat down; (motor) quit’)

*LAtugg* ‘it keeps swelling (with moisture)’ (cf. *sLitugL* ‘it’s swollen with moisture’)

*q’e’ GALAdAta’g* ‘it keeps coming back alive’ (cf. *GALAtah* ‘it’s alive’)

*k’ut’a’ xLt’u’g* ‘I use it once in a while’ (cf. *k’ut’a’ ixLt’eh* ‘I’m using it’, Neuter imperfective)

*xLt'uxg* 'I'm tugging on it' (cf. *GAXL'tuxL* 'I'm holding it', Inceptive perfective stative)

*t'uhLga'da'X 'ALtsAXg* 'cut it in three!' (cf. *'ALtsAX* 'cut it!')<sup>3</sup>

*xtsu'dg* 'I'm drowsing, sleeping on and off' (cf. *tsu'dinh* 'he's sleeping')

*dAxche'g* 'I'm hungry on an off, keep getting hungry' (cf. *dishiche'L* 'I'm hungry' Active perfective stative)

*xga'g* 'I get tired easily, I keep getting tired' (cf. *sigal'L* 'I'm tired')

*tl'ehd kugg* '(house) is fairly bursting open (with abundance of food)' (Anna poetically in text, cf. *sAkugL* 'it broke')

*Lich' k'ahdg* 'often gets sick' (cf. *yik'a'd* 'is sick', Neuter imperfective)

*lAXAdla:LAqahGg* '(ball) is bouncing (repeatedly)' (cf. *disLiqahGL* 'it fell')

*'u'dALqa'ginh* 'he repeatedly counts it' (cf. *'u'xLqah* 'I'm counting it')

*'Aw qa:g* '(fish) are just nibbling it' (Lena, literal but poetic, "not really biting, getting away", cf. *'Aw sAqahL* 'bit it')

*Lich' dA'Aw sitl' 'a'Xa'ginh* 'he keeps telling me the same story' (cf. *'a'Xah* 'is telling of it')

*k'ushiyah 'adu'sLiXa'gLinh* '(child) was bad off and on' (cf. *k'ushiyah 'Adu'LiXah* 'is being (making self) bad')

*'ALawe'Lg* 'snare (a bunch of) them (ravens)!' (cf. *siLwe'L* 'I snared it')

*ya'X dAlAGginh* 'he's being blanket-tossed (more than once)', *ya'X 'AdAlAGginh* 'he's jumping up and down', *'iLta:s qa:nch' 'AdAlAGginu:* 'they're playing leapfrog' (cf. *sAlAGL* 'threw it', *'AdsilAGL* 'jumped')

*yALqa:gga' le:g* 'aurora' (< 'it repeatedly acts like it is repeatedly dawning')

*'iLch'a' yALAqa:g* 'every day' (from Rezanov 1805, < 'dawns to each other repeatedly')

*Xe:ga' gulAle:g* 'water is calm once in a while' < 'water repeatedly acts/looks like grease', *li'X lAle:ginh* 'he gets laughing spells'

*te'ya' k'uxahch' xLi:g* 'I'm cleaning (many!) fish' (cf. *te'ya' k'uxah xLih* 'I'm cleaning/processing (one) fish')

*dAqa:yu: wAX dAxLi:g* 'I make noise sometimes'

*k'ulAX 'iL'a:nginh* 'she's menstruating' < 'she repeatedly sees something', *'ulAX 'ixL'a:ng* 'I see it on and off'

3 This is the only such instance with numeral plus 'times', perhaps nicely definitive, but evidently also 'cut three times' = 'cut it into fourths'?

*qe'gu:l 'iL'a:ng* 'it's thundering, lightening' < 'thunderbird is repeatedly traveling'  
*dAqa:yu: 'Awlu' gula'a'g* 'occasionally water gets (extends) through it'

In a number of instances there may be no difference in the glossing, where the repetitive is paired with a non-repetitive Inceptive perfective. In these examples (cf. 17) the former presumably refers to repeated action and the latter a continuous process. (See also §15.8 on the progressive derivation.)

- (17) Repetitive paired with non-repetitive Inceptive perfective, no difference in meaning  
*xu:LdAtl'g* and *xuGi:LdAtl'L* 'you're hurting me'  
*GAXL't'ich'L* and *xLt'ich'g* 'I'm propping fish open'  
*LAGAXLda'ts'L* and *lAXLda'ts'g* 'I'm making a basket design'  
*ya' GAXLwAL* and (once) *ya' xLwALg* 'I'm splitting wood with wedge'  
*GAXwi'gL* and *xwi'gg* 'I'm hanging them up'

Negation does not negate merely the repetitive meaning, but the whole verbal activity: *dik' ki:XgGinh* 'he's not crying, even occasionally', i.e. not 'he's crying not occasionally, but all the time'.

#### 15.3.2.4 "Try to"

The notion of repetition, especially that without deliberation or full control of periodicity or outcome, as can be seen in some of the above, can easily lead to that of 'trying to accomplish or reach a goal. It is unclear to what degree such a gloss could be applied also to some of the above, but especially with verbs of locomotion that meaning is specifically shown, cf. (18).

- (18) Repetitive with verbs of locomotion meaning 'try to'  
*'u:ch' dALAK'a't'g* 'it's trying to fly there (e.g. against the wind)'  
*'u:ch' xwe:g* 'I'm trying to swim there'  
*'u:ch' qu'xwe:g* 'I'll try to swim there'  
*'u: ch' 'Axwe:g da:X* 'if I try to swim there'

The repetitive is kept in the negative, i.e. in the case of a negative result, in *k'udAX 'u:da' 'Axwe:gG* 'I can't swim there'. These items presumably do not preclude the meaning also 'I repeatedly/sometimes swim there' etc., not tested. With *-a* '(sg) go/walk', an easier mode of locomotion, we have the ordinary examples in (19).

- (19) Repetitive with *-a* '(sg) go/walk' meaning 'try to'  
*q'e:LAG 'Ada:g* 'keeps walking back up ashore' (with irregular 'A-)  
*q'e' 'Ada:g* 'keeps trying to walk back' (with irregular 'A-)

'AdiXich' 'a:g 'tries to come in'

'ika:XAch' 'i'di:xa:g 'I'm trying to catch up with you'

Likewise negative *dik' uch'a:X 'Axa:gG* 'I can't help it', the negatives here clearly meaning 'though trying, cannot' rather than 'not try'. Other types of themes are found glossed with this meaning in the repetitive, often with 'keep trying', cf. (20).

(20) Repetitive meaning 'keep trying'

*ya'X xta:g* 'I keep trying to lift it'

*XahdL siXa' hu:l 'u'dla:xLXa'g* 'I'm trying to sell my car' (cf. *XahdL 'uXa' hu:l 'u'dla:sALXa'Lin* 'he sold his car')

*xLXahdg* 'I keep trying to drag it' (cf. *GAXLXahdL* 'I'm dragging it')

*xLXAdg* 'I keep trying to take it apart' (cf. *ya' GAXLXAdL* 'I'm taking it all apart')

*qa:nch' xXa'ts'g* 'I'm trying to lace it (shoe) up' (cf. *qa:nch' GAXXa'ts'L* 'I'm lacing it (shoe) up', *qa:nch' xXa:ts'* 'I'm lacing it (shoe) up (taking long time)' (persistent))

*silAXa:nch' le'gginh* 'he's trying to pet me'

### 15.3.2.5 Thematization of -g

Clearly, the activities denoted by the verbs above are not viewed as repetitive in themselves, even though walking, for example, could be viewed as repetitive motion of the legs. The same is true of other activities involving motions that could be viewed as repetitive, for which there are verbs denoting the whole activity, cf. (21).

(21) Repetitive with other activities

*xGahG* 'I'm chopping it (wood)', 'AXAkih *xGahG* 'I'm chopping/ hewing a (dugout) canoe'

'AdxdAk'in't' 'I'm scratching myself (for itch)'

*xuxahL* '(dog) is barking at me' (cf. *xuxahLg* '(dog) barks intermittently at me')

*GAla:dAsha'tl'* 'sweep the floor!'

*k'uxLshah* 'I'm digging for something'

'iqe'xXu'ts' 'I'll slap you (one or many times), I'll whip you'

*sich' 'Aw gulAXu:ts'inh* 'he's splashing it (water) at me all the time' (persistent)

*xwe'ts'* 'I'm weaving it' (persistent)

*Lidah GAXxa:shL* 'I'm constantly cleaning (fish)' (no matter how many fish)

'Adtsin'xda'lahl 'I'm combing my hair'

*dAGAx'e:shL* 'I'm stringing beads'



Along with *xLts'a:g* 'I'm bailing it' we have one instance of *Lich' xLts'a:gg* 'I'm always bailing', which probably falls in this class, to cite what are probably many uncertain or borderline cases. For this class, the only use for the repetitive has to be glossed e.g. 'intermittently'. No instance, apparently, of gloss 'trying to', seems to come up.

Perhaps what might be considered examples at the other end of the scale of "repetition sensitivity" are verbs for activities that tend to be highly repetitive but where a very clear distinction is made between single and repeated motions. One fine example is *O-L-'na't'* 'lick O'. This is almost always attested as repetitive, e.g. *xLna't'g* 'I'm licking it', but which was in fact tested for the contrast, with the result *xLna't'* 'I'm licking it (with one single lick)'. This is proof that the repetitive for this verb is not lexicalized or thematized. Cf. further *sa'd yAX La'na't'X* 'he's pushing it about in his mouth with his tongue', where the *-X* of the *yAX* perambulative is not replaced by a repetitive *-g*, further implying a non-repetitive theme *O-L-'na't'* 'tongue O'.<sup>4</sup> Other confirmed examples of this distinction between a single and repeated motions are '*AdxsLiqa:'sgL* 'I stretched (myself, after sleeping)', '*AxLAqa:'sg* 'I'm stretching,' but in response to 'I'm stretching (one single stretch)': '*AdxLAqa:'s*. Likewise *dla:xtsu:xg* 'I'm basting' and *dla:xtsux* 'I'm doing a (single) basting stitch'. Finally, note: *LAXAXg* 'it (e.g. landed fish) is (still) quivering', noun *XAXg* 'fresh fish meat', and with *d-* qualifier 'oral noise' *dALAXAXg* 'is snoring'. However, in response to elicitation we have 'he snored (a single snore)' *disLiXAXL*, without the *-g*, apparently an extreme instance, if that is to be believed.

Aside from such examples, some themes get completely different glosses in English, or may be considered lexicalizations. For example, from *O-L-GAdj* 'move O with the end of a stick', *ya'X GAXLGAdjL* 'I'm lifting it with the end of a stick', *ya'X xLGAdjg* 'I'm trying to lift it with the end of a stick', we have very often *k'uxLGAdjg* 'I'm paddling a canoe' < 'I'm moving something repeatedly with the end of a stick'. We have no elicitation of 'stroke (once)!', but cf. the theme *k'uxGahdjg* 'I'm drumming (on something)', of course almost always with *-g*, but for which we happen to have both *LinhGda'X GAGahdj* 'beat it (once)!' and *k'uxGahdj* 'I ring (something, once)'. Here we also have the interesting probability that the stem *-GAdj* is etymologically derived from *-Gahdj* by reduction of the vowel.

Another example of full "repetition sensitivity" is *O-L-tl'a'* 'strike O', often 'make mark on O', very often repetitive as *k'uxLtl'a'g* 'I'm writing, repeatedly making marks on something'. In this case only subjectivity or "external" cultural context, one's level of literacy, determines whether 'writing' is a separate new theme from 'making marks'.

### 15.3.2.6 Full thematization of *-g*

At the opposite end of the scale, not of "repetition sensitivity," but of the scale of "degree of thematization" itself are those themes that require in all instances the suffix *-g*, even where no repetition of any kind is involved. Perhaps the most spectacular example of this is *xLA'Ashg* 'I'm sneezing (repeatedly or once)', specifically verified for the case of a

<sup>4</sup> Cf. below and §15.5.4.7 on *yAX* perambulative; also noun *-la't'* 'tongue'.

single sneeze. (Cf. Athabaskan, e.g. Koyukon *ye-l-ʔusk* ‘sneeze’.) With this perhaps unique exception, the other themes attested only with the suffix *-g* all seem to refer to activities that could be seen to involve fine repeated movements, cf. the examples in (22).

(22) Thematized stems with *-g* repetitive

*xugudi:Lidg* ‘braid my hair!’, *ʔAdguda:dALAdg* ‘braid your hair!’

*sdiLidgL* ‘(tree) is dead; dry wood’, *dALAdg* ‘(tree) is dying, drying’ (perhaps a different stem)

*xLAsitʔg* ‘I’m shivering (from cold)’

*kʔusuhdzg* ‘it’s hissing, sizzling’, *sisuhdZgLinH* ‘I hissed him (baby) to sleep’

*GAXL AchahdgL* ‘I’m staggering along, having hard time, barely making it’ (locomotion, where Inceptive perfective is not converted to Active imperfective)

*dAL AchahdgInH* ‘he’s stammering, blubbing (e.g. child while crying hard)’ (action)

*Xu:ndla:sAgihdZgL* ‘it bared its teeth/fangs’

*LAXALgidjg* ‘it’s drizzling

*xgaʔchʔg* ‘I’m weak in the knees’

*xLqaʔtʔg* ‘I’m cooking it’, *LAqaʔtʔg* ‘it’s cooking, boiling; fermenting’, *sLiqatʔgL* ‘it’s cooked; fermented’, *GALAqaʔtʔgL* ‘it’s starting to boil’ (well documented)

In the examples in (23) the progressive derivation overrides the Active imperfective.

(23) Progressive derivation overriding Active imperfective

*ʔAw Xa:shg* ‘it’s gnawing it’, *kʔuXa:shg* ‘beaver’ < ‘it gnaws something’

*siLʔuhdZgL* ‘I’m a bit high’

*qi:dAxLʔu:dZg* ‘my foot’s been asleep (all day long)’ (persistent, retaining repetitive)

*dAdAʔuhdg* ‘is laying egg(s)’, *disdiʔuhdgL* ‘laid eggs, laid a single egg’, noun

*kʔudAʔuhdg* ‘egg (of something)’ (unclear whether verb is derived from noun or the reverse)

*LAXAXg* ‘(landed fish) is (still) quivering’; *XAXg* ‘fresh fish meat’<sup>5</sup>

*ʔALtsʔinʔtlʔg* ‘slap it!’, *ʔAdlixsLitsʔinʔtlʔgL* ‘I slapped my face’ (not tested for ‘one slap’)

*xqʔa:ʔshg* ‘I make a clicking sound’ (not tested for single click)

5 The same stem *dALAXAXg* ‘is snoring’ was once elicited for ‘snored (one single snore)’, *disLiXAXL* without *-g*, again, if that is to be believed, then belonging not here but above, q.v. next item.

*Lts'atl'g*, *GALts'a'tl'gL* 'its dripping, leaking', *'u:dAX sALts'a'tl'gL* 'it leaked through there', *gulALts'a:tl'g* 'it's leaking (in many places)', persistent, retaining repetitive *xLts'u'ts'g* 'I'm sucking on it; I'm smoking it (tobacco)', *k'uGAts'u'ts'g* 'take (even one) puff!', so checked.<sup>6</sup>

Reviewing the above, the verbs in this class do indeed seem to refer to activities involving fine movements. A possible exception is 'slap', not checked, and more likely, 'lay egg' and 'sneeze', which might be included especially if considered "trivial" if not "fine." To this group should perhaps be added some more of this type which are attested usually with -g but in a small minority of instances without it, which are either mistaken or which may classify the theme as "optionally" thematized as Repetitive, or "preferably" so.

A special example of this is *dAtAsg* 'it is trembling', amply attested as such, including *sdiAtsgL* 'trembled', but *LAXAdAtAs(g)* 'dice', *k'uqi:lAtAs(g)* 'yoyo', *dAtAsinh* 'he's trembling' (Marie once), Rezanov (1805) <atiil'tas'> 'you're afraid' to be read *'a'd 'i: 'iLtAs* 'it/he is shaking *you* very hard, making *you* tremble greatly' or *'a'd 'i: yiLtAs* 'you are shaking it/him, making it/him tremble very hard', so perhaps showing increased tendency to thematize the repetitive in an archaically "repetition insensitive" theme. The reverse may be the case with *dAxwLsik* 'I have hiccups', Rezanov (1805) тупльсуккъ (<tuff'sykk">), clearly to be read *dAxwLsik'g* with repetitive, unlike the modern form, unless 'I'm hiccuping repeatedly/intermittently' was meant.

More typical examples may be *k'uti:lAxyAXg*, *ya' xyAXg* 'I'm softening it (skin) by rubbing', *ya' GAXyAXgL* 'I'm softening skin by rubbing it, all day long', progressive derivation, but once *ya' siyAXL* 'I softened it' without the -g; *'AXuhLg* 'shovel it!', *'a'q' GAXuhLg* 'shovel them (bones) out!', *sdiXuhLgL*, *sdiXuhL* 'its been shoveled', noun *XuhLg*, *XuhLgL* 'shovel' (not *\*?XuhL*); single shoveling motion not tested.

### 15.3.2.7 Partial thematization of -g with transitivity

More frequent than full thematization or the like is partial thematization of the repetitive. Perhaps the most frequent subtype of these is intransitive themes which become repetitive when transitivized or causativized. The logic for this is that the event or condition or process of the intransitive often or normally requires repeated action or effort on the part of the subject of the transitive to bring it about.

(24) Partial thematization of -g

*sid 'ALde'g* 'teach me how (skill)', *'AdxLAd'e'g* (= *'Ad[d] xLAd'e'g*) 'I'm practicing' < 'I'm teaching myself', < 'repetitively (-g) causing (LA-) myself ('Ad-) to know how' (cf. *Lideh* 'knows how')

<sup>6</sup> With this item, given the full thematization, we have a Neuter perfective, *'iLX diLits'u'ts'gL* 'they're stuck together (by suction)'.  


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*'id 'u'lAxLga'g* 'I'm teaching you it', *sid k'u'lALga'ginh* 'my teacher; he's teaching me something' (cf. *'u'lixilgah* 'I know it')

*'Awch' ya' xLya:g* 'I'm training it' < 'I'm making it used to that' (cf. *'Awch' ya' si'yahL* 'I got used to it')

*lAxLxa:g* 'I'm raising it', *xulAdAxa:g* 'I'm being raised, brought up'

For the last example in (24), cf. *lAGAxxa:L* 'I'm growing, growing up', so also causative *lAGAxLxa:L* 'I'm raising him, having him raised, seeing that he grows up', i.e. presumably with less direct care or effort than the repetitive, which therewith might possibly also be glossed as 'I'm trying to raise him'. Note finally also even *xulAGALxa:gLinH* 'he's raising me' (with care, and long-term), further derived with the progressive (see §15.8). Two more such themes are *li:Lq'AXg* 'fatten him up!', cf. *'i:nsLiq'AXL* 'he's fat'; and *dAxL'ehdg*, *dAGAxL'ehdL* 'I'm drying it', cf. *dAGAL'ehdL* 'it's drying', *dAsAL'ehdL* 'it's dry' Active perfective stative, amply documented and fairly regular.

Some examples (25) are less regularly repetitive in the causative:

(25) Themes less regularly repetitive in causative

- a. Verbal examples: *xLXa:ng* 'I'm melting it (snow)', cf. *GAxLXa:nL* 'I'm melting it' (presumably by less direct or by steadier less repeated method)

*xLGu'g* 'I'm warming it up', cf. *GAxLGu'L*, *xLGu'* 'I'm warming it up' ('more like holding it against yourself', i.e. steadier though perhaps more direct method)

- b. Relativizations:

*dAlu' yAX Lxehd(g)*, 'strainer, filter' < 'makes it fade down through hole(s) in indeterminate object', cf. *sAxehdL* 'it's faded'

*sahs qi' dAdAda'ts'g*, a place-name with the meaning 'where (*qi'*) sea lions (*sahs*) are drowned', cf. *dAGAxLda'ts'L* 'I'm drowning'

*'ALtsu'dginh* 'put him (baby) to sleep!; make him drowse!', also *'ALtsu'dinh*, *GALtsu'dinh* 'put him to sleep!' (repetitive can be either regular for 'drowse', or some special way of putting a baby to sleep involving repetitive action)

Another example well attested is the causative of *lAXxLixa:s* 'I'm afraid', a unique Neuter imperfective with expanded persistive stem, also uniquely missing the /i/ expected after the /X/, as though a blend of Active and Neuter. The causatives keeping the expanded stem are all repetitive: *lAXAxLxa:sginh* 'I'm scaring him' etc. The minority, with stem *-xa's* or *-xahs*, may distinguish the repetitive semantically: *xulAXAGi:xahsL* 'you're scaring me', *xulAXAsALxahsL* 'you scared me', but *'iqe'lAXi:xLxa'sg* 'I'll try to scare you, I'll threaten you'.

Quite regular but interestingly different semantically, perhaps belonging to §15.3.2.8, is *Lda:sg* 'it's heavy when one tries to lift it', cf. *yiLda:s* 'it's heavy', Neuter imperfective; hence also *xLda:sg* 'I'm weighing it', *siLda:sgL* 'I weighed it', i.e. 'repeatedly experienced how heavy it is'.

### 15.3.2.8 Other partial thematization of repetitive

At least two Neuter statives take the repetitive in mode-aspects other than the Neuter imperfective, i.e. in transitionals: *yishah* ‘is stingy’ becomes optionally repetitive *GAXsha’gL*, *GAXsha’L* ‘I’m getting stingy’, *sAsha’gLinh* ‘he got stingy’, *dik’ ’Assha’LGINh* ‘he didn’t get stingy’, whereas *k’u’Lituh* ‘is lazy’ in transitionals is always repetitive: *k’u’GALAtuhgLinh* ‘he’s getting lazy’, *k’u’qu’LATuhginh* ‘he’ll get lazy’. Aside from these and the above, there is a large gray area of themes in which the repetitive can be said to be partly thematized, where it is basically a subjective semantic call to determine whether to consider those with the repetitive as separate themes. Perhaps a good example is *k’uts’i’k’g* ‘something is bitter, tart, “hot”-tasting’, cf. *O-ts’i’k’* ‘pinch O’. More examples are presented in (26).

#### (26) Partial thematizations of repetitive

*iLqa:nch’ k’udi:LdjahGLg* ‘make a quilt!’ (lit. ‘sew things repeatedly among each other!’), cf. *k’uxdjahGL* ‘I’m sewing something’

*ya’ ’insLisa’t’gLinh* ‘his face is all wrinkled’, cf. Active perfective stative *ya’ sdisa’t’L* ‘it’s pliable’, Inceptive perfective stative *GALAsa’t’L* ‘it sags’

*’ALq’a:’shg* ‘iron it!’, cf. *sLiq’a:’shL* ‘it’s stiff, flat’, may belong above as a regular causative

*xLq’e’g* ‘I’m cooling it off’, *dAQ’e’g* ‘it’s cooling off’, cf. *GALq’e’L* ‘fire is going out’, *Lq’e’g* ‘fire keeps going out’

*’ALq’a:g* ‘keep it burning!’, noun *dAQ’a:g* ‘fire’, also *ya:X Xadla:dAQ’a:g* ‘it’s frying’, cf. *GALq’a:L* ‘it’s burning’

*sich’ yALAQ’AQ’ginh* ‘he’s making a fist at me’ (evidently not opening and closing his hand), cf. Inceptive perfective stative *yAGALAQ’AQ’Linh* ‘his hand is closed, he’s making a fist’

*dit’a’ch’ dALAduxginh* ‘he’s stuttering’ (‘is repeatedly falling silent, stuck behind indeterminate o’), cf. *ya’ dALAdux* ‘is (completely) falling silent’

*dAxLda’ts’, dAxLda’ts’g* ‘I’m picking basket-design grass’.

### 15.3.2.9 Free variation with optional -g

Finally, and unsurprisingly, given the complexity above, there is a sizable array of verb themes that may appear both with and without -g, where there appears to be no difference of meaning between the forms with and without it, at least in the glossing. At the same time it would seem hardly escapable that the suffixed variant would suggest more repetitive action than that with zero.

#### (27) Variation with optional -g

*XAdAxtsah, XAdAxtsahg* ‘I’m sharpening it’

*o-X diLits'u'ts'L*, *o-X diLits'u'ts'gL* 'it adheres (by suction) to o'

*xsinhX*, *xsinhXg* 'I'm shaving it, scraping it' (repetitive more frequent)

*'iLu' dAsiyuhinu.*, *'iLu' dAsi:ginu* 'they're killing each other' (see also dictionary entry *siyuhginu*: 'keep killing plural')

*yAX GAchich'Linh*, *yAX GAchich'gLinh* 'he's breaking it (stick) apart'

*'ALshitl'*, *'ALshitl'g* 'file it! (more generally 'abrade', where 'sawing' is more often repetitive, 'wearing thin' more often zero, so perhaps a cline; cf. also *lAsAshitl'L* 'is bald' always zero, *'uX k'ushitl'gL* 'saw', instrumental noun, always with -g)

*sAgehdzL*, *sAgehdzgL* 'is poor, pitiable'

*xxa'ts'*, *xxa'ts'g* 'I'm tying a knot' (latter perhaps also more 'I'm repeatedly tying knot(s)', but a single knot might also be seen as entailing repeated actions)

*lAXALGehdinh* 'is jouncing him (baby)', *lAXa:nLGehdginh* 'jounce him!' (both repeated actions)

*lAxLqa:ginh* 'I'm dissuading him, getting him to stop', *xulAsALqa:gLinh* 'he stopped me', *'i:nsiLqahLinh* 'I dissuaded him'

See Chap. 18 on Nominals for more examples of such variation.

### 15.3.2.10 Nouns and nominalizations with repetitive

The repetitive has its fair share of nominalizations and nouns derived from it, as distinguished quite clearly from those first mentioned above, phonological after CC cluster codas, and for the most part also distinguished from those above suggesting "fineness", not so derived. Some are with apparently meaningful suffix -g. In fact many of those are with repetitive, even though derived from non-repetitive themes, evidently by some preference that goes beyond the usitative sense. Examples follow as (28).

#### (28) Repetitive nominalizations

*daQ'a:g* 'fire', cf. *dAGAq'a:L* 'it's burning', also *'uyAq' 'iq'a:gL* 'stove', instrumentalization, 'in it indeterminate O is kept burning'

*'iLAdzanhg* 'hummingbird', cf. *'iLAdzanh* 'outboard motor boat', *'ixLAdzanh* 'I'm yoyoing' (with reference to humming noise)

*'uX tl'ehd k'uLdja:t'g* 'key' (Rezanov 1805, < 'by means of it one pries indefinite O open', i.e. with repeated motion?, possibly an *ad hoc* translation, replaced after 1805 by Russian loan *gAlu:dj*), cf. *'A(L)dja:t'* 'pry it up!', *dja:t'L* 'crowbar'

*da:X XAdAdja'g* or *da:X XAdidja'g* 'match' < '(stick) which is repeatedly jerked against indeterminate o', cf. *da:X XAdAdja'* strike it (match)!', even *'ALdja'* 'pluck it (duck)!', certainly with repetitive motion, likewise repetitive *qa: dja'ginu*: 'police' < 'those who repeatedly jerk/arrest us', possibly because a match required repeated striking, and/or arrests repeated jerking?

*Ga:ndich'ich'g* 'small songbirds', with qualifier *Gl-* 'ground', *di-* from *dA-* classifier, lit. 'that which ... repeatedly on the ground', no otherwise known verb

*'uX k'ushitl'gL* 'saw', instrumentalization (cf. *'uyAq' 'iq'a:gL* 'stove' above)

*'uX 'iLch' k'udAgAXts'g* 'glue' < 'by means of (-X) it ('u-) things (k'u-) are repetitively glued to (-ch) each other ('iL-)', *'Adix da:X dAgAXts'g* 'wallpaper' < 'it is repeatedly glued to indeterminate o indoors ('Adix)', *dAgAXts'g* 'band-aid', cf. *LigAXts* 'it's sticky', Neuter imperfective, *LAGAXts'g* 'it keeps sticking'

*qa:nch' k'uq'Ats'g* 'hornet' < 'suddenly bites repeatedly', cf. *k'usAq'At'sL* 'it bit something, something bit it'

*Xi:ch' dAdA'iLgyu:* 'trash' < 'things that are dumped away (*Xi:ch'*)', cf. *k'uya' di:iL* 'dump it into something!'

*dAxu'tl'g* 'blowgun; balloon', see also four other nominalizations with -g and two without under *O-xu'tl'* 'blow O' in the dictionary, and cf. e.g. *'uyAq' 'iGAXu'tl'*, *'uyAq' 'iGAXu'tl'g*, *'uyAq' 'i:xu'tl'g* 'blow into it!', where it is unclear that any distinction is made between one and many breaths

*k'uXa:shg* 'beaver', lit. 'it is gnawing something', inherently repetitive to begin with.

Some are nouns, rather than nominalizations, which consistently have the -g suffix, whether derived from known verb themes or not, cf. the examples in (29).

(29) Nouns consistently with -g suffix

*XahLg* 'wand, rattle', cf. *LXahLinh*, *LXahLginh* 'he's shaking it (rattle)'

*Xa'tl'g* 'club' (seven times from four speakers), *Xa'tl'gL* (four times from two), *Xa'tl'L* (once), *'ALXa'tl'* 'club it!', also repetitive *yinwa:yu: qa: lALXa'tl'ginu:* 'shore patrol', < 'sailors are repeatedly clubbing us over the head' (cf. 'police' in (28))

*XuhLg* 'shovel', once *XuhLgL*, cf. *O-XuhL-g* 'shovel O', generally with -g, also *-XuhLg* 'sternum'

*XAXg* 'fresh fish meat', *LAXAXg* '(landed fish) is (still) quivering' listed above *-LXAdjgL* 'skeleton, skull', *-dALXAdjgL* 'lifeless frame, empty container' (no known verb)

Further, there are some such nouns, if not verbal nouns or instrumentalizations, with apparently optional suffix -g, cf. (30).

(30) Nouns with an optional -g

*t'ich'gL* ~ *t'ich'L* 'prop for keeping drying fish open', cf. *GAXLt'ich'L*, *xLt'ich'g* 'I'm propping fish open'

*tl'its' ~ tl'its'g* 'dirt', cf. *sLitl'its'gL* 'it's dirty'

*tl'Adj* ~ *tl'Adjg* 'slush', cf. *sLitl'Adj(g)L* 'it's gelatinized'

*dza'tl'(g)(L)* 'peg, stake', *'uX k'udza'tl'(g)(L)* 'chisel', from verb themes

*O-(L-)dza'tl'(-g)* 'peg O, chisel O'

*wa'ts' ~ wa'ts'gL* 'whip', cf. *O-L-wa'ts'(-g)* 'whip O', also *'uX k'udAwa'ts'* 'whip'

*ga'ts'g(L) ~ gats'L* 'ladder'

*dla:LXe:djg(L) ~ dla:LXe:dj*, *dla:Xe:ch'g* 'quartz' (*dla:-* qualifier for 'stone', no known verb).

The following nominalizations also belong into this group: *k'uqi:lAtAs(g)* 'yoyo', *LAXAdAtAs(g)* 'dice', *dAlu' yAX Lxehd(g)* 'strainer, filter' mentioned above, and *da:X 'i:nLAXi'ts'(g)* 'woodpecker' < 'it drums its head (repeatedly) against indeterminate o'. In at least one case the noun has no -g, while the verb, apparently derived from the noun, usually has -g: *qa't'L* 'patch', *O-L-qa't'g-L* 'patch O', with instrumental -L kept, after the -g. There is often a problem distinguishing nouns from verbal nouns or deverbalizations, given that instrumental -L or gerund -L after obstruents may alternate with zero. For this see §18.13 on deverbalizations.

### 15.3.2.11 Repetitive combined with other derivations

In addition to the various types of nominalizations shown throughout this section, above, the repetitive is found also in deverbalizations and in combination with other derivations, e.g. Active *yAX* perambulative, customary, persistive, and Inceptive perfective stative etc.

Examples of repetitive in deverbalizations other than gerunds are included above. It follows that repetitives are also found in gerunds, e.g. *k'ah 'i:nsta:gL* 'forgetting' (Rezanov 1805), *'ilAxa:g* 'raising you', *k'uGAdjgL* 'paddling (a canoe)', *'iLLAXa:n' lAq:g* 'footracing'.

When the repetitive combines with the Active derivation *yAX* perambulative, the suffix -X of that, which appears only in the Active imperfective, is most often replaced by the -g of the repetitive. The two suffixes do not co-occur or hardly co-occur. This pattern confirms that the suffix -g is in the same position as the -X of the *yAX* perambulative. Cf. the examples in (31).

(31) Repetitive with *yAX* perambulative

*yAX 'AdxLAts'itl'g* 'I'm skating, sliding about repeatedly'

*Li'q' ya:yu: yAX GAxLAts'itl'g da:X* 'when I slap everything around' (Inceptive conditional)

*yAX 'ixLaxut'g* 'I'm going about shooting (rifle, at indeterminate O, repeatedly)', referring to repeated shots made while going about



'Aw 'uq' yAX 'ixLAts'in'tl'g 'I'm slapping about all over on it'<sup>7</sup>

'uwa:LX yAX k'udAqe:g 'compass' < 'that according to which someone repeatedly boats about' (relativization)

The last example in (31), also of the point made above of preference for repetitive in some nominalizations, was from Lena, and not fully appreciated in Krauss (1970a). There I wrote “-g-repetitive perhaps in error for -k' customary.” It is clear now from further study of both the repetitive and customary that one of the clearest differences between them is that the repetitive serves freely in nominalizations, the customary not at all.

There is one exception attested, with -X instead of -g, cited in the subsection below on combination of yAX perambulative with other derivations, and another type of exception, with -g-X actually co-occurring, in that order. However, in that type of exception, the verb is LA-GAGsh-g 'limp (along)', where the repetitive suffix is maximally thematized, in fact the phonologically motivated type with stem-final cluster. We have two instances of that combined with the yAX perambulative where the two suffixes are combined, -g-X, as noted above both from Lena (who in the perambulative glosses the forms 'hop around on one foot', but is overruled by both Marie and Anna). Even here, however, the -X is absent in two such perambulatives from Marie, and one from Lena herself. See the forms in the dictionary entry.

On the other hand, there is both combination of repetitive and customary and some overlap between the two. In fact combination of repetitive and customary is fairly common, both deliberate (at least from elicitation, 'repetitive action at regular intervals') and seemingly gratuitous suffixation of -g as well as -k' in ordinary customary usage, the latter in fact rather common. Examples of the former: *sid k'u'lALga:gk'inh* 'he customarily teaches me (something)', *'Atsu:dgk'inu:* 'they customarily sleep' (or 'customarily drowse on and off?'). Examples of the latter, which may be especially common with open variable stems: *k'a:dihch' 'ALe:gk'inu:* 'they keep disappearing', *'u:d qa: 'u'yALqa:gk'* 'we customarily spend the night there', along with many instances from Anna in text.

Overlap between repetitive and customary use seems to go both ways, repetitive used where customary would be expected from the preceding at least once, namely in *qa: dzuxginu:* 'they (humans) keep spearing us (wolves)'. The reverse, customary where the repetitive would be expected, occurs much more frequently, e.g. in *ya:kihdahch' xLi:k'* 'I tried to pay him off' (certainly one occasion), *'a'q'e:k'* 'tries to do it' (likewise), *wAX dAle:k'* 'customarily says thus' occurring several times in text, e.g. text 25, Anna, with reference to one occasion, glossed 'kept saying', but perhaps for some other stylistic effect, in any case extending the domain of the customary. Careful examination of such texts would no doubt reveal more examples.

<sup>7</sup> But see reverse example under §15.7 on yAX perambulative, implying prevalence of repetitive suffix over perambulative may be only statistical.

A fair number of examples of repetitive combined with persistent are also attested. No fewer than 9 of the 36 stems attested in the persistent are also found in combination with the repetitive. Two or three of those are with *-g* thematized before application of the persistent (*-ts'a'tl'-g* 'leak', *-'uhdz-g* 'woozy', perhaps *-ts'u'ts'-g* 'suck'), but other stems attested also without *-g* are found with repetitive and persistent combined. For full treatment of these, see §15.4.2.3 on the persistent.

Finally, the repetitive is also found in combination with Inceptive perfective or progressive derivation in the transitional inceptive sense, e.g.: *k'u'GALAtuhgLin* 'he's getting lazy', *xulAXAGi:Lxa:sgL* 'you're starting to scare me', *'u:ch' GAXLtl'a'gL* or progressive sense, locomotion 'I'm going along making marks toward there', or durative *xuLAGALxa:gLin* 'he's raising me' (long term, with personal care). A few more examples are cited in the subsections above (§15.3.2).

## 15.4 Persistent

The persistent is an action derivation applicable to probably any verb theme class, rendering that basically active. It is of limited frequency, occurring perhaps 200 times in the corpus, on 36 different (closed) verb stems. Given that the persistent derivation entails expansion of the stem, it also follows that Eyak verb stems that are attested only in the form CV:C might in fact be unidentified persistives. Though an aggressive effort was made to find the simplest themes possible for a given stem in terms of affixation, no effort was made in the case of CV:C stems themselves to test for the possibility of occurring also as CV'C, CVhC, or CV:'C. Since no such testing was done, it is entirely possible that some minority of verb stems attested only as CV:C might have been shown in fact to be persistives, especially those not extensively documented and/or referring to durative and/or multiple actions. (The statistics on stem shapes in the Phonology shows a total of 132 stems of the shape CV:C, but presumably at least half of those are not verb stems. Since not many verbs are attested more usually as persistent rather than not so derived, there is no reason to expect many stems of the form CV:C to be unrecognized persistives, at least not synchronically.)

In fact, a survey of stems that are basically verbal and of the form /CV:C/ reveals not quite 40 such stems that might be expanded, listed in (32) together with basic gloss.

(32) CV:C stems which could potentially be expanded

<i>-da:s</i> 'heavy'	<i>-ts'i:k'</i> 'ulcerate'
<i>-tl'i:ts'</i> 'soak'	<i>-ts'i:nG</i> 'dip fingers'
<i>-dza:nts'</i> 'plead'	<i>-su:t'</i> 'slurp'
<i>-tsi:ndz</i> 'dream'	<i>-si:q's</i> 'whimper'
<i>-tsu:x</i> 'thrust'	<i>-dja:t'</i> 'pry'

- <i>dje:dj</i> ‘be amazed’	- <i>xa:sh</i> ‘butcher’
- <i>dje:G</i> ‘be tangled’	- <i>xe:g</i> ‘whistle’
- <i>cha:d</i> ‘swell’	- <i>Ga:sh</i> ‘stuff mouth’
- <i>che:k</i> ‘be toothless’	- <i>Gu:G</i> ‘be fussy (baby)’
- <i>ch’e:t</i> ‘be silly’	- <i>Gi:nq’s</i> ‘creak’
- <i>ch’a:k</i> ‘be knotty (wood)’	- <i>q’a:ch</i> ‘have heartburn’
- <i>ch’a:q</i> ‘hear’	- <i>q’e:g</i> ‘shout angrily’
- <i>she:t</i> ‘scrape cambium’	- <i>q’e:k</i> ‘be angry’
- <i>sha:t</i> ‘be soggy’	- <i>Xe:dj</i> ‘make spark with stone’
- <i>shu:t</i> ‘vault’	- <i>Xa:sh-g</i> ‘gnaw’
- <i>ga:G</i> ‘mix with water’	- <i>we:g</i> ‘slice babiche’
- <i>ku:nch</i> ‘fart’	- <i>a:t</i> ‘be rare, bawl’
- <i>ki:nq</i> ‘be shy’	- <i>a:G</i> ‘tire of’
- <i>ki:nX</i> ‘weep’	- <i>a:nG</i> ‘be feeble with age’

The relative frequency of the four vowel timbres differs from the norm, as shown in §7.2, especially in that the relative frequency of /e:/, 20% generally, is here 14/38 or 38%, significantly higher. That figure certainly supports the notion that some of these stems attested only as /CV:C/ are indeed expanded by the persistent, at least historically.

#### 15.4.1 Morphology of the persistent

The morphology of the persistent is extremely simple. It has the usual Active morphology, no special prefixation, and no special suffixation, but only expansion of the stem vowel V’, Vh, to V:, reduced vowel to e:, so far as known. I.e., there is no reason to believe that expansion for the persistent should be seen as in any way different from that in the customary, q.v. §15.5.3 for details.

There is a probable trace of the mode-aspect prefix *i-* ~ in two nominalizations with persistent and possibly persistent verb stems, *shi:nda*’ *lAXi’Lch’e:*’ ‘small hemlock species’, and *qa*’ *lAXi’she:t*’ ‘plant species’, q.v. in the dictionary. The first is definitely with expanded stem, *-ch’e*’ ‘red’, the second possibly so, *-she:t*’ ‘scrape cambium’.

#### 15.4.2 Semantics of the persistent

The persistent most often seems to refer to multiple actions, repeated not at regular intervals as in the case of the customary, but on a single occasion, e.g. on a single object or

a succession of similar objects. It is also distinguished from the repetitive in not referring to rapid motions, e.g. back and forth, or trying to reach a goal, but rather to deliberate multiple acts. It is distinguished, further, from the prefix *qA-XA-* that refers to multiple motions by implying neither derision nor emphasis on plural actions needed to accomplish a single goal.

Here, perhaps with some uncertainty, is included another small semantic group. In June 1987, with Sophie Borodkin and her alone, it was discovered that the basic locomotion verbs *-a* '(sg) go, walk', *- 'a'ch*' '(pl) go, walk', *-qe* 'go by boat', *-we* 'swim', can be used in the Active imperfective with lengthened or expanded stem in the sense which is perhaps best expressed as insistence on traveling by the specific mode indicated by the stem. Further, this seems to be as opposed to the non-lengthened Active imperfective, with usitative sense. Sophie showed some uncertainty and inconsistency in this, and these forms were never heard from speakers interviewed earlier, nor could they be confirmed afterward with Marie. Nevertheless, the foregoing conclusion seems to account best for the data at hand.

These data will be presented in §15.4.2.1 below in an attempt at semantic classification, not an easy task. The result will perhaps also present a rounded picture of the appropriateness, or lack thereof, of the label "persistive".

It should be noted that to some degree, the persistive can be used in potentially all mode-aspects of the Active conjugation, as attested in the imperfective, perfective, imperative, and optative. Lack of instances in the conditional and desiderative is most probably fortuitous. Note further that the persistive differs from the customary also in being thematizable, whereas the customary never is thematized. The persistive also differs from the customary in that the persistive occurs in its share of nominalizations as well as proper names.

The persistive is attested in combination with other derivations, e.g. the *yAX* perambulative. It is attested together with *-g* repetitive, though with some inconsistency, perhaps depending on the degree of thematization of the repetitive. Whether it can co-occur with the usitative and/or customary is moot, morphologically and perhaps even semantically, except for the customary with *AN-* or *'i-* prefixation. Customaries with zero prefixation can hardly be regarded as "persistive customaries," however, given the freedom of variation between zero and at least *AN-* prefixation in the customary.

#### 15.4.2.1 Plurality of object and/or actions

Grouping of examples of the persistive in some semblance of semantic subclasses follows. For what is the largest group, it is probably pointless and impossible to distinguish between action on plural objects and plural acts, e.g. plural similar acts on a single object and plural similar acts on a succession of similar objects. In some cases this is specified one way or another merely by the glossing. However, such cases were not checked for other interpretations.

(33) Plural acts on single object

*sishe:gL* ‘I bent it in lots of places’ (O-*she’g* ‘bend O’)

and especially several instances with verb *-le’g* ‘move hand’, O-*le’g* ‘touch O with hand’ (cf. *’i-’e’dz* ‘move foot’, O-*’e’dz* ‘touch with foot’, below)

*’uq’ li’ xle:g* ‘I’m petting it’ (o-*q’ li’ -le’g* ‘move hand on o toward tail end’; cf.

*’u:na’q’ li’ sile’gL* ‘I petted it (one stroke, on head)’)

*’uq’ li’ qu’xle:g* ‘I’ll pet it’

*’uq’ li’ ’Ale:g* ‘pet it!’

*xule:ginh* ‘he’s massaging me’

*xu:le:g* ‘massage me!’

*xuyi:le:g* ‘massage my hand!’

*’Adqi:dAxdAle:g* ‘I’m massaging my foot’.

In the examples in (33) the sense is shifting to durativity or intensivity. This can progress even into further derivation with Inceptive perfective (progressive) durative: *’Aw ya:X GAle:gL* ‘he’s eating it all up’ (where *ya:X* indicates ‘consumption’). The same doubly derived verb with plural object gloss *Xu’ GAle:gLinh* ‘she’s making beds’ (*Xu’* ‘aright’) was accepted by Lena, but noted “but doesn’t like this,” surely not because of plural objects, but rather because of the double degree of derivation.

(34) Other instances of specified singular object

*qa’ qi:li:xa:d* ‘pull it (rope) out (in several motions)!’ (O-*Xahd* ‘pull/drag O lengthwise’)

*’iLXa:dinh* ‘drag him (some distance) in a sled!’ (with apparently exceptional *i*-imperative, still referring to several motions?, but cf. below)

*qa:nch’ xXa:ts’* ‘I’m trying to lace it up’ (shoe, O-*Xa’ts’* ‘lace, loosely stitch O’), loosely glossed, presumably referring rather to duration or repeated motions

Many instances are glossed with reference specifically to plural objects (35). Some of these by semantic necessity refer to plural actions as well.

(35) Plural objects

*ya:nch’ qAdla:siLdza:tl’L* ‘I put a lot of stakes in’ (O-*dza’tl’* ‘drive O (stake)’)

*’iLq’ dAXe:d*, a dog’s name, lit. ‘takes things apart’ (thus translated by Lena, but gloss should perhaps be ‘comes apart from on one another, with *-XAd* meaning ‘come apart’)

*k’uxLku:d* ‘I’m doing the dishes’, *’uch’a:X k’uxLk’u:dinh* ‘I’m helping her with the dishes’ (O-*L-k’uhd* ~ *-k’u’d* ‘wipe O’).

Most such instances are semantically such that though a singular act on plural objects together is possible, such is not specified, and the verb presumably at least can and perhaps always does refer to plural acts on a succession of similar object (pluractionality), as in (36).

## (36) Pluractionality

*Li'q' ya:yu: ta'ch' xLtsi:nd* 'I threw everything in the water (one after the other)  
(O-L-*tsinhd* 'throw/flip pl O')

*XAWa:shiyah Li'q' ya:yu: siXa' ya' sA'a:tl'L* 'that mutt chewed up all my stuff'  
(O-'a'tl' 'chew O')

*'u:dAX 'Aw li' sALXa:dL* '(dog) dragged it (food) way in (under the bed, presumably  
in several trips?)'

*'a:ndAX xLXa:d* 'I'm dragging (them) along here (several trips)' (cf. *'a:ndAX  
GAXLXahdL* 'id., one trip')

*GAXLXa:dL* 'I'm dragging them (in several trips all day long)' (Lena, doubly  
derived, persistive and durative progressive, no objection this time)

*siLXa:dL* 'I dragged them (several trips)' (cf. *siLXahdL* 'I dragged it/them, one trip')

*'u:ch' 'ALXa:d* 'pull them there!' (not *\*iLXa:d*, but cf. above (34), not *\*GALXa:d*; cf.  
though *'u:ch' iLXahd* or *'ALXahd* or *GALXahd* 'pull it/them there, one trip!')

*da: 'i:LXa:d* 'let's drag them (several trips)', Active optative.

One other locomotion verb is well documented in this way for the persistive, O-L-*Xe'dz* 'shoulder O, pick up onto shoulder and/or carry on shoulder'. See (37) for examples thereof.

(37) Persistive with O-L-*Xe'dz* 'carry on shoulder'

*tsa' XAdi:LXe:dz* (or *XAda:LXe:dz*, by lax rule) 'shoulder them (logs) down to shore  
(presumably several trips)!

*ya'X XAdi:LXe:dz* 'pick them (logs) up onto your shoulder!'

*'u:ch' 'ALXe:dz* 'shoulder them there (several trips)!

*'ALXe:dz* 'shoulder them!' (not *\*iLXe:dz* or *\*GALXe:dz*)

*'u:da' siLXe:dzL* 'I shouldered them there (several trips)'

*Xi:ch' xLXe:dz* 'I'm shouldering them yonder (several trips)' (cf. *Xi:ch' GAXLXe'dzL*  
'I'm shouldering it/them yonder (one trip)')

*yAX 'ALAXe:dz* 'carry it about on you shoulder!' (more than once?) (also combined  
with *yAX* perambulative)

Another verb, *'i-'e'dz* 'move foot', O-*'e'dz* 'touch O with foot' (cf. (32), *-le'g* 'move hand,  
O-*le'g* 'touch with hand'), is fairly well attested in the persistive, with reference to singular  
and/or plural object, with plural movements, cf. (38).

(38) Persistive with *'i-'e'dz* 'move foot' and O-*'e'dz* 'touch O with foot'

*ya:nch' 'A'e:dz* 'push it down with your foot (in several movements)!

*'u:ch' xL'e:dz* 'I'm moving them there with my foot'

'u:dAX yAX xLA'e:dzX 'I'm moving them about there with my foot' (combined with yAX perambulative)

ya'X 'i'e:dz 'lift your foot (repeatedly, or one after the other)!' (cf. ya'X 'i'e:dz 'lift your foot/feet (once)!')

ya'Xu: yAX xuqu'qi:di:L'e:dz 'don't keep stepping on my feet' (cf. ya'Xu: yAX xuqu'qi:di:L'e:dz 'don't step on my foot (even once)')

Finally, one colorful quotation vividly remembered by Lena: 'ilA'e:dz da:X 'uXa'X 'isALxut'L, Gus Nelson's comment on her poor riflery, 'it (duck) was stepping (persistently!) on your head and you missed it'.

#### 15.4.2.2 Persistence, intensity, duration

In a fair number of instances, especially with intransitive verbs, it is difficult to discern either multiple objects or motions, such that the reference appears to be more toward persistence, intensity, or duration. E.g. ya' da:LAde:x 'quiet down!' (from Rezanov only, theme ya' d-LA-dux 'quiet down, stop making noise'), 'u:d da: tu:ch' 'we lie there' (in attempt to elicit usitative, correctly in dA'a:nd da: tu'ch' 'we lie right here (this is our bed)', which Marie then prefers for this usitative meaning). Likewise here belongs sich' gulAXu:ts' 'he's splashing water at me (lots, for a long time)', this elicited also in Active perfective, Inceptive imperfective, Active optative (cf. O-Xu'ts' 'slap O'). Another probable instance, either with Inceptive perfective stative not shifted to Active imperfective, or more likely shifted back by durative progressive derivation, is sitl' 'iGAXa:sL 'it's itching me (for a long time)', longer than GAxXAw'a'sL 'I itch', also yisiXa:sL 'my hand long itched' (where -Xa:s is presumably the expanded form of -XAw'a's < \*-Xwa's).

There are two more verbs with some quantity of documentation that are somewhat problematical with respect to the semantic difference between expanded and non-expanded stem, vague perhaps in different ways. One is LA-Xu'G 'exert effort', an Inceptive perfective stative. See, e.g., the examples in (39).

(39) Semantic problems with LA-Xu'G 'exert effort'

'uwahd GAxLAXu'GL 'I'm straining at it'

persistive xLAXu:G 'I'm straining at it (long, with repeated efforts)'

GAxLAXu:GL, once, doubly derived, but Lena clearly prefers the two preceding

'uwahd 'ALAXu:G 'strain at it!'

xsLiXu:GL 'I strained at it'

dALAXu:Ginh 'he's yelling at the top of his voice'

disLiXu:GLinh 'he yelled long and loud' (cf. disLiXu'Glih 'he raised his voice, once').

The other such verb is basically in two themes, d-LA-'u'G 'breathe' and reflexive 'Ad-LA-'u'G 'rest oneself'. In both of these the semantic distinction between -'u'G and

persistive *-’u:G* seems to be at least partly lost, the glosses failing to show any clear pattern. In the former, the *d-* qualifier, probably ‘oral’, very often takes on an entirely irregular form *di’-*, which seems not to be related in any but a formal way with *d-* qualifier plus any identifiable prefix *’i-*. See the examples in (40).

(40) Forms with irregular *di’-*

*dALA’u:G(inh)* or *di’LA’u:G(inh)* ‘is breathing’

*sahdX disLi’u’GLinh* ‘he lived a long time’ (surely durational progressive yet not persistive)

*sahdXshgahX di’GALi’u’G* ‘I hope you live long’

*dik’ sahdX qu’di’xLA’u:GG* ‘I wont live long’

*li’X di’GALA’u:G* ‘take a deep breath!’ (imperative)

*ch’a’ di’GALA’u’G* ‘take a deep breath!’

*dAqa:yu: qa:nch’ di’LA’u:G* ‘take a deep breath every once in a while!’ (where *di’-* could be from the *’i-* imperative)

*di’LA’u:G, da:LA’u:G, da:nLA’u’G* ‘breathe!’

The glossing fails to specify singular or plural breaths, but given the preceding forms and glosses, no correlation seems likely. With the reflexive theme ‘rest oneself’ there is perhaps a clearer pattern, with non-expanded stem in only one form, *’AdGALA’u’G* ‘take a rest!’, twice from Lena, the second glossed ‘take a (single) rest!’. However, this theme is otherwise usually with expanded stem: e.g. *’AdALA’u:G, ’Ada:LA’u:G* ‘take a rest!’, *dA’Alga’kih ’Ada:LA’u:G* ‘take a short rest (for a second)!’, along with exceptional(?) *’Adya:ndA’u’G* ‘rest your hand!’.

Perhaps unique in seeming to have a fully thematized persistive is the Inceptive perfective stative *-ch’ehX* ‘have mouth open’, where the persistive seems rather regularly to mean ‘yawn’. This certainly can not be in the sense of deliberate repeated actions, but is more possibly so in the sense of durativity, though hardly that in comparison with the Inceptive perfective stative: *dAxLch’e:X* ‘I’m yawning’ (cf. Inceptive perfective stative *dAGAxLch’ehXL* ‘I have my mouth open’). We even have the persistive itself also doubly derived with durative progressive *dAGAxLch’e:XL* ‘I’m yawning constantly’. Finally, this persistive is often found with *tsu’d* ‘sleep’, ‘sleepily’ (adverbial): *tsu’d disilch’e:XL* ‘I yawned sleepily’.

#### 15.4.2.3 Persistent and repetitive

There is a fair number of instances of persistive combined with *-g* repetitive. One might itself be thematized as such: *’Aw siya: ya’ ’a:tl’ginh* ‘she’s chewing it up / masticating that for me (mother for baby)’. The repetitive is perhaps gratuitous in *Lich’ ’ilch’ dAle:gginu:* ‘they’re always fighting’, *Lich’ ham ’a’le:gginh* ‘she keeps buying ham’. In *gahX ye’X qi:dAxL’u:dzg* ‘all day long my foot’s been asleep’, which was aggressively elicited on the



basis of *qi:disiL'uhdzgL* 'my foot's asleep' and *si'uhdzgL* 'I'm a bit high' (both Active (s-) perfective stative); the -g repetitive is itself probably thematized in the underlying theme; this persistent is accepted by Lena with acquiescent "I guess that's OK."

In the case of one verb with thematized repetitive, *L'ts'a'tl'g*, *GALts'a'tl'gL* 'it's dripping, leaking' we have *gulALts'a'tl'g* 'it's leaking (in many places)', persistent retaining the -g. Further related are probably \**Ga:nts'a'tl'g* 'muddy/wet terrain' (older sources only), thence *ts'a'tl'(g)(L)* 'baby basket' < '(diaper) moss'.

There is one clear example of persistent with -g repetitive on an open variable stem of the type CV', where resulting CV'g becomes CV:g. Thus from *'id qu'xLde'g* 'I'll teach you it' we have *'id qu'xLde:g* 'I'll teach you it all day long'.

From the noun *Lu'ch* 'blister', and e.g. *LAGAxDALu'ch'L* 'my face is swelling', we have also not only *GAdALu:ch'L* 'it's swelling' with no special gloss for the persistent, but also that with repetitive, *GAdALu:ch'gL* 'it swells bad'.

From O-*ts'u'ts-g* 'suck O, on O; smokes O (tobacco)', with thematized -g repetitive, we have persistent *dA'u:dAnuh 'Aw 'i:tsu:ts'ginh* 'OK I give up, let him smoke them', an Active optative. In another theme with that stem we have much freer variation between full and expanded stem: e.g. *dALAts'u'ts'g* and *dALAts'u:ts'g*, both glossed 'it's making a sucking noise, squeaking noise', 'it's making a hissing sucking noise'. With this theme or homophone thereof, and preverbal o-X 'in (non-punctual) contact with o', so 'stick, adhere to o by suction', appearing in Neuter perfective as well as Active perfective, the repetitive understandably becomes optional at least with the non-persistent. E.g. *'iya:X diLits'u'ts'L* 'it's stuck to your hand', along with *siqi:da:X disLits'u'ts'gL* 'it stuck to my foot'. The one persistent we have is non-repetitive: *da:X diLits'u:ts'L* 'it's stuck (to indeterminate o), it adheres', Neuter perfective. The fact that these remain at all in the Neuter perfective, rather than switching to Active imperfective, may be an important point for Eyak grammar and the status of Neuter perfective as a verb class. This is so as well for the description of what have here been called Active derivations, given that even some may allow a theme to remain in the Neuter perfective.

There is a clear alternation, rather than option, between repetitive and persistent with *k'u:su't'g* 'slurp (something)!' (e.g. suck in noodle), *k'uqu'xsu't'g* 'I'll slurp (something)', repetitive without persistent on the one hand, and on the other, persistent without repetitive, *k'u:su:t'* 'slurp (something)!', *li' dAsu:t'* 'you're slurping it down', *guli:su:t'* 'slurp it (liquid)!'.

Such mutual exclusivity between persistent and repetitive is far less clear, not only with stem *-ts'u'ts' ~ -ts'u:ts'* above, but in a different way also in verb themes with the stem *-ch'u:ch' ~ -ch'u'ch'*. Note the noun *ch'u:ch'* 'snail, conch', also *ch'u:ch'ALAk'ih* 'small bird species', anatomical *-ni:k'AdAchu:ch'* 'philtrum' (vertical indentation between upper lip and nose). One theme with this stem is always persistent: e.g. *qa' xuGach'u:ch'* 'pinch me!' (often with preverbal *qa'* 'up out'), attested also together with repetitive in *qa:nch' ixch'u:ch'g* 'I'm pinching you with a twisting pulling motion', which probably refers to more than one such pinch. With this stem usually in the persistent also is a pair of themes, often with preverbal *ya'* 'completely', so *-ch'u'ch'* 'bending, twisting, crumpling'. One such

theme, not freely used, is attested only in the Neuter perfective: *ya' 'i:ch'u:ch'L* 'it's all bent up (and been that way a long time)'. Another is more freely used, Neuter perfective *'iLich'u:ch'L*, *ya' 'iLich'u:chL* 'it's all bent up', also *ya' yixsLich'u:ch'L* 'my hand got all twisted, gnarled'. With this in the causative/transitive, Lena prefers the same, persistent, without repetitive, e.g. *ya' GALch'u:ch'* 'bend it all up!', while Marie uses non-persistent, albeit also without repetitive: *ya' GALch'u'ch'* 'bend it all up!', *ya' qu'xLch'u'ch'* 'I'll bend it all up', except in the Active imperfective *ya' xLchu'ch'g* 'I'm bending it all up'.

A unique theme with expanded persistent stem partly thematized or generalized is *LAXxLixa:s* 'I'm afraid', Neuter imperfective but irregular in missing the /i/ expected after the /X/, so looking like a blend of Active and Neuter imperfective. In the causative retaining the expanded stem this takes a repetitive suffix: *LAXAxLxa:sginh* 'I'm scaring him', regular Active imperfective. However, we do find *-xa's* or *-xahs*, the unexpanded stem sometimes in the Active and Inceptive perfective (often *-xahs*) and Inceptive imperfective (often *-xa's*, once even with repetitive *-xa'sg*). Note also the noun *xa:s* 'taboo'.

#### 15.4.2.4 Nouns and persistent

On the border between noun and verb is the stem *(-)ch'e'* 'feces; defecate', both possessed and non-possessed as a noun, and expandable to *-ch'e'* as a derived verb, perhaps also as a noun. From the verb is a derived theme, reflexive *'Ad-dA-ch'e'* 'rust', e.g. *'Ads dich'e'L* 'it's rusted, rusty; it got rusty' in the Active perfective stative. This is sometimes expanded, e.g. *'Ads dich'e:L*, same gloss, but once *'AdAdiche:L* 'it's got lots of rusty spots', a Neuter perfective clearly with persistent meaning. Then always with expanded stem are verb themes and some nouns referring to the color red. Verbs include the following: *qu'lAXAdAch'e'* '(berries) will get red', *'Adi:ndAch'i:n'inh* (even *'Adi:ndAch'e':inh*) 'she's rouging her face'; nominalization *shi:da'lAXi'Lch'e'* 'small hemlock' < 'up the creeks, berries red', with problematic prefixation, including *'i-* as in some customaries, the only such case. Non-verbal are probably *k'udALch'e':L*, *k'udALch'e':* 'egg yolk', *XAdich'e':* ~ *XAdAch'e':* 'red-tip clam', *dla:ch'e':* 'red snapper' ('rock-red'), from which we have the standard term *dla:ch'e':ga'* - *'t'e'* ~ 'be like red-snapper' for 'red'. Note also the nouns *ts'a:tl'g* 'baby-nasket' < 'diaper moss', *Ga:nts'a:tl'g* 'muddy ground', cf. *L-ts'a:tl'-g* 'leak, drip'; and *-Xe'* ~ *-Xe:* 'be greasy, grease/smear/paint O', derived from the noun *Xe:*, possessed *-Xe'*. In all these the variation very probably involves persistent.

There are at least two noun stems with vowels expanded as in the persistent. One such is *-dA-'u:G* 'breath; life breath' (cf. 40, and also *-dA-'uGL* 'heart', instead with reduced stem). The other is *qu' LXa:d(L)* 'bow (for arrows)', with expanded stem from *O-Xahd* 'pull O', prefixation unclear. A nominalization but irregular in both showing instrumental *-L* and retaining *L-* classifier is *tsidl dALXa:dL* 'duck species (teal or female mallard)' < 'dragging boards'.

Some nominalizations of verbs with expanded stems are not easy to explain clearly as persistives. One is *k'u:na'q' li' tse:tl'* 'meat still left on fat of skinned seal; meat left on

sealskin' < *-tsitl'*, < 'slides (down) over the head (and neck) toward the tail of something'. Another is the personal name of Old Man Dude, *'iLu' dAse:d* < *-sid* 'plural extend through (holes in) each other'; cf. also dog's name above (35), *'iLq' dAXe:d* < 'they come apart from on top of each other'.

Three other such nominalizations are much easier to explain: *qe'xu:tl'* 'porpoise' < *qa' i-xu'tl'* 'emerge blowing' < *O-xu'tl'* 'blow on O', *qa:nch' 'a:ch'* 'spring' < 'they (animals) emerge', and *sitl'a:ch'inh* 'my would-be seducer' < *sitl' 'a:chinh* 'he who would (persistently like to) go with me'.

We have at least one instance of the persistent in a gerund: *yAX 'ixet'(X?)L* 'shooting (gun) about', q.v. in the dictionary under the stem *xut'*.

#### 15.4.2.5 Persistent in locomotion verbs

This leads finally to field sessions, June 1987, with Sophie Borodkin. As mentioned in §3.3.10.6, she is the only source for what are included here, with some uncertainty, as persistives of locomotion verbs. These involve not only expanded *-'a:ch'* '(pl) go/walk', but also the open variable stems *-a:* '(sg) go/walk', *-qe:* 'go by boat', and *-we:* 'swim'. There are of course many instances throughout the corpus of lengthened variable open stems, e.g. *dAle:* 'says' instead of *dAleh*, but these are merely expressive or random, and especially frequent, even usual, with suffixes, e.g. negative *-G*. However, these open variable expanded stems were quite special in Active imperfective locomotion verbs. Such are necessarily derived. They are moreover distinct from such Active imperfectives *-ah* '(sg) go/walk', *qeh* 'go by boat', *weh* 'swim', with non-expanded vowel of the usitative, e.g. *'u:ch' da: qeh* 'we boat thither' (translated as 'we go there' by Sophie, i.e. 'there is where we boat to'), as opposed to those with lengthened stem, e.g. *'u:ch' da: qe:* 'we're going there by boat', with the comment "we're doing it now". This contrast becomes somewhat clearer with such responses as *'u:ch' xa:* 'I'm walking over there right now [and somebody asks me if I want a lift]', and *dik', 'u:ch' xwe:*, translated by Sophie as 'no thanks [for boat ride offer], I'm swimming there', i.e. most probably 'I insist on swimming there, going there by swimming'. I was partly uninformed at the time, especially to begin with, especially with regard to the potential of the persistent. The elicitation was probably rather aimed at getting Active imperfectives of locomotion verbs, especially usitative, where such are marginal (unlike the case with postural themes, e.g. *'and xteh* 'I lie here, this is my sleeping-place'). There were many inconsistent or uncertain responses at this late stage of Eyak for Sophie. However, several considerations point to the strong probability that Sophie was remembering a contrast in open locomotion stems that CV: reflects persistent while CVh reflects usitative. First, there is the very fact that she could utter e.g. *da: qeh* and *da: qe:*, and utter those as distinct from each other with any consistency. Second, non-expansion is otherwise attested for the usitative, and expansion is otherwise attested for the persistent. Third, Sophie clearly hints in those two expanded instances about turning down a ride, so to continue the intended mode of locomotion. This at least strongly suggests some kind of special meaning for the expanded stem, which could be classed with the persistent.

#### 15.4.2.6 Origin of O-L-ya:’ ‘handle O in plural acts’

There is the special high-frequency action verb theme O-L-ya:’ ‘handle O in plural acts’, which should probably be regarded as a special thematized persistive version of the classificatory theme O-L-(y)a ‘handle plural O’, itself very frequent. The O-L-ya:’ seems phonologically irregular especially in having final glottal stop, whereas it is O-L-(y)a that is especially irregular in deleting /y/ immediately after /L/. Both themes have for some reason a fully thematized L- classifier, greatly increasing the *a priori* likelihood of a relationship. It only remains to relate the stem ya:’ with the (y)a. The expansion of the ya:’ is presumably the persistive, of course, so it only remains to explain the final glottal stop. The simplest explanation has already been noted in the Phonology above, under the account of stem shapes. No verb stem may be basically of the shape CV:. Noun stems of that shape are converted to CV:’ in the process conversion to verbs: e.g. *ma:* ‘lake’, O-L-*ma:*’ ‘make O (lake)’. Whereas the simple CV: expansion of the open stem motion verbs cited just above from Sophie is a regular stem variant, whereas in O-L-ya:’ the stem is thematized or lexicalized as basic, as in the case of O-L-*ma:*’ ‘make O (lake)’, not the case in the open-stem motion verbs. A further argument might be made from the phonology. There is no phonological contrast possible between -V:C’ and -V:’C’. The customary of O-L-(y)a with D-element in the classifier, LA-ya:-k’, dA-ya:-k’ would be indistinguishable from that with stem -ya:’-. Thus O-L-ya:’ could then conceivably be partly a back-formation, analogical with the customary.

### 15.5 Customary

The Eyak Customary is an Active derivation, applicable to verb themes of any class, which therewith makes them a derived action theme. Examples will be seen in this section of such applied to motion and stative verbs, as well, of course, as to underlying action themes.

The “corpus” here, so far, means only that of 1963-65, in the ledger, since there was no systematic further investigation of the customary as such in later fieldwork, although there are surely further instances of it, probably at least a hundred of them, especially in the later texts.

#### 15.5.1 Semantics of the customary

The meaning of the customary is that the verbal action is marked as taking place at regular intervals, repeatedly. This can be translated normally by the English simple present, e.g. ‘I eat fish’, as opposed, of course, to ‘I am eating fish’. It so happens the convention throughout the Eyak dictionary and grammar chapters is also to use that English simple present in glossing lexemes abstractly, but in this chapter it is to be taken literally, and the usual abbreviation “(cust),” to be found throughout the fieldnotes in specific glosses, is here omitted.

The meaning of the customary contrasts with that of the repetitive, also an Active derivation, in that the repetitive refers rather to repeated movements, often rapid ones, on a single occasion, and/or in the sense of ‘trying to V’ or ‘trying to reach a point by V-ing’, e.g. by such repeated motions. As the repetitive can also be glossed ‘intermittently, occasionally’, the customary by contrast implies more regular intervals. The repetitive is often thematized or lexicalized, whereas the customary never is. Moreover, the repetitive and customary rather frequently co-occur, presumably with the meaning ‘V repeatedly at regular intervals’. “Regular intervals” of course has the range of meaning from ‘generally’, ‘always’, to ‘every Sunday’, ‘whenever possible’, e.g. *te’ya’ XAxa:k* ‘I eat fish’.

The customary contrasts semantically also with the usitative, another Active derivation, in that the usitative refers to a usage, e.g. *’a:nd xteh* ‘I lie here, this is my sleeping-place’ as opposed to customary *’a:nd xte:k* ‘I lie here (often) / (on Sundays)’. Accordingly, it is the usitative, not customary, which is used in lexicalized nominalizations or relativizations, e.g. *qa: Xinhinu* ‘cannibals’ < ‘they who eat us’ (or non-usitative ‘they are eating us; they who are eating us’), not customary *qa: Xa:k’inu*, which means only ‘they eat us; they who eat us’. Likewise usitative and not customary, can become instrumental relativizations, e.g. *’uq’ k’uteh* ‘bed’ < ‘that on which someone lies’, *’uX k’udAwa’ts* ‘whip’ < ‘that by means of which someone is whipped’, for which see §18.13.3 on instrumentals. Though the matter was probably not specifically tested, both instrumental relativizations and customaries are abundant enough that it seems clear and significant that no such relativizations are attested with a verb in the customary. We even have a sentence demonstrating the principle: *yAX ’AdAxuLX da: ’u’li:’eh, dA’a: yAX ’idAxe:Lk* ‘we call it a barrel (‘it rolls around’, non-customary), because it rolls around (customary)’ (or both passive, ‘is rolled around’). The semantic contrast between usitative and customary might have been made more explicit had the term ‘habitual’ been picked instead of ‘customary’.

The Customary is abundantly attested in the Active imperfective, with perhaps a thousand instances. However, its occurrence in other mode-aspects was not systematically investigated, leaving some questions that probably cannot be answered. There are about two dozen instances in Inceptive imperfective (‘future’), not surprisingly, given that the ‘future’ is a relatively recent development. There are only 16 imperatives (7 Active *A*- and 9 Inceptive *GA*-), 13 optatives (11 Active, 1 Inceptive, one important anomaly), no perfectives, and no clear conditionals or desideratives.<sup>8</sup> However, the absence of clear customary desideratives, also perhaps not specifically tested, given the paucity e.g. even of imperatives, cannot be statistically interpreted. The absence of customary conditionals, on the other hand, is very probably not accidental. There are many instances of the conditional attested in the customary sense of ‘whenever’, in fact explicitly so. Though probably no

<sup>8</sup> The fact that there are no perfectives is probably significant, even though there is no record of that having been tested—I have a vague memory, which I cannot trust, of those proposed being rejected.

conditional customary may actually have been proposed, it seems probable that such would have been rejected.

### 15.5.2 Customary with *o-ya:X* ‘lest o’

There is one other use of the customary, semantically quite unexpected, given all of the above. That is the use of customary in clauses subordinated to the postposition *o-ya:X* ‘avoiding o’, here with the meaning ‘lest’ (the action of the verb take place, ‘so that not’). The subordinated verb is in the usual Active imperfective customary, but apparently without any reference to action repeated at intervals, i.e. not specifically ‘lest ever, so that never’ or of course ‘lest action take place repeatedly at intervals (but fine if it takes place once)’. We have only ten instances of such clauses with *o-ya:X*, and five of them are with customary, five without. The instances with customary are presented in (41).

(41) Customary with *o-ya:X* ‘lest o’

*'Aw qAmAXch'LdA'e' 'a:k'ya:X* ‘lest he walk into that hole in the ice’

*dAche:k'ya:X* ‘lest he hunger’

*'ALts'i:nt'k'ya:X* ‘lest it sink’

*xuli:gu:k'k'ya:X* ‘lest he punch me’

*xu:she:k'ya:X 'uya:X 'Adla:xsLi'ehL* ‘I stole away from him so he wouldn’t kill me’

These five instances with customary are no more marked semantically as referring to action repeated at intervals than are the five without customary. Although there is no specific record of the matter being investigated as such, the glossing here does not suggest any specific semantic reason for the customary. The statistics, however, strongly suggest a special preference for the customary in clauses subordinated by *o-ya:X*, and just this one postposition, none other, as far as we know. The reason for this preference seems in no way clearly related to the meaning otherwise attested for the customary, suggesting either a separate type of customary or even a homophone.

In addition to the ten instances from the 1963–5 corpus, we find two more in late investigation with Anna, 6/19/72. She used the customary in both examples of a pair where the main clause was in the contrasting Active perfective and Inceptive imperfective (‘future’): *'Axx'a:dk'ya:X dik' 'AxsdAlahLG* ‘I didn’t drink it, lest I get sick (so I wouldn’t get sick)’, *'Axx'a:dk'ya:X dik' qu'xdAlahG* ‘I wont drink it, lest I get sick (so I won’t get sick)’, showing that that contrast had no effect on the preference for customary in subordination to *o-ya:X*.

### 15.5.3 Morphology of the customary

#### 15.5.3.1 Suffix *-k'* and expansion of stem

Unique to and definitive of the customary is *-k'* suffixed to the stem, in all cases.

The customary shares, uniquely with the persistive, expansion of the verb stem in all cases. This expansion requires that any stem nucleus become V:, i.e. that all full vowels, V:, Vh, V', and also V:', become V:, keeping their quality (/i, e, a, u/) and nasality, if present, thus e.g. *-tsu'd* ~ *-tsuhd* 'sleep' becomes *-tsu:d-k'*, thus also *-ku:n'd* 'grab' becomes *-ku:nd-k'*.

Contrast between reduced vowels is secondary in verb stems (except those beginning with a glottal stop). Such stems in principle expand to /e:/ or probably all can (or once could) so expand. There is therefore a strong argument that reduced verb stem vowel (schwa) should have been represented in the practical orthography with the symbol <E> rather than <A>, as Leer does for Athabaskan or Proto-Athabaskan. However, that same choice for Eyak prefix vowels cannot be justified, since schwa in prefixes never alternates with /e:/, but only with /a'/ or /a:/ or /i:/. Beside the stable contrast between reduced vowels /A, i, u/ in stems beginning with a glottal stop, a secondary contrast between /u/ and /i, A/ in stems has developed with the loss or reduction of contrast between labialized and non-labialized front velars (initial and/or final). Also there is the strong tendency to polarization of schwa to [A] or alpha (with uvulars) and to [u] (especially between coronals), probably under the influence of Tlingit and/or English. That ambivalence is probably what has given rise to a certain amount of variation, probably rather recent, in the expansion of reduced verb stem vowels. Those were therefore rather extensively tested, though not systematically, with the following results.

The reduced vowel of all verb stems with initial or final uvulars, phonetically /A/ expands to /e:/ (about 20 instances, e.g. *-dAq'* > *-de:q'k'*, *-XAL* > *-Xe:Lk'*), invariably, with one partial exception (see *-guG* below (43)).

The reduced vowel in stems with front velars, initial or final, expands not only to /e:/, but where that reduced vowel is [u] (/u/) from older Eyak labialized front velars, it may sometimes expand instead to /u:/. Of a total of 13 such verb stems, the seven in (42) are attested only expanded to /e:/.

(42) Verbs with older labialized front velars, expand to /e:/ only in the customary

*-dux* 'float' *-tug* 'swell', *-shux* 'extend legs', *-kus* 'wash', *-kug* 'break', *-xutl'* ~ *-xAtl'* 'be blown by wind', *-xul* 'roll'

None in (42) are attested with reduced vowel expanded only to /u:/, but the six in (43) are attested with both /e:/ and /u:/, often with preference for one or the other, itself very often inconsistent.

(43) Verbs with older labialized front velars, expand to either /e:/ or /u:/ in the cust.

*-t'ux* 'hold', *-tl'ug* 'knead', *-dzux* 'stab', *-tsug* 'swell', *-xut'* 'shoot with gun', *-guG* 'tell lie'

For the last verb in (43), *-guG* ‘tell lie’, where the initial labialized velar interestingly once overrides effect of uvular, we have from Sewak and Anna both *-gwe:Gkʷ*, from Lena once *-ge:G*, but who later momentarily prefers *-gu:G*.

We have only four verb stems with non-labialized front velar attested in the customary: *-giL* ‘shrivel’, expanded to *-gi:Lkʷ*; *-gis* ‘roast’ to *-gi:skʷ*; *-sikʷ* ‘hiccough’ to *-si:kʷkʷ*; and *-tʷikʷ* ‘shoot with arrow’, to *-tʷe:kʷkʷ* from Marie, but for which Lena then prefers instead *-tʷi:kʷkʷ*. These four perhaps best belong to the following category with initial and final coronal.

In verb stems with coronals only as onset and coda, the reduced vowel, varying between schwa and iota or [ɪ], that vowel becomes /e:/ and/or /i:/ expanded in the customary. Of 14 different stems of this type, six are attested only with vowel expanded to /i:/, six are attested only with vowel expanded to /e:/, and only two are attested with vowel expanded both to /e:/ and /i:/, cf. (44a–c). If the four stems with non-labialized velar (previous paragraph) are added, the figures become 9 with /i:/ only, 6 with /e:/ only, and 3 with both.

(44) Verbs with coronal onset and coda

- a. Expand to /i:/ only in customary:

*-tʷichʷ* ‘prop (fish) open’, *-chʷishtʷ* ‘(fly) lays eggs’, *-shitlʷ* ‘abrade’, *-shishʷ* ‘sip’,  
*-witlʷ* ‘be startled’, *-litsʷ* ‘be smooth’

- b. Expand to /e:/ only in customary:

*-tʷitsʷ* ‘freeze’, *-tlʷishʷ* ‘be shiny’, *-Lidʷ* ‘braid’, *-shilʷ* ‘(fish) swim to surface’, *-wAsʷ*  
‘(non-linear) move, change shape’, *-wAdjʷ* ‘be ashamed’

- c. Expand to either /i:/ or /e:/ in customary: *-tisʷ* ‘tremble’, *-chichʷ* ‘break’

There appears to be no clearly identifiable phonological factor determining these statistics, nor personal difference between the two main sources, Lena and Marie. Most stems without front velars were elicited only once or twice (only one, *-shishʷ* ‘sip’, is attested four times), and it seemed inadvisable to elicit aggressively to determine more decisive preferences in what was clearly a gray area.

Clearly the statistics show nothing but uncertainty or indeterminacy between what was most probably original /e:/ for the expansion of reduced vowels in these verb stems and a more recent expansion to /u:/ or /i:/ (never /a:/) as the reduced vowels took on timbre from labialized or coronal obstruents. For the one verb stem beginning with /ʃ/ attested in the customary with reduced vowel not /A/ (always expanding to /e:/), namely *-ʃiLʷ* ‘pour’, with PAE initial *\*-ʷmgy-*, the customary is *-ʃi:Lkʷ*.

For disyllabic stems with internal sonorant no clear pattern emerges. There are three stems, all perception verbs, that appear to belong to one phonological class as well, with dorsal initial and medial labial sonorant, from which the labialization could have originated, separated from the initial only by /A/, and followed by /i:/ which can drop, e.g. with the negative suffix *-G*. These are *-gAwilʷ* ‘feel’, *-gAmilʷ* ‘taste’, and *-Xawilʷ* ‘believe’.



For these we have customary *-gAwik'* (Lena), *-gAwk'* (Marie), *-gu:k'* (Lena and Marie); *-gAmi:k'* (Lena, Anna); and *-XAwk'* (Lena); i.e. no consistent pattern.

The disyllabic stem most frequently and spontaneously attested in the customary is *-siyu ~ -si: ~ -su:* 'kill many O', possibly from \*-siw at some stage. For this we have customary *-si:k'* (Marie, Anna 11 times in text) and *-siyu:k'* (Lena, Anna 4 times in text), no *\*?-su:k'*. Unlike this item, the remaining disyllabic stems attested in the Customary merely expand the second vowel. For /A/ the evidence is limited but convincing: for *-siyAq'* 'belch' we have *-siye:q'k'*; for *-GAmAt'* and *-GAmAts'* 'twist' (cf. *-GAts'*, with the same meaning 'twist') we have *-q'Ame:st'k'* and *-q'Ame:sk'*, from Anna only, obviously garbled, but consistent. For the vowel /a/ we have *-shiya'* 'be exhausted', *-k'Awahdj'* 'nail', and *-XAma'* 'growl' (the latter two probably from some earlier *\*-k'wahdj* and *\*-Xwa:n* (cf. perhaps *XAwa:* 'dog'), in the customary: *-shiya:k'*, *-k'Awahdj'* and *-XAma:k'*. Cf. however *-XAwa:s'* 'itch', presumably from some earlier *\*-Xwa:s'*; the frequent and thematized persistive of 'itch' is *-Xa:s*, having lost the original labialization in the persistive expansion. We do not have either attested in the customary).<sup>9</sup>

This expansion for the Eyak persistive and customary is evidently a later process than that process or gradation in the PAE verb, mere traces of which persist in the two ablauting Eyak verbs 'be' and 'see', from PAE *\*-t'ew* and *\*-'en*. The full grade of these in Eyak comes out as *-t'eh* and *-'eh*, the reduced grade being reflected as *-t'u'* and *-'an*. Since in the customary these consistently come out *-t'u:k'* and *-'a:nk'*, the customary must come from the PAE reduced rather than full forms of such open stems closed with a sonorant.

### 15.5.3.2 Prefixation with the customary

As noted above, the customary is sparsely attested in paradigms other than the Active imperfective. In all these other than the Active imperfective, and one instance of optative, the customary shows no special prefixation, only the expanded stem and suffix *-k'*. The Active imperfective customary has relatively complex prefixation: a choice of  $\emptyset$ -, *AN*- and *'i*-, seemingly in free variation. That was studied in some detail in the writing of this grammar, and that detail will be presented below, including the examination of the forms with 2s subject pronoun, with indeterminate object, and combinations with the *yAX* perambulative derivation. These details might be said to be covered with in the morphophonology of the prefixes involved, but are nevertheless kept here below in the description of the customary as well. Therewith, some generous citation, especially of scarcer forms, will be included. Since the forms cited here are all in the customary, the convention for glossing will be the English "simple present" without further specifying the semantics. Before dealing with the complexity of the prefixation in the Active imperfective, the other mode-aspects are treated here first.

<sup>9</sup> If we did have attestations in the customary, chances are we would have both *-Xa:sk'* and *\*?-XAwa:sk'*, the latter probably by later (modern) "patterns," since there is no reason to believe that there are originally two different patterns of expansion for the persistive and customary.

### 15.5.4 Usage of the customary

#### 15.5.4.1 Inceptive imperfective

In the Inceptive imperfective (i.e. future) with twenty or so instances, a disproportionate number are with *-she* 'kill sg' and *-siyu* 'kill pl', with which the future has a special use, 'be going/intending to kill', often referring to hunting (see §18.13.6 on the acquisitional). Examples are given in (45).

- (45) Inceptive imperfective customary with *-she* and *-siyu* 'kill'

*xuqa'she:k'inh* 'he's trying to kill me' (Lena)

*'Aw qa'she:k'*, *'Aw qa'she:ɡk'* 'he (Raven) was intending to kill that (eaglet), was bent on killing it' (Anna in text, here poetic use of customary, repeated with addition of repetitive)

*lAXa: k'uqa'siyu:ɡk'* 'will keep killing things for you (pl) [be a good provider]' (Anna, text, again expressively adding repetitive)

Also the prohibitive requires Inceptive imperfective, including some in the customary, cf. (46):

- (46) Inceptive imperfective customary for prohibitive

*ya'Xu: qa: qu'wAsi:k'inu:* 'they must not kill us' (Anna in text)

*ya'Xu: q'e' qa: qu'siyu:k'inu:* 'they must not kill us anymore' (Anna in text)

However, the future customary is adequately attested with other verbs, cf. the examples (47), where the first three appeared in text from Anna.

- (47) Future customary

*'u:ch' qu'wa:k'* 'will go there' = 'will keep going there' (Anna in text)

*'ulAX' iqe'yiL'a:nk'* 'you'll see it' (Anna in text)

*ya'Xu: ... qu'di:le:k'* 'don't say ...' (Anna in text)

*'uXa' qu'xki:nXk'* 'I'll cry over it'

*qu'yiga:k'* 'you'll get (keep getting) tired'

*yAX qu'dAqe:k'inh* 'he'll boat about' (also perambulative)

*dik' iqe'xLXa:Xch'k'G* 'I won't tickle (keep tickling) you'

We also have the following from Neuter imperfective themes: *C dik' k'uqa'Le:k'G* 'C will not exist', *qu'yi:xXa:nk'* 'I'll be fast with my hands'.

### 15.5.4.2 Imperatives

For the imperative customary there are in the corpus seven Active (*AN-*) and nine or ten Inceptive (*GA-*) instances, as noted, and no *'i-* imperatives. Prefixation is as for non-customary imperatives, including *AN-* (Active *Ci-* from prefixes with the structure *CA-* with no syllable intervening before stem, *Ca:(n)-* otherwise). The choice between Active and Inceptive is the same as that exhibited in the non-customary imperative, for which we have the basic contrasting pairs *Lich' ya' 'Ada:k' 'always sit still, stay seated!*' vs. *ya:n' GAda:k' 'sit down!*'<sup>10</sup>. Likewise, adding also repetitive, *ya' 'Ate:gk' 'lie still! vs. keep lying still!, try to lie still!*', *ya:n' GAte:gk' 'lie down!*' with the same semantic range from Lena in elicitation. Another such pair, semantic motivation unclear, and one with added repetitive, probably shows little or no semantic weight for the repetitive, *'u'li:tsa:k' and 'u'GAtsa:gk' 'buy it!*'. Further instances of Inceptive imperative (48) and Active imperative (49) are presented below.

(48) Inceptive imperative

*qa:de:leh Ga:k' 'visit us!* (from *-a ' (sg) go*)  
*yAX GAda:k' 'walk about!, take walks!* (also perambulative)  
*'ud k'uGALA:k'inh 'feed him!* < *'cause him to eat something!*

(49) Active imperative

*wAX di:le:k' 'say thus!*  
*'Adya:ndAke:sk' 'wash your hands!* (reflexive *'Ad-* with anatomical qualifier *y-*,  
*-kus 'wash*)

It is impossible to evaluate the lack of any customary *'i-* imperative here, which was never tested even with motion verbs, e.g. *'a:nch' ? 'iya:k'*, presumable customary of the extremely common *'a:nch' 'iya' 'come here!*', or better *? 'iya:k' 'walk (wherever you go, don't run or ride)!*'.

### 15.5.4.3 Optatives

For the optative customary, we have eleven instances of the Active and only one of the Inceptive. It appears that still less remains of the semantic distinction between optative conjugations than of the imperative ones, that the Active has become much more common or generalized with the customary as well as in other mode/aspects (but not imperative where it's best preserved). The possibility of Inceptive optative instead of Active in the customary was evidently not tested as such. It came up spontaneously, however, in elicitation with Lena, perhaps significantly. Her first response was *'ixitsu:dk'wahd 'so that I might sleep, in order for me to sleep'*, and then *dAwa'dga'shgahX GAxitsu:dk' 'I wish I*

<sup>10</sup> Glossing here again not specifying 'at regular intervals' or the like.

could (get to) sleep quickly/easily', where it seems likely that the latter is in nice contrast to the Active optative in the Inceptive or transitional sense. Further examples (50) show that the prefixation in Active optative with customary is the same as without.

(50) Optative customary

*'i:tsu:dk'inh* 'he should sleep' and *'i:tsu:dk'* 'you should sleep'

*'idila:k'inh* 'he should drink it'

*k'udzu:dahk'a' 'i:litsi:ndzk'* 'do have a nice dream'

*'idila:k'* 'you should drink it'

*GAla:disha:tl'k'* 'you should sweep the floor'

*ya' gu:Liya:nk'* 'you should stand still'

*'id k'uXa:nxiLa:k'* 'let me feed you' and *'id k'uXa:liLa:k'* 'let him feed you'

*da: Xa:nliya:k'* 'let's eat it'

However, we happen to have one anomalous optative customary, with an allomorph of the prefix *'i-* as it appears in the *'i-* imperative, and, as we shall see below, also in Active imperfective customary. This is from Lena in elicitation: *diLich' 'Adq'k'a' ti:li'di'e:k'* 'you should always wear it (e.g. cape over your shoulders)'. The regular Active for this would be *ti:la:di'e:k'*, but here we see instead *ti:li'-* from class-marking qualifier *ti:LA-* 'leaf-like/fabric', plus *'i-*. We cannot know whether this is "correct" or, given that we have no other optative with *'i-* of some hundreds in the corpus, this form is, as probable, analogical with the customary Active imperfectives with *'i-*, for which see the following subsection §15.5.4.4.

#### 15.5.4.4 Active imperfective

The vast majority of the instances of customary are in the Active imperfective, and it is in the Active imperfective customary that there is by far the most variability in prefixation. There is no such variability in prefixation, not only in non-derived Active imperfective, Ø-always, but also Ø- always in Active imperfective with repetitive, and of course usitative. With the customary, however, not only does there appear to be essentially free variation, interchangeability, optional marking with *AN-* or *'i-*, albeit much less frequently. With the Active conditional it specifies 'just as action/process is/was beginning'.

As we shall see, Ø- and *AN-* alternate very freely in the Active imperfective customary, with no observable difference in meaning, which was certainly tested. The frequency of one or the other may be relatable only to some influence of phonological environment. Though Ø- is probably somewhat more frequent overall, the *AN-* must in any case be always an option. In negatives, however, the *AN-* is somewhat more frequent, in 41 instances, as opposed 30 with Ø-. The proportion in the positive is perhaps the converse.

The *'i-*, on the other hand, is relatively rare, occurring in about 5% of the ca. 1,000 instances of customary. Though its freedom of use was never tested, from probably 50-

**Table 15.1:** Ø- ~ AN- doublets of the Active imperfective customary.

Ø- form	AN- form	
wAX <i>Li:k</i> ' (more frequent)	wAX ' <i>ALi:k</i> '	'does thus to it'
wAX <i>dAle:k</i> '	wAX <i>k'u:dAle:k</i> '	'thus is done to it/something'
<i>qa:nch' ki:shk'</i>	<i>qa:nch' 'Aki:shk'</i>	'dipnets it'
<i>xshi:shk'</i>	<i>'Axshi:shk'</i>	'I sip it'
<i>dAxa:shk'</i>	<i>'AdAxa:shk'</i>	'is butchered'
<i>ya' xXe:ts'k'</i>	<i>ya' 'AxXe:ts'k'</i>	'I tenderize it'
<i>ma:t'k'</i>	<i>'a'ma:tk'</i>	'it cooks'
<i>yAqa:k'</i>	<i>yi:Lqa:k'</i>	'day dawns'
<i>lAXALya:k'</i>	<i>lAXa:nLya:k'<sup>11</sup></i>	'puts berries'
<i>dAxle:k'</i>	<i>da:xlek'<sup>12</sup></i>	'I say'

some instances of it in the corpus, there is no clear hint of semantic significance for it, except perhaps from the fact that a clearly disproportionate number of those instances, about 25, occur with the *yAX* perambulative derivation. The *yAX* perambulative can of course be associated with atelicity, specifically 'move about, without destination or definite trajectory'. Imperatives for *yAX* perambulative, without or with the customary do not appear to otherwise show 'i- at all, or do so rarely, with clear preference for AN-. For 'go walking (about)!' we have *yAX 'Ade:* several times (not *\*?yAX 'ida:(:)*) and for imperative in the customary we have *yAX GAda:k'* (probably twice, not *\*?yAX 'ida:k'*).

Therefore, in spite of the disproportionate number of the 5% of Active imperfective customaries with prefix 'i-, nearly half, in the *yAX* perambulative, it still does not appear that that 'i- is connected in meaning with the 'i- of the imperative or of that of the conditional. Rather, it is somehow special to the Active imperfective customary, with virtual exclusivity, so represents still another use of that 'i-, or yet another homophonous morpheme of that shape and position.

We happen to have all three variants of the prefixation for Active imperfective customary (Ø-, AN-, 'i-) in one most frequent theme: *wAX dAle:k'* 'says thus' (Ø-, once from Lena, seven times from Anna in text), and *wAX di:le:k'*, *wAX di'le:k'* ('A- twice and 'i- once each from Lena). There are many Ø- ~ AN- doublets (see Tab. 15.1). There is at least one Ø- ~ 'i- doublet: *wAX le:k'* 'does thus' and *Lich' wAX 'ile:k'inh* 'he always does thus'. Also, there is one AN- ~ 'i- doublet: *ya' gu:La:nk'* and *ya' gu'La:nk'* 'stands still'.

A few singlets with AN- are provided in (51).

(51) Singlets with just AN- attested

showing Cu:(n)- < Cu- objects:

*k'u:nLsh'iya:k'* 'it exhausts one'

*xu:nLku:ndk'inh* 'he grabs me'

showing Ci:- and Ca:(n)- with qualifiers:

*xudi:Lku:ndk'inh* 'he jumps down my throat'  
*li:Lk'i:k'inh* 'he gets skinny'  
*li:qu:k'inu:* 'they run'  
*qid lAXa:ndAxe:Lk'* '(ball) rolls off' (after X-)  
*da:dAtse:Xk'* '(d-class) is cut'  
*q'e:ya'X da:LAKa:t'k'* 'they fly back up'  
*'Adya:dAXa:dk'inh* 'he pulls his (own) hand'

See also personal name *dAqa'X ya:n'ya:k'* at end under §15.5.4.9 on personal names. A few singlets with 'i- are presented in (52).

(52) Singlets with 'i-

*'iLdja:t'k'inh* 'he pries it'  
*k'usahd 'AwyAq' da: li'Ldu:k'k'* 'we stuff liver into that'  
*'ALdah 'ixle:k'* 'I play'  
*wAX da: 'ile:k'* 'we do thus'  
*wAX da: di'le:k'* 'we say thus'  
*wAX 'iLtl' di'dAle:k'* 'we say thus to each other'  
*yAX 'Adu'gudli'LAYA:k'* '(paddles) curl up'  
*dik' ya:n' k'u'xLYa:k'G* 'I don't set things down'

#### 15.5.4.5 Active imperfective with 2s subject

Second person singular subject is of some special interest, in that with AN- after qualifiers and no other syllable between that and stem, the result is Ca:yi- (cf. examples in (53)), not found in imperatives, given that in those the 2s subject prefix is Ø-.

(53) 2s Active imperfective with AN- after qualifiers

*'uk'ah la:yita:k'* 'you forget it'  
*sitl' da:yile:k'* 'you tell me' (cf. Ø- *sitl' di:le:k'*)  
*dik' sitl' da:yile:k'G* 'you don't tell me'

After Cu:(n)- objects the result is *k'u:li-*, as in *dik' k'u:lish:k'G* 'you don't kill anything' (cf. Ø- *dik' k'u:she:k'G*). We have a doublet with Ø- and AN- where the 2s pronoun itself is Ø- with vocalic classifier: *'AdLA'e:k'* and *'AdALA'e:k'* 'you pretend to marry'. In absolute initial we have 2s *yi-* and *'i-*, where the latter contains AN-, or perhaps presumably also *'i-*, cf. (54).

(54) 2s Active imperfective with *yi-* and *'i-* in absolute initial

*yitsu:dk'* 'you sleep'

o-tl' ya' 'i:tu:ch'k' 'you lie with o'  
 O ya:n' 'i:Lte:k' 'you put O to bed'  
 de:lehd dik' sida' 'i:ya:k'G 'why don't you visit me?'

See also §15.5.4.5 for other 2s instances.

#### 15.5.4.6 Active imperfective with indeterminate object

Some instances of customary with indeterminate object 'i- follow here. With zero mode-aspect marking: 'ixtsi:ndzk' 'I dream', 'idAXAma:k' '(dog) growls'. With AN- mode-aspect marking the result is 'i:(n)- 'i:nq'a:k' 'I keep a fire going'. With the frequent theme 'i-L-'e ~ -'an 'travel' (often with o-LAX 'beyond o', thus 'see o'), in the positive, we have eleven instances of Ø-, i.e. 'iL'a:nk', nine of AN-, i.e. 'i:(n)L'a:nk', and one only of 'i-, i.e. 'i'L'a:nk'. For some reason though, in the negative of that, we have ten instances with 'i-: dik' ... 'iL'a:nk'G, from Lena, Marie, and Anna, including one with 2s subject dik'shunh 'ulAX 'i'yiL'a:nk'G 'don't you ever see him?'. We have none of Ø- or AN- in the negative. Alternatives were not tested, but the statistics seem significant.

With indeterminate object and indefinite subject k'u-, which precedes indeterminate object (except in the directive, where it follows, 'ida'k'u-), the result is normally k'u-, as in the examples in (55).

- (55) Active imperfective indeterminate object and indefinite subject k'u-
- 'ulAX k'u'sAL'anhL 'someone saw it'  
 dik' 'ulAX k'u'sL'anhLG 'no one saw it'  
 dAdi:yAX 'ulAX k'u'GAL'a:nLG 'no one has yet seen it'

However, in the four customary instances, for some reason we have no instances of Ø-, presumably \*?k'u'L'a:nk', only one instance of AN-: silAX k'u'i:nL'a:nk' 'someone sees me' (Marie), and three instances of 'i-, all negative (56).

- (56) Active imperfective with customary and 'i- (Marie)
- dik' 'ulAX k'u'i'L'a:nk'G 'no one ever sees it' (Marie)  
 dik' 'ulAX k'u'i'L'a:nk'Ginh 'no one ever sees him' (Lena)  
 dik' silAX k'u'i'L'a:nk'G 'no one ever sees me' (Marie)

It is hard to judge how natural such a prefix sequence is in these forms, all early elicitations. In any case, they must reflect the same very specific strong preference shown above for 'i- with this particular theme in the negative customary.

#### 15.5.4.7 yAX perambulative

The customary can be combined with the yAX perambulative (q.v. in §15.7). As mentioned above, it is in the customary Active imperfective with the yAX perambulative that we have

the highest proportion of forms with the prefix *'i-*. There are a few such instances without it, of which a few examples are given in (57).

(57) Perambulatives without *'i-*

*da:* *yAX 'AdLAtsi:tl'k'* 'we slide about'

*yAX LAqu:k'inu:* 'they swim about (on surface)'

*dik' Xa:'dAX yAX k'udA'a:ch'k'G* 'people don't go about outdoors'

*dik' Xa:'dAX yAX dA'a:ch'k'G,* 'they don't go about outdoors'

There is one doublet with *'i-* and *AN-*: *yAX k'u'da:k'* and *yAX k'u:da:k'* 'someone walks about' (both George Johnson), and perhaps one instance of *AN-* with 2s subject: *yAX 'i:da:k'* 'you take walks', if that is not to be interpreted *'i-*.<sup>13</sup> By far the most common here, however, is in any case the prefix *'i-*, with about 25 instances, as noted above, of which some are given in (58).

(58) Perambulatives with *'i-*

O *yAX 'iLAta:tl'k'* 'kicks O around'

*yAX 'idAte:kinh* 'she lies about'

*yAX 'ixdAwe:k'* 'I swim about', *da:* *yAX 'idAwe:k'* 'we swim about'

*yAX 'idAqe:k'* 'boats about'

*yAX 'ida:k'* 'walks about'

*yAX k'u'da:k'* 'someone walks about' (George Johnson)

*yAX xu'dAle:gk'* 'you mistreat me (push me around)'

*yAX gu'da'ya:k'* 'tide/person dawdles'

*silah yAX 'i'dAyu:k'inh* 'he curses me'

*yAX 'i'xLA'a:nk'* 'I travel about'

*'ahnu:'e:X yAX 'i'LA'a:ch'k'* 'they go about in search of it'

*si:na'q'* *yAX 'ilAXdA'a:ch'k'* 'you (pl) mistreat me', lit. 'you walk about down over my head'

#### 15.5.4.8 Customary applied to Neuter imperfective themes

Even though Neuter imperfective themes are inherently stative, we have a fair number of instances of those, about forty, to which the customary derivation is applied. This derivation being Active, we should expect all these instances to show Active prefixation.

<sup>13</sup> This is not to be interpreted as  $\emptyset$ - with *dA*-classifier though, because of reinterpretation of monosyllabic zero-initial stem.



This is not quite the case, however. In fact one instance retains the positive Neuter imperfective prefixation, three retain Neuter negative, and three use Neuter negative or imperative prefix 'a', surely analogical. About seven have Ci- or Cu-, which could be either Neuter or Active with AN-, and at least 27 are definitely shifted to Active imperfective, with Ø-, AN-, or 'i- prefixes. Of the five unchanged Neuter imperfectives, two are with *d-LA-de'* 'understand O('s speech)': *diLide:k'* 'understands O', *dik' da: da'Lade:k'G* 'we don't understand O'. This theme duly becomes Active, however, in *qa: dALAdē:k'* 'understands us', *dik' dAwa'd 'Aw di'Lade:k'* 'doesn't understand it easily' (with 'i-), *'ALAshgahX qa: diLide:k'* 'would that he understand us' (Active optative).

Some could represent either Neuter imperfective or Active imperfective with AN-, in doublets, e.g. *di:Lda:sk'* '(d-class) is heavy' (also *dALda:sk'* Active imperfective with Ø-), *guli:tl'e:k'* '(liquid) is cold' (also *gulAtl'e:k'*, an Active imperfective with Ø-, and *GAdAtl'e:k'* '(place) is cold', likewise). Some such themes are attested only changed unequivocally to Active imperfective, see (59):

(59) Themes changed to Active imperfective

C 'Adu'LAXa:k' (Ø-), C 'Adu'lALAXa:k' (Ø-), C 'Adu'la:LAXa:k' (AN-) 'makes self be C'

*dALAtsa:nk'* 'is expensive' (Ø-)

*siya: dAk'a:t'k'* 'I get headaches (d-class aches me)'

'u'li'Lga:k' 'knows' ('i-), 'u'lALga:k' 'knows', *dik' 'u'lALga:k'G* 'doesn't know' (both Ø-)

These last two forms in (59) are remarkable in losing length, /i:/, expected from expansion rule in 'CA with no syllable intervening before the stem in directive and future. Cf. *'udahd da: 'u'li:ta:k'* 'we hear the sound of it', *'ulah k'u'li:ta:k'* 'one finds out about it', where the /i:/ could be either Neuter imperfective, and/or expansion in Active imperfective directive and/or from AN- of the customary.

It is difficult to evaluate the two forms *'u'lALga:k'* 'knows' and *dik' 'u'lALga:k'G* 'doesn't know', where the zero customary prefixation evidently overrides the rule of expansion of /A/ to /i:/ in futures and directives where no syllable intervenes before the stem. Given that morphophonological rule, however opaque, we should perhaps expect *'u'li:Lga:k'* in any case. Possibly the two forms with /lAL/ should be considered analogical, even "incorrect." A question of ordering the rules of imposing the /i:/, and of (optionally!) imposing the Ø- could be invoked, if theory allows.

The two verbs of 'being' present some analogical forms. The *-t'e ~ -t'u* alternation is usually regular, vowel duly shifted, generally with zero prefix (60).

(60) Customary with *-t'e ~ -t'u* 'be'

wAX t'u:k' 'stays, dwells'

k'ut'a' xLt'u:k' 'I use it'

sidAwa: t'u:k'inh 'he waits for me'

'uch' dla:Xxt'u:k' 'I watch it'

k'ut'a' 'a'Lt'u:k'inh 'he uses it'

The last two in (60) are from Lena, the latter of them clearly analogical with Neuter negative or imperative 'a'. With C -Le 'be C', on the other hand, it appears that the regular forms are almost always instead with 'A-: 'ALe:k' 'is' (8 times, including George Johnson), 'AxLe:k' 'I am', q'e' AdALe:k' 'becomes again', k'a:dich' 'ALe:gk' 'keeps disappearing' (with repetitive), 11 forms with initial AN- and only one with Ø-, Le:k' (George Johnson). There are several more with equivocal AN-: qi:di:xLe:k' 'my feet are', gudi:xLe:k' 'my butt is', li:xLe:k' 'my face is', C k'u:Le:k' 'something is C, C exists, abounds'. For the last we also have q'e' k'u:dALe:k' 'abounds again', and negative dik' k'u:Le:k'G 'does not abound', both unequivocally Active with AN-. Those plus the preponderance of AN- in absolute initial for this verb probably implies that the equivocal instances here and perhaps also those above should not be counted as failures to shift from Neuter to Active.

With -Le we have the other two failures to shift to Active, both negatives: dik' 'a'Le:k'G 'is not' and dik' k'a'Le:k'G. In addition, we have two surely analogical forms, both from very rusty George Johnson, in dictation to Austerlitz, 'a'Le:k' 'is', and dik' k'u'a'Le:k'G 'does not abound'.

#### 15.5.4.9 Customary in personal names, not in nominalizations

Though there are no attested lexicalized nominalizations in the customary. Though there was no attempt to elicit such, their absence is surely significant. Clearly, lexicalized relativizations is the domain instead of the usitative.

On the other hand, there are at least three or four personal names in the customary (61).

#### (61) Customary in personal names

ya'a:k' < ya' 'a:k' 'goes into fits'

dAqa'X ya:n'ya:k' 'wanders' < '(motion) among indeterminate o',<sup>14</sup>

'Aw lALcha:nk', a man's name or nickname, < 'kisses it' < 'smells its face'

A probable fourth is XAlah yAXa:nk', the first word of which means 'around a point (of land)', the second in fact variable yAX(')a:(n)k', not identifiable, but probably a customary.

#### 15.5.4.10 Customary and desiderative

We have one evident attempt to elicit a desiderative in the customary from Lena: diLich' Li:dAwa: yAX GAda:k' qa: Lyi:nhinh 'itl' dAleh which has to be interpreted 'doctor tells

<sup>14</sup> Theme y-'ya 'wander', with AN-, the usual for which would be yi:'ya:k', by lax rule instead here ya:n-.

you “take walks early every morning”. However, this is in fact a direct quote with the imperative, rather than a desiderative. If such desiderative customaries did exist, we should presumably expect then to have desiderative prefixation and expanded stem with suffix *-k'*, plus *-X* following that, in the order *-k'-X*, as happens with desiderative repetitives, *-g-X*.

#### 15.5.4.11 Customary and conditional

One might consider whether there is at least one possible instance of conditional customary attested in text from Anna, namely (62).

(62) Conditional customary

*Ga:ndich'ich'gyAquhyu*: ‘little song-birds’

*'ulu'qa: da: yAX 'idA'a:ch'k da:X* ‘when we go about in search of them’

*'uwAlahyu: qa:ch' dAGAleh da:X* ‘when their spirits talk to us’

*dik' 'uXa' da: q'e' k'uLA'yahG* ‘we don’t bother them any more’

The glossing, probably done with Lena, implies that the first verbal clause, subordinated by *da:X* glossed as ‘when’, is a conditional customary, but the next such clause, not customary, with *da:X* also so glossed, is the usual Inceptive conditional instead, and the final main clause also loses the customary. There are three possible interpretations of the customary clause, listed here perhaps in descending order of probability: 1. the clause is not conditional, but the usual Active imperfective perambulative with *'i-*, and the *da:X* should simply have been glossed ‘and’; or 2. it is the Active conditional and should be glossed ‘just as we begin to go about’, the usual ‘when we go about’ being *da: \*GA'a:ch'k' da:X*; or 3. that this is indeed a customary conditional but the prefixation is different from that in the non-customary. A careful examination of all texts might disclose a few more customary clauses subordinated by *da:X* which might be interpreted ‘when’ instead of ‘and’. However, the probable fact that there are no forms in the corpus like *\*?GA'A:ch'k'* (other than imperatives) might well be significant.

Returning to the section on the conditional (§12.3.1), it is noted that “the Inceptive conditional can [also] be used in the customary sense, ‘whenever’, so *'a:nda' Gah da:X 'ud k'uXAxLa:k'inh* may also translate ‘whenever he comes here, I feed him.’” Furthermore, “there are no conditionals in the customary, i.e. the customary is presumably precluded.” These conclusions seem confirmed by a cursory review of some of the instances to be readily found in Krauss (1966a). Usually the main clause associated with the conditional is not included in the ledger entry, but a good survey for main clause verbs can be conveniently enough done by checking the references for textual instances. Perhaps as many as half the instances of conditional are subordinated to main clauses with a verb in the customary. In those, such as the one above, the conditional clause is surely in a customary sense, ‘when(ever) he comes here’. It is surely of statistical significance that in none of the hundreds of cases does there occur a form like customary Inceptive imperfective *\*Ga:k'*. In such clauses subordinate to customary main verb there are also

sometimes instances of Active conditional, e.g. *'iLse'L da:X* 'as soon as evening begins to fall', as opposed to Inceptive imperfective *GALse'L da:X* 'when evening falls'. These appear translatable as the usual Active conditional, 'begins to'. Such also occur with about the same relatively low frequency as opposed to the Inceptive conditional. The conclusions just quoted should thus be amended to include the Active along with the Inceptive conditional as not occurring in the customary.

However, it is true that there are a number of clauses in the Active imperfective customary that are themselves subordinated by *da:X*, as in the instance questioned in the section above (62), *'ulu'qa: da: yAX 'idA'a:ch'k' da:X* 'when we go about in search of them'. Such subordinated customaries are in fact so common that we must conclude this clause was misglossed as 'when we go about in search of them', and should have been routinely glossed as 'we go about in search of them and'. The next clause on the other hand is indeed conditional, 'when their spirits talk to us', and that may have influenced the glossing of the preceding clause.

There is a fair amount of such switching back and forth, between conditionals and customaries. An excellent text demonstrating this is Text 65, where Anna describes for us and/or instructs us how to make various kinds of dry salmon. Through much of the text she uses subordinate clause conditionals, usually Inceptive, with a few purposeful Actives, with main clause customaries, but many of those "main clause" customaries are themselves subordinated also by *da:X*, which in such cases are properly glossed 'and', as should have been done with the instance questioned above.

Through parts of her Text 65, Anna uses instead the future in the second person singular in the "main clauses," 'you'll do', as a stylistic shift from description (in customary) to a kind of instruction. The subordinate clauses there are still in the conditional, and glossed as 'when'. However, it is probably (stylistically) significant that although Inceptive imperfective customaries are indeed possible, as shown above, here where Anna switches to her instructional style, she still does not use the Inceptive imperfective, 'you'll', in the customary.

Also not kept in mind during the initial writing of the section on the customary was the fact that there is a fair amount of variation between *'i-* and *AN-* prefixation in the non-Inceptive conditional, i.e. in the so-called Active conditional. This choice or variation might be significantly parallel to that in the customary. It can certainly be said that there is a *GA-* and (with a different meaning) an *'i-* or *AN-* conditional, and that there is a  $\emptyset-$  and an *'i-* or *AN-* customary (for all of which three no difference in meaning can be clearly discerned.) It is also true that there is a *GA-*, an *'i-*, and an *AN-* imperative, for all three of which some meaning can be distinguished, or choice of which is to some extent predictable. It is a significant and perplexing question for Eyak morphology and its history, how the patterns of use in the imperative can be compared with that in the conditional, for those three prefixes and/or homophone sets, *GA-*, *'i-*, *AN-*. That question is only further complicated, so far, by any pattern that might possibly be discerned in the customary between  $\emptyset-$ , *'i-*, and *AN-*. Clearly, again, there is no difference in meaning between  $\emptyset-$  and *AN-* for the

customary. Between AN- and 'i-, on the other hand, there is at least a clear difference in frequency between what occurs in the customary, 'i- far less frequent there than AN-, while in the Active conditional, 'i- is at least somewhat more frequent than AN-. Cf. here the concluding or evaluative subsections under Chap. 12.

## 15.6 qAXA- 'multiple'

A minor Active derivation is qAXA- 'multiple'. Morphologically this derivation is marked by a combination of the zone C1 pluralizer qA- and C3 qualifier XA-. The meaning is expressive emphasis on a plurality of subject, object, or action, often or usually with an element of derision and/or irritation. (63) is an extensive sampling if not complete listing of the instances of this derivation in the corpus, all Active imperfective. There may not be more or much more in the corpus than the 18 forms cited here.

(63) qAXA- 'multiple'

*dA'Alga'kih 'idiyah dik' qAXAXehGinh* 'he can't even pack little things' (Lena, lit. 'even like (-ga') these (dA'Al) little-sized (objects) (-kih) he (=inh) doesn't (dik' ... -G) backpack (-Xeh)')

*qAXAXinhinh* 'he's packing (plural) little things' (Lena, derisive)

*dAXk'nu:duw qAXALah* 'how many (dAXk'=duw with pl -nu) (lake dwarves) were carrying them! (plural small objects)' (Anna in text, definitely derisive)

'Aw *qAXAtinhinh* 'he's carrying them (small objects)' (Lena, but note singular object classificatory theme)

*dLAGshg k'uqAXALe* 'there's dirt (dLAGshg) all over' ('dirt exists plurally (in small amounts?)')<sup>15</sup>

*listsin'da'X qAXa'yah* 'chickadee(s)' (nominalization, < 'plural small things move situated among (-X) tree-tips (listsin)'); "they fly in bunches from tree to tree", Lena)

*guG lahdz xuqAXi:LAG* 'you mistreat me with lies' < 'you (yi-) throw me (xu-) forward (lahdz) bit by bit lyingly (guG)' (more irritated than derisive)

'udAch' *k'uqAXA'a'ch'*, Marie Smith-Jones's personal name < 'people plurally come (-'a'ch) to (-ch) the sound (-dA) of her ('u)', sometimes expressed as 'people come from far and wide to hear her'<sup>16</sup>

<sup>15</sup> This is one of only two Active imperfective instances of otherwise Neuter imperfective -Le(') 'be' in the corpus; see also below (*ya'X dAqi:kihch' qAXALe*, this example).

<sup>16</sup> Such is remarkably prophetic for Marie, who became well known as the last speaker of Eyak. As an expression of respect, however, this interpretation is inconsistent with whatever degree to which derision

*ts'inhG wAX qAXALinhinu*: 'they're picking alders (*ts'inhG*)' (Marie in text)

*qAXAxwe:ch*' 'I string them (fish-meat on sticks)'

*ya'X dAQi:kihch*' *qAXALe*' it (rainbow) dwindles upward (*ya'X*) to (*-ch*) nothing (*dAQi:kih*)' (cf. *dLAGshg k'uqAXALe*' above, this example), here probably in the sense 'bit by bit'

'*Aw ch'i:leh Li'q*' *ya:yu:dah qAXAlinhinh* 'that ('*Aw*) Raven (*ch'i:leh*) does all (*Li'q*)' sorts of things (*ya:yu:*), with *Li'q*' *ya:yu:*' everything' adverbialized

*da: lAX qAXALXa'tl*' 'we (*da:*) shake them this way (*lAX*)', alder branches, connotation unclear (1967 text from Anna)

*ya' qAXAdAsid* 'they (plural trees, *d*-class) extend up (*ya'*)', Active imperfective from Neuter imperfective

Along with *qAXAtinhinh* in (63), there is the notation that Lena rejected proposed \**qu'qAXi:tinhhinh* 'he'll pack (plural) little things', an indication that use of this derivation may be restricted solely to the Active imperfective. Apparently no further checking was done, e.g. \*?*qAXAsAtahLinh* Active perfective, so that this limitation in use of this derivation remains somewhat uncertain. A possible instance of *qAXA-* used with other than Active imperfective might be with the locomotion theme *X-'ya* '(pl) fly', from which *listsin'da'X qAXA'yah* 'chickadee(s)' is listed above as a multiple derivative. As this theme has its own qualifier *XA-*, 'chickadees' might instead be merely a usitative Active imperfective nominalization, with only the pluralizer *qA-* added. From that locomotion theme we also have e.g. *qu'qAXi:yah* 'they'll fly away', *qAXAsa'yahL* 'they flew away' (along with *XAsa'yahL* etc.), showing Active perfective and Inceptive imperfective forms that may be merely homophonous with what the multiple would be, if allowed.

This derivation is attested outside Active imperfective in one further derivation, the gerund with *-l*. From Anna 1971, we have the phrases in (64).

(64) *qAXA-* 'multiple' with gerund

'*u:ch*' '*iXe:l*' 'backpacking (*-Xe:l* < *-Xeh*) you (sg) ('*i*) there ('*u:ch*)', carrying you thither on (my) back', as in the frame 'I'm getting tired of ...'

'*u:ch*' *xuqAXAte:l* 'carrying (*-te:l* < *-ta*) me (*xu-*) there'

'*u:ch*' '*iqAXAte:l*' 'carrying you there', i.e. '(I'm tired of) carrying you there on my back—in many stages, step by step, ploddingly along, when you should be able to walk?'

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is essential to semantics of the *qAXA-* derivation. Especially as a traditional name in that case, reference here might originally in fact have been to the multiplicity of a baby's vocal output, or response needed to deal with it. Marie's own early comment on the name may be especially insightful, "like a movie star."

There is in any case some expressiveness involved, derision and/or irritation, in this case perhaps more toward the object than the subject. This use in the gerund does not imply any answer to the question of other use of *qAXA*- beyond the Active imperfective.

## 15.7 *yAX* perambulative

“*yAX* perambulative” is the name so far used throughout. It has the value of being descriptive both semantically and morphologically, though it is faulty in both respects. The *yAX* is the preverb that characterizes almost all instances of this derivation, with however one significant exception. “Perambulative” is a term currently used in Athabaskan literature for a semantically similar though not cognate derivation. It is nicely descriptive of a sector of its meaning that is best described as only exemplary, as it is of course applied to motions other than walking and ambulation. This will become clear as the semantics and morphology of this derivation are detailed, first the semantics, relatively simple, then the morphology. Earlier, e.g. in Krauss (1970a), this derivation was called the “*yAX*-progressive.” However, that has been abandoned, in part because it does not correspond to what is called “progressive” in Athabaskan (cognate to Eyak *GA*- Inceptive perfective and to what is now recognized in Eyak as the progressive derivation). Abandoned also because “progressive” is less accurately descriptive than is “perambulative” for the semantics.

The *yAX* perambulative is an Active derivation, converting all themes to Active. It is attested in all mode-aspects, most frequently by far in Active imperfective, but also in the Inceptive imperfective, Active perfective, imperative (always with *AN*-), optative, and, least frequently, in the conditional and desiderative. It is attested in combination with other Active derivations (repetitive, customary, persistive), in durative and transitional progressive, in gerunds, and in a fair number of nominalizations. It is applied most frequently to motion verbs (locomotion, postural, classificatory), also to action verbs, but marginally also to statives.

This derivation is rather abundantly attested in the Eyak corpus, though not so much as the customary, for example. There are in any case several hundred instances of it. For the writing of this chapter, scanning of the ledger (Krauss 1966a) was only very selective, taking the most productive stems, especially variable open motion stems, where also the morphology requires the most description. Further, since the perambulative involves an unbound morpheme, i.e. more than just affixation, there is an entry in Krauss (1970a), *yAX*<sup>1</sup>, which provides a full listing of the themes with which this derivation is attested in the ledger, with much exemplification and semantic information, to which this description may refer.

### 15.7.1 Semantics

This derivation is most simply described by the gloss ‘to V about’ in British English, ‘to V around’ in American, with the British gloss preferred here as being less ambiguous in not implying any specifically circular motion. For that reason, ‘about’ is substituted for ‘around’ in writing the grammar from the field data. The central idea is motion, more or less random, with no destination or any definite trajectory. This is indeed well exemplified by the derivation ‘take a walk, go for a walk, walk about’,  $\gamma AX \text{ } dA\text{-}a\text{-}(X)$ , from  $-a$  ‘(sg) go along (on foot), walk (somewhere)’, i.e. here ‘perambulate’. It applies of course equally well, however, to ‘take a swim, go swimming, swim about’, ‘move about while sitting, sit about’, so also ‘weep about’, ‘kick about’ from action themes, and a number of idioms, some of which will be given in the exemplification.

In addition to the indefinite movement described above, the meaning of the preverb  $\gamma AX$  and this derivation can of course be bounded or limited by further preverbal, e.g.  $lu:di:’X$  ‘(movement in area of) tide-beach’,  $’a:ndAX$  ‘(movement in ) this area, here’,  $ta’X$  ‘(movement) in the water’, and many others. Further, especially with  $q’e’$  ‘back, some more’, combined variant  $q’e:-\gamma AX$  ‘back’, and also in some cases without that,  $\gamma AX$  can refer to ‘reversal of motion, turn around’, and especially with preceding  $’iLya’$  ‘into each other’,  $’iLya’ \gamma AX$  ‘back and forth, to and fro’. Such further restrictions will be treated in subsections at the end of the more basic description.

### 15.7.2 Morphology

This derivation has four morphological characteristics. Aside from (1) the preverb  $\gamma AX$  and (2) the essentially ordinary Active conjugational prefixation, it requires (3) in all cases vocalization of the classifier (in transitives as well as intransitives), and (4) suffixation to the stem of  $-X$ . That suffix is overt only in the Active imperfective however, though it leaves traces in the form of lengthened vowel in open variable stems of the form /CV/ in some cases, and some blocking of  $e$ -shift in stem vowel in some imperatives. This morphology will be demonstrated in the exemplification below, with default glossing ‘V about’.

The positional order of the preverb  $\gamma AX$  is essentially indefinite, within the rightmost preverbal position, along with disjunct personal pronouns and  $q’e’$  ‘again’. It tends, however, to be rightmost even in that position. For example, with 1p subject,  $da: \gamma AX$  is more frequent than  $\gamma AX da:$ ,  $q’e:\gamma AX$  more frequent than  $\gamma AX q’e’$ , and  $da: q’e:\gamma AX$  is perhaps more frequent than other orders, all also acceptable, so long, probably as  $\gamma AX$  and  $q’e’ \sim q’e:-$  are not separated by  $da:$ .

Open variable stems of the form CV take the overt suffix  $-X$  in the Active imperfective with lengthened vowel, i.e. CV:X. Those of the form CV’ take overt suffix  $-X$  with V’, i.e. CV’X, though there are not many instances of such, and there seems to be some uncertainty, with the possibility also of CVhX in some cases. Such cases are probably analogical with the desiderative mode (CV’  $-X/$  of the desiderative > CVhX). Most



frequently attested of this type is *'i-ga'* 'dance': yAX *'ixdAga'*X 'I'm dancing about' and the like, attested seven times spontaneously from Lena, but the pair or alternatives yAX *'idAga'*Xinh and yAX *'idAgah'*Xinh 'he's dancing about' was elicited once each from both Lena and Marie. A superficially similar case is yAX *'iLACHanh'*X 'it (dog) is sniffing about' (Marie), but yAX *'ixLACHan'*X 'I'm sniffing about' (Lena, Anna, Marie), but in this case the former is due to some uncertainty whether the stem is *-chan'* or invariable *-chanh*. Likewise yAX *Ga:ndAsha:Xinh* 'he's digging about' (Lena) and yAX *GALALASHa'*Xinu: 'they're digging about' (Marie), the former implying stem *-sha*, the latter *-sha'*. Finally, in application to Neuter imperfective themes, where open stems are regularly *-CV'*, we have yAX *'Adi:nLala'*X and yAX *'AdlALAla'*X '(child) is pouting, making faces about' (reflexive causative; cf. *'iLga'* *liLilah* 'they resemble each other, are like each other facially'). Likewise yAX *gulAdA'a'*X 'water is flowing all over, in several puddles' (Lena; from *'a'* 'extend').

### 15.7.3 Mode-aspects

Since this is an inherently Action class derivation, the perambulative is consistently Active conjugation in all mode-aspects.

Active imperfectives with CV stems are presented in (65).

(65) Active imperfectives with CV stems

yAX *xda:*X 'I'm taking a walk'

yAX *xdAqe:*X 'I'm boating about'

yAX *xdAwe:*X 'I'm swimming about'

yAX *dAla:Xinu:* 'they're moving/camping about'

yAX *'Adi:lihLA'*ya:X 'I'm thinking' < 'I'm causing (LA-) my mind (*i:lih-*) to be situated about'

yAX *xdAte:*X 'I'm lying about'

yAX *dAda:Xinh* 'he's sitting about'

yAX *'ixLA'a:nX* 'I'm looking about, traveling'

yAX *dAta:Xinh* 'he's carrying it about'

*'itl'* yAX *'AdyAdAta:Xinh* 'he's signaling (moving his hand (*y-*) about) to (*-tl'*) you (*'i-*)'

*'iLu'* yAX *guLAqu:*X 'they're chasing each other (*'iLu'*) about'

yAX *LAYa:Xinh* 'he (=inh) is carrying them about'

yAX *k'uxLAYa:*X 'I'm trapping', an idiom; literally 'I'm carrying something(s) about'

*siqi:yAga:GX yAX xLa:X* 'I'm tiptoeing about'<sup>17</sup>  
*yAX qAyuh La:Xinh* 'he's going about fighting (*qAyuh*) mad'

Further examples of Active imperfectives, with closed stem, are given in (66).

(66) Active imperfectives with closed stems

*yAX dAle'gXinh* 'he's using/working with his hands'  
*'uq' yAX xdAle'gX* 'I'm touching/feeling it all over'  
*yAX xLale'gX* 'I'm rubbing/massaging it'  
*yAX 'AdxdALAGX* 'I'm jumping about'  
*yAX xLata'tl'X* 'I'm going about kicking it, I'm kicking it about'  
*yAX 'ixdAta'tl'X* 'I'm kicking my foot about' (indeterminate object)  
*yAX xdAki:nX* (< -X-X) 'I'm going about weeping'  
*yAX k'udAtsi:nX* 'he's going about singing (something)'  
*yAX 'idAshe:Xinh* 'he's going about killing'  
*yAX 'ixLaxut'X* 'I'm going about shooting' (indeterminate objects)  
*yAX 'AdLaxutl'X* 'I'm sailing', lit. 'I'm causing (LA-) myself ('Ad-) to be blown  
(*xutl'*) about'  
*'uyAq' yAX LAK'ahdX* 'he has pains moving about inside (-yAq') him ('u-'), from a  
Neuter imperfective stative

One instance is derived from Inceptive perfective stative: *yAX guLa:n'Xinh* 'he's standing about, he's standing' (perhaps in contrast with *ya' guGALa:'Linh* 'he's standing still'. A negative form, showing -G following -X: *dik' yAX dAqe:XGinh* 'he not boating about'.

A few examples of Active perfectives with open variable stems, CV and CV', are presented in (67).

(67) Active perfectives with open variable stems

*yAX xsdiyahl* 'I took a walk'  
*yAX xsdiwehl* 'I went for a swim'  
*yAX sdiqehLinh* 'he boated about'  
*yAX 'isLichan'L* 'it sniffed about'  
*da: yAX 'isdiga'L* 'we danced about'

<sup>17</sup> In this and the following phrase, the preverbal requires *L*-classifier with '(sg) go'.

Inceptive imperfectives, occasionally with lengthened vowel (especially in the negative) are given in (68).

(68) Inceptive imperfectives occasional vowel lengthening

- yAX qu'xdAqeh* and *yAX qu'xdAqe*: 'I'll go boating'  
*yAX qu'xdAweh* and *yAX qu'xdAwe*: 'I'll go swimming'  
*yAX qu'xdAdah* and *yAX qu'xdAda*: 'I'll sit about'  
*dik' yAX qu'xdAqe:G* 'I won't go boating'  
*dik' yAX qu'xdAwe:G* 'I won't go swimming'  
*dik' yAX qu'xdAda:G* 'I won't sit about'

Negatives with long vowels are generally preferred by Lena, but she has also uttered *dik' yAX qu'xdAtahG*, *dik' yAX qu'xdAta:G* 'I won't carry it about' (Lena). In the negative, lengthening is common also in ordinary non-suffixed open variable stems, taking the form CV:G, so is not a property specifically of the perambulative. In the non-negative, however, there is the question whether the lengthening may or may not be due to suffixation of -X with lengthening, and then deletion of -X, leaving the lengthening, by rule order. In the case of stems of the form CV', where suffixation of -X results in CV'X, Inceptive imperfective of such stems is not CV' in the cases of *da: yAX 'iqe'dAgah* 'we'll dance about' (Marie), *qa: yAX qu'i:nLAmihinu*: 'they'll get us hurt' (Lena), or *yAX 'iqe'LChanh* 'he'll sniff about'. However, it is indeed CV' in *yAX 'iqe'dAga* 'he'll dance about' (Marie) and *yAX qu'Ga:xLasha* 'I'll dig about in the ground' (Lena), so leaving the question about regular deletion of -X unanswered. For this, see further under §12.3.3 on the optative and §12.3.2 on the imperative.

Optative is always Active, sometimes also with lengthened vowel in CV stems, cf. (69).

(69) Active optatives

- yAX 'idiyah* 'let him take a walk'  
*da: yAX 'idiqeh* and *da: yAX 'idiqe*: 'let's go boating' (Lena; Marie *qeh* only)  
*da: yAX 'idiqehwahd* 'in order that we may go boating' (*qeh* only)  
*yAX la:diquhinu*: 'let them run about'  
*da: yAX 'idiwe*: (Lena twice, rejected by Lena) and *da: yAX 'idiweh 'id'* (Marie and Lena), both 'let's go swimming'  
*da: yAX k'u:dilah* 'let's go drinking about' (Marie)  
*da: yAX 'iLiyah* 'let's carry them about' (Marie)  
*yAX 'ididah* 'let it sit about' (Marie, consistent)

The one instance of CV' optative is *da: yAX 'i:nLichanh* 'let's sniff about' (Lena), not implying deletion of -X.

Imperative is always Active, with prefix *AN-*, and usually with *e*-shift on open variable stems of the form CV, cf. (70).

## (70) Active imperative

*yAX 'Ade*: 'take a walk!' (4 times)

*'iqi:yAga:G yAX 'ALe*: 'tiptoe about!'

*yAX 'AdAqe*: 'go boating!' (\**yAX GAdA-*, \**yAX 'idA-* rejected by Lena)

*yAX 'ALAQe*: 'play with model boat!'

*yAX 'ALAXdAQu*: '(pl) sit about restlessly!'

*yAX gu:LAQu*: 'chase them about!' (-*qe*: rejected for both, homophone avoidance with preceding)

*yAX gu:LAde*: 'chase it about!' (< -*da*)

*yAX 'AdAwe*: 'go swimming!'

*'ulah yAX 'Adi:lih'Ala'ye*: 'think about it!'

*Li'q' yAX 'ALAye*: 'carry them all about!' (< *L-(y)a*)

*yAX 'ALa'ye*: 'carry it about (in container)!'

*yAX 'ALAte*: 'carry it (pup) about!'

*yAX 'ALAti:nhinu*: 'carry them about!' (< -*te*)

*yAX 'AdAte*: 'carry it about!' (< -*ta*)

*yAX guda:dAte*: 'steer it about!' (< -*ta*)

*sitl' 'Adya:ndAte*: 'signal to me!' (< -*ta*)

*yAX 'iLA'e*: 'travel, look about'

*'u'e:X yAX 'iLA'e*: 'look (about) for it!'

*yAX 'u'dA'e*: 'look for it!'

*yAX la:dA'e*: 'carry it (hammer) about!' (< -'*a*; Marie), but *yAX 'AdA'a*: 'carry it about!' (Lena)

*yAX 'AdAla*: 'move/camp about!' (Marie)

Very probably more variation between *e*-shift and lack thereof could have been elicited. The two instances we have of imperative for CV' stems are both from Marie: *yAX 'i:LAGa'* 'dance about!', and *yAX GAla:LAsha'* 'dig about in the ground!', implying a rule to delete rule of -X.

Conditionals are Active, with prefix *AN-*, though almost certainly meaning 'if/when', not 'just as soon as': *yAX 'AdAweh da:X* 'if you go swimming' (not \*-*we*; Lena), *yAX 'AdAle'g da:X* 'when they do things with their hands', *yAX 'AdAdAlAG* 'when I jump about'.

Desideratives are also Active, with the prefix *AN-*, and desiderative suffix *-X*, not the perambulative *-X*: *yAX 'AdAwe:X 'utl' dAxlinhinh* 'I told him to go swimming', *dik' 'ulah yAX 'Adi:lih'AxLa'ya:X 'ixle:G* 'I don't want to think about it'.

#### 15.7.4 Combination with other derivations

The *yAX* perambulative is widely attested in combination with the customary, where the customary mode-aspectual prefixes, expanded stem and suffix *-k'*, all prevail, together with preverb *yAX* and *D*-effect on the classifier. Prominent is the prefixation with *'i-* in the Active imperfective, e.g. *da: yAX 'idAqe:k'* 'we go boating', *da: yAX 'idAwe:k'* 'we go swimming'. See §15.5 on the customary.

There are instances of combination with persistent, e.g. *yAX 'ALAXe:dz* 'carry it about on your shoulders!' (several trips?, Marie, cf. *yAX xLAXe'dzX* 'I'm carrying it about on my shoulders'), or *'u:dAX yAX xLA'e:dzX* 'I'm moving them about with my foot there'.

In combining with the repetitive, the *-g* of the repetitive normally replaces the *-X* in the Active imperfective, as shown in several examples in the subsections in the section on the repetitive on thematization and repetitive combining with other derivations (§§15.3.2.5–15.3.2.6 and 15.3.2.11). The example of *sa'd yAX La'na't'X* 'he's moving it about in his mouth, tonguing it, without swallowing it', cf. *Lna't'g* 'is licking it', is probably not an exception, but derived rather from a hypothetical *O-L-'na't'* 'tongue O'. A true exception, evidently, is *giyahya'X yAX 'iLAts'in'tl'Xinh* 'he's slapping about in (a basin of) water' (Lena), so the rule of repetitive suffix prevailing over perambulative is perhaps only statistical. Cf. discussion of this combination in §15.3 on the repetitive.

Further derivation with Inceptive perfective (progressive) in both durative and transitional senses is fairly well attested. Unsurprisingly, Lena in particular is ambivalent about the acceptability of some of these instances, some of which are listed in (71).

(71) *yAX* perambulative with Inceptive perfective

*yAX GAda:L* 'he's walking around all the time' (durative)

*yAX GAdAqe:Linh* 'he's boating about' (rejected with the comment "you have to say *yAX dAqe:Xinh* even if he's going around a lot")

*yAX GAdAqe:Linh* 'he's boating about a long time' (only later accepted)

*yAX gudAGAxLata:L* 'I'm steering it about a long way, and with no help'

*'Aw yAX guGAdAda:Linh* 'he's chasing it all over the place'

*silah q'e:yAX 'Adi:lihGALa'ya:Xinh* 'he (=inh) is starting to think about (-lah) me (si-) again (q'e:yAX)

*'u'a:nch' 'Adi:lihGAXLa'ya:L* 'it's coming to me, I (x-) am beginning to come upon (-'a:nch) it ('u-) mentally (i:lih-)

The last two examples in (71) are transitionals, and are presumably less questionable.

### 15.7.5 Nominalizations

There are a good number of gerunds attested, with suffix *-X* regularly overt, sometimes followed by *-L*, and with prefixation of *'is-* in intransitives, and with the classifier always deleted. E.g. *yAX 'isa:X* ‘walking about’, *yAX 'iswe:X* and *yAX 'iswe:XL* ‘swimming about’. For full listing of these see Krauss (1970a) under *yAX*<sup>1</sup>, and for full treatment, see §18.13.1 on gerunds.

The *yAX* perambulative has its share of use in relativizations, many lexicalized to varying degrees. Examples are presented in (72).

(72) Perambulative in relativizations

*yAX XAda'ya:Xyu:* ‘birds’ < ‘they fly about’

*yAX dA'a'ch'Xyu:* ‘dangerous animals’ < ‘they walk about, ‘roam’

*yAX k'ugudAta:Xinh* ‘steersman’

*yAX 'iLA'a:nXinh* ‘watchman

*yAX dAku'dXinu:* ‘acolytes’ < ‘they are sent on errands’

*k'uga' yAX dAta:Xinh* ‘snooty conceited person’ < ‘he goes about with his head like something’

*yAX dAxuLX* ‘barrel, keg’ < ‘it is rolled about’

*qi'ch' yAX k'udA'a'ch'X* ‘toilet’ < ‘where people “go” (about) into’ (cf. *Xe'X yAX xda:X* ‘I have diarrhea’ < ‘a short distance outdoors (*Xe'X*) I “go” about’

‘Walk/go about’ seems to be especially productive in idioms; cf. also *'ulah yAX 'Adi:nhinh* ‘take care of him, nurse him, minister to him!’ < ‘walk about around him!’.

### 15.7.6 Restricted *yAX* perambulative, ‘reversal of motion’

There is a range of usage of this derivation where the meaning is restricted to ‘reversal of motion’, i.e. ‘back and forth’; also, as specified, ‘up and down’, ‘in and out’, etc.’. Cf. examples in (73).

(73) Perambulative to mean ‘reversal of motion’

*ya:nch' yAX 'Ade:* ‘sit down (and stand up) all day long, all along the way!’ (still Active imperative)

*ya'X yAX xdAta:X* ‘I’m picking it up (and setting it down)’

*'a'q'Ach' yAX xda:X* ‘I’m walking (in and) out’

*yAX dAdAXahdX* ‘accordion’ < ‘it is pulled back and forth with sound’

Most frequently this occurs with preceding preverbal *'iLya'* ‘into each other’, as in the examples in (74).

- (74) Perambulative with *'iLya'* 'into each other'  
*'iLya' yAX xda:X* 'I'm walking back and forth'  
*'iLya' yAX 'Ade:* 'walk back and forth!'  
*'iLya' yAX xdAwe:X* 'I'm swimming back and forth'  
*'iLya' yAX xdAqe:X* 'I'm boating back and forth'  
*'iLya' da: yAX dAlugX* 'we're pushing it back and forth'

In directives, here referring to movement of part, one end attached, we have the examples in (75).

- (75) Perambulative with directive  
*yAX 'u'la:dAte:* 'move it (attached) back and forth!'  
*'iL't'a'X yAX 'u'dla:dAta:X (tsa'L)* 'pocket knife' < '(knife) which is moved back and forth into cover of each other'  
*'iLya' yAX 'u'gudla:dA'a:X* 'I'm bending it back and forth'  
*'iLya' yAX 'u'gudla:dA'e:* 'bend it back and forth!'

Finally, also with preverb *lah* 'around, in circular motion' (see below, 76), *lah yAX XAx dAta:X* 'I'm switching sides paddling'. For more detail on these uses, see *yAX*<sup>1</sup>, subsections 2a.-c., in the dictionary.

### 15.7.7 Restricted *lah*-Perambulative

The preverb *lah* 'around, in circular motion' serves alone, as does *yAX*, mainly with the verb theme *-'ya* 'be involuntarily situated', *O-L-'ya* 'handle involuntarily situated O'. The basic idea is again that of motion restricted by the anchoring of the subject or object at one end, resulting in compassed circular motion, often glossed 'around'. Cf. the causative reflexives in (76) for examples of this pattern.

- (76) Restricted perambulative with *lah* 'around, in circular motion'  
*siXu:nLAyah lah da'ya:X* 'my (*si-*) tooth (*Xu:nLAyah*) is loose'  
*'anh lah da'ya:X* 'the earth (*'anh*) is quaking'  
*dik' q'e:lah da'ya:XG* 'it's not (*dik'...-G*) moving any more (*q'e:lah*)'  
*k'udAX lah 'AdxLa'ya:XG* 'I can't (*k'udAX*) move'  
*lah 'AdyAxLa'ya:X* 'I'm waving my hand (*y-*)'  
*lah 'Adya:nLa'ye:* 'wave your hand!'

In non-reflexive transitives, however, the *lah* perambulative does not take *D*-effect in the classifier, as in *lah dAxLya:X* ‘I’m shaking it (tree)’, *lah dAGALya* ‘shake it (tree)!’ (also with Inceptive imperative in *GA*- instead of Active *AN*-), *’ugut’ah yAX dALya:X* ‘(dog) is wagging its (*’u*-) tail (*-gut’ah*)’. For more detail see Krauss (1970a) for *-’ya*, paragraph 34.

This derivation and theme may be particularly helpful for an understanding of the origin of both the iterative *q’e* and the perambulative *yAX* and *lah*, also in connection with very similar derivations in Athabaskan, with *dA*- in the classifier. Just as the Athabaskan iterative prefix *\*na*- is probably derived from indirect reflexive *\*o-na* ‘around o’, i.e. ‘around self’ with zero pronoun, and Eyak *q’e* is likewise probably from *\*o-q’-’e*, Eyak *lah* is certainly from *o-lah*, exactly cognate with the Athabaskan. This is certainly evident in *lah dA-’ya-X* ‘move, wiggle’, and the fact that the causative of that, transitive *lah O-L-’ya-X* ‘move, wiggle O’ has no *D*-element in the classifier, as the S does not move O around S, but O around O. This principle certainly suggests further that the Eyak perambulative *yAX* ‘about’ may very well be from a postposition *o-yAX* with zero reflexive of the prefix, though the meaning of attested *o-yAX* is ‘under o’.

## 15.8 Progressive

The name PROGRESSIVE is here given to what has been called the Inceptive perfective applied to action and stative verb theme categories as a derivation. The name *Inceptive perfective* was given in 1965 to the paradigm with the conjugation prefix *GA*- and stem suffix *-L*, which suffixed to variable open stems of the form CV results in CV:L, and suffixed to CV’ and CV(’) results in CV’L.--To review the rationale for the core Conjugation-mode/aspect structure for Eyak verbs in sections above, here somewhat differently—the basic meaning of the Inceptive perfective paradigm is ‘be moving along’ for locomotion verbs. Since *GA*- was the “Inceptive” conjugational prefix and *-L* was the “perfective” aspectual suffix, the label “Inceptive perfective” simply follows. Thus ‘is moving along’ means that the beginning of the movement is accomplished, whereas Inceptive imperfective means ‘beginning not accomplished’ (< PAE event *irrealis*), i.e. future, however sophisticated or artificial that may seem. (This naming was given in order to parallel the contrast between Active and Neuter perfective and imperfective, in creating a two-dimensional pattern of three conjugations and two aspects.) Here, however, that same Inceptive perfective paradigm will be called the *progressive*, for two reasons: 1) it is the exact cognate with what in Athabaskan has long been called the progressive, there with prefix *\*yǝ*- and suffix *\*-l*, and 2) it describes also perhaps as well as any single other term the semantic range of effects it has as a derivation.

This progressive derivation is like the usitative in one crucial way: it has no overt marking of its own. The usitative is formally the same as the Active imperfective, zero affixation, so is formally distinctive only with motion and stative verbs, as a kind of conversion or displacement of those to action. Likewise, since the progressive is formally



the same as the Inceptive perfective, *GA-p-(:)L*, so it is formally distinctive only with action and (non Inceptive perfective) stative verbs, as a kind of conversion or displacement of those to motion.

It could certainly be argued that these two derivations cast doubt on the validity of both the two-dimensional array of two aspects and three conjugations essentially established in 1965, and on the validity of the verb theme category system as defined in this grammar. However, in historical perspective, both in the sense of the diachrony or historical development of the Eyak language itself, and the history and evolution of my own thinking about Eyak grammar, it seems clear that Eyak grammar is neither merely a logical mechanism nor a static construct. Rather it is an attempt at describing the result of historical processes still in action even in the final generations of native speakers. As I believe, the result is necessarily a hodgepodge, no doubt in the case of any natural language, to which Eyak is no exception. As a historical phenomenon, the true explanation of Eyak grammar must itself be historical. The only final way to evaluate this attempt at an explanation or even description of it will therefore have to await assembly of all the comparative evidence eventually to become available from Tlingit on the one hand, and the Athabaskan languages and comparative Athabaskan on the other. We have much reason to be optimistic that this evidence will become available in this new century. Meanwhile the present approach, I still believe, will suffice as the best description I can offer for Eyak verbs.

### 15.8.1 Semantics and function of the progressive

It is possible to subclassify examples of the progressive into three main subclasses, which we shall here label (A) locomotion (through space), (B) durativity 1 and durativity 2 (through time), and (C) transition or inceptivity.

Before presenting examples of these subtypes, it should be noted that the function of the Inceptive perfective (or progressive) is clear for motion and for stative verbs. It is its function in action verbs that will be the subject of this section. First, however, a brief word about its function in stative and motion themes. In all three subclasses of stative themes (Neuter imperfective, Active/Neuter Perfective, Inceptive perfective), Inceptive perfective is freely and regularly used in the transitional sense ‘become’, thus e.g. for Neuter imperfective *xik’a’d* ‘I’m sick’, *GAxk’ahdL* ‘I’m getting sick’, for *’u’lixilGah* ‘I know it’, *’u’LAGAxLga’L* ‘I’m learning (of) it’, for Active perfective *disiche’L* ‘I’m hungry’, *dAGAxche’L* ‘I’m getting hungry’, for Inceptive perfective *GAt’e’q’L* ‘it’s straight’, also *GAt’e’q’L* ‘it’s getting straight’. For motion verbs, use of this paradigm depends on the subclass. For locomotion its meaning is very basic ‘be moving along’, e.g. *GAXa:L* ‘I’m walking along’. For postural and classificatory themes its use is not basic but could probably be called derivational also, as for action themes. For postural verbs its meaning is ‘is getting into posture’, and/or ‘moving while in posture’ (especially as specified by preverbal), e.g. *ya:n’GAXda:L* ‘I’m sitting down (moving downward into sitting position)’,

'ich' *GAXte:L* 'I'm moving toward you (while I am) in prone position'.<sup>18</sup> Likewise, for classificatory themes its meaning for intransitives is 'be getting into position', and in transitives 'be putting O into position' as specified by preverbals, e.g. 'ich' *GAXta:L* 'I'm giving it to you, moving it toward you'

By far the largest class of verbs is action, which also has by far the broadest variety of specialized meanings and subtypes. This is certainly true also with regard to use of the two paradigms in question here, Active imperfective and Inceptive perfective.

### 15.8.2 Locomotion

Probably simplest to define is the locomotion use of this progressive derivation, with reference to space rather than time. Locomotion is in fact relatively distinct, applied to acts or events which normally do not involve motion over a "distance," "from one place to another," as in e.g. the examples of *GAXda:L* and *GAXte:L*, 'I'm moving while in sitting/lying posture'. (77) are examples of locomotion progressive applied to action verbs that would otherwise be in the Active imperfective.

#### (77) Progressive of locomotion

'iqi:dAGALchan'L (dog) is tracking you' < 'smelling your ('i-) feet (*qi:dA-*) along' (cf. presumed 'iqi:dALchanh 'is smelling your feet')

*siqu:dla:GA'e'X GALchan'L* (dog) is sniffing along in my track'

'idAGAxLch'a:q'L 'I hear you (you walking by) (cf. 'idAXLch'a:q' 'I hear you')

'a:nch qi:dAGAxLch'a:q'Linh 'I hear him coming' < 'I (x-) hear his (=inh) feet (*qi:dA-*) hither ('a:nch)'

*sich' iGAgALinh* 'he's dancing toward me'

'a:nch'a:X xulAGAtuxLinh 'he (=inh) is coming this way ('a:nch'a:X) spitting at me (*xu-*)'

'u:ch' *GAXtl'a'gL* 'I'm making marks thither ('u:ch)') (repetitive, e.g. marking a trail)

*LAGAxkidL* 'I'm going along knocking off berries'

'u:ch' *LAGAdAk'ahgLinh* 'he's playing (some game moving) in that direction'

*lah dla:GAXsha:L* 'I'm making a fence' < 'digging for a fence along in a circle' (cf. *k'uxshah* 'I'm digging for something')

*ta: XAdAGAxXuhLgL* 'I'm shoveling the sidewalk' (cf. *Ga:ndAXuhLginh* 'he's digging in the ground with a shovel' (repetitive thematized))

*xuGALna't'L* 'he's licking along me (one lick covering some distance)'

<sup>18</sup> *GAXda:L* and *GAXte:L* alone as predicates are unattested and probably unusable without preverbal.

The last verb, *xuGALna't'L*, already verges on the next type in that this is still hardly locomotion, and takes longer than one lick; cf. *xLna't'g* 'I'm licking it', *xLna't'* 'I'm licking it (one lick)' (elicited specifically, hardly spontaneous); and one nicely minimal pair: *'u'qi:LAGAxyahdL* 'I'm measuring a (long) rope', *'u'qi:LAxyahd* 'I'm measuring a (short) rope'.

### 15.8.3 Durativity

That brings us to the durativity type of use of the progressive, which is of course with regard to time instead of space. This will be described as bipolar, labeled and exemplified here as *durativity 1* and *durativity 2* at the extremes, with a complex semantic cline in between. The most important single semantic criterion or property is what might be called inherent punctuality or momentaneity of the verbal action or event, as opposed to durativity, or better, as opposed to reference to the specific action or event more abstractly as such, without reference to duration.

#### 15.8.3.1 Durativity 1

What is here called *durativity 1 progressive derivation* is applied to verbs at the momentaneous extreme, not only 'kill, die, fall', but also 'burn', for example, normally referred to, evidently, as a whole momentaneous event. For these there can be no basic Active imperfective, i.e. no *\*xshēh* 'I'm killing (it)', *\*xsinh* 'I'm dying', *\*dAxLAqahG* 'I'm falling', *\*dAq'ah* 'it's burning', or *\*dAxLq'ah* 'I'm burning it'. However, with the derivational process, one may take these as durativized, i.e. view them as a process in progress, thus the progressives in (78).

(78) Durativity 1 progressives

*GAXshe:L* 'I'm (in the process of) killing it'

*GAXsi:nL* 'I'm (in the process of) dying'

*dAGAxLAqahGL* 'I'm (in the process of) falling'

*dAGAq'a:L* 'it's burning'

*dAGAxLq'a:L* 'I'm burning it'

*xuGALKu:n'dL* 'he's (in the process of) grabbing me'

*'iGAXq'a:L* 'I'm lighting a fire' < 'I'm in the process of lighting indeterminate O on fire'

*la'q' GAqAts'L* 'it's bursting'

*qid dAGALAqahGL* 'it's falling down off'

*yAX qi:LAGALdja'L* '(rope) is breaking (apart in two)'

*'Aw yAX GACHich'Linh* 'he's breaking it (stick, apart in two)'

'Aw ya' *GAchich'Linh* 'he's breaking it (stick, completely)'

Themes like these should be possible in Active imperfective in usitative derivations, e.g. \*?'a:nd *k'uxsheh* 'here is where I kill things' or \*?'qi' *k'udAsheh* 'place where things are killed', \*?'qi' *k'udALAQahG* 'place where things fall'.

As noted above, the presence of the preverbal, with which these forms most often appear, in itself adds a physical and/or temporal dimension to the action which entails a trajectory or goal for a process, as will be seen in many of the examples below.

### 15.8.3.2 Durativity 2

At the opposite end of that scale described above are action verbs routinely found in the Active imperfective, such as *xleh* 'I'm doing, acting', *dAxleh* 'I'm saying', *XAxah* 'I'm eating it', *xdAlah* 'I'm drinking it', which, again, are seen neither as momentaneous acts nor as processes in progress, but rather generically, just as specialized acts quite abstractly without regard to duration. The basic normal paradigm used for these is the Active imperfective as just exemplified. Applied to these is what may be called the *durativity 2 progressive derivation*, by which the action or event is viewed or becomes marked as a process of some non-routine duration. There are many examples, a selection of which follows in (79), with a variety of glossing, mostly verbatim from the speakers. As will be seen, many of the examples include relevant or explanatory temporal phrases or adverbs.

#### (79) Durativity 2 progressives

*k'uGAtsi:nLinh* 'he keeps singing' (more exactly 'he is singing (something, i.e. song) lengthily)' (cf. *k'uxtsinh* 'I'm singing (something)')

*GAdAxa:gL* 'you're working a lot' (cf. *xdAxa:gL* 'I'm working')

*GALAqa:'Linh* 'he keeps hollering'

*'ida'GAXa:L* 'I'm telling a long story' (cf. *'ida'xXah* 'I'm telling a story')

*k'uGAXehdzL*, *gahXAdA'a:w* 'I'm chopping nicks (in something), all day long' (cf. *xXehdz* 'I'm nicking it')

*dA'wAX GAlle:ch'L* 'she's still picking berries' (cf. *Lle:ch'Linu:* 'they're picking berries')

*diLich'a' 'iGAdAGAmal* '(dog) is always (*diLich'a'*) growling (i.e. lengthily)'

*k'uGAXLmahdL* 'I'm baking (something; *k'u-*) all the time' (cf. *k'uxLmahd* 'I'm baking (something)')

*tsin'dAGAxle:L* 'I'm talking a long time'

*'ida'ya:lAX tsin'dAGAle:L* 'he's talking too long (*'ida'ya:lAX* 'excessively'), for no good reason'

*wAXyu: dAGAle:L* 'he's saying such things' (cf. *wAX dAleh* 'says (thus)')

*dA'wAX 'a:wAyu: 'Awtl' dAGAle:L* 'kept (*dA'wAX*) saying such nasty things (*'a:wAyu:*) to (*-tl'*) it (*'Aw*)'

*dAtli: sahdX wAXyu: Gale:L* 'has already (*dAtli:*) long (*sahdX*) been doing such (*wAX*) things (*-yu:*) (acting such ways)'

*Li'q' ya:yu:dah 'ulu'qa: GAlE:L* 'he's doing everything (*Li'q' ya:yu:*) to get (*-lu'qa:*) her (*'u-*)'

*k'uGAXdAla:L* 'I'm drinking constantly'

*Gi:'a'tl'L* 'you're chewing it (tobacco)' (cf. *x'a'tl'* 'I'm chewing it')

*'ida'ya:lAX k'uXAGAXa:L* 'I'm eating too much (*'ida'ya:lAX*)'

*XALAXAGa:Linh* 'he keeps eating them (*XI*-class for berries)'

*k'ut'a' GAXt'u'L* 'I'm using it *up*'

*'itl' dAGAXdAdza:nts'L* 'I'm begging you (*'itl'*) constantly'

*ya' GAXdzuxL* 'I'm poking lots of holes in it'

*GAXshishL* 'I'm sipping (it) all day long'

*GAXxudL* 'I'm shaking it all the time' (cf. *xxud* 'I'm shaking it')

*'u'dAGAXqe'dLinh* 'sounds like you're asking (about) him all day long'

Examples from thematized repetitives are *xu'LAGALts'in'tl'gLinh* 'he (=inh) is slapping my (*xu-*) face (*-l-*) all the time' or *gahXye'X GAXLA'AshgL* 'I'm sneezing all day long (*gahXye'X*)' (cf. *gahXye'X xLA'Ashg "id."*). There are even examples of this with persistives, e.g. *qi:dAGAXa:sL* 'my foot (*qi:dA-*) is itching continuously' (cf. *qi:dAXXa:s* 'my foot itches (persistently)'), *sitl' 'idAGAXa:sL* 'it's itching me a long time'; *dAGAXch'e:XL* 'I'm yawning constantly' (from thematized persistive).

#### 15.8.4 Intermediate examples

Between these extremes shown above, there is a cline where Active imperfective and Inceptive perfective can both be used, the latter still derivationally durative progressive, but not at all or not necessarily so marked as taking a long time, but rather more or less simply treating the action or event as a process through time and/or space, rather than

Table 15.2: Comparison of Active imperfective and Inceptive imperfective forms

Active imperfective	Inceptive perfective
<i>xLdu'k'L</i> 'I'm squeezing it, milking it' (i.e. reference only to specific nature of act)	<i>GAXLdu'k'L</i> 'I'm squeezing it' (cf. Inceptive perfective statives, e.g. <i>GAXt'uxL</i> 'I'm holding it')
<i>lAxduh</i> 'I'm fleshing it (skin)'	<i>lAGAXdu'L</i> 'I'm fleshing it (skin)'
<i>guxtsu:x</i> 'I'm threading a needle (thrusting a filament)'	<i>'Awqa'ch' GAXtsu:xL</i> 'I'm pushing it between them'
<i>xtsAX</i> 'I'm cutting it' ("that's what I'm doing")	<i>GAXtsAXL</i> 'I'm cutting it' (e.g. large piece of cloth, in the process, being part-way through it)
<i>'AddAk'in't'inh</i> 'he's scratching himself'	<i>xuGAdAk'in't'L</i> 'I'm being scratched'
<i>'u'xLqah</i> 'I'm counting it'	<i>'u'GAXLqa'L</i> 'I'm counting it'
<i>xLXehL</i> 'I'm handling blankets' ("one by one")	<i>GAXLXehL</i> 'I'm handling blankets' ("in one bunch")
<i>xXAs</i> 'I'm carving it'	<i>GAXXAsL</i> 'I'm carving it'
<i>lAminhinh</i> 'he's spoiling it'	<i>lAGALma'Linh</i> 'he's spoiling it'
<i>ya' lAxLwa'</i> 'I'm grinding it up'	<i>ya' lAGAXLwa'L</i> 'I'm grinding it up'
<i>ya' xLwALg</i> 'I'm splitting it with at wedge' (repetitive)	<i>ya' GAXLwAL</i> 'I'm splitting it with at wedge'
<i>xwi'gg</i> 'I'm hanging them up' (Lena, repetitive, * <i>xwi'g</i> rejected)	<i>GAXwi'gL</i> 'I'm hanging them up' (Anna)
<i>xwe'ts'</i> 'I'm weaving it' (Lena, latter preferred or more spontaneous)	<i>GAXwe'ts'L</i> 'I'm weaving it'
<i>dAXlits'</i> 'I'm smoothing it'	<i>dAGAXlits'L</i> 'I'm smoothing it'
<i>si:nL siXa' xtl'ih</i> 'I'm tying my shoe(lace)s'	<i>si:nL siXa' GAXtl'i:L</i> 'I'm tying my shoe(lace)s'
<i>t'its' dAq'utl'</i> 'ice is breaking'	<i>t'its' dAGAq'u'tl'L</i> 'ice is breaking'

more generically or abstractly without regard to space or time. A few paired examples are given in Tab. 15.2.<sup>19 20</sup>

With thematized repetitive, we also have *'Aw (ya') GAXyAXgL* and *'Aw (ya') xy'AXg*, both 'I'm softening skin (completely)'.<sup>19</sup>

<sup>19</sup> Almost always Inceptive perfective here, whereas reflexive with *y*-anatomical 'count on one's fingers' in three instances was twice in progressive. The difference in meaning between the two forms for 'ice breaking' is explained by Marie as follows: while the Inceptive perfective implies that "I see the ice breaking", for the Active imperfective "I know it's breaking, or hear it breaking, but don't see it". That is the difference is whether the process has been seen or is a more abstract concept.

<sup>20</sup> For 'spoil', Lena provided the Active imperfective here, but the Inceptive imperfective is preferred by Marie, i.e. more spontaneous 'he's (in the process of) spoiling it' than 'he's spoiling it (that's what he's doing)'.<sup>19</sup>

### 15.8.5 Transition, inceptivity

As noted above, the progressive or Inceptive perfective is used very basically for all stative verbs in what is here called the transitional sense, translated with ‘become’, e.g. *dAGAxche’L* ‘I’m getting hungry, becoming hungry’. As noted also, the name Inceptive perfective, meaning that the beginning of the act or event has taken place so is in process seems to be indeed appropriate, especially for the so-called transitional, as the Inceptive perfective could presumably in every case also fit the transitional description, e.g. ‘the beginning of my being hungry has taken place and is in process, I have started to be hungry’. I.e., the distinction between transitional for stative verbs and Inceptive for action verbs is artificial. The difference between this and the durativity use of the progressive, on the other hand, is much more real. First is exemplified in (80) the transitional/Inceptive use of the progressive, and in §15.8.6 some contrasting examples are given.

(80) Transitional/Inceptive progressives

*GAxLAsit’gL* ‘I’m getting shaky (with cold, starting to shiver)’

*GALACHan’L* ‘it’s getting stinky, starting to smell’

*qa:nch’ GAKi:nXLinh* ‘he’s starting to cry’ (with preverb *qa’* ‘up out’, often used with meaning ‘suddenly break out’)

*dAGAxLXAwilinh* ‘I’m beginning to believe him’ (cf. Active or Neuter imperfective *dAxLXAwinhinh* or *dixiLXAwinhinh* ‘I believe him’)

*q’e’ di’GALA’u’GL* ‘he’s starting to breathe again’

*LAXA’mahdL* ‘(berries) are ripening’

*’ulah qe’GAxle’L* ‘I’m starting to like it’

*’ALdah Gale:L* ‘is starting to play’

*GAXdAtAs(g)L* ‘I’m starting to shake’

*GAdAxitl’L* ‘it’s starting to snow’

One frequent example that demonstrates the transitional/Inceptive use of the progressive is *o-ga’ Gale:L* ‘is becoming like o’, which may include also a verb clause as object, as in *sAsinhLga’ Gale:L* ‘he’s acting more and more like he’s dead’, cf. *sAsinhLga’ xleh* ‘I’m acting like I’m dead’). Presumably *LAGAdAk’ahgLin* could also be glossed ‘he’s beginning to play’. Even without a minimal triplet, it appears clear enough that the progressive has at least three contrasting semantic subtypes of use: locomotion, durativity (1 and 2), and transition or inceptivity.

### 15.8.6 Subtypes of progressive in contrast

Finally, some instances of contrasting use of progressive subtypes with the same or similar verb themes, beginning with the transitional/Inceptive contrasting with duratives (Tab. 15.3).

**Table 15.3:** Transitional/Inceptive in contrast with durative.

Transitional/Inceptive	Durative
<i>dAGALAdē:L</i> 'it's starting to glow'	( <i>dīLidehL</i> 'it (light) is on'), <i>dAGAxLde:L</i> 'I'm turning the light on' (durative 1)
<i>GAXtsuhdL</i> 'I'm falling asleep, going to sleep' ( <i>xtsuhd</i> 'I'm sleeping')	<i>gahXye'X GAtsuhdLinh</i> 'he slept all day' (durative 2)
<i>k'uGAtsi:nLinh</i> 'he's starting to sing (something)'	<i>k'uGAtsi:nLinh</i> 'he keeps singing' (durative 2)
<i>GAXXa:sL</i> 'I'm starting to itch'	<i>siqi:dAGAxXa:sL</i> 'my foot itches continuously', etc. above (durative 2; applied to persistent)
'AwlA'e: <i>dAGAlē:L</i> 'he was starting to say the wrong thing', 'AwlAX 'iLch' <i>dAGAdAlē:Linu:</i> 'they're getting into a heated argument over it'	<i>wAXyu: dAGAlē:L</i> 'he's saying such things' etc. above (durative 2)
<i>wAX GAlē:L</i> 'it's taking shape' (Rezanov 1805 'beginning')	<i>wAX GAlē:L</i> 'it's happening, it's going on (thus)' (durative 2)
<i>wAX GAXLi:L</i> 'I'm beginning to make it look right (be thus)', <i>yahd Xu' dAGAXLi:L</i> 'I'm starting to build a house'	<i>wAX GAXLi:L</i> 'I'm working on it steadily' (durative 2), "I'm making it, taking all day, and may not succeed" (durative 2, perhaps smacking also of transitional/Inceptive, Marie, cf. <i>xLih</i> "I'm making it, will definitely succeed")
	<i>GAqa:L</i> 'it's biting it' (durative 1), 'it's holding it in its teeth' (Inceptive perfective stative, = durative 2?), 'it's carrying it along in its teeth' (locomotion)
	<i>gahXye'X IAGAdAk'ahgLinh</i> 'he's playing all day' (durative 2, <i>IAdAk'ahginh</i> 'he's playing'), 'u:ch' <i>IAGAdAk'ahgLinh</i> 'he's playing (some game moving) in that direction' (locomotion).

### 15.8.7 Relativizations

At least two relativizations with this derivation have been noted, namely *dAGALAdē:L* ~ *dAGAdAdē:L* 'smelt, candlefish, eulachon; flashlight', presumably durative 2, and *GALAXa'Xch'XL* 'dimple', certainly from O-L-Xa'Xch'-X 'tickle O'. The latter is from an action theme; the semantics in this case are somewhat unclear, possibly that facial expression or grimace of someone being tickled would highlight dimples. Cf. §14.8 on Inceptive



perfective stative. Beside these, about five more Inceptive perfective relativizations are listed in §14.8 on Inceptive perfective statives, though less clearly involving the semantics of the progressive derivation.

Concerning *dAGALAdē:L ~ dAGAdAdē:L* ‘flashlight; smelt’, the simplest explanation after all might well be locomotion for both glosses, even though this is not what occurred to Lena or Marie. For more on this, see this entry in §14.8 on Inceptive perfective stative. See, moreover, that section for what might be called yet another type of progressive derivation. So much effort was made to find any possible members of the Inceptive perfective stative theme class, highly marked with small membership, that a significant proportion of those instances are questionable. They raise the question of themes with multiple membership vs. conversion of a theme from another to this class by yet another progressive derivation to Inceptive perfective stative. The meaning of that derivation would of course be conversion to a state seen as stabilization of motion by opposing forces, isometric, balanced or distorted.

## 15.9 Directive

The directive is different from the other derivations treated in this chapter in that it does not involve choice of conjugation, but only prefixation in Zone B. The directive is nevertheless included here because it is in Zone B along with the future, which has become definitively inflectional, while the directive is left as the only derivational prefix of a whole zone. Unlike the future, the use of the directive is largely limited, though not entirely defined or limited, in what must have been its original use, as ‘action directed at O’. It has spread in limited ways, even to a few intransitives.

The name “directive” has been used recently, along with “conative”, in Athabaskan for the derivation with *u-* after the direct object prefix of the verb, e.g. in ‘shoot at O’, as opposed to ‘shoot O’. The name DIRECTIVE will now also be used for the same derivation and prefix in Eyak. The meaning of this derivation is quite complex. I have here separated all the themes attested in the directive into eight semantic groups, the first being the most productive and most literally described by the name directive (‘action directed at O’).<sup>21</sup>

This section on the directive is given special treatment here, with more Athabaskan comparison than anywhere else in this grammar. It is true that I do this in part because the Athabaskan cognation is especially close here, because I see the Eyak as nicely illuminating the Athabaskan, and because I wish the directive in some Athabaskan language had

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<sup>21</sup> That name “directive” is far more appropriate and descriptive a term than the term “semitransitive” used in the grammatical sketch of Eyak (Krauss 1965a). It appears that that was the first name given to it in the published literature of Athabaskan as well as Eyak, and was the only name for it until “conative” and later “directive” came to be used in Alaska, “directive” probably first by Jeff Leer in the 1980s.

been described with as much effort as has been given here. I include this comparison without apology. Indeed, if apology is due, it is for not including such comparison throughout this grammar.

The Eyak directive was not investigated in a fully systematic way before it became too late for further fieldwork. Nevertheless, the directive is important and prominent enough in Eyak that a reasonably full account of it can be presented from the data at hand. No doubt some more themes with the directive could have been elicited where it is productive, though surely its limits were tested with the last speakers to some extent. On the other hand, it is probable that for all themes in which it is attested, an effort was routinely made to learn whether and how those themes could also be used without the directive, so to determine or explain the function of the directive as well as possible. Thus it is probable that no non-directive related theme exists in Eyak where none is shown here.

### 15.9.1 Morphology of the directive

The directive is marked by prefixation in Zone B of the Eyak verb prefix complex. It takes the basic form ' added to the prefixes of Zone A, pronominals consisting mainly of the direct objects of the verb: 1s *xu'*, 2s *'i'*, 2p *lAXi'*, indefinite *k'u'* (object or subject) (cf. §9.1). The results are thus *xu'*, *'i'*, *lAXi'*, *k'u'* in the directive, respectively. With indeterminate object *'i'*, the result is most commonly *'ida'*, but evidently in one subgroup that result remains *'i'*. For that and further on the possible origin of the *da'*, see discussion under §15.9.2.8. In one theme alone we have *da'* (see *da'-L-Xa'* 'have O' in Group 4 below, §15.9.2.4). As for zero objects, those unmarked in Zone A, i.e. third persons and 1p, those become very distinctively *'u'* in the directive. That whole *'u'* is optionally deleted in the presence of the future prefix *qu'* also in Zone B, the only other prefix of that zone, thus combining either as *'u'qu'* or just *qu'*.

The directive (*'u'*) also shares two very distinctive phonological traits with the future prefix *qu'*, traits of less than fully transparent motivation. Firstly, when no syllable intervenes between either the directive or the future prefix and the stem, the /u/ vowel in both of them becomes /a/, thus forming *'a'* and *qa'*, or optionally instead *'u'wA-* and *qu'wA-*. Secondly, when a qualifier (i.e. a prefix of Zone C) followed by no intervening syllable before the stem (i.e. no prefix with a vowel in Zone D) occurs with either, that qualifier then takes a long high vowel, /i:/ instead of /A/ and /u:/ instead of /u/, e.g. *dA-* becomes *di:-*, and *gu-* becomes *gu:-*. Thus there must very evidently be some important historical relation or isomorphy between these two prefixes, the only prefixes of Zone B. For further details of the morphophonemics of the directive, see also §§6.6.3, 15.9.3.1 on the future and directive prefixes, and irrealis ' , as well as 12.1.5 on the future.

In addition to the *'u'* in third person object, i.e. zero conjunct object, it should be noted that with the reflexive *'Ad(-)*, which has an ambiguous status as a preverb, being disjunct, the directive reflexive becomes *'Adu'* which is unambiguously conjunct.

Conversely, the reciprocal, which as a possessive or object of postposition is *'iL-*, as direct object of any verb is always disjunct *'iLu'*, appearing in origin to be an elision (*'iL-u'*) similar to that in the reflexive (*'Ad-u'*). However, in the only two attestations we have in the corpus of direct directive reciprocals, the result is (a seemingly redundant) *'iLu' 'u'*: *'iLu' 'u'lAXALAtsi:ndzinu*: 'they're dreaming of each other' and *tsa:dli:nAX 'iLu' 'u'sLits'AXLinu*: 'they threw stones at each other', both from Lena. The seemingly probable alternative, e.g. *? 'iLu'sLits'AXLinu*, or negative thereof, *dik' ? 'iLu:la'LAGa:Ginu*, was not tested in time.

The primary synchronic mark of the directive in Eyak is unquestionably the *'* rather than the *u-*, which is linked rather to the third person, therefore also very probably what is in Athabaskan *\*wə-*, cognate with Eyak *'u-*, pronominal third person object of postpositions and possessor. Compare further, however, the two Eyak nouns with fossil prefix *wA-*, namely *wA-Xah* 'story' and *wA-sheh* 'name'; the two directive verbs (both under §15.9.2.4) *O-'-Xa* 'tell of O' and *O-'-l-'e* 'name O'; and the Athabaskan noun and verb *\*o-* (*'*)*u-ž(w)-ə* 'o's name', *\*O-u-ž(w)i* 'name O'. Those two Eyak nouns with prefix *wA-*, which can hardly be analogical with Eyak third person prefix *'u-* as such, thus strongly suggest for the Eyak directive a link also with some special PAE prefix to be reconstructed *\*wə- ~ \*u-*. Possibly then also the /u/ of the reflexive *'Ad-u'* and reciprocal *'iL-u'* above, instead of being analogical with third person *'u-* are instead further support for this linkage.

One other morphological feature that may be associated with the directive is the frequency of the *l-* qualifier along with the (*u*)*'-l-*, the *l-* of which is often deleted under certain conditions, called here "weak *l-*". This weak *l-* is especially associated with semantic group 1, as with some other groups below, so is first described there (§15.9.2.1). Further, a lengthy account of it is given in §17.10.4.1.

## 15.9.2 Derivational function, semantic groups

Most directives are transitive (but see parts of Group 2 (15.9.2.1) and Group 3 (15.9.2.3) below, with object of postpositional phrase semantically as object).

The directive operates mainly on action verb themes, also some Neuter statives, and classificatory themes, but not (except for Group 8) locomotion themes. The directional does not itself change a theme from one class to another.

Directives share the basic meaning that the subject acts upon the object in an abstract or partial way, without full physical effect on the object, rather in a way "directed at" the object. Over 90 Eyak verb themes are attested with the directive. About a quarter of these are directly matched with a non-directive theme, where the directive is an optional one-step derivation with a clear meaning. At the opposite end of the scale, there are verb themes, another quarter of the total, which are attested only with the directive, i.e. with the directive fully thematized, lexicalized. There are of course also a fair number of items in between, about half the total, with a directive clearly related to a non-directive, though less

directly related, including thematic prefixes, preverbs, and/or postpositions, with semantic differences that are much less predictable.

Directives fall into seven or eight semantic groups. These groups are more or less clearly defined. They are presented here as follows. The listing is complete for each basic directive theme attested, but of course does not include many further derivations on the directive themes themselves, except in some more interesting instances.

There are 18 verb stems that occur only with the directive. These are confined to Groups 3-6, but none of these groups consist entirely of themes with such stems. In other words, there are themes with stems that occur both with and without directives in all eight groups, but Groups 1-2 and 7-8 have only stems which occur in both directive and non-directive themes.

### 15.9.2.1 Group 1 directives

This first group (81) is the most clearly defined, perhaps by far, where the directive is an optional derivation, in verbs of striking an object aggressively, but instead of definitely striking or connecting, the stroke may in fact miss, so is translatable as e.g. 'strike at O', 'shoot at O' instead of 'strike O', 'shoot O', cf. the forms in (81).

#### (81) Group 1 directives

O-*'-ta'tl'* 'kick at O' < O-*ta'tl'* 'kick O'

O-*'-l-t'a'q'* 'fish with small hook e.g. for trout' < O-*l-t'a'q'* 'hook trout'

O-*'-tux'* 'spit at O' < O-*tux'* 'spit on O'

O-*'-L-t'ik'* 'shoot arrow at O' < O-*L-t'ik'* 'shoot O with arrow'

O-*'-l-Lts'in'tl'* 'slap at O('s face)' < O-*l-Lts'in'tl'* 'slap O('s face)' (with *l-* qualifier for face)

(o-X) O-*'-l-ts'AX'* 'strike at O (with thrown o)' < (o-X) O-*ts'AX'* 'hit O (with thrown o)'

O-*'-l-gu'k'* 'punch at O('s face)' < O-*l-gu'k'* 'punch O (in face)'

O-*'-l-k'in't'* 'scratch at O('s face)' < O-*l-k'in't'* 'scratch O (in face)'

O-*'-L-xut'* 'shoot at O with gun/bullet' < O-*L-xut'* 'shoot O with gun/bullet'

O-*'-Adz'* 'throw spear at O' < O-*Adz'* 'spear O'

Since directives were not routinely elicited for every plausible theme, this first group is not the largest, attested with only ten themes. This first group, all action themes, is the most distinctive, in its optional use with such a clear meaning, presumably that which gives it its name in Athabaskan. One Athabaskan language, Koyukon, has expanded its use to all verbs, in a fully productive derivation or "super-aspect" called "conative," 'try to V', a term obviously chosen from its free expanded use, which originated in this first semantic group. For this reason, the corresponding prefix and derivation has been labeled

“conative” in some other Athabaskan grammars as well, e.g. Rice’s (1989) Slave grammar, even for all themes showing the directive prefix.

Note further, that here as in some other groups, the thematic or anatomical qualifier *l-* ‘facial’ is used somewhat loosely, sometimes meaning ‘in the face, head’, but is in fact used more generally, often not specifying ‘in the face, head’. At the same time, it is often absent, most especially with the Active perfective *s-*. For a case where the *l-* is purely thematic, take e.g. *O-’l-L-ga’* ‘know O’ of Group 3, Neuter imperfective always *’u’lixilGah* ‘I know it’, with the qualifier *l-* present; the Active perfective for that can be *’u’lisiLga’L* (or even, but far less commonly, *’u’i:nsilGa’L*), but most commonly the *l-* drops, *’u’silGa’L* ‘I found out about it, came to know it’. Such themes were previously notated *O-’(l-)L-ga’*, but here the parentheses are omitted, automatically meaning that the *l-* may delete in the Active perfective, unless literally specifying ‘facial’. This thematic qualifier *l-*, which is optional especially with Active (*s-*) perfective, will be called henceforth for our purposes “weak” (thematic) *l-*. It is present in a number of themes in Groups 2 through 4 below, perhaps decreasingly, and is altogether absent as such in Groups 5 through 8. The deletion or optionality of weak *l-* is described at considerable length in the subsection on l-9 in the chapter on qualifiers further below.

### 15.9.2.2 Group 2 directives

The second group (82) goes off in its own special semantic direction from the first, in the direction of partially affecting the object, or affecting part of the object, in a physical way, whereas the next three groups progress in a direction of not directly affecting the object in a physical way at all. Group 2 is one of the three largest. It refers, for example, to folding an object, or moving part of it, or turning it over, or e.g. cutting it open but not apart. Such action is usually described also with the addition to the basic verb theme not only of weak *l-*, but with further qualifiers and preverbs and postpositions. The derivation is therewith semantically much more complex than in the first group, but still the basic theme from which it is derived remains apparent. Weak *l-* is not specified for examples that happen to be attested only in the Active perfective without it. In this and in much else the picture could have been made clearer with more systematic elicitation for this purpose, but even with that not everything would become clear, and the results could in no way become so predictable as in the first group. Nevertheless, the morphological and semantic picture is surely clear enough to justify the grouping.

#### (82) Group 2 directives

*O-’l-ta* ‘move part of O’ (e.g. ‘turn page of book’), ‘fold O’ < *O-ta* ‘move sg inanimate O’

*’iLch’ O-’L-(y)a* ‘fold pl O’ < *O-L-(y)a* ‘move pl inanimate O’

*’iLt’a’X li’ O-’-l-L-ya:’* ‘fold pl O one after another’ < *O-L-ya:’* ‘move pl O one after another’

'iLch' O-'l-L-'e:dz 'fold pl O with feet' (persistent) < O-L-'e'dz 'move O (once) with foot' < O-'e'dz 'touch O with foot'

O-'L-q'a:'sh 'crease O' < O-L-q'a:'sh 'press O flat'

'ulah qa' xu'yixsLiq'a:'shL [2BB?] 'my hand is paralyzed around it' ('I'm hand-creased up (qa') around (-lah) it ('u-)', passive with *y-* qualifier for hand)

O-'dl-tsAX 'cut O open' < O-tsAX 'cut O'

O-'l-chich' 'break O (e.g. stick) but not apart' < O-chich' 'break O (e.g. stick)'

xut'L li' O-'Lu'g 'pull trigger' ('press part of gun fully back') < O-L(l)u'g 'press on O with hand'

yAX O-'gdl-'a' 'turn O over' < -'a' '(sg S) extend'

The five or six items in (83) are derived from intransitives but appear at least formally to be transitive, with "empty" directive object 'u-' (see also some items in Group 3 below, §15.9.2.3). Following these are reflexives and items with indeterminate object of uncertain status. Note the thematic qualifier *gdl-* in the preceding and four of the below, possibly soft *l-* plus anatomical qualifier *gd-* 'rump'.

(83) Formally transitive forms with "empty" directive object

O-'xuL 'S (motor) turns over (once, but does not start)' < -xuL 'S rolls, revolves'

yAX O-'dl-xuL 'S (boat) capsizes' < -xuL 'rolls, revolves'

O-'l-'ya 'one side of S droops (as in the letter <r>)' < -'ya 'S is involuntarily situated'

O-'dl-'ya 'S (tree) stands slanted' < evidently the preceding, with *d-* class mark for 'tree', perhaps more precisely 'stands with top part bending', but cf. the following

Xu' O-'dl-'ya 'S stops tilting, stabilizes', not clarified, Xu' 'correct'

O-'gdl-dA-'a 'S bends sharply, folds' (probably a passive) < O-'a 'move sg inanimate O'

'Adu-'gdl-LA-'a 'S hangs on' (reflexive, 'folds self')

'Adu'gAdli'Lyak' 'they (paddles) (customarily) each curl up' (reflexive, < O-L-ya:' 'move pl O one by one')

da:X 'i-'gdl-gehdx 'S barely hangs on' ('to indeterminate o of o-X', with 'i'- of unclear status, see Group 8 below, §15.9.2.8, to which it may more properly belong) < -gehdx 'S is pitiable'

'ida-'-L-'a' 'S (wind) changes direction' (cf. 'fold') < 'i-d-L-'a' 'S (wind) moves'

### 15.9.2.3 Group 3 directives

The third group, the second of the three larger ones, is semantically rather cohesive if seen as having to do with sensing the object, e.g. perceiving it, knowing it, counting or measuring it, believing it, guessing about it, dreaming about it. Treated first here is a subgroup (84) about perception that is transparently derivational like the first two groups, though still rather irregular:

(84) Group 3 directives

O-'*d-L-ch'a:q*' 'hear O indistinctly' < O-'*d-L-ch'a:q*' 'hear O'

*sida*' 'u'*disLich'a:q*'L 'word of it came to me' (a passive)

O-'*e* ~ 'look for O' < O-'*G-e* ~ 'see O' (if not belonging to Group 4 or 5; often *yAX*)

O-'*dA-e* ~ 'look about for O', perambulative; note gerund *yAX*'u'*wA'a:nX*)

O-'*G-dA-e* ~ 'O seems, looks, appears' (with adverb; a passive, and semantically regular as such)

O-'*l-LA-tsa* 'O becomes indistinctly visible' < O-'*LA-tsa* 'O becomes visible' (a passive; no non-passive attested)

O-'*l-LA-tsa* 'stare piercingly at O' (non-passive, irregularly related to preceding), or perhaps belonging in group 1

O-'*gAwi*' 'feel O (abstract, not tactile)' < '*Ad* O-'*gAwi*' 'feel O'

'*Adu*'-'*dA-gAwi*' 'feel a certain way' (reflexive, with adverb)

This subgroup includes the sense of sight only irregularly. Smell and taste were not tried, but it seems likely that directives of those should exist. 'feel' too is morphologically and semantically irregular.

The directives in (85) are fully thematic, i.e. they do not occur at all without the directive:

(85) Thematic directives of Group 3

O-'*dji'd*' 'guess about O, at O (e.g. riddle)'

O-'*L-qa*' 'count O', '*ida*'-'*y-Lqa*' 'count abstractly on fingers'

O-'*yahd*' 'measure O' (often *yAX* O-'*dA-yahd*' 'measure O about', perambulative)

O-'*L-q'e:*' 'try (e.g. sample) O'

O-'*lX-LA-tsi:ndz*' 'dream about O' (indirectly derived, for -*lX*- cf. Group 6 in §15.9.2.6) < '*i-tsi:ndz*' 'S dreams' (indeterminate object)

Whereas the preceding are all action themes, the items in (86) are Neuter statives:

(86) Neuter statives

O-'*l-L-ga*' 'know O (fact, thing, person)'

*o-dahd* O-<sup>3</sup>-*l-ta* ‘hear o, listen to o’ < *l-ta* ‘S has head in position’, *o-dahd* ‘pressing against o’

*o-dahd* O-<sup>3</sup>-*l-l-ya:* ‘hear o several times, hear o one after another’, as above from O-*L-ya:* ‘move pl O in pl acts’

*o-lah* O-<sup>3</sup>-*l-ta* ‘notice, become aware of, find out about o’ < *l-ta* ‘S has head in position’, *o-lah* ‘around, about o’ (evidently Action theme rather than Neuter stative, unlike the preceding)

C O-<sup>3</sup>-*LA-le(’)* ‘believe, think O to be C’ (Neuter stative, e.g. *’uta:* *xu’Lileh* ‘thinks I’m his (*’u-*) father (*ta:*)’) < *’i-le(’)* ‘S has emotion’ (indeterminate O)

*o-X* O-<sup>3</sup>-*LA-le(’)* ‘be aware of o, realize o’ (Neuter stative)

The items in (86) with postpositional phrases are only formally transitive with “empty” directive object marked by *’u-* (cf. some items in Group 2, §15.9.2.2). These directives relate instead to the indirect object of the postposition (*o*), or to the complement (C).

#### 15.9.2.4 Group 4 directives

The fourth group is also one of the three larger ones. This group might best be described as having to do with gaining control of the object, e.g. bossing (again “directing”), training, acquiring, buying, or more abstractly, marking and naming, perhaps even ‘telling of’ the object, i.e. being an authority over the object. This group is a mixture in that some items are derived from non-directives, and others, purely thematic, are not.

##### (87) Group 4 directives

O-<sup>3</sup>-*de’L* ‘hoard, keep O possessively; boss O’

*o-X* *’Adu-<sup>3</sup>-dA-de’L* ‘store, save o up’ (reflexive)

O-<sup>3</sup>-*d-de’L* ‘boss O (with oral commands)’, usually *yAX* O-<sup>3</sup>-*d-dA-de’L* ‘boss O about’ (perambulative), also in *yAX k’u’dA(dA)de’Linh* ‘square-dance caller’ (‘he (=inh) who orders one (*l’u-*) about’)

O-<sup>3</sup>-*ye:X* ‘train O (e.g. person, dog)’, usually *yAX* O-<sup>3</sup>-*dA-ye:X* (perambulative)

O-<sup>3</sup>-*tsa* ‘buy O’

O-<sup>3</sup>-*le’g* ‘seize, grab, take O’ < O-*le’g* ‘touch O with hand’ < *-le’g* ‘S moves hand’

*Xu’* O-<sup>3</sup>-*d-L-’a’* ‘decide on, plan O’ < *-’a’* (sg S) extend’, causative, with *d-* qualifier ‘speech’, *Xu’* ‘right, complete’

O-<sup>3</sup>-*L-la* ‘save O from danger’, *yAX* O-<sup>3</sup>-*LA-la* ‘keep O safely about, hidden’ (perambulative), *’Adu-<sup>3</sup>-LA-la* ‘hide self, flee danger’ < O-*L-la* ‘save, rescue O’ < *-la* ‘subsist, dwell, live’

C O-<sup>3</sup>-*l-L-Xa’* ‘make O (into) C’, regular suppletive causative of C *-Le(’)* ‘S is C’, e.g. *xi:l dAkinh XAwa:* *’u’sALXa’L* ‘a shaman turned a stick into a dog’



C *da-'l-L-Xa'*<sup>22</sup> 'S have C, gain possession of C', anomalous in lacking the 'i- of 'ida'- indeterminate object; intransitive, with *D*-effect on the classifier in the iterative, no class-mark for "Object" (i.e. C): e.g. *XahdL q'e' da'liLiXinhin* 'he has another car (*XahdL*)', independent personal pronoun, not Object, as C: e.g. 'i: *da'lixilXah* 'I have you (to depend on)'

O-'*Xa* 'tell of O, about O', with indeterminate object 'ida'-*Xa* 'tell story', semantically difficult to classify, but perhaps with the idea of authority over object or knowledge of it; cf. then Group 3, but also the following

C O-'*l-L-'e* 'call O C, name O C', often C '*Adu-'dA-'e* 'be called, named C', reflexive with '*Ad-*

O-'*l-L-ts'inhG* 'mark O' < O-(*l*-)L-ts'inhG 'mark O', no clear difference in meaning, directive much more common, the latter being possibly a back-formation or only the result of a routine attempt to elicit the non-directive, possibly with loss for speaker of meaning of expression of authority over object; note also reflexive '*Ad-'y-LA-ts'inhG* 'mark (own) hand (cheating at cards)'

'*Adu-'l-LA-ta* 'smoke or dry fish or meat, prepare winter food supply; store up food', direct reflexive, perhaps best to assign here, with idea of storing up provisions. Cf. o-X '*Adu-'dA-de'L* 'store up o' above. This may be assignable to Group 2, with idea of meat or strips hanging folded, cf. O-'*l-ta* 'fold O' in Group 2, but the classifier of that is zero.

Probably belonging to Group 4 also is O-'*l-L-xa* 'raise O (imperfectly?)' in the sense of upbringing, 'cause to grow', implied in the reflexive causative repetitive *XAWa:ga'* '*Adu'la:LAXa:g* 'bring yourself up like a dog!' from Lena (IV 41). This is presumably said to a child unresponsive to parental advice. The theme, clearly directive of O-*l-L-xa* 'raise O', was not further investigated. The status of this theme, however, is questionable, in that it was offered by Lena during the second summer, but then rejected by her the third.

### 15.9.2.5 Group 5 directives

This is a smaller group, possibly shading into Group 4. Group 5 refers to a relation preceding control or knowledge of an object, e.g. asking, begging, summoning, expecting the object. Three of five stems have no non-directive themes.

(88) Group 5 directives

O-'*qe'd-X* 'inquire, ask about O'

O-'*d-L-qe'd-X* 'ask, inquire of O', with *d-* 'oral, speech'

<sup>22</sup> This stem is either the same as the preceding or homophonous with it. Both are found only with these directives.

O-’-’ehdz ‘invite, summon O’, ’ida-’-’ehdz ‘have potlatch’, with indeterminate object

O-’-yl-ta ‘expect O’ (Neuter stative) < O-ta ‘move sg inanimate O’

O-’-L-ya’X ‘beg O (for S to be included, to go along)’

o-X O-’-L-ya’X ‘beg O for o’

o-lu’qa: o-tl’ da:X ’i-’-d-le ‘beg o(-tl’) for o’ (cf. da:X ’i-’-gdI-gehdz in Group 2, and Group 8) < o-tl’ d-le ‘S says to o’

### 15.9.2.6 Group 6 directives

This is a small cohesive group, the central idea of which seems to be aversion, fear, taboo. Three of five stems have no non-directive themes.

#### (89) Group 6 directives

O-’-lX-L-ki:nq’ ‘be shy, modest, reserved towards O’,

’Adu-’-(l-?)LA-ki:nq’ ‘be sexually shy, modest, reserved’, reflexive (cf. ’Ad-lA-LA-kinq’ ‘be shy, modest, reserved’)

O-’-lX-LA-xa:s ‘fear O’ < lX-LA-xa:s ‘be afraid’ (Neuter stative)

O-’-L-xa:s ‘follow O (taboo)’

k’u-’-LA-tuh ‘be lazy’ (Neuter stative), with thematized k’u- indefinite “empty” (?) object (cf. k’u-’-Xdl-a ‘S staggers’ of Group 8 (93), the only other directive theme attested with k’u- indefinite object; future k’u’qu’-, not k’u’qe’-, though Lena has heard that understandable mistake)

O-’-t’e’(?) ~ -t’u’ ‘take dislike, aversion to O’ (not attested in Neuter stative), probably < -t’e’ ~ -t’u’ ‘be’, plus adverbial; ’u:ch’ ’Adu’xsLit’u’L ‘I changed my mind about going there’ < ‘I developed aversion thither’, reflexive

### 15.9.2.7 Group 7 directives

This is a highly limited and cohesive group, with impersonal subject, referring to the passing of time, day, season, on the object. It might have been filled out more by elicitation e.g. with the stems gah ‘day’, xah ‘summer’, se:L ‘evening’. All are derived from non-directives.

#### (90) Group 7 directives

O-’-Gl-’ya ‘time passes for O’ < Gl-’ya ‘time passes’

O-’-y-L-qa ‘O spends night’ < y-L-qa ‘day dawns’

O-’-L-Xe’tl’ ‘night falls on O’ < L-Xe’tl’ ‘night falls’

(o-ch) O-’-L-XAla:g ‘O winters (at o)’ < L-XAla:g ‘winter passes’

### 15.9.2.8 Group 8 directives

This is a quite separate category both morphologically and semantically. Semantically it seems to refer clearly to the relation between two simultaneous motions or processes. Morphologically, it shares only the ' - apparently in the same position as that of the directive, and what appears to be the indeterminate object 'i-, thus 'i-'. For some reason, as mentioned above, the norm for indeterminate object of directive is not simply the expected 'i-', but 'ida'- instead, as in the paradigm *xu'yiXah* 'you're telling of me', *'i'xXah* 'I'm telling of you', but *'ida'xXah* 'I'm telling a story', not the expected \**'i'xXah*, which would be homophonous with *'i'xXah* 'I'm telling of you'.

The difference between expected 'i-' and 'ida'- is strictly that a *dA-* has come between the 'i- and the (tautosyllabic) ' -, the reduced /A/ necessarily therewith becoming full /a/. It seems doubtful that a *dA-* is simply "inserted," from nowhere, to disambiguate 2s object 'i- from indeterminate object 'i-, given that those are homophonous in the non-directive, i.e. the vast majority of instances. Some better explanation for the *dA-* is called for, and that could come from three directions, within the verb either from the right or the left, or both, and/or from outside the verb.

Speaking for an origin outside the verb is the fact that the indeterminate object of postpositions is itself precisely *dA-*, a suppletive allomorph of the same morpheme as object of verb 'i-, as in *'Awt'a' sa'yahL* 'it's stuck behind that', *k'ut'a' sa'yahL* 'it's stuck behind something (specific)', *dAt'a' sa'yahL* 'it's stuck'.

From within the verb, one source from the right could be the fact that in a large number of instances, the valence-lowering effect of the indeterminate causes the insertion of the *D-* element in the classifier, i.e. *dA-* for  $\emptyset$ - classifier, thus e.g. *xkus* 'I'm washing it', *'ixkus* 'I'm washing you', *k'uxkus* 'I'm washing something (specific)', but indeterminate 'I'm doing the wash/laundry' is *'ixdAkus* instead of \**'ixkus*, with the valence-lowering *dA-* coincidentally removing the homophony between e.g. *'ikusinh* 'he's washing you' and *'idAkusinh* 'he's doing the wash', now a minimal pair, plus/minus *dA-*. In the directive, e.g. *O-'Xa* 'tell of O', we have *'i'Xinhinh* 'he's telling of you', but for 'he's telling a story', instead of \**'i'Xinhinh* or \**'i'dAXinhinh*, the correct regular form is *'ida'Xinhinh*, which could be explained as metathesis of ' - and *dA-*, i.e. /'dA/ > /da'/. That is at least one conceivable explanation of a source from the right. Such an explanation is strongly supported by the fact that in directives with indeterminate object 'ida-', the classifier is not changed from  $\emptyset$ - to *dA-*, unlike the 'laundry' case. In fact a passive can then be made with that classifier, *'ida'dAXah* 'a story is being told', so also *'i'dAXah* 'you're being told of'.<sup>23</sup>

A source for support also for an origin from the left might have been the particle 'ida: 'what; that', as in *'ida: xkus 'u'li:Lgah* 'you know what I'm washing; you know (that) I'm washing it', and 'so' in *'ida: siga'L* 'I'm so tired that ...'. That particle can always be reduced

<sup>23</sup> Unfortunately, an Eyak equivalent of 'laundry is being done' was not elicited. If allowable, it must be *'idAkus*, homophonous with both *'idAkus* 'you are being washed', and in a sense, *S 'idAkus* 'S is doing the laundry'.

to proclitic *'idA-*, thus *'idAxkus* ‘what I’m washing; (that) I’m washing it’, *'idAsiga'L* ‘I’m so tired that ...’, so providing a frequent disjunct proclitic sequence *'idA=* at the beginning of the verb as a basis for the anomalous usual form *'ida'-* of the indeterminate object in directives.

As if these sources were not enough, there are in addition three rather high-frequency themes with the conjunct string *'i-dA-*, where the second morpheme is not the *dA-* classifier (of Zone D) but the thematic *d-* of Zone C. These three are basically intransitive themes. One is *'i-(d-)'a* ‘S (wind, smoke, clouds, fog) moves’. The second is *'i-d(-)'L-'a'* ‘S (wind, smoke) moves’, where the *'-* is especially frequent before the conjugation-aspect markers *GA-* and *sA-*, resulting in frequent sequences *'ida'-*. The third is *'i-d-le* ‘go on, happen (of activity, event)’. This third is of course also frequent in the causative *'i-d-L-(l)i* ‘carries on (an activity)’, where in spite of the apparent presence of indeterminate object *'i-*, a separate overt direct object can appear. One particularly irregular use of that theme means ‘knit’, e.g. *ch'iyahd 'iya: 'iqe'di:xLih* ‘I’ll knit a hat (*ch'iyahd*) for (-a:) you (*'i-*)’, where also the expected noun class marker *l-* for ‘hat’ does not appear, or can not appear. Moreover, with the indefinite object marker *k'u-*, as used e.g. in ‘I’ll knit something for you’, the result is not the expected *'iya: \*?k'u'qe'di:xLih* (perhaps never tested), but is instead consistently *'iya: 'idAk'qu'di:xLih*, where the *'idA-* now appears not at all as conjunct indeterminate object (at least in appearance) plus thematic *d-* of Zone C as in these themes all the rest of the time, but instead as *'ida:* ‘what; that’ reduced to proclitic *'idA-*. In this striking irregularity, we see some real instability and confusion between conjunct and preverbal (disjunct proclitic) *'idA=*. It seems like knitting, obviously a recently introduced activity, is referred to partly as, or smacking of, the idea ‘what S is making; that S is making something’. Moreover, this second conjunct *'idA-* (with thematic *dA-* of Zone C, not the classifier of Zone D) is in itself yet another and much closer source from the right for a *dA-* to make *'ida'-* of the expected directive indeterminate object *'i'-*.

Group 8 begins precisely with just that form *'i'-*, now of a status quite different from the “regular” modern indeterminate object of the directive, *'ida'-*. The form *'i'-* is now specialized for some reason in Group 8, with themes which refer to the relation of one motion or process to another simultaneous motion or process. The best attested subgroup is derived from locomotion themes, which otherwise do not occur with the directive at all. The future of these shows umlaut to *-i'-qe'-*, < *\*-i'-qwe'-* < *\*-i'-qwa'-*), just as it does with indeterminate object in non-directives or, for that matter, with second person singular and plural objects, i.e. with any preceding prefix ending in the vowel /i/. That renders moot the question of whether the *'i'-* in these forms in fact includes the indeterminate object or a homophone thereto, given on the one hand the apparent intransitivity of these locomotion verbs, but on the other, the “empty” directive object in some of the themes above.

These themes all take postpositional phrases specifying the relation between the locomotions: *o-ka-X(-A-ch)* ‘(toward) catching up with o’ (< *o-ka'* ‘even with, locomotion along with o’, *o-X* ‘motion within area of o, non-punctual contact with o’), *o-Xahd* ‘pulling away from o’ (cf. *o-X*, and *-ahd* in *o-ch'ahd* ‘from o’, *o-ch'* to o’), once *o-'ih-ch'* ‘falling behind o’ (cf. *O-'ih-d* and *O-'ih-X* ‘behind o’ with *-d* ‘punctual, at rest’, *-X* ‘non-punctual,

in motion'; therefore it is probable that in this instance O-*'ih-X-A-ch'* would have been equally or more correct). Most of these show a thematic qualifier *d-* or include a /d/ in the qualifier, with some degree of variation and in one case displacement, indicating perhaps some shakiness in control of this derivation in the late stages of Eyak. All or nearly all instances are derived from the basic locomotion intransitives *-a* '(sg) walk', *-a'ch* '(pl) walk', *Xdl-'ya* '(sg) run', *-we* '(sg) swim'. Others would surely be possible. The postpositions with *(-A-)ch'* are normally used with the Inceptive perfective ('progressive'), as exemplified in (91).

## (91) Group 8 directives

- o-ka:X(Ach')* *'i-'d-a* '(sg S catches up with, gains on o walking', once without *d-*: *'ika:XAch'* *'i'(dA)GAxa:L* 'I'm catching up to you' (Lena)
- o-ka:X(Ach')* *'i-'d-'a'ch'* '(pl S) catch up with o, gain on o walking', once without *d-*: *sika:X* *'i'(dA)shA'a'ch'Linu:* 'they caught up with me walking' (Lena)
- o-ka:X(Ach')* *'i-'d-we* '(sg S) catch up with o, gain on o swimming'
- o-ka:X(Ach')* *'i-'Xdl-'ya* '(sg S) catch up with o, gain on o running', once with *d-* displaced to left and duplicated, immediately following *'i-'*, probably in analogical error: *'ika:XAch'* *'i'dAXAdla:GAxya:L* 'I'm catching up with you (running)' (Lena)
- o-Xahd* *'i-'Xdl-'ya* '(sg S) pull away from o running'
- O-*'ihch'* *'i-'d-'ya* 'S falls behind o (running?)', attested only once, either missing the *Xdl-* in '(sg) run', and misused for '(pl) run', or perhaps more likely, more general or abstract, from *-'ya* 'be involuntarily situated': *'u'ihch' da: 'i'dAGa'ya:L* 'we're falling behind him' (Lena).

The items in (92) are action intransitives, typically in Neuter perfective as statives, also with thematic qualifier *d-*, and using *o-X* to relate to an indirect object. They may also be seen semantically as involving a relation, not between two locomotions, but between two processes, and/or pathos or debility.

## (92) Action intransitives

- tl'eh o-X* *'i-'d-'ya* 'o catches S (cold)', i.e. 'a cold finds itself in contact involving movement with o', cf. preceding
- da:X* *'i-'gdI-gehdz* 'barely hang on, hang on or together by a thread', also entered above in Group 2, but perhaps belonging more properly to this group, < *-gehdz* 'pitiable', Active *s-* perfective stative, with *dA-* indeterminate object of postposition *o-X*, other objects not tested
- (*o-lu'qa: o-tl'*) *da:X* *'i-'d-le* 'beg o(-tl') for o(-lu'qa:)', also entered in Group 5 in §15.9.2.5, along with other themes for 'beg', *da-X* perhaps thematized, not tested for meaning, cf. the preceding
- o-X* *'i-'lXdl-XAL* 'o gets half drunk and liquor runs out', i.e. 'S (supply of liquor) runs out, leaving o only partly drunk' < *lX-XAL* 'be drunk, dizzy'

o-X 'i-'-lXdl-we'q' 'o gets half drunk and liquor runs out', i.e. 'S (supply of liquor) runs out, leaving the object only partly drunk' < -we'q' 'run out of liquor' (back-formation?), < o-Xa' dA-we'q' 'S (supply of anything) runs out on o', a more probable source, exact derivation of directive unclear, but not parallel to that of the preceding

Finally, one last theme appears semantically related to this group, but has *k'u*-indefinite (something specific but not named) instead of the indeterminate 'i- (abstract and not specific), as thematized "empty" object of the directive:

(93) *k'u*- indefinite as thematized "empty" object of the directive

*k'u*-<sup>1</sup>-Xdl-dA-a 'stagger' attested only once not in perambulative

*k'u*XAdla:GAxda:L 'I'm staggering feebly (from old age)' (Lena, inherent dA-classifier)

yAX *k'u*-<sup>1</sup>-Xdl-dA-a 'S staggers (drunkenly) about'; < -a '(sg) walk'<sup>24</sup>

yAX *k'u*XAdla:da'a'ch'Linu: 'they're staggering drunkenly about'

### 15.9.3 Eyak directive compared with the Athabaskan

Here I indulge in some comparative Athabaskan considerations, not only to explain the Eyak directive better, but also because the Eyak can explain the Athabaskan, or at least provide the basis for producing a better account of the Athabaskan directive, which could use some improvement. Something cognate and quite similar to the directive in Eyak is likely to be found in all Athabaskan languages, with the possible sole exception of Tutchone (John Ritter, p.c.). The directive is obvious in all Alaskan Athabaskan languages. It is certainly present, generally as a tonally unmarked full vowel /u/ in a position closely corresponding to Eyak Zone B, also in Slave, Chipewyan, Tahltan, Tsetsaut, Beaver, Sekani, Carrier, Chilcotin, Tututni, Tolowa, Galice, Hupa, Mattole, Kato, to mention only some of the more easily checked languages. In Sarsi it is present as /i/, high-toned (i.e. reflex of a full vowel, but shifted). It is obvious though "not very productive" in Western Apache (Willem de Reuse, p.c.). It is apparently less obvious (vestigial?) in Navajo (for Apachean see §15.9.3.2.) Thus in Athabaskan we have the extremes of Tutchone at one end, where it may be gone, or Apachean where it may be "not very productive" or even vestigial, and at the other end we have Koyukon, where the directive has been expanded to potential use with any verb meaning 'try to', a full conative.

<sup>24</sup> The *k'u*- indefinite in this form is thematized as object of directive, not indeterminate, confirmed by Marie in checking that future here is not with *qe'*, but rather *-qu'* (cf. *k'u*-<sup>1</sup>-LA-tuh 'be lazy' in Group 6 (89), the only other directive attested with thematized indefinite object). Since the verb presumably remains intransitive, or cannot be confirmed as transitive, the *k'u*- must be allowed as "empty O".

The impression I get from a very quick and superficial tour of the published literature is that the inventory of directives in the average Athabaskan language is about the same size as in Eyak. Further, the Athabaskan languages appear to have the same combination of productive use as in Eyak Group 1 (§15.9.2.1) with meaning such as ‘shoot at’, and of thematic or lexicalized use shown in the other Eyak groups, what Keren Rice ((Rice 2000: 429) calls “frozen conatives.” Cook’s 2013 Chilcotin grammar (Cook 2013) devotes but one page (166) to the *u-* he calls “conative,” the only examples being *O-u-l-gad* ‘point at O’ and *O-u-tal* ‘kick O (seriatively)’.

### 15.9.3.1 Origin of the Eyak and Athabaskan directive and future prefixes

Currently there seems to be a consensus that the Athabaskan conative prefix is leftmost of the qualifiers. That corresponds exactly to its position in Eyak. However, for Eyak I have had to define a special zone, Zone B, to include the closely related Eyak future *qu’-* along with the directive. When the directive *’u’-* and future *qu’-* overtly co-occur, the directive precedes the future (*’u’qu’-*). It is in that case separated from the qualifiers by the *qu’-*. However, at least as frequently, the two combine or collapse, as *qu’-* in the third person. The Eyak future can by no means be considered a qualifier, having synchronically what is purely an aspectual inflectional function (cf. §12.1.5). It therefore becomes even more inappropriate to call the Eyak directive a qualifier.

However, the current practice in Athabaskan is indeed to call the *\*tə-* component of the Athabaskan future *\*tə-γə-* a qualifier, so also the directive/conative marker *\*u-* preceding it. Unlike the Eyak *qu’-* of exactly the same position though, the Athabaskan *\*tə-* does not itself alone constitute the future. Further, it combines not only in *\*tə-γə-* for the future, but it also combines with the *\*s-* perfective as *\*te’s-* for the Inceptive perfective. It thus combines in two uses that are aspectual-inflectional, as opposed to the basically thematic or derivational qualifiers. However, at the same time, the *\*tə-* can also stand alone, derivationally like a qualifier, with the meaning ‘forward’, nicely epitomized in the theme *\*tə-ɣweq* ‘spit’, as opposed to *\*\*ɣweq* ‘drool’.

Thus we see that the future in both Athabaskan and Eyak is a later development outside the zone of the rest of the mode-aspect prefixes, to the left even of the qualifiers, albeit with different prefixes, Eyak *qu’-* vs. Athabaskan *\*tə-* (plus *\*γə-* or *’s-*), of different origins and meanings. Both separate the directive from the qualifiers. In Eyak this is still so, whereas in Athabaskan *\*tə-* is currently described as separating the conative *u-* from the rest of the qualifiers. Some Athabaskan, e.g. Koyukon, seems to have gone one step further, where in combining *tə-* with the qualifier *də-*—not in combining with any others—there seems to be a metathesis, resulting in *dətə-* instead of *tədə-*, mingling *\*tə-* one step farther into the qualifiers, unless one is willing to call that a mere phonological movement of the feature of aspiration, probably a better way of looking at it.

It is certain, on internal grounds, that the Eyak *qu’-* must be segmented historically as *\*qwa-’-*, just as certainly as the directive, on partly different internal grounds, must be segmented into *u-’-* (< *wA-’-*; see final paragraph of §15.9, and §15.9.1 under “Some

thoughts” and “Further comments”. That \**qWA-* is then with equal probability cognate with the Athabaskan prefix of that exact same form, \**q<sup>w</sup>ə- ~ \*q<sup>u</sup>-*, and position, meaning ‘area, event’, deictic subject/object, sometimes also considered (at the same time?) a “gender” qualifier. The development of the Eyak future, segmented \**qWA-’-*, can thus be fully accounted for, not just phonologically, but its semantics can also be very nicely explained as ‘event-intended’, quite literally. For the gloss ‘intended’ we are indebted to Jetté (1906) (for which see the end of this addendum). There seems to be no cognate at all in Eyak for Athabaskan \**tə-* ‘inceptive, forward’, the origin of which remains unexplained.

As for an Athabaskan cognate for the segment *-’-* ‘intended’, of both the Eyak future and directive, we might conceivably connect that with the mysterious tone-marking Athabaskan constriction and full vowel \**e’* that appears for some reason in combinations of the \**s-* perfective with conjunct CE-prefixes, e.g. Inceptive perfective \**te’s-*. No meaning can be attached to that Athabaskan \**-’-*. Whereas *-’-* is the essential part of the directive in Eyak, it appears that the full vowel /*u*/, usually but not always without constriction, has become the essential part of the directive in Athabaskan.

It should also be noted that in many of the Athabaskan languages there is a qualifier \**nə-* closely associated with the *u-*. This corresponds with the *l-* or “weak” *l-* also closely associated with the directive in Eyak (cf. §17.10.4).

### 15.9.3.2 Semantics of the Athabaskan directive

We turn now to the semantic function of the Athabaskan directive, and will deal with the description of that in three groupings, recent, intermediate 1930–70, including Golla (1970), and Jetté’s pioneering work on Koyukon (Jetté and Jones 2000), with historical perspective.

#### Recent studies 1989–2007

Perhaps the fullest contemporary account of the directive we have is in Hargus (2007: 392–4) for Witsuwit’en, nearly two pages. Hargus calls it simply the “*u-* qualifier,” out of respect for the terminology of Jetté (1906), discussion of and place of honor for whom is reserved for the end of this sermon. Using neither the term “directive” nor “conative”, she therewith also avoids the issue or choice of what to call it. The difference between “directive” and “conative” has been anything but clearly defined in the discussions that do exist. Hargus says of the “*u-* qualifier” and its semantics that it “occurs in derivational prefix sequences and in verb themes. There is no obvious semantic characteristic that all *u-* qualifier prefixes have in common.” She provides 32 examples, the best list in the Athabaskan literature so far, with some grouping, e.g. under ‘at O’, and ‘-ish, sort of (color)’, also under ‘active verbs’ (‘buy O’, ‘ask O’, ‘call name of O’) and ‘neuter verbs’ (‘know O’, ‘be shy of O’). Here have been cited specifically her examples that coincide with the Eyak ones in §§15.9.2.1–15.9.2.8, though in many cases the stems themselves are not cognate with the Eyak stems. The remarkable point is that it is the ideas (lexemes, semantics of the directive) that remain the same, often showing more persistence than do the stems.



One of the better modern lists is in Kari's Ahtna dictionary (Kari 1990: 68-69), with 17 examples under the verb prefix *u*, glossed 'conative'. There under "thematized conative, attempting" are listed e.g. *O-u-Ø-zii* 'call O's name', *O-u-Ø-kaet* 'buy O'. This can be explained by Kari's tendency toward semantic associations that some would consider on the flexible side, here in the use of the term "conative". Kari also sublists, among others, the derivational string "u+n" ("n-momentaneous", requiring aspectual prefix *n-*), "directive, do V at O: *yuninitsaetl'* he chopped at it." This may be the first use of the term 'directive' in the published literature. It appears that Kari here distinguishes the 'directive' as a subtype of (or including the prefix for) conative, requiring aspectual marker *n-*, meaning 'do V at O'. He does not comment explicitly, though, that the directive is more productive in this narrow way than is the "thematized conative, attempting," which one may well expect to be the case in Ahtna, as is usual in Athabaskan.

Rice's (1989: 599-601) Slave grammar, the earliest of the recent accounts, lists *u-* as the conative "aspect" prefix (requiring *n-* conjugation prefix in the imperfective, perfective and optative modes). She gives the six examples: *u-h-k'é* 'shoot at', *u-Ø-'a* 'throw clothlike O at', *u-Ø-káh* 'take swipe at with axe', *u-de-Ø-dlá* 'call to', *u-Ø-séh* 'spit at', *u-ne-h-dzáh* 'try'. Understandably prominent, at least four of the six examples, are what Kari (1990) would call the "directive." To these Rice also includes therewith 'try' and 'call to', without comment, and none of the many other more thematized items, which Rice 2000 would distinguish as "frozen conatives," corresponding to those in the Eyak groups other than Group 1, which are of course also present in Slave.

The Young-Morgan-Midgett *Analytical Lexicon of Navajo* (Young et al. 1992: 852) has the following: "yi/- -i/- directive. Occurs in combination with *ni*<sup>7</sup>- [belonging in the next subposition], with which it contracts, in certain environments, to produce *-o/-*. (Cf. *yínishtá*: I have hold of it / *shotá* he has hold of me.)" Then, on the same page, for the prefix there said to be in the next subposition, they write "*ni*<sup>7</sup>- *-n/-*: a category into which are placed sundry *ni-* prefixes that cannot be readily identified, even speculatively, with a particular positional slot. (Cf. *di*<sup>14</sup>-)". [I.e. *di-* in the subposition immediately preceding that of the directive.] The "*di*<sup>14</sup>-" they call "a 'catch-all' for *di-* prefixes that, even speculatively, cannot be assigned to any one of the foregoing categories" [i.e., *di*<sup>1</sup>- through *di*<sup>13</sup>-?]. The only example offered is 'have hold of', to show the *ó-*. The morphophonemics of the *ín(i)- ~ ó-* variation are not explained; the persistent high tone reflects a PA full vowel. No comment is offered about the productivity of the Navajo directive. A quick survey of the published literature did not turn up any more revealing description of the Navajo directive than that.<sup>25</sup>

25 Earlier, we have e.g. the Hoijer[-Sapir] *Navajo Lexicon* (Hoijer 1974: 299), which lists the verbal prefix string "yi- ([position] 6) ni- (6) 'directed toward, at'". Leer (p.c. 2009) agrees it is possible that that may have been the inspiration for his label "directive". Before that we also have the gloss 'doubtful destination' for that string in Reichard's *Navaho Grammar* (Reichard 1951: 255-7). The phonological evolution of the prefix in Navajo is connected with that in Sarsi (Tsuùt'inà) *í-*, yet another trait connecting Apachean with Sarsi.

Surely the Eyak directive as described above might provide some helpful suggestions for improving the understanding of the very same thing in Athabaskan, no less interestingly *mutatis mutandis*. To this I would add the much more general claim that in a crucial sense, there is no better explanation for what happens in language than the historical explanation.—At least where that is available, one might add, and that should indeed be the case in Eyak-Athabaskan.

One further example of the close relation between the Eyak and Athabaskan directive here may also be seen in the parallel association of the Athabaskan *u-* with aspectual *n-* and/or qualifier *n-* on the one hand, and on the other, the Eyak directive and “soft” *l-* qualifier associated with it in Groups 1 through 5, especially in Group 1. That is the group in which the directive is most predictably productive, so often with that *l-*, which is certainly cognate to the Athabaskan qualifier *n-*, and probably therewith also relatable to aspectual \**ŋʷ-*, etymologically different, but possibly arising out of re-identification of the gender prefix as the aspectual one. We shall return briefly to this particularly in connection with Koyukon below in §15.9.3.2, as we continue backward in the history of the study of the subject.

### Studies 1930–70, Golla

About twenty years before the present improvable state of the study of the directive in Athabaskan, we have Victor Golla’s dissertation on Hupa grammar (Golla 1970: 145–7, 163–4), which contains a somewhat clearer picture of it. Golla calls it the “semitransitive,” a term which he certainly got from my early Eyak grammar sketch (1965). Golla writes: “Themes of the semi-transitive type have a thematic locative prefix #O-*o*<sub>11</sub>-.” His subscript 11 refers to a prefix position number away from the stem, marking the disjunct object of a postposition, which he acknowledges is “somewhat arbitrary.” Golla notes at the same time that the /o/ follows the conjunct deictic subject *k’r-* (same as Eyak *k’u-*). The /o/ is rather also just a conjunct prefixal element which changes e.g. 2s object *nə-* into *no-*, and takes the direct object pronoun type rather than the possessive or object of postposition type. Golla offers some semantic description, that the actor ‘reaches for’, ‘points at’, or ‘thinks about’ things. He then gives four examples of semantically predictable semitransitive derivatives: O-*o*<sub>11</sub>-ʔ<sub>13</sub> ‘shoot at O’, O-*o*<sub>11</sub>-*t-tal/taλ* ‘kick at O’, O-*o*<sub>11</sub>-*t-wal/waλ* ‘hit at O with club’, O-*o*<sub>11</sub>-*t-čʷid* ‘point at O’ (< ‘push O’). He then gives four more with “more abstract meaning,” namely: O-*o*<sub>11</sub>-*t-tač* ‘count O’, O-*o*<sub>11</sub>-*t-c’id* ‘know O’, O-*o*<sub>11</sub>-*xed* ‘buy O’, O-*o*<sub>11</sub>-*We/We?* ‘call O by name’, no doubt corresponding especially to his ‘thinks about’ group. Krauss (1965a: 172) had commented on the difficulty of choosing a name for this derivational prefix, and mentioned, as the clearest type of example for its meaning, only ‘throw (e.g. stone) at’ and ‘kick at’, but none of the more “abstract” ones. It is indeed uncanny, coincidence quite literally, how Golla picked four nice examples that have exact counterparts in Eyak, semantically, although none of the stems in those four are cognate! Golla and I were in frequent contact in 1969, but I do not recall that there was personal communication about this very thing or that Golla had access to the Eyak dictionary just then about to be

photoprinted. Possibly just as much a source for Golla then was Li's Mattole grammar (Li 1930a: 54), which includes a verbal prefix *-o-*, *-o:-* 'aiming at, for, toward (postpositional)', which probably influenced Golla to consider it a postposition. Li gives examples with five stems: *'oŋge*' 'you spear at him', *'ona-yilfsid* 'I recognize him', *'odjlxj*' 'ask him', *'oninla*' 'you shoot at him', *'osilfsán* 'you listen to it'. It may be that Li (1930a) is the only recognition that this prefix received in the entire Goddard-Sapir(-Li)-Hojjer literature of Athabaskan language study.

Golla's Hupa sketch (Golla 1996: 373), most of which was probably written in the 1970s, still considers the prefix disjunct and calls it "semitransitive", but in Sapir and Golla (2001: 853) he calls it "directive", and notes that its problematic ordering with regard to the object and deictic subject prefixes makes it look "as if it were a disjunct adverbial prefix," therewith implying that it is in fact a conjunct prefix.

### Koyukon, Jetté 1906

Finally, and most spectacularly in more ways than one, is the case of Koyukon. As already mentioned, Koyukon has made the most of the directive of all Athabaskan languages, by expanding to free use of it with any verb in the sense 'try to', for which the term "conative" was probably first used, at ANLC, probably in the late 1970s. In the Koyukon dictionary (Jetté and Jones 2000: 12–3) Kari (as executive editor) should be given credit for providing the second most extensive presentation available in print, with 27 examples (after Hargus 2007's 32 for Witsuwit'en and his own 17 for Ahtna 10 years earlier, Kari 1990). He lists the conative *oo-* as a "multifunctional prefix in the qualifier zone", and as a "theme formation string" meaning 'at, toward, trying to, tentative', which is "lexicalized" in various verb themes:

- (94) Koyukon conative *oo-* ([u])  
*yoozee* 'he is calling his name'  
*yootunh* 'he is holding it'  
*yookkaat* 'he is buying it'

Kari then lists the fully productive "conative mode-superaspect" meaning 'try to' with any verb, as *u+nə*, where the *nə-* is still a qualifier, still in the position corresponding exactly to that in which we find the cognate Eyak soft *l-*. The next sub-entry is listed as an "aspectual derivational string," specifically "n- momentaneous" (requiring aspectual prefix *n-*). Kari glosses this as 'directive, directed at O, rushing at O', including e.g. predictable *yooneeLdzets* 'she swung at him (with her fist)'. It also includes, however, the example *yooneeggets* 'she gave him a mean, reprimanding look'. There is no non-directive theme from which this could be directly derived to be found in the dictionary, showing in this case Kari's semantically flexible use of the term "directive," going well beyond the predictable derivation as in Eyak Group 1 (cf. perhaps *O-'l-LA-tsa* 'stare piercingly at O' of Group 2, §15.9.2.2). As in the case of Ahtna, Kari does not comment on the relative productivity of the more literal '[stroke] directed at O' subtype of this derivation.

Most spectacular is the contribution of the Jesuit priest Jules Jetté, working with Koyukon at the beginning of the last century, writing in 1906, and who never took a course in Linguistics. Jetté wrote a century ago what must be the best description yet of the semantics of the directive, as quoted in Jetté and Jones (2000): “The peculiar import of the Qualifier U seems to be the cooperation of mind, by will or attention, to the verbal action. It occurs generally when the intention of the agent is an important feature of the action.” Further, from his dictionary manuscript: “Imparting to the verb a shade of intentionality, it occurs in most verbs implying an act of the mind, a purpose or an effort, a design.” Clearly Jetté here is seeing the big picture, not just the strict conative ‘try to’, so productive in Koyukon. Jetté’s insight is beautifully suited to Eyak as well as to Athabaskan.

After Jetté 1906, Golla 1970 does next best. Far behind is Krauss, not only with his “semitransitive” (Krauss 1965a), but also even with the above 2008 statement on the “shared basic meaning” of the directive that was penned at the outset of writing this section. Even at the outset of writing this comparative-historical addendum including the history of its study, it seems that I had forgotten that history. I leave this disquisition as it is, as a sermon to show the moral to the story, the value of history. Though I am not the most guilty of ignoring history, I am again reminded of the penalty for forgetting even for a moment either the history of a language or the history of its study.

## 16 PREVERBALS

Preverbals are defined morphologically as the category of postpositions and preverbs, combined because many stems are both postpositions and preverbs, and because these both occur syntactically before the verb in combination with the verb, to form “bases,” verging on lexemes. Unlike Athabaskan, Eyak preverbals are almost completely separate from the verb word phonologically, not even to be considered proclitic. They are always written separated by space from the verb, treatable and isolable as “words,” even though many or most might never in normal speech be uttered in isolation as such. Certainly together with the verb they form lexemes or “bases,” but “base” is a very vague term in Eyak. There certainly is no clear line between verb words of very general meaning, e.g. classificatory, or ‘go’, combining with different preverbals to form different “bases” with very different English translations, e.g. ‘lift’ versus ‘give’, on the one hand, and verbs of more specific meaning with different preverbals, e.g. ‘crawl into’ and ‘crawl up’, on the other. Further, Eyak preverbals are quite unlike the Athabaskan ones in their relatively consistent unbound status. Athabaskan has preverbals that incorporate into the verb word as “disjunct” prefixes and those that do not so incorporate, even though the membership in such sets may overlap to a great extent. The “unincorporated” elements in Athabaskan may include certain special categories, especially the directionals, which even have their own special affix morphology. Eyak, on the other hand, has no such distinctions as incorporated versus unincorporated preverbals, but has instead a rather cohesive and distinctive category only of preverbals, phonologically unattached to the verb word itself.

This claim needs to be qualified only in minor ways. At the end this chapter is a section (§16.12) rather thoroughly covering any phenomena in Eyak that cross or violate the otherwise clear and stable boundary between verb and preverbals. There are relatively trivial phonetic or phonological effects at that border on some preverbals, a very few actual incorporations of preverbs, and some significant changes in the reverse direction, “preverbalizations,” affecting only the leftmost position of verb prefixes, some personal pronouns.

The syntactic definition of preverbals is somewhat different, in that there is a preverbal sector, definable as a specific part of the sentence, which includes the “disjunct” personal pronouns, non-prefixal to the verb, and the demonstrative pronouns as subject and object. These are listed and their order of co-occurrence with the preverbals is described in §16.7 below. Further discussion is included in Chap. 25 on syntax.

It is a crucial point that preverbs and postpositions can be distinguished but are closely related. The overlap of preverbal stems that are found both in postpositions and preverbs is 33%. (See §16.5.) In fact many preverbs can be shown to be derived from postpositions with zero oblique object in the derivation called indirect reflexive. A clear example of the workings of this process is with the postposition *o-sa* ‘into o’s mouth’ as in *sisa’ siLitahl* ‘I put it in my mouth’. Because of its reflexivity, this preferably becomes *’Adsa’ xsLitahl* ‘I

put it in my own mouth' (with *D*-classifier). This in turn preferably becomes *sa'xsLitahL*, deleting the reflexive pronominal object 'Ad-. From this, there is derived a preverb *sa'* 'at the mouth', of somewhat limited use. There are both preverb and postposition in the case of *o-lah* 'around o', of equally wide use and the preverb *lah* 'circular motion around', the identity of the stems also is obviously not coincidental, one can also see nicely how the preverb is derived from the postposition. Cf. the case of *o-sa' > sa'* (with *D*-classifier). This very same process occurs also in Athabaskan, where we have the "iterative" \*na:, cognate to Eyak *lah*, requiring the *D*-classifier in intransitives. That \*na: can be seen in exactly the same way, as originating in the indirect reflexive 'around self' with deleted reflexive pronominal object of the postposition \*o-na: 'around o'. Cf. also the Eyak iterative preverbal *q'e'* 'back, some more, again', < *o-q'-e'*, and *o-'e'* 'in place of (absent) o', and Athabaskan \**o-q'e'* 'for want of o, in exchange for o', showing the same type of postpositional origin. This is discussed in §16.10.8.

At least five preverbal stems have been noted as attested in conversion to verb stems, at least four of those obviously by derivation from the preverbal: *O-L-t'a'L* ~ 'tie O down with responsibility', *O-qi-d-L-e'* 'track O by footprints'; *LA-tsa'* 'be deep (water)', and nominalization of Neuter imperfective *qi' k'uGi:lu'* 'smokehole'. For these see *o-t'a'* 'behind o', *o-'e'* 'in (vacant) place of o', *tsa'* ~ 'downhill to/past shore', *o-lu'* 'through ole in o' below. In the case of *O-d-L-Xawi'* ~ 'believe O' and *o-XAw'* 'simultaneous with o' direction of derivation is less obvious.

There are some nominals, possessed nouns, which are treated or sometimes treated as postpositions, at least by taking the suffixation of postposition-final *-d*, e.g. *o-q'As-d* 'opposite end of o'. For these see §18.5.

## 16.1 Internal composition of preverbals

Preverbals may vary considerably in the complexity of their internal composition, from a single morpheme to at least as many as six morphemes, and that is without considering the compounding of preverbals. Some of this internal structure is quite transparent, especially where qualifiers are prefixed to the stem, and with what are called *preverbal finals* suffixed to the stem. There may be combinations of qualifiers in the prefixing, and combinations of finals in the suffixing, affixing up to five elements to the stem itself, hence the considerable polymorphy. Greatly adding to the complexity of the morphological analysis of the preverbals, however, is the range from transparency to opacity in the segmentation, partly in the prefixation and partly in the suffixation of finals.

As noted, the internal structure of the preverbal stem itself can vary from relatively transparent to opaque, even with the same elements composing it, depending, of course on the semantics. Many stems can themselves be seen as composed of at least two elements, the *initial* and the *augment*, the initial being the onset consonant, obstruent or sonorant,

and the augment being the syllable nucleus, vowel and stigma. In the case of stigma-less or reduced vowel nucleus, then a final obstruent coda must be part of the stem, though all such codas happen to be uvular obstruents. It is an important fact that the structure of preverbal stems is for the most part significantly limited in the range of initials, nuclei, and especially codas allowed. Most preverbal stems are in fact open, having no obstruent coda, unless uvular after reduced vowel, leaving a residue of only about 10% that show a less highly limited structure.

Taking now some concrete examples, three of the five basic simple non-syllabic obstruent postpositions are with *-a'*, *o-ch'* 'toward o', *o-d'* (at rest) in punctual contact with o', *o-X'* 'in non-punctual (or moving) contact with o'. Adding the augment *-a'* to these produces the three clearly related postpositions *o-ch'a'* 'toward o', *o-da'* 'right in front of o, arriving at o', and *o-Xa'* 'in close relation to o, right by o'. Here the semantic relationship of *o-ch'* to *o-ch'a'* (synonyms) is inescapable, and of *o-d'* to *o-da'*, *o-X'* to *o-Xa'*, at least perfectly plausible. Another preverbal stem initial is *y-*, which itself is identical or homophonous with the anatomical qualifier *y-* 'hand', serving as such a qualifier e.g. in *o-y-Xa'* 'into o's charge, succumbing to o'. Adding the augment *-a'* directly to *y-* produces the preverb *o-ya'* 'in(to) o (concavity with broad opening at top)', presumably as is a cupped hand. We now have four initials, *ch'*, *d'*, *X'*, and *y-*, the first three of which, obstruents, themselves serve as a non-syllabic postposition, and the fourth of which cannot so serve, but is itself an anatomical qualifier.

To all four of these has been seen added the augment *-a'*, transparently or plausibly producing a semantically related set of syllabic preverbal stems. Adding now a different augment, *-ah-d* produces another such set, *o-ch'ahd* 'from o', *o-Xahd* 'leaving, abandoning o', *o-yahd* 'wresting from o's hand'. This meaning of the last item convincingly supports the segmentation *o-y-ahd*, where clearly the *-ahd* has a privative or ablative meaning. (Cf. in fact Athabaskan \**o-č'ən* 'to o' and \**o-č'ən* 'from o', to which Eyak *-ch'-a'* and *ch'ah-* obviously correspond in an interesting way, PAE \**-čən* and \**-ch'ən*.)

This now raises two questions, the status of the final *-d*, and the semantically troublesome fourth member of that set, *o-dahd*. The meaning of *o-dahd*, far from privative or ablative, is in fact 'touching against o', almost the antonym of the meaning expected from the components thereof. At the same time, the segmentation *-ah-d* is virtually demonstrable by the fact that another peculiarity of *-dahd* is that for some reason there are no Eyak stems both beginning with a non-affricate coronal stop and ending with one (cf. §7.2.1). There are no Eyak stems with initials /d, t, t'/ which also have with coda d or t'. (The same is probably true of Athabaskan as well.) We should therefore expect the *-d* of *o-dahd* to be suffixal, perhaps even to be identified with the final *-d* transparently suffixed to so many preverbals. This segmentation of *-ah-d*, whatever sometimes the semantics, is further supported by e.g. *o-xah* 'removal, loss of o', *o-k'ah* 'away from o', and by the pair *o-wah* 'makings of o', *o-wahd* 'for the sake of o'. The identification of the segmented *-d* with *-d* preverbal final, moreover, is itself supported by the absence of *-d* or any other finals suffixed to preverbals with stem *-ah-d*. It could, however, be said that this particular final loss of *-d* does not fit very clearly with any of the rather well defined uses of preverbal

final *-d*, except in that *-d* as a preverbal final can also be seen with the meaning ‘from a point (at rest) of contact with o’, see §16.10.1.

Here we have seen, all too typically, concrete exemplification of the inescapable or irresistible segmental analysis of preverbals, even of preverbal stems themselves, and how that quickly leads to serious problems, especially with the semantics. It is inadvisable if not impossible, not to begin such grammatical analysis. At the same time, there is no clear line whatever for where to stop in such an analysis or “internal reconstruction” that corresponds to any synchronic reality. Therefore, the approach undertaken here will be what Leer (p.c.) in response to this analysis has aptly called “atomistic,” of unapologetically maximum segmentation, or phonological form over semantic substance. Of course the reality of this approach is highly problematical, especially for synchronic grammar. The degree to which the implied structure is realistic even diachronically can be seen at least in part by comparison with Athabaskan and Tlingit. Such a comparison may prove that the Eyak system is indeed evolving from such a system, or toward such a system, or somehow even both.<sup>1</sup>

It should be noted at the same time that there are at least two small groupings of preverbals that are semantic, at least of postpositions, that are useful in that they do constitute classes that relate to morphological or syntactic criteria. One is the comparative postpositions *o-ga* ‘like o’, *o-lax* ‘more than o’, *o-u’X* ‘less than o’, which are here treated as a group. The other is the possessive uses of *o-Xa*, *o-ya*, and *o-a*; which are not treated as a separate group, i.e. are grouped phonologically with the rest.

For identifying morphemes, if for no other purpose than organizing the corpus into dictionary entries, or organizing a grammatical presentation, as here, the policy here will be heavily analytical, atomistic. At the same time, however, it will not make morpheme identifications where no semantic rationale or explanation can be adduced. This policy will therefore sometimes require enumerating some homophones separately, e.g. *ɣAq*<sub>1</sub> ‘(confined) inside’, *ɣAq*<sub>2</sub> ‘to shore’, *ɣAq*<sub>3</sub> ‘taboo’, where no semantic connection can be seen, even though there may well have been one. Otherwise, highly disparate but relatable glosses for what may be considered the same morpheme will simply be separated by semicolon in glossing for the same entry.

The difficulties are not only semantic, however, as combining with the semantic problems are uncertainties in segmenting the formal structures, in three places. The

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1 Turning to English, the status e.g. of *to-ward-s* comes to mind, so then *for(e)-ward-(s)*. Or better, analysis of English pronouns: such segmentation of *it-s* is so irresistible that many misspell it *it’s*; *you-r* is certainly analyzable, so maybe also *thei-r*, even *ou-r*, so *he-r* (leaving *he-?!*)—and that raises the interesting problem of English rhotacism (e.g. *are - is*, *were - was*; *ear-ly - eas-t*, *more - mos-t*, not to mention the latinate element, e.g. *rural*, *rustic*). In English one might claim the systems are too small, the alternations too “irregular,” but in Eyak the preverbal system is much larger, the analysis here is more productive, in spite of the genuine semantic irregularities.



segmenting at stem-initial, between that and the augment, and between the augment and the final, can all be quite uncertain. E.g. where the initial is qualifier *y-* ‘hand’ in *o-yahd* ‘wresting out of o’s hand’, segmenting is quite clear. In *o-ya* ‘in(to) o with broad opening at top (like cupped hand)’, that segmentation is maybe less clear. But what to make of *ya*’*X* ‘up (vertically through air) < (movement within) (from cupped hand?)’, fitting the formal pattern for preverbals perfectly, with final *-X*, < *ya*’*-X* < *y-a*’*-X*?

Given this vagueness, taking a highly analytic approach, and a modicum of semantic flexibility, we might count conservatively somewhat over 100 basic preverbal morphemes or main dictionary entries. This number might in fact constitute up to 10% of the native Eyak morpheme corpus.

Finally, there seems to be a few preverbal stems with a suffixal *-L*, probably to be identified with that in many nouns (cf. §18.13.3): *da:n*’*-L-ga*’ ‘slowly’, *o-wa*’*-L-X* ‘in accordance with o’, and *a:li*’*-L-X* ‘headwaters’.

## 16.2 Preverbal initials and qualifiers

Almost all preverbal stems are, as noted, of a highly limited phonological structure compared to Eyak stems in general. There are 30 consonants that could be stem-initial in Eyak, and 16 of these are found productively in preverbals. This might well be considered somewhat lower than a statistically representative proportion. Of these, five constitute non-syllabic postpositions themselves, four productively: /d-, tl’-, ch’-, X-/; and /q’-/ marginally. Then there are four consonants, not counting /d-/ and /X-/ already mentioned, which serve as preverbal stem-initial with augment, which can themselves be a qualifier: *y-* ‘hand’ and *l-* ‘head’ very productively, *w-* less so and with no clear meaning, *g-* marginally. Then there are eight more obstruents that occur only as preverbal stem-initials with augment: /t-, t’-, ts-, s-, k-, k’-, x-, q-/; as well as /’-/ and Ø-, in general less productively.

Along with some qualifiers that can serve as preverbal stem initials, a wide variety of qualifiers can be prefixed to preverbals in Eyak, if not in Athabaskan, in their usual role of qualifiers, as prefixed also to verbs, adjectives, and nouns. In their regular and semantically predictable role as noun class markers, or anatomical markers with predictable use or meaning, these need not be cited here. Preverbals with qualifiers are fully listed as such in the dictionary and in Chap. 16 on qualifiers. However, in semantically unpredictable thematic uses, e.g. *o-y-Xa*’ ‘falling victim to o’ (< ‘in(to) close relationship with o’s hand’), such derived preverbals (both postpositions and preverbs) will be individually cited in the main list in §16.10.

### 16.3 Augments or preverbal stem nuclei

If a preverbal stem-initial can represent a postposition and/or a qualifier alone, then the stem nucleus can be called an augment. It is of course not a coincidence that the membership of the set of augments and that of productive preverbal stem-nuclei are the same. These are, moreover, very predominantly of the timbre /a/. Far fewer are of the timbre /e/ or /i/, with some degree of variation between /e/ and /i/. Far fewer still are those with timbre /u/. (However viewed, these proportions must certainly be skewed to a point that is far from statistically representative for other types of stem.) Augments of timbre /a/ are *-a'*, *-ah(-d)*, *-a:(n)'*, and *-a:*, mentioned here probably in order of decreasing frequency. The augments *-a'* and *-ah* have been discussed above in the introduction to internal composition of preverbals in §16.1. The augment *-a'* yields meaning closely related to that of the initial itself, while the *-ah* clearly has a privative or ablative meaning—most of the time.

The remaining *-a:* and *-a:(n)'* are presented here. The augment *-a:* is seldom without a final segment, unlike *-a:(n)'*. Both are complicated by the very inconsistent change from *-a'* to *-a:* before *-X*, and before *-q'*, where furthermore the contrast between *-V:* and *-V:* is neutralized. The meaning of *-a:*, on the other hand, seems to be quite clear, especially after *-d*, *-ch'*, *-X*, where it indicates a wider range, looser relationship with oblique object: *o-da:* 'near o' rather than in *o-d* 'punctual contact', or than *o-da'* 'right in front of'; likewise *o-ch'* and *o-ch'a'* 'to(ward)', *o-ch'a:-* 'in the direction of o'; clearly also *o-X* 'non-punctual contact', *o-Xa'* 'in close relation with', *o-Xa:-* 'in loose relation with o'. Even for *-a:(n)'* a meaning may perhaps be discerned, here especially with preverbs, 'loose relationship with origin, then movement stopped, especially as in *da:n'* 'obstructed', *Xa:n'* 'finished, stopped', *ya:n'* 'down to rest on horizontal surface'. Interestingly, it may be that *da:n'* 'obstructed', not common, was found only by elicitation for analysis of *da:n'-L-ga'* 'slowly'. Note also *o-t'a'* ~ *-t'a:-* and especially *o-qa'* ~ *-qa:-* with the same difference in meaning.

In fact, it has been only in the process of writing this part of the grammar that a consistent pattern of meaning has emerged for the augments *-a'*, *-a:*, and *-a:(n)'*. It is therefore likely that no systematic elicitation was done in the field for more such possibilities (unlike the case for preverbal finals), and that even more such structure may have existed in Eyak.

A large proportion of those preverbals with /e/ or /i/ timbre can be identified as originating in one postposition, *o-'e'* 'in (vacant) place of o', i.e. as that or including that with various allomorphs thereof: *-e'* and *-(')i(:)(')*. Fewer are *-eh(-d)*, *-e:*, *-ih*, *-i:*. Those with timbre /u/ are *-u'* and *-u:*, and there is probably one with *-Aw* related to *-u'*. For these preverbals with nucleus other than /a/ timbre, no clear pattern of gradation appears.

There is then the group of preverbal stems with schwa nucleus, i.e. presumably without augment. All of these happen to start with /d-, l-, y-/ , all highly productive initials in the preverbals with augment. As the nucleus is schwa, they must all end with a consonant, and it happens that that consonant is always a uvular obstruent, /-G/, /-q'/,

or /-X/. These severe limitations are probably not coincidental, and may very well point to a conclusion that these are to be seen as preverbal stems without augment, possibly related to those three productive initials, also productive as qualifiers. Another conceivable interpretation, given the instability of *-e'*, is that the reduced vowel is in some or all cases from *-e'*.

Except for this last smallish group with reduced stem vowel, all “regularly” formed preverbals have what might be called open stems, or can be seen as such, with a full-vowel nucleus, i.e. ending in stigma /'/, /h/, /:/, or /:'/, where /h/ and /' / are not classed as obstruents, but as “glides.” They are closed, if at all, only with what can be seen as preverbal finals for the coda. Even including the “irregulars” or “outliers” at the end of the main list below, only about seven preverbals out of over 100 close with a consonant other than the regular finals (4 of those 7 closing with an obstruent of the TS-series: /dz, ts' s/).

## 16.4 Preverbal finals, and compounding

The three most basic preverbal finals are *-d*, *-ch'*, and *-X*. All three of these represent non-syllabic basic postpositions and also serve as productive preverbal initials. Of the two other such o-C items, *-q'* and *-tl'*, the latter does not serve as a preverbal final at all, but *-q'* does, in an ambivalent way, so has been treated ambivalently or inconsistently, both as a preverbal final, or as compounded with the preceding preverbal, o-*q'* then as head of the compound.

Adding then to the constraints on the form of preverbal stems is that of 24 possible Eyak coda consonants in the corpus (>90% of the preverbals), only 3 or 4 obstruents can serve as coda, /-d, -ch', -X/, and questionably /-q'/. The proportion of these closed preverbals where the coda must be suffixal is very great, if not 100%. Certainly suffixal are all cases of final *-ch'* ‘continuously, repeatedly’, transparently so, alternating with zero or another final as semantically appropriate. Likewise with *-d* ‘at rest, from a point at rest’ or nominalization of postposition, the suffixal status of *-d* is possibly questionable only or mainly in some instances of *-Vhd*. With *-X* ‘motion within area’ that question might arise in the largest (and still small) minority of instances, e.g. in *ya'X* ‘up (in the air)’, as already noted, and in o-*'u'X* ‘short of, less than o’, where /-X/ might not be suffixal.

Suffixation of *-X* involves interesting complications. The *-X* may be simply added, e.g. to the augment *-a'*, as in *ta'-X* ‘movement in water’ < *ta'* ‘in(to) water’. However from o-*t'a'* ‘behind o’ and *-X* we have two outcomes. One, phonologically simpler, is lexicalized, somewhat specialized, as o-*t'a'-X* ‘preoccupied, distracted by o’. The other, o-*t'a'-X* ‘in the shelter of o’, seems to be clearly the less lexicalized, and at the same time is where the *-X* can be seen to “change” the augment only in the same way that it requires *-a:-* in simple combination with any qualifier, e.g. routinely *y-X* > *ya:X*. It is that variant o-*t'a:X* that can then take a further final *-d* in o-*t'a:Xd* ‘(at rest) in the shelter of o’, and further then o-*t'a:XdAX* ‘(movement) in the shelter of o’. The last is at least partly required by the phonology, given here the constraint in preverbals against both \**-X-X* (cf. §6.14) and even, for some reason, involving the complexities of *A*-epenthesis (cf. §6.17), \**-d-X*, though

not ruling out *-L-X* in *o-wa:-L-X* 'in accordance with o'. There is likewise a phonological constraint in preverbals not only against preverbal final *-Q-X* (where "Q" is any uvular, again with *A*-epenthesis), but apparently even against *-Q-A-X* with epenthetic /A/. Thus the postpositions *o-dAG* 'above o' and *o-lAG* 'further ashore than o' with the final *-X* do not come out *\*o-dAGX* or *\*o-lAGX* or even *\*o-dAGAX* or *\*o-lAGAX*, but instead come out *o-dAGdAX* and *o-lAGdAX*. Further, the same stems as preverbs do not for some reason come out *\*dAGdAX* or *\*lAGdAX*. Instead we have *dAGe'X* '(movement) above' and *lAGe'X* '(movement) further ashore', with *-e'* clearly from the postposition *o-'e'* 'in (vacant) place of o'. Such forms could be considered either to include a suffixed allomorph of stem *-'e'*, or already to be compound preverbals, with two preverbal stems.

The case of *o-q'* and *-q'* as final or compound is at least equally complicated, given that with this there is no allomorphic difference. As in the case of *-X*, with qualifier (*C-X > Ca:X*) the result with *(o)-q'* is *Ca:q'*. While the stem *o-la'* 'down over o's head' and *(o)-q'* may combine as *o-la'q'*, with *o-sa'* 'into o's mouth' and *(o)-q'* we get *o-sa:q'-d* 'o's palate', so presumably even *o-sa:q'dAX* '(movement) on o's palate'. Further, with *o-q'*, we have *o-q'Ach'* '(continuously onto o)' by *A*-epenthesis, where *-Ach'* seems merely to be a postposition-final. However, we also have *o-q'Ach'ahd* 'from on o' and *o-q'Ak'ah* 'away from (on) o' where the line between postposition with final and compound postposition becomes blurred. These are dealt with inconsistently, with *-q'*, *-ch'ahd* and even occasionally *-k'ah* listed as finals rather than as elements of a compound.

Compounding of postpositions can in fact go significantly further than that described here; some description of such further compounding will be appended at the end of this section. A much more extensive study of preverbals compounding could in fact be done from the ledger as it stands. It remains to be seen how much patterning could be found in that.

In 1967 a two-dimensional table of preverbals and finals was attempted. The results were quite unsatisfactory in that no clear patterns seemed to emerge. This was in spite of the fact that a deliberate attempt was rather consistently made in fieldwork to test for choices of preverbal finals during elicitation. The conclusion is apparently that freedom of choice of preverbal finals is more of a lexical matter, to be listed with each lexical entry. Accordingly, this is covered fairly well in the dictionary. For the purposes of this grammatical account, possible or attested finals will be merely listed with each preverbal. For semantic or lexical detail the dictionary should be consulted.

## 16.5 Postpositions and preverbs, Athabaskan and Eyak, statistics

Eyak distinguishes between postpositions and preverbs as does Athabaskan. For Eyak preverbs, Athabaskan has what are called "disjunct" verb prefixes. In both Athabaskan and Eyak, postpositions and preverbs are related, the same morpheme often used as both post-

position and preverb stems. These are to be consistently distinguished, however, in that postpositions take pronominal or nominal oblique objects, whereas preverbs do not take such prefixes. In other words, postpositions explicitly relate semantically to an oblique object (o), outside the verb, whereas preverbs do not. Preverbs relate therefore more exclusively, more closely, to the verb itself.

Syntactically, preverbs therefore are in the rightmost preverbal position in the sentence immediately preceding the verb. Postpositional phrases are rightmost before that, following subject, object, complement. In other words, the preverbal position in a sentence consists of two subpositions after the complement, preverbs following postpositions. Some postpositional phrases can even function alone as predicate in verbless sentences, e.g. *da:na: siXa* 'I have money'. Preverbs cannot so serve as predicates.

A major difference in syntactic function is that many postpositions can subordinate whole verbal clauses, thus acting like conjunctions, while preverbs cannot. For further on this see §16.6.

As noted above, it is very difficult to arrive at a conclusive count of the number of distinct stem morphemes in Eyak preverbs. However, a somewhat analytical conservative or low (semantically liberal) count comes to a convenient ca. 100 morphemes for Eyak preverbal stems. Of these, 72 are attested in postpositions, and 60 are attested in preverbs, with an overlap of about 33 attested in both. This of course also means that 39 stems are found exclusively in postpositions, and 27 are found exclusively in preverbs.

There are apparently no fully comparable counts for Athabaskan preverbals. While there are comparable counts for the total number of postpositions, the number of preverbs in available counts is for some reason always lumped together with the number of postpositions in the disjunct sector of verb prefixes. The earliest count, Hoijer's Navajo, from Sapir (Hoijer 1974: 284), numbers 64 postpositions, combinatory and non-combinatory. It should be possible to extract further figures, including number of preverbs, from the list of 322 [derivational] "verbal prefixes" with some careful work. Young and Morgan (1987: 27) provides the latest such count for Navajo, "77 postpositional stems." They specify that 40 of these are non-combinatory, 17 are combinatory, 12 are both (totaling 69, but 12 compounds are somehow to be figured in). These figures are not to be compared with the Eyak, which as noted has no such distinctions in combining with the verb. The bound "disjunct derivational/thematic" prefixes, postpositions and preverbs are again lumped together, with no count. Kari (1990: 34) counts 83 postpositions altogether for Ahtna, and in Table 9 (Kari 1990: 40) notes that there are 93 bound disjunct "derivational/thematic" prefixes, likewise lumped together. Kari's figures, 83 and 93, are the only ones both comparable to the Eyak, 72 and 100. Hargus (2007: 286) for Witsuwit'en counts "about 70 morphemes" for (all) postpositions, but also lumps incorporated postpositions and preverbs together as "preverbs," without subtotals.

Though the Athabaskan counts of postpositions look quite comparable to the 72 of Eyak, much more exact comparative study needs to be done for a genuine comparison, given the probable difference in counting, and given the segmentation done for the Eyak, presumably much more than for the Athabaskan.

It is in fact due at least in part to the differences between Eyak and Athabaskan, that accounts of Athabaskan preverbals do not go into internal structure or segmentation of preverbals at all along the lines of the analysis for Eyak preverbals presented here. For example, Rice (1989) treats Slave postpositions at several points, in separate listings, e.g. unincorporated and incorporated. However, she subclassifies the postpositions only by semantic groupings, necessarily with overlap. There are at the same time many phonologically similar items with related meaning, within and across those categories; there is however no discussion of possible relationship between such items. Then, corresponding to Eyak preverbs as opposed to postpositions in Slave are the “(incorporated) adverbs.” Rice’s discussion is also much preoccupied with verb theme classes and conjugation choice connected to the incorporated postpositions and “adverbs.”

Hargus (2007: 286, 443) treats Witsuwit’en postpositions also in two major separate discussions, one for “[unincorporated] postpositions” and in another for an [incorporated] leftmost section of the verb, for the “preverbs.” The latter is itself consists of two subsections, treating first those in the leftmost position of the verb word for “[incorporated] postpositions,” followed by “adverbs,” in the disjunct part of the verb prefix complex. Hargus notes some overlap of membership in sets of morphemes found as postpositions and as incorporated “adverbs.” However, she does not discuss segmentation of these morphemes, or suggest that the object prefix-less “adverbs” might be connected with reflexivity, even though several of her contrasting examples show a *D*-element in the classifier with the preverb.

In other words, and perhaps correctly so, the structures considered here would for Slave and other Athabaskan have to pertain exclusively to etymology. Athabaskan grammar has in this respect evolved far beyond Eyak, or Eyak somehow devolved far beyond Athabaskan.

## 16.6 Postpositions, derivations, and possessed nouns

Postpositions are closely related to or are analogous to possessed nouns in the morphological sense. They are bound to the same set, more or less, of pronominal prefixes as are possessed nouns, or if not bound to pronominal prefixes, bound to nouns as oblique object. The prefixes used for both possessed nouns and for postpositions are 1s *si-*, 2s *'i-*, 3 *'u-*, 1p *qa-*, 2p *lAX-*, indefinite *k'u-*, and reciprocal *'iL-*. Indeterminate *dA-* does not occur as possessor. Reflexive as possessor is the same as third person (*'u-*; reflexive as object of non-syllabic postposition is *'Ad-*, and with syllabic postpositions is most often zero. (See Tab. 9.1.) There are, however, some differences in the membership of this prefix set between

postpositions and nouns, in that there are four items that may be prefixed to postpositions but cannot be prefixed to possessed nouns.

First is that postpositions can take the indeterminate object pronoun *dA-*, while possessed nouns cannot. Doubtlessly insufficiently tested, perhaps only the following postpositions in (1) have been found with the indeterminate object prefix. These often have idiomatic meaning, cited below where especially so.

(1) Postpositions with indeterminate object prefix

<i>o-da</i> 'right to in front of o'	<i>o-lu</i> 'on(to) o as clothing'
<i>o-t'a</i> 'behind o'	<i>o-yAX</i> 'through (hole) in o'
<i>o-ch</i> 'to(ward) o'	<i>o-e</i> 'in place of (absent) o'
<i>o-qa</i> 'among o'	<i>o-d-i:q</i> 'under o',
<i>o-X, o-la</i> 'in non-punctual contact with o'	?? <i>o-u'X (dA-du'X)</i> 'less than, short of o'
<i>o-la-q</i> 'down over o's head'	

A second difference in the pronominal object between nouns and postpositions, and most significant here, is that postpositions can take the reflexive object pronoun *'Ad-*, as in verbs. This pronoun moreover, with syllabic postpositions, can be and usually is deleted, while the postposition still functions as such. This postposition with zero pronominal prefix does not function as a preverb; it still is not a preverb even though it might then look like one. This reflexive object pronoun deletion happens routinely in indirect reflexive constructions, e.g. *sisa' siLitahL* > *'Adsa' xsLitahL* > *sa' xsLitahL* 'I put it in my mouth'.

### 16.6.1 Derivations of postpositions

Further distinguishing postpositions from possessed nouns in prefixation is that postpositions but not nouns can take a third and a fourth set of prefixes, turning them into attributive nouns and areals. The prefixation *GA-L-* turns postpositions into attributive nouns, which may be glossed 'extreme of series'. This prefixing is attested with at least the postpositions in (2), not necessarily a complete list. Here the *GA-* is probably to be considered the qualifier *G-* (see Chap. 16) and *L-*, which is also found in nouns, especially "part" nouns (not classifier *L-* as thought in 1970).

(2) Postpositions with *GA-L-* prefixation, 'extreme of series'.

<i>GA-L-'ih-d</i> 'last of series (in time or space)' < <i>o-'ihd</i> 'after o'
<i>GALda</i> 'frontmost' < <i>o-da</i> 'right to in front of o'
<i>GALdAda</i> 'topmost' < <i>o-d-da</i> 'in contact right in front of o'
<i>GALLa</i> 'topmost' < <i>o-la</i> 'in non-punctual contact with o'

*GALLa'q'* 'topmost' < *o-la'-q'* 'down over o's head'

*GALt'a:X* 'innermost layer of clothes' < *o-t'a:-X* 'behind o, under cover of o, in the shelter of o (e.g. edifice)'

*GALqa'* 'mid(most)' < *o-qa'* 'among o'

*GALLi'* 'furthest into cavity' < *o-li'* 'deep in cavity of o'

*GALdAG* 'uppermost' < *o-dAG* 'above o'

*GALLAG* 'uppermost on land, slope' < *o-LAG* 'upland of o'

*GALyAX* 'lowermost' < *o-yAX* 'through hole in o'

*GALdALyAX* 'first' < *o-d-L-yAX* 'o'

*GAL'ihd* 'last' < *o-'ih-* 'behind, after o (in space or time)'

*GALLahdz* 'first forward, ahead' < *o-lahdz* 'in front of o'

*GALSinh* '(hidden) furthest behind' < *o-sinh* '(into position) hidden, out of sight behind o'

No doubt more of these could have been elicited, had I made any systematic attempt to do so.

The other prefixation, *XA-* turns postpositions into areal adverbials meaning 'area of'. This prefix is perhaps to be identified with qualifier *X-* (and almost certainly not to be identified with PA <sup>\*wə-</sup> 'area, event'). This *XA-* is attested with over a dozen postpositions in (3).

(3) Postpositions occurring with *XA-* 'area'.

*o-dAG*, 'above o'

*o-lahdz* ~ 'forward of o'

*o-da:-q'*, 'on surface of o'

*o-LAG* 'upland of o'

*o-ta:s* 'over across o'

*o-ya'* 'in(to) o (concavity)'

*o-tsiya'* ~ 'downhill of o'

*o-yAX* 'under, below o'

*o-li'* 'in(to) o (cavity)'

*o-yAX-e'-X* 'northwest(?) of o'

*o-lah* 'around o'

*o-lu'* 'through (hole in) o'

*o-d-i:-q'* (*o-'e' ~*) 'offshore of o'

The possibilities were sometimes tested, given e.g. the notation that *\*XA-yAq'* was rejected by Lena, but they were no doubt insufficiently tested. There is also ample evidence that postpositional phrases with this 'areal' *XA-* can in turn take their own object, in which case the *XA-* acts as a qualifier, of unclear status, at least in *o-XA-la'* 'hanging down from on o (peg)', *o-XA-yAX-* 'in lower area of o'. This *XA-* is further to be found in the demonstrative areals listed in (4).



(4) XA- in the demonstrative areals.

*Xi-d* ‘yonder’ < \*XA-yA-d, *Xi:ch* ‘away’ (in sense of ‘out of presence, riddance’) < \*XA-yA-ch’

*Xi:nXinh* < \*XA-yA-X=inh ‘yonder person’

*Xi:nXinu:* ‘yonder persons’

*XAyA'u:d* ‘over there’

*XAlA'u:d* ‘over there (less far than preceding)’

*XAsha:nd* < ‘(at rest) close over here’ < \*XA-sh-AnA-d

*XAshlAX* ‘(movement) closer over here’ < \*XA-sh-AnA-X

An extended discussion of areals and demonstrative adverbials can be found in §21.2.

Preverbal finals *-d*, *-X*, and *-ch* are also to be found in the demonstrative adverbials ‘*u:d*’ ‘there’ < \*Aw(A)-d, ‘*a:nd*’ ‘here’ < \*An(A)-d, likewise ‘*u:ch*’ ‘thither’, ‘*a:nch*’ ‘hither’, ‘*u:dAX*’ ‘(movement) along there’, ‘*a:ndAX*’ ‘(movement) along here’, and (-)wAX ‘thus, so’ < \*Aw(A)-X, (-)lAX < \*An(A)-X ‘this way’.

### 16.6.2 Postpositions and possessed nouns

A problem or gray area does arise with possessed part nouns. One might find it difficult to decide whether e.g. *-q'a* ‘edge (of)’ is a noun or a postposition. That could appear with *o-ch* ‘toward the edge of’ and even *o-d* ‘(punctual contact) touching’, indistinguishable from postposition-finals. The criterial distinction presumably is that as a nominal, *-q'a* does not require the nominalizer *-d*. In the dictionary (Krauss 1970a) *-q'a* was listed as a postposition. Likewise *-t'e'ts'G* ‘temporary handle or grip for’, where *-G* is probably a suffix, but not attested with e.g. the final *-d*. This was entered in the 1970 dictionary with questioned label. Very similar, however is the case of *o-l-tl'in'ts'-G* ~ *o-l-tl'in'ts'-d* ‘top of o’s head, summit of o’, with the same *-G* as in *-t'e'ts'G*, acting still more as a postposition with alternate nominalizer *-d*. Most of all, clearly acting as both, is *-q'As* ‘other/mate (of a pair)’, and *o-q'As-d* ‘opposite end of o’. Albeit quite small, there is an overt overlap between possessed part nouns and postpositions in Eyak, morphologically. On the other hand, there are postpositions. e.g. *o-ta:s* ‘across over o’, which apparently take no finals, but are distinguished from part nouns only on a syntactic and/or semantic basis.

Many of the part nouns have a prefix *L-* and/or a suffix *-L*. These are listed and discussed in the section on part nouns of the form (L)P(-L) in §18.6.

## 16.7 Order of preverbal, internal syntax

Clearly the major difference between postpositions and preverbs is that postpositions include a pronominal prefix or are attached to a noun, so postpositions must be less closely

related to the verb than are preverbs. Accordingly, a fundamental principle of order is that postpositional phrases precede preverbs, in Eyak as in Athabaskan.

(To be noted here parenthetically is that the three postpositions *o-ya* 'in(to) o (concavity)', *o-a* 'for o, part of o', and *o-XA* 'in close relation to o', in their possessive use, are special in having their own syntactic properties as part of noun phrases, rather than belonging in the preverbal sector of the sentence. For the structure and function of such noun phrases, see §25.3.)

The preverbal sector of the sentence is between subject, object and complement nouns on the left, and the verb on the right. (The complement is also part of the preverbal sector in sentence syntax, q.v. Chap. 25.) Postpositions with an overt nominal object must of course be leftmost within the preverbal part. After that, the rules of order within the preverbal section evidently have a different status, as tendencies of varying statistical strength. Strongest is that postpositions precede preverbs, very usually the case, though with some exceptions, many of which can be explained as lexicalizations. One such exception is *k'uyAXa* 'on the hand of someone, something', itself a postpositional phrase, with classificatory theme *O-(L-)ta* is glossed 'send O', as in *'i:ndzi'X k'uyAXa siLtaHL* 'I sent it outside (to Seattle)', with a preverb preceding that postpositional phrase lexicalized as another preverb. Most common is *ya:qa* < *ya:-qa* 'among thing(s)' > 'away', as in *li'X 'Aw ya:qa sALtaHLinh* 'he took it away downriver', likewise following a preverb (and a pronominal direct object). The preverbal status of this is confirmed in *q'e:ya:qa qu'xdah* 'I'll go away again', with the combinatory allomorph of the rightmost preverbal, recursive *q'e* ~, for which see below in this section. There is perhaps a tendency for *o-ch* 'toward o' with augment *-a*' and zero reflexive pronoun to be treated as a preverb also: *qid ch'a' GAXdAta:L* 'I'm taking it down (toward self)', *qid ch'a' GAXdAXahdL* 'id.', *'ahnu: ch'a' 'u'sdi'ehdzL* 'they invited them (to themselves)', with *ch'a'* after the object pronouns. The same may be the case with the equivalent of *ch'a'* without deletion of the reflexive pronoun in *qehX 'Adch' 'ixsLidja:t'L* 'I locked myself out', perhaps completing the list of such incidences. More exceptional may be certain instances of *o-tl* 'with o' (5).

(5) Preverbals with *o-tl*'

*ya:n' sitl' 'isAgu'k'L* 'he punched me down (accidentally or on purpose)'

*qid 'utl' 'isigu'k'L* 'I punched it off (accidentally)'

*qid 'utl' sALkinhdL* 'he knocked it off'

*qid 'utl' GALkinhd* 'knock it off!'

*yAq'Ach' 'utl' GAXAL(inh), yAq'Ach' 'Aw 'utl' GAXAL* 'it's rolling shore with him'

*ta' 'anhtl' shA'a'ch'L* 'went into the water with her'

*'anh 'utl' Gi:a'ch' da:X* 'when you get home with it'

*qa' 'anhtl' q'e' shdi'a'ch'L* 'came back up with him' (but then twice *'anhtl' qa'*, and *'anhtl' q'e' qa'*)

This is perhaps a complete listing of instances of *o-tl'* in this order, compared no doubt to many more in the usual order; these may conceivably be in recognition of some comitative construction. Note, incidentally, that this comitative takes a singular subject pronoun (not plural) with the plural stem for the verb 'go', *-a'ch'*, as in the last three examples in (5).

Finally, to fill in further the list of incidences of preverbals and even more, where the basic order of preverbals shows further exceptions, we evidently must include even one demonstrative, the basic unmarked demonstrative adverb *wAX* 'thus, that way'. This evidently can be lexicalized with *-t'e' ~ 'be (so)'* in the theme *wAX -t'e' ~ 'be(so), live'*, as in *o-Xa' wAX -t'e' ~*. E.g. *siXa' wAX 'i:t'inhinh* 'he who lives in intimate relation with me, my husband', *ya:q'd wAX 'ixLit'eh* 'I keep/wear it on my (own) wrist'. In these *wAX* functions in the same position as a preverb.

The coverage here of exceptional instances where postpositions follow preverbs should not be allowed, however, to distract from the fact that in the vast majority of cases where there is both a postposition and a preverb, it is the preverb that follows the postposition.

The order of elements in the preverbal part of the sentence is further complicated by the presence of a third type of element, however, namely subject and object pronouns. These pronouns are of two types, three demonstrative pronouns, and three personal pronouns. The demonstratives are non-human *'Aw* 'it, that, they them' and human singular *'anh* 'he, she, him, her', plural *'ahnu*: 'they, them'. The personal pronouns are 1p subject *da*: and object *qa*:, as well as (human and non-human) reciprocal object *'iLu'* (cf. §9.1). Where present, in the majority of instances all these pronouns precede the preverbs and follow the postpositions, i.e. they most often occur between the postpositions and the preverbs. There is one difference in privilege of occurrence between the personal pronouns and the demonstratives. The personal pronouns *da*:, *qa*:, and *'iLu'* may in a minority of instances occur after the preverb, but not before the postposition. However, the demonstratives, necessarily third person, of course, may in a minority of cases occur after the preverb, as may the personal pronouns, but they may also, in a minority of cases, occur before the postposition. The same rules or tendencies for position of pronouns apply of course where only a preverb or a postposition is present and not both.

Thus, the most common sequence is exemplified in (6), with pronouns in between postposition and preverb.

- (6) Pronouns between postposition and preverb
- a. *'Aw-ya'd 'Aw qa' sALtahL=inh*  
 DIST-out DIST out handle.elongated=HUM.SG  
 'He took it (bone) out of it (soup).'

- b. 'Ad-tl' 'Aw yahd sLita'tl'L=inh  
 RFLX-with DIST out.into kicked=HUM.SG  
 'She kicked it (canoe) out (into water) herself.'
- c. 'u-ch' 'Aw da: q'e:yAX 'i:tsAX=inh  
 3-to DIST 1p back throw=HUM.SG  
 'Let us throw it back down to him.'

The first of the examples in (6a) shows that even what might look like a constituent of o (vessel with broad opening at top), o-ya'-d qa' 'up out (from a point, at rest), as opposed to o-ya' qa' 'up out (e.g. of water) into o (vessel with broad opening at top)', can be interrupted by the pronoun. (6b) contrasts with what might be a comitative. (6c) has two pronouns, 'Aw and da:, between the postposition and the preverb. A survey of the preverbals column of Krauss (1966a) was part of the process of compiling this section of the grammar. The resulting impression is that spontaneous instances of these pronouns with both postpositions and preverbs were by no means so numerous as to be in the hundreds. Of those noted, only three (7) showed the pronoun not between the postposition and preverb, but *before* the postposition,.

(7) Pronoun preceding postposition and preverb

- a. 'Aw 'i-ch' qAnuh qu'xtah  
 DIST 2s-to into.open.view show  
 'I'll show it to you.'
- b. 'Aw 'u-yAX li' GAta'  
 DIST 3-under back put  
 'Put it well (in toward back) under!'
- c. 'Aw 'iXa' ya:X 'Ale:gk'  
 DIST 2s-on up eat  
 'He keeps eating it up "on" you.'

Still these three in (7) are seemingly normal sentences. There are many more examples of only a postposition with a pronoun following, and only a preverb with a pronoun preceding. Of those spontaneous exceptions to that order noted, 13 had the pronoun preceding the postposition (none of them personal pronouns), and 11 had the pronoun following the preverb (three of those a personal pronoun).

Combinations of two prepositions or of two preverbs are not rare, but also not abundant, with of course the exception of recursive *q'e'* ~ and another preverb, a special case, as e.g. in *q'e' lah ~ q'e:lah* 'back around'. In the survey of the ledger there happen to be no combinations of three, presumably not by rule, but only for the apparent lack of an attempt to elicit such. Presumably it would not have been hard to elicit three preverbs, especially including recursive *q'e'*. A few examples of two postpositions are of special interest.

## (8) Combinations of two postpositions

*la'ch' 'uXa' xdishah* 'I'm too stingy to wear it' (indirect reflexive, lit. 'onto self (down over (-ch') self's head (l-) with (-Xa') it ('u-) I'm stingy')

*'uya' 'Adq'Ach' k'udAdAGu'* 'hot water bottle' < 'in (-ya') it ('u-) onto (-q'Ach') self ('Ad-) something/someone (k'u-) is kept warm'

*'ilah sitl' 'u'dAXah* 'I (si-) am told about (-lah) you ('i-)

*'Aw 'uch' 'ud sile'gL* 'I left (unhanded) it ('Aw) with (-ch') him ('u-)

*'ilAX k'ulAX 'ixit'eh* 'I have more than you' < 'more than (-LAX) you ('i-), more than someone (k'u-) I am (powerful, rich)' (with postposition -LAX twice, the latter lexicalized)

*siya: 'uwa: k'uGsheh* 'kill some (k'u-) for (-a) me (si-)! (with postposition -a: twice, the latter lexicalized)

Examples of two preverbs, even without recursive *q'e' ~* are somewhat more common. To cite only a very few:

## (9) Combinations of two preverbs

*ta'd qa:n'ch' 'AGAts'g* 'wring it out (up: *qa:n'ch'*; out of water: *ta'd*)!

*qa' li'X l-le* 'burst out laughing'

*qa: ta'X yAX 'i:nLyi:n'inh* 'priest' < 'he (=inh) who dips our (*qa:*) heads ('i:n-) down (*yAX*) in water (*ta'X*)'

It would presumably have been easy to elicit the first two of (9) with recursive *q'e' ~*.

There are a few spots in the fieldnotes where preverbal order was deliberately explored. In one session alternative orders to *sich' ya'X q'e' 'AtsAX* 'throw it back (*q'e'*) up (*ya'X*) to (-ch') me (si-)! were explored: *ya'X sich' q'e'* and even *q'e':ya'X sich'* were accepted, only *\*q'e':sich' ya'X* rejected. In view of all other evidence, however, the main conclusion should be that uncontrolled or overly aggressive suggestion can have misleading results, or perhaps distinguish only what is literally unspeakable. At the same time, it does also show that rules for order of preverbal do not have the same status as do prefixes within the verb.

As noted, recursive *q'e' ~* is exceptional. For one thing it has two allomorphs: *q'e:-* is combinatory preceding another preverb; *q'e'* is non-combinatory, and may precede or follow another preverb. Details, i.e. statistical tendencies for choice of allomorph, are given for this in the dictionary entry for *q'e' ~*, especially in relation to other preverbal. Included is the observation that *q'e' ~* regularly follows the personal pronouns *da:*, *qa:*, and *'iLu'*, perhaps never precedes them, at least in "natural" speech. For details see the dictionary entry under *q'e' ~*, especially section 2b., dealing especially with exceptional orders and testing of acceptable orders, which will not be repeated here.

## 16.8 External syntax of preverbals

There are significant syntactic relationships between preverbals and the verb itself, specifically in the choice of classifier, and in choice of conjugation. For instance, with a classifier, the preverb *q'e'* ~ 'back, again' requires the *D*-element in the classifier in intransitives. The perambulative derivation with preverb *yAX* or *lah* requires the *D*-element in both intransitives and transitives. The postpositions *o-X* 'by means of *o*', and others ending in *-X*, e.g. *o-ya-X* 'avoiding *o*' and *o-'e:-X* 'in search of *o*', under certain conditions require the *L*-element. The preverb *qAyuh* 'belligerently' requires both *D*- and *L*-. For further detail, see Chap. 11 on classifiers, and Chap. 25. In at least one case, a preverb chooses qualifier *d-* with *ya'* completely'.

As noted above, preverbals likewise have a significant effect on the choice of conjugation, though this is very much less the case in Eyak than it is in Athabaskan. Certainly the mode-aspect in which preverbals most affect the choice of conjugation in Eyak is the imperative mode, where that effect is for some reason either the most highly developed or the least decayed, in comparison with Athabaskan. The degree of what may be termed "telicity" of the preverbal is certainly involved. To a lesser extent the same rules as for the imperative operate with the optative and desiderative modes. See Chap. 12 on the mode-aspects, especially §12.3.2 on the imperative, but also the others, which generally include elaborate discussions on choice of conjugation.

There are also strong correlations between preverbals, especially preverbal finals and certain paradigms (mode-aspect plus conjugation), especially Inceptive perfective, and derivations, not only the progressive (i.e. Inceptive perfective), but especially repetitive. These, for example, rather regularly correlate with use of the final *-ch'* with preverbs, for continuous or repeated motion or action. Again, such information is provided in the relevant subsections in Chap. 12 on mode-aspect and derivations.

There are no real conjunctions in Eyak. However, at least 18 of the postpositions are attested also as subordinators of whole verbal clauses or sentences. Directly suffixed to the verb, therewith disallowing or deleting any *=inh* or *=inu:* (sg/pl human enclitics, relativizers in origin but not used as relativizers, cf. §25.2.3), these thus turn a sentence into a subordinate clause. By far the most common is *o-da:X* 'and; if, when', to be glossed 'if, when' with a verb in the conditional, otherwise 'and' or translated as participial 'V-ing, having V-ed'. Especially common as subordinators are *o-lehd* 'because of *o*', and *o-wahd* 'for the sake of, in order to *o*' (with optative), and *o-d-wa:* 'pending *o*'. Used with a verb in the optative only if unrealized are *o-Xa'* 'for the purpose of *o*', *o-ch'ahd* 'after *o*', *o-ch'* 'until *o*', and *o-LAX* 'too much for *o* to happen'. For some very interesting but completely unclear reason *o-ya:X* 'avoiding *o*; lest *o*' requires the customary in the subordinated verb, without any clearly customary meaning. At least six further postpositions are attested as subordinators, suffixed to verbs: *o-ga'* 'like *o*', *o-t'a'-X* 'distracted by *o*', *o-d-L-yAX* 'before *o*', *o-y-Xa:-q'* 'by virtue of *o*', *o-'ih-d* 'after *o*', probably also *o-wa:-L-X* 'paying close attention to', *o-X* 'aware of *o*'; probably other postpositions could be found in that role.

No postpositions, however, even *o-da:X*, are found exclusively as clause subordinators. Subordinated clauses (or phrases) are more often found before the subordinated ones, but the reverse is also possible, by extraposition. For further on this postpositional use, see §26.2.

## 16.9 Preverbals in dictionary and grammar

Krauss 1970a does a good job not only of listing all preverbals, but also goes into full detail on them, including qualifiers, finals and compounding, and citation of examples and lists of verb themes with which the preverbals are attested. It likewise includes detailed documentation of semantics. Furthermore, at the head of each entry etymological probabilities and possibilities, including segmentation for stem initials and augments or nuclei, are routinely shown, down to the level presented here. Here that detailed lexical information is highly summarized, as the present purpose is to understand the preverbals in as much of a system as possible. As noted, there are many problems with that, especially in decisions dealing with homophony as opposed to polysemy, along with those of segmentation.

For the moment, changes of interpretation here will not affect the dictionary. That is considered to have its own validity. There are of course many gray areas. The decisions made in Krauss 1970a were no doubt influenced more by my immersion at that time in the welter of semantic and morphological detail, now very much in the distance. That immersion, it could be claimed, “obscured” the “insight” illuminating the following grammatical analysis done 45 years later, done now in the “wisdom” of old age. For the “welter” of semantic detail, see the dictionary.

In fact, 517 of the ca. 2900 pages of the typescript 1970 dictionary are devoted to preverbals, almost 18% of it. As the percentage of stems that are preverbals is only ca. 10% of the total, the 18% figure reflects mainly that the preverbals are well above average frequency, and probably also that the coverage of the preverbals is not significantly different in level from the average.

Preverbals have their own kind of phonology. As shown in detail below, most fall into a restricted range of phonological shapes, are highly segmentable, polymorphemic, with special combinatory rules including qualifiers, and *A*-epenthesis. For the last, see especially §6.17.

## 16.10 Presentation of preverbals

Here the preverbals will not be organized and presented in any alphabetical order or by semantic category, but according to phonological composition reflecting the “atomistic” approach. Justification for that approach, or lack thereof, depends on the validity of the

claim that there is some structure, historical and/or synchronic, that can be observed thereby. In fact it will be seen that an extreme application of this approach somehow manages to classify to some degree practically all the Eyak preverbals, or at least a very large proportion of them.

The order begins with the most productive elements and structures. Accordingly, the first set of preverbal “stems” is *o-d* and then all those beginning with *d-* augmented by the full vowel of timbre /a/, plus /'/, /:/, /:(n)'/, /h(d)/, i.e. *da'*-, *da:-*, *da:'-*, *da:n'*-, or *dah-*. All of these may (or must) be followed by a coda, itself a postposition final of the shape -C, namely *-d*, *-ch'*, *-X*, *-q'*, sometimes also *-da'*, *-ch'a'*, or *-ch'ahd*. Of the 100 or so different preverbal stems, about 60% are of such a phonological shape, beginning with the consonant /d, ch', X, y, l/, also to a lesser extent /t', tl', ts, s, k, x, q, ' / or zero, followed by an augment or nucleus vowel of timbre /a/. First preverbs with timbre nuclei /a/ will be listed, then those with timbre /e/ and /i/, then those with /u/.

To restate, the relative scarcity here of other nuclei and codas compared with non-preverbal stems strongly suggests rules in the formation of many preverbal stems. The relatively low diversity in phonological shape of preverbal stems combined, unsurprisingly, with semantic complexity, leads of course to significant difficulties in solving problems in the identity of morphemes, polysemy vs. homophony, as noted. Krauss 1970a makes its own valiant attempt at this. I was keenly aware of this large gray area of preverbal analyzability in the writing of the dictionary. The dictionary gives coverage as fully detailed to preverbals as it does to other types of morphemes, and certainly includes generous cross-referencing and routine statements in stem-entry introductions for them to the effect “perhaps related to ...”. There was little attempt at further fieldwork on preverbals as such after 1970. Therefore all the data for grammatical analysis of preverbals is here confined to the dictionary file as source.

After the more fully segmentable preverbs this chapter then progresses to those less so. At the same time will be shown throughout freedom of occurrence or attestation with coda preverbal finals (especially zero, *-d*, *-ch'*, *-X*, *-dAX* (< *-d-X*), *-q'*). Entries will be listed with succinct glossing, and without exemplification, as full documentation can easily be found in the dictionary.

### 16.10.1 Preverbals with initial element *d-*

First, there is the postposition and preverbal element *o-d* ~ *d-* itself alone. Given the sharp semantic difference, there are three of these, which could be treated as three homophonic morphemes, though historically they very probably must have been one. This element can then be augmented with the full range of vowel nuclei of the timbre /a/. The dictionary has *o-d<sub>2</sub>* and *o-d<sub>3</sub>* listed together as *o-d<sub>2</sub>*. The augmented forms below (this section) are probably all to be derived from *o-d<sub>2</sub>*.

*o-d<sub>2</sub>* with the gloss ‘by o (as agent)’ is used to mark the object of causatives, as ‘make/let o V O’ and to mark the indefinite subject *k'u-d* where preverbal, i.e. where the



direct object pronoun (O) position is filled in the verb, as ‘something V O’, as in *k’ud xusAk’in’t’L* ‘something scratched me’. With the gloss ‘in punctual contact with o; (emanating) from point of contact with o’, *o-d* is most often of all to be found as preverbal-final element, with the meaning ‘at rest at point in o’ in contrast with final *o-X* ‘in non-punctual contact with o; in moving contact with o’. Thus further, *o-d* may be glossed ‘from point of contact with o, as in *si-d sAle’gL* ‘let go of me (*si-*)’, or in combination with a preverb, e.g. *o-ya’-d qa’* ‘up out of point at rest in o with broad opening at top’. It is thus also to be considered a final in the composition of several preverbals of the form *C-ah-d* with clearly ablative or privative meaning. A third and especially distinct function of *o-d* may be glossed or explained as nominalization of the postpositional phrase itself, as in *siyAq’* ‘inside of me’, *siyAq’-d* ‘my insides’. This final *-d* is especially notable also in Athabaskan, as in \**o-yi’* ~ \**-yi’d* ‘in o’, or in directional suffixes. (See e.g. Hargus 2007: 309, Leer 1989: 591 for Athabaskan cognates of both *-d* and *-X*.)

With the augment *-a’* there are both postpositions and preverbs with *d-* as initial element. The dictionary has seven or eight morpheme entries of the shape *da’*, of which at least the first three are preverbals. All three of these are here collapsed into a single item under one new gloss, ‘right in front of o’, which is to cover them all, sometimes idiomatically. The variation in attested final elements can be attributed thereto accordingly.

The form *da’* also occurs as a preverb, though not widely, but as a postposition it occurs with a wide range of qualifiers, all anatomical, except for *g-*.

Further, *-da’* is attested as a “final” or as head of compound with a variety of other postpositions and preverbs. As such, it is usually with zero final itself, and for that reason is listed in the dictionary under *o-da’<sub>2</sub>* ‘arrival at o’, here collapsed with *da’<sub>1</sub>*. For these, see the dictionary, which lists at least 19 such cases.

*o-da’* ‘right in front of o, (>) arrival at o’ is attested with the finals  $\emptyset$ , *-d*, *-ch’*, *-X*. In the dictionary *o-da’<sub>2</sub>*, always with zero final, is here seen as semantic derivative. Note also *o-da’* in unique phonological combination with a verb as “directive” with the theme *O-’-y-L-qa* ‘O be forced to camp overnight’; here *o-da’-y-L-qa* ‘o be forced to camp overnight’. At least part of the reason for this unique binding with a verb, exceptional, is analogy with *’i-da’* as the allomorph of the indeterminate object in directives, also analogical with *da’* alone in the very frequent theme *C da’-L-Xa’* ‘hove C’. The postposition *o-da’* is also found nominalized with final *-d* and indeterminate object in *dAda’d* ‘box cover, lid’.

*da’* ‘in the face; into vessel for preservation as food’ is attested with the finals  $\emptyset$ , *-d* (for punctual contact), and *-ch’*; also (infrequent) *da’d* ‘up out of vessel’.

*o-d-da’* ‘muzzling o(s) mouth); covering aperture of o (vessel)’ is attested with the finals  $\emptyset$ , *-d*, *-ch’*, *-X*, and also even *o-d-da’-dAX* ‘movement on lid of o’.

*d-da’* ‘covering aperture of vessel’ is attested mainly with final *-X*, possibly also with *-d*.

*o-g-da’* ‘outlet, mouth of o (body of water)’ is attested usually with the nominalizing final *-d*, but also with *-ch’*, *-X*.

*o-l-da'* (i.e. *o-V:n-da'*) 'face of o' < 'front of head', cf. also *-l-da:'* (*-V:n-da:'*) 'face'. This is attested with the finals *-d*, *-ch'*, *-X*.

*o-y-da'* 'on hand, wrist, forearm of o' is attested with the finals  $\emptyset$ , *-d*, *-ch'*, *-X*, *-q'*. Also, idiomatic with *-X*, 'into clutches of, falling victim to o'.

*o-tsin'-da'* (probably with PAE meaning of *-tsin'*, 'head') 'tip, end, point, extremity of o' is attested with finals  $\emptyset$ , *-d*, *-ch'*, *-X*, also *-ch'ahd*. Further, with compounded constituency of qualifiers, *o-y[-tsin'-da'-d]* 'fingertips of o', *Xd(l)[-tsin'-da'-d]* 'point of land'.

Further, two postpositional phrases, both anatomical marks, are only attested with *-d*: *o-qi-da'-d* 'upper surface of o's foot', *o-k'ush-da'-d* 'shin of o's leg'.

Finally, perhaps a different morpheme, is *o-da'* '(good/bad) luck' where [o] is an adjective, attested only in *k'udzu:da'* and *k'usha:da'* with the themes *o-leh Gl'-ya* 'o have year of (good/bad) luck', and *O-'-Gl'-ya* 'O have period of (good/bad) luck'. This is listed in the dictionary as *da'*<sub>3</sub>, along with *o-da'* with a numeral as the object to mean 'o (number of) ways', attested only in *la'da'* 'two ways (to do something)', hypothetically < *la'd-da'*, but not checked with other numerals; cf. below (this section), however.

Initial *d-* with augment *-a:* is attested with a wide variety of finals, but never zero (?; see immediately below, this section), and is highly productive. In some instances, with final *-X* and *-q'*, it may be difficult to distinguish from *-da:X* and *-da:q'* where the element *d* is in origin merely the qualifier *d-*. This problem raises the question as to what extent the element *d* in many of the preverbals of this series is to be identified with the qualifier, parallel to the concept that at least many of those with initial elements *y* and *l* may also be related to the qualifiers *y-* and *l-*, especially in their anatomical use 'hand' and 'head', respectively.

Further contributing to the complexity of ultimate morpheme identity with preverbal initial *d-*, there is also the problem that *o-da:* 'near o' never occurs with zero final, and further that there is the basic interrogative *da:=d* 'where?'; cf. *du:=d* 'who' and *de:=d* 'what'.

*o-da:* 'near o' combines with final *-d* to form *o-da:-d* 'at rest at point near o'. With the other preverbal finals: *o-da:-da'* 'arrival at a point near o', *o-da:-ch'* 'to a point near o', *o-da:-ch'ahd* 'from a point near o', *o-da:-X* 'movement near o', with final *-d* as nominalizer 'place of o, o (as place)', then with final *-X* *o-da:-dAX* 'movement in vicinity of o'. This is also found with adjectives and numerals as object, thus *k'udzu:da:d* 'nice place', *la'(d)da:d* 'two places' (partly verifying *la'da'* above), *t'uhLga'da:d* 'three places'. With qualifiers as noun class marks and anatomical, *o-da:* is well attested, with literal meaning, e.g. *siyAda:-* 'near my hand'. However, especially with final *-X* there are many extended meanings, e.g. *'iLda:X* 'motion near each other; contrasting, different', *o-da:X* 'contrasting with, different from o; made of o; converted into o'.

With adjectives, numerals, adverbs as object, *o-da:X* is a general adverbializer and subordinator. Above all, however, this is written separately by convention as *da:X*, preceded by space. In fact it is often extraposed preceded by pause, as in an afterthought. It is most often translated as 'and'. In grammatical reality, however, this is neither a preverb

nor even a conjunction. It is by far the most general subordinator, subordinating any kind of sentence as a clause.

Preverb *da:X* ‘across’ is perhaps analyzable as *o-d-a:-X*, as in *da:X sahL* ‘he went across (street, creek, ice)’, *'Awda:q' da:X sahL* ‘he went across on that (surface)’, *q'e:da:X* ‘back across, across again’. Cf. at the same time the preverb *da:X* ‘(movement) grazing’, under *o-X* in §16.10.2.

(*o*-)*da:-q'* serves as a preverb and/or postposition, where *d-* can be not only the preverbal initial element, but also the qualifier *d-*, or *dA-* indeterminate object of *o-q'*.

*o-da:* enters into a fair number of compound postpositions, including probably some opaque ones. For these, see §16.11 on preverbal compounding, including there *o-X-da:-d* ‘without *o*’ in the final section; also *o-de:-leh* ‘visiting *o*’ under *-leh*.

Initial *d-* with augment *-a:'* or *-a:n'* is perhaps only one item, the preverb *da:n'* ‘against obstacle; > into trouble’. That is also found as object of the postpositional phrase *da:n'-L-ga'* ‘slowly; > quietly’, where it is not clear whether the *-L* goes first with *da:n'-* or with *o-ga'* ‘like *o*’; perhaps more likely with *da:n'-* (cf. e.g. *o-wa:-L-X* ‘according to *o*’) rather than with *o-ga'*, there being no other *o-L-ga'*. The anatomical noun *-l-da:'* (*-n-da:'*) ‘face’ may well be derived from or related to *o-(l-)da'*; cf. also PA \*-*da* ‘mouth, lower half of face’.

Initial *d-* with augment *-ah* is less productive than that with *-a'* or *-a:*. In fact it is found in only two morphemes. Both might seem problematical analyzed here as such, but in view of larger pattern seen (or emerging?) throughout preverbals, these either fit vestigially, or are starting to fit incipiently.

*o-dah* is defined as an adverbializer, in that the result is always syntactically an adverb, though here it can be defined also as postpositional with a unique set of forms as *o*, some themselves unique, i.e. found only as object of *o-dah*, of limited productivity. Many of the results are of high frequency, e.g. *'i-dah* ‘well, OK’, reduplicated *'idehdah* ‘quite well’, from *'idah* *'idah*, *ya:-kih-dah* ‘in payment’ (‘thing-diminutive-ADV’). With numerals as *o*, *LinhGdah* ‘in one place, still motionless’ < ‘in one way’, *la'dah* ‘in two ways’ < *\*?la'd-dah*, *t'uhLga'dah* ‘in three ways’. Usually with zero final, but note *ya:kihhdahch' xLi:k'* ‘I try to pay him’, further justifying analysis a preverbal. For further examples see the dictionary entry *-dah*.

*o-dah-d* ‘(pressing) against *o*, touching on *o* with some pressure’. There is practically no question that this item must be segmented *-dah-d* given the total absence in Eyak and perhaps PAE of any stems of the form with (non-affricated) coronal stop in both onset and coda, against which there must therefore be a rule. In Eyak preverbals, on the other hand, there is a clearly distinct series with *-ah-d*, for which see *ch'-ahd*, *X-ahd*, *y-ahd*, *l-ah-d*, *-wah-d*. The meaning ‘(pressing) against *o*’ may seem almost the reverse of the privative or ablative meaning of the first three of these though not the last two, and there are traces of perhaps very different meaning, perhaps including ablative, under *o-dahd<sub>2</sub>* in the dictionary, q.v.

### 16.10.2 Preverbals with initial element X-

In usually direct contrast with the postposition and postposition-final *o-d* 'in punctual contact with o' is the postposition and postposition-final *o-X* 'in non-punctual contact with o'. This element *-X* as initial is at least as productive of preverbals as is the element *d-*, having also the full range of vowel nuclei of timbre /a/ as augments.

*o-X* 'in non-punctual contact with o, moving in contact with or moving within area of o; into existence as o; by means of o', the last often requiring *L-* classifier in the verb. Several other extended or abstract meanings are noted in the dictionary, q.v., but all are treated as a single morpheme. See also *o-X-da:-d* 'without o' in §16.4 on preverbal compounding below.

This same *o-X* is also very frequent as a preverbal-final element, specifying 'movement within area', e.g. *ta'-X* 'movement in water' as opposed to *ta'-d* 'at rest in water'. In certain cases, however, *-X* final is compounded first with *-d* (as nominalizer), to form *-dAX*, instead of suffixation to the preverbal directly, e.g. after augment *-a:n*, or after uvulars, e.g. *o-yAq'-dAX* 'movement within enclosed area of o'. After some uvulars, however, *o-'e'* 'in (vacant) place of o' is interposed instead, e.g. *o-dAG-e'-X* 'movement above o', rather than \**?o-dAG-dAX*. Note below, however, *o-yAX-dAX* 'movement beneath o' and *yAXe'X* <? *yAX-e'-X* wind direction.

*da:X* '(movement) grazing', unclear whether truly a preverb, is perhaps derived from *dA:-X*, indeterminate object with automatic lengthening of the vowel, if this is as happens with the vowel of a qualifier. E.g. *da:X O-L-dja'g* 'strike O (match)', unless this is to be identified with the preverb *da:X* 'across', q.v. §16.10.1 under *o-da:*.

For preverbal-initial *X-* with the augment *-a'* there is only one extremely important postposition. It is not difficult semantically to see this augmented form *o-Xa'* as relatable in much the same way to initial element *X-* as *da'* is to initial *d-* above. There is apparently no simple preverb *Xa'* (not counting, of course, this postposition with zero reflexive object, q.v. dictionary entry). Probably the compound *Xa'-dih-* belongs here, however. The postposition *o-Xa'* is also attested with qualifiers, even more productively with certain qualifiers than is *o-da'*. Routine class marks or anatomical uses are not listed separately here, but only the thematized ones with *d-* and *y-*.

Postposition *o-Xa'* 'in relation to o, in intimate relation with o' is translatable as 'right by/near o, in (alienable) possession of o, with o, for o, as far as o is concerned, because of o, "on" o (to o's discomfiture'. This is well covered in the dictionary, q.v., 15 pages of typescript, but is combined there with the augment *-a:-* as *o-X-a:-* as an allomorph of *-Xa'-*, here considered incorrect. In this broad meaning just described *o-Xa'* is with zero final. With class-marks and routine anatomical qualifiers, and in some specialized uses, *o-Xa'* itself may occur with the finals *-Ø*, *-d*, *-ch'*, and *-X*. It is especially frequent as *o-Xa'-X* '(movement) along o, alongside o' (see also *o-d-Xa'-X* below), and with deverbals as postpositional object or as subordinator of verbal clauses as 'for the purpose of o'. In *'AdXa'd ye'X* ~ 'suddenly', it has final *-d*; see *ye'X* ~ further below. In its possessive

use, always with zero final, for non-possessed (i.e. alienably possessed) nouns, *o-Xa'* is syntactically special, along with *o-a:* and *o-ya'*, as part of noun phrases, rather than preverbal.

*Xa'-dih-* 'on a visit' is attested with finals *-d*, *-ch'*, *-X*, and *-da'*.

*o-d-Xa'* 'talking back to, being impudent with o' is attested with finals  $\emptyset$  and *-X*. With final *-X*, this is not derived from *o-d-Xa'*, as just cited, but probably instead to be analyzed *o-d-[Xa'-X]* 'paying close attention to what o says'.

*o-y-Xa'* 'lending to o, into charge of o; falling prey to o, succumbing to o', is attested with finals  $\emptyset$ , *-ch'*, *-X*. With indefinite object, *k'u-y-Xa'* is found in the theme or base *o-ch'* *k'uyAXa'* 'sending to o'.

Initial *X-* with augment *-a:-* is found clearly with final *-X* and in a meaning which can be seen as clearly parallel to that of augment *-a:-* with initials *d-* above and *ch'* below, to an effect 'in general direction of o, diverging widely from o, in loose connection with o'. As there is evidently no *o-Xa:-* with zero final, any more than is the case with *o-da:*, the only other preverbal *o-Xa:-* is listed here as *o-Xa:-q'* (which would be homophonous with *o-Xa:-'q'* but not so analyzed).

*o-Xa:X* 'wide of o, missing o' is clearly a lexicalized combination, attested with its own further final *o-Xa:XAch'* 'veering, diverging away from o' as in *ta:XAAdA-Xa:XAch'* 'swerving off the road'. Further attestations with *-Xa:-* are *o-Xa:-q'* 'on account of, because of, over o', *o--d-Xa:-q'* 'on account of, because of, over what o says', *o--y-Xa:-q'* 'dependent on, by virtue of, thanks to o'.

While the preceding can be considered fully predictable in meaning, this item can be called thematized, if not fully lexicalized, < 'on account of o's hand'.

There is one item which could be derived from initial *-X* with an augment definitely of the form *-a:-*, if the preverb *Xa:d* 'outdoors, world' is analyzed *Xa:-d*, as is done in the dictionary. It is found there as lexicalized with final *-d*, as nominalizer, further as *Xa:dAX* with final *-X*, as *Xa:ch'* (= *Xa:ch'*) with final *-ch'* (<? *Xa:-d-ch'*). However it is not attested as used with zero final *\*?Xa:-* '(move) out (of doors)'. This was not tested; for this meaning, see the preverb 'a'q'.

Initial *X-* with long glottalized augment, with the possible exception of the preceding, is nasalized *Xa:n'*. It is quite possible that the nasalization is not to be considered a morpheme at any level, but only allomorphic as is the nasalization to be found most consistently in the verbal prefix *AN-* after the qualifier *X-*. This is attested as a preverb and as a postposition, and in one postposition with thematized qualifier.

*o-Xa:n'* 'along the entire length of o; return to equilibrium, normal state of o' is attested with finals  $\emptyset$  and *-ch'*. *Xa:n'* 'to stopping point, finish, completion' is attested with finals  $\emptyset$  and *-ch'*. *o-l-Xa:n'* 'avenging o; in competition with o, racing o' is attested with finals  $\emptyset$ , *-d*, *-ch'* and *-X*. The qualifier *l-* is perhaps anatomical, meaning 'head'.

*o-l-Xa:n'-d* 'opposite o' is the above with lexicalized final *-d*, in turn attested with final *-dAX*. See further §17.4 for how this prefixed postposition as a lexeme thus fails

to undergo morphophonemic rules of qualifier combination because of its lexicalized status as a constituent. This item is even attested, from Marie only, as *o-[l-Xa:n']-d-AX-d* 'on account(?) of o'. *o-y-Xa:n'* 'playing into the hands of o; in competition with o; in payment/kindness to o', is attested from Marie only, rejected by Lena.

As with several other preverbals, initial *X-* with augment *-ah-* is found only with the final *-d*, as an ablative or privative, both as a postposition and as a preverb. The meaning can clearly enough be seen as 'from a position of non-punctual contact'. The postposition is also productive with even better than the usual array of more or less thematized anatomical qualifiers.

(10) Postposition *o-Xahd* 'from a position of non-punctual contact'

*o-Xahd* 'away from o, leaving, deserting o; extending from behind o' (For the latter gloss, see the following.)

*Xahd* 'loss of integument, becoming bare; into visible from hidden position' (Cf. the preceding.)

*o-d-Xahd* 'walking out on o as o is talking'. Note also *o-d-yAX-(X?)ahd* 'away from o's nagging, complaints'; cf. under *o-yAX* 'under o' below, either a compound, or privative *-ahd* added to *o-yAX*.

*o-y-Xahd* 'out of unwilling o's hand'

*o-l-Xahd* 'in o's opinion (correct or not)'

### 16.10.3 Preverbals with initial element *ch'*-

This group is semantically the simplest or clearest, in comparison with the other basic initials, and helps justify or reinforce the structure seen with the other basic initials. *(-)ch'(-)* appears by itself not only as a basic postposition, but also like *-d* and *-X* as a preverbal final in a full range, and also as an initial element with a full range of augments. Appearing with a variety of augments, as do also *d-* and *X-*, it appears with the augment *-a'* without any clear change of meaning, thus more clearly justifying the very concept of augment itself than with any other preverbal initial element. Unlike the case of *d-* and *X-*, there are evidently no preverbs with initial *ch'*- (though such preverbal (*o-pp*) does occur). The Athabaskan cognates are not only obvious; the relationship between PA \**o-č'ən* 'to o' and \**o-čən* 'from o' is also explained by the Eyak.

*o-ch'* '(continuous or repeated motion) to o, toward o', less definitively 'arrival at o' than for *o-da*; also 'giving to o, adhering to o'; extended to time as subordinator of optative clause, 'until o'. For further phonological, combinatory, and semantic detail, see the dictionary. This basic postposition is frequent also as preverbal-final, as in (11), especially in connection e.g. with Inceptive perfective and certain other paradigms, repetitive and

certain other derivations, for which see Chap. 13 on the paradigms and Chap. 15 on derivations. The meaning of *o-ch'* is not distinguished from that of *o-ch'a'*, below.

(11) *o-ch'* 'toward o' as preverb final

*o-y-ch'* 'into clutches of, victim to o', with anatomical qualifier *y-* 'hand' thematized

*o-d-ch'* 'toward the sound of o', with *d-* thematic 'oral, noise'

*o-lXdl-ch'* 'in presence, view of o', with anatomical qualifier *lX-* 'eye', and thematic qualifier *dl-*

*o-ch'-L*, suffixed to stem of deverbalization as object in the acquisitional derivation,

See also *o-ch'a'* 'toward o' etc. under §18.13 on deverbalizations, with the exact same meaning as *o-ch'*, with *-a'* augment, adding no meaning except potentially some emphasis, but more motivated phonologically. E.g. with zeroed-out reflexive, '*Adch'* or *ch'a'* are both attested; '*Adch'a'* is presumably acceptable, but *\*ch'* alone is explicitly rejected by Lena. Augmented *o-ch'a'* is also preferred with foreign names as object and is much more common in Rezanov (1805) than in modern Eyak, for dialectal and/or historical reasons. Augmented *o-ch'a'* is also found as a variant for *o-ch'* as a preverbal final, though far less frequently, except in Rezanov. Augmented *o-ch'a'* itself is attested only with zero final, as is *o-ch'*. Presumably *o-ch'a'* is the exact cognate to Athabaskan *\*o-č'ən*, of the same meaning, the Eyak tending to denasalize. Cf. *o-ch'ahd* 'from o' further below.

*o-ch'a'*: 'in the direction of o, toward o' is attested marginally with finals  $\emptyset$  and *-d*, but productively, and often with lexicalization, with finals *-ch'*, *-X*, and *-ch'ahd*. With zero final we have at least the instance '*uch'a': sahL* 'you went right close to it, you "got warm" (but didn't see it)'. With final *-ch'* it is glossed also as 'next after o (in rank, time)', and with final *-X* also as 'helping o'. With final *-ch'ahd* or compounded with *o-ch'ahd* as head it is of course 'away from the general direction or vicinity of o'. However, with final *-q'* or compounded with *o-q'* 'on o' as head, itself attested with finals  $\emptyset$  and *-d*, *o-ch'a':q'* is glossed 'in straight line toward o'. At the same time, however, it is glossed at least once 'missing o' in '*Awch'a:q'* *'isALxut'L* 'you missed it (shooting with rifle) (VI 144 L); and *djig'uch'a:q'* *siyahLinh* is glossed 'I ran right (*djig*) into him (*'u-; =inh*) unexpectedly'; at the same time, we have e.g. '*lCh'a:q'd qAsALahL* 'they're lined up', implying 'in line with o'. This leaves us to speculate on some meaning like 'straight at o' for *o-ch'a:q'(d)*.

*o-L-ch'a:-* 'side of o' is attested with finals *-d*, *-ch'*, *-X*, and *-ch'ahd*, often with reference to one of two paired sides, e.g. 'outer/inner, upper/lower, left/right, front/back'. It is also found with directionals or locatives as object, treated in §21.2.

*Li-ch'a:-* 'on one side' is used as preverb or adverb, with *Li-* 'one' (?) as object. This is attested with finals *-d*, *-ch'*, and *-X*. With final *-d* it may also be glossed 'aside'; with final *-ch'*, also 'aslant, sideways, over to the obverse side'.

*o-ch'ah-d* 'from o' is attested only with final *-d*, certainly an example of privative or ablative *-ah(-d)*. This is sometimes with a meaning extended to time, 'after o', including use as subordinator of a verbal clause. It is found also as the final element of or as compounded as head of compound postpositional phrases with over a dozen other preverbals or

locatives, including some themselves with final *-d*. Certainly *o-ch'ah-* presumably without the *-d*, is cognate to Athabaskan \**-č'ən* 'from', Eyak again tending to denasalize.

#### 16.10.4 Preverbals with initial element *y-*

Given that no word or stem can consist of a sonorant alone, *y-* initial preverbals must have an augment. It is nevertheless easy to conceive that the initial *y-* of these preverbals may very well be or is in fact is to be identified with the anatomical qualifier *y-* meaning 'hand', perhaps originally in the sense of a cupped hand. Given that *-a'* is usually the most productive augment, it may hardly be a surprise that in the dictionary there are no fewer than five different *ya'* morphemes, both postpositions including thematized derivatives, and preverbs with some extended meanings. That classification will be considerably modified here.

*o-ya'* 'in(to) o (vessel or thing with broad opening at top; concave topographical feature, body of water)' is attested with finals *-Ø*, *-d*, *-ch'*, *-X*, and compounded with *o-ch'a'*, *o-ch'ahd*, and *o-k'ah* as well. With final *-X* only and deverbalization it may be glossed with an object as 'while o-ing'. With zero final and reciprocal object it may be glossed as 'folding, crossing o together', and that with the preverb *yAX* as in the perambulative derivation, *'iLya' yAX* is 'back and forth'. With final *-d* and preverb *qa'* 'up out', *'iLya'd qa'* it is 'separating from each other'. With final *-ch'*, attested only with the theme *-a'ch'* '(pl) go' it is 'dance frenziedly', for which cf. the following preverb.

*-Xl-ya'-d* 'vagina' has nominalizing final *-d* and anatomical qualifier *Xl-* 'female genital'.

*-qi-d-ya'-d* 'sole of foot' with nominalizing final *-d* and anatomical qualifier *-qi-d-* 'foot'. See also *-qe:-s-d-ya'-d* 'inside of knee', *-qe:s-g(-l)-d-ya'-d* 'ankle', *-qe'-d-ya'-d* 'haunch', and *La:n'-d-ya'-d* 'crotch' in the dictionary.

*k'iya'* 'to landing-place (in boat travel)' functioning as a preverb, is presented under §16.10.15, but it is almost certainly from *k'u-ya'* and lexicalized and with /u/ vowel fronted by the following /y/, 'into concavity in something'.

*ya'* is rare and marginal with the finals *-Ø*, *-ch'*, *-X*, meaning 'in(to) vessel with broad opening at top', but it is well attested with final *-d* 'out of vessel with broad opening at top; to a state of emptiness'. Also well attested with the finals *-Ø* and *-ch'*, only with the themes *-a* '(sg) go' and *-a'ch'* '(pl) go' 'dance into a state of frenzy, trance, euphoria; "whoop it up"', for which cf. above (this section). This preverb is attested with zero final, 'vertically'; for this note especially also the preverb *ya'X*, below. With zero final, *ya'* as a preverb is attested only with *-a* '(sg) go', 'unexpectedly'. Cf. again the preverb *ya'X* in the phrase *'AdXa'd ya'X* 'suddenly', below.

*o-ya'* 'of o, belonging to o', entered separately here, is always with zero final, used for possession of all non-possessed nouns, and very frequently used also for more abstract essential relationships between nouns, rather than compounding, including e.g. as



in *xAtl'ya' XuhLgL* 'snow (*xAtl'*) shovel', *Xe:ya' tsa:L* 'grease box', *lixahya' duxL* 'grizzly deadfall'. This is of course very possibly to be identified with *o-ya'* above, especially in the possibly original sense 'in o's hand'. Being part of noun phrases, but like *o-Xa'* and *o-a:*, possessive *o-ya'* does not occur preverbally; at the same time it differs syntactically also from *o-Xa'* and *o-a:* even within the noun phrase as attribute preceding the head noun rather than following it.

The preverb *ya'* 'completely, to bits; to a state of rest', always with zero final, is also treated separately here. It is possibly to be identified with the preverb *ya'* 'into concavity', above. It sometimes requires the qualifier *d-* in verbs, and is often used in meaning 'to a state of rest' with Active *AN-* imperatives. See the dictionary, as well as §12.3.2 on imperatives, and §17.10.3 on qualifier *d-*.

The preverb *ya'X* 'up, into/through the air' refers to any movement upward not beginning from under or behind something, for which see the preverb *qa'* '(emergence) up and/or out'. Most likely this is to be segmented, perhaps even synchronically, as always with final *-X*, thus < *ya'X* '(movement) up from a vessel with broad opening at top, e.g. cupped hand'. Note '*AdXa'd ya'X* 'suddenly' < 'up from a state of rest in relation to self'; cf. also the preverb *qa'* 'up out; suddenly begin to V', and of course *ya'* above.

Initial element *y-* with augment *-a:-* is marginally attested with zero final, if at all. At the same time that is difficult to distinguish from the indefinite pronoun or noun *ya:* 'thing', and/or from qualifier *y-* 'hand' plus postposition *-d*, *-ch'*, *-X*, or *o-q'*, especially where the last two may require morphophonemically *-a:-* to connect the qualifier and postposition. For these see especially *ya:5-7* in the dictionary. See thereunder especially also *ya:-q'* 'sky, firmament', itself also with finals *-d*, *-ch'*, *-dAX*, and *-ch'ahd*; cf. moreover Athabaskan \**ya* 'sky', and Eyak *-sa:q'd* 'palate, roof of mouth' below. However, there is a postposition and a preverb, next, both always with final *-X*, which, never with further final, potentially or probably may be analyzed *ya:-X*, though the semantic relations are then quite obscure.

*o-ya:X* 'avoiding o' requires the element *L-* in the classifier of the verb, as do several postpositions ending in *-X*, thus further suggesting segmentation as *o-y(a:-)X*. This postposition is often used as subordinator of a verb phrase, requiring for some reason the customary derivation of the verb functioning as the object, 'lest o, so that not o'. See also §15.5 on the customary and Chap. 11 on the classifiers.

The preverb *ya:X* 'to total destruction, consumption', e.g. in burning, eating, is listed in the dictionary as *ya:X<sub>3</sub>*, variously to be analyzed *o-y-X* 'by (own) hand', *ya:-X* with *ya:* 'thing' (?) as object of *o-X*.

The initial element *y-* with augment *-ah* alone might be found only in *yah-GAyu:* 'Ahtna Athabaskans'. With *-ah-d*, however, it is found clearly in both one postposition and in one preverb.

*o-yahd* ‘out of unwilling o’s hand’ is very clearly from the anatomical qualifier *y-* ‘hand’ with the usual privative or ablative meaning of augment *-ah*.

The preverb *yahd* ‘out to sea’ is possibly derived semantically from the preceding, though only obscurely so.

The preverbal initial element *y-* with augment *-a:n’* is found in one preverb, the nasalization possibly arising in the same way as with CV plus imperative AN- where C is non-coronal, though cf. also *o-t’a:n’ch’*, below.

The preverb *ya:n’* preverb ‘down (to rest on horizontal plane)’ is attested usually with finals *-Ø* or *-ch’*, rarely with *-d* or *-dAX*.

For the preverbs *ya:nahd* ‘down flat covering’ and *yAna:’-* ‘downhill’ see next under §16.10.5 on preverbals with initial element *l-*, though these might be considered preverbs beginning with a combination of both *y-* and *l-* (*~ n-*), in the standard combinatory order of the qualifiers *y-* and *l-*.

### 16.10.5 Preverbals with initial element *l-*

Given that no word or stem can consist of a sonorant alone, preverbals with initial element *l-* must have an augment. Though not quite so productive as initial *y-* with augments of the timbre /a/, an argument might well be made for *l-* with augments *-a’*, *-ah*, and *-a:(n)’*, though probably not with augment *-a:*. There is also the *l ~ n* alternation to consider here, producing allomorphs *-na’*, *-na:*, *-nah*, and *-na:’* under conditions to be described below. The initial *l-* is clearly relatable semantically to the anatomical qualifier ‘head’ in the case of *o-la’-*, but the semantics are much more obscure in other cases. One further item not listed below is *o-Xu:n-tl’A(-?)la’* ‘gums’, for which see also *-tl’A-* below. Note that Eyak /l/ not only alternates with Eyak /n/ and nasalization, but that it regularly corresponds to Athabaskan /n/.

*o-la’* ‘sign, omen of o; disaster for o’ is attested with zero final only.

*o-la’-* ‘down over o’s head, draped over, hanging on o’ (e.g. of clothes, also emotion), this is attested with finals *-d*, *-ch’*, *-X*, not *-Ø*, unless that above is to be considered here. This is also compounded as object of comparative postpositions, in *o-la’-ga’* ‘fitting o’s head’, *o-la’-lAX* ‘too big for o’s head’, and *o-la’-u’X* ‘too small for o’s head’. This is further attested, once, together with anatomical qualifier *l-* ‘head’ itself in *o-l-la’-d* > *o:-na’-d* in *o:-na’d qa’* ‘up from over o’s head’.

*o-la’-q’* ‘on o as clothing, covering’ is the preceding with *-q’* final or as object of *o-q’* ‘on o’ as head of a compound postposition, itself attested with finals *-Ø* and *-ch’*. Note the noun *o-la’q’-Aya’* ‘o’s clothes. With reciprocal object, *’iLa’q’*, it may be glossed ‘in layers, strips’.

*la'q'* 'in thickness/thinness; deflation, collapse; baldness; (head) looking upward', including a variety of derived meanings, some of which are obscure, is certainly in part derived from *la'-q'*, but conceivably in part is derived from a different morpheme *la'q'*.

*o-X-la'* 'hanging on, impaled on protruding o' e.g. a peg, with thematic qualifier X, attested with finals *-d*, *-ch'*, *-X*, and *-q'*. This is attested also with further anatomical qualifier, *o-y-[X-la'-]* 'on o's finger'.

Preverbals with initial *l-* and augment *-ah* (§16.3) are limited and not clearly relatable semantically to 'head'. *o-lah* 'around in more or less circular motion or position about o; concerning o'. With anatomical qualifier *l-* we have *o--nah* 'around o's head; with respect/admiration for o'. This is entered in the dictionary under the verb theme *yAX dA-la-X* 'turn to face direction', perhaps incorrectly, as this would be the only preverbal derived from or identified with a verb stem.

The preverb *lah* 'in more or less circular motion, turning in arc' is clearly the cognate of the Athabaskan recursive preverb *\*na* 'back, again', presumably from the postposition *o-lah*, in the sense of a circle or reversal of motion around self, also the Athabaskan postposition *\*o-na*. In Eyak the preverb *lah* does not add element *dA-* to the classifier in intransitives, except in one (perambulative) verb theme *yAX dA-'ya(-X)* 'move self limitedly in position, quake'.

*o--nah-d* 'down over and covering o's head' < *o-n-nahd* (= *o-l-lah-d*) is not widely attested as such, no *o-lah-d* being attested. See the dictionary entry, under *nahd*, and see *y--nahd* below in this section. This is also regularly attested with the meaning 'in month of o', *qAXah* 'moon' being *l*-class. The meaning is clearly not the privative or ablative, but nearly the opposite, as in the case of *o-dah-d* 'against o (with pressure)'.

*y-l-lah-d* > *ya:nahd* 'down flat covering a surface' is clearly related to the preceding, and is quite productive in noun formation, e.g. 'rug'.

Preverbals with the augment *-a:n'* are clearly attested in one postposition and one preverb, both explained as presumably from *\*-n-na:n'* > *-na:'*. These are to be found in the dictionary under the entry *na:'*. The sharp difference in meaning between the preverb combined with initial element or qualifier *y-* 'hand' and the preverbals without that can perhaps be reconciled with a meaning like 'at high or low level' (!). Any relationship between these and the only possible form without nasality in the augment *-la:'* is at least equally obscure semantically.

*o--na:'* is attested only with *'itl'* 'mountain' (*l*-class) as object, *'itl'a:na:'* 'on mountainside', attested with finals *-d* and *-X*.

The preverb *'i:na:'* 'on mountainside; up high' is derived from *\*n-na:n'*, with *n-* (= *l*-class marker) for *'itl'* 'mountain', and with zero object in the formation of the preverb. This is attested with finals *-d*, *-dAX*, and *-X*.

The preverb *y-na:'* > *yAna:'* ~ *yina:'* 'down below, on lower level, on bottom, floor, ground' is attested with finals *-d*, *-dAX*, *-X*, and *-ch'*.

*Li(-?)la:* 'man, male' is entered as a disyllabic stem, *Lila:*, in the dictionary, but is conceivably to be segmented as shown here; for *Li-* see the dictionary entry *Li-* 'one; all'. This segment is certainly with the allomorph *-ni:*' in *LAni:*'-kih 'boy', where *\*-na:*'-inh- > *-ni:n'* > *-ni:*'-; cf. *ya:*-inh > *yi:nhinh-*, with nasal umlaut here on a non-verb.

### 16.10.6 Preverbals with initial element *w-*

To round out the picture of preverbals with initial sonorants, here are presented those with initial *w-*, even though these appear to be rather less systematic than those with initial *y-* and *l-*. The reason for this is that unlike *y-* and *l-*, which have large and clear roles in the system of qualifiers, including anatomical roles, *w-* may not be a qualifier at all. In view of this, *w-* might be seen as playing a relatively significant role as preverbal initial element. None of the preverbals with initial *w-* has the usual variety of preverbal finals, but are mostly evolved in specialized ways with prefixation and/or suffixation.

Initial element *w-* with augment *-a'* is probably or perhaps to be found in three basic Eyak forms, all suffixed, one of which is also prefixed. The two items listed here are the most likely to be analyzed *wa'*. This leaves aside the third, a noun, adjective and verb *wa'q'* 'shallow' which is very conceivably to be analyzed *wa'-q'* with final *-q'* or postposition with *wa'* as object, semantics of which are obscure.

*dA-wa'-d* 'quickly, fast, hurry!, soon, early', found as an interjection, or as object of *oga'* 'like o'. Though this item is entered in the dictionary as *dAwa'd*, there are no Eyak stems with both initial and final /d/, /t/ or /t'/, as noted above. This form is therefore necessarily to be analyzed in some way, most probably as *dA-wa'-d*. Further, a disyllabic stem with initial *d-* and internal /w/ would probably be unique, and *-d* is very probably a final in a preverbal. The implied resulting stem *-wa'* is relatable to others semantically, also to *wa:* and *wah*, the general semantic notion being perhaps 'preceding, leading to'. The prefix *dA-* is either thematic qualifier *d-* of unclear meaning, indeterminate object of a postposition, or proclitic *dA=* 'self'; cf. *dA-wa:* here further below.

*o-l-wa'-L* 'edge, rim of o' is attested only with thematic qualifier *l-* of unclear meaning, and one of several possible suffixes *-L*. This segmentation is further supported by the Athabaskan cognate *\*-wa:n'* 'edge'. It is entered in the dictionary as *wa'L<sub>1</sub>*, to be distinguished from *wa'L<sub>2</sub>* 'hang suspended'. The semantics are obscure, or this is a mere homophone with *-wa'* above.

Initial *w-* with augment *-a:* is very probably to be found in two forms, one prefixed and one suffixed. Both are semantically relatable to some broader common meaning.

*o-dA-wa:* 'pending, waiting for, while, after, before' is often also found as temporal quasi-conjunction with a verbal clause as object, and sometimes after a finished sentence and pause, extraposed as if it were a conjunction, 'and then', or with demonstrative as object, e.g. *dA'AwdAwa:* 'and after that'. It is marginally also attested without *dA-*, probably

thematic qualifier, for which see the dictionary, supporting in any case the segmentation *dA-wa:*, given that a stem *\*?dAwa:* is already improbable given the lack of any clear disyllabics of the form *\*?dAwV-*.

*o-wa:-L-X* ‘according to, following (the example, path, directions of) o, with careful attention to o; making faces at o’ is only marginally attested without *-X*; cf. *'a:li' LX*, *o-IX-a:L* in §16.10.10. This postposition is also to be found with thematic qualifier *d-* in *o-d-wa:LX* ‘imitating o verbally’. It is listed in the dictionary under the stem *wa:L*.

Initial *w-* with augment *-ah* is clearly attested in two forms, one with final *-d* and one without, with unquestionably related meaning. This pair thus constitutes the best evidence we have that the several other instances of preverbals with the rhyme *-ahd*, for which we have no corresponding or no clearly related *-ah* form (without final *-d*), may nevertheless be segmented *-ah-d*.

*o-wah* in the phrase *o-wah ya:* ‘makings of o, raw material for o’ is attribute to *ya:* ‘thing’, sometimes subordinating a verbal clause. It is only marginally attested without *ya:*.

*o-wah-d* ‘for the sake of, purpose of o, in order to o’ is very often found subordinating an optative verbal clause. It is attested also with thematic qualifier *d-*, ‘satisfying, cloying o’s hunger’, and compounded with *o-xa'-d-* ‘for o to eat’.

### 16.10.7 Preverbals beginning with *Ca'-* and *Cah-*

This next large grouping is composed of preverbals of the basic form *Ca'* or *Cah-* where no segmentation is probable between the initial consonant and the nucleus. In these the nucleus (if not augment) is still *-a'* or *-ah*, which may vary with *-a:* or *-a:(n)'*. In these items the initial C, including here three aspirated stops, cannot by themselves be identified with any other morpheme. It should be noted that the meanings for this group are generally much more specific than those for the maximally segmentable items above. This group has the morphologically unsegmentable initials /s-, t-, t', q-, k-, x-, k'-/ , presented in that order.

We begin here with *o-sa'* ‘in(to) o’s mouth, to o’s mouth’, where the object, usually animate, may also sometimes be a trap or the like. This item might in principle belong with the preceding group in that there is a rare qualifier *s-*, which even has an Athabaskan cognate or counterpart, also rare. However, there is no clear semantic relation to any of the Eyak qualifier uses (though conceivably with the Athabaskan *\*zə* ‘kill, destruction’), and the meaning of *o-sa'* is very specific and consistent. The postposition is often attested with zero reflexive pronominal prefix as *sa'*, in indirect reflexive verbal constructions, e.g. ‘V (O) in(to) own mouth’. This indirect reflexive construction with zero postpositional prefix has a widely attested Athabaskan cognate, with marked tone on the postpositional vowel and sometimes even a voiceless fricative initial, attesting to the antiquity of the

construction. This postposition is attested with finals  $-\emptyset$ ,  $-d$ ,  $-ch'$ ,  $-X$ , and  $-ch'ahd$ . With final  $-d$  as nominalizer it is also frequent as a noun, meaning 'mouth', itself often then compounded with other postpositions, e.g.  $o-sa'd-lah$  'around o's mouth',  $o-sa'd-A-k'ah$  'away from, out of o's mouth'.

This item is also found, in a limited way, as a preverb  $sa'$  'at the mouth' requiring in some cases thematic qualifier  $Gd-$  in the verb, but not  $D$ -classifier.

Finally, the augment—or rather, the nucleus—is changed,  $sa'$  to  $sa:-$  (=  $sa:-'$ ) with  $o-q'$  'on o' as final or as head of compound, with nominalizing final  $-d$  in turn, in  $o-sa:q'd$  'o's palate, roof of o's mouth'. Cf. e.g.  $ya:q'd$  'sky, firmament', but  $o-t'a'q'd$  below, so that it is not at all clear why the form is consistently  $sa:q'$ - rather than  $*sa'q'$ -.

$ta'$  'in(to) water' is a preverb only, attested with finals  $-d$ ,  $-ch'$ ,  $-X$ , and perhaps also incorrectly  $-dAX$ . It is attested with the nucleus  $-a'$  only.<sup>2</sup> Cf. Athabaskan  $ta'$  'in(to) water', with at least final  $-X$  and variable nucleus, e.g.  $*te'X$ ; cf. also Athabaskan  $*tu:$  'water', but note e.g. Galice  $təm$  'water', implying evidently also  $*?təw$ . Cf. also the pair  $o-t'a'X$  vs.  $o-t'a:X$  next.

The subgroup has yet another pattern of nucleus variability, basic  $t'a'$ , in some cases invariable, but in other cases, variable as  $t'a:n()$ - $ch'$  and  $t'a:-X$ .

$o-t'a'$  '(physically) behind o, obstructed by o, under o's clothing, in o's pocket'. This is attested with finals  $-\emptyset$ ,  $-d$ ,  $-ch'$ , and  $-X$ . With zero final only it may be glossed 'dependent on o', and with final  $-X$  only 'preoccupied, distracted by o' (including a verbal clause as object). For details see the dictionary. In this the nucleus is invariably  $-a'$ . With indeterminate object the result  $dAt'a'$  may be glossed 'stuck; difficult'. There is one verb very probably derived from this postposition, listed in the dictionary as  $O-L-t'a'L$  ~ 'tie O down with responsibility'.

$'iL-t'a'$  ~  $-t'a:n'$  'gathering together (of people, fish, objects)', only with reciprocal object, is very probably to be considered a preverb, in that it does not entail the  $D$ -element in the classifier even in intransitive verbs. The allomorph here with final  $-ch'$  is  $-t'a:n'-ch'$ , homophonous with  $-t'a:n-ch'$ , but considered to be  $-t'a:n'$ , given the glottal stop in  $Xa:n'$  and  $ya:n'$  above. The meaning is clearly derived from that e.g. of  $'iLt'a'-ch'$  above, 'behind each other', but also makes contrasting minimal pair therewith. Cf. further  $'iL-qa'$  ~ below in this section.

$o-t'a'-q'$  'in back of o, behind o's back' is attested with finals  $-\emptyset$  and  $-d$ . Note that the nucleus is not lengthened; cf.  $-sa:q'd$  above. Also attested in  $o-y-t'a'-q'-d$  'back of o's hand', with anatomical qualifier  $y-$  'hand', the preceding is nominalized with the final  $-d$ . Likewise  $o-qi:y-t'a'q'd$  'top of o's foot', with anatomical qualifier  $qi:y-$  'toes', is perhaps in error for  $qi:d-$  'foot', the preceding nominalized with final  $-d$ , or perhaps also correct as 'top of toes, top of front part of foot'.

<sup>2</sup> A hypothetical  $*?ta:X$  instead of the consistent  $ta'X$  was presumably not tested.

*t'a'q'e'ch'* 'backwards', with *t'a'q'* as in the preceding, is compounded as the object of *o-'e'* 'in vacant place of o', with final *-ch'*.

*o-t'a:-X* 'behind o, under cover of o, in the shelter of o (e.g. edifice)', with nucleus *-a:-*. This contrasts with *o-t'a'-X* above, with final *-X* thematized, itself attested then with finals *-Ø*, *-d*, *-dAX*, *-ch'*, *-ch'a'*, and *-ch'ahd*. Note lexicalized *GA-L-t'a:X* 'undermost, innermost (of layers of clothes)'. Note also that the form with expanded nucleus *o-t'a:X* is closer in meaning to the basic meaning of *o-t'a'* than is the specialized extension *o-t'a'-X* 'distracted by o' without that expansion, implying that extension of *-a'-* to *-a:-* is the norm with final *-X*. Cf. however the preverb *ta'*, *ta'-X* (§16.10.2).

Rather similar to *o-t'a'* here above is the case of *o-qa'* 'among o', which has the allomorphs *-qa:n'-* and *-qa:-* with *-ch'* and *-X*, respectively, but only with reciprocal object *'iL-* where the finals are thematized, contrasting with *-qa'* where they are not thematized, at least in the case of *-qa:-X*.<sup>3</sup>

*o-qa'* 'between, among, mixed with, involved with o' is attested with finals *-Ø*, *-d*, *-ch'*, and *-X*, and compounded with *o-ch'ahd* 'from o' and *o-k'ah* 'away from o' as head, or with those as finals. With indeterminate object, the result *dAqa'* may be glossed 'involvement, mixture of people'. This postposition, with the final *-X* only, may be glossed 'through hole in o', also 'in shares distributed to o'; and with zero final, 'cost-sharing with o'. For semantic details see the dictionary. The nucleus here is always *-a'-*, even with finals *-ch'* and *-X*. Cf. next.

*'iL-qa' ~ -qa:n'-* 'mixed, mingled, tangled together', only with reciprocal object. This is very probably to be considered a preverb, not entailing *D*-element in the classifier even in intransitive verbs. This is attested with finals *-Ø*, *-d*. The allomorph with the final *-ch'* is *-qa:n'-ch'*, homophonous with *-qa:n-ch'*, but considered to be *-qa:n'*, given the glottal stop in *Xa:n'* and *ya:n'* above. The meaning is clearly derived from that of *'iL-qa'-ch'*, but unlike the case of *'iL-t'a:n'-ch'*, *'iL-qa:n'-ch'* is apparently in free variation with *'iL-qa'-ch'* rather than in semantic contrast. Cf. *'iL-t'a'-* above; *-qa'-ch'* is perhaps to be considered a postposition, *-qa:n'-ch'* a preverb.

The preverb *dA-qa'(-X)* '(movement) on(to) fire' is probably with thematic qualifier *d-* 'fire'.

<sup>3</sup> The Athabaskan equivalent of this *o-qa'* is *\*o-ta'* 'among o' with similar variation as well as meaning. It may conceivably also be a cognate, by special correspondence with one other possible important instance, Athabaskan *\*tə-* 'forward, inceptive'. This prefix is also combined with progressive *\*γə-*, in the Athabaskan future construction *\*tə-...-γə-*, and combined with *\*s-* perfective in the Athabaskan inceptive perfective construction *\*te'...-s-*. To be compared with this, the Eyak future prefix *qu'- ~ qa'- ~ qe'-* from *qwa'-* 'event irrealis', is very close to the Athabaskan in unique prefix position combination, and in meaning. The variation in labialization may not be a problem, but cf. Athabaskan *\*q<sup>w</sup>ə-* 'place, event', a prefix to the left of *\*tə-*.

'*iL-qa*:-*X* 'dispersed, scattered, confused', not entailing *D*-element in the classifier, is therefore very probably to be considered a preverb, with final *-X* thematized. Its meaning is very probably derived from that of '*uL-aq*' ~ through the idea of confusion or implosion. See also the following items with nucleus *-a*: for their meaning, sharply distinguished here from that of '*iLqa*'*X*.

There are three stems or putative stems listed as *qa*: in the dictionary. The first, *qa*:<sub>1</sub>, is attested in the adverb *dA-qa*: 'once in a while, intermittently, vaguely', more often with plural suffix *-yu*:, to mean 'sometimes'. The prefix *dA*- is identified as *dA*= 'self' or as qualifier *d*-, but is most probably the indeterminate object of postposition *o-qa*:, with meaning relatable to the preceding. What is listed as *qa*:<sub>2</sub> in the dictionary, in *dAq'Adqa*: 'hole, den of animal in prone hollow tree', *yAq'Adqa*: 'standing hollow tree' and *dla:q'Adqa*: 'porcupine's hold under rock', referred in the dictionary to spurious stem *q'Ad* 'hollow place, hole', is almost certainly from \**o-q'-d-qa*: with epenthetic schwa, metathesized to before final *-d*, in a compounded postpositional phrase. Thereby *-qa*:<sub>2</sub> could be identified with *qa*:<sub>1</sub> 'interstice'. Likewise perhaps for *qa*:<sub>3</sub>, in the postpositional phrase *o-lu'-qa*: 'in quest of *o*, to fetch *o*', widely attested also in Athabaskan \**o-nu-qa*. This must be so segmented because of the constraint against aspiration in codas. The segmented result, homophonous with *o-lu*' 'through hole in *o*' in Eyak, is of course semantically problematical.

There is a second preverbal stem *qa*' ~ *qa:n*'-, preverb only, 'up out, emerging into view, erupting, suddenly starting activity, into awareness', with a variety of derivative meanings. See the dictionary for details. This is found only with zero final and allomorph *qa*', and as *qa:n'ch*' with final *-ch*'. Its relationship with the preceding preverbal stem *qa*' ~, if any, is not at all clear from the semantics. The two are in complementary distribution, this latter being a preverb only, the preceding stem *qa*' ~ being almost exclusively a postposition. Athabaskan clearly has cognate \**qa*' 'up out'. Cf. also *qAnuh* 'into open view' below.

*y-qa*' ~ *-qa:n*'- 'piling up, accumulating' is the preceding with thematized qualifier *y*-<sub>2</sub>, possibly from anatomical *y*-<sub>1</sub> 'hand', *-qa*' with zero final, *-qa:n*'- with final *-ch*'. It requires the qualifier *d*-<sub>3</sub> 'accumulation' in verbs.

*o-qa*: 'part of *o*; *o*'s kind, type, tribe' is a postposition-like noun, possibly related to the first and postpositional *o-qa*', with expanded nucleus *-a*:', and with zero final only.

*GA-L-qa:(')**q*' or '*iL-qa:(')**q*' 'grazing, slightly wounding *o*' is probably a preverb with limited use. It may conceivably be related to the preceding, and/or to other preverbs with initial *q*-referring to 'belligerence', especially the preverb *qAla*' 'seriously injuring, beating up', probably also belonging here. See further under unanalyzable *qa'ni*: ~ *qa'nu*:) and *qu:(l)*- in the dictionary, also *qAyuh* and *qAla*' under §16.10.15.

There are four more basic preverbals of the shape *Ca*- with variation in the augment. The first of these is like the preceding, having *Ca*' and *Ca*- variants, the second is attested



as Ca' only, and the third is *-k'ah*, with no clearly associable *-k'a'* attested.

The first of these, *-ka'*, has very much the standard expansion of the nucleus to *-a:-* with thematized final *-X*, as e.g. in *-t'a'* above.

*o-ka'* 'going along together with o' occurs with zero final only. It has a probable disyllabic variant in the possessed noun *o-kAwa'-na:-G* 'o's relative'.

*o-ka:-X* 'moving in the same direction and catching up with o, overtaking o', this is the preceding with final *-X* thematized, and is itself attested with finals  $-\emptyset$ , *-d*, and *-ch'* (*-Ach'*).

The second of these, *-xa'*, has an invariable nucleus unless it is considered relatable to the third, *-xah* below, though the semantics are then problematic.

*o-xa'-d-* 'for o to eat' is evidently a postposition underlyingly, but is attested only with final *-d*, so treated as a noun in dictionary. That itself is attested only compounded as *o-xa'-d-A-*, as object of another postpositions as head, namely *o-ch'*, *o-k'ah*, *o-Xa'*, *o-wahd*, *o-ga'*, *o-'e'-d*.

*xa'* 'appetite; jaws, mouth' was originally listed as a noun in the dictionary.

The third preverbal of the shape Ca-, *-xah*, is perhaps or probably two morphemes, the first of these being labialized more frequently than the second, perhaps significantly so. See the dictionary for details. The semantic connection between the two is also problematic, but not impossible, nor impossible to relate to the preceding. If it is not so related, then the nucleus is invariable, as far as is attested. Cf. however the noun *-xi:ya'X* 'jaw', very possibly < \**-xa:-ya'-X*, which would provide the semantic basis for connecting *xa'* and *xah*, especially the latter, and a third nucleus variant *-a:* (> *-i:*).

*o-xah* 'removal, loss of o (contents, integument)' has obviously an ablative or privative meaning, though without final *-d*, but with zero final only.

*o-d-xah* 'by command of o', with qualifier *d-* 'oral, noise', is attested only with zero final.

The fourth of these, *k'a-*, is attested only with *-ah* and *-a:*. No relatable *k'a'* is attested, unless *-k'a'* 'please' is considered, an enclitic requiring optative verb, for a polite command or wish, so not listed here as a preverbal.

*o-k'ah* 'away from o', with clearly ablative or privative meaning is attested with finals  $-\emptyset$  and *-ch'*, but never with *-d*. It is also compounded with or as final and head with other preverbals, itself with finals  $-\emptyset$ , *-ch'*, and *-X*, but again not with *-d*. It is compounded as head especially often in *o-q'AK'ah* 'away from on o', but also in the preverbals in (12).

(12) Preverbals with *o-k'ah*

*o-ya'-k'ah* 'away from inside o'

*o-d-da'-k'ah* 'away from in front of o'

*o-qa'-k'ah* 'away from among o'

*o-d-L-yAX-k'ah* 'away from before o'

*o-d-wa-k'ah* 'out of o's way'

*o-e-k'ah* 'away from the (vacant) place of o'

*o-e-d-A-k'ah* 'away from a point at rest in (vacant) place of o'

*o-sa-d-A-k'ah* 'away from o's mouth'

*o-xa-d-A-k'ah* 'away from o's eating-range'

*'u:d-i-k'ah* 'away from there' (with locative *'u:d* 'there')

*'a:nd-A-k'ah* 'away from here' (with locative *'a:nd* 'here')

The major source of AN- Active imperatives with locomotion theme class verbs, the most consistent in requiring such imperatives, is *o-k'ah*, for some reason. And *o-k'ah* is also the most consistent postposition in requiring Active.

*k'a:(-?)dih* 'lost, missing, vanished' is a locative rather than a preverbal, but is probably related to *o-k'ah*, as it includes some semantic spread into more general negativity, q.v. the dictionary entry. For *-dih* cf. *'Ash-dih* 'nowhere; I dunno', possibly cognate with Athabaskan enclitic *\*\*-dən* 'place where'.

*o-k'a:(-?)d* 'o plus n digits', usually *-k'w-* in Russian sources, is attested only with *dAGa:X-* 'ten, -ty' as o, followed by the digit numerals one to nine. This is semantically problematic but possibly related to *o-k'ah* and/or *k'a:(-?)d*.

### 16.10.8 Preverbals with initial *tl'*- and *q'*-

There are three obstruents, /d, ch', X/, which serve three roles: as preverbal initial elements in the analyses above; as non-syllabic postpositions, *o-d*, *o-ch'*, *o-X*, in themselves; and as basic preverbal finals as well. There are two more obstruents, /tl'/ and /q'/, which serve as non-syllabic postpositions in themselves, *o-tl'* 'with o' and *o-q'* 'on o', like the three preceding obstruents, but these two serve in a far less clear capacity as either preverbal initial elements, or as finals. The *tl'*- serves as initial element perhaps in a variety of preverbals, including some with nuclei or augments of timbre /a/, but the *q'*- serves as initial element in fewer, probably none with nuclei or augments of timbre /a/. The *tl'*- definitely does not serve as a preverbal final, but the *q'*- can be considered to do so widely, however ambiguously, and here is treated inconsistently, either as a final and/or as the head of a compound with the preceding preverbal. These roles will be shown here, first for *tl'*-, then for *q'*-.

In indirect reflexives, both *o-tl'* and *o-q'* remain *'Adtl'* and *'Adq'*. They can neither drop the *'Ad-*, nor, apparently, take the augment *'a'*, there being no attested *\*('Ad)tl'a'* or *\*('ad)q'a'*.

*o-tl'* 'with o', is most usually translated so, but also most often otherwise with the object (o) as the addressee in speech as in '(say) to o', always with zero final. With noun

class marks or thematic qualifiers *o-tl'* combines as *o-Ca:tl'*, except that with /l/ as C the result is *o:-na'tl'*; cf. also *o-q'* below. Cf. Athabaskan \**o-ł* 'with o', fully cognate.

*o-y-tl'* resulting in *o-ya:tl'* 'with o's permission', is with anatomical *y-* 'hand', zero final only. Cf. *o-ya:q'* 'because of o', < *o-y-q'* 'on o's hand'.

There are several preverbals with a stem of the form *tl'a-*. These may well be derived from or analyzed as initial *tl'*- plus *-a-* as vowel augment or nucleus, depending on whether the semantics is allowed to connect *o-tl'* 'with o' and *o-tl'a-* 'rear end of o'. Cf. the same in Athabaskan, \**o-tl'a*, fully cognate. This same morpheme is found in part nouns, e.g. *-L-tl'a* 'handle', *-d-L-tl'a* 'corner, edge', *-ku:n-d-L-tl'a* 'stock'. The allomorphy with *-tl'a-* is unique for preverbals in including reduced *-tl'A-*, except in a sense for *lahdz* ~ *-ndz*. q.v. below.

Another preverbal with *tl'a-* is *o-d-tl'a* 'corner of o's mouth'.

*o-g-tl'a* 'behind o', with qualifier *g-* 'filament; tail' thematized. With final *-d* this is 'stern of o'; likewise *o-g-tl'a'-q'* 'stern of o', with final *-q'* thematized, itself then with finals *-Ø*, *-d*, *-ch'*, and *-X*. This is also attested as *k'u-tl'a'q'* along with *gu-tl'a'q'* 'stern', which is either without qualifier *g-* and with indefinite object/possessor instead, or *gul'a'q'* is a preverb, without indefinite object/possessor, by loss of ejectivity and/or haplology.

*tl'a'q'* 'harm; long period of time' is possibly a pair of homophones, but with at least equal probability it could be seen (historically?) as a single morpheme, with meanings both related to the preceding, but with semantics obscure.

*o-tl'ah-* 'uppermost end of body of water, source of river, "head" of lake, bay' is attested with finals *-d* and *-ch'* only. The possessed anatomical noun *-g-tl'ah* 'tail' is related both to this and to *o-g-tl'a'* above.

*o-tl'A-* with reduced stem vowel is attested in at least the five forms in (13).

(13) Preverbals with *o-tl'A-*

*o-tl'A-qa'* 'cleft of o's buttocks, o's anus'

*o-gd-tl'A-lah* 'back end of o (lake)', with class mark *gd-* for *ma:* 'lake'

*o-y-tl'A-t'a'-q'-d* 'back of o's hand'

*o-yA-tl'e:q'-* 'palm of o's hand' < *-tl'A-yAq'*-

For these see *o-qa'* ~, *o-lah*, *o-t'a'* ~ above, and *o-yAq'* below. This *tl'A-* may also possibly be present in two nouns: *tl'A'a:G* 'basket', with unidentifiable *-a:G* (if it is not reduced from *tl'ihX* 'starting basket' q.v. below); and also in *-Xu:n-tl'A(-?)la'* with anatomical qualifier *Xu:n-* 'tooth' and possibly *o-la'* as above, unless the noun stem itself is *-tl'Ala'* as entered in the dictionary, a stem possibly related to that of *O-tl'i* 'bind O'.

Different indeed from the properties of *o-tl'* are those of the only other remaining single obstruent preverbal, the postposition *o-q'* 'on o'. This item does not combine with any augment or nucleus with vowel timbre /a/ at all, though very probably it does combine with *o-e'*, as will be seen below. On the other hand, (o)-*q'* serves rather widely as

a preverbal final, or perhaps better as a head in compounds, with a wide variety of other preverbals. There is a productive adverbial stem *q'ah* ~ 'already, now' etc., very conceivably relatable to *o-q'*, q.v. in the dictionary, but this is not connected here. Likewise, the part noun *o-q'a'* 'edge of o' is treated only as a noun, q.v. in dictionary, perhaps in error, as this might be seen as *o-q'*- with augment *-a'*.

*o-q'* 'on o', is found only with finals  $-\emptyset$ , *-d*, and *-ch'(a')* (in *o-q'Ach'(a')*). It is also attested with class marks or thematic qualifiers, or indeterminate object as *o-Ca:q'*, but with qualifier *l-* as *o-na'q'* (cf. *o-tl'* above). It is likewise compounded with *o-ch'ahd* and *o-k'ah* as head or as finals. As head of a compound or as final, *o-q'* joins with preverbals of the shape *Ca'* in two ways, resulting in *Ca'q'* and in *Ca:q'*. With *o-y-da'* and *t'a' ~ -t'a:n'* the result is *Ca'q'*, but in more cases, *o-sa' ~*, *o-Xa' ~*, *o-ch'-a' ~ o-qa' ~*, and *o-d(-)a(') ~* of various types, the result is *Ca:q'* (= *Ca:'q'*). For further details, not fully understood, see the dictionary. The complexities with (*o*)*da:q'* are particularly troublesome, where *d-* may also be the indeterminate object marker *dA-* as well as qualifier *d-*, and preverb-initial element *d-*, the vowel being automatically lengthened in any case, never *\*o-dAq'*.

*o-l-q'* 'on o's head; mistreating o' has anatomical qualifier *l-* 'head' partly thematized. The resulting form is *-na'q'*, attested with finals  $-\emptyset$ , *-d*, and *-ch'* (*-q'-Ach'*).

*o-y-q'* 'on o's hand; hurt, bothered by o', with anatomical qualifier *y-*, partly thematized. The resulting form is *o-ya:q'*, attested with finals  $-\emptyset$  and *-d*. This is further derived in *o-d-[y-q']* 'bothered, hurt by what o says'.

*o-d-[Xl-q']* 'on o's back', attested with finals  $-\emptyset$ , *-d*, *-dAX*, *-ch'*, and *-ch'ahd*. The resulting form is *o-dAXa:na'q'*, often nominalized as *o-dAXa:na'q'd* 'o's back'. The qualifier order is non-canonic, and the semantics are obscure; the qualifier combination *X-l-* is otherwise attested only as anatomical, meaning 'female genital' (cf. §17.10.6.3. The whole is further derived in *o-y-[d-[Xl-q']]* 'on the back of o's hand', attested with finals  $-\emptyset$  and *-d*.

*d-l-q'* in the form of *dla:q'*- is an apparent preverb in one form *dla:q'-A-ya'* 'mountain goat' < 'thing on rocky mountain slopes', with no need to mention or even pronominalize the rocky slopes; cf. *tša:* 'stone, rock', *tša-dli:na'q'* 'on rock', *dl-*class, though here for some reason *dla:q'*-.

The preverb *q'e' ~ q'e:-* 'back, again, more' is the basic iterative or recursive marker. The latter allomorph is usually combinatory as attribute to another preverb. This most frequent preverb is not quite provably analyzable, but probably analyzable in origin as from *\*o-q'-e'*, a compound with *o-'e'* 'in (vacant) place of o' as head. Thus, with zero allomorph of the reflexive object of *o-q'*, in a regular indirect reflexive construction, this is in origin a postposition. An attempt to elicit a non-reflexive, e.g. *\*?siq'e' sahL*, meaning hypothetically 'came to where I had been, came after me' was rejected, but that attempt was made only very late with Marie. Even so, the total absence of any *\*?o-q'e'* in the entire corpus probably confirms that unacceptability. Cf. however *t'a'-q'-e'-ch'* 'backwards' above for exactly the same combination, and cf. the Athabaskan postposition *\*o-q'e'* 'place of absent o, in

want of *o*, in exchange for *o'* etc. Cf. also Athabaskan recursive *\*na:* and *\*o-na:* ‘around *o*’, where the preverb is clearly the indirect reflexive of the postposition with deleted object, ‘around self’.

### 16.10.9 Preverbal *tsa'* ~

Another preverbal with partly unique patterning, in a class by itself, is uniquely variable *tsa'* ~, which has the basic meaning ‘down toward shore’ or, if historically related to *-tsin'* ‘neck, nape’ (cf. Athabaskan *\*-tsi'* ‘head’), then perhaps ‘ahead (with head downhill toward shore)’. The variation in the vowel of this group is not easily explained, but there is a clear relationship between the variation and choice of preverbal finals here. This item also has a related noun *tsa'* ‘place of deep water’, and related kin term *-tsa'-kih* ‘woman’s younger sister’ (evidently, who sleeps closer to the door, so closer to water, than the possessor?). There is even a verb *LA-tsa'* ‘be deep (water)’.

Unlike the obstruents /tɬ/ and /q'/, which can appear as such both in the syllable onset and coda, the aspirate /ts/ can appear only in the onset. It is conceivable, however, that like /q'/ (and *LAG, dAG*), the obstruent /ts/ minus its distinctive aspiration, might be the coda /dz/ that appears in the preverbal *lahdz* ~ *-ndz* ‘forward of *o*'. In this the stem-vowel varies uniquely between full *-ah-* and zero; this item is discussed further in §16.10.15.

*tsa'* ‘(movement) downhill toward, to, or past shore; downhill’ is attested with zero final only.

*o-l-tsa'* ‘toward the bow of the boat from *o*' has anatomical qualifier *l-* ‘head’, thematized. The result is *-ntsa'*, attested only with zero final, probably by chance; cf. the preverb next.

*l-tsa'* ‘in bow of boat’, as above, realized *'i:ntsa'*, is attested with finals  $-\emptyset$ , *-d*, *-da'*, *-X*, and *-ch'*. This together with the preceding are conceivably related, in some unique way, to *lahdz* ‘forward’ and *-ndz-kih* ‘woman’s brother’, q.v. further below.

*tse'-X* ‘(motion) below on slope closer to shore’ is attested with final *-X* only, thematized. The vowel is not explained, but cf. especially *Xe'-X* and *ye'-X* below.

*XA-tsiya'* ‘down at shore’ is attested only as a locational, with areal prefix *XA-* only as the object of a hypothetical *o-tsiya'*, and with finals  $-\emptyset$ , *-d*, *-da'*, *-dAX*, *-X*, *-ch'*. The disyllable is evidently some kind of expansion of the stem *-tsa*, the internal /y/ being probably “natural” after the onset *ts-*. Cf. e.g. *O-sha* ~ *-shiya* ‘dig *O*'.

*o-tsin'-da'* ‘tip, extremity of *o*' is attested only with final *-da'*, or possible compound, very probably from ‘front of head’. Here *-tsin'-* could still be a noun, but cf. next, and cf. also *tsin'-* as a qualifier.

*o-l-tsin'-d* ‘above, beyond *o*'s head on horizontal plane’ is attested only once, perhaps by chance only with final *-d*, and realized, irregularly or analogically, as *o-lAtsin'd*. This form shows *-tsin'* morphologically as a postpositional stem, allowing final *-d*.

*o-tsi:n'* 'downhill below, closer to shore than o' is attested with finals *-d*, *-da'*, *-dAX*, *-X*, and *-ch'*. This item more than any other relates this group to PA \**-tsi* 'head' (cf. also Eyak *-tsin'* 'neck, nape'), and/or is somehow an expanded and nasal-umlauted form of the stem.

#### 16.10.10 Open-stem preverbals with front vowel

The last two items, *q'e'* and *tsa' ~*, have brought us to preverbals with vowel nucleus of timbre other than /a/, those with timbre /a/ being in fact clearly the majority. The next largest possible grouping is preverbals with front vowels /e/ and /i/, numbering ca. 15 altogether. Though these include several minimal pairs contrasting with preverbals with vowel nucleus of timbre /a/, they include almost no minimal pairs contrasting nucleus /e/ with nucleus /i/. The pattern, such as it may be, of complementary distribution is not in any case obvious or simple. However, at the same time, surely playing a major role in the composition of these is the single postposition *o-'e'*, already taken up in §16.10.10, especially in connection with recursive *q'e'*. The postposition *o-'e'* 'in (vacant) place of o' is not only semantically flexible so that it can be seen in a variety of spatial preverbals, but *o-'e'* also happens to be demonstrably the most unstable or phonologically variable morpheme in the entire Eyak language. It clearly includes some allomorphs with vowel /i/ as well as /e/. It could thus easily be seen as an element in at least some large proportion of the 15 or so preverbals with any front vowel nucleus. All of these preverbals with front vowel nucleus, moreover, if closed, are closed with obstruents that are well attested otherwise also as preverbal finals, namely *-d* and *-X*, in semantically plausible use as well. Here the basic postposition *o-'e'* is presented first, then preverbals that can be seen as including an allomorph of that as nucleus. Clearly derived from the postposition is the one verb theme *O-qi:-d-L-'e'* '(dog) track O'. There are at least traces of that postposition in Athabaskan, e.g. Witsuwit'en *o-'et* 'without o', but more generally its place is taken by \**o-q-'e'* 'in want of o' etc., < \**o-q-'e'*, as noted above.

*o-'e'* 'in (vacant) place of o', attested with finals  $-\emptyset$ , *-d*, *-ch'*, *-X*, *-da'*, and *-ch'ahd*, further also *-d-A-k'ah*. It may be found with various semantic extensions, with various subsets or ranges of final, glossed e.g. 'in exchange for o, in o's home, in cavity of o, for lack of o, subsisting on o'. The numerous allophonic variations of *-'e'* will be found in related items below here. The phonology of this variation is not entirely explicable. In the 1970 dictionary the entry for *o-'e'* ~ occupies typed 20 pages.

*o-d-'e'* 'in o's vocal manner; interrupting o's speech', with qualifier *d-* partly thematized, attested with finals  $-\emptyset$  and *-X*.

*o-y-'e'-d* 'mark of o('s presence, handiwork)', with qualifier *y-* 'hand' thematized, and final *-d* as nominalizer.

o-*lX-[d-l]-'e'-X* ‘through holes in series of o’, with class mark *lX-* ‘beads’ and qualifier *d-l-* ‘series’.

o-*qi:-d-l-G-'e'* ‘track, footprints of o’, with anatomical *qi:-d-* ‘foot’, qualifier *d-l-* ‘series’, attested with finals -Ø, -*d*, and -*X*.

*qi'* *GA'e'd* ‘bed’, with *qi'* ‘place where’, *G-* qualifier thematic, as preceding, final -*d* nominalizer. The allegro pronunciation is *qi' Ge:'d*. Note further -*e'* allomorphs of -*'e'* below.

o-*la:X-e'* ‘in o’s view (opinion, eye)’, elided allomorph -*'e'* with noun *la:X* ‘eye’, attested with finals -*d* and -*ch'* only. Cf. regular o-*la:X-lX-'e'* ‘in o’s eye’.

o-*lX-d-e:'* ‘in o’s eye; in o’s sight, view (opinion)’ with anatomical qualifier *lX-* ‘eye’, elision of -*d-'e'* > -*de:'*, attested with finals -Ø, -*d*, and -*X*. Cf. regular and contrasting -*la:X-lX-d-'e'* and *k'u-lX-d-'e'* ‘eye-socket’; cf. also o-*d-i:'* below.

(o)-*dAG-e'-* ‘(movement) above (o)’ compounds o-*'e'* with *dAG* ‘above’ to accommodate final -*X*, instead of *dA-*. Cf. next, and see *dAG-i-da'*, *dAG-i-ga'*, *dAG* below.

(o)-*lAG-e'-X* ‘(movement) upland (of) o’ compounds o-*'e'* with *lAG* ‘upland’ to accommodate final -*X*, instead of -*dA-*. Cf. preceding, and see *lAG-i-ga'*, *lAG* below.

o-*l-'e'* ‘different from o’, with thematized qualifier *l-* only, attested only with zero final, listed in dictionary as separate stem, but semantically plausible as variant of -*'e'*.

o-*'e:-X* ‘in search of, looking for o’, with final -*X* thematized and grammatically (not just phonologically) expanded nucleus. This requires *L-* classifier in several verb themes. It possibly also may be found, with the same meaning, as o-*'e:ch'* with final -*ch'*, though that is attested only once, from Anna.

The next two items are of problematical analysis, *ye'X* ~ and *Xe'X*, but both may well include allomorphs of o-*'e'* with final -*X*. The first, *ye'X* ~ *ya'X*, is apparently two items, both varying between *ye'X* and *ya'X*, but in two different ways.

o-*ye'X* ~ -*ya'X* ‘all o long’ occurs with -*X* final only. The composition of -*ye'X* is presumably preverb initial element *y-*, or *ya'-* followed by -*'e'-X* (cf. *Xe'X* below). This variation of -*e'-* with -*a'-* is unique and inexplicable. It was carefully checked: -*ye'X* is used only in *gah-X-ye'X* ‘all day long’ and *XAtl'-ye'X* ‘all night long’; -*ya'X* is used only in *xah-X-ya'X* ‘all summer long’ and *XAla:g-ya'X* ‘all winter long’.

*ye'X* ~ *ya'X* is probably a preverb. Its meaning is unclear but perhaps relatable to the preceding. It is attested only in '*AdXa'd ye'X* ‘suddenly’ from Marie, rejected by Lena; for that same meaning, we have '*AdXa'd ya'X* is from Lena. For '*Ad-Xa'-d* ‘from a point of relation to self’ see o-*Xa'* above; for *ya'X* (though not *ye'X*), see *ya'X* ‘vertically up’ above.

*Xe'X* ‘outdoors, (movement) outside of the house (but not far away); “to the bathroom”’, with zero final only (but with -*X* thematized). The composition of this is presumably preverbal initial *X-* or locational prefix *XA-*, plus an allomorph of o-*'e'-X* (cf. *ye'X*

above). Another preverb,  $yAXe'X$ , could be seen to be segmentable as  $y-Xe'X$  with qualifier  $y-$ , but that is more likely, at least from a semantic point of view, to be derived from  $yAX-e'-X$ , q.v. below.

There is a somewhat distinct small group of preverbals with an invariant nucleus  $-eh$ . It so happens that all of them begin with what could be a preverbal initial element that occurs in other preverbals, and likewise with a coda that is restricted to what could also easily be a preverbal final:  $-\emptyset$ ,  $-d$ , or  $-X$ . The latter two,  $tl'ehd$  'open' and  $qehX$  'closed', are semantically related as antonyms.

$o-leh$  'year of time for o' with zero final only. This is attested only with the verb theme  $Gl-'ya$  'time pass'.

$leh$  preverb 'year passing', with zero final only. This is attested only with the verb theme  $Gl-'ya$  'pass (of time)'.

$o-de-leh$  'visiting o'. The composition of this is difficult to analyze, but most probably contains  $dA-$  or  $da:-$  with a /y/ or /i/ element fronting the preceding and/or following vowel. It is thus perhaps most likely from  $o-da:-'ileh$  'wanting to go/be near o' where  $-leh$  is from the verb theme  $'i-le(')$  'have emotion/desire'. In fact, we have one instance,  $'ude:lehshuh sahL$  glossed 'did you come close to it?'.

$o-lehd$  'because of o' occurs with zero final only (but with  $-d$  thematized). The frequent use of this postposition often includes that of a subordinator to a verbal clause.

$tl'ehd$  preverb 'open', with zero final only (but with  $-d$  thematized). Considering the possible original composition of this preverb, and conceivable composition of the antonym thereto, next, it is perhaps not coincidental that both also have vowel  $-eh-$ .

$qehX \sim qe:X$  'closed', with zero final only (but with  $-X$  thematized), meaning extended to 'blocked, clogged; off (deactivated)'. The allomorph with expanded vowel was rejected by Lena, but evidently preferred by Marie; the two were in free variation for Anna.

$o-L-qehX-d$  '(on) bottom of o' is a nominalization with final  $-d$ , as partial noun  $-L-qehX$  'bottom'.

$(o)yAX-d-A-qehX-q'$  'at bottom (of o)'. Here  $qehX$  is compounded with  $o-yAX$  'under o';  $dA-$  is either final  $-d$  for  $o-yAX$ , or a thematized qualifier  $d-$ . This compound is with final or head  $-q'$ , and is itself attested also with finals  $-\emptyset$  or  $-d$ , or compounded with  $o-da:-d$  'near o'. We also have it once with allomorph  $-qe:X-$  from Lena herself, in spite of her rejection of the allomorph  $qe:X$  above.

This brings us to the subgroup of preverbals with a stable vowel of timbre /i/. These too have initials all of which are attested in other preverbals, namely  $l-$ ,  $d-$ ,  $'-$ ,  $q-$ , and are almost all open, one with what is probably final  $-d$  in origin. The first four could all be interpreted as including original  $o-'e'$ , with the reason for shift to vowel /i/ not entirely clear, likewise for those with  $-ih$  and  $-i:$ . The last,  $o-li'$  'deeply into cavity of o', having the Athabaskan cognate  $*ni$  might seem unanalyzable as such, but after all the rest of the



patterning, this too can seem at the same time plausibly to be derived from PAE \*nə-’e’, with perhaps some nasal umlaut.

o-*d-i:*’- appears in two items only, one of which is *lu-d-i:*’- ‘at tide-beach’ with *lu:* ‘tide-beach’ as object, with class mark or preverbal final -*d*, and finals -*d*, -*ch*’, and -*X*; the other is *ts’AL-qa-G-d-i:*’-*X* ‘through smokehole’. The allomorph -*i:*’ of o-’e’, as opposed to that in o-*LX-d-e:*’ above, form the only minimal pair; the conditioning is unclear. The allomorph -*i:*’ is otherwise attested only in *d-i:*’-*q*’, q.v. next.

o-*di:*’-*q*’ ‘in o’ with various uses of class mark *d-* for the object, thematic ‘vocal’ (e.g. ‘in o’s language’), or *Xd-* ‘in breakers’, etc., with finals -∅, -*d*, and -*ch*’ (-*Ach*’). For details see the dictionary; some instances, but not all, are perhaps from -*d-yAq*’, q.v. below.

The preverb *di:*’-*q*’ ‘inside (of something)’, as above, probably includes indeterminate object, or class mark *d-*, attested with finals -∅ and -*d*. Note the difference in allomorphy between fully regular *dA-*’e’-*d* ‘hold (of ship)’ and *di:*’*q*’*d sAtahl* ‘it’s inside (anything)’.

-*di*’ occurs as a probable segment in two unanalyzables. In *q’ah-di’lah* ‘goodbye’ we have *q’ah* ‘now, already’, and *di:*’- from *dA-*’e’ where *dA-* is the indeterminate object, thus ‘now in (vacated) place’, and *lah* ‘behold’ (?). The other is *k’u-di-*’*lah-G* ‘chief of opposite moiety’, where the /-d-/ may be qualifier *d-* ‘oral noise’, so meaning ‘one who stays in speech place of someone’.

There may also be at least three items with historic allomorphy -*i:* of -’e’ in *gusi:kih* ‘small amount, little bit’ < \**gu-sA-*’e’-*kih* (?), with qualifiers *g-s-*, and *dAqi:kih* ‘nothing left, all gone’ < \**dA=qwA-*’e’-*kih*, i.e. indeterminate object or reflexive proclitic, PAE \**q<sup>w</sup>ə-* ‘place/event’, both with o-’e’ ‘place of vacant o’ and diminutive -*kih*. Belonging here must be *di:yAX* negative ‘not yet’, probably from \**dA-*’e’-*yAX* with indeterminate object, and o-*yAX* ‘under’, but also ‘before’.

At the opposite extreme of allomorphs of o-’e’ from -*i:*’, with vowel /i/, is stigma-less therefore “reduced” vowel /i/ with nevertheless clearly marked timbre /i/ (contrasting with /A/ even next to uvulars), as noted in §§4.3.2 and 4.3.5 on the complex issue of reduced vowel contrasts. Some instances of this reduced /i/ may vary with -*i*’. The most obvious example of derivation from o-’e’, and where there is no variation whatever with -*i*’, is *’AdiX* ‘indoors’ will be presented first.

*’AdiX* preverb ‘indoors, in(to an edifice)’ is reduced from *’Ad-*’e’*X* ‘(movement) at (one’s own) home’, well attested as such and contrasting with *’AdiX* with reflexive object pronoun of o-’e’, with final -*X* ‘movement within area’, but lexicalized as preverb and not requiring *D*-element in the classifier of the verb. It is attested with finals -∅, -*d*, -*dAX*, and also with -*ch*’ and -*ch’ahd*, resulting in *’AdiXich*’(-), where the latter /i/ might be from vowel harmony with /i/ in the stem, but is more likely to be from another reduced -’e’-.

*dAG-i-da*’ ‘full, filling up’, is attested with finals -∅ and -*ch*’, clearly from *dAG-*’e’-*da*’ ‘right up to (vacant) place above’. Cf. *dAG-*’e’-*X*, *dAG-i-ga*’, and *dAG* in this list.

*dAG-i-ga* ‘a little above’ is attested with zero final only, and is analyzed as *dAG-’e’-ga*, thus a compound with *o-ga* ‘like o’. Cf. *dAG-e’-X*, *dAG-i-ga*, *dAG*, and *LAG-i-ga* in this list.

*LAG-i-ga* ‘a little upland’, with zero final only, is analyzed as *LAG-’e’-ga*, a compound with *o-ga* ‘like o’. Cf. *LAGe’-X*, *LAG*, *dAG-i-ga* in this list.

*t’a’q’ich* ‘backwards’ is a variant from Marie of *t’a’q’e’ch* from Lena.

*o-X-i’ ~ -i ~ -’i-L-ch’-a-* ‘on side of o’, itself as the object of *o-L-ch’-a-* ‘direction of, side of o’, q.v. under *o-ch’-*. The *-i(’)- ~ -’i-* is almost like an epenthetic vowel, found only after final *-X* of the object before compounding with *o-L-ch’-a-* as head. The allomorphs are evidently in free variation.

*’i-G-i’-~* ‘place’, a variable sequence underlyingly or historically < *’e’-G-’e’-* with either anticipatory or “echo” realization of *o-’e’* combined with qualifier *G-*. This qualifier is labeled *G<sub>5</sub>* and is well detailed under that label in the chapter on qualifiers. That is shown there attested in up to twenty nouns and adjectives. Its realization in those is *-((’i)Gi(’)-*, lacking final *l’/* more frequently of course where followed by ejective stop. It is also attested in a least a half-dozen verb themes, where its minimum realization is *-iG-* instead of *-Gi-*. It is not in the dictionary as such; see instead Chap. 16 on qualifiers. Here is also an instance of a preverbal, this time a postposition, incorporated into the verb word.

*qi’* preverb ‘place where’, with finals *-d*, *-ch’*, *-ch’ahd*, *-dAX*, *-da’*. The likely etymology for this is PAE \**q<sup>w</sup>ə-* ‘place, event’, as pronominal object of postposition *o-’e’*. There are in fact some nominalized instances of this preverb transcribed *qid-*, probably correctly, from *qi’-d*, along with *qi’dga*, as object of *o-ga* ‘equal to o’. These are found in place names and phrases, e.g. *qidga’ tsa’lahdz’Axe:Xk’* ‘low water mark’ < ‘as far as tide empties’, *ta: qidga’ i:’ah* ‘end of road’ < ‘as far as the road extends’. Cf. next.

*qid* ‘down off’, probably the same as above in origin, with final *-d*. The distinct */i/* timbre must be secondary, so the likely etymology is PAE \**q<sup>w</sup>ə-’e’-d*, ‘(falling, removal) from former place’.

*o-li’ (~ le’ ?)* ‘deep in cavity of o, deeper in cavity than o’, with occasional variants *o-le’*, perhaps more than just as lapses, involving nasal umlaut. This is possibly also more than one morpheme or meaning, including ‘face, emotional, antipathy’. For details of the variation with *le’* and variation in meaning, see the dictionary. Attested with finals *-Ø*, *-d*, *-dAX*, and *-ch’*, and in various compounds.

*li’ (~ le’ ?)* preverb ‘deeply into cavity, from front toward back (including animal), well onto impaling object’, also ‘downriver’ (! < Copper River blocked with ice’?), ‘into bay’ (especially often *le’ ~ ne’* at Yakutat). This is attested only with finals *-Ø*, *-d*, and (rarely) *-ch’*. It is frequently preceded and sometimes followed (!) by a postpositional phrase.

*’a:li’-L-X* ‘at the headwaters’, most probably with *’a:n-* ‘river’ as object, either of *o-li’*, though it is then unclear why the result is not *’a:ni’L-X*. Another etymology is possibly *’a:n’e’-L-X*, with metathesis, */n’/ > /’n/ > /’l/*. For *-L-X* cf. *o-wa:-L-X*.

For open preverbal stems with vowel nucleus */i/* that is not etymologically *-i’*, the only fully established item also has glottal initial, *o-’ih* ‘behind o’. Even this stem is therefore

also comparable or relatable in some way to *o-'e'*. The preverbal nucleus *-ih-* can further be seen perhaps in two preverbs both of the form *tl'ihX*; likewise *-ih* and *-i-*, found only marginally in two more forms, both with initial *d-*.

*o-'ih-* 'behind, after *o* (in space or time)' occurs with finals *-d*, *-X*, and (rarely) *-dAX*, *-da'*, and *-ch'* or compounding. Also, with final *-X* 'imitating *o*', and *o-d-'ih-X* 'repeating after, imitating *o* in speech'.

*tl'-ih-X-'i-Lch'-a-* is a postpositional phrase 'left side', in which *tl'-ih-X-* is possibly a preverb with such an analysis. It is found only as object of *o-'e'-L-ch'-a-* 'side of *o*'. Cf. Athabaskan \**tl'əχ* 'left (side)'.<sup>4</sup>

*tl'ihX* 'start of woven basket' is perhaps from the noun *tl'ihX* 'grass', and/or is related to the verb theme *O-tl'i* 'bind *O*'. Cf. Athabaskan \**O-tl'u* 'bind *O*', \**tl'əχ* 'grass', from PAE \**O-tl'iw* and PA \**tl'əχw*, respectively. The final labialization of either implies pre-Eyak \**tl'ihXw*, a different morpheme from 'left (side)' so less amenable to analysis as *tl'-ih-X*.

The suffix *-dih*, found only in '*Ash-dih* 'nowhere; I dunno', and probably in *k'a:-dih* 'lost, missing', *o-Xa'-dih* 'visiting *o*' may perhaps be cognate with the Athabaskan enclitic \**-dən* 'place where' relativizer, but perhaps with negative connotation.

*di:* is a preverb found only in the combination *o-li' di:* 'in spite of *o*, resentment of *o*'. Possibly also to be found in the composition of *di:yAX* 'not yet'; see *o-yAX* below, especially *o-d-L-yAX* 'before *o*'.

### 16.10.11 Open-stem preverbals with vowel /u/

There are only five preverbal stems with a nucleus of the timbre /u/. Four of these are open and begin with *X-* or *l-*, both of which are common preverbal initials. The fifth begins with *'* and might close with final *-X*, *o-'u'X* 'short of, less than *o*', and is listed under comparative postpositions below. Note that three of the five have nucleus *-u'*, consistent with the dominance of *-a'* as nucleus.

*o-lu'* 'through hole in *o*, through *o* (hole), through *o*', usually with zero final, but with finals *-d*, *-X*, and *-ch'* only in some extended meanings. It is attested also once as a derived verb stem in the hypothetical theme *G-lu'* 'be a hole' found in the relativized verb phrase *qi' k'uGi:lu'* 'smokehole' < 'place where something spatial is a hole', Neuter imperfective, *ad hoc*, from Marie.

*lu'-d* 'in a hole' is attested only once, uncertain, with final *-d* 'at rest'.<sup>4</sup>

*ya:nu'* 'down below surface, underwater, underground' < *y-l-lu'*, cf. e.g. *ya:nahd* above, is attested with finals *-Ø*, *-d*, *-X*, *-ch'*, and *-ch'ahd*.

<sup>4</sup> The attestation is *lu'd sAtahL* 'it's in a hole *L'* (1970), where *lu'd* is perhaps to be corrected to *dAlu'd*.

*o-lu'-qa:* 'in search of o, to fetch o', perforce to be phonologically analyzed as indicated by the segmentation. See also *-qa:* under *o-qa'* in §16.10.7. It is difficult semantically to identify *o-lu'* with that above. Cf. also the clear Athabaskan cognate \**o-nuqa*, but cf. further the Navajo *o-níká* 'through hole in o'! This would certainly somehow tie the semantics back together.

*lu:* 'turning around/over (180 degrees); turning of tide; tidal beach' combines here two separate morphemes in the dictionary, attested with finals  $-\emptyset$  and *-ch'* only. It is sometimes used as a noun.

*lu:-d-i:-'* 'on tide-beach, clam-digging', with finals *-d*, *-X*, and *-dAX*, with *lu:* as object of *o-d-'e'*.

The only two preverbals with back round vowel nucleus and initial *X-* in the stem are themselves probably related, though not by any clearly regular phonological process.

*Xu'* 'to finished state, fully, solved, straight, right' is attested with finals  $-\emptyset$  and *-ch'*.

*dA-Xu'* 'right, correct, true' is a preverbal adverb with proclitic *dA=* 'self'.

*o-XAw'* 'simultaneous with o' is with zero final. It is probably related to the preceding, given also the verbs with stem *-Xawí' ~ O-d-L-XAwí' ~* 'believe what O says', *dA-XAwí' ~* 'have (good) luck'.

There is a group of possible preverbals with nucleus *-u-* and initial *q-*, somewhat problematical to sort out or distinguish from nouns, with the meaning 'fire', cognate with Athabaskan \**qun* 'fire'. See the dictionary under *qu'- ~ qu:n- ~ qu:-*, also *qu'L-*.

There is another problematical set, referring to 'belligerence' with initial *q-* and vowel /u/ possibly related to some preverbals starting with *qa:-*: see *qu:(l)-* in the dictionary, possibly *qAyuh* and *qAla'* below, possibly also *qa:-q'* above, and unanalyzable *qa'ni:* (*~ qa'nu:*) in the dictionary.

### 16.10.12 Preverbals with schwa nucleus and uvular coda

One further common or productive stem form for preverbals has the usual initials, here only *d-*, *l-*, *y-*, with a schwa nucleus, so necessarily an obstruent coda, here always uvular, therefore *-X*, *-q'*, or *-G*. This *-G* might be considered the necessarily non-aspirate counterpart of initial *q-*, as *-dz* was of initial *ts-* in the case of *lahdz ~* 'forward'.

As noted above, it is very probably not coincidental that this group of preverbals with reduced vowel nucleus has such a severely restricted set of onsets and codas, such that they may be seen as with zero augment. Conceivably, on the other hand, some or all may ultimately be from \**CA-'e'C*, the preverbal *-e'* being, as noted above, the most unstable of Eyak morphemes.

The first two, of these listed below, the pair *dAG* and *lAG* share not only formal and combinatory characteristics, but also show some semantic overlap, in the sense of 'upland'.

However, with *dAG* there is the meaning of pure verticality, lacking in *LAG*, whereas in *LAG* there is much more relation to shoreline area, ‘in toward shore, up inland from shore’. Both have the peculiarity that with final *-X* ‘motion within area’, as postpositions they both take *-dAX*, i.e. finals *-d* plus *-X*, while as preverbs they both undergo compounding with *o-’e’*, resulting in *dAGe’X*, *LAGe’X*, and *dAGi-*, *LAGi-*, q.v. above.

*o-dAG* ‘up (vertically) above *o*; above, upland of *o*’, with finals  $-\emptyset$ , *-d*, *-ch* (*-Ach*), and, quite regularly, *-dAX*. As a postposition this stem is compounded with *o-’e’* only in the locational *XA-dAG-i-d-a-q’-* ‘upstairs, in loft’, with *XA-* ‘area’ as object, and *da:q’-* ‘on surface’, itself attested with finals *-d*, *-dAX*, and *-ch* (*-Ach*); cf. the different and regular use of *o-’e’* with *dAG* as a preverb, below.

*-dAG-e-* ‘younger sibling’, kinship noun < ‘(stays, sleeps (?)) in part of house) above possessor’.

*dAG* ‘upstream, upriver, toward head of bay, upland via body of water’ occurs with finals  $-\emptyset$ , and *-ch* (*-Ach*). This is compounded with *o-’e’* then finals *-X* and *-da*, thus *dAGe’X* (movement) upstream; *dAGida* ‘full’ < *dAG-’e’-da* ‘arrival at place above’, itself with finals  $-\emptyset$  and *-ch*. Cf. above (3) the postposition *o-dAG*, with *-dAX* final instead, and different use of *o-’e’*.

*o-LAG* ‘closer in toward shore than *o*, ashore from *o*, further upland or inland from shore than *o*; downhill toward shore toward *o* from above, down to meet *o* at shore; up (Orca?) inlet; further from door than *o* inside house’, with finals  $-\emptyset$ , *-d*, *-dAX*, *-ch* (*-Ach*), and *-da-ch’ahd*. Also with *o-’e’* and *-da* ‘arrival at’, as *o-LAGida*.

*o-d-LAG* ‘down to shore to meet *o*’ contains with thematic qualifier *d-*.

*LAG* ‘ashore and/or up from shore; up (Orca?) inlet; to back end of house opposite door; to church; losing in game or in gambling’ occurs with  $-\emptyset$ , *-d*, *-ch* (*-Ach*), and

*o-’e’-X* with final *-X*, resulting in *LAGe’X*. It is also found with *o-’e’* and *o-ga* ‘like *o*’, resulting in *LAGiga* ‘a little way up from shore’.

The next item or items, *yAX*, is/are perhaps the most frequent and complex of all preverbals to analyze or group semantically. The dictionary identifies four such morphemes or stems. That analysis is not followed here. The only postposition and one preverb are clearly identifiable semantically, ‘under *o*, down’, but the rest have seriously problematical semantics. Here these meanings are all assigned to *yAX*<sub>1</sub> and/or a single other morpheme, glossed first ‘reversal of motion’ and including especially *yAX* of the perambulative derivation ‘about (with no specified trajectory or goal), random movement’. An attempt had been made to distinguish morphemes by whether or not they entail *D*-element in the classifier for ‘reversal of motion’, but this trait is not considered here for identity of morpheme. For details in that regard, see the dictionary.

*o-yAX*<sub>1</sub> ‘under, beneath *o*; inferior to, oppressed by *o*’, with finals  $-\emptyset$ , *-d*, *-dAX*, and *-ch* (*-Ach*). Meaning ‘before in space, time’ in *o-dA-L-yAX* ‘before *o*’; and *di:yAX* ‘not yet’, *yAqe:X* (*yA-qa-yAX*) ‘tomorrow’, q.v. under *o-’e’*.

*o-d-yAX* ‘oppressed, annoyed by o’s talk, noise’, with thematic qualifier *d-*.

*o-d-yAX-(X?)ahd* ‘away from o’s nagging, complaints’, as preceding, either compounded with *o-Xahd*, or followed by what is otherwise privative nucleus and final.

*o-yAX-A-ga* ‘enough for o’, perhaps < *o-yAX-e’-ga*’, compound in any case, with *o-ga*’ ‘like, equal to o’ as head.

*o-L-yAX-* only in *o-ch’AX-A-LyAX-d* ‘o’s armpit, underarm’ < ‘underside of wing’, attested with with finals *-d* and *-dAX*.

*o-d-L-yAX* ‘before o (in space)’, with thematic *d-* qualifier. This occurs with finals *-dAX*, *-ch’* (*-Ach’*), and *-k’ah*. This is also extended to ‘before o (in time)’, with zero final only, including use as subordinator of a verbal clause. Cf. also *di:-yAX* ‘not yet’ under *o-’e’* above, and *yAqe:X* ‘tomorrow’ < \**yAqah-yAX* ‘before dawn’; cf. further qualifier *d-* plus *L-* with nouns, e.g. *-dA-L-ts’Alih* ‘shell’ from *-ts’Alih* ‘bone’.

*yAX<sub>1</sub>* ‘downward (in controlled motion, not free fall); impaled; (night) completely dark, turning over, frying on both sides (pancake), inside-out(?)’, with zero final only. Some of the latter meanings belong perhaps better with the next, *yAX<sub>2</sub>*.

*yAX<sub>2</sub>* ‘reversal of motion, back and forth; (sun) rise; about (with no specified trajectory or goal), random movement’, with zero final only. Some of the meanings here and under *yAX<sub>1</sub>* sometimes or always require *D*-element in the classifier of the verb, including always ‘about, random movement’, detailed in the dictionary.

*q’e:-yAX-Ach’* ‘backward’, compound with *q’e’* ~ ‘back, again’ and final *-ch’*, sometimes requiring *D-* in classifier of verb.

*yAX-e’-X* ‘from southeast or southwest, “west”’, especially of wind. The exact directional meaning is unclear, but the segmental analysis is probably preverb *yAX*, compounded with *o-’e’*, and final *-X*, rather than *y-X-e’-X* with thematic qualifier *y-* and preverb initial *X-*.

*XA-yAXe’X* ‘northwest’, with the preceding as a postposition, *XA-* ‘area’ as object. The gloss here supports the meaning ‘southeasterly’ for the preceding. See also next.

*yAX-’i-L-ch’-a:-* ‘northwest’ < *yAX-’e’-L-ch’a:-* ‘in the direction of *yAX*’, with finals *-ch’* and *-ch’ahd*. The gloss supports ‘southeasterly’ for *yAXe’X*, as does that of the preceding.

The only preverbals with schwa vowel and *-q’* in the coda have the stem with onset *y-*, all of the form *yAq’*. Like *yAX* above, there is only one postposition *o-yAq’*, with a clear meaning ‘in (relatively enclosed) o’, with a more or less corresponding preverb of very limited use. However, there are also two other preverbs, of less restricted use, *yAq’<sub>2</sub>* and *yAq’<sub>3</sub>* with meanings so distinct from *yAq’<sub>1</sub>* and from each other that these are left as such here, as they are in the dictionary.

*o-yAq’<sub>1</sub>* ‘in(to) (relatively enclosed) o’, in contrast with e.g. *o-ya’* ‘in(to) o with broad opening’. This generally does not refer to topographical features, but does include abstract objects, e.g. *-dAGAleh* ‘mind’, *tsu’d* ‘sleep’, *Gu* ‘warmth’. It is attested with finals *-Ø*, *-d*, *-dAX*, *-ch’* (*-Ach’*), and *-ch’ahd*. The use of *-d* is irregular in its absence, as e.g. in *o-yAq’ qa’*

‘out of o’ rather than *o-yAq’-d qa’*. With reciprocal object, *’iLyAq’* ‘inside each other, one inside the other’ it has further extended meanings, e.g. ‘closed (of eyes)’ and even ‘apart from inside each other, outspread, scattered’ (from implosion?). With reflexive object and final *-ch’*, *’AdyAq’Ach’* means ‘regaining consciousness’; with anatomical qualifier *l-* ‘head’, *’Ad-l-yAq’-Ach’ k’u-tsinh* means ‘hum’ < ‘sing into own head’; cf. the preverb *l-yAq’* below. Possibly some instances of *o-di’q’* above are from *o-d-yAq’* instead of *o-d-’e’-q’*, but cf. *\*o-y-tl’A-yAq’* ‘into o’s palm’ > *o-y-tl’e’q’* (not *\*o-y-tl’i’q’*), q.v. under *o-tl’A-* in §16.10.8.

The precise meaning of *o-d-yAq’* is unknown. It is attested only in *’udAyAq’ ’AdAwil’idAleh tsi:n* ‘? war (*’AdAwil*)-waging song (*tsi:n*)’, presumably of specific vocal style.

*yAq’<sub>1</sub>* preverb ‘confined inside’ (?) is of highly limited use, and semantically problematical as a unit: *yAq’ -tsu’d* ~ ‘sleep deeply’, *yAq’ d-’mahd* ‘(egg) be hard-boiled’. See the dictionary for further details.

*lAyAq’* ‘quality of voice’, with anatomical qualifier *l-* ‘head’. This preverb is attested only with Neuter imperfective adjectival verbs, requiring qualifier *’iGi’-* < *’i-G-’e’-* ‘space’ in the verb.

*yAq’<sub>2</sub>* ‘to shore, landing, ashore’ is attested with finals  $\emptyset$ , *-d*, *-dAX*, and *-ch’* (*-Ach’*).

*yAq’<sub>3</sub>* preverb ‘taboo, startling, hexed’, with zero final only, perhaps also *-ch’* (*-Ach’*), attested only with themes of *a-* ‘(sg) go’, *l-a* and *l-dA-a*.

There are no preverbals of the form *dAX*, only the preverbal final *-dAX*, i.e. the combination of finals *-d* and *-X*, which together refer to movement in *o* area nominalized by final *-d* with epenthetic schwa, required here in preverbals, though not e.g. in perambulative verbs, *-CVd-X* being quite regular. Since *d-* is not an anatomical qualifier, the form *\*o-d-A-X* is presumably impossible.

One further postposition of this form, *o-LAX* ‘beyond, more than o’, is listed in the next section below, because of its meaning. Counting homophones listed here above, *o-LAX* makes the eighth preverb of this phonological form, with reduced vowel and uvular coda. It may be somehow significant statistically that there are no preverbals with reduced vowel and non-uvular coda.

### 16.10.13 Comparative postpositions

This brings us to the only set of preverbals that are grouped semantically instead of structurally as are the rest of the preverbals here, the three “comparative” postpositions, *o-ga’* ‘same as o, like o’, *o-LAX* ‘beyond o, more than o’, and *o-’u’X* ‘short of o, less than o’. The three have in common 1) that they all fall within the usual phonological limitations of preverbals; 2) that they all admit only zero final; 3) they all require *’i-* (< *’A-*) and *L-* classifier in Neuter imperfective adjectival verbs to which they are preverbal. The three may have different other or extended uses, but they do at the same time or primarily form a clear semantic class of dimensional comparison. Accordingly (beside the possessive uses of *o-ya’*,

o-*Xa*’, o-*a*’, not otherwise grouped), this appears to be the one semantic class of preverbals that correlates with other criteria, not phonological, but morphological and syntactic. Grouped together following the three are a few derivatives.

o-*ga*’ ‘like o, same as o equal to o’, with some extensions, especially e.g. with indeterminate object, *dA-ga*’ ‘fair (just); sufficient, enough’. This (and o-*a*: ~ ‘for o’) are the only preverbals which got left out of Krauss (1970a). The velar initial is especially often labialized -*gwa*’, perhaps always so in Rezanov (1805). The stem vowel is very often reduced especially in o-*ga*’ *i:t’eh* > o-*gA*:*i:t’eh* ‘be like o’ as in standard idioms for color names. It is included as head in two basic numerals *t’uhL-ga*’ ‘three’, *qAlahqa’-ga*’ ‘four’;<sup>5</sup> likewise in the interrogatives *de:-ga*’(...)=*d* ‘how much?’, *de:-ga’-da:X*(...)=*d* ‘when?’. It combines idiomatically with other postpositions, as e.g. in o-*yAq’-A-ga*’ ‘of size fitting inside of o’, o-*qa’-ga*’ ‘each of o’. It is found in some adverbials, e.g. *da:n’L-ga*’ ‘slowly’, *dAwa’-d(-ga)*’ ‘quickly’, *ne:tl’(-kih(-ga))* ‘soon’. It is also found as subordinator of certain verbal clauses, e.g. o-*ga*’ *u’GAdA’eh* ‘it appears that o’.

o-*LAX* ‘more than o, beyond o’, is primarily a regular comparative. However, it occurs very frequently also with the irregular verb ‘see O’. The semantically regular O-*G’-e* ~ ‘see O’ is only Active imperfective (ancient, with precise Athabaskan cognates), all other mode-aspects requiring the suppletive theme o-*LAX* *i-L’-e* ~ ‘see o’ < ‘travel (sightseeing, seeing indeterminate objects) beyond o’.

o-’*u’X* ‘less than o, short of o’, is perhaps only a regular comparative. Here it should be noted that this is used also with adjectives or adjectival verbs of negative valence, e.g. ‘smaller than o, shorter than o’, i.e. ‘small short of o’, not with \*o-*LAX* ‘small beyond o’, which hypothetically might mean ‘less small than o’, not tested. Probably also to be found elided in *dAdu’X* ~ ‘almost’, where *dAd-* is some combination of reflexive *dA=*, indeterminate object of postposition, *dA-*, and/or qualifier *d-*.

o-*y-ga*’ ‘of size/power that o can handle, overcome’ is a semantic derivation of ‘like o’s hand in size’.

o-*y-LAX* ‘too big/powerful for o to handle, overcome’ is semantically derived from ‘more than o’s hand in size’.

*LAX-kih-ga*’ ‘a little too much’ possibly includes *LAX* as preverb, if it is not from *’LAX* ‘this way’. The latter is less likely, as \**wAX-kih-ga*’ was proposed and rejected; \*\*’*u’X-kih-ga*’ was not tested.

#### 16.10.14 Preverbals with initials ’- and -Ø

In addition to o-’*e*’ ~, o-’*ih-* and comparative -’*u’X* above, there are seven further preverbals with initial ’-, one where zero alternates with ’-, one with zero, all with vowel nucleus

5 The analysis for the numeral ‘4’ is clear semantically, -*qa’-ga*’ ‘each of’ < ‘among-like’. *t’uhL* in ‘3’ might be *t’uh-L-*, cf. *da:n’-L-ga*’ ‘slowly’ (< *da:n*’ ‘to barrier’. Cf. §16.11.



timbre /a/. They do not seem to show any of the patterning seen with some other initials above, e.g. in that there is no o-'a' at all, unless one sees that in a'q' 'out (of house)'. Two others end with obstruents not otherwise found as such in preverbals. In fact only the first two to be listed here are of a shape that fits at all the restrictive pattern found regularly in preverbals.

o-a: ~ 'for o; (part, some) of o', with zero final only. This postposition is the only preverbal with initial zero, attested as such only with 1s *si-*, 2s *'i-*, 3 *'u-*, and indefinite *k'u-* objects, with the appropriate epenthetic sonorant: *siya:*, *'iya:*, *'uwa:* (usually transcribed *'Awa:*), and *k'uwa:*; also *lAXa:* 'for 2p'. All other instances are *-a:*, e.g. *qa:'a:* 'for us', *siya:n'a:* 'for my mother', *'Ad'a:* 'for self', (presumably) *'iL'a:* 'for each other', *sita:'a:* 'for my father' (< *-ta:'a:*). This postposition is used in the first basic sense 'for o' e.g. in *'uwa: xdAxa:gLinH* 'I work for him'. It is used in the second, syntactically different, as a possessive emphazier following possessed kin, anatomical, or part nouns: e.g. *siya:n siya:* 'my mother', *silAqah siya:* 'my head', *siyAq'd siya:* 'my insides', and especially as a partitive, e.g. *'uwa: k'uXAsiyahL* 'I ate some of it', even *xu: 'uwa:* 'as for me, I however'. It can therefore be found in double use *siya: 'uwa: k'uGAsheh* 'kill some for me!'. As possessive, along with o-*ya'* and o-*Xa'*, o-a: ~ is part of noun phrases, rather than a preverbal; referring to inalienably possessed nouns (parts, body parts and kin), it contrasts especially with o-*Xa'* used instead for alienable possession.

Finally, in the process of writing this grammar, what I had considered a special particle for numerals with classified nouns, *-a:* with qualifier, I now consider more probably to be a special partitive use of this postposition. It would take the zero-initial allomorph without epenthetic sonorant because qualifiers almost all take the form of or end with (-)CA-. The main problem, with simple partitive meaning is that the postposition or particle does not occur with unclassified nouns, but only with qualifier for classified nouns, e.g. *ts'i:n XAwa:* 'six dogs', but *ts'i:n da: lis* 'six trees', *ts'i:n ti:la: k'utah* 'six skins'. It could be further argued syntactically that this is not preverbal use, and more importantly, that with the one qualifier of the form Cu-, namely *gu-* 'filament-like', the result is not the expected *\*g(w)a:* or *\*guwa:* at all, but the startlingly unexpected *guka:*. There is no regular phonological explanation for this, e.g. that an epenthetic aspirate stop could be expected, even though /k/ is partly from *\*kw*. Nor should *-ka:* be associated with o-*ka'* ~ o-*ka:-* '(going along) with o' on any semantic basis, or by deletion of /k/ except after *gu-*. Cf. the subsection on this item §6.14.1, where it is treated as an anomalous epenthetic (!). Cf. also *k'uwa:* 'for/of something', *'uwa:* 'for/of it', not *\*k'uka:* or *\*'uka:*. Crucial 'for o (g-class)', o-*gu-?a:* never came up spontaneously and was never tested. The only other instances of this same segment *-ka:-* are with qualifier *gu-* and asyllabic postpositions o-*X* and o-*q'*, *-guka:X* and *-guka:q'd*. In these the /a:/ is somehow phonologically motivated by the *-X* and *-q'*, implying apparently that the /k/ is more a property of the *gu-* than of o-a: ~.

o-*lX-a:(?)L* 'in sight, presence of o', with anatomical qualifier *lX-* 'eyes', may possibly be the preceding o-a: with suffix *-L*. Cf. also o-*wa:-L-X* and *'a:li'-L-X* above.

'*anh*' (arrival) home, to habitation' is attested with zero final only. This is listed in the dictionary as a derivative of '*anh*' 'earth, land', for which cf. the next. No other preverbals have nasalized nucleus or augment *-anh*.

*dla:'anh*' (into) hole, den, lair' (of animal), cf. the preceding, with thematic qualifier *dl-*, with finals  $-\emptyset$ , *-d*, and *-ch*'. Cf. also *dla:-sinh* below.

*o-'a:n'* 'coming upon o (whether looking for o or not); happen upon o (sometimes misfortune)', with finals  $-\emptyset$  and *-ch*' only. This is the only preverb with initial '*-*' with a common nucleus or augment.<sup>6</sup>

'*Ash*' 'completely by, past, through' occurs with zero final only. This is the only preverbal with the final obstruent *-sh*. The only homophone is in '*Ash-dih*' 'nowhere, I don't know'; here the *-dih* is listed above, 'unknown place'(?), but the '*Ash-*' is more likely relatable semantically to the interrogative enclitic =*sh* than to this preverb.

*o-'a:g*' 'in the middle, center of o' is attested with finals  $-\emptyset$ , *-d*, *-dAX*, *-ch*', and as object of *o-ga*' 'like o', *o-da*' 'right to front of o', *o-da:-d* 'in are of o'. It is also found with thematic qualifier *l-* or "phonological l" (< *-n-*', see §6.3) in *ge:-l-'a:g* 'midday' and *xah-l-'a:g* 'midsummer' and very probably in the etymology of *XAla:g* 'winter', for which cf. Athabaskan \**χəy* 'winter'.

'*a'q*' (motion) out (of house), (at rest) outside (of house)' is attested with finals  $-\emptyset$  and *-ch*' (*-Ach*') only. It is conceivably segmentable as '*a'-q*'.

### 16.10.15 Remaining miscellaneous preverbals

This now leaves a residue of but 10 preverbal items, 6 with open stems, of which 4 are disyllabic, and 4 with closed stems. All four closed stems end with an obstruent of the sibilant series, though note '*Ash*' above. The first of those four, *lahdz* 'forward', might conceivably be analyzed *lah-dz* where *-dz* is to be identified as deaspirated from /ts/ of preverbal *tsa'* ~ 'ahead (?)' group in §16.10.9. The second and third are fully noun-like, *o-tl'in'ts'* 'crown of o's head' and *o-q'As-d* 'opposite end/side of o'. These are or are like anatomical nouns, but being also with preverbal final *-d*, they are both potential or "part-time" postpositions. The fourth, on the other hand, *o-ta:s* '(in arc) over o, across o', is semantically and syntactically a model postposition or preverbal, except that it apparently allows no preverbal finals. It also happens to be the only preverbal ending with *-s*, in fact the only preverbal ending with a fricative, along with '*Ash*', not counting *-X* itself. Athabaskan does have a clear cognate to this, \**o-təs* 'across o'.

*o-sinh*' (into position) hidden, out of sight behind o' is attested with finals  $-\emptyset$ , *-d*, *-ch*', *-X*, and *-da*'.

<sup>6</sup> It is probably purely coincidental that the two basic allomorphs of the verb stem for 'see O', *-'e* and *-'an*, resemble the two postpositional stems in *o-'e(:-X)* 'looking for' (< *o-'e*') and *o-'a:n'* 'coming upon'.

*o-lX-sinh* ‘(into position) hidden from o’s view’, attested with finals -Ø and -*d*, with anatomical qualifier *lX-* ‘eyes’.

*dla:-sinh* ‘(into) den, hole, lair (of animal); hiddenly, surreptitiously’, attested with finals -Ø and -*d*, with qualifier *dl-* thematic. Cf. *dla:-’anh* (§16.10.14).

*o-ka:n* ‘because of o’s infanticide’, uncertain or unclear, attested only in *’uka:n k’uleh* ‘something (storm, bad weather) is happening because of her (infanticide?)’. Cf. *k’uleh* ‘rain’ < *k’u-leh* ‘something is happening’; cf. also Athabaskan \**-ka:n* ‘rain; abdomen; be pregnant’. In fact this is attested, from Lena, no doubt only because very deliberate effort was made to elicit a cognate for the Athabaskan.

*k’iya’* ‘landing, to edge of body of water; spilling (onto surface)’, with finals -Ø and -*ch*. Of the four preverbals with open stem, this is the most “regularly-shaped,” possibly disyllabic from some \**k’a’* (with non-rounded initial), cf. *o-kuwa’* as a variant of *o-ka’* (§16.10.7). If not from disyllabification, then this is possibly from *k’u-ya’* ‘into something (topographical concavity)’ where the rounding has been lost from *k’u-* under the influence of /y/. Cf. also *k’iya’t* ‘fish meat’ < \**k’u-ya’t*, Athabaskan \**-ŋ’a’t* ‘fish meat’.

*qAnuh* ‘into open view, in public’ is attested with finals -Ø, -*d*, -*ch*, and -*X*. This is probably a disyllabic stem.

*qAyuh* ‘belligerently, fighting-mad’ requires *LA-* classifier with an intransitive verb, and is therefore probably a postposition in origin, with zero reflexive pronoun object. This disyllabic stem is possibly related to *qa:-q’* (§16.10.7), and/or other preverbals referred to there, including the next here

*qAla’* ‘severe injury, beating up’, a disyllabic stem, is possibly related to *qa:-q’* and/or other preverbals referred to there (§16.10.7).

*o-lahdz* ~ ‘in front of o, on open side of o; out to sea from o; south of o’, with finals -*d*, -*dAX*, and -*dA-ch’ahd*. With finals -*d*, -*dAX*, -*dA-ch’ahd* the stem becomes -*lahs-*, except once in Rezanov (1805). With the areal prefix *XA-* the meaning is especially ‘south, “outside”<sup>7</sup>, Seattle’, and *XA-lahs-d-la:-G* ‘white man’. With *tanh* ‘waves’, sometimes *Xdl-* class, *tanhXAdli:nahsd* ‘outside the breakers’.

*lahdz* ‘forward; out to sea; south’ has Athabaskan directional cognate \**nəs(-d)*.

*o-ndz-i’-d* ~ ‘in front of o in boat’ shows unique reduction of the full vowel in the stem to \**-nAdz-* and further *-n-dz-*, in combination with *o-’e’- > o-i’-*, attested only with final -*d*. Presumably this results in *o-’i:ndzi’-* where not with *Ci-* or *Cu-* prefix pronoun. This is confirmed by the kin term noun derived from the same stem, *-ndz-kih* ‘woman’s brother’, e.g. *si:ndzkih* ‘my (woman’s) brother’, *’u:ndzkih* ‘her brother’, *qa:’i:ndzkih* ‘our (women’s) brother’.

*’i:ndz-i’-* ‘forward in boat; with finals -*d*, -*da’*, and -*ch’* ‘in(to) bow of boat’; with finals -*X* the meaning is extended to ‘forward, frontward; out to sea, south, overseas, to Seattle’.

*o-l-tl’in’ts’(G)* ‘crown of o’s head, occiput’, always with anatomical qualifier *l-* ‘head’ is attested with finals -Ø and -*d*, so could also be a noun, but this was not tested syntactically.

7 “outside” in the sense of “Lower 48”, as used in idiomatic Alaskan English.

With final *-d*, the *-G* is usually deleted, probably due merely to phonological complexity and/or uncertainty.

*o-q'As-d* 'at opposite end/side of o', i.e. spatially opposite, therefore e.g. reciprocal *'iLq'Asd* 'both ends/sides of o; end-to-end; facing opposite directions'. The meaning is also extended to 'avoiding, abstaining from o'. Attested apparently with final *-d* only. Not attested as clause subordinator, but likely possible as such e.g. with verb theme *O-l-L-qa* 'dissuade O from/against o'. The postposition is of course the same morpheme as *-q'*. As 'one of a pair', a semantically postposition-like noun, often with class marks or anatomical qualifier, e.g. *k'ulAXAq'As xiLeh* 'I'm one-eyed'.

*o-ta:s* '(in arc) over, across o; instead of o', with zero final only. The latter meaning is far less usual than *o-'e'* for 'instead of o'.

The preverb *ta:s* 'over, across' is marginally attested. This is most often attested in the noun *ta:sGALah* 'belt' < *tas GA-L-ah*, possibly from *GA-L-lah*, problematically segmented. Alternatively, this might be an indirect reflexive construction with postpositional object deleted or derived from such. See the discussion in the dictionary.

## 16.11 Compounding of preverbals

Considerable internal complexity in the composition of preverbals was already noted in the introduction. The system of preverbal finals could in itself be considered a form of compounding, in that the nonsyllabic finals "suffixed" to the preverbal stem are all themselves postpositions with non-syllabic stems, *-d*, *-ch'*, *-X*, *-q'*. At the same time, some of the syllabic postpositions were also treated as "finals," however inconsistently. These are *-da'*, *-ch'a'*, *-ch'ahd*, even *-k'ah*, no doubt merely because of their frequency in that position.

(14) is a small sample of further compounding of preverbals, involving two syllabic preverbal stems, sometimes three, including syllabic stems not noted above as compounding. If non-syllabic finals that are usually involved are counted, the number of elements in the compounding of course then goes higher. If moreover segmentations between initial element and augment were made—not done with the hyphenation here—the morpheme count would go still higher (no counting epenthetic schwa).

### (14) Compounding of preverbals

*XA-ta:s-ya'-d* 'Odiak Slough' < 'nominalized concave topographic feature (with water) in area across/over'

*dAG-i-da'* 'filling' < 'arrival at (*-da'*) (vacant) space (*-'e'*) above (*dAG*)'

*o-da'-L-ch'a'-d* 'front side of o'

*XA-lAG-d-A-q'As-d-kih* '(at rest) in the back end of little above-shore place', i.e. of animal den, the whole with affective diminutive suffix *-kih*

*XA-li'-d-i'-q-d* 'at rest) in area way inside enclosed space' (e.g. under bed, inside pipe)

*tl'A-qa'-gAdA-lah ch'AX* 'bat', epithet, < 'wings around butt (between buttocks, with anatomical classifier *gd-*)'

*XA-yAX-d-A-qehX-q'-da:-d* "at foot of mountain, down below way over there" < 'at rest) in vicinity on bottom of area below'

Another postposition, productive of compounds in its own way, is comparative *o-ga'* 'like o', cf. (15):

(15) Postposition *o-ga'* in preverbal compounds

*da-ga'* 'equal, fair, just; fitting; enough', with indeterminate object

*o-y-ga'* 'size fitting o's hand; such that o can handle'

*o-yAX-A-ga'* 'fitting size for under o'

*o-qa'-ga'* 'each o, every single o' (with *o-qa'* 'among o')

*t'uhL-ga'* 'three', cf. *da:n'-L-ga'* 'slowly', therefore *t'uh-L-ga'* ?

*qa-lah-qa'ga'* 'four', compounding three unsegmentable postpositions, glossed right to left 'like between around *qA-*'. Here *o-qa'-ga'* is a lexicalized constituent 'each one of o', where the object is from the PAE pronoun \*q<sup>w</sup>ə- 'place, event'. Thus 'each one (of the four fingers) around (object held in hand)'

Many more examples of different types of preverbal compounding could certainly be cited. However, there was never any systematic attempt in the field to determine the extent or nature of preverbal compounding possibilities. It remains therefore unclear what patterns or limitations might have emerged.

Probably here should be added at least one item that is semantically a single lexeme, but inescapably a compound from its form, *o-X-da:-d* 'without o', with final *-d* only. This could or must be analyzed as shown, so literally to be glossed '(at rest) in the vicinity of non-punctual (moving) contact with o', certainly lexicalized.

There is also at least one preverb consisting formally of two morphemes, but perhaps opaque, *qa'ni*: 'into a fight', requiring *L-* classifier. It most probably includes *qa'-* 'up out; suddenly', and likely a verbal noun of *-le* 'act' (cf. *li'X 'i:ni*: 'laughter'), with the idea of outburst into action.

These two items, plus *o-de:leh* 'visiting o' above under *-leh* (§16.10.10), add up to merely three preverbals that are obviously more than one morpheme and even moderately opaque in Eyak. This score is in stark contrast to what seems to be the case for segmentable cognates and or counterparts in Athabaskan, unless far more analysis can be done there, especially on the basis of comparison with Eyak.

## 16.12 Preverbals incorporated into the verb word, and the reverse

As noted above, there are a few exceptions to the general statement that preverbals are not bound to the verb. These exceptions furthermore are mostly trivial. The trivial ones fit in a category that are noted in Krauss (1970b) and Krauss (1970a), if at all, by the single symbol of umlaut over the affected last preverbal vowel, always /a/. They occur optionally in allegro speech, and fall into two categories. The first is phonetic shift to a greater or lesser degree of /a:/ to or toward /e:/, as in the optative *da: 'i:a'ch'* 'let's go', where the /a:/ is followed by 'i-. The second is the sequence (-)Ca' 'V-, where the first glottal stop is deleted, the preverbal is phonetically procliticized, and the vowel thereof is reduced to /A/, as in *xitl'ga' 'i:t'eh* 'it's white (like snow)', or *ya' 'Ade:* 'sit still!'. In these cases too, the shift was shown by umlaut over the /a'/. These two simple and superficial types of change account for the vast majority of phonological interactions between verb and preverbals that even begin to weaken that boundary.

It is clearly this "umlauting" effect on Ca', however, which leads to the one most dramatic exception to the rule that preverbals are not incorporated into the verb. This is attested in two themes with the preverb *q'a'* 'up out'. One is *qe'le(')* 'have strong concern, emotion' which is transparently derivable from but no longer synchronically analyzable as *qa' 'i-le(')* 'have upsurge of feeling < up out have feeling'. There are phonological parallels in the lexicalizations *te'ya'* 'fish' < \**ta'(A)ya'* 'thing that is found in, belongs in water', *qe'yiLteh* 'whale' < \**qa' yiLteh* 'it lies dead up out (of ocean, as virtually inherent quality)'. An intermediate and related case, with 'i-le('), is o-Xa' 'i-le(') 'care about o', which is more usually phonologically o-Xe'-le('), with elision of the 'i- of the verb, itself an irregularity. However, in exceptionally careful speech, o-Xa' 'i-le(') can be pronounced as such, and more importantly, e.g. with indefinite subject *k'u-*, the result is regular *'uXa' k'u'leh* 'someone cares about it', definitely nothing like \**k'u(')Xe'leh*. With the preverb *qa'* and 'i-le('), the highly exceptional result is *qe'le(')* 'have upsurge of feeling' where *qa'* is entirely incorporated, cannot be realized as *qa'*, and most importantly, with indefinite subject the result is *k'uqe'leh*, as in *'ilah k'uqe'leh* 'someone loves you (< has upsurge of feeling about you)'. 'I love you' is *'ilah qe'xleh*, 'I'll love it' *'ulah qe'qe'xleh*. The degree to which *qa'* in this case is recognizable as such was apparently not investigated, but is no doubt "merely" a subjective matter. For further data on these irregularities, see the dictionary under the verb stem *le(')*, theme 'i-le('), the prefix 'i- of which is in fact the real source of the irregularities. This theme, moreover, is spectacularly exceptional in being itself the only verb theme that can even be incorporated into the verb, not only in Eyak, but likewise in Athabaskan. For this see the unique 'i:lih in §17.10.1.

The only other Eyak theme noted to incorporate *qa'* in the verb is underlying *qa' 'i-d-l-LA-a'* 'be pretty' (stem -a'₂), e.g. Neuter imperfective *qe'dla:Liyah* 'it's pretty'. Here the negative is *dik' qe:dla'La:G* 'it's not pretty', from Lena (notebook VII, page 63). The /' / is converted to /:/, though this has nothing to do with the irrealis as in the negative Neuter

imperfective directive *dik' 'u:la'xLga:G* 'I don't know' (motivated by non-repetition or dissimilation for two irrealis prefixes). Here also, then, we have the *qa'* definitely treated as part of the verb word. Conceivably, this analogical development may also be under the influence of future prefix *qu'-* plus *'i:lih-* 'emotionally', which becomes *qe:lih-* as another somewhat frequent phonological stretch in verb prefixes.

One other instance of such actual morphophonological incorporation of a preverbal into a verb is *o-da'-y-L-qa* 'o be forced to spend night (at given location)'. Here the postposition *o-da'* 'right up to o' and the directional theme *O-'y-L-qa* 'O overnight (at given location)' (< 'it dawns (directively) on O') coalesce. This coalescence is demonstrably based on analogy of *o-da'* with the presumably unrelated indeterminate object allomorph *'ida'* in directives of *'i-* indeterminate object in non-directives. The demonstration is in the future, e.g. *sida'qe'yi:Lqah* 'I'll be forced to overnight (at a given location)'. Here the allomorph *qe'-* of the future is that which goes with *'i-*, second person singular or indeterminate object of non-directive verb, and also, quite regularly, with *'ida'*, indeterminate object of directive verb. That regularity is itself analogically motivated, not phonologically, as the fronting of the vowel to the *qe'-* of the future morpheme is of course not phonologically motivated by the preceding *'ida'*, but only by the immediately preceding *'i-* in the non-directive.

Probably the most anomalous or irregular verb in Eyak is *'idA-L-le* 'knit'. Certainly of recent origin, this is some kind of derivation of the theme *'i-d-L-le* 'carry out activity', causative of *'i-d-le* 'event takes place'. In this the *'i-* of the underlying intransitive is not clearly identifiable, since it cannot be the indeterminate object. 'I am knitting a hat (*l*-class)' is *ch'iyahd 'idAxLih*, which is syntactically and semantically a transitive, but does not take the expected class mark *l-*. The *d-* is treated as a qualifier, as in *ch'iyahd 'iqe'di:xLih* 'I'll knit a hat', which also shows that the *'i-* is treated as if it were an indeterminate object, as shown by the *qe'-* allomorph of the future prefix as its position. This is the same as in *mAgAG 'iqe'di:xLih* 'I'll play checkers'. However, with indefinite object *k'u-*, the result is entirely inconsistent with the preceding. For 'I'll knit (something)', instead of what we might expect from the preceding, *\*k'u'qe'di:xLih*, we get *'idAk'uqu'xLih* from Marie, and *dAk'uqu'xLih* from Lena. Consistent with those, e.g. for 'I'm knitting (something)', we have also *'idAk'uxLih* from Marie, *dAk'uxLih* from Lena. Unless in 'knit' we have the only survival of some ancient otherwise lost Eyak prefixes that were part of the verb word proper—hardly likely here—these latter forms show coalescence with the verb of a preverbal (*'i-*)*dA-*. The most likely candidate is the morphologically unique "preverbal" (in the literal if not grammatical sense) *'ida: ~ 'idA-* abstract relative 'what, that, so ... that', as in '(I know) what (you're eating), (I know) that (you're eating), (I'm) so (tired) that ...'. Of the two allomorphs, in free variation, the procliticized *'idA-* is at issue here. Lena's variant presumably has lost this identity. There is no other obvious explanation for this irregular modern verb.

It is probably true that the abstract relative *'ida: ~ 'idA-* (itself surely polymorphemic in origin) is "preverbal" without being a preverbal proper. However, the vague and com-

plicated *'i-da- ~ 'i-da'* is also involved in the irregular *o-da'-y-L-qa* mentioned above, and is also an influence in the phonologically unmotivated allomorphy of the indeterminate object of the verb, *'i-* in the non-directive and usually *'ida'-* in the directive. This item is in any case another source of the blurring there is to be found between Eyak verb and preverbal.

In addition to incorporation of preverbal material into the verb, there are movements of material in the reverse direction, from the verb into the preverb also, “preverbalization.” This understandably involves only the leftmost of the prefixes in the verb word, the personal pronouns. Eyak has the same limited personal pronoun system in the verb as does Athabaskan, especially as regards first person plural. The Eyak development is that first person plural marking is preverbal, *da:* for the subject, *qa:* for object. Likewise the reciprocal and reflexive pronouns are or have become preverbal, the reciprocal perhaps entirely so, the reflexive partly so. The reciprocal, *'iLu'*, is clearly a composite of *'iL-*, as still in the object of postpositions and possessor of nouns, and *-u'* as in the otherwise unmarked object of directives, *'u'-*, and in the directive reflexive *'Ad-u'-*, which is always prefixal, never preverbal. We have very few attestations of reciprocals in the directive, as *'iLu' 'u'-*, with the object remaining preverbal as usual. However, the possibility of prefixal *\*?'iLu'* instead was not adequately investigated, e.g. *\*?'iLu'liLiginhinu:* ‘they know each other’ in addition to *'iLu' 'u'liLiginhinu:*, which would parallel the reflexive *'Adu'liLiginhinh* ‘he knows himself, is wise’. In any case, whether it can any longer in the directive be (re-)attached to the verb or not, the reciprocal *'iLu'* is probably an instance of the detachment of a prefix to the verb, the prefix becoming a preverbal.

The reflexive *'Ad(-)*, *'Adu'-* in the directive, is another instance of such detachment, where the preverbal or prefixal status of the morpheme in the non-directive is quite ambiguous. For example, ‘did he kill himself?’, with yes/no interrogative enclitic =*shunh*, can be either *'AdsdishehLshunh* or *'Adshunh sdishehL*. It is even possible that there could be a phonological difference in whether the /d/ of *'Ad-* is released or can be contrastively released before the onset of the following /s/ in the former, i.e. with the cluster /ds/ possibly contrasting with the affricate /dz/. In Krauss (1970a) and Krauss (1970b) the prefix sequence with reflexive *'Ad-* followed by qualifier *l-* (or *dl-*) was regularly written simply with <λ>, as affricate rather than cluster. It is possible that an extensive careful study of the tape recordings could yet reveal a possible contrast. That the reflexive object prefix can be part of the verb word is unquestionable, and probably is that in most instances. At the same time, at least one verb theme is attested where *'Ad* must be preverbal, that is *'Ad gAwí* ‘feel’, where the absence of the qualifier *d-* can be explained in one other way. This absence was carefully verified in this unique theme, where *'Ad* is not even treated as an indirect reflexive, as possibly < *'Ad-d*.

There is one further preverbalization of a personal pronominal verbal prefix, which becomes object of a postposition, namely indefinite subject *k'u-* as object of *o-d*, when the direct object position is filled. For example, ‘it scratched me’ is *xusALk'in't'L*; ‘it scratched something’ or ‘something scratched it’ are both *k'usALk'in't'L*, as indefinite subject or ob-



ject both occupy the same position as *xu-* ‘me’. Therefore, ‘something scratched me’ cannot be either *\*k’uxu-* or *\*xuk’u-*. The solution instead is *k’u-d xusALk’in’t’L*, with the indefinite subject pronoun preverbalized as object of *o-d*. The choice of the postposition *o-d* is perhaps predictable or at least explainable as parallel to its use with the middle object of causatives, e.g. *te’ya’ si-d XAsALahL* ‘he fed me a fish < made/let me eat a fish’. For further on this, see the dictionary entry for *o-d*.

In addition to movements of morphemes in either direction across the preverbal-verb border, representing much older incorporations further into the verb beyond Zones A (pronouns) or B, are the qualifiers of Zone C, in subpositions 3 and beyond of that zone. Those are detailed in Chap. 17 on qualifiers, as relatable to nouns outside the verb in Eyak and/or Athabaskan. The qualifier *’i:lih* ‘mentally’ of subposition C1, certainly relatable to the verb theme *’i-li(’)*, uniquely, occurs also still at least in some instances as a preverb. For further details on this, see the dictionary entry. Another type of incorporation of a preverbal, in fact a postposition, into the qualifier zone of the verb is that of *o-’e*, strictly in connection with the qualifier *G-*. Also, there are reflexes, purely historical, of a PAE morpheme *\*q<sup>w</sup>ə-* in the future morpheme *qu’-~* of Zone B of the verb, and in the preverbs *qi’* ‘place where’ and *qid* ‘detached, falling’.

Also, in addition to movements, relations between verb and preverb are found in Eyak. However, such relations are far less or fewer in Eyak than in Athabaskan. These relations for Eyak are detailed particularly in Chap. 12 on verb mode-aspects, especially in §12.3.2 on the imperative mode, to a lesser extent in the optative and desiderative modes, where choice of preverbal and the “telicity” of those determines or influences the choice of conjugation. In Chap. 11 on the so-called classifiers a detailed account is given of choice of classifiers insofar as this is determined by preverbs. There are even at least a few instances of a preverb determining or influencing the use of a qualifier (*ya’* and *y-qa’* on *d-*) shown in Chap. 16 on qualifiers. In the opposite direction, choice of paradigm or derivation, involving continuous or repeated motion, influences choice of preverbal-final, especially *-ch’*, as noted in this section. These verb-preverbal relations in Eyak are in any case so far less than those in Athabaskan, that in Eyak they must be seen as either incipient or vestigial.



## 17 QUALIFIERS

A major component of the Eyak verb prefix complex is the zone of the QUALIFIERS, Zone C. This is by far the largest part of that complex, with 7 subpositions and 18 attested prefixes. At the same time, however, qualifiers also occur prefixed to nouns, postpositions, and adjectives, so will also be treated as such here in a separate unit of the grammar, rather than under that for verbs.

In Eyak there is not very much linkage between qualifiers and other verbal prefixes or preverbals. Eyak qualifiers are notably less interrelated than their Athabaskan counterparts with preverbals (Athabaskan disjunct prefixes) or with classifiers. They are hardly at all related with conjugation or mode-aspect prefixes. There are a few linkages of qualifiers with other prefixes forming prefix strings of this type, e.g. preverb and qualifier in *ya'd-* ‘completely’, qualifier and classifier in *l-dA-* ‘errative’, which will be shown below. (There are further Eyak “prefix strings” consisting of preverbs and classifiers, e.g. recursive *q'e'* + *D-*, but also some preverbs and especially imperative conjugation choice.) Where Eyak is much richer than Athabaskan in prefix strings or thematized combinations of verbal prefixes is in combinations of two or more qualifiers. Eyak qualifier combinations could be called prolific. In fact, at least 60 combinations are attested, in sequences of up to at least four qualifiers, potentially five or six including *q-(X-)*. Description of them constitutes a major portion of this account. The seven subpositions of zone C are required by the order(s) in which the qualifiers combine.

Qualifiers show a range of semantic as well as morphological functions. Several of the qualifiers occur across a spectrum of three basic semantic functions: (1) noun-classificatory, (2) anatomical, and (3) thematic, with an extreme range of varying degrees of identifiable meaning.

In Krauss (1965a) I had called these morphemes, not counting adjacent *'i:lih-* and *qA-*, “Position 5” prefixes. That prefix position clearly corresponds to that which in Athabaskan grammars had often been called “adverbial” or “(conjunct) thematic” or “modal” (in part), or Athabaskanists simply referred to them by position number, as was done for Eyak in Krauss (1965a) and later. More recently these prefixes have been called “qualifiers” in the Athabaskan literature, for two excellent reasons.

First, the meaning of the term QUALIFIER is appropriately vague and general—even arbitrary—enough to be ideally suited not only for the Athabaskan counterpart to them in Eyak, but all the more for their still greater complexity in Eyak.

Second, historically, this usage is in fact not at all new, but originates over a century ago in the work of the Jesuit scholar Jules Jetté, in his manuscript grammar of Koyukon, partially published as Jetté (1906). Jetté’s detailed grammar manuscript includes 35 foolscap pages on the “qualifier.” The first 29 pages are morphophonemics and conjugation tables, but the last six remained until recently the best description I have seen of those prefixes in any Athabaskan language. Jetté explains his choice of the term at the start of his subsection

entitled *Use of the qualifiers*. There he states that “[t]he qualifiers N, D and Ro [Xw], are used frequently, *though not exclusively* [emphasis added] [,] to denote certain *qualities* of the object, or, if the verb is intransitive, of the subject.” Jetté thus chooses the name from the “qualities” of nouns, i.e. he names these prefixes according to their noun-classificatory function, giving some examples of that function. He then continues, “[s]ubsequently, the term was extended to other prefixes, which proved to be of the same nature, but in which its etymological meaning does not apply as nicely.”—to put it mildly! Jetté was thus certainly well aware from the beginning that his choice of term focused on the noun-classificatory pole of a wider range of semantic functions. However, by its very breadth or vagueness, his term “qualifier” remains an apt name for these prefixes. We therefore have good reason to keep the name, and in so doing, we duly honor the memory of a hero in Athabaskan studies.

In 1968 I published an article on noun-classificatory systems in Athabaskan, Eyak, and Tlingit (Krauss 1968), showing how noun-classification became an elaborate system in Athabaskan verb-stems, and vestigial in Athabaskan conjunct prefixes, whereas in Eyak it is the reverse, elaborate in the prefixes and vestigial in the stems. This article received little overt notice. In the 1970’s James Kari began publishing on those prefixes, naming them gender prefixes (cf. Kari 1979). I consider the term gender prefixes unsuitable because they still have in both Athabaskan and Eyak semantic functions that have nothing to do with noun classification (anatomical and thematic), and insofar as they classify nouns, there are more than two such classes, none having anything to do with gender in the sense of male as opposed to female.

## 17.1 Summary description and listing

I shall begin with a complete listing of all Eyak qualifiers which occupy Zone C of Eyak verb prefixes (see Tab. 17.1), through their seven subpositions, and then compare these very briefly with their Athabaskan counterparts.

Zone C occupies the space after Zone B, which contains the (derivational) directive  $u\text{-}'\sim$  and the (inflectional) future  $qu\text{-}'\sim$ —itself preceded by inflectional Zone A, for direct objects, and indefinite object or subject  $k'u\text{-}$ . Following the qualifiers is Zone D, for the inflectional mode-aspect prefixes.

It is an all-important principle that the qualifiers combine in a fixed and transitive order, i.e. if  $x$  precedes  $y$  and  $y$  precedes  $z$ , then  $x$  precedes  $z$ . The only attested exceptions to this are the three qualifiers in subposition C3, described below.

The three basic semantic functions of each qualifier as mentioned above in C3-7 are listed here as follows: thematic (usually without gloss), noun-classificatory (abbreviated NC and glossed usually ‘x-like’), and anatomical (abbreviated AN, with gloss). As will be seen in detail in the description of each of the qualifiers and qualifier combinations below, these semantic functions are fairly distinct, though related. Some of the qualifiers have only one of the functions, some two, and some all three, as can be seen from the table

below, listing all 18 classifiers and their functions. Only two (*l-* and *g-*) have all three functions, eleven have only one, and five have two functions. Combinations are more thematic, but some are also anatomical and/or noun-classificatory. Finally, it appears that all three qualifier functions are used, to somewhat varying extent, with all four morphological categories, prefixed to verbs, adjectives, postpositions, and nouns. This will be shown in detail both in this section on the individual qualifiers themselves, and also in the sections on the four categories mentioned.

The first two qualifiers, so also the first two subpositions, stand somewhat apart from the rest in more than one way. First, unlike the rest, they do occur only in verbs. They do not occur also prefixed to postpositions, adjectives, or qualified nouns, as do the rest. Second, they do not share with the rest their relatively complex multifunctional or combinatory morphological potential. As for *'i:lih-* 'mentally', the only qualifier in subposition C1, it is not attested in combination with any of the rest and has only one semantic function, which perhaps marginally may be called anatomical. As for *q-*, the only qualifier in subposition C2, that alone can in principle combine freely with any of the rest, including *'i:lih-*, has a semantic function unique to itself, that of a plurality emphazier, and appears in the lexicalized combination *q-X-* 'multiple', a derivation imposing the Active conjugation, described above. Nevertheless, rather than multiply zones, or complicate further the prefix taxonomy structure, it seems far preferable to include these two prefixes together with the rest in a single Zone C. This zone remains subdivided at only one level, and the combinatory order of those subdivisions remains essentially transitive linear throughout. This Zone C, for qualifiers, is most sharply defined or distinguished by its clearly derivational function throughout, as opposed to the preceding partly inflectional and partly derivational Zone B, and the following inflectional Zone D.

Given that the phonological structure of most of the qualifiers is CA-, throughout this account, as in the grammar and dictionary generally, as convenient the qualifiers will be abbreviated C(-) for CA-, including *g-* for *gu-* in formulas of stems etc., but the full form will be cited for actual attested utterances. Qualifier combinations will thus be abbreviated C-C- or CC-. Hyphens will be used as convenient.

The C4 qualifiers, phonologically more complex, will not be abbreviated, except for final schwa, e.g. *ti:-lA-* may be abbreviated as *ti:l-*, and *lAXA-* as *lX-* (the one possible source of confusion, *dAlAXA-* always being [*d-l-*]X-, never \**d-lX-*). Such abbreviation turns out to be especially useful also in distinguishing the qualifier *d-* from the classifier *dA-* in standard representation of verb themes, so skirting the need for distinguishing homophonic prefixes in such representations by further markings.

Further below we shall see that many of the qualifiers have not only multiple functions but also multiple meanings in those functions. There specific numeral labels will be attached to each meaning, insofar as those can be clearly distinguished, thus  $G_1-$ ,  $G_2-$ ,  $X_1-$ , etc. The question as to whether each differently numbered qualifier is to be considered a different morpheme may be left moot.

Table 17.1: Eyak qualifiers by subposition.

zone	qualifier	gloss
C1	<i>'i:lih-</i> ~	'mentally'
C2	<i>q-</i>	plurality emphazier
C3	<i>X-</i>	thematic
	<i>G-</i>	thematic
	<i>g-</i>	NC: 'filament-like AN: 'rear part, hip' thematic in combination <i>g-dA-</i> AN: 'buttocks in combination <i>g-l-</i> NC: 'liquid'
C4	<i>ti:-</i>	only in combination <i>ti:-LA</i> NC: 'skin-like'
	<i>qi:-</i>	in combination <i>qi:-d-</i> AN: 'foot' in combination <i>qi:-y-</i> AN: 'toe' in combination <i>qi:-l-</i> NC 'rope-like'
	<i>IX-</i>	AN: 'eye' NC: 'berry-like' thematic
	<i>ku:l-</i> ~	AN: 'belly'
	<i>Xu:l-</i> ~	AN: 'tooth'
	<i>k'ush-</i>	in combination <i>k'ush-dA-</i> AN: 'leg'
	<i>ch'a:n-</i>	in combination <i>ch'a:n-d-</i> AN: 'forearm'
C5	<i>djAXA-</i>	AN: 'ear'
	<i>tsin'-</i>	thematic 'confusion' AN: 'neck' in one theme <i>tsin'-dA-le</i> 'speak'
C6	<i>y-</i>	AN: 'hand' thematic
C7	<i>d-</i>	NC: 'wooden, etc.' thematic in combination <i>d-l-</i> > <i>dla:-</i> NC: 'stone, etc.' (also thematic)
	<i>l- ~ ('i):n-</i>	NC: 'roundish organ, etc.' AN: 'head, face' thematic
	<i>s-</i>	thematic (rare)

Qualifiers of a given subposition do not move, but are, by definition, always found in the same order. Even in the more complex cases, e.g. qualifier *d-*, subposition C-6, where semantically different qualifiers can be shown to be of probable different origins, we have no instances of qualifier combination orders that show *d-* in different or conflicting subpositions. The real set of exceptions to these rules is the subposition C3 of qualifiers, described immediately below in §17.1.1. (There is one further type of exception to these rules, which can be explained by constituent hierarchy, for which see §17.4.)

### 17.1.1 Special traits of C3 qualifiers in multiple positions

All three qualifiers of subposition C3, and only those of subposition C3, seem to appear in more than one subposition. Thus, the thematic qualifiers *G-* and *X-*, as well as *g-* appear in two different positions within zone C, even if each is considered semantically to be more than one morpheme. Rather than to call them “floaters,” the most economic interpretation is to assign them to their own position, C3, where they all can occur, but not co-occur in a consistent order of precedence. Moreover, *X-* and *G-* have the same alternative positions, and that of *g-* does not conflict with those.

*X-* is in C3, given that it is clearly attested after *q-* of C2, especially in *q-X-* ‘multiple’, an Action derivation, q.v., and that it occurs before e.g. *lX-* or *ti-l-* of C4, as attested in themes in *O-X-a* ‘eat O’, thus *O-X-lX-a* ‘eat O (berry-like)’, *O-X-ti-l-a* ‘eat O (leaf-like)’.

Assigned to this same subposition is also thematic and anatomical *g-*, in part because, like *X-*, it also shows some mobility, occurring both before and after qualifiers of subposition C4, i.e. before *lX-* and after *qi-*. At the same time, uniquely, *g-* combines with *X-* and does so inconsistently, in either order. This had evidently been checked carefully in the field, as we have 11 obviously deliberate elicitations of *X-* in ‘eat’ together with *g-* in ‘eat grass’ (*tl’ihX* ‘grass’ class *g-d-*). Of these 11 elicitations, 8 have the order *g-X-d-* (6 from Lena, 2 from Marie) and 3 have *X-g-d-* (all from Lena). We also have 5 instances of the *X-* of ‘eat O’ combined with *g-* ‘filament-like’ alone, all 5 (3 from Marie, 2 from Lena) showing the order *g-X-* instead of *?X-g-*. The latter order was perhaps not tested, but here we probably see some kind of phonological preference for the sequence *guX-* over *XAg-* rather than some fixed prefix ordering, whereby we should assign *g-* to a “C3a” and *X-* to a “C3b,” creating further (sub)positional levels of a zone.

Another exception to the fixed transitive linear qualifier ordering is the theme *o-ch’ dla:-X-t’e ~* ‘look at o’, along with a certain few unusual nominal forms also with the prefix series *dla:-X-*. These would place *X-* again in its own additional qualifier position, rightmost of all, to the right of *d-l-* (> *dla:-*) of C6–7. Here there is certainly no phonologically motivated preference for this sequence at all, as the reverse of this apparent *[[d-l-]X-]* order is fairly common and productive, *X-d-l-* (*/XAdla:-/*). Thus, in order to accommodate this *X-* in a strict pattern of subposition-ordering, we need to allow two subpositions for it alone, whether we call it one or two morphemes, both a subposition between C2 and C4 and another for that uniquely in *dla:-X-* ‘watch’, following C7, that now being “C8.” A

second subposition might best be called a phonologically motivated optional variant in ‘eat grass etc.’. The latter, in ‘watch’, could then possibly be dismissed as the only “exception” for qualifier order, highly specialized. In this connection cf. the anatomical noun *-la:X* ‘eye’, no doubt the source also of the C4 item, reduced *IX-* ‘eye’, very probably the source also of ‘berry-like’. However, I prefer here to leave *X-* and *g-* together in C3, in part also because they are both exceptionally distinguished by some limited mobility, and co-occur in either order with regard to each other.

An alternative analysis, given the order *qi:g-* in the sequence *qi:g-d-l-*, might be to assign *g-* to C5, since we have no unquestionable combinations of *g-* with the other members of that subposition or with *y-* of C5. Then the only exceptions would be *g-IX-* and the apparent preference of *g-X-(d-)* over *X-g-(d-)*. These could be explained by a single phonological rule or tendency, disfavoring the sequence *XAg-*, favoring *guXA-* instead, along with especially frequent *gula-*, so *gulAXA-*. Conceivably one could likewise reassign *X-*, explaining *X-IX-* as obvious phonological preference of *XAlAXA-* over *lAXAXA-*. However, that does not explain *XA-ti:l-* ‘eat leaves’. That was also carefully checked in the field, *XA-ti:lA-* in all 5 elicitations (3 from Lena, 2 from Marie), so requiring a subposition C3 at least for *X-*.

The first interpretation, rather than the phonologically motivated one, is further supported by the assignment also of *G-* to C3, as *G-* is not only phonologically simple like *X-* (as opposed especially to members of C4), and semantically so (much more abstract, not anatomical), but above all as *G-* has the same alternative positioning as *X-*. Though *G-* is not attested together with *’i:lih-* ~ or with *q-*, there is no reason to expect it not to follow them. It does, like *X-*, co-occur with *g-*, in the one item *gu-GA-L-te* ‘handle (of axe, shovel, etc.)’, with the alternative order untested. *G-* is attested, sparingly, before *IX-* of C4, as is *X-*, abundantly, in *O-X-a* ‘eat O’. Above all, however, again like *X-*, *G-* also occurs rightmost of all qualifiers in the sequence *dla:-GA-*. Finally, at the same time, like *X-* and *g-*, *G-* occurs with some productivity combined with *dl-* in the sequence *GA-dla:-*. Thus *G-* fits best together with *X-* and *g-* in C3, all the better establishing that subposition as the only one with special and well-defined privilege of mobility.

### 17.1.2 Special traits of C4 qualifiers

The members of subposition C4 form a very distinct class of qualifier. Along with *IX- < -la:X* ‘eye’, note moreover that the rest of the items in C4 are all also easily relatable to anatomical nouns in Eyak and/or PA (Tab. 17.2).

Thus (1) all items in C4 are clearly anatomical nouns in origin; (2) they are nine or ten in number, many more items than in any other subposition, in fact more items than all the others combined; (3) they are all of much greater phonological complexity and variety than the other qualifiers, all of which are basically *CA-*, not counting *’i:lih-*; (4) they are generally much more transparent semantically; (5) they have no cognates in the conjunct part of the Athabaskan verb. Additional to point (2) is that what look like and act like



**Table 17.2:** C4 qualifiers along with their corresponding anatomical nouns.

qualifier	anatomical noun	gloss
<i>lX-</i>	<i>-la:X</i>	'eye'
<i>ti:-l-</i>	<i>-tah</i>	'skin'
<i>qi:-d-</i> , <i>qi:-y-</i>	PA *-qe'	'foot'
<i>ku:IA-</i>	<i>-kumah</i> ~	'belly'
<i>Xu:-l-</i>	(PA *-y'u')	'tooth'
<i>k'ush-d-</i>	<i>-k'ahsh</i>	'lower leg, foot'
<i>ch'a:n-d-</i>	<i>-ch'Alih</i>	'forearm'
<i>djAXA-</i>	<i>-djehX</i>	'ear'
<i>tsin'-(d-)</i>	<i>-tsin'</i>	'neck'

combinations of some of the other qualifiers might also be instead of this origin, e.g. for *g-d*- 'buttocks', cf. PA \*-ž<sup>wr</sup>adə- 'leg', or more likely, rather, that Eyak *g-d*- and PA \*-ž<sup>wr</sup>adə- are somehow of the same origin.

There is one example of a (deliberately elicited) combination of two C4 qualifiers, *O-tsin'-lX-(L)-a* 'scatter O (berries)', including the only member, *tsin'*- 'head; confusion' that is even in part non-anatomical. (Cf. e.g. Navajo disjunct thematic *tsi-* 'thought, fright, aimless'). Rather than add a subposition to Zone C for this presumably unique combination, either we might further subdivide, "C4a" for *tsin'*-, "C4b" for the rest, or allow for one "exception." Moreover, having no record that the alternative order ?*lX-tsin'*- was tested, there remains the possibility of a principle that two qualifiers of the same subposition can combine in either order, as is quite probably the case, as demonstrated by *g-* and *X-* of C3.

Given that the origin of Eyak C4 qualifiers is relatively transparent, this class of qualifiers is probably a relatively late development in the prehistory of Eyak. Comparison with Athabaskan qualifier-zone prefixes shows perhaps no cognates whatever in that subposition itself, so supporting a late origin for this majority of the qualifiers in Eyak as such. Again, see Krauss (1968), which shows at length how in Athabaskan the noun-classificatory function of verb stems is much greater than that of the qualifiers, whereas the reverse is the case in Eyak (even without the C4 array), with qualifiers much more important or elaborate than stems. The picture for PAE remains an interesting open question, perhaps especially for comparison with Tlingit.

## 17.2 Athabaskan qualifiers compared with Eyak

For the rest of the Eyak qualifiers (other than those of C4), however, and prefixes of Zone B (and Zone A as well), Athabaskan has a very high rate both of cognation and isomorphy, i.e. a very similar order of those prefix morphemes. This discussion duplicates, in a different perspective, the explanation of these prefixes in §12.1.6 on the Inceptive perfective (future) conjugation and §15.9 on the directive verb derivation.

Starting the comparison at the rightmost end, we see that for Eyak C7, *l-* and rare *s-*, PA has abundant *\*nə-*'s and rare *\*sə-*'s, exactly the same. (In some Athabaskan languages *\*sə-* is attested following *\*nə-*; this still does not disagree with the Eyak.)

For C6 Eyak has *d-* alone, and PA has *\*də-* alone, exactly the same.<sup>1</sup>

For Eyak C5, Athabaskan has only in a position further to the left, rare *\*yə-* in 'sneeze; dawn' cognate to the Eyak *yA-* thematic of 'dawn', but nothing comparable to *y-* anatomical 'hand'.

For Eyak C4, as noted above, Athabaskan has no cognate qualifiers and no qualifier subposition, but has cognates outside the verb, and in disjunct verb prefixes. Those cognates are listed above where Eyak has no separate anatomical noun, but Athabaskan cognates for the rest are ubiquitous and well known.

For Eyak C3 qualifiers, mobility noted above, *X-* has perhaps no clear Athabaskan cognate, unless perhaps some *\*χə-*. For *g-*, at least in its frequent combination with *d-* in *g-d-* 'buttocks', cf. somehow *\*-ǰʷradə* 'leg'. For *G-* cf. very strikingly Eyak *GA-x-eh* 'I see it', and e.g. Navajo *yi-sh-ʹi* 'I see it', quite precisely cognate in all three morphemes.

To the left of Eyak C5-3, i.e. in C1-2, we shall see that there is again a very high degree of cognation and even ordering with Athabaskan, but mainly disagreement in labeling due to difference of function or perception of the prefixes in that area of the prefix complex. Athabaskan thus includes also cognates to Eyak Zone B prefixes and most of the Eyak pronouns.

Eyak C2 consists only of the plurality emphazier *q-*, quite optional (except in the derivation *q-X-* 'multiple'), referring to plurality of subject, object, indirect object, or even of actions. Corresponding to this is the PA *\*qə-* "promiscuous" plural (see Leer 1991a), of much the same function, but most obviously occurring to the left of the object pronouns *\*yə-* and *\*wə-*. At the same time, the same *\*qə-* can appear rightmost of the pronominal zone or leftmost of the qualifiers, sometimes in a more thematic use, as e.g. Navajo 'seriative', i.e. very much in the same position as the Eyak *q-*. Even insofar as it appears in the Athabaskan pronominal zone, associated with pronouns, Athabaskan *\*qə-* can be seen as a plurality marker rather than as a pronoun itself, as is definitively the case in Eyak. (See below also for an anomalous instance of Eyak *q-* occurring two or three positions to the left

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1 In several Athabaskan languages, e.g. Koyukon, Babine, it appears that the inceptive *\*tə-*, originally to the left of *\*də-* has switched places with *\*də-*, so *dətə-* instead of *tədə-*, but even in these cases, that change may be considered not a metathesis of morphemes but as metathesis only of the phonological feature of aspiration. Further, the question of directionality of change might be answered that *\*tədə- > dətə-* is better motivated than the reverse, that the extra energy needed for the aspiration is more likely to come as stem-initial is closer. The stem initial in Athabaskan is a tremendous "information explosion" spike in the contour of information flow of the verb word. The prefix complex in Athabaskan, especially the conjunct part, has relatively low variety of consonants (mostly plain) and vowels (mostly reduced), high levels of homophony, including *də-* for *\*tə-* as well as for *\*də-* in many languages, e.g. Navajo. Compared to that, the information- and energy-spike at stem-initial is spectacular. In all Athabaskan languages, and even in Eyak, it is in the stem initial that by far the largest number of phoneme contrasts is encountered. That dynamic in itself clearly favors the change *\*tə-də- > də-tə-* over the reverse.

of the usual.) An important point also is that Eyak *q-* cannot be considered inflectional at all, being strictly optional as an emphasizer for plurality, and marginally derivational in *q-X-* ‘multiple’. In Athabaskan, on the other hand, it is at least partly inflectional in the pronominal zone.

Eyak C1 is also occupied by only one prefix, *'i:lih-* ~. That prefix quite clearly adds the meaning ‘mentally’ to a theme, e.g. *xLits'anh* ‘I’m strong’, *'i:lihxLits'anh* ‘I’m strong-minded, emotionally stable, don’t get easily upset’, *yAX 'Adi:ilihxLa'ya:X* ‘I’m thinking’ (‘I(x-) am causing (LA-) myself (’Ad-) to be in a situation moving about (yAX...-X) mentally (*i:lih-*’)). Its origin is obviously the verb theme *'i-le-* ‘wish, consider, will, have emotion’, so is literally a conjunct incorporated verb theme or verbal noun, utterly unique for Eyak grammatical structure. At the same time, it has spectacular cognates widely in Athabaskan, e.g. Slavey (*(')e*)*ni-* varying widely between position of (disjunct) incorporated noun and of (conjunct) qualifier, preceding or following pluralizer *gi-* (“unstable in terms of its position in the verb complex”, Rice 1989.608-9). In Eyak also, *'i:lih-* is found, though quite rarely, as a preverbal.

### 17.2.1 Eyak cognates of Athabaskan *\*q<sup>w</sup>ə-* and *\*qə-*

This brings us to Eyak Zone B, with no recognized Athabaskan counterpart, so to prefixes in Athabaskan considered variously to belong with qualifiers and/or with pronouns (object and deictic subject). This discussion duplicates, in a different perspective, the explanation of these prefixes in subsections §12.1.6 on the Inceptive perfective (future) conjugation, and §15.9 on the directive verb derivation. The prefixes of this zone are, to be exact, the directive (*(')u-*’- ~ (*')a-*’- and Future (Inceptive imperfective) *qu-*’- ~ *qa-*’- ~ *qe-*’-. The second allomorph of each appears where no syllable intervenes between that and the verb stem, and the *qe-*’- allomorph of the future appears where that is preceded by *i-*. The instability of the vowel can only be because the vowel was originally schwa. It is thus necessarily non-tautosyllabic with following ’-, opening to /a/ when /’/ becomes tautosyllabic. According to the same principle, the directive is to be reconstructed as *\*('wA)-*’-, the *\*'wA-* being default where no conjunct overt first or second person or indeterminate object or indefinite pronoun is present. That variability likewise shows that the future is clearly to be reconstructed *\*q<sup>w</sup>A-*’-.

When the directive and future co-occur, the resulting order is regularly (*(')u-*’-*qu-*’- ~, directive preceding future. However with default /u-, usually and in fact almost always in spontaneous speech, the result is shortened or haplological or “telescoped” *qu-*’-. The best explanation for that striking result must be the principle that the /’/ of each is the same morpheme (originally irrealis) and so should not be duplicated or occur twice in the same position or even zone. Very clearly, the *\*'wA-* is the same as the PA third person pronoun *\*wə-*, Eyak indirect object and possessor *'u-*. Just as clearly, the Eyak *\*q<sup>w</sup>A-* is the same as Athabaskan *\*q<sup>w</sup>ə-* ‘area/event’ or more abstractly ‘space/time’, also belonging in exactly the same position in both languages. The Eyak has no other cognate or reflex of this *\*q<sup>w</sup>ə-*

in the verb, except the  $*q^w\text{ə-}$  here in the future, where combined with irrealis marker  $\text{'}$  to form  $qwA\text{'}$ , which shows the original meaning of the Eyak future prefix to be ‘unrealized event’. (For preverbal cognates of Athabaskan  $*q^w\text{ə-}$  see Eyak *qi*’ and *qid* <  $*q^w\text{ə'e'(-d)}$ ; also *dAqi:kih*.)

As exact counterparts to Eyak Zone B, as just described, Athabaskan has two prefixes that in recent years have been included in the left part of the qualifier zone, in the same order as the two components of Eyak Zone B. The first of these is the  $\text{'u-}$  ‘directive/conative,’ cognate to the third person or default segment of the Eyak directive, though not to the  $\text{'}$ . That  $\text{'u}$  is generalized to all persons in the Athabaskan, though cf. Navajo *i ~ o*, phonology unclear. The second part in Athabaskan is inceptive  $*t\text{ə-}$ , presumably not cognate with the Eyak future marker  $*qwA\text{'}$ , but in exactly the same position, following the directive/conative, and preceding PA  $*\text{G}\text{ə-}$ ,  $*d\text{ə-}$  etc. The Eyak  $*qwA\text{'}$  is, as noted above, cognate instead to the PA ‘area/event’ pronoun  $*q^w\text{ə-}$ , naturally therefore to the left of directive  $\text{'u}$ . The Athabaskan inceptive  $*t\text{ə-}$  in the same position as Eyak  $*qwA\text{'}$  has no evident Eyak cognate and is presumably older than the Eyak use of  $*qwA\text{'}$  there. The original position of the Eyak irrealis marker  $\text{'}$  is unclear, but now it occurs in two places in Zone B as shown, and in Neuter negative of Zone D. It lacks any clear Athabaskan counterpart.

The exact PAE position of the plurality emphasize, Eyak  $q\text{-}$  and Athabaskan  $*q\text{ə-}$ , is unclear, being especially variable in Athabaskan, as mentioned above. In at least one apparently unique but confirmed spontaneous instance in Eyak, its position proves variable also in Eyak. That instance is from Anna in text, *dik' udahd qu:la'ta:Ginu:* ‘they didn’t hear her’, instead of *?dik' udahd 'u'qAla'ta:Ginu:* or *?'u:qAla'ta:Ginu:*, where the plurality emphasize  $q\text{-}$  now appears to the left of the directive  $\text{'u'}$ . The  $q\text{-}$  in this unique instance would have to be in the pronominal Zone A, much more as it would appear in Athabaskan.

In fact, as shown above, the normal position of Eyak  $q\text{-}$  is C1, following the directive and future (and the  $\text{'}$  of each). In Athabaskan the  $*q^w\text{ə-}$  ‘area/event’ and  $*q\text{ə-}$  ‘plurality’ are both both squarely in the pronoun zone and in the left part of the qualifier zone. In the qualifier zone their function is either somewhat out of place or tends to be more thematic. The order of  $*q\text{ə-}$  and  $*q^w\text{ə-}$  with regard to each other is not clear in Athabaskan, the  $*q^w\text{ə-}$  perhaps more often preceding the  $*q\text{ə-}$ .

In addition, there are in Athabaskan some frequent stray thematic prefixes of the form  $*q\text{ə-}$  to the right of  $*q^w\text{ə-}$  and of plurality emphasize  $*q\text{ə-}$ , but different from that, e.g. perhaps most notably in ‘talk’, without Eyak counterparts and probably originating in the plurality emphasize  $*q\text{ə-}$ .

Likewise there are some stray qualifier prefixes  $**y\text{ə-}$  in Athabaskan to the right at least of  $*q\text{ə-}$  functioning as qualifiers e.g. in ‘dawn’, ‘sneeze’. Eyak has cognates for both themes: *LA-'Ash-g* ‘sneeze’ is without the  $y\text{-}$ , but *yA-L-qa* ‘dawn’ has it in the regular position C5, well to the right, along with frequent  $y\text{-}$  ‘hand’, which has no Athabaskan counterpart. For ‘dawn’, however, cf. also PAE  $*ya:$  ‘sky’.

At the opposite end of the qualifier zone, the rare *s-* in both Athabaskan and Eyak could somehow equally be a stray from the perfective *s-* of the next zone. Toward that end of the qualifiers, in Athabaskan only, is even a stray \*!ə-, especially in some color statives, clearly from the classifiers still farther to the right.

### 17.3 Constraint against qualifier duplication

In accordance with the general principle in Eyak of non-duplication of single segments, we do not find repetitions like \*'a'd 'a'd 'very very', though we do have 'AXAkihkih for 'little canoe' only because 'AXAkih 'canoe' is fully lexicalized, no longer 'AX-'A-kih 'little boat'. There are no double negatives, double interrogatives (one possible exception), double classifiers (e.g. \*!dAdAlah 'it is being drunk', that being also dA-lah, homophonous with dA-lah 'is drinking it').

There is likewise no duplication of qualifiers, even where such is semantically motivated. Different qualifiers, on the other hand, combine freely. Thus, for example, disLiqahGL 'it fell', from theme d-LA-qahG 'fall' with thematic *d-*, becomes dla:sLiqahGL 'it (hat, *l*-class) fell', lAXAdisLiqahGL 'it (berry, *lX*-class) fell'. On the other hand, 'it (wooden, *d*-class) fell' remains disLiqahGL, not \*!didisLiqahGL. By the same token, 'it (stone, *dl*-class) fell' remains dla:sLiqahGL, and 'it (snowball, *lXd*-class fell' remains lAXAdisLiqahGL. (Examples presumed.) Accordingly, Lena rejected \*'u'gulixiLgah for 'I know (about) it (drink, *g-l*-class)' for 'u'gulixiLgah (theme O-'*l-L-ga*' 'know O'). Going even further, Lena insisted on 'u'lAXAxiLgah 'I know (about) them (berries)', explicitly rejecting the expected \*'u'lAXAlixiLgah. The only explanation for this is her objection apparently to even a partial phonological duplication, \*-lAXA-lA-, in different qualifier subpositions, *lX-* of C4 and *l-* thematic of C7! This seems to be carrying the matter to extremes, including an "analysis" or segmentation, -lA-XA- of lAXA- (< -la:X 'eye', cf. also irregular dla:X- above). Here Lena goes beyond even non-duplication of deeply buried irrealis ' in different positions, even different zones.

Given the (limited) "mobility" of *G-* and *X-*, especially, the question of possible duplication of those in more than one position might arise. This was probably not investigated. However, rightmost *X-* occurs only after *dl-*, productively only in dlX-t'e ~ 'watch', which is intransitive, so that 'watch clouds/waves' would be q'ahsXAdAch' / tanhXAdla:ch' dlX-t'e ~, not with noun class marks in the verb itself. Rightmost *G-* is productive only in active imperfective of O-G-'e ~ 'see O', but *G-* of C3 does not occur alone or in combination in noun class or anatomical markers. There is thus probably no possibility of testing for duplication of *G-* or *X-* in both subposition C3 and rightmost simultaneously. Even if such could be found, the definition of the constraint against duplication would only have then to be modified to exclude duplication only "in the same (sub)position" or "consecutive duplication."

As a result of the non-duplication rule mentioned above, a given qualifier or qualifier combination might be a result of more than its apparent or overt constituents. Such might be *d-* plus *d-*, or *dla:-* (from *d-* plus *l-*, itself primary or secondary, see below) might in fact be a combination of underlying *dl-* plus *d-*, *dl-* plus *l-*, or even *dl-* plus *dl-*). As a result of this rule there are *covert* combinations even in what look like single qualifiers, and that sometimes combinations are more complex than can be seen in their *overt* form. This issue potentially adds yet another dimension to the nature of Eyak qualifiers, of covert vs. overt, and in any case adds complexity to the very distinction between single qualifier and qualifier combination. Where covert combinations have been noticed, they are listed separately toward the end of the presentation of the qualifier or qualifier combinations described below.

## 17.4 Constituent hierarchy

The principles of transitive order and non-duplication may be overridden by the principle of *constituent hierarchy* due to lexicalization. For example, in *tsa'l-dA-yA-quh* 'little knife' (< 'knife's offspring') we have an apparent violation of order, with *d-* of C6 preceding *y-* of C5. However, this can be explained as *tsa'l-d-[y-quh]*, a compound of *tsa'l* 'knife', a *d*-class 'roundish' noun (because knives were earlier roundish, of stone), as the possessor of possessed (quasi-kin-term) *-yAquh* 'offspring; small version of', which is fully lexicalized, from thematic *y-*, no definable meaning, and verb stem *-quh* '(pl) sit/stay'. Likewise with historically derived postpositions, e.g. *o-dA-ya:q* 'because of what o said' where *o-ya:q* 'because of' is from *o-y-q* 'on o's hand', thus *o-d-[y-q]*. Another example of the same apparent violation, here of the non-duplication rule, may be seen in the postpositional phrase *o-dA-di:-* 'disregarding what o says', where *di:-* is itself lexicalized from *o-dA-'e-* 'in place of o's speech', thus here *o-d-[d-i:-]*, q.v. under *d<sub>3</sub>-*. Apparent violations of qualifier order to be explained by constituent hierarchy begin only with the rightmost qualifiers *y-*, *d-*, and especially *l-*. Such apparent violations are not attested frequently.

Note also, for reasons of constituent hierarchy, the failure of *d-* and *l-* to coalesce to *dla:-* in *XahdLdAlAXa:n'd* 'across from a car' (Lena, notebook X, page 19). Though they happen to be in the correct order for the coalescence rule to operate, here 'car' is *d*-class, and the *l-* is part of the lexeme *o-l-Xa:n'* 'across from, opposite o'. Hence *XahdL-d-[l-Xa:n']*. For the same reasons, note the duplication of *l-* in *tsa:dla:lAXa:n'd* 'across from a stone' (ibid.), where *-dla:-* is the combined *dl*-class marker for *tsa:* 'stone' with the same *o-l-Xa:n'*, thus here not *\*?tsa:dla:Xa:n'd*.

There are also examples of instability, inconsistency, or even possible contrasts or minimal pairs in this regard, not systematically investigated. In the qualified noun *-dA-shid* 'rim, flare' the qualifier *d-* is highly thematic or lexicalized, the stem *-shid* not occurring without *dA-*, itself not identifiable with any particular qualifier *d-*. In one form *k'u'uGLdla:shid* 'white part around heart' the *d-* combines with the *l*-class mark for 'heart' as usual. However, in instances such as *'u:ndAshid k'u:Leh ch'iyahd* 'cap with

peak' the combination results in *-n-[d-shid]* (i.e. order *-l-d-*) with the constituent hierarchy, overriding the canonic qualifier order, given the lexicalization. Alternatives, such as *?k'u'uGL'i:ndAshid* or *?'udla:shid k'u:Leh ch'iyahd* were not tested, so the details of possible variability, or of the status of hierarchy, remain partly unclear.

For yet another level of constituent hierarchy see §17.8. At this lower or more internal level, where qualifier order cannot be violated, in combinations of three or more qualifiers, there can be combinations of primary and secondary combinations with internal hierarchy, such e.g. that *g-d-l-* might have internal structure such as *g-[dl-]* or *[gl-]d-* (also *> gdl-*).

## 17.5 Degree of productivity

Productivity of the various qualifiers has an extreme range, with *d-* the most productive, found as thematic and noun-classificatory, marginally anatomical, in verbs, adjectives, postpositional phrases, and qualified nouns. Second most productive is *l-*, thematic, anatomical, and noun-classificatory, in verbs, adjective, postpositional phrases, and qualified nouns. This high productivity is no doubt true also of the Athabaskan cognates *\*də-* and *\*nə-*. Comparable to 16 Eyak enumerated semantic prefixes of the form *dA-*, Navajo, as far away from Eyak as Athabaskan gets, has 14 enumerated semantic qualifiers *di-* according to Young and Morgan (1987), the last a “catch-all” for the many not covered in the first 13. Comparable likewise to 10 Eyak qualifiers of the form *lA-*, Navajo has 7 qualifiers of the form *ni-* in Young and Morgan, the last also a catch-all. Hoijer (1974) lists 20 and 8, respectively—some however of different origin. At the other end of the productivity scale is Eyak *djAX-* ‘ear’, strictly anatomical, attested in only one deverbalization, and with postpositions. Likewise *s-*, with no identifiable meaning, is attested only in a few qualified nouns. In Athabaskan the latter is also the least productive qualifier, glossed ‘destruction’ and attested most widely in ‘kill O’. All the other Eyak qualifiers fill reasonably well the wide scale of productivity between these extremes. The issue of productivity will play a role in the order of presentation of the qualifiers, for which see §17.9.1.

## 17.6 History or background of study; place in grammar or lexicon, coverage here

Not surprisingly, there is no literature, even unpublished, on Eyak qualifiers, before 1963. In the fieldwork of 1963–5 I had investigated relatively well the potential of the qualifiers, as thematic, anatomical, and noun-classificatory, at least in verbs (and adjectives, where they are almost always noun-classificatory or anatomical, seldom thematic). Their use with postpositions and in qualified nouns was probably less well or deliberately investigated in the field. In 1964 and again especially in 1968, I went through the entire corpus of the time

to excerpt and categorize all instances of all qualifiers (except *q-*, not then considered to be a qualifier or to be in the qualifier zone, and for some reason also not *qi-* and its combinations). The 1968 file is 141 manuscript pages long, with one page including the following caveat: “This file is but a very preliminary attempt to make a semantic subclassification for these elements. Items added in red, not in a systematic way, are from the texts where it seemed such uses of these elements were not, or might not have been attested in the ‘elicitations.’” In addition to those files we have the ledger, which systematically shows the qualifiers, in a column specifically for them, for the texts as well as for the elicitations. What is most preliminary about the 1968 file is the attempt at semantic subclassification specifically for the thematic use of the qualifiers. That therefore applies most to *d-*, *l-*, *G-*, *X-*, *g-*, *y-*, and to combinations of those or including those. Though the texts were thus evidently less systematically covered in the 1968 file, the present study is nevertheless based on that file rather than the ledger, given how the caveat implies that all significantly additional uses of the qualifiers found only in the texts were included or added. In post-1965 fieldwork there were no specific attempts to investigate qualifiers any further, but the possibility should be noted that some significant further attestations of qualifier use might be found both in the post-1965 fieldwork and in the 1963–5 texts.

Krauss (1970a) covers quite fully the qualifiers of position C4, including their occurrence in verb themes, adjectives, postpositional phrases, and qualified nouns. This includes *lX-*, even though *lX-* is partly thematic. At the same time, for some reason, inconsistently, the dictionary excludes *qi-*, *qi-d-*, *qi-y-*, *qi-l-*, even though those are virtually all anatomical or noun-classificatory. Further, the dictionary covers *'i:lih-* of C1, but not *q-* of C2, and not *X-*, *G-*, *g-*, *y-*, *d-*, *l-* or *s-*, of C3 of C5–7. Throughout the dictionary, the analyses or etymologies do indeed refer to these qualifiers, and even include brief glosses to identify various semantic groupings or uses of them, here further identified by numbers.

The question of how or whether affixes should be dealt with or covered in a grammar and/or in a dictionary is here at least for the moment partly answered by these circumstances. The coverage in Krauss (1970a) of C1 *'i:lih-*, and all C4 items except *qi-(d-* etc.), as noted, does not need to be fully repeated here. At the same time however, that coverage is partly repeated, as the dictionary entries are by no means extensive for most items, except some C4. Accordingly, most coverage in the bulk of this chapter on qualifiers will be devoted to *q-*, *X-*, *g-*, *qi-(d-* etc.), *G-*, *y-*, *d-*, *l-*, *s-*, to the many combinations of those, and to the challenge of improving on the “very preliminary attempt to make semantic subclassification for these elements” of 1968.



## 17.7 Intrinsic and extrinsic qualifiers

One further variable accounted for here is whether a given use of a thematic qualifier is INTRINSIC or EXTRINSIC to a given verb theme or qualified noun.<sup>2</sup>

In the process of determining the meanings of stems in the field, one inquiry quite systematically pursued was testing the possibility of deleting all affixes, including qualifiers. Thus, in the case of *-lA-qah* ‘head’, where the qualifier *l-* itself can mean ‘head’, it was naturally crucial to check what, if anything, that *(-)qah* itself could mean. Though no record was made of the negative response, because of the fieldwork policy we can be sure the question was asked and that the response was negative. That stem *(-)qah* does not otherwise occur, so the qualifier *l-* is therefore *intrinsic* to the qualified noun *-lAqah* ‘head’, and, since *l-* itself can mean ‘head’ no clear meaning can be determined for the stem morpheme of *-lA-qah*. In the case of the qualified noun *-yA-k’u’t* ‘hand-vein’, where *y-* can mean ‘hand’ and *-k’u’t* by itself ‘vein’, we have the extreme opposite, where *y-* is *extrinsic* to the qualified noun. In the verb theme *y-LA-q’Aq* ‘make a fist’, since it was certainly determined, even if we have no record of that, that the stem *-q’Aq* cannot otherwise be used (even though there is a different stem, presumably, in *q’Aq* ‘grebe’), so the *y-* in this theme is *intrinsic* to the theme. A most striking case of the opposite is the extremely basic *d-le* ‘say’, from the even more basic *-le* ‘act, do’. Here the *d-*, still transparently ‘oral, noise’, is therefore *extrinsic* to the theme *d-le* ‘say, act vocally’. There are, however, varying degrees to which a qualifier is extrinsic in that often there will be no minimal pair, but the same stem, as e.g. in *d-dA-tux* ‘spit’, no *\*dA-tux*, but there is also *O-d-tux* ‘spit O’, and even *O-tux* exists, but means ‘spit on O’. One can speculate that the last, simplest, *O-tux* ‘spit on O’, is the most basic, and certainly that the classifier *dA-* of *d-dA-tux* is a detransitivized “middle” derivation, but nothing can explain the *d-*, presumably meaning ‘oral’, in two but not all of the three themes.

There is a deeper level of qualifier identification which is not considered here, in the composition or etymology of some postpositions, e.g. *o-ya:q* ‘because of o’, the origin of which is probably *o-yA:-q* ‘on o’s hand’. Here the *y-* was etymologically extrinsic, almost transparently, but synchronically could only be viewed as the initial of a postpositional stem *-ya:q*. Such a level of analysis is treated in Chap. 16.

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<sup>2</sup> No adjectives or postpositions have synchronically identifiable intrinsic thematic qualifiers, though several postpositions apparently do in deeper historical analysis. For those see Chap. 16 on preverbals, i.e. postpositions and preverbs.

## 17.8 Primary and secondary qualifier combinations

As noted above, the 18 qualifiers are attested in some 60 different combinations, of up to at least four (overt) qualifiers. The majority of those combinations are *secondary*, i.e. they are more or less transparent combinations of qualifiers with meanings identified with each of the qualifiers constituting the combinations.

However, up to 20 of these 60-some combinations are at least sometimes fully lexicalized or *primary*, i.e. the meaning of the combination is only partially or not at all identifiable in terms of the meanings of the constituents themselves. It could be said that primary combinations of qualifiers are those that have taken on a life of their own.

Thus, the qualifier combinations by the criterion of primary vs. secondary may fall into two or three categories, namely those that are always secondary (analyzable), e.g. X-[*ti:-l-*] ‘eat leaves’, second those that are both primary and secondary, and possibly third those that are always primary, even if fully analyzable, e.g. *qi:-y-* ‘toes’ (cf. *qi:-(d-)* ‘foot’, *y-* ‘hand’). For those that are clearly both, sometimes the frequency of primary vs. secondary is extreme, e.g. *gl-*, where primary *gl-* ‘liquid’ accounts for nearly all occurrences, or *gd-*, usually ‘buttocks’ (and cf. *g-* ‘hip area’); the primary quality especially of *gl-* might well qualify it as a single morpheme as opposed to any other incidences of *gl-*, but the case of *gd-* ‘buttocks’ is more dubious, in spite of the possible Athabaskan cognate \* $\zeta^{\text{WT}}$ ad- ‘leg’. The concept of “morpheme” is most sorely tested by Eyak in the complexity of its qualifier system.

These primary combinations may function as noun class markers, anatomical markers, and/or may be thematic.

Combinations of three or more qualifiers may be *partially primary*, so showing internal constituent hierarchy of their own, not to be confused with the external constituent hierarchy shown above, which may override order of qualifier subposition order. This internal constituent hierarchy does not override qualifier subposition order. Thus overt *gdl-* may underlying be not only [*gdl-*] (fully primary), or [*gd-*]+*l-*, or *g-*+*[dl-*] or *g-*+*d-*+*l-*, but also [*gl-*]+*d-*, still overtly following qualifier subposition order. (This is not to mention further covert possibilities due to non-duplication!) For examples, see combinations of *g-d-l-*, or other combinations of three qualifiers, in the listings below.

## 17.9 Manner of presentation

Within the presentation of each qualifier or qualifier combination, first will be listed any nouns of the class marked thereby, then examples thereof in noun-classificatory function, then anatomical, then thematic, further subdivided as occurring in verbs, adjectives, postpositional phrases, and qualified nouns. At the same time, an attempt will be made to subgroup the noun-classificatory and thematic uses semantically, as far as possible, numbering the semantic clusters or areas. In the case of qualifier combinations, basically

the same approach will be followed, including the underlying constituency and semantic numbering. Finally covert combinations may be noted.

As noted above, much of the work on qualifiers was done in the 1968 file. That manuscript cited much of the data as themes rather than as actual examples, which in many cases were of course multiple. That practice will be largely repeated here, so that for actual examples one is categorically referred to the dictionary, not only for verbs, but also for examples with adjectives, postpositions, and qualified nouns. At the same time, one is also categorically referred to Chap. 19 on adjectives, Chap. 16 on postpositions (preverbs), and Chap. 18 on nouns for further exemplification and discussion.

### 17.9.1 Problem of order of presentation

Given that qualifiers can occur in many combinations, more and less analyzable, of up to four, the qualifier system becomes essentially multidimensional. This quality makes the necessarily linear order of their written presentation here quite problematical.

Furthermore, it follows of course that the status of combinations is a complex issue, given primary vs. secondary combinations, mixtures thereof e.g. a[bc], semantically different homophonous qualifiers entering into the combinations, and covert constituents. A given overt combination of two qualifiers can be of several different underlying constituents, one of three qualifiers often many more, potentially if not actually. It also becomes difficult (or pointless) even to count the actual (attested) qualifier combinations, let alone order them.

Initially, it seemed best to order the presentation in some mechanical way: first the single qualifiers, ordered by their subposition, from left to right, subordered within those subpositions by phonological criteria. After all that, somehow qualifier combinations of two, then three and four, would be presented. In fact, the single qualifiers were presented in the first draft according to this simple mechanical plan, though some problems already appeared, in that some qualifiers of subposition C4 occur only in combination, e.g. *ti-l-* 'skin-like' and *k'ush-d-* 'foot'. Then presentation of two-qualifier combinations was completed in the first draft by that same order for the first constituent, but in reverse of that for the second constituent, because two of the rightmost-positioned qualifiers, *l-* and *d-*, proved to be by far the most common second constituent. Being by far the most common single qualifiers, those two constitute, unsurprisingly, also the most common combination of two qualifiers, with the extra phonological complication that *d-l-* > *dla-*. The order still managed to remain mechanical, however complex and problematical, through the presentation of most of two-qualifier combinations, so long as the second element was *l-*, *d-*, or *y-*. The thorny issue of primary and secondary combination had already arisen, and was handled simply by presenting first the primary, then the secondary, for each combination.

At the end for each combination, at least some of the secondary that had been noticed as more than the sum of their overt constituents because of the non-duplication rule were

also presented, e.g. some instances of *dl-* might be underlyingly *d-d-l-*, *d-l-l-*, or even *d-l-d-l-*. In fact, given the possibility of secondary combination, and the non-duplication rule, many instances also of single qualifiers should be analyzed as underlying combinations, e.g. *lis dAq'a:g* 'a tree (*d*-class) is burning' must have underlying *d-d-q'a:g*. This issue complicates the very distinction between single qualifier and qualifier combination, let alone the linear presentation order for the combinations!

At this point, given the inherent complexity and multidimensionality of the qualifier system, also the incompleteness of the closed corpus, necessarily shaped in part by the wide range in frequency of occurrence of the single qualifiers and qualifier combinations, any mechanical order of presentation was proving untenable and even illogical—illogical because even if the corpus has fortunately managed to include perchance all primary combinations, and most of the secondary ones, it certainly does not include all possible secondary ones. Any logical order would have to have holes filled by (predictable) hypothetical forms contrived for secondary combinations, and become more of a listing than a grammar.

Turning to combinations of three and four qualifiers, these issues become all the more overwhelming, and that of primary vs. secondary all the more salient. Primary combinations are frequent and have a life of their own, whereas secondary combinations are infrequent and fully predictable in meaning. That difference takes over in importance, e.g. it can add hierarchy in constituent analysis with more than two constituents. It also becomes a huge factor in determining which combinations are attested, or even which are "attestable". In fact, there are even some combinations of three which are fully primary themselves, perhaps unsurprisingly, given the frequency of their three components, or partly primary (with two immediate constituents). By far the most frequent primary combinations of these kinds are C3 qualifier plus *d-* and/or *l-*. Thus in addition to primary combinations of two (of course most frequent of all *dl-*, also especially *Gl-*, *Gd-*, *Xd-*, *gl-*, *gd-*), there are the primary combinations of three *Gdl-*, *Xdl-*, *gdl-*, and also, given the two positions of *G-* and *X-*, *dlG-* and *dlX-*.

Given the necessary complexity of the system and problem of linear order presentation, and the frequency issues from the basic shape or nature of the Eyak language and its relationship to that of the Eyak corpus, it becomes evident that the best solution cannot be mechanical, but must be determined by the nature of Eyak. It so happens, not by chance, that *d-* and *l-*, by far the most frequent Eyak qualifiers, are also by far the most frequent and important in Athabaskan, corresponding closely, as *d-* and *n-*. Also *dl-*, by far the most frequent combination in Eyak, has its reflex in Athabaskan, *dn-*, where it may be not just the most frequent, but be the only qualifier combination.

There is further the basic desideratum that in presenting the combinations, presentation of each component thereof should precede presentation of the combination. Given the structure of Eyak, with the extreme frequency of *d-*, *l-*, thence also *dl-*, abandoning (ultimately futile) mechanical order to present these first would optimize presentation order of qualifier combinations. Furthermore, because of the real historical relationship of Eyak to Athabaskan, many or most users of this grammar will be

**Table 17.3:** Order of presentation of qualifiers in the grammar.

Position	Qualifier
C1	<i>'i:lih</i>
C2	<i>q, 'i:lihq</i>
C6	<i>d, qd</i>
C7	<i>l, 'i:lihl, ql</i> <i>dl, qdl</i>
C3	<i>G, Gd, Gl, Gdl, dlG, dG</i> <i>X, Xd, XdG, Xl, Xdl, dlX, qX</i> <i>g, gd, gl, gdl, gX Xg, gXd Xgd, gG</i>
Remainder	<i>ti:l, ti:dl, Xti:l</i> <i>qi:, qi:y, qi:d, qi:dl, qi:dG, qi:dlG</i> <i>qi:l, qi:dl, qi:gdl, Xqi:l</i> <i>lX, lXd, ?lXl, lXdl, GlXl, qlX, XlX, glX, glXd</i> <i>ku:l, ku:nd, ku:ndl</i> <i>Xu:l, Xundl</i> <i>k'ush, k'ushd</i> <i>ch'a:nd, cha:ndG</i> <i>djAXA, djAXAdl</i> <i>tsin', tsin'd, tsin'lX</i> <i>qu:l, qu:lX</i> <i>y, yl, yd, ydl. yG, qy, qyl</i> <i>s, Gs, Gds, GlXs</i> <i>w</i>

involved with Athabaskan. This approach should therefore optimize the presentation for Athabaskan readership as well.

Therefore, the order will combine the basic (arbitrary mechanical) order principles with the above points, frequency of *d-*, *l-*, *dl-*, and relationship to Athabaskan. Thus the order will start with C1 *'i:lih* ~, then C2 *q-*, both marginal but clearly cognate to Athabaskan, and in the same (sub)position as in Athabaskan; then *d-* (of C6), *l-* (of C7) and *dl-*, as justified above; then *G-*, *X-*, and *g-* of C3; but immediately after *G-* then the combinations *Gl-*, *Gd-*, *Gdl-*, also *dlG-*; immediately after *X-* then *Xl-*, *Xd-*, *Xdl-*, also *dlX-*; and immediately after *g-* (and *GX-* ~ *XG-*) *gl-*, *gd-*, and *gdl-*. Of a total of over 70 single qualifiers plus actually attested qualifier combinations, this portion (of seven singles plus 14 combinations thereof) constitutes over 3/4 of the bulk of the account of Eyak qualifiers. Tab. 17.3 shows the presentation order of these as shown above, and also of the remainder. The order of the remainder is partly arbitrary for the combinations. The section ends with a brief addendum on *w-* as a possible qualifier.

## 17.10 The individual qualifiers and their combinations

### 17.10.1 *'i:lih-* ~ 'mental'

Though *'i:lih-* ~ was not recognized or classified as a qualifier in 1970, this item is well covered in the 1970 dictionary, under the stem *le(') ~ lih*. Information here is mainly additional to that coverage. The morpheme *'i:lih-* ~ is unique in several ways. It alone occupies subposition C1. It is a verb theme in origin, which is itself uniquely irregular as such. It is the only verbal form incorporable in other verbs, yet even has an Athabaskan cognate and exact parallel as mentioned above. The verb theme has a unique prefix *'i-*, and has an open stem of unique variability, *-leh* only in the Active imperfective, otherwise *-le'*.<sup>3</sup> The qualifier *'i:lih-* ~ is certainly to be identified with this theme, though by unique allomorphy, as some kind of deverbalization. The lengthening of the prefix *'i-* to *'i:-* is not explained, nor is the shift of *-leh* to *-lih*.

Probably because of its semantics, *'i:lih-* ~ is only marginally attested with other qualifiers, but note the combination with thematic *l-* covered in §17.10.4.5. More importantly, for the definition of its subposition, we have three instances of it immediately preceding the plurality emphazier *q-*: *'i:lihqALits'inhinu*: 'they're stout-hearted', *qe:lihqALAts'inhinu*: 'they'll be stout-hearted', *k'ushiyah 'i:lihqAGi:Li:Linu*: 'you're making them angry'. I see no notes and have no memory that a reverse order *\*?qi:lih* was actually tested and rejected, so it is only probable that the three attestations (on two occasions) show that *'i:lih-q-* is the only permissible order for these two qualifiers.

The one allomorphic variant of *'i:lih-* ~, other than *-i:lih-* with reflexive object in *'Adi:lih-*, is *-lih*, in combination with 1s object *xu:lih-*, 2s *'i:lih-*, 2p *lAXi:lih-*, indefinite *k'u:lih-*, and most notably, with future *qu'-* ~ as *qe:lih-*. We have no attestation of *'i:lih-* ~ with the directive, except one instance in the shorter form of the future, *-qe:lih-* instead of an also predictable *-u'qe:lih-*. However, Lena, on first hearing that, mistakenly repeated it *-qu'lih-*, in text from Anna, 36.20, *'Ashdih 'Adqu'lihLALAXah* 'you'll lose consciousness' ('you'll make yourself mentally nowhere, unaware'), with theme O-'l-L-Xa' 'cause O to be C'. Her motivation for the slip is quite probably that the non-future would have been *'Adu'lih-*, implying the non-reflexive default object *'u'lih-*, rather than anything like *\*?we:lih*, not tested, as a conceivable parallel to *qe:lih-*, as likelier than *\*?'u'i:lih-*. Thus, the Inceptive perfective 'he's losing consciousness' would presumably be *'Adu'lihLAGAXa'Linh*.

The dictionary coverage also shows *'i:lih* also as a preverbal, perhaps as a free (?) variant of the qualifier, of limited attestation, probably not actively investigated. A related adverbial form, *'i:li:-X* is also shown, with a stem variant and suffix *-X*, which might be postposition or, not mentioned, *-X* of the desiderative mode, with meaning 'try, make desultory effort, pretense'.

3 The stem *-leh* was mistakenly called Neuter imperfective in Krauss (1970a)

The meaning of the qualifier is clearly related to that of the verb theme, here ‘mentally, emotionally’. The dictionary entry lists the ten themes with which it is attested, e.g. *LA-ts’an* ‘be strong’, *’i:lihLAts’an* ‘he’s emotionally strong’ (i.e. ‘emotionally stable’, or ‘hard-hearted’, or, importantly, ‘good disciplinarian for raising children’). An especially large number and variety of examples, though different mode-aspects, is provided under *’i:lih-t’e’* ~, including some instances of coalescence of *’i:lih-* ~ with preverbal *o-Xa* ‘in relation to’, resulting in *o-Xe’lih-*, as happens also with the verb theme, *o-Xa* *’i-leh* > *o-Xe’leh*.

These last instances, and the fact that this verbal noun *’i:lih-* ~ can at least to some extent still occur as such preverbally, indeed reveal this qualifier in a unique and obviously intermediate state of incorporation into the Eyak verb prefix complex. Such is apparently also the case for it in Athabaskan.

See below also *’i:lih-q-*, *’i:lih-l-*.

### 17.10.2 *q-* ‘plurality’

Plurality emphazier *q-* has no entry in the dictionary as such, so is treated fully here. It is the only qualifier occupying subposition C2. Its semantic function is such (different from those of all other qualifiers) that it combines freely with all other qualifiers. Like *’i:lih-* ~, it does not occur with adjectives, with objects of postpositions (as does its cognate in Athabaskan), or in qualified nouns, as do the rest of the qualifiers. Its use is confined strictly to verbs.

There is no question about the basic regularity of the position of *q-* in C2, e.g. *xuqu’qi:qah* ‘they’ll bite me’. There are however two attestations of *q-* well to the left, on the border between Zone A and Zone B. The main such attestation is from Anna in text, *dik’ulah qu:la’ta:Ginu*: ‘they didn’t find out about it’, actually Neuter imperfective, ‘they’re not aware of it’, discussed extensively in other sections, especially on the directive, and on the phonology of CV’CV’ > CV:CV’ in the special case of Neuter negatives. This *qu:la-* is seemingly quite unexpected, instead of presumably expected *’u:qAla-*’ or the like, with *q-* preceding the default direct object of directive instead of following it. The form was immediately understood and accepted by Lena, though with a recognition at the same time of its special quality, with a kind of tacit gesture to the effect, “believe it or not, this is perfectly good Eyak.” This special quality was not broadly investigated, nor were such order possibilities further tested systematically, but it at least narrowly checked, to the extent that Lena accepted *’u:qAla-*’ and *’u’qAla-*’ as alternatives. This one instance of repositioning or position variability is in retrospect quite shocking, quite in contrast to the stability of the nature of the Eyak prefix complex. It might be viewed, on the one hand, as a trivial “euphonic” metathesis, or on the other hand, as a unique surviving glimpse into a radically different earlier state of affairs, and there matching closely its position in Athabaskan.

There are at least twelve other instances of directives with *q-*, all with *q-* following the directive direct object. These include however only one other Neuter negative, from Lena,

*dik* 'u:qALAXa'xLaxa:sinu: 'I'm not afraid of them', also 'u'qALAXa', definitely inviting the same *qu-*, but there is no indication whether that actualization was tested on that occasion. That much at least indicates that the anomalous *qu-* (< *qA-u-*' with the plurality emphazier preceding Zone B default directive object with phonologically motivated /' / > :\_\_/la') is not a preferred form.

Along this same line, the survey of all instances of *q-* in the ledger revealed some 32 of *q-* together with future *qu'-* ~, all of which regularly show the order *qu'-q-*. On one occasion, however, no doubt motivated by the question of some mobility of *q-*, I did ask Lena about the opposite order, with proposed *Li'q' ?qAqa'sinh* 'will they all die?'. She did understand the form, perhaps even "accepted" it, to the effect "OK; I suppose you could say that, but..." At the same time, she much preferred then the normal *Li'q' qu'qi:sinh*. It remains difficult to determine whether even her ability to understand the form was due strictly to her intelligence and intimate understanding of my questions, or to some remotely marginal acceptability of that order.

Use of *q-* is strictly optional, therefore in no way inflectional, only to emphasize plurality. There are only about 300 instances of it in the whole corpus, a good 100 of which are inflectional elicitations. Of the remainder, certainly a minority are in text, so an average of at most one instance for every three pages of text, perhaps as few as one for every five or six pages.

The number referred to as plural covers the full range from innumerable all the way down apparently to two, as in Text 47b.39 from Lena, *qAsAtsu:xL* 'thrust sticks' (impaling explicitly two women). The referent can be human, animal, or inanimate. Further, the plurality may refer not only to grammatical subject or direct object, indiscriminately, for which see examples below, but in more than one instance, to the action itself. That is from Lena, *XAtl'ye'X qAdALAXAXginh* 'he snores all night long!', where the human singular enclitic =*inh* rules out a plural subject. Conceivably that could be a shortening of *qAXA-* 'multiple'. There are at least five examples among the Neuter imperfective stative themes by liability derivation, q.v. §14.4.1 on Neuter imperfective stative themes. E.g. *qAlidAtl'X* 'it gets hurt easily', *qAdiLikugX* 'it (stick) is brittle'. On the other hand, it appears that *q-* cannot be used with the indirect object of a postposition (hence no doubt not possessor of possessed noun) as a referent. No such instances are attested, and there is once a notation in connection with *Li'q' 'ulAX 'isi'anhL* 'I saw them all', saying "no *qA-* possible." The only explanation for that must be that the object of *o-lAX* cannot be a referent for *q-*. I have no record or memory of having investigated the possibility more aggressively. At the same time, that conclusion does not seem consistent with the possibility of no grammatical referent at all in the case of 'he snores all night'. Conceivably the referent could be nights, and there is one other semantically similar instance confirming the use of reference to plural events. Note the nominalization 'uwa:LX qAyALqah "a certain bright star, sometimes comes up in the morning", presumably Venus, literally 'by following it pl dawns', from *y-L-qa* 'it dawns, day breaks', referring here certainly to plural daybreaks, not to the object of 'following o'.



The plurality can of course refer to first and second persons as well as third, e.g. *da: qALits'anh* 'we're strong', *ts'a' da: qi:Leh* 'we are muddy', *ts'a' qAli:Leh* 'our faces are muddy', *ts'a' qALXiLeh* 'you (pl) are muddy', *ts'a' qAla:lAXiLeh* 'your faces are muddy'. There are many such instances of both first and second persons as subject, but, it so happens, only one instance of either as grammatical object, *qa: qi:Lyinhinh* 'he drives us crazy'.

In the expressive instance *'AdqAdALAgAG* 'you [Raven] tell many lies', explicitly singular for subject and of course reflexive object, the *q-* can only refer to the acts themselves, 'you make a liar of yourself many times over.' In the dictionary the *q-* is said to be thematic with the verb. This could be correct.

There appears to be no regular correlation between *q-* and such quantifiers as *Li'q'* 'all', or *'uqa'X yi:nhinu:* 'some of/among them', as exemplified in (1).

(1) *q-* with plural quantifiers

*Li'q' da: qa:lisinh* 'let's all die'

*Li'q' 'ahnu: qAsAsuhL* 'he killed them all'

*'uqa'X yi:nhinu: 'uwa: 'iqAginhinu:* 'some of them are dancing'

*'uqa'X ya:yu: 'uwa: qAshichich'L* 'I broke some of them'

At the same time there are many instances of such quantifiers where the *q-* is lacking, and even the converse, where *Li'q'* is lacking and the *q-* is glossed 'all', e.g. *'i'e:X 'ida'qAdi:Lqe'dXinu:* "they're all asking about you".

In some cases, where the stem of a verb refers to plurality, e.g. *-t'u'* 'be many', or *O-L-ya:* 'handle O in pl acts', it so happens that there are no attestations of *q-* in the prefixes, but this is by no means the case in all such. With classificatory *O-L(-y)a* 'handle pl O', the only attestations of *q-* are in elicitation, but quite natural ones, e.g. *'iLqa:X qi:Lahl* 'they're all jumbled together'. With e.g. *-qu* '(pl) sit/stay', though there only in the derivatives *ya:n'ch' qAli:quhLinu:* 'their heads are drooping', and *qu'qAli:xLquhinu:* 'I'll corral them up'. With *-a'ch'* '(pl) go', there are no instances with *q-*, so it is safe to say that with such basic suppletive stems pairing with singular (*-da* '(sg) sit/stay', *-a* '(sg) go'), *q-* is of low frequency, but the matter was not actively investigated. In fact, with *-sid* '(pl) extend' (*-a'* '(sg) extend), *q-* is perhaps not infrequent, *qa' qi:sid* 'they stick up out'. In any case, there are verbs which refer inherently to plural acts and/or objects, where *q-* may be in fact above average frequency, e.g. *qid qAsAwusL* 'things fell' (with *-wus* 'amorphous S moves'), *qa:we:ch'* 'string them up! (fish on a stick)', *qAxwi'g* (or *xwi'g*, or *qAGAxwi'gL*) 'I'm hanging them up (clothes on a line)'.

This brings us to the question of distributivity, as Eyak lacks the distributive prefixation basic to Athabaskan, 'each; one by one', and *q-* does not serve for such purposes either. Even in combination with the contrast between unmarked Active imperfective, (*qA*)*xwi'g* 'I'm hanging them up' (e.g. clothes, more in the normal unmarked sense of one after another) as opposed to *qAGAxwi'gL* 'I'm hanging them all up' (i.e. 'I am somewhere in the process of hanging them along the line'), here for Lena the *q-* seems merely to refer

to the plurality, rather than any difference between individuality and collectivity of the object. We do have the postpositional phrase *o-da:X* ‘o at a time’ for a numeral object. Though the matter was not specifically investigated, it is evident that Eyak grammar is not highly concerned with distributivity.

There is, however, the derivation with *qAXA-* ‘multiple’, requiring Active imperfective, the only qualifiers or qualifier combination that chooses a conjugation. This *qAXA-* is obviously a combination of the qualifiers *q-X-* with the meaning ‘bit by bit, in numerous small increments’, not abundantly attested. This is treated in §15.6.

With the exception of *qAXA-*, there are probably no primary qualifier combinations with *q-*. Secondary combination with *q-* were not included in Krauss (1968), nor were they in the recent one(s), but it is evident that *q-* combines freely with other qualifiers, not only with *:lih-* ~ as shown above, but even in the few examples given above, *q-l-*, *q-y-*, *q-d-*, and *q-dl-*.

Finally, there are a few nouns derived from verbs with *q-* (2).

(2) Nouns derived from verbs with *q-*

*qALAtAq* ‘shrimps, sand-fleas, minnows’ (< ‘many jump, hop’)

*:iLqa’X qAdi:sid* ‘chain’ (‘pl extend through each other’)

*:uni:k’ :uwa: qa’ qi:sid* ‘razor-clams’ (< ‘their noses extend out’)

*:uq’ k’uqAdla:xuL* ‘railroad track’ (‘pl wheels roll on it’)

*ma:ya’X qa:nLxAwah* ‘water lilies’ (< ‘pl grow in lake’)

*:uwa:LX qAyALqah* ‘planet Venus, morning star’ (< ‘following it days break’)

For the qualifier combination *:lih-q-* see under *:lih-* ~ in §17.10.1.

See below also *q-d-*, *q-l-*, *q-d-l-*, *q-lX-*, *q-y-*, *q-y-l-*.

### 17.10.3 *d-* qualifier

The sole qualifier of subposition C6 is the qualifier *d-*. This qualifier, or perhaps the *d-* qualifier-set, is by some margin, beyond *l-*, the most productive (and polysemic) of all Eyak qualifiers. It has no purely anatomical function as such, but the largest set of classified nouns, including some anatomical nouns, are *d-*-class. The qualifier *d-* also qualifies a fair number of qualified nouns, is qualifier for a large number of postpositions, and is found in a large number of verbs, both as a noun-qualifier and above all as thematic, both predictably and in special meanings or clusters of meanings for verbs. A basic task of this description will be to group by number the meanings or clusters of meanings for the qualifier *d-*, and attempt to organize this description accordingly, rather than by usage with nouns (therewith adjectives), postpositions, and verbs. Use in different morphological settings will vary significantly according to semantic grouping, but that variation will be regarded as a function of the semantic grouping, however problematic that may prove to be.

Historically, it is entirely possible, or probable, that there is more than one origin for the qualifier *d*-, given its complexity. Compare, for example, Athabaskan \*-da' ~ \*-da:- 'mouth area' with the Athabaskan qualifier \*də- and the Eyak qualifier *d*<sub>3</sub>- 'oral' and/or 'oral noise'. Certainly the semantic difference between this and *d*<sub>1</sub>- 'woody plant' and *d*<sub>2</sub>- 'fire, bright' is clear, greater than e.g. that between *d*<sub>1</sub>- and *d*<sub>2</sub>- (with the connection 'wood-fire'). Still, counting morphemes for the whole range of the qualifier *d*- is inadvisable. Moreover, we have no morphological evidence of more than one qualifier *d*- in that no multiple positioning of *d*- can be shown (outside of the predictable exceptions combining with C3 qualifiers, or overriding constituent hierarchy).

The main part of this description of the use of qualifier *d*-, in verbs, postpositions, and adjectives, will be sandwiched between two exceptional subsections: first semantic sub-classification of *d*-class nouns, which will begin to explain the semantic subclassification of *d*- qualifiers (*d*<sub>1-7</sub>-); and last, the subsection on *d*-qualified nouns, which can best be explained by what precedes (*d*<sub>1-15</sub>-).

### 17.10.3.1 *d*-class nouns

An exception to this sub-classification will be made, in a sense, for a listing of nouns ascertained to be of *d*-class themselves, i.e. nouns which require the qualifier *d*- as the subject of intransitive verbs, or the object of transitive verbs, or qualifier *d*- with adjectives or in propositional phrases as object thereof. These are by no means themselves necessarily *d*-qualified nouns, with which they are not to be confused; in fact only a few of them happen also to be *d*-qualified. Numbering over 70, perhaps in fact over 100 if the Eyak noun corpus could have been more completely checked, *d*-class is definitely the largest group of classified nouns.

#### *d*<sub>1</sub>-

Though the differently enumerated or semantically defined qualifier of the form *d*- will not be listed in this section as such, there is at least one group, the largest, of classified nouns that do constitute a subclass which corresponds to the most frequent use of the qualifier *d*- in its noun-classificatory function in verbs, which will be called *d*<sub>1</sub>-. This noun-class has to do with woody plants, wooden artifacts, therefore also buildings (including modern ones not necessarily made of wood; note e.g. 'sled', now also 'automobile'). At the same time, as is true of much qualifier use, this does not by any means automatically include all nouns referring to wood things either: e.g. *Le:sk* 'log', *tl'i:* 'bear-spear' are *Xd*-class; '*uq*' 'isda'L 'chair' and '*AX*' '(hand-powered) boat' are unclassified; cf. here *tsidl* 'board', *gehgl* 'fish spear', *shdu:lihG* 'table', which are *d*-class (related to *d*<sub>1</sub>-), and '*AX*' 'motor-powered boat', which is *d*-class, but probably class *d*<sub>2</sub>- 'fire'.

Included in this *d*<sub>1</sub>- group are artifacts such as the ones listed in (3).

- (3) *d*<sub>1</sub>-class nouns

- a. Wooden objects:
- shdu:lihG* ‘table’  
*gehgL* ‘fish spear’  
*tsidl* ‘board’  
*yahd* ‘house’  
*la:xga:* ‘store’  
*yahddA’a:w* ‘cannery’ (‘long house’)  
*didit’u:ch’ ’uda’d yiLeh* ‘cannery’  
 (‘its front is iron’)  
*dAGALAWa’L* ~ ‘door’  
*t’ik’L* ‘arrow’  
*duxL* ‘deadfall’  
*XahdL* ‘sled; automobile’  
*dzanhd* ‘snowshoe’  
*sha’L* ‘digging-stick’  
*shiL* ‘spoon’ (unless  $d_6$ - ‘round’).
- b. Woody plants, bark, resin:
- lis* ‘spruce’  
*La:X* ‘red cedar’
- t’AXgs* ‘cottonwood’  
*ta’xts’L* ‘tree species’  
*tl’e:yu’* ‘hemlock’  
*q’a’ts’* (‘salmonberry) bushes’  
*tl’etl’G* ‘salmonberry sprouts’  
*’u’tl’* ‘driftwood’  
*disdiLidg* ‘dry wood’  
*k’udALidg* ‘dead tree’  
*La’g* ‘firewood’ ( $d$ -class or unclassified)  
*ye:t’* ‘wild celery’  
*qahdL* ‘bark’  
*lisdAtah* ‘spruce-bark’  
*k’udAtah* ‘tree-bark’  
*te:k’* and *LihL* (‘types of) bark’  
*sinhX* ‘resin’ (also  $Xd$ -class)  
*gahG* ‘spruce-pitch’ (cf. *gahG* ‘bullets’ as  $IX$ -class, and *gahG* ‘lead sinkers’, unclassified)

 **$d_2$ -**

A much smaller group (4) here than in verbs is  $d_2$ - ‘fire, bright’, which could be connected to  $d_1$ - via ‘fire’, i.e. ‘burning of wood’.

(4)  $d_2$ -class nouns

- ’AX* ‘(motor-powered) boat’  
*shgu:na:* ‘schooner’ (unless  $d_1$ -)  
*dAq’a:gda:tl’* *’AX* ‘steamer’ (‘boat with fire’)  
*dAq’a:g* ‘fire’ (< ‘it burns’)
- qu’- ~* ‘(on the) fire’  
*qu’ta’L* ‘floor’ (the fireplace having been in the middle of the floor)  
*dide’L* ‘lamp’  
*dALt’u:ch’g* ‘charcoal’

 **$d_3$ -**

Likewise a much smaller group (5) here than in verbs is  $d_3$ - ‘oral, noise’.

(5)  $d_3$ -class nouns

- tsi:n(y)* ‘song’  
*wAsheh* ‘name’

*iLAdzanh* ‘bull-roarer, buzz-toy’

#### ***d*<sub>4</sub>-**

There are at least three more groups, somewhat larger than *d*<sub>2</sub>- and *d*<sub>3</sub>-, which do not seem to correspond to thematic *d*- in verbs. The first, *d*<sub>4</sub>- (6), might be described as ‘flat natural expanse’.

(6) *d*<sub>4</sub>-class nouns

<i>dehdj</i> ‘sand-bar’	<i>qAmAXts’L</i> ~ <i>dAmAXts’L</i> ‘rotten spot in ice’
<i>La</i> ‘glacier’	<i>qih</i> ~ <i>quh</i> ‘clearing’
<i>t’its</i> ‘ice’	<i>ts’a</i> ‘mud flats’

#### ***d*<sub>5</sub>-**

Another such, *d*<sub>5</sub>- (7) is anatomical, perhaps referring to ‘protuberance, appendage’.

(7) *d*<sub>5</sub>-class nouns

<i>-gu-tl’ah</i> ‘tail’	<i>-ts’a:</i> ‘umbilical cord’
<i>-gu-ka</i> ‘(bird’s) tail’	<i>-ni:k</i> ‘nose’
<i>-k’ahG</i> ‘porcupine quill’	<i>-La:n</i> ‘thigh’
<i>-xi’ts</i> ‘shin(-bone?)’	

#### ***d*<sub>6</sub>-**

Shading from the above through *-dA-ga’q’L* ‘throat’, *-lA-qah* ‘head’, *-dA-kuhd* ‘lips’, to a larger group, *d*<sub>6</sub>- ‘roundish’ (8).

(8) *d*<sub>6</sub>-class nouns

<i>-dA-’uhdg</i> ‘egg’	<i>’udAya’X yAX XAdla:dAq’a:g</i> ‘skillet’
<i>-dA-L-ts’Alih</i> ‘shell’	<i>da:na:</i> ‘dollar; money; coin’
<i>tsi:</i> ‘mussel’	<i>da:na:shu:wu:</i> ‘half-dollar’
<i>-dA-q’Ats</i> ‘collar’	<i>ka:ta:</i> ‘quarter-dollar’
<i>Ge’q</i> ‘bracelet’	<i>wAG da:na:</i> ‘eyeglasses’
<i>ya:n’ dA’a’L</i> ‘ring (for finger)’	<i>tsa’L</i> ‘knife’ (originally of stone, evidently)
<i>GAdAGAmAk’L</i> ‘hoop’	
<i>shgu:lihAG</i> ‘frying-pan’	

<i>tsa'L-dA-[yA-quh]</i> 'small knife' (including modern; note again sequence <i>d-y-</i> allowed by constituent hierarchy)	<i>shiL</i> 'spoon' (if not <i>d</i> <sub>1</sub> -)
<i>da'ts</i> 'basket-decoration straw' (perhaps)	<i>xut'LyAq' uX dAk'u:d</i> 'ramrod' (semantic connection unclear)

***d*<sub>7</sub>-**

Finally *Xa*: 'north wind', though not *k'u:y* 'wind' (generic), is sometimes (archaically?) *d*-class, e.g. in *Xa*: *di:tl'eh* 'north wind is cold', is classified as *d*<sub>7</sub>-.

**17.10.3.2 *d-* in classificatory usage*****d*<sub>1</sub>-**

This is the largest semantic group for noun classificatory qualifier *d-*, referring to woody plants and wood artifacts. Accordingly, it is also that largest group of verbs with qualifier *d-* added merely because the subject of transitives or the object of intransitives is of that class, thus extrinsic to the theme. This happens to be attested with about 60 themes, see (9).

(9) Verbs attested with qualifier *d*<sub>1</sub>-

<i>L-da:s</i> 'be heavy'	<i>la'q' LA-tsidz-g</i> 'be thin'
<i>-da</i> '(sg) sit' ('car is parked')	<i>LA-ts'an'</i> 'be strong'
<i>-ta</i> classificatory (with about 12 subjects of intransitives, 9 objects of transitives)	<i>L-ts'in'tl'</i> 'sink'
<i>-'a</i> classificatory (about 10 subjects of intransitives, 12 objects of transitives, see also Krauss (1968); for preference between <i>-ta</i> and <i>-'a</i> see also the dictionary under <i>-ta</i> )	<i>-sid</i> '(pl) extend'
<i>LA-t'its'</i> 'freeze',	<i>O-sinhX</i> 'scrape O'
<i>O-L-t'ux</i> 'hold O'	<i>-sinh</i> 'die'
<i>-t'e'q'</i> 'be straight'	<i>O-djiL</i> 'make O (platform)' ( <i>djiL</i> is unclassified, but necessarily made of boards, so <i>d-</i> here is presumably not thematized)
<i>o-ga' -t'e' ~</i> 'be like'	<i>O-chich'</i> 'break O'
<i>k'ut'a' O-L-t'e' ~</i> 'use O'	<i>LA-chehg</i> 'rot'
<i>dA-Lid-g</i> 'dry'	<i>LA-chan'</i> 'have odor'
<i>C -Le</i> 'be C'	<i>O-L-chan'</i> 'smell O'
<i>-tsAtl'</i> 'slide'	<i>LA-ch'a:nG</i> 'be weak'
	<i>LA-sha't'</i> 'sag'
	<i>-she'k'</i> 'be crooked'

<i>LA-gihdz</i> ~ ‘be useless’	<i>O-XAt</i> ’ ‘peel O’
<i>O-gu’k</i> ’ ‘knock on O’	<i>O-Xa:sh-g</i> ’ ‘gnaw O’
<i>LA-gAXts</i> ’ ‘be sticky’	<i>O-XAq</i> ’ ‘peel O with teeth’
<i>LA-kinhd</i> ’ ‘swipe O’	<i>O-L-wAs</i> ’ ‘extend O’
<i>O-L-k’u’d</i> ~ ‘wipe O’	<i>LA-lits</i> ’ ‘be smooth’
<i>O-L-k’uwahdj</i> ’ ‘nail O’	-‘li’ ‘be too big’
<i>LA-k’uhgsh-g</i> ’ ‘be rough’	<i>O-L-li</i> ’ ‘process O’
- <i>xuL</i> ’ ‘roll’	-‘a’ ‘extend’
<i>O-xa:gL</i> ’ ‘work on O’	<i>O-’yahd</i> ’ ‘measure O’
<i>LA-qa’t’-g</i> ’ ‘boil’	-‘ya’ ‘be involuntarily situated’
- <i>qe:L</i> ’ ‘be oval’	<i>lah O-L-’ya-X</i> ’ ‘shake O’
- <i>qAts</i> ’ ‘split’	- <i>L-(y)a</i> plural classificatory
- <i>q’e’s</i> ’ ‘be jammed’	<i>O-L-ya:</i> ’ ‘handle O in pl acts’
<i>O-L-qa’k</i> ’ ‘split O’	<i>O-’a’tl</i> ’ ‘chew O’
<i>O-Lq’a</i> ’ ‘set O sideways’	<i>LA-’Adz</i> ’ ‘fall’
<i>O-L-Xahd</i> ’ ‘drag O’	<i>O-’Adz</i> ’ ‘spear O’

$d_1$ - is also attested in the nominalizations listed in (10).

(10) Nominalizations with qualifier  $d_1$ -

*lis dA-Gahdj-g*’ ‘woodpecker’

*tsAtl dA-L-Xa:d-L*’ ‘female mallard, teal’ (‘it drags boards’, persistent)

*tsAtl dA-GA-Xe:-L*’ ‘bug species (‘backpacking boards’)

*XA-dAG dA-LA-yah*’ ‘fish-drying rack’

In at least one instance extrinsic  $d_1$ - for the subject and intrinsic thematic  $d_2$ - ‘fire, bright’ combine (see non-reduplication in §17.3): *yahd dAq’a:g*’ ‘house is burning’, even if one attributes the origin of intrinsic  $d_1$ - ‘S (necessarily or especially wood, i.e. not counting e.g. seal-oil) burns’, since there is no verb \*-*q’a* without *d-*.

$d_1$ - is attested with most of the adjectives, given in (11), referring to  $d_1$ - class nouns:

(11) Adjectives attested with  $d_1$ - referring to  $d_1$ -class nouns

-*dik*’ ‘short’

-*tsidz-g*’ ‘narrow’

-*t’u*’ ‘many’

-*cha’sh* ~ ‘thick’

-*dzu:*’ ‘good’

-*shiyah*’ ‘bad’

- <i>gut</i> '-g 'tiny'	- <i>luhd</i> -g 'few'
- <i>kih</i> 'small'	-' <i>lAw</i> 'big' (a dozen items)
- <i>kuts</i> '-g 'little'	-' <i>a:w</i> 'long'
- <i>wAX</i> 'wide'	

$d_1$ - is attested with many postpositions, where the object is of  $d_1$ - class, as shown in (12):

(12) Postpositions attested with  $d_1$ -

o- <i>dA-d</i> 'from contact with o'	o- <i>dA-lu</i> ' 'through hole in o'
o- <i>dA-da:-d</i> 'near o'	o- <i>lu'qa:</i> 'in quest of o'
o- <i>dA-dahd</i> 'sound of o'	o- <i>dA-Xa</i> ' '(going) for o'
o- <i>da:-q</i> ' 'on o'	o- <i>dA-yAq</i> ' 'in o'
o- <i>da:q'-A-ch</i> ' 'onto o'	o- <i>dA-yAX(-A-ch')</i> 'under o'
o- <i>da:-X</i> 'in non-punctual contact with o; by means of o'	o- <i>dA-da</i> ' 'front of o; arriving at o'
o- <i>dA-t'a:-X-d</i> 'in shelter of o'	<i>gahG-dA-ya'-d</i> 'in (vat of) spruce-pitch'
o- <i>da:-tl</i> ' 'with o'	<i>qahdL-dA-ya</i> ' 'in(to) a vessel of bark'
o- <i>dA-ch</i> ' 'to o'	' <i>Aw-dA-ya</i> ' 'into that (automobile)'
o- <i>dA-qa'-X</i> '(movement) among o'	' <i>u-dA-ya</i> ' 'on board it (schooner)'
o- <i>dA-lah</i> 'around o'	o- <i>dA-a:g</i> 'middle of o'
	o- <i>d-a:</i> with numerals'

Finally,  $d_1$ - is used also in two nominalizations of postpositional phrases: '*u-da:-q'-A-ch'ahd k'uXAdah* 'table' ('from on top of it ( $d$ -class) something is eaten'), and o-*dA-q'As* 'one of a pair (of snowshoes)'.

**$d_2$ -**

This noun-class is for nouns relating to the idea of 'fire, bright', a much smaller class of nouns than for  $d_1$ -. It is found as noun-class mark in some verbs (13).

(13) Verbs attested with qualifier  $d_2$ -

O-( <i>L-</i> )- <i>ta</i> 'handle O'
O- <i>xu'tl</i> ' 'blow on O'
-' <i>ya</i> 'be involuntarily situated'
O- <i>L-li</i> 'cause O to act' ( <i>radio wAX dAxLih</i> 'I'm playing the radio')
O- <i>L-xuL</i> 'roll o' (thematized, 'turn up lamp wick')



It is also found in the nominalization *dAXunhyu*: *dAL'ah* 'old-fashioned stone lamp' ('people/Eyaks (*dAXunhyu*) keep in position light-emitting/fire-bearing O'), and in a few adjectives, *-lAw* 'big', and *-dzu*: 'good'. It is found as expected in its share of postpositional phrases, often with 'fire' as object, some involved in interesting lexicalized noun phrases, cf. (14).

(14) Postpositional phrases with  $d_2$ -

<i>o-dA-da:-d</i> 'near o'	<i>dAq'a:g-dA-wa: LX 'AX</i> 'streamer' ('boat following fire')
<i>'Aw-dA-qa'-X</i> 'over that (fire)'	<i>o-dA-ch'</i> 'to o'
<i>qu:n-dA-dAG-dA-X</i> '(movement) over/above the fire ( <i>qu:n</i> )'	<i>o-dA-lah</i> 'around o (fire)'
<i>o-dA-dAG-d</i> 'over o (fire)'	<i>o-dA-lu'-X</i> 'through o (fire)'
<i>o-da:-q'</i> 'on o'	<i>dAq'a:g-dA-yAq'</i> 'in o (fire); Hell'
<i>dAq'a:g-da:-tl'</i> 'AX 'steamer' ('boat ('AX) with ( <i>-tl'</i> ) fire ( <i>dAq'a:g</i> )')	<i>o-dA-'a:g</i> 'middle of'
	<i>o-d-a:</i> with numerals

$d_2$ - thematic is intrinsic to some verb themes, but extrinsic to others, including a number of themes specifying 'fire' or 'onto the fire' (15).

(15) Verb themes with intrinsic and extrinsic  $d_2$ -

a. Intrinsic:

- d-LA-de'* 'emit light'
- d-LA-tl'ish(-g)* 'be shiny'
- d-dA-le* '(fire) sputters'
- dAGALAd:e:L* 'smelt' (nominalization)
- dide'L* 'lamp' (deverbalization)

b. Extrinsic:

- d-LA-ts'in'tl'g* '(sparks) fly'
- (qu'-q')* O-(*L-ta*) 'handle O'
- (qu'-q')* O-*L-ts'AX* 'throw O'
- 'uyAq' -xu'tl'* 'blow into it (fire)'
- O-*L-q'e'* 'extinguish, blow out O' (sometimes with  $d_2$ , but usually without)
- O-*L-ya:* 'handle O in plural acts'

In *d-q'a* 'burn',  $d$ - may also be extrinsic or even noun-classificatory for 'wood', considering O-*L-q'a* 'ignite O', and the evident fact that e.g. 'oil burns' was not tested. The nominalization *dAq'a:g* 'fire' may or may not refer to 'fire' other than 'wood burning'. The theme  $\gamma$ AX *d-'ya* 'S is dyed' might refer to 'bright'.

See also *IXdl<sub>2</sub>-*, and §17.10.19.2 on *Gds-*.

**d<sub>3</sub>-**

This noun class is for nouns relating to the idea of ‘oral and/or noise’. It is found as noun-class marker in a few verbs and adjectives: *wAsheh o-la* ‘O-d-(L-)ta’ ‘name o O’, *-dzu:* ‘good’, and *-shiyah* ‘bad’. It is found much more interestingly in a number of postpositional phrases (16).

(16) *d<sub>3</sub>-* in postpositional phrases

<i>o-dA-xah</i> ‘by o’s oral command’	<i>o-dA-wa: LX</i> ‘imitating o’s speech’
<i>o-xa’-dA-ga’</i> ‘according to o’s taste in food’	<i>o-dA-yAX</i> ‘oppressed by o’s speech, bawled out by o’
<i>o-dA-wahd</i> ‘satisfying o(’s hunger?)’	<i>o-dA-[ya:-q]</i> ‘because of what o said’
<i>o-xa’-dA-wahd</i> ‘(cooking) for o’	<i>o-dA-’ih-X</i> ‘repeating (after) o’s speech’
<i>o-xa’-dA-Xa’</i> ‘for o to eat’	<i>o-di:q</i> ‘in o’s language, in o’s singing style’ (< <i>-dA-’e’-q</i> )
<i>o-dA-Xa’</i> ‘backtalking to o’	<i>o-dA-’e’</i> ‘in o’s speech style, singing style; interrupting o’s speech’
<i>o-dA-Xa’-X</i> ‘heeding o’s words’	
<i>o-dA-Xa:-q</i> ‘because of what o said (e.g. trouble)’	
<i>o-dA-Xahd</i> ‘leaving o’s presence while o is talking’	<i>ts’iyux-xa’-dA-’e’-d</i> ‘mosquito bite’

In one case, component hierarchy permits apparent duplication of *d-*: *sidAdi:ch’ sAlil* ‘I told you so, you didn’t heed what I said’ (*si-dA-d-i:-ch’* < *si-dA-[dA-’e’-]ch’*, ‘you acted (continually, repeatedly) in the absence of what I said’, status or meaning here of *o-ch’* was not tested, but is a probable derived postpositional phrase *o-dA-di:* ‘disregarding what o says’); *’u-dA-ch’ k’uqAXA’a’ch’* personal name of Marie Smith-Jones (‘to (the sound of) her voice someone comes one after another’).

*d<sub>3</sub>-* is rather productive as thematic in verbs, in over sixty such, both intrinsic and extrinsic. In some of these, the meaning ‘oral’ could be considered anatomical, referring to ‘mouth’, but even here, it will be seen that that meaning does not necessarily or always refer to the mouth of the object of transitive verbs, as it should if the qualifier were truly anatomical. Many of these for making a sound have the thematic combination *d-LA-*, which could be considered a class to be labeled ‘onomatopoetic’. In a majority of these verbs, listed in (17), the *d<sub>3</sub>-* is extrinsic, to varying degrees.

(17) Extrinsic *d<sub>3</sub>-* in verbs

<i>ya’ d-LA-dux</i> ‘cease talking’ ( <i>ya’ LA-dux</i> ‘cease undesirable behavior’)
<i>dit’a’ch’ d-LA-dux-g</i> ‘stutter’ (‘drift orally repeatedly against barrier’)
<i>O-d-LA-de’</i> ‘learn O (language skill), understand O’s speech’ ( <i>O-LA-de’</i> ‘learn, understand O’)

- O-*'d-de'L* 'tell O what to say'
- O-*d-L-ta* 'confuse O by/in speech, 'make you forget what you were going to say'  
(cf. O-(L-)ta 'handle O', but no relatable \*O-L-ta)
- o-lah 'iLLAX d-t'u ~ 'argue with each other over o' (o-lX-t'u ~ 'surpass o')
- O-*d-tux* 'spit O'
- d-*dA-tux* 'spit' (cf. O-*tux* 'spit on O')
- O-*d-L-tl'Ala'* 'O tire of S (food)' (cf. *gl-tl'Ala'* '(water) become stale')
- d-*L-dzu'* 'make very annoying noise, say something very annoying' (cf. *L-dzu'* 'do something very annoying')
- d-*LA-dzahd* 'sizzle'
- d-*dA-ts'e'ts'* 'spit tobacco quid' (cf. O-*L-ts'e'ts'* 'compress, extrude O')
- d-*LA-ts'u'ts'* 'make sucking sound'
- O-*d-L-ts'u'ts'* 'call O (weasel)' (cf. O-*ts'u'ts'* 'suck, suck on O')
- d-*LA-chahd-g* 'stammer, blubber' (*LA-chahd* 'stagger')
- O-*d-she* "'kill" O's voice'
- d-*ga'* 'S's voice tires' (-*ga'* 'tire')
- d-*guG* 'lie' (-*guG* 'be deceitful')
- O-*d-L-ku:n'd* "'jump on" what O says' (O-*L-ku:n'd* 'grab O')
- O-*d-L-k'a'd* 'sicken O with talk' (O-*L-k'a'd* 'sicken O')
- d-*LA-Ga'* 'quiet down' (*LA-Ga'* 'cease activity')
- d-*dA-GAGsh-g* 'S's lower lip hang loosely' (-*GAGsh-g* 'be bent out of shape')
- O-*'d-L-qe'dX* 'ask question about O' (O-*'L-qe'dX* 'carry out investigation about O')
- yAX dA-*dA-Xahd* 'accordion', nominalization 'that which is pulled back and forth with noise' (from O-*Xahd* 'drag O')
- d-*LA-Xu'G* 'raise voice' (*LA-Xu'G* 'exert self')
- d-*LA-XAX-g* 'snore' (*LA-XAX-g* 'quiver')
- '*Ad-d-LA-ya* 'sing medicine song' ('cause self to be involuntarily situated sound-wise')
- d-*dA-'a:t'* 'howl, bawl' (cf. o-X '*i:lih-LA-'a:t'* 'become enamored of o')
- '*Ad-dALyAXAch* O-*'d-LA-'ehdz* 'call upon O to go ahead of self (S)'
- d-*LA-'u'G* 'breathe' (*LA-'u'G* 'rest'; also noun -*dA-'u:G* 'breath, life-breath', if deverbalization with expanded stem vowel)

*yAX 'i:lih-XA' d-dA-'ya-X* 'be thinking hungrily (without knowing what for)  
*o-Xa' k'u-d-L-'ya* 'bother, kid, tease o (with speech)  
*O-'d-L-ya'X* 'beg persistently for O' (*O-'L-ya'X* 'want O')  
*d-dA-le* 'make noise, (bird) call' (no comparable \**dA-le*, but cf. following)

Of course, as noted above, the definitive—generic—case is *d-le* 'say' (*-le* 'act'), causative *O-d-L-li* 'cause O to say, play O (instrument, radio)' (*O-L-li* 'act on O'). See also *qd-* below.

In a minority of these themes (18), *d<sub>3-</sub>* is intrinsic:

(18) Intrinsic *d<sub>3-</sub>* in verbs

<i>d-da'ch'</i> 'asphyxiate, drown'	<i>O-d-L-ch'a:q'</i> 'hear O'
<i>d-LA-dzahd'</i> 'sizzle'	<i>O-'d-L-ch'a:q'</i> 'hear O at a distance, vaguely'
<i>d-dA-dza:nts'</i> 'plead, beg'	<i>d-gudj</i> 'close mouth tightly'
<i>d-LA-tsi:ndz</i> 'squeak, wheeze'	<i>d-LA-k'ik'sh-g</i> 'crunch, pop (when chewed)'
<i>d-LA-ts'a'tl'-g</i> 'make oral clicking sound'	<i>d-LA-k'i:nk'sh-g</i> ~ 'squeak'
<i>d-LA-ts'i:nts'</i> ~ 'squeak'	<i>d-LA-xe:g</i> 'whistle'
<i>d-L-sik'</i> 'hiccough'	<i>d-L-Gu:G</i> '(baby) be hungry'
<i>d-dA-si:q's-g</i> '(dog) whimper, whine'	<i>d-q'a:ch'</i> 'have heartburn'
<i>d-che'</i> 'be hungry'	<i>d-LA-q'e:g</i> 'talk angrily, bellow'
<i>d-ch'ehX</i> 'open mouth'	<i>o-ch' d-'a:G</i> 'tire of o (food)'
<i>d-L-ch'e:X</i> 'yawn'	

In one theme this *d-* appears to be optional, meaning the same with or without: (*d-*)*L-siyAq'* ~ 'belch'.

In spite of the obvious anatomical meaning of 'oral', *d<sub>3-</sub>* can hardly be considered an anatomical use of the qualifier, as we have no attestation e.g. of *O-d-* in a verb theme meaning 'V O in the mouth'. Though there may have been no attempt to elicit such, its absence is probably statistically significant. Cf. also *d<sub>5-</sub>* below, also relatable to anatomy, but not grammatically anatomical use of *d-*.

***d<sub>4-</sub>***

This noun class is for nouns relating to the idea of 'flat natural expanse', often 'ice'. For this noun-class mark in verbs, adjectives, and postpositional phrases, see (19).

(19) Attestation of *d<sub>4-</sub>* as noun-class mark

- a. With verbs:
- |   |                              |
|---|------------------------------|
| <i>O-(L-)ta</i> ‘handle o’  | <i>-shiyah</i> ‘bad’         |
| <i>O-L-t’ik</i> ‘shoot O with arrow’  | <i>-kih</i> ‘small’          |
| <i>C -Le</i> ‘be C’   | <i>la’q’ -chahsh</i> ‘thick’ |
| <i>LA-shAX-g</i> ‘be frosty’  | <i>-’lAw</i> ‘big’           |
| <i>L-qAtl’-X</i> ‘be slippery’  |                              |
| <i>d-dA-qAmAXts</i> ‘become rotten (only of ice)’   |                              |
| <i>ya’ -q’u’tl’</i> ‘break up’  |                              |
| <i>O-XuhL-g</i> ‘shovel O’  |                              |
| <i>L-Xan</i> ‘melt’   |                              |
| <i>LA-lits</i> ‘be smooth’  |                              |
| <i>la’q’ -cha’sh</i> ‘be thick’   |                              |
| <i>k’a’t’ shgahX di:Le</i> ‘would that it be an island’ ( <i>k’a’t’</i> ‘island’ here is unclassified but the subject is <i>d-</i> ). |                              |
- b. With adjectives:
- |                    |  |
|--------------------|--|
| <i>-t’u</i> ‘many’ |  |
|--------------------|--|
- c. With postpositional phrases:
- |   |  |
|---|--|
| <i>o-da-:q’</i> ‘on o’  |  |
| <i>o-dA-t’a</i> ‘behind o’  |  |
| <i>o-dA-Xa’</i> ‘in relation to’ o’                                     |  |
| <i>o-dA-lah</i> ‘around o’  |  |
| <i>o-dA-lu’qa:</i> ‘in search of o’                                     |  |
| <i>o-dA-yAq’</i> ‘in o’   |  |
| <i>o-dA-lu’</i> ‘through o’   |  |
| <i>o-dA-’e’-’</i> ‘place where there is/was o’                          |  |
| <i>lu:di:-’</i> ‘on tide-beach’ (< <i>lu:-dA-’e’-</i> )                 |  |
| <i>ts’a’-di:-q’-A-ya’-d</i> Marten River (‘body of water on mud flats’) |  |

There do not appear to be any verb themes with thematic use of  $d_4-$ , except perhaps in *ya’ dAsALti’ik’L* ‘dry cracked expanse of mud in flats’.

### $d_5-$

This noun class is for nouns relating to the idea of ‘anatomical protuberance, appendage’. These include incidences with *-lA-qah* ‘head’, *-dA-ga’q’L* ‘throat, neck’, *-dA-kuhd* ‘lips’, though those could equally well belong to  $d_6-$  ‘roundish’. For its use as a noun-class mark, see (20).

(20) Attestation of  $d_5-$  as noun-class mark

- a. With verbs:
- |  |                               |
|--|-------------------------------|
| <i>O-ts’AX</i> ‘throw O’                               | <i>O-L-Xahd</i> ‘drag O’      |
| <i>-k’a’d</i> ~ ‘ache’ (partly thematized, for ‘head’) | <i>O-Xa’tl’</i> ‘strike O’    |
| <i>O-L-ku:n’d</i> ‘grab O’                             | <i>O-L-Xe’dz</i> ‘shoulder O’ |
| <i>O-’le’g</i> ‘grab O’                                | <i>lah O-L-ya-X</i> ‘wag O’   |
| <i>ya’ -q’utl’</i> ‘break up’ (‘lips get chapped’)     | <i>O-L-(y)a</i> ‘handle pl O’ |
|  | <i>-’a’</i> ‘extend’          |
- b. With adjectives:

- |   |   |
|---|---|
| <i>gutl'ah-dA-dik</i> 'short-tail' (epithet,<br>dog's name) | <i>'ugutl'ah-da-X</i> 'by its tail'                   |
| <i>-tsidz-g</i> 'thin'                                      | <i>P-gutl'ah-dA-lAX</i> 'isAL'anhL 'saw<br>P-'s tail' |
| <i>'igutl'ah-dA-kih</i> 'your little tail'<br>(dog's name)  | <i>'ilAqah-da:-q'</i> 'on your head'                  |
| <i>-gut'g</i> 'tiny'  | <i>P-dAga'q'L-dA-lah</i> 'around P's<br>neck'         |
| <i>-lAw</i> 'big'   | <i>P-dAga'q'L-dA-la'-</i> 'down over P's<br>neck'     |
| <i>-a:w</i> 'long'  | <i>o-dA-'a:n'</i> 'coming upon o'                     |
- c. With postpositional phrases:  
*La:n'-dA-ya'* 'crotch' ('in thigh(s) as  
o with broad opening')

There do not appear to be any verb themes with thematic use of  $d_5$ -, unless possibly *d-LA-le'g* for some hand movements, *d-LA-shux* 'extend/straighten legs', *o-X d-dA-'e'edz* 'brace self with feet against o'.

Though the semantic range of  $d_5$ - is indeed anatomical in a sense, grammatically it is not an anatomical qualifier, as there is no attested freely productive use of  $d_5$ - in *O-d-* in the sense 'to V O (not in torso, but) in appendage/protuberance' as such.

### $d_6$ -

This noun class is related to the idea of 'roundish'. See (21) for its use as noun-class marker.

#### (21) Attestations of $d_6$ - 'roundish' as noun-class marker

- |   |  |
|---|--|
| a. With verbs:                                  | <i>o-yA-lu' qa' LA-q'a:sh</i> '(ring) leave<br>red impression on o's finger' |
| <i>k'ut'a' O-L-t'u</i> ~ 'use O'                | <i>d-LA-Xan</i> '(mussel) be fat'  |
| <i>o-ch' wAX O-L-t'u</i> ~ 'owe o O<br>(money)' | <i>-mahd</i> 'be (hard-)boiled'  |
| <i>-tl'e'</i> 'be cold'                         | <i>li' O-LA-'ni:q'</i> 'swallow O'   |
| <i>O-L-tsinhd</i> 'throw O'                     | <i>wAX O-L-li</i> 'gather O'   |
| <i>O-tsinhG</i> 'handle with fingers'           | <i>O-d-L-yAq'sh-g</i> 'break open O<br>(mussel)'                             |
| <i>O-'LA-tsa'</i> 'O has appearance'            | <i>LAG O-'ya</i> 'win O'   |
| <i>O-'tsa'</i> 'buy O'                          | <i>L-'ya</i> 'be (in container) in position'                                 |
| <i>O-L-ka'L</i> 'inherit'                       | <i>O-L-'ya</i> 'handle O in container'                                       |
| <i>d-L(A)-xix</i> '(egg) turn to chick'         | <i>O-L-ya:'</i> 'handle O one after<br>another'                              |
| <i>O-'L-qa'</i> 'count O'                       | intransitive <i>-a</i> and transitive  |
| <i>O-L-qa't'</i> 'boil O'                       | <i>O-(L)-a</i> classificatory 'roundish'                                     |
| <i>O-L-q'u'tl'</i> 'break O'                    |  |

(twelve items, significantly more than in the following)

intransitive *-ta* and transitive

O-(L-)*ta* (five items, significantly fewer than in the preceding; see Krauss 1968 and Athabaskan literature)

O-L-(y)*a* 'handle pl O'

b. With adjectives:

-*t'u* 'many'

-*dzu*: 'good'

-*gut*'-g 'tiny'

-*kuts*'-g 'little'

-*shiyah* 'bad'

-*luhd*-g 'few'

-*lAw* 'big'

c. In postpositional phrases:

o-*dA*-*ch*' 'to o'

o-*dA*-*qa*:' 'kind of o'

o-*da*-:X 'by means of o'

o-*Xa*' 'in relation to o'

o-*dA*-*lu*'*qa*: 'in search of o'

o-*dA*-*e*:X 'looking for o'

o-*dA*-*a*:*n*' 'coming upon o'

*d-a*: with numerals

A special case is *d-LA*-*ts'an*' 'be expensive', where *d-* is thematized from 'S (money) is strong' (> 'be strong money-wise'), therewith also the thematic negative *d-LA*-*ch'a:nG* 'cheap' ('money-weak').

*d<sub>6</sub>*- 'roundish' is further used in a few nominalizations and deverbalizations (22).

(22) *d<sub>6</sub>*- 'roundish' in nominalizations and deverbalizations

a. In nominalizations:

*dAt'e:G* 'raw egg(s)

-*dALxix* 'white of egg'

'*u-dA*-*ya*'-X *yAX k'udla:dAq'a:g* 'frying-pan'

b. In deverbalizations:

'*u-da*:-X '*AdlAsinhX(L)* 'razor'

'*u-da*:-X *k'ushe:t'L* 'spoon for shaving cambium'

*ya:n*' *dA'a'L* 'ring' 'roundish positioning (?) down'

There do not appear to be any verb themes with thematic use of *d<sub>6</sub>*-, unless perhaps O-*d-dA*-*uhd*-g 'lay O (egg)', and the noun itself, as deverbalization.

### ***d<sub>7</sub>***-

This noun class is related to the idea of 'wind', at least for *Xa*: 'north wind'. It appears as noun-class mark in the verb theme *Xa*: *di:tl'eh* 'the north wind is cold'. This *d<sub>7</sub>*- may be most clearly identified in *d-LA*-*yAX* '(wind) die down', also the mythical entity *di:ye:X* 'Good/Calm Weather', a deverbalization of *d-LA*-*yAX* with expanded vowel. In this it might be anything from thematic to an extrinsic noun-class marker, cf. O-L-*yAX* 'train, tame O'. Beyond this, however, there is a complex group of verb themes, '*i-d-L*'-*a*' 'wind move', '*id-L*'-*a*' ~ '*i-d*'-*a*' 'smoke move', and '*i-d*'-*a*' ~ '*i-d*'-*a*' 'cloud/fog move' all with a *d-* referring in

some way to air currents. Generic *k'u:y* 'wind' is not *d*-class, however, but unclassified, as is *Lanhd* 'smoke'; *q'ahs* 'cloud' is *Xd*-class, and *GA-dA-q'Ayi:ny* 'fog' is usually unclassified, occasionally *Xd*-class. The '*i-d*' of these themes may also be identified with the '*i-d*' (with indeterminate object '*i*-') of '*i-d-le* 'event occurs' and '*i-d-L-li* 'carry out event', following under *d*<sub>8</sub>-.

#### ***d*<sub>8</sub>-**

This begins the set of *d*-qualifiers that does not appear identifiable with any class of nouns, but is at the same time similar to *d*<sub>7</sub>- in that it is associated with indeterminate object '*i*' in verbs of abstract meaning and even more abstract transitivity. The first type is the pair just mentioned '*i-d-le* (event) occur' and the causative thereof, '*i-d-L-li* 'carry out event', perhaps only this most basic active theme. The second type has indeterminate object '*i*', plus directive '*'*', i.e. '*i-'*', different from other directives where indeterminate object is for some reason regularly '*ida-*' rather than '*i-'*', so here '*i-'-d-*', rather than '*ida-*'. This is found mainly of course in motion verbs, referring to the relationship of two motions, essentially *o-'ih-ch* 'falling behind o', and *o-ka-X-A-ch* 'catching up with o', attested with the themes *-a* '(sg) go', *-a'ch* '(pl) go', *-we* 'swim', and *Xdl-'ya* '(sg) run'. It is further attested with the postural theme *-'ya* 'be involuntarily situated' in *tl'eh o-X 'i-'-d-'ya* 'o catch cold' ('cold (illness) "catches" (?) o'.

#### ***d*<sub>9</sub>-**

This is used perhaps only with classificatory or postural themes, with the meaning 'accumulation'. It is attested widely with *-'ya*, q.v. in the dictionary under *d-'ya* 2a.-f. as such, and with *-L-(y)a* '(pl) be in position', likewise with *O-L-(y)a* 'handle pl O', with preverbal *dAGida* 'filling' (< 'to the top'), *yAqa* 'accumulation', *'iLqa* 'together', in reference to 'filling O' or 'S fill'. See also *lXdl*<sub>2</sub>-.

#### ***d*<sub>10</sub>-**

*d*<sub>10</sub>- is for a small group of themes with the idea in common of 'agreement': *O-d-L-XAwi* 'believe O' (intrinsic, though here perhaps but not necessarily 'oral'; cf. *dA-XAwi* 'have good luck'); *xu:dAg 'idAxLih q'Aw* 'I sympathize with you' (< 'it is (*q'Aw*) that I (*xu*, *x-*) too (=dAg) act upon you ('*i-*'), or if the object is indeterminate 'carry on event'); with *Xu* 'right, complete' *Xu 'u-'-d-'a* 'be decided, settled', *Xu O-'-d-L-'a* 'settle, decide O'. In all these 'oral' or 'speech' may be involved, but not necessarily, as specified in the first case.

#### ***d*<sub>11</sub>-**

This may be the largest single group not associated with any nouns, glossable as 'detachment, free fall', and as such might be relatable to *d*<sub>7</sub>-. In the following verb themes it is especially clear: *d-LA-qahG* 'fall', *d-'iL* 'spill', *O-d-'iL* 'spill, pour O', *d-L-k'a't'* '(sg) fly' (possible connection to *d*<sub>7</sub>-). Loosely here *d-LA-dux* 'drowse off', *d-L-qu* '(pl) drift', more



clearly in *ya:n' d-'ya* 'rain, snow, hail) fall', *yAX d-'ya* 'capsize'. Further, the preverb *qid* 'down off' (either by movement off an edge or by detachment, but given the relationship of this meaning to that of *d<sub>8</sub>-*) often introduces *d<sub>8</sub>-* qualifier extrinsically to some verb themes. In some of the following the subject of an intransitive or the object of a transitive might also be of *d*-class, so possibly with triple motivation for *d-*: *Lich'a:ch' qid d-'a'* 'stand aslant (downward)', *qid d-kug* 'break off', *qid dAGAts'ik'* 'pinch (part of) it off!', *qid dAGALtsAX* 'cut it off!' (plus a number of instances of *qid O-L-tsAX* 'cut O off' in texts 22 and 65, where the object is explicitly unclassified, and some are explicitly *d*-class, likewise *d*-class in *qid O-d-L-GahG* 'chop O off', *qid O-d-q'Ats'* 'bite O off', *qid O-dja'* 'pluck O off'). On the other hand, there are verb themes with other preverbs referring to detachment or movement through air that do not otherwise introduce qualifier *d-*: *ya'X O-d-L-t'Aq'* 'flick O off (up) with fingers', *qa' O-(d-)L-dlahG* 'explode O', *ya'd qa' disiltsAXL* 'I cut a piece out of it'. Possibly also here: *dAshAch'uL* 'he stole it' (meat, unclassified), *o-X d-LA-kinhd* 'jostle o with abrupt hand movement'.

### ***d*<sub>12</sub>-**

This may be the only thematic qualifier *d-* that is essentially associated with a preverb, namely *ya'* 'completely'. At the same time, the very widely attested *ya'* 'completely' is not by any means always accompanied by qualifier *d-* in the verb. No systematic testing was done to define the correlation, but in at least three of the themes to which *ya'* introduces this extrinsic qualifier *d-* (23), the *d-* is attested as optional (indicated by parentheses here)

#### (23) Verb themes with *d*<sub>12</sub>- and *ya'* 'completely'

*ya' O-d-L-dzux* 'stab O all up / to bits'

*ya' O-d-L-tsu:x* 'set O up completely straight'

*ya' O-d-k'in't'* 'scratch O all up'

*ya' O-d-xihs* 'rip O all up'

*ya' (d)dA-la'-G* 'completely disintegrate'

*ya' qA(dA)sA'a'tl'L* 'chewed them all up'

*ya' O-d-L-'a'* 'stand O completely up'

*Lich'a:ch' ya' d-'a'* 'stand aslant (upward)' (cf. *Lich'a:ch' qid d-'a'* 'stand aslant (downward)', above)

*ya' O-(d-)L-tsAX* 'cut O to pieces'

*ya' d-q'Ats'* '(clothes) be in shreds, tatters'

### ***d*<sub>13</sub>-**

This is one of two different qualifier derivations that may both be called *errative* (for the *errative* 2, see §17.10.4.7. It is attested only with motion themes, *d-a'* '(sg) go astray, get lost

(on foot), *d-'a'ch'* '(pl) go astray, get lost (on foot)', *o-tl' d-'a'ch'* 'go astray with o, mislead o'. Further use, e.g. *d-qe* 'get lost (in boat)', can be presumed, but was not investigated. The difference in meaning between errative 1 (with *d-*) and errative 2 (with *l- + D-*) was not investigated, but it appears that errative 2 may have broader meaning and use beyond motion themes.

#### ***d*<sub>14</sub>-**

This group is perhaps related to errative *d*<sub>13</sub>-, with the meaning 'bother, importune, discomfit', mentioned as 'emotional' in the dictionary. This is most frequent with *-'ya* (see *d-'ya*<sub>3</sub> in dictionary), but is probable with a few others as well: *o--nA-X k'u-d-'ya* 'o have hard time' (< 'something come over o's nape'), *o-la'-X d-'ya* '(adverse) come down over o's head', usually *k'ushiyah* 'bad', i.e. 'be angry', and with unspecified subject, *o-la'X k'u'-d-'ya* 'o be sexually excited', hence the basic meaning called more neutrally 'emotional' in the dictionary, the sexual not basic either, but connotative, discretionary; e.g. *?k'udzu: 'ula'X dAsa'yahL* 'he got a good feeling' was not tested; note also *siya:q' dAsAliLinh* 'I hurt/bothered him' ('he got hurt (feelings) because of me', cf. *d-le* below under *d*<sub>15</sub>-), *o-a: d-dA-'yahG* '(anatomical) aches o' (perhaps intrinsic); above all, *d-q'e:k'* 'be angry', with *d-* evidently intrinsic, and *o-li'* '*i-d-L-a'* 'hate o'.

#### ***d*<sub>15</sub>-**

This group is used for instances of thematic *d-* for which no meaning can be isolated, each attested in one verb theme only. This miscellany of loose ends is perhaps most remarkable in that it consists of hardly a dozen cases, considering the proportionately large number themes attested with *d*-qualifiers—over two hundred, i.e. 95%—that fall into the preceding 14 semantic classes with more than one such theme:

#### (24) Thematic *d*<sub>15</sub>-

*di:tsin'G* 'naked' (cf. *O-L-tsin'G* 'unclothe O')

*'iLXa'* *O-d-L-djahGL* 'sew O together'

*'iLqa'* *O-d-LdjahGL* 'make crazy-quilt' (cf. other instances of *O-L-djahGL* 'sew O')

*d-dA-ch'e'* 'be soiled with excrement' (cf. *-ch'e'* 'defecate')

*d-LA-shux* 'extend/straighten legs' (possibly *d*<sub>5</sub>-; intrinsic; cf. Navajo *-d-l-zhóósh* with the same meaning)

*O-d-L-GAdj* 'tow O (e.g. on rope)' (cf. *O-L-GAdj* 'move O with end of stick')

*o-q'-A-ch'* *O-d-L-Gu'* 'warm o by applying O' (*O-L-Gu'* 'warm O')

*di:yanh* 'stickleback (fish)' (cf. *X-d-yan'* 'be sharp')

*d-le* in *dA'u:dkih wAX dAGi:leh* 'let it happen' (cf. *siya:q' dAsAliLinh* 'I hurt/bothered him' above)

*d-L-'ehd-g* 'dry' (intrinsic)

O-*d-L-'esh* 'string O' (intrinsic)

*dA-'e:dz-g* 'slabs of dry salmon meat' (only once, where *dA-* may be classifier or thematic *d-*)

*didit'u:ch* 'iron' (*d-* possibly thematic, < *dA-t'u'ch* 'be black')

A few instances of *d-* from qualified nouns might be added here, e.g. that of *-dA-shid* 'rim, flare'.

See also *IXd<sub>2</sub>-*.

### 17.10.3.3 *d*-qualified nouns

There are at least forty-some *d*-qualified nouns attested in the corpus. These are not to be confused with *d*-class nouns, though some *d*-qualified nouns do happen also to be themselves *d*-class nouns, e.g. *-dA-tah* 'bark'. Some *d*-qualified nouns are intrinsically so, e.g. *dA-kinh* 'stick', no *\*(-)kinh* being attested or elicitable without *d-*. Many, however, are only extrinsically so, e.g. *k'u-dA-tah* 'bark (of something *d*-class [tree])', cf. *-tah* 'skin'. The status of 'bark' as a lexeme, 'integument of woody plant', could thus be considered debatable, of course.

Accordingly, several of the attested extrinsically *d*-qualified nouns are found especially in compounds, as further in *lis-dA-tah* '(spruce-)tree bark', where the qualifier is the expected *d*-class mark for *lis* '(spruce-)tree' as overt possessor in this compound with possessed noun *-tah* 'integument'. More such examples of qualifier *d-* in compounds are given in (25). Note that some of these appear with the possessed noun prefixed by *L-*.

#### (25) Compounds with *d*-class possessors

*k'u-dA-L-ts'Alih* 'eggshell' ('shell of something (*k'u-*) *d*-class', cf. *k'u-dA-'uhd-g* '(bird-)egg', *d*-class, cf. *-ts'Alih* 'bone')

*k'u-lA-qah-dA-L-ts'Alih* 'skull' ('shell of head of something *d*-class', i.e. of *-lA-qah* 'head', *d*-class)

*-lA-Ga:nsh-dA-Xu* 'mustache' (*-lA-Ga:nsh* 'lower part of face, around mouth', *d*-class, and *-Xu* 'hair')

*-ni:k'AdAch'u:ch* 'philtrum (between nose and upper lip)' (with *-ni:k* 'nose', *d*-class ('protuberance') cf. *ch'u:ch* 'snail', and *-dALts'u:xL* below)

*-ni:k'AdALxa'ch'L* 'septum of nose' (with *xa'ch'-L* 'knot' not normally possessed)

*ni:k'AdAka:shk* 'person with aquiline nose' (*ka:shk* 'humpback salmon' not normally possessed, epithet)

*ni:k'AdAch'e:* 'bird species' (*-ch'e:* 'rust(y)-nose', epithet and perhaps verbal)

*-ni:k'A[dA[tsin'da'd]]* 'tip of nose' (nominalization of postpositional phrase *o-da'-d* 'front part of o' with C4 qualifier *tsin'*, q.v., that as constituent, with itself with *d*-qualifier from *-ni:k'*)

We have two further examples with mythical beings in tales, which are unpossessed nouns in compounds: *lis-dA-dAXunh-yu*: 'tree(-sized) people', *'u'tl'-dA-qe'L* 'driftwood-woman'.

Thus we have of course some *d*-qualified possessed nouns (non-kin, non-anatomical), e.g. *(tsa'L)-dA-q'a'* 'edge' (of 'knife', *d*-class), 'corner' (exterior sense, of 'house', *d*-class), whether the object is overt, forming a compound, or not, just as we have such postpositions; cf. *-lA-q'a'* 'summit (of mountain, ridge)', *l*-class. Thus also *tsa'L-[dA-[yAquh]]* 'small knife' 'young/offspring of knife', but *lis-yA-quh* 'sapling' ('young/offspring of tree', without *d*-, conceivably because *-yAquh* is here inconsistently treated as a kin-term, the object of which is normally unclassified).

At the opposite extreme, there are such *d*-qualified nouns for which the qualifier *d*-appears to be fully thematic or thematized, e.g. *-dA-shid* 'edge, rim, brim, flare', where there is no clear semantic origin for the *d*- (unless *d*<sub>6</sub>- 'roundish?'). This item should perhaps be added to *d*<sub>15</sub>-. In this case, where compounded with class-marked possessor other than *d*-, the results are inconsistent: *-'uGL-dla:shid* 'white part by heart' ('thymus?'; 'heart-brim'), but *'u[:n-[dA-shid]] k'u:Leh ch'iyahd* 'hat with brim' ('its brim exists hat'). In the former the qualifier subposition-order *d-l-shid* is preserved, in the latter *l-[d-[shid]]* is implied.

A large number of *d*-qualified nouns are to be viewed somewhere between these potential extremes. In many cases, not possessed nouns, but uninflectable noun phrases, or such that were inadequately investigated, the original semantic subclass can be guessed at but not demonstrated. A disproportionate number of these include the noun-prefix *L*-.

Some the largest single groups probably come from *d*<sub>1</sub>- 'woody plant', for which see examples in (26).

(26) *d*<sub>1</sub>-qualified nouns 'woody plant'

<i>k'udALt'ihXL</i> 'nest'	<i>-dALXAlah</i> 'butt-end of tree'
<i>k'udALdzits'gL</i> 'calyx, epicalyx'	<i>dAkinh</i> 'stick, wood' <sup>4</sup>
<i>k'udALts'Aq'</i> 'young grass'	<i>dA-dzanhGL</i> 'cane, walking-stick'
<i>-dALt'ahl</i> 'leaf'	<i>-dAXAGL</i> 'gunwhale'
<i>-dALku:n</i> 'roots with stump, roots (e.g. of wild celery)'	

4 However, the stem *-kinh* is not otherwise attested in Eyak, in stark contrast to its Athabaskan cognate \*də-kən with the same meaning, where \*(-)kən is abundantly attested with the meaning 'base' (for which cf. Eyak *-ku:n* ~ *-kAmah*).

It is not entirely clear whether *dA-dzanhGL* and *-dA-XAGL* belong to (26). These, as well as *k'udALtl'ihXL* and *k'udALdzits'gL* may also originally be deverbal.

Some others may be from *d<sub>6</sub>*- 'roundish', cf. (27), though many of these (except the first three clearer cases) may perhaps belong to *d<sub>5</sub>*- 'protuberance' including 'neck', and/or *d<sub>3</sub>*- 'oral, oral noise'.

(27) *d<sub>6</sub>*-qualified nouns 'roundish'

*-dA-'uhd-g* 'bird's egg' (deverbal?)

*-dA-L-dje:'(L)* 'yolk (of egg)'

*k'udALqehX* 'mature egg (white nearly gone)'

*-dA-L-ts'u:xL* 'philtrum (between nose and upper lip)' (cf. *ts'u:x* 'barnacle', and

*-ni:k'AdAch'u:ch* in 25)

*-dAga'q'L* 'throat, windpipe' (cf. *-ga'q'L* 'Adam's apple, larynx')

*-dA-q'Ats* 'collar'

*-dA-t'a'q'L* 'collarbone'

*-dA-kuhd* 'lips'

*-dA-'u:G* 'breath'

*-dA-tl'a'(-d)* 'corner of mouth' (also 'corner of table' as a postpositional phrase referring to *shdu:lihG* 'table' of *d*-class; cf. *-lu:ch-dA-tl'a'(-d)* 'corner of mouth at inside of cheek', with *-lu:ch*, *d*-class)

Conceivably also belonging to (27) are *dA-'e:ts'g* 'fish-meat slabs', and *dA-q'Aw* 'travel provisions' (stems *-'e:ts'* and *-q'Aw* not otherwise attested), as food, but best purely thematic, opaque. Clearly *di-de'L* ~ from *dA-de'L* 'lamp' (deverbal) is less likely *d<sub>6</sub>*- than *d<sub>2</sub>*- 'fire, bright'.

Finally, we have some compounds where the *d*- qualifier of the possessed noun may disagree with the class of the possessor, being thematized to the possessed head noun, e.g. *-dA-djehX* 'upper corner, tied, as of sack' (*-djehX* 'ear'), *k'u-dA-L-Xa'L* "'button" of clam' (*-L-Xa'L* 'handle (of cup, etc.)'); also *-dA-L-tl'a'* 'handle of axe, knife, door', again perhaps best considered a nominalized postpositional phrase, for which cf. e.g. also *xah-dA-L-ch'a:d* 'toward summer' (*xah* is not *d*-class). Note further *-dA-L-XAch'gL* 'empty thing' (e.g. 'empty house' *d*-class, but also 'empty bottle', unclassified; cf. *-L-XAch'gL* 'skeleton'). Again this truly thematic *d*-, not clearly associable with any *d<sub>1-15</sub>*-, seems to be associated with the prefix *L*-, with which it so frequently co-occurs. This may be especially striking in the two probably recent compounds *k'uleh-dA-L-ch'iyahd* 'rain-hat' and *k'uleh-dA-L-ch'iya'tl'G* 'umbrella' ('rain-frog'), the latter, of which Lena was confident, being somehow influenced by both phonological resemblance to *ch'iyahd* 'hat', and the semantics of 'mushroom' (including English 'toadstool') resembling umbrella, cf. *ch'iya'tl'Gya' ch'iyahd* 'mushroom' ('frog's hat'). Most importantly, *k'uleh* 'rain' is unclassified or *LX*-class, not *d*-class, and neither *ch'iyahd* 'hat' nor *ch'iya'tl'G* 'frog' is otherwise a possessed noun. This

joining with *dA-L-* is thus another way of forming a compound with unpossessed nouns, including a fully thematic qualifier *d-* to the head noun. This compound construction is shown by these two compounds, and *ni:k'-A-dA-L-xa'ch'L* 'septum' ('nose-knot') and *ni:k'-A-dA-ch'u:ch'* 'philtrum' ('nose-snail') above. Further, and perhaps more fundamentally, it seems probable that this thematic *-dA-(L-)* can function to make a possessed noun out of an unpossessed one, as in *-dA-L-t'su:x(L)* 'philtrum', though the *dA-* there could also be interpreted as 'oral' or *d*-class mark for 'nose'. The productivity of this construction, qualifier *dA-(L-)*, with possible noun suffix *-L*, was not tested, either for further compounds with non-possessed head or for making further possessed out of unpossessed nouns.

In any case, this last qualifier *d-* in qualified nouns, recurrent (as opposed to *d<sub>15-</sub>*), and frequently combined in *dA-L-*, for which no concrete meaning can be identified, can itself be enumerated as *d<sub>16-</sub>*.

This *d<sub>16-</sub>* may well be found in the formation of some postpositions, e.g. *o-dA-L-γAX* 'before o (in space or time), cf. *o-γAX* 'under/below o', *xah-dA-L-ch'-a:-d* 'toward summer'.

#### 17.10.3.4 *q-d-* qualifier combination

Purely secondary, the three examples of the combination of plurality emphazier *q-* with *d<sub>3-</sub>* are: *qAdAdAleh* '(crows) clamor', *'i'e:X 'ida'qAdi:Lqe'dXinu:* 'they're all asking about you', *XAtl'ye'X qAdALAXXginh* 'he snores all night!', poetic.

See below numerous (33) further qualifier combinations including *d-*.

#### 17.10.4 *l-* qualifier

The qualifier *l-* occupies subposition C7, alone except for the rare qualifier *s-*. (As there are no combinations of *s-* and *l-* attested, no relative order between the two can be demonstrated, so the two are left in the same subposition.) The qualifier *l-* is the second-most frequent and complex semantically, after *d-*, by a good margin. Phonologically the qualifier *l-* is of course the most complex in that by nature it participates in the alternation *l ~ n* (*/n/* being nasalization of preceding vowel unless vowel follows, cf. also §6.3). It abides by the basic synchronic rule *lA- > :n/\_\_[+cor]*, though in verbs this very often fails because of analogical influences. In Chap. 6) both the working of the *l ~ n* alternation and its blocking by analogy in verbs are described in some detail, not repeated here. A further phonological peculiarity of the *l-* qualifier is that when it combines with *d-*, as is frequently the case, the result is (*\*dA-lA- >*) *dla:-*, presumably due to homorganicity of */d/* and */l/*, where *dl-* is indistinguishable from the plain lateral affricate phoneme */dl/*. Some morphophonological peculiarities of *dla:-* itself will be noted in §17.10.4.7 for qualifier combination with *dl-*.

The *l-* qualifier is found in all three semantic functions, as noun-classifier, anatomical, and thematic. In this way it is unlike both *d-*, which is noun-classificatory but hardly anatomical, and *γ-*, which is anatomical but not noun-classificatory. The *l-* qualifier is

also found in all morphological functions, as prefixed to verbs, adjectives, nouns, and postpositions. As was done with *d-*, also the *l-* qualifier will be presented sandwiched between first a subsection on *l*-class nouns (§17.10.4.1), and last a subsection on *l*-qualified nouns (§17.10.4.2), the main subsections by enumerated semantic areas between.

Historically, the *l-* qualifier is cognate with Athabaskan \**nə-*, and may also, at least as *l*<sub>1</sub>, be related to the verb stem *-la'* in 'be facially' and/or postposition *o-la'* 'down over o's head'.

#### 17.10.4.1 *l*-class nouns

There are twenty-some *l*-class nouns (28), not a very large class, most of which fit in a semantic area referring to roundish body parts, especially internal organs or the head, roundish artifacts, artifacts with a handle and head or blade, also 'moon' and 'abalone species', viewable as 'round(ish)'.

(28) *l*-class nouns

<i>q'Ama</i> : 'roe(-sac), kidney'	<i>tl'A'a:G</i> 'basket'
<i>mAdjiduhg</i> 'herring roe'	<i>ts'a:tl'</i> 'baby-basket' (or unclassified)
<i>LAXAlk'i:ngshg</i> 'dried salmon roe'	<i>ts'a:gL</i> 'bailer'
<i>-'uGL</i> 'heart'	<i>giyahX da: LAlah</i> 'bucket'
<i>-ts'u:</i> 'breast, teat'	<i>XuhLg</i> 'shovel'
<i>-ga'q'L</i> 'throat'	<i>kAwAsk'L</i> 'paddle'
<i>'i:nLch'iya'k'</i> 'rotten fish-heads'	<i>LAGAdAq'a'L</i> 'axe' (relativized verb)
<i>-sha:w</i> 'head'	<i>tAGL</i> 'hammer' (loan from Tlingit)
<i>ch'iyahd</i> 'hat'	

With artifacts, consideration should perhaps be given to earlier or aboriginal forms in addition to modern ones. Somehow to be added perhaps to internal organs is *-q'AX* '(body) fat', to 'round(ish)' *qAXah* 'moon', and *'i:nLxi:shg* 'red abalone', *'i:ndit'u:ch* 'black abalone'.

Note, of course, that this *l*-class of nouns does not by any means include all nouns referring to anatomy or artifacts of this sort. Several such are in fact listed as *d*-class (*d*<sub>4</sub>- and *d*<sub>5</sub>-) 'protuberance', 'roundish', such that it seems not easy to predict whether a roundish protuberance, for example, should be *d*- or *l*-class. In fact *-lA-qah* 'head' is *d*-, and *-sha:w* 'head (including hair)' is *l*- (cf. the special references to head-hair listed under *l*<sub>1</sub>- below). Note also, however, that several of these *l*-class nouns in (28) are themselves *l*-qualified: *'i:nLch'iya'k'* 'rotten fish-heads', *tl'A'a:G* 'basket', *LAGAdAq'a'L* 'axe', *'i:nLxi:shg* 'red abalone', *'i:ndit'u:ch* 'black abalone', *tl'A'a:G* and *'i:nLxi:shg* intrinsically so.

There are at least three other *l*-class nouns that do not seem to fit at all easily into the semantic area of the rest: *wAL* 'wedge', *'itl'* 'mountain', and *chi:sh-g* 'gravel beach', by

any contemporary reasoning. However, note a fourth item, *tsa*: ‘rock, stone’, is now regularly *dl*-class, but we have three items which show *tsa*: archaically to have been *l*-class: *tsa:le:Xquh* ‘octopus’ (transparently < *tsa:-LA-yaX quh* ‘pl stay (*quh*) under (-*yAX*) rock’), *tsa:-LA-q’AX* ‘jellyfish’ (‘rock-fat’), and *tsa:-LA-XAL* ‘gravel on beach’ (with -*XAL* ‘granular’?). Certainly *wAL* ‘wedge’ (if not of wood or iron), *’itl’* ‘mountain’, and *tsa:-LA-XAL* ‘gravel’ could all share the semantics ‘stone’, maybe even ‘roundish’. Conceivably all the first twenty items might fit into one group; it now seems that even the latter four might be included without stretching credibility too much; in fact, because of the archaic but clear inclusion of ‘rock, stone’, the latter four become somewhat difficult to separate completely, at least by the standards combining the first twenty. In fact, because of this, for the present purposes, the *l*-class nouns will not be separated into subgroups, except insofar as any separations are further supported by semantically corresponding distinctions below, especially in different verbal thematic qualifiers with the form *l*-. Thus, the noun-classificatory function of *l*- will remain one semantic subclass, named here *l*<sub>2</sub>- as realized as noun-class marks, to be taken up after the anatomical function of the qualifier, *l*<sub>1</sub>-, still more frequent than *l*<sub>2</sub>- in the Eyak corpus.

### *l*<sub>1</sub>-

*l*<sub>1</sub>- with anatomical semantics, ‘head, face’, is by far the largest group, and makes up the most frequent use of the *l*- qualifier. It may well be related in a way to part, but not all, of the semantic range of the *l*-qualified nouns listed in 28 under *l*-class nouns. This *l*<sub>1</sub>- is fully productive, attested with at least 100 verbs, too many to be fully listed here, extrinsic, specifying ‘head, face’. By far the most common is the basic pair *l-ta* ‘(sg) have head in position’ and *l-qu* ‘(pl) have head in position’, well attested in the dictionary. (See also *q-l*- in §17.10.4.6.) A sample listing of some others is given in (29).

#### (29) Verbs with *l*<sub>1</sub>

O-*l-L-ta’itl’* ‘kick O in head’

O-*l-L-tux* ‘spit on O’s face’

*ya:n’ch’ Adla:dAdja* ‘duck! (< ‘jerk your own head downward!’)

*’illu qa’ch’ ’i:nshdixa’ch’Lga’ ’Adi:nLit’inhinh* ‘he has a mean look’ (< ‘he has his face like his face is tied in an overhand knot’)

*’insdit’ich’Lga’ ’i:nLilinhinh*, nickname for wide-faced Chugach woman (‘she has a face like her face is propped [cheeks, with fish-drying prop]’, main verb Neuter imperfective stative *l-la’* ‘be facially’, stem conceivably related to *l*<sub>1</sub>-)

*’i:nsALts’u:xL* ‘he has a cyst on his face’ (< noun *ts’u:x* ‘barnacle’, cf. nominalizations below).



In a few such cases there may be a tendency for some  $l_1$ - to become thematized, e.g. *O-l-gu'k* 'punch O's face', on occasion 'punch O (anywhere)' (= *O-gu'k*), likewise *o-X O-l-ts'AX* 'hit O (in head, or otherwise) with o'.

In some cases the use can refer to hair of the head: *O-l-L-tsAX* 'cut O's hair' (as well as 'cut O in face'), *l-dA-si:ms* 'become grey-haired' (<'S's head becomes moldy'), *l-shitlg* 'become bald' (<'S's head becomes worn, abraded'), *l-LA-GAGshg* 'have curly hair'. With some basic or high-frequency stems,  $l_1$ - can be productive in unpredictable ways especially with preverbals: e.g. *l-le* 'act with face', *li'X l-le* 'smile, laugh'; *l-ta* 'have head in position', *o-k'ah l-ta* 'forget o' (with *o-k'ah* 'away from o'), which could be considered some degree of thematization of  $l_1$ -. Likewise, there are directives, with thematized "weak *l*" referable to 'head', *o-dahd O-'(-l)-tah* 'hear o', and three or more others, q.v. under  $l_9$ - below.

There are a few verbs with qualifier *l* that seem to be partly—or further partly—thematized from anatomical  $l_1$ -: *ya:n' l-Xa'tl'* fall over (hitting head?); likewise possibly, *o-ch' l-wehs-g* 'S, for lack of food, "collapse on" o'. There are two more verbs referring to grimaces, with stems otherwise unattested, which have thematized indefinite object and intrinsic *l*-, probably 'V-ing on something facially': *k'u-l-gu:nsh* 'squint', and *k'u-l-xwe't'* 'grimace, pout'. See further under  $l_9$ - and  $l_{10}$ - for themes in which thematized *l*- may have derived from  $l_1$ -.

One particularly difficult area of Eyak grammar is the status of qualifier *l*- with directives, inadequately documented. See below under  $l_9$ - for the difficulty of distinguishing weak *l*- from strong *l*-, which may involve several verb themes with  $l_1$ - 'face, head'. Some of these have further examples of partly thematized  $l_1$ -, e.g. *O-l-gu'k* 'punch O in face' which have also come to mean, potentially 'punch O', i.e. in any anatomical part, unless otherwise specified by another anatomical prefix. See under  $l_9$ - for further examples.

There are several lexicalized nominalizations with  $l_1$ -: *'i:nLsinh* 'rotted fish-heads', *'i:nLch'iyak'L* with the same meaning (cf. no lexicalization in *l-L-ch'iyak'* 'S's face smarts'), *'Adk'u:nLak'u'dL* 'towel' ('one wipes own face with it', with analogical *-L*), *'i:nsdile:L* 'crested cormorant' (< noun *le:L* 'strand/lock of hair', cf. *'i:nsALts'u:xL* 'he has a cyst on his face'); note also *XAlah sdlahGAyu:ga'* *'i:nLila:Xinh* 'duck species' (< 'has eyes like a white man', more exactly 'he is facially eyed like white man', Neuter imperfective derivation with anatomical nouns, 'have N like o', but here with  $l_1$ - also). Likewise most probably *da:X 'i:ndAxi'ts'* 'woodpecker' (< 'drums with its head on indeterminate object' or 'indeterminate object is drummed on with its head').

Being anatomical, there are only a few marginal or metaphorical uses of  $l_1$ - with adjectives: *ch'u:ch'AlAkih* 'small bird species' (< 'small snail head' rather than 'small snail', unclassified), *-l-t'u'* 'many people' (rather than the usual *-gl-t'u'*, thus 'faces'), *'Ad-Xa' lA-shiyah* 'ne'er-do-well' (no noun, 'bad-head for self', epithet), *k'u-lA-wAX-shiyah* 'old wide-face!' (morphologically not epithet).

There are many instances of anatomical  $l_1$ - in postpositional phrases (30), with both phonological and semantic complications. The phonological complications occur before coronal-initial postpositions, sometimes with analogical *-lA-* instead of *-n-* (perhaps

always optional), and with postpositions with initial *l*-, *-lA-lV*- (This is according to the general rule that *\*-nA-nV-* > *:-nV-*. See §6.3 for further discussion.)

(30) Anatomical *l*<sub>1</sub>- in postpositional phrases

*'i:n-dahd dixLile'gL* 'I'm resting my head on my hand' (lit. 'I have my hand pressed against my head', indirect reflexive)

*o:-n-dAG-d, o-lA-dAG-d* 'above o's head'

*:-n-da'* 'front of o's head, to o's face'

*k'u-n-da-'ch'* in reference to Russian Orthodox church or prayer ('[movement of hand] repeatedly to one's face')

*'i:n-da'-d wAX O-lA-t'e'* ~ 'wear over head, face'

*o:-n-tsa'* 'in front of o in canoe'

*'i:n-tsa'-d* 'bow of canoe' (nominalization)

*si-lA-tsin'-d* 'above my head (horizontally)'

*o-lA-Xa'* 'by o's head'

Thematized or partly thematized, but more or less clearly relatable still to 'head, face' are the examples in (31).

(31) Thematized *l*- qualifier still relatable to 'head, face'

*o-lA-Xahd* 'in o's opinion' ('away from o's head')

*o-lA-Xa:n'* 'across from, opposite, competing with, balanced against, avenging against o' (with *o-Xa:n'* 'entire length of o' and preverb *Xa:n'* 'finishing')

*-lAXe:'nah* 'partner' (probably < *\*-lAXa:n'-i:nah*)

*o-lA-γAq'* 'inside o's head'

*lA-γAq'* 'in voice quality' (preverb)

With *l*-initial postpositions we have the further rule *\*-nə-nV-* > *:-nV-*: *'i:na'-d qa'* *GAdAta'* 'take it off (e.g. dress) over your head!' (lit. 'take it up off from hanging down over head!', indirect reflexive, not 2s object), *o:-na'-q'* 'down over o's head, face' (with *o-la'* 'hanging down over o', cf. also preverb *la'q'* 'in thickness'), *o:-nah* 'around o's head' (*o-lah* 'around o'). With the combined postposition *o-la'-q'* ('hanging) down over o', and qualifier *l*<sub>1</sub>-, resulting in *(-):n-na'-q'(-)*, we have not only *'i:na'q'd wAX LA-t'e'* ~ 'wear O on head' ('make to be on own head'), but also *si:na'q' yAGAdAle:'* 'make it up to me!', *si:na'q' yAX 'ilAXdA:ch'k'* 'you (pl) mistreat me' ('walk about on my head', customary), with idiomatic productivity.

There is one postposition, hypothetical *\*o-lahd*, perhaps to be analyzed *o-lah-d*, that is attested only with qualifier *l*-, thus *o:-nahd*, probably with anatomical *l*<sub>1</sub>- (and *l*<sub>2</sub>-, for 'month', see below), meaning 'down over and covering o'. Problematical is *o:-nAX*

‘bothering o’, which could be from *o-l-LAX* ‘more than, too much for o’s head’, but cf. the following homophone. With non-syllabic postpositions, we have *o:-n-AX* ‘bothering o’ if from *o-l-X* ‘in non-punctual contact with o’s head’, *o:-nA-ch* ‘toward o’s head’, *o:-na’-q* ‘on o’s head’ (not \**o-lA-q*’ or \**o:-nA-q*’). There appears to be further relationship between anatomical *l*- and the postposition *-la*’ ‘hanging down over o’, perhaps also an etymological relationship \*(*-la*’), in the postpositions of comparison *o-lAX* ‘bigger than, beyond o’, *o-’u’X* ‘smaller than, short of o’, and *o-ga*’ ‘like, equal to, fitting o’. These are only partially documented, not systematically investigated, in *sila’ga*’ right size for my head’ (with *o-lA-ga*’ ‘like o (*l*-class)’ otherwise attested), *o-la’LAX* ‘too big for my head’, *o-la’u’X* (< *o-la’-’u’X*) or *o-lA-’u’X* ‘too small for o’s head’. This last alternative form confirms the presumable correctness of *o-lA-ga*’ and *o:-nAX* also as alternatives for the first two postpositions of comparison. It even casts further question, especially semantic, as to the motivation or origin of the variants with *-la*’- here.

One postposition, *o-lahdz* ‘in front of, out to sea from’, probably with *l*<sub>1</sub>-, compounded with reduced and nasalized *o-’e*’, itself undergoes stem-reduction to /:ndz/ in *o:-ndzi(n)*’- ‘forward of o (boat), forward of o (in boat)’, and *’i:ndzi(n)*’- ‘forward’.

See also *l*-qualified nouns, below, for further instances of *l*<sub>1</sub>- ‘head, face’.

## *l*<sub>2</sub>-

*l*<sub>2</sub>- will be used for the second most frequent semantic type of qualifier *l*-, found in verbs, adjectives, and postpositions in reference to the great bulk of *l*-class nouns, in the semantic area of ‘roundish organs, artifacts (also with handle), moon’ listed above (28). Though there is a vague similarity with some semantic areas of *d*<sub>1</sub>- for *d*-class nouns, the uses are generally distinct, considering the usually identifiable referents. These examples are generally straightforward, not thematized or intrinsic to the themes, even in verbs for phases of the moon.

At least a dozen *l*-class nouns are attested with classificatory *-ta* and *-’a* (cf. (9)).<sup>5</sup> Other themes which happen to be attested with *l*<sub>2</sub>- are presented in (32).

(32) Themes attested with *l*<sub>2</sub>-

<i>’i:nsLiduxL</i> ‘(paddle) drifted away’	<i>-k’a’d</i> ‘be in pain’
<i>’Aw kAwAsk’L ’u’li:le’g</i> ‘grab the paddle!’	<i>O-L-Gu</i> ’ ‘warm O’
<i>k’ut’a</i> ’ <i>O-L-t’e’</i> ~ ‘use O’	<i>-GAGsh-g</i> ‘be misshapen’
<i>O-tsu:x</i> ‘thrust O’	<i>-q’e’s</i> ‘be too tight’
<i>O-tsAX</i> ‘cut O’	<i>O-q’a:’sh</i> ‘straighten O’
<i>O-L-sid</i> ‘cause pl O to extend’	<i>O-Xahd</i> ‘drag O’

<sup>5</sup> For preferences between *-ta* and *-’a* see the dictionary under *-ta*, and more in Krauss 1968.

<i>l-dA-'ya</i> ‘(heart) beats’	<i>-dA-a'</i> ‘be of size’
<i>O-L-'ya</i> ‘handle O in container’	<i>'Aw'u'X li:Ldik'</i> ‘(oar) is shorter than that’
<i>-L(y)a</i> plural classificatory	<i>tAGL lAGAXe:L</i> ‘spider species’ (‘is carrying hammer ( <i>tAGL</i> ) on its back’, nominalization)
<i>O-L-ya:'</i> ‘handle O in pl acts’	
<i>-'a'</i> ‘(sg) extend’	

In one theme  $l_2$ - may be thematized, *l-(L-)da'ts'* ‘make basket decoration’, from *tl'A'a:G* ‘basket’, *l*-class. Themes referring to movement or phases of the moon generally do not have the noun *qAXah* ‘moon’, *l*-class, overtly, but have *l*- in the verb, which could be considered lexicalized or thematized: e.g. *Xu' l-t'e'* ~ ‘(moon) be full’, *dAqi:kih l-Le()* ‘(moon) be gone (new)’, *l-le* ‘(moon) be in phase’. Cf. *qAXah o-la'X l-'ya* ‘be a month pregnant’. See also *l*- for ‘moon’ with postpositions below.

$l_2$ - is attested with the five adjectives in (33).

(33) Adjectives with  $l_2$ -

<i>chi:shgAlAdzu</i> ‘nice gravel-beach’	<i>-lA-luhd-g</i> ‘few’ (probably analogical, cf. next)
<i>-(A-)lA-kih</i> ‘small’	<i>ya:-'a:nuhd-g</i> ‘few’
<i>'itl'AlAkuts'g</i> ‘small mountain’	<i>-a:'nAw</i> ‘big’

$l_2$ - is well attested in postpositional phrases (34), but with phonological complications and analogical irregularities where the postposition is non-syllabic, with initial coronal or *l*-. With postpositions with initial coronal the results are inconsistent, complicated by analogy, and not systematically or aggressively investigated

(34) Postpositional phrases with  $l_2$ -

a. Non-complicated:

- ch'iyahd-lA-ga'* ‘like a hat’<sup>6</sup>
- ts'u:lAk'ah sAle'gLinh* ‘is weaned’ (‘taken away from breast (*ts'u:*)’)
- k'u-lA-qa'* ‘between moons (at new moon)’
- o-lA-yAq'* ‘in o (*l*-class)’
- o-lA-ya'* ‘in o (with broad opening at top; *l*-class)’
- ts'a:tl'AlAya'X* ‘(movement) in a baby-basket’
- o-lA-'e:X* ‘in search of o’

<sup>6</sup> Here /d/ is least potentially released and /l/ is fully voiced; the orthography is marginally inadequate; a possible variant also presumably *ch'iyahd(')AlAga'*.

*tʃa:le:Xquh* ‘octopus’ (< *tʃa:-lA-yAX quh* ‘(pl) stay under rock’, archaically *l*-class)

*ʼa:na:*, numeral particle or postposition *o-a:* with *l*-class nouns

b. With non-syllabic postpositions:

*ʼu:d ʼulAd ʼAleʼg* ‘leave it (hat) there!’ (‘remove hand from (punctual contact with) it there!’)

*ʼu:nAd* ‘off it (hat)’ (= *ʼulAd*), *chʼiyahdʼa:nAd* ‘off a hat’

*chʼiyahdʼa:naʼtlʼ* ‘with a hat’

*ʼaʼd o-ʼuGLʼa:naʼtlʼ ʼidAleh* ‘it touches o’s heart deeply’

*tAGLʼa:nAchʼ = tAGLALAchʼ* ‘toward a hammer’, *ʼitlʼa:nAchʼ* ‘toward a mountain’, *ʼu:nAchʼ* ‘toward it (*l*-class)’

*ʼu:naʼqʼ* ‘on it’ (*l*-class), *tAGLʼa:naʼqʼ* ‘on a hammer’, *chʼiyahdʼa:naʼqʼ* ‘on a hat’, *chi:shga:naʼqʼ* ‘on gravel beach’, *ʼitlʼa:naʼqʼ* ‘on a mountain’

*tAGLʼi:nAX = tAGLʼa:nAX* ‘by means of a hammer’, *chʼiyahdʼa:nAX* ‘by means of a hat’ (twice, Lena, further indication that the *-i:nAX* variant is less correct), *kAwAskʼLʼa:nAX* ‘by means of a paddle’, *ʼu:nAX* ‘by means of it (*l*-class)’

c. With coronal-initial postpositions:

*chʼiyahdAlAda:d ya:nʼ GAtaʼ* ‘set it down by the hat!’

*tAGLAlAda:d ya:nʼ GAtaʼ* ‘set it down by the hammer!’

*ʼitlʼa:ndAGd* ‘above a mountain’

*ʼitlʼAlAta:s* ‘across mountains’

*ʼitlʼa:ntʼa:X* ‘inside a mountain’

*ʼitlʼAlAtʼaʼ* ‘behind a mountain’

*chʼiyahdAlAluʼ* ‘through (hole in) hat’ (?*chʼiyahda:nuʼ* not tested)

*ʼitlʼa:nsinh* ‘behind a mountain’

*ʼitlʼa:nchʼa:chʼ* ‘in the direction of a mountain’.

There is also the hypothetical *l*-initial postposition \**o-lahd* (if not < *o-lah-d*), attested only with *l*-qualifiers, *l*<sub>1</sub>- anatomical, above, and here *l*<sub>2</sub>- for ‘month’, as *o-:nahd* or *o-:nah-d* ‘month of o’, especially of course in month-names.

See below, under *l*-qualified nouns, for further instances of *l*<sub>2</sub>-.

### *l*<sub>3</sub>-

This constitutes a far lesser semantic category of *l*-qualifiers, very probably to include the one anatomical *l*-class noun *-qʼAX* ‘(body) fat’, listed earlier under *l*<sub>2</sub>-. This *l*<sub>3</sub>- is attested in a small class of verbs, referring to condition of body fat or its removal from hides: *l-LA-qʼAX* ‘be fat, plump (generally)’ (< noun *-qʼAX*), also causative *O-l-L-qʼAX* ‘fatten O up’. Further showing the thematic status of *l*<sub>3</sub>- are *O-l-L-tseʼ* ‘fatten O up’ (‘put flesh on O’, <

noun *-tse* ‘flesh, muscle’, unclassified), and *l-L-k'in* ‘be skinny, scrawny (generally)’ (with other qualifiers, but no *l-*, for specific body parts). In *la'q' l-cha'sh* ~ ‘skin is thick with fat’ (from adjective), *l<sub>3-</sub>* could refer to the fat itself. In the two verbs referring to the removal of fat from a hide, *l<sub>3-</sub>* is intrinsic: *O-l-sanh* ‘flesh O (sealskin)’, *O-L-duh* ‘flesh O (land-mammal hide)’. This may be the only semantic subgroup connected with or thematized from an *l*-class noun. That noun, *-q'AX*, is also the one which is the most difficult to connect semantically with the rest of the *l*-class nouns.

#### *l<sub>4-</sub>*

This is another distinct semantic subgroup, referring to growth, maturing, ripening, aging, attested with three stems. It could of course be connected with *l<sub>3-</sub>* ‘fattening’, so is listed next. It is not connectible with *l*-class nouns or *l<sub>2-</sub>*. Most fundamental is *l-xa* ‘grow’, with *l<sub>4-</sub>* intrinsic, also of course causative *O-l-Lxa-(g)* ‘raise O (human, animal, plant)’; see also *lixah* ‘grizzly bear’, *'i:LxAwah* ‘ribbon seaweed’, *ma:ya'X qa:nLxAwah* ‘pond-lilies’ under *l*-qualified nouns, listed also under *q-l-* in §17.10.4.6. Extrinsic thematic *l<sub>3-</sub>* is found with postural *O-'ya* ‘be involuntarily situated’ in *l-L-'ya* ‘be old’; cf. very interestingly *'Ad-LA-'ya* ‘be giant’, reflexive causative of the same without *l<sub>3-</sub>*), and note also *dAXunhyu:qa'(ch')* *q'Aw 'Adla:LA'ya:k* ‘among humans you “stay”’ (customary reflexive causative, with *l<sub>3-</sub>*, ‘cause yourself to grow old, with covert motive or pretense’). Further, note *dAlu'qa' la'yah* ‘boil, abscess’ under *l*-qualified nouns below, and *qehX l-dA-xa* ‘clog (closed)’, possibly to be classed under errative *l<sub>6-</sub>* below. Also extrinsic thematic *l<sub>3-</sub>* is found in *l-'mahd* ‘(berries) ripen’; see also *la'mahd* ‘berries’ under *l*-qualified nouns, and *-'mahd* ‘cook, be boiled, baked’, *O-L-'mahd* ‘cook O’; note also coincidentally, from Anna in text, with *l<sub>1-</sub>*, *ya' 'i:nsa'mahdL* ‘her head cooked completely’. This is very likely a gleeful play on words, not noted in either the 1970 or 1982 editions of Anna’s masterful version of Blind Man and Loon (Krauss 1982).

#### *l<sub>5-</sub>*

This is a fairly distinct subgroup, referring to emotional qualities or conditions, though for that reason it could possibly be relatable to *l<sub>1-</sub>* ‘head’ assuming that emotions were attributed to the head, which was not otherwise established, to my knowledge. Thus, with *l<sub>5-</sub>* intrinsically *l-L-gehG* ‘be lonesome’, *l-widj* ‘be ashamed’, *'Ad-l-LA-ki:nq'* ‘be sexually reserved’. With *l<sub>5-</sub>* extrinsically, *l-LA-ts'an'* ‘be stout-hearted’, *l-LA-ch'a:nG* ‘be faint-hearted’ (thematic negative of preceding), and perhaps here also, *l-dA-te* ‘be sated, full (of food)’, with *l-dA-* clearly not errative *l<sub>6-</sub>*.

#### *l<sub>6-</sub>*

This is one of only two *l*- qualifiers connected with a prefix outside the qualifier zone, namely the classifier *dA-* or *D*-classifier element of Zone D, in the errative 1 prefix string *l-D-*. (Errative 2 is represented by *d<sub>13-</sub>* alone, attested only with motion themes; the other

qualifier with an outside connection is  $l_9$ -, connected with the directive of Zone B.). Errative 2 is clearly of broader use than errative 1, being attested in at least some Action as well as Motion themes, not only the idea of ‘go wrong’, but also semantically broader, ‘misfortune’, intrinsic as well as extrinsic. It is intrinsic with at least one stem, in *l-dA-má* ‘go wrong, be ruined, be wrecked, often causative O-*l-l-má* ‘botch, make mess of, ruin, wreck O’. It is possibly intrinsic in *l-dA-ga*’, used with motion preverbs ‘clear the hell out, beat it’, very strong and contemptuous. Cf. the deverbalization *k’ulAgah* ‘corpse’ under *l*-qualified nouns, below. That stem is entered in the dictionary as separate from the stem *-ga*’ ‘tire, be wearied’. However, with the preverb *ya*’ ‘completely’ it has the same meaning as *l-dA-má*’, so that *l*- may in fact be extrinsic as part of the errative of a single stem *-ga*; cf. also *ya*’ *dla:dAga*’ ‘shut up!’, same, in combination with qualifier  $d_3$ - ‘oral’. Note also *l-dA-k’ahg* ‘play (with toys)’, under  $l_{10}$ -, conceivably an errative.

The other attestations of  $l_6$ - are extrinsic, given in (35):

(35) Extrinsic  $l_6$ -

*l-dA-a* ‘(sg) get lost, go amiss, get stuck somewhere’ (with *-a* ‘(sg) go (on foot)’)

*l-dA-’a’ch*’ ‘(pl) get lost, go amiss, get stuck somewhere’ (with *-’a’ch*’ ‘(pl) go (on foot)’)

*o-ya*’ *l-dA-’Adz* ‘fall (unsuspecting) into o’ (cf. *LA-’Adz* ‘jump’)

*yAq*’ *l-dA-a* ‘be startled; be hexed, tabooed’

causative O-*l-l-a* ‘hex, startle O’

O-’*l-dA-’e* ~ and O-’*l-LA-tsa*, both meaning ‘discountenance O’.

Several of these are with classificatory *-’a*: *l-dA-’a* ‘come to an end, extinction, wane away, (season) pass’, and with special frequency ‘all die off’ (e.g. in reference to the Eyaks themselves), causative O-*l-l-’a* ‘use O up, wipe all O out’, further with preverb *tl’aq*’ *l-dA-’a* ‘hurt self badly’, causative *tl’aq*’ O-*l-l-’a* ‘hurt, ruin O’. Cf. O-*l-(L-)’a* ‘gather O all up’ under  $l_{10}$ -, perhaps closely related or even at the origin of errative 2. Here probably also *l-dA-chahd-g* ‘(supply of food, fuel) run out’ (cf. *LA-chahd-g* ‘stagger’), and *qehX l-dA-xa* ‘(passage) be clogged’ (< *qehX* ‘closed’, *l-xa* ‘grow’, so ‘grow unfortunately/mistakenly closed’). Note further *l-dA-te* ‘eat one’s fill’, which looks like the errative of *-te* ‘(sg) lie prone’, though the semantics are not at all obvious. See possible further instances below under  $l_7$ -, and further instances in combination with  $d_3$ - ‘oral’ under analyzable *d-l* combinations.

This derivation was further investigated late with Marie, on May 2, 1997. In addition to *’i:nxsdiyahl* ‘[I’m] going around in circles because [I] lost my way’, when questioned for *’i:nxdiqehl* ‘[I’m lost (boating)]’ she agreed “that happens too.” However, when asked about an action theme, such as *\*’i:nxsdiki:nXL* ‘I made a mistake crying’, she laughed and rejected that. (The fact that these should have been *\*lixsdi-* rather than analogical *’i:nxdi-* presumably does not enter into her judgments.) She likewise rejected *\*wAX dla:xsdilil* ‘I misspoke’, *\*wAX ’i:nxsdilil* ‘I misdid’, suggesting instead *wAX dla:xsdimaL* ‘I botched

vocally'. Except possibly for this last, the previous three imply that errative 2 can be used only with motion verbs, or at least is not fully productive for Marie with action themes.

See further instances of errative 2 in the combinations *y-l-* and *d-l-*.

### *l<sub>7-</sub>*

*l<sub>7-</sub>* 'bend, twist' and *l<sub>8-</sub>* 'act with hook' will here be separate, in spite of some semantic similarity, because they are different morphologically and also distinguishable semantically. These two subgroupings could both be themselves considered the middle two sectors of a continuum *l<sub>6-7-8-9-</sub>*. *l<sub>7-</sub>* 'bend, twist' could, on the one hand, be connected with *l<sub>6-</sub>* in the same way as English *wrong* and *wring* are etymologically connected. At the same time, *l<sub>8-</sub>* 'act with hook' on the other hand, could be connected with the 'fold, move part of O' of *l<sub>9-</sub>*, with weak *l-* in directives, q.v. below. Of course neither *l<sub>7-</sub>* nor *l<sub>8-</sub>* are predictable, nor are they to be found with by any means all of the verbs referring to bending or hooking. *l<sub>7-</sub>* is found with two or three stems or "stem-groups", often optional (cf. weak *l* of *l<sub>9-</sub>*, though by no means the same options). It is also often difficult or impossible to distinguish sometimes from *l<sub>1-</sub>* 'head, face', perhaps partly thematized from that, but there are still some examples definitely not involving 'head, face'. In (*l*)-*q'Ash* 'be bent at an acute angle' (as diamond from square, trapezoid from rectangle), the *l-* seems preferred to or is more frequent than zero, causative O-*l-L-q'Ash*, but is not relatable to 'head, face'. In *qa'* O-(*l*)*GAts* 'wrench O up out' *l-* is probably not relatable to 'head, neck', but in *lah* (*l*)-*dA-GAts* 'wrench self turning around too fast', *lah* (*l*)-*dA-GAmAts* 'get crink in neck from turning head around too fast' (stem related to the previous one, gloss difference perhaps incorrect), not only might 'head, face' be involved, but also the errative 1 marking *l-dA-*. Likewise the latter but not 'head, face' may be involved in (*l*)-*dA-GAts* 'be twisted, warped', not a passive of basic O-*L-GAts* 'twist, wring O'. Finally, see also (*l*)-*dA-GAmAt'* ~ (form variable, uncertain, partly confused with -*GAmAts*) 'be twisted, contorted, puckered', where some forms are clearly associable with *l<sub>1-</sub>* 'face, head', but others not.

### *l<sub>8-</sub>*

This group with the meaning 'act with hook' is found intrinsically with two stems, O-*l-L-t'a'q* 'hook fish with small hook (e.g. trout)', and O-*l-L-k'a:sh* 'hook fish with handline and large hook (halibut, cod)'. Also with a third stem, extrinsically and with unclear transitivity and not with reference to fishing, *l-dA-Xe'tdj* '(hook) be hooked through (e.g. eyelet), causative O-*l-L-Xe'dj* 'put hook through (hole in) O'. Note also the nominalization *k'uqa'ch* 'i:ndXe'djg 'hook that goes through eyehole', and cf. 'iLu' *dA-Xe'dj-g* 'wrestle one another'.

### *l<sub>9-</sub>*

This is a special subgrouping for qualifier *l-* with the directive, and a rather complex one. See §15.9 on the directive verb derivation. This subgrouping is mixed semantically. In addition to its meaning in the directive, in some cases it may include thematically the mean-



ing for at least two of the subgroups above,  $l_2$ - ‘head, face’ and  $l_{7/8}$ . Moreover, it is highly marked in its morphology. At the same time, this complexity was not systematically investigated in the field, so that some space will need to be devoted to philological and statistical investigation the corpus, at least that of the ledger.

Morphologically, not only is  $l_9$ - associated always with the directive, but because of that, here under  $l_9$ -, we must distinguish also between weak  $l$ - and strong  $l$ -. Weak  $l$ - can be deleted under certain conditions, whereas strong  $l$ - cannot be deleted. These conditions will be described below. Though weak  $l$ - is associated only with directives, not all  $l$ - qualifiers in directives are weak. (Only the first 4 of the 8 semantic groups of directives show any  $l$ - at all, i.e. 23 of the first 55, of the total of ca. 90 attested directives.) For distinguishing always between weak and strong  $l$ - in those 23 cases, the documentation is in fact inadequate, especially for about half of them, mainly in directive group 1.

Weak  $l$ - is written “(l-)” in theme notation. The main environments in which weak  $l$ - may be deleted are before  $s$ - perfectives and/or the vocalic or + $D$ - classifiers,  $dA$ -,  $di$ -,  $LA$ -,  $Li$ -. Phonological motivation for these deletion conditions is not at all clear. The deletion occurs equally whether the  $l$ - is extrinsic or intrinsic. In fact, where this weak  $l$ - is intrinsic, it could well be viewed instead as epenthetic rather than deletable. Thus e.g. in  $O$ -’-( $l$ -)’ $e$  ~ ‘call  $O$ ’, so ‘ $u$ ’ $li$ : $x$ ’ $eh$  ‘I’m calling it’,  $s$ - perfective ‘ $u$ ’ $lisi$ ’ $anhL$  ‘I called it’, but the latter varies freely with ‘ $u$ ’ $si$ ’ $anhL$ . This alternation could allow the semantically unmotivated or unidentifiable disappearing  $l$ - to be viewed as part of an allomorph - $u$ ’ $l$ - of the directive, motivated in the same way as “phonological”  $l_{10}$ - or “epenthetic  $l$ -” (e.g. \* $Vn$ ’ $V$  >  $Vl$ ’ $V$ ), q.v. §17.10.4.1. Cf. also in this connection especially the Athabaskan directive, which is often followed by or associated with the qualifier \* $n\partial$ -, e.g. in the Koyukon conative prefix-string - $u$ - $n\partial$ -. See below in this section for further information on the rules or rather statistics of the deletion of weak  $l$ -.

The inadequate documentation for strong/weak  $l$ - is partly due to poor record of negative responses in the fieldwork, poor record or memory of how much was asked. There is, however, in the dictionary, at least one record showing that strong  $l$ - can occur with directives, from  $xu$ ’ $lisLitsahLinh$  ‘he stared piercingly at me’, from Lena, actually with the comment that she rejected a proposed \* $xu$ ’ $sLi$ [ $tsahLinh$ ], that evidently from the theme  $O$ -’- $l$ - $LA$ - $tsa$  ‘stare piercingly at  $O$ , stare  $O$  down’ (impolite act). We happen to have what is a minimal pair for that, with another theme ‘ $u$ ’ $sLitsahL$  ‘it became indistinctly visible’ from  $O$ -’-( $l$ -) $LA$ - $tsa$  ‘ $O$  be partially visible’, itself the directive form of  $O$ - $LA$ - $tsa$  ‘be visible’,  $sLitsahL$  ‘it became visible’. This latter theme shows weak  $l$ -, which could be interpreted as merely epenthetic, unmotivated except as part of the directive. The former ‘stare down’ theme is intrinsically directive, there being no \* $O$ - $l$ - $LA$ - $tsa$  attested (and for which an attempt was very probably made to elicit). The strong  $l$ - of that is most probably  $l_1$ - ‘face, head’. It is listed in group 3 of directives, with semantics related to perception, but it may well belong in directive group 1 ‘strike at  $O$ ’. There is an apparent synonym  $O$ -’- $l$ - $G$ - $dA$ -’ $e$  ~ ‘stare piercingly at  $O$ ’, attested only in  $xu$ ’ $lAGAdA$ ’ $inhinh$  ‘he’s staring me down’. Though this is a form in which the  $l$ - is very unlikely to delete even if weak, the  $l$ - of this theme

is to be considered strong merely because of the close conformity to O-*'l-LA-tsa* of this theme and its derivation.

For all the rest of the *l*-qualifiers definitely in directive group 1 'strike at O', we lack adequate documentation to prove the *l* is strong, but it is definitely possible they all have strong *l*.

There is a further complication, potentially, in that the *l*<sub>1</sub>- 'head, face' may become partly thematized, as e.g. in O-*'l-gu'k'* 'punch at O's face', also 'punch at O' (in face or anywhere, unless other anatomical part is specified, presumably because the default place to punch is the face). This directive is clearly derived from O-*l-gu'k'* 'punch O in face; punch O', itself derived from O-*gu'k'* 'strike O with fist, punch O'. For the directive, the only form we have in which the *l* is likely to be deleted, if weak, is the *s*-perfective *xu'lAsAgu'k'Linh*, glossed 'he punched at me'. However, since we have no record or memory that *?xu'sAgu'k'Linh* was tested and rejected, we have no proof that this *l* is strong rather than weak. Nor was a potential difference tested for strong vs. weak *l* in 'he punched at my face' as opposed to 'he punched at me'. If the question had been aggressively pursued, and the *l* is in fact weak, the chances are of course the *l* would delete much less readily where 'face' specifically is meant.

Probable indication or some support for a probability that the *l* in directive group 1 'strike at O' are strong is in the cumulative statistics for similar themes, in this group of directives. For (o-X) O-*'l-L-ts'AX* 'strike at O (with o)', the only criterial forms (i.e. in which *l* can be deleted) are the three synonymous phrases *tsa:dli:nAX xu'i:nsALts'AXLinh*, and *tsa:dli:nAX xu'lAsALts'AXLinh* and *xu'lAsALts'AXLinh*, all 'he threw a stone at me', again *xu'lAsALts'AXLinh* 'he threw a stone at my face', also passives *xu'i:[n]sdits'AXL*, *xu'lisdits'AXL* 'a stone was thrown at my head', (or rather 'my head had a stone thrown at it'). That totals six criterial instances with *l* not deleted. Cf. O-*l-L-ts'AX* 'strike at O's head; strike at O', O-*L-ts'AX* 'strike at O'.

There are two further such themes, with fewer criterial attestations: *xu'lAsALK'i't'L* '(cat) scratched at my face' (cf. O-*'l-L-k'in't'* 'scratch at O', O-*k'in't'* 'scratch O'), and *xu'lAsALts'in'tl'gL* 'he slapped at my face' (cf. O-*l-L-ts'in'tl'-g* 'slap O's face, slap O', O-*L-ts'in'tl'-g* 'slap O'). This adds two more instances in which this *l* is not deleted, for a total of eight such instances, but none of *l* deleted.

Finally, there is one group 1 directive theme in which the *l* is evidently thematic, not with *l*<sub>1</sub>- 'head' but *l*<sub>8</sub>- 'act with hook'. Here the *l* is intrinsic, the directive theme derived from a theme also with *l* in the non-directive. Here the *l* is even more likely to be strong, though the only instance we have is non-criterial, *k'u'lAGAt'a'q'* 'go fishing (with small hook, e.g. for trout)!' (cf. O-*l-t'a'q'* 'hook fish (e.g. trout), *t'a'q'-L* 'small type of fishhook').

The rest of the directive groups with *l* (i.e. *l*<sub>2,3,4</sub>) have an *l* that is demonstrably or proven to be weak *l*, or perhaps in some cases "weakened" *l*. This kind of *l* is perhaps originally from *l*<sub>1</sub>- 'head', especially in group 3 directives related to perception, or very

probably from  $l_{-7/8}$  ‘bend/hook’ with group 2 directives ‘move part of O’.

With group 2 directives and  $l_{-7/8}$  ‘bend, hook’, and preverbal ‘*lCh*’ ‘toward each other’ or ‘*ilt’a’X*’ ‘behind each other’ we have  $O\text{-}'-(l\text{-})(L\text{-})ta$  ‘fold O’. These are demonstrably with weak *l*- as in passive Neuter perfective ‘*u’lidityahL*, or ‘*u’sdityahL*’ ‘it’s folded’, also (not passive) ‘*u’siLtahL*’ ‘I folded it’ (three such instances). For that one the corresponding theme is  $O\text{-}'-(l\text{-})L\text{-}ya\text{:}$  ‘fold O in multiple acts’, we have only the passive ‘*u’lAdAya\text{:}*’ ‘they’re being folded one after another’, with *l*- not deleted in a deletable environment. Here again, because of full conformity with the preceding theme, this *l*- is presumed weak. Likewise with the theme  $O\text{-}'-(l\text{-})L\text{-}(y)a$  ‘fold pl O’ we have only ‘*lCh*’ ‘*u’lisiLahL*’ ‘I folded them’, *l*- likewise presumed weak.

Further with group 2 directives, for preverbal plus  $O\text{-}'-(l\text{-})L\text{-}'e'dz$  ‘fold O with foot’, we have only non-criterial ‘*lCh*’ ‘*u’li:L'e'dz*’ ‘fold it with your foot!’, *l*- presumed weak. For  $O\text{-}'-(l\text{-})'ya$  ‘one side of O droop’ we have only probably non-criterial (*-D*) Neuter perfective ‘*u’li\text{:}yahL*’ ‘one side of it droops’; the *l*- here is probably weak, if the resulting ? ‘*u’yi'yahL*’ is permissible, but this was not tested.

We do have two more themes of this type, on the other hand, where the *l*- is demonstrably weak:  $O\text{-}'-(l\text{-})L\text{-}q\text{:}a\text{:}sh$  ‘crease O’, e.g. ‘*u’li:Lq\text{:}a\text{:}sh*’ ‘crease it!’, but ‘*u’siLq\text{:}a\text{:}shL*’ ‘I creased it’ (cf.  $O\text{-}l\text{-}L\text{-}q\text{:}a\text{:}sh$  ‘press O flat’); and  $yAX\ O\text{-}'-(l\text{-})chich$  ‘snap O (e.g. twig) incompletely apart (so it becomes hinged)’,  $yAX\ u\text{'sichi'ch}L$  ‘I snapped it’ (cf.  $yAX\ O\text{-}chich$  ‘break O in two’). In the first of these the *l*- is intrinsic thematic to the non-directive, evidently becoming “weakened” in the directive, whereas in the second the *l*- is not present in the non-directive, so found only in the directive derivation thereof, partly optional and having an “epenthetic” appearance even, as part of the directive prefixation itself.

With group 3 directives related to perception, we have five themes with *l*- attested, very possibly all  $l_1$ - ‘head’ in origin. In one of these, ‘know’ the *l*- is intrinsic along with the directive, but in three others the *l*- is intrinsic to the directive only, itself derived from themes with semantics related to head movement, where the  $l_1$ - is extrinsic. The theme in which the *l*- is intrinsic along with the directive is  $O\text{-}'-(l\text{-})L\text{-}ga$  ‘know O’. This is of course abundantly attested, with many instances of deleted *l*-, e.g. in ‘*u’iLga’L* ~ ‘*u’lisiLga’L*’ ‘I came to know it’; statistics for some of these will be shown below. There are three others with *l*- intrinsic to the directive only, two of which are also abundantly enough attested to contribute to the statistical table below. Those two are  $o\text{-}dahd\ O\text{-}'-(l\text{-})ta$  ‘hear o’ (Neuter imperfective), lit. ‘have head directly pressed against o’ and similarly  $o\text{-}lah\ O\text{-}'-(l\text{-})ta$  ‘find out about o’ (Active imperfective) ‘have head directly around o’, with plentiful instances of Active perfective or Neuter imperfective, active or passive, ‘*u’sAtahL*’ as well as ‘*u’lAsAtahL*, ‘*u’dityah*’ as well as ‘*u’lidityah*, etc. The statistics of the deletion are both interesting and puzzling, as shown below. For the ‘hear o in multiple acts’ we have only one criterial instance,  $qa\text{:}dahd\ u\text{'qu'lAdAya\text{:}}$  ‘we’ll be heard (one after another?)’, where the *l*- is presumed weak. Finally, for  $O\text{-}'-(l\text{-})LA\text{-}tsa$  ‘become indistinctly visible’ we have ‘*u’sLitsahL*’ ‘it became indistinctly visible’, with demonstrably weakened *l*- (cf.  $O\text{-}l\text{-}LA\text{-}tsa$

‘become visible’), noted above as part of a minimal pair with group 1 directive theme with strong *l*. This may prove that the “epenthetic” appearance of weak *l* in many cases is indeed illusory, but it could well provide an analogical origin of the \**nə*- so often found in association with the Athabaskan directive.

With group 4 directives related to control, we have four themes, all with *l*-demonstrated or proven to be weak. In two major themes clearly of this group both the directive and the *l*-are intrinsic. One was mentioned above, O-’-(*l*-)*e*~ ‘call O’ (as in English or French, ‘call O; call O C’), with many instances of ‘*u*’*sA’anhL* as well as ‘*u*’*lAsA’anhL*, both ‘called him’, for example, but, for some reason many instances of ‘*Adu*’*dA’eh* ‘he is named’ and none of presumable acceptable ‘*Adu*’*lAdA’eh*. For this see the statistical table (17.4).

The most frequent theme of all in this group is O-’-(*l*-)*L-Xa*’ ‘make O C’ (the suppletive causative of C-*Le*(’) ‘be C’), which in a sense is combinable with C *da*’-(*l*-)*Xa*’ ‘have C’ with uniquely irregular *da*’- instead of ‘*ida*’- as indeterminate object. Here we have many more instances of ‘*u*’*sALXA’L* than of ‘*u*’*lAsALXA’L*, both ‘made’, and more of *da*’*sALXA’L* than of *da*’*lAsALXA’L*, both ‘got’; see the statistics in (17.4).

In O-’-(*l*-)*L-ts’inhG* ‘mark O’ the intrinsic status of the *l*- is less clear, because in the non-directive O-(*l*-)*L-ts’inhG*, much less frequent than the directive and with the same meaning, the *l*- may be extrinsic as shown by *XAdisdits’inhGL* ‘it (log. *Xd*-class) has been marked’; but such an *l*- is unmotivated, except e.g. in O-’-*l-L-ts’inhG* ‘mark O (*l*-class)’. Perhaps more likely the form is in error for *XAdla:sdits’inhGL*, combining the qualifiers, as the *l*- cannot be literally weak, only perhaps optional, in a non-directive. The attested criterial forms attested are *k’u’lisdits’inhGL* ‘something has been marked’ (e.g. of blazed trail), and ‘*u*’*sdits’inhGL* ‘it’s been marked’, demonstrating weak *l*-. Note also ‘*Adu*’*yAxLAts’inhG* ‘I marked my hand’ (cheating at cards), probably with deletion of weak *l*- in combination with anatomical qualifier *y*-. Cf. other forms below, after the statistical table, showing some other qualifiers combining with this weak *l*-.

Finally, we have the reflexive theme ‘*Ad-u*’-(*l*-)*dA-ta*’ ‘have fish being smoked’, also in group 4 directives related to control (it was decided, rather than group 2 ‘fold’). Here we have six instances with more or less thematized future (interestingly and idiomatic) with *l*- not deleted, ‘*Adqu*’*lAdAtah* or probably personally inflected variants like ‘is smoking fish’ and none, it happens, with *l*- deleted ‘*Adqu*’*dAtah* (or ‘*Adu*’*qu*-). At the same time we have one each of Neuter and Active perfective with *l*- deleted, ‘*Adu*’*xditahL* ‘I have fish smoking’, and ‘*Adu*’*xsditahL* ‘I smoked fish’; likewise two instances of the usitative nominalization *qi*’ ‘*Adu*’*dAtah* ‘place where fish are smoked’ (= ‘*Adqu*’*li:ta’L* ‘smokehouse’). These statistics are not included in the statistical table below, but would certainly add to the inconsistency shown there. In fact they seem quite typical of that inconsistency.

For some reason, not phonological, but in part morphological, nearly all deletion of weak *l*- occurs before the perfective prefix *s*- (positive Active perfective, but not negative) and/or before +*D*-classifiers. Statistical details in the documentation of Active perfective

positive and negative +/-D with weak *l-* were investigated only in the writing of the grammar, not in the field. The most abundant statistics for this are available in the documentation of the five themes in (36), for each of which we have well over ten criterial instances, as detailed in Tab. 17.4.

(36) Common themes with weak *l-*

- O-ʼ-(*l-*)*L-ga*ʼ ‘know O’  
*o-lah* ʼ*u-*(*l-*)*ta* ‘find out about o’  
*o-dahd* ʼ*u-*ʼ-(*l-*)*ta* ‘hear o’  
O-ʼ-(*l-*)*L-Xa*ʼ ‘make O C’, *dA-*ʼ-(*l-*)*L-Xa*ʼ ‘have O’  
O-ʼ-(*l-*)ʼ*e* ~ ‘call O’

It is presumably clear that deletion of weak *l-* is limited to positive *s-* perfective and/or with +D, but not clear why under those two particular conditions.

One exception, Lena’s acceptance of ʼ*u*ʼ*xiLgah* = ʼ*u*ʼ*lixilgah* ‘I know’ must be a tired lapse. Another exception, counted in the table below, is the deleted *l-* in the negative Active perfective of ‘know O’. Negative Active perfective with weak *l-* is seemingly always Vʼ*LA(x)s-* (twelve times), but once Lena’s *dik*ʼ *q*ʼ*e*ʼ ʼ*u*ʼ*xsLAga*ʼ*LGin*h ‘I didn’t recognize him’ (together with other incorrect forms, also with +D in a transitive (?)) might be another tired lapse. Or perhaps that is allowed because of *LA-* classifier, and/or is connected somehow with rule of /A/ > /i:/ expansion with no intervening syllable before the stem. There is probably no attestation of -*u*ʼ*i:nsDA-* for the Active perfective negative. There may be some connection also between this and /A/ > /i:/ expansion in -D directive and future. E.g. *dik*ʼ ?ʼ*u*ʼ*sLAga*ʼ*LGin*h ‘it didn’t get learned of’ may be acceptable, but perhaps less likely, also *dik*ʼ \*ʼ*a*ʼ*sLga*ʼ*LGin*h ‘he didn’t learn of it’.

**Table 17.4:** Frequency (number of tokens) of attestation of Active perfective positive and negative +/-D with weak *l-*. (All 18 instances of ‘call’ in +D, no *l-* are reflexive.)

	Ni+D		Act. Perf. (pos)		Act. Perf. (neg)	
	with <i>l-</i>	no <i>l-</i>	with <i>l-</i>	no <i>l-</i>	with <i>l-</i>	no <i>l-</i>
‘know’	6	3	2	4	0	1
‘find out about o’			0	19	3	0
‘hear o’	5	12	7	7	6	0
‘make/have’	5	17	5	48	1	0
‘call’	2	18	8	6	2	0
Total	18	40	22	84	12	1

Some “patterns of inconsistency” may be discerned in Tab. 17.4. In the +D Neuter and Active imperfectives, ‘know’ seems to be reversed by the other three, in which the *l-* is deleted more often than not, most extremely so in the reflexive of ‘call’ (18-0).

In the positive Active (*s*-) perfectives the *l*- seems generally to be deleted also more often than not, to a higher degree than in the *+D* imperfectives, but by no means in all five themes. Especially in ‘find out’, the *l*- seems always (19-0!) to delete, in ‘make/have’ nearly always, in ‘know’ more often than not, in ‘hear’ half the time, and in ‘call’ less often than not.

These statistics cannot in full be lexically determined. They are certainly not determined by the phonology as such. In fact it appears that the factors shaping the statistics are indeed certain morphological factors in certain lexemes, independently, but in combination. For example, generally, where deletable, weak *l*- is deleted more often than not, 124 times to 40 in the positives, but in the Active perfective negative that is almost never the case, 12 to 1, and the one instance of deletion may be an error. Attributing some of the significant statistics merely to “lexical determination,” i.e. to particular themes over others, cannot be accurate. Deletion or retention of weak *l*- may be determined more by certain inflectional or derivational (?) subsets of a theme or verbal lexeme. Such is evident most strikingly in the reflexive Active imperfective *+D* of ‘call’ which always happens to be *'Adu'(x)dA'eh*, 18 times, never happening to be *'Adu'LA(x)dA'eh*, while the passive *+D* forms happen both times to be *xu'lAdA'eh* ~ *'u'lAdA'eh*.

This table, as noted above, could be expanded somewhat, both with more themes and more inflectional forms, e.g. future of ‘make/have’ with *l*- two times, and without *l*- four times; or with the statistics of ‘smoke fish’ or of ‘throw at’, above. The accumulation of the rest combined, however ragged, might add more pattern to these statistics. Also perhaps breakdown by speaker and/or elicitation vs. text might help some, or in fact make more complication.

No active investigation was made in the field about the deletion of weak *l*- in combination with other qualifiers. However, we do have some forms showing that, with the possible exception of *dl*-, weak *l*- may delete. Note *'Adu'yAxsLits'inhGL* ‘I marked my hand’ above, with weak *l*- deleted in *y(l)*-, *s*- perfective and *+D*. With the plurality emphasizer *q*- we have both *'iLch'u'qa:[n]ditahL* ‘they’re folded together’, with weak *l*- retained, and *didu'X'u'qAsiLXa'L* ‘I almost did them in’, with weak *l*- deleted. With *IX*- we have *hu:l'u'lAXAsiLXa'L* ‘I sold them (berries)’, with weak *l*- deleted. Finally, with *'i:lih*- ‘mentally’ we have *'Ashdih'Adqe:lihLAXah* ‘you’ll lose consciousness’ from Anna in text (36.20), first repeated by Lena as *-qu'lih-*, which Lena then corrected to *-qe:lih-*. The first is probably wrong, as 2s with *+D* should be zero, so correct would be *'Ad(u')qu'lALA-*; *'AdqelihLA-* is doubly interesting: it deletes the irrealis entirely in deleting the *-u-*-, *'Ad(u')qe:lih-*, and deletes weak *l*- of *-qe:lih(LA)LAgah*.

#### *I*<sub>10</sub>-

This group is reserved for singletons, i.e. *l*- qualifiers in verbs that do not seem to fit clearly in any of the preceding nine groups. With not really eight themes, this is indeed a small residue for a qualifier as complex as *l*-. Presumably four more instances might be added

from *l*-qualified nouns, for which see §17.10.4.2. The most frequent theme with qualifier  $l_{10}$ - is semantically unique *l-qu* ‘(pl) run’, nevertheless with extrinsic qualifier (cf. *-qu* ‘(pl) sit, stay’, *-da* ‘sg sit, stay’, but no *\*l-da* ‘(sg) run’, rather *X-d-l-’ya* ‘(sg) run’). See also *q-l-* in §17.10.4.6. For *O-l-qa* ‘dissuade O, make O inactive’, often repetitive, there is no other stem *-qa* that seems clearly relatable; conceivably  $l_1$ - ‘head’ is involved. Much more likely derived from  $l_1$ - is *qa’ O-l-(L-)’a* ‘surprise O pleasantly’ (‘lift O’s head up out’, *qa’* also ‘suddenly’; cf. *ta’ yAX O-l-(L-)’a* ‘lower O’s head in water, baptize O’). See under  $l_1$ - and  $l_9$ - for further verbs where that appears partly or heavily thematized. Likewise with intrinsic *l*- are three themes with stem otherwise unattested: *l-dA-k’ahg* ‘play (with toys), conceivably errative; and *O-l-L-ga:G* ‘mix O with water’. The latter shows the only *l*- that might refer to water, for which cf. the qualifier combination *g-l-* ‘liquid’. The third such is *O-l-L-wa’* ‘grind O’, possibly relatable to ‘mix O with water’, if instead the meaning of this *l*- has to do with ‘reducing the solidity of a substance’. Therewith *ts’u:-lA-wa’* ‘ice cream’ (‘grinding of milk (*ts’u:*)’). The remaining themes with  $l_{10}$ - all have extrinsic *l*:- *o-wahd’ Ad-l-LA-Xu’G-g* ‘tug hard at O’, reflexive repetitive apparently with thematic *l*- (cf. *LA-Xu’G* ‘exert self’), and finally, *O-l-L-’a* ‘gather O all up’, with various preverbals, some with the effect of ‘pillage, consume’, likewise *O-l-L-ya:* ‘gather all up in pl acts’, which may be at the origin of the errative 2 prefix string *l-D-*.

#### 17.10.4.2 *l*-qualified nouns

##### $l_1$ -

There are at least nine nouns with intrinsic qualifier  $l_1$ - (37), clearly referring to ‘head, face’ with otherwise unattested stem.

##### (37) Nouns with intrinsic qualifier $l_1$ -

<i>-lA-du:ts’</i> ‘skin on seal’s face’	<i>-lA-Ga:nsh</i> ‘lower part of face’
<i>:-n-da:</i> ‘face’	<i>-lA-Gu:G</i> ‘inside of fish forehead skin’
<i>-n:-dAleh</i> ‘horn, antler’ (probably < <i>l-dA-leh</i> ‘head made into it’)	<i>-lA-qah</i> ‘head’
<i>:-n-ch’it’</i> ‘forehead’	<i>-lA-quhL</i> ‘cheeks’
	<i>-lA-wahsq’</i> ‘temple (of head)’

There are also at least seven with extrinsic  $l_1$ - ‘head, face’.

##### (38) Nouns with extrinsic qualifier $l_1$ -

<i>:-n-tah</i> ‘fish head skin’	<i>-lA-k’u’t’</i> ‘veins of temple’
<i>:-n-til’in’ts’G</i> ‘crown, top of head’	<i>-l-Gu’ts’</i> ‘dandruff’
<i>-lA-ch’u:ch’</i> ‘soft part of cheek’	
<i>:i:Lch’iya’k’</i> ‘rotten fish heads’	<i>-l-Xu’</i> ‘head hair, facial hair’

Note that two of the nine with coronal-onset stem do not follow the  $l \sim n$  rule, namely *-lA-du:ts'* and *-lA-ch'u:ch'*.

### *l*<sub>2</sub>-

There are at least nine nouns or noun phrases with extrinsic *l*<sub>2</sub>- qualifier (39) clearly as class-mark of the object or postpositional object of compounds or reference to *l*-class nouns.

- (39) Nouns with extrinsic qualifier *l*<sub>2</sub>-  
*tAGL'AlALte'* 'hammer handle'  
*'itl'a:ntl'in'ts'G* 'mountain summit'  
*'Aw'a:ntl'i'ts'G* 'summit of it (mountain)'  
*'itl'AlAqe'L* 'Mountain-Woman'  
*'i:nLxi:shg'i:nLts'Alih* 'abalone shell'  
*'i:ndit'u:ch'* 'black abalone' (itself *l*-class)  
*q'Ama:LAk'i:ngshg* 'dry roe'  
*-lAq'a'* 'edge (of axe-blade); top (of ridge of mountains)'  
*-lAwa'L* 'rim, edge'  
*tsa:LAxAL* 'gravel on beach' (archaic class-mark for *tsa:* 'stone')  
*tsa:LAq'AX* 'jellyfish' (lit. 'stone-fat', in Rezanov 1805).

A special case is *ch'iyahd'AlAga'L* 'old worn-out hat', with a unique form from verb *-ga'* 'wear out, tire' serving as adjective.

Less clearly with reference to *l*-class nouns are two noun phrases with stems that are otherwise unattested, but which seem to refer to *l*<sub>2</sub>- class nouns of the type 'roundish internal organ': *k'u:ntuh* 'salmon milt', *k'u:ndza'L* 'semen of king salmon'.

### *l*<sub>4</sub>-

Several nouns, nominalizations, or deverbalizations are derived from verbs with *l*<sub>4</sub>- 'grow, age' as mentioned above under *l*<sub>4</sub>-.

- (40) Nouns, nominalizations, deverbalizations derived from verbs with *l*<sub>4</sub>- 'grow, age'

<i>la'mahd</i> 'berry'	<i>'i:LxAmah</i> 'bracket fungus'
<i>lixah</i> 'grizzly bear'	<i>ya:nu' 'i:nLxAmah</i> 'sponge'
<i>'i:nLxAwah</i> 'red ribbon seaweed'	<i>'i:nsALyahLinh</i> 'old person', <i>la'yah</i> 'old age', <i>dAlu' qa' la'yah</i> 'abscess'
<i>ma:ya'X qa:nLxAwah</i> 'pond lilies'	



## Others

One deverbalization is derived from a theme with errative 2  $l_6$ -,  $k'u\text{!}Agah$  'corpse', from  $l\text{-}dA\text{-}ga'$  'clear the hell out', or better, both are derived from the same theme.

A few more nouns have an intrinsic qualifier  $l$ -, stems otherwise unattested, which is not clearly identifiable with any of the above semantic fields, especially, because no meaning can be identified for the stem alone:  $k'u\text{:}nchiyah$  'scissortail',  $'i\text{:}nLk'a't$  'sea urchin',  $\text{-}lAwa'L$  'rim, edge', and two nouns both referring to poles:  $lAGAshg$  'pole, support',  $'i\text{:}dzinhG, k'u\text{:}ndzinhG$  'tent pole',  $lAGAshk'L$  'pole'. The same is true for two postpositions,  $o\text{-}lA'a:g$  'mid, middle of, half of o', and  $o\text{-}lA'e$ : 'different from', as in  $'Aw'lA'e$ : 'different, strange thing'. These should presumably be added to the small number of  $l_{10}$ - qualifiers.

### 17.10.4.3 Phonological or epenthetic $l$ -

In a small number of noun compounds a  $\text{-}lA\text{-}$  appears that has the appearance of the qualifier  $l$ - but for which there is no semantic or morphological motivation, but rather a historical phonological one. The clearest example is probably  $\text{-}qa'\text{-}lA\text{-}ehd\text{-}G$  'husband's sister' (wife speaking). The origin of the  $\text{-}lA\text{-}$  in this (archaic) compound must be that  $\text{-}qa'$  'husband' in PAE was  $*\text{-}q\text{ə}ŋ^y'$ , with metathesis of nasality and  $\text{'}$ , thus  $\text{-}n'$  became  $\text{-}n\text{-}$ , then  $\text{-}l'$ . The same is historically transparent in  $tsi'\text{!}ahl$  'pillow; comb', from  $*tsin'ahl$ ; cf. Eyak  $\text{-}tsin'$  'nape', Athabaskan  $*\text{-}tsi'$  'head',  $*tsi'$  'at 'pillow'. Though  $\text{-}tsin'$  'nape, neck' in Eyak is now usually  $g\text{-}d\text{-}l$ -class, note also the epithet  $tsi'\text{!}Akih$  'small-nape', and postpositional  $o\text{-}tsin'\text{!}AXa'$  'by o's head',  $o\text{-}tsin'\text{!}AyAq'd$  'inside, back of o's head, nape', Rezanov (1805) even having  $кацыниехтъ$  (<katsyniekht>) 'затылокъ' (<zatylok>) ('back of head') possibly still  $qa\text{:}tsin'\text{!}AyAq'd$  but more probably  $qa\text{:}tsi'n\text{!}AyAq'd$  'our/ human napes'. Another obvious instance is  $\text{-}qa'\text{!}A'ehd$  'brother-in-law' < 'husband's wife' <  $*\text{-}q\text{ə}ŋ^y'$  ehd; cf. PA  $*\text{-}q\text{ə}ŋ^y'$  husband. Likewise probably  $ge\text{:}lA'a:g$  'mid-day', for which cf. PA  $*\text{-}ȝ^wre:n$  'day', Eyak  $gah$ . This metathesis preserving  $l$ - from nasal works not only across  $\text{'}$ , but also across  $\text{-}h\text{-}$ , as in  $\text{-}k'\text{!}nh\text{!}Akih$  'woman's son's child', where  $\text{-}k'\text{!}nh$  'father's mother' is certainly not  $l$ -class. It is probably also present in  $\text{-}nu\text{:}lAya'$  'pair of', cf. human plural enclitic  $=nu\text{:}$ , perhaps <  $*\text{-}(n)\text{-}yu\text{:}n$ . This nasality movement may be related to that in the verb prefixes, and may possibly also support the development of epenthetic  $l/n$  as the reason for the connection between directive/conative  $u$ - and weak  $l$ -,  $*n\text{ə}$ - in Athabaskan.

Finally, there are a few forms with unidentifiable  $\text{-}lA\text{-}$ , which is probably not to be identified with the  $l$ - qualifier, perhaps not even to be segmented as a separate morpheme:  $'AlAX$  'hand me!', and especially  $'AlAk'ah$  'out of bed' (cf.  $o\text{-}k'ah$  'away from o') may well be postpositional phrases with archaic allomorphs  $'AlA\text{-}$  of  $'Al$  'this'. The segmentation of the locational  $XA\text{-}lA\text{-}'u:d$  'way inside closed space; a bit back from edge' is clear; cf.  $XA\text{-}yA\text{-}'u:d$  'way over yonder'; the  $\text{-}lA\text{-}$  here very possibly is also  $'AlA\text{-}$ ; cf.  $XA\text{-}sh\text{-}a\text{:}n\text{-}d$  and  $XA\text{-}sh\text{-}lA\text{-}X$  'closer'. For  $'ishta\text{:}lAq'Ama'$  'once upon a time' (formula for start of tale), cf.  $'ishta$ : 'long ago', where  $\text{-}l(A)\text{-}$  may either be gerundive suffix  $\text{-}l$  (§18.13.1) or indeed the qualifier,  $\text{-}q'Ama'$  otherwise unattested. Entirely opaque is  $'e'lAwah$  'weasel', where  $\text{-}wah$

is otherwise unattested, but cf. *-lAw* ‘big’, of which this could be an archaic allomorph, and also *o-’e* ‘place of (absent) o’; the *-lA-* is probably not from metathesis or epenthetic, as the *-’e*, if nasalized, would have become *l’i/*, or possibly *l’a/*.

#### 17.10.4.4 Constituent hierarchy and qualifier order with *l-*

Apparent violations of qualifier order, to be explained by constituent hierarchy, are to be found most frequently with *l-*, because it is rightmost of the productive qualifiers. Even here, examples are not abundant. With *-dAshid* ‘rim, flare’ (< *-dA-shid*) we have: *’u-n-[dA-shid] k’u:Leh ch’iyahd* ‘cap with peak’, *’u-n-[dA-shid] qa’X k’u:Linhhin* ‘she’s wearing a labret’ (< ‘there’s a flaring up out on her face’). With *o-di:q’d* (< *-dA’e’-q’-d* or *-dA-yAq’-d*) we have *silAdi:q’d* ‘way back inside my nose or throat’. The analysis of the place-name *’itl’a:ndAya’d* ‘Mountain Slough’ is unclear; ‘body of water associated with mountain’ might be *’itl’AlAya’d*; but the identity of *-dA-* is unclear.

With *o-lA-Xa:n* ‘opposite o’ (< *-l-Xa:n*) we have *Xahdl-dA-[lA-Xa:n]* ‘across from a car (*d*-class)’ and *tsa:-dla:-[lA-Xa:n]* ‘across from a stone (*dl*-class)’. What needs to be explained is not the order of qualifiers but the phonology of *-dA-lA-* in the first instance (which does not become *-dla-*, though *?Xahdl-dla:-Xa:n* was not tested) not tested), and the duplication ([*-d-l-l-*) in the second.

Finally, one unexpected form is *yahd’i:nda’d* ‘front side of, face of house’, for which *yahd-dA-da’-d* might be expected, *yahd* ‘house’ being *d*-class, certainly not *l*-class. Here it appears that *o-n-da’-d* ‘front of o’s head, face’ (nominalization) is thematized, or better, lexicalized, while at the same time *yahd* is declassified, not *?yahd-dla:-da’d*; *yahd* appears often to be declassified, though perhaps only on the phonological surface, in that *yahd-d* often becomes */yahd/*.

#### 17.10.4.5 *’i:lih-l-* qualifier combination

This qualifier combination is purely secondary, with *’i:lih-* ‘mentally’ and *l<sub>1-</sub>*, and is attested only in problematical *’Ashdih ’Adqe:lihLALAXah* or *’Adqu’lihlALAXah* ‘you’ll lose consciousness’, q.v. also §17.10.1.

#### 17.10.4.6 *q-l-* qualifier combination

This qualifier combination is also purely secondary, with plurality emphazier *q-*, attested in three forms with *l<sub>1-</sub>* and one with *l<sub>4-</sub>*: *ya:nch’ qAli:quhLinu*: ‘their heads are bowed downward’, with *l<sub>1-</sub>*; *ma:ya’X qa:nLxAwah* ‘water lilies’ < ‘pl grow in lake (*ma:*)’, and in the altogether anomalous interrupted case where the *q-* precedes negative directive *u-* of Zone B and the *l-* follows: *dik’ qu:la’ta:Ginu*: ‘they didn’t find out about her’; with *l<sub>4-</sub>*: *qu’qAli:xLquhinu*: ‘I’ll corral them (humans) up’ < ‘I’ll make them run’, with *l<sub>10-</sub>*.

### 17.10.4.7 *d-l* qualifier combination

This is the most frequent qualifier combination, not surprisingly, given the frequency and complexity of both *l*- and *d*-. It is the Eyak counterpart of what is perhaps the only qualifier combination noted in Athabaskan, \**də-nə*-. Due no doubt to the homorganicity of *d*- and *l*-, and the existence of the phoneme /dl/ in Eyak, the combination *dA-lA*- regularly results in phonemic *dla*- (with variation *dli*- ~ according to rules treated in §6.13. First, examples of combinations of identifiable *d*- and *l*- will be presented, then the unanalyzable examples of *dl*- with their own enumerated semantic groupings. Because of the non-reduplication rule, note that *dla*- can also represent underlying *d-dl*-, *dl-l*-, or *dl-dl*-. Examples of these will be treated after unanalyzable *dl*- itself.

Given that qualifier combinations were investigated to some extent, but of course not systematically or fully for each of the different semantic fields of each qualifier here enumerated, we do have a modicum of different combinations. That includes also some combinations that may have come spontaneously rather than from elicitation. This combination of *d*- and *l*- is not only the most frequent for inherent reasons, but is probably the combination most frequently investigated.

There are some 25 examples (41) of more or less clearly analyzable *d-l*- in the corpus.

#### (41) Forms with *d-l*- qualifier combination

- sa' k'u-dl-dA-Ga:nsh* 'stuff mouth (*sa'*) with something (*k'u*-: food)', indirect reflexive, with *l*<sub>1</sub>- 'face', *-Ga:nsh* 'lower part of face, below nose', and *d*<sub>3</sub>- 'oral'
- O-dl-L-'ehd-g* 'dry O's face', with *l*<sub>1</sub>- and a *d*<sub>15</sub>- singleton
- O-dl-L-'ehd-g* 'dry O (net)', with *l*<sub>2</sub>- as class mark for O
- ya' dl-ga'* 'something is wrong with S (net)', with *l*<sub>2</sub>- and *d*<sub>12</sub>-
- di:q' dl-dA-xa* '(egg) turn into bird', with *l*<sub>4</sub>- 'grow', *d*<sub>6</sub>- class mark for the subject, 'roundish'
- dl-xa* '(tree, wild celery) grows', with *d*<sub>1</sub>- 'wooden' as class mark for the subject
- dl-q'a* '(net) burns', with *l*<sub>2</sub>- class mark for the subject, and *d*<sub>4</sub>- 'burn'
- O-dl-L-qa* 'quiet/calm O down', with *l*<sub>5</sub>- 'emotional quality' and *d*<sub>3</sub>- 'vocal'
- O-dl-L-GA* 'quiet O down, shut O up', with errative *l*<sub>6</sub>- and *d*<sub>3</sub>- 'vocal'
- dl-dA-ma'* 'say something wrong, garbled, unlucky', with errative *l*<sub>6</sub>- and *d*<sub>3</sub>- 'vocal'
- dl-dA-da* '(sg) run short of food'
- 'Ad-dl-dA-da* '(sg) fast', reflexive causative
- ya' dl-dA-da* '(sg) starve'
- ya' O-dl-L-da* 'starve sg O'
- dl-dA-qu* '(pl) starve', errative 2 of *-qu* '(pl) sit, stay' with *l*- qualifier and *dA*-classifier, and *d*<sub>3</sub>- 'oral'

O-*dl-L-qu* ‘starve pl O’, errative of *-qu* ‘pl sit, stay’, *L-* classifier

O-*dl-L-’a* ‘use up, spend all O (money)’, errative with *d*<sub>6</sub>- class mark for O

*ya’ dla:dAga* ‘shut up!’, errative *l*<sub>6</sub>- with *d*<sub>3</sub>- ‘vocal’<sup>7</sup>

*dl-widj* ‘be ashamed of what (S) says’, with *l*<sub>5</sub>- ‘emotional quality’ with *d*<sub>3</sub>- ‘vocal’

*dAXu’ O-’-d(l)-L-Xa’* ‘believe what O says, take what O says as true’, with *d*<sub>3</sub>-, and *l*<sub>9</sub>- of the directive, group 4

O-’-*dl-L-ts’inhG* ‘mark O (tree)’, with *l*<sub>9</sub>- of directive group 4, and *d*<sub>1</sub>- ‘wood’

O-’-*dl-L-ga’* ‘know O (house)’

*’iLt’a’X li’ O-’-dl-dA-ta* ‘fold O (pocket-knife)’, cf. following form

*’iLt’a’X yAXd’u’dla:dAta:X tsa’L* ‘pocket knife’, with *l*<sub>7</sub>- ‘fold’, and/or *l*<sub>9</sub>- with group 2 directive, plus *d*<sub>2</sub>- class mark for O

*lAGAdAq’a’Ldla:Lteh* ‘axe handle’, with *l*<sub>2</sub>- class mark, and *d*<sub>16</sub>-

O-’-*dl-L-tsAX* ‘cut O open’, with *l*<sub>9</sub>- and perhaps *l*<sub>7</sub>- together with what in

O-(*d*)-*L-tsAX* is an optional *d*-, probably *d*<sub>11</sub>-, not optional in the directive.

An especially interesting noun phrase is *k’u’uGLdla:shid* ‘white part around heart’ (‘thymus’?), combining *l*<sub>2</sub>- class-mark for ‘heart’ with thematic *d*- to the qualified noun *-dA-shid* ‘edge, flange’, in other forms lexicalized so that in combination with *l*- the result is *’i:n-[dA-shid]* instead of *-dla:shid*. Note also the qualifier combination *djAXA-dl-* in §17.10.15, with an adjective, suggesting archaic *dl*-class *-djuhX* ‘ears’, analyzable as *d*<sub>5</sub>- ‘anatomical protuberance’ and *l*<sub>1</sub>- ‘head’.

### ***dl*<sub>1</sub>-**

More often than not, *dl-* occurs as an unanalyzable combination. This includes especially what will be enumerated *dl*<sub>1</sub>-, noun class mark. There are about 16 nouns of the *dl*-class. This noun class is by no means obviously defined semantically. The largest single semantic cluster is *tsa*: ‘rock, stone’, and some items in (42) are made of stone.

#### (42) *dl*<sub>1</sub>-class nouns

*tsa*: ‘rock, stone’

*tAwi:s* ‘stone axe’ (loan from Tlingit)

*Xa’tl’gL* ‘stone club’

*we:gshg* ‘stone ulu’

*dla:LXe:djg* ‘quartz, stone with shiny flakes’

*Gits’AX* ‘copper nugget’

*gu:nAtsa*: ‘gold nugget’

<sup>7</sup> This is perhaps the best known Eyak expression, known even to some non-speakers in Yakutat.

Probably *dla:XA'i:nd* 'button', and *dla:GAxul* 'grindstone, wheel', can also be counted to (42), hardly that Eyaks had stone wheels, though grindstones may have been among the first wheels they saw. To speculate, given  $l_2$ - 'round' as archaic the class-mark for 'rock' and  $d_6$ - 'roundish' including e.g. *tsa'L* 'knife', originally of stone, it should not be surprising that *tsa:* is now *dl*-class. In two of these items, 'button' and perhaps 'quartz', the *dl*- is intrinsic, with more identifiable meaning in the prefix than in the stem.

The rest of *dl*-class nouns fall into much smaller groups of one or two items. For '*anh* 'earth, land' one could speculate that its class-mark is from  $l_2$ - 'mountain' and  $d_4$ - 'flat expanse' (!). For reduced *djAXA-* 'ear', i.e. in further qualifier combination, but not *-djehX* 'ear', unclassified, one could nicely speculate for a combination of  $l_1$ - 'head' and  $d_5$ - 'anatomical protuberance'. For *tsi:n(y)* 'branch', and *Li:n(y)* 'part of tree' (?) we have at least  $d_1$ - 'wood, tree'. For *dzAwuL* 'net, purse seine' and *kihshL* 'dipnet', however, we have only this grouping; likewise for *djahGL* 'needle' alone.

It is in this noun-classificatory function that we have the largest number of attestations of the qualifier *dl*-. The instances are listed in (43).

(43)  $dl_1$  as noun-classifier

a. In classificatory verbs:

*dl-ta* '(*dl*-class) be in position' and O-*dl-(l-)ta* 'position (*dl*-class) O' (*djahGL* 'needle', *kihshL* 'dipnet', *we:gshg* 'ulu knife', *tsi:n(y)* 'branch')

*dl-'a* '(*dl*-class) be in position' and O-*dl-(L-)'a* 'position (*dl*-class) O' (*tsa:* 'stone', *tAwi:s* 'stone axe', *Gits'AX* 'copper nugget', *gu:nAtsa:* 'gold nugget' *dzAwuL* 'fishing net', *kihshL* 'dipnet', *we:gshg* 'ulu knife', *djahGL* 'needle', *tsi:n(y)* 'branch', significantly more often than with *-ta*; see the dictionary and Krauss (1968)

*dl-L-(y)a* '(pl *dl*-class) be in position'

O-*dl-L-(y)a* 'position (pl *dl*-class) O'

O-*dl-L-'ya* 'position (*dl*-class) O in container'

b. In other verbs:

*dla:sLiduxL* '(net) drifted'

O-*dl-ta'k* 'tangle O (net)'

*dlasiLt'e'q'L* 'I straightened it (net) out'

*dlasiLtle'XL* 'I skipped it (stone) in water'

O-*dl-L-ts'e'ts* 'lift O (rock) with tongs'

*dla:sdits'u:xL* '(rock) is full of barnacles'

*tsa: 'u:dAX 'Ash dla:sAts'AXL* 'a stone whizzed by there'

O-*dl-ts'AX* 'throw O (stone)'

*dl-dA-shAX-g* '(stone) be frosted'

O-*dl-sha* 'dig O (stone) out'

*dl-k'a'd* '(stone) is hot'

O-*dl-L-k'a'd* 'heat O (stone)'

*dl-L-q'u* '(net) be wet'

*dl-dA-q'u* '(net) be full of herring-spawn'

O-*dl-L-Xan* 'heat O (stone)'

*dla:sdili'ts'L* '(net) got wet'

*dAla'd dli:'yahL* '(net) hanging up'

O-*dl-tAGL* 'hammer O (stone)'

*qa'* O-*dl-dja'* 'jerk O (branch) out'

O-*dl-L-ya:'* 'handle O (stones) in pl acts'

*dl-L-Xe:dj* 'make sparks with stone'

'*Ad-dl-LA-le* 'ride bicycle' ('act on self ('*Ad-*) with wheels')

(probably also:) O-*dl-dza'tl'* 'chisel O (stone?)' (usually without *dl-*)

*ya:nu'/ya:nch'* O-*dl-L-dza'tl'* 'drive O into ground'

c. In nominalizations:

'*Adtl' dla: yAX dla:dAle:X* 'bicycle' 'with (-*tl'*) self ('*Ad-*) is acted (-*le*) upon about (*yAX, -X*) with wheels (*dl*-class)'

*dla:GALAGAmAk'L tsa:* 'round stones'

*dla:GALAwe:gshgL* "ulu stone"

*dla:sdit'its'L* 'rock candy' (lexicalized ('stones) have been frozen')

'*uX tsa: dla:dAqahG* 'pickaxe' ('stone is chopped with it')

*dla:GAdAq'a'L* 'rock is turned sideways; rock crevasse'

*dla:LXe:djg* 'quartz, shiny flakes in rock'

(probably also:) *dla:GAXuL* 'grindstone, wheel' (but cf. *dl<sub>2</sub>-* below)

d. In adjectives:

-*dl-t'u* 'many, much (stones, *Li:n(y)* 'hardwood')

-*dl-shiyah* 'bad (net)'

*djahGLdla:kuts'g* 'small needle'

*djahGLdla:kih* 'little needle'

-*dli:'nAw* 'big' (attested with at least eleven of the *dl*-class nouns)

*dzAwuL dla:'a:w* 'long net'

*djAXAdla:'a:w* 'long-ears' (epithet for rabbit, dog with ears up, with further qualifier combination *djAXA-* 'ear')

e. In postpositional phrases with the non-syllabic postpositions:

*dzAwuLdli:nAX* 'with a net'

*tsi:nydli:nAX* ‘with a branch’

*tsa:dli:nAch* ‘toward a stone’

*dzAwuLdli:na’tl* ‘with a net’

*’anhdli:na’q* ‘on the ground, earth’

*tsa:dli:na’q* ‘on a rock, skerry’, but cf. *dla:q’Aya* ‘mountain goat’, below

f. In postpositional phrases with syllabic postpositions:

*tsa:dla:t’aXd* ‘(sheltered) under a rock’

*tsa:dla:t’a:XAch* *GALa’nik* ‘(bug) is crawling under a rock’

*’anhdla:yAq* ‘into the ground’

*kihshLdla:yAq’d* ‘in a dipnet’

*tsa:dla:lah* ‘around a stone’

*tsa:dla:xa* ‘for a stone’

*tsa:dla:lu’qa* ‘for a stone’

*tsa:dla:da:d* ‘near a stone’

*tsa:dla:sinh* ‘(hiding) behind a rock’ (see preverb below, this example)

*tsa:dla:yAX* ‘under a rock’

*’udjAXAdla:qa’X k’u:Linhih* ‘she’s wearing earrings’ (‘something (*k’u-*) is (*Le(’)*) through (*-qa’X*) her (*’u-*, =*inh*) ears (*djAXA-*)’)

*o-djaXAdla:yAq’d* and *o-djAXAyAq’d* ‘inside of o’s ear’

g. In preverbs:

*dla:sinh-* ‘in hiding’

*dla:’anh-* ‘into den’

There are some clearly *dl*<sub>1</sub>-qualified nouns, cf. (44).

(44) *dl*<sub>1</sub>-qualified nouns

*’anhdla:xa:g* ‘mist’ (‘earth (*’anh*) steam (*xa:g*)’)

*’anhdla:yahsh* ‘drift particles at tidewater-line’ (‘earth’s children (*-yahsh*)’)

*’anhdla:Xu:ch* ‘devil-club file’ (‘earth thorn’)

*tsa:dla:xix* ~ ‘Grass Island’ (‘white island’, probably nominal)

*tsa:dla:guch’uh* (modern) die or dice; Government Rock (lit. ‘stone die’)

*guch’uh* ‘gambling die’, loan from Tlingit)

Here probably also *dla:ch’e:* ‘red snapper’ (rockfish, ‘rock rust, rock feces’). See below for *dl*-qualified nouns other than these obviously qualified with *dl*<sub>1</sub>-. Probably here too is *sidla:Ltah* ‘my scrotum’, certainly ‘testicle bag’, so perhaps also *sidla:tsa*: ‘my testicles’, with seemingly redundant *dl-*, since there is no other clear *dl-* that would make ‘stones’

refer to ‘testicles’; class mark of *-dla:tša:* is itself unattested, but must presumably also be *dl-*, as implied by *-dla:Ltah*.

At least one important noun *dla:q’Aya’* ‘mountain goat’ seems to be from class mark *dl-* of unexpected form with postposition *o-q’* ‘on o’ and *-(A)ya’* ‘that which is found on/in o’, so here < ‘that which is found on rocks’ (cf. *te’-ya’* ‘fish’ < ‘that which is found in water’). Cf. however, the “regular” *tša:dli:na’q’* ‘on a rock’ in (43), which leaves unexplained the “irregular” *dla:-q’* here. Note also *dla:q’Adqa:* ‘porcupine’s hole “under rock”’, probably < *dla:-q’-d-qa:*.

### ***dl<sub>2</sub>-***

This usage with apparent basic meaning ‘tilt, lean’ is the most common of the verbal thematic meanings of this combination. One could speculate that this may originate as a combination of *l<sub>1</sub>-* ‘head, face’ and *d<sub>11</sub>-* ‘fall’. The most abstract theme derived with this qualifier, most analyzable semantically, is *dl’-ya*, lean over (slowly)’, with the forms in (45).

#### (45) Attestations of *dl’-ya*, lean over (slowly)’

*ya:n’ dl’-ya* ‘keel, topple over (down to the ground)’

*ya:n’ ’Ad-dl-LA-’ya* ‘bend over/downward’ (reflexive causative)

*t’a’q’e’ch’ ’Ad-dl-LA-’ya* ‘lean/bend over backward (*t’a’q’e’ch’*)’ (reflexive causative)

*yAX dl-dA-’ya-X* ‘(tent) teeters about’

*yAX O-dl-LA-’ya-X/-g* ‘gently rock O (baby) at breast or on shoulder’

*’u-’-dl’-ya* ‘stand (stable) aslant’ (directive)

*Xu’ ’u-’-dl’-ya* ‘stop tilting, stabilize vertically’

*dl-dA-q’e’s* ‘(surface) tilt, list’

*O-dl-L-q’e’s* ‘tilt, level O (surface)’, *sa’d yAX ’Ad-LA-q’Ash-X* ‘move jaw (mouth) about sideways’

The rest of the attested themes so derived and/or including preverbs (46) mostly entail in themselves actual falling or inversion with *dl<sub>2</sub>-*.

#### (46) *dl<sub>2</sub>-* with themes related to ‘falling’ or ‘inversion’

*dl-LA-’Adz* ‘fall over’, *o-X dl-LA-’adz* ‘bump against, stub toe on o’, though cf. *qa’*

*dl-LA-’Adz* ‘accumulate, pile up (involving stable slant?)’

*dl-Xa’tl’* ‘fall over’ (cf. *l-Xa’tl’* above)

*O-dl-L-Xa’tl’* ‘knock O over’

*yAX O-dl-(L-)’a* ‘invert O’

*yAX ’u-’-dl-dA-’a* ‘be turned over, upside down’

*yAX ’u-’-dl-xuL* (e.g. canoe) capsize’ (probably belonging here)



*dla:GAxuL* ‘grindstone, wheel’ (possibly belonging here)

See also below under *qdl-* for ‘*uq*’ *k’uqAdla:xuL* ‘(railroad) track’ ‘pl (*q-*) wheeled (*-xuL*) something (*k’u-*) rolls on (*-q’*) it (*’u-*)’, unless *dl-* is class mark ‘stone’, cf. *dl<sub>1-</sub>* above. See further in the final section below for combinations to be analyzed *d-dl-* (§49) and *dl-l-* (§48) with rule of non-duplication.

### ***dl<sub>3-</sub>***

This is a small semantic group sharing, somewhat abstractly, the concept of ‘series’. The relevant examples are presented in (47).

(47) Attestations of *dl<sub>3-</sub>* ‘series’

*dl-tsu:x* ‘baste with running-stitch’

*dla:sha’L dla:sitsu:xL* ‘I put a fence in’

*dl-sha* ‘make fence’ (‘dig in series’)

*dl-tanh* ‘waves move’ (cf. *tanh* ‘waves’, *Xdl*-class)

*yAq’Ach’ dla:Lya:’* ‘(waves) lap up, keep lapping up on shore’ (with *yAq’Ach’* ‘toward inside’)

*tanh qi’ lAG dla:Lya:’* ‘where (*qi’*) waves (*tanh*) lap ashore’

*dla:sha’L* ‘fortress; fence’ (deverbalization)

Probably also belonging to this group is *-dla:si:nd* ‘ribs’, with intrinsic *dl<sub>3-</sub>*, stem *-si:nd* otherwise unattested, certainly checked.

See also *qi-d-l-G-*, *lX-d-l-*.

### ***dl<sub>4-</sub>***

This might be another semantic group or branching, ‘deceive, conceal, hide’ (also relatable to various of the preceding, ‘dig in ground’): *O-dl-L-’e* ‘fool, deceive O’, *O-dl-L-we’ch* ‘fool, cheat O; hide O’, ‘*Ad-dl-LA-we’ch*’ ‘sneak’; see also preverbals or nouns *dla:da:n’-* ‘(into) rodent’s hole’, *dla:’anh-* ‘(into) den, lair’, *dla:sinh-* ‘in hiding, hibernating, secretly’, some mentioned also in connection with *dl<sub>1-</sub>*. See also *y-dl-*.

### ***dl-***

from reduction There are examples of *dl-* that, with the non-duplication rule, are themselves to be analyzed *dl-l-*, *d-dl-* and *dl-dl-*.

For *dl-l-*, we have (48).

(48) Themes and attestations with *dl-l-* qualifier combination

o-X *dl-LA-'Adz* 'bump head against o' ( $l_1-$ ,  $dl_2-$ )

*yAX dl-LA-'Adz* 'S's head droops down' (same qualifiers as above)

'*lQa' dla:sdi'yahL* '(net) got all twisted up' ( $l_6-$  of errative 2 marker *l-dA-*,  $dl_1-$ )

'*u'-dl-LA-tsa* '(stone) have appearance' ( $l_9-$ ,  $dl_1-$ )

O-'*dl-L-ts'inhG* 'mark O (stone)' ( $l_9-$ ,  $dl_1-$ )

*dla:GAshk'L* 'fence posts (*l-* (*LAGAshk'L* 'pole',  $dl_3-$ , qualified noun)

In the case of *tsa:dla:LAxa:n'* 'across from a stone' we have the constituent hierarchy [-*d-l*][*l-Xa:n*]; the conceivable alternative ?-*dla:xa:n'* was not tested.

For the combination *d-dl-* we have the attestations in (49).

(49) Themes and attestations with *d-dl-* qualifier combination

'*Aw tsa: Xi:ch' dli:tux* 'spit out that stone' ( $d_3-$ ,  $dl_1-$ )

*ya' dl-ga'* 'something is wrong with S (wheel; net)' ( $d_{12}-$ ,  $dl_1-$ )

*dl-LA-qahG* '(stone) fall' ( $d_{11}-$ ,  $dl_1-$ )

*ya:n' dla:sAkugL lis* 'tree that is broken and windfallen' ( $d_1-$ ,  $dl_2-$ )

'*Aw yahd ya:n' dla:sAxut'L* 'the house tumbled over' ( $d_1-$ ,  $dl_2-$ )

*ya:n' O-dl-GahG* 'chop O (tree) down'

For the qualifier combination *dl-dl-* we seem possibly to have *qid dl-LA-'Adz* 'fall down, off' ("if person, head first"), i.e.  $dl_2-$ , plus  $l_1-$  'head' and  $d_{11}-$  'free fall', especially with *qid*. Other such composition could probably have been elicited e.g. with 'stone tilt' ( $dl_1-$ ,  $dl_2-$ ). Likewise *ya:n' dla:sAkugL lis* 'tree that (has died and) fallen down'.

***dl\_5-***

This leaves a residue of about eight forms not explained by the preceding. Given the complexity of both qualifiers *d-* and *l-*, this is not a large number for a combination of the two. At the same time, the same complexity easily allows for guessing in most cases. Two nouns clearly include singleton  $d_{15}-$  in *d-L-ehd-g* 'dry': *kus dla:L'ehdg* 'crab species' ('urine (*kus*) dry',  $d_{15}-$ ,  $dl_1-$  'rock?'), and *shug dla:L'ehdg* 'dried brick of pressed strawberries (*shug*)' ( $d_{15}-$ ,  $dl_1-$  'rock-like?', i.e. with *shug* no longer *lX*-class 'berry-like).

Perhaps most puzzling, if not itself a *dl-* singleton, is (o-X) *O-dl-L-du'* 'stuff O (with o)'; the difference between that and *O-L-du'* is unclear; also *O-dl-du'* 'chink O'; possibly these are related to the  $dl_4-$  series 'missed'? The rest are given in (50).

(50) Remainder of forms with *dl-*, semantics unclear

*k'uhdL dla:mahd* 'red berry species, ferment easily' (*k'uhdL* 'moss' (< *k'uhd-L* 'wiper'))

*dl-dA-Xan* ‘be hot, have fever’ ( $l_1$ - and  $d_2$ -, ‘head fire’?)

‘*AlAk’ah* ‘*u’dla:GAta*’ ‘open hatch over hold!’ ( $l_7$ -,  $l_9$ - directive ‘fold, move part of O’)

$d_1$ - ‘wooden’?

‘*AlAk’ah* ‘out of bed’ (preverbal < postpositional phrase ‘away from this’?) being otherwise attested only meaning ‘out of bed’

*dla:GehGL* ‘ring-shaped rim of dip-net, made of pliable branches; hoop, barrel hoop’

*dla:Ge’q’* ‘rim, ring, hoop of drum’ ( $dl_1$ - for ‘net’?, if dip-net rim was the original)

*dAyAX dla:sditahL* ‘rain bucket’ (lit. ‘positioned under indeterminate o’,  $d_1$ - and  $l_2$ - ‘wooden basket’?)

### Secondary *dl*-

There are of course purely secondary *dl*- combinations, e.g.  $d_1$ - and  $l_9$ - in ‘*Aw yahd* ‘*u’dla:xiLgah* ‘I know that house’ (*d*-class).

The form *qA*-[*dA-LA*]- is secondary, with the pluralizer *q*- and  $dl_2$ -, in ‘*uq’k’uqAdla:xuL* ‘railroad track’ < ‘pl wheels roll on it’, a deverbalization.

See the following sections for numerous (30) further qualifier combinations including *l*-.

### 17.10.5 *G*- qualifier

The meaning of *G*- alone (not in combination) is too thematic or abstract, perhaps something like ‘space, area’, and its occurrence or attestation too limited, to allow for anything more than vague and tentative grouping by number. Accordingly, this grouping by number will be based mainly on the position (C3, or rightmost) and function (e.g. verbal or postpositional) of *G*- as a qualifier. The groupings in C3 are  $G_{-1-3}$ , and those occurring rightmost (after *d*- of C6, so presumably also after *l*- of C7) are  $G_{-4-5}$ . Mention will also be made of homophonic *GA*- of other morphological function where relevant or problematic, e.g. *GA-L*- also as object of postpositions, or *GA*- of mode-aspect.

#### ***G*<sub>1</sub>-**

This group may be especially in verbs, resulting in an animal name. Of this there are two or three instances, from themes with *LA*- classifier (51).

(51) Animal names with  $G_1$ - qualifier and *LA*- classifier

*GA-LA-qa:* ‘hollerer’ (mythical fish, see Text 35, < *LA-qa:* ‘holler’)

*GA-LA-tsatl* ‘land otter’ (< *-tsatl* ‘slide’)

*GA-LA-t'Aq* ‘shrimp, sand fleas, minnows’ (< *LA-t'Aq* ‘small S jumps, flits’; also *qA-LA-t'Aq* with plurality emphasizer *q-*, thus either > *GA-* with loss of aspiration, or *qA-* by analogy).

To these should probably added *GA-LA-t'a'Lk* ‘bird flapping its wings’, attested only in this form, so perhaps only a nominalization, not productive as a verb (cf. *-IX-d-L-t'a'Lk* ~ ‘eyelashes’, *IX-d-L(A)-t'a'Lk* ‘blink, flutter eyelids’).

### G<sub>1</sub>-

We may assign four or five artifact nouns from verb themes to this group: *GA-su* ‘type of dried fish’ (< *O-su* ‘dry O (fish, into *GA-su*)’), *GA-xits* ‘drum’ (< *O-xi'ts* ‘beat O (drum)’), and cf. *-xi'ts* ‘shin(-bone?)’. To those should probably be added *GA-GAG* ‘quoit’; though no stem *-GAG* is attested, cf. *O-GehG* ‘put hoop on O’. With these evidently also belongs *ta:s GA-Lah* ‘belt’, where *ta:s* is *o-ta:s* ‘over/across o’ with deleted reflexive object, and the verb theme is probably classificatory *O-L-(y)a* ‘handle pl O’, so ‘put pl O across self’. However, this should perhaps more regularly be *GA-LA-yah* rather than *-Lah* (< *-LA-ah*) with expected classifier *LA-* from indirect reflexive. Another possibility might be *GA-L-lah* with *GA-L-* as object of *o-lah* ‘around o’ Especially problematic is opaque *Gats'AX* ‘cloth’, perhaps to be segmented *GA-ts'AX* (cf. *O-ts'AX* ‘throw O’, with no clear semantic connection; freely alternating with *q'Ats'AX*, more likely the original, which might instead be segmented *q'Ats'-AX*). It is possible that some of these could be seen as deverbalizations, i.e. verbal nouns, from the passive form of themes such as *O-su*, with deletion of classifier *dA-* or *LA-*, though not the case of *ta:s GA-Lah* ‘belt’, where the classifier remains.

The exact subposition of the *G-* of these cannot be directly determined because of the lack of combinations with other qualifiers. Looking beyond, however, we note nouns with this *G-* in combinations, especially *GA-dA-shA-xa'ch* ‘wick’, which fits morphologically and semantically with the preceding items. It is derived from the verb theme *O-xa'ch* ‘tie O (knot), O into knot’. This shows that the *G<sub>2</sub>-* belongs in a subposition preceding that of *d-*, i.e. preceding C6, in contrast to *G<sub>4</sub>-* below, which appears in rightmost subposition of all after C6-7.

Some of the preceding might be otherwise interpreted, as instances of “independent” Inceptive conditionals, ‘anything which might V’, where *GA-* is not a qualifier but mode-aspectual of Zone D, e.g. especially *G<sub>1</sub>-* in *GALaqa:* ‘anything which may holler’, hypothetically. However, this is not possible in the case of *GA-dA-shA-xa'ch* ‘wick’, where the *G-* precedes qualifier *d-*.

There are a few instances where relativized verbs might indeed be so interpreted, e.g. *qi' ya:nu' k'u-GA-dA-teh* ‘graveyard’ (‘place where (*qi'*) someone (*k'u-*) might be laid underground (*ya:nu'*)), and possibly the place-name *XA-tl'a'-q' dla:GA'ah* ‘area (*XA-*) on (*-q'*) the back end (*-tl'a'*) of which *dl-*class noun (stone?) might be in position’).

One might add to these certain lexicalizations from what have been classed as relativized Inceptive perfective verbs, the stems of which themselves end in *-L*, assumed to include suffixed *-L* which is categorically deleted (*-L-L# > -L#*). Examples could be *dla:GAxuL* ‘wheel’, *GAqe:L* ‘oval’, *dAGALAWa’L* ‘door’, and more could be found in §14.8 for Inceptive perfective statives, where this issue is not raised.

However, there are instances, which should perhaps not be dismissed, where this issue could have been raised by the speakers themselves, in that there are reverse examples, Inceptive perfectives with stems not ending in *-L*, where the suffix *-L* expected for the Inceptive perfective is missing in the original notation. This happens four times in the case of (*gAdA*)*GALAGAmAk’L* ‘round(-rumped)’, of which we have 13 instances with the expected *-L*, from Marie, Lena, Anna and twice from Rezanov (1805), but four without: *GALAGAmAk’* from Sewak, *GALAGAmAk’ shdu:lihGda’lAw* ‘big round table’ and *GALAGAmAk’ ’uq’ ’isda’L* ‘round chair’ from Lena, *gAdAGALAGAmAk’* ‘round-rumped’, epithet, from Anna. These instances of *GALAGAmAk’* without the *-L* are perhaps too many to be dismissed, as an indication that speakers themselves are sometimes seeing this as having a *G-* qualifier, as e.g. in *GALAtsAtl’* ‘land-otter’, instead of the also somewhat unusual Inceptive perfective stative.

Problematical are two flora names, both clearly from the verb theme *O-L-ya:* ‘handle O multiply, one by one’, namely *qu’ GA-L-ya:* ‘shield-fern sprouts’, and *qa’ GA-di-’-L-ya:* ‘daisies’. The preverb *qu’* in the first means ‘onto the fire’ and *qa’* in the second means ‘up out’. The first could be a nominalized Inceptive imperative ‘put it bit by bit onto the fire!’ or Inceptive conditional ‘anything (he) puts on the fire bit by bit’, and the second an Active imperative with *’i-*, translated as ‘pull it/them out bit by bit / one by one!’ or a corresponding independent conditional. Certainly neither of these mode-aspects is at all common in lexicalizations. However, at least in the second case, *G-d-* can only be qualifiers, implying, if the two are of the same morphological structure, *G-* of the first is also a qualifier.

The meaning of use of these two and the following two is too abstract and vague to assign to another number than *G<sub>1-</sub>* and/or *G<sub>2-</sub>*.

There are only two forms (of necessity beyond *GAdAshAxa’ch’* ‘wick’ and *qa’ GAdi’Lya:* ‘daisies’ showing *G-* preceding *d-* of C6) that show *G-* preceding qualifiers of C4, i.e. unquestionably in position C3, preceding *lX-* ‘berry-like’ of C4. These are *GA-lAXA-sA-Xe:ts’* ‘big blueberry species’, *G-lX-s-*, and *GA-lAXA-l-Xah* ‘tadpoles’, likewise, q.v. below under the respective qualifier combinations.

### **G<sub>3-</sub>**

Genuine *G<sub>3-</sub>* may be assigned to one or two nominal forms. First is the noun *gu-GA-L-te’* ‘rod-like handle (of axe, hammer, etc.)’, which is also attested in *’uGALte’* ‘its (rod-like) handle’, implying that *gu-* is very probably from the indefinite possessor prefix *k’u-* with irregular loss of ejectives, rather than from a combination *g-G-*. Here cf. *XA-dA-L-te’* ‘rod’, the same stem with *X-d-* qualifiers, PA *\*-teŋ<sup>y</sup>* ‘handle’. In any case *G<sub>3-</sub>* is especially

marked by the prefix *L-* following *G-*, with possessed noun stem, typical of nouns ‘part of o (possessor)’, as is ‘handle’. The actual subposition of  $G_3-$  cannot be determined, since it is not found in combination with other qualifiers, except *gu-* that is probably not *g-* in origin. For this, see qualifier *g-* in §17.10.7.

The second form, problematical, may be a noun used adverbially or a preverb of nominal origin, viz. *GA-L-qa:q*’ as in *GALqa:q’ xusALiLinh* ‘he wounded me, grazed me’. Alternatively, this form may conceivably be derived from a postpositional phrase with pronominal object *GA-* and *L-*, here *GA-L-qa*’ ‘middlemost’ plus final *o-q*’ ‘on o’, however opaque the semantics. For this pronominal *GA-L-*, which needs to be distinguished from qualifier *G-* with a following *L-*, see next below.

Note that  $G_{1-2}$  are thematic only with verbs or forms that are potentially verbs, and not with postpositions or adjectives or clear qualified nouns. However, there are forms in which *GA-L-* as in  $G_3-$  ‘handle’ and ‘wound’ does appear as a prefix at least for postpositions and adjectives. These instances of *GA-L-* are problematic morphologically, and are better classed as pronominal rather than as a qualifier at all, very much like *XA-* ‘area’ rather than qualifier *X-* of the same subposition as *G-*, noted above (previous paragraph). The pronominal *GA-L-* as object of postpositions, always with *L-*, to be compared, as noted, with prefix *L-* of many nouns, especially possessed, ‘part of o’, here refers, productively, to ‘extreme of series’. Thus e.g. *GA-L-’ihd* ‘last, hindmost’ (*o-’ihd* ‘behind, after o’), *GA-L-yAX* ‘bottom, lowest, nethermost’ (*o-yAX* ‘beneath o’). This is attested in about 18 postpositional phrases, for which see §16.

#### **$G_4-$**

$G_4-$ , unlike all the preceding, must be assigned to the *G-* that appears in the rightmost possible subposition, following *y-* and *d-* and *l-* of C5–7. A very special and definitive example is in the Active imperfective of *O-G-’e* ~ ‘see O’, uniquely irregular in that this form of the theme occurs only in the Active imperfective, with suppletive prefixation (*o-IAX* ‘*i-L-’e* ~) in other mode-aspects. As noted, this theme corresponds exactly with e.g. “irregular” Navajo *yi-sh-’í*, Eyak *GA-x-’eh* ‘I see it’. We have this special Active imperfective theme, and derivative directive passive C *O-’G-dA-’e* ~ ‘O seems C’, with  $G_4-$  attested also in combination with and following noun-classificatory *d-G-*, *X-d-G-* and anatomical qualifiers *qi-d-G-*, *ch’a:n-d-G-*, *y-G-*, of subpositions C4–6. Those combinations are listed separately above and below under the qualifiers with which they are combined. Those two noun-classificatory and three anatomical markers are the only qualifiers or qualifier combinations with which  $G_4-$  happens to be attested. Presumably many more such combinations, over a dozen, could have been elicited in the theme *O-G-’e* ~ ‘see O’.

Another verbal example, here listed as  $G_4-$ , is the verb *G-L-dzu*’ ‘act annoyingly, infuriatingly’, which is shown to have *G-* of the same subposition as that of ‘see O’ by *d-G-L-dzu* ‘act annoyingly, by voice’, for which see also *d-G-* below. These have added  $G_4-$  to the verb themes *L-dzu*’ and *d-L-dzu*’, of the same meaning, respectively. As in the case of *O-G-’e* ~ ‘see O’ above, no clear meaning can be identified for  $G_4-$  in either of

these themes, except in that the stem *-dzu* of ‘annoying’ is probably related to or is an allomorph of, ironically, the adjective *-dzu*: ‘good’. This latter is renamed *G<sub>4</sub>* because of the comparison with *d-G* in *k’ushiyah* ‘iyAch’ *dAGAdAleh* ‘you’re asking for trouble’, for which see §17.10.5.5 on *dG*-.

### **G<sub>5</sub>**-

This label can be assigned to the one clear use of the qualifier *G*- with postposition *o-’e’* ‘(in) place of absent o’, again with the meaning ‘place’, at most, if with any meaning at all. Like *G<sub>4</sub>*-, its subposition is rightmost of all the qualifiers, as will be seen in its combination with other qualifiers. The only obvious use of *G*- alone with *o-’e’*, not in combination with preceding other qualifiers (as *d-G*, *d-l-G*-, *qi-d-l-G*-), is with the preverb *qi* ‘place where’, in the nominalized non-verbal clause *qi* ‘GA-’*e’-d* ‘(modern) bed’ (only attested current use, ‘place where is unoccupied space/trace’), lexicalized and often allegro [qe’GA’e’d] or [qi’Ge:’d]. In this item it could be argued that *G*- has become pronominal, but not in the combined qualifier cases, q.v., here further below and in the dictionary.

The postposition *o-’e’* is in fact unique in morphophonemic complexity or instability. It includes the allomorph of phonologically irregular contrasting reduced vowel /i/ even next to uvulars, as e.g. in the preverbs *qid* ‘down off’, and ‘*AdiX* ‘home (to own home), indoors’ (clearly < ‘*Ad-’e’-X* ‘(movement within) own place (of absent self)’). Accordingly, there are a number of forms including the phonologically “irregular” or “secondary” segment *Gi(’)*- which should most probably be explained, at least historically, as qualifier *G*- plus postposition *o-’e’*, clearly referring to ‘space, enclosure, cavity’. This *Gi’*- is relatively productive, unlike other instances of the qualifier *G*- alone. It is found in several verbs, adjectives, and qualified nouns, but not, significantly, in postpositional phrases. Whatever its origin or status, it is presented here as a derived form of *G<sub>5</sub>*-, historically including the postposition *o-’e’*. Since it is not entered in the dictionary as such, being in fact the one allomorph of *-’e’* ~ not so listed, full listing will be provided here.

To begin with the qualified nouns, we have seven examples in (52).

#### (52) *G<sub>5</sub>*-qualified nouns

*-yAq’AGi’ya* ‘entrails’ (o-*yAq’-A-Gi’-(A)ya* ‘thing inside enclosed space of o’)

*-yAq’iGi’Xe’* ‘marrow’ (o-*yAq’-i-Gi’-Xe’* ‘fat inside enclosed space of o’)

*-lAqahyAq’AGi’djilahG* ‘brains’ (*-lA-qah-yAq’-A-Gi’-djilahG* ‘pudding-like substance inside enclosed space of head’)

*lAyAq’iGich’e’* ‘unpleasant gravelly voice’ (*lA-yAq’-i-Gi-ch’e’* ‘feces (rust?) inside head’)

*XAwa:lAXAde:’Gi’giyah* ‘berry species’ (*XAwa:lAXA-d-e:’-Gi’-giyah* ‘dog’s eye-space water’)

*lisda:q’AGi’si:ns* ‘tree fungus species’ (*lis-d-a:-q’-A-Gi’-si:ns* ‘mould on surface on tree (*d*-class’)

*ya:nu' Gi'sinhX* 'algae' ('underwater resin')

*da' GiLe't'* 'box-face' (nickname or epithet)

In each of the cases in (52), the head of the form is a noun, preceded by a postpositional phrase or preverb.

We have instances of *Gi'*- (i.e. maximally *'iGi'*-) with the four adjectival stems shown in (53).

(53) *Gi'*- with adjectival stems

*'uq'AGit'u'* 'abundance of it'

*Xala:g 'iGi'a:w GALe'L* 'winter is getting long', *'uyAq' li' ('i)Gi'a:w* 'it's deep inside' ('cavity which is long to far end', Marie, showing optional (*'i*) > zero /' \_\_)

*LAXAde:'Gi'lAw* 'big-eye(-socket)s!', *qi' k'uGi'lAw* 'big place', *da' Gi'lAw* 'big-face!' (pejorative epithet)

*LAXAde:'Gi'kuts'g* 'small-eye(-socket)s!', *'uyAq' 'iGi'kuts'g* 'inside (which is) small'

The phonology here is reasonably predictable, with optional rules, that *G-* is preceded most fully by *'i*, which can be reduced to /i/ or /A/ when preceded by /q'/, or to zero preceded by /'/. In *qi' k'uGi'lAw* 'big place' (not *?k'u'Gi'lAw*) that *'i-* is also zero. The *G-* is followed most fully by /i'/, reduced to /i/ before ejective consonants and in one other case by Lena, *da' GiLe't'*, to zero.

The noun *Gits'AX* 'copper' is an important special case, the only explanation of which would seem to be the prefixation of the minimal form of *'iGi'*- to the stem *-ts'AX*. There are apparently four stems or morphemes of that shape in the dictionary, q.v., the most relevant probably *-ts'AX<sub>4</sub>* 'throw, strike', and that of 'cloth', the variant *GAts'AX* of which is a minimal pair with *Gits'AX* 'copper'.

One other item conceivably like this is *Giyah* 'food', which could either be simply a disyllabic stem, or be related to the theme *O-X-a* 'eat O' minus the thematic *X-*; cf. the verbal noun *k'uwah* 'meal'.

We have seven verbs with this *G<sub>5-</sub>*. In these verbs the *Gi'()*- must be seen as represented by or reinterpreted as or reduced to underlying *GA-*, while the preceding *'i-* remains, but is somewhat unstable. At the same time the verbs are all Neuter imperfective or Neuter perfective statives, so have *Gi:-* except where negative or *s-* perfective, or sometimes 1s. One of these is Neuter perfective stative *L-k'in* 'be skinny' with the preverb *da'* 'face' (cf. *o-da'* 'front of o'). The preverb *da'* regularly takes qualifier *G<sub>5-</sub>*, which we can still consider thematic ('space, defined area') rather than anatomical. Thus we have *da' Gi:Lk'in'Linh* 'he's skinny-faced', *da' GixiLk'in'L* 'my face is skinny' (Cf. *GAXi-* below, with unstable /i/), and *da' qu'Gi:xLk'in* 'I'll be skinny-faced', where the initial *'i-* is altogether absent, underlyingly zero (note that the result is not *da' ('i)qe'*, cf. below), perhaps by analogy with the other forms where *'i-* is phonologically deleted after *da'*. We have one nominalization from this type of verb, derived from the postpositional stem *o-lu'* 'through hole in o', *qi'*



*k'uGi:lu* 'smokehole' < 'place where something spatial is a hole', from Marie only, probably *ad hoc*. This then would be a sign of some productivity of this structure.

With *-Le()* 'to be' we have *ku'lAw 'uyAq' 'iGi:Leh* 'it's big inside', *'uyAq' li' Gi:Leh* and *'uyAq' li' 'iGi:Leh* 'it has a hollow inside'. With *o-ga' 'i-t'e' ~ 'be like o'* we have *xitl'ga' da' GAxit'eh* 'my face is white (like snow in color)' (cf. *Gixi-* above, unstable), *xitl'ga' da' qu'Gi:xt'uh* 'my face will be white' (with *qu'-* rather than *(i)qe'*). These again indicate underlying zero rather than *'i-*; showing *-Ci-* as expected for any qualifier in the future form with no intervening syllable between *qu'-* and the stem. A form with intervening syllable was not tested: *xitl'ga' da' q'e' ?qu'GAxdAt'uh* 'my face will again be white' (*?-GixdA-*; *?q'e'(i)qe'*).

Related to the adjective *-lAw* 'big' is the verbal variant of that stem *-li'* 'be oversize', attested several times with *G<sub>5-</sub>*, cf. (54).

(54) *-li'* 'be oversize' with *G<sub>5-</sub>*

*'uyAq' 'iGi:lih* 'it's too big inside, its inside is too big'

negative *dik' 'uyAq' 'iGa'lihG* 'it's not too big inside' (< *'iGa'lih-*)

*'uyAq' siXA' 'iGAsa'li'L* 'it got too big for me inside'

*'uyAq' siXa' 'iGAGa'li'L* 'it's getting too big for me inside'

*'uyAq' siXA' 'iqe'Gi:lih* 'it'll get too big for me inside', this time with stable *'i-*, including future

Understandably, it was possible for speakers, here even Lena, analogically to extend the verbal inflection to adjectival *-lAw*, first in reading Rezanov (1805) *лееххаккеилляга* (<leekh'khakkeiliaga> (<ei-> disyllabic)), Russian 'громко' ('loud-voiced'), as *lAyAq'AGi:lAw* (stem *-lAYV* in Yakutat Eyak of Rezanov 1805), which she later corrected to adjectival *-Gi'lAw*. In the meantime, she had acceded to my ill-advised elicitations with *? 'uyAq' 'iGAsa'lAwL* 'it got big inside', *?dik' 'uyAq' 'iGa'lAwG* 'it's not big inside', *? 'uyAq' 'iqe'Gi:lAw* 'it'll get big inside', all of which are probably wrong.

Similarly, we have no clear attestation of any qualifier *G-* alone with *-a'* 'extend, but with the related adjective *-a:w* 'long' we have the expected *(i)Gi'-a:w*, as shown above. In addition to that, however, we also have *dik' 'uyAq' li' 'iGa'a:wG* 'it's not deep (cavity) inside' (< *'i-G-a'-a:w-G*), which may be analogical, and *? 'uyAq' li' 'iGAsa'a:wG* 'it got deep inside', both perhaps ill-advised elicitations from Lena, the first annotated "has heard [but might not herself say]", the second annotated "awkward."

In the case of the adjective *-kuts'-g* 'small', verb and adjective stem are alike. (55) shows examples of the verb stem with *G<sub>5-</sub>*.

(55) *G<sub>5-</sub>* with verb stem *-kuts'-g*

*'uyAq' 'iGi:kuts'g*, [*'uyAq'AGi:kuts'g*] 'it's small inside'

*dik'* [*'uyAq'AGa'kuts'gG*] 'it's not small inside' (correct for verb, perhaps analogical for adjective)

'uyAq' 'iqe'Gi:kuts'g 'it'll be small inside' (retaining /'i-/)

lAyAq' 'iGi:kuts'g 'voice is soft; is high-pitched'

'uda:q' 'iGi:kuts'g 'it's surface area is small'

Adjectival forms are 'uyAq'AGi'kuts'g 'its small interior' and lAXAde:'Gi'kuts' 'small-eye(-socket)s!'. In addition, there are four forms in Rezanov (1805) with variant stem *-kuch'*, glossed 'narrow', to be read verbal [*'uyAq'AGi:kuch'g(V)*] or adjectival [*'uyAq'AGi'kuch'g(V)*], the key segments being written <akei>, <akai>, <akhei>, <akhai> (all <ai> or <ei> monosyllabic), which could represent either *-AGi-* or *-AGi'*.

We have a noun derived from one other verb with this  $G_5$ -, the problematical case of *Ge'Gi'shah* 'cemetery', which clearly includes the *Gi'*-, theme *O-sha* ~ 'dig, bury O', and *Ge'*- not otherwise attested, but for which cf. *Ge't* 'body' (though not necessarily 'corpse'). The lack of any pronominal prefixes and especially classifiers, especially *dA-* for passive, as 'place for buried bodies' suggests this is a deverbalization of ?*O-Gi'-sha* 'dig place for O (bodies)'

Considering the origin of *Gi'*- from *GA'e'*-, there is small wonder that incorporation of such into adjectives and verbs should entail some complication, inconsistency or uncertainty. To this we see further added a somewhat unstable *'i-* as well, homophonic with indeterminate object pronominal prefix *'i-* of verbs, so somewhat supported by that. Conceivably, the origin of that might again be *-'e'*-. Cf. *'AdiX* 'home, indoors', clearly from *'Ad-'e'-X*, therefore also the phonologically irregular but altogether stable preverb *qid* 'down off', so hypothetically from *\*q-'e'-d*, and so especially *qi'* 'place (where)' from *\*q-'e'*, above all if we allow instead PAE pronominal *\*q<sup>wə</sup>-* 'place, event', so *\*q<sup>wə</sup>-e'-d* > *qid*, *\*q<sup>wə</sup>e'* > *qi'*, as also in *qi'* *GA'e'd*, *qe'GA'e'd* '(modern) bed' (< PAE *\*q<sup>wə</sup>-e'-Gə'-e'-d*). Allowing for such, and replacing pronominal *\*q<sup>wə</sup>-* with anything else, and replacing likewise postpositional-final *-d* 'from a position' at rest punctually; nominalization of', one can easily enough envision from *\*-'e'-GA-'e'*- an origin for *'i-Gi'*- and reductions of that. See here below also *dl-G-*.

#### 17.10.5.1 *G-d-* qualifier combination

The *G-d-* combination, realized as *GAdA-*, is found extrinsically in two quite distinct thematic uses.

##### *Gd<sub>1</sub>-*

*Gd<sub>1</sub>-* is attested in a limited number of themes with the meaning 'place, area', perhaps on land as opposed to body of water, but this was not checked. Cf. *G-*, especially  $G_5$ -,  $Gl_2$ -, and possibly  $d_4$ - 'flat natural expanse'. This applies especially to verbs referring to temperature, but is evidently is not limited to such, cf. (56).

(56) Themes with *Gd<sub>1</sub>-* 'place, area'

*Gd-dA-t'its'* '(place) freeze'

*Gd-tl'e'* '(place) be cold'

*Gd-dA-Gu'* '(place) be warm'

O-*Gd-L-tl'e'* 'cool O (place)' (causative)

O-*Gd-LGu'* 'warm O (place)' (causative)

*GAdAsA'a'L* (also *dAGAsA'a'L* by metathesis?) 'steep dangerous place'  
(nominalized *s*-perfective of *-a'* 'extend')

*sitl' GAdi:a'L* 'I'm stuck in a steep dangerous place' ('(place) has become steep dangerous with (*-tl'*) me (*si-*)')

*GAdi'di'ah* 'steep place' (irregular Neuter imperfective of *Gd-dA-a'*, expected ?*GAdidi'ah*)

*GAdAq'Ayi:ny* 'fog' (with *Gd<sub>1</sub>-* as noun-qualifier, probably generic rather than over land, cf. *-lAXAdAq'Ayi:ny* 'eyebrows')

*GAdAk'uhdL* 'mossy ground'

Note also the use of *Gd<sub>1</sub>-* originally as the object of *o-'e'* in *ts'AL-qa' GAdi:-q'-d ~ ts'AL-qa' GAdi:-X/-d* 'smokehole', and in *GAdi:q'Ach' GAqe:Linh* 'he's paddling out towards the breakers', which presumably indicates that its use not limited to place over land.

### ***Gd<sub>2</sub>-***

*Gd<sub>2</sub>-* is used together with preverbal *sa'* 'mouth' as though it were a class mark, but must instead be seen instead as a specialized anatomical for 'mouth', though any use without overt *sa'* is probably quite limited; cf. *d<sub>3</sub>-* 'oral'. The attested forms of *Gd<sub>2</sub>-* are presented in (57).

(57) Themes with *Gd-* and preverbal *sa'* 'mouth'

*sa' Gd-k'a'd* ~ 'S's mouth hurts, be sore'

*sa' Gd-qAsh* 'have mouth wide open'

*sa'GAda'lAw* 'big-mouth!', *o-sa'GAdAlah* 'around o's mouth, lips'

*qa:sa' GAdAtl'ats'* 'lowbush cranberries' (nominalization, 'our (*qa:-*) mouth dirty')

*sa' GAdAts'u'ts'g* 'suckerfish' (nominalization)

*sa' GAdAGAGshg* 'whitefish' (nominalization, 'has flared mouth')

Though *sa'*, q.v., is widely attested without *Gd<sub>2</sub>-*, there is perhaps but one attestation of *Gd<sub>2</sub>-* without *sa'*, intrinsically, in *o-yAq' qa' Gd-'la'G ~ 'o's tongue be coated in indigestion'*.

### **Others**

Unidentifiable instances of *Gd-* are perhaps to be found in *qa' GAdi'Lya:* 'Alaska daisies' (if not *qa' gAdi'Lya:*), and in *GAdAgil* 'sun' (if not to be read *G-dA-gil* with *dA-* classifier, or *GA-dA-gil-L*).

### 17.10.5.2 *G-I* qualifier combination

The qualifier combination *G-I*, realized as *GALA-*, is not attested as a noun-class or anatomical marker at all, but occurs instead only as thematic, extrinsically, with two very clear meanings.

#### *GI*<sub>1</sub>-

*GI*<sub>1</sub>- ‘passage of time’ is attested in five verb themes. Most basic is *GI*-’*ya* ‘time passes’, with numerous preverbals, including e.g. *o-leh GI*-’*ya* ‘year passes for o’, the deverbalization *leh GALa*’*yah* ‘year’, and *O*-’*GI*-’*ya* ‘time passes for O, O spends time’. A special pair is *GI*-’*ta*’ (sg) live’, *GI*-’*qu*’ (pl) live’, specifically ‘be alive’, or ‘live a certain quality of life’ (as opposed to *-la* ‘dwell, camp, subsist’). It might be supposed that the stem *-ta*’ is not a morpheme related to *-ta* sg classificatory, by reason of the different allomorphy indicated by the *-*’ marking. However, the same cannot be said of *-qu*’ (pl) live’ as opposed to *-qu*’ pl sit, stay’, where the *-*’ allomorphy is obviously carried over as such from the *-ta*’. Even if we consider this to be purely analogical, there is no question that the *-*’ allomorphy is isolated as such, creating the potential of analyzing *-*’ as a morpheme. One other pair belongs here: *GI*-’*LA*-’*ch*’*a:nG* ‘be weak with old age’; cf. *LA*-’*ch*’*a:nG* ‘be weak’, thematic negative of *LA*-’*ts*’*an* ‘be strong’; and *GI*-’*da*’*a:nG* ‘be feeble’, which looks like it might also be a thematic negative, derived from an otherwise unattested theme.

#### *GI*<sub>2</sub>-

*GI*<sub>2</sub>- ‘earth, ground, floor’ is attested in the forms in (58).

(58) Attestations of *GI*<sub>2</sub>- ‘earth, ground, floor’

*yAX* ’*i*-’*LA*-’*chan*-’*X* ‘(dog) sniffs about’

*dA*-’*shAX*-’*g* ‘be frosty’

*O*-’*k*’*in*’*t*’ ‘scratch O’

*dA*-’*Gu*’ ‘be warm’

*L*-’*q*’*Atl*’-’*X* ‘be slippery’

*LA*-’*lits*’ ‘be smooth’

*-le* ‘be a certain way’

*GI*-’*da*-’*ts*’*a*’ ‘(ground) be muddy’ (*-ts*’*a*’ ‘be muddy’)

*GI*-’*da*-’*sha* ~ ‘dig in ground’ (*O*-’*sha* ~ ‘dig for O’)

*GI*-’*da*-’*sha*’*tl*’ ‘sweep floor’ (*O*-’*sha*’*tl*’ ‘sweep O’)

’*uX* *GAL*’*Asha*’*tl*’*L* ‘broom’ (deverbalization)

*GI*-’*da*-’*XuhL*-’*g* ‘shovel, dig ground’ (*O*-’*XuhL*-’*g* ‘shovel O’)

’*idah* *GI*-’*LA*-’*le* ‘clear ground’ (*O*-’*L*-’*li* ‘act on O’)

*Gl-dA-ts'a'Lk'* '(sparrow) "pecks"(?) ground' (in attempted analysis of noun  
*Ga:nts'a'Lk'* 'sparrow')

*GA:ndLAGshg* 'mud' (*dLAGsh-g* 'mud')

*Ga:ndich'ich'g* ~ 'small songbirds' (*Gl-dA-chich'-g* ~)

*GALAgA:X* 'highbush cranberries'

'*uX GALAkusL* 'scrubbrush' (deverbalization), '*uX (k'u)GALA(dA)chi'ch'X* 'id.', '*uX (k'u)Ga:n(dA)ch'i'ch'X* 'id.' (relativization or deverbalization)

a. With adjectives:

*qi' k'uGa:ndzu:* 'where there's good ground for camping'

*qi' k'uGa:n'nAw* 'where there's lots of ground'

b. With postposition:

*ya:GALA'a:gd sAdahL* 'sat down in the middle of the floor, ground'

### 17.10.5.3 *G-d-l-* qualifier combination

This combination is thematic only, of limited yet not fully explainable use.

#### ***Gdl*<sub>1</sub>-**

This group is thematic, meaning 'distance over land', for which cf. *Gl*<sub>2</sub>- 'earth, ground, floor', *d*<sub>2</sub>- 'flat natural expanse', and *gdl*<sub>4</sub>- 'distance over water' and *gl*<sub>1</sub>- 'liquid'.

(59) Attestations of *Gdl*<sub>1</sub>- 'distance over land'

*Gdl-dik'* 'be short distance over land', also extended to time: 'be short time'

*Gdl-'a'* 'be/extend long distance over land', perhaps not applied to time, cf. *sahdX* 'long time'

*Gdl-L-'a'* 'extend (comparative) distance over land'

*qi'dAX GAdli:dik'* 'shortcut' (nominalization, 'place along which it is short to go')

a. With adjectives, used adverbially:

*GAdla:dik'* 'near, close, short distance overland; short time'

*GAdla:'a:w* 'far, long distance overland'

Possibly belonging under *Gdl*<sub>2</sub>- below, here with preverbal *ya'* 'to state of rest; vertical', itself optionally taking qualifier *d*<sub>12</sub>-, reference is to vertical distance, perhaps or probably not specifically over land, *ya' \*?gdl-* not being tested.

(60) *Gdl*<sub>1</sub>- with preverbal *ya'* 'to state of rest; vertical'

*ya' Gdl-dik'* 'be short, low (not tall)'

*ya' Gdl-'a'* 'be high, tall'

*ya'* *Gdl-sid* '(pl) extend up high'

With adjective '*a:w* 'long': *gu:nehG ya'* *GAdla:'a:w* 'tall horse', *shdu:lihG ya'*

*GAdal:'a:w* 'high table' (itself *d*-class, thus including at least two different prefixes *d*-

### ***Gdl*<sub>2</sub>-**

This group is thematic, referring to 'vertical (movement) suspended' for which cf. *gdl*<sub>3</sub>- 'non-vertical movement suspended', and cf. immediately preceding here, but without *ya'*.

#### (61) *Gdl*<sub>2</sub>-

*Gdl-wa'L* ~ 'hang suspended'

O-*Gdl-L-wa'L* ~ 'raise or lower suspended O'

o-X '*Adu-*'-*Gdl-LA-'a* 'hang onto o' (presumably with vertical effort)

'*Ad-Gdl-LA-xut*' 'ride (up and down) on seesaw'

'*AdGAdla:LAXut*' 'seesaw' (nominalization)

### ***Gdl*<sub>3</sub>-**

This group is for two miscellaneous singletons, apparently opaque: nominalization *GAdla:Lquh* 'lungs' (cf. *Gl-qu'* '(pl) live' with *Gl*<sub>2</sub>- 'passage of time', *L*- classifier causative); and o-*yaq' qa'* *Gdl-q'a* 'o have heartburn' ('inside o up out, *d-q'a* 'burn', possibly partly calque on English?).

#### **17.10.5.4 *d-l-G-* qualifier combination**

There are at least three attested instances of *dlG-*, allowable by mobility rules for *G-*. Two are in the nominalized postpositional phrases *tsi:nydla:GA'e'd* 'knothole', with *tsi:ny* 'branch' *dl*-class, and in *dla:X'i:nddlaGA'e'd* 'buttonhole', with *dla:X'i:nd* 'button' *dl*-class. These instances could be considered combinations of class-mark *dl-* for 'branch' and 'button' with *G-* as separate constituent as in *G*<sub>5</sub>- above, but this need not be the case in view of the following. The unique nominalization *XAtl'a'q' dla:GA'ah* 'bay' ('extends *dlG-* in headwater area') cannot be clearly analyzed semantically, but is surely an instance of primary *dlG-*, with no identifiable *dl*-class mark. Though apparently not attested as such, *dlG-* must be possible with with *G*<sub>4</sub>- of 'see' and noun class marker *dl*<sub>1</sub>- as O-*dlG-'e* ~ 'see O (*dl*-class)'.

#### **17.10.5.5 *d-G-* qualifier combination**

The qualifier combination *dG-* appears purely secondary, in two themes: first with *d*<sub>1</sub>- and *G*<sub>4</sub>-, attested in '*Aw liSSH dAGi:'eh* 'do you see that three?'; second with *d*<sub>2</sub>- and *G*<sub>4</sub>-, in *d-G-L-dzu* 'act annoyingly, infuriatingly, by voice, speech', where *G-* is optional, adding

no meaning to *d-L-dzu*'. However, cf. *k'ushiyah 'iyAch' dAGAdAleh* 'you're asking for trouble', a problematical form, not adequately investigated. The second *dA-* must be the classifier, the first the qualifier *d<sub>2</sub>-*. There is the theme *d-dA-le* '(animal) call, make natural vocalization', possibly here 2s subject, zero with *D-* classifier. However, the syntax makes this unlikely, as *?k'usha:dah 'Adch' dAGAdAleh* would be expected for 'you're acting badly toward yourself vocally (+/- animal-like)', with *G<sub>4</sub>-*. It appears therefore that a more correct reading is passive of *O-d-L-(l)i* or passive causative of *O-d-G-dA-le*, 'evil is being vocally made toward you', with *G<sub>4</sub>-* but not the reflexivity. In either case, the overt *k'ushiyah* 'evil' casts doubt on the possible reversal meaning or irony of *G<sub>4</sub>-* in the preceding example of *d-L-dzu*'.

See below also *G-lX-l*, *G-lX-s*, *G-s*, *G-d-s*; *X-d-G*, *qi-d-G*, *ch'an-d-G*, *y-G*; *g-G* above under *G<sub>3</sub>-* (§17.10.5).

### 17.10.6 X- qualifier

The qualifier *X-* needs to be distinguished, at least in part, from the grammatically unique *X-*, which is best categorized as a kind of locational or locational prefix glossed 'yonder; area'. This is dealt with separately, in connection with locationals and preverbals (postpositions and preverbs).

The qualifier *X-* does not have a large repertoire standing alone, but is much more common in qualifier combinations. There are no *X*-class nouns; *X-* is thus found in the two functions of anatomical and thematic.

#### **X<sub>1</sub>-**

As anatomical, *X-* specifies 'human male pubic, groin'. As such, it is not widely attested, in fact attested as such only by some diplomatic elicitation, especially from Anna and Sophie. That attestation happens to be mainly with two nouns and one adjective: *'uguch*' or *'uXAguch*' 'his penis' (cf. *'uguguch*' 'its penis'), *siXAXu*' 'my pubic hair' (man speaking), *k'uXa'lAw* 'big (human penis)', *'uXAguch'Xa'lAw* 'his big penis'. For verbs we have only the one elicitation *xuXAsAta'tl'l* 'he kicked me in the groin' (man speaking), and very evidently two nominalized verbs for clam species. The first is *qa' 'AdXALA'ah* 'horse-clam', a usitative Active imperfective relativization of 'causes (*LA-*) its (*'Ad-* own, human[-like]) penis to extend up out (*qa'*)', explained by Lena as 'sticks its nose out, "nose" [i.e. siphon], not "digger"'. The second is *XAdAch'e:*' or *XAdich'e:*' (former Active imperfective, latter possibly Neuter imperfective) 'red-tip clam', probably to be analyzed *X-dA-ch'e:*' 'its penis is rust-colored'. It is by no means clear that the 'penis' meaning is conscious in the clam names.

Cf. the combination *X-l-* 'female pubic' under §17.10.6.3.

**X<sub>2-6-</sub>**

As thematic, X- alone is not productive, but appears in five distinct semantic groups, three with but one stem each. It is not possible to assign a gloss to this generally, or even for any of its specific semantic subgroupings. The three with but one item each are treated exceptionally here, as separately numbered “groups,” with but one member each, whereas elsewhere such are put last together under one number in a last “catch-all” or “miscellaneous” grouping. The reason here is that there are only three such items, each of which is an important high-frequency verb theme. See also *qX-* in §17.10.6.6, the only conjugation-choosing qualifier combination, dealt with separately also as the MULTIPLE verb derivation.

X<sub>2-</sub> appears in all forms of the verb theme O-X-a ‘eat O’, with the exception, not explained, of the gerund or verbal noun *k’uwa:* ‘eating, meal’. E.g. *XAXah* ‘I’m eating it’, *qu’Xi:wah* ‘it will eat it’, *Xa:ne:* ‘eat it!’ (with “irregular”, i.e. fullest realization of the Active imperative prefix AN-), causative o-d O-X-L-a ‘S feeds o O’ (‘causes o to eat O’); see further examples in the dictionary and in qualifier combinations below.

X<sub>3-</sub> appears in X-’ya ‘(pl) fly’ (-’ya ‘be involuntarily situated’; cf. *d-L-k’a’t’* ‘(sg) fly’). See also below under *qX-* (§17.10.6.6).

X<sub>4-</sub> appears in ’i-X-qe ‘boat paddled by unidentified S moves’, ’i-X-Xa ‘S (pl boats) travel as fleet’.

X<sub>5-</sub> appears in *lah X-(dA-)ta-X* ‘switch sides paddling’, *lah yAX XAXdAta:X* ‘I keep switching sides paddling’ (‘I move (paddle) in circle back and forth’); o-ya’-X *lah ’i-X-(L-)ta* ‘S stirs o’ (‘S moves indeterminate O circularly in o with broad opening at top’). Here perhaps also, metaphorically, o-q’Ach’ O-X-(L-)ta ‘S blames O on o’ (all from classificatory O-(L-)ta ‘handle elongated O’). Cf. ‘steer O’ under X-d- below.

X<sub>6-</sub> with preverb *ya:X* ‘consume completely’, by phonological reduplication, *ya:X* reinterpreted as *ya:X XA-*, attested in *ya:X qu’Xi:xLtsAX* ‘I’ll cut it all up’, *ya:X O-X-siyu* ‘kill all O off’, *ya:X O-X-Xihs* ‘rip O all up’, *ya:X qu’Xi:xch’u* ‘I’ll steal them all’, *ya:X O-X-’Adz* ‘spear all O’. In these instances it is noted that the X- appears in all instances with preverb *ya:X* and only in those. This confirms the phonological origin of X<sub>6-</sub>, which could probably have been thus elicited with numerous other themes, so is the only productive thematic use of qualifier X- alone. This is not the only clear case of a qualifier with phonological origin; cf. *y<sub>5-</sub>*. It is also not the only case of a qualifier of preverbal origin or at least sharing in preverbal position, given the case of *’i:lih*, at least.

**17.10.6.1 X-d- qualifier combination**

The qualifier combination *Xd-* occurs both as noun class marker and as thematic, especially with a meaning ‘wooden pole; linear’, for which cf. also *d-*, but also with other meanings,



seemingly quite unrelated.

### ***Xd*<sub>1</sub>-**

This is not a semantic class in itself, but a noun class mark. About twenty nouns are *Xd*-class, a startling mixture, several of which share the semantic quality ‘stout pole-like’.

(62) *Xd*<sub>1</sub>-class nouns ‘stout pole-like’

<i>Le:sk</i> ‘log, plank, railroad tie’	regularly <i>tAwi:s</i> ‘(wood-handled) axe’
<i>tl'i</i> : ‘bearspear’	<i>we:shg</i> ‘fishrack’
<i>LAGAshk'L</i> ‘pole’	<i>ta</i> : ‘trail, road (whether corduroy or not); sidewalk; bridge; pier’
<i>XAdALt'u:ch</i> ’g ‘charred logs’	sometimes <i>duhsk</i> ’ ‘riverbank’
<i>ts'isa:-XAdALte</i> ’ ‘mast’ (‘sail-rod’)	<i>'uhs</i> ‘riverbank’
<i>t'a'q'L-XAdALte</i> ’ ‘fishing-rod’ (‘fishhook-rod’)	sometimes <i>GAdAq'Ayi:ny</i> ‘fog’
<i>yAX XAdAdA'ah</i> ‘candle’	regularly <i>q'ahs</i> ‘cloud’ (of any type)
<i>da:XAdidja</i> ’g ‘match(stick)’	<i>ya:djilah</i> ‘rainbow’
sometimes <i>La</i> ’g ‘firewood’	<i>gah</i> ‘day’
sometimes <i>sinhX</i> ‘resin’	sometimes <i>-GAla</i> ’ ‘shoulders’
sometimes <i>Xihshg</i> ‘spearhead’	

Accordingly, *Xd*<sub>1</sub>- is attested extrinsically with a fair number of verb themes (63).

(63) Verb themes attested with *Xd*<sub>1</sub>-

a. Classificatory verb themes:

classificatory *-ta*, *-a* ‘be in position’

O-(L-)*ta* and O-(L-)*a* ‘handle O’

O-L-*'ya* ‘handle O in container’

O-L-(y)*a* ‘handle pl O’

*-sid* ‘(pl) extend’

*-a'* ‘(sg) extend’

b. Other verb themes:

*gah Xd-LA-dzu*’ ‘day improves’

*yAX XAdisitsu:xL* ‘candles are set (thrust down in sockets)’

*da:X O-Xd-dja*’ ‘strike O (match)’

*yAX Xd-LAsha't-g* ‘(candle) sag (from heat)’

*qid* O-*Xd-L-shu:t* 'slide O (logs) down'  
 O-*Xd-L-Xand* 'drag O (log) along ground'  
 O-*Xd-XuhL-g* 'shovel O (sidewalk)'  
 O-*Xd-L-Xe'dz* 'shoulder O (log)'  
*ya*' *Xd-Xehdz* 'nick, mark, chop at O (log)'  
*XAdisdiXAq'L* '(logs) be notched'  
*ya*' *Xd-L-wAL* 'split O (log) with wedge'  
*Xd-wAs* '(cloud, fog) move, change shape'  
*ya:n*' *XAdAsAwAL* '(rainbow) formed (down to earth)'  
*XAdi:Lle:ch'L* 'gather it (fog, by handfuls, into your hat)!' in order to make fog lift ('berrypick it (fog)!')  
*ya*' *XAdAsAliL* '(fog) lifted (completely)'  
*q'ahs ts'AGLga*' *XAdAGAle:L* 'clouds are getting black'  
*Lanhd*' *AdiXd*' *iXAdAGA'a:L* 'smoke is hovering inside (like cloud)'

## c. Nominalizations:

*da:XAdidja'g* 'match' (< *da:X XAdAdja'g* 'jerk it across')  
*yAX XAdAdA'ah* 'candle' ('is extended downward')

## d. Deverbalizations:

*dAXAyAxd yAX XAdA'a'L* 'lantern' (('candle) extended downward underneath indeterminate o')  
*XAdi:t'u:ch*' 'charred log, charcoal', *XAdALt'u:ch'gL* 'charcoal'

Presumably also belonging here is the deverbalization *ya*'*X XAdAtsinhdL* 'throwing-sticks, throwing-stick game', with *Xd-* for the object, 'throwing stick' ('flung up'), classification not verified. See also *XdG-* below.

*Xd<sub>1</sub>-* is attested with the adjectives in (64) and the postpositional phrases in (65).

(64) Adjectives attested with *Xd<sub>1</sub>-*

<i>-t'u</i> ' 'many'	<i>-luhd</i> ~ 'few'
<i>-dzu</i> : 'good'	<i>-lAw</i> 'big'
<i>la'q</i> ' - <i>chahsh</i> ~ 'thick'	
<i>-kuts</i> '-g 'small', diminutive <i>-kih</i>	<i>-a:w</i> 'long'

(65) *Xd<sub>1</sub>-* with postpositional phrases

*Le:sk'XAdAda:d ya:n*' *GAta*' 'sit it down by the log!'  
*o-XAdA:tl*' 'with *Xd*-class o'

*q'ahsXAdAsinh* 'behind a cloud'  
*Lich' gahXAdAqa'ga'* 'every single day'  
*ta:XAda:q'* 'on a pier'  
*k'uGAla'XAda:q'd* 'on one's shoulders'  
*duhsk'XAda:q'd* and *'uhsXAda:q'd* 'on a riverbank'  
*Le:sk'XAda:X xu'sALts'AXLinh* 'he threw a log at me'  
*tl'i:XAda:X* 'with a bearspear'  
*ta:XAdAXa:XAch'* 'going off the road'  
*we:shgXAdAla'd* 'hanging on the fishrack'  
*q'ahsXAdAyAq'd* 'in the clouds'  
*ta:XAdAyAX* 'under the bridge'  
*XihshXAdA'e'd* 'place/mark where weapon-point went in'  
*'uhsXAdi:q'd*, a place-name 'where there is a riverbank'  
*la'dXAda: gah* 'two days'  
*gahXAdAtsin'da'ya'* 'about half a day'.

*Xd<sub>1</sub>*- is attested as noun-qualifier, not noun class mark for attribute noun, in the noun phrases *ts'isa:XAdALte'* 'mast' and *t'aq'LXAdALte'* 'fishing-rod', which are themselves *Xd*-class nouns.

There appears to be some problematic overlap or confusion between *XA*- 'areal' and the qualifier *Xd<sub>1</sub>*- as class-mark e.g. for 'riverbank', especially in place-names referring to the sandbanks called 'Egg Islands': cf. *lis'uXAda:q'(d)k'u:Leh* 'Egg Island' ('there are trees on it (e.g. riverbank?)'), where *Xd*- would be *Xd<sub>1</sub>*- class-mark for 'riverbank', *'uhsXAda:q'd* 'on a riverbank', also a place-name, on the one hand, and on the other *XAda:q'* 'riverbank; out in the flats', q.v. in the dictionary under *o-q'* 2d(4), and place-names such as *tAwi:s XAda:q'd* 'Egg Island', hardly 'on a stone-axe' but rather 'stone axe on it', *chi:shg XAda:q'd* 'on edge of gravel beach' (*chi:shg* not *Xd*-class), place-names with unidentifiable attribute, e.g. *nik'nish XAda:q'd*, unlikely to be *Xd*-class nouns. Cf. also areal *XA-dla:-* 'by shore, riverbank' mentioned in connection with *Xdl<sub>1</sub>*- below.

### ***Xd<sub>2</sub>***-

This group is thematic, 'line, stripe, streak', possibly related to *Xd<sub>1</sub>*- 'log, etc.': *Xd-'a'* '(line, stripe) extend', *O-Xd-Xahd* 'draw line', *yAX (O-)Xd-dA-dja'-X* 'draw (O, line) about', perhaps the nominalization *XAdich'e:* 'red-tip clam', also perhaps *XAdAchich'* 'inside corner' (< 'line broken?', listed under *Xd<sub>6</sub>*- below). Altogether unique, poetically in song, as truncated or false start of intended *XAdi:'inhinh* 'it extends as streak' is "corrected" to

*qi:li'inhin* 'it extends ropelike', *XAd-*, *'uni:sq'yAX qi:li'inhin* 'streak-like, under (-yAX) her ('u-, =inh) nostril (*ni:sq*) it extends rope-like'.

### ***Xd<sub>3</sub>-***

This group too is thematic, probably related to *Xd<sub>1</sub>-* and/or *Xd<sub>2</sub>-*, with the classificatory verb for 'aim': *o-ch'a:q'd O-Xd-(L-)ta* 'aim O at o', *'Awch'a:X XAdisiLtaHL* 'I'm aiming/pointing it at it', *'Awch' 'idahshuw XAdAsAtaHL* 'it is aimed correctly at it?', *o-ch' ya' O-Xd-(L-)ta* 'set O aimed/pointing at o'.

### ***Xd<sub>4</sub>-***

Also *Xd<sub>4</sub>-* is thematic, 'sharp', in *O-Xd-tsa* 'sharpen point of O' (cf. *tsa*: 'stone', *tsa-L* 'knife'), extrinsic in *O-Xd-L-shitl'-g* 'sharpen O (knife, axe) by abrasion; file O', intrinsic in *Xd-yan* 'be sharp' (cf. also *d-yan*).

### ***Xd<sub>5</sub>-***

This group is thematic, 'opening container', with preverbal *dA-da'-d* 'removal of' front of indeterminate o' in *dAda'd O-Xd-(L-)ta* 'open O (e.g. box)', *dida'd 'Aw XAdAsALdja'Linh* 'he jerked the lid off'.

### ***Xd<sub>6</sub>-***

This group is for miscellaneous singletons for which it is difficult to isolate meaning: *'ida'u:G li' XAdi'Xahd* 'take a deep breath!' (possibly including *d<sub>3</sub>-* 'oral'), *yAX O-Xd-LA-wAd-g* 'wave O (alders) about, so they make whistling noise to scare wolves' (*ts'inhG* 'alders' is unclassified), *XAdAchich'* 'inside corner' (< 'line broken?').

### ***Xd-* from reduction**

Although no instances of qualifiers *X-* and *d-* seem to be listed, there are several of *Xd-* plus *d-*, and even *Xd-* plus *Xd-*, cf. (66).

- (66) Combinations of *Xd-* plus *d-*, and *Xd-* plus *Xd-*

*O-Xd-L-q'a* 'light O (candle)' (*O-(d)L-q'a* 'ignite O' with optional *d<sub>2</sub>-* 'burn')

*'iLq' yAqa' XAdidi'yahL* 'they (logs) are piled on top of each other' (with *Xd<sub>1</sub>-* and *d<sub>9</sub>-* 'accumulation')

*tl'i: 'uch' ya'X qid qAXAdidisidinu:* 'bearspears have been placed pointing up at them', evidently with *Xd<sub>1</sub>-* and *Xd<sub>3</sub>-* 'aim'

*ya' qAXAdi:sid* ‘trees are high’ (with *d*<sub>1</sub>- class mark ‘wooden’ for the subject, and perhaps *qX*- ‘multiple’)

To this group also belongs the nominalization *tAwi:s XAdAts'AX* ‘snipe species’, explained as “pecking [logs] like [as does] a stone hammer”, unclear and perhaps partly folk etymology, where *Xd*<sub>1</sub>- could be for ‘stone hammer’ as the subject and/or ‘logs’ as the object.

### 17.10.6.2 *X-d-G-* qualifier combination

Purely secondary, this combination of *Xd*<sub>1</sub>- and *G*<sub>4</sub>- is attested in *gusi:kih gah XAdAGAx'eh* ‘I see a little daylight’.

### 17.10.6.3 *X-l-* qualifier combination

This combination is of limited attestation, but evidently in two semantic fields, both anatomical.

#### *Xl*<sub>1</sub>-

This usage is attested almost entirely with the anatomical meaning ‘female pubic’. There are no *Xl*-class nouns, or clear thematic uses of *Xl*-. The *l*- cannot be identified with any particular qualifier *l*-, but for the *X*-, cf. of course *X*- ‘male pubic’. The *Xl*- is slightly better attested than that *X*-, in part because there is no attested noun stem meaning ‘vulva’, whereas there is *-guch*’ for ‘penis’. For ‘vulva’ there is instead the postpositional phrase *o-Xl-ya*- ‘in female pubic area’, with the postposition *o-ya*- ‘in o with broad opening’, so nominalized *o-XAlAya'd* ‘vulva’; likewise *o-Xl-yaq'-d* ‘in female pubic o (enclosure, nominalized)’ more specifically for ‘vagina’. So also *'iXAlAyaq'* (*ya*:) *shahG* ‘your vaginal fluid’, *'uXAlAyaq'* *yAX guli:'inhinh* ‘fluid is flowing down from her vagina’. *Xl*- also occurs with another postposition, *'iXAlAlah yAX 'ixdile'g-wahd* ‘so I may touch you about around your genitals’ (speaking to woman). It also occurs with the nouns *siXAlAXu* ‘my pubic hair, (woman speaking), and *qe'LXAlAtl'a't'g* ‘woman’s clitoris’ [*sic*], presumably also *-Xa:n-*, see next. Furthermore, it appears in the verb *xuXAlAsAta'tl'L* or *xuXa:nsAta'tl'L* ‘he kicked me in the groin’ (woman speaking).

#### *Xl*<sub>2</sub>-

This usage is attested in two other forms with *Xa:(n)-*, not to be identified with the preceding, where *Xa:n-* may not be derived from areal *X*- combined with *l*-, because in the first form we do not have the phonologically expected *XAlAgu-* or morphologically expected *XA-g-d-l-* or *g-X-d-l-*. These two forms are *Xa:ngudi:(n)ya:n'* ‘porcupine’ (where *-g-d-d-* > *g-d-* by constraint on duplication) ‘rump is sharp’ or *g-d-* ‘filament-like is sharp’, and *o-dAXA:na'q'-d* ‘o’s back’ (*-dA-XA:n-na'-q-d*, cf. *o-la'-q'-d* ‘that which hangs down over o’), to which ‘porcupine’ is evidently related.

#### 17.10.6.4 X-d-l- qualifier combination

This combination functions both as a noun class mark and as thematic, quite definitively, though in a limited way.

##### **Xdl<sub>1</sub>-**

*Xdl<sub>1</sub>-* is a class mark for the nouns *tanh* ‘wave’ and *gush* ‘sand hillock, dune’, as such conceivably relatable to *Xd<sub>2</sub>-* ‘line, stripe, streak’, and some items of *Xd<sub>1</sub>-* class mark, for which cf. also associated *XA-dA-* items with *XA-* areal object. Therewith *Xdl-* is also an optional class mark alternative to *Xd-* for *duhsk* ‘riverbank’ and *’uhs* ‘riverbank’. (67) shows the forms in which *Xdl<sub>1</sub>-* appears as a class mark.

(67) *Xdl<sub>1</sub>-* as class mark

a. In nouns:

*tanh* ‘wave’

*gush* ‘sand hillock, dune’

*duhsk*’ and *’uhs*, both ‘riverbank’

b. In verbs:

*Xdl-q’u’tl*’ ‘(wave) break into whitecap’

*tanh Xdl-LA-’adz* ‘waves roll’

*’uhs ’u:d XAdla:sA’ahL* ‘a riverbank is there’

c. In adjectival phrases:

*tanhXAdla:t’u*’ ‘many waves’

*gushXAdla:t’u*’ ‘many sand hillocks’

*-XAdli:’nAW* ‘big (waves, sand hillocks, riverbank)’, partly thematized in *giyah k’uXAdli:’nAw sALe’L* ‘tide water reached a very high level’ (‘water became big waves’)

d. In postpositional phrases:

*duhsk’XAda:q’d* ‘on riverbank’

*tanhXAdli:LAG Ga:L* ‘is walking along ashore inside waves’

*tanhXAdli:nahsd* ‘outside the waves, breakers’

e. In the noun phrase *tanhXAdla:yahsh* ‘drift particles at waterline’ (‘waves’ children’, also *tanhAyahsh*)

Finally, *Xdl<sub>1</sub>-* functions as a noun qualifier in *XAdla:duhsk*’ ‘fallen? riverbank’.

Parallel to morphologically problematic *XA-d-* mentioned in connection with *Xd<sub>1</sub>-*, but not to be mistaken for the qualifier combination *Xdl<sub>1</sub>-*, is areal *XA-dla-* ‘by shore’. Examples of this are in (68).

(68) Examples of areal *XA-dla-* ‘by shore’

*XAdla:da:X GAxqe:L* ‘I’m paddling along near shore’

*XAdla:t’a’X* ‘in sheltered channels’

*XAdla:tsin’da’d* ‘point of land jutting out from bank into river’

*XAdla:q’ qa’ GA’ah*, name of bay at Mile 5 on Eyak Lake’

perhaps *XAdli:na’q’ yAX da:Xinh* ‘he’s walking about on riverbank’ (if not for ‘*uXAdli:na’q’*).

### **Xdl<sub>2</sub>-**

This group is highly thematic, primarily in the basic verb *Xdl-’ya* ‘(sg) run’ (not e.g. *l-qu* ‘(pl) run’), of course amply attested; also ‘*i-’Xdl-’ya* ‘move running (catching up to or falling behind another running)’. To this may be related *k’u-Xdl-Xan’* ‘alarm rings’, an obvious neologism, < *-Xan’* ‘be fleet-footed’, explained by Lena with reference to swift vibration of rod between two bells, ‘causing something to move appendage swiftly’?. Conceivably also *yAX k’u-’-Xdl-dA-a-(X)* ‘(sg) stagger about’ and *yAX k’u-’-Xdl-dA-’a’ch’-X* ‘(pl) stagger about’ can also therewith be explained.

This, especially considering the explicit explanation of the neologism for ‘alarm (clock) rings’, is a vivid demonstration of the “psychological reality” of even some of the most abstract qualifier uses.

### **Xdl<sub>3</sub>-**

This group too is thematic, associated with *ya:X* ‘complete destruction, complete consumption’, perhaps in part involving phonological reduplication of /X/. It occurs in verbs referring to fire, cf. (69).

(69) *Xdl<sub>3</sub>-* with *ya:X* ‘complete destruction, complete consumption’

*ya:X Xdl-q’a* ‘burn up/down completely’ (itself including *d<sub>2</sub>-* ‘fire’)

*ya:X O-Xdl-L-q’a* ‘completely burn O up/down; fry O’ (itself including *d<sub>2</sub>-* ‘fire’)

*ya:X Xdl-L-shuh* ‘flame/light go out, extinguish’ (intrinsic)

*ya:X Xdl-xu’tl’* ‘blow out O (candle, itself *Xd*-class)’.

Though the *d-* and *X-* may be explained, the lack of *dA-* classifier in *ya:X Xdl-q’a* ‘burn up/down completely’ precludes explanation of the *l-* as being part of *l-dA-* ‘errative, consumption’.

### **Xdl<sub>4</sub>-**

This group is thematic, though likely enough composed of class mark *Xdl<sub>1</sub>-* ‘log, etc.’ plus *dl<sub>2</sub>-* ‘tilt’, and occurs in the forms in (70).

(70) Forms with thematic *Xdl<sub>4</sub>-*

## a. Verbal:

'u'XAdla:sA'yahL '(mast) is standing aslant'

## b. Nominalizations:

XAdla:tah dAkinh 'latch-stick' ('stick (dAkinh) in latching position')

'uX k'uXAdla:tah 'latch' ('something (k'u-) is in latching position on (-X) it ('u-'))

ts'isa:XAdALte' XAdla:tah 'boom' ('cross-pole for mast')

'uX k'uXAdla:GAta' 'latch it (door)!' ('put something as latch on it!')

'Al dAkinh 'AwX XAdla:GAta' 'put thus stick as latch on that'

Other instances of *Xdl-* are transparent secondary combinations of *Xd<sub>4</sub>-* in *Xd-an* 'sharp' and the class mark *dl<sub>1</sub>-* 'stone, knife', so *Xdl-yan* '(knife) is sharp', or class mark *Xd-* for 'day' plus *l-dA-* 'errative, consume', as in *Xdl-dA-'a* '(day) wanes', *O-Xdl-(L-)'a* 'spend O (day)'; also *ya'X XAdli:sid* 'pl stick up high' (unidentified S); further *X<sub>2</sub>-* of *-X-a* 'eat' and *dl<sub>1</sub>-* in *O-Xdl-a* 'eat O (*dl*-class)'.

#### 17.10.6.5 *d-l-X-* qualifier combination

As allowed by the mobility of *X-*, there are two distinct qualifier combinations of the form *dlX-*, one verbal thematic, the other a noun qualifier.

##### *dlX<sub>1</sub>-*

This is unique to the basic theme, *o-ch' dlX-t'e' ~* 'watch o', amply attested, including usitative nominalization *qi' k'uch' k'udla:XAt'uh* 'showhouse, movies' ('place where one looks at something'). From *-t'e' ~* 'be (so)', the meaning strongly suggests *-la:X* 'eye' but the expected anatomical mark is *lX-*, unless the formation is much earlier *d-lX-* in morphological order, otherwise unknown; the easier morphophonological explanation is regular *d-l- > dla:-* and mobility of *X-*, though the semantics are opaque.

##### *dlX<sub>2</sub>-*

This is attested as noun qualifier in five nouns, one with two variants, mostly opaque: *dla:X-ta:*, a man's name (*-ta:* 'father'), *dla:Xt'e'q'shg* 'unripe berries', *dla:Xk'ik'shg* 'berry species', *dla:Xq'e:ts* 'nausea, seasickness', *dla:X'i:nd* or *dla:XA'i:nd* 'button' (*dl*-class). The usual *dla:X-* instead of *dla:XA-* is perhaps explainable by prosody. The opaqueness of these forms, the inability of speakers to explain them, the intrinsic status of *dlX-*, with stems otherwise unattested, leaves *dlX<sub>2</sub>-* without identifiable meaning. The one analyzable form, *dla:XLXe:dj(g)* 'quartz', cf. *O-dl-L-Xe:dj(g)* 'make sparks by striking stone', where *dl-* may be the class mark for the object (stone), does not clarify the others, and may have analogical *X-*.



### 17.10.6.6 *q-X-* qualifier combination

This is mainly a primary combination, of pluralizer *q-* and *X-*. It is covered mainly in the verb derivational subsection, named Multiple, as it is the only conjugation-choosing qualifier combination. As a primary combination, specific identification of *X-* is problematical. The only candidate is  $X_3-$  of *X-'ya* ‘(pl) fly’, such that instances of *qX-'ya* may have a covert combination *qX-X-'ya*, especially in the usitative Active imperfective nominalization *listsin'da' qAXa'yah* ‘chickadees’ < ‘pl fly (multiply) at tree-tops’.

See below also *X-g-* ~, *X-g-d-* ~, *X-ti:l-* (§17.10.8.2), *X-lX-* (§17.10.10.6), *X-qi:l-* (§17.10.9.9).

### 17.10.7 *g-* qualifier

This qualifier is abbreviated *gu-* or *g-*. Its phonological realization is *gu-* in more “careful” speech, *gA-* in less “careful” speech. Followed by modal *'i-*, the result is *gu'-*, followed by modal *AN-*, the result is *gu:(n)-*, and followed by 2s subject or optative *yi-*, the result is also *gu:(n)-*. For the sequence *gu-a:-*, in postpositional phrases, the result is *guka:-*, with morphophonologically unique /k/ of unknown origin. This must be motivated by some constraint against the result *\*ga:-* with loss of labial identity of *gu-* (cf. §6.14.1). In any case, it is quite clear that in spite of its frequent realization as *gA-*, the underlying form of this qualifier prefix synchronically is *gu-*, not *g(w)A-*. See extensive discussion of this *-gu-k-a:(-)* both in §17.10.5, and with the postposition *o-a: ~* in Chap. 16.

The qualifier *g-* has all three functions: noun-class, anatomical, and thematic.

#### **g<sub>1</sub>-**

*g<sub>1</sub>-* as noun-class marker clearly enough has the meaning ‘filament-like’. Attested in the modest-sized class of at least eight items are the forms in (71).

(71) *g<sub>1</sub>-* as noun-class marker ‘filament-like’

<i>Ge:ts'</i> ‘spruce-root’	<i>'idAgAdAleh</i> ‘knitting-yarn’
<i>la:X</i> ‘string, cord, twine’	<i>tl'ihX</i> ‘blade of grass’
<i>-k'u't'</i> ‘vein, artery; nerve; sinew, thread’	probably <i>kidz</i> ‘grass species, seaweed species, type of twine’
<i>sa'</i> ‘cambium or sap scrapings’	probably <i>gusi:ns</i> ‘(strand of) grey hair’
<i>le:L</i> ‘strand of hair’	probably <i>lisgusi:k'</i> ‘beard-moss on tree, usnea’
<i>dzAwUL guLeh</i> ‘net-cord’	

This *g-* is well attested with adjectives in reference to *g*-class nouns: *-t'u* 'many', *-L-chahsh* 'thick', *-shiyah* 'bad', *-kuts'-g* 'small', *-'a:w* 'long'.

Noun-classificatory *g-* is also well attested with postpositions (72).

(72) *g*<sub>1</sub>- with postpositions

- o-xah* 'removal of o' in *le:Lguxah* 'removing (loose strands of) hair'
- o-qa:* 'kind of o' in *k'Ayi:nyguqa:* *Ge:ts* 'a different kind of spruce-roots'
- o-Xa* 'for o' in *le:LguXa* *ya:n* 'hair tonic' ('medicine for hair')
- Ge:ts'guXa* *-a* 'go for (to get) spruce-roots'
- o-lah* 'around o' in *dzAwuLguLehgulah* 'around a ball of net-cord'
- o-ch* 'toward o' in *dzAwuLguLehAch* 'toward a ball of net-cord'

However, as mentioned above, with non-syllabic postpositions requiring epenthetic /a:/, where /k/ of unknown origin appears, we have the forms in (73).

(73) Forms with *-guka:-*

- dzAwuL guLehguka:q' ya:n* *GAta* 'set it down on piece of net-cord' (with *o-q* 'on o')
- le:Lguka:X* 'by means of its hair' with *o-X* 'by means of o'
- Ge:ts'gAka:X dAGida* (*gA*)*di:'yahL* 'it's full of spruce-roots' (like previous)
- k'Ayi:nyguka: Ge:ts* 'a different kind of spruce-roots'

The qualifier *-gu-k-a:* also occurs with numerals.

It is of course in verbs that noun-classificatory *g-* is most widely attested, with at least thirty verbs, cf. (74).

(74) Noun-classificatory *g-* in verbs

- O-g-ta'k* 'twist O (nettles)'
- 'iLlah O-g-tl'i* 'roll up O, hold onto O'
- o-X O-g-tl'i* 'tie O to o'
- ya'X 'Ad-g-LA-tl'i* 'put up (own) hair'
- O-g-L-li* 'do something to yarn'
- O-g-tsu:x* 'thread O (thread, through needle)'
- 'iLlah/iLqa* *g-LA/dA-dje:g* '(string) is all tangled up/together'
- yAX g-dA-djahGL(-X)* 'S embroiders, tattoos' (perambulative)
- g-dA-djehX* '(thread) gets loop in it'
- O-g-dja* 'yank O (hair)'
- O-g(-L)-sha* and *O-g-L-shiya* 'dig O (spruce-roots)'

- O-*g-xa'ch* 'tie (knot in) O (string, etc.)'  
 O-(*L-xik*) 'slit/peel O (spruce-roots)'  
 O-*g-L-GAmAts* 'twist O (strands)'  
*g-LA-GAGs-g* 'have curly hair' (cf. *l-LA-GAGs-g* with the same meaning)  
 O-*g-qa(:-g)* 'hold O (spruce-root) in teeth'  
 O-*g-XAt* 'peel O (spruce-roots)'  
 O-*g-XAq* 'flatten/split O with knife/teeth'  
*'idA-g-dA-le* 'make O (yarn)'  
*Ge:ts' gu'a'tl'inh* 'he's chewing spruce-roots'  
*g-'ya* '(string) is situated'  
 O-*g-L(-y)a* 'handle pl O (spruce-roots)'  
 O-*g-(l)ta* 'handle O' (*Ge:ts'* 'spruce-root', *la:X* 'string, cord, twine', *-k'u't* 'vein, artery; nerve; sinew, thread', *sa'* 'cambium or sap scrapings')  
 O-*g-(L-)a* 'handle (same)'  
*g-ta* 'be in position' (7 items), *g-'a* 'be in position' (2 items) (see Krauss 1968)

In a few cases, this *g-* moves a bit toward anatomical or thematic use, though still clearly different semantically from other such, as in *g-LA-GAGs-g* 'have curly hair' (cf. *l-LA-GAGs-g* with the same meaning?), *o-Xa:n' yAX gu-'a'* 'o has hair hanging all the way down on her', *o:-nAX yAX gu-'a'* 'o's hair hangs down in/on her face'.

Further, there are at least four nominalizations of verbs with this qualifier: *Ge:ts' guXAq'* 'magpie' (< 'flattens spruce roots'), *le:L guch'u'* 'hummingbird, dragonfly' (< 'steals hair'), *gus:ins* 'grey hair' (< 'it (hair) is moldy'), *dzAwuL guLeh* (most likely from 'net composed of filament-like S' where *-Le(')* 'be' is shortened Neuter imperfective *gu:Leh*, or possibly a verbal noun).

### ***g*<sub>2</sub>-**

Another function of the qualifier *g-*, quite distinct at least partially, is anatomical, or the like, with the meaning 'hind part, hips', as such often glossed 'thematic, caudal, appendage' in the dictionary. This *g*<sub>2</sub>- seems to be found especially in qualified nouns. It does not follow, of course, that such nouns are themselves of *g*-class. Several of these, e.g. *-gu-tl'ah* 'tail' are of *d*-class. There are at least a dozen clear examples, cf. (75).

(75) *g*<sub>2</sub>- 'hind part, hips' in nouns

- gu-Xa:* 'butt-end of tree'  
*-gu-da:n'* 'back, hips'

*-gu-tl'idj* 'rump, hindquarter, tailbone'

*-gu-tl'ah* 'tail of animal'

*-gu-L-ts'ahLk'* 'tailbone; seal's tail'

*-gu-tl'a'* 'stern of boat'

*-gu-ka'* 'tail of bird'

*-gu-guch'* 'animal (e.g. dog's) penis'

*-gu-nAgAG* 'hip' (<?, *-nA-gAG*, both segments otherwise unattested, though *-nA-* is possibly the qualifier *l-*)

*-qe'-gu-ya'd* 'small of back, animal's hips' (postpositional, *-qe'* otherwise unattested (but cf. *-qe'guwa'* below), *o-ya'-d* 'in o (with broad opening, nominalized)')

*-gu-'a'L* 'hip, haunch' (perhaps deverbal from *-'a'* 'extend')

*'Ad-gA-dA-t'ux* 'vest' (< 'it holds itself at one's hips?') (nominalized verb)

*'Ad-gA-dA-sa'q'* 'woman's dress' (< same as preceding, verb stem *-sa'q'* otherwise unattested)

To these should very probably be added the forms in (76), with the meaning 'lower part of dress, skirt, coat; hem', attested at least with postpositions and verbs.

(76) *g<sub>2</sub>-* 'lower part of dress, skirt, coat; hem'

*o-gu-k-a:-q'* in *siguka:q'd* 'hem of my coat, of my dress' (postpositional, with *o-q'* 'on o', cf. *o-gu-k-a:-X* above for *g<sub>1</sub>-*), in *o-gu-lah* 'around o's dress-hem'

*o-t'a:X / o-Xa:n' yAX gu-'a'* 'o's slip is hanging down showing'

*yAX 'AdguLi'e'dzL* 'she is very virtuous, chaste' ('she has her hem held down with her feet', Neuter perfective)

See below under verbs with thematic *g-* for two verb themes that have *g-* that can probably be identified with this *g<sub>2</sub>-* anatomical. Finally, cf. the much more common qualifier combination *g-d-* 'rump, buttocks' (§17.10.7.1), which very probably includes this *g-*; likewise some instances of *gdl-* (§17.10.5.3).

From June 11, 1971 we have from Anna *k'u-gu-q'uhL* there glossed in the original 'turned-up hem', but elsewhere (?) 'crotch-piece of woman's underwear', with the stem *-q'uhL* otherwise unattested. The qualifier *g-* here might add the meaning 'crotch, perineum' to the basic anatomical gloss for *g<sub>2</sub>-*, say 'loins' (cf. *kuhsL* 'loin-cloth'), to round it out or even clarify it, also distinguishing it more clearly from anatomical *g-d-* 'rump, buttocks' (which includes 'anus'). That may also distinguish *g<sub>2</sub>-* more clearly from *X-* 'human male genital/pubic' and *Xl-* 'human female genital/pubic', as in *-gu-guch'* 'animal (e.g. dog's) penis' as opposed to *-XA-guch'* 'man's penis'.

At the same time, it is uncertain whether  $g_2$ - can be considered anatomical in the same full or productive sense as other anatomical qualifiers, in that we have no attestation of that used productively in verbs; forms such as ?'iguGAX'eh 'I see your loins' were not tested.

### $g_3$ -5-

In sharp contrast to the functions of qualifier  $g$ - above, there are three fully thematic uses of it in the following few verb themes, all with very basic motion, postural or classificatory stems. The first two consist of suppletive singular-plural pairs.  $g_3$ - is in  $g$ -LA-*a:n*' (sg) stand', where the stem is unique to this theme, and  $g$ -LA-'*a'ch*' (pl) stand', where the stem is that of -'*a'ch*' (pl) go/walk'. It is possible that this thematic  $g$ - is originally related to the anatomical use for 'hips'. Both themes are unusual Inceptive perfective statives, which itself has a meaning of something like 'equilibrium of forces or pressures' (cf. §12.4.2.2). The second pair, with  $g_4$ -, is  $g$ -Le-*da*' (sg) flee' and  $g$ -LA-*qu*' (pl) flee', with causatives O- $g$ -L-*da*' chase (sg O)' and O- $g$ -L-*qu*' chase (pl O)', from -*da*' (sg) sit/stay' and -*qu*' (pl) sit/stay', respectively, and O-L-*da/qu*' cause (sg/pl O) to sit/stay'. Conceivably, these two pairs could have in common the anatomical concept of  $g_2$ - 'back end, hips'.  $g_5$ - is found only in  $g$ -'*ya*' 'tide is/moves in position' from -'*ya*' 'be involuntarily situated', where the  $g$ - obviously refers specifically to 'tide', not otherwise associated with qualifier  $g$ -. In some cases, these vary with the much more frequent combination  $g$ -*l*- 'liquid', to which this  $g_5$ - is presumably related.

There are two further themes with  $g$ - where that can probably be identified with  $g_2$ - 'back end':  $g$ -*q'Ash*' 'be lame, crippled, limp', for which cf. *l-q'As*' 'be bent out of shape, not a right angle', and *ya:n*' *AdgusdidzuxL*' 'I sat down fast' (Lena, 'I poked my rump down'), which should perhaps have been *AdgudisdidzuxL*, with  $g$ -*d*- 'buttocks' instead, to which this probable  $g_2$ - is presumably related.

There is one instance of duplication of  $g$ - itself, written *ya'gusLi'a'ch'L*' 'its hair bristled up', from Lena. This could certainly also have been glossed 'they stood up', and the gloss from Lena, with *le:L*' 'hair' as subject, itself a  $g$ -class noun, must reflect special thoughtfulness on Lena's part, that the  $g$ - could reflect a  $g$ -class subject in addition to its thematic use. Lena's thoughtfulness here might be motivated by the fact that in  $g$ -LA-*a:n*' (sg) stand' the  $g$ - is intrinsic, but in  $g$ -LA-'*a'ch*' (pl) stand' the  $g$ - is extrinsic. Her thoughtful gloss for this also reflects her extraordinary linguistic insight (cf. §3.3.10.4).

There are several more non-verbal items with  $g$ - alone that are not listed with specific numbered instances of  $g$ - above, but for which a tentative association with such will be suggested, rather than multiply the numbers. There are the nouns *gu-L-t'ahL*' (plume-) feather', non-possessed, so perhaps derived from *k'u-L-t'ahL*' leaf, (plume-) feather', and further, *gu-GA-Lte*' 'handle (e.g. of axe, shovel)' (q.v. also under combination  $g$ - $G$ -), which

could be reminiscent of  $g_2$ -. There are postpositional *o-gu-da'* 'outlet of body of water'<sup>8</sup>, and *o-gu-d(?)a:-q'* 'on bank of o' (*'a:nguda:q'd* 'bank of river'). These could be associated with  $g_5$ - 'tide'. The noun *lis-gu-si:k* 'beard-moss on tree' (with *lis* 'tree', but stem *-si:k* otherwise unattested) is of unclear morphology, possibly *-gu-si:k*, probably not a possessed noun, which should instead show the *d*-class mark for *lis* 'tree'; it is therefore most likely a nominalized verb, where the *g*- is  $g_1$ - 'filament-like'. Finally, there is the adverb *gu-si:-kih* 'little (bit)', with diminutive *-kih*, stem *-si:-* otherwise unattested but presumably itself adverbial, and *g*- which is probably also  $g_1$ -.

Beyond the clearly segmentable instances of *g*-, there are several more possible instances of it in the following items that cannot be clearly segmented: *-qe'guwa'* 'bile' (cf. *-qe'gu-ya'-d* 'small of back' under  $g_2$ - above, but here with possible stem *-guwa'*, otherwise unattested); *-guwa'ts'* 'mesentery' and *guwa'ts'* 'seaweed (focus) species, rockweed', entered in the dictionary under *-wa'ts'* 2 (cf. *wa'ts'* 1 'whip'), but perhaps instead a disyllabic stem. Finally two unanalyzable nouns include a *-gA-* or *-gu-* in a position where that could be the qualifier *g*-: *Ge:LgAlid* 'owl' and *Ga:gAleh* 'cod species', but nothing else in these two nouns is identifiable.

#### 17.10.7.1 *g-d*- qualifier combination

This combination is found in two major functions, as noun class mark, and as anatomical mark. Thirdly, it appears as thematic with a few verbs.

##### *gd*<sub>1</sub>-

*gd*<sub>1</sub>- is a noun class mark for a small group of about five nouns (77), which certainly do not seem all to have a single common semantic element.

(77) *gd*<sub>1</sub>-class nouns

<i>tl'ihX</i> 'grass'	<i>gudAsu</i> 'dry salmon type 2' (< O- <i>gd-su</i> )
<i>k'udALts'aq</i> 'grass species'	<i>-tsin</i> 'nape, neck' (also <i>gdI</i> -class)
<i>gudALidg</i> 'braid of hair' (< <i>gd-Lid-g</i> )	<i>ma</i> : 'lake'

Certainly the first three in (77) could share the element *g*- 'filament-like', possibly the fourth too, but hardly *-tsin* 'nape, neck' (cf. *d*- 'protuberance'), and certainly not *ma*: 'lake' (cf. *gl*- 'liquid').

<sup>8</sup> *'a:nguda'd* 'outlet of river', *'i:ya:Gguda'd* 'site of Eyak Village', *ma:guda'd* 'outlet of lake', *di:ya'guda'd* 'salt-water outlet', said to be etymology of *ya:gwda:d* 'Yakutat'

As a noun class mark  $gd_1$ - is attested in verbs, adjectives, postpositional phrases, cf. (78).

(78)  $gd_1$ - as noun class mark

a. In verbs:

*sitsin' siya: gudAsALdAtl'Linh* 'he hurt my neck'

O-*gd-su*' 'make O (dry salmon type 2)'

*gd-ta* and *gd-'a* '(*gd*-class) be in position'

O-*gd-(L-)'a* and O-*gl-(L-)ta* 'handle O (*gd*-class)'

O-*gd-L-'ya* 'handle O (*gd*-class) in container'

b. In adjectives:

*tl'ihXgudAt'u*' 'lots of grass'

*k'ugudAchahsh k'utsin*' 'thick neck'

-*gd-shiyah* 'bad (of *gd*-class)'

*ma:gAdAGAmAk*' 'round lake'

-*guda'lAw* 'big (of *gd*-class)'

*k'ugudALidggudA'a:w* 'long braid'

c. In postpositional phrases:

*tl'ihXgudAda:d ya:n' GAta*' 'set it down by the grass!'

*ma:gAdAta:s* 'across a lake'

*tl'ihXgAdAch*' 'toward the grass'

*tl'ihXguda:q*' 'on the grass'

*tl'ihXguda:X* 'with the grass'

*tl'ihXgudAXa*' 'for the grass'

*tl'ihXgudAlu'qa*' 'for grass'

*tl'ihXgAdAyAq*' 'in the grass'

*ma:gudAlah* 'around a lake'

*ma:gudAtl'Alah* 'around a lake (dwarves)'

*ma:gAdAya'd* 'in a lake'

*k'Ayi:nyguda: ma:* 'a different lake'

d. In a noun phrase:

*sitsin'gudAk'ut*' 'my neck-tendons'

### $gd_2$ -

This usage surely unrelated to  $gd_1$ -, is the anatomical mark 'buttocks, rear end, butt, rump', for which cf. probably PA  $^{**}$ - $\zeta^{wr}$ ad- 'leg'; at the same time, cf. also  $g_2$ - 'hind part, hips' and  $d_5$ - 'anatomical protuberance'. This is well attested in verbs, extrinsically, cf. (79).

(79)  $gd_2$ - 'buttocks, rear end, butt, rump' in verbs

O-*gd-L-dAtl'* 'hurt O in buttocks'

O-*gd-ta'tl'* 'kick O in buttocks'

*sig'a gAdi:t'inhinh* 'he has buttocks like mine'

*gd-LA-dLAGshg* '(butt) be muddy', *ts'a' gd-Le(?) 'id.*'

*'idAyishah gAdisdiLe'xts'L* 'he's so stingy he has warts (*Le'xts'*) on his butt' (idiom)

o-X *'Ad-gd-dA-dzux* 'bumps buttocks against o'

*ya:n'ch' 'Ad-gd-dA-tsu:x* 'do deep knee bends' ('thrust buttocks downwards')

O-*gd-L-ts'in'tl'-g* 'slap O's buttocks, spank O'  
 o-X O-'*gdL-L-ts'AX* 'throw o at O's butt'  
 o-X O-*gd-L-ts'AX* 'hit O's butt with thrown o'  
 O-*gd-ch'u:ch'* 'pinch O's buttocks twistingly'  
*gd-ga'* 'have tired/sore buttocks'  
 O-*gd-xut'* 'shoot O in buttocks'  
 o-X O-*gd-L-qAtl'* 'rub O's rump with o'  
 'Ad-*gl-LA-'ya* 'wiggle butt'  
*gd-'a'q'* 'have sunburned buttocks'  
*gAdAGALAGAmAk'L* 'has round butt'

This use can extend to clothes: O-*gd-L-qa't'* 'patch O (pants, on seat)', *gd-qAts'* 'S's pants split/rip', perhaps even more generally, *gd-t'ux* '(clothes) be tight', including nominalization: 'Ad-*gAdAt'ux* 'vest'.

Anatomical *gd<sub>2</sub>-* is also attested with adjectives and postpositions, cf. (80).

(80) *gd<sub>2</sub>-* in adjectives and postpositional phrases

a. In adjectives:

*guda'lAW* 'big-butt!'  
*gAdAGAmAk'* 'gnat' (< 'round-butt!')

b. In postpositional phrases:

o-*guda:X* 'in contact with o's butt'  
 o-*gd-'e'* 'impression (in snow, mud) where o's buttocks were'  
*sigAdA'a:n* 'encountering my rump'  
 o-*gAdAyAq'* 'up o's rectum'  
*k'ugAdAyAXAya* 'diaper' ('thing (-ya' under (-yAX) one's (k'u-) buttocks')

This anatomical mark was also eloquently attested in a session with Sophie with adjectives in interrogative phrases, e.g. *k'e:gAdAdzu:dkihnu: 'a:nda' shA'a'ch'L* 'how did those cute-butted (girls) get here?'; for further examples, see §23.3.

There is the archaic postpositional phrase *tl'A-qa'(-d)* 'anus, rectum; ass' (< 'between (-qa') buttocks (*tl'A-*')), for which cf. Eyak *tl'ah* ~ 'back end', PA \**tl'a* ~ 'buttocks', functioning adverbially (rather than as a *gd*-class noun), with which *gd<sub>2</sub>-* is also used, in the noun phrase *tl'Aqa' gAdAlah ch'AX* 'bat (mammal)' (< 'around its rump wings (*ch'AX*)'). This *tl'Aqa'* is also found in combination with *ya:X*, of unclear origin, in the phrase *ya:X tl'Aqa'* 'upside-down' with the verbs of extension, including also *gd-*: *ya:X tl'Aqa' gd-'a'* '(sg) be upside-down' and *ya:X tl'Aqa' gd-sid* '(pl) be upside down'.

Further semantic extension of *gd<sub>2</sub>-* is most probably to be found in O-*gd-ta* 'steer O (boat)', as certainly in *k'ugAdAch' dAxuLg* 'outboard motor, kicker' (< 'continually at the



back end of something it revolves’).

### **gd<sub>3</sub>-**

This group is thematic, attested in only one pair of verbs, *gd-dA-da* ‘(sg) flee’, *gd-dA-qu* ‘(pl) flee’, causative *O-gl-L-da*, *O-gl-L-qu* ‘chase (sg/pl O) away’. The meaning is not clearly distinguished from that of *g-LA-da*, *g-LA-qu*, *O-g-L-da*, *O-g-L-qu*, with what is numbered *g<sub>4</sub>-*, possibly identifiable with *g<sub>2</sub>-* ‘hind end, hips’. In that case, then *gd<sub>3</sub>-* is in turn identifiable with *gd<sub>2</sub>-*.

### **gd<sub>4</sub>-**

This group is for miscellaneous thematic single items, more or less clearly derivable from *gd<sub>1-2</sub>* or at least class mark *g-* ‘filament-like’: *O-gd-Lid-g* ‘braid O’s hair’, or ‘braid O (e.g. wick)’, likewise nominalization *gAdAsu* ‘dry salmon type 2’. Here also presumably *gd-LA-XuhX* ‘(cloth) gathers, puckers (in poor sewing)’, perhaps *O-gd-ch’ich* ‘tie knot at end of spruce roots (*g*-class)’, and *qa’gAdi’Lya:* ‘Alaska daisies’ (if not *qa’GAdi’Lya:*) ‘(pull them (*gd*-class?) out one after the other!’).

### **gd- by derivation**

Finally, there are instances of *gd-* that are purely combinations of *g-* and *d-*, or of *gd-* and *d-* (81).

(81) *gd-* as combination of *g-* and *d-*, or of *gd-* and *d-*

*dAGida’gd-’a* ‘be full of (spruce roots)’ (with class mark *g<sub>1</sub>-* and *d<sub>9</sub>-* ‘accumulation’)

*’Aw gudALq’a:gk’* ‘burn them (spruce roots)’ (customary repetitive with class-mark *g<sub>1</sub>-* and *d<sub>2</sub>-* ‘burn’)

*gd-q’a* ‘(grass) burn’ (with class mark *gd<sub>1</sub>-* and *d<sub>2</sub>-* ‘burn’)

Uniquely problematical is *Xa:ngudi:(n)yanh* ‘porcupine’, with anatomical *Xa:n-* (*Xl-*) (cf. *o-d-Xa:na’q’-d* ‘o’s back’) plus *gd-yan* ‘(*g*-class, filament-like) be sharp’, cf. *d-yan* ‘be sharp’ with catch-all *d<sub>15</sub>-*.

#### **17.10.7.2 g-l- qualifier combination**

This combination varies phonologically as *gula-* ~ *gAlA-* freely, and *gun:n-* ~ according to the *l* ~ *n* rules (cf. §6.3). Here the combination is abbreviated *gl-*.

Nearly all examples of *gl-* are in the unanalyzable *gl<sub>1</sub>-* ‘liquid’ below. The few even partly analyzable exceptions are in three nouns, apparently with *g<sub>2</sub>-* ‘hind part, hips’, but the identity of the *l-* is unclear. One of these has the strikingly unique allomorph -

*gunA-*, unexplained, intrinsically, in *-gunAGAG* ‘hips’; the *-gunA* is consistent, though the “regular” *?-gulAGAG* was probably not tested. Even though the other two nouns are fish-parts, the *gl-* is probably not ‘aquatic’: *-gu:nt’ahL* ‘ventral fin’, and *-gu:ndza’L* “the red stuff by fish spine”, with *gl-* intrinsic in the latter, extrinsic in the former; cf. *(-gu)-L-t’ahL* ‘leaf, feather’, also raising the possibility of analysis as *-g-g-l-* ‘ventral fin’ with non-duplication.

### *gl*<sub>1</sub>-

*gl*<sub>1</sub>- ‘liquid’ is by far the most common of the *gl-* combinations. It is well attested as noun class marker, qualifier in verbs, adjectives, and postpositional phrases, but as qualifier of only a few nouns. There are over twenty attested *gl*-class nouns (82), routinely for liquids.

#### (82) *gl*<sub>1</sub>-class nouns ‘liquid’

- |  |   |
|--|---|
| a. General liquids:                              | <i>shi:</i> ‘creek’                         |
| <i>giyah</i> ‘water’                             | <i>q’Ats</i> ‘slough’                       |
| <i>di:ya</i> ‘salt water’                        |   |
| <i>ts’u:</i> ‘milk’ (as opposed to <i>-ts’u:</i> | c. Other substances that are more or        |
| ‘breast’, <i>l</i> -class)                       | less liquid:                                |
| <i>che:y</i> ‘tea’                               | <i>’u:gu:nAX k’uXehL</i> ‘paint’ (‘by       |
| <i>gu:xyAG</i> ‘coffee’                          | means of which liquid something is          |
| <i>na:w</i> ‘whiskey’                            | smearred/greased’)                          |
| <i>gi:wa:</i> ‘beer’                             | <i>Xe:</i> ‘grease, seal oil’               |
| <i>ka:dj</i> ‘soup’                              | <i>tsa:dla:Xe</i> ‘kerosene’                |
| <i>ya:n</i> ‘(liquid) medicine’ (as opposed      | <i>XAs</i> ‘pus’                            |
| to <i>ya:n</i> ‘pills’ <i>lX</i> -class)         | <i>shahG</i> ‘slime’ (more often            |
| <i>kus</i> ‘urine’                               | unclassified)                               |
| even the English loan <i>wine</i>                | <i>dAL</i> ‘blood’                          |
| b. Some bodies of water: <sup>9</sup>            | <i>gu:nLdAsL</i> ‘clotted blood’            |
| <i>a:n</i> ‘river’                               | <i>ma:sdla:</i> or <i>ma:sdlAG</i> ‘butter’ |
|  | <i>la:d</i> ‘lard’                          |

An especially interesting case is *di:ya* ‘salt water’, which remains consistently *gl*-class when meaning ‘salt’ including ‘table salt’. That appears to be in stark contrast to what seems the norm, e.g. *ya:n* ~ ‘medicine’, *gl*-class as liquid, but *lX*-class a ‘pills’ (‘berry-like’).

Verbs with qualifier *gl-* are amply attested, in ca. sixty themes, perhaps all with extrinsic *gl-*, often with predictable meaning. These with fully predictable meaning are listed first in (83), to be followed by those in which the meaning is less predictable (84). The fully predictable may be only half the cases.

<sup>9</sup> But not all bodies of water: cf. *ma:* ‘lake’, which is *gd*-class.

(83) *gl*<sub>1</sub> - in verbs, with fully predictable meaning:

*gl-tl'e'* '(liquid) is cool'

*Gu:X guli:Leh* '(water) has bugs in it, is full of bugs'

*ka:st' gulAGALe'L* 'water is splashing wildly in storm (*ka:st'*)'

*O-gl-ts'u'ts'g* 'suck O (liquid)'

*gl-LA-ts'an* '(liquor, infusion) be strong'

*gl-LA-ch'a:nG* '(liquor, infusion) be weak'

*ts'u: gu:nsALsi'L* 'milk got sour'

*guli:Lsi:k'* '(urine) sours' (customary: *-k'*)

*gl-LA-chan* '(liquid) smell'

*gl-LA-gAmi'* '(liquid) taste'

*gl-k'a'd ~* '(liquid) be hot'

*O-gl-L-kuhd ~* 'wipe O (water)'

*gl-dA-Gu'* '(water) be warm'

*O-gl-L-q'e'* 'cool O (soup)'

*O-'gl-q'e:'* 'try (taste) O (liquid)'

*gl-dA-q'ihdj* '(butter) become rancid'

*O-gl-Xu'ts'* 'splash O'

*yAX gl-dA-wAs* '(liquid; salt) spread about'

*yAX O-gl-LA-wAs* 'spread O (liquid; salt) about'

*gl-le* '(liquid) do something, be in certain condition'

*O-gl-le'g* 'grab O (seal-oil)'

*ya'X qu'gAli:t'ich'* 'you'll prop it (water) up (magically)'

*ya: gAlAGahG* 'snipe' ('chops a (liquid) thing (*ya:*), relativization)

a. Verbs of extension (especially productive):

*gl-sid* '(streams of water) extend, flow'

*gl-'a'* '(water) extend, flow'

*li' gAli:'ah* 'brook, stream, tributary'

*gl-'a* '(butter) be in position' (with classificatory *-'a*)

*O-gl-'a* 'handle O (butter, fat)' (as above; note, evidently no productive attestation of *\*?gl-ta*)

*gl-L-'ya* '(liquid in container) be in position' (with classificatory *-'ya*)

*O-gl-L-'ya* 'handle O (liquid in container)'

O-*gl-L-ya*: 'handle O (liquid in container, pl acts)'

b. Relativizations:

*di:ya* 'uya'ch' *gU:ndAya*: 'salt cellar', passive ('salt (*di:ya*) is put into (-*ya'ch*) it (*'u-*) bit by bit')

*di:ya* 'uya'd *gulALah* 'salt cellar'

*di:ya* 'uq' *qu'gAli:xLah* 'I'll put salt on (-*q*) it'

One place-name on Eyak River seems to attest classificatory *gl-ta*, namely *'itl'a:ndahd 'igAli:Ltahl* 'keeps indeterminate O (liquid) up against (-*dahd*) mountain (*'itl'*), a Neuter perfective form.

The theme *gl-'ya* is especially productive with reference to tides (for which see also *g-'ya*). The same theme is found in several more specialized uses: *giyah 'uyAq' gl-'ya* 'blister form', *o-yAq' yAX k'u-gl-'ya* 'o have diarrhea' ('something (*k'u-*) liquid is situated downward (*yAX*) in (-*yAq'*) o'), *dAL o-yAq' qa' gl-'ya* 'o have hemorrhage, spit blood', *o-d-tl'a'X yAX gl-'ya* 'o drool'. *gl-'ya* is also found in the relativizations *li' gAli:ya* 'brook' and *lu: k'ugu:n'ya*: 'big September tide', and in the deverbalization *yAq' gAla'yah* 'bile'.

(84) *gl*<sub>1</sub>- in verbs, with less fully predictable meaning:

*'uyAq' 'Aw qa' gu:nsALdu'k'L* 'he squeezed it (e.g. milk, not water) out of it' (O-*du'k* 'squeeze O')

*'Aw che:y 'ida'ya:lAX gu:nsAduxL* 'the tea has too many leaves in it, floating on top' (LA-*dux* 'float')

*gl-dA-tug* '(soup) be thick, (tea) have lots of leaves' (LA-*tug* 'swell')

*gl-tl'i:ts* '(infusion) be strong' (O-*t'i:ts* 'soak O')

*gl-L-tl'Ala* '(water) get stale' (O-*d-tl'Ala* 'tire of O (food)')

O-*gl-L-ts'u* 'guzzle O (beverage)' (O-(L-)*ts'u* 'suck O')

*gl-dA-suhdz* 'sizzle' (O-*suhdz* 'hiss at O')

*gl-ch'a:x* '(water) be cloudy, muddy' (*ch'a:x* 'cloudy, muddy water')

*gl-(LA)-shiL-g* '(water) splosh' (*qa' LA-shiL-g* '(fish) swarm at surface')

*gl-xwehd* '(water) be clear' (-*xwehd* 'fade')

*gl-xuL* '(water) swirl, form whirlpool' (-*xuL* 'roll')

*gl-LA-GAmAt'-g-L* '(water) be hard' ('can't wash in it', with *dA-GAmAt'* 'contort')

*gu:nsLiGAmAk'L* '(milk) curdled' (*GALAGAmAk'L* 'is round')

*gl-LA-qa'd-g* '(water) boil' (LA-*qa'd-g* 'cook')

O-*gl-L-qa'd-g* 'boil O (water)' (O-*L-qa'd-g* 'cook O')

*gl-L-Xan* '(snow) melt into water' (L-*Xan* 'melt, thaw')

O-*gl-wug* 'gulp (water) with grunts' (*k'u-wug* 'grunt, strain at something')

*gAlAdAkus* ‘big September tide’ (‘washes everything out’, relativization with O-*kus* ‘wash O’)

Here it is important to note that verb themes essentially (inherently) referring to liquid seldom or never have qualifier *gl-*, there being apparently no themes attested with intrinsic qualifier *gl-*. Routinely without *gl-* are O-*dA-la* ‘drink O’, O-*shish* ‘sip O’, O-*su:t* ‘slurp O’, *L-ts’a’tl’g* ‘leak’, *dA-xAX* ‘tide go out’, *-ts’e’q* ‘urinate’, O-*qa* ‘handle O (liquid in container), fetch O (water)’. The matter was not systematically investigated, but, exceptionally, for ‘drink’ we have *gAlAxdAlah* ‘I’m drinking it’ both from Marie and Lena, with the specification that the object must be something “special,” as opposed to water, e.g. *na:w* ‘whiskey’ or *ya:n* ‘medicine’; with O-*shish* ‘sip’ we have *gAli:shish* ‘sip it (tea, from saucer)’ from Lena; also from her *gAli:su:t* ‘slurp it!’ (with clearly optional *gl-*, no special meaning), *q’e’gAlAGAdAxAXL* ‘tide’s going back out’ (also with *gl-* clearly optional, no special meaning); and *gAla:yiLts’a’tl’k’ya:X* ‘lest it leak’ from Marie. For O-*qa* ‘handle liquid in container, fetch water’ we have no form attested with qualifier *gl-*.

Several adjectives are attested with class mark *gl<sub>1</sub>-*, and *gl<sub>1</sub>-* also occurs in postpositional phrases, cf. (85).

(85) Adjectives and postpositional phrases with *gl<sub>1</sub>-*

a. In adjectives:

-*gu:nAw* ‘big, large amount of’, attested with most nouns of class *gl<sub>1</sub>-*

-*gl-t’u*’ or -*gu:nt’u*’ ‘many, much’

-*gulAdzu*: or -*gu:ndzu*: ‘good’

*giyahgu:ndzu*: ‘Holy Water’

*di:ya’gAlAchahsh* ‘coarse salt’

-*gu:nshiyah* ‘bad’

-*gAlAgut’g* ‘very small bit of; very low (water)’

-*gulAkuts*’ ‘small amount of (liquid)’

*’a:ngAlAkih* ‘small river, creek’

*’Aw wine-gAlAkihX ’Ada:Laya:n*’ ‘cure yourself with this little bit of wine!’

b. In postpositional phrases:

*Xe:gu:na’tl’ xts’i:nG* ‘I eat it with my fingers, dipped in seal oil’

*o-gu:na’q*’ ‘on *gl*-class o’

*ya:gu:na’q*’ ‘out on salt-water’

*o-gu:nAX* ‘by means of *gl*-class o’

*’ugu:nAX k’uXehL* ‘paint’

*Xe:gu:nAch*’ ‘toward fat’

*giyahgu:nch*’ ‘(go) for water’ (irregular?, twice, contrasting with the preceding?)

*giyahgALAXda:d* ‘without water’  
*giyahgALAlu’qa:* ‘(going) for water’  
*’a:ngALAya’-* ‘in/into a river’  
*o-gALAQ’As-d* ‘against o (drinking)’  
*o-gl-’e’* ‘(desire) for o (liquid)’  
*di:ya’gALA’e’d,* a place name near Yakutat, ‘place of (now absent) salt-water’  
*giyahgALA’e:X* ‘looking for water’  
*k’Ayi:ny gu:na:* ‘different (beverage)’  
*giyahgALAda’* ‘to the water’  
*’a:ngu:nda:X* ‘along a river’  
*giyahgALAdAGd* and *giyahgu:ndAGd* ‘above the water’  
*ya:gALAta:s* ‘over bodies of water’  
*’a:ngALAta:s* ‘across a river’  
*’Aw giyahgALAt’a’-* ‘behind the waterfall’  
*’a:ngALAyAX* ‘under a river’ and *AwgALAyAX* ‘under it’ (magically lifted up)  
*’a:ngALA’a:n* ‘coming upon a river’  
*’a:ngulah* ‘around a river’ (by haplology < *’a:ngulAlah*)

Note that analogical *-gALA-* is especially common before coronal-initial postpositions.

There are only a few *gl-*qualified nouns attested: *gu:nLdAsL* ‘clotted blood’, where the *gl-* is intrinsic, but presumably refers to ‘blood’; *gu:ntl’ich’g* ‘jellyfish’ with extrinsic *gl-* ‘aquatic’, cf. *tl’ich’g* ‘gelatin’. In the compounds *’a:ngALAyU:* ‘rivers’ and *’a:ngALAch’iya’sAqe:G* ‘river-master’s son’ *gl<sub>1</sub>-* is merely an extrinsic class mark.

### *gl<sub>2</sub>-*

This usage is highly specialized, and semantically irregular or unique, in that except for this item, the semantic category ‘human’ is unclassified, taking no noun-class mark with verbs or adjectives, but here requiring the qualifier combination *gl<sub>2</sub>-*, in one pair of adjectives or verbs. It refers specifically to ‘humans, people’, but only with the adjectival pair *-t’u* ‘many’ and *-luhdg* ~ ‘few’, e.g. *k’ugu:nt’u* and *k’ugu:nt’u’inu:* ‘many people’, never with analogical *-gALA-*. However, the *gl-* is absent for some reason, not investigated, when the adjective is suffixed: *qe’LGAYu:’it’u’(yu:)* ‘many women’. The antonym *ya:gu:nuhdg* ‘few people’, happens to be attested only as independent, not tested as suffixed. These stems are both also attested in verbs: *’ida’ya:lAX gula:lAXLit’u* ‘you (pl) are too numerous’, *da:gAli:lu’dg* ‘we are few’, *gulAGAluhdgl* ‘people are becoming few’.

In this semantically unique case, conceivably, the *l-* might be identified with *l<sub>1</sub>-* ‘head’, but the *g-* is entirely unexplained.

**gl<sub>3</sub>-**

gl<sub>3</sub>- ‘ankle’ serves as class- or anatomical mark with the irregular noun (-)qe:s having to do with ‘ankle’ (gl- or g-class), perhaps originally ‘Achilles’ tendon’. In -qe:sguya’d ‘ankle’ the class-mark is g<sub>1</sub>- ‘filament-like’. Cf. however the forms in (86).

(86) gl<sub>3</sub>- with (-)qe:s related to ‘ankle’

siqe:s ‘back part of my lower leg’

’Awqe:sgu:na’q’ yAX dAq’Ats’g ‘(wolf) bites it (deer) on back of lower leg’

siqe:sgu:nLGAmAdL or -GAmAdl ‘my ankle-bone’

siqe:sgu:[n]dAya’d ‘my ankle, back of my ankle’ (-gl-[d-ya’-d])

yAX qe:s gl-xuL ‘turn ankle’, (with qe:s seemingly as preverb)

**gl- from reduction**

Two instances of gl-l- (with gl<sub>1</sub>- and l<sub>9</sub>-, l<sub>6</sub>-) are attested: ’Aw’u’gulixiLgah ‘I know that (beverage)’, gu:nsdi’ahL ‘it’s all drunk up’ (‘liquid is all consumed’, errative 2).

**17.10.7.3 g-d-l- qualifier combination**

Though this combination is largely or mostly derivable as gl- plus d-, or gd- plus l-, much of the time it has its own distinct thematic meanings with a fair variety of verbs. It functions marginally also as a class mark for three nouns (-tsin’ ‘neck’ under gdl<sub>1</sub>-, ’ugu:nAX k’uXe’L ‘paint’ under gdl<sub>2</sub>-, and gAdla:t’its’ ‘icicle’ under gdl<sub>3</sub>-).

**gdl<sub>1</sub>-**

gdl<sub>1</sub>- is a class-mark for the noun -tsin’ ‘nape, neck’, along with gd<sub>1</sub>- class mark, thus possibly a combination of that plus l<sub>1</sub>- anatomical ‘head’. Possible semantic difference was not specifically investigated. Both instances with gdl- happen to be in epithets, tsin’gAdli:nAw ‘big-neck!’, tsin’gAdla:a:w ‘long-neck!’, but not the six instances with gd<sub>1</sub>- not, even though this may be insignificant morphologically as well as semantically.

gdl<sub>1</sub>-, clearly with anatomical reference to ‘neck’, functions thematically in several verbs, cf. (87).

(87) gdl<sub>1</sub>- ‘neck’ in verbs

O-gdl-L-tsAX ‘cut O’s throat’

dAtli: qid ’iqe’gAdli:xdja’ ‘I’ll jerk your head off already!’ (to dog)

qid ’ahnu: gAdla:chich’g ‘he keeps breaking their necks/heads (off)’

qid O-gdl-L-tsAX ‘behead O’

lah O-gdl-GAmAts’ or lah O-gdl-GAmAt’ ‘wring O’s neck’

classificatory *qid* O-*gdl*-(*L*-)'a 'decapitate O'

O-*gdl*-(*L*-)'a 'handle O (neck)' (here as actual class-mark)

### ***gdl*<sub>2</sub>-**

In this group, *gdl*- clearly referring to 'color, in color' functions primarily as thematic, possibly as a combination of *gl*<sub>1</sub>- 'liquid' (< 'dye') plus unidentified *d*- (presumably not *d*<sub>2</sub>- 'bright', that being related to 'firelight', and dyes not being bright). See (88) for attestations of this *gdl*<sub>2</sub>-.

(88) *gdl*<sub>2</sub>- 'color' in verbs

*wAX gAdli:t'eh* 'it's colored thus'

*dAk'e:[d] gAdli:t'eh* 'it's of any color'

*dla:ch'e:'ga' dli:t'eh* 'it's red'

*dla:che:'ga' dli:t'ehX 'ALXe'* 'paint it red!'

*'iLda:X gAdla:dit'eh* 'it's of different colors'

*'iLqa'* O-*gdl*-*ga*:G 'mix O (different colors)'

classificatory *'u:d gudla:sAtahL* 'it is there' (e.g. colored pencil or crayon, which would be *'uX k'utl'a'g(L)*)

The qualifier *gdl*<sub>2</sub>- also appears in the nominalization *qa:ni:ch'AdALgahGga' gudli:t'eh* 'kind of pink dye', in the adjective *-gdl-t'u'* 'many colors', and as noun-qualifier in *gudla:Gu'L* 'Chilkat blanket' ('colorful blanket').

Further, *gdl*<sub>2</sub>- evidently also serves as class-mark for *'ugu:nAX k'uXe'L* 'paint' with the adjectives *k'ugudla:t'u'* *'ugu:nAX k'uXe'L* 'much paint' and *k'ugudla:shiyah 'ugu:nAX k'uXe'L* 'bad paint', and presumably also for *'uX k'utl'a'g(L)* 'colored pencil, crayon' itself.

### ***gdl*<sub>3</sub>-**

*gdl*<sub>3</sub>- is thematic, here treated as a single item, possibly derivable from *gd*<sub>2</sub>- 'buttocks, rump' plus unidentified *l*-, and/or *dl*-, with a broad meaning referring to 'jackknife at hips, overturn, swing', for which cf. also *Gdl*<sub>2</sub>- (§17.10.5.3). The forms are presented in (89).

(89) Attestations of *gdl*<sub>3</sub>- 'jackknife at hips, overturn, swing'

*gdl-wa'L* ~ 'hang suspended from above'

O-*gdl-Lwa'L* ~ 'hang, swing O suspended from above'

*gAdla:wahLg* 'hammock; swing for baby' (deverbalization)

*'Ad-gdl-dA-xut'* 'somersault'

*qa' gdl-xut'* '(tree) fall, roots coming out'



yAX 'Adgudla:sLitahL 'he somersaulted'; frequent in directive, 'move part, fold':

yAX 'Adu'gudla:sLitahL 'he rolled/flipped himself over'

'iLt'a'X qa' 'Ad-u'-gdl-(dA/LA)-'a 'be in jackknife/fetal position'

'iLya' yAX O-'gdl-dA-'a 'bend O back and forth until it breaks'

yAX O-'gdl-L-'a' 'turn O over'

'Ad-u'-gdl-dA-'a 'hang/cling on'

da:X 'i-'gdl-gehdz ~ 'barely hang/cling on'

### **gdl<sub>4</sub>-**

In this group too *gdl-* is thematic, derivable from *gl<sub>1</sub>-* 'liquid' plus various *d-* and/or *dl-*.

#### (90) Attestations of thematic *gdl<sub>4</sub>-*

##### a. With *d<sub>11</sub>-* 'detachment, free fall':

yAX 'i-gdl-L-'a' (waterfall) fall'

(qi') yAX 'igAdli:L'ah 'waterfalls' (relativization)

ya'X O-gdl-LA-t'Aq' 'flick O (water) with (thumb and third) finger' (also -t'ik')

O-gdl-L-ts'e'ts' 'squirt O (water, with pressure)'

'u:d yAX 'igAdli:sid' 'there are several waterfalls there'

##### b. With *d<sub>9</sub>-* 'accumulation':

dAGida' gdl-'ya' 'be full of water; be high tide'

giyah'uyAq' gA(d)li:'yah' 'water blister' (nominalization)

##### c. With any of the above or unidentified *d-*:

gdl-'ya' (water) drip, trickle, flow'

gdl-L-'a' 'puddle of water form, get in position'

o-d-tl'a'X yAX g(d)l-'ya' 'o drool'

O-gdl-L-'ya' 'put/take O (container of liquid) on/off (fire)'

'ilqa' O-gdl-L-'ya' 'mix liquids (in container)'

yAX O-gdl-LA-'Adz' 'shake O about (liquid medicine)'

##### d. With *d<sub>15</sub>-* as in *d-L-ehd-g* 'dry':

giyahya'd gdl-L-'ehd-g' 'water evaporates'

##### e. With *d<sub>12</sub>-* and *ya'* 'completely':

ya' O-gdl-L-k'uhd ~ 'wipe dry (e.g. inside bowl of soup)'

##### f. With *gl<sub>1</sub>-* plus *d<sub>4</sub>-* 'flat natural expanse' or perhaps *dl-*:

O-gdl-sha' 'dig O (drainage ditch)'

o-ga' gdl-L-'a' 'extend distance of o over water'

gudla:sAdik'L' 'distance over water became short'

*gAdla:'a:w* 'long distance over water' (adjective, cf. *GAdla:'a:w* 'long distance over land' and *Gl-* 'earth' as opposed to *gl-* 'water')

*gdl-gAmAG* 'be muddy, mired in wet mud' (possibly belonging here)

### ***gdl*<sub>5</sub>**

This is a miscellany of singletons: *q'e'* *gAdla:sdiyahl* 'he went home crying', *q'e'* *gAdla:shdi'a'ch'L* 'they went home crying' may conceivably be idiomatic from *gdl*<sub>4</sub>-; *'iLqa'* *gdl-LA-'Adz* '(colors) mix together' is also '(chased animals) mix wildly in confusion together'; *Xa:n'* *gdl-'ya* '(suit in cards) be trump' in game "66". The deverbalization *gudla:t'its'* 'icicle' itself appears to be *gdl*-class: *gudla:t'its'gudla:'a:w* 'long icicle'. In *siXu:ntl'* *gAdla:qa'k'u:'yahL* 'something is stuck between my teeth' the morphology is uniquely problematical, where *-Xu:n-* 'teeth' serves as object of *o-tl'* 'with o', followed by *gdl-qa'* 'between *gdl*-class?', where in any case 'teeth' is not *gdl*-class.

Finally, in *O-gdl-L-Xahd* 'tighten O (bowstring)' the combination must consist of *g*<sub>1</sub>- 'filament-like, cord' etc.' and unidentified *dl-* or *d-* and *l-*.

#### **17.10.7.4 *g-X-* (~ ?*X-g-*) qualifier combination**

Elicitations of the purely secondary combination of *g*<sub>1</sub>- and *X*<sub>2</sub>- of *O-X-a* 'eat O' resulted five times in *O-gX-a*, never in ?*O-Xg-a*, but the latter was not tested. See §17.1 on C3 qualifiers combining in variable order, and §17.10.7.5 on that variability in *gXd-* ~ *Xgd-* for full documentation.

#### **17.10.7.5 *g-X-d-* ~ *XA-[g-d-]* qualifier combination**

Elicitation of the partly secondary combination of *gd*<sub>1</sub>- (and *gd*<sub>4</sub>-) and *X*<sub>2</sub>- of *O-X-a* 'eat O' with *gd*-class object resulted eight times in *O-gXd-a*, and three times in *O-Xgd-a*. The order variability indicates that *XA-* and *gwA-* are in the same subposition. The 8:3 statistics no doubt reflect the phonological preference for /*gX*/ over /*Xg*/ as shown in §17.1.1, entitled "Special traits of C3", q.v. also for full documentation.

See below also *g-lX-*, *qi:-g-d-l-*; *g-s-*; for *g-G-*, see above under *G*<sub>4</sub>- (§17.1.2).

#### **17.10.8 *ti:-l-* qualifier (combination)**

This qualifier is no doubt to be identified with the possessed anatomical noun *-tah* 'skin, hide (of mammal, not fish)'. As such, it is always found in combination with *l-* of C7. The vowel shift /*a*/ > /*i*/ is explained, adequately if not systematically, by the nasal origin of /*l*/ and the coronal place of articulation of both the preceding and following consonants. Where preceding a coronal consonant and not analogical, the allomorph of *ti:-l-* is *ti:n-*. The

*l-* nevertheless remains clearly a separate C7 element, as is shown by that fact that when *ti:-l-* combines with *d-* of C6, the result is *ti:dl-*, also with no nasalization remaining on *ti:-*.

The qualifier *ti:-l-* is well covered in Krauss (1970a). There it is entered as a separate stem *ti:-*, rather than under *tah* ‘skin’ (though cross-referenced both ways), in spite of what is now considered explainable allomorphy. It is essentially noun-classificatory, with the meaning ‘flat thin flexible, as broad leaves, pelts, certain garments’. The dictionary lists nine nouns of *ti:-l-* class, 19 verb themes with *ti:-l-* class mark, and one verb theme in which the *ti:-l-* might be considered thematized, ‘*Ad O-ti:-l-dA-*’e ‘put on, wear O over one’s shoulders (e.g. shawl), hiding self with originally *ti:-l-* class O’. It further lists six adjectives, 13 postpositional phrases with attested with *ti:-l-* class mark, and two numerals (as o of *-ti:na:*). Because the dictionary lists them all, the lists will not be repeated here.

### 17.10.8.1 *ti:-d-A-l-* qualifier combination

Three verbs are attested with this secondary combination overtly. The first two are with *ti:-l-* plus *d<sub>9</sub>-* ‘accumulation’: *yAqa*’ *ti:dli:*’*yahL* ‘(skins) are (accumulated) in piles’, and *dAGida*’ *ti:dli:*’*yahL* ‘it’s full of skins’. The third is a combination with *dl<sub>4</sub>-* ‘deceive’: ‘*AW k’utah ti:dla:*’*GAL*’e’ ‘hide that skin!’ (< *-ti:-l-* + *-[dl]*-, with non-duplication of *l-*).

### 17.10.8.2 *X-ti:-l-* qualifier combination

The purely secondary combination of *X<sub>2</sub>-* of *O-X-a* ‘eat O’ and *ti:-l-* is attested in *O-X-ti:-l-a* ‘eat leaf-like O’.

### 17.10.9 *qi:-* qualifier(s?)

This is the only C4 qualifier that is for some reason not covered in the dictionary, so will be treated in full here. Furthermore, *qi:-* is the only qualifier of subdivision C4 which has more than one clearly different meaning, *qi:₁-* ‘foot’ and *qi:₂-* in *qi:-lA-* ‘rope’, where it is impossible to see how the combination with any *l-* could so affect the meaning of *qi:-*, itself perhaps indeed two different morphemes.

The qualifier or qualifier element *qi:₁-* ‘foot’ is attested alone in only three forms. One is the anatomical possessed qualified noun *-qi:-tAtl*’ ‘heel’, where the stem allomorph is otherwise unattested as such, being the reduced form of stem *-ta’tl*’ as in *O-ta’tl*’ ‘kick O’. Cf. Minto Athabaskan *-ka-tʷdl*, PA \**-qe-tətl*’. The PAE is more likely to have been \**qi:-* with lowering of the vowel after /q/ than the reverse. The other form with *qi:-* alone is *siqi:da’d* ‘top, upper surface of my foot’, a nominalized postpositional phrase with ‘*o-da’-d*’ ‘front of o’; cf. *-k’ush-da’-d* below. The third is Rezanov (1805) *кехыя* (<*kexkhyia*>) ‘башмаки’ (‘shoes’), for which a virtually certain reading is ?*qi:q’Aya*’ ‘shoes’ (‘thing on foot’), i.e. *qi:-q’-A-ya*’, with *o-q’* ‘on o’, *-A-* connective, *-ya*’ ‘thing’, though the form was not confirmed. Reference may have been to a Russian shoe, possibly even *ad hoc*.

### 17.10.9.1 *qi:-y-* qualifier combination

The combination of *qi:-* ‘foot’ and *y<sub>1</sub>-* ‘hand’, meaning ‘toes’ has obvious explanation, even if unpredictable semantically.

(91) Attestations of *qi:-y-* ‘toes’

a. In nouns:

*qi:yA-tl'ish* or *-qi:yA-L-tl'ish-L* ‘toes’ (cf. *yA-tl'ish* ‘glove-fingers’)

*-qi:yA-L-tsAq's-g-L* ‘toes’, Galushia Nelson (perhaps analogical, ‘foot-fingers’, cf. *-yA-LtsAq's-g-L* ‘fingers’)

*si-qi:yA-ga:g* ‘my big toe’ (stem otherwise unattested)

*-qi:yA-ku:nch'* ‘big toe’, Galushia Nelson (perhaps analogical, cf. *-yA-ku:nch'* ‘thumb’)

*si-qi:yA-L-Xahdz* ‘my toenails’ (cf. *-yA-L-Xahdz-L* ‘fingernails, claws’)

b. In postpositional phrases:

*si-qi:yA-t'a'-q'-d* ‘the back of my foot’ (cf. *-yA-t'a'-q'-d* ‘palm of hand’, under *o-t'a'* ‘behind, sheltered by o’)

*o-qi:ya-X* ‘in contact with o’s toes’

c. In nominalized verbs, lexicalized:

*qi:yi:'ah* ‘king crab’ (‘toes extend’, Neuter imperfective)

*qi:yidichanh* ‘spider, daddy long-legs’ (‘toes smell’)

*qi:yidich'an'k* ‘Dungeness crab’<sup>10</sup>

The last two forms in (91) also look like Neuter imperfectives, but are Active imperfectives with underlying vowels next to classifier *LA-* and *dA-* phonetically shifted to /iLi/ and /idi/ because of /i:y/ and coronal environment. The productivity of *qi:-yA-* in verbs is unclear: twice so attested, *xuqi:yAsALdAtl'Linh* ‘he hurt my toes’ and *siqi:yisiL'uhdzgL* ‘my toes fell asleep’, but with notation that such were difficult to elicit.

### 17.10.9.2 *qi:-d-* qualifier combination

With the exception of the three forms above with *qi:-* alone, the combination *qi:-d-* is the regular form of the anatomical marker meaning ‘foot’, with but minor extensions, e.g. ‘stocking; seal flipper; footprint’. For the *d-*, cf. *d<sub>5</sub>-* ‘appendage’ and *k'ush-d-* ‘lower leg’. Full listing is provided here, as such is absent in the dictionary.

The combination *qi:d-* serves marginally as noun class marker for *-k'ahsh* ‘foot’, *sanhAsi:nL* ‘socks’, and *si:nL* ‘shoes’, all also unclassified.

This combination is widely attested in verbs, and also occurs with adjectives and postpositional phrases, cf. (92).

<sup>10</sup> Editors’ note: the dictionary only has *qi:yALachanh* ~ *qi:yilichanh*.

(92) Attestations of *qi:-d-* ‘foot’

## a. In verbs:

- k'uqi:dAsahL* ‘a track goes by there’ (lit. ‘feet went’)  
*'Awq'Ach' 'Adqi:disLiyahL* ‘he put his feet on it’  
*O-qi:d-L-dAtl'* ‘hurt O’s feet’  
*qi:disLitAsgL* ‘my leg got shaky’  
*sig'a' qi:di:t'inhinh* ‘he has feet like mine’  
*qi:disLidla:GshgL* ‘your feet got dirty’  
*ts'a' qi:d-Le(?)* ‘have muddy feet’  
*qi:d-dA-tsug* ‘have swollen feet’  
*'Adqi:dAGAdAtsu:xL* ‘he’s waling slowly, dawdling along’ (‘thrusting feet’, progressive)  
*lahdz 'Ad-qi:d-A-tsu:x* ‘thrust foot out forward’  
*qi:dAGAts'in'tl'ginh* ‘hit (slap repeatedly) his foot!’  
*dAkinhX 'u'qi:dAGAts'AXinh* ‘throw a stick at his foot!’  
*qi:dAxts'ahLk'* ‘my feet are throbbing’  
*yaX O-qi:d-LA-chan-X* (dog) track O’ (‘sniff footprints about’)  
*qi:dALACHanh* ‘your feet smell’  
*qi:d-dA-k'ug* ‘get cramp in foot’  
*O-qi:-xut'* shoot O in foot’  
*qi:dixsLixut'gL* ‘my feet got wrinkled from long immersion in water’  
*'Adqi:dAdAGahdjginh* ‘he’s tapping his foot’  
*qi:dAGALAGAGsGL* ‘my feet are cold and numb’  
*'uya'd / 'uyAq' qi:dAGAxq'e'sL* ‘shoes are too tight’ (‘my feet are cramped in them’)  
*'uyAq'Ach' 'u'qi:da:xdiq'e:'* ‘let me try them on my feet’  
*'Adqi:dAGALAXan'Linh* ‘he’s fluttering his feet’  
*qi:d-xa:s* ~ ‘feet itch’  
*lAXiqe'qi:di:xLXa'Xch'X* ‘I’ll tickle your (pl) foot’  
*'Adqi:dAxdAle:g* ‘I’m rubbing my foot’ (persistent)  
*yAX 'Ad-qi:d-LA-'ya-X* ‘move foot around’  
*qi:d-'uhdz-g* ‘foot be asleep’  
*'u:d qi:dAsA'ahL* ‘a seal flipper is there’  
*dik' 'uyAq'Aga' qi:da'yida:G* ‘your foot isn’t big enough (right size) for it’  
*O-qi:d-L-'ehdz* ‘step on O’s foot’ (but note that basic *O-'ehdz* ‘act on O with foot’ itself does not take *qi:d-*)

## b. In adjectives:

*k'uqi:dAt'u* 'lots of feet'

*k'uqi:dAchahsh* 'thick feet' (insult)

*k'uk'ahshqi:da'lAw* 'big foot'

*qi:da'lAw* 'big-feet!' (epithet)

*k'uqi:da'lAw sanhAsinhL* 'big stockings'

## c. In postpositional phrases:

*siqi:dAch* 'toward my foot'

*siqi:da:q* 'on my foot'

*LinhGqi:da: k'uk'ahsh* 'one (disembodied) foot'

*k'uqi:dAq'As* 'one-legged'

## d. In Nominalizations:

*siqi:dAqa'd* 'my crotch, between my legs'

*k'uqi:dAya'd* 'sole'

A covert combination of *qi:-d-* plus *d<sub>8</sub>-* occurs in *sanhAsi:nL 'iya: 'iqe'qi:di:xLih* 'I'll knit socks for you'.

**17.10.9.3 *qi:-d-G-* qualifier combinations**

Purely secondary, with *qi:₁-*, *d₅-*, and *G₄-*, attested in *'iqi:dAGAx'eh* 'I see your foot'; likewise with *qi:₁-*, *d₅-*, and *G₅-* in nominalized postpositional phrase *-qi:-dA-GA-'e'-d* 'footprint' (singular; cf. below).

**17.10.9.4 *qi:-d-l₁-* qualifier combination**

Partly covert combination of *qi:₁-*, *d₅-* (or *d₃-?*), *l₁/₉* in verb *'i'qi:dla:xiLgah* 'I know your footsteps' (translated thus by Lena, with unclear meaning: if rather than footprints, reference is to sound of footsteps, then *d₃-* 'noise' is also included). A partly covert combination of *qi:₁-*, *d₅-*, and *dl₄-* 'deceive' occurs in the verb *yAX 'Ad-qi:-dl-dA-'e:X* 'walk around quietly, stealthily'.

**17.10.9.5 *qi:-[d-l]-G-* qualifier combination**

This is a partly covert combination of *qi:₁-*, *d₅-*, *d₇₋₃* 'series', and *G₅-* that occurs in combination with the postpositional phrase *o-qi:-dla:-GA-'e'(-X)* 'o's footprints, trail' < '(movement) in series of places of absent feet' (cf. above): nominalized: *-qi:-dla:-GA-'e'-d* 'footprints, trail', *dzahndqi:dla:GA'e'd* 'Milky Way' ('snowshoe (*dzanhhd*) trail').

### 17.10.9.6 *qi:-l-* qualifier combination

This is clearly a combination of a “*qi:₂-*” and *l-* morphologically, in that the further combination *qi:-d-l-* results in *qi:dla:-* rather than \**qi:n-dA-* (cf. *ku:ndA-* below). Semantically, however, no combination of *qi:₁-* ‘foot’ and any of the numerous qualifiers of the form *l-* can account for the meaning of *qi:-l-* ‘rope’, with limited extensions to ‘cord, electric wire, chain’.

The combination *qi:-l-* serves as noun class marker for about five nouns, is widely attested in verbs, and occurs with a number of adjectives and postpositional phrases (93).

(93) *qi:-l-* ‘rope’ as a noun class marker

a. In nouns:

*k'uXehL* ‘rope’

*la:X* ‘string, cord’ (of heavier type,

cf. *g-*class mark for lighter type)

*'iLqa'X dAsid* ‘chain’

*we'L* ‘snare’

*kidz* ‘twine’

b. In verbs:

*qi:LAGAdik'L* ‘rope is getting short’

*O-qi:l-ta'k'* ‘twist rope, string’

*ya:nAX qi:li:t'its'L* ‘rope is frozen to ground’

*'Aw qi:lAsAlt'uxgL* ‘he tugged on it (rope)’

*qi:li'Lt'ux* ‘hold onto it (rope)!’

*qi:li:t'uxL* ‘electric light wire is strung up’

*k'uqi:lAxdzanh* ‘I’m working a buzz-toy’

*O-qi:l-L-tsinhd* ‘throw O (rope)’

*qi:lAXLtsahdg* ‘I’m stretching rope’

*qi:LAGALtsAX* ‘throw a rope!’

*qi:l-sid* ‘(pl ropes) extend’

*qi:l-L-dja:g* ‘(rope) be tangled’

*O-qi:l-dja'* ‘yank rope’

*yAX qil:-L-dja'* ‘rope break’

*'Adqi:lishdich'eL* ‘chain rusted’

*O-qi:l-xa'ch'* ‘knot O (twine)’

*O-qi:l-GAmAts'* ‘twist twine, strand of rope’

*O-qi:l-Xahd* ‘pull/drag O (rope)’

*qi:li:LXAd* ‘loosen (tight) string!’

*qi:l-wAs* ‘rope move, be in position’

*'AlAshgahX qi:lidila'* ‘I hope the rope is tough/strong’

*O-'-qi:l-yahd* ‘measure O (rope)’

*silah qi:li:'yahL* ‘rope is wrapped around me’

*O-qi:l-L-'ya* ‘put O (rope) in position’

*qi:l-'a'* ‘(sg rope) extend’

*k'uqi:lAtAs* ‘yoyo’ (nominalization)

*qi:lAkihsh* ‘plant species’ (perhaps belonging here, stem otherwise unattested)

c. In adjectives:

*ya:qi:lAdik' k'uXehL* ‘short rope’

*k'uqi:lAt'u'* ‘lots of rope(s)’

*kidz qi:lAt'u'* ‘lots of twine’

*ya:qi:lAtsidzg* ‘thin rope’

*k'uqi:lAshiyah* ‘bad rope’

*k'uqi:lA'a:w* ‘long rope’

*kidzqi:lA'a:w* ‘long piece of twine’

*we'Lqi:'nAw* ‘big snare’

<i>'iLqa'X dAsid</i> 'big chain'	<i>la'dqi:na: la:X</i> 'two pieces of twine'
d. In postpositional phrases:	<i>la:Xqi:nAX</i> '(tie) with twine'
<i>k'uXehLqi:na'q</i> 'on a rope'	
<i>k'uXehLqi:lAch</i> 'toward a rope'	<i>la:X qi:lAda:d ya' GAta'</i> 'set it down by the rope!'
<i>LinhGqi:na: k'uXehL</i> 'one rope'	

All nouns of *qi:l*-class listed in (93), except *kidz*, are also attested as unclassified. Classificatory use of *qi:l*- is noteworthy in that plural *qi:l-L-(y)a* 'rope be in position', O-*qi:l-L-(y)a* 'handle O (rope)' is usual for singular rope; singular *qi:l-ta*, *qi:l-'a*, O-*qi:l-(L-)ta*, O-*qi:l-(L)-'a* are used only for short pieces of rope. Also, *qi:l*- possibly functions as a noun qualifier: *qi:LAkihsh* 'plant species', listed above as possible nominalized Active imperfective.

#### 17.10.9.7 *qi:-d-l<sub>2</sub>*- qualifier combination

The primary combination of *qi:l*- 'rope' with *d*- or *dl*- not appearing with *d*- or *dl*- alone, but here with clear meaning 'hollow', serves as noun class marker consistently with two nouns: *duh* 'rope kelp (macrocystis); garden hose' and *-lahs* 'intestines'. Also evidently, perhaps in the same sense as 'hollow', it serves in the relativization *dide'L qi:dla:Lq'a:g* 'electric wire' < 'lamp (*dide'L*) burns along it (hose-?like)', and/or with *d<sub>2</sub>*- 'fire, bright', but cf. also *qi:dla:LAGi:nq'sg* '(wire spring) squeak', perhaps the same but probably including also *d<sub>3</sub>*- 'noise'.

(94) shows *qi:-d-l<sub>2</sub>*- in verb and adjective forms. Its classificatory use is probably similar to that with *qi:l*- 'rope' (sec:qual:list:qi:-lA-).

(94) Attestations of *qi:-d-l<sub>2</sub>* 'fire, bright'

a. In verbs:

*'u:dAX yAX qi:dli:'ah* 'hose hangs down there'

*duh sich' qi:dli:'a' / qi:dli:ta'* 'give me a (short?) piece of rope kelp!', *duh sich' qi:dli:La'* 'give me some rope-kelp!', O-*qi:dl-L-(y)a* 'handle pl rope-kelp' (with classificatory verbs)

*yAqa' qi:dla:'yahL* 'ropes lie in piles' (partly covert with *d<sub>9</sub>*- 'accumulation')

*yAX qi:dla:xLat'uxX* 'I'm fishing about with a line' (with unidentified *d*- or *dl*-)

*lAX q'Aw da: qi:dla:Lt'e:xk'* 'this is how we tighten it (rope)' (same as previous)

b. In adjectives:

*duhqi:dli:'nAw* 'long rope kelp'

*k'u'lahsqi:dla:'a:w* 'long intestine'

*duhqi:dli:'nuw* 'big rope kelp'

A secondary combination of *qi:l*- 'rope' and *d<sub>3</sub>*- 'oral, noise' appears in *qi:dla:LAGi:nq'sg* '(wire, spring) squeak, creak'.



### 17.10.9.8 *qi-g-d-l*- qualifier combination

A possibly primary(!) combination of *qi-l-* ‘rope’ with *g-d-* or *g-d-l-* is not easily identifiable: *qi:gdl-t’ux* ‘rope be stretched tight’, *O-qi:gdl-t’ux* ‘stretch O (rope) tight’, for which cf. *g<sub>3</sub>-* ‘tension’ and *qi:dl<sub>1</sub>-*, as well as the relativization *shawe:nahch’ qi:gAdli:’ah* ‘anchor chain’ (‘extends toward anchor’) implying either that ‘chain’ is *qi:gdl*-class instead of *qi-l-* as shown above (cf. *gdl<sub>3</sub>-* here referring action of links), or is tightly stretched toward the anchor; *’iLda:X qi:gAdla:dA’ah* ‘something inside porcupine, edible’ “like two ropes together.”

### 17.10.9.9 *X-[qi:-l]-* qualifier combination

This is a purely secondary combination of *qi-l-* ‘rope’ and *X<sub>2</sub>-* ‘eat’ in *XAqi:LAyinhih* ‘he’s eating rope’, elicited from Marie to show order of qualifiers; this form should be corrected to *XAqi:linhih*.

### 17.10.10 *IX-* qualifier

The dictionary coverage of *IX-* is quite full and will mainly be summarized here. This is the most frequently and broadly used qualifier of C4, noun-classificatory ‘berry-like’, anatomical ‘eye’, and thematic. At least in its noun-classificatory and anatomical functions, *IX-* is clearly a reduced version of the anatomical noun *-la:X* ‘eye’, and is not morphologically to be segmented *\*l-X-*. (Cf. Athabaskan *\*-na:γ-ə’ ~ \*nəχ-*, but not as qualifier unless *\*nə*–). Since ‘berry-like’ and ‘eye’ have the common semantic ground ‘small spherical’ (e.g. ‘ball’ is also *IX*-class), there seems to be no strong reason to separate these as *IX<sub>1</sub>-* and *l<sub>2</sub>-*, even though in function they tend to polarize between ‘berry’ and ‘eye’. That notwithstanding, *IX<sub>2</sub>-* and beyond will be reserved for thematic uses.

#### *IX<sub>1</sub>-*

The dictionary provides eight pages of full coverage of all uses of *IX-*. Its section 1 covers anatomical *IX-* ‘eye’, citing ten verbs in which that is attested, five qualified nouns, and five postpositional phrases. Then in section 2a, for noun-classificatory uses, it cites about 75 *IX*-class nouns (referring to berries, eyes, balls, coarse granular materials, several fruits and vegetables), about fifty verbs attested with that class-mark, ten adjectives, about twenty qualified nouns and nominalized verbs, seven postpositional phrases.

#### *IX<sub>1-2</sub>-*

*IX<sub>2-3</sub>-*. In its section 2b the dictionary entry for *IX-* lists “probably partly thematized uses,” which we shall here call *IX<sub>2</sub>-* referring to ‘coarse/fine, thick/thin’ with reference to cloth, grain, precipitation, and skin conditions. These could conceivably be derived from the

'berry-like' pole of  $lX_1$ -. Perhaps with equally conceivable likelihood derived from the 'eye' pole of  $lX_1$ - is  $lX_3$ -. In section 3 the dictionary lists uses with "no clear derivation from anatomical or class-mark, but with vague general semantic suggestiveness, basic meaning conceivably 'eye-movement, furtive, vertiginous', attested in relatively few themes." This classification is followed here, with label  $lX_3$ -, for themes referring to shyness, modesty, fear, abstinence, dreaming, dandling, dizziness, inebriation. One verb is irregular,  $lX-LA-xa:s$  'be afraid', in that the second vowel of the qualifier is deleted, e.g.  $lAXxLixa:s$  'I'm afraid', instead of \* $lAXAxLixa:s$ .

#### 17.10.10.1 $lX-d$ - qualifier combination

This is a rather productive combination, well covered in the dictionary, attested in a variety of functions. See also  $lX-d-l_2$ - below for further combinations of underlying  $lXd$ -.

##### $lXd_1$ -

This is a combination of  $lX_1$ - and  $d_6$ - 'round', as anatomical mark 'eye(ball)', more common for 'eye' than  $lX_1$ - alone. The dictionary cites  $lXd_1$ - in 16 verb themes, as qualifiers of two nouns, and in six postpositional phrases. See also  $lXdl_2$ - below, underlyingly of the same composition as  $lXd_1$ -, and the only qualifier combination in which the resulting form has more components than does the underlying form.

##### $lXd_2$ -

This is a combination of  $lX_1$ - more in the sense of 'granular', in origin, and with three (?) semantic classes of  $d$ -, as noun class mark, for four nouns:  $xitl'$   $lAXAdaq'$  'snowball' ( $d_1$ -),  $xitl'$  'expanse of snow' ( $d_4$ -),  $k'uhdL$  '(expanse of?) moss' ( $d_4$ -), and  $sanh$  'fluff, Alaska cotton' (unidentified  $d$ -, but cf. the preceding). The dictionary cites use in twelve verb themes, four postpositional phrases (to which should be added  $xitl'$   $lAXAda:X$  'with a snowball'), and with two adjectives.

#### 17.10.10.2 $lX-l$ - qualifier combination (?)

A deliberate attempt to elicit from Lena the secondary combination  $lX_1$ - and  $l_9$ - — ('*Aw la'mahd*) 'u'lAXAlixiLgah 'I know those berries' resulted in 'u'lAXAxLgah, with the second  $-lA$ - syllable missing. The correctness of this or the expected alternative was not tested. It can perhaps be surmised the initial response was an over-application of the non-duplication rule. See also  $GlXl$ - below.

#### 17.10.10.3 $lX-d-l$ - qualifier combination

This is not only the combination of  $lX$ - and of  $dl$ -, but also, apparently of  $lX$ - and  $d$ -, where  $d$ - is represented by  $/dl/$ , perhaps for some (non-optional) phonological reason, i.e. the result is not in free variation with  $lXd$ -. This is the only Eyak qualifier with more overt

components than the underlying form (in contrast with the usual reverse). Of 18 citations in the dictionary, only six have identifiably underlying *IX-* and *dl-*, whereas twelve are apparently underlying *IX-* and *d-*. This present account, a reorganization of that for *IXdl-* in the dictionary, is a revision thereof.

### ***IXdl<sub>1-</sub>***

Of the six citations of *IX-* plus *dl-*, five are *IX<sub>2-</sub>* and *dl<sub>3-</sub>* ‘series’, i.e. ‘series of beads’, in verbs, cf. (95).

(95) *IXdl<sub>1-</sub>* in verbs

*chiyah la'X IAXAdla:sa'yahlih* ‘he’s wearing a dentalium necklace’

O *la'X IAXAdla:sa'yahL* ‘is wearing O as a necklace’

*la'X IAXAdla:ya'L* ‘necklace’ (deverbalization)

O-*IXdl-'e:sh* ‘string O (beads)’ (itself with covert *d<sub>15-</sub>*, cf. O-*d-'e:sh* ‘string O’)

*kAww:d-IAXAdla:'e'X* ‘hole in beads for string’ (postpositional phrase)

The one other instance of underlying *IX-* and *dl-* is O-*IXdl-L-'e* ‘hide O (berries)’ with *IX<sub>2-</sub>* and *dl<sub>4-</sub>* ‘deceive’. See also *lIXd-* below.

### ***IXdl<sub>2-</sub>***

Of the twelve citations where *-dl-* comes from *d-*, only one has *IX<sub>1-</sub>* and *d<sub>6-</sub>*, i.e. *IXdl<sub>1-</sub>*: the postpositional phrase o-*IAXAdla:ch* ‘into sight of o, in(to) o-s view’; cf. o-*IAXAda:q* ‘on o’s eye’; \*?o-*IAXAda:ch* ‘toward o’s eye’ evidently was not tested. The rest are combinations of *IX<sub>2-</sub>* and various semantic classes of *d-*, cf. (96).

(96) *IXdl<sub>2-</sub>* containing *IX<sub>2-</sub>*

a. With *d<sub>9-</sub>* ‘accumulation’:

*yAqa' IAXAdla:sdika:stl'* ‘snowdrift(s) piled up’

(*yAqa'*) *qAIAXAdli:'yahL* ‘there are (several) piles of berries’

*dAGida' IXdl-'ya* ‘be full of berries’

*IXdl-'Adz* ‘snow avalanche, pile up, drift’ (perhaps belonging here and/or as following)

b. With *d<sub>11-</sub>* ‘free fall’:

*IXdl-LA-qahG* ‘(ball) fall’

O-*IXdl-L-'iL* ‘spill O (berries)’

c. With *d<sub>2-</sub>* ‘fire’:

O-*IXdl-L-'ya* ‘handle (container of) berries onto/off fire’

d. With *d<sub>15-</sub>*:

*lXdl-L-'ehd* 'berries) dry'

*dla:'ehd* 'raisins' (deverbalization)

- e. With  $lX_3$ -, specifically 'drunkenness', perhaps  $d_9$ -:

*siX 'i'lAXAdli:XAL* 'I was only partly drunk and) liquor supply gave out on me'

*o-X 'i-'lXdl-we'q* '(o be only partly drunk and) liquor supply give out'

#### 17.10.10.4 G-IX-l- qualifier combination

This is the only possible or canonic segmentation of *GAlAXAlAXah* 'tadpoles'. The form is quite opaque, probably expressive. It is certainly reminiscent of *O-X-a* 'eat O', but that *X-*, along with *G-*, belongs in subposition C3, so cannot be preceded by *IX-l-* of subpositions C4 and C7. The stem must therefore be *-Xah*, not semantically identifiable with any known stem of the shape *-Xa*. The segmentation *\*G-l-X-l-Xah* is not possible either, as *l-* (C7) cannot precede *X-* (C3). However, *IX-* 'berry-like' may be quite appropriate semantically, and the qualifier sequence *G-IX-l-* is canonic, though semantically opaque except vaguely for *IX-*. The iambic prosody [*GAlA/XAlA/Xah*], hearable as *GA-* followed by two prominent *-lA/Xa-* disyllables in a row is quite expressive, but not consistent with grammatical analysis.

#### 17.10.10.5 q-IX- qualifier combination

This is a purely secondary combination, of plurality emphasizer *q-* and  $lX_3$ -, in *dik* 'u:*qAlAXa'xLAXa:sinu*: 'I'm not afraid of them'.

#### 17.10.10.6 X-IX- qualifier combination

This is a purely secondary combination of  $X_2$ - and  $lX_2$ -, attested in *O-X-IX-a* 'eat O (berry-like)'.  
'

#### 17.10.10.7 g-IX- qualifier combination

This is a not quite fully transparent combination of  $g_1$ - and/or possibly also  $g_2$ - 'hip area' and  $lX_2$ - 'granular', functioning as noun class marker for one noun or anatomical marker: the noun is *-gAlAXAde:L* 'spine, backbone; spine and ribcage', with stem *-de:L* not otherwise attested, for an anatomical noun intrinsically qualified by *gIX-*. As anatomical mark it appears in a verb *yAX gAlAXi:kugL* 'its back is broken', and with adjectives: *k'ugAlAXAdik* 'short backbone', *k'ugAlAXA'a:w* 'long backbone'.

#### 17.10.10.8 g-[IX-d]- qualifier combination

This is a combination of  $g_1$ - 'filament' and  $lXd_1$ - 'eye(ball)', for some reason rather than  $lX_1$ - 'eye'. Cf. English 'eye' vaguely in the sense 'loop'. This serves as a noun class mark at least sometimes for *we'L* 'snare' in the postpositional phrases *we'L[.] 'ugulAXAdAyAq' sahL* (or

*we'L-lAXdAyAq' sahL* 'it got caught in (walked into the eye of) a snare', *la'd gAlAXAda: we'L* (or *la'dih we'L*) 'two snares'.

See below also *tsin-lX-* (§17.10.16.2), *qu:-lX-* under *qu:l-* (§17.10.17), *G-lX-s-* (§17.10.19.3).

### 17.10.11 *ku:l-* ~ *ku:n-* qualifier

The dictionary coverage of *ku:l-* ~ will be mainly summarized here. This anatomical qualifier *ku:l-* ~ belly, thickest part' of C4 is unquestionably related to the anatomical noun *-kumah* 'belly, stomach, abdomen'. (This in turn is probably part of a PAE complex \*kVN(w) where N(w) is some kind of nasal with and without a labial element, thus including also \*kən 'base' and \*kan ~ \*kam 'belly'.) Accordingly, unlike *ti:-l-* and *qi:-l-* above, but like *Xu:l-* below, *ku:l-* is not to be segmented \**ku:-l-*, as is shown by the fact that in combination e.g. with *d-*, the result is *ku:n-d-*, and not \**ku:-dl-*.

Dictionary coverage shows the use of *ku:l-* alone is quite specific and not extensive, having only one page, with no need for semantic numeral subdivision. Use in five verb themes is listed, one adjective: *-ku:'nAw* 'big-bellied', one postpositional phrase: *o-ku:lA-yAq'* 'into o's belly', and three qualified nouns: *ku:n-L-da'ts'* 'stump', *-ku:n-L-ch'iyAq'* 'abdomen', and *-ku:lA-kuhs-L* 'brisket'.

#### 17.10.11.1 *ku:n-d-* qualifier combination

Partly a primary combination, with *d<sub>1</sub>-* 'base, thickest part of *d*-class, e.g. 'tree', cited in two verbs, with two adjectives, qualified noun or postposition *o-ku:n-d-L-tl'a'* 'stock of rifle, part of (axe-)handle nearest head', and figuratively in a picturesque relativization *XAdAGd ku:ndAGALa:L* 'cocktail glasses, goblets', lit. 'their broadest parts are becoming above', Inceptive perfective.

#### 17.10.11.2 *ku:n-[d-l]-* qualifier combination

This is a secondary combination in the verb *O-'ku:n-dl-L-tsAX* 'cut O's belly open'.

### 17.10.12 *Xu:l-* qualifier

Dictionary coverage of *Xu:l-* will be repeated here with some refinements, so to be superseded here to some extent. *Xu:l-* 'tooth, teeth' of C4 is evidently a single segment morphologically, as is *ku:l-* 'belly', as is demonstrated when *Xu:l-* combines with *dl-* as *Xu:ndl-* (not \**Xu:dl-*, also showing that that is not \**Xu:l-* combining with *d-*). The /l/ must be considered part of the morpheme in Eyak even though the Athabaskan cognate is \**-yu* 'tooth'. Its meaning and function is strictly anatomical 'tooth', not in need of

numerical subdivision. The Eyak noun for ‘tooth, teeth’, a possessed anatomical, is the derived relativization from the usitative Active imperfective plural classificatory verb -*Xu:n-LA-yah* ‘those tooth-like which be in position’, or perhaps better a passive ‘which are kept in position’, given the *LA*-classifier.

At least one noun, -*Xu:nLAYah* ‘tooth, teeth’ itself is definitely in *Xu:l*-class. Perhaps also *ga'ts'gL* ‘ladder’, as shown below, but evidently not *tsi'lahL* ‘comb’, imputing the ‘ladder’ marking to the rungs themselves rather than to the ladder; Eyak for ‘rung of ladder’ and ‘teeth of comb’ were not elicited.

This anatomical qualifier being of somewhat limited productivity, other attested uses of *Xu:l*- as a qualifier are not very numerous, covered in less than one page of the dictionary, not too much to repeat here, with some refinements, as noted above. The dictionary lists *Xu:l*- in one qualified noun -*Xu:n-L-tl'Ala* ‘gums’, and with three adjectives: *k'uXu:nLYah-ku:-'nAw* ‘big teeth’, *k'uXu:nLAYah-ku:LA-kih* ‘little teeth’, and *ga'ts'gL-ku:LA-'a:w* ‘long(runged?) ladder’ (Lena, uncertain, evidently classifying *ga'ts'gL* ‘ladder (rungs?)’ as teeth or toothed). It lists *Xu:l*- in two postpositional phrases: *o-Xu:LA-'e'-d* ‘o’s toothmarks’ in ‘*uXu:nLAYahXu:LA'e'd yiLinхин* ‘he has its toothmarks on him’, and *si-Xu:n-tl'-gudla:-qa' k'u:'yahL* ‘something is stuck (between [one of the series of interstices]) in my teeth’. Then first four verbs are cited with *Xu:l*- in combination with *d*- or *dl*-, to be covered below, followed by three with *Xu:l*- alone, all referring to one tooth: *siXu:nLAYah siya: Xu:nda'yahGL* glossed ‘one of my teeth aches’ (Lena), and with the singular non-elongated subject classificatory verb, *k'uXu:nLAYah 'ud Xu:nsA'ahL* ‘a tooth is there’ and *k'uXu:nLAYah sich' Xu:li:'a* ‘give me a tooth!’. The noun -*Xu:nLAYah* is itself in origin a verb, as explained above, evidently no longer used as such, and also the only relativized verb attested as a possessed noun. Though that noun explicitly has to have referred to plural teeth in origin, these three verbs all show at least that it also serves for the singular.

#### 17.10.12.1 *Xu:l*-[*d-l*]- qualifier combination

There are three verbs (97) attested with the secondary qualifier combination *Xu:l*- plus the combination *dl*<sub>1</sub>- ‘series’ itself as a constituent.

(97) *Xu:l*-[*d-l*]-

*siXu:nLAYah siya: Xu:ndla:LASit'g* ‘my teeth are chattering’ (*LA-sit'-g* ‘tremble’)

*'iLX 'AdXu:ndla:LAqAtl'inh* ‘he’s gnashing his teeth’ (*O-L-qAtl* ‘rub O’)

*Xu:n-dl-LA-gihdz* ‘bare fangs’

This combination might be considered a thematization and/or a way to distinguish to distinguish ‘(set of) teeth, collective’ from ‘(singular) tooth’. Questions of this sort, use of qualifier combinations with *Xu:l*- were not extensively investigated.

### 17.10.13 *k'ush-* qualifier

Perhaps the only attestation of anatomical qualifier *k'ush-* ‘lower leg, foot’ alone is in the noun *k'ush-tl'i'L* ‘garter’ (first attested in Rezanov 1805), itself a deverbalization of *O-tl'i* ‘bind O’ with instrumental suffix *-L* (cf. *ɟAXA-tl'i'L* ‘earring’). *k'ush-* is the reduced form of the anatomical noun *-k'ahsh* ‘lower leg, foot’, most probably cognate with Athabaskan *\*-ch<sup>wr</sup>-əch<sup>wr</sup>* ‘kidney; calf (of leg)’, from PAE *\*-k'wənch'* or the like (for the semantics, see Krauss 1985). A possible verb, e.g. *?Ad-k'ush-dA-tl'i* ‘put garter on (self)’ was not tested. There is one more item with *k'ush-* alone in *-k'ush-da'-d* ‘front of leg (shin)’, *sik'ushda'd* ‘the front of my lower leg’ from Marie, not further confirmed, but cf. *siqi:da'd* ‘top surface of my foot’, likewise from Marie, where *qi:-* ‘foot’ is not combined with *d-*, in the postpositional phrase *o-da'-d* ‘front of o’, nominalized.

#### 17.10.13.1 *k'ush-d-* qualifier combination

Except for the above, the qualifier *k'ush-* is attested only in combination with *d-* of C6, ‘lower leg, foot’, perhaps best glossed ‘lower leg including foot’, not different from the above or from *-k'ahsh*. The *d-* may be an archaic class-mark for *-k'ahsh*; cf. the *d-* in the qualifier combination *qi:-d-* ‘foot’.

(98) Attestations of *k'ushd-* ‘lower leg (including foot)’

a. In verbs:

*k'ushd-kug* ‘S’s leg breaks’, *ɟAX k'ushdAsdAq'utl'Linh* ‘he broke his (own) leg (completely through?)’

*k'ushd-LA-q'AX* ‘have fat legs’

*k'ushdAsALK'in'Linh* ‘his legs are skinny’

b. In adjectives (all epithets):

*k'ushdAdik* ‘short-legs’

*k'ushdA'a:w* ‘long-legs’ (also ‘snipe species’, and a woman’s name)

*k'ushda'lAw* ‘big-legs’

*k'ushdAdjidjg* ‘skinny-legs’

c. In postpositional phrases:

*o-k'ushdA-da:-d* ‘(at rest in area) near o’s lower leg’

*o-k'ushdA-lah* ‘around o’s lower leg’

*'uk'kushdAXa' k'usLi'yahLinh* ‘something interfered with her leg’

*k'ushd-* is also attested in one qualified anatomical noun: *-k'ushdA-q'u* ‘calf of leg’, stem related to *q'Ama:* ‘roe, roe-sac’ (cf. above etymology for *-k'ahsh* itself, ‘kidney; calf of leg’).

### 17.10.14 *ch'a:n-d-* qualifier (combination)

Attested only in this combination, this anatomical means 'forearm'. Cf. *-ch'Alih* 'forearm', probably cognate with Athabaskan \*-ch'an 'side; wing'; cf. also *ch'a:n* 'five'. For *d-* cf. *qi:-d-* (§17.10.9.2), and especially *k'ush-dA-* (§17.10.13.1) of limited productivity.

(99) Attestations of *ch'a:nd-* 'forearm'

a. In verbs:

*yAX ch'a:nd-kug* 'S's arm breaks'

*lah xuch'a:ndAsAGAts'Linh* 'he twisted my arm'

b. In postpositional phrases:

*si-ch'a:mda:q' sAdahL* 'it (fly) alighted on my forearm'

*sich'a:ndAlah GAt'i:* 'wrap it around my (fore)arm!'

*sich'a:nda:X xusAdja'Linh* 'he jerked me by the arm'

c. In adjective (epithet):

*ch'a:ndA'a:w* 'long-arms'

#### 17.10.14.1 *ch'a:n-d-G-* qualifier combination

The use of *ch'a:n-d-* may be less restricted than earlier thought: on 9-19-98 Marie accepted '*ich'a:ndAGAx'eh* 'I see your forearm'.

### 17.10.15 *djAXA-* qualifier

This is the reduced form of the possessed anatomical noun *-djuhX* 'ear' (cf. *-la:X* ~ *lX-* 'eye'; cf. Athabaskan \*-djəy- 'ear'). It is of highly restricted productivity. In postpositional phrases: *o-djAXA-yAq'* 'in(to) o's ear', *o-djAXA-yAq'-d* 'o's inner ear'; in one qualified noun, *djAXA-tl'i'L* 'earrings' (cf. *k'ush-tl'i'L* 'garters' above), an instrumentalization implying a verb theme ?*O-djAXA-tl'i* 'put earrings on O', but probably no verb themes are possible, which was almost certainly tested. For adjectives see §17.10.15.1 There is a form in Li's notes, elicited from George Johnson (cf. §3.3.7), to be read *k'udjAXALiyahL* 'earrings'. This can hardly be a traditional form, however. Not only is Neuter perfective nominalization unlikely, 'pl kept in position', but the qualifier is also unlikely for oblique instead of direct object for this passive. My own notation on the copy of the manuscript 'place-name?' cannot be relevant.

#### 17.10.15.1 *djAXA-[d-l-]* qualifier combination

This is a combination with *d-l-* of unclear identity, suggesting that 'ear' may earlier have been *dl-* class, with *d<sub>5</sub>-* 'anatomical protuberance' and *l<sub>1</sub>-* 'head'. This qualifier combination is attested only in epithets: the two adjectives *djAXAdli:nAW* 'big-ears' (pejorative), and



*djAXAdla:'a:w* ‘long-ears’ (of rabbit, alert dog); and the qualified noun: *djAXAdla:k'u't'* ‘tendon-ears’ (> ‘thick-skinned person’).

### 17.10.16 *tsin'*- qualifier

This possibly or probably subsumes two morphemes of two origins, *tsin'*<sub>1</sub>- and *tsin'*<sub>2</sub>-, both phonologically unique in that *tsin'*- > *tsin'*l-\_\_/(<sup>o</sup>)V. The first is to be identified with *tsin'* ‘neck, nape’, most probably in origin meaning ‘head’, cf. Athabaskan \**-tsi'* ‘head’, and Eyak *tsi'lahL* ‘pillow; comb’, Athabaskan \**tsi'al* ‘pillow’; Eyak *o-tsi'-da'-d* ‘tip of o’, in postpositional phrase, but also itself qualifiable, e.g. *si-[yA-[tsin'-[da'-]]]d* ‘my fingertips’, not implying that *y-* precedes *tsin'*- in basic qualifier order. Here the qualifier is of limited productivity, attested with two apparent meanings, in four verb themes. From these it cannot be determined whether the *l-* is of independent combinatory status, *l*<sub>1</sub>-, or is merely phonological, from the nasalization in *tsin'*-, or is in fact another instance of “weak *l-*”, as in many directives. For this see Chap. 6 on morphophonemics and §15.9 on directives. For the origin of the second, see *tsin*<sub>2</sub>- below.

#### *tsin'*<sub>1</sub>-

*tsin'*<sub>1</sub>- ‘head’ is attested as productive in only two verb themes. The first is *ya:n' tsin'-(l-)LA-'a* ‘bow head’, in several instances, also causative *ya:n' tsin'LAGAL'in'inh* ‘put his head down!’. Cf. *l-ta* ‘have head in position’, where *l-* is anatomical *l*<sub>1</sub>- ‘head’. The second is *O-tsin'(l)-lahL* ‘comb O’s hair’, often reflexive *'Ad-tsin'(l)-dA-'lahL* ‘S combs (own) hair’. Here the stem is clearly *-lahL*, presumably a back-formation historically, given Athabaskan \**tsi'al*. It is also the qualifier in the nominalized postpositional phrase *o-tsin'-da'd* ‘tip of o’ (*o-da'-d*) ‘front of o’, in *si-tsin'LA-Xa'd sAtahL* ‘my pillow’ (‘it lies by my head’, probably late, if not *ad hoc*), and of course in the original noun *tsi'lahL* ‘pillow, comb’, very probably itself in origin an instrumental deverbalization of classificatory *O-(L)-'a*, given the Athabaskan (see also §18.13.3 on instrumental nominalizations).

#### *tsin'*<sub>2</sub>-

*tsin'*<sub>2</sub>- ‘disorder’ is attested in the classificatory theme *tsin'(l)-(dA-)'a* ‘S is in disorder, piles, jumbled, scattered here and there, helter-skelter’, attested only with the preverbal *'iLqa'* ‘among each other’ or *'iLqa:X* ‘in motion through each other’, itself a postpositional phrase with reciprocal object, so requiring a *dA-* classifier in the verb. It is therefore not possible to determine whether the *l-* is merely part of the qualifier with *tsin'*-, or here is instead part of the thematic combination *l-dA-*, qualifier *l-* plus *dA-* classifier ‘errative’. The ‘errative’ could probably explain enough of the semantics for ‘disorder’. At the same time, however, note widespread Athabaskan disjunct \**tsi-* glossed e.g. ‘aimless, fright, wild’ (Navajo), ‘wrongly’ (Koyukon), which could point to a totally distinct morpheme or origin. Eyak attestation is only in *tsin'(l)-(dA-)'a*, possibly basic, mentioned above. This is attested

also in the transitive *'iLqa'* / *'iLqa:X O-tsin'(l)-(L)'a* 'scatter, jumble O', perhaps merely the causative of the preceding, in several instances, for which see the dictionary, and also in *sich' tsin'li:Lya:* 'move that pile of junk over to (-ch) me (si-) (bit by bit)!'

#### 17.10.16.1 *tsin'-d-* qualifier combination

This is the combination of *tsin'*<sub>1</sub>- 'head' and *d*<sub>3</sub>- 'oral noise', found thematically in one Action verb theme *tsin'-d-le* 'S speaks', of very high frequency and covered in the dictionary, together with the causative, *O-tsin'-d-L-le* 'cause O to speak'.

#### 17.10.16.2 *tsin'-lX-* qualifier combination

We have this one deliberately elicited instance of thematic *tsin'*<sub>2</sub>- 'confusion' combined with noun-classificatory *lAXA*<sub>1</sub>- 'berry-like', both of which have been considered members of the set of qualifiers assigned to subposition C4. In this instance, from Lena, we have *'iLqa:X tsin'lAXAGA'a'Linh* 'he's spreading (and mixing) those berries all around', again with *'iLqa:X* (movement) among each other', and stem *-a'* 'extend', perhaps erroneously for *O-L(y)a* 'handle pl O'. The important result is that the *tsin'* precedes the *lX-*, but we have no record that the alternative *?lX-tsin'* was tested. We therefore cannot be sure whether this case is like or unlike that of *g-* and *X-* both assigned to C3, which combine in either order.

#### 17.10.17 *qu:(l)-* qualifier

This is a marginally attested possible qualifier in two forms, if such, meaning 'belligerent'. In *dAqu:lAXA'ah* 'fierce, tough, mean person', *dAqu:lAXA'ah XAwa:* 'bulldog', from elicitation of Furuhjelm (1862a) <Takhulhaa> 'warrior', q.v. in the dictionary under *qu:(l)-* and *'ah*<sub>2</sub>. Lena and Marie were unable to identify the components, to be segmented either *dA-qu:lA-XA-'ah* or *-qu:-lX-*. If the latter, this could be a second instance of combination of two C4 qualifiers, *lX-* coming second. The other form is only a possible instance, uncertain, from Galushia Nelson, 'war apron', written *kùləkùstl*, not known to Lena or Marie, to be read either *?ku:lA-kuhsL* 'belly apron', or conceivably *?qu:lA-kuhsL* 'war apron', especially given that the form is annotated "The first word is translated as 'war'." If correct, then presumably the latter segmentation of the preceding *dA-qu:-lX-'ah* is incorrect. If *qu:(l)-* is a qualifier, the *dA-* would probably have to be proclitic *dA=* 'selfsame' and the qualifier essentially initial. In any case, identification of *qu:(l)-* as qualifier remains indeed uncertain.

#### 17.10.17.1 *qu:-lX-* qualifier combination

See *qu:(l)-* under §17.10.17.

### 17.10.18 *y*- qualifier

The qualifier *y*- alone occupies subposition C5, definitively combining after *qi*- of C4 and before *d*- of C6. It is fully productive as anatomical *y*- ‘hand’, and appears in several roles thematically, but is not noun-classificatory. Since it is not a dictionary entry, full listing, however abbreviated, will be provided here, at least as listed in the ledger (Krauss 1966a). More attention will of course be paid to the less routine uses.

Historically, qualifier *y*- probably has more than one origin. Cf. e.g. Athabaskan \**ya*-, Eyak *ya:q*- ‘sky’ in connection with *y*<sub>4</sub>- in ‘dawn’, while for *y*<sub>1</sub>- ‘hand’ cf. Tlingit *ji*- (Jeff Leer p.c. 2011). Though the semantic difference is entirely clear, there is probably no way to prove by combination with other qualifiers that *y*<sub>4</sub>- is morphologically different from *y*<sub>1</sub>- by being in a different subposition of Zone C.

At the deepest level of internal analysis of Eyak, related to the meaning ‘hand’, a *y*- serves as initial element in preverbals and locationals, for see the examples in (100).

(100) *y*- as initial element in preverbals and locationals

*y-a-* ‘to a state of rest, completely’

*o-y-a-* ‘in(to) o with broad opening on top’

*y-ah-d* ‘out to sea’

*o-y-ah-d* ‘out of o’s hand’

*yA-na:-d* ‘below on slope’

*ya:-nah-d* ‘covering surface’

*ya:-n* ‘down to surface’

*XA-yA-* ‘yonder area’

Cf. at this level also the qualifiers *d*- and *l*- as similar initial components in preverbals.

There is another *yA*- in Eyak, perhaps not related to the qualifier *y*-, to be found in locationals: *XA-yA-* ‘*u:d* ‘yonder over there’ (also *Xi:d* ‘yonder, away’, *Xi:nXinh* ‘that yonder person’ < \**XA-yA-X-inh*). Here the *XA*- is also not a qualifier, but a locational prefix. That locational *yA*-, or something like it, is also found initially as prefixed to at least one preverb, which looks like *qa* ‘up out’, but is probably in place of the object of *o-qa* ‘among o’, *yAqa* ‘in confusion, scattered all about’, cf. ‘*iLqa*’ with reciprocal object ‘among each other; all mixed together, in confusion’. The qualifier *y*- should be rather clearly distinguished from these.

#### ***y*<sub>1</sub>-**

The anatomical ‘hand’, labeled *y*<sub>1</sub>-, is by far the most productive of *y*- qualifiers. It is abundantly attested in verbs and in postpositional phrases, with a few adjectives, and in a number of qualified nouns. Starting with nouns qualified with *y*-, there are 16 or

17 altogether, ten of which have  $y_1$ - 'hand', four intrinsically. Of these ten, six (101) are without  $-L$ - $P(-L)$ , but four have prefix  $L$ -, and three of these also have or can have suffix  $-L$ , cf. (101):

(101) Nouns qualified with  $y_1$ - 'hand'

$-yAch'a:L$  'index finger' (stem otherwise unattested, unless postpositional)

$o-ch'a:L$  'direction of o' ( $-L$  unidentified)

$-yAku:nch'$  'thumb' ( $ku:nch'$  'fart' is perhaps a mere homonym in origin, but

$-yAku:nch'$  is used in insults)

$-yAk'u't'$  'hand-veins'

$-yAq'As$  'one hand of pair; one-handed'

$-yAq'a'ts'$  'hand' (anatomical noun, cf.  $O-q'Ats'$  'grab in pincers')

$yidiguG$  'thimble' (part loan from Chugach *tekeq* 'index finger')

$-yA-L-tSAq's-g-L$  'fingers' (cf.  $O-L-tSAq's-g$  'cut O into fringes')

$-yA-L-ts'ihnG(-L)$  'little finger'<sup>11</sup>

$-yA-L-ts'Alih$  'finger-bones' (perhaps also 'hand-bones')

$-yA-L-Xahdz-L$  'fingernails' (apparently missing prefixal  $L$ - in both Rezanov (1805) and Furuhielm (1862a); stem otherwise unattested, except in  $-qi:-yA-L-Xahdz-L$  'toenails')

Being anatomical rather than noun-classificatory,  $y_1$ - is attested only in special cases, with two adjectives:  $k'uyAt'u$  'lots of hands',  $la'q' yAcha'hs$  'thick-hands!' (pejorative epithet).

$y_1$ - is attested with about fifty verbs (102) quite routinely as specifying 'hand' of subject of intransitives and of object of transitives. These are all attested extrinsically, in themes without  $y_1$ - with the same meaning, only not so specifying 'hand'.

(102) Verbs attested with  $y_1$ - 'hand'

$O-L-dAtl'$  'hurt O'

$O-tl'in't'$  'sting O'

$dA-tis-g$  'tremble'

$O-tl'i$  'tie O'

$k'u'-LA-tu$  'be lazy'

$dA-Le'xtl'$  'have wart'

$dA-t'its'$  'freeze'

$O-L-tsAX$  'cut O'

$'Ad-LA-t'e:q'$  'straighten self'

$O-L-ts'in'tl'-g$  'slap O'

$LA-dLAGsh-g$  'be muddy'

$L-ts'i:k'$  'ulcerate'

<sup>11</sup> This is associated in the dictionary with  $ts'inhG$  'alders' and  $O-L-ts'inhG$  'mark O', rather than with  $O-L-ts'i:nG$  'dip fingers in O to taste O', perhaps mistakenly.

<i>LA-ts'an'</i> 'be strong'	<i>O-L-Gu'</i> 'warm O'
<i>O-L-sin'L</i> 'rub, caress O'	<i>O-L-qAtl'X</i> 'rub O'
<i>la'q'</i> <i>y-cha'sh</i> ~ 'have thick hands'	<i>O-Xahd</i> 'pull, drag O'
<i>LA-ch'u:ch'</i> 'be twisted'	<i>dA-Xe's</i> 'be infected'
<i>L-ch'iyak'</i> 'smart, have burning sensation'	<i>-Xa:s</i> ~ <i>-XAw:s</i> 'itch'
<i>L-giL</i> 'be shriveled'	<i>-Xe:</i> 'be greasy'
<i>o-X LA-gAXts'</i> 'adhere to o'	<i>-Xan'</i> 'be fast, speedy'
<i>-ga'</i> 'be tired, sore'	<i>-mahd</i> 'get cooked, burnt'
<i>-k'a'd</i> ~ 'hurt, be ill'	<i>O-L-'na't'-g</i> 'lick O'
<i>dA-k'ug</i> 'have cramp'	<i>O-L-ya:n'</i> 'cure O'
<i>L(A)-k'ahgsh-g</i> 'have scab'	<i>L-'u'dz-g</i> 'be 'asleep, have pins and needles'
<i>O-L-xut'</i> 'shoot O with gun'	<i>'Ad-LA-'u'G</i> 'rest self'
<i>LA-xut'</i> 'be shriveled from immersion'	<i>-a'q'</i> 'get sunburned'
<i>lah O-GAts'</i> 'twist O'	<i>O-tAGL</i> 'hit O with hammer'
<i>-Gu'ts'</i> 'be coated with fish scales'	<i>O-kus</i> 'wash O'
<i>LA-GAGsh-g</i> 'be cold and numb'	

Anna's personal name *yigil* is thought to be (deverbalization) from *y-L-giL* '(hand) shrivels'.

With (102) should be included examples with basic themes, such as the ones in (103), as well as (104).

(103) Basic themes with  $y_1$ -

*'Ad-y-LA-ta* 'position own O (hand)' (e.g. *ya'X 'AdyixLitahL* 'I have my hand(s) raised'; note use of *-ta* 'classificatory longish object' rather than *-a* 'classificatory roundish object')

*'Ad-y-L-'ya* 'move hand' (cf. *y-'ya* with thematic *y*-)

*y-le* 'act with hand' (e.g. *o-X y-le* 'barely touch o with hand')

*o-tl' ch'a' y-dA-le* 'motion toward self to o with hand'; cf. *y-le* with thematic *y*-)

*O-y-L-li* 'act on O's hand'

causative reflexive of *-a'* 'extend' (e.g. *djAXAyAq' 'Ad-y-LA-'a'* 'put fingers in ears', *'iLq'X 'Ad-y-LA' a'* 'clasp hands')

*'iLya' qa' xuyAGALA'* 'try to open my hand!' ('move my hands out from in each other!', evidently with classificatory plural object verb *O-L-(y)a*)

- (104) Themes with  $y_1$  and *-le'g* 'act with hand', subject acting with hand on the object's hand

O-*y-le'g* 'hold O's hand'

O-'*y-le'g* 'grab O's hand'

O-*y-le:g* 'massage O's hand' (thematized persistentive)

*ya'X* '*Ad-y-LA-le'g* 'raise hands' (reflexive)

$y_1$ - occurs both in preverbal and theme itself in the following utterances: *yAtl'e:q'* *yAGAdAxu'tl'L* 'he's blowing on his hands' (indirect reflexive), '*iLyAtl'e:q'd q'e'* '*Adyis-LiyahLinu:* 'they shook (clasped each other's) hands again' ('they (=inu-) put own ('Ad-) hands in each other's ('iL-) palms (*yAtl'e:q'd*) again (*q'e'*), again with classificatory plural object verb theme).

Finally, there are several themes (105) in which use of  $y$ - is either complicated in some ways as not to have an entirely predictable meaning, or is not altogether transparent, but is clearly enough idiomatic or figurative in connection with 'hand' to remain classified as  $y_1$ -.

- (105) Themes with  $y$ - indirectly related to 'hand'

*'Ad-'y-LA-qa'* 'count on fingers' ('count own ('Ad-) fingers')

*'Ad-y-LA-ts'i:nG* 'lick fingers after dipping them in food' (< O-*L-ts'i:nG* 'dip fingers in O (food, to eat)')

*'Ad-'y-LA-ts'inhG* 'mark (own) hand, cheating at cards' (< O-*L-ts'inhG* 'mark O')

*'Ad-y-LA-ts'in'tl-g* 'clap hands' (< O-*L-ts'in'tl-g* 'slap O')

O-*y-she* 'hurt (lit. kill) O's arm' (also perhaps the only instance glossed 'arm')

*'iLu'* *y-dA-Xe'dj-g* 'hand-wrestle one another ('iLu')' (cf. *l-dXe'dj* 'be hooked', semantics not predictable)

*yAX* O-*y-LA-t'A'X* 'tie O down', 'burden O with responsibility for S (child)' ('distract(?) O's hands all about')

o-*ga'* *y-LA-q'a'ts'* 'have hands like o'

*y-LA-q'Aq'* 'close hand, make fist'

For the form *yAX* O-*y-LA-t'A'X*, cf. o-*t'a'-X* 'distracted by o', '(motion within area) behind o, sheltered by o', here evidently one of the few cases of a verb theme with stem derived from a postposition, or a stem not otherwise attested; listed in the dictionary under stem -*t'a'L* ~). Note also o-*ga'* *y-LA-q'a'ts'* 'have hands like o', a Neuter perfective derivation from a qualified noun -*y-q'a'ts'* 'hand' (< 'hand-pincers'), retaining both elements as such. Finally, *y-LA-q'Aq'* 'close hand, make fist' may be the only case of otherwise unattested

stem with  $y_1$ -, intrinsic.

$y_1$ - is also well attested with postpositions (106). In many of these cases there is a range of meaning, including metaphorical extensions beyond ‘hand’. The dictionary covers these, but glosses for that range will be included in (106) also. Variable finals will be listed separated by slashes, *-d* ‘nominalization; (from) punctual contact, point of rest’, *-(dA)X* ‘movement within’, *-ch* ‘continuing or repeatedly toward’.

(106)  $y_1$ - in postpositions

*o-yA-d* ‘detaching from point of contact with hand’

*o-yA-da-* ‘heel (i.e. front) of o’s hand; playing into o’s hand, falling victim to o’

*o-yA -da:-d / -(dA)X / -ch* ‘near, in vicinity of o’s hand’

*o-yA-[tsin’-da’d]* ‘o’s fingertips’

*o-yA-t’a’-q’-d* ‘back of o’s hand’

*o-ya:-tl’* ‘with o’s hand; with o’s permission’

*o-yA-tl’a’-q’-d* ‘back of o’s hand’

*o-yA-tl’e:q’-d* ‘palm of o’s hand’ (< *-tl’A-yAq’-*)

*o-yA-ch* ‘toward o’s hand’, in *k’ushiyah ’iyAch’ dAGAdAleh* ‘you’re asking for trouble’ (‘evil (*k’ushiyah*) is said toward your (‘i-) hand’); *o-yA-ch’ d-l-X-t’e* ~ ‘watch o’s manual activity’; *o-yA-ch’ -t’e* ~ ‘fall into o’s clutches’; *k’uyAyAch’* [sic] *qu’yiyah* ‘you’ll go/fall into the clutches of a wild beast’ (*k’u-yA-[yA-ch]* not exactly duplication, but ‘fall victim to the clutches of something’)

*o-yA-ga* ‘like o’s hand; fitting o’s hand; of size or condition such that o’s hand can handle, catch, overcome’

*o-yA-qa* ‘between o’s hands; between o’s fingers’

*o-ya-X* ‘in non-punctual contact with o’s hand, grazing o’s hand’ (cf. *o-ya:X* ‘avoiding o’, this origin?)

*o-yA-Xahd* ‘wresting out of o’s hand’ and *o-d-[yA-Xahd]* ‘away from o’s nagging’

*o-ya:-q’* ‘on o’s hand; because of o; hurt by o’, *o-d[-ya:-q’]* ‘(hurt) because of what o says’

*o-yA-Xa:-q’* ‘thanks to o, dependent on o, by virtue of o’; *o-yA-Xa’(-)* ‘in intimate relation with o’s hand, under o’s control; sent, lent to o; in o’s clutches, succumbing to o’, *o-yA-XA-la-* ‘down over o’s finger (as ring)’

*o-yA-lAX* ‘too big, much for o’s hand, more than o can handle, bear’

*o-yA-lah* ‘(circularly) around o’s hand’

*o-yA-la-* ‘hanging, draped over o’s hand, forearm’

o-yA-[dAXa:na'q'] 'on outside surface of o's forearm'

o-yA-lu' qa' LA-q'a:sh 'leave red impression on o's fingers, wrist'

sisyAya'd sAdahL 'it alighted on my hand'

o-yA-'u'X 'smaller than, too small for o's hand'

o-yA-'e'-d 'place where o's hand was; mark, battle-scar from fighting o',

k'u-yA-'e'-d 'dangerous place, e.g. grizzly bear den'

From the preceding, it would be a difficult task to draw lines in the grading between routine literal meaning of 'hand' with prepositions and metaphorical extensions of that meaning, so the temptation to assign further numbering than  $y_1$ - to these seems not advisable, so long as the semantic connection remains traceable. Here with postpositions there is also a bit more glossing that includes 'wrist' or even 'forearm', extending the anatomical meaning somewhat beyond 'fingers' and 'hand' that is central to  $y_1$ -, into the domain of qualifier *ch'a:n-dA-* (§17.10.14), which is far more restricted in use.

Finally, note here the combination of  $y_1$ - with other qualifiers, in hierarchy of constituency which allows *-d[-y-q]* and even *-y[-y-ch]*. Such hierarchy explains the apparent violation of qualifier order and even constraint against duplication.

### $y_2$ -

Turning now from anatomical  $y$ - to thematic  $y$ -,  $y_2$ - is reserved for the  $y$ - of the basic verb theme *y-le* 'make hole, hollow, disembowelment', also 'dig' (with hands, shovel, etc., according to Marie. We have no record of 'dig (as dog) with forepaws', so we lack the full semantic trail. Still not clearly connecting with *y-le* 'act with hand', we also have *o-q' y-dA-le* 'pay for o', *o:-na'-q' y-dA-le* 'make it up to o' ('recompense o'), *o-LA-Xa:n' y-le* 'avenge o'. Perhaps this distinction of  $y_2$ - 'make hollow' from  $y_1$ - 'hand' is by a stricter standard than that for postpositional qualifier  $y$ -. Thematic  $y_2$ - is perhaps the place also to list *yA-qa' ~* 'accumulating', a preverb, requiring qualifier  $d_9$ - 'accumulation' in verbs.

### $y_3$ -

This label is assigned to  $y$ - in the theme *y-'ya* 'travel involuntarily, be sent, wander, end up', *o-qa' y-'ya* 'get involved with', *'iLqa' y-dA-'ya* '(people(s)) mingle', *dA-qa'-X y-'ya* 'wander among various peoples'. (The transcription of Lena's *'a'd da: 'u'ihch' yAGa'ya:L* 'we're falling very much behind it' should probably be corrected to *'a'd da: 'u'ihch' 'i'Ga'ya:L*.) See *y-l-* combinations for two errative 2 themes with  $y_3$ -.

### $y_4$ -

This is assigned to  $y$ - in the single theme *y-L-qa* 'day dawns' and derivatives *O-'y-L-qa* 'O camps overnight' (< 'dawn on O'), *o-da' y-L-qa* 'o has to overnight without food', *yA-qah* 'dawn' verbal noun, *yA-qe:X* (phonologically < \**yA-qa-y(A)X*, meaning unclear).



This has precise a cognate in Athabaskan, \**y-əl* ‘dawn’); at the same time cf. perhaps PAE \**ya* ‘sky’. (Eyak ‘sky’ is *ya:-q’-d*, nominalization of ‘on (top of) *ya:-*’.) On 8-7-96 Marie (on the telephone) verified *yA-GA-L-xa’-L* ‘it’s becoming summer’ and *yA-GA-L-Xe’tl’-L* ‘it’s becoming night’ (= *GA-L-xa’-L*, *GA-L-Xe’tl’-L*), i.e. with optional *yA-*, presumably with the same *yA-* as in *yA-qah* ‘dawn’, but where *y-* is not optional. However, on 9-25-96, she considered *GALxa’L* preferable to *yAGALxa’L*, and rejected \**yAGALXe’tl’L* in favor of *GALXe’tl’L*. At the same time, she verified that \**GALqa:L* is unacceptable for ‘it’s dawning’. See further *qA-yA-* in §17.10.18.5.

#### **y5-**

This *y-* is no doubt purely of phonological origin, in *k’u:y yAX y-LA-’u’G-X* ‘wind blows about’, originating in resegmentation from *k’u:yA#LA-’u’G* ‘wind blows’, still with vowel after now final *-y* as late as Rezanov (1805). Cf. *X<sub>6</sub>-* below for another qualifier of phonological (preverbal) origin.

#### **y6-**

This is in a group of nouns, having to do with affinal kinship: *-yA-ta:* ‘father in law’ (*-ta:* ‘father’), *o-yA-danh* ‘mother-in-law’, *o-yA-’ehd* ‘daughter-in law’ (*-’ehd* ‘wife’), but not in other affinal kin terms. To these should probably be added *-yA-quh* ‘young, small offspring of any animal’ (cf. *-qu* ‘(pl) sit/stay’), also ‘small version of’, e.g. in *xut’LyAquh* ‘pistol’ (*xut’L* ‘rifle’), *tsa’L-dA-[yA-quh]* ‘small knife’ (*d-* class for *tsa’L* ‘knife’). Perhaps added to these, in a broader socio-ceremonial semantic area, might be *yAda:* ‘shaman’s power’, probably to be segmented *yA-da:* (this *-da:* otherwise unattested). Therewith then conceivably *yAXuh* ‘don’t!, taboo!, bad luck!’, possibly *yA-Xuh* (cf. even *ya’Xu:* ‘don’t, do not ..’ introducing prohibitive clause, cf. Koyukon *’iXú* ‘in vain’).

### **17.10.18.1 y-d- qualifier combination**

There appear to be two primary *yd-* combinations with their own semantic fields.

#### **yd-1-**

The qualifier combination *yd-* is most clearly attested with the meaning ‘fish flesh, fish meat’, and only with the themes *-Le(’)* and *-t’e’ ~*, both glossed ‘be’, cf. (107).

(107) Attestations of *yd<sub>1</sub>-*

*cha’ch’ yAdi:Leh* ‘it’s red-salmon meat’

*XAXg yAdi:Leh* ‘fish-meat is fresh’

*k’udzu: yAdi:Leh* ‘fish-meat is good’

*Gi:nga:dAG yAGAdALe’L* ‘salmon-meat is getting old, red’

*cha’ch’ga’ yAdi:t’eh* ‘fish-meat looks like that of red-salmon’

It is not clear how much more widely this could be used. Cf. *k'iya't* 'fish meat', and evident Athabaskan cognates *\*-ŋya't* 'flesh (of fish)', implying earlier Eyak *\*k'u-ya't*, which could well be the preverbal origin of this qualifier *yd-*.

### ***yd-***

At least one other thematic instance of *yd-* is in *di'dah 'uX yAdisi'yahL* 'I got it hunting' (modest expression) from Lena', for which cf. *y-'ya* 'wander', and *o-y-da'-X y-dA-'ya* 'I got it hunting' (modest expression, 'it ended up in my hand'), q.v. under *y-'ya*, the *y-* here being some combination of *y<sub>1-</sub>* 'hand' and *y<sub>3-</sub>* 'wander'.

### **Secondary *yd-***

The secondary combination *y<sub>1-</sub>* 'hand' and *d<sub>15-</sub>* 'miscellaneous' is attested in *'A-y-d-LA-'ehd-g* 'dry (own) hands'.

#### **17.10.18.2 *y-l-* qualifier combination**

We have two errative 2 themes with *l-dA-* (*l<sub>6-</sub>*) that combine with *y<sub>3-</sub>* 'travel involuntarily, wander': *yl-dA-ma'* 'make mistake of going somewhere' (e.g. "didn't have fun; got hurt"), *o-ch' yl-dA-'ya* 'have misfortune to go to o and get stuck (e.g. bad weather)'.

Thematic unanalyzable *yl-* is found in *O-'yl-ta* 'expect O', Neuter perfective stative *'u'yilixitahLinh* 'I expect him', with many elicited instances. See also *qyl-* under §17.10.18.6. Directive *l<sub>9-</sub>* can be identified, perhaps from *l<sub>1-</sub>* 'head', but no *y-* that accords with any of the identified qualifiers of the form *y-*, unless conceivably *y<sub>4-</sub>* 'dawn, passage of days'?

Another possible instance of *yl-* might be the explanation of *ge:LA'a:g* 'noon', cf. *gah* 'day' and *-'a:g* 'middle, half'. The *-LA-* is not otherwise expected with *-'a:g*, and *ge:-* is perhaps from *gah-y-*. Cf. e.g. *tsa:le:Xquh* 'octopus' < *tsa:-LA-yAX quh* '(pl) stay under stone', but cf. also PA *\*ž<sup>wf</sup>e:n* 'day' < PAE *\*gwa:yn?*. For that, however, cf. Eyak *xah* 'summer', PA *\*še:n* 'summer', PA *\*š<sup>wf</sup>a:* 'sun', but Eyak *xahlA'a:gd* 'midsummer', not *\*xe:LA'a:gd* (tested).

#### **17.10.18.3 *y-[d-l]* qualifier combination**

There is one deliberately elicited instance of this partly secondary combination of *y-[dl-]*, i.e. *y<sub>1-</sub>* plus *dl<sub>4-</sub>*: *yAX 'AdyAdla:xLA'e:X* 'I'm moving my hands (about) quietly', cf. *O-dl-L-'e* 'deceive O'.

#### **17.10.18.4 *y-G-* qualifier combination**

Purely secondary, with *G<sub>4-</sub>*, this combination is attested in *'ulu'ch' 'AdyAGAxda'eh* 'I see (reflection of) my own hand in it'.

**17.10.18.5 *q-y-* qualifier combination**

Purely secondary, this combination of the plurality emphasizer *q-* and *y<sub>4</sub>-* occurs in *'uwa:LX qAyALqah* ‘morning star, planet Venus’ < ‘plurally dawns according to it’.

**17.10.18.6 *q-y-l-* qualifier combination**

Purely secondary, this combination of the plurality emphasizer *q-* and *yl-* above is attested in *xu'qAyili:tahLinu*: ‘they’re expecting me’.

See also *qi:-y-* under §17.10.9.1.

**17.10.19 *s-* qualifier**

The qualifier *s-* is not at all productive, much like its cognate counterpart in Athabaskan, to be found in fewer than ten Eyak forms. It occurs mainly in combinations with other qualifiers, including especially *G-*. All instances of Eyak *s-* are or happen to be in nouns; in all of these the morphology is such that the *s-* is clearly in a prefixal position such that it can only be interpreted as a qualifier.

***s*-1-**

This occurs in but a single basic item, *sA-qe:-*, probably from the PAE term for ‘child’, in three forms, irregularly related semantically: the kin term *-sA-qe:-G* ‘man’s son’, *sA-qe:-G-A-yu*: ‘children’ and *sA-qe:-ts'-A-kih* ‘child’. The last is most probably irregularly derived from *\*sA-qe:-kuts'-A-kih* (*-kuts'* ‘small’, with *-kih* diminutive). The form *sA-qe:-* is opaque, unless related to *qe'L* ‘woman’, which is probably from *qe-'L* as an instrumental, i.e. ‘child (bearing) instrument’. That leaves this *sA-* with no clear meaning. The Athabaskan cognates, however, correspond irregularly, showing PA *\*s<sup>wf</sup>e-* (not *\*sə-*) as in Navajo *'ishké* ‘boy’, Minto *sra-ka-yi* ‘children’. This shows that the Eyak *sA-* in *sA-qe:-* is etymologically different, presumably, from the combinatory instances of *sA-*, where it is definitively in qualifier position. It is only from a purely synchronic point of view that this *sA-* in *sA-qe:-* can be included in the list of Eyak *s-* qualifiers.

***s*-2-**

This is found only in *-sA-L-ku:n* ~ ‘roots (of plant)’, i.e. presumably of a small plant, as opposed to *-dA-L-ku:n* ‘base of, roots of tree’ (*d*-class, thematized). The stem is *-ku:n* ~ ‘base, belly, thickest part’. The meaning of *s<sub>2</sub>-* seems clearly related to that of *s-* in the qualifier combinations below, meaning ‘small products or parts of plant material’. Though this may well correspond phonologically and morphologically in subposition with the Athabaskan qualifier *\*sə-*, it does not seem to correspond at all in meaning, where it is found mostly in Athabaskan verbs meaning ‘kill, destroy’ and ‘hear’.

**Unidentified s-**

There are two other forms in which an unidentified *s(A)-* appears in Eyak, presumably not relevant here: *la:sA'ah* 'pot', a loan from Tlingit *naasa.áa*, and *sLa'-dah* 'beautiful', with opaque *s-La'*.

**17.10.19.1 G-s- qualifier combination**

In this position, following qualifier  $G_2-$ , itself of zone and subposition C3, *s-* must either be in the qualifier zone and position C7, or be in zone D as *s-* of *s-* (Active) perfective, but the latter identification is ruled out by the lack of perfective *-L* suffixed to the stem. There are three nouns with this qualifier combination. For the first, *GAsAtsah* 'wood shavings', cf. *O-Xd-tsa(h)* 'sharpen O'. The second is *GAsALga:X* or *GAsAga:X(L)* 'cones of conifer', for which cf. *GALAga:X* 'highbush cranberries', *O-L-ga:X* 'crush and preserve highbush cranberries'. The third, *GAsALGahGL* 'wood chips', is either a nominalized *s-* perfective of *O-L-GahG* 'chop O' with otherwise unexpected qualifier *G-*; *s-* perfective nominalization of non-passive is also quite unexpected; or, far more likely, the perfective suffix *-L* is analogical, and the form should be *GAsALGahG* with qualifier *s-*, conforming exactly to *GAsAtsah*; cf also the preceding, which shows only one variant with suffix *-L*, almost certainly analogical.

**17.10.19.2 G-d-s- qualifier combination**

Only one form is attested with this combination. It shows more specifically that  $s_2-$  belongs not only after  $G_2-$  of C3, but also after *d-*, therefore in C7, along with *l-*, exactly as in Athabaskan. Since no combinations of *s-* and *l-* are attested, no relative order between these two can be established, so they are left together in the same rightmost subposition. The single form is *GAdAshAxa'ch* 'wick'. Again, the *shA-* (< *sA-* with assimilation to the stem-final) cannot be *s-* perfective, given the lack of the perfective suffix *-L*. This *sA-* is extrinsic, given the basic verb *O-xa'ch* 'tie O (knot, etc.)'. The meaning of *G-s-* here is clearly enough the same as above, the original lamp wicks being made of small plant material, and the *d-* may well be  $d_2-$  'fire, bright'.

**17.10.19.3 G-IX-s- qualifier combination**

Only one form is attested with this combination also, *GALAXAsAXe:ts'* 'big blueberry species'. Here *IX-* obviously refers to 'berries' but the stem *-Xe:ts'* is not otherwise attested, making this the only known form with fully intrinsic qualifier *s-*. The meaning of  $s_2-$  here fits well enough, except that this is the only berry species name with qualifier *s-*.

**17.10.19.4 g-s- as a possible qualifier combination**

The adverb *gu-si:-kih* 'small amount, little bit' very probably begins with *g-* qualifier, followed by *-si:-kih* with diminutive suffix or adjective. As there is no stem *-si:-* otherwise attested, it is quite possible that this is from *\*-sA-e'*, with the postposition *o-'e'* 'vacant

place of o'; *-kih* is well attested after postpositional phrases. Cf. further *dAqi:kih* 'all gone, nothing left'. The possible meaning of *s-* as 'fine part of something small' from much of the above is nicely supported by this etymology.

### 17.10.20 *w-* as a possible qualifier

The prefixal *w-* in the following few nouns might be considered a qualifier from a purely synchronic point of view: *wA-sheh* 'name', *wA-Xah* 'story', *-wAXa:w* 'shadow, image, picture', *-wAlah(-yu:)* 'spirit(s) of animals, things'.

The most transparent of these is *wAXah* 'story', clearly a deverbalization of the directive verb theme *O'-Xa* 'tell of O', where the *wA-* must clearly be a form of the third person directive object 'u-, with ' of the directive deleted. We have perhaps only one other gerund of a directive attested: *yAX 'u'wA'a:nX* 'looking about for it', where the *-wA-* is from the *-u'wA-* variant of futures and directives, where /u'/ otherwise surfaces as /a'/ where no syllable intervenes before the stem. (This allomorphy must also be the explanation for the /wA/ in the one noun *-gu'wA-L-wahg* 'member of same tribe', very evidently from the postpositional phrase in *?o-ga' L-wahg* with the nominal or verbal *L-wahg* '(be?) member of tribe like o'.)

The closest parallel to *wAXah* 'story' is *wAsheh* 'name', in that *wAsheh* has Athabaskan cognates from *\*-(')uz<sup>w</sup>ə* 'name', and the related directive verb *O-u-z<sup>w</sup>e* 'name O, call O by name'. That verb theme has no full cognate in Eyak, though the Eyak semantic equivalent is also directive, *O-'l-'e*. This then further supports the hypothesis or etymology for *wAXah* 'story'. However, the 'u- of the directive in third person has been identified with the third person o/P pronoun *wA- < \*'wA-*, of Zone A, not Zone C of the qualifiers.

The third form, *-wAXa:w* 'shadow, image, picture', is a loan from Tlingit *-YixaaY*, simply fitting the same pattern by coincidence. Only the last, *-wAlah* has no explanation other than as a qualifier in origin, and appears to have some meaning, with the identifiable stem *-lah*, from the basic verb *-la* 'subsist, camp, live'. For this cf. *-dA-lah-G* '(human) inhabitant of'.

A few combinations could perhaps successfully have been tried with *w-* to test its position in the order of qualifiers, e.g. *\*?si-yA-wAXA:w* 'picture of my hand'. There is at least one instance of 'spirit (of classified o)' in *'u'tl'-wAlah qe'L* 'driftwood-spirit woman', where *'u'tl'* 'driftwood' is *d*-class, and *?-dA-wAlah* (or *\*?-wA-dA-lah!*), if not *-dA-[wA-lah]* might have been expected. However, the attested form might be a declassification of 'driftwood', or a mistake.



## 18 NOMINALS

Nominals, or nouns, are a huge grammatical and syntactic category. Nominals are of three types, stem nouns, noun phrases, and nominalizations (relativizations and deverbalizations) from verbs or verb phrases. This terminology deserves some explanation at the outset. The term **NOMINAL** is the most general and explicitly descriptive for the present subject. The term **NOUN** might do, especially from a syntactic point of view, but is not used to cover the subject here as being too narrow especially from a morphological point of view, except as modified in the phrase stem noun. The term **STEM NOUN** was favored over an earlier used “basic noun”, as being more explicit for a nominal that consists of a single noun stem, with or without affixes. In this sense, the phrase may be shortened simply to *noun* below. The term **NOUN PHRASE** is used for a nominal consisting of more than one stem noun, i.e. a compound, or of a stem noun together with a postpositional phrase (often possessive), or nominalized postpositions. **NOMINALIZATIONS** are nominals derived from verbs or verb phrases. These are of two types morphologically, relativizations and deverbalizations. As **RELATIVIZATIONS** are morphologically nothing more than verbs with relativizing enclitics, zero enclitic unless the subject is human. These have already been extensively included, even listed, in the sections above on verb morphology. For **DEVERBALIZATIONS**, on the other hand, more space will be needed here, because they are further derived from verbs, by deletion of all Zone D prefixes, so are not dealt with under verbal morphology itself; they may involve further affixation, and fall into a difficult complex of morphological and semantic categories.

Eyak, like Athabaskan and Tlingit, greatly prefers coinage of neologisms by nominalizations to loanwords for post-contact introduction of new items. As will be seen in the statistics above and below, Eyak nominalizations greatly outnumber the loanwords in part for this reason.

The basic order of presentation for the nominals will be the same as mentioned above: stem nouns, noun phrases, nominalizations (relativizations, then deverbalizations).

### 18.1 Nouns stems vs. verb stems

There is no clear line between what are inherently nominal vs. inherently verbal stems. Such a classification is in fact complex and entails something of a cline, from stems that are primarily nominal to stems that are primarily verbal. The possibility of using any given stem as verb and/or noun was fairly well investigated in the last summer of fieldwork, as I generally tried to find a noun for stems attested only in verbs, and verbs for stems attested only as nouns. The results are quite complex, somewhat as in English, especially for verbs for stems attested only as nouns, where for noun X, ‘S makes X’ is generally possible, e.g. *duhdz* ‘porch’, as in *qu’xLduhdz* ‘I’ll make a porch’, *sdiuhdzL* ‘porch has been made’ (though it is perhaps not clear whether such verbs are really transitive). Note also e.g. O-

*t'ahL* 'make love-potion for O' (from Anna only, by deliberate elicitation) and *t'ahL* 'leaf; (plume-)feather', where the noun is so basic and the verb so specialized that the verb must be derived from the noun.

As for phonological characteristics of noun stems, there is little difference between these and verb stems (as opposed to minor grammatical categories, more specialized). I.e. verbs show the same maximum range of canonic stem-shape, with the following relatively minor exceptions, specific characteristics that may be present in nouns but not in verbs (significantly, rather than merely by chance). The range includes verb stems with disyllabic stems (i.e. internal sonorants) or stem final clusters (though perhaps disproportionately few of the type with coronal fricative plus stop, only *-t'a'Lk'* 'flutter', as opposed to 21 such nouns; see §15.3.2.1). Insofar as inherently nominal stems can be differentiated from verbal, some finer statistics might show up in the frequency of various subtypes of stems, consonant-vowel sequence frequencies, etc., as shown in §7.1 on stem structure. No such attempt is made here.

The most salient phonological difference, by far, between noun and verb stems is in the presence of noun stems of the basic form CV:, with 18 such nouns attested, and the definitive lack of any invariable open-stem verbs of the basic form CV:. Some instances of verbs can indeed end with -CV:, such as variable open-stem verbs in the Active imperative, especially *e*-shifted, -Ce:, e.g. *ya'* 'Ade: 'sit still!', or expressively lengthened Active imperfectives, *wAX dAle:* 'says so'. However, there are no verbs, only nouns, with an underlying invariable stem of the form CV:. That lack is an actual constraint, as shown by the very deliberate elicitation from Lena of stem noun *ma:* 'lake' as a verb stem in *ch'i:lehshiyah qi' k'usALma:'L* 'place (*qi'*) where Raven (*ch'i:lehshiyah*) made a lake'. Here insertion of -' proved necessary, confirmed in *k'uju'xLma:'* 'I'll make a lake'. Perhaps any semantically fit noun stem can be used as a verb stem by such a derivation. The process does not entail any change in the stem, as in the instance of *duhdz* 'porch' noted above, except in the case of CV:.

## 18.2 Statistics of nominal types

Here follows a preliminary statistical picture from ms. 30-page manuscript survey of the ledger (Krauss 1966a). The analysis is of a "sample" of over 1,000, ca. half (?) of all the nouns in that corpus. The listing is fairly full for stem-nouns, i.e. nouns not derived in some way from verbs or consisting of compounds of various types, but the listing covers presumably well under half for those latter types, i.e. under half of relativizations of verbs, and only a few of the compounds, etc., as specified below. I believe that an earlier calculation indicated there were ca. 2,100 nouns in the corpus. The counts below, however, are from the current survey. The figures in Tab. 18.1 are approximate, rounded slightly upward. Subcategories not explained above will be explained below.



**Table 18.1:** Nominal statistics.

Type of noun	Count
Unpossessed stem, in some cases with repetitive suffix <i>-g(-L)</i>	200
Same, with suffix <i>-L</i>	100
Same, with qualifier prefix, a few also with suffix <i>-L</i>	40
Same, with qualifier prefix, prefixal <i>L-</i> , several also with suffix <i>-L</i>	10
Subtotal	350
Possessed stem, a few (??) with suffix <i>-L</i>	70
Same, with qualifier prefix	70
Same, with qualifier prefix, prefixal <i>L-</i> , many also with suffix <i>-L</i>	80
Subtotal	220
Possessed ~Unpossessed	30
Total above	600
Deverbalizations	
Gerunds	75
Verbal Nouns	70
Instrumental-Descriptive	130
Acquisitional	5
Total deverbalizations	280
Lexicalized Relativizations	
Active imperfective (Ai)	400
Active perfective (Ap)	40
Inceptive perfective (Ip)	26
Neuter imperfective (Ni)	100
Neuter perfective (Np)	20
Other	10
Total lexicalized relativizations	596
Total counted	1,381
Loans, non-canonic unanalyzable	300
Compounds, other NPs, including o-pp + N, lexicalized N + adj., etc.	ca. 300
Other uncounted (incl. post-1970), especially Ai relativizations	ca. 200

### 18.3 Noun-classification by qualifiers

Before discussion of the various morphological types of nouns, there is one more important property of nouns that needs to be mentioned. A large proportion of nouns are *classified*, or have what has by some been called “gender” in Athabaskan. This was first described for Eyak in Krauss (1965a), then for Athabaskan and Eyak in Krauss (1968). This classification is manifested in what I have called CLASS-MARKS since 1965. Class-marks are in fact the qualifiers in their noun-classificatory function. This is included in great detail in Chap. 16 on qualifiers.

Many nouns are unclassified, perhaps the majority, including all nouns referring to humans or higher animals. These classes are extensively documented in the listings in §17, given first under each qualifier or qualifier combination that functions as a noun-class marker, including discussion of the semantics of that classification. As shown there, that classification is sometimes consistent, and sometimes beyond any predictability. That classification is in itself variable, but even that variability is inconsistent. The classification of the majority of nouns is perhaps variable, by “reclassification” or “declassification”. For example, classification of eggs (raw, hard-boiled, scrambled, fried) can change according to the state of the eggs; likewise money (paper, coins); likewise medicine (liquid, pills); *gahG* (meaning either spruce-pitch/gum; sinkers of net; or bullets). This variability is by no means consistent, however; *di:ya*’ remains classified as liquid whether it refers to ‘seawater’ or ‘table salt’. Nouns can also become declassified, e.g. a miniature bear-spear belonging to tiny lake-dwarf becomes unclassified, though both a normal hefty bear spear and a matchstick happen to be *Xd*-class. Noun-classification and class of each noun has been specified and exemplified consistently, routinely, in Krauss (1970a); likewise, under the subsections of each noun-classifying qualifier there is extensive or complete exemplification, semantic subclassification and discussion. Moreover, classification of nouns and noun-classes in Eyak, especially as compared with Athabaskan, has been extensively discussed in Krauss (1968). Noun classification from that point of view is therefore not further discussed here.

On the other hand, as shown in Tab. 18.1 above, where nouns are classed according to their own morphological composition, many nouns have their own qualifier prefixes. This is the case not only for a minority of unpossessed nouns (50/350) in the above count), but also in fact for a majority of possessed nouns (120/200). This use of qualifiers, in the derivation of nouns themselves, will be examined prominently in this section.

Aside from extra complications such a re-classification, de-classification of nouns in the noun classificatory function of qualifiers is discussed under §18.3 on noun classification, so further complications may be mentioned here. One is multiple nouns of conflicting classification. This was once actually addressed with Lena, who translated the concoction ‘give me a hat and some eggs!’, with ‘hats’ being *l*-class and ‘eggs’ *d*-class. She

obliged with *ch'iyahd da:X k'udA'uhdgyu: sich' 'Ala'*, omitting the classification altogether, rather than (conceivably) combining the *l-* and *d-* in \**dli:la'*.

Another problem, probably more complex, common, and not addressed, is multiple uses of a single class mark in a sentences. E.g. for 'I ate three big strawberries', presumably *t'uhLga' lAXa: shuglAXa' lAw XAlAXAsiyahL*, with three instances of class-mark *lX-* 'berry-like' is acceptable. However, it is likely that one or two of those instances may be suppressed, by some rules of preference. This was not deliberately investigated in the field, but it is probable that enough instances of such suppression may be found in the corpus to determine those preferences at least partly.

## 18.4 Stem nouns

There are two main morphological oppositions for stem nouns, which crosscut each other:  $\pm$ possessed and  $\pm$ qualified. *Possessed* nouns, bound, require a possessive prefix or possessor noun, as opposed to free-standing nouns. By *possessed* is meant inherently, inalienably possessed. These are therefore most generally kin terms, and anatomical terms, for some body parts, sometimes also parts of plants or artifacts. In addition, however, there are over twenty nouns noted here which seem to be used both free and possessed, but only two or three of these nouns have different stem allomorphs (corresponding at all to the pattern in both Athabaskan and Tlingit). These are *Xe: ~ -Xe'* 'fat, grease', *ts'Al ~ -ts'Alih* 'bone, shell', and probably *ya: ~ -ya'* 'thing'.

Nouns found both as possessed and unpossessed will be examined at length here. All kin terms are possessed, but some body parts or products that are possessed in Athabaskan are not so in Eyak, e.g. *q'Ama:* 'kidney', *le:L* '(strand of) hair', or *ts'a:* 'umbilical cord', also *GAdla:Lquh* 'lungs', perhaps so *ts'u:* '(female) breast', and *dAL* 'blood' (as body product normally unpossessed as well as possessed in Athabaskan and Tlingit). For all types of possession not covered here Eyak uses postpositional phrases (see §25.3).

At the same time, there are *qualified* nouns, i.e. nouns with qualifier prefixes, mentioned above, as opposed to unqualified, those without such prefixes, an opposition coexisting with the  $\pm$ possessed opposition. These combine to produce ( $2 \times 2 =$ ) four categories of basic nouns: possessed unqualified, possessed qualified, and unpossessed unqualified, unpossessed qualified. For much more information on qualified nouns, see Chap. 16 on qualifiers, where, for each qualifier, nouns which are found with that qualifier are listed. Basic nouns will be presented in the order first possessed, unqualified and then qualified, next unpossessed, unqualified then qualified. Those that may be both possessed and unpossessed are considered in detail between the subsections on possessed and unpossessed.

## 18.5 Possessed nouns

For possessed nouns there is a further subcategorization, for those without and those with *L-* prefix immediately preceding the stem, following the qualifier, a qualifier being usually but not always present. The position of that *L-* prefix is the same as that of the *L-* classifier in verbs, so the question arises whether that *L-* is perhaps in origin an *L-* classifier. However the complete absence of such nouns with a *LA-* or *dA-* in that position to match the other non-zero classifiers, might argue strongly against that interpretation. At the same time, the difference between that *L-* (and zero) on the one hand, and *LA-* (and *dA-*) on the other is merely a matter of the absence and presence of the *dA-* or *D-* element in the classifier. It is hard to imagine what semantics might prefix the *dA-* classifier to a noun, but it is no less hard to imagine what semantics might prefix *L-* classifier to a noun either. The semantics of  $\pm L-$  will be considered further below.

Many of these *L-* prefixed nouns also have an *-L* suffixed to the stem, probably of more than one origin. These too will be considered further below, in §18.6, first with stem nouns, some anatomical, body parts, also, e.g. *-Lts'Alih* 'pit (of fruit)', *-d-Ltl'i:hXL* 'nest (of bird)', *-L-te'* 'handle (of artifact)', and others. Then, however, suffixes of the same form *-L* are even more prevalent throughout the different types of deverbalizations, which have no *L-* prefix, having by definition no prefixes in Zone D.

First, I shall present possessed nouns without prefixal *L-*, unqualified, then qualified, and after these, those with *L-*.

### 18.5.1 Possessed nouns without qualifiers

Nearly all possessed nouns without qualifiers are either kin terms or anatomical. Kin terms are predictably all possessed, i.e. definitively so, and most are basic stem nouns, too numerous to list exhaustively here, but some are given in (1).

(1) Unqualified possessed nouns referring to kin terms

<i>-chu:</i> 'maternal grandmother'	<i>-Ad</i> '(woman's) older sister'
<i>-k'inh</i> 'paternal grandmother'	<i>-'ehd</i> 'wife'
<i>-'uh</i> 'paternal grandfather'	<i>-qa'</i> 'husband'
<i>-'we:shG</i> 'maternal grandfather'	<i>-yahsh</i> '(woman's) child'
<i>-a:n</i> 'mother'	<i>-Ginh</i> 'woman's brother's child'
<i>-ta:'</i> 'father'	<i>-t'inh</i> 'man's sister's child'
<i>-tinh</i> 'father's brother'	<i>-tsi:ny</i> '(man's) daughter'
<i>-XAwAX</i> '(man's) older bother'	

The rest of the kin terms require *-kih* ‘diminutive’ (6 items), or are Tlingit loans (2), or are various noun phrases; for these, the whole kinship system, and more, see Krauss (1977).

When referred to generically, without specifying a possessor, *k'u-* indefinite is regularly used, e.g. *'anh k'u-ta:* ‘that father’; *qa:-ta:* ‘our/a human father’ means more often ‘God’ than ‘our father’. In fact, the Eyak norm in speaking of a common father, e.g. to a sibling, is *si-ta:* ‘my father’.

Some examples of unqualified possessed anatomical terms, human and/or animal, are given in (2):

(2) Unqualified possessed nouns referring to anatomical terms

<i>-tah</i> ‘skin’	<i>-guch</i> ‘penis’
<i>-La'ch</i> ‘stomach’	<i>-ga'qL</i> ‘larynx’
<i>-La:n</i> ‘thigh, hindquarter’	<i>-k'ahsh</i> ‘foot’
<i>-tse</i> ‘flesh, meat’	<i>-Gu(n)hd</i> ‘knee’
<i>-tsin</i> ‘neck, nape’	<i>-Ge't</i> ‘body, torso’
<i>-ts'a:nX</i> ‘eyebrow’	<i>-Gu'ts</i> ‘(fish) scales’
<i>-sahd</i> ‘liver’	<i>-GAla'</i> ‘shoulder, foreleg’
<i>-sits</i> ‘skin (of fish)’	<i>-Xu</i> ‘hair, fur’
<i>-djuhX</i> ‘ear’	<i>-Xa:dj</i> ‘gills’
<i>-ch'idj</i> ‘elbow’	<i>-lu:ch</i> ‘inside or soft part of cheek’
<i>-ch'AX</i> ‘wing’	<i>-la:X</i> ‘eye’
<i>-cha:d</i> ‘dorsal fin’	<i>-ni:k</i> ‘nose, beak’
<i>-she:k</i> ‘chest’	<i>-ni:sq</i> ‘nostril’
<i>-gAwa'ts</i> ‘mesentery’	

For *-la't* ‘tongue’, cf. *O-L-'na't* ‘lick’, a unique pairing of stems

Many more anatomical nouns have qualifier prefixes, for which see below.

When referring in Eyak discourse to a possessed anatomical noun generically, the indefinite possessor *k'u-* is used, e.g. *k'ula:X* ‘an eye’. When so referring specifically to that of an (unspecified) human, the 1<sup>st</sup> person plural possessor is used, e.g. *qa:-la:X* ‘our eye’, meaning ‘a human eye’.

The third semantic class of possessed nouns, which are neither kin terms nor anatomical (body parts), but which do resemble those to some degree, is what are here called part nouns. (Jeff Leer has called them relational nouns, which is appropriate in its broadness.) These will be treated in §18.6, because they are almost all prefixed with

a qualifier and/or the *L-* noted above. They include a number of plant parts, none of which lack both qualifier and *L-*. The very few with neither qualifier nor *L-* are listed in (3).

- (3) Other possessed nouns without qualifier or *L-*
- o-q'a'* 'edge of o' (e.g. box)
  - o-q'Ayanh* 'o-'s homeland'
  - o-qa:*' 'o's tribe, kind; part of o, some of o'
  - o-ch'iya'* 'o-'s boss, owner of o, master, expert of o'
  - o-t'e'ts'-G* 'suspended by o, serving as handle of o'
  - o-q'As* 'one of o (pair)'

Some of these verge on acting as postpositions: *o-t'e'ts'-G* is called a postposition in the dictionary; correctly entered together with *o-q'As* in the dictionary is *o-q'As-d*, as a postposition, with nominalizing *-d* final, 'opposite side of o, opposite end of o, opposed to o'. One stem, *-tl'a'*, cf. Athabaskan *\*-tl'a'* 'rump', serves in Eyak preverbals without *L-*, and in part nouns with *L-*.

### 18.5.2 Possessed nouns with qualifiers

Following are possessed nouns with qualifier prefixes, presented in (4)–(9) in descending frequency. (For more of these, see also §18.6 on the same also with prefix *L-*, as well as the Chap. 17 on qualifiers.) Many nouns have anatomical qualifiers, e.g. *l-* 'head', *y-* 'hand', which obviously bear much of the meaning, with a stem that may or may not be otherwise identifiable, as shown where identification is clear. It will be seen that a fair proportion of these possessed nouns with qualifiers do indeed have a stem that is not otherwise identifiable, in which the qualifier is therefore to be considered "intrinsic."

- (4) Possessed nouns with *l-* anatomical qualifier, 'head' (clearly cognate with a PA *\*-nə-*)
- n-da:*' 'face'
  - n-dAlah* 'antler, horn' (cf. PA *\*-de*' 'horn', and §18.5.3 below)
  - n-ch'it'* 'forehead'
  - lA-ch'u:ch'* 'inside or soft part of cheek' (possibly mistaken, blend; *lA-* instead of *-n:-* before coronal is irregular; cf. *ch'u:ch'* 'snail', *O-ch'u:ch'* 'pinch/twist O', and *-lu:ch'* 'inside cheek')
  - lA-Gu'ts'* 'dandruff' (*-Gu'ts'* 'fish scales')
  - lA-Ga:nsh* 'lower part of face, below nose'
  - lA-Gu:G* 'part of fish head'

-*lA-qah* ‘head’  
 -*lA-quhL* ‘cheek’  
 -*lA-Xu* ‘facial hair’ (cf. -*Xu* ‘hair, fur’, and below)  
 -*lA-wahsq* ‘temple’

(5) Possessed nouns with *l*-thematic qualifier

-*l-gah* ‘corpse’ (cf. *l-dA-ga* ‘leave, get the hell out’, very forceful, so quite possibly a verbal noun in origin, and with -*l-dA-* ‘errative’)  
 -*n-tuh* ‘milt’  
 -*n-dja*’*L* ‘king salmon milt, semen’ (cf. -*gu:ndza*’*L* ‘dorsal fin; (fish) kidney’ in (9))  
 -*lA-wa*’*L* ‘rim, edge’ (cf. -*wa*’*L* ‘covering (of cloth over aperture)’?)  
 -*lA-’e*: ‘different from, strange to’ (unique, semantically more like a postposition)

(6) Possessed nouns with *y*-anatomical qualifier, ‘hand’

-*yA-da*’ ‘palm of hand’ (cf. *o-da*’ ‘arriving at o; front side of o’)  
 -*yA-ch*’*a*:’*L* ‘index finger’  
 -*yA-ku:nch*’ ‘thumb’ (cf. -*ku:nch*’ ‘S fart?’)  
 -*yA-q’a*’*ts*’ ‘hand’ (cf. *O-q’A*’*ts*’ ‘bite O, trap O in jaws’)

Possessed nouns with *y*-qualifier probably thematic

-*yA-ta*:’ ‘father-in-law’ (cf. -*ta*:’ ‘father’)  
 -*yA-danh* ‘mother-in-law’  
 -*yA-quh* ‘young of animal’ (cf. -*quh* ‘(pl) sit, stay’)

(7) Possessed nouns with *g*-anatomical qualifier ‘hip area’ and/or noun-classificatory ‘filament-like’

-*gu-tl’ah* ‘(mammal) tail’ (cf. -*tl’ah-* ‘headwater’, PA \*-*tl’a*’ ‘rump’, etc.)  
 -*gu-guch*’ ‘penis (of dog, etc.)’ (cf. -*guch*’ ‘penis’, and -*XA-guch*’ in (8))  
 -*gu-ka*’ ‘bird tail’ (cf. PA \*-*ke*’ ‘tail’)  
 -*gu-Xa*:’ ‘turned-over stump, butt end of tree’  
 -*gu-’a*’*L* ‘hipbone’  
 -*gu-q’uhL* ‘crotch of underpants’  
*lis-gu-si:q*’ ‘tree moss, usnea’

(8) Possessed nouns with *X*-anatomical ‘human male genitalia’

-XA-Xu' 'male pubic hair'

-XA-guch' 'human (as opposed e.g. to dog's) penis'

- (9) Possessed nouns with combinations of anatomical and/or thematic qualifiers

-XA-lA-Xu' 'female pubic hair' (cf. -XA-Xu' 'male pubic hair' in ex4-1-9)

-XA-lA-ya'd 'vulva' (postpositional)

-gu-n-dza'L 'dorsal fin; (fish) kidney' (cf. -n-dja'L 'king salmon milt, semen' in 5)

-gu-nA-GAG 'hip' (with unique allomorph of lA-, cf. discussion on *n* ~ *l* alternation, §6.3)

Unique is -qi:-tAtl' 'heel' with anatomical qi:- 'foot' alone instead of qi:-dA- (cf. O-ta'tl' 'kick O', and PA \*qe' ~ -qe- 'foot', Eyak cognate only in zone of qualifiers), as the anatomical qualifier for 'foot' is otherwise the combination qi:-dA-, except also in the following. Anatomical qi:- combines with *y*- 'hand' in -qi:-yA-tl'ish 'toe' (varying with -qi:-yA-L-tl'ish-L), -qi:-yA-ga:g 'big toe'.

Very common as thematic is the qualifier *d*-, but which is far less common proportionately here, as in the examples in (10).

- (10) Possessed nouns with *d*- qualifier (sometimes related to 'mouth', cf. PAE \*d- qualifier 'oral/vocal activity' and PA \*da' 'mouth')

-dA-tah 'bark' ('skin of *d*-class, tree'; cf. -tah 'skin')

-dA-djehX '(outside) corner (e.g. of sack)' (cf. -djehX 'ear')

-ni:k'A-dA-ch'u:ch' 'philtrum'

-dA-shid 'edge, rim'

-dA-kuhd 'lips'

-dA-q'Ats' 'collar' (cf. O-q'Ats' 'bite O, grab O in jaws')

-d-XAG-L 'gunwhale'

-d'e:sh 'string (of strung objects)'

-dA-'uhd-g 'egg' (cf. -d-'uhd-g 'lay egg', perhaps a verbal noun in origin)

-dA-'u:G 'breath' (cf. d-LA-'u'G 'breathe', so probably a verbal noun in origin)

- (11) Possessed nouns with combinations of *d*- and *l*-

-dla:-tsa: 'testicles' (cf. tsa: 'stone')

-dla:-si:nd ~ -dla:-si:nt' 'ribs'

-<sup>3</sup>uGL-dla:-shid 'pericardium?' ('heart edge')

-n-dA-shid in 'u:ndAshidqa'X k'u:Linhih 'he's wearing labrets' ('there is something through his *l*-lips'; cf. -dA-shid 'lips' in (10); the qualifier order in -:dA-shid is constituent-hierarchical -l-[d-shid])



Some combinations involve reduced forms of anatomical nouns which occur in that reduced form in the qualifiers of C4, e.g. *lX-* ‘berry like’ (cf. *-la:X* ‘eye’), *k’ush-dA-* ‘lower leg’ (cf. *-k’ahsh* ‘foot’, plus *d-* qualifier) in (12).

(12) Possessed nouns with C4 anatomical qualifiers

- gu-lAXA-de:L* ‘spine’ (cf. *g-* in 7)
- lAXA-q’As* ‘one eye of pair’
- k’ush-dA-q’u’* ‘calf of leg’<sup>1</sup>

### 18.5.3 *-n-dAleh* ‘horn’ and *-Xu:nLAyah* ‘tooth’, possessed nouns from verbs

The possessed noun ‘horn, antler’ is particularly problematical in more ways than one. Synchronically it is probably to be seen as a possessed noun with anatomical *l-* qualifier ‘head’ and disyllabic stem, *-dAleh*. This might be compared to Athabaskan *\*-de* ‘horn, antler’, as was done in the dictionary. That comparison, however, is quite problematic phonologically, and a stem of the shape *-dAIV* with non-affricated onset would be unique for Eyak. A more probable origin is verbal *-dA-leh* with *dA-* classifier and stem *-le* ~ ‘act, do’, here from transitive *O-L-le* ~ ‘act on, make, process O’, in the passive, *O-LA-le* ~, with the always permissible variant for passives, *O-dA-le* ~. With the anatomical qualifier the meaning is to be seen as ‘O’s head is acted on, something is done to O’s head’, relativized perhaps ‘that which O’s head is processed into’. The possibility of *k’u:nLAleh* for ‘horn’ was not tested, but almost certainly *k’u:ndAleh* is fully lexicalized. In addition to *k’u:ndAleh* ‘(something’s) horn’, we do happen to have possessed *’u:ndAleh* ‘its horn’ adequately attested, implying e.g. *si:ndAleh* ‘my horn (animal speaking)’. This proves its status as a possessed noun, rather than nominalization or relativization of the verb. This leaves the problem of a still overt relativized verb serving as a possessed noun, almost uniquely. The form with *k’u-* could still be a verb with the indefinite *k’u-* as object of the passive, but *’u:ndAleh* ‘its horn’ can only be a possessed noun with qualifier, synchronically *o--n-dAleh*. Cf. incidentally, *k’uleh* ‘rain’, from *k’u-leh* ‘something is happening’, with the same stem.

Supporting the analysis of *-n-dAleh* ‘horn’ is one other such noun, *-Xu:nLAyah* ‘tooth, teeth’, unmistakably a verb form, with qualifier, converted to a possessed noun, amply attested as *k’uXu:nLAyah* ‘a tooth, teeth’, *’uXu:nLAyah* 3<sup>rd</sup> person possessed, *siXu:nLAyah* 1s possessed, etc. The *-Xu:n-* is listed as position C4 qualifier *Xu:lA-* ‘tooth’ in §17.10.12, certainly cognate with Athabaskan *\*-yu* ‘tooth’. The *-LAyah* can be none other than the classificatory verb *-L-(y)a* ‘(pl) be in position’, still complete with classifier. It is therefore a relativization of the passive of the transitive *O-L-(y)a* ‘handle pl O’, in the Active

<sup>1</sup> Instead of *\*?-k’ahsh-dA-q’u’* with the usual form *-k’ahsh* ‘lower leg, foot’, not tested. For the unknown element *-q’u’*, cf. *-q’u’* ‘(herring) spawn’, *q’Ama:* ‘salmon roe; kidney’, PA *\*q’un*, also PA *a\*-ch<sup>wr</sup>əch<sup>wr</sup>- ~ \*-č<sup>wr</sup>ə’ə’š<sup>wr</sup>* ‘kidney; calf of leg’, Russian *икра* ‘caviar; calf of leg’, etc.

imperfective, therefore in the usitative derivation, ‘those plural (teeth) which are/belong positioned’, used as if it were a noun. One would have to ask an ancestral Eyak why that replaced simple old PAE \*-χu:n’ or the like.

## 18.6 Part nouns and nouns of the form *-L-stem-L*

The category of possessed nouns that are neither kin terms nor anatomical is not large. It was at one secondary stage in the writing of this grammar listed in connection with postpositions as suggesting a gray area between postpositions and nouns. This proves unsubstantiated, however, because of clear morphological differences between postpositions and nouns, as described in §16.6. Above all, however, the set of pronouns prefixed to postpositions is the set *o-*, while those prefixed to part nouns is presumably *P-* (see Tab. 9.1). That earlier listing included as possessed nouns a few items that are in fact morphologically postpositions or postpositional phrases in their composition, e.g. *o-(gu)tl'a'-q'* ‘stern’, *o-tl'a'q'Aya'* ‘rudder’, a noun derived therefrom, *o-tsin'-da'-ya'* ‘tip of *o'*, *o-γA-'e'd* ‘sign of *o'*, *o-dl(G)-e'd* ‘hole left by *o'*. From a semantic point of view, however, a significant gray area does indeed exist between postpositions and part nouns.

That list was of thirty part nouns 16 of which had a *L-* prefixed to the stem. This joins and overlaps with a list of a class of possessed nouns with that same *L-* prefix, some of which are anatomical nouns. Thus with this trait anatomical and part nouns overlap, unsurprisingly, and the noun section included a subsection on possessed nouns with *L-* prefix to the stem, many of which also had *-L* suffix. That included a range of both part nouns and of anatomical nouns, to which the list of part nouns obviously also belongs, thus creating a continuum of anatomical and part nouns, a large proportion of which has *L-* prefix.

Part nouns will be presented here by stem, and by class of stem in their least derived forms.

A very few part nouns (13) are simple underived stem nouns, semantically also resembling postpositions.

### (13) Part nouns from underived stems

*o-qa:*’ ‘some, part, portion of *o*; *o*’s kind, type, tribe’

*-q'As* ‘one of a pair of *P*’ (a genuine doublet as postposition, *o-q'As(-d)* ‘opposite end of *o'*)

*o-q'a'* ‘edge of *o'*

A few more stems (14) are attested only as part nouns with qualifiers.

### (14) Stems only attested part nouns with qualifiers

*-d-shid* ‘edge, rim, brim, flare’

- l-wa'L* ‘edge, rim’
- l-dzinhG(-L)* ‘tent pole’
- lis-gu-si:nk* ‘usnea, beard moss’ (*lis-* ‘tree’)
- d-djehX* ‘corner’ (< anatomical *-djehX* ‘ear’)
- l-da'ke:d* ‘container’ (Tlingit loan)

This brings us to the vast majority of part nouns that are derived with prefixal *L-*. This prefix is homophonous with the classifier *L-* and occupies the same pre-stem position, but it appears to be unrelated semantically to the classifier. Further, since no *dA-* or *LA-* is attested in that position with such forms, this *L-* is judged not to be identified with the classifier *L-*.

Two such *L-* prefixed part nouns meaning ‘handle’ have a stem that appears only as a part noun stem; *-L-te* ‘(stick-like) handle’ (cf. PA \**-təŋʷ*), with several further qualifier derivations, q.v. under *-te* in dictionary; *t'ahL* ~ ‘handle (semicircular type, on container)’ (only conceivably derived from postposition *o-Xa* ‘in intimate relation with o’, or verb *O-L-Xa* ‘cause to be’); *-dL-Xa'L* ‘button’ of clam’.

Two more stems do indeed come from a preverbal: *-d-L-tl'a* ‘handle (of axe, knife, door)’, *-ku:n-d-L-tl'a* ‘stock (of gun)’, *-L-qehX* ‘bottom (of cavity, vessel)’, *mAgAG-dA-L-qehX* ‘chessboard’.

A few part nouns with *L-* are derived from unpossessed nouns, for which see (15). Others (16) are derived from possessed nouns, anatomical (fairly productive). For derivatives of all these see the dictionary.

(15) Part nouns with *L-* derived from unpossessed nouns

- d-L-q'a* ‘stem or non-edible part of plant’ (< *q'a* ‘bush; twig’, therefore probably not to be identified with *o-q'a* ‘edge of o’ listed above)
- d-L-tl'ihX-L* ‘nest’ (< *tl'ihX* ‘grass’)
- lX-L-gug-s-g* ‘small seeds (of fruit)’ (< *-gugs-g* ‘louse’)
- d-L-ts'u:x(-L)* ‘philtrum’ (anatomical, from *ts'u:x* ‘barnacle’)
- qa:-ni:ch'-A-dA-L-gahG-L* ‘ink substance’ (< *gahG* ‘resin’, *-ni:ch'*- cf. *-ni:k'* ‘nose’)
- L-t'ahL* ‘leaf, plume feather’ (< *t'ahL* ‘leaf, feather’)<sup>2</sup>

(16) Part nouns with *L-* derived from possessed anatomical nouns

- L-tah* ‘skin container’ (< *-tah* ‘skin, pelt’)
- dA-L-ts'Alih* ‘shell’ (< *-ts'Alih* ‘bone’), *-l-L-t'sAlih* ‘shell’, *-lX-L-ts'Alih* ‘pit (of fruit)’

<sup>2</sup> This form is of special interest, as it appears simply that the unpossessed form lacks the *L-*, which appears in the possessed form. There may be something more to it than that, however, and a whole subsection is devoted to that pair: §18.7.

*-d-L-ku:n* ‘base, thickest part’ (< *-ku:l* ~, cf. PA \**-kən* ‘base’), *-s-L-ku:n* ~ ‘(finer?) roots’ (with rare *s-* qualifier)

Other part nouns (17) are derived from attested verbs, including color verbs, for which see the dictionary for more detail.

(17) Part nouns with *L-* from attested verbs

*-L-Xahd(-L)* ‘cable, string’ (< *O-L-Xahd* ‘pull, drag O’), *qu’-L-Xa:d-L* ‘bow (weapon)’ (persistent, with problematical *qu’-*)

*-y(-L)-ts’i:nG-L* ‘little finger’ (< *O-L-ts’i:nG* ‘dip O’)

*-lX-d-L-t’ahLk’* ‘eyelashes’, *-gl-L-t’ahLk’* ‘gill-covering’ (cf. *G-LA-t’ahLk’* ‘flutter wings’)

*-lX-L-dAtl’-g-L* ‘eyelid’ (cf. *(O-)L-dAtl’* ‘hurt (O)’, PA \**O-l-dətl* ‘shake, strike O’, Minto *-noX-dudla* ‘eyelid’)

*k’u-lX-L-shitl’-g-L* ‘sawdust’ (< *O-shitl’* ‘abrade O’, *’uX k’u-shitl’-g-L* ‘saw’)

*-L-ga’-L* ‘worn-out, battered old’ (< *-ga’* ‘weary’, q.v. under *ga’*<sub>1</sub> in dictionary)<sup>3</sup>

*-d-L-xix(-L)* ‘eggwhite’, *-lX-xix-L* ‘white of eye’ (< *-xix*)

*-lX-L-t’u:ch’-L* ‘pupil of eye’ (< *-t’u:ch’*)

Some part nouns (18) are derived from stems that function as both nouns and verbs, or it is unclear whether the stem is nominal or verbal.

(18) Part nouns from stems attested in both nouns and verbs (or unclear which)

*-d-L-dzits’-L* ‘receptacle and/or calyx, sepals, “stem” (of berry)’ (*O-lXd-L-dzits’* ‘remove calyx from O (berry)’)

*-y(-L)-tsAq’s-g-L* ‘fingers’ (with *y-* anatomical ‘hand’, *O-L-tsAq’s-g* ‘make O (fringes)’)

*-ni:k’-A-d-L-xa’ch’-L* ‘nose-septum’ (with *-ni:k’* ‘nose’; and *O-xa’ch’* ‘tie O’ or *-xa’ch’(-L)* ‘knot’)

*-d-L-t’Aq’-L* ‘collarbone’ (cf. *LA-t’Aq’* ‘jump’, *t’a’q’-L* ‘fishhook’, or *-t’e’q’* ‘be straight’)

Yet other part nouns (19) are with stems not found in any other category, i.e. are unique to *L-* prefixed part nouns or anatomical nouns.

(19) Part nouns with *L-* prefixed stems not found in any other category

*-L-Xa’L* ‘handle’ (semicircular type, on container)’ (only conceivably derived from postposition *o-Xa’* ‘in intimate relation with o’, or verb *O-L-Xa’* ‘cause to be’)

<sup>3</sup> This form was earlier thought to be a special type of adjective, but is now rather clearly of this type.

- d-L-tl'a'* 'handle (of axe, knife, door)'  
*-L-XAdj-g-L* 'skeleton', *-d-L-XAdj-g-L* 'empty, lifeless frame, building, container, (dead) body'  
*-y-L-Xahdz-L* 'fingernails, claws', *-qi-y-L-Xahdz-L* 'toenails'  
*qe:s-gu:n-L-GAmAd-L* 'anklebone' (with *-qe:s* 'Achilles tendon')  
*-d-L-XAlah* 'butt-end (? of tree); corner'  
*(k'Ayi:ny) gu'w-A-L-wahg(-L)* '(of a different) tribe' (*gu'wA-* probably from postposition *o-g(w)a'* 'like o')  
*k'u-dA-L-ts'Aq'* 'young grass'  
*-Xu:n-L-tl'Ala'* 'gums'  
*-gu-L-ts'ahLk'* 'tailbone of seal'  
*-qi-y-(L-)tl'ish(-L)* 'toes'  
*-Guhd-X-L-chAXch'-L* 'kneecap' (with *-Guhd* 'knee', and cf. *o-X* 'in (non-punctual) contact with o')  
*-d-L-dje:'(-L)* 'eggyolk'  
*k'u-L-quhXch'-L* 'lamp-chimney' (no explanation!, in spite of recent reference)  
*ni:-L-ts'is(-L)* 'porcupine's hole'

For more detail on these, see of course the dictionary. It is safe to say that an attempt was made to elicit each of the stems cited here in other categories, without success.

Of 46 stems involved in these nouns, 9 appear without *L-* and 41, the great majority, appear with *L-*. Note, further, that of those 41, some also have *-L* suffix, some have apparently optional *-L* suffix, and in 16 *-L* is not attested.

Note that in two nouns it cannot be determined whether they are suffixed with *-L* because the stem itself ends in *-L*,

It is doubtful that any attempt was made to test this variability. The origin of this suffixal *-L* cannot be determined by any semantics, it appears, but the frequency is probably much greater than could be attributed solely to analogy with the many nouns with *-L* suffix to be found in the various subcategories of nominals derived by deverbalization, q.v. §18.13. In other words the *-L* suffix may be to some extent inherent in the category of nouns prefixed with *L-*. On the other hand, the *L-* prefixing itself does indeed seem to bear some semantic effect, in a sense epitomized by *t'ahL* ~ *-L-t'ahL* 'leaf, plume feather' seen as unpossessed and possessed, separate and part of something, respectively (cf. §18.7). (The fact that the PA cognate is *\*(-)t'an*, so the *-L* is etymologically a suffix, is perhaps beside the point.) Further items derived from unpossessed nouns add interestingly to this semantic function. E.g. *-L-tl'ihXL* 'nest' < *tl'ihXL* 'grass' ('-N made of N'), *-lX-L-gugs-g* 'small seeds (of fruit)' < *-gugs-g* 'lice' ('-N resembling N'), not counting any qualifiers added. Likewise,

not counting qualifiers added, derivations from already possessed nouns: *-L-tah* ‘skin’ > *-tah* ‘skin container’ (‘-N repurposed as -N’), *-d-L-ts’Alih* ‘bone’ > *-ts’Alih* ‘shell, pit’ (‘-N resembling -N in different function’). For further consideration of the function of the prefixal *L-*, see the detailed case of *ts’Al* ~ *-ts’Alih* ‘bone’ in §18.8.1. Note at least occasional parallels in Athabaskan, e.g. Koyukon *-tlee-tl’en-e-* ‘skull’ (‘head bone’).

### 18.7 *t’ahL* ~ *-L-t’ahL* ‘leaf, feather’

A most interesting item is Eyak *t’ahL* and *-L-t’ahL* ‘leaf, (plume-)feather’, cognate with Athabaskan *\*-t’an*. Given that cognate, as noted, it is evident that the Eyak *-L* is suffixal at least in origin. In any case it cannot be determined whether the Eyak has a synchronic *-L* suffix as well, since it is very clear that all instances of *-L-L* surface as simple *-L*. Most interesting here is that this noun stem occurs both possessed and unpossessed, but all instances of the unpossessed have no *L-* and all instances with *L-* are possessed. There is one instance only of possessed without *L-*, from Anna in text, *sit’ahL* ‘my feathers, plumage’, as opposed to 36 instances of possessed with *L-* (8 of which are from Anna herself in text), and 19 instances of unpossessed without *L-* (8 of which are from Anna in texts). That the one irregularity out of 55 instances is in the case of a bird talking (loon to blind man) presumably explains the irregularity, in one way or the other! In any case, this behavior of this one lexeme, which appears to mean exactly the same thing both possessed with *L-* and unpossessed, shows at least, and perhaps conclusively, that the *L-* prefix, whatever its origin and meaning, belongs only (or almost only, see below) with possessed nouns. One clear instance of *-L-t’ahL* with qualifier is *-gu-n-L-t’ahL* ‘ventral fin’. That raises by one the total of these nouns with *L-* to 52, 41 of which have qualifiers.

### 18.8 Nouns attested both possessed and unpossessed

In addition to the unique case of *-L-t’ahL* ~ *t’ahL* ‘leaf, (plume-)feather’, just discussed in §18.7, there are ca. 21 more nouns noted here which seem to occur both possessed and unpossessed, and there may be several more in the corpus. Though there was no thorough systematic testing of all basic nouns to see if the possessed could also be used unpossessed, or the reverse. Such testing conceivably could have revealed some more examples, though certainly not very many more. It is in any case abundantly clear that noun-possession as such is far more restricted in Eyak than in Athabaskan or Tlingit. In fact, since the Athabaskan and Tlingit noun-possession morphology is cognate, as Leer (1991b) has shown, it follows that Eyak must have had that morphology and lost it.

As though ideally designed to prove this point, the Eyak corpus has a combination of two and only two nouns that together can best be explained as a vestige of that system. These are the two stem nouns, morphologically unique for Eyak, *Xe:* ~ *-Xe’* ‘fat, grease, oil’ and *ts’Al* ~ *-t’Alih* ‘bone’, which can be directly compared to the regular Athabaskan

cognates with the alternations \* $\chi e \sim *-\chi e'$ , \* $ts'ən \sim *-ts'ənə'$  for exactly the same items. The Eyak *-ts'Alih* uniquely reflects the suffix vowel, and *-Xe'* the suffix glottal stop. Apparently no other trace is left in Eyak of this alternation process that is so fundamental to nouns in Athabaskan and Tlingit, but nothing else explains these unique “irregularities” in Eyak.

There is possibly one other pair like *Xe: \sim -Xe:*, namely *ya: \sim -(A)ya'* ‘thing’, q.v. in Krauss (1970a). However, *-(A)ya'* occurs only with preverbal possessors, e.g. *te'ya'* ‘fish’ (< *ta'-ya'* ‘water-thing’), *dla:q'Aya'* ‘mountain goat’ (*dla:-q'-A-ya'* ‘thing on (-q') *dl*-class o (rocks)'), *ts'AlyAq'ya'* *Xe:* ‘marrow’ (‘inside of bone thing? grease’). The possessed *-(A)ya'* might well also be associated with the postposition, *o-ya'* as ‘(thing) belonging to o’, q.v. in Krauss (1970a) as *ya'₅*. Both semantically, as ‘thing’, and phonologically, with so many homophones, *ya'* is hardly distinctive enough to serve well as such evidence as is the *Xe: \sim -Xe'* ‘grease’ item.

### 18.8.1 *ts'Al \sim -ts'Alih* ‘bone’

The case of *ts'Al \sim -ts'Alih* ‘bone’ is well documented (45 instances in the ledger) and interesting enough to show in some detail. The regularity of the alternation is not quite perfect. There are 14 instances of the unpossessed, none in text. Of the 14, 12 are plain *ts'Al*, but Rezanov (1805) has ‘цѣллія’ <tsyllia> (not in Radloff 1857) for Russian ‘берцо’ (‘shin, tibia’), which must be read *ts'AlA* rather than as \**ts'Alih*, explicitly. This both shows the vowel still expected after the sonorant is there in 1805 and that it is of the /A/ quality rather than *-ih*.<sup>4</sup> The only apparent counterexample we have, unpossessed disyllabic, is Furuhielm (1862a) <zali> ‘bone’. For the possessed *-ts'Alih* (without *L-*) there are 12 instances, 8 of which are in text, mostly from Anna. The counterexamples are from Lena, “*siGAla'ts'Al* ‘my shoulder blade?’”, then later checked, “*siGAla'ts'Al(ih)* ‘my shoulder blade, shoulder bone’”; Lena’s uncertainty was certainly not semantic, but morphological, very probably and understandably in view of the following point, also of interest.

There are 18 more instances of this lexeme, all possessed with *L-* and all with *-ih*. Most of these are with qualifiers, especially *-dA-L-ts'alih* ‘(egg) shell, sea shell’ (8 instances), also *-lAqah-dA-L-ts'alih* ‘skull, head bone’ (twice in text from Anna), the latter hardly a “displacement,” though, it could be said, “part of a part.” Note further *si-ya-L-ts'Alih* ‘my finger bones’ and *si-qi:-dA-L-ts'Alih* ‘my foot bones’, still parts of a part, and *'i:nLxi:shg-'i:-n-L-ts'Alih* ‘red abalone shell’, with *l-* class-mark for *'i:nLxi:shg* ‘red abalone’, a displacement. Without displacement and without *L-*, we have not only the *-GAla'-ts'Al(ih)* ‘shoulder blade’ from Lena but also *k'uts'Alih* ‘bone (of something)’, and from Galushia Nelson (probably from Anna, cf. §3.3.10.2) also in basket-pattern names, along with the abalone shell, *ch'i:leh-ts'Alih* ‘raven bone’, and *qa:-ts'Alih yahd* ‘Eagle [moiety] House’ (‘skeleton house’), < ‘our/human bones house’. Likewise, from Anna in text, we

4 We have the latter in contrast, incidentally, in Rezanov (1805) уталецъ алюа (<utalets' aliua> ‘eggshell’, clearly to be read *'udALts'Alih 'uwa:* ‘its shell of it’.

have *k'uts'Alih* 'bones' (probably being or at least including skeletons of slave-woman and dog, presumed dead), without *L-*, but also *qa:-L-ts'alih-shiyah-yu:* 'old human bones', certainly inconsistent with the preceding. It does not seem that the distinction is related to whether the bone is viewed as part of a living being or as dead and disembodied, given that *L-* is also present in e.g. *si-yA-L-ts'Alih* 'my finger bones' and *si-qi:-dA-L-ts'alih* 'my foot bones', living person speaking spontaneously.

Phonologically similar to the case of (*ts'Al* ~) *-ts'Alih* is the case of *-ch'Alih* 'forearm', which alternates with *ch'a:n-* in the obsolescent anatomical qualifier combination *ch'a:n-dA-* 'forearm', where *\*ch'AnA-* > *ch'a:n-* before coronal (instead of > *\*ch'ALA-*).

### 18.8.2 *Xe:* ~ *-Xe'* 'grease'

The noun *Xe* ~ *-Xe'* 'liquid fat, grease, oil' is fairly well documented, in 52 instances, and less complex. There is no *L-* prefixation involved. All 36 instances of unpossessed are *Xe:*, and all 13 instances of possessed are *-Xe'*, in *xa:s-A-Xe'* 'soap' ('taboo fat'), *tša:-dla:-Xe'* 'kerosene' ('stone-oil'), *te'ya'-Xe'* 'fish oil', and *ke:Lta:g-Xe'* 'seal oil'. There are no instances of *k'uXe'* 'oil' (generic) or *'uXe'* 'its oil', presumably for the simple reason that the oil does not come without a process. There are three items that are less clear-cut. We have 'marrow' twice from Lena, *ts'Al-yAq'-ya' Xe:* and *k'u-yAq'-iGi'-Xe'*. The former is not puzzling, as explained above, but the latter is less clear, as though possessed or from the inside, now of 'something' instead of 'bone', and the peculiar *-iGi'-* < *-GA-'e'*, q.v. §17.10.5 qualifier *G-* and postposition *-'e'*. The opacity of the result presumably allows very easily for a possessive interpretation of the combination.

Verbs derived from this noun, *Xe* ~ *-Xe'*, with the meaning 'grease, paint O; S becomes greasy', consistently have the stem-form *-Xe'*, or quite commonly also *-Xe:*, perhaps an expansion and/or, perhaps more likely, based on *Xe:*, but in any case always with final glottal stop. Cf. *ma:* 'lake', derivative verb *-ma:*'.

There is one possible counterexample, however, in the term or name for the mythical being Property Woman, *k'u-Xe:-gAXts'*, with what looks like it should be possessed *k'u-Xe'*, plus the stem from the Neuter imperfective verb *LA-gAXts'* 'be sticky'. Though the composition of the name looks like it includes a *-Xe:-* which might be identified as this lexeme, the connection of such a name with the story of Property Woman is not clear, nor is the reason for *-Xe:-* instead of *-Xe'*, except that we are in the domain of less than fully clear proper names.

### 18.8.3 *ya:* ~ *-ya'* 'thing'

This is by no means a clear synchronic pair, though semantically and phonologically plausible, and likely enough a pair historically. The *ya:* is abundantly attested, and the *-ya'* is well attested in at least two dozen items. This was entered in Krauss (1970a),



**Table 18.2:** Semantics of variably possessed and unpossessed nouns.

Semantic category	count
Body parts (but not inherently localized)	5
Body products	6
Plant-related	5
Kin terms	3
Miscellany	6
Total	33

extensively, q.v., as two separate items. There are no minimal pairings, e.g. no *\*?siya* ‘my thing’, though for that cf. *xu: siya’ yahd* ‘my house’, where *si-ya’* is firmly identified as the postposition *o-ya’*, here ‘belonging to’. For this, see Chap. 16 on preverbals, and §25.3 on noun possession. That the possessed form *-ya’* is not to be identified as a postposition is shown also by the absence of *-d* final nominalizer even though this *-ya’* is clearly a nominal syntactically.<sup>5</sup> A further point dissociating *ya:* from *-ya’* synchronically is that *ya:* has the variant *yi:nhinh* ‘person who’, plural *yi:nhinu:*, with extended or irregular use of relativizing verbals enclitics for singular and plural human to *ya:*, as well as to a very few other non-verbal forms. This use does not extend to possessed *-ya’*. In fact, there is no identified attestation of possessed *-ya’* with pronominal possessor, *\*?’uya’* or *\*?’anhya’* as such. In fact, *-ya’* is attached almost exclusively to preverbals, including some all-important items, e.g. *te’ya’* ‘fish’ (preverb *ta’* ‘in water’).

#### 18.8.4 Other stem nouns attested both possessed and unpossessed

Up to 33 nouns have been noted as both possessed and unpossessed, in one way or another (Tab. 18.2). None are attested so abundantly as the three or four above (including *t’ahL ~ -L-t’ahL* ‘leaf; feather’, cf. §18.7), and none have variant allomorphs relating to  $\pm$ possessed status. They will be taken up in the order listed in Tab. 18.2.

In semantic and statistical but not morphological contrast with *Xe: ~ -Xe’* above, and also cognate with Athabaskan, is *q’AX* ‘(body) fat’. This is attested abundantly, 19 times, as possessed *k’uq’AX*, though e.g. a presumable *siq’AX* ‘my body fat’ was never elicited. It is also found in three compounds, one ancient, *tsa:-lA-q’AX* ‘crab (species)’ in Rezanov (1805), lexicalized, with archaic *l-* class- instead of *dl-* class-mark for *tsa:* ‘stone’; one ordinary, *dla:q’Aya’-q’AX* ‘mountain-goat fat’, a delicacy; one modern, *shAdinngAG-q’AX* ‘bacon’, lit. ‘pig fat’. On the other hand, it was easily elicited also as unpossessed, *q’AX* ‘fat (not rendered)’, three times, and in Rezanov. (Further details: from Lena and Marie we have the phrase *q’AX-de:* ‘greedy person, hungry baby’ (origin of *de:* is unclear), found as *k’uq’AXde:*

<sup>5</sup> A variant *-Aya’* was allowed in Krauss (1970a), but that was before any analysis was made for epenthetic schwa (§6.17, which now fully accounts for the *-A-* of the *-Aya’* variant).

from Galushia Nelson 1933 (cf. §3.3.4.2). From Anna in text we have the epithet *lAquhL-q'AX-lAw* 'big fat cheeks' with possessor of *-lAquhL* 'cheeks' zeroed out. There is also the Active or Neuter perfective stative verb theme *LA-q'AX* 'be fat'.)

Another body part is *k'u't* 'nerve, sinew, thread; tendon; blood vessel', attested 18 times as such, unpossessed, but then twice possessed with specific anatomical qualifiers, *si-yA-k'u't* 'my hand-veins', *'i-lA-k'u't* 'vein in your temple', and one in compound *tsin'-gudA-k'u't* 'tendon in my neck' with *gd-* class-mark for *-tsin'*.

Finally, there is the body part *(-)Gu:dj(L)-qa'(-d)* 'joint', a nominalized postpositional phrase with *o-qa'* 'between o', found twice from Lena as *siGu:djLqa'd* and *siGu:djq'a'd* 'my joints', and twice from her as *Gu:djLqa'd* and *Gu:dLqa'X* as 'joint(s)'. In any case, *Gu:dj(L)*, found only here, to be taken as meaning 'bone-end', is evidently  $\pm$ possessed also.

There may be others, e.g. *q'As* 'gland', *q'As siya: lAXi:k'a'd* 'my glands hurt' from Lena, clearly unpossessed, but in Harrington from George Johnson as *sAqe:ts'Akih-q'As* 'womb' (< 'child gland'), a compound, implying possessed form, though likely enough an *ad hoc* response to Harrington (cf. the forms *sAqe:ts'Akih 'uyAq' dah/quh* from the women, with *-dal/-qu* 'stay (sg/pl)').

Finally, belonging conceivably to this subcategory of "non-localized body parts," also might be *wAsheh* 'name', attested unpossessed a dozen times, including Rezanov (1805). Since the possessed Athabaskan cognate is well known, *siwAsheh* 'my name' was suggested to Marie, who readily accepted and said it, quite confident of its authenticity. Lena, however, rejected it, insisting instead on *xu: siya' wAsheh* 'my name, name belonging to me'.

Some body products are another subcategory of  $\pm$ possessed nouns, or at least of items that are attested inconsistently. Starting with 'blood', for this we have abundant non-possessed *dAL* (~ *diL*) 19 times, and *dAL 'iya:* 'your blood' spontaneously from Lena. Marie rejected *\*sidAL* for 'my blood', but Lena then accepted *k'udAL* 'blood (of something)' and *sidAL* 'my blood', though perhaps only reluctantly.

For 'dung' we have unpossessed *ch'e* attested five times, including Rezanov (1805), *LAXAdA-ch'e* ' "sleep" in eyes' with *lX-d-* qualifiers, no possessor, and *lixah-ya' ch'e* 'grizzly's dung', not compounded, also *ch'e'-ga' lAXi:t'eh* 'brown beads' (< '(berry-like) are like dung (in color)'). There is one clear old lexicalized compound, *GAdAgil-ch'e* 'brass, copper' (< 'sun-dung'), well attested, including Rezanov, and *XAwa:-ch'e* 'dog-dung', but no attempt was made to elicit others, e.g. *\*?lixah-ch'e*. For *lA-yAq'-AGi'-ch'e* 'unpleasant voice', lit. 'inside (-yAq) head (lA-) dung', cf. 'marrow' above, but note here that the *lA-yAq'* 'inside head of' has its possessor zeroed out, as in epithets. (There is also the verb *-ch'e* 'defecate', and further, what must be this same stem expanded to *-ch'e:* in 'rust', 'redden', *dla:ch'e:* 'red snapper', etc.)

For 'urine', on the other hand, the pattern seems different. We have possessed *k'u-tse'q'* '(something's) urine' freely enough, likewise *XAwa:-tse'q'* 'dog-urine' including Rezanov (1805) (in Хаотсех- (<Xaotsex->) *XAwa:-tse'q'-ga' 'i:t'eh* 'yellow' < 'it resembles dog-urine'). Unpossessed *\*(?)tse'q'* 'urine' was rejected by Lena, but is evidently attested from Galushia

Nelson in Birket-Smith and de Laguna (1938) as *tsä:t*, and also, perhaps as a verbal noun(?) in Rezanov *цхъ хуселькатль* (<*tsX*” *xusel’katl’*>) ‘to urinate’, to be read *tse’q’ xusALga’L* ‘I need to urinate’ (cf. verb *-tse’q’* ‘urinate’).

We have two more items that are both body products and localized body parts, viz. (-)*wAt’* ‘stomach; vomit’, and (-)*ts’u*: ‘breast; milk’, both of serious interest, and both with obvious PA cognates, identical to the Eyak forms, so PAE stems \**wət’* and \**ts’u*:

The (-)*wAt’* is attested in modern Eyak as unpossessed, as *wAt’* ‘vomit’, freely from Lena and Marie, and once accepted by Lena as possessed *siwAt’* ‘my vomit’, though perhaps reluctantly. There are the verbs *-wAt’* ‘vomit’ and O-*L-wAt’* ‘vomit O’. Possibly *wAt’* could be considered a verbal noun, which might also explain a suffixed *-L* in *wAt’L-A-t’u* ‘lots of vomit’ once from Marie. Most interestingly, we also have from Rezanov (1805) *ка готтъ* (<*ka gott*”>) ‘брюхо’, certainly to be read *qa:wAt’* ‘our/human belly’, i.e. ‘stomach’, confirmed in Anonymus (1810), found only in 1990, *кавватъ* (<*kavvat*”>) ‘брюхо’, exactly the same. Both sources are from Yakutat, 200 miles away from Cordova and over 150 years older. Neither Lena nor Marie had any memory of hearing a possessed *-wAt’* meaning ‘stomach’, but clearly that is what the old Yakutat form means, exactly as in Athabaskan and PAE, lost as such in modern Cordova. The pair together also nicely represents the different patterns of possessed (localized) body parts, and unpossessed body products, sometimes also possessed.

Much more problematical is the case of (-)*ts’u*: ‘breast; milk’, because of inadequate documentation. We have unpossessed *ts’u*: in 20 instances, including two in Rezanov (1805), meaning both ‘breast’ (*l*-class) and ‘milk’ (usually *gl*-class, ‘liquid’, though for some reason *l*-class in *ts’u*: *lA-wa’(-L)* ‘ice cream’ < ‘grinding of milk’). This is a clear case of unpossessed noun for localized body part as well as body product. However, in Rezanov we have *кыць-у* (<*kyts’-u*>) ‘сосокъ, сосецъ’, clearly to be read *k’uts’u*- ‘nipple’, most definitely a possessed form. Presumably, unless Rezanov’s semantics are off, this still refers to the body part, not its product. For some reason, not noted, this was evidently never re-elicited from a modern speaker.<sup>6</sup> So the question remains, whether this would have been \**k’u-ts’u*:, or \**k’u-ts’u*’ as in the case of *Xe*: ~ *-Xe’*, or even \**k’u-ts’u*’. One thing that is quite unlike the case of *Xe*: ~ *-Xe’* is that the associated verb is O-*ts’uh*, with basically open invariable stem, e.g. *iGAts’uhLinh* ‘he’s starting to suck’; cf. verbs derived from *Xe*: ~ *-Xe’*, where the stem is always *-Xe’(-)*. Testing e.g. \**XAwa:-ts’u*: etc. for ‘dog teats’ and for ‘dog milk’ might have been informative indeed.

At least one more item should be added for body products or parts in this subcategory. Unpossessed *du:ts’* ‘dried nasal mucus in place under nose’, unclassified, was well remembered by Lena and Marie. Less well remembered, by Lena, was possessed *i-lAXA-du:ts’* ‘inside corner(?) or your eye, tear duct(?)’, not unpossessed \**lAXA-du:ts’*, with anatomical *lX-* ‘eye’, and possessed *k’ulAdu:ts’* and unpossessed *lA-du:ts’* ‘skin of seal’s

<sup>6</sup> In Krauss (1970a) it is noted, “[exact] form uncertain, attested only in Rezanov.”

face from above eyes to nose', with anatomical *l-* 'head'. We even have the stem as a verb in a song Marie remembers her father signing to her, *ts'ALX sLidu:ts'Linh* 'snotted into bone', highly poetic, about her face. From this information, not easily gained, it remains difficult to assign exact meaning to a single stem *du:ts'*, but even for the last instance alone, remembered both possessed and unpossessed, this item should be included.

Another similar-looking item does not belong here. There is also *tl'Adj(-g) ~ tl'Ach'(-g)* 'snot; gelatin, jelly; slush', unpossessed, also *gu:n(-L)-tl'Adj-g (~ -tl'Ach')* 'jellyfish', on the one hand, and possessed *-gu-tl'Adj* 'tailbone, coccyx' on the other, with *g-* qualifier 'hip area; filament-like'. However, in this case we may consider the semantics too different to posit a single stem, especially since the two are at least potentially not homophones. In fact it is most likely that the original form of *tl'Adj(-g) (~ tl'Ach'(-g))* may be *tl'Ach'*, losing its final ejectivity perhaps under the influence of *-gu-tl'Adj* 'tailbone'.

It should be again pointed out that there was inadequate testing of the possibilities, and/or inadequate record of the testing. For example, very possibly an intermediate level of possessibility exists, where these nouns can be used in compounds more freely than with possessive pronoun prefixes, so if adequate testing had been done, perhaps e.g. *XAwa-wAt'* 'dog vomit' might have proven more readily acceptable than *'uwAt'* 'his vomit'. At any rate, one unsurprising conclusion we can come to about body products is that they can be freely used unpossessed, at least *dAL ~ 'blood'*, *ch'e' ~ 'dung'*, *wAt' ~ 'vomit'*, *ts'u: ~ 'milk'*, *du:ts' ~ 'dried nasal mucus'*, also probably *tse'q' ~ 'urine'*. They are less freely attested as possessed, though some can also be possessed, marginally and/or in compounds, *tse'q'* 'urine' quite freely so. Other body product nouns were checked to some degree, and found quite unacceptable in possessed form, e.g. for *tux* 'saliva', Lena rejected *\*k'utux* '(something's) saliva'. We have six instances of *XAs* 'pus', no *\*\*?k'uXAs*; several instances of *kus* 'urine (for washing)', a loan from Tlingit, no *\*\*?k'ukus*.

It also so happens that most of these, e.g. *tux* 'saliva', *kus* 'urine (for washing)', *Gu'* 'sweat', *ki:nX* 'tears', so also *ch'e'* 'dung', *tse'q'* 'urine', *wAt'* 'vomit', could be seen as verbal nouns derived from the verbs as well as nouns from which the verbs are derived. Or it could be seen that that question is moot, or that the stems are equally nominal and verbal.

Five more items marginally in this  $\pm$ possessed category have to do with plants, or can be so seen: *ch'an'* 'soft, fluffy substance; tinder', but, for some reason, is possessed in *k'uch'an'-yAquh* 'baby seal; pussy willow', possibly "anything soft and fuzzy," with *-yAquh* 'young, offspring of'. Another is *q'a'* 'bush', *-dA-L-q'a'* 'stem of bush'. Note also *k'u-dA-L-tl'ihXL* 'nest', mentioned above, no doubt from *tl'ihX* 'grass', where the possessed form is with the prefixal *L-*, as is the case with *t'ahL* 'leaf, feather', etc., dealt with above. We also have *tl'ihX* even as a preverb, referring to the 'start (of weaving, e.g. basket)'. The clearest item is *sa'* 'cambium' and *lis-gu-sa'* 'tree cambium', the same thing, with qualifier *g-* 'filament-like', possessed by *lis* 'tree'. Perhaps less clear is *guwa'ts'* 'seaweed species' and possessed *-guwa'ts'* 'mesentery', with the further question of whether one or both is

a disyllabic stem or is qualifier *g-* and stem *wa'ts'*, cf. *wa'ts'* 'whip'.

Perhaps belonging here semantically, at least as anatomical, is *(-)le:L* 'hair (of head); strand of hair'. This noun is certainly used freely in unpossessed form. However, we have from Furuhielm (1862a) <Inell> 'hair', which must be read either *'ine:L* or *'i:ne:L*. The former has only one interpretation, simple possessed *'i-ne:L* 'your (sg) hair', allowing for stem-initial /n/ instead of /l/, given the date and/or Tlingit influence. As shown in the dictionary, this was tested with Marie and Lena, *'ile:L* 'your hair' accepted by Marie, but explicitly rejected by Lena. The latter reading, *'i:ne:L* 'head hair', with *l-* qualifier 'head', *\*(-)n-ne:L*, was not tested, but is certainly a phonological possibility, both possessed 2s (*<\*'i-n-ne:L*) and unpossessed (*\*n-ne:L*).

Finally, there are also three kin terms that marginally or incidentally fall into this category, as kin terms prove to be the nouns that are indeed the most inherently possessed. One is *-yahsh* 'woman's child', with *yahsh* 'doll'. Another is *-sA-qe:G* '(man's) son' and *sAqe:GAyu:* 'children'. These are probably to be segmented *-sA-qe:-G* and *sA-qe:-G-A-yu:*, in view of singular *sAqe:ts'Akih* 'child', entirely irregular, suppletive-looking, most probably from *\*?sA-qe:-kuts'-A-kih*, with the adjective *-k'uts'* 'small' and diminutive *-kih*. The *sA-* is unexplained, perhaps the rare qualifier *s-* (§17.10.19), here corresponding irregularly with (unanalyzable) Athabaskan cognates, including Navajo *'ashkii* 'boy', Minto *srakayi* 'child'; cf. also Eyak *qe'L* 'woman', very possibly with *-L* instrumental suffix. Finally, *-'ehd* 'wife' is also used in a syntactically unique way, with suffixed *-G*, not to be identified with negative *-G*, in *'ehdG XAwa:* 'female dog, bitch', *'ehdG 'uyahsh* 'her female child, daughter'.

To be added here is a small miscellany of five items (in addition to *le:L* 'hair') which do not fit in the above semantic groupings. One is *tanh* 'wave', *k'u-tanh* 'wave made by something', the latter not well documented. Another is fully localized anatomical, *-dla-tsa:* 'testicle', *tsa:* 'stone'. Another alludes to localized anatomical, *qa:-ni:ch'-A-dA-L-gahG* "pink substance" < 'our/human (*qa:-*) nostril-pitch', with *gahG* 'pitch, gum'. In the case of *-L-Xahd-L* 'cable, tow-rope', the non-possessed *Xahd-L* 'cable' is itself an instrumental, cf. *O-L-Xahd* 'drag O'. More problematical is *-L-qehX* 'bottom surface (e.g. of box)', *mAgAG-dA-L-qehX* 'chessboard', where *qehX* 'closed' is a preverb. Inadequately documented is *xu'ch' di:Leh* 'it (wood) is rough' and *k'u-xu'ch'* "something rough", where the latter may be a verb, 'something is rough'. Semantically unclear is *ts'Ala'* 'smashed salmon roe put up for winter', *k'u-dA-ts'Ala'* 'kettle'. Finally we have, all from Lena only, *k'uleh-dA-L-ch'iyahd* 'mushroom' (< 'rain-hat'); cf. *k'ulehya' ch'iyahd* 'id', 'hat for rain'. Likewise from her, however, *k'uleh-dA-L-ch'iya'tl'G* 'umbrella', rechecked and verified, (< 'rain-frog') and *k'ulehya' ch'iya'tl'G* 'mushroom' ('frog for rain' [!]). Both these pairs may be modern and confused, possibly influence by English 'toadstool'. These bring the total of  $\pm$ possessed nouns to a maximum listed here of 33, but without any systematic attempt in the field to elicit such.

## 18.9 Unpossessed nouns

The category of unpossessed nouns is far larger, of course, than that of possessed nouns, mostly because of the huge category of nominalizations, but partly also because the number of never possessed stem nouns, 350, is significantly larger than that of always possessed stem nouns, 220.

Unpossessed stem nouns fall into a very wide range of semantic categories, presumably the full range, the main exception being kin terms, as noted above. We shall merely exemplify in (20) unpossessed stem nouns here, showing the variety of phonological shapes they may take.

(20) Examples of unpossessed stem nouns by phonological shape (counting nasalized vowels along with non-nasalized)

- |                             |   |
|-----------------------------|---|
| a. CVh                      | <i>tsa:</i> ‘stone’                       |
| <i>duh</i> ‘hose kelp’      | <i>ts’a:</i> ‘umbilical cord’             |
| <i>sanh</i> ‘cottongrass’   | <i>cha:n</i> ‘bait’                       |
| <i>tanh</i> ‘shoe stuffing’ | <i>shi:</i> ‘creek’                       |
| <i>tanh</i> ‘wave’          | <i>Xa:</i> ‘northwind’                    |
| <i>gah</i> ‘day’            | <i>ma:</i> (< * <i>wa:n</i> ) ‘lake’      |
| <i>xah</i> ‘summer’         | <i>’a:n</i> ‘river’                       |
| <i>qih</i> ‘meadow’         | <i>Xe:</i> ‘grease’                       |
| <i>’anh</i> ‘land’          | <i>ts’u:</i> ‘breast’                     |
| b. CV’                      | d. CV:’                                   |
| <i>La’</i> ‘glacier’        | <i>ya:n’</i> ‘medicine’                   |
| <i>sa’</i> ‘cambium’        | e. CVR (R = sonorant: /w, l, y/, not /n/) |
| <i>q’a’</i> ‘bush’          | <i>tsi:ny</i> ‘mussel; branch’            |
| c. CV:’ <sup>7</sup>        | <i>k’u:y</i> ‘wind’                       |
| <i>ta:</i> ‘trail’          | <i>xi:l</i> ‘shaman’                      |
| <i>tl’i:</i> ‘bear spear’   | <i>qAw</i> ‘clearing’                     |
| <i>La:n</i> ‘baleen’        | <i>ts’Al</i> ‘bone’                       |

No stem can take the simple form of CV or CVn, i.e. no open stem can have a nucleus consisting solely of a reduced vowel. Another difference between noun-stem shapes and verb-stem shapes, aside from that that verbs cannot take the shape CV:, is that nouns can take the shape CAw, CAI, as shown here, but not verbs. Verbs do however include *-gAwi’*

<sup>7</sup> Recall that CV: is the one phonological shape not shared by verb stems, cf. §18.1.

~ ‘feel’, *-gAmi* ~ ‘taste’, *-XAwí* ~ ‘believe’, which in the imperfective negative may take the form *-gAW-G*, *-gAm-G*, *-XAw-G*.

Closed stems have the same wide variety of full-vowel nuclei as do open stems, except that CVhC’ without morpheme boundary is missing, CVhC’ in stems having lost final ejectivity. CV:’C’ is likewise missing, there being no surface contrast between underlying CV:’C’ and CV:C’ (e.g. *siya:n-tl* ‘with my mother’ and *sita:’tl* ‘with my father’ are identical in stigma, i.e. rhyme perfectly). Thus morpheme-internally such a distinction cannot be made, and such stems are written CV:C’, arbitrarily. Closed stems also have reduced vowel nuclei, but with restrictions of occurrence and contrast according to rules shown in the phonology. In fact closed stem phonological patterns are examined in great detail, including statistical, in Chap. 7. This includes also the entire range of stem-shapes, including disyllabic or sonorant-medial stems, and stems with coda consonant clusters. Aside from the fact that CV: stems are in nouns but not verbs, there is no obvious difference in the structure of noun stems from verb stems.

### 18.9.1 Unpossessed nouns with qualifiers

Member of this subclass are particularly hard to distinguish from usitative Active imperfective relativizations or verbal nouns (without *-L*). They are not very numerous, but still are too many to allow very easily that they are all derived from verbs no longer attested as such. It can be said with some confidence that such stems were quite consistently checked for possible use in verbs. (The same could be called the only argument that proves such nouns do not exist, the very low probability that they are so derived from otherwise unattested verbs.)

The variety of qualifiers here appears less broad, more specialized than the variety of qualifiers that appear with possessed nouns, for some reason. For example, there may be no items with *l*-qualifier; *lixah* ‘grizzly bear’ (< *lA-xah*) is classified as a relativization of *-l-xa* ‘grows’, for which see below. Note also the case of *(-)le:L* ‘head hair’ above. There are some qualifiers which seem relatively numerous in this group also, especially the irregular *dla:X-*, the apparently generic or abstract *G-*, and rare *s-*.

For *d*-qualifier ‘wood’, there are at least two or three clear examples (21.a). There are likewise four items (21.b) with the “irregular” qualifier *dIX-*, surfacing as *dla:X-*, the regular order within the qualifier zone being *Xdl-*, *XAdla:-*, and with *lX-* ‘eye, berry’ and *d-* it is *lX-d-*, i.e. *lAXAdla:-*. None of these have any verb with those stems. A few more with other qualifiers, especially *G-* ‘generic’(?) have no verbal use of the stem (21.c).

#### (21) Unpossessed nouns with qualifiers

##### a. With *d*-qualifier:

*dA-kinh* ‘stick, wood’ (cf. PA \*də-kən ‘id.’ and \*kən ‘base’), no verb

*dA-duhdz* ‘porch’, verb only O-*L-duhdz* ‘make O (porch)’ (verb presumably derived from noun;

*dA-chehg* ‘rotten wood’ (cf. *LA-chehg* ‘crumble’; *dA-chehg* would have to be a verbal noun, to explain the absence of thematic *LA-* classifier)

b. With *dIX-* qualifier:

*dla:X-t'e'Gsh-g* ‘unripe berries’ (“irregular”)

*dla:X-k'igsh-g* ‘berry species’

*dla:X-q'e:ts'* ‘nausea’

*dla:XA-'i:nt'* ‘button’

c. With other qualifiers:

*GA-dA-q'Ayi:ny* ‘fog’

*GA-sA-(L)ga:X* ‘pine cones’

*GA-lA-ga:X* ‘highbush cranberries’

*dla:-Ge'q'* ‘drum hoop’

*gu-Xa:* ‘overturned stump’

*ti:-lA-kihs* ‘wild rhubarb’ (insofar as distinct from *-kihsh*)

*Gi-ts'AX* ‘copper’ (maybe belonging here)

For *Gi-ts'AX* ‘copper’, cf. *O-L-ts'AX* ‘pound, strike O’ (< *O-ts'AX* ‘hurl O’; /i/ unexplained, cf. *GA-ts'AX* ‘cloth’, possibly avoidance of homophony, unless *Gi-ts'AX* is from \**GA-'e'-ts'AX*).

However, it appears that about half the nouns listed as unpossessed nouns with qualifiers do have stems that also appear in verbs from which they could be derived. Possibly derived only as verbal nouns are those for which there are verbs with non-zero classifiers, in addition to *dA-chehg* in (21.a), are *lAXA-t'its'* ‘hail’ and *gudla:-t'tits'* ‘icicles’ (with *gdl-* ‘suspended’), for which cf. *dA-t'its'* ‘freeze’ and *t'its'* ‘ice’; *gu-si:ns* ‘gray hair’ (not possessible), cf. *dA-si:ns* ‘become moldy’ and *si:ns* ‘mould’. Possibly either relativizations or verbal nouns, derived from verb themes with zero qualifiers, are items like the ones in (22).

(22) Unpossessed nouns derived from verb themes with zero qualifiers

*lAXA-dAq'* ‘snowball’ (cf. *O-lX-dAq'* ‘mash, compress O’)

*GA-su'* ‘type of smoked salmon’ and *gudA-su'* ‘type of smoked salmon’ (cf. *O-su'* ‘make O (type of smoked salmon)’)

*XAdA-chich'-g(-L)* ‘corner (seen from inside)’ (cf. *O-chich'* ‘break O’)

*GA-xits'* ‘drum’, cf. *O-xits'* ‘beat O (drum)’

*GAnA-wAs*, place-name in Yakutat Bay (with *Gl-* ‘ground’, *-wAs* ‘change shape, crumble’)

*GA-dA-shA-xa'ch'* ‘wick’ (probably belonging here, cf. *O-xa'ch'* ‘tie knot in O’, *xa'ch'(-L)* ‘knot’)



*dla:-ch'e:* 'red snapper' (with *dl-* qualifier class-mark for 'stone') and *XAdich'e:* ~ *XAdAch'e:* 'red-tipped clam' (probably with *Xd-* qualifier 'streak', cf. *-ch'e:* 'rust or redden all over', persistive expansion of *-ch'e* 'defecate', *ch'e* 'feces')

For the items related to *ch'e:* 'rust or redden all over', the expanded verb stem can only be a verb, so it could be argued these two could only be verbal nouns, at least from a diachronic point of view. Whether synchrony can allow *dla:-ch'e:* 'red snapper' to be a verbal noun is another question, especially in view of the fact that *dla:ch'e:* is also used or lexicalized in the color term for 'red', as of of *o-ga* 'like o', as in *dla:ch'e:'ga' i:t'eh* '(it is) red, (that which in color) is like red snapper'.

It has been noted that unpossessed qualified nouns with *l-* qualifier seem to be missing (except possibly for *le:L* 'hair'), and that prefixal *L-* (presumably not the classifier *L-*) occurs only with possessed nouns, extensively documented in §18.5. However, for some reason, the items in (23) occur as an exception to both, there being apparently no exceptions to either constraint alone. Note that for all of these there are homophonic or phonologically relatable stem, but only the *l-xa* 'grow' seems semantically relatable to its derived noun.

(23) Exceptional unpossessed nouns with *l-* qualifier and prefixal *L-*

*'i:n-L-k'a't'* 'sea urchin' (cf. *k'a't'* 'island', a loan from Tlingit)

*'i:n-L-xi:sh-g* 'red abalone' (cf. *xi:sh-g* 'gravel')

*'i:n-L-xAwah* 'red ribbon seaweed' (cf. *l-xa* 'grow')

*'i:n-L-XAmah* 'bracket fungus' (cf. *-XAmah* '(dog) barks')

If indeed *'i:n-L-xAwah* 'red ribbon seaweed' is related to *l-xa* 'grow', that would confirm that instead of *\*lA-xAwah* (cf. however *li-xah* 'grizzly bear'), insertion of *L-* is preferred, regularly resulting in *'i:nL-*. Conceivably the *L-* in *dla:-L-Xe:ch'-g* 'quartz' may be so explained, especially if this is not a verbal noun, *-Xe:ch'* - not otherwise attested; cf. *dla:-ch'e:* 'red snapper' in (22), also with qualifier *dl-*, class-mark for *tsa:* 'stone', much more likely to be a verbal noun, at least in origin.

## 18.10 Phrasal nouns

Phrasal nouns include two or three types: noun compounds, which include more than one noun stem, and noun phrases, composed of noun preceded by postpositional phrase. The term *phrasal noun* is used here instead of *noun phrase* simply in order to avoid confusion with the more general linguistic use of the latter in syntax, and refer instead specifically to compounds and nouns with postpositional phrases. These constitute a large category of nouns, some hundreds, only a selection of which is included below. A third type is postpositional phrases that are nominalized with suffixed *-d*. Those last will be exemplified here, but were already treated more systematically in Chap. 16 on preverbals.

### 18.10.1 Compounds, with unpossessed nouns as head

Noun compounding was never actively investigated in the field, but the corpus probably provides adequate data to determine the basic facts. Possessed nouns compound freely, but with unpossessed nouns compounding is rather limited, to two or three main uses: 1. 'Y made of X', literally (24), including a few natural items, still 'Y consisting (partly) of X' (25), and 2a. legendary creatures (26), 2b. ceremonial artifacts or events (26, largely originating in Tlingit culture).

Note that in compounding with monosyllabic first element, an epenthetic schwa is inserted under certain circumstances. This matter was never systematically investigated in the field. In any case, the connective schwa proves that the forms shown here are indeed phonological compounds, and not just attributives or appositionals. Also, where the first element is a classified noun, the class-mark for it is also inserted in group 2a., but not consistently. The data for the epenthesis are presented and discussed in §6.17.

(24) Compounds: artifacts, 'Y made out of, consisting of X'

*k'u:ndAleh-tsa'L* 'horn knife'

*k'u:ndAleh-shiL* 'horn spoon' (Galushia Nelson)

*da:na:-shiL* 'silver spoon' (Galushia Nelson)

*dAkinh-shiL* 'wooden spoon' (Galushia Nelson)

*sah-A-si:nL* 'socks, stockings' (< 'fluff boots')

*Gits'AX-si:nL* 'stockings' (< 'cloth boots'; Rezanov 1805)

*ke:Lta:g-si:nL* 'seal (skin) boots'

*didit'u:ch'-tAGL* 'iron hammer' (Rezanov)

*didit'u:ch'-k'uXehL* 'chain; knout' (< 'iron rope'; Rezanov 1805)

*dza:nd-ch'iyahd* 'skunk-cabbage (leaf) hat'

*k'uXa:shg-ch'iyahd* 'beaver (skin) hat' (cf. 27)

*tSa:-dla:-tAwi:s* 'stone axe'

*tSa:-dla:-guch'u'* 'dice' (< 'stone gambling-die')

*Le'Lq'(-A)-tsi'lahl* 'feather pillow'

*tl'e:yu'-yahd* 'hemlock house'

*Le:sk'-A-yahd* 'log house'

*qahdl-A-yahd* 'bark house'

*t'a'Xts'-A-yahd* 'bark house'

*ts'isa:-yahd* 'tent' (< 'canvas house')

*k'utah-yahd* 'skin house'

*kidz-k'uXehL* 'coarse twine'

*dAkinh-dzanhd* 'wood snowshoes' (Galushia Nelson)

*Ge:Xah-dla:XA'i:nd* 'mother-of-pearl button'

*tsAtl-dA-ts'ik'*, personal name of Anna's father (< 'board-plate')

*k'uXehL-tAL* 'firedrill' (< 'rope drill', perhaps incorrect, Galushia Nelson).

- (25) Compounds: artifacts, 'Y consisting (partly) of X'

*k'uhdL-d-la:-mahd* 'berry species' (< 'moss berries')

*di:ya'* *giyah* 'salt water'

*gu:n-A-tsa:* 'rock with gold nugget' (< 'gold stone')

*qa:-la:X-A-giyah* 'tears' (< 'our eye water' (Rezanov), perhaps mistakenly; Lena: 'eye-water', not tears')

As shown in (26), the compounds referring to legendary creatures are mostly formed with *dAXunh* 'person, man' or *qe'L* 'woman' as second element, head, and are all to be found in texts from Anna and Lena.

- (26) Compounds: Legendary creatures

*lis-dA-dAXunh* 'tree man'

*GAdAgiLch'e'-dAXunhyu:* 'brass-people'

*sahx-dAXunh* 'cockle person'

*tsa:-dla:-dAXunh* and *tsa:-dAXunh* 'stone man' (with and without *dl-* class-mark for 'stone')

*ch'iyatl'G-qe'L* 'frog woman'

*'itl'-A-lA-qe'L* 'mountain woman'

*'u'tl'-dA-qe'L* and *'u'tl'-qe'L* 'driftwood woman' (with and without *d-* class-mark for *'u'tl'* 'driftwood')

For legendary creatures, there are several more listed under *dAXunh* 'person, man' and *qe'L* 'woman'. In addition to these, we have further *GAdAgiL-sAqe:ts'Akih* 'sun child' and *GAdAgil-dAkinh* 'sun sticks', showing that this type of compound is not confined to *dAXunh* and *qe'L* as head, but rather to oral literature.

The attested ceremonial artifact terms (27) appear confined to clan-house names and totem-poles, and might well reflect Tlingit linguistic style as well as Tlingit culture.

Compounds describing clan-house names and ceremonial artifacts are exemplified in (27). Several more clan-house names are listed under *yahd*, many from Galushia Nelson.

- (27) Compounds: clan-house names and ceremonial artifacts

*ch'i:leh-yahd* 'Raven House'

*gu:djgAlAG-yahd* ‘Eagle House’

*na:XAG-yahd* ‘Seagull House’

*’AyAwih-IAgAshk’L* ‘totem pole’ (‘mask /grotesque face pole’, Lena)

*-lAGAshk’L* ‘totem pole’ (Galushia Nelson, “prefix with [word for] eagle or raven”)

*k’u:nda’ch’ gah-yahd* ‘church, prayer house’

*sAsinhLinu-dla:sha’L* ‘cemetery’ (< ‘dead people’s enclosure’, this and the above being related to the Russian Orthodox church)

*mAgAG-qAXah* ‘checkers month’ (ceremonial, probably belong here, along with several other month-names)

Possibly also here belong e.g. *ya-djilah* ‘rainbow’ (‘sky-?’), *k’uXa:shg-ch’iyahd* ‘mushroom’ (< ‘beaver hat’, cf. 24 above).

Another suspect item, perhaps belonging to (27) is *La’-dA-ts’iyuh* ‘glacier-bear’ (*sic*) from Lena and Anna, which may be a calque on the English, and/or from Anna’s knowledge of Tlingit, accepted by Lena, and/or considered to be legendary.

One other regular compound type is limited to the use of *qe’L* ‘woman, female’ and *Lila:’* ‘man, male’ as first element where needed to specify gender, so even with possessed kinship nouns as head.

(28) Compounds with *qe’L* ‘woman’ and *Lila:’* ‘man’

*qe’L-sAqe:ts’Akih* ‘girl baby, girl child’

*Lila:’-sAqe:ts’Akih* ‘boy baby, boy child’

*Lila:’-dAXunh* ‘male person, male baby’

*Lila:’-XAwa:* ‘male dog’

*qe’L-ch’iya’tl’G* ‘female frog’

*Lila:’-siyahsh* ‘my male child’ (of woman)

*qe’L-siyahsh* ‘my female child’ (of woman)

*qe’L-sidAGe:’* ‘my female younger sibling’

Note also Galushia Nelson *XAwa:-qe’L* ‘girl dog’, which Marie glosses ‘dog’s wife’ or ‘dog-girl’, asserting that is “not good Eyak.”

Aside from these limited usages, instead of compounding, Eyak specifies the relationship between two unpossessed nouns by subordinating the first to a postposition, unlike other languages such as English, or Athabaskan and Tlingit. E.g. for ‘Raven House’ instead of \**ch’i:leh-yahd* we have from Lena *ch’i:lehshiyahya’ yahd* ‘Raven’s house’, i.e. *ch’i:leh-shiyah* ‘Old Raven’ (with pejorative/endearment adjectival suffix as used in myth), as object of *o-ya’* ‘of o’, a rather common and general postposition in such noun-phrases. Some examples of this structure or process are given in (29), but it is in fact highly productive in Eyak.

## (29) Phrasal nouns combined with a postposition

- a. With
- o--ya*
- 'in(to) o (concavity with broad opening at top)'

*ts'iyuhya' duxL* 'bear trap', i.e. 'blackbear's deadfall'*yahshya' ch'iyahd* 'shellfish species' (< 'doll's hat')*lisyā' tsi:ny* 'spruce branches'*lisyā' 'a:L* 'spruce boughs'*lisyā' gahG* 'spruce pitch'*yahGAyu:ya' yahd* 'menstruants' house'*qe'LGAYu:ya' na:w* 'wine' (< 'women's whiskey')

- b. With other postpositions

*lis-dA-yAq' qALa'nik'* 'wood worms' (< 'worms in (-yAX) trees')*dAq'a:g-da:-tl' 'AX* 'steamboat' (< 'boat with (-tl') fire')*Gu'L-q' ya:nahd tah* 'bedspread' (< 'that which lies flat on (-q) blanket')

For more on this structure, see §18.10.3. Compounding, by contrast, plays but a small part in the formation of Eyak phrasal nouns.)

**18.10.2 Compounds, with possessed nouns as head**

Possessed nouns compound freely as head of phrasal nouns. Therefore *la:xga:-ch'iyā'-ta:-ni:k'* 'store-keeper's father's nose' is presumably grammatical. Nouns such as the ones in (29) are perfectly predictable compounding, also (30).

## (30) Transparent compounds with possessed noun as head

*'anh qe'L-ta:'* 'that woman's father'*si-chu:-ta:'* 'my maternal grandmother's father'*siya:n-ni:k'* 'my mother's nose'*XAwa:-djuhX* 'dog's ear'*si-lA-Ga:-nsh-dA-Xu'* 'my whiskers' ('hair of the lower part of my face')

Other compounds are lexicalized and metaphorical: (31).

## (31) Lexicalized and metaphorical compounds

*tsa:-dla:-Xe'* 'kerosene' (lit. 'stone-oil')*xa:s-A-Xe'* 'soap' (lit. 'taboo-grease', ceremonial or mythical?)*k'u-'uGL-dla:-shid* 'pericardium' (lit. 'heart-rim')*giyah-L-tah* 'water-skin, bucket'

*tanh-A-yahsh* and *tanh-dla:-yahsh* ‘flotsam’ (lit. ‘wave child’)  
*sahxw-A-yahsh* ‘small clam species’ (lit. ‘cockle’s child’)  
*sahx-wAlahyu:* ‘cockle-spirits’  
*djiL-yAquhyu:* ‘shelves’ (lit. ‘platform-young’)  
*disLi’ehdg-yAquhyu:* ‘Ritz crackers’ (lit. ‘pilot-bread young’)  
*xut’L-yAquh* ‘pistol’ (< ‘rifle-young’)  
*dji:dj-dAkuhd* ‘fireweed’ (< ‘?’s lips’)  
*sAsinhLinu:-wAXa:w* ‘ghost, shadow’ (lit. ‘dead people’s image’)  
*XAwa:-djeHX* ‘berry species’ (lit. ‘dog’s ear’)  
*k’u:y-A-yahsh* or *k’u:y-A-yAquh* ‘slight breeze’ (lit. ‘wind’s child’)  
*-qa’-LA-’ehd* ‘husband’s sister-in-law’ (< ‘husband’s *l*-wife’)  
*tlu:dj-qa’* ‘king (at cards)’ (lit. ‘klootch’s husband’, from Chinook jargon)  
*du:s-qa’* ‘king at cards’ (some confusion, with *du:s* ‘ace’ from Russian *тыз* ‘ace’)  
*Le’t’-LA’ah* ‘jack of diamonds’ (< *Le’t*’ box; diamonds’)  
*-LA-’ah* ‘slave’, ceremonial?)  
*XAwa:-tl’Aqa’d* ‘berry species in moss’ (lit. ‘dog’s anus’)  
*lis-dA-tah* ‘bark’ (lit. ‘tree’s skin’)  
*lixah-’i:nda:* ‘bear mask’ (lit. ‘grizzly’s face’)

In addition to (31) there are no doubt many other such compounds with *-wAlah* ‘spirit of’, and with *-yAquh* ‘offspring’.

Of course nouns that are found both possessed and unpossessed can also be compounded, as in the lexicalized *GAdAgil-ch’e* ‘brass’ (lit. ‘sun dung’, mythical?), *tsa:-LA-q’AX* ‘crab species’ (lit. ‘rock fat’).

As noted in §18.8.3, in the subsection for *ya: ~ -ya’* ‘thing’, including problematically the possessed variant *-ya’*, this variant is hardly attested as compounding with nouns, but almost always with preverbals, both preverbs and postpositions, cf. (32).

(32) Compounds with preverbal and *-ya’*

*te’ya’* ‘fish’ < *ta’-ya’* ‘thing in water’  
*dla:q’Aya’* ‘mountain-goat’ < ‘thing on *dl*-class (rocks)’  
*XAdAGAya’* ‘God’ < ‘thing above’ (Rezanov 1805)  
*yahdAya’* ‘boat’ < ‘thing out to sea’  
*ya:’a:gAGAda:lAya’* ‘middle finger’ (unclear, but with *ya:’a:g* ‘middle one, *g*-qualifier, and unidentified *-da:l-*, possibly the gerund of *-da* ‘(sg) sit/stay’)

Full documentation of these is to be found, about 23 items not counting further derivatives, under a separate *ya’ ~ -Aya’* in Krauss (1970a).

### 18.10.3 Phrasal nouns with unpossessed nouns as head with postpositional phrases

This is a large group, probably much larger than that of compound nouns, as noted above. Here it becomes more difficult to distinguish clearly between lexicalized phrases and those of predictable use or meaning. These function to occupy much of the semantic space which in Athabaskan languages is occupied by noun compounds, with head possessed or not. It is unlikely that there could be such compounding with postpositional phrases with possessed nouns as head. By far the most common postposition is *o-ya* ‘belonging to, for o’, probably more numerous than all other postpositions combined, in this construction. See also §25.3. Some examples of this structure with *o-ya* are presented in (33).

(33) Phrasal nouns with *o-ya*’

*Xe:ya’ tsa:L* ‘grease box’

*xi:lyu:ya’ tsi:ny* ‘shamans’ song’

*ts’AlyAq’ya’ Xe:* ‘marrow’ (lit. ‘inside (*-yAq*) of bone (*ts’Al-*) grease (*Xe:*)’)

*ma:ya:ya’ sinhX* ‘algae’ (lit. ‘lake (*ma:*) thing’s (*ya:-*) resin (*sinhX*)’)

*sAsinhLinu:ya’ la’mahd* ‘inedible berry species’ (lit. ‘dead (*sAsinhL*) people’s (=inu:) berries (*la’mahd*)’)

*sAsinhLinu:ya’ XAwa:* ‘moth’ (lit. ‘dead people’s dog’)

*sAsinhLinu:ya’ yet:* ‘small smelly dark kind of wild celery’ (lit. ‘dead people’s wild celery’)

*k’ulehya’ ch’iyahd* ‘mushroom’ (lit. ‘rain’s hat’)

*ch’iya’tl’Gya’ ch’iyahd* ‘mushroom’ (lit. ‘frog’s hat’)

*yahshya’ ch’iyahd* ‘shellfish species’ (lit. ‘doll’s hat’)

*XAwa:ya’ gugsg* ‘flea’ (lit. ‘dog’s louse’)

*xAtl’ya’ XuhLg* ‘snow shovel’

*lixahya’ duxL* ‘bear trap’

*yahGAyu:ya’ yahd* ‘menstruants’ house’

*ts’iyuxya’ ya:* ‘mosquito bar’ (lit. ‘thing for mosquitoes’)

*qi:yALACHanhya’ dzAwAL* ‘spider’s web’

*ch’e:yu’ya’ la’mahd* ‘elderberry-bush berries’ (and five other such berry names)

*lisya’ gahG* ‘spruce pitch’

*lisya’ ’a:L* ‘spruce boughs’

Phrasal nouns with all postpositions other than *o-ya*’ combined are evidently far fewer than those with *o-ya*’. Some examples are given in (34).

(34) Phrasal nouns with postpositions other than *o-ya'*

- a. With
- o-Xa'*
- 'for o':

*le:L-gu-Xa' ya:n'* 'flower species' (lit. 'for hair medicine')

*giyah-gulA-Xa' ya'* 'boots' (lit. 'for water thing')

- b. With
- o-yAX*
- 'under o':

*Lanhd-A-yAX-A-yahd* 'smokehouse' (lit. 'under smoke house', probably from *Lahnd 'uyAX yahd* 'smoke under it house')

*dzanhdAyAXAta:* 'Milky Way' < *dzanhd-dA-yAX-A-ta:* 'trail under snowshoes'

- c. With
- o-q'*
- 'on o':
- qa:-q'-A-yahd*
- 'grave house' (lit. 'house (
- yahd*
- ) on (
- q'*
- ) us (
- qa:-*
- )')

- d. With
- o-yAq'*
- 'inside o':

*-lAqah-yAq'(-d)-A-djilahG* or *-lAqah-yAq'-A-Gi'-djilahG* 'brain' (< 'inside (*-yAq'*) of head (*-lAqah sarana*/pudding')

*ts'AlyAq'iGi'-Xe:* 'marrow' (< *ts'Al-yAq'-A-GA-'e'-Xe'* 'inside (*-yAq'*) bone (*ts'Al-*) grease (*Xe:*)')

*xut'L-yAq'-d chi:shg* 'gunpowder' (lit. 'inside (*-yAq'*) gun (*xut'L*) gravel (*chi:shg*)')

- e. With
- o-tl'*
- 'with o':

*dAq'a:g-da:-tl' (')AX* 'steamboat' (lit. 'with (*-tl'*) fire (*dAq'a:g*) boat (*'AX*)')

- f. With
- o-wa-L-X*
- 'following o':

*dAq'A:g-dA-wa:L(X)'AX* 'steamboat' (< 'following (*-wa:LX*) fire boat')

*qa:-sa'-d giyah* 'saliva' (< 'water in our mouth')<sup>8</sup>

A special case are the directional winds, e.g. *shi:-da' k'u:y* 'into creeks wind'; for this and other winds, see Krauss (1970a) under *k'u:y* 'wind'. Note that several of the phrasal nouns in (34) are phonological compounds, e.g. *dzahndAyAXAta:*, with what looks like epenthetic schwa joining the postposition and unpossessed noun, perhaps in origin a fully reduced *-e'*, q.v. in the dictionary. Note also that these are all lexicalizations, i.e. lexemes to cite here precisely because they are lexicalized. This is sometimes shown by an epenthetic schwa between the postposition and head noun. (For this see §6.17.) These phrasal nouns are of the same structure as e.g. *shdu:lihG-da:-q'(-d) ditl'a'g* 'book (that is) on the table'; cf. *shdu:lihG-da:-q'(d) sA'ahL ditl'a'g* 'book which is situated on the table'. Much more common, of course, are such noun phrases where the head noun itself is a relativization, to be taken up in a major subsection below (§18.12).

<sup>8</sup> *qa:sa'd* is dubious, but cf. *'AX-ya'-d (qa')* 'out of boat', and see especially the next paragraph.



## 18.11 Nominalization of postpositions

Aside from the major category of nominalization of verbs by relativization and deverbalization, there is a category of nominalization of postpositions themselves. Postpositions or postpositional phrases are regularly nominalized by the suffixation of the postpositional suffix or final *-d*. This *-d* is either homophonous with or identical with the postposition-final *-d* ‘punctual contact with, at rest within o’ (as opposed to postposition-final *-X* ‘non-punctual contact with, movement within o’). Full account of such finals is included in §16.6 on postpositions. Exemplification of this category of nominalizations will be confined here to some lexicalizations in (35).

### (35) Lexicalized nominalizations of postpositions

*ts'AL-qa' GAd-i:'-X-d* or *ts'AL-qa' GAd-i:'-q'-d* ‘smokehole’ (with unknown *ts'AL-*, *o-qa'* ‘between o’, *Gd-* qualifier ‘place’, *-e'* ‘unoccupied place of’, *-X* ‘movement within’ or *o-q'* ‘on o’, and *-d*)

*-tsin'-da'-d* ‘tip’ (lit. ‘front part of head’, where *-tsin'* is usually ‘neck’ in Eyak, but cf. PA \**tsi'* ‘head’)

*XAdla:-tsin'-da'-d* ‘point of land’ (with *dl-* qualifier)

*ts'iyux-xa'-dA'-e'-d* ‘mosquito bite’ (< ‘unoccupied place (*-e'*) of mosquito (*ts'iyux*) eating-range (*-xa'-*)’)

*-sa'-d* ‘mouth’ (cf. *o-sa'* ‘into o’s mouth’)

*-ku:n-L-ch'A-yAq'-d* ‘abdomen’ (< ‘inside (*-yAq'*) of toward (*-ch'*) belly (*ku:n-*); cf. *o-yAq'-d* ‘inside of, interior of o’)

(-)*Gu:dz(-L)-qa'-d* ‘joint’ (with *o-qa'* ‘between’ and unique *Gu:dz(-L)* only attested here)

*sAndi-qa'-d* ‘week’ (< ‘between Sundays’)

There is at least occasional nominalization of preverbals with *-ch'* final, e.g. *'a:nd ya:nch'* ‘Awa: ‘this here lower part of him’, without *-d* final, except insofar as *-d* can be considered present as phonetic zero, routinely absorbed by *-ch'*.

## 18.12 Nominalizations of verbs

Except for the above, nominalizations are nominals or nouns derived from verbs or verb phrases. As noted more than once above, such nominalizations are of two types, relativizations and deverbalizations. These will be treated in two separate sections, first relativizations, and then deverbalizations.

### 18.12.1 Lexicalized relativizations

Lexicalized relativizations constitute a very large proportion of nominals or nouns, as shown above in the statistical table. These are formed retaining all prefixes to the verb, plus zero enclitic for verbs or verb phrases with no human reference, enclitic *=inh* for singular human reference, and *=inu:* for plural human reference. (There are two exceptional clear cases of an Active imperfective relativizations converted to possessed nouns. For these see §18.5.3 on possessed nouns from verbs.)

Clearly, by far the largest proportion of lexicalized relativizations is in Active imperfective, for two reasons: 1. the large proportion of verbs that is the Active theme category, and 2. the very frequent use of the usitative (Active imperfective) derivation, for themes of all categories, in the derivational process of lexicalized relativization to form nouns. Where such relativizations are switched to Active imperfective from another category by the usitative derivation, the original category will be indicated. It should be kept in mind that in the case of Active imperfectives with  $\emptyset$ -classifiers, deverbalizations are homophonous with relativizations, so can be indistinguishable

from them. After Active imperfective relativizations are exemplified, we then turn to nouns that are relativizations of other mode-aspects. Lexicalized relativizations in the Active imperfective are too numerous to list here. With some help from Guillaume Leduey and the database from the dictionary typescript, we were able to find about 350 of these, and may guess that more may exist in the corpus. Of lexicalized relativizations in other conjugations and mode-aspects, the total of all these combined is only about half that of the Active imperfective ones alone. We can include fairly comprehensive lists of all of these: 40 Active perfectives, 4 Futures, 25 Inceptive perfectives, up to 100 Neuter imperfectives, and 19 Neuter perfectives; also 3 Inceptive conditionals, 5 Active optatives, evidently one Active desiderative, and perhaps one *'i*-imperative and one Inceptive imperative.

Here throughout, the forms are cited precisely because they are lexicalized as nouns, not simply relativizations, though to the extent that in some subcategories the use and/or meaning is/are predictable, such a line is hard to draw.

Beside the subsections below listing relativizations according to the paradigms they represent, there are many relativizations listed above in the sections or subsections on the derivations or verb theme classes themselves (Chap. 14). Those listings, however, concern relativizations or nominalizations in general, more than lexicalizations thereof as a subclass of the lexicon of nominals. The following should be mentioned. Under Inceptive perfective statives (§14.8) there is a paragraph on relativizations, with eight examples. Under Neuter imperfective statives (§14.7), there are 5–10 examples in §14.7.5, in addition to other relativizations throughout. Under Active perfective (§12.1.4) and Neuter perfective statives (§14.7) there is a subsection “Nominalizations” with 33 examples. Under §15.2.2 in the section on the usitative (Active imperfective) derivation there are 33 examples, a mere sampling. Under §15.3.2.10 in the section on the repetitive there are 20 examples including three below that. Under §15.4 on the persistive there is a paragraph with five examples. Under §15.5 on the customary there is a statement on the near absence of the customary

in relativizations, discussed further here below. Under §15.7.5 in the section on the *yAX* perambulative there are ten relativizations. Under §15.8 on the progressive, there is a subsection “Relativization” with two examples. Under the directive (§15.9) there is no special mention of relativizations, but there is a normal modicum of such. Finally, in §18.13.3 on instrumentals, there is a subsection on instrumental relativizations, with about 30 examples, in a classification which uncharacteristically for this grammar is momentarily based on semantics rather than morphology.

The treatment or listing of relativizations below may overlap in part with what is referred to just above, but is not coordinated with that. What follows here is classified according to the paradigm represented by the relativization, and includes a larger proportion of relativizations that are in verb phrases, e.g. with preverbals, subject, object. For the internal syntax of such phrases, which follows the same principles and has the same problems as phrasal and sentence syntax, see Chap. 25 on syntax itself, which deals extensively also with relativized verb phrases. Almost all the relativizations in this section are lexicalizations. In fact, special attention is given to lexicalization and the problem of defining lexicalization.

Such a large proportion of relativizations are in the Active imperfective paradigm that the first subsection (§18.12.2) is devoted to those, and relativizations in all other paradigms are dealt with in the next subsection (§18.12.4).

### 18.12.2 Active imperfective lexicalized relativizations

Almost 200 samples of various categories are cited here, double the usual amount for an open category, and these are by no means a full list, which might be twice as long. Glossing here does not include the relative phrasing itself, e.g. ‘he who’.

(36) Active imperfective lexicalized relativizations with human relativizing suffix =*inh*

a. Intransitive:

*LA'inhinh* ‘married woman’

*dik' LA'ehGinu:* ‘unmarried women’

*k'uGA'a:nGinh* ‘blind person’ (thematic negative)

b. Transitive:

*k'uts'AXinh* ‘smith’ (< ‘he pounds something’, Rezanov 1805)

*'iLgiyiL(inh)* ‘witch’ (< ‘bewitches indeterminate O’)

*qa: Xinhinu:* ‘cannibals’ (< ‘they eat us (*qa:*)’)

*qa: Lyi:n'inh* ‘doctor’ (< ‘he cures us’)

*qa: ta'X (yAX) 'i:nLyi:nhinh* ‘priest’ (< ‘he puts our heads (*'i:n-*) (down: *yaX*) into water (*ta'X*)’)

## c. Active perambulative:

*yAX k'uLAq'a'Xinh* and *yAX k'u'LAde' LXinh* 'square dance caller' (< 'he directs us about')

*yAX 'iLA'a:nXinh* 'watchman' (< 'he looks about')

*k'uq'Ach' 'ida'Xinhinh* 'tattle-tale' (< 'he tells on one')

*Xe'dAlinhinh* 'fop, conceited snob' (< *Xa''i-*, 'he carries on with himself')

*'iLXe'dAlinhinh* 'sweethearts' (< 'they carry on with each other ('iL-))

*o-tl' tsin'dAlinhinh* 'sweetheart of o' (< 'speaks with o')

*'AwLA'e: tsin'dAlinhinu:* 'Swedes, Greeks' (< 'they speak strangely')

## d. Passive perambulative:

*yAX dAKu'dXinh* 'messenger; acolyte' (< 'he is sent about on errands')

*k'ul' 'ida'Xinhinh* 'storyteller' (< 'he tells stories to one')

## (37) Active imperfective lexicalized relativizations without human relativizing suffix

## a. Intransitive:

*lAXALAtux* 'rice' (< 'granular (lX-) swells')

*LAdlahG* 'firecrackers' (< 'it explodes')

*k'udALidg* 'dead tree'

*GALAt'Aq'* 'shrimp' (< 'it hops')

*GALAtsAtl'* 'land otter' (< 'it slides')

*GALAqa:* 'hollerer' (mythical beast)

*Ga:ndich'ich'g* < *Ga:ndAch'ich'g* 'songbird' (< 'pecks ground')

*qi:yidich'a:nk* < *qi:yAdAch'a:nk* 'Dungeness crab' (< 'toes clamber')

*'i:nLch'iya'k* 'rotten fishheads' (*'i:nLch'iya'k'wL* by Sewak) (< 'head is sharp-tasting')

*lAXALAchanh* 'onion' (< 'ball-like (lX-) smells')

*qi:yALAchanh* 'daddy long-legs' (< 'toes (qi:y-) smell')

*gulAxuL* 'whirl of water (gl-)

*dALAXe:g* 'groundhog' (< 'it whistles')

*k'uxi:x* 'bald eagle' (< 'something is white')

*k'uLAqa:* 'siren' (< 'something screams')

*dAq'a:g* 'fire' (< 'it burns', deverbalization?)

*dAq'u'* 'herring spawn'

*-Xu:nLAYah* 'teeth' (< 'teeth (Xu:n) are positioned', usitative from positional)

*gu:nch'a:x* 'silty water (gl-)' (from Active stative, or deverbalization?)

*gudAGAmAk* ‘gnat’ (< ‘its butt (*gd-*) is round’, from Inceptive stative, or deverbalization?)

*la'mahd* ‘berries’ (< ‘it ripens’, deverbalization?)

*lixah* ‘grizzly bear’ (< *lAxah* ‘it grows’, deverbalization?)

*dla:wehsg* ‘swamp’ (< ‘it (*dl-*class) collapses’, deverbalization?)

*lAXAwehsg* ‘quicksand’ (< ‘granular (*lX-*) collapses’, deverbalization?)

*qALa'nik* ‘woodworms’ (< ‘they crawl’)

*k'uleh* ‘rain’ (< ‘something is happening’)

*k'ulah* ‘bear hole’ (< ‘something is living/subsisting’, or noun, ‘something’s dwelling’, usitative from motion theme)

b. Transitive:

*k'uxu'tl'* ‘killerwhale’ (< ‘it blows on something’)

*k'uLGAdjg* ‘propeller’ (< ‘it paddles something’)

*'AdLAXa'tl'(g)* ‘clock’ (< ‘it knocks itself (*'Ad-*)’), *k'uXa'tl'* ‘hour’ (deverbalization?)

*k'uXa:shg* ‘beaver’ (< ‘it gnaws something’)

*'AdLa'ni:q* ‘seagull’ (< ‘it swallows itself’)

*dA'a: 'AddAkahL* ‘coyote’ (< ‘it barks at itself’)

*'AdA'a: 'AdLa'na't'g* ‘snowfall which melts right away’ (< ‘it licks itself up’)

*'AddAGahdj* ‘bell’ (< ‘it rattles itself’)

*'AdgudAt'ux* ‘vest’ (< ‘it embraces itself at waist (*gd-*)’, usitative from Inceptive perfective stative)

*qa' 'AdXALA'ah* ‘horseclam’ (< ‘it extends own penis (*X-*) out (*qa'*)’, usitative from Neuter imperfective).

c. Transitive passive:

*lAXAdAtAs(g)* ‘dice’ (< ‘ball-like (*lXd-*) are shaken’)

*ditl'a'g* ‘book’ (< *dAtl'a'g* ‘it is nicked, spotted’)

*lAXAdAtsu:x* ‘musket’ (< ‘granular (*lX-*) are thrust (into it?)’)

*lAXAdAts'uh* ‘orange’ (< ‘ball-like (*lXd-*) is sucked’)

*dAxu'tl'g* ‘balloon’ (< ‘it is inflated’)

*dAxits'* ‘drum’ (< ‘it is beaten’)

*dAGahdj(g)* ‘rattle’ (< ‘it is rattled’, cf. *'AddAGahdj* ‘bell’ above)

*lAXAdAGahdjg* ‘small bell’ (< ‘ball-like (*lX-*) is made to rattle’)

*dAdAq'a:g* ‘incense’ (< ‘it is burned’)

*dla:dAq'a:g* ‘coal’ (< ‘(stone: *dl-*) is burned’)

*lAdAxa:g* ‘(domestic?) plant’ (< ‘it is made to grow’)

*yAX LAwAsX* ‘sweater’ (< ‘it is stretched about’)

*XAdAGdALayah* ‘fish-drying rack’ (< ‘plural are placed above’; cf. deverbalizations below)

Note here again also the cases of *-n-dAlah* ‘horn, antler’ and *-Xu:n-LA-yah* ‘tooth’, conversion to possessed nouns of Active imperfective transitive passives, explained in §18.5.3.

More examples Active imperfective lexicalized relativizations, of more complex structure, follow in (38).

(38) Complex Active imperfective lexicalized relativizations

a. Intransitive with preverb:

*ta’ Lteh* ‘dead spawned-out fish’ (< ‘lies dead in water (*ta’*)’)

*ya:nahd tah* ‘cover’ (< ‘lies flat covering (*ya:nahd*)’)

*Gu’Lq’ ya:nahd tah* ‘beadsread’ (< ‘lies flat on (-*q*) blanket (*Gu’L*)’)

*yAX dALAK’a t’yu:* ‘birds’ (< ‘fly about (*yAX*)’)

*ta’d qALA’nik* ‘small fish species’ (< ‘wriggles in water’)

*LAG tli:X* ‘halibut’ (< ‘flips/flounders ashore (*LAG*)’)

*dAG lah* ‘trout species’ (< ‘swim upstream (*dAG*)’)

*li’ lah* ‘trout species’ (< ‘swim downstream (*li*)’)

*yAX dAla:X* ‘planet’ (< ‘moves about’)

*qa:nch’ a:ch* ‘spring (season)’ (< ‘they (animals) come out’, persistent)

*yAX XAda’ya:X(yu:)* ‘birds’ (< ‘they fly about’)

b. Intransitive with postpositional phrases:

*’uq’ k’uteh* ‘bed, sleeping-place’ (< ‘one (*k’u-*) lies on (-*q*) it (*’u-*)’)

*’uyAq’ k’uteh* ‘sleeping-bag’ (< ‘one lies in (-*yAq*) it’)

*’uya’ k’uteh* ‘sleeping-bag’ (< ‘one lies in it, open top (-*ya*)’)

*qi’ch’ k’uch’e* ‘toilet’ (< ‘place where (*qi*) one defecates’)

*tsa:le:Xquh* ‘octopus’ (< *tsa:-LA-yAX*, ‘plural stay under (-*yAX*) rock (*tsa:*)’)

*da:X dALAts’u’ts’g* ‘leech; suction cup’ (< ‘it sucks with mouth (*d-*) on a surface (*da:X*)’)

*sLa’dah gu:nLAchanh* ‘perfume’ (< ‘it smells beautiful (*sLa’dah*)’)

*’idah LAGAmih* ‘sugar’ (< ‘it tastes good (*’idah*)’)

*’uwa:LX yAX k’udAqe:g* ‘compass’ (< ‘one (*k’u-*) navigates according (-*wa:LX*) to it (*’u-*)’)

*ya:q’d k’udAq’ah* ‘aurora borealis’ (< ‘something (*k’u-*) burns in sky (*ya:q’d*)’)

*’iLqa’X qAdAsid* ‘chain’ (< ‘plural (*q-*) extend between (-*qa’X*) each other (*’iL-*)’)

'uya'ch' yAX k'udA'a'ch'X 'urine tub' ('into (-ya'-ch) it ('u-) one (k'u-) (plural) goes about (yAX, -X)')

qi'ch' yAX k'udA'a'ch'X 'toilet' (< 'place where (qi) one (k'u-) (plural) goes about (yAX, -X)')

c. Intransitive with overt noun subject:

sAqe:ts'Akih 'uyAq'd dah 'womb' < 'a child (sAqe:ts'Akih) stays in (-yAq'-d) it ('u-')

sAqe:ts'Akih 'uyAq'd quh 'womb' (< 'children stay in it')

lAXALAtux 'uq' Xa:n'ch' lAXA'yah 'rice table in church' (< 'rice (lAXALAtux) is ready (Xa:n'ch) on (-q) it ('u-')

dja:q' ya:q'dAX yAX dAla:X 'bullhead constellation' (< 'bullheads (dja:q) swim about (yAX, -X) in sky (ya:q'd)')

di:ya' 'uya'd gulALah 'salt shaker' (i.e. 'cellar'?, < 'salt (di:ya) is in (-ya): open at top) it ('u-')

qihda:q' lAXALAyah 'cranberries' (< 'berries (lX-) are on (-q) meadow (qih)')

lisAyAq' qALa'nik' 'wood worms' (< 'wiggle inside (-yAq) tree (lis)')

dALAXe:g GAnuh 'whistling duck (GAnuh) species'

d. Transitives, some with indeterminate object:

qa: 'i:ntl'in't' 'bee' (< 'it farts on our (qa:) face ('i:n-')

qa:nch' k'uq'Ats'g 'hornet; horsefly' (< 'it suddenly bites one (k'u-')

qe'xu:tl' 'porpoise' (< qa'-i-, 'it emerges (qa': 'up out') blowing')

'uX 'Adk'u:nLak'u:d 'towel' (< 'one (k'u-) wipes own ('Ad-) face (-:n-) with (-X) it ('u-'), persistent)

'udAyAq' k'u'xutl'g 'flute' (Rezanov 1805, < 'one (k'u-) blows into (-yAq) it ('u-) with noise (d-')

'uyAq'Ach' k'u'xu'tl'g 'flute' (< 'one blows into it')

qi' 'Adk'udAxahL 'steambath, sweathouse' (< 'place where (qi) one (k'u-) steams self ('Ad-')

'uyAq' yAX k'u'LA'a:nX 'field glasses' (< 'one (k'u-) looks about (yAX, -X) in (-yAq) it ('u-')

dAlu'ch' da: [ 'Ad]LAGADA'e: 'mirror' (< 'we (da:) see our ('Ad-) face through (-lu'-ch) indeterminate object (dA-')

Many of the forms in (38.a–b, with preverb, PP phrase) are usitatives derived from other theme classes: positional (*L-teh*, *-teh*, *quh*), classificatory (*tah*), Neuter imperfective (*-sid*), motion (*lah*, *-a'ch*, *-qe*), some of which are already in Active imperfective by other derivations: viz. persistent, repetitive, perambulative.

All but the last in (38.c, overt noun subject) appear to be usitative derivations from other than Active verb themes: positional (*sAqe:ts'Akih 'uyAq'd dah* 'womb'), classificatory (*LAXALAtux 'uq' Xa:nch' LAXA'yah* 'rice table', *di:ya' 'uya'd gulALah* 'salt shaker', *qihda:q' LAXALAyah* 'cranberries'), or motion: (*lisdAyAq' qALa'nik'* 'wood worms').

Here follows a listing of relativizations that was originally made for a section entitled 'instrumentals', conceived as a semantic category, which has since been incorporated into the formal categories of relativizations and deverbalizations. It is here given together with its original introduction.

As instruments are essentially non-human, and the only overt relativizing enclitics are (anaphoric) for third person human subjects or objects (or indirect objects), sg =*inh*, pl =*inu*; it follows then that all relativized instrumentals show only zero relativizing suffix. The most common type is formed from a verb phrase beginning with a postposition with third person object/possessor (o = P), e.g. *'uX* 'by means of it', *'uyAq'* 'in it', i.e. 'that by means of which', 'that in which', plus *k'u-dA--V* 'something (specific) is V'ed', i.e. indefinite object of verb, with *dA-* classifier, a passive. Eyak passive object remains the object, not becoming the subject as in English. Passives are formed by deletion of the subject, with *D*-effect on the classifier, thus e.g. *xusALts'AXL* 'it struck me', passive *xusLits'AXL*, *xusdits'AXL* 'I was struck', with *dA-* classifier always an option instead of *LA-* in the passive. For some probably interesting reason in this type of instrumental, the *dA-* option is found in all instances, but the *LA-* option was probably never tested in these instrumental cases. Most of the examples cited here are passivized transitives with indefinite *k'u-* 'something' as object, but some are active, with *k'u-* 'someone' as subject, as is the case in the few intransitives. All these forms are in the Active conjugation, imperfective mode, and are glossed with the English simple (i.e. customary) present, pointedly, in fact, as here the Active imperfective seems to be used in the derivative usitative sense. Perhaps over a hundred such instrumentals are attested in the corpus. A goodly sample is given in (39), especially to include items which, or items similar to which, are attested as further derived instrumentals of the next category, instrumentalizations [i.e. deverbalizations], to be shown below, in about 17 cases, about half the items listed here.

(39) Instrumental deverbalizations

*'uX wAX k'udAleh(yu:)* 'tools and materials (pl)' < 'that/those by means of which something is made'

*'uX k'uju-(L)shephyu:* 'weapons' (< 'by means of them one will kill something', inflected for subject as possessor)

*'uX k'udAxa:sh* 'large crooked knife' < 'that by means of which something is butchered'

*'uX k'udAdza'tl'(g)* 'chisel' < 'that by means of which something is (repeatedly: -g) chiseled' (cf. *'uX k'udza'tl'gL* 'chisel', below)



- 'uX k'udAtl'ishg 'polish' < 'that by means of which something is made to shine'
- 'uX k'uGALALAch'i'ch'g, 'uX k'uGa:nLACH'i'ch'g 'scrubbrush' < 'that by means of which something (floor: *Gl-*) us scrubbed, abraded' (cf. 'uX GalAch'i'ch'X 'scrubbrush' below)
- 'uX 'iLch' k'udAgAXts'g 'glue, paste' < 'that by means of which something is stuck together ('iLch')
- 'uX k'udAqah 'pliers' < 'that by means of which something is gripped (as between teeth)' (cf. 'uX qa' k'uqa'L 'pliers' below)
- 'uX k'udAq'Ats' 'pincers' < 'that by means of which something is pinched' (cf. 'uX qid k'uq'Ats'L 'candle-snuffer', below)
- 'uyAq' k'u'Lq'a:g 'stove' < 'that (enclosed) in which someone keeps a fire burning', not a passive (cf. 'uyAq' 'iq'a:gL 'stove', below)
- 'uyAq' k'uda'mahd 'oven' < 'that in which something is baked'
- 'udAyAq' [k]u'xu'tl'g 'fife' < 'that with sound (*d-*) into which one repeatedly blows' (Rezanov 1805)
- 'udAyAq'Ach' k'u'xutl'g 'bugle' < 'that with sound into which one repeatedly blows'
- 'uX k'udAwa'ts' 'whip' < 'that by means of which someone is whipped' (cf. wa'ts'L 'whip')
- 'uX yAX k'udAyahdX 'measuring-stick' < 'that by means of which something is measured about'
- 'uX yAX k'udAXe:X, 'uyAq' yAX k'udAXe:X 'backpack' < 'that by means of / in which 'something is backpacked about' (cf. XehL 'backpack')
- 'uX k'uXAdah 'fork' < 'that with (by means of) which something is eaten' (Anonymous 1810)
- 'utl' k'uXAdah 'pepper' < 'that (along) with which something is eaten'
- 'uda:q'Ach'ahd k'uXAdah 'table' < 'that (*d*-class) from (*-ch'ahd*) the surface of (*-q*) which something is eaten'
- 'uX k'uti:lAdAsinhXg 'skin-scraper' < 'that by means of which something skin-like is scraped' (cf. 'uda:X 'AdlAdAsinhXg 'razor')<sup>9</sup>
- 'uq'Ach' k'udAts'AX 'anvil' < 'that on(to, with repeated movement) which something is pounded' (cf. 'uq'Ach' k'uts'AXL 'anvil')

<sup>9</sup> Editor's note: The dictionary only lists 'uX k'uti:lAdAsinhX (without the repetitive *-g*) and 'uda:X 'AdlAsinhXgL (without *dA-*, but with *-L* suffix) for these two nouns.

'uq'Ach' t'a'q'e'ch' k'udAGAdjg 'oarlock' < 'onto it backwards (t'a'q'e'ch') something is paddled' (cf. 'uq'Ach' k'uGAdjgL 'oarlock')

'uya'X k'udAkus 'washing machine' < 'that (with broad opening at top -ya'; movement : -X) in which something is washed' (cf. 'uyaX 'AdlAkus 'washbasin', 'uyAX 'ikusL 'washing machine' and GALAkusL 'scrubbrush')

'uya'X k'udAqa'd(g) 'cooking pot' and 'uyAq' k'udAqa'dg 'cooking basket', both < 'that in which something is cooked' (where choice of postposition appears suspect, especially for the latter)

'uX yAX k'udla:dAts'e'ts'X 'hot rock tongs' < 'that by means of which something (dl-class) is tonged about' (with overt object)

'uX tsa:dla:dAGahG 'pickaxe' < 'that by means of which stone (dl-class) is chopped'  
dAq'a:g 'uX dAdAxu'tl'g 'bellows' < 'that by means of which fire (d-class) is repeatedly blown upon' (cf. 'fife' and 'bugle' above, and 'uX k'udAxu'tl'L 'bellows')  
xut'LyAq'd 'uX dAk'u:d 'cleaning-rod' < 'that by means of which the inside of a rifle is wiped'

'uX 'Adk'u:nLak'u:d 'towel' < 'that by means of which someone wipes own ('Ad-) face (-n-)' (cf. 'uX 'Adk'u:nLak'u:d 'towel' and 'dishcloth', and k'uhdL 'moss')

With at least one stem, xut'LyAq'd 'uX dAk'u:d 'cleaning-rod', the expanded (persistent) form is used.

'uX 'Adk'u:nLak'u:d 'towel' is the only other non-passive attested in this group, reflexive with LA- classifier. Slightly different in including no postpositional phrase is dAdAdeh 'flashlight', passive of causative of d-de '(d-class) shines, emits light', thus 'that which is caused to shine', perhaps not a true "instrument" (but cf. dide'L 'lamp').

Most of the forms above are derived from transitive themes, generally passivized. There are also a few (usitative) Active imperfectives derived from intransitive postural themes, cf. (40).

(40) Active imperfectives instrumentals from intransitive postural themes

'uq' k'uteh 'bed, sleeping-place' < 'that on which someone lies' (cf. 'uq' 'iste'L 'bed', and te'L 'mat', below)

'uyAq'd k'uteh 'sleeping-bag' < 'that (enclosed, at rest) in which someone lies'

'uya' k'uteh 'sleeping-bag' < 'that (with broad opening at top: -ya') in which someone lies'

Somewhere within what must be a huge semantic gray area between simple relativizations and instrumental would be sAqe:ts'Akih 'uyAq' dah or sAqe:ts'Akih 'uyAq' quh 'womb' < 'child (sg or pl) stay/sits in it'. Accordingly, a hypothetical but highly probable 'uq' k'udah 'that on which someone sits', not tested, would mean 'chair, seat' (cf. below next).

Evidently the most frequent instrumentals are passives from transitives (including some more instrumental-type items), cf. (41). Note that many, but not all, of these appear to be neologisms. As for the passives with overt noun object (45), they appear all to be neologisms.

(41) Instrumentals with passives from transitives

- ya:nahd dAtah* ‘grass mat’ < ‘it is set down flat, as covering (*ya:nahd*)’  
*'uyAq' k'ugulAdAts'u'ts'* ‘sucking tube, drinking straw’ < ‘into it liquid (*gl-*) is sucked’  
*qi' k'udAts'AX* ‘smithy’ < ‘place where (*qi'*) something is pounded’  
*yAX lAXAdAts'AX* ‘ball’ < ‘ball-like (*lXd-*) is thrown about’  
*sa' dA'ah* ‘tobacco’ < ‘it is put into own mouth (*sa'*)’  
*da:X XAdAdja'g* ‘matches’ < ‘linear (*Xd-*) is jerked against surface (*da:X*)’  
*dAch' dAgAXts'* ‘bandage’ < ‘it is made to stick to (*-ch'*) indeterminate object (*dA-*)’  
*'AdiX da:X dAgAXts'* ‘wallpaper’ < ‘it is made to stick to surface (*da:X*) indoors (*'AdiX*)’  
*qi' k'ud k'u'lAdAga'g* ‘school’ < ‘place where (*qi'*) something is taught to (*-d*) one (*k'u-*)’  
*yAX dAxuLX* ‘barrel’ < ‘it is rolled about (*yAX, -X*)’  
*k'ugudAch' dAxuLg* ‘outboard motor’ < ‘it is made to revolve at the butt-end (*gd-*) of something’  
*'uX k'udAxa:sh* ‘lancet’ < ‘something is butchered with it’ (Birket-Smith and de Laguna 1938)  
*qi' k'udAxa:g* ‘garden’ < ‘place where (*qi'*) something is made to grow’  
*'uX k'udAGAdjg* ‘oar, paddle’ < ‘with it something is levered, paddled’  
*'uq'Ach'ahd 'ida'dAXah* ‘Bible’ < ‘from (*-ch'ahd*) on (*-q'*) it (*'u-*) story is told’ (cf. ‘newspaper’ in (44))  
*yAX dAdAXahd* ‘accordion’ < ‘it is pulled back and forth (*yAX*) with noise’  
*dAlu' lahdz yAX dAXahd* ‘bureau of drawers’ < ‘it is pulled forward back and forth through indeterminate object’  
*yAX lAXAdAXa'tl'X* ‘shinny ball’ < ‘ball-like (*lXd-*) is batted about (*yAX, -X*)’  
*'uX yAX k'ulAXAdAXa'tl'X* ‘shinny stick’ < ‘with it something ball-like (*lXd-*) is batted about (*yAX, -X*)’  
*'uX k'udAXAs* ‘crooked knife for carving’ < ‘with it something is carved’  
*'uyAq' k'uda'mahd* ‘oven’ < ‘in it something is baked’

*qi' k'uda'mahd* 'oven' < 'place where (*qi*) something is baked'

*'uya'X k'u:ndAwa* 'mortar' < 'in it (motion [-X] in opening at top [-ya']) something is ground'

*'uyAX k'u:ndAwa* 'ice cream maker' < 'under it something is ground'

*Xi:ch' dAdA'iLgyu:* 'junk, trash' < 'things which are thrown away/yonder (*Xi:ch*)'

*'uyAq' k'uGAdA'eh* 'field glasses' < 'in it something is seen'

*'uq'Ach' k'uqi:dALAYah* 'footstool' < 'onto it one's feet (*qi:d*) are put'

*ya:nu'ch' lAXAdAya:* 'seeds' < 'granular (*lX*-) are put underground (*ya:nu'ch*) one after another'

(42) Instrumentals with passive and overt noun object

*xut'LyAq'd 'uX dAk'u:d* 'cleaning-rod' < 'inside of gun is wiped with it' (persistent)

*'uX tsa: dla:dAGahG* 'pickaxe' < 'stones are chopped with it' (unusual in that postpositional phrase precedes object)

*qa:Xu:nLAYah 'uX dAkus* 'toothbrush' < 'our (*qa:-*) teeth (*-Xu:nLAYah*) are cleaned with it' (more normal order)

*di:ya' 'uya'ch' gu[:n]dAya:* 'salt shaker' < 'i.e. cellar'? 'salt (*di:ya*) is put into it, open at top'

*dide'L qi:dla:dAq'a:g* 'electric wires' < 'lamp is burned involving hollow rope-like (*qi:l-*)'

*giyah qi' tl'ehd dAxuLg* 'faucet' < 'place where (*qi*) water (*giyah*) is turned open (*tl'ehd*)'

*ts'ik' 'uX dAkus* '[dish]rag]' < 'dishes (*ts'ik*) are washed by means of it' (in Austerlitz 1961 from Lena)

To the above, cf. also the active forms with noun as object (43).

(43) Overt noun as object

*tAwi:s XAdAts'AX* 'snipe species' < 'it throws (or pounds?) stone axe'

*ya: gulAGahG* 'snipe species' < 'it chops liquid thing'

*le:L guch'u* 'dragonfly; hummingbird' < 'steals hair'

*giyah gulAts'u'ts'g* 'pump' < 'it sucks water'

*Ge:ts' guXAq'* 'magpie' < 'it peels spruce-roots'

*lis dAGahdj* 'woodpecker' < 'it rattles tree'

*'uya'ch'ahd giyah k'udAlah* 'drinking glass' < 'one drinks water from it, open at top'

There are at least a few lexicalized relativizations with an overt noun as head (44).

(44) Lexicalized relativizations with overt noun as head

- a. With head as subject (all or most being neologisms, if not *ad hoc* descriptions):

*qa:Xa' Lts'iya'ts' giyah* 'vodka' < 'water (*giyah*) which utterly rots on us (-*Xa'*) (*qa:-*)' (Rezanov)

*'idah gu:nLAgAmih giyah* 'syrup' < 'water which tastes good (*'idah*)' (Rezanov)

- b. With head as object of postposition:

*'uq'Ach'ahd 'ida'dAXah ditl'a'g* 'newspaper' (< 'paper (*ditl'a'g*) from (-*ch'ahd*) on (-*q'*) which a story is told' (cf. 'Bible' in 41)

*'uwa:LX 'u'dAgah Lanhd* 'smoke signals' < 'smoke (*Lanhd*) according to (-*wa:LX*) which something gets known' (verb usitative from Neuter imperfective, Birket-Smith and de Laguna 1938)

- c. With head as object of passive (verbs usitative from classificatory):

*t'a'd dAtah 'AdLAXa'til'* 'pocket watch' < 'clock which is kept in own pocket (*t'a'd*)'

*XAdla:tah dAkinh* 'latch stick' < 'stick (*dAkinh*) which lies crosswise'

### 18.12.3 Lexicalized relativizations of other than Active imperfective

#### 18.12.3.1 Active perfectives

*Active perfectives* are very frequent in the corpus, but proportionately few of these are relativized and lexicalized. Up to 40 examples (45) were noted in the corpus, and of these, a large proportion refers to foods.

(45) Lexicalized relativizations in the Active perfective

*sLicha:dL* 'hump of humpback salmon' (a delicacy, 'hump of humpback salmon that has been cut off', passive)

*sALts'ahsL* 'partly dried fish' (unclear why not passive)

*sALsi'L* 'fish that has rotted'

*sLit'its'L* 'rock candy' < 'it has been frozen'

*sLixu'tl'gL* 'bread dough' < 'it has been inflated'

*sLi'mahdL* 'bread' < 'it has been baked'

*disLi'ehdgL* 'pilot bread' < 'it has been dried'

*yAX XAdla:LsLiq'ahL* 'pancake' < 'it has been burned flipped over'

*lAXAsdiXu'L* 'peach' (< 'fruit (*lX-*) that has become hairy')

*sdiye'sL* 'food brought home from a potlatch'

'i:nsLiwa'L 'snuff' < 'it has been ground'

lAXAsALGidjgL 'poor small berries (among good ones)'

qi' 'ida'sdi'ehdzL 'potlatch' < 'place where (qi) invitation has been called'

sLiwe'L 'babiche' < 'it has been sliced into babiche'

sLich'a:nGL 'moulting duck' < 'it has weakened' (uniquely derived from Neuter imperfective -ts'an' 'strong', cf. LAts'a:nG 'moulting duck', thematic negative)

sALK'ushL 'ouzel, grebe' (unanalyzable, stem -k'ush possibly reduced from -k'ahsh 'foot')

'i:nsdile:L 'sawbill, merganser' < 'head ('i:n-) is haired'

'i:nsLixu'tl'L 'young seal (not pup)' < 'its face ('i:n-) is puffed up'

XAdisdiXahdL 'plain line basket pattern' < 'linear (Xd-) has been dragged' (Birket-Smith and de Laguna 1938)

XAdla:sLi'yahL 'wave basket pattern' (Birket-Smith and de Laguna 1938: 82,547)

uya'X 'AdsdikusL 'bathtub' < 'one has washed oneself ('Ad-) in it, open at top (-ya)'

sitsin'lAXa'd sAtahL 'my pillow' < 'it is in position by my (si-) nape (tsin'-)'

sdiGehGL 'keg' < 'it has been coopered'

qi' qa: XAdla:sLiq'ahL 'funeral pyre' < 'place where (qi) we/humans (qa:) have been burned'

GAsALGahGL 'wood chips'

tsa' 'uX sa'yahL, placename < 'it fell downhill (tsa) brushing by it'

GAdAsA'a'L 'steep place' (cf. dAGAdA'a'L in 46)

k'uch'ahd 'i:lihsa'yahL 'good luck amulet' < 'from (-ch'ahd) something (k'u-) is mentally ('i:lih-) situated' (perhaps somehow from \*'uch'ahd k'u:lihsa'yahL 'from it one is mentally situated/affected')

'i:lihshAche:k'L 'cranky person; gnarled-grain wood'

disdiLidgL 'dry wood'

o-tsin'lAXa'd sAtahL 'pillow'

sALsi'L'Akih, dog's name < 'rotten (diminutive: -kih)'

disdidjiL 'platform cache'

dla:shLishahL 'fort; fish weir'

'u'sdiyahdL 'yardgoods' < 'it has been measured'

Some Active perfective relativizations appear commonly, but are hardly lexicalized, e.g. *'i:nsALxahLinh* ‘old person’, *sAsinhLinu*: ‘dead people’, evidently here also *'AdsLi'yahL* ‘giant’ (mythical; lexicalized stative, relativized [ $< O-L-$  ‘ya, reflexive, ‘which has caused self to be situated’]).

INCEPTIVE IMPERFECTIVES (or future) are attested as what could be considered lexicalized relativizations, particularly in the specialized semantic area of weapons and hunting: *'uX k'uqu'xLshehyu*: ‘my weapons, hunting-gear’ (‘those with which I’ll kill something’), *'uX k'uqi'yiLshehyu*: ‘your weapons’, *'uX k'uqu'wALshehyu*: ‘his weapons’, including the same special use of the future *qu'*- ~ as in the acquisitional *k'uqu'wAshe:ch'L* ~ *k'uqa'she:ch'L* ‘hunging’ and gerund *k'uqa'she:l* ‘hunting’, more exactly ‘be going to kill something’, discretely avoiding presumption of hunting success. Cf. the synonymous *'uX k'uxLsiyuhyu*: (‘those with which I kill many things’) and *'utl' da: k'uLsiyu:k'* (‘that with which we kill many something’, an exceptional customary). We have similarly *k'uqu'wAsheh* or *k'uqa'sheh* ‘hunnable animal, game’ < ‘someone will kill it. Wider such use of the future in such nominalizations was not tested, but it seems possible that such use is restricted mainly to the stems *-she* ‘(sg) kill’ and *-siyu* ‘(pl) kill’. Note also *qu'Xi:dahwah ya*: ‘potential food’ (‘thing which is for being eaten in the future’), indicating the future may be further used in this way, but other verbs subordinated to *o-wah ya*: ‘makings of o, potential o’ are otherwise in the optative mode-aspect. One other real example is the woman’s name *da: qa'Lyi:n'inh* < ‘we will doctor her, cure her’, which suggests or confirms that the essential basis for this type of relativization has to do with verbs the success of which is by no means assured, to be treated with circumspection.

### 18.12.3.2 Inceptive perfectives

INCEPTIVE PERFECTIVES in lexicalized relativizations are not very common, with about 26 instances noted (46). A few are from motion verbs, but a larger proportion are Inceptive perfective stative themes, retaining the semantic character of those, (q.v. §14.8).

(46) Lexicalized relativizations with Inceptive perfectives in

a. From motion verbs:

*tsAdl dAGAXe:L* ‘water bug species’ < ‘it is packing a board (*tsAdl*) on its back’

*tAGL lAGAXe:L* ‘large-bodied spider species’ < ‘it is packing a hammer (*tAGL*) on its back’

*'u'tl' dAGAXe:L* ‘squid’ < ‘it is packing driftwood (*'u'tl'*)’

*dla:GAXuL* ‘wheel; grindstone’ < ‘it is rolling along; stone (*dl-*) is revolving’

*GALa'nik'L* ‘bugs’ < ‘they are crawling along’ (but cf. *qAla'nik'* ‘waterbugs, woodworms’, usitative Active imperfective)

*GAXits' GAta:Linh* ‘drummer’ < ‘he who is carrying along a drum (*GAXits'*)’

*dja:q' qi' GALa:L* '(a certain) constellation (Pleiades?)' < 'place where (*qi'*) a bullhead (*dja:q'*) is swimming along'

b. From stative themes:

*GALAduk'L* 'hill, mound'

*GALAXi'ts'L* 'some kind of hill'

*dAGALAshugL* 'crooked knife'

*GALAguk'LinH* 'hunchback'

*XAdAGd ku:ndAGALa:L* 'goblets' < 'widest part plural are progressively at top'

*GAqe:L* 'ellipse'

*LAGAdAq'a'L* 'axe'

*dla:GAdAq'a'L* 'crevice in rock (formed by rock set or leaning sideways)'

*GALAGAmAk'L* 'circle, hoop'

*dla:GALAGAmAk'L* 'button' (Rezanov 1805, 'round stone'; but cf.

*gudAGAmAk'L* 'gnat', and *'Adgudat'ux* 'vest', which have been switched usitatively to Active imperfective)

*dla:GALAwe:gshgL* 'ulu-shaped stone (*dl-*)' (derived from noun *wegshg* 'ulu' as Inceptive perfective stative)

? *GAdAgil* 'sun' (if not a verbal noun with *GAdA-* thematic qualifier, stem *-gil* without *-L* suffix, cf. next)

*dAGALde:L* ~ *dAGAdAde:L* 'smelt, candlefish' < 'they shine'

*GALXa'Xch'XL* 'dimple' (likewise derived from Action verb, and with overt noun (?) complement)

*xuch' GAlE'L* 'roughened wood' < 'it is becoming roughened wood' (cf.

*k'uxuch' di:Le'L* 'roughened wood' < 'wood which has become rough', Neuter perfective)

*dAGAdA'a'L* 'steep place' (cf. *GAdAsA'a'L* in 45)

### 18.12.3.3 Neuter imperfectives

NEUTER IMPERFECTIVES are commonly relativized and lexicalized. In fact, Neuter imperfective is proportionately by far the most productive of all the mode-aspects and/or theme classes as a source of lexicalized relativizations. In fact, while there are only about 70 lexically distinct Neuter imperfectives attested (and not derived from other theme-classes), from those we have at least 60 lexicalized relativizations, up to perhaps over 100, depending on what is considered a lexicalization.

A good proportion of these, perhaps over half, come from three such themes: *-t'e'* ~ *-t'eh* 'be a certain way', C *-Le'* ~ *-Leh* 'be C', *-a'* '(sg) extend'. From *-t'eh* 'be a certain way' we have (47).

(47) Neuter imperfective lexicalizations from *-t'eh* 'be a certain way'



*k'uLAX 'i:t'inhinh* 'chief' < 'he (=inh) is greater (-LAX) than someone (*k'u-*)  
*o-Xa' wAX 'i:t'inhinh* 'spouse' < 'lives with (-Xa) o'  
*qi' wAX k'u:t'eh* 'camp' (< 'place where (*qi*) people (*k'u-*) live')  
*t'its'ga' 'i:t'eh* 'glass' < 'is like (-ga) ice (*t'its*)'  
*tsin'tl'gga' 'i:t'eh* 'flour' < 'is like ashes (*tsin'tl'g*)'  
*q'Ama:ga' 'i:t'eh* 'millet' < 'is like roe (*q'Ama:*)' (Rezanov 1805)  
*k'uLe'xtl'ga' lAXi:t'eh* 'grapes' < 'berry-like (*lX-*) are like gallbladder (*k'uLe'xtl'*)'  
*ch'e'ga' lAXi:t'eh* 'brown beads' < 'berry-like (*lX-*) are like feces (*ch'e*) (in color)  
*'iLga' 'idit'eh* 'suit of clothes' < 'they (jacket and trousers) are like each other (*'iL-*)'  
*'i:nda:q' wAX dAt'uh* 'mask' < 'it is worn/kept over (-q) the face (-nda:)' (passive,  
 itself further derived by usitative)

This is 9 or 10 items, to which another twenty or so could be added, of the form *o-ga' 'i:t'eh* 'is like o', and not counting perhaps another twenty that are used as the Eyak color terms. For all of these see the dictionary under *-t'e' ~*.

With C *-Le(') ~ -Leh* 'be C', more specifically C *k'u:Leh* 'something is C' > 'C exists', we have the forms in (48).

(48) Neuter imperfective lexicalizations from C *-Leh* 'be C'

*'udALts'Alih k'u:Leh* 'brown bug species' < 'its shell exists'  
*'ulAXALts'Alih k'u:Leh* 'cherry; prune' < 'its pit exists'  
*'ulAqah k'u:Leh* 'straight pin' < 'its head exists'  
*'uyAq' li' k'u:Leh* 'tube' < 'inside (-yAq) of it (*'u-*) goes all the way (*li'*)'  
*dik' 'uqa' ka'Le:Ginh* 'widow' < 'her husband (-qa) does not (*dik'*) exist, she has no husband'  
*dAGAleh k'u:Linhinu:* 'smart people' < 'their mind exists' (perhaps epithet)

The last example in (48), *dAGAleh k'u:Linhinu:* 'smart people', may represent enough of a pattern to be considered not a lexicalization, rather part of the semantics of *-Le(')*: it may be productive as place-names or personal names, e.g. *dAGAleh k'u:Leh*, a cat's name ('smart'), or *tl'ihX qi' k'u:Leh*, a placename on Eyak lake 'where there is grass', and several more such place-names, listed under *-Le(')* in the dictionary. This is not to mention in principle some open categories, e.g. *siya:n yiLininh* 'my stepmother' (< 'she who is my mother', for step-relatives), relativized but not lexicalized.

Especially productive here also is *-a'* '(sg) extend', of which at least 17 examples are attested (49).

(49) Neuter imperfective lexicalizations from *-a'* '(sg) extend'

*yahd* 'i:'ah 'cape of land' < 'it extends out into ocean (*yahd*)' (or at least *yahd* 'i:'ah<sup>a</sup>:', Eyak man's name, 'father of *yahd* 'i:'ah")

*lis**yAq*' *dAG* *guli*:'ah < 'liquid (*gl*-) extends upland (*dAG*) into tree(s?) (*lis*)' (place-name on Eyak River)

*xut*'*LyAq*' *li*' *di*:'ah 'ramrod' < 'it (*d*-class) extends all the way (*li*') into (*-yAq*) a rifle (*xut*'*L*)'

*dAga*'*q*'*L* *di*:'ah 'great blue heron' or 'crane' < 'neck extends' (attested in Rezanov 1805 only, apparently an epithet)

*ta*' *li*:'ah < 'it (*l*-class) extends into water (*ta*)' (place name near Eyak River)

*qidga*' 'i:'ah 'end (of extent, e.g. of road)'

*la*'*da*'*X* 'i:'ah 'two-pronged fish spear' < 'it extends in two directions (*la*'*da*'*X*)'

*li*' *guli*:'ah 'brook, stream, creek' < 'liquid (*gl*-) extends downstream (*li*)'

*yAX* *XAdi*:'ah 'candle' < 'linear (*Xd*-) extends downward (*yAX*)' (cf. synonymous usitative *yAX* *XAdAda*'ah < 'linear is made to extend downward')

'*uX* *k'udi*:'ah 'pot with handle' < 'something (*k'u*-) extends attached (*-X*) to it ('*u*-)'

'*iLX* *XAdidi*'ah 'seam' ( 'linear (*Xd*-) extend in contact (*-X*) with each other ('*iL*-)'

*ya*'*X* *di*:'ah 'ramp' < 'wooden (*d*-) extends upward (*ya*'*X*)'

'*iLda*:'*X* *qi*:'*gudla*:'*di*'ah 'something inside porcupine, edible' < 'rope-like (*qi*:'*d*-) extends near (*-da*:'*X*) each other ('*iL*-)'

*qi*:'*yi*:'ah 'king crab' < 'toes (*qi*:'*y*-) extend'

Neuter imperfective lexicalizations from other themes are presented in (50).

- (50) Neuter imperfective lexicalizations from themes with far fewer examples

'*uni*:'*k*' 'uwa: *qi*:'*sid* 'razor clams' < 'their ('*u*-) noses (*-ni*:'*k*) protrude'

'*iLqa*'*X* (*qA*)*didisid* 'chain' < 'they (*q*-) extend between (*-qa*'*X*) each other ('*iL*-)'

'*iLqa*' *XAdidisid* 'dovetailed corner of log cabin' < 'they (logs: *Xd*-) extend between each other' (less lexicalized)

*didit*'*u*:'*ch* 'iron' < 'solid (?) is black'

'*i*:'*ndit*'*u*:'*ch* 'black abalone' < 'head ('*i*:'*n*-) is black'

'*Adu*'*liLiginhinhkih* 'well-mannered child' < 'little (*-kih*) knows-self ('*Ad*-)'

*o*-*d* *k'u*'*li*:'*Lga*'*ginh* 'o's teacher' < 'teaches something to <sup>o</sup>'<sup>10</sup>

<sup>10</sup> This item is unusual in keeping Neuter imperfective with repetitive, presumed Active imperfective *o*-*d* *k'u*'*li*'*Lga*'*ginh* probably as good or better, unless in fact further derived as a "affective stativization", for which cf. below

*di:yanh* ‘stickleback’ < ‘it’s sharp’

*Xa:ngudi:yanh* ‘porcupine’ < ‘its back is sharp’

*diLits’anh* ‘silver’ < ‘it is expensive’ (Rezanov 1805)

*da’L Ach’a:nGinh* ‘cheapskate, poor man’ < ‘he (=inh) is weak (*d*-class, money-wise)’ (thematic negative)

*da’ ’i(n)t’its* ‘frozen salmon roe, put up for winter’ < ‘it (*l*-class) is frozen into container (*da*)’

*qi’dAX GAdla:dik* ‘shortcut’ < ‘place where distance overland is short’

*dAXunhyu:ga’ ’i:nLilah* ‘owl species’ < ‘it has human-like face’

Neuter imperfective relativized lexicalizations also occur with overt nouns, as subject or head of relative clause. Examples of this structure are presented in (51). For lexicalizations with an overt noun as head of noun phrase, see (52).

(51) Neuter imperfective lexicalizations with overt nouns

a. With overt noun as subject:

*ta: qi’dga’ ’i:’ah* ‘end of road’ < ‘place (*qi’d*) as far as to (*-ga*) which trail (*ta:*) extends’

*giyah (qi’) yAX ’igudli:L’ah* ‘waterfall’ < ‘(place where: *qi*) water (*giyah*) extends downward (*yAX*)’

b. With overt noun as head of relative: clause:

*’iLXa’X ’idid’ah xut’L* ‘double-barreled shotgun’ < ‘rifle (*xut’L*) which extends along (*-Xa’X*) each other (*’iL-*)’

(52) With overt noun as head of noun phrase:

*gu:nLits’anh giyah* ‘hard liquor’ < ‘water (*giyah*) which is strong liquid (*gl-*)’

*qi:yAtl’ishqa’ k’u:Leh ts’a’k’* ‘gloves’ < ‘mitts (*ts’a’k*) which have (*k’u:Leh*) interstices between (*-qa*) the toes, digits (*qi:yAtl’ish*)’

*di=’idiyah-ga’* ‘in one piece, whole’ < ‘just as it is in size’ (unique instance as object in postpositional phrase *o-ga* ‘like o’, with *dA*= ‘selfsame’)

Problematical is *’i:Lilits’* ~ *’i:Lilits’L* ‘cliff, steep “smooth” cliff’, both from Lena, Neuter imperfective or perfective; the latter gloss is possibly folk etymology; cf. place-name *lAts’* (~ probable *lits’*), in the Yakutat area, possibly a cliff, and *LA-lits’* ‘be smooth, slippery’, attested as Neuter perfective stative *diLilits’L* ‘it (ice) is slippery’.

Additionally, there are lexicalized relativizations of two Neuter imperfective derivations: anatomical resemblance (53) and of “poetic stativization” (54).

(53) Neuter imperfective lexicalized relativizations of anatomical resemblance and

*dAXunhga* 'i:nLida:' 'owl species' < 'it has a face like (-ga) a person (*dAXunh*)'  
(same as *dAXunhyu:ga* 'i:nLilah in 50)

*XAlahsdla:GAyu:ga* 'i:nLila:X 'duck species' < 'it has eyes in its head like white  
men (*XAlahsdla:GAyu:*)'

- (54) Neuter imperfective lexicalized relativizations of “poetic stativization”

*qe'yiLteh* 'whale' < 'it lies dead emerged (*qa*)'

*'itl'a:ndahd* 'iguli:Ltah 'Eyak River' < 'it keeps liquid (*gl-*) pressed against (-*dahd*)  
the mountain (*'itl'*)'

*ya'X gudli:* 'yah 'fountain' < 'water is situated upward (*ya'X*)'

? *o-d k'u'li:Lga'ginh* 'o-'s teacher' (possibly belonging here, mentioned in (50))

For examples of Neuter imperfective themes that have not remained as such in lexicalized relativizations, on the other hand, cf. (40), items listed under Active imperfectives above), switched to that by the usitative derivation, q.v. also section §15.2.

Finally, there are some forms, about 10, in Eyak that appear morphologically to be lexicalized relativized Neuter imperfectives for which there is no corresponding productive verb. This is perhaps not surprising in the case of the Neuter imperfective, which is so productive of lexicalized relativizations. These forms are listed and discussed in some detail in §14.7.5, entitled “Nouns from verb themes otherwise unattested as Neuter imperfective.”

#### 18.12.3.4 Neuter perfectives

NEUTER PERFECTIVES are probably represented here relativized and lexicalized, at least as well as Active perfectives, proportionately also much better, in about 19 items (55):

- (55) Neuter perfective relativizations and lexicalizations

*ts'a:tl'ya* 'i:dahLinh 'infant' < 'is staying in (-ya) baby basket (*ts'a:tl'*)'

*gutl'a'q'ya* 'i:dahLinh 'sternman' < 'is sitting in stern (*gutl'a'q'*)'<sup>11</sup>

*'uleh GAl:* 'yahLinh 'she's pregnant' < 'it is her (*'u, =inh*) time of year (*leh*)'

*dAyAX dla:ditahL* 'rain-bucket' < 'it (*dl-*class) is set underneath (*dAyAX*)'

*djAX k'u:Litl'ihL* 'sun halo' < 'something is wearing earrings'

*djAX k'ulAXAlitl'ihL* 'butterball duck' < 'something is wearing berry-like (*IX-*)  
earrings'

<sup>11</sup> Editor's note: the dictionary only lists *gutl'a'q'ya* 'i:dahLinh, without the -ya' 'in (vessel) with broad opening'.

*da*' *i:t'its'L* 'frozen roe' < 'is frozen into container (*da*)'

*ya*' *lAXi:Lts'iyats'L* 'badly rotten fruit' (with *ya*' 'completely' and *lX-* qualifier for 'fruit')

*lAXAdiXu'L* 'peach' < 'ball-like (*lXd-*) is furry'

*ni:Lts'isL* 'porcupine hole' (unanalyzable, stem not otherwise known, *ni:-* anomalous, perhaps for *'i:n-*)

*k'uxuch*' *di:Le'L* 'rough wood' < 'wooden is rough' (overt noun complement, cf. *xuch*' *GALe'L* in 46)

*'ilgutl'a*' *'idiquhL* 'North and Observation Islands' < 'at the back end (*g-tl'a*) of each other (*'iL-*) they sit' (placename)

*dAXunhyu:k'ah*' *'i:uyahL* 'menstruant' < 'she's situated away from (*-k'ah*) people (*dAXunhyu:*)'

*giyah*' *uyAq*' *guli:'yahL* 'blister' < 'water (*giyah*) is situated in (*-yAq*) it (*'u-*)'

*la'X* *yAX dAdAtl'ih* 'necklace' < 'it (*d-*class) is tied/worn hanging (*la'X*) downward (*yAX*) over head'

*ya:n*' *di:'yahLLtah* *q'Al Cordova* 'this Cordova's a rain-bag' < *ya:*' *di:'yahL* 'it is coming down (*ya:n*), raining' (in derivative compound)

*ta'X* *yAX 'i:ndi'ahLinu:* 'baptized people' < 'their (*=inu:*) heads (*'i:n-*) are dipped down (*yAX*) in water (*ta'-X*)'

*yAX dAxuLX qi'* *ya:nu'* *'iditahL* 'well' < 'place where (*qi'*) a keg (*yAX dAxuLX*) is put underwater (*ya:nu'*)'

*dAyAX dla:ditahL* 'rain-bucket' < 'it (*dl-*class O) is placed underneath (*dAyAX*)'

Probably also to (55) belongs *'i:Lilits'L* 'cliff, steep "smooth" cliff', also Neuter imperfective *'i:Lilits'*, both from Lena, latter gloss possibly folk etymology; cf. both *lAts'* place-name in Yakutat area, possibly a cliff, and Neuter perfective *diLilits'L* 'it (ice) is slippery' under *LA-lits'* 'be smooth, slippery'; noted also under §18.12.3.3 on the Neuter imperfective.

### 18.12.3.5 Conditionals

CONDITIONALS are attested as relativized, though not abundantly so. These are most often Inceptive conditionals, but it proved possible to elicit Active conditionals as well, from Sophie. There are also a few Neuter conditionals. For these see §12.3.1 on the conditional. There at least most of the relativized instances are specifically cited. Of those, only three are likely to be lexicalized: *xAtl'* *ya:n*' *dAGa'yahwahd* 'for winter' < 'for (*-wahd*) when snow (*xAtl'*) falls' from both George Johnson and Anna in text, *qi'* *ya:nu'* *k'uGAdAteh* 'graveyard' < 'place where (*qi'*) anyone (*k'u-*) might be laid underground (*ya:nu'*)', and

the place-name *XAtl'a'q' dla:GA'ah* < 'area (X-) at (-q') the back (-tl'a') of which dl-class (stone?) might be in position'.

### 18.12.3.6 Active optative

ACTIVE OPTATIVE is evidently well attested in at least the specific semantic area of food, cf. (56).

(56) Active optative lexicalized relativizations

*Xa:ndiyah(yu:)* 'food' < 'may be eaten (plural: -yu:)'

*Xa:nliyah'e:X* 'looking for food' < 'looking for what he may eat' (Lena in text)

*k'uXa:nliyah* 'food' < 'what one may eat' (also Lena)

Cf. also *Giyah* 'food', unanalyzable, possibly a disyllabic stem, but also possibly with stem -X-a 'eat', minus X- thematic qualifier, cf. *k'u-w-ah* 'meal' verbal noun likewise, but in *Giyah* with possible G- thematic, and -iy- as vestige of the optative. One other possible example is *qa:da:X 'iyinhinh* 'priest' (only from Sophie, 6-22-87, "because he walks in front of us", so to be interpreted < 'let him (=inh) walk in front of (-da:X) us (qa:-)'; but cf. *qa: ta'X yAX 'i:nLyi:'inh* 'priest' from Lena, *qa: ta'X i:nLyi:nhinh* 'priest' from Marie, < 'he (=inh) puts our (qa:) head ('i:n-) (down) into water (ta'X)'). No systematic testing for relativized optatives was done.

ACTIVE DESIDERATIVE (hortatory) appears to be genuinely attested in one form, *yAq' la:X* 'eulachon' ("because they bury themselves in the mud," Anna explains, so evidently to be interpreted 'they should swim ashore (yAq)'), given that the only other interpretation would be a mishearing for verbal noun with deletion of dA- classifier, *yAX la:X*, from perambulative *yAX dAla:X* 'they swim about'). Further such possibilities were not tested.

ACTIVE 'I- IMPERATIVE appears to be attested in at least one form, *qa' GAdi'Lyā:'* 'Alaska daisies', a heart medicine. This is also transcribed *qa' GAdi:Lyā:'*, likewise an imperative, but the form with -i'- is further confirmed by both Lena and Marie. Lena explains that it "sounds like 'dig them up'", more literally < 'handle them in plural acts up out (qa)!', with Gd- thematic qualifier, possibly Gd- 'area on land'. The only alternative explanation is that the -i'- comes from the treatment of the O-L-ya:' as a customary, one possible interpretation of the origin of that in relation to O-L-(y)a 'handle pl O'. In this same way, looking like Inceptive imperative, is *qu' GALyā:'* 'shield fern roots' (< 'put them on the fire!'), with *qu'* 'on the fire' as preverb. However, this might alternatively be interpreted as derived from *qu'q' 'ALyā:'*, as if it were a customary with 'A- prefix.

### 18.12.3.7 Customary

CUSTOMARY itself, on the other hand, is conspicuously absent in any kind of nominalization: totally absent, evidently, in deverbalizations, and practically so in relativizations. As of writing the section on the customary, no lexicalized relativizations whatever had been noted, other than two personal names, as mentioned in §15.5.4.9 entitled “Customary in personal names, not in nominalizations.”

Since then evidently one or two exceptions have come to light, the passive *'ut'ets'G ya'X k'uda'ya:k'* ‘detachable handle for vat or tub’ (< ‘by using it (*'u-*) as a handle (*-t'ets'G*) something (*k'u-*) in container is customarily (*-k'*) made to be situated upward (*ya'X*)’, from Lena), and *'utl' da: k'uLsiyu:k'* ‘our weapons’ (< ‘that with (*-tl'*) which we (*da:*) customarily (*-k'*) kill many something (*k'u-*)’, Anna in text, mentioned in 18.12.3.1). Both are quite transparent, only marginally lexicalized in that regard. Further such possibilities were not tested, but the extreme low frequency of any lexicalization of the customary compared to the frequency of its use otherwise, and the normality of use of the usitative Active imperfective derivation in lexicalized relativizations instead of the customary, leaves these one or two forms as unexplained exceptions, not counting the two personal names. Other Active imperfective derivations beside usitative, and excepting customary, i.e. repetitive, persistive, perambulative, are freely or proportionately represented as lexicalized relativizations.

### 18.12.4 Status of relativizations and morphosyntactic definition of lexicalization

The question of the possibility of a formal definition of the term “lexicalization” arises in connection with these relativizations as a noun-forming process where the possibility of possession arises. This question was never systematically addressed, and the data that we have give a partly unclear picture.

First, there are the two relativizations converted into possessed nouns in the semantic fields allowing inalienable possession, the two anatomical terms *-ndAleh* ‘horn, antler’ and *-Xu:nLAyah* ‘tooth/teeth’, explained in detail in a special subsection above. For the first, there is just enough documentation, including *'u:ndAleh* ‘its horn’ to show that the form is a possessed noun from a relativized verb, not a deverbalization, given the presence of the *dA-* classifier, so that it must be like the ‘tooth/teeth’ item. For ‘my (own) tooth/teeth’ we have *siXu:nLAyah*, and unattested *k'uXu:nLAyah siXa* ‘tooth/teeth of something that I own’ would certainly mean only that or perhaps ‘my false tooth/teeth’. On the other hand, though it was never tested, no doubt significant is the fact that we have nothing like *\*??Xu:nxLAyah* for ‘my tooth/teeth’ (< ‘I keep my own tooth-like in position’), which would better explain the *LA-* classifier as reflexive instead of passive that *-Xu:nLAyah* must be.

More interesting is that for third person human possessed we have ten instances, all *'uXu:nLAyah*, never reflexive or with relativizer *\*?'uXu:nLAyinhinh*, though it is true no attempt was made to elicit such. Perhaps confirming this pattern, however, is one pair

of quasi- or *ad hoc* kin terms, *si'ihd lah* 'my younger sibling' (< 'he lives after (-'ihd) me (si-)'), *sidALyAX lah* 'my older sibling' (< 'he lives before (-dALyAX) me'), certainly not \**linhinh*, plural presumably *lahGAyu*: and not \**linhinu*. However, it is also entirely possible that this *lah* should be regarded as a verbal noun in origin, quite unlike -*LAYah*, and there is another genuine kin term, -*ch'an'win'inh* 'sibling-in-law of same sex as possessor', now fully opaque. It is clearly with relativizer in origin (< \*o-*ch'-a' wV'-inh* 'he who V's toward o'). The plural, however, is now -*ch'a'win'inhGAyu*:, presumably therefore never \**ch'an'win'inu*:, an extreme lexicalization in any case. By all indications, any relativizations that became lexicalized as possessed anatomical or kin term nouns are treated morphologically as possessed nouns.

The treatment of relativizations used not as those two exceptional inherently possessed nouns leaves more unanswered questions, however. In one text from Anna we happen to have the noun base *'uX k'uqu'LShehyu*: 'weapons, hunting-gear' (nominalized even with -*yu*: 'plural') with both first and second singular, as well as third person possessive prefixes. Here the possessor is still the subject of the verb, in *'uX k'uqu'xLShehyu*:, *'uX k'uqi'yiLShehyu*:, and *'uX k'uqu'wAshehyu*: 'those with which I'll kill something' etc., respectively. This must certainly be a lexicalization, however transparent. Note, though, that in the third person, the form lacks the relativizer, is not \*?'*uX k'uqu'wAshinhinh(yu)*:. This looks like it is treated as though it does not refer to a human third person. Far more probably instead it is 'those with which someone will kill something', *k'u*- representing both subject and object, no duplication because of the constraint against duplication of verb prefixes (cf. §8.2). Another item, *'utl' da: siyu:k'* 'our weapons' (< 'that with (-tl') which we (*da*:) kill many somethings (*k'u*-)'), relativized customary, is quite exceptional in being a customary, but from Anna in text, noted above. It certainly appears that at least in this specialized semantic area of weapons and hunting-gear, possession is shown by personal inflection of the subject of the relativization as a verb, however inconsistently as indefinite in third person.

We have a clear usitative Active imperfective relativization of a motion theme from Marie in *sich'a:X 'inhinh* 'my helper' (< 'he (who) comes to my (si-) aid (-ch'a:X)'); cf. *sich'a:X Ga:Linh* 'he's helping me') here with inflection of the oblique object. Likewise from Marie 1980, *xuLyi:n'inh* 'he's my doctor' (< 'he (who) cures me (*xu*-)'; cf. *xuGALya:n'Linh* 'he's curing me'), along with *qa: Lyi:n'inh* '(medical) doctor' (usitative, < 'he (who) cures us/humans (*qa*:)'), inflected for direct object of relativized verb. Though not involving possession, still inflectional in a different way is *LAX k'u:t'e*: '*AnahshAkih 'uXe'xleh* 'I like this weather'. Here *LAX k'u:t'e*: 'this weather' (< 'something (which) is this way') is a lexicalized relativization serving as the object of 'like' which has the marked proximal demonstrative *LAX* 'this way' instead of the unmarked distal *wAX* 'so, thus, that way', so probably not \*?'*Al wAX k'u:t'e*: as 'this weather'. Further, from Lena, with personal inflection of postpositional oblique object, we have *sid k'u'li:Lga'ginh* 'my teacher' (< 'he (who)—perpetually—causes (*L*-) me (*si-d*) repeatedly (-g) to know something (*k'u*-



), with unusual Neuter imperfective stative along with repetitive), along with *k'u'd k'u'li:Lga'ginh* 'a teacher' (< 'he (who)—perpetually—causes someone (*k'u-d*) to know something'.) Likewise *sitsin'lAXa'd sAtahL* 'my pillow' < 'what is in position by (*-Xa'-d*) my (*si-*) nape (*tsin'-*)'. In *xu: qi' xdah* 'place where (*qi'*) I (*xu:*) stay, my place', we have inflection for subject, though this item may not count insofar as there is no lexicalization whatever. In any case, these forms certainly show that these relativizations, even if lexicalized to some degree, remain internally inflectable for person as subject (*'uX k'uqu'xLshehyu:* 'my weapons'), as object (*xuLyi:n'inh* 'my doctor'), or object of postposition (*sid k'u'li:Lga'ginh* 'my teacher').

What remains unclear is the degree to which it is also possible to say e.g. *\*?'uX k'uqu'dAshehyu: siXa'* 'my weapons' (< 'those (*-yu:*) something (*k'u-*) belonging to (*-Xa'*) me (*si-*) with (*-X*) which (*'uX*) is killed', passive); *\*?'xu: siya' qi' k'udah* 'my place' (< 'my (*xu:*, *si-*) place where (*qi'*) someone (*k'u-*) stays'), *\*?k'uch'a:X 'inhinh siXa'* 'my helper' (< 'he who (= *inh*) helps (*-ch'a:X*) someone (*k'u-*) in relation to (*-Xa'*) me (*si-*)'; or *\*?qa:ch'a:X...* 'helps us/humans'), *\*?qa: Lyi:n'inh siXA'* 'my doctor' (< 'he who cures us/humans in relation to me'), *\*?k'ud k'u'li:Lga'ginh siXA'* 'my teacher', or, as noted, *\*?'Al wAX k'ut'eh* 'this weather'.

In an attempt to answer this question, apparently never directly addressed in the field, the only relativization on which we have further such data may well be the relatively well attested *k'ulAX 'i:t'inhinh* 'chief, rich/powerful person', once glossed, even alone, as 'God'. In the absence of any forms either for 'my chief' on the one hand or 'I am chief' on the other, here follows the one relevant form we have for this lexeme. That form is Rezanov's (1805) аткольгете эллитту <atkol'gete etleittu> 'biednoi' ('poor'). The first <e> of the second word is non-palatalizing <e>, and what is probably the <i> of that word has a mark above which does not resemble Rezanov's usual micron stroke for *ï* representing semivowel /y/ rather than /yi/. This allows the possibility that the *и* <i> is *и* <n> instead. This phrase and gloss represents an obvious misunderstanding of some colorful performance by Rezanov. It was carefully considered with Lena and interpreted as *'a'd k'ulAX 'i:t'eh yiLinhinh-duh* 'he's a very rich/powerful person indeed'. Note in the Rezanov original that the usual relativizing =*inh* and nasal umlaut appear to be absent in the relativization itself, *'i:t'eh* rather than *'i:t'inhinh*, but is more likely present in the main verb, which is so interpreted, even if the original is to be read with *и* <i> rather than *и* <n>. Rezanov never came at all close to transcribing *-inhinh* well, *-енъ* <-en"> at best. Whatever the original was, we apparently have from Lena the phrase in third person, relativized *'i:t'eh* for some reason without relativizer, present presumably without relativizing force on the main verb. Another interpretation, with *и* and not *и*, is second person singular in the main verb, thus *'a'd k'ulAX 'i:t'eh yiLeh-duh* 'you're a very rich person indeed'. In this too we still clearly have, in both original and interpretation, the 'he (who) is rich' relativized as complement to 'he is' or 'you are'. I.e., this phrase from Rezanov does answer the question, that such lexicalized relativizations can be used in this way, implying that for 'I am a chief, I am a rich man' it should be possible to say at least one of *\*?k'ulAX 'i:t'inhinh xiLeh*, or *\*?k'ulAX 'i:t'eh xiLeh*, or even *\*?!k'ulAX 'i:t'eh xiLinhinh*.

The transparency of *k'ulAX 'i:t'inhinh* for 'chief, etc.' is very evident, as we have *k'ulAX qu'xt'uh* 'I'll get rich', *k'umah 'ulAX sAt'u'L* 'a sea-lion prevailed over him', *silAX 'i:t'inhinh* 'he's stronger or higher than I am' (Lena). Certainly *k'ulAX 'ixit'eh* means 'I'm rich', but it remains uncertain whether that can also mean 'I'm chief', whether *silAX 'i:t'inhinh* also means 'my chief' (i.e. 'chief with regard to me'), or whether that can or should be *k'ulAX 'i:t'inhinh siXa*. This last, on the other hand, must certainly mean primarily '(he is) chief as far as I am concerned, (he is) chief for me' (cf. *lixah 'uXa* 'it (mouse) was a brown bear for them (lake-dwarves)'). We have a fair number of examples of regular personal inflection for possessor of nominals that are relativizations of verb phrases, and no counterexamples thereto. Thus, though the limits were not carefully tested, it seems quite probable that even 'my chief', if anyone wanted to say that, would be *silAX 'i:t'inhinh* rather than *k'ulAX 'i:tininh siXa*.

### 18.13 Deverbalizations

Deverbalizations, as opposed to relativizations, have the striking morphology of deleting all prefixes of Zone D. That is, deverbalizations delete all classifiers, conjugation and mode-aspect prefixes, and Zone D subject pronouns. Deverbalizations may include the derivational suffixes for repetitive (-g) and perambulative (-X), but not inflectional suffixes. They may include their own suffix or suffixes -l and -L, and for acquisitional -ch'L. None are attested with any enclitics. They include some prefixing of special interest, considerable variation or inconsistency in affixation, and present a major problem for synchronic description.

Deverbalizations proved to be extremely problematical because they constitute something of a cline, from the most obvious to types that become increasingly difficult to distinguish, down to forms only with suffixal -L (which may be analogical), or zero. Such may be homophonic with simple Active imperfective verbs or bare noun stems.

Deverbalizations may be said to be of four main types, though all except acquisitional are often difficult or impossible to distinguish. These types are obviously related both morphologically and semantically. They are all also of limited membership, and some types are perhaps long non-productive. As shown in the statistical table above at the beginning of this chapter on nominals (§18.2), recognized deverbalizations total about 280 items altogether. Thus, though they seem to be of limited productivity, they are also far more than isolated fossils.

These four types of deverbalization are gerunds, verbal nouns, instrumentals and descriptives, and acquisitionals. 1. *Gerunds*, including various subtypes. Some of these can be definitively recognized by the unique prefixation 'is-~, and above all by the suffixation of sonorant -l to open stems. 2. *Verbal nouns* are another large group, potentially the largest, semantically indistinguishable from gerunds insofar as they mean 'the act/process of V-ing', but this is not always clearly distinguishable from the 'means for V-ing' or 'product or result of V-ing'. Affixation for these may be zero, i.e. the bare stem, as in 'a'tl' 'chew-

ing'. There is sometimes suffix *-L*, probably analogical. 3. *Instrumentals and descriptives*. The main mark for these is *-L* suffix, occasionally missing. This group was originally written up first, defined on a semantic basis, as "instrumentals." In fact, it was written up long before other deverbalizations, at a time when I was trying more to see verbal categories on a semantic basis. Indeed, that afforded certain insights, e.g. the close relation of relativized instrumentals and deverbalized ones, including a number of pairs that could be described as showing a regular transformation from relativization to deverbalization. It thus included more or less lexicalized relativizations, especially whole verb phrases, e.g. 'with it something is V-d', i.e. 'that with which something is V-d', say 'uX k'udAda'tl'(g) 'chisel' < 'with (-X) it ('u-) something (k'u-) is chiseled'. Derived from those we have instrumentalizations, i.e. deverbalizations, e.g. 'uX k'udza'tl'(g)L 'chisel', with classifier deleted, *-L* suffix (cf. *dza'tl'(g)(L)* 'peg, stake: chisel?'). That earlier subsection also considered instrumental nouns, i.e. verb stems, both open and closed with *-L* suffixes. Such forms later incurred serious trouble, however, as indistinguishable morphologically from simple verbal nouns with *-L* or zero suffix, e.g. *dzanhd(g)(L)* 'chisel'. But many could also denote 'V-ing' or even 'product or result of V-ing', e.g. not only *sha'L* 'digging stick' (< O-*sha* 'dig O'), but also *dla:sha'L* 'palisade' < 'series (*dl-*) of diggings', certainly a result or product, not a means. Such forms have had to be reclassified here. A still more complex example is *tsahgL* ~ *tsahg* 'legend', (< O-*tsahg* 'tell legend of O'), where *tsahg(L)* could be seen as 'act of telling legend (of O)', 'result of telling legend', or in fact equally well 'means of telling a legend', morphologically as well as semantically, especially as no attempt was made to correlate presence or absence of suffix with difference in meaning. 4. *Acquisitional* is the most limited group of deverbalizations by far, attested in only a half-dozen items, and morphologically the easiest to recognize, with the unique stem-suffixation *-ch'-L*.

A serious morphophonological question arises in what appears to be a regular variation between highly distinctive voiced sonorant *-l* suffixed to open stems and voiceless obstruent *-L* suffixed to a minority to closed stems, in the gerund. The trouble with this is twofold. First, phonologically, the *-l* is a sonorant, demonstrably from *-n*, while the *-L* belongs to a different phonological class, obstruent as opposed to sonorant. There is otherwise not even a trace of relationship such as *l* ~ *L* variation in Eyak. (That stem-initial /l/ is often "absorbed" in *L-l* > *L*- though shared laterality is conceivably relevant, but the sequence *L-l* is also often quite stable.) This *-L* suffix to closed stems in gerunds is homophonous with what is clearly *-L* suffix in instrumentals, beginning serious difficulties in distinguishing different types of deverbalizations.

A serious attempt must be made to characterize the frequency of *-L* versus zero suffixation to help determine its status or original use before the onset of analogy and collapse of the system, though little or no attempt was made in the field to determine the admissibility or preference for plus/minus instrumental *-L*. Such statistics may lead to hypotheses that one or another type of *-L* suffix is original to one category and spread to another. In fact, since no systematic attempt was made in the field to determine more

exactly this variability, all we have is the statistics of the incidence of *-L* in the corpus to go by. This may prove to be of great importance in untangling the mess.

In the history of writing this grammar, deverbalizations were examined piecemeal. First acquisitionals, in part because of their distinctive marking, *-ch'-L*, and the small membership of the category. Later instrumentals were written up, as a semantic class, including relativizations, several of which were matched by deverbalizations; then stems with *-L*, so also stems without *-L*, which led to the inclusion of many such forms not semantically instrumentals. Later still gerunds, starting with *-CV:-l* and *'is-*, which then necessarily led to the recognition also of verbal nouns as such, and finally recognition of the extent of the huge gray area where the three categories overlap. The presentation here will reflect some of this history. It is unclear how many more deverbalizations, of which types, could have been elicited, or checked for acceptability, or degree thereof. It is also unclear how much more such information would have allowed a clearer picture of deverbalization types, or how well the subject could have been covered even from living memory.

After considerable application of Occam's razor, of some months' duration, this impossible synchronic challenge was resolved only by historical explanation, which turns out to be rather simple, unless of course it is an oversimplification. Gerund is defined by suffix *-l* to open stems, (*'*)*is-* prefix to intransitive, but the appearance of *-L* suffix to closed stems is a spread originally from instrumentals and descriptives, then to verbal nouns, then to gerunds. Instrumental-descriptive is defined by suffix *-L*, appearing as *-L* after most open stems, in a few cases *-hL*, sometimes dropped after closed stems, in probable analogy with verbal nouns. Verbal nouns have no definitive affixation (other than zero for all Zone D prefixes), with *-L* suffix very often spread from instrumental-descriptive; without such suffix they may be the result of mere conversion of verb stem to noun, or are stems functioning equally as noun and verb. This explanation, based heavily on the idea of analogical spread of *-L* from instrumental to verbal noun and further to gerund, allows for a linear explanation and description of the three "confused" deverbalization types. It may be that statistics of the presence of *-L* suffix will lend credence to the hypothesis of spread from instrumental to verbal noun to gerund, particularly if its frequency is highest in instrumentals, lowest in gerunds.

There is, however, the set of five nouns which combine definitive affixation of the two extremes, e.g. *'uq' iste'L* 'bed', which consists of *o-q'* 'on o', gerund marker *'is-*, *-te* '(sg) lie prone', *-L* from instrumental, cf. *te'L* 'mat'. Likewise *'uq' isda'L* 'chair', from *-da* '(sg) sit', *da'L* 'seat in canoe'. These are fully dealt with in §18.13.3.5 on *'is-CV'L*. The remarkable point is that perhaps all these refer to items that must be post-contact introductions to Eyak culture. The gerund or its morphology seemed "obsolescent" to me in the 1960s, not simply because it was not always easy to elicit, in a language that was itself already obsolescent, but because it seldom or never occurred spontaneously, in text. In view of the inclusion of *'is-* ~ definitive otherwise for gerunds in these neologisms, definition of "obsolescence" in Eyak grammar is hardly a simple matter. On balance, I prefer to consider my subjective observations of the vicissitudes of "obsolescence" in late Eyak to be far less

important than a plausible historical explanation of Eyak deverbalizations.

Note that Eyak turns out to be very much like Athabaskan in its strong tendency to use native morphemes to coin new terminology from contact, as opposed to incorporating loans. Loans are treated thoroughly in (§18.15). They are far fewer than neologisms by relativization and deverbalization. Note further that the nature of the Eyak corpus is such that texts are predominantly traditional text, especially legends, so that nouns for post-contact items are almost all from elicitation. This starts with Rezanov, who was clearly more interested in contemporary (1805) nouns than traditional lexicon. Interestingly, he got a significantly larger proportion of the deverbalizations than he did of the relativizations.

### 18.13.1 Gerund

The Eyak gerund is a deverbalization of verb themes or bases, having the meaning of the verb theme or base as an act or state, ‘V-ing’. The gerund did not frequently appear spontaneously in the last stages of Eyak, and was not systematically or thoroughly investigated or routinely elicited. We thus have in the corpus only little over 40 themes for which we have what are definitively gerunds, with *-l* and/or *'is-* ~. Nevertheless, it will be seen that we can present a fairly satisfactory description of the Eyak gerund insofar as it can be identified—while keeping in mind the severe limitations of distinguishing it especially from the verbal noun.

One way of eliciting gerunds, perhaps the most common, was in the frame ‘I’m tired of V-ing’, e.g. *yAX 'iswe:X xusALga'L* ‘swimming about has tired me’. For more on the use of the gerund in sentences, virtually necessary for eliciting gerunds, see §18.13.5 on syntactic use of the gerund.

Many gerunds are from Rezanov, i.e. they are first attested in Rezanov (1805). That further suggests that gerunds were more freely used in Yakutat 1805 than Cordova 1965. The relative frequency of these forms in Rezanov may also have something to do with the fact that Rezanov’s glosses or elicitations are in the infinitive. Rezanov was certainly unaware that Eyak has no infinitive as such, but it seems nevertheless unlikely that these 1805 Yakutat forms were no less easily forthcoming than those of Cordova 1965.

#### 18.13.1.1 Morphology of the gerund

First, since the gerund is a deverbalization, all prefixes of Zone D are deleted, not only the inflectional subject and mode-aspect prefixes, but also even the classifier, which may be thematic, intrinsic to the theme. Deverbalization, it has to be said, actually deletes any classifier, however essential the classifier is to the theme, and however sensitive the gerund is to valence or transitivity, as will be seen in both prefixation and suffixation of the gerund.

As will be discussed at length in §§18.13.1.2 and 18.13.1.4, the gerund has double distinctive affixation, both suffixation of sonorant *-l* to open stems and prefixation of *'is-* ~ to intransitives. These in principle go together. Thus e.g. for *-te* '(sg) lie prone', the gerund is *'iste:l*. There should be no *\*'isteh* or *\*te:l*. However, *-l* is deleted or cannot be present the majority of the time because it cannot phonologically be suffixed to an obstruent or obstruent-closed stem, and certainly the majority of stems is obstruent-closed. Likewise, the *'is-* ~ prefix is also deleted a large proportion of the time, regularly in transitives (with a few apparent exceptions, most probably analogical). In transitives it is normally replaced by object prefixes, or apparently (in 3 out of the 6 such attestations) it is deleted by qualifiers even in intransitives. The high rate of deletion of both these affixes distinctive to the gerund makes it impossible to distinguish the gerund from the verbal noun a large proportion of the time. We begin with what are most definitively gerunds, with *-l* suffix, to open stems only, and/or with *'is-* prefix, mostly intransitives, and mostly without qualifier.

### 18.13.1.2 *-l* suffix to open stems

Most characteristic of the gerund, in fact the only affix altogether unique to it, is the suffix *-l* to open stems, whether of the CV or in some cases CV' type, with the result CV:l in both cases. For the CV: type we have the forms in (57a). These intransitives without other prefixes regularly take the prefix *'is-*~, q.v. below, whereas transitives (57b) do not regularly do so. We have likewise for the CV' type in (57c).

#### (57) Gerunds with open stems

##### a. Intransitives of the form /CV:/

- 'isda:l* '(sg) sitting'
- 'iste:l* '(sg) lying prone'
- 'ista:l* '(sg) inanimate being in position'
- 'isqe:l* 'boating', *'isqu:l* '(pl) sitting'
- 'isa:l* '(sg) going'
- qa' isya:l* 'staying awake'

##### b. Transitives of the form /CV:/

- k'utsi:nl* 'singing something',
- k'uXe:l* 'carrying something on one's back'
- O-le:l* 'acting on O'
- 'idAle:l* 'carrying on activity'
- tsin'dAle:l* 'talking'
- k'ula:l* 'drinking something' (< O-*dA-la*)
- yAX 'i'a:nl* 'traveling about, looking about' (error for *yAX 'i'a:nX* < *yAX 'i-LA-'e ~*)
- O-ya:l* 'handling plural O' (< O-*L-(y)a*)

*'uqa'she:l* 'hunting' (with future prefix *qa'*-)  
*o-d k'uXa:l* 'feeding something to o' (< *o-d O-X-L-a*)

c. Stems of the form /CV'/

*'ist'u:l* 'being'  
*li'X lAt'u:l* 'smiling'  
*o-ch' dla:XAt'u:l* 'watching o'  
*dAche:l* 'hungering, hunger'  
*'ists'a:nl* 'being strong'  
*k'u'tu:l* 'laziness'

Note that this *-l* suffix, surely from PAE *\*-n*, remains *-l* instead of changing or reverting to the earlier *-n* even after a nasalized stem-vowel, as in *-tsi:nl*, *-ts'a:nl*, *-'a:nl*; for the case of *li'X 'i:ni* 'laughter' and possible case *qa'ni* 'fighting' see §18.13.1.7, where we must have had such an *-n* (< *\*-n-ne:-n*). In principle this suffix must historically have been followed by some kind of vowel, in order to explain that it does not result in a nasalized vowel. We have at least one instance of such a vowel after the *-l* in *k'utsi:nlAya'X yAX da:Xinh* 'he's walking about singing' with the gerund as the object of *o-ya'X*, where there is no expectation of epenthesis.

### 18.13.1.3 Zero or *-L* suffix to closed stems

First, it should be noted here that gerunds also allow at least two derivational verb stem suffixes, the *-g* repetitive, and *-X* perambulative, which can be suffixed to open stems as well as closed, thus closing open stem.

With closed stems, closed necessarily by voiceless obstruent, it is phonologically impossible to suffix a voiced sonorant *-l* (§6.14). Instead, such gerunds have suffix zero or *-L*. There was no systematic attempt to check the possibility of one instead of the other. Given that, it is very important to note that zero is significantly more frequent than *-L*. One may be tempted to claim that *-L* is a phonologically plausible allomorph of *-l* by simple devoicing. However, there is otherwise no alternation between sonorant *-l* and obstruent *-L* in Eyak at all. Moreover, unlike the sonorant *-l* suffix, which is almost unique to the open-stem gerund, there are multiple obstruent *-L* suffixes to both nouns and verbs in Eyak, most notably here the *-L* instrumental, as mentioned also above.

Thus, there are very few, one or two, closed-stem intransitive gerunds suffixed with obstruent *-L* and prefixed with *'is-* that happen to be attested only with *-L*: perhaps only *o-yAX 'isyahGL* 'o being a pest'. Another might be Rezanov's (1805) *коинстакль* (<*koinstakl'*>) 'to forget', most likely to be read [*'u]k'wah 'i:nta:gl* 'forgetting repeatedly', not verified, from base *o-k'ah l-ta* 'forget o' (< 'position head away from o'). The only two intransitive gerunds attested both with and without *-L* are with stems closed with *-X* perambulative (58.a). Eight more intransitive themes are attested once each with only zero suffix, no *-L*: (58.b).

(58) Variability of suffixation with *-L* in gerunds from Intransitive themes with closed stems

a. Attested both with and without *-L*

*yAX 'isqe:X* (twice) and *yAX 'isqe:XL* (once) 'boating about'

*yAX 'iswe:X* (7 times, including Rezanov 1805) and *yAX 'iswe:XL* (twice)  
'swimming about'

b. Attested once each with only zero suffix, no *-L*:

*'iski:nX* 'weeping'

*'isqa:'* 'yelling' (cf. *qa:'* verbal noun, below)

*'istu:ch'* (pl) lying' (persistent, expanded stem)

*LAXisxwa:s* 'being afraid'

*'isxa:g* 'working' (Lena, mistakenly minus even the *-L* which is part of the CVCC stem; cf. *xa:gL* verbal noun, below)

*yAX 'isa:X* (sg) walking about'

*yAX 'isla:X* 'moving, camping about'

*yAX 'ists':nGX* 'dipping fingers about'

*yAX 'is'a'ch'X* (pl) going about'

The statistics are a total of 18 instances of zero altogether, 5 or 6 of *-L*, presumably supportive of the notion that the gerund was originally with zero suffix to closed stems, and that *-L* was spreading there analogically. If we consider the 16 instances of *'ishguG* 'deceit' below, all with zero, the total of those with zero is 33.

Note herewith that the gerund allows a seemingly full or wide range of derivational stem morphology, i.e. it allows not only repetitive and perambulative suffixation, but also persistent expansion; expansion with customary *-k'* suffix was not tested.

#### 18.13.1.4 Prefix *'is-* in intransitives

The prefix most characteristic of the gerund, probably occurring properly only in the intransitive, is *'is-*. This prefix appears to be unsegmentable, even though there are other verbal prefixes of the form *'i-* (e.g. indeterminate object, imperative), and *s-* (Active perfective, *s-* optative). As will be shown below in combination with qualifiers, this prefix has the word-internal allomorph *is-*, not *-i'*, proving that it is underlyingly *is-*, not segmentable as (*'*)*i-s-*.

This *'is-*, as noted, is not quite definitive of gerunds in late or modern Eyak, however. I.e. it does occur mostly in gerunds, but is not quite unique to gerunds, in that it is found in five cases in instrumentals, three of which are open stems together with *-L* instrumental suffix, e.g. *'uq' 'isda'L* 'chair' < 'on (*-q'*) it (*'u-*) thing to sit' (cf. further *da'L* 'canoe seat'). For a full account of these see §18.13.3.5 on *'is-CV'L*. However, all these *'is-* instrumentals denote culturally recent items, so may well be innovative spread in use from gerund to instrumental.



By far the clearest correct use of gerund prefix *'is-* is in the intransitive with no other prefixes present, already listed above for open stems, with *-l* suffix, and closed stems, with zero and/or *-L* suffix, attested in over 30 forms, listed above.

### 18.13.1.5 Status of counterexamples in use of *'is-*

There are two instances of non-prefixed intransitive gerund missing the *'is-*. One is in *'ALdah le:l*, along with correct *'ALdah 'isle:l* 'playing'. However, the reason for *'ALdah le:l* is that *'ALdah*, actually an adverbial in the theme *'ALdah -le* 'play (actively, outdoors)' is being treated analogically as a direct object of *O-Li*, the irregularly related transitive, < \**O-L-le*, the regular gerund of which is *le:l* (cf. below). The other is *'u:ch* *'Aya:l xuGALga'L* 'I am getting tired of walking there', where the preceding *'u:ch* 'thither' is evidently being treated as a direct object of a transitive. The form is further analogical with epenthetic /y/ after what appears to be a prefix *'A-*, but what is most probably an epenthetic *'A-*, for which see §18.13.4.1 on third person objects of gerund and verbal noun, and §6.17 on epenthetic *'A-*. The conclusion here is that both these exceptional intransitive deverbalizations are analogical in a system that is collapsing. Even so, as noted in the subsection above, there are apparently no exceptions of the opposite type attested, intransitives with *'is-* prefix and no *-l* suffix on an open stem, such as \**'isteh* '(sg) lying prone'. Note, however, next below, likewise exceptions, presumably analogical, of *'is-* prefixed to transitives, as in *'u:ch* *'ista:l 'uwa* 'taking it there'.

It appears in fact that the *'is-* prefix seldom occurs with any other prefixes, i.e. either in transitives, or even in intransitives with thematic prefixes. An apparent transitive exception is in the reflexive causative perambulative *yAX 'Adists'itl'X* 'skating about' < 'causing self (*'Ad-*) to slide about', conceivably because it is derived from presumable *yAX 'ists'itl'X* 'sliding about', an unattested but likely frequent gerund; cf. *'uya* *yAX 'Adists'itl'X* 'skates' < 'things to cause self to slide about in them', an instrumental like the above, missing the *-L* suffix. These forms are especially interesting in that the initial *'-* is deleted after the *'Ad-* reflexive object, which is of ambiguous status phonologically as either preverb or conjunct prefix. It is here (unnecessarily) treated as a prefix to the verb word, thus showing secondary or superficial status of the glottal stop, unlike that of the indeterminate object or of imperative *'i-*; cf. below. Further showing that difference in combining with preceding segments on the part of gerund prefix *'i-* is the form *qe'sa:l* 'walking (up out)' from *qa* *'isa:l*, where the *'i-* deletes but the quality of the /i/ is preserved in fronting of the /a/ to /e/ in the preverb *qa* 'up out'.

A more convincing example of *'is-* in a transitive might be *'u:ch* *'ista:l 'Awa* 'taking it there' from Lena. For this, cf. *'u:ch* *'Aya:l* 'walking there', just above, the exact reverse exception, almost certainly analogical. Even less convincing is *'Aw wAX 'isLi:l* 'making that', early from Marie, which is also patently wrong in retaining the classifier, and treating the stem as not (irregularly) derived from *-L-le* (cf. below). There is also *yAX 'isxut* 'shooting about' (Lena) for expected *yAX 'ixut'X*, explained above, along with

correct persistive  $\gamma AX \text{ 'ixe:t'[X]L}$ . Most likely, these forms merely show some degree of uncertainty about this obsolescent derivation for the last speakers of Eyak.

### 18.13.1.6 'is- vs. zero with qualifiers in intransitives

If a gerund can be identified by *-l* suffix to open stems, and/or by 'is- prefix at least to intransitives (not counting the recent instrumentals), the question still remains whether the 'is- remains when a qualifier prefix is present. As will be seen, that prefix may delete with a qualifier. With open stems the *-l* still remains, but with closed stems, lacking *-l*, if the 'is- also deletes, we can no longer determine whether the form is a gerund or a verbal noun.

We have three forms where (')*i-* does co-occur with the qualifier, and in these cases the (')*is-* follows the qualifier. That at least shows that the prefixal position of 'is- is between the qualifier Zone C and the stem, in the place of the four prefix positions of Zone D which are always otherwise empty in deverbalizations. One example is in *dists'a:nlch'iya'*, followed by *'ists'a:nlch'iya'* 'Strength-Master, Giver of Strength', in a legend from Anna, where the *d-* is probably in error semantically, corrected by the latter form; cf. *Lits'anh* 'is strong, *diLits'anh* 'is strong (e.g. of wood); is expensive'. Even though semantically questionable, spontaneous *dists'a:nl* clearly shows *is-* following the qualifier. Another example of such a sequence, probably altogether correct, is *lAXisxwa:s* 'being afraid' (Rezanov 1805, confirmed). There the /i/ quality of the reduced vowel moreover shows itself as stable and basic, whereas other reduced prefix vowels of /i/ quality turn to /A/ after /X/. The glottal stop initial, on the other hand, shows itself unstable and superficial in deleting completely; again, cf. above, unlike the glottal stop of the indeterminate object or 'i- imperative, which in so combining result in Ci', not the case here, where we do not get *lAXi'-*, *di'-*. In any case, again, these two forms, which have the ring of spontaneous authenticity, show both that the prefixal position of (')*is-* is as filler of that prefix position zone which must otherwise be empty, and that in its phonological shape the glottal is superficial, while the /i/ quality of the vowel proves to be basic. The third example is again from Rezanov's *коинстакль* (<*koinstakl'*>) 'to forget', which has to be read [*'u*]k'wah 'i:nsta:gL 'forgetting repeatedly'; see §18.13.1.3, theme *o-k'ah l-ta*. Obviously the /s/ is retained, but the /i/ itself evidently not, as we see here the *lA-* > *-n-* rule operating before coronal, instead of perhaps expected *\*?lista:gL*.

We have three examples of the gerund of intransitives with thematic ("qualifier") prefixes and without (')*is-*. These are the following: *li'X lAt'u:l* 'smiling', *o-ch' dla:XAt'u:l* 'watching o' (cf. *'ist'u:l* 'being'), *dAche:l* 'hungering'. This leaves us with three examples of definitive qualified gerund with 'is-, three without. No attempt was made to test the possibility of including *is-* in these instances, or the reverse. Use of (')*is-* must remain maximally uncertain in this respect for intransitive gerunds.

Also interesting would have been the gerund of *gu-LA-a:n'* '(sg) stand', *guwa:n'* (> *\*?guma:?*), *\*?gu-?-isa:n'*, but this was never aggressively enough tested. Only a (defective,

third person, still with classifier) perambulative  $yAX\ guLa:n'[X]$  'is standing about, it has tired me' is attested for that (V 148 L).

### 18.13.1.7 Special cases of gerunds

There are a few gerund forms with special morphological traits: prefixal *'ish-* instead of *'is-*, special allomorphs in connection with suffixal *-l*, and *-qu'* ~ in Zone B, taken up individually as follows.

#### Gerunds *'ishguG*

Very similar to the otherwise non-prefixed intransitive gerunds with *'is-*, we have an abundantly attested form *'ishguG* 'lie, falsehood, deception'. This must be the gerund of the verb *-guG* ~ *-gwAG* 'tell lie', many times adverbialized in *'ishguGdah* 'falsely' e.g. with the themes *d-le* 'say', *O-'L-Xa'* 'tell of O'. Of the total of at least 16 instances, only once is it transcribed with *'is-* (Marie). From all others, including five instances from Rezanov (1805), it is always *'ish-*. Nonetheless, this may well be, or have been, the gerund of *-guG*, labialized to /sh/ possibly because of the labialization of stem-initial /g/, still sometimes to be heard as such in *-g(w)e:G-k'*, the stem of the customary, with expanded vowel. Most importantly, however, there is no other known Eyak prefix *'ish-*, with the sole exception of the particle or adverb *'ishta:* 'long ago', segmented *'ish-ta:* but opaque.

Jeff Leer (p.c.) points out that the *'ish-* here instead of *'is-* may be a trace of the pejorative shift  $s > sh$  (cf. §6.14), well attested in Tlingit, applying to the whole obstruent series. If so, it would reinforce the argument for the one other trace we have of that in the unique pair *Lits'anh* 'is strong' and *LAch'a:nG* 'is weak', the latter also suffixed with thematized negative *-G*, with  $ts' > ch'$  pejorative shift.

In this category, incidentally, was mentioned *'ishta:* 'long ago' as the only other item with the potentially pejorative /sh/ instead of /s/. To that should be added the formula for beginning a legend (reported by Lena, but never so attested) *'ishta:LAq'Ama'* as "Once upon a time..." The *-q'Ama'* could be a canonic stem, but could not be otherwise identified; the *-LA-* could either be a thematic *l-* qualifier for *-q'Ama'*, or just as likely, it could represent the *-l* suffix of an otherwise unattested open-stem gerund *'ishta:l*.

One other item may contain this *'ish-*, namely *chi'ch'isxah* 'wild celery turned to wood', which must probably be segmented *ch'ich'-ish-xah*, where *-xah* is 'grow' and *-ish-* is most probably the gerund prefix, 'growth to an undesirable state (?)'. Alternatively, it is possible that  $s > sh$  before labialized velar, which might apply equally to *'ish-guG*.

#### Gerunds *li'X 'i:ni:, qa'ni:, qe'gu:l*

There are also a few items attested as functioning like nouns, with unique morphology, which appear to be derived from verbs, and may be gerunds. Certain to be such is *li'X 'i:ni:* 'laughter', as in Rezanov's (1805) prohibitive 'don't laugh!' *ya'Xu: q'(ah) li'X 'i:ni:* 'no

laughing!’, from the theme *li’X l-le* ‘laugh’, with unique preservation here of nasal stem-initial, due to *’i:n-* allomorph of thematic *l-* ‘facially’, stem *-le* ‘act’, also the *-l* gerund suffix, with nasal umlaut of /e:/ to /i:/, i.e. *\*nA-ne:-n > ’i:ni:* (see above). That same is also attested as subject in *li’X ’i:ni: qa:la’X di:’yahL* ‘we feel like laughing, laughter (feeling) has come over us’. Lack of nasalization of the vowel in both directions is to be expected. Finally, the CV: form of the verbal stem, with long vowel, rather than CVh is also a probable sign of lost final sonorant. (In fact, it may well be that the only historical source for Eyak stems of the form CV: is from PAE stems with final sonorant.)

The form *qa’ni:* ‘fight’, functioning as a noun, and as object of a postposition in the theme *qa’ni:xa’X -a* ‘go to, get into fight’, as object of *qa’ni:* O-L-’ya ‘fight O’, and in Rezanov’s (1805) prohibitive ‘don’t fight!’ *ya’Xu: q’ah qa’ni:* ‘no fighting’. The *qa’* is probably the preverb *qa’* ‘up out, suddenly’, the verb stem might well be the same *-le* ‘act’ as in *li’X ’i:ni:* ‘laughter’ with gerund suffix, *\*-ne:-n*. Reinforcing the possibility that this too is to be seen as a gerund is its use in the 1805 Yakutat prohibitive from Rezanov.

One other form, *qe’gu:l* ‘Thunderbird’, clearly has the appearance of a gerund, and can certainly be from *qa’* ‘up out; suddenly’, *’i-gu-l*, with *’i-* indeterminate object, an unidentified *-gu* or *-gu’* verb stem, and *-l* gerund suffix. The closest verb theme to *’i-gu* is *’i-g(w)a’* ‘dance’, which has the attested gerund *’ig(w)ah* (see above), a transitive with thematized indeterminate object, *’g(w)a-ing* things’, opaque. Possible semantic connection may be the sound of drums, but *-gu:l* instead of unattested *-g(w)a:l* is not explained. Rezanov (1805) has twice *Кероуль* (<Kegoul’>) for ‘lightning’, which might instead imply a stem *-gAw* (cf. O-*gAw(i)* ‘feel O’). Most interestingly, Wrangell (1839) has *кагяуль* (<kagiaul’>) for ‘thunder’, which may confirm that interpretation of Rezanov’s stem, or may be a transposition (we lack Wrangell’s manuscript) for *кагяуль* (<kagiaul’>) for *qa’igu:l* or *qa’igAw:l*.

### Gerunds *k’uqa’she:l*

Finally, we need to call special attention to the gerund form *k’uqa’she:l* ‘hunting’, attested only once from Anna in text, in *k’uqa’she:lXa’* ‘for the purpose of hunting’. It appears here asyntactically, appositively, in the phrase *’a’q’ ’a:k’, k’uqa’she:k’, k’uqa’she:lXa’* ‘it (giant rat) would go out (customarily), it would hunt (customarily), for the purpose of hunting’. The theme for ‘hunting’ is clearly derived from the theme O-*she* ‘kill O’, as in *sishehL* ‘I killed it’ or *k’uqa’she:k’* ‘it will (customarily) kill something’, which also means ‘it would hunt, (customarily) hunts’. The simple gerund of *k’usheh* ‘it’s killing something’ would be *k’ushe:l*, unattested. This theme involves the lexicalization of the Future paradigm, the prefix for which, uniquely, is in Zone B instead of Zone D, which is empty in gerunds.

Given the careful taboo observance so crucial for hunting success, need for discretion, avoidance of unlucky presumption, it would seem that this use of the future prefix would be called for indeed. Moreover, the future is in the same zone as the directive, to which it has a relation through the irrealis, the prefix that distinguishes between ‘kill something’ and ‘go hunt (and maybe, with luck, be going to kill something)’. (Cf. §18.13.6 on the acquisitional,

and *'udAt'A:Xd 'Adqu'li:ta'L* 'smokehouse', *'uwa:LX 'kuqa'xut'L* 'target; columbine' in §18.13.3 on instrumentals.)

### 18.13.2 Verbal nouns

Contrasting morphologically but overlapping in part semantically with the gerund is the verbal noun. There are deverbalizations with open stems having zero suffix instead of *-l* (or *-L*), and without *'is-* in the case of intransitives, some of which seem to denote the verbal activity or state itself, as well as many more that refer to a concrete noun.

#### 18.13.2.1 Open variable stems

Of over a dozen such verbal nouns that seem to refer to activity or state rather than concrete object about eight (59) are intransitive.

(59) Verbal nouns from open invariable stems

*yAqah* 'dawn' < *y-qa* '(day) dawn'

*tl'eh* 'cold, chill, cold (illness)' < *-tl'e'* 'cold'

? *-leh* 'activity' in *-dAG-A-leh* 'mind' < 'activity above'

*tsin'dAleh* 'speaking; language' (partly interchangeable with the gerund *tsin'dAle:l* for *tsin'd-le* 'speak', and probably partly contrasting, in the sense of 'language', e.g. *'i:ya:GdAlahGAyu:ya' tsin'dAleh* 'Eyak(s) language')

? *-Leh* 'being, becoming?', in *Lanhd Leh* 'tobacco, cigar, cigarette' < 'being smoked', and in *dzAwuL guLeh* 'net-cord' < 'being net', given the semantics and given that the stem is irregularly variable

? *sAqe:GAyu:XA' qe'le'* 'babysitting' < *qa' 'i-le'*, similarly irregular verb stem, with different variant

? *qu:lAXA'ah* in *qu:lAXA'ahch'iya'* 'mean guy', from *qu:lAXA-* 'belligerent', with *-'ah* probable verb stem *-'a* theme otherwise unknown, and *-'ch'iya'* 'master at o'.

Another is the very productive theme *-'ya* 'be involuntarily situated', very productive, attested only once with *-l*, in *qa' 'isya:l* 'staying awake' as in *qa' 'isya:l xusALga'L* 'I'm tired of staying up', but without *-l* in *la'yah* 'old age' as in *la'yahyAXa' -'ya* 'succumb to old age', from *l-'ya* 'be old'; *dAt'a'(')yah* 'difficulty' from *dAt'a' -'ya* 'get stuck (behind indeterminate o)'; *leh GAla'yah* 'year' from *o-leh Gl-'ya* 'year passes for o'; more concrete result is in *dAlu' qa' la'yah* 'boil, carbuncle' < 'emergence out through hole'; *la'q' lAXA'yah* 'old berries' < 'berry bursting (?)'. These various instances of *-'ya* 'be involuntarily situated' together may begin to give some idea of the semantic difference between gerund and verbal noun; if e.g. *\*?la'yal* (or *\*?'i:nsya:l*, *\*?lisya:l*) *xusALga'L* 'I'm tired of/ ruined by old age' had been tested, that might have yielded a kind of minimal pair between gerund and verbal noun, something like English '(act/process of) growing old' and 'old age'.

Probably intransitive is *gah* (~ *gwah*) ‘dance’ (event, activity), as in *gah sid* ‘Alde’g ‘teach me (*sid*) to dance!’, *k’udzu: gah* ‘good dance’, *k’u:nda’ch’ gah* ‘(Russian Orthodox) prayer’ < ‘dance toward (-*ch*) face (*k’u:-nda*)’. Cf. verb *’i-ga’* ‘dance’, verbal noun *’igah* ‘dancing’ as in *’igah xuGALga’L* ‘I’m getting tired of dancing’, with indeterminate object of unknowable meaning. Cf. also *qe’gu:l* ‘thunder(bird)’, perhaps from *qa’ ’i-gwa:-l?*

There may be or have been, *Xanh* ‘desire to weep’, given the verbal or adjectival meaning of the form, likely variability of the stem, even though none could be elicited for the stem.

There are at least six further such verbal nouns, from transitive themes. Of these, three are attested with *-l* suffix as well as without, thus potentially minimal pairs. No patterning is clear. Adequate investigation was not done. It is indeed possible that no difference in meaning could have been discerned, and/or that further variation between zero and *-l* could have been found, had more aggressive testing been done.

From O-*tsinh* ‘sing O (song)’ we have both *k’utsinh xuGALga’L* (from Marie) and *k’utsi:nl xuGALga’L* ‘I’m getting tired of singing’, *k’utsi:nlya’X -a* ‘walk singing’ from both Lena and Marie. Cf. noun *tsi:ny* ~ |eytsi:n ~ *tsinh* ‘song’, and *k’utsinh* ‘singing; phonograph record, record player’, latter meanings possible from homophonic Active imperfective relativization ‘that which sings’.

From O-*dA-la* ‘drink O’ we likewise have *k’ulah* ‘drinking’ (including especially alcoholic), *’ulah* ‘drinking it’ (see further below under third person direct objects of deverbalization); also *k’ula:l* evidently in later source, not identified, clearly less frequent.

From the theme O-*X-a* ‘eat O’, we have *k’uwah* ‘eating, meal’, with multiple attestations consistently with that form, no *k’uwa:l* attested, and uniquely without *X*-qualifier, intrinsic to the theme in Eyak, though cf. Athabaskan O-*a*; also *’Awah* ~ ‘eating it’ (< *’uwah* < \**’u-ah*). At the same time we have *’id k’uXa:l xuGALga’L* ‘I’m getting tired of feeding you’, a perfectly regular gerund of the causative, with *L*-classifier duly deleted, but with the qualifier retained; neither alternative, \**k’uXah* or \**k’uwa:l* was tested. Cf. also *Giyah* ‘food’, possibly eventually from \**G-’e-a*.

Three more verbal nouns are attested only with zero suffix. Two of these are from directive themes. From the theme O-’-*Xa* ‘tell of O’ we have the noun *wAXah* ‘story, news’, which must somehow be derived from a verbal noun \**k’u’wAXah*, in order to explain the prefixal *wA-*. Neither this nor \**k’u’wAXa:l* were tested. For the preceding cf. *k’uwAqah* ‘counting’, verbal noun from O-’-*L-qa’* ‘count O’, as in *k’uwAqah xuGALga’L* ‘I’m getting tired of counting’, so attested exactly like gerundive, without test for potential alternative \**k’wAqa:l*. A third transitive attested with zero suffix only is from O-*sha* ~ ‘dig (for) O’: *k’ushah* ‘digging’, as in *k’ushah xuGALga’L* ‘I’m getting tired of digging’, again clearly with meaning of gerund, \**k’usha:l* untested; also *Ge’Gi’shah* ‘cemetery’ (< \**Ge’t* ‘bodies?’), *G-’e-sha* ‘digging of place for’ (?); cf. pure instrumental *sha’L* ‘digging-stick’.

The woman’s personal name *q’e’te’teh* is certainly a verbal noun, from *q’e’ dA-teh* with deleted *dA-* classifier, either from intransitive ‘lie back down’ or passive of transitive ‘be found’ from *q’e’ O-te* ‘find (living) O’ < ‘bring living O back’.

For the difference between gerunds and verbal nouns, conceivably syntax may provide some better explanation than semantics, to be considered under §18.13.2.2. Another consideration might be semantic in the possible difference between action or state generally and the more specific or concrete notion of individual action or state, i.e. e.g. ‘eating’ versus ‘meal’, ‘singing’ versus ‘song’, ‘dancing’ versus ‘dance’ (event), in spite of apparent counter-examples above, e.g. as subject of *xuGALga’L* ‘is tiring me’.

### 18.13.2.2 Closed stems

Closed stems are a final category of deverbalizations with gerund-like meaning that contrast morphologically with the gerund so must be classified as verbal nouns. These appear without *-l*, and without qualifiers, would be eligible for *’is-* prefixation, but lack that prefix. There are several dozens of such stems where the meaning is concrete, especially for artifacts. These are not considered here; the definitive criteria here are semantic, requiring a gerund-like meaning, verbal action or state, or at least potentially that.

These forms must also be from intransitive themes, so without potential object prefixes i.e. themes that are at least potentially non-derived intransitives. With these closed stems, special attention will be given to the frequency of suffixed *-L*. Mechanically repeated instances in a single session are counted as single instances.

From *-tsu’d* ~ ‘sleep’, we have *tsu’d* ‘sleep’, as in *tsu’dyAq’ yAX xda:X* ‘I am walking about in my sleep’, attested ten times without *-L*, including Rezanov (1805), Wrangell (1839), Furuhjelm (1862a), once *tsu’dL*. From *-k’a’d* ‘sick, hot’, we have *k’ahd* ‘pain, sickness’ and *k’a’d* ‘pain, sickness; psychosis’, over ten instances of each; but of *k’a’d* no instances are with *-L*, whereas with *k’ahd*, half are with *-L*. These forms contrast with a potential *\*?’istsu’d*, *\*?’iska’d*, presumably never tested. Another six such verbal nouns also referring to condition or affliction are attested, none with *-L* suffix: from *-gehdz* ‘miserable’, *gehdsah* ‘poor thing!’. More such forms are presented in (60).

#### (60) Verbal nouns from intransitive themes with closed stems

From *LA-qahdX* ‘cough’: *qahdX* ‘cough’

From *-Ge’* ‘seasick’: *Ge’* ‘seasickness’

From *dA-Gu’* ‘warm’: *Gu’* ‘warmth; sweat’, *GAdAGu’* ‘warm weather’ (*Gd-Gu’*; cf. instrumental *Gu’L* ‘blanket’)

From *L-dAtl’* ‘suffer physical injury’: *dAtl’* ‘physical injury’

From *-Xawa’s* ~ *-Xa:s* ‘have itch’: *Xa:s* ‘itch, itchiness’

From *-dje:g* ‘tangled’: *dje:gL* ‘tangle, confusion’ (attested only with *-L*)

From *LA-qa:’* ‘yell’: *qa:’* ‘yelling voice’ cf. gerund *’isqa:’* ‘yelling’

Given that all examples in (60) are intransitive and without any prefixation, they may all be verbal nouns rather than gerunds, since none have the gerund prefix *’is-*, but it must be noted that perhaps for none of these was *’is-* tested. One item of this type

which we have both with and without *'is-* may refer to vocalization, *'iski:nX* ‘weeping’ in *'iski:nX xuGALga'L* ‘I am getting tired of weeping’ from *-ki:nX* ‘weep’, but also *ki:nX* ‘weeping, tears’, attested twelve times, always without *-L*, as in *ki:nX Aya'X Ga:Linh* ‘she’s walking along crying’. This pair, *'iski:nX* and *ki:nX* might have provided a chance to test for difference in meaning of gerund and verbal noun, not done. We have another pair of this type in *'ishguG* ‘deception’ and *guG* ‘deception’ (16 and 10 times, respectively, never with *-L*), from *-guG* ‘deceitful’, *d-guG* ‘tell lie’, where the two appear at least largely interchangeable. A third pair is *xa:gL* ‘work(ing)’ and *'isxa:g* ‘work(ing)’, with *-L* intrinsic to the stem missing, by analogy, from *dA-xa:gL* ‘work’. From the data available in the dictionary for these and for other gerunds and verbal nouns, e.g. *Gu'*, it does seem that the gerund is restricted to the act or state, whereas the verbal noun may have a broader meaning. For *-ki:nX* ‘weep’ the verbal noun does indeed overlap with the gerund as the object of *o-ya'X* ‘while V-ing’, but the verbal noun *ki:nX* is also used in the sense of ‘need/desire to weep’ and especially of ‘tears’, as specified in the dictionary. There is at least one more verbal noun, referring to excretion, which may be appropriate to cite here: *tse'q'* ‘urination’, from *-tse'q'* ‘urinate’, *-tse'q'* ‘urine’; from *(-)ch'e'* ‘feces’ and *-ch'e'* ‘defecate’ we simply do not have ‘defecation’ attested. One more item probably belonging here is *wAt'* ‘vomiting, urge to vomit; vomitus’ from *-wAt'* ‘vomit’ (verb), where the verbal noun, or noun from which the verb is derived (cf. Athabaskan *\*-wət'* ‘belly’), is attested six times with zero suffix, but once with *-L* in *wAt'L'At'u'* ‘lots of vomit’ from Marie. Finally, it appears that there may be only one of this category, intransitive, definitively a verbal noun, which is attested only with *-L* suffix, once, *'uhdzL* ‘tingling’, cf. *L-'uhdz-g* ‘have tingling’. Note, on the other hand, without *-L*, *XAXg* ‘quivering’ in *XAXg yAdi:Leh* ‘fresh fish meat’ < ‘quivering it (fish meat) is’, from *LA-XAX-g* ‘quiver’, *'Ash-g* ‘sneeze (act of sneezing)’ < *LA-'Ash-g* ‘sneeze’.

Though the frequency of suffix *-L* is higher than in preceding categories, clearly the overall majority overall with these closed stems is still zero suffix rather than *-L*.

### 18.13.2.3 Forms precluding morphological distinction between gerund and verbal noun

Herewith ends the list of recognized forms that appear to be verbal nouns as distinguished from gerunds, as not only do closed stems preclude suffixation of *-l*, but other prefixation, i.e. qualifiers much of the time, and transitives regularly, preclude prefixation of *'is-*. In these cases gerunds and verbal nouns must be morphologically indistinguishable.

There are thus several intransitives from themes that have intrinsic qualifiers. Though it is true that some such themes are attested as verbal nouns with *'is-* prefixation, some (open stems with *-l* suffix) are not, implying that for those with closed stems with no *'is-* no distinction between gerund and verbal noun can be made. Such examples are given in (61).

(61) Gerunds / verbal nouns from intransitive themes with intrinsic qualifiers



From *d-LA-xe:g* ‘whistle’: *dAxe:g* ‘whistling sound’

From *d-dA-tux* ‘expectorate’: *dAtux* ‘spitting’ (Rezanov)

From *d-q’e:k* ‘angry’: *dAq’e:k* ‘anger’ (Rezanov),

From *d-dA-’a:t* ‘bawl’: *dA’a:t* ‘bawling’

From *l-dA-k’ahg* ‘(child) play’: *lAk’ahg* ‘(child’s) playing’

From *l-wAdj* ‘ashamed’: *lAwAdj* ‘being ashamed’

*qa’t’g* ‘boiling, act of cooking’ (Rezanov only, cf. *la’mahd da’ qa’t’g* ‘canned fruit’ and *da’ lAXAqa’t’g* ‘canned berries’ below)

From O-’a’tl’ ‘chew O’: ’a’tl’(-y-’e’d) ‘bite-mark’ and (*gahG*)-*dA’a’tl* ‘(act of) chewing (gum, *d*-class)’

From *lX-lA-XAL* ‘intoxicated’: *lAXAXAL* ‘intoxication’ (with potential *-L* suffix)

From *l-gehG* ‘lonesome’: *lAgehG(L)* ‘loneliness’ (once with *-L* suffix but twice without), in *lAgehGLdah k’u:t’eh* ‘it is (a) lonely (place)’ from Lena, later from her *lAgehGdah k’u:t’eh*, *lAgehGga’ k’u:t’eh*

From *yAX Xdl-dA’ya-X* ‘run about’: *yAX XAdla:’ya:X* ‘running about’, very probably a gerund, from the semantics (cf. *yAX ’isa:X* ‘walking about’), derivational affixes precluding both ’is- and *-l*

From ’*lL-l-Xa:’ l-qu:-g* ‘in competition with each other plural keep running’: ’*lLlAXa:n’ lAqu:g* ‘running race’, also very probably a gerund

There are more forms that may fit this category of verbal noun, but which are much more questionable semantically. One such form is *gAdAGAmAk* ‘gnat’ < ‘round-butt’, cf. *LA-GAmAk* ‘round’. Another is *la’mahd da’ qa’t’g* ‘canned fruit’ < ‘boiling of berries, declassified, into jar’, *da’ lAXAqa’dg* ‘canned berries’, cf. *LA-qa’t* ~ ‘boil’, or passive of causative O-*L-qa’t* ~, cf. *qa’t’g* in (61). Also *dA’ehdg* ‘dry’ as in *k’u:y dA’ehdg* ‘dry wind’, *sa:q’sg dA’ehdg* or *shug dA’ehdg* ‘dried dulce’ or ‘dried strawberries’ (pressed into hard block for winter eating), *lAXAdla:’ehdg* ‘raisins’, *sahx dA’ehdL* ‘dried cockles’; from *d-L-’ehdg* ‘dry’, or passive of causative.

Some of these may thus be from transitives, as passives of causatives, e.g. *lAXAdla:’ehdg* ‘raisins’ as from ‘berries which have dried’ or ‘berries which have been made to dry’. Here also, as referring to process rather than object thereof, is *dA’e:’sh* ‘stringing’, from O-*d-’e:’sh* ‘string O’, as in *sahx dA’e:’sh* ‘dried cockles on a string’, and *dA-’e:’sh te’ya* ‘dried salmon on a string’ from Lena (either for relativized *dAdA’e:’sh te’ya* ‘salmon which are strung’, passive, or *te’ya dA’e:’sh*). These may also belong to the category of quasi-instrumentals, q.v. §18.13.3, which happen to lack *-L* suffix. More such forms are presented in (62).

(62) Gerunds / verbal nouns from transitive themes

From O-*l-l-t'a'q* 'hook O (fish)': *'ilAt'a'q'L* 'trout-fishing (with hook)', with indeterminate O

*yahddAt'a:X'ehdz* 'potlatch at new house', cf. O-*'ehdz* 'invite, summon O'

From O-*'a'tl'* 'chew O': *'a'tl'ya'e'd* 'toothmark' and *gahG dA'atl'* '(act of) chewing gum', with *d-* qualifier for class of object, and with overt noun object *gahG*

From *'i-tsi:ndz* 'dream': *tsi:ndz* 'dream', with thematized indeterminate object, unless verb is from noun

From O-*tsinhG* 'grab O by handful': *tsinhGta:'*, a man's name

From O-*tl'i:ts'* 'soak O': *tl'i:ts'* in *tl'i:nts'ga'* *'AdiLit'inhinh* '(baby) has soaked himself' (< 'he (=inh) has made himself ('Ad-) like (-ga) soaking')

From O-*l-duh* 'flesh O (hide)': *k'u:nduh* 'fleshing something (hide)' and *k'ulAduh* 'unfleshed hide' (morphological equivalents with indefinite object pronoun, where both can probably mean either, and with invariable stem, hence *\*-du:l* rejected)

? From O-*l-l-wa'* 'grind O'(?): *ts'u:lAwa'* ~ *ts'u:lAwa'L* 'ice cream' (once each, from Lena) < 'grinding of milk', especially if referring to the act of making ice cream in ice cream maker with crank, resembling grinder, *ts'u:Awa'* refers to the activity, *ts'u:lAwa'L* refers to the product or the instrument, but that was never checked

From O-*ch'u'* 'steal O': *'ich'u'* 'stealing' in *'ich'u'ch'iyā* 'thief', with indeterminate O

From O-*L-GAdj-g* 'move O with end of stick repeatedly': *k'uGAdjg* ~ *k'uGAdjgL* 'paddling (canoe)', twice without *-L*, once with

From O-*L-xut'* 'shoot O with gun': *yAX 'ixetl'X* 'shooting about (with gun)', perambulative persistive, with indeterminate object, cf. here *yAX 'isxut'* 'shooting about', with *'is-* prefix, analogical, as if intransitive gerund

From O-*l-tsa'-g* 'buy O repeatedly': *k'u'wAtsa:gL* 'shopping', directive, attested only with *-L*

From O-*l-l-xa:-g* 'cause to grow': *sAq:GAyu: 'ulAxa:g* 'raising children', *'ilAxa:g* 'raising you', repetitive

From O-*L-ya:'* 'handle O in plural acts': *'ilT'a:n'ch' k'uya:'* 'gathering things together'

From *yAX 'Ad-i:lih-LA'ya:-X* 'cause self to be mentally situated about': *yAX 'Adi:lihya:X* 'thinking', perambulative

From *yAX O-'-e* ~ 'look about for O': *yAX 'ilA'a:nX* 'looking about', directive perambulative (?) and *'uyAX 'u'wA'a:nX* 'looking about for it', directive

From (O-?)-*d-dA-uhd-g* 'lay eggs (of bird)': *-d-'uhd-g* 'egg (of bird)'

Semantically ambivalent are *'Adi:ntl'a'gL* 'face painting', from *O-l-L-tl'a'g* 'mark O's face', reflexive, and *ya'X XAdAts'AX* 'throwing sticks', given both the glossing and the possible reference to concrete objects. Likewise *xAtl' lAXAdAq'* 'snowball' < 'snow (*xAtl'*) packed ball-like (*IXd-*)' may be seen as the act of packing a snowball or the result thereof. The case of *xa:gL* 'work(ing)' from the verb *dA-xa:gL* 'work' is ambiguous in a very different way, as the *-L* is invariable, part of the stem, to which suffixed *-L* would become zero; the form is certainly a verbal noun, but ambiguous as to *-L* suffixation.

Finally, there may be a goodly number more, dozens, of such deverbalizations in the corpus, which have been not recognized as such. At this point, a careful inspection was made of a sample of the dictionary, namely through closed stems beginning with *X-*. This revealed the following possibilities: *k'uXa:shg* 'beaver', from *O-Xa:sh-g* 'gnaw O', certainly a nominalization, could technically be a deverbalization, but given the zero classifier, this was assumed to be a relativization, 'that which gnaws something', better semantically; *k'uXa'tl'* 'clock; hour', on the other hand, from *O-L-XA'tl'* must be a deverbalization, and given 'hour' as in time-telling, may well refer to the action 'striking O', and Furuhjelm's (1862a) <Athalk> 'heart' is probably to be read *'AdXa'tl'g* repetitive reflexive of the same theme, *'Ad-LA-Xa'tl'-g* 'it beats itself repeatedly'; *tsa:lAXAL* 'gravel', < *tsa:* 'stone' as object of *l-XAL* 'granulation', also Rezanov (1805) *gulAXAL* or *k'ulAXAL* 'fine rain', from otherwise unattested theme, stem possibly *-XAL-L*; *Xihsh* 'scar(ring)', from *L-Xihsh* 'have scar'. The last noun may well be the basic form, from which instead the verb should be derived, or the matter is moot, of which there may be dozens of cases in Eyak.

One other form that may belong here is *suhgL-* in *suhgLdah* 'harm, serious misfortune (adverbialized)' in a number of expressions, q.v. in the dictionary. These are all strong threats or curses, attested 13 times, including twice in Rezanov (1805), always with *-L*. The stem is probably *suhg-*, not otherwise elicitable, as the *-L* may well go with adverbializer *-dah*; cf. *k'ahLdah* in expressions meaning 'hurt O', where *k'ahd* 'sickness' is a verbal noun otherwise without *-L*.

The lack of *-L* suffixation should not be allowed to influence the decision whether a form is a deverbalization or what type of deverbalization it is, as such influence would compromise the validity of using the frequency of that suffixation as correlating with the different types of deverbalization.

Out of a total of ca. 45 instances, counting duplicates, of these verbal nouns or gerunds unambiguous for *-L* suffixation, also unambiguous for being possibly Active imperfective relativizations, 39 are without *-L*, and 6 are with *-L*. Even allowing for some subjectivity in the listing, the statistics are presumably valid for showing a strong preponderance of zero suffix over *-L*. (For purposes of counting gerunds and verbal nouns separately in the table of nominal types above, these are counted as 22 each.)

### 18.13.3 Instrumental and descriptive deverbalizations, *-L* suffixation

In the process of first writing up “instrumentals” as a semantic category, I soon discovered that not only were instrumentals in three distinct formal categories, already obvious, but also that instrumental deverbalizations were formally indistinguishable from deverbalizations that referred to the product or result of the verbal action as semantically opposed to the means for it. The term “descriptive” was finally chosen as the label for the semantic category referring to the result or product. Here both instrumental and descriptive deverbalizations will still be treated separately, but also at least in juxtaposition. I had further concluded that “instrumentals” were not only in the formal categories of relativizations and deverbalizations, but in a kind of third as well, nouns suffixed with *-L* which appear to be of a simpler structure than deverbalizations obviously derived from verb themes or phrases. These can sometimes be seen to be deverbalizations, e.g. with overt direct object, but they lack preverbs and prefixes of Zone A and B, and may simply be seen as nouns with *-L* suffix. The meaning of that suffix in this group is by no means always instrumental either. These will be treated here together as related or a third category of deverbalizations, defined morphologically by suffixation of *-L*, though that *-L* is susceptible to deletion by analogy, in a relatively small number of instances.

There is an extra complication in the suffixation of *-L* to variable open stems. The usual result is CV'L, but in certain cases it is CVhL. Open stems therefore need to be treated separately before closed stems.

#### 18.13.3.1 Open stems with *-L* suffixation

As just noted, in the process of writing this grammar, the first type of deverbalization I wrote on was what I had called instrumentals, both relativizations and deverbalizations (often related). I then found, however, that the most elemental form, e.g. *sha'L* ‘instrument for digging’ (< O-*sha* ~ ‘dig O’) was not uniquely for instrumentals, but also was for nouns descriptive of concrete things that were the product or result of the verbal action, e.g. *dla:sha'L* ‘fortress’ (< ‘product of series of diggings’, cf. O-*dl-sha* ~ ‘fence O in’). Accordingly, those CV'L forms with instrumental meaning will be treated first, then those with the descriptive meaning, to be called “instrumentals” as opposed to “descriptives”, respectively.

#### 18.13.3.2 CV'L instrumental

The very simplest instrumentals are monosyllables of the form CV'L from the simplest verb themes with stem *-CV*. These are *da'L* ‘seat in canoe’ from *-da* ‘(sg) sit’, *te'L* ‘mat’ from *-te* ‘(sg) lie prone’, both intransitives. Transitives are *sha'L* ‘digging stick’ from O-*sha* ~ ‘dig O’, *xa'L* ‘skinning/peeling stone’ from O-*xa* ‘skin/peel O’. Here also perhaps anciently *qe'L* ‘woman’, from an original meaning ‘means for producing children’ (cf. *-sA-qe:-G* ‘man’s son’, *sA-qe:-GA-yu:* ‘children’, *sA-qe:-ts'-Akih* ‘child’ < \**sAqe:-kuts'*, PA \* $\zeta^{wr}$ ən'-qe: ‘woman’ < ‘female-’). Another very basic noun, *tša'L* ‘knife’ is quite probably

of such origin (cf. *'uX k'utsa'L* 'plane' following, *tsa:* 'stone', PA \*tse:, O-*Xd-tsa* 'sharpen O', *GAsAtsah* 'wood shavings').

Far more common are deverbalizations of themes with more complexity, qualifiers, and/or especially preverbals, intransitive or transitive, including object prefixes. Thus we have, from Rezanov (1805) only, *оxкoцaаль* (<*oxkotsaal'*>), *'uX k'utsa'L*, even showing the glottal stop by the <aa>, glossed 'cтpыг' ('(carpenter's) plane'), unconfirmed, not the modern term. This would be quite typical if a verb \*O-*tsa* 'cut O somehow with stone knife' instead of just derivatives thereof were attested; Rezanov's instrumental is no doubt from a usitative passive, 'by means of it something is so cut'; the *k'u-* must be the object, not subject, pronoun as will be seen in many other instrumentals, relativizations as well as deverbalizations below.

Further examples are given in (63). Note the huge disproportion of items from Rezanov (1805), in fact nearly all initially from Rezanov, mostly confirmed with Lena, but modern use less consistently confirmed.

(63) CV'L instrumentals

*dAde'L ~ dide'L* 'lamp' (*dAde'L* in Rezanov 1805, modern usually *dide'L*, < *d-LA-de* 'emit light', cf. relativization *dAdAdeh* 'flashlight')

*'uyAq' q'a'L* 'oven' (Rezanov 1805, cf. stem closed with repetitive *'uyaq' 'iq'a:gL* 'stove' and relativization *'uyAq' k'u'Lq'a:g* 'stove')

*'uya'd k'ut'u'L* 'container' (< 'in it (with broad opening at top: *-ya'*; at rest: *-d*) something (*k'u-*) is kept', Rezanov 1805, verified)

*'uX qa' k'uqa'L* 'pliers' (Rezanov 1805, < 'by means of (*-X*) it (*'u-*) something is bitten—pulled as with teeth—up out (*qa'*)'; cf. relativization *'uX k'udAqah* 'pliers')

*'uyAq' yAX k'u'an'L* 'telescope' (with O-'*-an* 'look at O', Rezanov 1805)

*'uya' yAX k'uya'L* 'tray' (< 'in/on (*-ya'*) it downward (*yAX*) some things are put', Rezanov 1805)

*'uyAq'Ach' k'uya'L* (or *k'uya:L*) 'storage-box' (< 'repeatedly into it (enclosed) some things are put', Rezanov 1805)

*'uq'Ach' da:X 'ita'L* '(skin-)stretching-frame' (< 'on it (continuously) across indeterminate O is put', *da:X ta'L* 'stretching-frame' (clearly also instrumental in view of preceding, Rezanov 1805)

*'udAt'a:Xd 'Adqu'li:ta'L* 'smokehouse' (probably more instrumental than descriptive, directive of *'Ad-* O-'*-l-dA-ta* 'smoke O (fish, for self?)', < 'in the shelter of it (*d*-class) O is kept under controlled conditions'; note the use of future *qu'*, cf. the gerund *k'uqa'she:l* 'hunting' and acquisitional *k'uju'wAshe:ch'L* 'to hunt', probably from taboo, discretion, on premature declaration of success; not also exceptional use of "inflectional" prefix, Zone B, not D)

*'uX dAda'd k'uXAdAta'L* 'key' (< 'by means of it something is opened', Rezanov 1805, cf. *'Aw Le't' dAda'd XAdAsAtahLinh* 'he opened the box'; so this is very possibly a spontaneous coinage by a speaker observing 1805 demonstration; modern 'key' is *gAlu:dj*, loan from Russian)

*'uX k'uXAd[l]a:ta'L* 'lock', probable reading of Rezanov (1805) *оxkoxetatatl'* (<*okhkokhetatatl'*>) 'замок Schloss' < 'by means of it something is placed crosswise'. This seems to be literally a mixture of instrumental and descriptive, and appears to be an attempt to translate 'замок' 'lock' without a clear notion of the item.

The last pair of *'uX dAda'd k'uXAdAta'L* 'key' and *'uX k'uXAd[l]a:ta'L* 'lock' shows the close relationship between instrumentals and descriptives.

### 18.13.3.3 CV'L descriptive and ambivalent

As noted above, formally identical with instrumentals are forms that have to be called descriptives.

#### (64) CV'L descriptives

*dla:sha'L* 'fortress' (historical, now only a place name, with clear meaning 'fortress' (< 'product of a series of diggings', definitely not 'means for series of diggings', though perhaps interpretable as 'act of serial digging', but never so glossed)

*gu'a'L* 'hip' (unpossessed noun with *g-* qualifier 'hip area' and descriptive deverbalization *-a'L* '(sg) extend' or '(sg) be in position', definitely not 'means for' anything)

*k'u:ta'L* 'floor' (analysis unclear, especially stigma */:/* in prefix; correctness uncertain; cf. *qu'Lta'L* 'floor' ('is in *qu'* position', meaning of *qu'* unclear, cf. preverb *qu'* 'fire'; there is no doubt about the correctness of this form; cf. the two following); less certainly correct is *k'uta'L* 'floor' < 'something is put in position', probably a neologism for the preceding

*qa:lah wAX qu't'u'L* 'grave fence', < 'around (*-lah*) us (*qa:-*) it is kept *qu'*', apparently with the same prefix as in *qu'ta'L* 'floor', in which case the identity with 'fire' is unlikely; not future *qu'-~*, which would have allomorph *qa'* - without intervening vowel before stem

The other clearly descriptive examples of *-CV'L* with open stem have the stem *-(y)a* plural classificatory or *-a'* '(sg) extend' in all or most cases (65), rather than *-a* singular classificatory:

#### (65) CV'L descriptives with *-(y)a* plural classificatory or *-a'* '(sg) extend'

*la'X dAya'L* 'necklace' (< *la'X* 'down over head') and *la'X LAXAdla:ya'L* 'bead necklace' (cf. *O-lXdL-(y)a* 'put series of *lX*-class (berry-like) O')

*ya:n' dA'a'L* 'ring (for finger)' (< *ya:n'* 'down', '*d*-class extends' or 'is put')  
*dAga'q'LdAlah 'a'L* 'necklace; ribbon around neck' (*dAga'q'L-dA-lah* 'around neck')  
*dAGAdA'a'L* 'steep dangerous place' (*dAG* 'above', epenthetic schwa as in compound (cf. §18.10), *-a'* '(sg) extend', either with *d*-qualifier, unexplained, or *dAG-d* with two epentheses, for which cf. *XAdAGAdAya'L* 'fish-drying rack' and *k'udAGAdAya'L* 'smoking rack' next paragraph).

More difficult to distinguish semantically between instrumental and descriptive are the following with open stems. Simply so are e.g. *djAXAtl'i'L* 'earring' and *k'ushtl'i'L* 'garter' (Rezanov 1805) 'bound to ear' and 'bound to leg', respectively, where the concrete thing can be seen as 'means of binding ear/leg', or 'thing bound to ear/leg'. Possibly ambiguous is the pair *XAdAGAya'L* 'fish-drying rack' (*XA-dAG* 'area above', epenthetic schwa; cf. synonymous relativization *XAdAGALAyah*, above) and *k'udAGAdAya'L* 'smoking rack' (*k'u-dAG* 'above something', /A/ either with *d*-qualifier 'wooden', which would make the derivation descriptive, 'pl wooden are placed above something', or *k'u-dAG-d-* with epenthesis on both sides of *-d-*, thus referring instead to a means for placement of unclassified direct object ('fish'); cf. *dAGAdA'a'L* just above). There are yet two more synonymous forms. One is *k'udAGAdAya'*, missing the *-L* itself, which could be looked at as a unique instance of zero instead of *-L* as in other deverbalizations above, or as an instance of compound with *-ya'*, possessed form of 'thing', with epenthetic schwa as expected, or as a momentary lapse. Finally we also have *qu:ndAGAdAya'L* with *qu:n-* ~ 'fire' as object of *o-dAG* 'above o'. For further details on each see the dictionary.

Apparently ambiguous in this respect also is *dAXAyAX yAX XAdA'a'L* 'lantern' (Rezanov 1805, confirmed by Lena, cf. relativization *yAX XAdAda'ah* 'candle' < *yAX* 'down (into socket) it (*Xd*-class) is caused to extend', as well as *dA-XA-yAX* 'in area underneath', i.e. either 'instrument for having candle under' or 'it (candle) is caused to extend down under it'). Likewise probably *utl' dAlu' qa' k'u'a'L* 'safety pin' (< 'something (*k'u-*) is extended up (*qa'*) through hole in (*-lu'*) indeterminate o (*dA-*) with (*-tl'*) it (*'u-*), exact interpretation unclear). Likewise certainly is *'utl' 'iLlah 'Adlitl'i'L* 'hairpin' (from Anna 6/19/871, < 'with (*-tl'*) it (*'u-*) around (*-lah*) each other (*'iL-*) bound to one's own (*'Ad-*) head (*l-*), presumably derived from a reflexive, but much more like an instrumental; status in Eyak otherwise unconfirmed, smacking possibly of Anna's glib creativity).

#### 18.13.3.4 CvHL instrumental, descriptive, or ambivalent

A major reason for treating open-stem deverbalizations of the form CV'L separately from closed ones is because of the strong possibility that CV'L deverbalizations may contrast with open-stem deverbalizations of the form CvHL, most particularly Eyak *XehL* 'backpack; burden carried on back' from O-Xe 'carry O in pack on back' as opposed e.g. to *te'L* 'mat' from *-te* '(sg) lie prone'. This is clearly the case also in Athabaskan, with what appear to be the exact cognates, from PA \*xe:l and \*te:l, with consistent tonal contrast in many

Athabaskan languages; in fact \**xe:l* and \**te:l* are a kind of classic tonal minimal pair for Athabaskan.<sup>12</sup>

This nevertheless presents a challenging problem for comparative Athabaskan-Eyak, on two accounts. One problem is that almost all Eyak deverbalizations of this sort are CV'L instead of CvhL, the only other probable Eyak example of CvhL being *tsi'lahL* 'pillow', PA \**tsi'a:l*, leaving aside the issue of the Eyak examples being CvhL rather than CV:L. The other problem is that while all the other examples in Eyak are CV'L, Athabaskan examples may be CV:L, e.g. Eyak *-tl'i'L* in *djAXAtl'i'L* 'earring', *k'ushtl'i'L* 'garter' (PAE \**tl'iw-*), but Athabaskan has \**tl'u:l* 'rope', consistently, never \*\**tl'u:l* which would correspond with the Eyak. I am unaware of any comparative study of Athabaskan deverbal suffix *-L*, which would help explain this problem. It is clear that Athabaskan has such a suffix (see below on *-L* literature, Li 1956), on closed stems as well as open, CVC-*L*, best reflected in Koyukon, e.g. *sehtl* 'pot hook' < \**š<sup>wr</sup>əq'-l*, mentioned in Krauss and Leer (1981: 110), but, again, any systematic study or even listing of these is apparently lacking.

Conceivably, there were two kinds of *-L* suffixation, *-l* and *-hL*, which might yet be detected comparatively with Athabaskan, but which in Eyak got generalized to CV'L except for the case of *XehL* 'backpack'.

Though the relationship between O-*Xe* 'carry O in pack on back' (e.g. *GAXXE:L* 'I'm backpacking it along') and *XehL* 'backpack' seems clear, the synchronic relationship is far from clear. There is no fully parallel example of verb CV and deverbalization CvhL, *tsi'lahL* 'pillow' notwithstanding.

The cognation and etymology of *tsi'lahL* may well parallel that of *XehL*, in that PA \**-tsi* 'head' and Eyak *-tsin* 'nape, neck', clearly cognate, explains the *-l* of the second syllable-initial nicely, as metathesis from *-n'*, for which there are other instances in Eyak (cf. §6.4). The form has also come to mean 'comb' in Eyak (already in Rezanov 1805), with *tsin'* as qualifier and stem now *-lahL*, including however the glottal initial. The Athabaskan means only 'pillow'. An Eyak relativization specifically for 'comb' was also elicited, *'uX 'Adk'utsin'da'lahL* 'that with which one combs own hair'. The stem, unless originally unique for 'pillow', is most likely the singular classificatory *-a* for 'roundish' subject or object, clearly *-lahL* for Eyak, \**-a:l* for Athabaskan, as in the case of *XehL* 'backpack'. The meaning in the case of 'pillow', incidentally, is descriptive rather than instrumental, as in the case of *gu'a'L* 'hip' above, so the difference between CV'L and CvhL is not in those semantics. Possibly discrediting this etymology is Hupa *k'e-tse-L-AL* 'put head on headrest' with perfective *-a'tl'*, homophonous with *-a'tl'* 'chew O', but that may be analogy, especially given the consistent unmarkedness of the *-a:l* for tone in Athabaskan generally.

<sup>12</sup> I probably made no attempt to elicit \*\**Xe'L* or \*\**tehL*, but the attested forms are so consistent that those in question would almost certainly have been rejected.



There is further complication in the meaning of the stem *-XehL*, specifically as found in *k'u-XehL* 'rope, cord, twine, string', where the *k'u-* appears to be the direct object of a deverbalization, not possessor, Lena rejecting *\*'uXehL* 'its rope etc.' There is also the verb *O-L-XehL* 'tie O with rope etc.' The verb may be derived from *k'uXehL*, but perhaps more likely the deverbalization is derived from *O-L-XehL*, i.e. < *k'u-XehL-L*. In any case, these are presumably derived from *O-Xe*, as backpacks certainly involved ropes, or even consisted of ropes, which of course invites speculation that the derivation is in the reverse direction of that one might expect. Finally, we do have a term for 'backpack' itself, as opposed to the burden, the relativization *'uyAq' yAX k'udAXe:X* 'in (-yAq) it ('u-) something (k'u-) is backpacked about (yAX, -X)', and also *'uX yAX k'udAXe:X* 'pack-strap, tumpline' < 'by means of (-X) it something is backpacked about', and what appears to be *'uX k'uju'dAXeh* 'pack strap' < 'by means of it something will (qu-) be backpacked' from Galushia Nelson in 1933 (cf. §3.3.4.2. All these relativizations appear to be derivative neologisms for modern backpacking.

### 18.13.3.5 Special category 'is-CV'L

Before going fully on to closed stem deverbalizations with *-L* (~ *-Ø*) suffix, there is one more small but striking category of deverbalizations to describe, attested in only five items (66). These all happen to begin with a preverbal.

(66) Deverbalizations with preverbal and 'is-

*'uq' 'isda'L* 'chair' (< 'on(-q) it ('u-) (sg) sit (-da)')

*'uq' 'isqu'L* 'bench' (< 'on it (pl) sit (-qu)')

*'uq' 'iste'L* 'bed' (< 'on it (sg) lie prone (-te)', closed stem, no *-L*)

*'uya' 'ist'u'ch'L* 'blanket' (< 'in (-ya) it ('u-) (pl) lie prone (-tu'ch)')

*'uya' yAX 'Adistsitl'X* '(ice-)skates' (< 'in them cause self to slide about', from Marie, perambulative reflexive causative (yAX, -X), including 'is- after direct reflexive object ('Ad-), possibly irregular.

Note that the last two items in (66) are with closed stem and no *-L* suffix.

One might expect such a small category to be an ancient fossil, especially with such obsolescent morphology as 'is- confined to intransitive gerunds, and unstable *-L* deverbal suffix. Quite the opposite, however, is the case, as must be obvious from a consideration of literally all the referents to these deverbalizations. All refer to items that cannot predate European contact, including what must be modern blankets. These must all be neologisms, made up of morphology still being used productively. The second item in fact is attested only in Anonymous (1810) from Yakutat, at a time when Eyak was already approaching extinction there. The reading of the form is clear, and so is the meaning, 'on it pl sit'. The gloss, however, is *столь или кресло* 'chair or easy chair', not 'bench', further indication of less than perfect communication or familiarity with the object in question. This small

category is indeed a remarkable type of Eyak deverbalization, and a difficult one to fit into this narrative.

### 18.13.3.6 Closed-stem deverbalizations with *-L*

Eyak, unlike most modern Athabaskan, has no constraint preventing obstruent clusters in stem syllable coda of the form *-CL*, including e.g. *-tl'L* (though *-L-L > -L*). Unlike the case of Eyak CV'L just described, suffixal *-L* does alternate to some extent with zero after obstruent coda, as it does in the case of both *'uya' ist'u'ch'L* 'blanket' and *'uya' yAX 'Adistsitl'X* 'skates', listed just above (66). A fairly full listing is given in (67).

#### (67) Closed-stem deverbalizations with *-L*

*'uX 'AdlAXe'* 'mountain goat fat for face' < 'with (*-X*) it (*'u-*) self's (*'Ad-*) face (*l-*) is smeared', lacking *-L* suffix, Galushia Nelson)

*'ugu:nAX k'uXe'L* 'paint' < 'by means of (*-X*) it (liquid: *gu:n-*) something (*k'u-*) is smeared, painted'

*k'uGanta'L* 'soul' < unattested *k'uGandAtah*, passive causative 'someone is kept alive, made to live'

*'uX k'utl'a'gL* 'ink' (Rezanov), 'pencil' (Marie) < *O-L-tl'a'-g* 'make marks on O'

*'uq'ach' k'uts'AXL* 'anvil' (Rezanov), cf. relativization *'uq'Ach' k'udAts'AX*

*'uX k'udza'tl'(L)* 'chisel' (Rezanov), *'uX k'udza'tl'L* (Marie), *'uX k'udza'tl'gL* (Lena), cf. relativization *'uX k'udAdza'tl'g*, *'uX k'udAdza'tl'* 'chisel' from Lena, and *dza'tl'(g)(L)* 'peg, stake' below

*'uX k'udzuxL* 'awl' (Rezanov) < *O-dzux* 'stab O'

*'uX k'uts'AXL* 'saw' (Rezanov), 'scissors' (Lena, Marie) < *O-L-ts'AX* 'cut O'

*'uX k'ushitl'gL* 'saw' (Lena, Marie) < *O-L-shitl'* 'abrade O'

*'uX k'u'li:tsinhGL* 'seal, cachet' (Rezanov) < *O-'l-L-tsinhG* 'mark O'

*'uda:X 'AdlAsinhX(g)L* 'razor' < 'by means of it (*d*-class, knife) self (*'Ad-*) scrapes face (*l-*)', cf. 'razor' below

*'uda:X k'ushe:t'L* 'bark-scraping spoon' < *O-she:t'* 'scrape O (bark for cambium)'

*'uX 'AdlAk'u:dL* 'towel' (Rezanov), cf. relativization *'uX 'Adk'u:nLak'u:d*, and *k'uhdL* 'moss' < 'wiper' below

*'uX k'udAxu'tl'(L)* 'bellows' (Rezanov), final *-L* here indistinguishable from zero; cf. relativization *dAq'a:g' uX dAdAxu'tl'g* with the same meaning

*'uX qa:nch' k'uxuLg* 'corkscrew' < 'with (*-X*) it (*'u-*) something (*k'u-*) is repeatedly (*-g*) turned upwards out (*qa:nch'*)', lacking *-L* suffix

*'uq'Ach' k'uGAdjgL* 'oarlock' < 'on it repeatedly something is moved by end of stick'

- 'u:nAX t'a'q'e'ch' k'uGAdjL 'oar' < 'by means of it (*l*-class) something is paddled backwards', cf. relativization 'uq'Ach' t'a'q'e'ch' k'udAGAdjg
- 'uya' lAXAqAtl'(L) 'mortar' (Rezanov) < 'that in (*-ya*) which granular (*lX*-) is rubbed', unverified
- 'uX lAXAqAtl'(L) 'pestle' (Rezanov) < 'that by means of which granular is rubbed', unverified
- 'uX qid k'uq'Ats'L 'candle-snuffer' (Rezanov) < 'that by means of which something is pinched off', unverified, cf. relativization 'uX k'udAq'Ats'
- 'uX k'uq'a:shgL 'pressing-iron' < O-(L-)q'a:sh-g 'smooth O flat')
- 'uyAq' 'iq'a:gL 'stove' (Anna), cf. 'uyAq' q'a'L 'oven', and relativization 'uyaq' k'u'Lq'a:g with the same meaning
- 'uX ya' k'uXehdzL 'meat chopper' < ya' O-Xehdz 'chop O up'
- 'uX GALAsha'tl'L 'broom' < O-Gl-dA-sha'tl' 'sweep O (floor)'
- 'uX GALAkusL 'scrubbrush' < O-Gl-kus 'wash O (floor)'
- 'uX GALAch'i'ch'X 'scrubbrush' < 'by means of it the floor (*Gl*-) is abraded, scrubbed, cf. relativization 'uX k'uGALALAch'i'ch'g ~ 'scrubbrush'
- 'uX ya'd k'uya:' 'pier' < 'by means of it some things are unloaded one after another out of boats (*ya'd*)'
- 'uwa:LX k'uqa'xut'L 'target; columbine' < 'according to (*-wa:LX*) it (*'u-*) something (*k'u-*) will (*qa'*-) be shot'
- 'uya'X 'AdlAkus 'washbasin' < 'in (*-ya'-X*) it (*'u-*) self's (*'Ad-*) face (*l-*) is washed', zero suffix
- 'uya'X 'ikusL 'washtub', cf. relativization 'uyA'X k'udAkus 'washing machine' above, and 'idAkus 'do laundry', with indeterminate object)
- 'uya'X yAX k'u'ya:gL 'dye' < 'in (*-ya'X*) it (*'u-*) downward (*yAX*) something (*k'u-*) is repeatedly (*-g*) situated in vessel (*-ya'-X*)', with *-L-'ya-g*)
- ts'ik' 'uX 'Ak'uhdL 'dishcloth' (Anna), with overt specific object, cf. k'uhdL 'wiper' below, prefixed or joined with 'A-)
- ? 'uX qa:nch' k'uxuLg 'corkscrew' < 'by means of it something is screwed up out (*qa:nch'*)', though missing *-L*, this must probably be a deverbalization, as semantically required by the absence of (passive *D-* or causative *L-*) classifier and presence of *k'u-*

The deverbalizations in (67) seem to be entirely instrumentals as opposed to descriptives. However, their status in this respect is far from clear. 'ut'a' k'u:ya Xu'GL 'sail' (< 'wind blowing behind it'), listed in (68) along with other possible verbal nouns, is particularly interesting in that 'wind' is here the subject of the deverbalization, not the object.

## (68) Possible verbal nouns

*'Adi:ntl'a'gL* 'face-painting' < 'self (*'Ad-*) face (*i:n-*) markings' (basket-decoration pattern, Galushia Nelson)

*ya'X XAdAtsinhdL* 'throwing-sticks, throwing-stick game' < 'fling plural *Xd-* class upward (*ya'X*)'

*xAtl' lAXAdAq'* 'snowball' < 'snow (*xAtl'*) packed ball-like (*lX-*)', minus *-L* suffix

*'ut'a' k'u:ya Xu'GL* (presumable reading of Rezanov's утакъ-ояхокль (<utak"-oiakhokl">) 'парус Segel' ('sail')) < 'wind blowing behind it', where instrumental versus descriptive seems hardly relevant

*k'uqi:lAtAsg* 'yoyo (spinning on horizontal string)', minus *-L*, with zero classifier as result of deverbalization; derived from passive of *O-L-tAs-g* 'shake O', causative of basic *dA-tAs-g* 'tremble', not \* $\emptyset$ -*tAs-g*, a descriptive and/or verbal noun

These five items, if not verbal nouns, would be the only non-instrumentals with closed stem. As there are a fair number of non-instrumentals, i.e. descriptives, with open stem and *-L* suffix, it may seem strange that there not a similar proportion of such closed-stem deverbalizations that are descriptives. There still may well be a certain number of further such deverbalizations without suffix *-L* in the corpus, not recognized as such.

One contributing fact in this may simply be that well before undertaking the presentation of all classes of deverbalizations, a morphological category, as such, I was motivated to treat instrumentals as a semantic category, i.e. both relativizations and then deverbalizations, together. Many of the deverbalizations, 7 of the 38 items cited in (67) could be seen to be nicely related to the relativizations as derivative thereof ("transformations"). The subject took on a life of its own, and formally similar descriptives that crept into the listing were later weeded out. In retrospect, undertaking instrumentals as a semantic category may well have been motivated in fact by the long-term existence of "instrumentals" as a subject of Eyak linguistic literature, so named, even, by Li (1956). An account of that literature is still appended to this section below. The organization that I have ended up following, however, is again the morphological, with the instrumentals treated at least along with the non-instrumentals, i.e. the "descriptives." If no such semantic separation had been attempted, the morphological category of "instrumentals" plus "descriptives" might have been called "deverbals" or even "deverbs." (Further below, finally, another morphological category will be presented, called simply *-L* suffixed nouns with closed stem, lacking in prefixation which would distinguish them as deverbalizations, which are therefore even more ambivalent morphologically and semantically.)

Note that of the 38 closed-stem items cited here, only seven are clearly without *-L* suffix, two of which are for some reason stems of the form *CV'* and three already have a cluster with repetitive suffix *-g*. However at least 11 of the 38 are from Rezanov (1805), always with *-L*, or possibly so. Note that the zero/*-L* proportion here is nearly the opposite of that for the closed-stem gerunds and verbal nouns, where zero is by far the more frequent.

It is certainly also noteworthy that a greatly disproportionate number of instrumentalizations cited here are from Rezanov (1805), whereas most of the relativizations cited above are not from Rezanov. That difference is certainly not due to choice of examples, but a significant statistical reflection of dialectal and/or chronological difference in preference (cf. §2.2).

### 18.13.3.7 Closed stems with *-L*

This brings us finally to a category of deverbalizations or possible deverbalizations which is most difficult to define the membership of, which are mainly stems with suffixal *-L* or sometimes with suffixal *-L* which could be deverbalizations without preverbal or prefixes of zones A or B. They are monosyllabic if also without qualifier, as in *qa:lAGa:nshdAXa' sinhGL* ‘razor’ < ‘our whiskers scraper’ below, with overt object (O), demonstrating that these are at least potentially to be classed as deverbalizations.

In most cases the verb from which they are derived is attested, but in some cases, they must be from a theme that is not otherwise attested in Eyak, e.g. *kuhsL* ‘apron, breechclout’, though cf. PA *\*-ku*’s classificatory ‘handle cloth-like’. In such cases, it is certain that an attempt was made to elicit an underlying verb, to no avail. Uncertainty may remain, however, in whether a noun without *-L* could have been elicited along with forms that are attested only with *-L*.

Alternatively, some of the forms below may be Active imperfective or zero-affixed verbs, or even nouns, to which *-L* has for some reason been suffixed analogically. As we shall see, the *-L* most often may seem to have an instrumental meaning, in about thirty examples, but that is by no means always the case; some may be considered descriptive, and/or even to be verbal nouns. Some attempt will be made below to subclassify these forms accordingly.

It should also be remembered that there are kinds of *-L* that are not even suffixal or are marginally so: in stems of the form CVCL where *-CL* is morpheme-internal coda cluster, e.g. *k'e'k'L* ‘mink’, *dA-xa:gL* ‘work’, or where *-L* is usually added after a stem-coda cluster for “euphony”, e.g. *la'Xts'L* ‘star’. This is not to mention the *-L* of all perfectives, or the *-L* in question here, making word-final *-L* so conspicuously frequent for Eyak that there is actually a published literature on it, starting already 1816, described at the end of this section.

For these stems no distinction can be made between such suffixation which would with open syllable result in CVhL as opposed to CV'L. However, for the two closed stems which vary between CVhC and CV'C and for which we have the instrumental *-L* suffix, it appears CVhC-*L* may well be the rule. For *k'ahdL* ‘pain, illness’ (< *-k'a'd* Neuter imperfective, ~ *-k'ahd* ‘be ill, feverish’, we have seven instances with *-L* (and three without), whereas for the somewhat differently used *k'a'd*, zero is the rule, *k'a'dL* once exceptionally, or better, as an exception to *k'ahdL*. Likewise, for ‘moss’ (< O-*L-k'uhd* ~ *-k'u'd* ‘wipe O’), we have ten instances of *k'uhdL*, never *\*k'u'dL*, strong confirmation of the preceding. In the case of *-tsu'd* ~ *-tsuhd* ‘sleep’, on the other hand, we have one instance of *tsu'dL*,

but the rest of the time *tsu'd*, 11 instances, without *-L*, perhaps confirming at least that in those variable stems, *-L* does not correctly go with CV'C.

We begin the listing in (69) with examples where the *-L* seems more or less clearly to have an instrumental meaning:

(69) Closed stems with *-L* with instrumental reading

*t'ich'(g)L* 'fish-prop' < O-(*L*-)*t'ich*' 'prop O (fish) open'

*t'ik'L* 'arrow; bow-and-arrow' < O-*L*-*t'ik*' 'shoot O with arrow'

*t'a'q'L* 'small fishhook' < O-(*l*-)*LA-t'a'q*' 'hook O (fish)'

*dza'tl'(g)(L)* 'stake, peg' < O-*L*-*dza'tl*' 'fix O with stake, peg' (cf. *'uX k'udza'tl'g(L)* and *'uX k'udAdza'tl'(g)* 'chisel' in 67)

*dzuxL* 'spear-point' < O-*dzux* 'stab O' (cf. *'uX k'udzuxL* 'awl', above)

*dAdza(n)hGL* 'cane' < *'Ad-LA-dza(n)hG* 'walk with cane'

*'i:ndzinhG(L)* 'tent-pole' < *'Ad-LA-dzinhG* 'pole self along' (Lena uncertain, cf. preceding)

*ts'a:gL* 'bailer, dipper' (< O-*L*-*ts'ag* 'bail O')

*qa:lAGa:nsh[d]AXu' sinhXgL* 'razor' (unique example here including overt O, demonstrating deverbal nature of these forms, perhaps neologism, from Rezanov 1805, 'our/human hair of lower face scraper', cf. *'uda:X 'AdlAsinhXg(L)* 'razor' above)

*dja:t'L* 'crowbar' < O-*L*-*dja:t*' 'pry O' (cf. *'uX tl'ehd k'u'ldja:t* 'key')

*che'q'L* 'halibut hook' < O-*L*-*che'q*' 'hook O (halibut)'

*gehgL* 'fish spear' < O-*L*-*gehg* 'spear O (fish)' (note also *gehg* 'shaft of fish spear', Lena, but dubious)

*gu'k'L* 'fist' < O-*gu'k*' 'punch O'

*kihshL* 'dipnet' < O-*kihsh* 'scoop O (fish with dipnet)'

*k'uhdL* 'moss' < O-*L*-*k'uhd* ~ *-k'u'd* 'wipe O', noted above)

*k'a:shL* 'hook for halibut, cod' < O-*l*-*L*-*k'a:sh* 'fish for, hook halibut, cod'

*xut'L* 'gun, rifle' (O-*L*-*xut*' 'shoot O with gun', however puzzling as underived theme for modern contact time)

*Gu'L* 'blanket' < *dA-Gu*' 'be warm', O-*L*-*Gu*' 'warm O'

*gudla:Gu'L* 'Chilkat blanket' (*gdl*-thematic 'color')

*Ge'q'L* 'bracelet, hoop' < ? (partly confused with the following)

*dla:GehGL* 'hoop' < O-*L*-*GehG* 'put hoop on O (keg)'

*qAmAXts'L* 'top' < *-qAmAXts'* '(top) spins', *O-L-qAmAXts'* 'spin O (top)'

*XahdL* 'sled, car, automobile' < *-Xahd* 'move lengthwise', *O-L-Xahd* 'move O lengthwise, drag O'

*wa'ts(L)* 'whip' < *O-L-wa'ts'* 'whip O' (cf. *'uX k'udAwa'ts'* 'whip' in 39)

*-'uGL* 'heart' (*di'-LA-'u'G* 'breathe, be alive, *-d-'u:G* 'life-breath')

*chAGL* 'fork(ed stick)' < *O-L-chAG* 'handle O with fork'

*k'uwahdjL* 'nail' < *O-(L-)k'uwahdj* 'nail O; drive O (nail)'

Note that in several of the preceding, there are examples which might be expected *a priori* to be verb derived from a primary noun, though it is the noun that is derived with *-L*, e.g.: *chAGL* 'fork(ed stick)' from *O-L-chAG* 'handle O with fork', or *k'uwahdjL* 'nail' from *O-(L-)k'uwahdj* 'nail O; drive O (nail)'.

In addition, there are three examples where the *-L* is also found throughout the conjugation of the verb itself, which could of course be considered at the same time to include *-L* suffix, since *-L-L* inevitably becomes *-L*, namely *djahGL* 'needle' (*O-djahGL* 'sew O', never *\*-djahG*), *xa:gL* 'work' (< *dA-xa:gL* 'work', never *\*dA-xa:g*), *qa't'L* 'patch' (*O-L-qa't'(g)L* 'patch O', irregular, confused). In the case of *qa't'L* 'patch' it appears that the verb must be derived from the noun, keeping the *-L* as thematized (cf. *XehL* 'rope', *O-L-XehL* 'tie O with rope' above), but in *O-djahGL* 'sew' and *dA-xa:gL* 'work', either the *-L* could be thematized, or perhaps more likely, the clusters *-GL* and *-gL* are part of the stem itself (cf. also *k'e'k'L* 'mink' etc. below).

There are several examples (70) where *-L* more or less clearly has a descriptive meaning, as the product or result of the verb. In many of these one might indeed expect the verb to be derived from the noun, though morphologically the opposite appears to be the case.

(70) Closed stems with *-L* with descriptive meaning

*shAXgL* 'frost' < *dA-shAXg* 'be frosted'

*XAsL* 'carved design' < *O-XAs* 'carve design in O, carve O (design)'

*XAdAchich'L* 'corner' < *O-chich'* 'break O', with *Xd-* qualifier, e.g. 'log; line'

*kugL* 'wood (for fuel)' (*-kug* 'break'; cf. PA č<sup>wr</sup>əž<sup>wr</sup> 'wood (for fuel)')

*dAchehg(L)* 'rotten wood' (< *d-LA-chehg* 'wood rots')

*dje:gL-ga* 'tangle-like' (< *O-L-dje:g* 'tangle O', *-dje:g* 'be tangled')

Further, in some of these nouns with *-L*, the function of the suffix is much less clear. In the case of *dju'k'L* 'thwart, canoe crosspiece' (*O-L-dju'k'* 'make, install crosspiece'), the *-L* would be descriptive for 'make thwart', instrumental of 'install thwart'. In *duxL* 'deadfall trap' (< *LA-dux* 'collapse; be still', *O-L-dux* 'trap O in deadfall') the relation between noun and verb is quite unclear, between means and result. Still less clear are the

following where all three basic relations could be understood, instrumental, descriptive, or verbal noun. A good example is *xa'ch'* 'knot, something tied' (Lena once) but more often *x(w)a'ch'L* (Rezanov 1805, three times, Lena once; *yAda'q' xwa'ch'L* 'bracelet', *dAga'q'L xwa'ch'L* 'neckerchief'; < O-*x(w)ach'* 'tie O (knot), tie knot in O, tie O to o', raising the question whether the knot is the means or the result; note also overt direct object as in *qa:lAGa:nshdAXa' sinhGL* 'razor' above). In some of these cases the *-L* is less stable. It is thus quite possible that we are dealing with two different forms and lexemes, that with *-L* which would have an instrumental and/or descriptive meaning, and that without *-L*, which would more likely be a verbal noun. Such a hypothesis, however, was not tested with speakers, so only the statistics and glossing might contain the needed clues. A good example is *tsahgL* 'legend' (Marie only, three times), also *tsahg* 'story' (Lena, Galushia Nelson in Birket-Smith and de Laguna 1938 ; < O-*tsahg* 'tell O (legend), tell legend of O', the legend itself being possibly the means of telling a legend as well as the result, and the form without *-L* being perhaps a verbal noun referring to the telling of the legend as does the verb, though this was not checked).

Listed above as verbal nouns because of their semantics and appearance usually without *-L* were with following. From *-k'a'd ~ -k'ahd* 'have pain illness, fever' were both *k'a'd'* 'mental disorder', always with zero suffix, but also *-k'ahd(L)* 'pain, etc.', attested twice without *-L* and once with *-L* (including several adverbialized instances, *k'ahdLdah*, which often appears as *-L-dah*). Body products are generally without *-L*, but note 'vomit', usually *wAt'*, once however *wAt'L*, analogically (< *-wAt'* 'vomit', O-*L-wAt'* 'vomit O'). Likewise was *tsu'd* 'sleep', 13 times without *-L* (including Rezanov 1805, Wrangell 1839, Furuhielm 1862a; < *-tsu'd ~ -tsuhd* 'sleep', mentioned above as a variable closed stem); this was once *tsu'dL*, presumably on the same analogical basis.

There are of course many verbal nouns or plain nouns which might have yielded alternatives with *-L* if routinely so tested, e.g. *ki:nX* 'weeping; tears' (< *-ki:nX* 'weep'), or *gahG* 'spruce pitch' (< O-*L-gahG* 'smear O with spruce pitch'. No such routine testing was done.

Further, there are certainly items where the status of *-L* is quite unclear, e.g. *Xa'tl'(g)L* 'club' (< O-*L-Xa'tl'* 'club O') attested as *Xa'tl'L* only once, from Marie, and as *Xa'tl'gL* once from Marie, twice from Lena. Most often it is *Xa'tl'g*, only with repetitive *-g*, no *-L*, twice from Galushia Nelson in Birket-Smith and de Laguna (1938), twice from Marie, once from Lena without comment, once from her in text, and once from her with the comment that it "sounds better than *Xa'tl'gL* or *Xa'tl'L*," no doubt in response to a deliberate question on my part, for once. Not too much should be made of this, however, as *-CC* over *-CCC* might be a phonological preference in the case, in spite of the "euphonic" *-CCL* tendency described again below, as in *Le'xts'L* 'wart' (< *dA-Le'xts'* 'have wart'). Cf. also e.g. *XuhLg* 'shovel', so attested at least 15 times, no *-L* (< O-*XuhL(-g)* 'shovel O'), certainly instrumental; likewise *XahLg* 'rattle' (< O-*XahLg* 'make rattling noise with O').

Several more of these *-L* suffixed nouns (71) are with stems which cannot be identified with any verb. In probably every case, an attempt was made to elicit a verb with such stems,



to no avail. These can only be listed with gloss, not internally explained as related to any verb, though sometimes comparatively.

(71) *-L* suffixed nouns without corresponding verb stems

*ga'ts'(g)L* 'ladder' (Rezanov 1805 *ga'ts'g*)

*kuhsL* 'apron' (but cf. Athabaskan \**-ku'ts'* in 'handle flexible', mentioned above)

*ts'a:tl'(g)(L)* 'cradle' (cf. *-ts'a'tl'* 'leak', *Ga:nts'a:tl'g* 'muddy', Athabaskan \**ts'a'tl'* 'moss, baby-wiper')

*GanhdgL* 'spruce needle' (Lena and Marie, 6 instances, *Ganhdg* Marie once, *Ganhdl* Harrington from George Johnson, cf. §3.3.10.3)

*Gu:dz(L)-qa'* 'joint (anatomical)' (o-*qa'* between o')

*Ge:t'L* 'reincarnation' (cf. (-)*Ge't'* 'body, torso')

*qa't'(g)L* 'patch' and *qa't'LyAquh* 'moth larva' ('young of *qa't'L*')

*dla:Xe:ch'(g)(L)* 'quartz' (perhaps with *dl*-class 'stone')

? *tsa:L* 'bentwood box', if suffixed

? *k'u:ndja'L* ~ *k'ugu:ndja'L* 'milt, semen' (*l-*, or *gl-* 'liquid'; cf. possibly *O-dja'* 'move O abruptly')

As discussed in the Phonology, a disproportionate number of such unexplained items have *-L* suffixed to stems ending in consonant clusters, such that the *-L* in these cases might merely be phonologically or "euphonic" motivated. Ironically enough, Eyak seems to prefer not allowing such clusters in absolute final without adding another consonantal suffix, *-g* (especially after velar or uvular stop plus /s/ or /sh/), or here *-L*, cf. (72).

(72) *-L* suffixed to stems ending in consonant clusters

*qAmAXch'L* 'rotten spot in ice'

*ta'Xts'(L)* 'special bark or tree species'

*la'Xts'L* 'star' (16 instances, from Rezanov 1805 on, *la'Xts'* Sewak only)

*kAwAsk'L* 'paddle'

*lAGAshk'L* 'pole' (cf. *'i:ndzinhGL* 'tentpole' in 14)

*dla:GaAshk'L* '(series of) fenceposts'

As discussed in the phonology also, in another subclass that has the appearance of these nouns the *-L* may not be a suffix at all, but the second segment of a final cluster following velar or uvular stop in the same pattern as /g, k', G, q'/ plus /s/ or /sh/, thus *k'e'k'L* 'mink', *-ga'q'L* 'Adam's apple', *dA-ga'q'L* 'throat', *ts'AGL* 'graphite' (also in Yakutat Tlingit), *cha'nik'L* 'funny'; cf. *djahGL* 'needle', *xa:gL* 'work' in §18.13.3.7.

Finally, reference needs to be made here to two more classes of nouns with suffixal *-L*, listed under §18.6 on part nouns, and under §18.5 on nouns of the form *-L-P(-L)*'. These

are a fair number, about 50, with *-L* of variable stability, in part originally considered to be deverbalizations, but here considered to be relevant to deverbalizations in that they so predominantly show *-L*, grammatically and/or analogically.

### 18.13.3.8 Previous literature!

It so happens that there is previous literature on the *-L* suffix and instrumentals. In fact, of the little that has ever been published on Eyak grammar, the instrumental figures spectacularly, not in one, but two publications, almost a century apart, 1857 and 1956. The instrumental appears so prominently in the history of Eyak documentation and study that it was even noticed, however dimly, in print already by 1816.

The first notice of the Eyak *-L* suffix, or implied suffix, appears in Adelung and Vater's *Mithridates* (1816), Volume 3, Part 3, pages 211–3. The authors recognize that in Tlingit and especially Eyak, from Rezanov's manuscript lexicon including nearly 1200 Eyak words, a <-tl> ending is extraordinarily frequent in Eyak. No doubt given especially the Humboldt brothers' interest in the origin of Native Americans, and Alexander Humboldt's work with Nahuatl Aztecan, this trait in Eyak and Tlingit leads them to comparison with "Mexican" in a table of 26 Nahuatl words with 19 Eyak and 10 or 12 Tlingit ones, with resemblances that are deemed to show it "not improbable" that these languages might be genetically related. Two of the 19 Rezanov Eyak words might actually have the *-L* suffix, and are included above: <keēl> 'girl' (from Rezanov кеэль (<keell'>), the second <e> non-palatalizing, thus even reflecting the glottal stop), i.e. *qe'L* 'woman', see above, and <katkakl> 'throat' (Резановкаткакль (<katkakl'>)), i.e. *qa:-dAga'q'L* 'our/human throat', also listed above.

Some forty years later the German comparativist Buschmann, in his *Die Spuren der aztekischen Sprache* (Buschmann 1859, written 1854–9), pp. 664–5, following up on the Humboldts, repeats the 19 Mexican-Eyak comparisons from *Mithridates* (1816). He severely criticizes them on the basis of better information and analysis especially of the Aztecan, but also some of the Eyak, which he has from Radloff's 1857 edition of the Rezanov (Radloff 1857). Buschmann had received that from Radloff in the process of writing, but Buschmann does not add anything relevant to our understanding of Eyak instrumentals or the *-L* suffix.

Leopold Radloff, however, in his edition of Rezanov's Eyak lexicon, *Ueber die Sprache der Ugalachmut*, at the very end of his introduction (Radloff 1857: 488), does indeed recognize the suffix, and correctly so, to wit: "аль, тль, кль, хль (<al', tl', kl', xl'>) suffixed to verbs appears to form nouns, e.g.: хотль (<xotl'>) 'rifle', from аль хотъ (<al' хот'>) 'to shoot'; охкоцохль (<oxkotsoxl'>) 'awl', from infinitive сыцухль (<sytsuxl'>), imperative ацуху (<atsuxu>), 'to stab'; очохуцааль (<ochokutsaal'>) 'anvil', аццаху (<atstsaxu>) 'to pound', цахль (<tsaxl'>) 'knife', альцахъ (<al'tsax'>) 'to cut', каль кожахоху ськль (<kal' koazhaxo sykl'>) 'razor', from иллокошка ськль (<illokoshka sykl'>) 'to shave self; cf. further 'towel' [охотлекоуль (<oxotlekoul'>)] with the verb forms for 'wash' [e.g. охотле катакузь (<oxotle katakuz'>)], thus also сьльхоутль (<sy'l'xoutl'>) 'wet' and ильхо-у (<il'xo-u>) 'make wet'. Indeed also very many nouns end with this ль (<l'>) in common with their corresponding verbs: cf. e.g. 'comb' [цыллядль (<tsylliadl'>)] and e.g.

ацынталять (<atsyntaliatl'>)], 'begin(ning)' [оx кале этль (<ox kale etl'>, second <e> non-palatalizing), and оx саль этль (<ox cal' etl'>, <e> likewise)], 'work' [хотты хакль (<xottu xakl'>) and хакль (<xakl'>)], 'bellows' [охкотехутль (<охкотехутл'>)] with 'blow' [ауя коутыхутль (<auia koutyхutl'>)]."

Of these 11 comparisons by Radloff, five are in fact quite valid, so are found in the sections above. Certainly valid are *xut'L* 'rifle' and *'ALxut* 'shoot it!'; *'uX k'udzuxL* 'awl' and *sidzuxL* 'I stabbed it', *'Adzuxuh* 'stab it!'; *'uq'Ach' k'uts'AXL* (miscopied) 'anvil' and *'Ats'AXuh* 'pound it!'; *qa:LAGa:nsh[d]AXu' sinhXgL* 'razor' and *'ilAGa:nsh GAsinhX* (miscopied) 'shave your beard!'; and valid by coincidence is *'uX k'udAxutl'L* 'bellows' and *'Awyu' k'u'dAxutl'* 'someone is blowing on it (*d*-class)'. Probably not valid is *tsa'L* 'knife' and *'Alts'AX* 'cut it!'.<sup>13</sup>

Radloff was very familiar with *Mithridates* (1816), so must have been influenced by that. In any case, considering the nature of the data he was dealing with, not least the wretched phonetics, it must be conceded that Radloff's observation of the Eyak instrumental was quite remarkable for its time.

A century later, four years after he did his fieldwork on Eyak in 1952 (cf. §3.3.7, Fang-Kuei Li published the one and only article we have from him on Eyak. Only four pages long, that is on the instrumental suffix, "A Type of Noun Formation in Athabaskan and Eyak" (Li 1956). It is almost certain that Li never saw Radloff (1857) (or *Mithridates* 1816 or Buschmann 1859). In fact, very evidently, Boas, Birket-Smith and de Laguna, Sapir, so also Li, were quite unaware of all such earlier Eyak language work (cf. §3.3). Moreover, Li had not done any Athabaskan fieldwork since 1929 or any publication on it since 1930 (except for his masterful sketch of Chipewyan, Li 1946, written no doubt in the 1930s). It is only a (centennial!) coincidence that Li chose to treat the Eyak instrumental, in comparison with Athabaskan, in this brief and faint echo of his earlier comparative Athabaskan work. In the article Li correctly identifies eight Eyak instrumentals (or at least nominal *-L* suffixes) to compare with Athabaskan: *t'ik'L* 'arrow', *che'q'L* (halibut) hook', *tsa'L* 'knife', *xut'(g)L* 'rifle', *-L-t'ahL* 'leaf, feather', *ts'a:gL* 'bailer', *kuhsL* 'apron', and *'uyA[q'] 'iq'a:gL* 'stove', all listed here above.<sup>14</sup> The main importance of the article is that it is Li's only published statement on the genetic position of Eyak. That article happens also

13 All the rest are definitely not valid: *'uX 'AdlAk'uhdL* 'towel' is indeed an instrumental, but the stem is not related to that in *'uX 'AdLAGAdAkus* 'wash your face with it!'; *sALqu'L* 'it got wet' and *'ALqu'uh* 'wet it!', are perfective and imperative of the same verb; *tsi'lahL* 'comb' and *'Adtsin'da'lahL* 'you're combing your hair', are noun and verb with the same stem, the verb probably derived from the noun; *wAX GAlE:L* 'is doing so' and *wAX sAliL* 'did so' are Inceptive and Active perfectives of the same verb; in *xdAxa:gL* 'I'm working' and *xa:gL* 'work', the *-L* is part of the stem itself.

14 Along with these, however, Li includes a few other items that do not in fact have the nominal *-L* suffix. He also speculates that the instrumental *-L* might be related to the postposition *-tl'* 'with', and/or to the *-L* "progressive/perfective suffix used in the verbs."

to feature the instrumental as demonstration of the genetic relationship between Eyak and Athabaskan, and of the usefulness of Eyak in comparative study of or with Athabaskan.<sup>15</sup>

#### 18.13.4 Object prefixes in deverbalizations

Deverbalizations are derived from verbs, as are relativizations, which keep their subject and object pronouns as in the verbs from which they are derived. Hence, the issue of such pronouns also arises for deverbalizations. For one thing, we know that all of Zone D is deleted, including 1s, 2s, and 1p subject pronouns. In fact, all subject pronouns are deleted in deverbalizations, including *k'u-* indefinite in Zone A, as we shall see. In this respect then, deverbalizations are different from verbs or relativizations thereof. The question remains, however, for direct object pronoun prefixes in the different kinds of deverbalizations. This was aggressively investigated in the field only for gerunds. As will be seen below, for gerunds direct object pronouns regularly appear in Zone A quite as expected of a verb, rather than oblique objects of postpositions or possessor of nouns. Much of the time it is not evident whether a prefix is that for direct object (O) or oblique (o/P), since in many cases these are homophonous, i.e. indefinite *k'u-*, 2s *'i-*, 1p *qa(-)*. However, in the case of 1s, 2p, third person, indeterminate, reflexive, and reciprocal, there is a difference, the direct object being 1s *xu-*, 2p *LAXi-*, 3  $\emptyset$ - (but *'u-* in the directive), 2s *'i-*, reflexive *'Ad(-)*, reciprocal *'iLu'*, as opposed, respectively, to oblique 1s *si-*, 2p *LAX-*, 3 *'u-*, indeterminate *dA-*, reflexive  $\emptyset$ - ~ *'Ad-*, reciprocal *'iL-*; see Tab. 9.1 under §9.1. We have dozens of instances for indefinite object *k'u-*, in a very large proportion of transitive deverbalizations (cf. (73)) and many for second person *'i-* as well (cf. (74)).

(73) Transitive deverbalizations with indefinite object *k'u-*

*k'utsi:nl, k'utsinh* 'singing (something, a song)'

*k'uGAdjg(L)* 'paddling (canoe)'

*k'u'tu:l* 'laziness (aversion, to something)'

*k'u'wAqah* 'counting (something)'

*k'ulah, k'ula:l* 'drinking (something)'

*k'uqAte:l* 'carrying (living thing, plural acts)'

(74) Transitive deverbalizations with 2s *'i-* (homophonous for O and o/P)

*'iqAXAte:l, 'iqAte:l* 'carrying you singular, in plural acts'

*'iXe:l* 'backpacking you'

<sup>15</sup> Li, rightly, is highly respected, so much so that people would be motivated to fault me for not mentioning him, so I'm motivated to show how I've carefully considered his work, especially the one thing he published about Eyak.

*'ilAxa:g* 'raising you singular'

1p object is not attested in transitive deverbalizations.

However, for the criterial, non-homophonic, instances, of 1s, 2p, and indeterminate objects—leaving out for the moment third person objects—we have very consistent results, with the direct object type verbal pronoun appearing in every case for the gerund: *xuqAXAte:l*, *xuqAte:l* 'carrying me (plural acts)', *LAXiqAXAte:l* 'carrying you (pl), one after another', from deliberate elicitations. These are strikingly definitive as O, not *si-* or *LAX-* for o/P. There are several instances (75) of indeterminate object, though here also for several items with closed stems which might be verbal nouns, and some instrumentals.

(75) Deverbalizations with indeterminate objects

*'ich'u* 'stealing'

*'igah* 'dancing' (definitely verbal noun)

*'idAle:l* 'knitting'

*mAgAG 'idAle:l* 'playing checkers'

*yAX 'i'a:nX* 'travelling, looking about'

*yAX 'isxut'* (incorrect) for *yAX 'ixut'X*

*yAX 'ixe:t'[X]LX* for *yAX* 'shooting about'

*yAX 'its'i:nGX* 'dipping fingers about'

*'ilAt'a'q'L* 'trout fishing'

*'its'i:nG* 'dipping in seal oil'; *'uyAq' 'iq'a'L* 'stove'

*'uya'X 'ikusL* 'washtub', again definitive for direct object.

We have no reciprocal attested for these deverbalizations, though such might have been elicitable.

Finally, for reflexive, to which there is a special point here, we have at least seven instances, cf. (76).

(76) Deverbalizations with reflexive prefix *'Ad-*

*'Adi:ntl'a'gL* 'face-painting'

*'uda:X 'AdlAsinhXgL* 'razor'

*'uX 'AdlAk'u:dL* 'towel'

*'uya'X 'AdlAkus* 'washbasin'

*'uX 'AdlAXe'* 'mountain goat fat for face'

*'udAt'a:X 'Adqu'li:ta'L* 'smokehouse'

*yAX 'Adi:lihya:X* 'thinking' (< 'causing own (*'Ad-*) mind (*i:lih-*) to be situated about (*yAX, -X*)')

It is worth noting that in all of these the reflexive object is the direct object and that there is no indefinite *k'u-* subject prefix, no *'Adk'u-* as in relativizations. This *k'u-* prefix, being in Zone A, does not have to be deleted because of the deverbalization by virtue of its position in Zone A instead of Zone D; it is nonetheless deleted, evidently because of its function as subject.

In accordance with the results here and with Tab. 9.1, the reciprocal here would show preverbal *'iLu'* rather than prefixal *'iL-*.

#### 18.13.4.1 Internal syntax and 3<sup>rd</sup> person object of deverbalizations

For the most of their internal syntax, it appears that we do not need to distinguish the different types of deverbalizations just listed, treated therefore here together. We have about 23 different instances of deverbalizations with an internal structure including overt nouns as subject or object. We have none with both, because (a) no attempt was made to elicit such, (b) sentences with both are uncommon in the first place, as will be shown in Chap. 25, and (c) since deverbalizations are presumably all lexicalizations at least to some extent, both subject and object should hardly be expected.

The internal syntax of these deverbalizations is perhaps unremarkable. Most, if they consist of more than one word, preverbal only precede, most typically e.g. *'uX qid k'uq'Ats'L* 'candle suffer' < 'by means of (-X) it (*'u-*) down off (*qid*) something (*k'u-*) is pincered', i.e. a postpositional phrase with 3<sup>rd</sup> person object-preverb-deverbalization, typical for Eyak sentences. Further, of those with overt subject or object (instead of object pronoun, most often indefinite), the great majority here are object-(preverbal-) deverbalization. There are perhaps only two items with an overt noun as oblique object of a postposition, *dAga'q'IdAlah 'a'L* 'necklace' < 'be in position around (-lah) neck (*dAga'q'L*)', and *sAqe:GAyu:xa' qe'le'* 'babysitting' < 'caring for (-xa') children (*sAqe:GAyu:*)'.

A major complication here is that there is unexplained variation between  $\emptyset$ - and *'A-* and *'u-* as a segment in absolute initial prefix position of the deverbalization itself, something like object pronoun or epenthesis, along with overt noun object. This is highly inconsistent both in itself, not just the variation, but e.g. in taking direct object form *'i-* for indeterminate object with verbal noun and instrumental, instead of oblique *dA-*, yet apparently sometimes oblique *'u-* for 3<sup>rd</sup> person instead of zero direct object where zero is expected. Likewise, *'A-* if identifiable with epenthetic *'A~*, occurs sometimes where that is not expected. After a listing and discussion of the deverbalizations with overt noun object (or subject), the issue of that variation is taken up.

By far the most common variant of the segment is zero. In 14 of the items with overt object (77), whether or not between the object noun and the verb stem there is either a preverbal or a qualifier prefix.

#### (77) Deverbalizations with overt object noun

- a. With zero segment in initial prefix position:

*qa:lAGa:nshdAXu' sinhGL* 'razor' < 'scrape our lower face hair'

*dAga'q'L xwa'ch'L* 'neckerchief' < 'knot neck'

'*ALdah le:l* 'playing' < 'doing play' (status of '*Aldah* unclear)

b. With preverbal alone:

*la'mahd da' qa't'g* 'berry preserves' < 'cook berries into container' (berries evidently becoming declassified by the process)

c. With qualifier alone:

*gahG dA'a'tl'* 'chewing gum' (*d*-class)

*ts'u: lAwa'(L)* 'ice cream' < 'grinding milk' (*l*-thematic)

*sa'q'sg dA'ehdg* 'dried dulse', *shug dA'ehdg* 'strawberries dried into a brick', and

*sahx dA'ehdL* 'dried cockles' (*d*-thematic, latter object becoming declassified by the process)

*te'ya'le: dA'e:'dzg* 'dried king salmon' (*d*-thematic)

*sahx dA'e:'sh* 'dried cockles on a string' < 'strung cockles' (*d*-thematic)

*xAtl' lAXAdAq'* 'snowball' < 'snow packed' (becoming classified *lX*- 'ball-like' by process)

? *tsa: lAXAL* 'gravel' < 'stones granulated' (? status uncertain, 'stones' possibly *l*-class archaically, or *l*-thematic; cf. *ts'u: lAwa'(L)* 'ice cream' above here)

d. With both preverbal and qualifier:

*yahd Xu' dAleh* 'building a house' (*d*-class)

Syntactically irregular is *mAgAG 'idAle:l* 'playing chess' ('carrying on activity of chess', apparently indeterminate object and *d*-thematic). Unique is *dA'e:'sh te'ya'* 'fish on a string' (< 'strung fish', *d*-thematic; cf. *sahx dA'e:'sh* 'dried cockles on a string', *sahx dA'ehdL* 'dried cockles'), inverted with object as if head of relativization *dAdA'e:'sh te'ya'* 'fish which has been strung'.

In a significant minority of these deverbalizations, however, is a segment '*A*- or '*u*- leftmost in the verb itself, the position for direct object. These total six items (78), two with qualifier present, and four without.

(78) Deverbalizations with initial segment '*A*- or '*u*-

a. With qualifier:

*sAq:GAyu: 'ulAxa:g* 'raising children' (*l*-thematic)

*yahd Xu' 'udAle:l* 'building a house' (*d*-class)

b. Without qualifier:

*gi:wa: 'ulah* 'drinking beer'

'*AXAk'ih Xu' 'Ale:l* 'making a canoe' (this 3 times as such, together)

*te'ya' wAX 'Ale:l* '(commercial) fishing' < 'processing fish'

*ts'ik' 'uX 'Ak'uhdL* 'dish cloth' ('wipe dishes with it').

There are four more instances with overt object listed in §18.13.6 on the special category of acquisitionals, three with prefixal 'u-, discussed again there.

Given the form of the segment, 'u- which would be homophonous with third person oblique object pronoun, or 'A-, which would be homophonous with the fuller allomorph of the phonologically motivated epenthetic 'A- ~, the question arises if it is identifiable with one of these. First, however, there appears to be no rule predicting either of these instead of zero. There seem to be quasi-minimal pairs, e.g. *yahd Xu' dAleh* and *yahd Xu' udAle:l* for 'building a house', both with *d-* qualifier, not correlated with verbal noun vs. gerund. Moreover, neither pronominal 'u- nor epenthetic 'A- appear here because of their normal motivations otherwise in the language. In fact pronominal 'u- is even counter-indicated in that sense, given that in Eyak 'a woman's father' is always *qe'L-ta:*, never *\*qe'L'uta:* 'a woman, her father'; 'for a woman' is *qe'L'a:*, not *q'e'L'uwa:* 'a woman, for her'; as those might be in some modern Athabaskan languages. Thus *gi:wa: 'ulah* 'drinking beer' is not expected on those grounds, e.g. 'beer, drinking of it' is not expected from Eyak grammar.

Alternatively, the 'A- form of the segment might well be identified with epenthetic, 'A- as described in the Phonology, but this is also problematic. The motivation for it might be similar to that for its occurrence in compounds, but it certainly does not correlate with the epenthesis after monosyllables and not after disyllables, or as in preverbal ending in uvular obstruents; e.g. that in *'AXAkih Xu' Ale:l* 'making a canoe', *yahd Xu' udAle:l* 'building a house' could hardly be so motivated, given also *yahd Xu' dAleh*.

The variation between 'u- and 'A- is also problematic. Except for the interference of labial environments there is a stable phonemic contrast between those in prefixes. Clearly enough, given e.g. *giyah 'ulah* with no labial environment, or *'AXAkih Xu' Ale:l*, the reverse, there appears to be no such phonological motivation for the variation. It is evident that no specific attempt was made in the field to explain this variation.

There are three more deverbalizations with this segment unlike the preceding in including no overt noun, where therefore the segment might be viewed as a pronoun prefix. These are (*xusALga'L*) *'Awah 'Awa:* '(I am tired of) eating it', where both words are transcribed from elicitation from Lena with 'A-; *'Awa:* here is equivalent to *'uwa:* (< 'u-a:) 'of it' by neutralization (cf. §4.3.5), and *'Awah* must be equivalent likewise to *'uwah* (< 'u-a; with epenthetic /w/; cf. *k'uwah* 'eating (something), meal', verbal noun). Another elicitation from Lena is (*q'ahdAq'Aw xusALga'L*) *'ulah 'Awa:* '(I m by now tired of) drinking it', exactly the same as implied by the preceding. The third is either a problematic or very revealing instance from elicitation from Lena in *yAX 'ute:X* 'lying about' (twice, as object of o-Xa' *k'u'qu'LATu'g* or *k'u'qu'LATuhg* 'will get lazy from o'); given the context, this does not appear to be a misglossing for transitive 'carrying it about', but as intended by the elicitation, intransitive '(sg) lying about'. However, for 'lying about' we might expect the gerund *yAX 'iste:X*, a form in fact otherwise attested. Alternatively, if not a mistake (made twice, in a row, in elicitation really for the stem-form of *-tuh-g* 'lazy'), it might be the verbal noun, presumably *teh*, here perambulative *te:X*, here now possessed by subject, 'its lying about'. It therewith becomes possible that intransitive verbal nouns might allow



possessive prefixation for subject, and transitive ones for object. In that case, at least the 'u- in these three items might be the possessive prefix.

That still does not explain the 'A- ~ 'u- segment in the preceding cases, but might provide the motivation for the 'u- variant as analogical, if, in fact, we are dealing with two different elements in these different kinds of deverbalizations.

We can draw a probable conclusion that though gerunds definitively take a verbal direct object pronoun, verbal nouns (zero suffix) and instrumentals or descriptives (-L suffixed) take 'u- (o/P) oblique prefix at least for the subject of a verbal noun. Also, there is a 'A- which may or may not be associated with epenthetic 'A- ~ for object of transitive gerund. For other transitive deverbalizations in object prefix position we do not know the rules for the choice between zero, 'u-, or 'A-, or the patterns of analogy, if any.

Transitive verbal nouns with overt object without the 'u- segment are a norm e.g. *sahx dA'e:sh* 'dried cockles on a string, strung cockles' and *sahx dA'ehdL* 'dried cockles', but also at least *da' lAXAqa't'g* 'canned berries' (< 'IX- class cooked into container'), without overt object and with zero in object pronoun position; cf. *la'mahd da' qa't'g* 'berry preserves' above. Still, the difficulties in defining a verbal noun as opposed to other deverbalizations do not preclude the possibility that verbal nouns can take oblique object (/subject?) pronouns for third person. Such questions were not adequately addressed in the field, e.g. elicitation of 'my dying', 'my killing', and the feeling may have been that such questions would have pushed the limits of what was remembered of Eyak grammar. One can hardly resist the comparison with analogous issues in English such as 'I appreciate Bill doing the dishes / I appreciate Bill's doing the dishes', or 'love of God'.

Finally, there are two deverbalizations attested with overt subject. One is *XAWa:yu: dA'a:t'* 'dogs' howling' (as object of *o-dahd* 'sound of o'). Conceivably *dA'a:t'* should here be a possessed noun with no prefix because *XAWa:yu:* is the possessor; that is certainly the subject of 'howl'. 'The sound of their howling' might indeed be *'udA'a:t'dahd* ('uwa:). The other instance is from Rezanov (1805) Утакъ-ояхокль (<Utak"-oiakhokl'>) 'парус Segel' ('sail'), to be read *'ut'a' k'u:γA Xu'GL* (or persistent *Xu:GL*) 'behind it wind(s) blowing', probably a neologism or *ad hoc* description. Most interesting is that 'wind' in 1805 still consistently has a final -A of some kind, in several transcriptions, such that almost certainly belongs to *k'u:y-* rather than to *-Xu'GL* or to both, and the form is one word, like 'dogs' howling'. Note therewith also that the preverbal, postpositional phrase 'behind it' does not conform to the usual syntax *Subject - Preverbal - Verb* but has fronted the *'ut'a'* because *k'u:γAXu'GL* is a single constituent.

At least two more forms belong here which we are now in a better position to discuss. We have *k'udAXAGL* 'gunwale' and *'udAXAGL* 'its gunwale', from '(d-class) be carved', which must be a descriptive, clearly with 'u- oblique object, confirming the conclusion above that descriptives take 'u-. Further, we have *k'ulAgah* 'corpse', with no *'ulAgah* 'its corpse' attested. This deserves special attention as a possessed verbal noun, no suffix, where the possessor is the subject an intransitive verb, or at least very probably so, rather than the object of a passive causative, which would have to mean 'murdered corpse'. The underlying verb must be the errative theme *l-dA-ga'* 'stop damn activity, go to hell, die', a very forceful

expression of disapproval. The essential thematic *dA*- classifier is nevertheless deleted in this deverbalization. Beside *k'uAgah* 'corpse of something, someone', we have only *XAwA:lAgah* 'dog-corpse', which implies presumably that 'my corpse' would presumably be *silAgah*.

#### 18.13.4.2 Third person object of directive, *wAXah*

We have two instances of third person object of directives, which presumably could not be criterial, with 'u'wA- (or 'a'-?) expected in any case. One example is *yAX 'u'wA'a:nX* 'looking about for it', as expected.

Note also, however, the exceptionally interesting noun *wAXah* 'story'. This must be the verbal noun from 'u'wAXah 'tell of it' of the theme O-'L-Xa' 'tell of O'. There is no productive prefix of the form wA-; unless we count -wA- of -wA-lah 'spirit of' (cf. -lah 'inhabitant of', -la 'camp, subsist'). The only other likely instance, related to a directive, is in *wAshah* 'name', which has cognates in Athabaskan (e.g. Minto -uzra'), but for which no corresponding Eyak verb is attested; 'call O; name O' is the theme O-'l-'e (a directive, though, as in Athabaskan). The hypothesis here is that this is the second half of the optional variant 'u'wA- of or epenthetic alternative to the allomorph 'a'- of the third person object 'u'- in the directive. This is required for some reason where no syllable intervenes between that and the stem, as in 'a'LXah or 'u'wALXah 'is telling of it', cf. 'u'yiLXah 'you're telling of it'. The -wA- provides or is the syllable needed to allow the -u'- allomorph. Possibly then, *wAXah* is the result of deleting (!) just the 'u'- part of the 'u'wA- from the directive gerund.

One could say that the language has "gone out of its way" here to delete the 'u(')- in *wAXah* 'story', zeroing out the 'u(')-, though not the wA-, to be consistent with the use not of oblique object but of verbal direct object prefix, as in the two instances we have of 1s and 2p, ten of indeterminate object, and three instances of zero for third person object of this verb. However, one could perhaps equally well say that Eyak has "gone out of its way" in the opposite direction, to insert the 'u- in *gi:wa:'ulah* 'beer, its drinking/the drinking of it', instead of (unattested) *gi:wa:')(A)lah* 'beer-drinking, drinking beer, drinking of beer'. One is of course reminded again of the issue in English gerunds, *him drinking* vs. *his drinking*, but in Eyak we are dealing here with the object, not the subject, and any role here for English influence in either direction is highly unlikely.

#### 18.13.5 External syntax of deverbalizations

Whatever its internal syntax, and problems just mentioned in that regard, it is clear enough that the Eyak deverbalization functions as a noun or noun phrase in the sentence. Accordingly, it is attested as the subject of a verb, object of a verb, object of a postposition, or possessor in a nominal compound. There are, however, some uses special to deverbalizations or some kinds of deverbalizations, some inherently so, some at least in

part because of the frames used to elicit them. As noted, because of their often neological status and/or obsolescence beyond that of Eyak itself, most kinds are virtually absent from texts, so are attested only by elicitation in certain frames.

### 18.13.5.1 Prohibitive

To begin with, we have several examples of the gerund and verbal noun in non-verbal sentences, with the prohibitive particle *ya'Xu*: 'don't!', mostly from Rezanov (1805), no fewer than eight times, seven of which are listed in 79. Eyak has no negative imperative at all, but rather a prohibitive, with *ya'Xu*: plus (positive) Future of the verb, 'prohibit that you will...!', e.g. *ya'Xu: qu'IXi:xa:s* 'don't be afraid!'. Rezanov sometimes tried to elicit negative imperatives, and for 'don't be afraid!' he got <Iakhul'khyskhos>, which can only be read *ya'Xu: IAXisxwa:s* 'no fearing!'. Most of the time, however, he got Яхо (<Iakho>) followed by <къ-а> (<k"-a>) or <хъ-а> (<kh"-a>) or simply <къ> (<k">) or <хъ> (<kh">), clearly the particle *q'ah* 'now!' (expression of urgency or impatience), possibly with the /a/ devoiced, and/or reduced to proclitic *q'(A)-*.

(79) Prohibitive *ya'Xu*: in gerund and verbal noun in non-verbal sentences

*ya'Xu: IAXisxwa:s* 'don't be afraid!', lit. 'no fearing!'

*ya'Xu: q'ah dAtux* 'don't spit!', lit. 'no spitting!'

*ya'Xu: q'(ah) k'uGAdjg* 'don't row!', lit. 'no paddling/stroking!'

*ya'Xu: q'(ah) k'u'wa'ya'X* 'don't ask!', lit. 'no begging to go along!'

*ya'Xu: q'ah yA[X 'i]swe:X* 'don't swim!', lit. 'no swimming (about)!'

*ya'Xu: q'(ah) li'X 'i:ni*: 'don't laugh!', lit. 'no laughing!'

*ya'Xu: q'ah qa'ni*: 'don't fight!', lit. 'no fighting!'

The prohibitive construction *ya'Xu: q'ah* plus gerund, and several of the examples, were confirmed by modern speakers. For some (unexplored) reason though they were not offered spontaneously. They may well reflect some degree of dialectal difference between Yakutat and Cordova, and/or historical difference between 1805 and 1965.

Of the eight instances of prohibitive in Rezanov, only three have overt gerund affixation: *ya'Xu: q'ah yA[X 'i]swe:X* 'don't swim!', *ya'Xu: q'(ah) li'X 'i:ni*: 'don't laugh!', and *ya'Xu: q'ah qa'ni*: 'don't fight'. The other five, closed stems lacking both *-L* and *'is*- could be classified as verbal nouns.

### 18.13.5.2 Gerund as subject

The largest number of attestations of deverbalizations in the corpus is as subject, no doubt simply because the most common or routine frame for elicitation of it was as subject of the theme O-*L-ga'* 'tire O': thus e.g. *'isda:l xusALga'L* 'sitting has tired me, I'm tired of sitting', or *gahG dA'a'tl' xuGALga'L* 'chewing gum is tiring me, I'm getting tired of chewing gum'. Given the "looseness" in observance of Eyak syntax, there are occasional attestations of

the reverse order, extraposition, e.g. *xusALga'L(.)* 'Awah 'Awa: 'I'm tired of eating that', and even occasional non-use of the gerund, e.g. *xusALga'L(.) xdAlah* 'Awa: 'it has tired me, I'm drinking it, thereof; I'm tired of drinking that', as well as the gerund *xusALga'L(.) 'ulah* 'Awa: Likewise we have the non-gerund 'itl' *tsin'dAxleh(.) xu'GALtuhgL* 'I'm speaking to you, (it)'s making me lazy', as well as the gerund 'itl' *tsin'dAle:l xu'GALtuhgL* 'speaking to you is making me lazy'.

### 18.13.5.3 Gerund as object of verb; object of postposition or adverbializer, possessor

There are accordingly fewer attestations of gerund as direct object of a verb. Some examples are given in (80).

#### (80) Gerund as direct object of verb

'AXAkih Xu' 'Ale:lsh Lideh 'do you know how to make a canoe?'

yahd 'idAXu' dAle:l 'u'lixilGah 'I know how to build a house'

tsin'dAle:l sid di:Lde'g 'teach me to speak!'

yAX 'iswe:X sid 'ALde'g 'teach me to swim (about)!'

'ida: yAX k'udAwe:X sid 'ALde'g 'teach me how one swims about!'

Use of deverbal as object of postposition was never investigated by elicitation. Examples in (81) are few but interesting.

#### (81) Gerund as object of postposition

##### a. Gerund as object of o-ga' 'like o':

lAgehGga' k'u:t'eh 'something is (like) being lonely; lonely place' (nominalized; cf. below here)

'uyAX 'isyahGLga' di:leh 'your talk is (like) annoying' (cf. below here)

lAwAdjga' 'i:t'eh 'is shy-like, is like being ashamed'

##### b. Gerund as object of o-X 'by means of o':

yAX 'ixe:t'[X]LX qu'xLah 'I'll go shooting about' (see also §18.13.6 on acquisitional)

##### c. Gerund as object of o-ya'-X '(movement) in o (vessel or concavity with broad opening at top)':

k'utsi:nlAya'X yAX da:Xinh 'he's walking about (in) singing'

##### d. Gerund as object of o-Xa' 'relating to o' (first two instances from Anna in text, here in rather different senses):

qe'yiLtehlAXAde:'X yAX 'its'i:nG[X]Xa' tl'ehXA' si'yahL 'I caught a chill from dipping fingers about in the whale's eyeball'

k'uqa'she:lXa' 'for the purpose of hunting, for hunting'

*mAgAG 'idAle:IXa' 'AnahshAkih 'ilinhih* 'he likes playing checkers'

e. Gerund as object of *o-ya:q'* 'because of' < *o-y-q'* 'on hand of':

*LAXAXALya:q'* 'because of drunkenness' (Anna 6-17-72)

f. Gerund as object of *o-ch'* 'toward o':

*yAX 'iswe:Xch' yAX xsdi'yahGL* 'I got urge to go swimming'

An interesting use of *k'ahd* 'sickness' is that we have not only *k'ahdga' 'Adu'xdAgAwih* 'I feel sick(ly)', but also *k'ahdLAX 'i'qe'wALgAwih* 'it will make you feel sicker'.

We have also three clear examples of the gerund as adverbialized by *-dah* in (82).

(82) Gerund adverbialized by *-dah*

*LAXisxa:sdah 'ida'dAXah* 'scary story is being told, is being told scarily'

*'uyAX 'isyahGLdah di:leh* 'you're talking annoyingly' (cf. above)

*LAgehGdah k'u:t'eh* 'it is lonesome (e.g. place)' < 'something is being lonesomely' (cf. above)

As object of possessed noun, forming a possessive noun compound, we have half a dozen examples (83) of the gerund or verbal noun as object of *o-ch'iya'* 'master of, expert at o, big o-er'.

(83) Gerund as object of possessed noun

*k'u'tu:lch'iya'* 'lazybones' < 'master of being lazy'

*yAX 'isa:Xch'iya'* 'big walker'

*k'uwahch'iya'* 'big eater'

*'ich'u'ch'iya'* 'master at stealing things, thief; whiskeyjack, camprober'

*'ists'a:nlech'iya'* and *dists'a:lch'iya'* (latter possibly in error) 'Giver of Strength' < 'master of being strong'

*dAq'e:k'wch'iya'* 'crabby, irritable person' (Rezanov 1805)

### 18.13.6 Acquisitional

What I have named *acquisitional* is adverbialization found with only a few verbs, *O-she* 'kill O', *O-X-a* 'eat O', *O-dA-la* 'drink O', *O-L-(l)e* 'gather O', *O-L-xut* 'shoot O (with gun)', also *o-LAX 'i-'an* 'see o'. All of these, except perhaps the last, are used in constructions referring to the act of going somewhere with the goal of acquiring or consuming food or goods, hence the name given here. Productivity of this derivation is certainly limited, and not remembered with confidence. Results did not encourage aggressive systematic investigation. We have record that an attempt was made to elicit *\*k'uqu'wAsiyu:ch'L* 'kill many' (cf. *k'uqu'wAshe:ch'L* 'kill (sg)'), but that was rejected by Lena 6-15-71, even though it seemed a good candidate semantically.

### 18.13.6.1 Morphology of acquisitional

This class of deverbalization is morphologically distinct, completely, from other deverbalizations, with its suffixation *-ch'-L*, so is treated last, separately.

#### Suffixation

Attested forms regularly show the double suffixation *-ch'-L*. The *-ch'* is very probably to be identified with the postposition *o-ch'* 'toward, to o', and the *-L* is almost certainly to be identified with that of the instrumental-descriptive suffix. This unique suffixation is definitive of the acquisitional.

Of the six stems attested with the acquisitional, five are of the type CV, here taking the form *-CV:-ch'-L*. The acquisitional for *-xut'* 'shoot O (with gun)' takes the form *-xe:t'-ch'-L*, implying that this derivation requires expanded stem.

#### Prefixation

All classifiers are deleted, as exemplified in (84).

(84) Examples of acquisitionals

*k'ula:ch'L* 'drinking' < O-*dA-la*

*shug'ule:ch'L* 'picking strawberries' < O-*L-(l)e*

o-*LAX 'i'a:nch'L* 'seeing o' < o-*LAX 'i-LA-'an*

*ge:Lta:gyu: 'uxe:t'ch'L* 'shooting seals' < o-*L-xut'*

There are no mode-aspect prefixes, except, as also the case with gerunds, future *qu'-* is usual with O-*she* 'kill O', e.g. *k'uqa'she:ch'L*, *k'uqu'wAse:ch'L* 'hunting'. Uniquely, in the case of *k'uwa:ch'L* 'eating', the X-qualifier in the theme O-*X-a* 'eat O' is deleted, as it is in the verbal noun, *k'uwah*.

All attested forms are transitive. The pronominal object forms are problematic as in other deverbalizations, except in that we know first (and presumably second) person forms cannot be used, as we have record that proposed *\*xuxe:t'ch'L* 'shooting me' and *xuqu'wAse:ch'L* 'killing me' were rejected.

Third person object pronouns are as with gerunds and verbal nouns. In many instances indefinite *k'u-* is usual: *k'ula:ch'L* 'drinking', *k'uwa:ch'L* 'eating', and the three synonymous forms *k'uqu'wAse:ch'L*, *k'uqa'se:ch'L*, *k'ushe:ch'L* 'hunting' (in order for frequency, the first is by far the most frequent acquisitional in the Eyak corpus). In one case we have a theme with indeterminate direct object, for some reason the unique irregular or suppletive theme o-*LAX 'i-L-'e* ~ used for all mode-aspects of 'see O' (O-*G-'e* ~) in other than Active imperfective: *sikuwa:nahGAyu:LAX 'i'a:nch'L* 'seeing my friends' (\*? ~ O-*G-'a:nch'L* not tested).<sup>16</sup>

<sup>16</sup> The form *sikuwa:nahGAyu:LAX* is glossed *si-kuwa-nah-G-Ayu-LAX*, and literally translates to 'people who live along with me'.

We also have at least four instances of overt direct object, presented in (85).

(85) Acquisitional with overt direct object

*ge:Lta:gyu: 'uxe:t'ch'L* 'shooting seals (with gun)'

*ke:Lta:gyu: 'uqa'she:ch'L* and *ke:Lta:gyu: qa'she:ch'L* 'hunting seals'

*shug 'ule:ch'L* 'picking strawberries'

In at least three of these there is the overt pronominal prefix 'u- (possibly also the fourth, at least implicitly). This is not as expected either in verbs or possessed nouns, the norm for those being e.g. *XAwa: GA'eh* 'sees a dog' (not ever \*'uGA'eh), *XAwa:-ni:k'* 'dog's nose' (not \**XAwa: 'uni:k* 'dog its nose'). However, this does seem to be the case in acquisitionals, as also with some deverbalizations, where the 'u- alternates with 'A- and zero. This may be so here also, given that by chance the 'u- is preceded by labialization in all four instances; i.e. where the preceding vowel is /u:/, -u:'A- could easily be indistinguishable from -u:'u-, and the same could result after *shug*, phonetically [shukw]. We have one instance of overt subject in *lixahyu: qu'xse:ch'L* [*sic*] *qu'xLah* 'I'll go hunting grizzlies' in a later investigation with Lena, but this is almost certainly an incorrect form, inflected for subject in Zone D, showing the uncertainty encountered in pushing speakers' memory of this derivation.

### 18.13.6.2 Syntax of the acquisitional

Most characteristic syntactically of the acquisitional is its use adverbially with locomotion (basically intransitive) verbs, in which it then requires the *L-* classifier. The basic verbs so attested, with classifier, are *L-a* '(sg) go (on foot)', *L-'a'ch'* '(pl) go (on foot)', and *L-qe* 'go (by boat)'. The one example of 'eat O' is *k'uwa:ch'L 'AdiX sAL'a'ch'L* 'they went in to eat', from Marie in text. With 'hunting' all three locomotion verbs are attested in relative abundance, always with the *L-* classifier. Further examples:

(86) Further examples of adverbial use of acquisitional

*k'ula:ch'L qu'xLah* 'I'll go drinking'

*sikAwa:nahGAYu:lAX 'i'a:nch'L qu'xLqeh* 'I'll go (by boat) to see my friends'

*ke:Lta:gyu: ('u)qa'se:ch'L qu'xLqeh* 'I'll go seal hunting (by boat)'

*shug 'ule:ch'L sALahLinh* 'she went (on foot) to pick strawberries'

As noun object of a verb we have one instance of the acquisitional: *k'uqu'wAshe:ch'L Lideh* 'knows how to hunt'. As object of postpositions we have *k'uqu'wAshech'Lwahd* 'for (the sake of) hunting, in order to hunt', and *sAqehLinh, k'uqu'wAshe:ch' LXa'* 'he went (by boat), to hunt, for hunting' (cf. *k'uqu'wAshe:ch'L sALqehhLinh* 'he went hunting (by boat)'). In this way the acquisitional does not differ from the gerund; cf. especially the case of *k'uqa'she: LXa'*.

Finally, we have *k'ushe:ch' LX qu'xLah* 'I'll go hunting' (Lena, with the future prefix in 'go' but not in 'hunting'), where the acquisitional is the object of the basic instrumental

postposition *o-X* ‘by means of’. It so happens that that postposition itself with that meaning takes the *L*-classifier in verbs: e.g. *tsa:dli:nAX qu’xLsheh* ‘I’ll kill it with a rock’ (cf. *qu’Xsheh* ‘I’ll kill it’), *xut’LX ’AdsLishehL* ‘he killed himself with a gun (*xut’L*)’ (cf. *’AdsdishelL* ‘he killed himself’). Thus also, we have Lena’s gerund *yAX ’ixet’LX qu’xLah* ‘I’ll go shooting persistently about (at nothing in particular, firing a gun about)’, interpreted as a gerund with indeterminate object, persistent, and perambulative with expected *-X* suffix missing on the verb stem, thus here *yAX ’ixet’[X]LX*. This construction is similar to that of *k’ushe:ch’LX qu’xLah*, though in neither case is the acquisitional or gerund to be taken semantically as instrumental in relation to the verb ‘go’, but more as its goal.

### 18.13.6.3 O-L-le:ch’L ‘pick berries’

There is one verb theme that strikingly resembles the acquisitional both in meaning and in form, namely *O-L-le:ch’L* ‘pick O (berries), go berrypicking’. This is probably to be analyzed *O-L-le-ch’L* ‘act on O, process O’, with stem *-le* ‘act, do’, and the same suffixation as in e.g. *-she:ch’L*.<sup>17</sup> Indeed, I did later succeed in eliciting the certain instance of acquisitional *-le:ch’L* in *shug ’ule:ch’L sALAhLinh* ‘she went strawberry-picking’, which might well be considered the missing link for *O-L-le:ch’L*.

The theme *O-L-le:ch’L* differs from acquisitional not only in showing the overt *L*-classifier, but is a fully and regularly inflected verb, cf. (87).

(87) Inflection of the theme *O-L-le:ch’L* ‘pick berries’

*xLle:ch’L* ‘I’m picking berries’

*k’uqu’xLle:ch’L* ‘I’ll pick some (berries)’

*Li’q’ sLile:ch’L* and *Li’q’ sdile:ch’L* ‘they have all been picked’

*shug ’ALle:ch’L* ‘pick strawberries!’

*xLle:ch’Lk’* ‘I (customarily) pick them (berries)’

Most probably, this theme is a unique back-formation on the (only once elicited) *O-L-le:ch’L L-a* ‘go (on foot) to gather (berries)’. Here the *L*-classifier required on the motion verb in the acquisitional construction is now analogically combined with or incorporated into the acquisitional itself. This thus makes a new verb theme, a high-frequency item indeed.

### 18.13.6.4 Blending of acquisitional and gerund

In pushing enquiry for further information on acquisitionals and gerunds, a number of forms were elicited which show uncertainty, inconsistency, blending or analogy working

<sup>17</sup> Alternatively, this could conceivably be a different stem, *-le:ch’*, which might be cognate to Proto-Athabaskan *\*-ŋʷəʒ* ‘pluck’. However Eyak /l/ does not regularly correspond with the PA labialized palatovelar sonorant *\*ŋʷ*. More likely, especially considering that the final *-L* remains throughout all inflected forms of *O-L-le:ch’L*, it would seem that the suffixation in fact the same as that of the acquisitional.



between these two related derivations, both at a morphological and syntactic level. For example, from Lena (6/14-15/71) *lixahyu: 'ut'e:k'L qu'xLah* 'I'll go shooting grizzlies (with bow and arrow)'—itself perhaps a dubious enterprise—with expanded stem, *-L* suffix, but lacking the *-ch'*, then *L-* in motion verb; also *lixahyu: qu'xLt'ik'ch' qu'xah* of the same meaning, now with unexpanded stem, phrase subordinated to *o-ch'* 'toward o', a presumably acceptable sentence, Lena explicitly rejecting proposed expansion of stem-vowel, rejecting suffixation of *-L*, and rejecting *L-* classifier in motion verb. Then *lixahyu: qu'xshe:ch'L qu'xLah* also of the same meaning, but almost certainly incorrect, including 1s subject pronoun in acquisitional. Finally, *ke:Lta:gyu: 'uxe:t'Lch' qu'xqeh* 'I'll go (by boat) shooting seals (with gun)' has metathesis of *-ch'* and *-L* instead of *'uxe:t'ch'L*, and lacks the *L-* classifier for the motion verb (but for that lack cf. *lixahyu: qu'xLt'ik'ch' qu'xah* above).

Further, from Lena, we have both *yAX 'ixe:t'XL qu'xLah* and *yAX 'ixe:t'XL qu'xah* 'I'll go shooting about (with gun)' as well as earlier *yAX 'ixet'XL qu'xLah* (for what should presumably be *yAX 'ixet'XLX qu'xLah*), all coming out as perambulative gerunds rather than hypothetical perambulative acquisitional *yAX \*?'ixe:t'Xch'L*, perhaps not allowable.

Finally, from Lena, we have *k'u'wAtsa:gL da: yAX LA'a'ch'[X]* 'we're going about shopping', also missing the *-ch'*, with *LA-* from *L-* classifier in motion verb, with directional theme and repetitive. It is possible that the repetitive precludes a hypothetical acquisitional *\*ku'wAtsa:gch'L*.

## 18.14 Unanalyzable nouns

Miscellaneous nouns, i.e. those not covered in the previous categories, are of two basic types: 1. those of apparently Eyak origin but phonologically non-canonic and/or unanalyzable, made up in whole or in part of unrecognizable morphemes; and 2. nouns of non-Eyak origin or diffused of uncertain origin. The first subcategory will not be fully listed here, especially because the dictionary is organized in a way that these can be found separately from the rest as they are listed out of the special Eyak alphabetical order in the dictionary at the end of the section for each letter (i.e. stem-initial phoneme). The second subcategory is discussed in §18.15 below.

## 18.15 Loanwords

Eyak proves to be a relatively “pure” language, as far as can be directly seen. We have an Eyak morpheme inventory of ca. 1,300 morphemes. For a large part of that we can find no Athabaskan (or Tlingit) cognates, no doubt the majority. That allows for the strong possibility that there may be a large element of the Eyak morpheme inventory that is of unknown or substratal origin, to the extent that, maximally, everything for which no Athabaskan (or Tlingit) cognate can be found is substratal. As far as we know, such a substrate cannot be identified and is unlikely ever to be identified. There is certainly no

language yet identified to which that large part of the Eyak inventory not cognate with Athabaskan (or Tlingit) can be shown to be cognate.

Therefore, by “purity” I mean rather that Eyak has but a relatively small proportion of morphemes that can be shown to be of identifiably non-Eyak origin, a total of just under 200 morphemes, out of ca. 1,300; or, better, in terms of lexemes, just over 200 out of ca. 7,000, i.e. the Eyak lexicon is 97% native Eyak. The loans are almost entirely nouns, so are treated here.

The composition of this list, in terms of original source language and pathways into Eyak, is somewhat complex. By far the largest subset of these loans is from Tlingit (Yakutat dialect), at least 84 items. There are about 17 more from Chinook Jargon (mostly of English origin), which probably came or may have come through Tlingit, but this is not certain in all cases, as it is clear that some Eyaks knew some Chinook Jargon. Further below in the discussion of wider diffusions, there could be at least five more items that have come into Eyak from Tlingit, of Tlingit, Athabaskan, and English origin. Thus up to 111 of the 200 loanwords in Eyak have come from or through Tlingit.

From Chugach Yupik there are about 20 items, and up to 20 more from Russian which came into Eyak through Chugach. Of the rest of the Russian loans, a total of about 14, a few more may have come through Chugach, but more of these came directly from Russian to Eyak, and five through Tlingit.

The total of Russian loans attested in Eyak is relatively small, about 33. Moreover, of these, at least 25 came through Chugach or Tlingit, leaving only a maximum of 9 that came or may have come directly from Russian to Eyak. Such a low number of direct loans implies a very low intensity of direct contact with Russians during the colonial period, perhaps more than a high degree of resistance to Russian influence, more the case with Tlingit.

The third language neighboring to Eyak, Ahtna Athabaskan, is the source of the third-largest (i.e. by far the smallest) portion of loans in Eyak of Alaskan origin, perhaps as few as 6 items, or at most 12. That dovetails with 9 to 14 items that are widely diffused, shared in Athabaskan, Eyak, Tlingit and beyond, the origin and routing of which remain unclear.

Finally, included in the dictionary are 21 more loans that have come from English, but early in the contact period, with phonological and/or semantic adaptation, which are recognized as part of Eyak, rather than of open-ended bilingualism. A few may not have come directly, but via Jargon and/or Tlingit.

### 18.15.1 Loans from Tlingit

Crucial here, as will be shown below, is the difference between Northern Tlingit and Tongass Tlingit, the southernmost of the known dialects, now extinct, but valiantly documented by Leer 1973–78. The difference is that Northern Tlingit is tonal, with high and low tone for full vowels. Tongass, on the other hand, is non-tonal, and has glottal modification of its full vowels in what Leer calls three contrasting STIGMATA. Northern Tlingit has only two tones because it merged two of the Tongass stigmata. The three contrasting Tongass

stigmata are “fading” (decreasing volume or energy, perhaps also increasing breathiness, written  $V^{\cdot}$ ), “clipped” (glottal stop,  $V'$ ), and “sustained” (length,  $V:$ ). Where Northern Tlingit has low tone, Tongass regularly has fading stigma. In the other case, however, where Northern Tlingit has high tone on full vowels, Tongass has contrasting clipped and sustained stigma. There, crucially, the Northern can be predicted from the Tongass, but not the Tongass from the Northern; Northern has lost information preserved only in Tongass.<sup>18</sup>

Where Northern Tlingit has low tone and Tongass fading stigma, the nucleus will be written here as  $V^{\cdot}$ , grave accent after the vowel, nicely iconic for both varieties. In these of Northern high tone, however, the nucleus is written directly as it is in Tongass,  $V'$  or  $V:$ . (Where the Tongass form is lacking, the Northern high tone is written, as  $\acute{V}$ . These vowel nuclei are shown here as in Leer (1978). That list is also the source of most of the Tlingit data here. Some of the Northern forms may be my own transcription from Yakutat speakers.

**Table 18.3:** Tongass Tlingit full vowel stigmata correspondences with Northern Tlingit and Eyak.

	Tongass	Northern	Eyak
<b>fading</b>	$V^{\cdot}$	$VV$	$Vh$
<b>clipped</b>	$V'$	$VV$	$V'$
<b>sustained</b>	$V:$	$VV$	$V:$

The Eyak stigmata are fully isomorphic to the Tongass, virtually identical (Tab. 18.3). At the very opposite ends of the entire stretch of Tlingit territory, two of the stigmata are identical,  $V'$  and  $V:$ ; virtually also the third,  $Vh$  or  $V^{\cdot}$ . Before taking up the issue of a relationship of the Eyak to the Tongass stigmata, first we shall list and describe the corpus of Tlingit loans into Eyak in semantic categories.<sup>19</sup>

Tlingit loans are easily defined as such, especially as known to Lena or Marie. Lena’s father knew some Tlingit, but not Lena, nor Marie, whose father “didn’t want to have

<sup>18</sup> As Leer also discovered in 1973, the Tlingit dialect layer next-southernmost to Tongass, Saanyaa-Heinyaa, is tonal but has three tones, matching the three Tongass stigmata. Saanyaa-Heinyaa differs from the rest of the dialects to the North by having falling tone where Tongass has  $V'$  (Williams and Williams 1978). It might yet be possible to determine whether some of the Northern Tlingit high-tone stems missing in Tongass have high or falling tone in Saanyaa-Heinyaa, which still has a handful of speakers.

<sup>19</sup> The rest of the spelling system for Tlingit here, partly in order to be more directly comparable to the Eyak, and partly because underlining was avoided in my original draft and in Leer’s stem list, differs significantly from Tlingit orthography. Uvular obstruents are written as in Eyak and Leer’s stem list, instead of underlined symbols for the velars, while the affricates are spelled as in Eyak. Symbols for unaspirated coda stops and affricates are written instead of those for aspirated. Tlingit <|> is voiceless, Eyak <L>. For glottal stop, zero initial and non-initial <.>, is here <'> for both.

anything to do with Tlingits.” Bilingualism in Tlingit was apparently just beginning to reach Eyak Village, when, in 1889, the expansion of Tlingit was decisively aborted by the American canneries. Tlingit loans that are attested only in the Anonymous (1810) vocabulary are not included here, because that 1810 vocabulary shows abrupt increase in Yakutat Eyak of Tlingit loans over Rezanov (1805), obviously due to the open-ended bilingualism which was soon to lead to the extinction of Eyak at Yakutat. It is of course hypothetically possible that some shared monosyllables or stems could be loans from Eyak to Tlingit, especially in items shared only between Yakutat Tlingit and Eyak. Even in such cases, though, given the dominance of Tlingit over Eyak, the reverse, Tlingit to Eyak, might *a priori* be more probable. However, in the much more usual case of items shared between Eyak and all Tlingit, or even diffused further, to Haida and/or Tsimshian, the direction of the loan is virtually certain to be from Tlingit to Eyak, especially considering that it is clear that Tlingit spread northward from the Ketchikan area in relatively recent centuries, and it is possible that other languages, now unknown, were in between (cf. §3.2.5).

More legitimate loans from Tlingit could probably have been elicited from Lena or Marie, who knew no Tlingit as such, by going over Tlingit lists for likely shared concepts for which no Eyak was yet attested, but such elicitation was never systematically done.

As noted, Tlingit loans are much more numerous in Eyak than loans of any other source. Moreover, loans from Tlingit are the only subset of loans that goes beyond nouns, into verbs. The two most obvious cases are of special cultural interest, and are also stem nouns as well as verbs in Eyak. One is *kus* ‘urine (for washing)’ (< *kwás*), as opposed to *tse’q* ‘urine’ (cf. PA \*-tsu’g ‘be yellow’), also *kus’Akih* ‘(child’s) vulva’, and the verb O-*kus* ‘wash O’. The other is *Xah* ‘war’ (< *xaa*), with the verb -*Xah* ‘pl boats move’, which can be used neutrally in a routine non-threatening sense, but which obviously still can evoke the danger of a Tlingit fleet approaching. Two more are for basic tools, *tAL* ‘drill’ (< *tu’l*), O-*L-tAL* ‘drill O’, and *tAGL* ‘hammer’ (< *takl*), O-*L-tAGL* ‘hammer O’. One item alone appears to be only a verb both in Tlingit and in Eyak, -*dje:dj* ‘be amazed, surprised’ (< -*je`ch*), if not an unusually direct cognate.

One point to keep in mind in considering the cultural or historical implications of these loans is that, at least in many cases, the presence of a Tlingit loan does not mean that the concept or item is entirely new to the Eyak language or culture. Though this may be so in some cases, in others it means only that the Tlingit (word and/or object) has replaced the Eyak as being of higher prestige.

In addition to doublets such as original *tse’q* ‘urine’ and borrowed *kus* ‘urine (for washing)’, noted above, in at least one case we have both the original Eyak and the Tlingit loan, most significantly for a natural item, obsolescent Eyak *kushk* ‘bluejay, Steller’s jay’, being replaced by *q’e:’shk* (< *x’éishx’w*). A large proportion of Tlingit loans are in fact in the category of fauna (88) and flora (89). In some cases such biota are more in Tlingit territory than Eyak, but in some cases not. That distinction, even where possible, is not made in lists below.

## (88) Tlingit loans for fauna

*q'e:shk'* 'bluejay, Steller's jay' < *x'éishx'w* (original Eyak *kushk'* now obsolescent)

*de:qi:dGa:G* 'jaeger' < *dei'kee'tgaak*

*ts'its'* 'harlequin duck' < *s'ús'*

*ts'Axe:L* 'crow' < *ts'axwei`l*

*ch'Aq'i:nq'* 'mallard' < *ch'ax'ínx'* (Yakutat only)

*ga:x* 'black duck species' < *gaa`xw*

*GAXtl'* 'swan' < *gúkl'*

*sa:g* 'eulachon' < *saa`k*

*tu:ahs* 'fish species like hooligan' < *tu.áas* (Yakutat only, of Athabaskan origin?)

*ti:tl'* 'dog salmon' < *téel'*

*ch'ihdG* 'skate' < *ch'ee'tgaa*

*wa:w* 'herring' < *Yaa`w*

*ye:nn* 'sea cucumber' < *yéin*

*Gu:djih* 'wolf' < *goo`ch* (*-ih* unexplained; also diffused to Haida)

*quwAka:n* 'deer' < *guwaka`n*

*XAsqa:k'* 'cross fox' < *xaskáax'* (not attested in Tongass)

*XAlt'u:ch'* 'black fox' < *xalt'oo`ch'*, or *-t'u`ch'* in verb

*tle:shXa:shi:shXa:* ~ 'dragonfly' < Yakutat *lkaashishxaaw* (Tongass *kaa`shaa`shxaa`w*)

## (89) Tlingit loans for flora

*La:X* 'red cedar' < *laa`x*

*ga:ndAG* 'lupine' < Yakutat *ganták̄w* ~ *kanták̄w*

*ye:LtAXi:* 'onion' < *yei`ltaxi*

*shug* 'strawberry' < *shák̄w*

*q'e:shkuXa:gu:* 'berry species' < *k'eishkaháagu* (Tongass *k'ei`shkahaakw*) 'bog cranberry'

*kuts'i:ts'* 'plant species with purple flower' (< ??, Anna only)

Two Tlingit loans denote natural substances: *ts'AGL* 'graphite' (< *ts'ákl*) in *ts'AGLga'* 'i:t'eh' 'dark grey color', and *ts'Aga:d* (< *s'agwáat* 'brown thick hemlock bark') in *ts'Aga:dga'* 'i:t'eh' 'brown color'.

Among uncertain cases vaguely remembered are *Lu:n* 'some kind of plant' (< *loo`n* 'bark'), and *LuhL* 'some kind of bark' (cf. preceding, < *lólol* 'fireweed'). At least two items

are in Yakutat Tlingit and in Eyak, *ka:shk* ‘humpback salmon’ (< Yakutat *kwáash*, cf. Tongass *chaas*’), and *sahx(w)* ‘cockles’ (< Yakutat *saa`xw*), where the direction of the loan is uncertain.

Another large category is tools and artifacts, certainly covering an extreme range of chronology, with examples presented in (90).

(90) Tlingit loans for tools and artifacts

*tAGL* ‘hammer’ < *tákl*

*tAL* ‘drill’ < *tuL*

*tAwi:s* ‘stone axe’ < *taYee*’s (where Y is velar sonorant)

*XAt’a:* ‘adze’ < *xat’aa*’

*k’uda:* ‘file’ < *x’adaa*’

*kuts’i:d* ‘screw’ < *kas’éet*

*ts’ik*’ < *s’ix*’ ‘plate’

*shiL* ‘spoon’ < *shál*

*q’Adl* ‘cooking-pot’ < *k’wátl*

*q’Adlge:L* ‘bottle’ < *k’watlgwéil*

*ts’isa:* ‘canvas, tarpaulin’ < *s’isaa*’ ‘cloth’

*LAnAs* ‘nose-ring; padlock’ < *lunás*

*shAwe:na:* ‘anchor’ < *shaYei’naa*

*q’e:k’Atl*’ ‘straight pin’ < *x’eix’wal*’

*kust’a:t*’ ‘quilt’ < *kast’áat*’

*kushxi:d* ‘cloth’ (< *kashxéet*)

*kAna:d* ~ *kAna:’Ad* ‘coat’ < *kinaa’át*

*tsa’k*’ ‘gloves, mittens’ < *tsáax*’

*ku:shti:L* ‘moccasins’ (< Yakutat *keeshtéel* ~ *keishtéel*, Tongass *at xashdi tee:l*)

*dAq’Ata:L* ‘trousers’ < *tuk’atáal*

*kAwu:d* ‘beads’ < *kawóot*

*niLa:* ‘handkerchief’ (< Yakutat *nálaa*)

*’a:nke:we:* ‘flag’ (< *aa`n kweiYi* ‘land mark’)

*Ge’q’dja:* ‘musical instrument’ < *gix’jaa* (verb stem *gi`x`-*

*guch’uh* ‘gambling-die’ (only in Swanton 1908: 445, <k!ítc!ú> “buttocks-shaped”, but no such Tlingit meaning; Eyak -Vh seems irregular; loan in Tlingit from Eyak??)

*kut'i:k* 'chewing-tobacco' < Yakutat *kat'éex*  
*shuki:ʼAd* 'dance wand' (only Galushia Nelson) < *shakeeʼát* 'dance hat'  
*silke:d* 'goatskin shield' (only Galushia Nelson) < *sankeit* 'waistlet' ?  
 ʼAyAwih 'goblin; scary face mask' < ayÁYi, (Swanton 1909: 80-81)

A few more abstract loans are presented in (91).

(91) Tlingit loans for abstract notions

-*sa:w* 'namesake' < -*saa`Yi*  
*tle:qa* 'twenty' < *tlei-káa* (see Chap. 20)  
*nAts`gL qAXah* 'a certain month' (barely remembered by Lena; cf. Tlingit *nás`k* 'three')

Another Tlingit loan, not belonging in any of the categories above, is *t`u:ch`qa* 'black man' (cf. 'black fox' and *tle:qa*: '20' above, also the stem *-t`u:ch`* in more widely diffused terms below). Two basic items, ʼ*AdAwi`L* 'war, excitement, panic, frenzy' (< ʼ*adawoo`tl*), and *Xu:l* or *hu:l* 'sale, on sale' (< *hoo`n*), are both also used adverbially, especially as complement. The four clan names that could be considered Eyak or that were remembered by Eyak speakers are from Tlingit: *dji:shq:e:d(i)*, *de:qe:d*, *qu:sk`e:d*, and *Ga:nAXte*: (< *jee`shkwei`di*, *tei`kwei`di*, *koo`sk`ei`di*, *gaa`naxtei`di*); these seem to be somewhat marginally naturalized in late Cordova Eyak.

Possessed nouns are certainly not marginal, beside *-sa:w* 'namesake' (< *-saa`Yi*) above, and *-sha:w* (< *-shaYi* ?) are the two kin terms, for parents' cross siblings, *-ʼahd* 'father's sister' (< ʼ*aa`t*) and *-ga:g* 'mother's brother' (< *-káak*), for some reason fully and symmetrically incorporated into the Eyak kin term system from the Tlingit. Also possessed from Tlingit is *-wAXa:w* (~ *-yAXa:w*) 'soul, shadow, picture' (< *-Yahaa`Yi*). Another two possessed anatomical nouns are *-xi`ts* 'shin' (< *-xee`s*), and *-lahs* 'intestines' (< *-naa`s*), though in the case of the latter, cognation is to be considered, as the *-l-* is otherwise hard to explain.<sup>20</sup>

Very basic, unless in fact cognate, are *k`a`t* 'island' (< *x`a`t*), and *ts`a* 'mud, clay' (< *s`é* 'clay'). This small category of possible cognates may include also *du:xLidah* 'crane', with metathesis, Rezanov (1805) *du:Lxideh*, Tlingit *dóol*, PA \**de:l*, PAE \**dewl*, leaving *-xideh* unidentified, just as likely, however, to be a diffusion.

Finally, *ʼuk`ahyAkih* 'nobleman' is probably a reinterpretation of Tlingit *ʼaa`n-k`w-yadi*, formally appearing to be Eyak *ʼuk`ah* 'from it', *-yA-* thematic as in *-yA-quh*, and *-kih* diminutive, perfectly canonic, but with no such analyzable meaning. Likewise in

<sup>20</sup> Where Tlingit and Eyak are the same (*mutatis mutandis* phonologically), the default explanation is diffusion, especially in the case of morphologically complex items not analyzable in Eyak, and even for some monosyllables, stems, for cultural items like artifacts, ceremonial/spiritual, and even biota. There's only a small scope, like *-lahs* 'intestines', or *k`a`t* 'island', where we have to wonder.

*LAkush'i:ah* 'shrew', Tlingit *lukshiyáan* 'mink', we have *luksh-* > *LA-kush-*, where *LA-* sounds like a classifier, and *-iya:n* may be related to *'i:ah* 'extends'. This item is also listed as one of the unanalyzable nouns in §18.16, especially as there is no Eyak stem *\*-kush*.

The majority of Tlingit loans are probably still recognized as such, at least most of the disyllabic or polysyllabic ones, even though they have all undergone the necessary phonological adaptations to Eyak. Given the high rate of transparency of Eyak polysyllables, the opaqueness of such loans is distinctive.

Since the Eyak and Tlingit sound systems are quite similar or isomorphic, Tlingit loans are easy to adapt with a few general rules. Tlingit glottalized fricatives are borrowed as the corresponding stop or affricate, e.g. Tlingit *s'ix* 'plate' > Eyak *ts'ik*. The full vowel systems are isomorphic in quality so are regularly retained in Eyak, but the reduced vowels are shifted in Eyak as necessary, e.g. *s'ús* 'harlequin duck' is rendered *ts'its'*, *gúk'l* 'swan' becomes *GAXtl'*. Labialization is lost as such e.g. in *x'ei'shx'w* 'Steller's jay' becomes *q'e:shk'*, and *k'wátl-gweil* 'cooking pot' > *q'Adl-ge:L*. However, the labialization is kept with velars and reduced vowels, e.g. *shákw* 'strawberries' becomes *shug*, or even introduced, as in *kust'a:t'* 'quilt' from *kast'aa:t'*. Tlingit stem-initial /h/ is represented by Eyak /X/, as in *q'e:shkuXa:gu*: < *k'ei`shkaha:gu* 'bog cranberries'. The Tlingit back unrounded velar sonorant [u], sometimes written as underlined <y> or gamma <γ>, here <Y>, appears regularly as modern Eyak /w/, as in *wa:w* from *Yaa'w* 'herring', *-sA:w* 'namesake' from *-saa'Y-* 'name', above. This may be due to a change in Eyak itself, however, where Rezanov (1805) wrote <r> (<g>), not labialized, which is now always /w/, <aa> in *-lera* (<-lega>), to be read *-'AYa*, modern *-'lAw* 'big'. Prevocalic Tlingit /n/ is retained as such, not shifted to /l/, yet another reason why Tlingit *-naa* 's' 'intestines', Eyak *-lahs*, is easier to explain as a cognate than as a loan. Before a consonant Tlingit /n/ can become Eyak nasalization, e.g. *kantákw* is rendered as *ga:ndAG*.

Looking carefully now at the Tlingit tones and Tongass Tlingit stigmata, and any possibility of correlating those with the choice between Eyak V:, V', and Vh, we find the following. For most loans in Eyak from Tlingit, all Tlingit full vowels are V: in Eyak, no matter whether the tone is high or low or which is the Tongass stigma. We have over 60 instances of this indiscriminate V:. There is, however, a decisive minority of 16 exceptions to V: in Eyak, with Vh or V' instead, and those do show some highly interesting correlations.

Of the seven exceptions with Eyak V', it happens that four have glottalized obstruent coda. This may not be surprising, as with coda *-C'*, Eyak does not allow nucleus Vh, but only V' and V:. Thus we have *tsa'k* 'glove' (< *tsaa'x*'), *-xi'ts* 'shin' (< *-xee's*'), *k'a't* 'island' (< *x'aa't*'), *Ge'q'dja*: 'musical instrument' (< *gix'-jaa*, but verb stem *-gi'x'* 'squeak'), in all of which the Tongass nucleus is also V', except in a sense the last (reduced in the Tlingit derivative). Another instance, most important of the V' exceptions, is *'AdAwi'L* 'excitement', from what is *adawoo'tl* 'agitation' in Tongass, where the stem coda obstruent is not glottalized, to be discussed further below. At the same time, however, there are



also at least two instances of Eyak V: instead of V' before glottalized coda obstruent: *ti:tl'* 'dog salmon' (< *tee:l'*), and *kust'a:t'* 'quilt' (< *kast'aa:t'*), with *kut'i:k'* 'chewing tobacco' (< *kat'ee:x'*) possibly a third. These are proof of the corresponding contrast for V:C' as opposed to V'C', in Eyak exactly as in Tongass.<sup>21</sup>

Confirming the general tendency of Eyak-Tongass stigma agreement we see that of the nine exceptions with Eyak Vh instead of V:, six (92) come from Tlingit V', arguably the rule.

(92) Tlingit loans with Eyak Vh instead of V:

*ch'ihdG* < *ch'ee'tgaa:* 'skate'

-*'ahd* < *aa't* 'paternal uncle'

-*'lahs* < *-naa's* 'intestines'

*nahGAts'e:* < *naa'gas'ei:* 'fox'

*ta:snah-* < *táasnaa'*, a place-name

*sahx(w)* < *saaxw* 'cockles' (Yakutat only, so perhaps a loan from Eyak to Tlingit)

Two of the three other loans in Eyak with Vh coming from Tlingit V', are of highly questionable status: *Luhl* 'bark?' (< *lólol* 'fireweed', but cf. *loo'ni* 'bark'), *tu:'ahs* 'fish species' (< *tu'ús*, probably Yakutat only). Finally, there is *Xa:* 'war' (< *xaa*) along with variant *Xah*, a case with open stem; cf. the verb loan *-Xa* above.

One might argue that some of these items could be cognates instead of loans, but many are obviously not (cf. discussion immediately above); or that there might be also some kind of direct correlation between Northern Tlingit high tone and Eyak V', especially with following C', on the one hand, and, less unlikely, between Tlingit low tone and Eyak Vh, on the other. In any case, the results shown here, for whatever reason, coincide with the evidence provided exclusively by comparison with non-tonal Tongass Tlingit. We have the three or four instances of Eyak CV'C' corresponding with Tongass CV'C' and two or three of Eyak CV:C' corresponding with Tongass CV:C'. We have, moreover, no counter-examples of Eyak V' from any other type of closed Tlingit stem than with V', or clear counter-examples of Eyak Vh from anything other than Tlingit V', which might introduce a factor of randomness. So even these five to seven forms alone must be evidence of Eyak contact with some kind of pretonal Tlingit. Again, it could be argued that some of the 16 exceptions are cognates rather than loans, but certainly not the opposing V' and V: in 'AdAwi'L 'excitement' and *kust'a:t'* 'quilt'; or Vh in *nahGAts'e:* 'fox' and *chihdG* 'skate', given morphological structure and the diffusion tendency of some fauna terms.

<sup>21</sup> The two further examples with Eyak V' are not included here. One is *ts'a'* 'alluvial mud' (< *s'e* 'clay') with Tlingit reduced vowel and zero coda, impossible in Eyak, plus high tone and glottalized fricative onset, possibly explaining the result. The final example with V' is the variant *da'ked* 'container', along with regular *da:ke:d* (< *daa'kei't*), where the *da'*-variant may be influenced by Eyak preverbal *da'* 'into vessel for preservation of food'.

The one form with V' not preceding glottalized coda obstruent, 'AdAwi'L 'excitement', is downright startling. Morphologically canonic but semantically opaque in Eyak, it cannot be a cognate with transparent Tongass 'adawu'tl 'agitation, trouble' (cf. *d-wu'dl* 'become agitated'). The only part of the stem rhyme that Eyak can get right, ironically, is the stigma /'/ itself as in Tongass, since Eyak does not allow full-vowel stems with *-wu-* (or *-yi-*), and hardly has any with coda *-dl*. That form alone would already force us to consider the claim of contact with pretonal Tlingit.

The claim is not that Eyak had to have contact with what would become the modern dialect (now extinct) identified with the place called Tongass. The claim is rather that first coastal contact between Eyak and Tlingit has to have been with a form of Tlingit that had stigmata like those of Tongass, before the development of tonal Tlingit. Eyak must have taken many more loans subsequently, with V:, from tonal Tlingit high or low tone, over 60 items, but these five to seven examples of opposing V' and V: including 'AdAwi'L 'excitement', not to mention the six of Vh, or the lack of clear counter-examples, show that contact between Eyak and Tlingit must have begun on the coast before the development of tonal Tlingit. This implies contact at a time significantly before 1800 and significantly south of Yakutat.<sup>22</sup>

### 18.15.2 Loans from Chinook Jargon

Chinook Jargon is the source of about 17 more loans, mostly of English origin, it appears, as noted above, which came to Eyak through Tlingit during the historical period. Even though, as mentioned, some Eyaks knew some Chinook Jargon, it is clear that some of these loans came through Tlingit. This is demonstrable, because they have /n/ from Tlingit for what was /l/ in the Jargon, which Eyak would readily have kept as /l/, if they had come directly from Jargon into Eyak. Likewise, some have Tlingit /w/ from Jargon /m/, which Eyak might have kept as /m/. One obvious example of both is Eyak *na:w* 'whiskey, hard liquor' (< Tlingit *náaw*) from Jargon *lam* (from English *rum* or French *rhum*). Another is Eyak *da:na:* 'money; dollar; silver dollar' (Tlingit *dáanaa* ~ *daana*) from Jargon *dala* (from English *dollar*). More such loans are presented in (93).

(93) Loans from Chinook Jargon through Tlingit (all checked and confirmed for presence in Yakutat Tlingit as well)

*sAnAg, sAnng* 'silk' < *sang*

<sup>22</sup> This matter is further discussed in §2.1.1 on Eyak prehistory. As noted there, the only alternative explanation to direct contact of Eyak with pretonal Tlingit for the transmission of the decisive items discussed here is that whatever extinct speech was between those, genetically related or not, would have to have had the same stigma system. Given the vast extent of our ignorance, such a possibility cannot be excluded.

*gu:nn* ‘gold’ < *góon*

*shdi:nn* ‘steel’ < *shdéen*

*cha:nAwa:nn* ‘Chinaman’ < *cháanwaan*, Tongass *chaa:niwaa`n*

*yi:nAwa:(yu:)* ‘shore patrol’ < *wánwaa`* ‘man-o’-war’

*du:sh* ‘cat’ < *dóosh*

*dAwa:guh* ‘snuff tobacco’ < *dawaa`gú* (Rezanov 1805 also токудакетъ (<tokudaket>)), i.e. *dAwa:guhda`ke:d* ‘tobacco container’)

*gud* ‘dime, ten cents’ < Tongass *gwit*, from English *bit* (as in *two bits*), hence also the hybrid *gudshu:wu*: ‘nickel, five cents’ (‘half dime’)

*ka:ta*: ‘quarter, twenty-five cents’ < *kwáataa*

*xa:s* ‘cow’ (Rezanov 1805 only, as хассъ (<khass>)) < Tlingit *xaa`*s, from Chinook Jargon and ultimately English *horse* (also *xa:sqa`* ‘bull’ in Rezanov (1805) хассъ-ка (<khass”-ka>), lit. ‘cow’s husband’)

Incidentally, at least three more Tlingit loans can be counted, as hybrids, with these two Jargon items compounded with purely Tlingit elements in the following: *na:wshida*: ‘funnel’ (< *naa:w shidaa`*), *na:wda`ke:d* ‘whiskey bottle’ (< *naa:w daa`kei`t*; cf. *dAwa:guhda`ke:d* ‘tobacco pouch’ below), *da:na:shu:wu*: ‘half dollar’ (< *daa:naa: shoo`wu*), and *wAGda:na*: ‘eyeglasses’ (< *waak dáanaa`* ‘eye - silver dollar’).

It is not a surprise that words of English origin through Jargon were in Tlingit already in 1805. In fact Russians at that period were decrying the distinct Tlingit preference for English goods and culture over Russian.

Finally, one item that is definitely of Chinook Jargon origin, perhaps not known in Yakutat Tlingit, so perhaps also directly from Jargon, is Eyak *tlu:dz* ‘queen (at cards)’, Jargon *kluch* ‘woman’, so also *tlu:dzqa`* ‘king’ (‘queen’s husband’). Also the name of the Jargon itself, *djAnu:g*, ‘Chinook (Jargon)’, may have come this route.

### 18.15.3 Loans from Chugach

Chugach Yupik, “Aleut” in local English, is the second largest source of loans into Eyak, over 40 altogether, a distant second to Tlingit, but still the source of some of the items basic to Eyak, more so than might be expected, given the hostile relations between Chugach and Eyak. About 20 of these are Yupik nouns.<sup>23</sup> At the same time, however, Chugach is also

<sup>23</sup> Chugach is a dialect of Alutiiq (known variously as Sugpiaq, Sugcestun, Pacific Gulf Yupik; ISO 639-3 ems), spoken also on the Kenai Peninsula, Kodiak Island and the Alaska Peninsula. Popularly the term “Aleut” includes speakers of three languages, one of them the Aleut of the Aleutian Islands and Pribilof, and two Yupik languages: Central Alaska Yup’ik and Alutiiq (Krauss 1980a: 7).

the source of up to 20 Russian loans into Eyak, over half of the total of such loans, to be taken up after the non-Russian loans from Chugach.

The largest single semantic category of Chugach loans is marine fauna (94), not surprisingly, followed (more surprisingly) by some other fauna (95), and artifacts, cf. (96).

(94) Chugach loans for marine fauna

'a:da:g 'fur seal' < *aataak*

Ga:nihG 'killerwhale' < *qaaniq* 'porpoise'

mAdjiduhg 'codfish eggs' < *mac'utak*

dji:da:dAG 'razor clams' < *cingtaataq*

shALAG 'butter clams' < *salaq*

GAdi:yAG or gAdi:yAG 'kittiwake' (cf. Kodiak *qatayaq* 'gull')

'a:XA:ngihG, where -ng- is a velar nasal, 'saltwater duck species' < *aarraangiq* 'pintail'

'ALbah 'eider' < *elpa*

'Awa:yAG 'cormorant' < *agayuyq*

To the list above might be added *liglig* 'brant', the only item with that gloss in the Eyak corpus, vaguely remembered, perhaps only as an "Aleut word," and irregular phonologically; cf. Chugach and widely, *leqleq* 'goose', probably imitative.

(95) Chugach loans for other (non-marine) fauna

Gi:nga:dAG, where -ng- is a velar nasal, 'red rotten salmon, way upstream' < *qingtaataq* 'pregnant'

na:XA:g 'goose' < *nauruaq*

gu:djgALAG or Gu:djgALAG 'eagle' < *kuckalaq, quckalaq* (present also in Rezanov's (1805) Yakutat Eyak!)

(96) Chugach loans for artifacts

yidiguG 'thimble' < *tekeq* 'index finger' (with Eyak *y-* anatomical qualifier 'hand')

gunuxts'e' 'beargut rainwear, gutskin shirt' (cf. Kenai Chugach *kanaggluk*, plus otherwise unattested Eyak *-ts'e'*)

GAyAXgug 'baidarka, kayak' < *qayarpak* 'big kayak'

'Awa:dAG 'sealskin buoy, float' < *avataq*

'AwaLAG 'window' < *egalaq*

mAgAG 'checkers' < *makaq*

'ishXah 'round-bottomed bowl' < *isXati-X*

Note the final item in (96), *'ishXah* ‘round-bottomed bowl’, which proves to be an exceptionally ancient and spectacular diffusion, centering presumably on Yupik, cf. Central Alaskan Yup'ik *isran*, Aleut *isXati-X*, and even Proto-Athabaskan (found also in Navajo) *\*'asa:*.

A very significant proportion of Eyak place-names, especially in the Copper River area, are of Chugach origin. Those need to be taken up in the study of Eyak place-names, so will not be included here. One of these, however, is so important, having become the name for the people and the language, in the 20<sup>th</sup> century, that we include it here. The origin of the name ‘Eyak’, *'i:ya:G* in Eyak, is Chugach *igya'aq* ‘throat, gullet’ (Central Yup'ik *igyaraq*), also used commonly as a place-name for the outlet of a lake into a river. In this case it was the name of the village at the outlet of Eyak Lake into Eyak River, which became the last village of the Eyak Indians, hence the name by which they became known to the academic and wider world.

Perhaps most intimate and important of all as a probable loan from any language is the Eyak for ‘person, Eyak person’, *dAXunh*, which, though perfectly canonic phonologically, is unanalyzable morphologically, so most probably a loan. The *dA-* could be any of several prefixes, but there is no stem *-Xunh*. Segmentation *dAX-unh* allows two otherwise occurring elements, but they can make no sense at all together. By far the most likely origin is in Yupik *taru* [tʌru]. This item is found in most Yupik languages meaning ‘man, person’, especially as a shaman’s term, but sometimes also as an ordinary term, including some Chugach. The perfectly regular Eyak loan from that would be *\*dAXuh*, without the nasal. There are, however, related terms in some Yupik, with nasal in the second syllable, most notably Siberian Yupik *taghnugh-haq* ‘child’, where the suffix is a diminutive, obviously implying stem *taghnu-* ‘person’ (though Siberian Yupik also has *taghu* ‘person’). The best explanation for the origin of the all-important Eyak word *dAXunh* ‘person, Eyak person’ may very well be at a much older level than other loans, as a diffusion from some earlier Yupik, a basic term with special connotations or power.

#### 18.15.4 Loans from Russian

Russian loans documented in Eyak number a total of about 33, as noted above. Up to 19 of these come to Eyak through Chugach, as noted above. A maximum of five more definitely come through Tlingit, leaving up to nine that may have come directly, though some of those may also have come through Chugach. In the first subcategory are those with final *-G*, which is the Chugach singular suffix *-q*.

##### (97) Loans from Russian

*sha:XAIAG* ‘sugar’ < *saarralaq* < *caxap*; cf. Yakutat Tlingit *saxana*, clearly not the source of the Eyak)

*sha:lehG* ‘shawl’ < *saaliq* < *шалъ*

*shAdinngAG* ‘pig’, here *-ng-* not velar nasal but [nk] < *sitinkaq* < задінка ‘a back (of meat)’

*shdu:lihG* ‘table’ < *stuuluq* < стол

*shgu:lihdAG* ‘frying pan’ < *skuulutaq* < сквородá

*gu:xyAG* ‘coffee’ < *kuuggiaq* < ко́фе

*gu:nehG* ‘horse’ < *kuuniq* < конь

*lu:sga:G* ‘spoon’ < *luuskaaq* < ло́жка

*’Ala:bAG* ‘black person’ < *alaraq* < ара́б < Arab

*’Alu:sisdAG* ‘Christmas’ < *alusistaq* < Ро́ждество

*ba:sgAG* ‘Easter’ < *paaskaaq* < Па́сха

*bAlu:sgAG* ‘snuff’ < *peluskaaq* < поню́шка

*dji:ni:wAG* ‘teakettle’ < *ciiniiguaq* < *cainiik* ‘small kettle’ (with Chugach suffix *-uaq*, as opposed to next), and *dji:ni:g* ‘teakettle’ < *cainiik*, both from са́йник

There are at most five Russian loans in Eyak that appear to have come through Tlingit (98), because they are among the relatively few Russian loans attested in Tlingit, and the Eyak agrees with the Tlingit and not with the Chugach.

(98) Loans from Russian via Tlingit

*gi:wa:* ‘beer’ < *géewaa* < пи́во, cf. Chugach *pivaq*

*cha:shga:* ‘cup’ < *cháashgaa* < ча́шка, cf. Chugach *caskaq*, repeated below

*shgu:na:* ‘schooner’ < *shgóonaa* < шку́на

One more appears to have come through Tlingit because of /n/ instead of /l/ from Russian /ɾ/, in *cha:nguu:*, where *-ng-* is [nk], ‘drinking glass’, not documented in Tlingit, < ча́рку, accusative case of ча́рка ‘cup’.

In addition to *cha:shga:*, Eyak also has *cha:shgAG* from Chugach *caskaq*, mentioned above, an instance where Eyak has borrowed the same Russian lexeme demonstrably through two routes, though possibly not without influence of the direct on the Chugach-routed variant, as the probable reason for the aspirate initial.

The seven items in (99) are more likely to have come directly into Eyak from Russian, because they are not attested in Tlingit, and though attested in Chugach with the final *-q* added, that is not represented in the Eyak form, unlike the 13 in (98).

(99) Loans directly from Russian

*da:mah* ‘king (at checkers)’ < да́ма (cf. Chugach *taamaq*)

*gAlu:dj* ‘key’ < ключ (cf. Chugach *kelucaq*)

*gAldu:xa:* ‘potato’ < карто́фель (cf. Chugach *kaltuuggaaq*)

*ma:sdla:* ‘butter’ < м’асло (cf. Chugach *maslaq*)

*la:xga:* ‘store’ < лавка (cf. Chugach *laugkaaḡ*)

*yu:xga:* ‘skirt’ < юбка (cf. Chugach *yuurkaaḡ*)

*baashih* ‘God!’ < Бóже (cf. Chugach *puusaḡ*)

The absence of final *-G* (Chugach *-ḡ*) is perhaps not proof that such loans did not come somehow through Chugach, but note especially the final syllable of *ḡAldu:xa:* ‘potato’, where Eyak /x/ and Chugach /gg/ are both expected for Russian /f/, but not *-a:* or *-aaḡ* for Russian *-ель*. There are two items that could have come directly from Russian to Eyak or perhaps through Chugach: *mAshuhḡ* ‘gunnysack’ (< мешок, Chugach *misuuk*), and *ʼAmi:n* ‘prayer’ (< Амѣн ‘Amen’, probably also present in Chugach). Note also in *ḡAlu:dj* ‘key’ and *ḡAldu:xa:* ‘potato’ that Russian /k/ is not aspirated in the Eyak, so at least not precluding the Chugach route. There are three other items that most probably came directly to Eyak, the first two of which show aspirated initials: *che:y* ‘tea’ (< чай, not through Chugach because of initial *ch-*, not *dj-*, and not through Yakutat Tlingit *cheyu* < Russian partitive чаю), certainly the most widespread Russian loanword in Alaska; *kAle:stʼ* ‘cross, crucifix’ (< крест, cf. Tlingit *kAnésd*, Chugach *kelistaḡ*, Eyak final *-stʼ* in conformity with a certain type of stem-final cluster); and *sla:wa:dih* ‘some kind of Christmas church song’, vaguely remembered, (< слава ... ‘glory ...’, not documented in Chugach). It should also be remembered that Russian culture, especially Church Russian, would have been confined to the Eyak-Alaganik end of the Eyak dialects.

Finally, there are two more Russian loans that are hardly documented outside of Eyak. One, *sa:dḡAG* ‘cassock, priest’s robe’, certainly of Russian origin, is problematic because the original Russian is hard to identify, *за-тка-* including the root ‘to weave’; no Chugach intermediate source is documented, though the *-G* final indeed suggests such, while the *s-* initial is peculiar for Chugach routing. Finally, *sha:she:nn* ‘cord of wood’, is clearly from Russian *сажен* ‘sazhen’, a linear measure, 6–7 feet, about the length of a cord of wood. The initial *sh-* may be assimilation to that of the accented *-жѣн*; this item is otherwise attested only in Tlingit, *sha`shín* with the same meaning, and with the same assimilation, but the Eyak must have come directly from the Russian, given the second vowel in Tlingit. Also “bsbsbsbs” for calling a cat, and its variant “gsgsgsgs”, must be a loan from Russian. While Eyak has a relatively small number of Russian loans compared to Aleut, Alutiiq, Dena’ina, Yupik, even Koyukon, these Russian loans to Eyak somehow further show how complex or marginal was the nature of Eyak contact, indirect or direct, with Russian.

### 18.15.5 Loans from Ahtna

Ahtna Athabaskan is a very distant third, behind Tlingit and Chugach, as a source of loans into Eyak. Barely six to twelve loans into Eyak seem clearly to be of Ahtna origin, or even to have come through Ahtna, dovetailing with six to 14 more the source or routing of which cannot be traced at the present state of our knowledge.

(100) Loans from Ahtna

*dAni:gih* ‘moose’ < *deniigi*

*dAldu:deh* ‘ground squirrel’ < *delduudi* ‘tree squirrel’

*k'uLdiya:nn* ‘spruce grouse’ < *'el dyaani* < ‘that which eats spruce boughs’  
(probably influenced by *k'uLdAtl'G* ‘ptarmigan’)

? *t'AXgsg* ‘cottonwood tree’ (cf. Ahtna *t'aghes*, PA \*t'əχs, so possibly from some other Athabaskan)

? *cha:sh* ‘hedysarum’ (wild edible root, widespread in Athabaskan, e.g. Minto *troth*, PA \*č<sup>wr</sup>as, implying PAE \*kwas, which would be Eyak \*kas; Ahtna *tsaas*, also Tlingit *tsáats*, where the Eyak must clearly be from Ahtna)

? *k'udjAXAya:sh* ‘sable, marten’ (perhaps with folk-etymological *djAXA-* ‘ear’, attested not in Tlingit, but in Ahtna *tseghaasi*, of unclear status (Kari 1990: 207); cf. Dena'ina *k'cheghusha*, and Deg Hit'an *gitsighiy*, an irregular diffusion; this appears to be of some Athabaskan origin, borrowed into Eyak, reshaped, perhaps from some older form of Ahtna)

The loan *t'AXgsg* ‘cottonwood’ may be old, also *k'udjAXAya:sh* ‘marten’, perhaps also *cha:sh* ‘hedysarum’, but *dAni:gih* ‘moose’ is recent (no moose were found in Eyak territory until 1948!). *dAldu:deh* ‘ground squirrel’ is also recent, starting to displace *tsAlk'*, another diffusion, for which see §18.15.6 below. Only two place-names are attested in Eyak from Ahtna: *'a:dna:* ‘upper Copper River’ (< *'atna* ‘Copper River’, with *-na* ‘river’, but the meaning of *'at-* unknown, not ‘copper’), and *tAXe:l* ‘Chitina’ (< *taghael* ‘(old) Chitina village, Taral’). Beyond that, a few Ahtna words were known to individuals, reportedly, on enquiry, e.g. *-tsAq'w* ‘Ahtna word for “penis”’ (cf. *-tsok'*), and *tAnaets'* ‘Ahtna word for “long”’ (*-naes*, so questionable). In other words, the Ahtna component of Eyak is most remarkable for its minuteness and marginality, given the close proximity, including even direct railroad connection 1908–38. Finally, it is conceivable that Ahtna is the source of Eyak *LA'ah* ‘slave’; cf. Ahtna O-L-*'aa* (stem ‘extend’) ‘send O on errand, command O’, here a passive.

### 18.15.6 Diffusions

More widely diffused nouns are also to be found in Eyak, mostly biota. For some of these, neither the immediate source nor the original source can be clearly identified. The most extreme of these is *GAX* ‘rabbit’, found throughout Athabaskan, Tlingit, Haida, and beyond. Given, however, the statistics, 83 loans otherwise from Tlingit, four to six from Ahtna, perhaps on such grounds alone, Tlingit should be considered that much more likely to be the immediate source for these loans. Likewise *nahGAts'e:* ‘fox’, e.g. Ahtna *naggets'i*, Tlingit *naa'gas'ei:*, which looks like it came into Eyak from Tlingit, but which appears to be of Athabaskan origin, because it is possibly morphologically transparent there (but not in



Eyak or Tlingit).<sup>24</sup> Another is *tsALK* ‘ground squirrel’, Tlingit *tsálk*, Ahtna *tseles*, probably of Athabaskan origin, but most probably to Eyak via Tlingit, with Eyak final *-Lk*’ to comply with stem-final cluster patterns. The case of Eyak *Ge:XA:* or *Ge:Xah*, probably ‘mother-of-pearl, nacre’ as vaguely remembered by Lena, is not analyzable as Eyak, and very probably from Tlingit *gunxaa* ‘abalone’, but irregular phonologically, including assimilation of the initial velar to uvular; the item is also present in Ahtna as *guxaa* ‘abalone’, but both because of the statistics and the marine nature of the item, much more likely a loan from Tlingit and originally Tlingit. Probably of Athabaskan origin is *ta:snahyu:* ‘Irish, Scots’ as vaguely remembered by Lena, but better remembered by George Johnson for Harrington (cf. §3.3.5) as *ta:sna:dAlahGAyu:* (= Yakutat Tlingit *táasnaakwaan* ‘people of *taasnaa*, far interior’), v. also Swanton (1908: 167); cf. Ahtna *dasdnaey* ‘Tanainas’ (reinterpreted as *-dnaey* ‘people’, cf. Pinart (1872) Ahtna *tashne* ‘Kenai people’); the Eyak appears somewhat peculiar in suffixing *-yu:* without the *-GA-*, and is much more likely to have come via Tlingit.

An important productive stem to Eyak, Ahtna, and Tlingit is *-t’u:ch*’, as e.g. in *deL’t’u:ch’(g)* ‘charcoal’, *didit’u:ch*’ ‘iron’, *-lAXALt’u:ch’L* ‘pupil of eye’, and also, in non-expanded form *dA-t’u:ch*’ ‘turn black, e.g. bruise’. This stem is also in Tlingit *t’oo’ch*’ ‘charcoal, black’ (likewise in Tsimshian and Haida), and is already mentioned above in the Tlingit loans into Eyak *XALt’u:ch*’ ‘black fox’ and *t’u:ch’qa:* ‘black man’. Alone of the Athabaskan languages, Ahtna also has *-t’uuts*’ as a productive stem ‘be black’. The actual Athabaskan cognate, including Ahtna *t’aes*, is PA *\*t’e’š<sup>(wr)</sup>* ‘charcoal’, which goes back to PAE *\*t’ewč*’. The Tlingit and Ahtna would be from reduced *\*t’əwč*’, more likely in Ahtna by diffusion rather than parallel development—otherwise, why only Ahtna? The role of the Eyak in this diffusion is unclear. The productivity and stem variation make it look very fundamental to Eyak, but it is also the only Eyak color verb.

Two more biota nouns have an Athabaskan look to them, ending in *-nih*, strange for Eyak (though cf. *-ts’Alih* ‘bone’), or like an Athabaskan relativized verb: *XAya:nih* ‘caribou, moose’ (Rezanov 1805 ‘reindeer’), and *xa:nih* ‘old salmon’. For the latter cf. Eyak *l-xa’* ‘grow’, also Tlingit *xe’n* ‘old salmon’ and *sha’n* ‘old man’, also Ahtna *saan* ~ *-yaane* ‘old’, *-yaan* perfective of ‘grow old’. For *XAya:nih* ‘caribou, moose’, cf. Ahtna *ghenaay* ‘caribou’ (even Chugach *rranayiq*), Upper Inlet Dena’ina *ghenuy*, Koyukon *ghenoye*, interpreted as ‘that which moves’; but widely spread in Canada, either metathesized or original PA *\*yəyani* ‘large grazing mammal’, cf. Navajo *’ayani* ‘buffalo’ (‘that which eats’).

There is a miscellany of four more nouns with complex distribution to consider here, three of which are biota. Most complex is *sa:q’sg* ‘dulse, sea-lettuce’, Tlingit *La`k’ask*, also in Haida and beyond, but note also Dena’ina *jagalq’a* (Upper Inlet *jagalggey*), listed as “< Esk[imo]” (Kari 2007). Whether present in Alutiiq or not, the phonology can be explained by metathesis of velar and uvular stops, and metathesis of lateral and sibilant, while the

<sup>24</sup> The Ahtna form may be related to the stem *-ggets* ‘twisted’, with prefix Athabaskan this form may consist of a stem ‘twisted foot’, prefixed by *na’-*. Also, Athabaskan has a legend about legend that relates to this form, but maybe that arises out of folk etymology. This form diffused even to Haida, perhaps further.

Eyak shows assimilation of lateral to sibilant, the probable direction being from Tlingit northward, as the southern reflexes are more consistent, for one thing.

The vowel in Eyak *shi:q* ‘robin’ cannot be explained; cf. Ahtna *suux*, Athabaskan widely \*š<sup>wr</sup>uq’, and Tlingit *shoo`x*. The routing is unclear, unless the statistics favor Tlingit. If this is instead a PAET item, the Eyak could imply PAET \*šiwq’; cf. the verb stem \*-tliw ‘bind’.

In the case of *djiL* ‘bed shelf, platform, cache’, Ahtna *dzel* ‘bed, shelf’, Athabaskan has widely \*ž<sup>wr</sup>əl ‘platform cache’, Tlingit *chál* ‘storehouse’, the Tlingit aspirate is not a unique loan correspondence; since, however, we do not have other instances of that type of diffusion-correspondence which includes an item attested in Eyak, we do not know how to evaluate the Eyak here, except to preclude a (late) route from Tlingit to Eyak. This item is also present in the place-name *djiLqahd* ‘Chilkat’ (at least for the Eyak village on Bering River), Tlingit *jilkáat*.

For Eyak *dzi:dzi* ‘sandpiper’ there is both Ahtna *dziidzi* and Dena’ina *jija*, both meaning ‘waterfowl’, and Tlingit *heen hukadzeedzee* ‘semipalmated sandpiper’, closer semantically than the Ahtna; at least partly of imitative origin, directionality unclear.

Finally, there are two interjections or complements, both with /b/, which are probably also loans, but the distribution of these is rather poorly accounted for in the literature. Certainly widespread is ‘*Abeh* ‘dangerous!, hot!, ouch!’ especially as warning to children, Chugach *apa* or *api*, Ahtna ‘*aba* or ‘*ebii* ‘ouch’, and ‘*ebae* ‘hot!’, Minto *eba* ‘painful, ill’, also used in Yakutat Tlingit (Sampson Harry, p.c.). Evidently less widely diffused than the preceding is ‘*Aba*: ‘peekaboo’ (to children); Anna comments that Taral (Ahtna) people use that too.

### 18.15.7 Loans from English

Remaining here are English loans, about 21 in number, which have come directly from English, or which may have come through Chinook Jargon and Tlingit, or just Tlingit, but for which we may have no documentation in the Jargon or in Tlingit. Since Eyak ultimately gave way to English, use of English had become open-ended and English loans became indefinable as such. Definable English loans are therefore restricted to forms that are phonologically adapted to Eyak, and in one case, semantically changed.

We begin with four nouns for nationalities (101), three of which appear to be of 19<sup>th</sup> century local English, possibly through Chinook Jargon and/or Tlingit.

(101) Ethnonyms from 19<sup>th</sup> century English

*dja:bAni*: ‘Japanese (singular)’ and *dja:bAni:yu*: ‘Japanese (plural)’ < ‘Japanese’

*lu:shAnyu*: ‘Russians’ < “Rooshians” (cf. Tlingit *Anóoshi*, not the source of the Eyak)

*kAna:qa:yu*; vaguely remembered as ‘Greeks, Mexicans, Spanish’ < ‘Kanaka’, i.e. Hawaiian, Polynesian, also *kAna:qa:shiyahyu*: ‘bad Kanakas’; with *-qa:* under

Tlingit influence (cf. *tle:qa*: ‘twenty’, *t’u:ch qa*: ‘black man’; and/or through Tlingit so interpreted)

*xALAKi:nahyu*: ‘Filipinos’ (probably 20<sup>th</sup> century and not through Tlingit)

Also 20<sup>th</sup> century, and not through Tlingit, are the English loans in (102) and (103).

(102) Loans from 20<sup>th</sup> century English

*le:lu:d* ‘railroad’

*ke:nli*: ‘cannery’

*le:diyuh* ‘radio’

*’a:bAls* ‘apple’ and *’a:bAlsyu*: ‘apples’

*’a:ndj* ‘orange’ and *’a:ndjyu*: ‘oranges’

*mAnAdz* ‘minute(s)’

*ch’iya’tlGya* *’Amble:l* ‘mushroom’ (< ‘frog’s umbrella’)

*qe’LGAyu:ya* *kAnggu:dz*, with *-ng-* representing velar nasal, ‘women’s tools’ (perhaps vaguely remembered, evidently < ‘women’s canned goods’)

(103) Additional English loans, with non-prevocalic English /r/ as length or /h/

*la:d* ‘lard’

*lAbah* or *lAbAbu:dz* ‘rubber boots’

*’e*: ‘air’

*dja*: ‘jar’

*’a:mihyu*: ‘soldiers’ (< ‘army’)

*nu:yeh* ‘New Year’

*’a:nesdAshu*: or *’a:nAsdAshu:w* “Eyaks often said” (Lena, < honest-and-sure?, honest-to-sure?)

*LinhGih yahd* ‘one yard (3’)’, semantically and/or phonologically influenced by O-’*yahd* ‘measure O’

*sAndi:qa’d* ‘week’ (‘between Sundays’, Eyak postposition o-*qa*’ ‘between’ nominalized with *-d*, perhaps partly through Chinook Jargon and/or Tlingit)

A number of these also have Eyak-based synonyms, including *ke:nli*: ‘cannery’ (or *yahddA’a:w*), *’a:ndjyu*: (*lAXAdAts’uh*) ‘oranges’, *ch’iya’tlGya* *’Amble:l* ‘mushroom’ (or *k’ulehya*’ *ch’iyahd*), *dja*: ‘jar’.

## 18.16 Unanalyzable nouns

Having dealt with the loans that are identifiable as such, only some disyllabic or polysyllabic nouns remain in question, listed here for possible further research. As Eyak morphemes are generally monosyllabic, the one kind of morpheme that can even be disyllabic is some stems with medial sonorants /w, m, l, n, y/. These are listed and explained as far as possible in the section on disyllabic stems in the Phonology. Left aside here are a few stems with possible suffixes that cannot be assigned a meaning, e.g. *tl'etl'G* 'salmonberry sprout', *ch'iya'tl'G* 'frog', *qAts'LG* 'male salmon', or e.g. *ch'e:t'-A-shiyah* 'currants', where *-shiyah* means 'bad' but *ch'e:t'* cannot be assigned a meaning. Likewise not considered here are nouns such as *-lA-qah* 'head' with the anatomical qualifier prefix *l-* 'head', where the stem *-qah* cannot be assigned a meaning. These should be classified not as unanalyzables, but as analyzables or potential analyzables with one unidentified morpheme, real unanalyzables being those with two or more unidentified morphemes. On the other hand, included here will be nouns like *qAXah* 'moon', which could include a prefix *q-* 'plural' and a stem *-Xah*, possibly 'fleet moves', but the semantics cannot fit, and many more complex forms. Such forms are all segregated in Krauss (1970a), along with loans, at the end of each file for initial phoneme. They will be brought together here, all at least listed in (104), and some general patterns noted. It is hardly possible to note formal patterns. Such can clearly be discerned for VR(V) stems, but not for these 25. Not much more can be done than list them, with reference to potential analyses already in the dictionary. The other such twenty or so unanalyzables, not nouns, are likewise to be listed or dealt with below in minor categories, under adverbials (Chap. 21), especially interjections (§21.3). Possible alternate analyses of all those listed here need not be shown here, as that is done for each such entry in the dictionary itself. Note that at least 17 of the 25 are biota, though most of those 17 are *not* necessarily or particularly coastal biota. Several are quite basic vocabulary.

The 25 are listed in (104), with hyphens where there *must* be a morpheme break, by Eyak rules, not where there just *may* be such a break. See dictionary for further possible analyses.

### (104) Unanalyzable nouns

*di:-tinh* 'puffin'

*qA-Xah* 'moon'

*tl'e-kus* 'horsetail, equisetum'

*Lu:n-di-yahs* ~ *Lu:n-di-ya:s* 'mouse, rat', cf. PA \**dlun*'i certainly for *Lu:n-*

*lA-kush-'i:'-ah* 'shrew' (with *'i:'ah* 'extends', but maybe folk etymology, cf. Tlingit *lukshiyáan*)

*ts'i:n-tsih* 'fir'

*ke:(-)L-ta:g* ~ *ge:L-ta:g* 'seal'

*gu:-su-xk'-da:-X* 'fan out cambium'

*Ge:(-)L-gAlid* 'owl'

*Ge:-tsahg* 'starfish', (with *-tsahg* '(cut into) fringes?')

*ts'i:ntl'-Ga:-leh* 'heron'

*Ga:(-)gA-leh* 'fish species'

*q'a:(-)d-ya:g* 'slavery'

*q'Adi-lich* 'tomcod, gray cod'

*ni:ga:dA-sheh ~ ni:ga:dAshe:* 'kingfisher'

*Ga:djih* 'lynx' (ending in *-ih*, cf. *Gu:djih* 'wolf', *xa:nih* 'old salmon', *XAya:nih* 'caribou'; but cf. also *'Adjih* 'demon', *'Ani:djih* 'punished')

*ch'i:leh* 'raven'

*'Anuh* 'child's penis'

*'Ana:shah* 'flower'

*'AnahshA-kih* 'pleasure' (with diminutive *-kih*, cf. above)

*ya'XA-kih* 'large canoe'

*'e'lAwah* 'weasel' (cf. *o-'e* '(vacant) place of o', *-lAw* ~ 'big')

*-xi:ya'X* 'chin'

*Gits'AX* 'copper'

*q'i-Xah* 'fleet'

*dAG-LA'eh, LA'ah* 'slave'

*qa'ni:* 'fight(ing)' (perhaps gerundive)

This is in number a notably small residue, well under 1% of Eyak lexemes, that are opaque, cannot be analyzed, or identified as loans (not counting those that cannot be entirely or confidently analyzed, about again as many). These are all canonic phonologically, and do not follow some noticeably foreign pattern that I can see. They therefore do not seem to imply a particular unknown substrate or adstrate to Eyak in themselves, though it does indeed remain entirely possible that the high percentage of Eyak stems for which we do not find Athabaskan or Tlingit cognates might come from an unidentified substrate.



## 19 ADJECTIVES

Adjectives are a minor grammatical class in Eyak, of about a dozen members. Most of what translate into English adjectives are verbs in Eyak, especially of the stative theme class, e.g. Neuter imperfective *yiLda:s* ‘it is heavy’, Active perfective *disiche’L* ‘I am hungry’, Inceptive perfective *GALAGAmAk’L* ‘it is round’. Though these could hypothetically be relativized, e.g. *dla:yiLda:s tsa:* ‘a stone which is heavy, a heavy stone’, *dAsAche’Linh dAXunh* ‘person who is hungry, a hungry person’, *dla:GALAGAmak’L tsa:* ‘stone which is round, a round stone’, these verbs are seldom if ever actually used that way in spontaneous speech, and are in any case nothing like adjectives as in English. Adjectives in Eyak are the few stems that can be attached to or compounded with nouns, e.g. *-dzu:*, as in *XAWa:dzu:* ‘good dog’, *-’lAw ~ -’nAW* in *tsa:dli:’nAw* ‘big stone’, there being no *\*tsa:dla:da:s* ‘heavy stone’, or, possibly, *\*?tsa:dla:GAmAk’* ‘round stone’. Adjective are bound forms; they cannot occur initially except in epithets or names. The following deals primarily or first with those forms that are what here are called adjectives for Eyak. These are almost derivable from or relatable to Neuter imperfective stative verb theme types, except for the anomalous *-kih* diminutive.

All adjectives are treated in some detail in the dictionary. The present discussion is a summary of their general morphology and syntax based almost entirely on the data in the dictionary, plus their use with interrogatives, the main piece of information on them that was gathered after 1965. See also §14.7.2.1, which gives a full account of the verbs associated with, or having etymologically the same stem as the dimensional adjectives. That account also includes a table closely related to Tab. 19.1 below. There in Tab. 14.1 are two verbs which lack corresponding adjectives, namely *-tsa’* ‘deep’ and *-wa’q’* ‘shallow’.

There are 13 stems attested in the Eyak corpus that pattern clearly as adjectives (see Tab. 19.1). Of the 13, 11 are more or less dimensional and more or less paired off as of positive as opposed to negative valence, e.g. *-’a:w* ‘long’ (positive) vs. *-dik’* ‘short’ (negative), with one set *-chahsh* ‘thick’ (and *-wAX* ‘wide’) vs. ‘thin’ with two negatives, *-tsidz-g* ‘thin’ and *-djidj-g* ‘very thin’.

In the dictionary the two basic patterns of their use are called “dependent” and “independent,” corresponding roughly to attributive and predicative. As dependent, adjectives are appended to nouns. In independent use, positive-valence dimensional adjectives take the indefinite prefix *k’u-*, whereas those of negative valence we shall say are appended to the somewhat marginal noun *ya:* ‘thing’ (rather than treat *ya:* as a prefix). Thus e.g. *k’u’a:w* literally ‘something long’ as opposed to *ya:dik’* ‘a short thing’ (*\*?ya’a:w* and *\*?k’udik’*, though probably not tested, would presumably be rejected). The only non-dimensional pair is *-dzu:* ‘good’ and *-shiyah ~ -shah ~ -sha-* ‘bad’, which does not participate in the positive vs. negative valence opposition, both taking *k’u-* as independent, *k’udzu:*, *k’ushiyah*, with great frequency, no *\*?ya:dzu:* or *\*?ya:shiyah* being attested, even though such might be possible in a very literal sense. In other words, the valence opposition must be exclusively dimensional. In dependent usage, i.e. appended to a noun, there is no difference between

**Table 19.1:** Eyak adjectives and corresponding verb stems, grouped in antonymic sets. Verb gloss shown where different from adjective. Adjectives shown in independent form, with *k'u-* or *ya:-*.

	Independent adjective	Verb stem
'long'	<i>k'u-'a:w</i>	<i>-'a'</i> '(sg) extend'
'short'	<i>ya:-dik'</i>	<i>-dik'</i>
'thick'	<i>k'u-chahsh</i>	<i>-cha'sh</i>
'broad, wide'	<i>k'u-wAX</i>	<i>-wAX</i>
'narrow, thin'	<i>ya:-tsidz-g</i>	<i>-tsidz-g</i>
'very narrow, thin'	<i>ya:-djidj-g</i>	<i>-djidj-g</i>
'big'	<i>k'u-'lAw</i>	<i>-'li'</i> 'be too big'
'little'	<i>ya:-kuts'-g</i>	<i>-kuts'-g</i>
'very little, tiny'	<i>ya:-gut'-g</i>	<i>-gut'-g</i>
'many, much'	<i>k'u-t'u'</i>	<i>-t'u'</i>
'few, not much'	<i>ya:-luhd-g</i>	<i>-lu'd-g</i>
'good'	<i>k'u-dzu:</i>	<i>-dzu'</i> 'improve; annoy'
'bad'	<i>k'u-shiyah ~ -shah ~ -sha:-</i>	<i>-sha'</i> 'stingy'

adjectives of positive and negative valence. Therefore, the valence is evident only in dimensional adjectives in independent use.

All 13 adjectives in Tab. 19.1 are associable at some level with some verb theme that has a stem at least etymologically related to the adjectival stem. In the case of *-dzu:* 'good' and *-shiyah* 'bad' the semantics of the adjective and verb is a slight change. Phonologically, in the cases of non-obstruent-closed stems and even two of the obstruent-closed stems, there is an interesting difference or relationship. These six cases are commented on below.

The phonological relationships between the adjectival and verbal stems are quite interesting. Of the 13, seven are of the form CVC, where C is an obstruent and V a reduced vowel, or the stem is invariable *-t'u'*. In these seven cases there is no difference between adjectival and verbal stem. In all six others, however, there is.

There are two obstruent-closed stems with full vowel, *-chahsh ~ -cha'sh* and *-luhd ~ -lu'd-*, both of which belong to the small but historically important class of closed stems with *h ~ '*  alternation. Here the adjective shows /h/, whereas the verb shows /'/ rather consistently, at least in the Neuter imperfective. For more on that alternation, quite vestigial in Eyak, as opposed to Athabaskan, see §12.1.7 on the Neuter imperfective and §7.3.4 on closed stem variation.

In the remaining four adjectives, non-obstruent-closed, the verb stem is CV' (e.g. *-dzu'*) or CV', i.e. the variable open type which is basically CV' in all but the Neuter imperfective. In two of these, and perhaps historically in a third, there is or may have been a *-w* in the adjective, which is absent in the verb, in *-'a:w ~ -'a'*, in *-'lAw ~ -'li'*, and possibly in the case of *\*-dzu(:)w ~ -dzu'*, where the *-w* appears truncated in the verb, unless it was an ancient suffix. (Truncation appears to be the more likely explanation, according to Leer,



p.c., who reconstructs \*-'aw for PA '(sg) extends'. Concerning the case of *-dzu*; it should be noted that open stems of the form CV: , not a very common type, are regularly relatable to Athabaskan stems ending with sonorant.) The disyllabic *-shiyah* ~ and its allomorphy, with internal sonorant /y/, is not well understood historically, except that /y/ is the regular internal sonorant with stem-initial *sh-* or *CH-*series, never /w/. (In stems beginning with a consonant of the velar *K-*series, on the other hand, stem-internal /w/ or /m/ is especially common, presumably from \*Kw-.)

## 19.1 Dependent use

We shall begin exemplification in (1)–(3) with adjectives in dependent use, i.e. appended to nouns or nominals, syntactically much the simpler. These may first be shown appended to unclassified nouns, without class markers intervening between the noun and adjective. Here, however, there are two complications, namely epenthetic *-(')A-* between noun and adjective, where the noun is monosyllabic, and at least in some cases *-(')i-* between noun and adjective, where the noun, monosyllabic or otherwise, refers to humans (3). The vowel is only partly conditioned phonologically, partly conditioned also morphologically.

- (1) Adjectives with monosyllabic nouns, usually with connective *-(')A-*

*ta:hA'a:w* 'long road/trail' (showing zero = h, V: = V:h, no glottal stop perhaps to avoid V:'A'V, though cf. *ta:hAwAX* 'wide road', *ta:hAtsidzg* 'narrow trail', and on the other hand *ta:'Akih* 'little trail'; see §4.3)

*xut'L'a'lAW* 'big gun' (*A* > *a* before tautosyllabic /'/, sonorant following)

*Lanhda'lAw* 'a lot of smoke'

*'AX'At'u'* 'many boats'

*xah'Adzu:* 'good summer'

*ya:n'Adzu:* 'good medicine'

*ch'e:t'Ashiyah* 'lowbush currants'

- (2) Adjectives with polysyllabic nouns, without connective

*XAwa:dzu:* 'good dog'

*XAwa:shiyah* 'bad dog'

*dAkinhchahsh* 'thick stick'

*k'u:ya'lAw* 'big wind' (stable archaism, where modern *k'u:y* 'wind' is now without the final vowel consistently shown e.g. in Rezanov (1805), but here is still treated as a disyllable, rather than as a monosyllable, \**k'u:y'a'lAw* being twice rejected by Lena)

*xi:la'lAw* 'great shaman' (treated as *k'u:ya'lAw*)

- (3) Human nouns, usually with -(')i- before adjective (though cf. e.g. *xi:l* 'shaman', so here probably generic human)

*dAXunh'i'lAw* 'big person, great man'

*qe'L'i'lAw* 'big woman'

*qe'Likuts'gkih* 'little girl'

*sAqe:ts'i'lAw* 'big child'

*LAni:'i'lAw* 'big boy'

*LAni:'idzu:kih* 'cute little boy'

*dAXunhishiyah* 'bad person'

*qe'LGayu:'it'u'(yu:)* 'many women' (note plural =*yu:* following the adjective, not preceding)

Some time after this was written, a full study of the data for epenthetic -A- generally was made. Some attention had been given to this, just above in connection with noun plus adjective, correct as far as it goes. The new study covers the whole subject of such epenthesis, including noun plus adjective, including pejorative *-shiyah* ~ and diminutive *-kih*, and including allomorphic variation -'A- ~ -A- of the epenthesis. The presentation here, above and below is left unchanged, but for more detail and principles involved in the epenthesis, see §6.17 on the epenthetic schwa.

The general pejorative *-shiyah* 'bad', itself not always pejorative, is especially frequent and versatile, attached to nominalized (relativized) verbs, often in epithets and names, cf. (4). Attached to many kin terms *-shiyah* is idiomatic, with no pejorative force whatever, but rather endearment in grandparental terms.

- (4) Pejorative *-shiyah* in epithets and names

*'i:nLilinhinhshiyah* 'funnyface!'

*'i:nsAxahLinshiyah* 'poorly brought-up person, bad-mannered'

*Lsihshiyah* 'lousy rotten thing'

*qe'Lshiyah*, a woman's name (no -(')i-)

*shiyah* alone as a dog's name

*sichu:(shiyah)* 'my mother's mother'

*sitinh(shiyah)* 'my father's brother'

*ch'i:lehshiyah*, the routine for Raven in legends, maybe not pejorative

The corresponding vocatives to *sichu:(shiyah)* 'my mother's mother' and *sitinh(shiyah)* 'my father's brother' are *chu:shah*, *tinshah*, etc., the only kind of form in which the allomorph *-shah* appears. Note there is no connective vowel in these lexemes. *-shiyah* also appears attached to the exclamation of anger *'a:nya:shiyah*.

Also pejorative epithets are *djehXlAw* ‘big-ears!’, *Ge’tlAw* ‘big-body!’, in which there is neither an epenthetic vowel nor a possessive prefix. For these, see both the following, and §19.8.

In many cases, qualifiers (cf. Chap. 17) appear between the noun and adjective, in which case then no epenthetic vowel appears. Most such cases are with classified nouns, where class-marking qualifiers accordingly appear. There are also instances of anatomical qualifiers. See (5) for examples.

(5) Adjectives with qualifiers

<i>dide’LdAdzu</i> : ‘pretty lamp’	<i>kAwAsgL’i:’nAw</i> ‘big paddle’ ( <i>l</i> -class)
<i>ya:n’lAXAdzu</i> : ‘good pills’	<i>’a:ngu:’nAw</i> ‘big river’
<i>ya:n’gulAdzu</i> : ‘good (liquid) medicine’	<i>k’uLt’ahLti:’nAw</i> ‘big leaf’
<i>gahXAdAdzu</i> : ‘fine day’	<i>we:gshgda’lAw</i> ‘big ulu-knife’
<i>yahddA’a:w</i> ‘long house; cannery’	<i>dAq’a:gda’lAw</i> ‘big fire’
<i>tsa’Lda’lAw</i> ‘big knife’	<i>sa’GAda’lAw</i> ‘big-mouth!’ (epithet)
<i>Le:sk’XAdAkuts’g</i> ‘small log’	<i>qAdlku:’naW</i> ‘large-bellied pot’
<i>Le:sk’XAda’lAw</i> ‘big log’	<i>lisku:nda’lAw</i> ‘big-based tree’
<i>’itl’lAkuts’g</i> ‘small mountain’	<i>ku:’nAw</i> ‘big-belly!’ (epithet)

In 1971 it was discovered that adjectives could be appended also to interrogatives: Anna *de:lAwdA’Aw* ‘what’s that big thing?’, confirmed by Lena *de:shiyahdA’Aw* ‘what’s that nasty thing?’, *de:dik’dA’Aw* ‘what’s that short thing?’, further elaborated by Sophie in 1987, e.g. *’lLdu:gudAdzu:kihyu:shduhnu*: ‘I wonder who such pretty-butted (girls) are’ including anatomical qualifier. For further discussion and examples see Chap. 23 on interrogatives.

## 19.2 Independent use, syntax

All the adjectives in independent use are shown in Tab. 19.1 above, with *k’u-* indefinite prefix ‘something’ for *-dzu*: ‘good’, *-shiyah* ‘bad’, and for positive-valence dimensional adjectives. *ya:* ‘thing’ is used for negative-valence dimensional adjectives. The exact morphological status of the *k’u-* is hard to establish, as everywhere else it is either the object (o) pronoun prefix of a postposition, or possessive pronoun prefix of a possessed noun, or it is the subject or direct object (O) pronoun of a verb. Unless thematized as direct object pronoun of a verb (not common), *k’u-* is merely the indefinite of the set of such pronominal prefixes. At the same time, however, a non-indefinite personal o pronoun can appear prefixed to an adjective, where the adjective modifies the person, not something associated with the person, e.g. *sishiyah* ‘no-good me’ (not ‘my bad thing’ or ‘bad thing I did’). This was tested only late, shown in (6).

## (6) Adjectives in independent use (Sophie, 6/22-23/87)

*xu: shishiyah* ‘no-good me’

*'i:[ 'i?]shiyah* ‘no-good you’

*'i: 'ishiyahXA' XAWa:* ‘your dog (you being unworthy to have a dog)’

*'a: 'ushiyah,* no gloss, presumably ‘bad (person)!, unworthy him’

*GAyAG qa:shiyah* ‘bad us!’, evidently authentic, with anatomical qualifiers

*k'ulAXAshiyah* ‘bad eyes’, but *\*?xu: silAXAshiyah* ‘(me with) my bad eyes’ highly questionable in Sophie’s judgment

*xu: sidzu:* [‘nice me’] highly questionable, but *?xu: siqi:dAdzu:* ‘(me with) my nice feet’ only somewhat questionable

These not fully consistent responses, limited use, are the closest we have in the corpus to such constructions, if not meaning. However, these partly speculative forms are indeed confirmed, precisely, in spontaneous text from Anna, from supplementary text “Old Husband and Young Wife” (Text 9, line 17), *'i: 'ishiyah* ‘you nasty thing’, *xu: sishiyah* ‘nasty old me’.

Many instances of independent adjective are internally or morphologically as shown in Tab. 19.1, without qualifiers or class-marks when associated with unclassified nouns, but many do have such marks, between the *k'u-* or *ya:-* and the adjectival stem when associated with classified nouns. Independent adjectives without and with such qualifiers are treated together in the following discussion, which is essentially syntactic.

What may be termed the “adjectival” use of independent adjectives is before the noun they modify, having the same meaning as the dependent use shown above, but standing before in a kind of “relativized” function or as attribute to the noun as head of noun phrase, e.g. *k'ushiyah dAXunh* ‘bad person’, perhaps ‘person who is bad’, same meaning as *dAXunhshiyah* (see 3). Thus also,

## (7) Independent adjectives in attribution to a head noun

*'AXa: k'u'a:w 'AX* ‘what a long boat!’

*'Axa: ya:dAdik' shdu:lihG* ‘what a low table!’

*k'ugu'a:w k'u't'* ‘long sinew’

*k'uWAX ta:* ‘wide road’ (= *ta:hAwAX*)

*k'uda'lAw yahd* ‘big house’

*k'udzu: xah* ‘nice summer’ (= *xah'Adzu:*)

*k'uchahsh dAkinh* ‘thick stick’ (= *dAkinhchahsh*)

*k'ulAXAdzu: la'mahd* ‘nice berries’

*k'ugu:ndzu: giyah* ‘good water; Holy Water’

*k'ushiyah qe'L* 'bad woman'  
*k'udAshiyah La'g* 'poor firewood'  
*ya:tsidzg kushxi:d* 'narrow (strip of) cloth'  
*k'ut'u' dAq'Aw* 'many provisions'  
*'a'd k'u'lAw qe'yiLteh* 'a very big whale'

Examples of adjectives can of course be found as negated noun phrases, e.g. *dik' 'Aw k'u'lAwG* 'not that big thing'.

Examples without a head noun, but with qualifiers, are shown in (8):

- (8) Independent adjectives with qualifiers, with head noun

*ya:qi:lAtsidzg* 'thin (rope)'  
*k'ulAXAchahsh* 'coarse (grain)'  
*dAqi:kih k'ulAXa'lAW* 'big (berries) are all gone'  
*k'ulAXAdAt'u'* 'lots (of snowballs)'

Most uses of independent adjectives are nominal, as subject (S), direct object (O), object of postposition (o), or as predicative complement (C). It is in predicative use that adjectives are the most frequent, by far (perhaps favoring the term "predicative" in favor of "independent"). As predicative complement with or without verbs *-Le()* 'S is C' or the suppletive causative thereof *O-'l-L-Xa'* 'S makes O C', adjectives are in fact rather commonly found, either without a verb (9), or still more frequently with a verb (10).

- (9) Adjectives as predicative complement, without verb

*tl'ihst' k'u'a:w* 'devilclub is long'  
*'uch'AX 'uwa: k'u'lAw* 'its wings are large'  
*'uyAq'd 'uwa: k'u'lAw* 'its inside is big'  
*dik' 'Aw tail 'uwa: k'u'a:wG* 'its tail isn't long'  
*qi' k'uGa:ndzu:* 'place where the ground (*Gl-* thematic) is good'

- (10) Adjectives as predicative complement, with verb

*ya:tsidzg yiLeh* 'it's small'  
*k'u'lAwkih qAsALe'L* 'they became pretty big'  
*k'uku:nAw yiLeh* 'it's big-bellied'  
*k'ushiyah yiLinhinh* 'he's bad'  
*k'u'lAw xiLeh da:X* 'if I were big'  
*ya:dik' 'u'lAGALXa'* 'make it short!'  
*k'u'lAw 'u'lixilGah* 'I know it (to be) big'

*ya:lAtsidzg lAsAliL* ‘it (moon) became narrow (quarter)’

While not frequent as arguments other than complement in a sentence, adjectives can indeed be found as subject (11a), direct object (11b) and object of postposition (11c), in the pattern of nouns.

- (11) a. Adjective as subject of verb:

*k’ushiyah ’ula’X dAsa’yahLinh* ‘he got angry’ (‘evil, something bad (*k’ushiyah*) came down over (*-la’X*) him (*’u-*, =*inh*)’

- b. Adjectives as direct object of verb:

*k’ut’u’ sishahL* ‘I dug many’

*dAtli: q’Aw k’ushiyah tl’ihX sAL’ahL* ‘already he’s started trouble (*k’ushiyah*)’

- c. Adjectives as object of postposition:

*k’udzu:wahd* ‘for good (luck)’ (with *o-wahd* ‘for sake of’)

*k’udzu:la’* ‘good luck’ (with *o-la’* ‘for o (good or bad) luck’)

*k’ushiyahla’* ‘bad luck’ (as above)

*k’udzu:Lch’a:d* ‘right side’ (with *o-L-ch’a:d* ‘side of o’)

*k’ushiyahya’X* ‘in anger, in a fit’ (with *o-ya’-X* ‘(movement) in (concave) o’)

*k’ut’u’da’X* ‘many times’ (with *o-da’X* ‘o times’)

*k’ut’u’da:d* ‘many places’ (with *o-da:-d* ‘(at rest) in area of o’)

With the postpositional phrase *o-a:* ‘of o’, we have such noun phrases as *’Aw k’u’lAw ’uwa:* ‘the big one (of them), the biggest one’, *k’udzu: ’uwa:* ‘a good one’, *’Aw k’udzu: ’uwa:* ‘the good one, the best one’, these being the closest Eyak has to superlatives.

### 19.3 Multiple adjectives

There are several instances of more than one adjective combined (12).

- (12) Combinations of adjectives

*k’ulAwAXshiyah* ‘old fat-face’

*ch’i:lehkuts’gshiyah* ‘little old Raven’

*’anhga’kih ’i:Lkuts’gkuts’gshiyah* ‘poor little fellow who’s small like him’

(*’anhga’kih* ‘like him, diminutive’, *’i:Lkuts’g-* ‘is small’, a comparative verb, plus two adjectives attached to that verb nominalized)

*k’uwAXlAwshiyah* ‘wide-big-bad’ (pejorative, triple combination)

Most but not all combinations of adjectives end with *-shiyah* ‘bad/old’; an excellent example is *tsa’Lda’lAwdAt’u’* ‘many big knives’, where noun-class-marking qualifier *d-* appears before both adjectives.

## 19.4 Adverbialization with *-dah*

The two non-dimensional adjectives are very frequently adverbialized with the standard adverbializer *-dah*, as *k'udzu:dah* 'well, nicely', and *k'usha:dah* 'badly, poorly'. The latter shows the only environment for the allomorph *-sha:-* of *-shiya* ~ *-shah* ~ *-sha:-* 'bad' (except for the woman's name *qe'Lsha:kih*). Though most such adverbializations involve these two non-dimensionals, dimensionals are not excluded: *k'u'lAwdah* 'greatly, in a big way'. See §21.1.1.

## 19.5 Adjectives with thematic (*'i-*)*Gi-*

Three adjectives are attested with a somewhat problematical prefix, which most of the time takes the form of *'i-Gi-* (13). In some but not all of the adjectival attestations the *'i-* is either absent (14) or occurs as *A-* (15). The origin of the *Gi'-* is *GA-'e'*, i.e. *G-* qualifier plus postposition *o-'e'* 'in (vacant) place of o', long since unanalyzable, q.v. Chap. 17 on qualifiers and §16.2 on preverbals. The meaning however is still evident, 'cavity, space'. The *'i-* is unstable, perhaps reduplicative, and the *-i'* is also unstable. Especially the full form of *'iGi-* is liable to analogy with verbal *i-* of the Neuter. Except for one attestation with *-t'u'* 'many', the rest are all with *-lAw* 'big' and *-a:w* 'long'.

### (13) Adjectives with full form *'iGi'-*

*XAla:g 'iGi'a:w GAl'e'L* 'winter is getting long'

*'uyAq' li' 'iGi'a:w* 'deep cavity' ('space is long to the end of the inside of it')

?*dik' 'uyAq' li' 'iGa'a:wG* 'it's not deep inside' (Lena found this quite awkward, probably because it is incorrect.)

The examples in (14) have zero for *'i-*, where *k'u'i-* would be *k'u'-*.

### (14) Adjectives with reduced form *Gi-*

*qi' k'uGi'lAw* 'place where it is spacious'

*qi' k'uGi'lAw dla:'anhd* 'big den'

*'ilAXAde:'Gi'lAw* 'your big eyes (sockets)', pejorative

### (15) Adjective with reduced form *AGih-*

*dla:'anhdAGi'lAw* 'big den'

*lAyAq'AGi'lAwV* 'loud (big voice, inside of head)' (Rezanov 1805 only, as *леххаккеляга* (<леххаккелиага>)<sup>1</sup>

<sup>1</sup> Where <ɾ> represents a velar sonorant between two schwa-like vowels.

*xu: siya' 'uq'AGit'u', 'i: 'iya' ya:luhdg* 'I've got bunches, you've got just a few'

The last form in (15) can be glossed literally as 'mine are many, yours few', with postpositional phrase '*u-q*' 'on top of it', so possibly better glossed 'piles, amounts', from Lena, who was sure of the expression, but reluctant to use it freely or expand on it.

## 19.6 Adjectives with preverbals

The way in which adjectives seem most closely to act like verbs, or to be derived from verbs, is in that some of them are attested with preverbals, i.e. preverbs (16) and postpositional phrases (17). There would doubtless have been more attestations and a greater variety thereof if the possibilities had been actively investigated.

### (16) Adjectives with preverbals

*'AwlAX k'uchahsh* 'something thicker than that', cf. *'AwlAX 'i:Lcha'sh* 'it's thicker than that'

*lAyAq'AGi'lAw* 'loud voice', evidently a lexicalized epithet

*'uq'AGit'u'* 'many amounts', idiom

### (17) Adjectives with preverbs

*ya:n'ch' k'udAtsidzg* 'ten-pound lard can' < 'something (*k'u-*) (*d*-class) narrowing downwards (*ya:n'ch'*)' (with irregular *k'u-* instead of *ya:-*)

*'i:ndzi'X ya:lAXAtsidzg* '(type of) spear' < 'fine-grained through front'

Where the adjective is dependent and with a preverb, though written in (18) with spaces, the whole adjective phrase follows or is appended to the noun.

### (18) Dependent adjectives with preverbs

- a. With preverb *la'q'* 'in least dimension, in thickness' (probably < *la'-q'*):

*shdu:lihG la'q' dAchahsh* 'thick table ('table, *d*-class, with top made of thick boards)',

*shdu:lihG la'q' dAtsidzg* 'table with top of thin boards'

*la'q' XAdAchahsh* 'thick (logs)'

*la'q' tsidzg* 'flounder' (< 'thin/flat (fish)')

*la'q' qi:dAchahsh* 'thick-feet!' (epithet with anatomical qualifier *qi:d-* 'foot')

*la'q' yAchahs* 'thick-hands!' (epithet with anatomical qualifier *y-* 'hand')

- b. With other preverbs:

*shdu:lihG ya' GAbla:'a:w* 'high table (vertically long table)'

*XAla:g tl'a'q' 'a:w* 'long winter'



*xah tl'a'q' 'a:w* 'long summer' (cf. *tl'a'q' -'a'* ('season, process, event) lasts long', etymology of *tl'a'q'* unclear, cf. *la'q'* above)

We even have a form with both postpositional phrase and preverb: *'uyAq' li' 'iGi'a:w* 'deep cavity', cf. negativized form of this, above.

## 19.7 Adjectives with anatomical and thematic qualifiers

In addition to noun-class-marking qualifiers, note that there are adjectives with anatomical (19) and thematic qualifiers (20) as well.

### (19) Adjectives with anatomical qualifiers

*-gudA-dzu* 'nice -buted'

*-lA-wAX* 'wide-headed/-faced'

*-ku:'nAw* 'big-bellied'

*k'uqi:dAt'u'* 'many tracks (feet)'

*k'uqi:da'lAw sanhAsi:nL* 'big(-footed) socks'

### (20) Adjective with thematic qualifier

*qi' k'uGa:ndzu* 'where the ground is good'

For several more examples with anatomical and thematic qualifiers, see §19.8 on epithets and names, and §19.9 on lexicalizations.

Uniquely, with *-t'u'* 'many' and *-luhd-g* 'few' in reference to humans, the qualifier *gl-* is thematically used. Normally *gl-* is the class-marker for liquids, nouns denoting humans are always unclassified, and *gl-* is not used for humans with any other adjectives. Here *ya:gu:nuhdg* 'few (people)', *k'ugu:nt'u'* and *k'ugu:nt'u'inu:* 'many people'. See the dictionary for further data and possible etymology. The latter form with human plural relativizer *=inu:* is also a unique attested use of that with adjectives, perhaps allowable in the antonym, presumable *?ya:gu:nuhdinu:*, less likely so with any other adjectives, possibility not tested.

Somewhat special is the combination of thematic *Gdl-* 'distance over land' or *gdl-* 'distance over water' (cf. *Gl-* thematic 'ground', and *gl-* noun-class-marker 'liquid'), with the dimensional adjectives *-'a:w* 'long' and *-dik'* 'short'. These appear independently but without *k'u-* or *ya:-*, and frequently as locationals or with postposition-finals or as object of postpositions, cf. (21).

### (21) Combinations of adjective with *Gdl-* and *gdl-*

*dik' gudla:'a:wG* 'not far (over water)'

*dik' GAdla:'a:wG* 'not far (over land)'

*dik'* *GAdla:'a:wdG* 'at rest) not far'

*dik'* *GAdla:'a:wch'G sahLinh* 'he went (to) not far'

*di:yAX GAdla:'a:wda' Ga:LG* 'he hasn't gone far (reaching a distant point) yet'

Here we also have two attestations of dependent adjectives with preverb: *gu:nehG ya'* *GAdla:'a:w* 'high/tall horse' and *GAdla:dik'* 'a short distance or time away'.

## 19.8 Epithets and names

Adjectives are common in epithets and names, which are or at least can be grammatically marked in lacking a possessive or object prefix for anatomical noun in dependent use or, here *k'u-* and *ya:-* in independent use. Very common in pejorative epithets are dimensional adjectives of positive valence, reference to largeness or coarseness of physical features being the essence of Eyak insult. Several cases with anatomical qualifiers are given in (22).

### (22) Adjectives in epithets with qualifiers

#### a. Pejorative epithets:

*ku:'nAw* 'big-belly!'

*qi:da'lAw* 'big-feet!'

*guda'lAw* 'big-butt!'

*djAXAdli:'nAw* 'big-ears!'

*la'q' qi:dAchahsh* 'thick-feet!'

*la'q' yAchahsh* 'thick-hands!'

#### b. Epithets for animals:

*djAXAdla:'a:w* 'long-ears!', epithet for rabbit or alert dog

*ch'a:ndA'a:w* 'long-arms!', epithet for octopus

*k'ushdA'a:w* 'long-legs!', epithet for snipe, deer, also a woman's name

Epithets are also commonly formed with anatomical nouns, for which see (23).

### (23) Epithets with anatomical nouns

#### a. Pejorative epithets:

*tsin'gudli:'nAw* 'big-neck!' (pejorative)

*sa'GAda'lAw* 'big-mouth!'

*la:XLAXa'lAw* 'big-eyes!'

*sha:wa'nAw* 'big-head!'

*djehXlAw* 'big-ears'

*Ge't'lAw* 'big-body'

*yALtsAq'sgL'a:w* 'long-fingers!' (epithet of octopus)

## b. Others:

*xi'ts'dA'a:w* 'long-shins', also 'snipe'

*ch'Alih'a:w* 'long-sleeved garment'

*lAGa:nsh'a:wV*, epithet for pig, in Rezanov 1805 only as *люкашъ-ауа* (<liukash"-aua>), lit. 'long-(part of face below nose)'

*qe'Ldzu:kih* 'pretty girl', (probably an epithet, lacking connective -(')i-)

Many names (and at least grandparental kin terms) have *-shiyah*, where that is not pejorative, but means rather 'old' or endearingly 'good old' as in *ch'i:lehshiyah* 'Raven' (as culture hero), thus also *shiyah* as a dog's name, and the woman's names *qe'Lshiyah*, *qe'Lsha:kih*, both probably epithets, without connecting vowel, cf. *qe'Lishiyah* 'bad woman'.

## 19.9 Lexicalizations

Adjectives play a role in many lexicalizations; many of these are epithets, without *k'u-* or *ya:-* when independent, or without possessive prefix when attached to possessed anatomical nouns.

## (24) Adjectives in lexicalizations

*ts'iyuxlAw* 'caddis fly' < 'big mosquito'

*yahddA'a:w* 'cannery' < 'long house'

*xi'ts'dA'a:w* 'snipe species; long-shins'

*k'ugu:dzu: giyah* 'Holy Water' < 'good water'

*kAna:qa:shiyahyu:* "Greeks" (probably also 'Mexicans') < 'bad (poor semblance of) Hawaiians/Kanakas'

*dla:q'Aya'shiyahyu:* 'sheep; mountain sheep' < 'poor mountain-goats'

*ch'e:t'Ashiyah* 'lowbush currants' (analysis unclear, cf. 'Ad-LA-*ch'e:t'* 'act silly')

*LAXAchahsh* 'gunnysack' < 'coarse-grained' (with thematic qualifier *lX-*)

## (25) Adjective in lexicalization with anatomical nouns

*lAGa:nsh'a:wV* 'pig' (Rezanov 1805 Yakutat only (modern Cordova *shAdi:nngaG* < Chugach < Russian)

*guka'dAtsidzg* 'duck species' < 'narrow-tail'

*ya:n'ch' k'udAtsidzg* 'ten-pound lard can' < 'something (*k'u-*) narrowing downwards (*ya:n'ch'*)'

## (26) Adjective in lexicalizations with preverbals

'i:ndzi'X ya:lAXAtsidzg ' (type of) spear' < 'fine-grained through front'

la'q' tsidzg 'flounder' < 'thin/flat (fish)' (see yet further entries in dictionary under -tsidz-g)

lAyAq'AGi'lAw, epithet 'loud voice' < 'inside of head big'

### 19.10 Diminutive *-kih*

The general diminutive in Eyak is marked by the suffix *-kih*. It is morphologically unique, but more like an adjective than anything else, so is treated here. It is fundamentally different from adjectives in that there is no verb with a stem relatable to *-kih*. Moreover, unlike adjectives, *-kih* does not occur independently, there being no *ya:kih* of adjectival function (or \**k'ukih* at all). Finally, like adjectives in dependent use, *-kih* can be appended to nouns, but with greater freedom also to other forms, e.g. postpositional phrases. Its basic meaning is 'little', often also in a favorable sense, 'nice little, dear'. In one classic instance of endearment, with extreme irony, in Anna's "Blind Man and Loon" text, the abusive wife is caught by the formerly blind husband, cooking for herself meat he shot and which she told him he had missed; red-handed and acutely embarrassed, she addressed him *siqa'kih* 'my dear hubbie'.

This morpheme is well covered in the dictionary entry, from which only a few examples are presented below. Diminutive *-kih* is appended to nouns with basically the same connective vowel -(')A- to monosyllables, and -(')i- to nouns for humans, as are adjectives.

(27) Diminutive *-kih*

*dAXunh'ikih* 'small person; miniature person, mannequin, homunculus'

'AX'AKih 'small boat; model boat'

*du:shAkih* 'kitty, small cat'

*XAwa:kih* 'cute little dog, puppy'

(28) Diminutive *-kih* with class-marks for classified nouns

*tsa'LdAkih* 'small knife' (*dA*- qualifier)

*-ts'u:lAkih* 'small breasts' (*lA*- qualifier)

*k'uLt'ahLti:lAkih* 'small leaf' (*ti-lA*- qualifier)

(29) Diminutive *-kih* with anatomical mark

*k'uXu:nLAyahXu:lAkih* 'small tooth'

(30) Diminutive *-kih* in lexicalizations

'AXA*kih* 'canoe' (cf. 'AX'A*kih* 'small boat'), so 'AXA*kihkih* 'small canoe'

*k'udAGAlehkih* 'spider species' < 'a little mind'

*sichu:kih* 'my grandchild (woman's daughter's child)', cf. *sichu:(shiyah)* 'my grandmother (mother's mother)'

Beyond the examples in (30), diminutive *-kih* is in fact very frequent in lexicalizations. About two dozen such lexicalizations are listed in the dictionary *-kih* entry. Besides grandchild kin terms such as *sichu:kih* 'my grandchild (woman's daughter's child)', it is common in epithets and personal names: e.g. *qe'Ldzu:kih* 'pretty girl' (cf. *qe'Lidzu:kih* 'nice little woman'), *qe'Lsha:kih* woman's name, also even *kih* man's name. It is appended to adjectives, not only as in the above examples, but also *k'u'lAwkih* 'fair-sized, pretty big, just about grown up', *ya:kuts'gkih* 'quite little, nice little thing'; to nominalized verbs: 'AXa: 'Adu'liLiginhinhkih 'my what an outgoing knowledgeable little (child)!' ('Adu'liLigah 'knows self').

Unlike adjectives, however, diminutive *-kih* may be attached to some postpositional phrases: (*dA*)'Alga'kih '(just) this little bit; little thing like this', 'Aw'u'Xkih 'idiyah 'that smaller one, that which is of size less than that little'; to some locationals: XAyA'u:dkih 'a little further over yonder'. It forms adverbials or interjections, sometimes with morphemes otherwise unattested: *dAqi:kih* 'all gone, none left', *gusi:kih* 'a little (bit)', 'AnahshA*kih* 'fun, pleasure, desired'; or with well-attested forms: *ya:kihdah* '(in) payment' (*ya:-kih-* 'a little something', with *-dah* adverbializer), *di'dahkih* 'fairly well, decently, OK' (with *dA=* 'selfsame', 'i-dah 'well'), *q'a:lkihga* 'just a short while ago' (*q'a:l* 'now'); (*dA*)'u:dkih (originally locational), *tlanhkih* 'would that' (introducing optatives). More discussion and more examples of these types and the types above may be found in the dictionary entry *-kih*.



## 20 NUMERALS

The Eyak numeral system is essentially decimal on the grand scale. The basic system seems stable, showing no variation among modern speakers, or, among older sources, as far as those go (with exception of the final stages of Eyak at Yakutat, and temporarily at Copper River, for which see §20.6). The stability, the fact that they were remembered as well as can be shown here, and their use in texts, for example, including measurements, are good evidence that Eyak numerals, at least the digits, continued in actual use as long as did the language. They were not replaced by English numerals, as happened in many other Alaskan languages.

This discussion of Eyak numerals closes with a subsection on earlier sources. Those are not inconsiderable. Unlike other aspects of Eyak grammar—insofar as numeral systems belong to grammar—the numerals are indeed documented in all of the early sources, from Rezanov (1805) on.

### 20.1 Morphology of abstract counting

The numerals from one to ten are presented in (11), with the suffix *-ih* attached to ‘1, 2’, and ‘5’, for abstract counting, for unclassified nouns, and for singular human. (For counting classified nouns, or plural humans, see §20.2.)

(1) Eyak numerals 1-10

1 <i>LinhG-ih</i>	6 <i>ts'i:n</i>
2 <i>la'd-ih</i>	7 <i>la'dits'i:n</i>
3 <i>t'uhLga'</i>	8 <i>q'Adits'i:n</i>
4 <i>qAlahqa'ga'</i>	9 <i>guts'de:</i>
5 <i>ch'a:n'-ih</i>	10 <i>dAGa:q'</i>

The Eyak numeral system cannot be very ancient, as of all these, only ‘1’ and ‘2’ have Athabaskan cognates, from PAE \**lənq*’ and \**na'*-. The rest are analyzable at least to some degree.

‘3’ and ‘4’, appear to be postpositional phrases with postposition *o-ga'* ‘like o’, but there the resemblance stops. The object in ‘3’ is *t'uhL-* of unknown meaning to speakers, not otherwise occurring, possibly to be further segmented *t'uh-L-*; cf. *da:n'-L-ga'* ‘slowly’. Unlike the case of ‘3’, each morpheme in the analysis of ‘4’ is fully identifiable, < \**qwA-lah-qa'-ga'*, the last three each being a string of three postpositions, *o-ga'* ‘like o’, *o-qa'* ‘between, among o’, *o-lah* ‘around o’, and the object is from PAE \**q<sup>wə</sup>* ‘place, event’. The last two postpositions together are a lexicalized constituent, the compound postpositional phrase *o-qa'-ga'* ‘each o, every single o’. Thus ‘4’ is ‘each of those around the place/event’,

i.e. each of the four fingers as opposed to the thumb, e.g. around a gripped thing. Lena could not provide an explanation, no doubt because *qAlah-* is synchronically opaque, unlike the rest.

'5' *ch'a:n-* is very probably related to *-ch'Alih* ~ *-ch'a:n-* 'forearm'.

'6' *ts'i:n* has no clear other meaning or association, though cf. Athabaskan \**ts'ən* 'bone', Eyak *ts'Al* ~. '7' is obviously composed of '6' preceded by *la'di-* '2', which has to be interpreted as semantically ordinal "second *ts'i:n*", as arithmetically it can not be either '2 x 6' or '2 + 6'. '8' is the same *ts'i:n* preceded by *q'Adi-* (probably from *q'AdA-*), which is evidently a reduction of *q'ah-dA-* 'finally', q.v. in dictionary, i.e. here "last of the *ts'i:n*". In Tlingit the '6-7-8' sequence is also of a single pattern, though one quite different from the Eyak one, to be glossed '1-*dooshu*', '2-*dooshu*', '3-*dooshu*'. Here only '7' is like the Eyak "2 *ts'i:n*", the Eyak '6' lacking the '1-', and the '8' having instead *q'Adi-*, certainly not to be identified with Eyak '3'. The Tlingit *-dooshu* is itself nothing like Eyak *ts'i:n*, being of verbal origin, 'extending to' (Jeff Leer p.c. 11/14/09.)

'9' is presumably to be segmented *guts'-de:*, but neither segment can be identified.

'10' may well be also a postpositional phrase with *dAGa:-* as object of *o-q'* 'on o'. Cf. the alternation of that with *o-X* in *dAGa:X* for the teens and below; *dAGa:-* is either the preverb *dAG-* 'above' with augment *-a:-* as expected before *-q'* (cf. §16.3), or it is composed of a prefix or proclitic *dA-*, with several possible identifications, and stem *-Ga:-* not otherwise attested as such, though conceivably cognate with Athabaskan \**-ga:nə-* 'arm', Eyak *-GAla'* 'shoulder'. Cf. in this semantic connection Tlingit *kei-jin* '5', *jin-kaat* '10', where *-jin* is 'hand', but *kei-* and *-kaat* are of unclear meaning. There is some connection with the Tlingit numerals at least in that Eyak and Tlingit each have a pattern for 6-8, however dissimilar the pattern, and that Eyak '20' is a direct loan from Tlingit *tleikáa* (cf. §18.15.1).

In sum, clearly '1-10' is a hodgepodge, divisible into six subgroups, '1-2, 3-4, 5, 6-7-8, 9, 10': '1-2' are cognate with Athabaskan; '3-4' are both postpositional phrases, "like *t'uh(-)L-*" and 'each of those around'; '5' is 'forearm' (< \*'hand'?, cf. '10'); '6-8' are '6' *ts'i:n* (< \*'bone'?, cf. Tlingit '1-3' + *-dooshu*), '7' is "second *ts'i:n*", '8' is "*ts'i:n* finally"; '9' is composed of two unidentifiable segments; '10' is perhaps 'on top', or 'on arm' (cf. '5' 'forearm'). The level to which most can be analyzed suggests a relatively recent formation of the system.

The numerals '11-19' are *dAGa:Xk'a:d* plus the digit numerals '1-9'. The *dAGa:X-* is to be analyzed *dAGa:-X*, where *-X* is probably the postposition or postposition-final 'non-punctual contact, movement within o', instead of *o-q'* 'on o' as in '10', unless the motivation for /q'/ > /X/ here is purely phonological. The *-k'a:d* is not otherwise attested as such, but may be conceivably related either to *k'a:-d-* 'absent, gone', or perhaps more likely, to the *-k'* in the abstract numerals *dAX-k'* 'how many?' q.v. below, with *-a:-* augment and *-d* postposition final. The *-k'a:d* in any case is here treated as a postposition, 'o plus N'. Thus '11' is *dAGa:Xk'a:d LinhGih*, and '19' is *dAGa:Xk'a:d guts'de:*. The digits in all higher numerals, '21-29', '31-39' etc., are also composed of '1-9' following '20',



'30' etc. subordinated as object of *o-k'a:d*, thus *tle:qa:(g)k'a:d LinhGih* '21', *t'uhLga'da'X dAGa:Xk'a:d LinhGih* '31', etc.

The numeral '20' *tle:qa:g* is a loan from Tlingit *tleikáa* (< 'one-man', i.e. '(all digits of) one man'). The final *-g*, of unclear origin, is optional before *-k'a:d*, so '21' *tle:qa:gk'a:d LinhGih* or *tle:qa:k'a:d LinhGih*. This Tlingit loan for '20' is the only vigesimal trait in the Eyak numeral system. The plausible alternative to that, and presumable pre-loan form, as regular to the Eyak decimal system, *\*?la'da'X dAGa:q'* ('2 x 10'), was not tested, but is certainly not to be found in any of the documentation of Eyak.

The numerals '30, 40, 50, 60, 70, 80, 90' are formed with the decimal numeral subordinated as object of *o-da'X* 'o times', followed by *dAGa:q'*, or by *dAGa:Xk'a:d* itself followed by digital numeral '1–9'. Thus '30' is *t'uhLga'da'X dAGa:q'* ('3 x 10'), '40' *qAlahqa'ga'da'X dAGa:q'*, '50' *ch'a:n'da'X dAGa:q'*, '60' *ts'i:nda'X dAGa:q'*, etc., and '31' is *t'uhLga'da'X dAGa:Xk'a:d LinhGih*, i.e. '(3 x 10) + 1', '99' presumably *guts'de:da'X dAGa:Xk'a:d guts'de:* '(9 x 10) + 9'.

That may well have been the limit of traditional counting, if not in actual practice already beyond it. Attempts to elicit '100' resulted in *dAGa:q'da'X dAGa:q'* ('10 x 10') from Lena, perhaps the best, but also *wAX[k?]'da'X dAGa:q'* 'that many times 10', holding up all her fingers; and from Marie *la'dih ch'a:n'da'X dAGa:q'* 'second 50', not *la'da'X ch'a:n'da'X dAGa:q'* '2 x (5 x 10)'. Note, however, the late elicitation from Anna, 6/9/71, *dAGa:Xk'a:d ch'a:n'da'X dAGa:q'* '(10 + 5) x 10' for '150', confirming in principle the decimal '10 x 10' for '100'. For '1000' we have only modern *tAwsAn* from English, plus two failed attempts to elicit '1000' by Russians, along with four failed attempts by Russians to elicit '100'. All the history of eliciting Eyak numerals beyond shows no basic organization beyond that allowed by the decimal system terminology, with the exception of the term for '20' itself, noted above.

For details of the history of eliciting numerals (including '100, 1000'), their phonology, and a developing vigesimal system in the terminal stages of Eyak at Yakutat, see §20.6.

Finally, also belonging morphologically to the numeral system, there are the interrogative and demonstrative abstract numerals *dAXk'i-d* 'how many?', (')*wAXk'ih* 'that many', (')*LAXk'ih* 'this many', certainly analyzable as *dA-X-k'-ih-d*, (')*wA-X-k'-ih*, (')*LA-X-k'-ih*. For these, see further Chap. 23 on interrogatives for *dAXk'i-d*, and in §22.1 the section on demonstratives for (')*wAXk'ih* and (')*LAXk'ih*.

## 20.2 Morphology of non-abstract counting

As noted, the numerals *LinhG-ih* '1', *la'd-ih* '2', *ch'a:n'-ih* '3', have suffixed *-ih* in abstract counting, in counting unclassified nouns, or in counting one human. That *-ih* is not suffixed to numerals subordinated to postpositions used specifically with numerals, e.g. *o-da'X* 'times o', or in counting plural humans, which requires enclitic *-nu:*, or counting classified nouns, which requires a class-marked numerical particle or postposition, (o?) *-a:*.

Thus, with postposition *-da'X* 'o times': *LinhGda'X* 'once', *la'da'X* 'twice' (*-d-d- > -d-*), *t'uhLga'da'X* 'thrice', *qAlahqa'da'X* '4 times', *ch'a:n'dAX* '5 times', *dAXk'da'X-d* 'how many times?', etc., as in the decimal numerals; also of course in sentences: *la'da'X 'u'siLtahL* 'I turned two pages of it (twice turned part of it)', *la'da'X 'iqe'xL'e'dz* 'I will take two steps (step twice)'.

Counting humans: *LinhGih Lila:* '1 man', but *la'dnu: Lila:(GAYu:)* '2 men', *t'uhLga'nu:* '3 persons', *ch'a:n'nu:* '5 persons', *ts'i:nnu:* '6 persons' (evidently retaining the nasalization), *dAXk'nu:-d* 'how many persons?'; ?*dAGa:Xk'a:d LinhGih Lila:(GAYu:)* '21 men' or perhaps better ... ?*LinhGnu:*, was not tested, but cf. *LinhGnu:-lAya* '1 pair' below.

In counting classified nouns the numerals lack the *-ih*, and are followed by the particle or postposition (o)-*a:* preceded by the class mark. Very possibly the morpheme may be identified with the postposition o-(*'*)*a:* 'of o', which is otherwise not attested with class-marks prefixed to it. Thus e.g. *LinhGlAXa:* might in fact be interpreted as a postpositional phrase 'one of the berry-like class'. The phonology is that class-marks ending with (-)CA-, where C is obstruent, with the particle or postposition become -Ca:, thus *d*-class *-da:*, *Xd*-class *-XAda:*, *lX*-class *-lAXa:*, etc.; *gu-* class becomes *-guka:*, not *\*-ga:* (< *\*-gwa:*); the source of *-k-* is unexplained, though cf. *-gu-ka* 'tail'. (Cf. use of this particle or postposition also with *k'Ayi:ny* 'other, different, strange', including qualifiers *-guka:*, *-'a:na:*, *-da:*, which might therewith classify *k'Ayi:ny* also as a numeral. But cf. also o-*X* 'by means of o', with the class-marks e.g. *d-*, *gw-*, *l-*, viz. *-da:X*, *-guka:X*, *-'a:na:X*.)

Thus, counting classified nouns, we have e.g. *la'd da: yahd* 'two houses', *LinhGlAXa: la'mahd* 'one berry', *dAXk'lAXa: shuglAXa'lAwchi:d 'iXa'* 'how ever many big strawberries do you have?!', *ch'a:n'XAda: gah* 'five days'; *t'uhLga'guka: le:L* 'three hairs'. Where the last element of the class-mark is *l-*, the result is *-na:*, i.e. *-ti:na:* for *-ti:l-*, *-qi:na:* for *qi:l-*. For *l*-class itself, the result is *-(*'*)a:na:*, thus *la'd(*'*)a:na: ch'iyahd* 'two hats', presumably *dAXk'(*'*)a:na: ch'iyahd=d* or *dAXk'(*'*)a:na:=d ch'iyahd* 'how many hats?', *LinhGti:na: tsa'k'* 'one mitten', *LinhGqi:na: k'uXehL* 'one rope'. Combining with class-marks ending in *-dl-*, itself from *-d-l-*, i.e. *-(*'*)dla:-*, the particle or postposition becomes, as far as attested, either *-dla:na:*, e.g. *LinhGdla:na: tsa:* 'one stone', or, probably the more correct *-dli:na:*, as in *la'd dli:na: dla:XA'i:nd* 'two buttons' (Marie).

The class-mark particle or postposition is absent in the construction N-*nu:-lA-ya* 'N pair(s) of', e.g. *LinhGnu:lAya' tsa'k'* 'one pair of mittens', *la'dnu:lAya' tsa'k'* 'two pairs of mittens'.

Numerals subordinated to the adverbializer *-dah* and to certain other postpositions are also attested. With *-dah* adverbializer: *la'dah (-d-d- > -d-)* 'in two ways, (speak) in two languages', *t'uhLga'dah* 'three ways'; *LinhGdah* 'one way' is special in usually meaning 'motionless, still', *LinhGdah 'iLt'ux* 'hold it still!'. With postpositions, in addition to o-*dAX* 'o times' above, (2) shows examples with o-*da:* and various postposition-finals.

(2) Numerals subordinated to postpositions

*LinhGda:d* ‘(at rest in, nominalization of) one place’ and *t’uhLga’da:d* ‘three places’

*LinhGda:ch* ‘to one place’

*t’uhLga’da:X* ‘Aw *sALtsAXLinh* ‘he cut it in three pieces’

*XAwa:yu: la’da:X GA’a’ch’L* ‘dogs are going along two at a time’

*t’uhLga’nu:da:X GA’a’ch’L* ‘they’re going along in threes’ (Marie 9/19/98)

However, some of these uses vary from or conflict with responses from Marie’s sister Sophie, 6/23/87.

- (3) Numerals subordinated to postpositions (Sophie, 6/23/87)

*t’uhLga’da:X da’mahdg ’u’lixilGah* ‘I know three ways it can be cooked’

*t’uhLga’da’X* ‘Aw *yAX sALtsAXLinh* ‘he cut it apart into three’

*t’uhLga’da’X q’unh wAX sAlil* ‘he did it three times’

Sophie could think of no way to say ‘1/3’ or ‘2/3’, but for ‘1/2’ there is the well attested *ya:a:g*, q.v. under *a:g*, and also the well attested *-tsin’-da*, ‘1/2 or less’, q.v. under *-tsin*.

## 20.3 Syntax, ordinals

From the above, e.g. occurring as object of postpositions, it is clear that numerals and numeral phrases are a type of noun and noun phrases, more than are adjectives, especially in that the dependent use of adjectives is not applicable to numerals. Therefore, numerals are readily found not only as object of postpositions in sentences, as shown above, but also as subject, direct object, or complement thereof, even without overt nouns: e.g. as subject in *la’dnu: ’u:d sALtehL* ‘two (*la’d-*) persons (*-nu:*) are lying there (*’u:d*) (comatose or dead)’, or as direct object in *ch’id la’dih sich’ ’ALa* ‘give me (*si-ch*) just (*ch’id*) (exactly/at least) two!’, *LinhGLAXa: sich’ lAXA’a* ‘give me one (*LinhG-*) (berry: *IX-*)!’, *’Al la’dih ’uwa: ’ich’ qu’xLah* ‘I’ll give you (*’i-ch*) these (*’Al*) two of (*-a:*) them (*’u-*)’. Numerals as complement are found e.g. in *la’dnu: da’sALXa’L* ‘she had two children, she had twins’, and (Sophie 6/23/87) *t’uhLga’ yiLeh* ‘it’s (in) 3 (pieces)’. Numerals are also routinely found as attribute to overt nouns in noun phrases of any function in a sentence: *la’da:na: ch’iyahd sich’ di:’ahL* ‘I (*si-ch*) have two extra hats (*ch’iyahd*)’, and as attribute also to possessed nouns, in the following phrase as subject in a non-verbal sentence: *la’dih ’uXu:nLAYah ’uwa: k’a:dih* ‘two (of) his (*’u-*) teeth (*-Xu:nLAYah*) are missing/gone’.

The closest we find to an ordinal is a numeral used as attribute, here to *ya: ’thing: ’Aw t’uhLga’ ya: ’u:da’ da: sAqehL* ‘the third (one/day) we (*da:*) arrived there (*’u:da’*) (by boat)’, with *’Aw t’uhLga’ ya: ’the three thing’* used adverbially. This construction clearly differs from ‘three (days)’ *t’uhLga’XAda: (gah)* in lacking the *XAda:* (particle or postposition and *Xd-* class-marker for *gah* ‘day’), likewise *’Al q’Adits’in ya: gah* ‘this eighth day’. Though

ordinal numerals were evidently not further investigated, ‘the third one (human)’ would accordingly be *'anh t'uhLga' yi:nhinh*, and ‘the third man’ would be *'anh t'uhLga' yi:nhinh Lila:*, perhaps also simply *'anh t'uhLga' Lila:*, probably either. Note also the composition of the numeral *la'dits'in* for ‘7’ itself; as noted above, this obviously cannot mean either ‘2 [x] 6’ nor ‘2 [+] 6’, but only ‘second 6’. Also, especially in the earlier numeral lists (see final subsection here), there are a number of forms which imply the further ordinal use of numerals.

## 20.4 Measurement

Numerals are fairly well attested in measurements of time and distance. It is not clear that these ever constituted a system as such, and active investigation of that was perhaps not exhaustive. The dictionary entries for numerals include examples of all such usages, merely summarized here.

Traditionally, time was certainly measured in terms of days, months and years. Lesser measurements of time include ‘minutes’ only as a loan from English, *minidz*. Time of day was established with the phrase *k'uXa'tl'* ‘hour o'clock’; see the verb stem *-Xa'tl'* ‘strike’, here evidently of a clock striking, and derivatives. In addition to *gah* ‘day’ itself, especially the verb theme *y-L-qa* ‘day dawns’ and derivatives, are often used with numerals to measure the passage of days, e.g. *t'uhLga' yAsALqahL* ‘three days passed’, *t'uhLga' uch'ahd yAsALqahL* ‘three days ago, three days have passed since it’. Further, *t'uhLga' yAsALqahL* also means ‘Wednesday’, *ch'a:n'ih yAsALqahL* ‘Friday’, etc., the numerals ‘1–5’ thus serving to name the weekdays. ‘Week’ is *sAndiqa'd* ‘between Sundays’ (nominalized with *-d*). Given that loan from English, it is possible that the numerical weekday-names do not come from or are not patterned after the Russian, which are themselves partly numerical. ‘Moon, month’ *qAXah*, *l*-class, is unanalyzable, q.v. in the dictionary under *-Xah*. For ‘year’ see especially the verb theme *Gl-'ya*, where *Gl-* is thematic for ‘passage of time’, with preverbal *leh*, which itself should therefore be glossed ‘(in) year(s)’, seasons (*xah* ‘summer’ and *XAla:g* ‘winter’) are not used in counting years.

Less information remains about numerical measurement of distance, for which only two or three units are attested. One is *k'uk'ahsh* ‘foot’ (both anatomical and unit of measurement), as in English, and perhaps calqued from English, with *k'u-* indefinite possessive prefix as object of *o-ga* ‘like o’, so taking comparative dimensional verb, e.g. *la'dih k'uk'ahshga' i:L'a'* ‘it’s two feet long’ (‘it extends like/equal to (*-ga*) two (*la'dih*) feet (*k'u-k'ahsh*)’). The other and most certain unit is *yahd*, glossed by Lena as ‘yard’, very possibly under the influence of the resemblance to the English, but which is purely coincidental and does not fit phonologically as a loan (which would be *\*ya:d*). Cf. also, crucially, the basic directive verb theme with the same stem *O-'yahd* ‘measure O’, the existence of which may imply more of a measurement system than was remembered.

Lastly, note the loan *sha:she:nn* ‘cord of wood’, from Russian сажень, unit of linear measure, ca. seven feet, Eyak being the only Alaskan language in which this loan has been noted, though apparently it does not serve as a unit of linear measure. I did no doubt inquire about other measurements on the order of inch or arm-length, without success.

## 20.5 Arithmetic

No Eyak arithmetical discourse was attested or elicited, but such could certainly have existed or could be developed with the numerals, including the abstract *dAXk'-d* etc., and existing resources such as *o-ga* ‘like o’, *o-LAX* ‘more than o’, *o-'u'X* ‘less/fewer than o’, and *o-da'X* ‘times o’, in order to allow for the four basic arithmetical processes.

## 20.6 Older sources

There is significant history of the documentation of Eyak numerals, of some interest here. The first list of Eyak numerals is Rezanov (1805) from Yakutat, showing ‘1–12, 20, 30, 40, 50’; left blank are ‘60, 70’, etc., ‘100, 200’ etc., ‘1000’. The next list is Anonymous (1810), also Yakutat ca. 1810, with ‘1–11, 20, 30, 40, 50, 100’; left blank are ‘12–19, 21–29’ etc., ‘60, 70’ etc., ‘200’ etc. Then there is Baranov (1812), Yakutat, with ‘1–10, 20, 30, 40, 50, 100, 1000’, heavily influenced by the 1810 list, and the only list made at any time with access to or consideration of any previous list.

First at the Copper River area is Khromchenko (1823), with the numerals 1–10, 20, 30; 40 left blank. Next at the Copper River is Wrangell (1839), recorded ca. 1835, with ‘1–10, 20, 30, 100’. Last there in the Russian period is Furuhjelm (1862a), with ‘1–12, 20, 30, 100, 1000’.

After the Russian period, and a gap of 71 years, the first modern source is de Laguna and Reynolds 1933, with Galushia Nelson of Alaganik-Cordova (cf. §§3.3.4.1–§3.3.4.2), ‘1–10’ only. Next was Johnson and Harrington (1940), working with George Johnson of Bering River village, ‘1–10’, decimals ‘20–90, 100’, also counting people, ‘1–10’. Next was Li (1956), also working with George Johnson, ‘1–23’, decimals ‘30–90, 100’, and with Anna Nelson Harry of Cordova, ‘1–11, 20, 21, 30, 100’. Last was Austerlitz 1961, who elicited numerals from Lena Nacktan or Marie Smith, ‘1–11, 20, 21, 30, 50, 100, 200, 1000’. This is a total of ten sources before Krauss, six Russian and four post-Russian, eleven lists altogether, including Li with lists from two speakers.

First, regarding the system itself: all sources, as far as they go, agree on the numerals ‘1–20’, or, at least in principle, ‘1–29’. All show the same basic ‘1–10’, then *dAGa:Xk'a:d* N for ‘11–12’, and *tle:qa:g* for ‘20’.

However, for ‘30, 40, 50’, of the ten historical sources, seven agree on the decimal system, but three show vigesimal or potential vigesimal. Those three are Anonymous

(1810) at Yakutat and Baranov (1812), which is highly influenced by Anonymous 1810, both definitely vigesimal; and potentially vigesimal is Khromchenko 1823 at Copper River.

For '20' Anonymous (1810) has тлиекаквъ (<tliekakv>), and '30' is тлекакъ кватакаанъ (<tlekak"kvatakaan">), i.e. *tle:qa:gk'wa:[d] dAGa:q'*, i.e. '20 + 10', where <-к->, two short vertical lines, is easily misread for <-н-> in copying. For '40' Anonymous (1810) has латитъ тлекакъ кватакаакъ (<latit"tlekak"kvatakaak">), i.e. *la'dih tle:qa:gk'wa:d dAGa:q'* ('second 20) + 10', thus meaning '50' rather than '40'. For '50', switched with '40', Anonymous (1810) has лати-тлеква аакъва (<lati-tlekva aak"va>), i.e. *la'dih tle:qwa:(g)k'wa-*, seeming to start to say, and then truncate, the same as was said for '40' which was in fact '50', confused and/or garbled.

For the same four decimals very shortly after 1810, Baranov (1812) has '20', тлиекаквъ (<tliekakv>) for *tle:qa:gw*, '30', тлканъ кватакаакъ (<tlkan"kvatakaak">), i.e. *tle:qa:gk'wa:[d] dAGa:q'* as in 1810. Then for '40' Baranov (1812) has лати тлиекакъ ква (<lati tliekak"kva>), i.e. the same as was erroneously said in 1810 for '50' now corrected to '40'. This in may fact be, like 1810, more exactly to be read as a very carefully pronounced *la'dih tle:qa:gw*, but Baranov (1812) is also minus the extra and etymologically incorrect labialization *-qw-* of 1810, so at the same time showing some independence from 1810. Now for '50' Baranov (1812) has лати-тлекваакъва-такаакъ (<lati-tliekvaak"va-takaak">) for *la'dih tle:qwa:gk'wa:[d] dAGa:q'* ('second 20) + 10', fully correcting the switch in the 1810 for numerals (though this time with the extra labialization, *-qw-*, here rather than in the vigesimal meaning '40').

Khromchenko (1823) at Copper River also has Тлекану (<Tlekanu>) (for Тлекаку, <Tlekaku>) *tle:qa:gw* for '20', and for '30' has Тлекахъ Катекокъ (<Tlekaх"Katekok">), i.e. *tle:qa:xk'a:d dAGa:q'* as in 1810 and 1812. The list includes a place for '40', filled in for some of the other languages, but that is left blank for Eyak. Khromchenko's Eyak for '30' does indeed suggest a vigesimal system, but does not prove such, as it could also be interpreted merely a linguistically logical extension of the system 'twenty-nine, twenty-ten, ...', with no view to what '40' would be. The speaker in fact provides no form for '40' quite possibly for that very reason. Then, also at Copper River, we have from Wrangell (1839), from ca. 1835, тутлокекакхъ (<tutlokekakx">) for *t'uhLgw[a'da'X] dAGa:q'* for '30', definitively demonstrating a decimal system, only a dozen years after Khromchenko.

The system in Yakutat Eyak had indeed become vigesimal at this late or terminal stage of Eyak there. In Rezanov's Yakutat Eyak (Rezanov 1805), we can see the system was still clearly decimal there, even with the Tlingit loan for '20', тлякакъ (<tliakak">) for *tle:qa:g*, then '30' тоалькдаахтакакъ (<toal'kdaaxtakak">) for *t'uhLg[wa']da'X dAGa:q'* ('3 x 10'), '40' клякак[-]ахтакакъ (<kliakak[-]axtakak">), with two illegible letters, *qAlahqa'g[wa'd]a'X dAGa:q'* (4 x 10'), and '50' <chaan"axtakak"> *ch'a:n'[d]a'X dAGa:q'* ('5 x 10'), just as found in modern Cordova. Thus the development of a vigesimal system had taken over in late Yakutat Eyak, and had spread to Copper River, quite temporarily, as it turns out. The vigesimal must almost certainly have been under the influence of Tlingit vigesimal system of the time. Widely in Tlingit at least at that period, '30' was 'one-man + 10', '40' was 'two-man', '50' was '2-man + 10', etc., and '100' was '5-man'.

Some or most Tlingit dialects, especially by the 20<sup>th</sup> century, have a decimal system like Eyak, but very probably Yakutat in 1810 must have been vigesimal, to provide the model for that innovation in the Yakutat Eyak numeral system at the latest stage of its existence.

For ‘100’ in Eyak we have four Russian sources: Anonymous (1810) *ткаква цьи* (<tkakva tsi>), which can only be read *dAGa:Xk’wa:d ts’i:n* ‘16’, and Baranov (1812) has the same, still more poorly transcribed, <таква-цьи> (<takva-tsi>). Wrangell (1839) has *такакхъ тлекакъ* (<takakx” tleakx”>), i.e. *dAGa:q’ tle:qa:g* ‘tenth 20’, hardly correct, except perhaps for ‘200’. Furuhjelm (1862a) is still farther off, with <vetzte takhakh>, to be read [g]wAts’de: *dAGa:q’* ‘ninth 10’, cf. <kvatztz> ‘9’; he also has <khatatzi> *q’Adats’i:n* ‘8’ for ‘20’, and <khatatzi takakh> ‘eighth 10’ for ‘30’, which are his two numerals immediately preceding ‘100’, so that something like ‘90’ for ‘100’ here is hardly surprising.

From the post-Russian sources, both Johnson and Harrington (1940) and Li (1956) with George Johnson have *dAGa:q’da’X dAGa:q’* ‘10 x 10’, which also Krauss has with Lena, confirmed in principle by Anna’s form for ‘150’ (‘15 x 10’). Aside from that, Li also has *LinhGih hAndrEt* with Anna, and Austerlitz *LinhGih hAndEt* for ‘100’ and *la’dih hAndEt* for ‘200’ with Lena or Marie.

Thus, all four Russian attempts at eliciting ‘100’ were failures, and except for a plausible *dAGa:q’da’X dAGa:q’* from George Johnson twice and sometimes also from Lena, there seems to have been no consistent Eyak not borrowed from English for ‘100’. The “plausible” ‘10 x 10’ or ‘ten-ty’ from both George Johnson and Lena Nacktan, confirmed in principle by Anna’s ‘fifteen-ty’ could have been traditional, and/or it could well be a mere linguistically logical or automatic extension of the system itself. It is in any case no “special” Eyak term for ‘100’.

For ‘1000’, beside the modern *tAwsAnn* from English, we have only Baranov (1812) from Yakutat, *тлинакъа тыкаакъ* (<tlinak”a tykaak”>) or *тликакъа тыкаакъ* (<tlikak”a tykaak”>), *tle:qa: k’a:[d] dAGa:q’* ‘20 + 10’ (cf. same source *тлкакъкватаканъ* (<tllkak”kvatakaan”>), *tle:qa:gk’wa:d dAGa:q’* ‘30’), and Furuhjelm (1862a) from Cordova, <Khanakvaka>, *qAnahqwa’ga’* for *qanahqa’gwa’*, modern *qAlahqa’g(w)a’* ‘4’. These results are hardly surprising in view of the failures for ‘100’.

Finally, the historical documentation of the numerals is extensive enough to show some change in phonological details. First, *ts’i:n* ‘6’ in (Rezanov 1805) for some unidentifiable reason is consistently *цунъ* (<tsun”>), implying *ts’u:n* instead of *ts’i:n*. All subsequent sources have the Russian vowel ы, or и or е, interpretable as /i:/. Anonymous (1810) and Baranov (1812) sometimes have *цыннъ* (<tsynn”>), where the doubling of the nasal is very unlikely to be a transcription of consonantal or syllabic -n; in fact it is much more probably the reverse, an awkward attempt to show nasalization as opposed to normal Russian final nasal.

Harrington has *ch’a:’nu:* and sometimes *ts’i:’nu:* for ‘five persons’, ‘six persons’, with denasalization. Krauss, on the other hand, perhaps not in every case careful to distinguish, has *ch’a:n’nu:*, *ts’i:’nnu:*, with persistence of nasalization in most instances.

One other type of phonological detail in which especially the Russian transcriptions differ from the modern ones is in labialization of velars, in several particulars. First, the postposition *o-k'a:d* 'o plus' is written labialized *o-k'wa:d* in Rezanov 1805, and Anonymous (1810), Baranov (1812), so in all three Yakutat lists; it is not attested in the later Russian lists. Second, for '20' *tle:qa:g*, we have *tle:qa:gw* with labialized final, in Anonymous 1810, Baranov (1812), and Khromchenko (1823), but not in Rezanov 1805, or in Wrangell (1839). Third, the *-ga'* or *-gwa'* in '3' and '4' is usually labialized (<-кѡа, -коа, -кѡа>, <-kva, -koa, -kua>), as may be expected, given that *o-ga'* is pronounced *o-gwa'* even in modern Eyak some of the time. Finally, and of special interest, we already saw etymologically incorrect labialization *-qw-* of *-q-* in the Yakutat vigesimal for '40' and '50' above. We also see in '4' *qAlahqa'g(w)a'* a transcription where there is metathesis of labialization, *калакѡака* (<*kalakvaka*>) in both Anonymous (1810) and Baranov (1812), implying *-qwa'-ga'*, instead of the expected *-qa'-gwa'*. In fact we have that not only in Anonymous (1810), Baranov (1812), but also in Furuhjelm's (1862a) Cordova '1000' <*khanakvaka*> (see above), though not in his '4', <*khaliakhakva*>, or in Khromchenko 1823's *Кѡнакака* (<*Kunakaka*>) '4'—unless that is in fact to be read *qwAnaqa'ga'*, as we do not find distinctive *qu-* with reduced vowel in Eyak. Such metathesis, producing /qw/, very probably requires bilingualism with Tlingit, as labialized uvulars exist only in Tlingit, having long been lost in Eyak. Eyak-Tlingit bilingualism was certainly obvious for Yakutat in 1810, but is not at all surprising for the Cordova area in 1862 either, or perhaps even in 1823.



## 21 ADVERBIALS

Adverbials is a somewhat loose category in some respects, a miscellany that includes several minor subcategories: adverbs, demonstratives and areals, interjections, and imitatives. Each of these subcategories is discussed in the subsections below.

This definition is complex or hazy from a syntactic point of view as well, in that there are significant gray areas about the occurrence of the subcategories in the sentence, i.e. in the introductory part, between subject and predicate, or syntactically, i.e. extraposed or in isolation. Part of the definition of interjections should be that those occur in isolation, but much of that membership can also appear syntactically as well. These issues are addressed to some extent in this chapter, and to some extent in Chap. 25, but clearly this is a subject also in need of further research through the corpus.

### 21.1 Adverbs

Adverbs can be rather clearly divided into two morphological types, those that are formed with the postposition-like stem *-dah* as final segment, and the rest, which vary from monosyllabic stem to more or less analyzable polysyllabic phrases of various kinds. First discussed will be adverbs with *-dah*, the only morpheme definitive of adverbs, more definitively than English *-ly* (cf. *friendly*).

#### 21.1.1 Adverbs with adverbializer *-dah*

The adverbializer *-dah* has the phonological appearance of a preverb or postposition of the type with *d-* initial element and augment *-ah-* often found in privatives *-ah-d*, though *o-dahd* has the surprising meaning ‘contact with pressure against o’, almost the antonym of that expected (see Chap. 16. There is no attestation whatever in the corpus of a postposition *\*(?)o-dah* with personal pronoun, though such was perhaps never tested. That alone would disqualify *-dah* as a postposition, and *-dah* is also found attached mostly to word-classes that are not normally found as objects of postpositions. As such *-dah* is opposed to the postposition *o-ga* ‘like o’—and to the English *-ly* (< *-like*)—as in *Xawa:-ga* ‘like a dog’, attached to a stem-noun. That is apparently never the case with *-dah*, even though *\*(?)Xawa:-dah* was presumably never tested. A fairly complete or comprehensive listing of *-dah* adverbs is given in the dictionary (Krauss 1970a) under *-dah<sub>3</sub>*, according to the grammatical classes to which *-dah* is found attached to. The largest grouping is nine deverbalizations (four of which end with *-L*, which might be attributed to the *-dah*). In that connection a single relativization should be added, missing in the dictionary listing: *sdit'a'dzLdah yAX da:X* ‘he is walking about where it is rough going’, elicited from Lena. Lena could not otherwise inflect the form *sdit'a'dzL* ‘place where it is rough going’,

fossilized, apparently Active perfective stative ‘be impassable’. So *-dah* can be used with both types of nominalizations, though not with nouns, the closest to exceptions being three items including *ya*: ‘thing’: *Li’q’ ya:yu:-* ‘everything’, *dA’u:dAX ya:kih-* ‘anything’, *ya:kih-* ‘payment’. Of the rest, three more are adjectives (*k’udzu:-dah* ‘well’, *k’usha:-dah* ‘badly’ being very frequent; also *k’u’lAw-dah* ‘in a big way’, others probably possible); three more are numerals (*la’dah < la’d-dah* ‘two ways’, *t’uhLga’-dah* ‘three ways’, *LinhGdah* ‘one way(?)’; still, motionless’). Some of these subtypes may be open categories. The productivity of *-dah* is unclear, not fully explored. The total number attested is 30 or so.

The rest, eleven, are a miscellany, some with *-dah* attached to items difficult to classify, some not, but six are otherwise occurring and fully interpretable e.g. *’i:yah-* exclamation of disgust, *k’u-de:-* negative interrogative ‘no what, nothing’, so *k’ude:dah* ‘in no way, impossible’, or *’AnahshA-kih-* ‘fun’. The other five with *-dah* do not otherwise occur. The most complex is *’AwA’ah(LAw)-* in ‘(big) thanks’, for which see *’ah<sub>2</sub>* in the dictionary, *q’e:-* ‘simply, straightaway, etc.’ and *s-La’-* ‘beautiful’ under *La’<sub>2</sub>*, are in the dictionary. The simplest, however, *’AL-* and *’i-* are (so far) not in the dictionary as such. Because I must have regarded *’AL-* erroneously as somehow prefixal, *’ALdah* ‘playing’ is listed in the dictionary under its own stem *dah<sub>2</sub>*, though *’ALdah* is used mainly as an adverb with *-le ~* ‘act’. The very frequent *’i-dah* ‘well, OK’ is listed only under *-dah<sub>3</sub>* itself, but must be regarded as a stem, albeit the only stem of the phonological shape consisting of consonant plus open reduced vowel. This has variants *di’dah* ‘quite well’, *’idahkih, di’dahkih; ’idehdah* ‘pretty well’ < *’idah ’idah*. The stem *’i-* is probably attested in one other construction, discussed below, the pair *’ida’ya:lAX* ‘too much’ and *’ida’ya:’u’X* ‘too little’, as quantifying adverbs.

It should also be noted that the dictionary entry *-dah<sub>3</sub>* concludes with sentences of *-dah* adverbs subordinated to postpositions *o-da:d* ‘in area/time of o’, *o-X* ‘by means of’, and *o-ch’* or *-ch’* final, ‘(repeatedly) toward’.

### 21.1.2 Other adverbs, without *-dah*

The number of stems that are primary adverbs, inherently adverbial, is perhaps not over 15, and there are only a few dozen more complex forms that are primarily or inherently adverbs. The number of forms that can be used syntactically as adverbs, insofar as some such categories may be open, is therewith of course larger. There seem to be no phonological or morphological shapes typical of adverbs. Items that are primarily or inherently adverbs seem to fall especially into three semantic classes: temporal, quantifying, and manner—with the latter even more of a miscellany. We shall therefore organize the listing accordingly, with temporal adverbs, the largest semantic class, in (1). Forms are listed with minimal glossing and context, as all can be found in the dictionary with glossing and context in full detail.

#### (1) Temporal adverbs without *-dah*

*ta:dz* ‘long ago’

*'ish-ta*: 'in olden times'

*tli*: ~ *dA-tli*: 'already'

*tli-dA-wa*: 'early in the morning'

*tli-XAtl*: 'last night, yesterday'

*sahdX*: 'long time'

*gu-dAg*: 'again' (cf. *-dAg*: 'also')

*ne:tl*: 'soon, first'

*Li-ch*: 'always' (cf. *Li-dah*: 'constantly', with *-dah*)

*Li-'q*: 'all, every', *Li-ch'-a*: 'one side', *LinhG*: 'one'

*dA-qa:=yu*: 'sometimes'

*q'ah* ~ 'already', *q'ah=d=Aw*, *q'ah=dA=q'=Aw*: 'finally', *q'a:-l*: 'now', cf. *q'e:-dah*: 'forthwith' (< *q'a:-'i-?*)

In addition, at least four nouns are attested syntactically as temporal adverbs:

- (2) Nouns as temporal adverbs (without *-dah*)

*se:L*: 'in the evening'

*XAtl*: 'at night'

*gah*: 'during the day'

*XAla:g*: 'in winter'.

Likewise used adverbially are derivatives of *y-qa* under *qa<sub>4</sub>*: 'dawn', q.v. *yAqe:X*: 'tomorrow, at dawn' (< *ya-qa-yAX*), or *y-L-qa*: 'it dawns' with numerals for passage of days; and *leh Gl-'ya*: 'year pass' for passage of years.

The next semantic group might be called quantifiers. The first two in (3) are the most definitive and are often found together, in the order *'a'd xan'Lq'*, reverse order probably not tested.

- (3) Quantifier adverbs without *-dah*

*'a'd*: 'very much'

*xan'Lq'*: 'very much'

*ts'id* ~ 'only, just'

*djig(L)*: 'exactly'

*gu-si:-kih*: 'a little bit' (*gu-*: 'filament-like', *-kih*: diminutive)

Probably also quantifying adverbs are *'ida'ya:lAX* 'too much' and *'ida'ya:'u'X* 'too little'. However, these are obviously, at least in origin, postpositional phrases with comparative postpositions, *o-lAX* 'beyond, more than', *o-'u'X* 'short of' less than *o*', with *'ida'ya:-* as object 'thing coming right up to *'i-*', probably the same *'i-*' as in *'i-dah* 'well'. These, along with *o-ga* 'like *o*, equal to *o*', along in fact with all or most other postpositions, constitute postpositional phrases that are often used syntactically as adverbs. Thus *'ida'ya:lAX* and *'u'X*, except in that *'ida'ya:-* is not otherwise attested, and could be considered not adverbs in themselves, but rather members of the huge open class of postpositional phrases which can be used adverbially. The possibility of *? 'ida'ya:-ga* 'exactly to the right degree', or *? 'ida'ya:* 'right amount' was not tested; nor, however, is either attested in the corpus, perhaps with statistical significance. In any case the stem *'i-*, uniquely of the simple phonological form consonant plus open reduced vowel, is here the object of the postposition *o-da* 'right in front of *o*'. As such and as in the adverb *'idah* 'well', above, *'i-* is also the only stem appearing exclusively as a component of adverbs, along with *-dah* itself.

Two more items ending with preverbals might be considered quantifying adverbs. One is *dA-du'X* ~ *di'du'X* 'almost' which must historically be from proclitic *dA=* 'selfsame' and *dA-'u'X* 'short of *o*' with indeterminate object, irregularly contracted, so synchronically reclassified. The second variant may well be from *dA='ida='u'X*, with *i'dA-* the reduced procliticized variant of *'ida:*, abstract relative 'that which, degree to which' discussed at length in §26.3.

Similarly, with the third comparative postposition, there is *dA-ga* 'enough' < 'like *o*' where the object is indeterminate, in what might be considered a semantic shift, at least by a speaker of English, which would qualify it as reclassified from a postpositional phrase to an adverb. That appears also as an interjection, especially in the case of *dAga* (*q'Aw!*) '(that's) enough!'. As we enter such gray area, then also e.g. *dA-Xu* 'exactly', proclitic plus preverb *Xu* 'right, exactly', is just one more item of several which should be considered an adverb.

The third semantic group of adverbs with *-dah* is adverbs of manner. No doubt the adverbs of manner *par excellence* are the two (adverbialized) demonstratives or demonstrative adverbs *wAX* 'thus, that way' and *lAX* 'this way'. With proclitic *dA=* 'selfsame' they show the unique phonological output of *dA'wAX* 'that very way, still' and *dA'lAX*, anomalous in allowing schwa followed by tautosyllabic glottal stop. This suggests analysis perhaps even synchronically as *'AwA-X* and *'AlA-X*, i.e. archaically with the demonstrative pronoun as object of postposition *o-X*. (These correspond to the demonstrative adverbials *'u:d* 'there' and *'a:nd* 'here'; see §21.2.2 below.)

The first of these demonstratives, unmarked, is often the stem in the sentence introducer *'u:dAX q'-* 'then' with *=q'* emphatic (< *\*['AwA-d]-A-X* with epenthetic schwa, '(movement) along there', here now temporal). There are not surprisingly other sentence introducers, connectives, often followed by *=q'* emphatics, e.g. *dA-wa:* (*q'-*) 'then (pending)', again postpositional with indeterminate object. Likewise *dA'Awtl'* (*q'-*)

'nevertheless' with *dA*= 'selfsame', (< 'even with that'), also postpositional. This raises the issue of possible subclassification of adverbs, whatever their morphological composition, according to some degree of variation in syntactic use, q.v. Chap. 25.

Of a few other adverbs of manner, one not composed of preverbals may be cited, namely *'a:wAyu*: 'impolite, uncontrolled, nasty', composed of plural marker =*yu*: and *'a:w-*, attested only here. Morphologically more usual are postpositional *'AdXa'd* (*ya'X*) 'suddenly' < *'Ad-* 'self' as object of *Xa'd* '(from a point) in close relationship with o' (and *ya'X* 'upward'), and *'AdAX* 'however', probably with the reflexive *'Ad-* as object of *o-X* '(moving) contact with o'. Items like these may be considered adverbs at least insofar as they are semantically opaque internally.

A certain number of postpositional or preverbal phrases are used especially as adverbs, or might be called adverbs composed of preverbals, especially temporals or adverbs of manner. One such pair is *qi' ya:da:X* 'sometime(s), anytime', and *qi' ya:da:d* 'someplace, anyplace', composed of preverb *qi'* 'place where, time when', *ya*: 'thing' as object of *o-da*: 'in area of o'. Two more are *dA-wa'-d(-ga)* 'quickly, fast', clearly of postpositional origin with indeterminate object, *-d* final; *da:n'-L-ga* 'slowly', with preverb *da:n'* 'into obstacle', already allowing or requiring *(-L)-ga*', thus merely members of the entire set of postpositional phrases with *o-ga*' or in fact all postpositional phrases used adverbially.

A major quantifying or qualifying item is *k'e: '-sh ~ k'e'sh* 'perhaps, probably, approximately', clearly composed at some level, probably synchronic, of the interrogative pronoun *k'e:-* 'how?' and interrogative enclitic =*sh* for yes/no questions.

A number of unclassified morphemes, e.g. negatives, namely *dik'* 'no(t)', *di:yAX* 'not yet', *k'udAX* 'cannot', *k'u-de:-* 'no way', with their own etymologies or segmentation, could be called adverbs or at least adverbials.

Finally to be mentioned in this subcategory are items which are primarily classified as belonging more or less clearly to other categories, but which can be used syntactically as adverbials. This includes at least a few verbal nouns, e.g. *tsu'd* 'sleep' as in *tsu'd disilCh'e:XL* 'I yawned sleepily', or *k'a'd* 'pain' as in *siya: k'a'd k'udisilQahGL* 'I choked on something' < 'something fell painfully for me'.

## 21.2 Arels and demonstrative adverbials

Note that the semantic categories so far mentioned for adverbials have been temporals, quantifiers and adverbs of manner, hardly anything spatial. This is obviously because anything spatial or directional, location or movement, has so far been dealt with in connection with preverbals above, a large and elaborate category, and part of the verb system of Eyak. Any reference to adverbials of this semantic type has so far been vague or inconsistent in labeling, probably mostly as locatives or locationals or directionals. These are of two main

types, which will here be called areals and demonstrative adverbials.

### 21.2.1 Areal

Areal are a well-defined subcategory of adverbials, beginning with the prefix *XA-*, which could be considered the pronominal object of postpositions with the meaning ‘area of’. A complete listing of the areals in the text corpus is given in (4) belonging to the list of areals. There was evidently some effort to elicit forms with *XA-* for at least some postpositions, e.g. the notation that Lena rejected my proposed *XA-yAq*’ for ‘area within enclosed (three-dimensional) object’. It is still likely that no such effort was routinely made with the full range of postpositions, so it is uncertain how many other possible areals there may have been. Note that these are often productive in compounding and in place-names, and that they may often be found with *-d* final which could nominalize them.

(4) Areal adverbials

*XAdAGd* ‘area above’

*XAdAGdAch’ahd* ‘from area above’

*XAdAGida:q* ‘upstairs, in loft’

*XAdAGaya* ‘God’ (Rezanov) and *XAdAGd shich’iya* ‘God’ (< ‘my master above’, Galushia Nelson)

*XAta:s* ‘area across’, in the place-names ‘*AXAkih qi*’ *XAta:s dAya:*’ ‘Canoe passage on Hawkins Island’, *XAta:sya’d* ‘Odiak Slough’, *XAta:sguda’d* ‘mouth of Odiak Slough’

*XAtl’a’q* ‘back end of area’

*XAtsiya-* ‘area down at shore’, with various finals

*XAli-* ‘area in the back of enclosed space; downriver’, with various finals and compounding

*XAlah* ‘area around point of land’ or lexicalized ‘point of land’, in place-names and one personal name

*XAlu’d* ‘area way inside deep hole, cavity through area’

*XAlahsd* ‘area in front, far out to sea, Gulf of Alaska, Seattle’

*XAlahsdAlahGayu:* ‘White man’

*XALAG* ‘area upland’

*XALAGdAq’Asdkih* ‘animal den’ < ‘little other end of upland area’

*XA’ya’d* ‘concave geographical area’

*XAyAXd* ‘area underneath, downstairs’

*XAyAXe’X* ‘area northwest(?)’

*XAyAXdAqehXq’da:d* ‘ear at foot of mountain’ < ‘near area at bottom of area below’

There seem to be some instances where the postposition is asyllabic *o-q* ‘on o’, with *d-* and *dl-* qualifiers intervening, for which see especially *o-q*<sub>2d</sub> in the dictionary. With *d-* qualifier and various finals we have the items in (5).

(5) Areal adverbials with *d-* qualifier

*XAda:q’d* ‘riverbank area, flats, beach’

*XAdi:q’Ach* ‘towards breakers’ < (*XA-dA-’e’-q*)

*XAdla:q’qa’ah* ‘Bay at Mile 5’

*XAdli:na’q* ‘along riverbank’

Note however also *XAdla:dAX* ‘along shore’, conceivably with *o-d* postposition, or possibly mishearing for *XAdla:q’dAX*.

It seems, moreover, that some of these areal can in turn be treated as postpositions, though in a problematically small set of these areals, involving a very small set of postpositions. These are in fact on instance each of *o-yAX* ‘under o’, *o-lah* ‘around o’, and *o-d-q*, and all the rest are of *o-la’-* ‘hanging down on/from/over o’. First is *dAXAyAXd yAX XAdA’a’L* ‘lantern’ in Rezanov (1805), evidently confirmed by Lena. The *yAX XAdA’a’L* is a deverbalization clearly referring to the downward placement (extension) of a candle, *Xd-* class. The *dAXAyAXd* appears to be ‘(at rest) in lower area’, with *dA-* indeterminate object, which might seem problematical, but is confirmed by the rest of these items. The one instance of the second is *dAXAlah sahL* ‘went around point’, also with indeterminate prepositional object, but the ‘*u-* as object in the third is ‘*uXAda:q’d k’u:Leh* ‘Egg Island’, lit. ‘there are trees on it’, proving these items are indeed postpositional phrases now incorporating the areal *XA-*.

Of all the rest, for some reason all with the postposition *o-la’*, these five instances are like the preceding, listed in Krauss (1970a) under *la’ ~ na’* (erroneously as *o-X-la’-* “with *X-* thematic”), e.g. ‘*u:d’AwXAla’X sAtahL* ‘it is hanging on that (peg) there’, *dAkinhXAla’X li’ xLya:k’* ‘I hang them (far) on(to) sticks’. There are ten more instances of *dAXAla’-* with indeterminate prepositional object, many with preverb *li’*, here ‘back from head or point (of protrusion)’.

It is so far understandable that the *XA-* might be taken as “*X-* thematic (qualifier)”, but there is one more set supporting the present interpretation. The next subentry under *o-la’* in the dictionary is *o-y-X-la’-*, now adding the anatomical qualifier *y-* ‘hand’, in irregular order *-y-X-* explained as constituent structure [*y*-[*X-la’-*]]. However, this is no longer necessary if *X-* is now seen instead as *XA-* pronominal areal prefix instead of qualifier. This interpretation supports and is supported by all the above. In these cases the protrusion is

of course a finger, and a dozen examples are to be found under classificatory O-(*l-*)'a 18d.-f. for putting a ring on and off a finger.

It seems inescapable that these forms show that the areal, with XA- from postpositional phrases, is converted back into a postpositional phrase. This development was not further explored in the field. It therefore remains unclear how many more areals could have been found with other postpositions, and why what is attested is so dominated by one postposition, o-*la*', in 90% of the instances.

This shows only twelve different postpositions as the stem of all these areals of a total of 72 postpositional stems. The fact that Lena rejected e.g. \*XAyAq', or that there are no attestations e.g. of \*?XAqa' 'area between' must be significant. Certainly these two postpositions o-*γAq*' and o-*qa*' are spatial, as opposed e.g. to o-*lehd* 'because of o'. It is therefore perhaps the case that o-*γAq*' and o-*qa*' could be considered "abstract" spatial as opposed to "concrete" geographical or topographical spatial as applied to land formations, so that XA- as an oblique object pronoun should best be specified by the gloss 'geographical or topographical area, earth area'.

### 21.2.2 Demonstrative adverbials

Demonstrative adverbials may be subclassed as of two kinds, pure demonstrative adverbials and demonstrative areals.

Pure demonstrative forms have distal and proximal forms with meanings 'at rest', 'to(ward)' and 'movement (in)'. The synchronic paradigm is presented in the first two rows of Tab. 21.1, corresponding to distal and proximal. Pure demonstrative adverbials have a single stem, archaically 'AwA- 'distal; unmarked', and 'AlA- 'proximal', marked as close to speaker, therefore associated especially with first person. The usual modern pronouns are therefore 'Aw 'that' and 'Al 'this'. The adverbs of manner, as shown above, are wAX 'that way, thus' and lAX 'this way' (< \*'AwA-X and \*'AlA-X, with -X final). The demonstrative adverbials are 'u:d 'there (at rest)' and 'a:nd 'here (at rest)', presumably synchronically associable, at least for some speakers with the above, as < \*'AwA-d and \*'AnA-d (~ \*'AlA-d). Likewise 'u:ch' 'thither' and 'a:nch' 'hither' (transparently < 'AwA- and 'AnA- plus -ch' 'to' directly, or conceivably < -d-ch); likewise 'u:dAX 'movement within area there' and 'a:ndAX 'movement within area here' (of course transparently with -d and -X finals combined; cf. wAX and lAX with -X alone); i.e. [[ 'AwA-d]-X], [[ 'AnA-d]-X], with expected epenthetic schwa.

A few comments are in order on the distal adverbials 'u:d, 'u:ch', and 'u:dAX. Being unmarked, these items appear in some further derivatives. (The proximals, being marked, do not so appear, as is attested in notes to that effect on attempts to elicit such.) With dA= 'selfsame', dA'u:d 'right there' can be used as an interjection or commands, 'let it be (right there, as it is)!', even with person enclitic, dA'u:di:nu: 'let them be, leave them alone!'. With further final 'u:ch'ahd 'thence', 'a:nch'ahd 'hence', only 'u:ch'ahd (often with =q) can be used temporally, 'after that, then', often as sentence introducer. Likewise 'u:dAX



**Table 21.1:** Demonstrative adverbial paradigm, with corresponding demonstrative pronouns and adverbs, and potential “remote” set.

	pronoun	adverb	adverbial		
			at rest	to(ward)	movement in
distal	'Aw	wAX	'u:d	'u:ch'	'u:dAX
proximal	'Al	lAX	'a:nd	'a:nch'	'a:ndAX
(remote)			Xi:d	Xi:ch'	Xi:dAX

‘along there’, but not *'a:ndAX* ‘along here’ can be used temporally, *'u:dAX (=q)* ‘then’, often as sentence introducer. Further, with both *dA=* ‘selfsame’ and *ya:kih* ‘little thing’ or *yi:nkih* (< *ya:-inh-kih*) ‘little person’, *'u:dAX* (but not *'a:ndAX*) is found in *dA'u:dAXya:kih* ‘something, anything’, *dA'u:dAXyi:nkih* ‘someone, anyone’. These are quite common as indefinite pronouns, which could be included Tab. 21.1 above, as independent pronouns matching the indefinite pronominal prefix *k'u-*.

This brings us to another set of adverbials where the areals and demonstratives overlap. To begin with, there is what may appear to be a third set of “remote” demonstrative adverbials, (6).

(6) Third set of demonstrative adverbials

*Xi:d* ‘yonder’

*Xi:ch'* ‘to yonder, away’, also in the sense of ‘away’ in e.g. *Xi:ch' 'Ats'AX* ‘throw away’

*Xi:dAX* ‘(movement) yonder’

*Xi:da'* ‘(arriving) yonder’

*Xi:ch'a:-* ‘towards yonder’

*Xi:dAla'd* ‘hanging yonder’

The form of the first three items in (6) suggests that these could be included as a third set of demonstrative adverbials in addition to the distal and proximal in Tab. 21.1. This could be considered a marked distal, ‘yonder’, ‘far away’, probably ‘out of sight’. However, there is no corresponding demonstrative pronoun *\*Xi:X*; instead we find only *Xi:nXinh* ‘yonder person’ and *Xi:nXinu:* ‘yonder persons’. The nasalization in the *Xi:nX-* has evidently spread from the personal enclitics, perhaps further motivated by lack of synchronic identification with *Xi:d* and *Xi:ch'*. This is probably because these are no longer adverbials, but nominals, with enclitics for humans, so not forming the same kind of system as in the true demonstratives. In addition, there is no corresponding remote manner adverb *\*Xi:X*. That is, no *\*Xi:X* ‘yonder way’ (or *\*XAYAX*, for which see immediately below) ever developed; rather *Xi:-* (< *\*XA-γA*) went quite its own way with *-X* final.

In fact, phonologically like the demonstratives with coronal finals *-d* and *-ch'* with disyllabic or sesquisyllabic stems becoming monosyllabic, but morphologically like the areals, *Xi:d* and *Xi:ch'* prove to be from *XA-yA-*. That is, they are composed of pronominal *XA-* plus *yA-*, perhaps to be identified with the qualifier *y-*. Though the full analysis is semantically obscure, they must be related to *XAYa'u:d* '(in place) there yonder, way over there', *XAYa'u:dkih* 'a little further over there', *XAYa'u:ch'* '(to) way over there', *XAYa'u:Lch'a:d* 'way over on the other side', *XAYa'u:Lch'a:ch'* '(to) way over on the other side', without final *-d*. The exact semantic difference, if any, between *XAYa'u:d* and *Xi:d* is unclear, but the association with *Xi:-* seems inescapable. This is, moreover, not the only combination of areal plus demonstrative in a special set of compounds, which further support this analysis. This is especially true of *XALA'u:d* 'over there (less far than *XAYa'u:d*)'. It is possible that not enough attention was given to the glossing, and e.g. that *-ALA-* was associated with the proximal demonstrative rather than seen as a qualifier *l-* contrasting with *y-*. It is also possible that no investigation was made on further finals, e.g. *?XAYa'u:dAX*, *?XALA'u:ch'*.

It is clear, however that proximal *-'a:nd* was tested here, with startling results: *XAsha:nda'* '(arrival) close by', *XAsha:nch'* '(toward) close by', and, interestingly, *XAshlAX* '(movement) closer', evidently contrasting with *XAsha:ndAX* '(movement within) close by'. These forms are not widely attested, not glossed with much precision. Distal or unmarked *\*XAshu:d* was tested and rejected. Most startling, along with the use of the proximal itself, is *-sh-*. The only other known morphemes in Eyak this could conceivably represent are the preverb *'Ash* '(all the way) across' and *=sh* interrogative enclitic, neither likely. In Athabaskan /y/ and /sh/ can alternate, but such is unattested and highly unlikely in Eyak. Nor is there any *sh-* qualifier in Eyak. The etymology must be *XA-* and *-'AnA* proximal demonstrative minus glottal initial, with otherwise unknown *-sh-* intervening. The only other possibility is an otherwise unattested postposition *\*o-shAnA*, behaving with finals as with demonstrative *\*'AnA*, which seems less likely.

There is yet another set of combined areal and demonstrative adverbial *'u:d* in the pair *XAYaXu:d* 'lower area' and *XAdAGu:d* 'upper area', documented at least in connection with 'upper teeth' and 'lower teeth', likewise 'lips' q.v. under the entries for stems *Xu:n* 'tooth', *kuhd* 'lip' in the dictionary. For one thing, these also demonstrate the deletion of initial glottal stop as with *'a:nd* shown just above. This is further shown in *XAdAGu:Lch'a:d* 'upper side' (also for 'teeth'); cf. *XAYa'u:Lch'a:d* 'way over on the other side' above.

### 21.3 Interjections

Interjections are a minor and ill-defined morphosyntactic category. They are not phonologically imitative, but are nevertheless partly characterized phonologically by certain otherwise non-canonic shapes, especially those with initial *h-*, or often canonic *'A-*. All contain only Eyak phonemes, if one includes /b/ in the inventory. They are mostly

opaque morphologically. They may be defined syntactically as usable alone or syntactically unconnected to the rest of a sentence. Some, on the other hand, can be used adverbially as well, or are adverbs used alone. Because of this gray area, interjections are here included under the rubric of adverbials. Note further the form *gehsdahunh* ‘poor her’ under Chap. 27 on enclitics, with the unique enclitic =*unh*, suggesting for interjections that they constitute their own morphosyntactic category.

All interjections are listed in the dictionary with glosses and or description of use as well as could be done, so they are listed here with minimal glossing or description. Given the serious lack of documented Eyak conversation or use in real life, this category may well be documented the most incompletely. However, some deliberate effort was made to elicit them. Without comment to the contrary, the interjections listed below are not clearly attested as included syntactically in sentence structure. Likewise, without comment, the interjections are unanalyzable. In keeping with the usual practice in the grammar, the interjections will be listed not semantically, e.g. of pleasure or displeasure, but by phonological, morphological, and syntactic traits.

(7) Interjections

a. Beginning with *h-*

*hu'uX* ‘ouch’

*han'anh* ‘now what’s next?’

*he'eh* for amazement (e.g. *he'eh yiLda:s* ‘my it’s heavy!’)

*hanh* for surprise (often unpleasant)

b. Beginning with unstressed 'A-

'*Aya*: for surprise

'*Ayanh* [ '*Annyanh*] for regret or pity

'*Anik'eh* ~ '*AnAk'eh* ~ '*Anik'ih* ~ '*AnAk'ih* invoking demon-like to scare children (strongest stress on last syllable; second vowel /i/ may be due to /k'/, so '*AnA-* may be original, and possibly to be identified with the proximal demonstrative; cf. '*ALAX* in 7b)

'*Aba*: ‘peekaboo!’ to child while covering own eyes

'*Abeh* ‘watch out!’ (to child)<sup>1</sup>

'*Axa*: ~ *q'AXa*: for amazement or irritation

c. With stressed 'A- onset (perhaps analyzable or partly so)

'*ALAX* ‘give it to me!’ (possibly proximal demonstrative with -X final; often with object following or preceding, syntax unclear; however, as it occurs also with enclitics, '*ALAXuh* ‘give me it!', '*ALAXinh* ‘give me him! (baby)', it patterns like an imperative verb)

<sup>1</sup> '*Abeh* ‘watch out!’ and '*Aba*: ‘peekaboo!’ may both be possible loans from Ahtna; see §18.15.5.

'*Ashdih* 'I don't know', indefiniteness (also as C 'don't know where', cf. =*sh* yes/no interrogative, and *k'a:-dih* 'missing, lost', PA \*=dən 'place where', also e.g. Minto *athden* 'without, missing' possibly with irregular correspondence or Eyak pejorative \*s > sh)

d. Others with glottal onset

'*ih* for disgust

'*i:yah* ~ '*iyah* for mildly unpleasant surprise (possibly Active optative 'let it go')

'*a:n* 'yes'

'*anh* for embarrassed surprise

'*anhan*' 'look!' calling attention

'*uh*'Aw for tolerant irritation.

e. With dorsal onsets

*gah*, uttered when sitting down tired, accompanied by a sigh

*k'a:dah* pleasant surprise, with incredulity (presumably *k'a:-dah*, cf. adverbs)

*q'ah* impatience (cf. *q'ah* adverb)

*q'AXa*: ~ '*Axa*: amazement or irritation, noted above

*q'AXde*: 'greedy' (of child, *q'AX*- 'fat')

*q'Alé*' for urgency (often preceding imperatives)

*XAyuh* for alarm

f. With sonorant onset

*neh* for impatience

?*nah* as insult (Galushia Nelson only, unknown to Lena, Anna uncertain)

*lah* 'behold!, here it is'

*yAXuh* as taboo injunction (i.e. injunction not to say or do what may invite bad luck or disaster; this is attested also with the enclitic =*uh* for non-human object of imperative verbs, *yAXuhuh* 'don't (do/say that, taboo)!')

*ya'Xu*: 'don't!'' (no analysis; also standard prohibitive followed by Future)

*yA'anh* 'don't tell! (secret)'

Here may perhaps also be added *Ga:G* for the general cry of raven, *GAIAG* for the cry of Raven portending rain, *GAYAG* for cry of Raven meaning approach of people (cf. *GAYAG* 'we' independent pronoun). These appear to be the only imitatives in Eyak. See further §21.4 on this.

It is hard not to associate interjections with unstressed 'A- onset with vocatives with the same. The kinship system of Eyak has only vocatives for ascending kin terms, and of these, four have 'A-, '*Amah* 'mother', '*Adah* 'father', '*Atinh* 'paternal uncle', '*Aga:g* 'maternal uncle'. These are used in isolation, asyntactically, so could be considered interjections. At least '*Amah* is attested as a noun in narrative sentences as well, perhaps

under English influence. All vocatives, or possessed nouns for non-ascending kin terms, can also be used asyntactically in address. Further, the 'A- vocatives could be considered nursery terms as well as interjections. Along that line in this gray area we also have *ma'*, child language to ask for food.

Note that *h-* initial is the only phonological trait unique to interjections. There do not seem to be any (pure) interjections with coronal onset. Statistics are probably too borderline to determine whether this lack is significant or not. Also note that all three items with *y-* have prohibitive meaning.

We may note *'a:nAsdAsu:(w)*, evidently from English 'honest-to-sure' (cf. 'honest-to-God'). Less peculiar (*'iL- 'AL-*)*chi:-sh-dAg* ~ for dismay (fully segmentable, with stem *chi:-*, same as emphazier in content questions, =*sh* yes/no interrogative enclitic, =*dAg* ~ 'also', q.v. Chap. 27). Without the *'iL-* ~, this would be the only interjection beginning with a coronal.

Finally, we may consider negatives, insofar as they may stand alone as interjections, which do have a coronal onsets: *dik'* 'no', also with augments *dik'ah*, *dik'a*, and *di:yAX* 'not yet'. These have their own segmentation as shown in Chap. 24 on negation. Likewise e.g. the adverb *dAwa'd* 'hurry!', segmentable as shown above (7). These however get us into a significant gray area of whatever can stand alone as an utterance.

## 21.4 Imitatives and poetics

These are tiny categories. Eyak does not appear to be rich in imitatives, as speakers were asked for these and hardly seemed to know any, even though we would not expect them to be especially vulnerable to attrition. What we may call poetic speech, possibly eloquent "deep talk" was explicitly acknowledged or spoken of, with respect. They declared themselves unable to speak that way themselves, or even to remember examples of it. The few scraps we have of Eyak song text do indeed show traits not expected in the usual narrative register, which must be at least poetic, and may also be examples of "deep talk" register. All those are offered in Text 72, a miscellany of what song texts we do have, along with a fair number of textlets of colorful or clever speech, some of which might be considered proverbs, perhaps something of a genre in Eyak, remembered mostly by Lena.

Finally, as noted above, attempts to elicit imitative forms e.g. for animal cries were unsuccessful, except for the Raven cries *Ga:G*, *GALAG*, *GAyAG*. In fact, there seemed to be no further memory of animal cries imitated in Eyak, only verbs like *dALAXe:g* 'whistle', also nominalized for "whistler" ('groundhog'), but nothing like e.g. 'quack' or 'bow-wow'.

There is, however, a group of onomatopoeic verbs with *d-LA-* prefixation, cognate to Athabaskan, with stems having common traits which may be considered imitative, at least by Eyak standards. These stems are, most prominently, *-tsi:ndz*, *-ts'in'ts'* ~, *-k'i:nk'sh* ~, *-Gi:nq'sh*, all for different kinds of squeaks or the like, along with *-ts'u'ts'* for a sucking sound (< 'suck'), and *-Ge'q'sh* also for a squeak. The imitatives all have *-in-* nucleus,

homorganic obstruents in onset and coda, and include a sibilant. Other such themes, e.g. *dALAx*:g ‘whistle’, do not appear to be so imitative.

## 22 CLITICS

Clitics, both proclitics and enclitics, do not have much phonological definition. It could be said of the most important proclitic, *dA=*, that it is less closely joined to what follows than are prefixes, in that it creates the unique sequence *CA'*- in *dA'wAX* and *dA'lAX* rather than *da'*- in a syllable ending in tautosyllabic /'/; cf. normal *sa'yahL* < *sA-'yahL* (cf. §4.3.5). That in fact created the only minimal pair between /a/ and /A/ in Eyak phonology. At the same time, the opposite could be seen in the appending of the enclitics *=inh* and *=inu:* to open verb stems (ending in /' or /h/), creating a dramatic shift of /a/ and /e/ to /in/, e.g. *LAqa:'=inh* > *LAqi:'inh* 'he is shouting'.

Perhaps the best criteria for distinguishing clitics from affixes are morphological. Proclitics precede all prefixes and enclitics follow all suffixes. They are never inflectional, although *=inh* and *=inu:* singular and plural third person human may seem so. (Those turn out, however, to be required syntactically either for relativization or because human third person is represented by no overt noun or demonstrative, as subject, object, or only third person pronoun as o or P in the sentence.) They are in any case not required by the word they are attached to itself; i.e. the word they are attached to can always stand by itself without them. At least two of the proclitics, *q'A=* and *'idA=* are reduced variants of separate words *q'ah* 'already' and *'ida:* 'we', and several of the enclitics are probably reduced variants of other suffixes.

Many of the enclitics are governed by syntax. The case of *=inh* and *=inu:* was just mentioned. The case of *=sh* yes/no interrogative, and *=d* interrogative and emphatic, are mentioned in Chap. 23 on interrogatives, and those and the case of *=q'* emphatic are treated extensively in Chap. 25. In fact they plus the five further enclitics derived from reduced demonstratives further attached to *=sh*, *=d*, and *=q'* make up a large portion of the chapter on syntax, so central are they to our understanding of Eyak syntax and discourse.

### 22.1 Proclitics

By far the most productive proclitic, so that it will take up most of this subsection, is what has been called throughout this grammar *dA=* 'selfsame, the very', translatable from Eyak often with English adverbials as 'right', e.g. *dA'u:d* 'right there'.<sup>1</sup> In fact, *dA=* is probably most often found with adverbials, e.g. *dA'u:d* is not only 'right there, same place', but 'let it be!, leave it alone!', even used with verbal enclitics, *dA'u:dinu:* 'let them (humans) be!'. Also temporized, *dA'u:ch'ahd* 'from right there' > '(right) after that, then', as sentence introducer. Still more idiomatically, the exclamation of wonderment *dA'u:diduh* 'my!'. Other derivatives, e.g. *dA'u:dAX* 'right along there' are far less idiomatic. In fact, probably all other instances of the use of *dA=* are more or less predictable in meaning. A rather

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1 We use the English gloss 'selfsame' rather than Krauss' preferred Latin gloss 'ipse'.

comprehensive listing is given here because *dA=* ‘selfsame’ is not covered in the dictionary. The listing here still does not cover all the further derivatives, but rather the more basic forms, with less than full glossing.

It should be noted that as proclitic to stems with coronal onset, *dA=* varies freely with *di=*, and that *dA-'id-* > *di'd-*.

As full entries for demonstratives are also missing in the dictionary, we shall continue here with demonstratives in (1).

(1) Proclitic *dA=* with demonstratives

*dA'a:nd* ‘right here’ and *dA'u:d* ‘right there’ (see above for derivative)

*dA'wAX* ‘just so, still’ and *dA'LAX* ‘just this way, still’

*dA'Aw* ‘that very thing’, *dA'Aw gah* ‘that very day’

*dA'Awtl'* ‘with even that, nevertheless’ and *dA'AwdAwa:* ‘pending that very thing’, often sentence introducers

*dA'Awl'a'X* ‘distracted by that’

*dA'Al* ‘this very thing’

*dA'Alga'kih* ‘this little bit’

*dA'anh* ‘he himself’, *dA'anh Lila:* ‘that very man’, *dA'ahnu:* ‘those very persons’

The proclitic *dA=* is attested with all six independent personal pronouns, e.g. *dAXu:* ‘I myself’, *dAXu:gidAg* ‘me too’, *dA'uγAG* ~ *dA'AyAG* ‘they themselves’. (2) presents *dA=* in combination with other personal pronouns as object of postpositions.

(2) Proclitic *dA=* with personal pronouns

*dA'uga'* *sAqe:ts'Akih* ‘a child (just) like him’

*dAqa:ga'* *sAqe:ts'Akih* ‘a child (just) like us’

*dA'uqa:* ‘its exact kind, his own tribe’

*dAlAXqa:* ‘your (pl) own kind, tribe’

*dA'uwahd* ‘for that very purpose’

*dA'iLda:X* ‘different from each other, various’

*dA'iLga'* *'u'GAdA'eh* ‘they look quite alike’.

*dA=* also occurs with preverbs, in *dAXu'* ‘quite right, true’, *dA'AdiXd* ‘right inside (his own) home’, *dAqi'dAX* ‘right along where’, *dAqi' ya:da:X-d* ‘whenever’.

The proclitic is attested with a goodly proportion of the adverbs themselves, many temporal, cf. (3).

(3) Proclitic *dA=* with adverbs



<i>dAq'a:L</i> 'right now'	<i>dAne:tl'</i> 'as soon as'
<i>dAq'e:dah</i> 'forthwith, simply, that's all'	<i>dA'AdXa'd</i> 'suddenly'
<i>dAtli:</i> 'already'	<i>dAts'id</i> 'gratis'
<i>dAta:dz</i> 'quite long ago, in olden times'	<i>dA'a:wAyu:</i> 'quite nondescript, undisciplined'
<i>dALich'</i> 'always, forever, quite often'	<i>dA'Ashdih</i> 'don't know, God only knows, every which way'
<i>dALi'q'</i> 'all, everything'	<i>dA'ishguGdah</i> 'deceitfully'
<i>dALidah</i> 'constantly'	

With numerals we have *dALinhGih* 'exactly, just one', and *dAla'dnu:* 'the two (of us)', probably not in the sense of exact count, but to the pair itself.

All interrogative pronouns apparently can take *dA=* in an indefinite sense of 'any', cf. (4).

(4) Proclitic *dA=* with interrogative pronouns, forming indefinite pronouns

<i>dA=de:=d</i> 'any thing, anything, whatever'	<i>dA=de:ga'da:X=d</i> 'any time'
<i>dA=du:=d</i> 'whoever'	<i>dA=k'e:-d(-ah)</i> 'in any way'
<i>dA=da:=d</i> 'wherever'	<i>dA=k'ude:dah</i> 'in no way'

It is also attested with negative *dAdi:yAX* 'not yet', but not with *dik'*, i.e. *\*?dAdik'* 'not' is unattested, its absence being statistically significant rather than accidental, though not tested. In fact, as mentioned in the section above on Negation, the etymology of *dik'* 'no, not' itself might include *dA=* 'selfsame', as < *\*dA=k'w-*, cf. Navajo *do:*; with loss of labialization; cf. also *k'u-de:-d* 'nothing', *dA-k'u-de:-d* > *dik'ude:d* 'nothing'.

There is the predictable variant *di=* with the unique stem 'i- 'alright, suitable' in the adverb *'idah* 'well', thus *di'dah* 'pretty well, OK', *di'dahkih* 'sort of OK, a bit better'. Likewise with abstract relative *'ida:* 'degree to which, what' e.g. *di'da: siga'L* 'I am so tired that...', which itself can be procliticized, *di'dAsiga'L*. Note also *di'da:yu: silah tsin'dAleh q'A'Aw* 'so *that's* how he speaks of me!'.<sup>1</sup>

Statistically less frequent is use with nouns. The case of the pair *dAqe'L* 'female' and *dALila:* 'male' as in *dAqe'L ye:t'* and *dALila: ye:t'* for female and male wild celery is unique. With a relativization we have *dA'diyahga'* 'quite like in size'. A fine example as pure intensifier is Raven saying *k'uch'iya' xiLeh*, *dAk'uch'iya' xiLeh* 'I'm a hunter, I'm quite a hunter', glossed in the text as 'I'm a good hunter, I'm a great hunter'.

Less dramatic may be *dA'uchu:shiyahXa'* 'uwa: sAdahLinh' 'she stayed with her grandmother (-*chu:shiyah*)' (instead of remarrying), text 25.153A, where instead the scope of the proclitic is semantically wider than the noun to which the proclitic is attached. Likewise perhaps in *dA'anhtl' ya' GAdAtsAXL* 'it (whale) is being cut up with (-*tl'*) him

(Raven, inside)'. Most dramatically, however, the entire clause clearly has to be the scope for *dA=* in *dAk'uqu'Xi:yahda:XdAg* 'also (=dAg) even (*dA=*) when (*-da:X-*) you're going to eat'. Because *dA=* 'selfsame' was not entered for itself in Krauss (1966a), it is entirely possible that further such examples could be found in the corpus. This single example, however, proves syntactically that the scope of the proclitic can indeed be the entire clause, even though the entire clause in this case happens to be one word, the verb itself.

Normally homophonous to proclitic *dA=* is the indeterminate object pronoun prefix *dA-* to postpositions, easy to confuse with the proclitic (not to mention classifier *dA-* or qualifier *d-*). Where it is not clear whether what follows is a postposition or not, the morphological analysis can therewith be unclear. This is the case, at least etymologically with at least two forms. One is *dAqi:kih* 'all gone, nothing left', clearly to be segmented *dA-qi:-kih*, the last morpheme being the diminutive. The most likely origin of *-qi:-*, not otherwise attested, is *\*qWA-'e'*, PAE object pronoun *\*q<sup>wə</sup>* 'place, event' of *o-'e'* 'place of (absent) o', which would make *dA-* more likely to be the proclitic, hence *dA=*. The other is *dAqa*: 'occasionally, partly', *dAqa:yu*: 'sometimes', entered in the dictionary as *qa*: with *dA=* 'selfsame' or qualifier *d-*, but considered under Preverbals with initial *Ca'* or *Cah* above as postpositional, thus unclear.

We have at least one example of compound proclitics in *dA='AdA-dAXunh* 'real person', noted under *'AdA-* further below in this section. Another may be *didA'i: 'a:dga' 'a:nd qu'xdah* 'as long as you are here I will stay here' from Lena. This would be compounding *dA=* with itself at two syntactic levels [*dA=[dA='i:] 'a:nd*], unless it is a mistranscription for *di'dA'i:* from *dA='ida: ~ 'i: 'a:nd* 'to the very degree you are here'.

Probably all or nearly all other clear proclitics are derived, reductions of known stems, and far more restricted in their distribution.

Demonstrably *q'A=* alternating with *q'ah* is such a reduction, to be found exclusively in the cautionary prohibitive, e.g. *qid q'A-dAGALAQahGG* 'don't fall off', fully documented in Chap. 24 on negation.

Likewise demonstrably a reduction is *'ida=* (and *di'dA=* with further proclisis of *dA=*) from *'ida:* (and *di'da:*), the abstract relative 'degree to which, what (that which)', as in *'ida-siga'L* or *'ida: siga'L* 'I'm so tired that...', extensively documented in (§§26.2–26.7).

Probably a reduction from the numeral *LinhG-* 'one' is *dLAGA-*, perhaps with further proclisis of *dA=*. This proclitic can be used only with the six independent personal pronouns, as e.g. *dLAGA-xu*: 'I alone, just me'. This fully documented in the dictionary entry *dLAGA-*.

Likewise fully documented in the dictionary is *'AdA=* 'the real, exemplary, main kind of', e.g. *'AdA=lis* 'spruce' (from *lis* 'tree'). This proclitic is attested with only seven nouns in the corpus. It may be an allomorph of the reflexive pronoun and preverb *'Ad(-)*, or it may be a reduction of the adverb *'a'd* 'very'. We have at least one compounding of this with *dA=* 'selfsame' in *dA='AdA=dAXunh* 'real person'.

Probably also to be considered a proclitic is *'AL- ~ 'iL-* in (*'AL--*)*chi'-sh-dAg*, interjection of dismay, listed in §21.3 on interjections, and under *chi: ~* in the dictionary.

See also what is attested only as *'iL-* with interrogatives. Possibly a proclitic instead of a prefix might be *k'u-* negative with interrogatives as in *k'u-de:-d* 'nothing', itself often with *dA=* 'selfsame', e.g. *dAk'ude:d ~ dik'ude:d*, treated under Chap. 24 on negation.

## 22.2 Enclitics

Eyak enclitics form a more extensive system than do the proclitics. The function of this system is far more important to Eyak syntax and discourse than to its morphology, so is extensively treated in Chap. 27. Here only an introduction to the morphology of the main part part of the subject is offered, the set of three classes of enclitics. Only the fourth or miscellaneous class will be covered here in in the function of its various members.

Two of the first three classes of enclitics have a phonological definition of being vowel-initial, and are closely related to each other. The first subclass of these is the pair *=inh* for human singular and *=inu:* for human plural, attached to verbs. Their original function was as relativizers, 'he who(m)' and 'they who(m)'. Relativizer for non-human was zero. Attached to open stems (i.e. stems ending in *-h* or *-'*), these /i/ initial enclitics cause all stem-vowels /a/ or /e/ to shift to /in/, and /i/ and /u/ to /in/ and /'un/, obviously by anticipatory assimilation. The *=inh* corresponds exactly to the PA human singular relativizer *\*-ən*. The *=inu:* may well be from *=inh* plus plural marker *=yu:*, with irregular deletion of /y/, as suggested also by the "nasal umlauting" (nasalization with high fronting) of the stem-vowel as with *=inh*. This means that the /i/ was earlier nasalized, denasalized by later rule. It should be noted herewith that the /h/ of *=inh* is not present in non-final position when followed by other consonantal enclitics, e.g. *ki:nX=i=duh* 'he's crying (rush to him!)' in (36). (It is basic to the phonology that reduced (astigmatic) vowels, even those with distinctive timbre, can not be nasalized.) Cf. also the case of the enclitic *=gih ~ =gi* 'also' below.

The use of these relativizers has spread in Eyak to non-relative clauses, where a non-overt subject or object, or indeed oblique object, i.e. either possessor or object of a postposition is represented only by the (third person) pronoun *'u-*. E.g. *'Aw GA'inhinh* 'he sees it' or 'it sees him', *'uta:' GA'inhinu:* 'their father sees them, they see his/their father', showing also how this spread complicates the syntax, and showing why this subject is taken up extensively there (see §25.2.3).

This pair of enclitics has also spread, quite marginally, beyond attachment to verbs, to at least the noun or noun-like *ya:* 'thing', thus *yi:nhinh* 'person (who)', *yi:nhinu:* 'persons (who)', so e.g. *dA'u:dAXyi:nhinh* 'somebody, anybody', written as one word, likewise *dA'u:dAXyi:nhinu:*, plural thereof, < 'person(s) (in motion) right long there'. Further with lexicalized *dA'u:d* '(at rest) right there' > 'alright, let it be as it is, let him do so!', so *dA'u:dinh* 'let him be!, leave him alone!', *dA'u:dinu:* 'let them be!, leave them alone, let them do so!'. Also with the interjection *'ALAX* 'give me!' we have *'ALAXinh* 'hand him (baby) to me!'. This spread also includes at least one adjective, in the case of *k'ugu:nt'u'inu:*

‘many people’.

An entirely separate subclass of enclitics is phonologically consonantal, in fact consisting of three single consonants =*q*’, =*sh*’, and =*d*’. (Only the =*q*’ cannot be bound in absolute final position, though not for any obvious or inherent reason, so is followed by hyphen. By convention it is therefore written as a separate word, though again hardly justified linguistically.) The =*q*’ can be labeled “focus” or here and throughout “emphatic”, the =*sh*’ (‘yes/no) interrogative’, and the =*d*’ has two functions, (WH-)interrogative as final (and separable) to interrogative pronouns, e.g. *de:=d* ‘what?’ *dAXk’i=d* ‘how many?’; and emphatic, as e.g. =*d=uh* ‘indeed’. All three have Athabaskan cognates, that for =*q*’ being Minto *k’u* particle, and Navajo -*go* subordinator etc., clearly implying PAE \**q*’w.

A third subclass is again vowel-initial, itself attached to any of the preceding three. These are seven in number, and are all with one possible exception, clearly reduced forms of demonstrative pronouns: =*uh*’, =*Aw*’, =*Al*’, =*unh*’, =*uhn*’, =*unhAw*’, =*unhAl*’. The reductions to =*unh*’ and =*uhn*’: are almost certainly from ‘*anh*’ and ‘*ahn*’: human third person demonstrative singular and plural pronouns, reflecting also the PAE labialization of the uvular. The combinations are transparent. Use is described in Chap. 27. Combining the seven with each of the three consonantals makes for 21, plus two for =*sh*’ and =*d*’ alone, i.e. 23 possible such enclitics, if only one set for the =*d*’ series is counted. It will be seen below in Chap. 27 that there are also combinations such as =*sh=q*’, further elaborating the system.

One item above requires further discussion here. That is =*uh*’, on two accounts. First, of the seven, it is the only item that occurs alone, without consonantal enclitic preceding, as non-human direct object of imperatives, e.g. *GAsh*:’*uh*’ ‘kill it!’, *Xa:ne:huh* ‘eat it!’. This is attested also with interjections, at least in ‘*AlAXuh*’ ‘give me it!’, and *yAXuhuh* ‘don’t (do/say that, taboo)!’, with a temporal adverb in *ne:tl’uh* ‘(let it be/happen) later, afterwards!’. and the rhetorical interrogative *tlaxuh* ‘where is it?’. This =*uh*’ is very probably to be considered the same morpheme as in =*q’uh*’, where it is evidently required as an empty morpheme, since, as noted, =*q*’ is the consonantal that cannot occur without further enclitic. The =*uh*’ is optional after =*sh*’, as in ‘*i:shuh*’ ‘is it you?; hello.’<sup>2</sup> This =*uh*’ is required in the enclitic “=*duh* exclamatory” as fully described in Chap. 27. If the origin of =*uh*’ with its rounded vowel is not independent, one should more probably look toward unmarked demonstrative ‘*AwA*’ rather than labialization of \*=*q’w*’, even though it is apparently the semantically “empty” item. Otherwise its appearance in =*shuh*’ and =*duh*’ would have to be explained as analogical spread from =*q’uh*’.

In one supplementary text from Anna, Old Husband and Young Wife 25, we have the form *gehsdahunh* ‘poor her!’, an interjection further derived from the adverbial exclamation of pity *gehs-dah* < *gehdz-dah*, implying an enclitic =*unh*’ without =*q*’. Since the enclitic for singular human object of imperatives is regularly attested as =*inh*’, this unique instance

2 Note, curiously, also <Esh-est-esh> ‘Ho, you. do you hear.’ in Walker (1982), discussed in §3.1.2.

of *=unh* cannot be considered an extension of imperative use, though seemingly parallel to *=uh*. We cannot know whether its use is restricted to the one form *gehsdahunh*, and probably *?gehsdahuhnu*: ‘poor they (human)!’, but it may well in any case imply a further analysis of enclitics that includes at some level the segment /n/ for singular human.

One more important morpheme needs to be mentioned in connection with the consonantal enclitics, copular *-A-* in *=q'A-*, *=shA-*, *=dA-*. Thus e.g. *'Awq'A'Aw* ‘that’s it’, *'AwshA'Aw* ‘is that it?’, *de:dA'Aw* ‘what is that’, *du:dA'anh* ‘who is it/that?’. Likewise at least combinations like *'AwshdA'Aw* ‘I wonder if that’s it’ and *'Awshq'A'Aw* ‘I suppose that’s it’. Corresponding to each of these within the sentence are reduced counterparts *'Awq'Aw*, *'AwshAw*, *de:dAw*, *du:dunh*. It appears also that within the sentence the non-reduced forms can be used, obscuring somewhat the function of the reduction, as discussed at length in Chap. 27.

The fourth class, the rest of the enclitics, is simply a miscellany. Two of these are particles that trigger the optative in the verb. One is *=k'a'*, for polite requests, attached to the first constituent of the sentence, exemplified in (5), and fully covered in the dictionary entry *k'a'*.

(5) Enclitic *=k'a'* for polite requests

- a. *k'ut'u' dAq'Aw=k'a'*      *'i:-L-ah*  
 plenty provisions=*polite* 2s-CL-pl.inanimate.in.position  
 ‘take plenty of provisions’
- b. *yAX=k'a'*      *'idi-yah*  
 around=*polite* 2s.CL-walk  
 ‘do take a walk’
- c. *'Ad-i-Li-Gu'=ka'*  
 REFL-2S-CL-warm=*polite*  
 ‘do warm yourself’

The other such is *=shgahX*, fully covered in the dictionary under *-gahX*, the /sh/ being probably *=sh* interrogative enclitic in origin, *-gahX* being possibly one of the verbs with stem *-ga'*, especially ‘know’, or a homophone, with desiderative suffix *-X*. It has a stronger optative meaning than *=k'a'*, ‘would that, I wish that’, and is attached to syntactic constituents as is *=k'a'*, except that it also occurs attached to the archaic allomorph *'AlA-* of the proximal demonstrative, as *'AlAshgahX* to form its own constituent.

Two more of these enclitics are used with the meaning ‘also’. The more specialized is *=gih*, used only with the independent personal pronouns. Thus *xu:gih* ‘me too’ but not e.g. *\*'anhgih* for ‘he too’, rejected by Lena. This *enclitic* occurs also in the allomorph *=gi* with further epenthetic *=dAg* ~ also, e.g. *xu:gidAg* ~ ‘me too’. (Cf. the case of *=inh* ~ *=i* above.) The second enclitic with the meaning ‘also’, *=dAg* ~ *=dig* ~ *=dug*, has a much wider use than *=gih*. It is attached not just to independent personal pronouns, e.g. *xu:dAg*, *xu:gidAg* (al-

ways in that order) ‘me too’, and *xu:gihshdAg*, *xu:gidAgsh* ‘me too?’, freer order with =*sh*. It is also attached e.g. to nouns, postpositional phrases including subordinated sentences, clauses. It is also found in interjections of exasperation, e.g. *dAtli:dAg*, or (*'AL-*)*chi'-sh-dAg*. Both =*gih* ~ and =*dAg* ~ are fully covered in their own entries in the dictionary.

Especially difficult to classify is =*nuh*, usually found followed by *q'ah* ‘already’. As =*nuh* is not included as an entry in the dictionary, and is attested only five times, it is fully entered in (6), all examples being in text from Anna.

(6) All corpus attestations of enclitic =*nuh*

- a. *dA'u:d ya' 'i:-t'inh=inh nuh q'ah*  
right.there to.rest 2s-let=HUM.SG NUH already  
‘OK let him stay right there’ (in disgust)
- b. *dA'u:d=inh=inu: nuh q'ah, dAgwa'*  
right.there=HUM.SG=HUM.PL NUH already enough  
‘I give up, let them stay that way, enough!’
- c. *'anh-dAGe:' si-ch' 'A-L-t'inh nuh q'ah*  
HUM.SG-younger.sibling 1s-to 2s-CL NUH already  
‘give me his little sister, finally!’
- d. *sich' 'A-L-t'inh=inh nuh q'ah*  
1s-to 2s-CL-give=HUM.SG NUH already  
‘give me her, finally!’
- e. *dA'u:d ya' qu'-x-dinh=inu: nuh q'ah*  
right.there to.rest FUT-1s-stay=HUM.PL NUH already  
‘I may as well (give up and) settle down with them’

In all these instances, *nuh q'ah* is written with space before =*nuh*, but the intonation is steadily falling after the verb stem, which suggests that =*nuh* and perhaps even *q'ah* with it is/are enclitic(s). In one further instance, elicited from Lena, =*nuh* is definitely an enclitic: *dA'u:di=nuh 'Aw 'i:ts'u:ts'g=inh* ‘(I give up!) let him smoke (it)’. Here =*nuh* is necessarily attached to underlying *dA'u:dinh*, an introducer triggering optative, just as *-dA'u:dinu:* ‘let them...’ would be. In spite of the near homophony, the presence of =*inh* on the verb precludes there being any mistake in the Eyak or English.

There is at least one enclitic of the shape =*ih*. This is most productive and obvious with abstract numerals and counting unclassified nouns: thus *LinhGih* ‘1’ and derivatives (e.g. *dAGa:Xk'a:d LinhGih* ‘11’), likewise *la'dih* ‘2’ and derivatives, but not *t'uLga* ‘3’ or *qAlahqa'ga* ‘4’, present also in *ch'a:n'ih* ‘5’ and derivatives, but not in *ts'i:n* ‘6’ or *la'dits'i:n* ‘7’ or *q'Adits'i:n* ‘8’ or *guts'de:* ‘9’ or *dAGa:q' ~* ‘10’. Thus it only appears in the case of ‘1, 2, 5’, presumably for phonological reasons, however not obvious. ‘One person’ is also *LinhGih dAXunh*, not with =*inh*. ‘One berry’, however, is *LinhG lAXa: la'mahd*, with class-mark qualifier as object of partitive *o-a:*, and ‘two persons’ is *la'dnu:* (*dAXunh(yu:)*), thus

showing another enclitic, =*nu*: for plural persons, certainly the same morpheme as the =*nu*: of the pronoun 'ahnu: 'they (human)', the plural of 'anh, of =*inu*;; the plural of =*inh* human relativizer and more, and of the reduced enclitic =*uhnu*;; plural of =*unh*.

Morphologically also *dAXk'ih* 'how many?', *wAXk'ih* 'this many', *lAXk'ih* are numerals, so those referring to persons are *dAXk'nu*: 'how many persons; quite a few persons', presumably likewise with the demonstratives. There is at least one more item with epenthetic =*ih* behaving in part this way: *k'ula:Gih* (not =*inh*) 'someone else', probably to be segmented *k'u:-la:-G-ih*, entered in the dictionary as its own entry *k'ula:G*. As object of postposition the =*ih* is reduced to =*i*, e.g. *k'ula:GiXa'* 'with someone else'. The plural, however, is both *k'ula:Giyu*: (= *k'ula:GAyu*:) as well as *k'ula:Ginu*;; as shown in the dictionary entry. At one point in the notebook, the ledger shows, Lena preferred *k'ula:GAyu*:. That may well be analogical, however, with the highly frequent *-G-A=yu*;; human collective, as in *qe'LGAYu*: 'women', *'i:ya:GdAlahGAYu*: 'Eyaks', q.v. below. The fact that 'others' is *k'ula:Ginu*;; at all is significant of something, however, even though it seems never to be *\*?k'ula:Gnu*..

This occasional mention of the /i/ that is found with adjectives suffixed to nouns denoting humans is discussed at some length under §6.17 on the epenthetic schwa. There it is stated that the origin of that /i/ remains unclear.

This brings us to the problematic subject of the enclitic stem =*yu*;; collective plural, its origin, and possible relationship to =*nu*: (and =*ih*?). Perhaps because of this and the difficulty of classifying it, as well as its high frequency, =*yu*;; was not fully excerpted for the ledger or entered in the dictionary. This morpheme has a full vowel, but at least in words in isolation does not disrupt the downgrade of pitch, so acts as an enclitic phonologically. This morpheme is certainly old, \*=*yu*;; as far as we can tell in PAE, typically *-yu*;; in Athabaskan, with the meaning of plural or collective for humans, while in Eyak it is that both for humans and things. Nouns are both singular and plural in themselves, having no inflection for number. The =*yu*;;, however, not only specifies plurality, but also collective groups, species, quantities. Before going into the incidence of =*yu*;;, there remain the problems of its relation to =*nu*;;, hardly to be ignored, if only because of the enclitic =*inh* and the relative distinctiveness of /u:/ in =*i-nu*:. It is hard to dismiss the possibility of =*inu*;; being derived from =*inh-yu*;; somehow with deletion of /y/, which would make the enclitic =*nu*;; e.g. with numerals a later analogical development. Conceivably =*yu*;; could come from *-i-u*;;, in spite of Athabaskan *-yu*;;, but then we should certainly expect *\*la'diyu*;; for 'two people' instead of *la'dnu*:. The deletion of /y/ in *\*-ən-yu*;;- must remain unique.

The stem =*yu*;; is attested with over a hundred nouns and noun-phrases of all descriptions, not counting nouns denoting humans, pronouns, or adverbials, to be discussed further below (this section). The usual rules for compounding apply with regard to schwa epenthesis, present after monosyllables, absent otherwise, except after uvulars. Thus =*Ayu*;; only after monosyllables, e.g. *sahxwAyu*: 'cockles', but *ts'iyuxyu*: 'mosquitoes' or *k'utse'yu*: 'meats, quantities of meat'. It should also be noted that class-mark qualifiers

are usually absent with classified nouns, cf. (7). The only exceptions noted are two instances of *'a:ngulAyu:* 'rivers' with *gl-* class mark, in dictated text from Marie.

(7) =*yu:* with classified nouns, showing class markers absent

- |                                 |                                      |
|---------------------------------|--------------------------------------|
| a. <i>d-</i> class:             | <i>ch'iyahdyu:</i> 'hats'            |
| <i>t'ik'L'Ayu:</i> 'arrows'     | <i>tl'A'a:Gyu:</i> 'baskets',        |
| <i>yahd'Ayu:</i> 'houses'       | <i>kAwusgLyu:</i> 'paddles'          |
| <i>k'udA'uhdgyu:</i> 'eggs'     | d. <i>lX-</i> class:                 |
| b. <i>Xd-</i> class:            | <i>la'mahdyu:</i> 'berries'          |
| <i>tl'i:'Ayu:</i> 'bear-spears' | e. <i>gl-</i> class:                 |
| c. <i>l-</i> class:             | <i>che:yAyu:</i> 'quantities of tea' |

Examples with complex nouns are given in (8) and (9).

(8) =*yu:* with compound nouns

- te'ya'yAquhyu:* 'fry' < 'fish babies'  
*Li'q' ya:yu:* 'everything' < 'all things'  
*dAXunhyu:ts'Alihyu:* 'people's bones'

(9) =*yu:* with relativizations, including whole sentences

- sLiq'a:'shgLyu:* 'ironed (clothes)'  
*dAXunhyu: Xahyu:* 'humans' food' < 'those which people eat'  
*'uX k'uku'xLshehyu:* 'my hunting-gear' < 'those with which I will kill something'  
*dik' 'i: 'ilah ya: 'a'Le:Gyu:* 'things that are no concern of yours'

Beyond nominals, =*yu:* is found with adverbials, interrogatives, at least one demonstrative pronoun, postpositional phrase, adjective, and the abstract relative, cf. (10).

(10) =*yu:* with other parts of speech

- a. With adverbials (especially adverbials with *-X* final):  
*wAXyu:* 'various ways, all kinds of ways'  
*(dA=)'a:wAyu:* 'indiscriminate, nasty' (cf. *'a:w<sub>2</sub>* in dictionary)  
*dAqa:yu:* 'sometimes'  
*(dA=)'wAXyu:* 'all sorts of ways'  
*(dA=)'u:dAXyu:* 'all around there'  
*'a:ndAXyu:* 'all around here'  
*lahq'dAXyu:* 'all over about town'  
*Xa:'dAXyu:* 'all over outside'



*lu:di:dAXyu:* ‘around on the beach at low tide’

*(dA=)da:dAXyu:* ‘anyplace’

b. With postpositional phrase:

*'uqa'Xyu:* ‘some of them, some among them’

c. With demonstrative pronoun:

*Li'q' 'Awyu:* ‘all those (things)’

d. With adjective:

*k'ut'u'yu:* ‘many (things)’

*sAqe:GAyu:'it'u'yu:* ‘many children’

*qe'LGAYu:'it'u'yu:* ‘many women’

=*yu:* is also common with interrogatives, evidently most often with proclitic *dA=*. In the following, the English gloss is not explicitly plural, but the Eyak does specify plural: *dA=de:=yu:=d* ‘anything’, *dA=du:=yu:=d* ‘anybody’, *(dA=)k'e:=yu:=d* ‘any way, all sorts of ways’, also *dA=k'e:=d=Aw=yu:* ‘idem’, implying other possible order for all. Likewise the abstract relative *'ida:yu:* and *di'da:yu:* ‘degree(s) to which, what (plural)’.

Finally, with nouns denoting humans =*yu:* is fraught with the complexity of variation with *-GAyu:*, which clearly has the intervening personal suffix *-G* as e.g. in *'i:ya:G-dA-lah-G* ‘Eyak person, dweller at Eyak’, plural *'i:ya:GdAlahGAyu:* ‘Eyaks’, with epenthetic schwa due to uvularity of *-G* (cf. §6.17). The problem is immediately evident with e.g. *dAXunhyu:* ‘people; Eyaks’, but *qe'LGAYu:* ‘women’, *Lila:'GAyu:* ‘men’. Variation was not usually checked, but these three items are so frequent and consistent that the statistics with no counterexamples are surely significant.

There are some categories of noun with significant statistics, especially kin terms, with not only plural meaning where possible, but also or mainly related to specific kin and his/her relatives or side of the extended family. These are usually with *-GA-*, cf. (11).

(11) Plural kin terms with *-GAyu:*

*-ta:'GAyu:* ‘father *et al.*’

*-tinhGAyu:* ‘father’s brother(s) *et al.*’

*-tsa'kihGAyu:* ‘(woman’s) older sister(s) *et al.*’

*-ga:gGAyu:* ‘mother’s brother(s) *et al.*’

*-dAGe:'GAyu:* ‘younger sibling(s) *et al.*’

*-qa'GAyu:* ‘husband *et al.*’

*-ya:q'e'GAyu:* ‘mother’s sister(s) *et al.*’

*-AdkihGAyu:* ‘(man’s) sister(s) *et al.*’

*-yahshGAyu:* ‘(woman’s) child(ren) *et al.*’

*-ch'an'win'inhGAyu*: 'parallel sibling(s)-in-law *et al.*'

*-XAwAXGAyu*: '(man's) older brother(s) *et al.*'

*-il'la:GAyu*: 'cross-cousins'

None of the examples in (11) were checked for variation minus *-GA-*, presumably, and there are exceptions: *-i:ndzkihGAyu*: and *-i:ndzkihyu*: '(woman's brother(s) *et al.*'); *-chu:GAyu*: and *-chu:yu*:; also *-chu:siyahyu*: 'mother's mother *et al.*'. No other grandmother/grandchild term is attested with *-(GA-)yu*. These suggest that adjectival *-shiyah* or *-kih* may allow for no *GA-*. The best-attested term for these purposes is that of *-a:n* 'mother', which with *-(GA-)yu*: means 'parents' as well as 'mother's side of family', also showing that *=yu*: can refer to dual as well as plural number. We have seven attestations of *-uma:yu*: and *-a:nyu*: and only two of *'uma:GAyu*:, somewhat exceptionally for a kin term. I had evidently asked Lena about this, as there is a note she said they both meant the same thing.

There is one more pair of very special interest, the kin term *-sAqe:G* '(man's) son' (< \**-sA-qe:-G*; cf. e.g. Navajo *ashkii* 'boy', Eyak *qe'L* 'woman' < \**qe'-L*, 'instrument for bearing son?'), and the non-kin term *sAqe:GAyu*: 'children'.

This brings us to non-kin nouns referring to humans. Consistent were *dAXunhyu*: 'people, Eyaks' but *qe'LGAYu*: 'women', *Lila:GAyu*: 'men' noted above. Inconsistent, however, is *xi:lGAyu*: 'shamans', but *xi:lAyu*: in *xi:lAyu:ya' tsinh* 'shamans' song' in elicitation from Marie, and *k'ula:GAyu*: *xi:lGAyu*: 'other shamans' in dictated text from Lena. In fact otherwise it turns out that nearly all of the rest of nouns referring to humans with *-GAyu*: have the singular in *-lah-G* or *-la:G*, e.g. *ts'a:il'ya' lahG(Ayu)*: 'infant(s)' < 'inhabitant(s) of cradle-board', *qa: qa' lahG(Ayu)*: 'person(s) established) among us', *ya:nahG(Ayu)*: 'Ahtna(s)', *tla'Xa' lahG(Ayu)*: 'Tlingits'. Likewise *XAlahsdla:G(Ayu)*: 'White(s)', *-kuwa'na:G(Ayu)*: 'relative(s), friend(s)'. An exception is *-LAXe:'nah* 'wife's sister's husband, partner', < \**-LA-Xa:n'inah*, plural *-LAXe:'nahGAyu*:. In other words, the *-G(A)-* goes with the stem, not with the *=yu*:.

Accordingly, for humans, rather one might say the underlying basic rule is *=yu*: without *-GA-*, with understandable interference from the frequent instances of *-lahGAyu*: and *-la:GAyu*:, plus *qe'LGAYu*: and *Lila:GAyu*:, and the kin terms. There are many instances of types or nationalities, all without *-GA-*, cf. (12).

(12) Nationalities and clans with *=yu*:, but without *-GA-*

<i>-ch'iya'yu</i> : 'masters of'	<i>ta:snahyu</i> : '(group of) interior Athabaskans'
<i>'ishta:lahyu</i> : 'people of old'	<i>k'udi:q'AYu</i> : 'Chugach'
<i>q'a:lAlahyu</i> : 'young persons, persons in prime'	<i>cha:nAwa:nnyu</i> : 'Chinamen'
<i>dAXunhyAqhyu</i> : 'people's offsprings'	<i>t'u:ch'qa:yu</i> : 'blacks'
<i>-gu'wALwahgyu</i> : 'tribesman of'	<i>dja:bAni:yu</i> : 'Japanese'
<i>kAna:qa:yu</i> : 'Polynesians'	<i>lu:shAnnyu</i> : 'Russians'

*xAlAki:nahyu*: ‘Filipinos’

*yi:nnwahyu*: ‘shore patrol’

*'a:mi:yu*: ‘soldiers’

*dji:shqe:dyu*., clan name (from Tlingit)

*de:qe:dyu*., clan name (from Tlingit)

In fact, it would appear from this that the problem is as much in the unpredictability of the *-G* on the preceding stem, especially *-lah* and *-la:* than before the *=yu:*. The real exceptions are *qe'LGAYu:* ‘women’ and *Lila:'GAYu:* ‘men’. The *xi:lGAYu:* ‘shamans’ may indeed be the influence of preceding *k'ula:GAYu:* ‘other(s)’. In fact we see duplication of the *-GA-* in an opposite direction, in texts from Anna. In addition to the perfectly correct [[*'u:'ehd*]-*ku'wA*][*-na:-G*]-*A*-[[*yA-quh*]-*yu:*] ‘his wife’s relative’s offsprings’, we also have *qe'LGAYu:yAquhGAYu:* ‘women’s offsprings’ with the *-GA-* in ‘women’ repeated on *-yAquh-* ‘offspring’, likewise in *'uyahshGAYu:yAquhGAYu:* ‘her children’s offspring’. In stories humanizing animals we have *'uyahshyAquhyu:* ‘her offspring (eaglets)’, literally ‘her children’s offspring’, and allowing that (female) eagle has ‘children’ (kin term). The term is quite correct in having no *GA-*. Then in the same text Anna, now evidently overhumanizing the kin tern, Anna has the eagle mother saying *siyahshGAYAquhGAYu:* ‘my children’s offspring’, putting the *-GA-* in both places. The same principle is evident in her Wolf Woman text, regularly saying *Gu:djihyu:* for ‘wolves’ but twice, in emphasizing that wolves (the Wolf clan) live among humans, she has *qa:ga' GudjihGAYu:* ‘wolves (human) like us’ and *'uga' Gu:djihGAYu:* ‘wolves like her’. Here the *GA-* has taken on a life of its own with *-yu:*, emphasizing humanity.

There remains perhaps one enclitic, *=dih* in *k'a:dih* ‘missing, lost’ (cf. *o-k'ah* ‘away from o’ and *'Ashdih* interjection of indefiniteness, not knowing (cf. *=sh* yes/no interrogative enclitic)). Leer has suggested that this *=dih* may be cognate with the PA enclitic *\*=dən* ‘place where’. This may indeed be the case, but cf. also the *=ih* enclitic treated above, and for *'Ashdih* the enclitic combination *=sh=d* ‘I wonder whether’ treated in Chap. 27; for *k'a:dih* cf. *o-k'ah* ‘away from o’, with */a:/* augment instead, and */-d/* final.





Part IV: **SYNTAX**



## 23 INTERROGATIVES

Interrogatives are of the two basic types, *wh*- and *yes/no*. The *yes/no* type is represented by the interrogative enclitic =*sh* attached to the first constituent of the sentence: e.g. *dAsAche'Lsh* 'are you hungry?', *dAsAche'Lshunh* 'is he hungry?', *dik'sh dAsAche'LG* 'aren't you hungry?', *dik'shuhnu: dAsche'LG* 'aren't they hungry?' For this, see Chap. 27 on enclitics. The present chapter deals with *wh*-type interrogatives.

It should be noted that interrogatives were not thoroughly investigated in elicitation. Further, as interrogatives are much less common in narration than in conversation, the documentary corpus, textual and otherwise, is not rich in interrogatives. Hence, coverage of interrogatives is somewhat weaker than coverage of most other grammatical categories.

### 23.1 Content questions

The basic Eyak content question words or stems are *de*: 'what?', *du*: 'who?', *da*: 'where?', *dAX* 'how?', and *k'e*: 'how?'. From comparison with Athabaskan \**də-wə* (or \**wə-də*) 'who?' and \**də-yə* (or \**yə-də*) 'what?' it is clear that Eyak has cognate *dA*- as its *wh*-element, literally. This is confirmed internally by *dAX* 'how?' in comparison with (')*wAX* 'thus, in that manner', (')*lAX* 'in this manner' (cf. 'Aw 'that', 'Al 'this'). It will also be shown that *k'e*: has come from outside the system, partly supplanting *dAX*. Finally, and marginal to the system, *tla*: 'where?' will be treated at the end.

To all these, except in their use with negative prefix *k'u*- as negative words, the interrogative enclitic =*d* is attached, directly or after certain suffixes, or attached to other following words forming a noun phrase in the sentence. This is shown in §23.4 below.

The interrogative words are also used in non-interrogative sentences, in two ways. One is in negative words, *k'ude*: 'nothing', *k'udu*: 'no one', *k'udAX* 'cannot < 'no way', *k'uda*: 'nowhere' (uncertain), as mentioned above. These are shown elsewhere in detail, in Chap. 24 on Negatives. The other such use, often with proclitic *dA*= 'selfsame', is non-interrogative *dAde:-d* 'something, anything', *dAdu:-d* 'someone, anyone', *dAk'e:-d* 'some way, any way', *dAda:-d* 'somewhere, anywhere', or as a relative, for example, 'anyone who' or 'anything which'.

The interrogatives are extensively covered in the dictionary (Krauss 1970a) as far as they were documented by 1965, in their basic interrogative and derivative uses. There is, however, significant further documentation in the post-1965 materials, especially from enquiry into their derivational suffixation, for which considerable further potential is revealed. The information in the dictionary is treated here in summary only, as here we shall concentrate on the post-1965 material, which is cited by speaker and date. There are, moreover, some spots in the 1963-1965 notebooks where investigation of *wh*-interrogative is concentrated, and where only very common nouns or pronouns are used, so that much

may not have been copied into the ledger from which the lexicon and most of the grammar has been compiled. Such spots include I 43 M, V 60-62 L, V 70-73 M, VII 5 L, X 39-41, where perhaps more may be gleaned about interrogatives that is not shown in this grammar.

The different interrogatives will be treated together after some consideration of them individually, especially in the irregularity with which they now fit together to constitute a system. Clearly parallel are *du:=d* ‘who?’ and *de:=d* ‘what?’ in their patterning, also in their relation with Athabaskan. Not so with *da:=d* ‘where?’, which might have been like *du:=d* and *de:=d* in origin, but can be easily confused with the postposition *o-da:-d* ‘in the area of o’, especially with postposition-final *-d* ‘punctual’, cf. *o-d* ‘in punctual contact with o’. Because of that, for one thing, there is either duplication of final *-d*, i.e. both postposition-final and interrogative enclitic, *da:dd*, or possibly, allowing for overlap of categories, interrogative and locational, simplification, or haplogy, to *da:d*. For more detail on this, see *da:₂* in the dictionary. Further, there are no clear spontaneous attestations of a negative *k’uda:* ‘nowhere’ to parallel *k’udu:* ‘no one’, *k’ude:* ‘nothing’. For more on this see Chap. 24 on Negatives. Another major irregularity or complication in the interrogative system is in *dAX* ‘how?’ and *k’e:=d* ‘how?’. For one thing *dAX* itself appears to be composed of the *dA-* interrogative-initial particle as in *du:*, *de:*, *da:*, plus postposition *o-X* ‘by means of o; in non-punctual contact with o’. For this, already mentioned above, cf. also (‘)wAX ‘thus, in that way’, (‘)lAX ‘in this way’, earlier \*AwAX and \*AlAX, transparently, for which cf. further ‘Aw ‘that’, ‘Al ‘this’. (Both of these demonstratives still ended with a vowel in Rezanov 1805.) Use of *dAX* is quite unlike the three other *dA-* interrogatives, as it is now highly specialized, used only in the negative *k’u-dAX* ‘cannot, impossible’ < ‘no way to’, and in *dAX-k’=d* ‘how much/many?’. (Cf. also (‘)wAXk’ that much/many’, (‘)lAXk’ ‘this much/many’.) It may be questionable whether *dAX* in *k’udAX* and *dAXk’* should even be identified as a single morpheme from a strictly synchronic point of view.

By far more general for ‘how, in what manner/way?’ is *k’e:=d*. For this, cf. above all *k’e’=sh ~ k’e:=sh* ‘perhaps, probably, approximately’, indicating any kind of uncertainty, where *=sh* is still certainly the interrogative enclitic particle, though no *k’e(:)* is attested without that particle. Also unlike *du:*, *de:*, *dAX*, there is definitely no negative \**k’uk’e:*; for that, instead, we have, as noted, either *k’udAX* ‘cannot, impossible’, somewhat evolved or specialized in meaning from ‘no way, in no manner’, or, more frequently or generally, *k’ude:dah* ‘no way, in no manner, not at all’, from *k’ude:* ‘nothing’ with general adverbializer *-dah*.

## 23.2 Prefixation, proclitics

Three prefixes or proclitics are attested with interrogatives. Two, *k’u-* negative prefix and proclitic *dA=* ‘selfsame’, can combine, so are found in the order *dA=k’u-*, thence often *dik’u-*. These are covered with the interrogatives in the dictionary and in Chap. 24 on Negatives. The third is affective or exclamatory ‘*iL-*, intensifier often or usually with overtones of vexation or disgust, cf. (1).



## (1) Affective or exclamatory 'iL-

'iLk'e:duh 'how the hell...?'

'iLk'e:dAw 'a:nda' sahL and 'iLk'e:chi:dAw 'a:nda' sahL 'how did you get here?!'

(from Sophie 1987, surprised, unhappily or happily)

'iLde:duh XAsahL 'what in God's name did you eat?'

'iLde:dunh Xah 'what ever has he been eating?!'

'iLdu:dunh sA'ehL, 'iLdu:chi:dunh sA'ehL 'whom ever did he marry?!'

No combinations of 'iL- with *k'u-* or *dA=* are attested; once, with Sophie, 1987, \*?'iLdAk'ude:d and \*?'dA'iLk'ude:d were tested, with only puzzled results; results might have been clearer if all three proclitics had not been tested together. The other attestation of affective 'iL- is with the stem *-chi'* in the interjection 'iLchi'sh(dAg), of surprise and usually vexation, clearly to be segmented 'iL-chi'=sh=dAg, with =dAg 'also' and the =sh interrogative enclitic. The stem *-chi'* is in origin very probably and interestingly the same as the *-chi:* in *du:-chi:=d* 'who ever?, who on earth?', to be further exemplified in §23.3. Note further the parallel alternation V: ~ V'-sh in *-chi:* ~ *-chi'-sh* here and *k'e:* ~ *k'e'=sh* 'perhaps' above (where the variant *k'e':sh* may simply be an affective expansion). Conceivable \*?'iLk'e'sh(dAg) was never tested. It is not possible to distinguish whether this 'iL- is a prefix or a proclitic.

### 23.3 Affixation (or compounding)

Aside from the interrogative enclitic =d, at least one morpheme, the interrogative intensifier *-chi:* already mentioned just above in §23.2, can be suffixed to interrogative stems, to any interrogative stem; it is not attested with any other kind of stem. This unique morpheme or stem, 'wh...ever, on earth, in God's name', is well attested in *de:-chi:=d* 'what on earth?', *du:-chi:=d* 'who on earth?', *da:-chi:=d* 'where on earth?', and *k'e:-chi:=d* 'how on earth?', *dAXk'-chi:=d* 'however many?' (The *-k'* of *dAX-k'* 'how many?' is suffixed not only to *dAX-*, but it also occurs, as shown above, with (')wAX and (')LAX.)

The exact position of *-chi:* with respect to other suffixation between the interrogative stem and enclitic =d is uncertain. Clearly it is last or second-last, but with respect to postpositions, we have inadequate and ambivalent data: Marie pre-1966 *de:wahchi:d* wAX *yileh* 'what on earth did you do that for?', has postposition preceding, then much later testing for this, Marie 9/20/96, ?*du:chi:tl'duh* 'whom ever with?' uncertain, \**du:chi:xa'd* 'whom ever next to?' rejected, ?*du:xa'chi:d* uncertain. The only unquestioned form, *de:wahchi:d*, shows postposition before *-chi:*, and the only outright rejected form, \**du:chi:xa'd* shows postposition after *-chi:*, definitely favoring the postposition before the *-chi:*; the two others, one with postposition after and one with postposition before are questioned, canceling each other out, leaving the "vote" in favor of postposition preceding *-chi:*. The correctness of this speculation is dramatically confirmed by (2ab) which shows

that the intensifier can in fact be separated altogether from the interrogative, along with the =*d* enclitic itself, to the end of the whole noun phrase, so indeed is part of the enclitic, which it must immediately precede.

- (2) a. *dAXk'* *lAXa: shug-lAXa-'lAw-chi:=d* *'i-Xa*  
 how.many NC strawberry-NC-big-INTENS=Q 2s-with  
 'how ever many big strawberries do you have?!' (Lena, 6/13/71)
- b. *dAXk'* *da: da:na:-chi:=d=Aw*  
 how.many count money-INTENS=Q=DIST  
 'how ever much money is that?' (Anna, 6/72)
- c. *du:-tl'-chi:=d=Aw* *tsin'dAleh*  
 who-to-INTENS=Q=DIST speaking  
 'whom ever is he speaking to?' (Anna, 6/72)

Similarly, (2c) shows a postposition intervening between the interrogative and the intensifier.

Another item that can be so suffixed is *-yu:* 'plural', cf. (3).

- (3) *-yu:* 'plural' with interrogative words

Suffixed to *du:=d* 'who?'

*du:yu:dA'ahnu:* 'who are they?' (Lena rejected *\*?du:dA'ahnu:*, but cf. *du:duhnu:*, from Lena shortly afterward)

*du:yu:dAlAXi:* 'who are you (pl)?'

*du:yu:dA'ahnu: wAX 'Aw sALiL* 'who (are they that) did thus to it?'

*du:duhnu: shAshehL* 'who did they kill?'<sup>1</sup>

Suffixed to *k'e:=d* 'how?'

*k'e:yu:dunhAw 'anhtl' dAleh* 'what (things) is he saying to him?'

*k'e:yu:dunhAw 'utl dAGi:le:L* 'what (things) are you saying to him?' (X 40 L)

The position of *-yu:* with regard to postpositions and *-chi:* was not tested. Presumably it precedes the postpositions so also *-chi:*, because precession may not be transitive. Therefore, next to last (i.e. last before enclitic (*-chi:)=d* in these interrogatives) are the postpositions. These are fairly well attested, cf. (4).

- (4) Interrogatives with postpositions

*du:ya'=d* 'whose?'

*du:ch'=d* and *du:ch'a'=d-* 'to(ward) whom?'

*du:ch'ahd=d* 'from whom?'

<sup>1</sup> This and the other examples here with *du:* are all from V 62 L.

*du:ka'=d* 'along with whom?'

*du:lah=d-* 'about whom?'

*du:'a:=d* 'for whom?'

*du:tl'=d-* 'with whom?'

*de:X=d-* 'by means of what?'

*de:lah=d-* 'about what?'

*de:nahd=d-* 'what month?'

*de:lehd=d-* 'because of what?'

*de:wah(d)=d* 'for what purpose?'

*de:ya:q'=d* 'by virtue of, because of what?' (with analyzable *o-yA-q* 'on o' with *yA-* anatomical 'hand'; see below in this section for further such anatomical qualifiers)

*de:ga'=d* 'like what?, what kind of (in quality or quantity)?'

*de:ga'd da:na: 'iXa'* 'how much money you got?'

*de:ga'dAw diLits'anh* 'how much does it cost?' (Anna 6/72)

*de:ga'chi:dAw diLits'anh* 'however much does it cost?'

*da:ch'(=d)* 'where to?'

*da:ch'ahd=d* 'where from?'

With *dAX* and *k'e:*, which could be considered adverbial rather than nominal, postpositions are less freely used, but are nevertheless clearly attested. With *dAX* 'how?', postpositions are limited, but we have *dAXk'da'Xd* 'how many times?; a number of times' with specialized *o-da'X* 'o times', and in a specialized sense, *dAXk'iXa'd* 'at what hour o'clock?' with *o-Xa'* 'at o'. With *k'e:=d* 'how?', on the other hand, from Sophie 1987, p. 57, we have *k'e:leh[d?]shdAw* 'I wonder why' (see (5) for enclitic combination *=sh=d-*), *k'e:wahdAw* 'for what purpose?', *k'e:Xa'dAw* 'where is it?, what for?' ('next to, near what?; in relation to what?'), also *k'e:XdAw qu'xsheh* 'what shall I kill it with?' along with *de:XdAw qu'xsheh* 'id.' In these instances *k'e:=d* is treated like *de:=d*, perhaps questionably, and perhaps indicating a relatively recent origin and expanding role of *k'e:* in the system of interrogatives.

Before 1971 the only hint that adjectives could be suffixed to or compounded with interrogatives was the *dAde:kihdAw* 'any little thing', with diminutive *-kih*, by no means a regular adjective, morphologically unique. For further on *-kih* with interrogatives, see below in this section. Further examples of adjective-interrogative compounds are presented in (5).

(5) Interrogative-adjective compounds

a. pre-1971:

*dAde:kihdAw* 'any little thing'

## b. Anna 6/71:

*de:lAwdA'Aw* 'what's that big thing?' (which may be a mistranscription for *de:'lAw-*; cf. *k'e:'wAX-* below)

## c. Lena 7/13/71:

*de:shiyahdA'Aw* 'what's that nasty thing?'

*du:siyahdA'anh* 'who's that nasty person?'

*de:tsidzgdA'Aw* 'what's that narrow thing?'

*de:dik'dA'Aw* 'what's that short thing?'

*de:wahshiyah(chi:)dA'Aw* 'for (the purpose of) what (ever on earth) bad thing is it?' (here the postposition *o-wah(d)* not only precedes the *-chi-*, but much more surprisingly, precedes also the adjective *-shiyah* 'bad', perhaps incorrectly)

## d. Sophie 1987:

*de:shiyahdAW* 'what nasty thing?'

*k'e:shiyahdunh 'a:nda' sahL* 'how the hell did he get here?'

*k'e:dzu:dkinh 'a:nda' sahL* 'how did that lovely little (girl) get here?' (with the diminutive not only following even the enclitic =*d*, but nasalized as in singular human relative, confirmed by the following)

*k'e:dzu:dkinhnu: 'a:nda' shA'a'ch'L* 'how did they (cute girls) get here?'

*k'e:gAdAdzu:dkinhnu: 'a:nda' shA'a'ch'L* 'how did those cute-butted (girls) get here?' (here further elaborated with anatomical qualifier *gudA-* 'buttocks')

*'iLk'e:gAdAdzu:ki[h?]yu:chi:shduhnu: 'a:nda' shA'a'ch'L* 'I wonder how in God's name such cute little butts ever got here!'

*'iLdu:gAdAdzu:ki[h?]yu:chi:shduhnu: 'a:nda' shA'a'ch'L* 'I wonder who in God's name such cute little butts are who got here' (here with exclamatory prefix *'iL-*, the diminutive immediately following the adjectival stem, *-yu:* 'plural', and *=sh=d* enclitic combination 'I wonder')

The last form no doubt approaches the limit of elaboration of the interrogative word. If we add to that the postposition in its more likely position, we have the order of elements in Tab. 23.1

**Table 23.1:** Order of elements in interrogative words.

proclitic	interrog	qual	adj	pl	P	intens	enclitic			
	<i>de:</i>									
	<i>du:</i>									
<i>'iL</i>	<i>da:</i>									
<i>dA</i>	<i>k'e:</i>									
<i>k'u</i>	( <i>dAX</i> )			<i>yu:</i>		<i>chi:</i>	<i>sh</i>	<i>d</i>	<i>unh</i>	
									<i>uhnu:</i>	

The diminutive *-kih* appears in at least two positions, following the adjective, or, quite irregularly or uniquely, following =*d* enclitic, there combining with the human relativizers, as *-kinh*, *-kinhnu*; at least for Sophie.

Before moving on to syntactically more complex constructions (interrogative noun phrases), we touch upon some more basic uses of interrogatives in negatives and relatives. Negatives with *k'u-* prefix are presented in (6)

(6) Interrogatives with negative prefix *k'u-*

a. With positive verbs

*k'ude: XAdahG* 'there's nothing to eat' (Lena, more precisely 'nothing is being eaten?')

*k'udu:yu:tl' 'AdAwil q'e' 'idALAlehGinu:* 'they got nobody to war with anymore' (Anna, more precisely 'they're warring with no one more?', but cf. following)

*k'udu:tl' 'uwa: 'u:da' qu'xah* 'I got no one to go there with' (Sophie 1987)

*k'udu:XA' wAX 'ixit'eh* 'I got no one to be living with'

b. With negative verbs:

*k'udu:tl' 'uwa: 'u:da' qu'xahG*, (presumably) 'I'm not going there with anyone of them'

*k'udu:XA' wAX 'a'xt'u:G*, (presumably) 'I'm not living with anyone'

The important potential distinction between positive and negative verbs was not further checked, thus the forms in (6.b) are just presumable. For negatives such as *dik' du:dunh 'u:la'Lga:G* 'nobody knows', *dik' (dA)k'e:dunh 'AsliLG* 'he didn't do anything, nothing happened to him', see Chap. 24. Interrogatives, with and without *dA=* 'selfsame' are frequent in relative use, cf. (7).

(7) Interrogatives in relative use

*du:d 'AdsLilahL* 'one who saved himself, escaped'

*dAdu:d sAsinhL* 'anyone who died'

*du:chi:dAw lAwAdjga' 'i:t'eh* 'who ever is sort of shy'

*dAde:duhnu: Xah* 'whatever they eat'

*dAde:kihdAw* 'any little thing'

*dAde:yu:d-* 'anything pl'

*dAde:wahdd* 'for any purpose'

*dAde:chi:d* 'anything, whatever'

*dAde:(kih)lAXd* '(seeing) any (little) thing'

*dAk'e:yu:dAw* 'in any sorts of ways'

*dAk'e:yu:dunh dAXunh yiLeh* 'no matter what kind of person he is'.

Further examples can be found in the dictionary.

The interrogatives *de:* and *du:* can be found as possessor of inherently possessed nouns (as well as object of postpositions), i.e. anatomical or kinship nouns. We have these only as elicited from Sophie 1987: *de:ts'Alihd* 'bones of what?', *de:dA'uGLdAw* 'heart of what?', *du:ma:dAw* 'whose mother?'; also, however, *de:k'utse'd* 'meat of what?', which is almost certainly not precisely glossed. 'Flesh of what?' is presumably *de:tse'd*, 'whose flesh?' *du:tse'd*, but 'whose meat (game, store-bought)?' would be *du:ya' k'utse'd*, and *de:k'utse'd* must mean 'what (game or store-bought) meat?'

### 23.4 Syntax of interrogatives

This brings us to interrogative noun phrases, consisting of more than one word, of which the interrogative is the first, and the interrogative =*d* enclitic (glossed: Q) is attached to the last word of the phrase. In several phrases, *de:* is attributively adjectival (8), or the object of a postposition (9).

(8) Interrogative *de:* as attributively adjectival

- a. *de: k'utse'd*  
what meat=Q  
'what meat?'
- b. *de: Lila:=dA-'anh*  
what male=Q-HUM.SG  
'what man/boy is he?' (Anna 6/71)
- c. *de: 'Ana:shah=dA-'Aw*  
what flower=Q-DIST  
'what (species of) flower is that?' (Lena 6/13/71)
- d. *de: ya:=dA-'Aw* 'what thing is that?'  
what Q-DIST
- e. *de: gu'wALwahgL=dA-'anh*  
what tribesman-Q-HUM.SG  
'of what tribe is he?'

(9) Interrogative *de:* as object of postposition

- a. *de:-lah da:d=d*  
Q-around in.area.of=Q  
'about what place (is he speaking)?'

- b. *dA-de:=d*            *Ga:ndichidjg=yu:*  
 selfsame-what=Q small.bird=PL  
 ‘any (kind of) small birds’ (here relative, with =*d* enclitic not final, though presumably *dA-de: Ga:ndich’idjg=yu:=d* would be at least as acceptable; cf. next below)

Examples where an interrogative is the possessor of a noun that is not inherently possessed (not anatomical or kinship term) are *du:ya’ Ax dA’Aw* ‘whose canoe is that?’, *du:ya’ XAwa:dAw* ‘whose dog?’ (Sophie 1987, p. 59), for which Sophie also allowed *du:ya’dAw XAwa:* ‘id.’. Thus framing the whole noun phrase with =*d* enclitic at the end appears to be optional, but probably preferable, considering the following examples.

In the construction with the postposition *o-a:* ‘of o’ following *de:/du:*, ‘which/who of o’ the enclitic is phrase-final, cf. (10).

- (10) *de:/du:* with postposition *o-a:* ‘of o’ to mean ‘which/who of o’  
*de: ’uwa:dAw qu’xsheh* ‘which one of them (non-human) shall I kill?’  
*du: ’uwa:dunh sAshehL* ‘whom of them did he kill?’ (Marie 8/20/96)  
*du: lAXa:d* ‘who/which one of you (pl)?’  
*du: ’uwa:d qa:’a:* ‘which one of us?’ (X 7 L)

We have several attestations (11) of *de:* itself or as object of a postposition in phrases with *ya:* ‘thing’, the enclitic =*d* being phrase-final in each.

- (11) *de:* in phrases with *ya:* ‘thing’  
*de: ya:dA’Aw* ‘what (thing) is that?’  
*dik’ dAde:lah ya:dAw ’a’Le:G* ‘it’s nobody’s fault’ (‘it’s not a thing which is about anyone’)  
*de:wah ya: Lu:ndiyahstahdAw* ‘what good is a mouse-skin?’  
*de:wah ya:dA’Aw* ‘what’s that good for?’  
*de:wah ya:dAw* ‘why?’ (‘thing/material as potential for what?’)

In addition to (11) note also *da:ch’ahd ya:dA’Aw* ‘where’s that thing from?’.

The interrogative *dAXk’-d* ‘how many?’ is relatively limited or specialized, but is most frequent in noun phrases, where the enclitic is regularly phrase-final. Unclassified nouns (12a) appear with epenthetic enclitic =*ih* following *dAXk’* (see §22.2), while classified nouns appear with noun-class particle in this position (12b-e).

- (12) a. *dAXk’-ih*            *XAwa:=d ’i-Xa’*  
 how.many-EPEN dog=Q 2s-with  
 ‘how many dogs do you have?’  
 b. *dAXk’*            *lAXa: la’mahd=d ’i-Xa’*  
 how.many NC berry=Q 2s-with  
 ‘how many berries do you have?’

- c.  $dAXk' IAXa: shuglAXa'lAw-chi:=d 'i-Xa'$   
 how.many NC strawberry-INTENS=Q 2s-with  
 'how ever many big strawberries do you have?!' (Lena 6/13/71)
- d.  $dAXk' da: shdu:lihG=d da'li:LXah$   
 how.many NC table=Q depend.on  
 'how many tables do you have?'
- e.  $dAXk' 'a:na:=d tAGL da'li:LXah$   
 how.many NC=Q hammer depend.on  
 'how many hammers do you have?' (here the enclitic is on noun-class particle instead of phrase-final)

Interrogative  $dAXk'-d$  'how many?' also commonly occurs with demonstrative pronouns:

- (13)  $dAXk'-nu:=d=uhnu:$   
 how.many=HUM=Q=HUM.PL  
 'how many (people) are they?', also 'quite a few people'

The non-interrogative reading of (13) is idiomatic and does not extend to semantically similar constructions:

- (14) a.  $dAxk'-nu: 'i-'ehd=GAyu:=d$   
 how.many-HUM 2s-wife=HUM.PL=Q  
 'your quite a few wives'
- b.  $dAXk'-nu: Lila:'=GAyu:=d$   
 how.many-HUM man=HUM.PL=Q  
 'quite a number of men'
- c.  $dAXk' 'a:na:=d$   
 how.many NC=Q  
 'some months' (elliptical, l-class noun)

Interrogative  $dAXk'=d$  'how many?' also with specialized meaning as object of postposition:

- (15) a.  $dik' 'u:-la'-x-Lga:=G dAXk'-i-Xa'=d q'e: 'anh$   
 NEG 3=THM-1s-know=NEG how.many-EPEN-in.relation.to=Q back HUM.SG  
 $qu'-x-dah$   
 FUT-1s-go  
 'I don't know what time (at what hour o'clock) I'll come back home' (as object of o-Xa')
- b.  $dAXk'-da'X=d$   
 how.many-times=Q  
 'how many times?; quite a few times'

Most interestingly, we have three instances (16) clearly including a verb phrase subordinated to postposition o- $da:X$ , the most general subordinator, written as a separate word by convention and translated 'and'



(16) Verb phrases subordinated to *o-da:X*

*dAtli: dAXk' 'u:ch' 'uleh GALAGa'ya:L da:Xduhnu:*

‘already a number of years were passing for her there and’

*k'e:yu: q'e' k'uGAdAle:L da:XdAw*

‘all sorts of more things were happening and’

*de:ga' 'AwXa' wAX 'it'eh da:XdunhAw 'Aw 'a'q'e:'*

‘quite a while he had been living with it (giant rat) and (then) he attempted it (escape)’

These non-exceptions may literally prove the rule that the interrogative enclitic =*d* can be noun-phrase final, where it is usual or preferred, and can less easily be verb-phrase-final, as here too the phrase to which the =*d* is attached is only a noun phrase, where a verb phrase is nominalized as object of a subordinating postposition. Further examples of this were not tested. To indulge in speculation, presumable *du: sAsinhLlehdduhnu: ki:nX* ‘because someone died they’re weeping’ might well be acceptable (along with e.g. presumable *du:d sAsinhLlehd q'uhnu: ki:nX* or conceivable *?du: sAsinhLlehd q'uhnu: ki:nX* ‘id.’).

The possibility of interrogative with enclitic =*d* after verb-phrase was tested mainly late and desultorily—and at least once earlier. We have from Lena (V 61) *k'e: sAliLdA'Aw* ‘what happened to that (kicker [outboard motor])?’. Then with Sophie 1987 we have \**du: sA'ehLdunh* ‘whom did he marry?’, adjudged “goofy”. However, a day or so later, along with the normal *du:dunh sA'ehL* ‘whom did he marry?’, *du: sA'ehLdunh* ‘id.’ is accepted, possibly from fatigue. From Marie 8/3/96 we have *du:chi:d wAX qa'leh* ‘who on earth will do that?’, with \**du:chi: wAX qa'lehAw* ‘id.’ definitely rejected. From this much it appears that *du: V-d* as an interrogative may not be acceptable as such, but that Sophie’s partial acceptance of *du: sA'ehLdunh* may not have been entirely due to fatigue; it may be rather that as a relativized nominal phrase ‘she whom he married’ it might indeed be acceptable. Conceivably, on the other hand, it might be that that first form, from Lena, with *-dA'Aw*, copular, is acceptable after the verb, while reduced *-dAw* and *-dunh* are less so. This seems hardly likely, however, for which see Chap. 27 on enclitics, especially §27.10 on the copulars.

Once, late with Marie, a double interrogative was tested, \**du:d du:d sAshehL* ‘who killed whom?’, and rejected, though possibly in another situation, or with another speaker, or with personal enclitic, e.g. \**du:duh du:d sAshehL*, or with another gloss, e.g. ‘who killed someone?’, such could conceivably be accepted.

Though inadequately tested, it seems safe to say that the interrogative must be the initial sector of the sentence, whether with a transitive it is subject or object. Thus, for example, we have (17a) and no attestations with *de:d* in non-initial position. (17a) is O S V, the fronting of *de:d* as O being deviate from the basic Eyak order S O V. It follows,

therefore, that (17b) must have two readings, with ‘brother’ as subject and object. Marie confirms exactly this, “definitely goes either way” (V 120 M).

- (17) a. *de:=d Sophie 'u'sAtsahL*  
 what=Q S. buy  
 ‘what did Sophie buy?’ (V 120 M)
- b. *du:d 'i-dAGe:' 'i:nsAgu'k'L*  
 who=Q 2s-brother punch  
 ‘who punched your brother?’ / ‘whom did your brother punch?’ (constructed)

Without track of the preceding, this question was addressed again in (18a) (without checking for the reverse, ‘what bit the dog’). The answer is given in (18b).

- (18) a. *de:=d-(A')Aw XAwa: sAqahL*  
 what=Q-DIST dog bite  
 ‘what did the dog bite?’ (Lena, VI 5)
- b. *du:sh q'(A)'Aw XAwa: sAqahL*  
 cat EMPH dog bite  
 ‘the dog bit a cat’

Certainly (18b) could also mean ‘a cat bit the dog’, but here it is glossed ‘the dog bit a cat’. More importantly than anything else, this also strongly suggests—if not proves—that S O *q'\_\_V* is impossible. This is in answer to a question regarding object fronting that is raised in §27.2.1. There we have also *du:dA'anh 'Aw XAwa: sAqahL* ‘who is it that bit the dog?’, without checking that also for ‘who is it that the dog bit?’. Finally in the last session with Anna, 6/72, we have *du:dA'anh lixah sAshehL* ‘who killed the bear?’, apparently an attempt at disambiguation using the human enclitic, more exactly ‘who is that (human) that killed a/the grizzly bear’. It was not ascertained, however, whether that could also be parsed ‘who is that (human) that a/the grizzly bear killed?’. A full disambiguation of this might have to be a presumable *du:dA'ah, lixah 'anh sAshehL* ‘who is he?, a/the grizzly bear killed him’, as opposed to *du:dA'anh, 'anh lixah sAshehL* ‘who is he?, he killed a/the grizzly bear’. The possibility of non-initial interrogative, e.g. *\*?lixah du:d sAshehL* ‘bear killed whom?’ was never tested, but certainly no such is attested.

The interpretation of such sentences where the subject or object is not an overt noun but a demonstrative pronoun instead seems to be more complicated. This may be in part because of lack of good control in the sessions. We first have *du:dA'anh 'Aw shAshehL* ‘who killed it?’ (I 43) from Lena, without a check that that could not also be read ‘whom did it kill?’. Then we have (V 60), also from Lena, *du:dA'anh ('Aw) shAshehL* ‘who killed it?’, *du:dunh shAshehL* ‘who did he kill?’, and *de:dA'Aw 'Aw shAshehL* ‘what did he kill?’ [sic]. The last gloss is outright wrong (though listed that way in the notebook), for ‘what did it kill?’, and the preceding two are not checked for possible reverse subject/object readings. It is probable for the first that with ‘Aw present, *du:dA'anh 'Aw shAshehL*, ‘who (is he that) killed it?’ is at least indeed the preferable reading. We also have *du:duhnu: shAshehL* ‘who did they kill?’ (V 62 L), but the reason that is the preferable reading is only semantic, O-*she*

meaning preferably 'kill singular O', there being a special verb, *O-siyu* for 'kill plural O'. Therefore the plurality in the enclitic, =*uhnu*, must here refer to the subject and not to the object. We then have from Marie (V 71) *du:dunh shAshehL* 'who'd he kill?', without testing for the reverse, followed by *du:danh* [sic] *sAshehL* 'who killed him?', also without testing for the reverse. The ?*du:danh* itself cannot be correct (cf. end of Chap. 27). The very closest correct form for that must be *du:d'anh sAshehL*, for which the favored reading probably is 'who killed him', though the reverse is probably also possible.

There is a certain amount of further data for content questions in transitive sentences with only pronouns for subject and/or object. From Lena in notebook VII 5, we have *de:dunh 'Aw sAqahL* 'what bit him?', which looks as it should mean 'what did he bite?' at least as probably. If that is to be retranscribed *de:dunhAw sAqahL*, then certainly the two glosses are equiprobable, because *-nhAw* indicates involvement of human and non-human. The answer is *XAw: q'unhAw sAqahL* 'the dog bit him'. But that probably means just as well the reverse. An attempt at disambiguation resulted in *du:dA'anh 'Aw XAw: sAqahL* 'who bit the dog?', but again, a reverse reading is probably possible. That is followed by *du:dunh sAqahL* 'whom did it bite?', but it remains unclear how easily the reverse may be read for that; cf. *du:dunh yAsAqahL* 'whose hand did he bite?' as opposed to *du:duh yAsAqahL* 'whose hand did it bite?'. This last pair presumably shows that the nasalization in *du:dunh* refers to human subject, whereas in *du:dunh sAqahL* 'whom did it bite?' the nasalization refers to the human object. Obviously the control here is not fully adequate. What does this mean — since all possible glosses were not tested and evaluated. Cf. at the same time, as part of the same problem, the ambiguity, tested and confirmed, of the relativization '*anh lixah sAsheLinh dAXunh* 'the person who killed a bear; the person whom a bear killed'. Here the principle is evidently that where a process, in this case relativization, displaces an argument of the basic S O V structure, ambiguity results. For this, and much more, see Chap. 25 on clause-level syntax.

### 23.5 *de:ga'da:Xd* 'when?' and *k'e'wAXd* 'why?'

A further derived interrogative of special interest is *de:ga'da:Xd* 'when?' (at any time, past, present, or future). This is certainly derived from *de:ga'-d* 'like what?, what kind of?, to what extent?, how much?, quite an amount of', i.e. *de:* as object of 'o-*ga*' 'like o'. Identification of *-da:X* is a bit problematical: presumably dictionary entry *da:₃*, o-*da:-X*, uses 2d.-f. and 3., as vague meaning of postposition or subordinator, extended to concept of time, as e.g. in *ne:tl'-da:X* 'at first', *i'-ya:-da:X* 'sometime(s)'. It is strange, however, that we have a postpositional phrase the object of which is itself a postpositional phrase, *de:ga'*. For the semantics, however, cf. also *de:ga' 'AwXa' wAX 'i:t'eh da:XdunhAw ...* 'he had been living with it for quite some time and/when he ...' above (16). Dictionary examples for *de:ga'da:Xd* are only with the customary, e.g. *de:ga'da:Xd te'ya' Xi:ya:k'* 'when do you eat fish?', but from Marie 8/20/96 *de:ga'da:XdAw 'a:nda' sahL* 'when did you come here?', *de:ga'da:XdAw 'a:nda' q'e' qu'yidah* 'when will you come back here?'. This form is also attested in the

relative use, usually or probably chance always with *dA*= ‘selfsame’, *dAde:ga'da:Xd* ‘any time, whenever’, *dA'wAX dAde:ga'da:Xd da: 'i:lihsAliL* ‘just any time we felt like it’; also in negatives, in the sense ‘not at any time, never’: Marie 8/20/96 *dik' dAde:ga'da:Xd te'ya' XahGinh* ‘he never (at no time) eats fish’, *dik' dAde:ga'da:Xd 'a:nda' q'e' 'AsdahLGinh* ‘he never came back here’, *dik' dAde:ga'da:Xd 'a:nda' qe'qu'xda:G* ‘I’ll never come back here’.

Another derived interrogative of somewhat problematical structure is *k'e:'wAXd* ‘why?’. This is obviously composed of *k'e:=d* ‘how?’ and *(')wAX* ‘thus, so, that way’ (cf. *(')LAX* ‘this way’, *'Aw* ‘that’, *'Al* ‘this’, *dAX-* ‘how’, *o-X* ‘by means of o’), in which it may be surprising that the potential glottal initial appears as such, unless the form is most definitely one word at the phonological level. (Even in such cases, after long vowel, appearance of /' / is not quite certain, cf. *de:lAw dA'Aw* ‘what’s that big thing?’, if not mistranscribed, from Anna above, where *de:-'lAw* ‘what big’ is certainly in one word; cf. *da:wAX 'i:t'eh* ‘we dwell’ never [*da:'wAX*].) Evidently the compounding took place after the very late reduction of *\*'AwAX* to *(')wAX* took place. This is a third way of saying ‘why?’; others are exemplified in (19).

(19) Ways of saying ‘why?’

*de:lehduh wAX sAliL* ‘why (because of what) did he do that?’

*de:wah(d)duh wAX sAliL* ‘why (for what purpose) did he do that?’

*k'e:wAXduh wAX yileh* ‘why are you doing that?’

*k'e:'wAXchi:duh wAX yileh* ‘why on earth are you doing that?’

*k'e:'wAXshdunnu: wAX 'i:t'eh* ‘I wonder why they are that way’

The *k'e:'wAXchi:d* further proves, now at the morphological level, that *-'wAX* is in the same word with *k'e:-*, not just the same noun-phrase. Obviously this unique compounding is the result of the movement and incorporation of *(')wAX* from the verb-phrase into the interrogative.

### 23.6 *tla:* ‘where?’

Finally, there is one other interrogative, marginal to the system, *tla: qi'* and *tla:X* ‘where?’, sometimes rhetoric or skeptical. For one thing, *tl-* initials are quite rare; *-a:* could be an expanded augment, cf. *da:₃; qi'* is ‘place where’, and *-X* is probably *o-X* ‘in non-punctual contact with o’ and locational and postposition final ‘movement within area’. This differs distinctly from other interrogatives in lacking *=d* enclitic. See (20) for examples.

(20) *tla:X* ‘where?’

*tla:Xuhnu:* or *tla:X 'ahnu:* ‘where are they?’

*tla:XA'i:* ‘where are you?’ (so both this and previous without and with copular *-A-*)

*tla:X sini:k'lAw* 'where's my big nose?' (answer to insulting epithet)

*tla:X dAXunh* 'where is a person?' (no people present)

*tla:Xunh* or *tla:XA'anh* 'where is he?' (VI 151)

*tla:Xuh* or *tla:X 'Aw* 'where is it?' (VI 151)

*tla:Xuhnu*: or *tla:X 'ahnu*: 'where are they (human)?' (VI 151)

*tla:X'Ayu*: ['what places?'] (VI 151)

In *tla:Xchi:d sita*: 'where on earth is my father?', and Anna (late Raven text, 6/71) *tla:Xchi:d 'ila:X* 'where are your (missing) eyes?', *tla:X* is treated as fully regular interrogative, both with *-chi-* and, probably because of that, also =*d* enclitic.



## 24 NEGATION

The morpheme that is most basic to negation or definitiveness of negation is the negative suffix *-G* (perhaps cognate with prohibitive *-G* in Tlingit). Entirely alone, however, *-G* serves only as a derivational suffix to a few verbs, incorporated into the stem itself. This is treated first below in §24.1, with the label Thematic Negative. All other negatives have the *-G* suffixed to the stem rather than incorporated into a new derived stem.

This suffixed *-G* serves perhaps closest to alone in one future paradigm, of specialized limited occurrence, perhaps obsolescent. That paradigm is treated next below in §24.2, with the label Cautionary Prohibitive.

By far the most common type of negative takes the form of the frame *dik'* ...*-G*, beginning with *dik'* 'no; not' and ending with the *-G* suffix to the verb. There are, in addition, a few other more specialized negative clause introducers, *k'u-dAX* 'cannot', *k'u-de:* 'nothing', *k'u-du:* 'no one', *k'u-de:-dah* 'no way'. Treatment of these will constitute the largest section of this chapter.

Following that is a major section on the negative Inceptive perfective, 'not yet' (§24.4). Unlike the Cautionary Prohibitive, this is by no means obsolescent. It is a specialized type of negative Inceptive perfective, with its own subtypes.

Finally, there are a few other important constructions with what could be considered to be of negative meaning, especially prohibitive *ya'Xu:* with Inceptive imperfective; and *k'a:di'dah* with optative 'useless to', to be considered last.

### 24.1 Thematic Negative

This is a well-defined derivation, usually Active imperfective, that directly suffixes negative *-G* to a few verb stems, so that the suffix becomes incorporated into a new stem so derived. We have at least ten of these derived stems clearly attested. They are all of perceptual abilities or of stative qualities, to show lack of that ability or quality. These are listed in (1) in the third person Active imperfective.

- (1) Thematic negative forms in third person Active imperfective

*k'uGA'a:nG* 'is blind' < *k'uGA'eh* 'sees something'

*(k'u)dALAch'a:q'G* 'is deaf' < *(k'u)dALch'a:q'* 'hears it/something', *dik'*

*k'udAxLch'a:GG* 'I'm not deaf'

*'Ad dAgAwG* 'is numb' < *'Ad dAgAwih* 'feels it'

*dAla'G* 'is soft, weak' < *dila'* 'is hard, tough'

*'Adu'la:LAgA:G* 'is mentally retarded' < *'Adu'liLigah* 'knows self, is wise'; *-la:-* unexpected, resembling imperative, for expected *'Adu'lALAgA:G*, or, if not shifted

from Neuter negative, 'Adu'la'- or 'Adu:la'-. Confirmed in correct 'Adu:la'LAGa:Ginh 'ignorant person'.

dALAd:e:G 'does not understand it (speech)' < diLideh 'understands it (speech)', unconfirmed, attested only in Rezanov туфлетекъ <tufletek> 'deaf' dAxwLAd:e:G 'I do not understand it (speech)'

LACH'a:nG 'is weak' < Lits'anh 'is strong', with unique pejorative shift *ts'* > *ch'*, cf. Tlingit alternations TS ~ CH with CH-pejorative; cf. also LAts'a:nG 'moulting 'duck', relativization, without that shift.<sup>1</sup>

Rezanov (1805) АЛѢТАСКТО <Al'taaskto> 'легко leicht' ('light'), clearly to be read 'a'Lda:sGduh 'it's light indeed', cf. yiLda:s 'is heavy', with analogical Neuter negative prefixation.

XAda'ya:nG 'is dull', cf. di:nyanh < di:yanh 'sharp', with unexpected Xd- instead of d- qualifier, remaining Neuter with Neuter imperfective negative prefixation, instead of shift to Active

Of the nine stems attested, the first three in (1) are in Active imperfective themes to begin with. This being an Active derivation, only one, 'a'Lda:sGduh 'light', of the last five fully fails to show shift from Neuter imperfective to Active.

There are a few other verbs that look like they may be of this origin, with final -G which might be the negative suffix, e.g. Gl-dA-'a:nG 'be weak with old age', attested only as s-stative, e.g. Ga:nxsid'a:nGL 'I got weak with old age'.

## 24.2 Cautionary Prohibitive

This is a minor specialized paradigm of its own, the closest there is in Eyak to a negative imperative. It is, however, not an imperative in the sense that, unlike the Eyak imperative itself, which occurs only in the second person, this is attested in the third as well as second person. Moreover, the 2s subject prefix here is overt *i-* with classifiers Ø- and L-, whereas it is always Ø- in imperatives. Of the ca. 20 attestations, 10 are 2s, 1 is 2p and 8 are 3<sup>rd</sup> person. It is probably only because no attempt was made to elicit first person forms that such are absent in the corpus.

No morphemes are unique to this conjugation, but only the combination of the GA-conjugation prefix as e.g. in the Inceptive imperative or Inceptive perfective, and the -

<sup>1</sup> Sometimes also 'a'LACH'a:nG 'is weak' retaining analogous Neuter imperfective negative prefix; see 'dull' next. (Exactly the same form is confirmed by Anna 6/19/72) dALACH'a:nG or da'LACH'a:nG 'weak (e.g. of table); inexpensive'; further da'LACH'a:nGinh 'cheapskate' (Giant Rat text, Anna), 'i:lih'a'LACH'a:Ginh 'he is weak-minded, weak-willed', with analogical negative Neuter imperfective prefixation, other forms, e.g. dik' 'i:lihslACH'a:nGLGih 'he didn't give in, break down, turn weak-willed'.



G negative suffixed to the stem. Open variable stems take the form as in the Active imperfective, in all 7 examples with lengthening (perhaps therefore not optional) of the stem-vowel, including the one example of CV' (-ma-G).

In addition to the unique affixal frame GA-P-G, all examples include the adverbial particle *q'ah* 'now!, already!', usually (in 16 instances) reduced to proclitic *q'A-*. This is exactly the same as in the prohibitive gerund, q.v., attested mostly in Rezanov (1805), from Yakutat 1805, with *q'ah ~ q'A-*, e.g. *ya'Xu: q'ah dAtux* 'no spitting!' etc., but here, with one exception, without the prohibitive particle itself, *ya'Xu:* 'don't!'.<sup>1</sup>

The meaning of the Cautionary Prohibitive, as distinguished from the far more common ordinary prohibitive (for which see §24.6.1, simply *ya'Xu:* with positive Inceptive imperfective), and as distinguished from the ordinary imperative (always positive), seems to be advice or command specifically to avoid undesirable consequence, rather than mere prohibition.

The attested examples are listed in (2) in order of complexity of constituents preceding the verb. It is perhaps significant that no examples are attested with nothing but *q'ah ~ q'A-* preceding the verb.

(2) Cautionary Prohibitive

'Aw *q'ah Gi:sehdG* 'don't trip on it!'

'Aw *q'AXAGa:Ginh* 'let him not eat it!'

*ya' lAXAts'iya'ts'L q'AXAGi:ya:G* 'don't eat rotten fruit!'

'Aw *che:y / ka:dj q'AgAlAGALaqa't'gG* 'let the tea/soup not boil!'

'iXa' *q'AGAq'ashGinh* 'let him not choke "on" you!' ('don't let baby choke on bone in your care')

*si'e:X q'A'u'dAGi:Lqe'dXGinh* 'let him not ask about me!'

'Awla'd *q'ah lAGi:xa'tl'G* 'don't fall over it'

*k'uyAda'X q'AGi:ya:G* 'watch where you're going, so you don't run into dangerous!' (lit. 'don't walk into encounter with dangerous animals!')

*k'uyAda'X q'AlAGi:da:G* 'don't make the mistake of walking into encounter with dangerous animals!'

'u:dAX *q'AyAlAdAma:G* 'don't make the mistake (of going) by there'

'AwlAX *q'A'iGAL'a:nG* 'let him not see it!'

*dAmAXch'Lda'e' q'AGi:ya:G* 'don't walk in hole in ice!'

*qid q'AdAGALaqaHG* 'don't fall off!'

'anh *sAqe:ts'Akih q'Aqid dAGALaqaHG* 'let that child not fall off!'

*yaX q'AdAGi:ya:G* 'don't capsize!'

*yaX q'AdAGAlAXya:G* '(pl) don't capsize!'

*'Ad q'ALAGAdAk'in't'G* 'don't scratch your face!'

*'Aw XAwa: q'AyAX GAdA:G* 'let the dog not walk about!'

*k'ushiyah q'ah 'ula'X dAGi:Lya:Ginh* 'don't make him angry!'

*ya'Xu: 'Aw xut'L q'AGALxut'inhG* 'let him not shoot that gun!'<sup>2</sup>

The position of *q'ah ~ q'A-* may be after the first constituent of the construction. That is probably why it follows rather than precedes the preverbs *qid* in *qid q'AdAGALaqahGG* 'don't fall off' and *yAX* 'in *yAX q'AdAGi:'ya:G* 'don't capsizel', since nothing else in these cases precedes the preverb for the particle to follow. Even the reflexive *'Ad q'ALAGAdAk'in't'G* 'don't scratch your face!' falls in this category, as the reflexive prefix is optionally preverbal instead of conjunct. This question was not investigated. We have no examples with nothing preceding the verb for *q'ah* potentially to follow, or e.g. with both subject and object overt.

Not tested was the possibility that conjugation prefixes other than *GA-* might be possible, especially *'A-* Active or *'a'-* Neuter, e.g. *\*?'Aw q'ah 'i:sehdG*, 'don't trip on it!' or *\*?'uXa' 'a'yisha:Ginh* 'don't be stingy with him!' Existence of such might not be probable in view of the statistics, given 20 examples, all *GA-*. It so happens that these are probably all from Lena. Marie was asked to confirm hypothetical *'Aya: ya:n' q'AGALaqahGG* 'careful, don't fall down!' and she could not recognize even that, so that use of this construction in the late stages of Eyak may hardly have been robust.

I seem to remember seeing an example of the Cautionary Prohibitive with no *q'ah ~ q'A-* at all, seemingly plausible given the distinctiveness of the *GA-p-G* morphology, but that has not yet been located in the corpus.

Note below in §24.4 the negative Inceptive perfective 'not yet', of a structure in some ways parallel to this Cautionary Prohibitive with Inceptive prefix.

### 24.3 Full Negation

Full negation is defined as a frame involving two elements, in themselves both negative, i.e. negative word at the beginning and *-G* at the end. Thirdly, in verbal negatives, Active perfective and Neuters have special prefixation.

The negative words will be presented in two subsections here. The first will treat the most general, *dik'* 'no; not', and the second the more specialized *k'ude:* 'nothing', *k'udu:* 'no one', and *k'udAX* 'cannot', and *k'ude:dah* 'no way'. (The following section (§24.4) takes up *di:yAX* and Inceptive perfective 'not yet' negatives.)

<sup>2</sup> This example is perhaps analogical with the ordinary prohibitive, though not with the prohibitive gerund (*ya'Xu: q'ah ...*). It may also be interpreted, however, as simple mispunctuation for *'yaXu:!'—'Aw xut'l' q'AGALxut'inh!* 'don't! / let it not happen!—let him not shoot that gun!'.

It is obvious that the four specialized negative words are to be analyzed as interrogatives with the prefix *k'u-*. This negative prefix *k'u-* is not to be identified with the indefinite pronominal prefix *k'u-* at all, because their semantics don't match up, and personal pronouns aren't prefixed to interrogatives. It might, on the other hand, be identified with the *-k'* of *di-k'*. Such analysis hardly suggests itself internally in Eyak, especially since with the rounding we would then expect *\*duk'* rather than *dik'*, as *dik'* implies instead a definitively unrounded *-k'*. However, the Proto-Athabaskan negative word *\*du*, widely attested in Apachean, PCA, and parts of the North, if cognate, does suggest such an origin for *dik'*, somehow PAE *\*də-k'w(ə)*, where the modern Eyak *di-* might then be simply the rather freely used Eyak proclitic *dA=* 'selfsame, the very', still attested as such also e.g. in *dAk'ude:dah ~ dik'ude:dah* 'no way (at all)'. This *dik'* is frequently attested in (Rezanov 1805), over a dozen times, where it is usually transcribed <тык->, occasionally <тек->, at least once <так->, perhaps never <тик->. In Li's field notes (cf. §3.3.7) it is consistently transcribed <diq'>, but this is certainly incorrect.

### 24.3.1 *dik'* alone, in non-verbal constructions

First, *dik'* can be used alone, in the sense 'no, it is not so'. As such, it can also take the form *dik'ah*, especially for emphasis. At least once in the textual corpus, special emphasis gave it the form [dɪ:k'], once also *dik'a*. We have it also at least a dozen times as Anna corrects herself in text, e.g. *la'di-*, *dik'*, *t'uhLga'da'X* 'two, no, three times'. Once it is quoted: "*i: q'unhAw da:X sAtl'ihL.*" *'anh dAXunh "dik'" dAleh* "You're the one who took her across." That person said "No."

In many cases, *dik'* is followed with the correction, so should be separated by comma or stop: *dik'*, *'Alga' 'Aw* 'no, it[s] like this', *dik'*, *dik'* *'AdxLA'e:k'G* 'no, I don't keep marrying (with ulterior motives)', *dik'*[.] *dAXunh* 'no, [it's] a person' (cf. *dik' dAXunhG* '[it's] not a person'). These are to be distinguished also intonationally, in that the first stressed or full syllable is on a markedly higher pitch than that of *dik'*, as in *dik'*, *dAXunh q'A'anh* 'no, he's a person', which might be distinguished from *dik' dAXunh[G] q'A'anh* 'he's not a person' only by intonation; *dik'*, *ts'a' q'Aw dAsALt'ik'L* 'no, it's the mud you shot (with arrow)', *dik'*, *sida' sahL* 'no, he came (*did* come) to me'.

Note further, for the more precise semantics of the pair *dik'* 'no' and *'a:n* 'yes': *yik'a'dshunh?—dik'*, (*dik' 'a'k'a'dGinh*) 'Is he sick? — No, (he's not sick)', or *'a:n*, (*yik'adinh*) 'yes, (he's sick)'. However, for the answers to *dik'shunh 'a'k'a'dG* 'isn't he sick?' or 'he isn't sick, is he?', for the English answer 'yes' the Eyak is *dik'*, *yik'a'dinh* 'no, he is sick', and for the English answer 'no', the Eyak is *'a:n*, *dik' 'a'k'a'dGinh* 'yes, he is not sick'.

In a number of instances (3), *dik'* negates a previously stated construction without repeating it.

- (3) *dik'* negating a previous statement

*tli: gAli:tl'eh da:X q'a:l 'Awa: dik'* 'before the water was cold but now it isn't' (lit. 'already it (water) is cold and now though no/not'; this is as response to an effort to differentiate 'was cold (and no longer is)' past tense from present, for essentially tenseless Eyak Neuter imperfective stative 'it is/was etc. cold')

*'uqa'Xyi:nhinu: 'Awa: dik', yakuts'g yiLeh* 'some of them though no (aren't big), they're little'

*'anh LinhGih 'Awa: 'AdAX dik', dLAGA'a: wAX 'i:tinhin* 'the other one of them though (did) not, she lived alone'

*'Aw giyahya' qi' sahLch'ahd 'AdAX dik', k'ude:dah* 'from where she went into the water however not, no way (to follow her track)'

*xu:gidAg dik'* 'me neither' ('I also not')

In one example, *dik'* is in an apparent idiom with *'Awa:* (< *'u-a:* 'of it/them' in a partitive sense, often used contrastively, 'though', cf. above and below). In what may be the one instance of this we have, it is glossed as 'nonetheless', possibly from literally 'not for (all) that': *dik' 'Awa: [(?)] dA'wAX q'uhnu: 'iLt'a'd 'Aw sALahL* 'nevertheless, *still* they hung them up'.

### 24.3.2 The frame *dik' √-G* in non-verbal constructions

There are a fair number of negative non-verbal phrases or constructions attested, few in elicitations, but mostly in text. Those without enclitic particles must probably be considered sentence fragments.

(4) Negated nouns or noun phrases

*dik' lixahG* 'not a brownbear'

*dik' 'uqa'G* not her husband'

*dik' dAXunhyu:G* 'they [are] not humans'

*dik' dAXunhyu:G lAXi:* 'you plural [are] not humans'

*dik' k'ula:GAya' sAqe:GAyu:G* 'they [are] not others' children'

*dik' GAyAqa:qa:'G* 'they [are] not our own tribe/kind'

(5) Negated adverbs or temporal adverbial phrases

*dik' sahdXG* 'not for long'

*dik' q'a:lG* 'not now'

*ts'id XAtl', dik' 'Awa: gahG* 'only by night, not by day'

(6) Negated adjectives

*dik'* 'Aw tail 'Awa: *k'u'a:wG* 'its tail [is] not long'

*dik'* *k'udzu:G* 'not good'

*ta:dz* 'Awa: *dik'* 'a'd *k'ut'u'G* 'formerly though they [were] not very plentiful'

*dik'* *GAdla:'a:wG, qi'ch' da: GA'a'ch'L* 'not far (overland), the place we're going to'

(7) Negated postpositional phrases and locationals

*dik'* *GAdla:'a:wch'G* 'not to far'

*dik'* *LinhGda:dG* 'not in one place'

*dik'* *dAde:wahdG* 'not (help) for anything (any purpose)'

*dik'* *q'a:lga'G* 'not like nowadays'

*dik'* *qe'LGAYu: 'Awa:G* 'not women though' ('Awa: < 'u-a: 'of it (partitive)', often contrastive)

*dik'* 'A:ndG 'not here'

*dik'* *dA'u:dAXya:kih 'a:ndG* '[there's] nothing here'

*dik'* *dAXunh qi'G* 'place where [there's] no person

*dik'* *dAXunh qi'G, dAlinhinh* 'where there [was] no person, he was speaking'

*dik'* *dAXunh qi'G, 'utl' k'udAlinhinh* 'where no person [was], someone was speaking to him'

In 'uqa'X *yi:nhinu:*, *dik'* 'a'd *Li'q'G* 'some of them, not 'a'd all (of them)' we do not know the exact meaning of intensifier 'a'd 'very', here perhaps 'by no means', or perhaps 'not quite'.

In Negation of non-verbal sentences with copular *q'A-* (perhaps related to *q'-* set of focus enclitics), e.g. positive *XAwa: q'A'Aw* 'it/that is a dog', we normally have *dik'* *XAwa: q'A'Aw* instead of *dik'* *XAwa:G q'A'Aw* 'it/that is not a dog', with -G deleted by following *q'-*. As noted above, this is distinguished from *dik'*, *XAwa: q'A'Aw* 'no, it's a dog', mainly by intonation, in that in 'it's not a dog' the pitch of the first stressed or full syllable, -wa:, would not be distinctively higher than that of *dik'*. Accordingly, we have the phrases in (8).

(8) Negation of non-verbal sentences with *q'A-*

*dik'* *qe'L q'A'anh, Lila:' q'A'anh* '(s)he's not a woman, (s)he's a man'

*dik'* *XAwa: q'A'Aw, du:sh q'A'Aw* 'it's not a dog, it's a cat'<sup>3</sup>

<sup>3</sup> Also on two occasions the negated *XAwa: q'A'Aw* is here reduced to *q'A'Aw*.

*dik'* 'Aw q'A'Aw 'that's not it' (evidently not \*?*dik'* 'AwG q'A'Aw, though see the following, and certainly not \*!*dik'* 'Aw q'A'AwG, so contrasting with *dik'*, 'Aw q'A'Aw 'no, that is it')

In at least one instance, however, the -G is not deleted: *dik'* 'i'ehdG q'A'Al 'this is not your wife'.

There are several more non-verbal elicitations with *dik'* in the post-1965 data, added in (9).

(9) Non-verbal negation with *dik'* in post-1965 data

a. *dik'* k'e'shuh wAX-G

NEG perhaps thus-NEG

'I don't think so.' (Lena 6/13/71)

b. *dik'* si-ya:n 'i:-G / *dik'* si-ya:n-G 'i: / *dik'* 'i: si-ya:n / *dik'*

NEG 1s-mother 2s-NEG / NEG 1s-mother-NEG 2s / NEG 2s 1s-mother / NEG

'i:G si-ya:n

2s-NEG 1s-mother

'you're not my mother' (presumably with mild differences in focus, but all acceptable) (Sophie 1987, p. 19)

c. *dik'* dAde:d 'u:dG / *dik'* dAde:dG 'u:d

NEG nothing there-NEG NEG nothing-NEG there

'there's nothing there' (but the second "kind of goofy", and \**dik'* dAde:dG 'u:dG rejected, confirming complete unacceptability of double negatives) (Sophie 1987, p. 53)

d. *dik'* xu: 'a:nd-G-dAwa:

NEG 1s here-NEG-pending

'before I'm there' / 'while I wasn't there'

e. *dik'* xu: 'a:nd-G da:X

NEG 1s here-NEG and

'while I'm not here', instances of subordination of negative non-verbal clauses (Sophie 1987, p. 53)

f. *dik'* XAwa: q'=Aw, du:sh q'=A='Aw

NEG dog EMPH=DIST cat EMPH=COP=DIST

'[it's] not a dog, it's a cat'<sup>4</sup>

(10) Additional non-verbal negation with *dik'* from Marie 8/3/96

<sup>4</sup> It is unclear whether omission of copular /A/ in q'Aw (instead of q'A'Aw) is a less good form. (Sophie 1987, p. 53)

- a. *dik' XAwa: q'=AW*  
 NEG dog EMPH=DIST  
 'not a dog' (i.e. *\*?dik' XAwa:G q'Aw*)
- b. *dik' xu:G*  
 NEG 1s-NEG  
 'not I'
- c. *dik' 'Aw XAwa:-G*  
 NEG DIST dog-NEG  
 'not the dog'
- d. *dik' 'Aw q'A'Aw*  
 NEG DIST EMPH-COP-DIST  
 'that's not it' (not *\*dik' 'AwG q'A'Aw*, *\*dik' 'Aw q'A'AwG*)
- e. *dik' 'Aw q'=Aw*  
 NEG DIST EMPH=DIST  
 'not that one'
- f. *dik' qe'L=GAyu: 'Awa:-G*  
 NEG woman=PL though-NEG  
 'not [the] women[, just the men]'

### 24.3.3 The frame *dik' √-G* in verbal constructions

For this most common subtype of negative, by far, first will be discussed the verbal morphology, first prefixal, then suffixal; and then the very basic syntax of verbal negative sentences or phrases.

Regular full negatives are abundantly attested in the corpus, with probably a total of over a thousand instances, for Active, Inceptive and Neuter conjugations in the imperfective and perfective aspects, though far less abundantly in the conditional aspect and in the desiderative mode. For the imperative mode there is no negative (cf. instead especially the Prohibitives), and for the optative mode the negative seems marginal or questionable, q.v. the Negative optative subsection, where all instances are discussed.

Given the abundance of instances of the usual full verbal negative in the imperfective and perfective aspects, exemplification of those does not need to be provided immediately here.

#### 24.3.3.1 Negative verbal morphology: prefixation

As noted for Eyak inflectional morphology already in 1965, and in the Morphology, in addition to the negative frame, a third negative marking occurs in the prefixation of Active (*s-*) perfectives and Neuters (both perfective and imperfective). This reflects incompatibility of the PAE *\*ŋ<sup>y</sup>ə-* perfective (insofar as that was still present with *\*s(ə)-*) and the Neuter prefix, also PAE *\*ŋ<sup>y</sup>ə-*, with the negative. Thus, the positive Active (*s-*) perfective positive

paradigm with Ø- and *L*- classifier is as follows: 1s *si-*, 2s and 3 *sA-*, 2p *LAXsA-*; but the negative is 1s *'Axs-*, 2s and 3 *'As-*, *'ALAXs-*, respectively. With *dA-* and *LA-* classifiers, which are *di-* and *Li-* in positive perfectives, in the negatives the classifiers revert to *dA-* and *LA-*, preceded likewise by *'Axs-*, *'As-*, *'ALAXs-*. The *'A-* of this prefixation is always deleted when preceded by any other conjunct prefix, i.e. the *'A-* occurs only in absolute initial position. There is certainly some connection between the nonsyllabic *s-* and that same *\*'əs-* in the Athabaskan negative *non*-perfectives e.g. PA *\*'əs'a'tl'ə* 'is not chewing it', Eyak *dik' 'As'a'tl'G* 'didn't chew it'; cf. the same apparent reversal below.

Positive Neuters, imperfective and perfective, have *yi-* (< PAE *\*ŋ<sup>y</sup>ə-*) in absolute initial imperfective, otherwise *i-* (< CA*yi-*), or *u-* (< Kuy*yi-*) with Ø- and *L*- classifiers, but that is deleted as such with *dA-* and *LA-* classifiers, which become instead themselves *di-* and *Li-*. In Negative neuters the *\*ŋ<sup>y</sup>ə-* reflexes disappear altogether, *di-* and *Li-* revert to *dA-* and *LA-*, and the person prefixation becomes 1s *'A-'x-*, 2s *'A-'yi-*, 3 *'A-'*, 2p *'A-'LAX-*, all becoming *'a'* in absolute initial position; otherwise the CA- becomes Ca-. That implies that the fundamental Neuter negative prefix is *'*, the same as in the Neuter imperative and optative. The *-A-* is to be identified with that of the absolute initial *'A-* of the negative *s*-perfective, or that of any preceding conjunct prefix, and the segment *'* is the irrealis. There may be some connection between that, moreover, and the constriction of the Athabaskan negative perfective prefix, PPA *\*-i'*; cf. the same apparent reversal above.

### 24.3.3.2 Negative verbal morphology: suffixation of -G

As for suffixation of -G, a fair amount of early attention was given in my fieldwork to stem-nucleus variation when -G is suffixed directly to an open variable stem not otherwise suffixed, as in the case of numerous imperfectives.

First, in the case of the two still ablauting stems *-t'e' ~ -t'u'* 'be so' (< *\*-t'ew*) and *-'e ~ -'an* 'see, travel' (< *\*-en*), the results are most usually *-t'u:G* and *-'a:nG*, reflecting the reduced-grade PAE vowel in the negative. The modern vowel is itself usually long, however, *-t'u:G* and *-'a:nG*, though *-t'uhG* is less rare than is *-'anhG*.

Second, the synchronic matter in this regard is the complexity or freedom of open variable stem variation pattern in these imperfectives, between -CV:G and -CVhG. A fair amount of testing was done in the initial period, with no clear conclusion. It is possible that both lengthened and non-lengthened vowels are acceptable in all cases, and probable that the choice between them is determined by a combination of three or four factors: idiolect, style or expressivity (the latter favoring length), and the difference between underlying -CV and -CV', with -CV favoring length more than -CV'. This is not to mention the possible fourth factor of some degree of lexical determination. For further details in each case, see the entries in Krauss (1970a).

In the far fewer examples we have of negative -G suffixed directly to variable open stems in the *conditional* aspect, not systematically investigated, we seem to have the same lengthening, at least as frequently as in the Inceptives: *dik' 'a:nda' Ga:G da:X* (or *GahG*) 'if he doesn't come here', *dik' k'uXi:ya:G da:X* 'if you don't eat (something)'; also Active



conditional *dik' Xa:nliya:G da:X* 'if you don't (start to?) eat it'; even Neuter conditional with -CV' stem, *dik' 'ida'yiLa:G da:X* 'if you don't hate'.

Much of the time, -G is not the only suffix to the stem. Negative -G is in fact the last of a potential of at least three positions of suffixes to the verb stem, i.e. after -g repetitive, -X perambulative (and other uses, thematic, of -X), -L perfective, -k' customary, and -X desiderative. However, the position of the -G suffix is before that of the enclitic human relativizers =*inh* and =*inu*; i.e. when the verb itself is negated. Thus the enclitic follows -G in *dik' 'AssinhLGINu*: 'they aren't dead; those who aren't dead'. However, in negation not of the verb itself but of a resulting nominalization, we should of course have hypothetical *dik' sAsinhLinu:G* 'not dead people'.

Examples of -G with other suffixes to the verb stem are presented in (11).

(11) Negative -G in combination with other suffixes

a. Repetitive:

*dik' xLA'AshgG* 'I'm not sneezing'

*dik' ki:nXgGinh* 'he's not crying, even occasionally' (i.e. not in the sense 'he's not crying occasionally, but crying constantly')

b. Perambulative:

*dik' yAX da:XGinh* 'he's not walking about (though he may possibly be walking)'

c. Liability:

*dik' lAXa'LATugXG* 'berries that don't swell'

*dik' 'a' LXa'Xch'XGinh* 'he's not ticklish'

d. Perfective:

*dik' 'u:da' 'AxsahLG* 'I didn't go there'

e. Customary: (rather abundant in the corpus, often in the sense 'never')

*dik' 'a'q' 'a:k'Ginh* 'she doesn't go out'

*dik' sh yiki:nXk'G* 'don't you ever cry?'

*dik' dAXunhyu: Xa:dAX yAX dA'a:ch'k'G* 'people don't walk about outdoors'

f. Desiderative: (not common in corpus)

*dik' Xa:nxa:XG* '(doctor advised me) that I not eat it'

*dik' 'u:ch' 'ilAXqe:XG lAXtl' dAXleh* 'I told you (pl) not to boat there'

*qa: Lyi:nhinh sitl' dAleh dik' 'Aw xdAla:XG* 'doctor told me I shouldn't drink it'

*dik' sidAwahd le:XG* 'I never get tired of it' (Lena, opaque idiom, hortatory)

g. Combinations:

*dik' 'ixsLXa'Xch'XLG* 'I didn't tickle you' (generic, perhaps in more than one spot)

*dik' 'ixsLXa'Xch'gLG* 'I didn't tickle you' (repeatedly, in one spot); probably acceptable also is e.g. *dik' 'u:ch' xwe:gk'G* 'I never try to swim there'

*dik' dAxLAXe:Xgk'G* 'I don't snore' (negative Customary with thematic Repetitive)

*dik' 'AxLXa:Xch'Xk'G* 'I never tickle it' (with thematic -X)

Note also, above (§24.1), negation of thematic negatives.

### 24.3.3.3 Basic syntax of negation in verbal sentences or phrases

This subject was not studied systematically during the main fieldwork period. It is very probable that scanning the main corpus would yield sufficient examples to produce an adequate analysis of at least the basic principles, including scope of negation in some detail. However, instead of such an effort at this point, since the subject was investigated much later with Marie, on five occasions in 1996-98, attempt will be made here to establish the basic principles from that much more concentrated late corpus.

The first occasion February 10, 1996, determined that S O *dik'* V-G is unnatural, cf. (12).

(12) Unacceptability of S O *dik'* V-G forms

- a. \* *'anh dAXunh 'Aw XAwa: dik' 'AsshehL-G*  
 PROX man DIST dog NEG bit-NEG  
 'the man didn't kill the dog' ("sounds funny")
- b. \* *'Aw XAwa: 'Aw du:sh dik' 'AsqahL-G*  
 DIST dog DIST cat NEG bit-NEG  
 'the dog didn't bite the cat'

According at least to these investigations with Marie, the favorite, least marked structure appears to be S *dik'* O V-G, cf. (13).

(13) Judgments on syntax of negative by Marie on March 4, 1996

- a. *XAwa: dik' dAXunh 'AsqahL-G*  
 dog NEG man bit-NEG  
 'dog didn't bite man' (most natural)
- b. ? *dik' XAwa: dAXunh 'AsqahL-G*  
 NEG dog man bit-NEG  
 'dog didn't bite man' (OK but marked)
- c. \* *XAwa: dAXunh dik' 'AsqahL-G*  
 dog man NEG bit-NEG  
 (hardly OK, marked, "not sure even who didn't bite whom")

The preference is quite clear and consistent with other responses of that period, but the explanations of the markedness are inconsistent, cf. (14).

(14) Judgments on syntax of negative by Marie on February 7, 1996

- a. *Lila:’ dik’ lixah ’AsshehL-G*  
 man NEG grizzly killed-NEG  
 ‘man didn’t kill grizzly’ (normal)
- b. *dik’ Lila:’ lixah ’AsshehL-G*  
 NEG man grizzly killed-NEG  
 ‘man didn’t kill grizzly’. (focus on ‘man’)
- c. *Lila:’ dik’ sLi’mahdL XAsahL-G*  
 man NEG bread ate-NEG  
 ‘man didn’t eat bread’ (normal)
- d. *dik’ Lila:’ sLimahdL XAsahL-G*  
 NEG man bread ate-NEG  
 ‘man didn’t eat bread’ (focus on ‘man’)

That is, when the negative particle *dik’* precedes the subject noun phrase, as in (15b) and (16b), focus is said to be on the subject. But when the negative precedes the object noun phrase, as in (15a) and (16a), the focus is unmarked or on the object.

(15) Judgment on syntax of negative by Marie on August 3, 1996

- a. *qe’L dik’ wAX dAsliL-G*  
 woman NEG thus say-NEG  
 ‘a woman didn’t say that’
- b. *dik’ qe’L wAX dAsliL-G*  
 NEG woman thus say-NEG  
 ‘a woman didn’t say that’ (marked, focus on ‘woman’)

(16) Judgments on syntax of negative by Marie on September 19, 1998

- a. *’anh dAXunh dik’ ’Aw XAwa: ’Asta’tl’L-G*  
 HUM.SG man NEG DIST dog kick-NEG  
 ‘the guy didn’t kick the dog’ (unmarked)
- b. *dik’ ’anh dAXunh ’Aw XAwa: ’Asta’tl’L-G*  
 NEG HUM.SG man DIST dog kick-NEG  
 ‘the guy didn’t kick the dog’ (marked focus on ‘guy’)

Clearly one can conclude from this that Marie’s preferred and unmarked pattern is S *dik’* O V-G, that *dik’* S O V-G is marked, probably putting focus on the subject simply by including it in the negation frame, and S V *dik’* O is so barely acceptable that even the S O order becomes questionable, i.e. perhaps the whole sentence syntax questionable. All of this is in the absence of emphatic =*q’*, which is the usual means for showing focus. In the absence of an overt subject, it is abundantly documented that *dik’* can very normally begin the sentence, e.g. *dik’ wAX dAle:Ginh* ‘he didn’t say that’, not \**wAX dik’ dAle:Gunh*. Thus also presumably, *dik’ lixah ’AsshehL-Ginh* must mean only ‘he didn’t kill a grizzly’, *lixah*

*dik'* 'AsshehLGinh only 'a grizzly didn't kill him'. Also, with emphasis on the negative, 'he did not say that' is *dik' q'unh wAX dAle:G*. Marie rejects \**dik'* 'anh Lila:'G *tsu'd* 'it's not the man who is sleeping', which would have to be either *dik'* 'anh Lila:'G *q'AW tsu'd* with focus particle, or e.g. 'anh Lila:' 'Awa: *dik' tsu'd* 'the man for his part is not sleeping'; likewise *dik' wAXG q'AW dAleh* 'he's not saying that', not simply \**dik' wAXG dAleh*, or \**wAX dik' dAle:G*. Simple use of focus particle with negative suffix on the verb is consistently correct for focus on preverbal or direct object: *dik' wAX q'AW dAxle:G* 'I didn't say that'; *dik' XAwa: q'AW 'AxsshehLG* 'I didn't kill the dog'. Also, Marie on 1/31/98 and 2/7/98 confirms *dik'* preceding the subject should best be glossed 'it's not that...', *dik' 'anh Lila:' tsu'dG* 'it's not that the man is sleeping'.

#### 24.3.4 *k'udu:*, *k'ude:*, *k'udAX*, *k'ude:dah*

The first two of these negative words consist of the interrogatives *de:(-d)* 'what?', *du:(-d)*, with negative prefix *k'u-*, which must be a negative prefix. Also with that same prefix is *k'udAX*, of less obvious composition or identity, but cf. *dAXk'(-d)* 'how much/many?', *wAXk'* 'that much/many', *LAXk'* 'this much/many', *wAX* 'thus, that way', *LAX* 'this way', from underlying 'AwA and 'ALA demonstratives plus 'AwA-X and 'ALA-X, with postpositional final o-X 'by means of o, in o manner'. (Cf. also 'AdAX 'however, on the other hand'.) This implies an interrogative adverb of manner *dA-X-*, clearly composed of what must be a fundamental interrogative *dA-*, plus *-X* 'manner', though such an interrogative is not attested as such. Cf. further the Proto-Athabaskan cognates for *du:-* and *de:-*, definitely segmentable \**də-wə-* 'who?' and \**də-yə-* 'what?', as some Athabaskan languages reflect instead \**wə-də-* and \**yə-də-*.

Instead of the expected \**dA-X-*, the Eyak interrogative of manner is *k'e:-d* 'how?'. Synchronically, the negative *k'u-dAX* 'cannot, impossible, no way' no longer functions as the negative of *k'e:-d*, or at least no longer functions as the only such negative. There is no \**k'u-k'e:-*. Instead, that function is filled mainly by *k'ude:dah* '(in) no way', which is obviously from *k'u-de:-* 'nothing' plus general adverbializer *-dah*; *k'ude:dah* is in fact far more frequent in the corpus than are the three more basic specialized negatives added together.

(Corresponding to these are the more or less equivalent constructions *dik' (dA-)du:-d* 'not anyone', *dik' dA-de:-d* 'not anything', and *dik' dA-k'e:-d* 'not in any way'. These are treated in §24.3.4.4.)

Use of this set of specialized negatives was never systematically investigated as such. Though the corpus is adequate for a full account, some specifics are poorly attested, and some details are missing, especially systematic documentation of the use of *dA=* 'selfsame'. Organization here will parallel that for *dik'* above.

#### 24.3.4.1 Independent use of *k'udu*:, *k'ude*:, *k'udAX*, *k'ude:dah*

These three basic forms do occur in non-verbal constructions, alone or independently, but are barely so attested, at least in the ledger corpus. For these interrogative pronominal forms the ledger corpus may not be complete. For *k'udu*: ‘no one’ we have no such attestation. For *k'ude*: ‘nothing’ the only independent example we may have is Rezanov (1805) кэдъ-этъ (<ked”-et”> with non-palatalizing <э>) ‘no’, probably to be read *k'ude:d* ‘nothing’, confirmed by Lena, though as a variant of *k'ude:dah*. We do have at least one independent instance in text of *k'udAX* ‘they can’t do it, in vain, impossible’. Not surprisingly, on the other hand relatively abundant independently, is *k'ude:dah* ‘no way’: aside from several occurrences alone in text, we have e.g. ‘*ahnu*: *sA'ehdzLinu*: *q'uuhnu*:, *k'ude:dah*. *Xi:ch*' *k'a't'q'Ach*' *q'e*' 'idAle:k'G ‘those whom they had invited, no way, they would ever go back to yonder island’ (George Johnson), *k'ude:dah*, *dik*' *q'e*' *k'uGAdA'a:nGinh* ‘it was hopeless, he didn’t (couldn’t) see anymore’.

#### 24.3.4.2 Syntactic *k'udu*:, *k'ude*:, *kudAX*, *k'ude:dah*

Sentences with overt subject for these negatives are very scarce, but enough to confirm the same basic word order as for *dik*'...-G.

These negatives are more frequently attested in syntactically coherent verbal phrases or sentences. ‘No one’ is scarce: unproblematical is *k'udu*: ‘*iya*: lAXALGehdGlehd ‘because no one jounces him for you’. Less certainly correct is ‘*ahnu*: *k'ula:GAYu*: *k'ude:dah k'udu:yu:tl*' ‘AdAwi'L *q'e*' ‘AdALALehGinu: ‘those others in no way could wage war again with anyone (with no one plural)’. This is perhaps the only such double negative in the corpus, and very probably the perfectly correct norm for this would be ... *k'ude:dah dAdu:yu:tl*'d ...; cf. *dik*' (*dA*-)*du*:-d below. See §24.3.5 on the question of double negatives. A false start is *k'udu*:-, *dAdu:d sAsinhL* ‘*anhu ya:X XAdla:Lqak*' ‘nobody, anybody who died they used to cremate’. For *k'ude*: ‘nothing’, we have only one example: *k'ude: XAdahG* ‘there is nothing to eat’ (‘nothing is eaten’). Much more common for this is the corresponding negative *dik*' *dAde*:-d, for which see below.

Later we have from Sophie (1987.61) *k'ude:X* ‘*Awa*: *qu'xsheh* ‘I got nothing to kill it with’, *k'udu:tl*' ‘*uwa*: ‘*u:da*' *qu'xah* ‘I got no-one to go there with’, *k'udu:XA*' wAX ‘*ixit'eh* ‘I got no-one to be living with’. She rejects \**k'uk'e:X*, \**dAk'e:X*. In these examples the sentences are not negative, only the pronouns *de*: and *du*: as object of postpositions. For these see further §23.3 on affixation.

Of higher frequency than *k'u:du*: and *k'ude*: is *k'udAX*, perhaps further suggesting that *k'udAX* synchronically is not quite in the same class. Some of the examples are given in (17).

(17) Negation with *k'udAX*

*k'udAX xtsu'dG* ‘I can’t sleep’

*k'udAXsh yitsu'dG* ‘can’t you sleep?’

*k'udAX lah* ‘AdxLa’ya: XG ‘I can’t move’

*k'udAX yAX xdAwe:YG* 'I can't swim (about)'

*k'udAX XAGi:ya:G da:X* 'if you can't eat it'

We have two instances of what might be either *dAk'udAX* or *dik' AdAX*, 'cannot' with proclitic *dA=* or *dik'* followed by *'AdAX* 'however', which are easy not to distinguish, with reduced vowels in open prefix syllables, allowing also for simplification of *-k'-*. We have this problematic sequence in at least two sentences, one transcribed *dik' AdAX k'uGA'a:nG* 'he can't see (anything) though', but perhaps in fact *dik'udAX k'uGA'a:nG* 'he really can't see (anything)'; and one transcribed *dik'udAX 'i:ya:GdAlahGAyu:ga' tsin'dAle:G* 'he can't speak (like) Eyak(s) though', but perhaps in fact 'he really can't speak Eyak'. The etymology of *'AdAX* is unclear, including of course the possibility that it is itself related to *(k'u)dAX*.

(18) Negation with *k'ude:dah* 'no way'

*k'ude:dah lehG* 'it can't do anything' (because its back is broken)

*da:X q'uhnu: k'ude:dah q'e' dAle:G* 'and nothing more can happen to them / can they do'

*k'ude:dah 'Awa: k'uxLi:G* 'I can't catch any' (in hunting)

*k'ude:dah k'uXAxahG* 'I can't eat anything'

*k'ude:dah ta' 'a:k'G* 'there's never any way he can get into the water' (customary)

*k'ude:dahshuhnu: 'uqa' dAXunh 'Adu'la:IAXdAXa:k'G* 'is there no way you can turn yourselves human among them?' (interrogative customary)

In one case we have an emendation, *k'ude:dah q'e:yaX dAqe:YG*, *Xa:ndiyahlu'qa: q'e:yaX dAqe:YGinh* 'he can't boat about anymore, boat about for food anymore', without repetition of *k'ude:dah*.

#### 24.3.4.3 Use of proclitic *dA=* 'selfsame'

Along with possible use of *dA=* 'selfsame' barely attested, in possible *dik'udAX* above (§24.3.4.2), and only with *k'udAX*, we have at least one clear instance (19) of this as proclitic in *dik'ude:dah*, transcribed *di=*.

(19) *di=k'ude:dah qe'yiLteh-yAq' q'e' qa' 'Ada:k'-G*

selfsame-no.way whale-inside back out go.CUST-NEG

'There's no way at all he can ever get back out of the whale.'

This is at least enough to show that *dA=* in the form of *di=* can definitely be a proclitic to the specialized negatives with *k'u-*, though this is by no means frequent in the corpus. This use of *dA=* was not systematically investigated, even though it would be important especially in connection with the etymology of the general negative *dik'*. Note further, in any case, that there is not a single *\*dA=dik'* in the corpus, with *dik'* so frequent that the absence of *\*dAdik'* is surely of statistical significance as support for the *di-k' < \*dA-k'(w)* etymology. Note again in this connection the Athabaskan negative particle, e.g. Navajo

*do*; certainly supporting such an etymology, the only irregularity in which is the loss of the labialization in the Eyak, *dik'* instead of \**duk'* where the labial is final.

See §24.3.4.4 for further use of *dA=* in negatives.

#### 24.3.4.4 Corresponding or alternative *dik'* (*dA-*)*du:-d*, *dik'* *dA-de:-d*, *dik'* *dA-k'e:-d*

Along with the specialized negatives just covered, we have also the general *dik'* plus the interrogatives *du:-d*, *de:-d* and (not *dAX-* but) *k'e:-d*, in *dik'* (*da-*)*du:-d* 'not anybody', *dik'* *dA-de:-d* 'not anything', and *dik'* *dA-k'e:-d* 'not in any way' (no *dik'* \*?(*dA-*)*dAX-d* being attested). The first two are much more common than *k'udu*, *k'ude*, but *k'ude:dah* is more common than *dik'* *dAk'e:-d*, no doubt a reflection of the changes going on in the system. These will also show that double negatives are hardly a trend in Eyak, for whatever reason, so that the system operates in that respect in a way rather parallel to that of (standard) English. See §24.3.5 on double negatives.

Corresponding or alternative to the less frequent *k'udu*: 'no one', we have six attestations (five without *dA-* and one problematic such) in the ledger corpus of *dik'* (*da-*)*du:-d* 'not anyone', usually in the sense of 'no one'.

(20) Examples of *dik'* (*da-*)*du:-d* 'not anyone'

- a. *dik'* *du:duh* 'Aw *k'ut'a* 'A'Lt'u:G 'not anybody uses it' (in this one instance in the sense 'not just *anybody*—i.e. only important people')
- b. *dik'* *du:d* 'AdlAXa:n 'AsdAliLG 'not anyone avenged himself'
- c. *dik'* *du:dunh* 'u:la'Lga:G 'not anyone knows'
- d. *dik'* *dAdu:lahyu:dAw* 'a'Le:G 'it's no anybody's fault' ('it's about no one plural')

We also have independent *dik'* *dAde:yu:dunhG* 'not anybody', so glossed and therefore to be corrected to *dAdu:yu:dunhG*.

Corresponding or alternative to the less frequent *k'ude*, we have at least five attestations (none without *dA-*) in the ledger corpus of *dik'* *dAde:-d* 'not anything' probably all in the sense of 'nothing'.

(21) Examples of *dik'* *dAde:-d* 'not anything'

- a. *dik'* *dAde:d* *da:la'xLXa:G* 'I have nothing'
- b. *dik'* *dAde:dunh* 'udAGAlehtl' 'idAlehG 'nothing worried her' ('nothing concerned her mind')
- c. *dik'* *dAde:lAXd* 'ixsL'ahnLG 'I didn't see anything'
- d. *dik'* *dAde:kihlAX* 'ixsL'anhLG 'I didn't see any little thing'

Corresponding or alternative to *k'udAX* 'can't' we have no attestations of *dik'* \*?(*dA-*)*dAX-d*, perhaps only because no attempt was made to elicit that. Instead of that, corresponding both to the more frequent *k'udAX* and far more frequent *k'ude:dah* for the

negative adverbial we have here *dik' dA-k'e:-d* 'not in any way'. Perhaps significantly, this is always with *dA-*, attested at least four times in the corpus, never *\*?dik' k'e:-d*.

(22) Examples of *dik' dA-k'e:-d* 'not in any way'

- a. *dik' dAk'e:dunh 'anhtl' dAsliLG*  
NEG nothing.at.all HUM.SG-to say-NEG  
'she didn't say anything to him'
- b. *dik' dAk'e:duh q'e' dAle:-G*  
NEG nothing.at.all again happen-NEG  
'nothing more happens to them'
- c. *dik' dAk'e:duh yAX 'Adi:lihLa'ya:X-G*  
NEG nothing.at.all around think.of-NEG  
'he can in no way think anything (amiss about it)'
- d. *dik' 'a'd dAk'e:dunh 'Ad-la'-LAt'inh=inh*  
NEG very.much nothing.at.all RFLX-NC.face-CL-be=HUM.SG  
'there's no sign of anger on his face' (idiomatic, lit. 'not very much in any way is he making himself be facially', stem *-t'e' ~*)

The pattern of use of *dA-* in these negative constructions is not clear: five times without for *-du:-d*, only once with, whereas both *-de:-d* and *-k'e:-d* always have *dA-*. It may be particularly significant that we have no *\*?dik' k'e:-d*, but no attempt was made to test that. At the same time *dA-* is rare, though certainly attested, with (*k'udu:*) *k'ude: k'udAX*, *k'ude:dah*. Cf. the pattern of use for *dA-* with the interrogative pronouns in non-negatives

### 24.3.5 Avoidance of double negatives

As has been noted above, it appears that Eyak does not allow double negatives. In addition to the instances of *dik' dA-k'e:-d* above, e.g. *dik' dAk'e:dunh 'anhtl' dAsliLG* 'she said nothing at all to him', we have two more instances of this construction reversed, *dAke:d* outside the negation, preceding *dik'*, therefore in its positive meaning 'anything at all', cf. (23).

(23) Examples of *dAke:d* outside the negation, preceding *dik'*

- a. *dA=k'e:d=unh dik' 'anh-tl' dA-le:-G*  
not.in.any.way=HUM.SG NEG HUM.SG-to verbal-act-NEG  
'there's nothing he won't say to her'  
( 'any way at all he doesn't act verbally with her' )
- b. *dAk'e:=yu:d=unh dik' 'anh-tl' dAle:G*  
not.in.any.way=PL=HUM.SG. NEG HUM.SG-to verbal-act-NEG  
'there's nothing he won't say to her'  
( 'any ways plural at all he doesn't act verbally with her' )





glossed ‘before S V’s’. The second type presumably should be glossed ‘S has not yet V’d’, just as consistently. However, as noted above, the unsubordinated second type appears to be glossed ‘S has not yet V’d’ only about 75% of the time, not seldom as ‘before S V’s’. Consistent with that inconsistency, however, is the fact that, perhaps not surprisingly, there is some significant overlap between the two types just described. In addition to the around twenty instances of the first type and about forty of the second, there are at least six instances with both *di:yAX* and subordinating postposition *o-dAwa:* combined, all glossed ‘before S V’s’ (see examples below).

A significant problem is raised by the fact that the first type appears not in fact, most of the time, to be suffixed by *-G*, but rather by what was heard and transcribed as *-q’* (itself always followed by postposition beginning with *d-*). For further research, a careful examination of the field notebooks should be done to reconstruct more exactly the original statistics. Sometimes, certainly, the uncertainty was considered, whether a *-q’* or a *-G* was being heard, or rather the obvious alternative *-G* was asked for, especially in view of the second type. The answer was that *-G* instead of *-q’* is (also?) correct, for what that in fact is worth. There is one clear pattern in any case, that the *-q’*, never final or followed by *=inh* or *=inu:*, occurs most of the time in the first type and only in that type with no initial negative word, and that in the second type, with *di:yAX* initial, the *-q’* never appears, only *-G*, as also in all full negatives. Thus, deliberately elicited type-one negative Inceptive perfectives with *-G*, i.e. phonetically aspirated [q<sup>h</sup>], were sometimes elicited as alternatives to those with *-q’*, and accepted. This is not surprising, considering type-two, and even though probably some such were spontaneously offered. However, there appears to be no question as to the dominance of a real—not illusory—glottalized *-q’* in the first type. This then raises the question as to whether the glottalized *-q’* is original or a (trivial) shift from /G/ with some unclear motivation—as seems to have been my thinking. One possible identification, on the other hand, for *-q’* is that of the postposition *o-q’* ‘on, onto o’. The semantics of that, however, are not very satisfactory, and there seems to be little doubt about the negative meaning of the construction, identical with that of the second type, always with *-G*, never *-q’*, not even in the mixed type followed by postposition.

In making some historical interpretation of this situation, assuming the first type to be originally with *-G*, since this is a very special type of negative, unlike what are called the full negatives, occurring in only one paradigm, Inceptive perfective, with *-G*, it appears probable that the first type was the original one. Then, given the existence of full negatives in a frame beginning with a negative word, the combined type was created by the (redundant) addition of the negative word *di:yAX* at the beginning creating likewise a negative frame. After that, the postposition could be deleted, creating a second distinct type. Alternatively, but less likely, there were the two distinct types, both negative Inceptive perfective, and the overlap or confusion very unsurprisingly developed. In any case, least likely is that the frame *di:yAX* p-*G* was the original, which could of course be subordinated by postpositions like other sentences, positive and negative, and then, when so subordinated, it became popular to delete the *di:yAX*.

It is not entirely clear whether the form *di:yAX* could be historically a canonic single morpheme, but a highly plausible etymology is clear enough. For *-yAX* cf. *o-dALyAX* 'before, in front of o', which has to be segmented *-dA-L-yAX*. The sequence *-dA-L-* is common elsewhere, not only in verbs where *L-* is the classifier, but a different *-dA-L-* occurs also in nouns, e.g. *-dA-L-ts'Alih* 'shell' (cf. *-ts'Alih* 'bone'). For *-yAX* cf. *o-yAX* 'under, beneath o', and *GA-L-yAX* 'bottommost of a series', and especially *yAqe:X* 'tomorrow, morrow', < \**yAqah-yAX* 'not yet dawn'. For *di:-* the best explanation is probably \**dA-'e'*, *dA-* indeterminate o, o- 'e' 'in place of (absent) o'

The meaning of *dA-'e'-yAX* is thence 'before the vacant place/time of indeterminate o'. Unlike *dik'*, *di:yAX* standing alone or independently, is not attested nor, apparently, was any attempt made to elicit that as such.

In connection with the history of the negative Inceptive perfective here, cf. the Cautionary Prohibitive Inceptive perfective above (§24.2), which is perhaps significantly similar in its basic structure, and, with *GA-* minus *-L* perfective suffix, in aspectual meaning, 'let not the beginning of act/event take place!'. That too is introduced not by a negative word, but instead by the temporal adverb *q'ah* 'now', more often reduced to proclitic *q'A-*. The exact status or possibility of omitting that *q'ah ~ q'A-* was not carefully investigated either, though it clearly follows the direct object, whereas *di:yAX* clearly precedes the direct object. It is unclear exactly how parallel the historical development of the Cautionary Prohibitive Inceptive imperfective is to that of the negative Inceptive perfective.

#### 24.4.1 Type one: *-G / -q'* plus postposition

Since this subtype has no initial marker and ends only with *-G* or *-q'* plus postposition suffixed to an Inceptive perfective, the around twenty incidences thereof are rather uniform, except that three are subordinated by *o-dALyAX* instead of *o-dAwa:*, as noted above. Also, however, it is here, for whatever reason, that we have the suffix *-q'* most of the time instead of *-G*. Exact statistics are not given here because of uncertainty of what was the original transcription in the notebooks.

##### (24) Combination of *o-dAwa:* and *-G*

*'uk'ah lAGi:ta:LGdAwa:* 'before you forget' (Lena, but only in connection with *di:yAX lAGi:ta:LGdAwa:* 'id.', which see further below, also cf. *'uk'ah lAGi:ta:Lq'dAwa:* below, on earlier occasion)

*'Ashi:n'inh 'iGAshe:LGdAwa:* 'kill him before he kills you!' (Lena)

*'uch' 'Aw 'Atinhinh GAmi:nXLGdAwa:* 'give it to him before he starts crying!' (Lena, cf. below)

##### (25) Combination of *o-dAwa:* and *-q'*

'uk'ah lAGi:ta:Lq'dAwa: 'before you forget' (Lena, on earlier occasion and perhaps more spontaneous than instance with -G above)

Lich' Adya:ndAke:sk' k'uXAGi:ya:q'dAwa: 'always wash your hands before you eat!'

XAGa:Lq'dAwa: 'before he eats it'

GAXsinhLq'dAwa: 'before I die' (Lena, cf. below)

yAX GAKugLq'dAwa: 'before it breaks'

xuGALXa'Xch'XLq'dAwa: 'before he tickles me'

GALchan'Lq'dAwa: 'before he smells it'

'ilAX 'iGAL'A:nLq'dAwa: 'before he sees you'

(and 18 more textual instances listed under *wa:* in Krauss (1970a))

(26) Combination of o-dALyAX and -G / -q' (?) -

'uch' Xa'dihch' qu'xah GAsinhLGdALyAX 'I'll go visit him before he dies' (Marie, cf. above)

'iGALshe:LGLdALyAX GALxut'inh 'shoot him before he kills you!' (Marie also)

GA'a'ch'L[G/q']dAwa: 'before they left' (Anna in text, inaudible whether -G or -q')

#### 24.4.2 Mixed type: both di:yAX ... -G plus postposition o-dAwa:

There are six clear instances of this, all with o-dAwa:, none with o-dALyAX.

(27) di:yAX ... -G plus postposition o-dAwa:

di:yAX 'uk'ah lAGi:ta:LGdAwa: 'before you forget' (Lena; cf. above, on the later occasion, along with 'uk'ah lAGi:ta:LGdAwa: 'id' and 'uk'ah lAGi:ta:Lq'dAwa: 'id' on earlier occasion)

'ALxut'inh di:yAX 'ich' 'iGAXut'LGdAwa 'shoot him before he starts shooting at you!' (Lena)

ya'Xu: qu'Xi:yah di:yAX ya:n' Gi:da:LGdAwa: 'don't eat (it) before you sit down!'

'uch' 'Aw 'Atinhinh di:yaX GAKi:nXGdAwa: 'give it to him before he starts crying' (Lena, cf. above)

di:yAX 'anh' 'Aw ya:nch' GAdla:LAwa'LGdAwa: 'before he lowers it (suspended)' (Anna in text; with overt subject pronoun, following di:yAX)

di:yAX 'ahnu: dAXunhyu: 'a:nda' q'e' GAdA'a'ch'LGinu: 'before those people come back' (with overt subject noun phrase)

Note that in all instances above, and in all the many below, the suffix is never *-q'* but only *-G*, i.e. the *-q'* appears to be incompatible with *di:yAX*, though this was never tested. Note further that the two instances containing an overt subject both have *di:yAX* preceding that subject. This is perhaps more significant in the instance of the noun phrase *'ahnu: dAXunhyu:* 'those people' than in that of the pronoun *'anh* 'he'. See further below.

### 24.4.3 Type two: *di:yAX ...-G*

This clear type is the negative frame, beginning with *di:yAX* and ending unproblematically with the negative suffix *-G*, without a subordinating postposition *o-dAwa:* or *o-dALyAX*. (The only such attested is probably *o-da:X*, usually treated as 'and' by convention, but there is perhaps no reason other postpositions might not be possible, e.g. *o-lehd* 'because S has not yet V'd'.) As noted above, and also because broader syntax was not carefully considered for perhaps 25% of the instances it is instead 'before S V's', though the glossing for this type should consistently be 'S has not yet V'd'.

The two instances with *o-da:X* are *ya'Xu: qa' qi'yiyah di:yAX GAxsi:LGda:X* 'don't leave before I die!' (Lena, cf. above), and *di:yAX "ya'Xu:" dAGAle:LGda:X* 'before she says "don't!"'. Surely some of the instances are also followed by *o-da:X*, and are glossed by 'and'.

The mixed type above belongs much closer together with type two than with type one, for the following reasons: 1) they both begin with *di:yAX*; 2) like type two and unlike type one, the mixed type never ends with suffix *-q'*, only with *-G*; 3) type two is not sharply differentiated from the mixed type, because it too can also be subordinated by a postposition, *o-da:X* (general subordinator, instead of *o-dAwa:* in the case of mixed type). In other words, type two and the mixed type are not nearly so clearly distinguished from each other as either is from the first, which alone does not begin with *di:yAX*, and which much of the time appears to end with *-q'* instead of *-G*.

## 24.5 Interruption and Conclusion

At this point in the writing of this chapter, having forgotten how the negative words and interrogative pronouns were included the 1970 dictionary, I finally checked the dictionary, and found that all these items were indeed fully included, in fact well covered there, with very full exemplification as is the style of the dictionary. (See there the entries *dik'*, *k'u ~ k'*, *de;*, *du;*, *dAX*, *k'e;*; *ya'Xu:* and *k'a:*.) This "discovery" in no way invalidates any of this chapter, but renders part of it redundant, in a sense, particularly the two largest sections, "Full Negation" (§24.3) and "Negative Inceptive perfective, 'not yet'" (§24.4). The two shorter sections "Thematic Negative" (§24.1) and "Cautionary Prohibitive" (§24.2) are not covered in the dictionary at all, so are entirely new. Moreover, I am herewith deciding that the entire chapter should remain, in spite of the duplication, for the following reasons. 1) The difference in treatment inevitable from a stretch of 40 or 50 years in my own thinking

should in itself prove of interest. 2) The nature of the subject matter is in my opinion such that it naturally belongs in a gray area common both to the realm of grammar and that of lexicon. 3) There is information and details offered here that are not in the 1970 dictionary, even in the two overlapping main sections. 4) Above all, the basic approach here, represented in lengthy discussions above, is in the representation of negation as a grammatical system, or set of systems, including discussion or speculation on their historical development, much more than in the necessarily piecemeal treatment in the lexicon.

We shall however truncate the presentation of examples of type two above, *di:yAX ...-G(da:X)*, except to note examples of Inceptive perfective combined with analogical negative Neuter prefix from Neuter imperfective theme: *di:yAX q'Aw 'Awga' 'a'GAda'LG* 'it's not big enough yet' from Lena, but on checking with Marie *di:yAX 'Awga' GAda'LG* 'id' or *'a'GAda'LG*, likewise *di:yAX 'Awga' ('a')GAda:sLG* 'it's not heavy enough yet', i.e. analogical forms allowable along with the regular one.

#### 24.5.1 The question *di:yAX ... -G* with *s-* perfective

On enquiry on one occasion Lena allowed that Active perfective was possible in addition to Inceptive perfective with *di:yAX*, in the sense '(started but) not yet finished' in *di:yAX 'AdAxsdAkusLG* 'I haven't washed (finished washing) myself yet', but on a later occasion (1971) rejected just such a proposed form, *\*di:yAX te'ya' XAsahLG* for 'he hasn't eaten fish yet', accepting only *di:yAX te'ya' XAGa:LG* for that. The frequent attestation of the Inceptive perfective construction, in comparison with the complete absence of any spontaneous instance of Active perfective, plus the contradictory responses to proposed Active perfective, is strong indication that very probably only the Inceptive perfective construction should be considered authentic for Eyak.

However, on examination of post-1965 field sessions, we find that this question, use of *di:yAX ...-G* with *s-* perfective, was further examined on two occasions. With Anna 6/19/72 we have *di:yAX gi:wa: GAXdAla:LG* and *di:yAX gi:wa: 'AxsdAlahLG* "I never drink beer yet", *di:yAX te'ya' XAGAx:a:LG da:X* 'before I ate fish'. The note "can't pin down difference [between that and *di:yAX te'ya' XAsahLG da:X*]", only implies that somehow *s-* perfective is possible. At the same time, however, Anna rejected *\*di:yAX ya:n' 'AxstehLG* "I hadn't lain down yet", *\*di:yAX Xa:n' 'AdxsdAkusLG* 'I hadn't finished washing myself', *\*di:yAX sidAGAleh k'a'Le:G* 'I didn't yet have good sense' (Neuter imperfective). Finally, with Sophie 1987, p. 19 we have *di:yAX Xa:n' k'uXAsahLG da:X q'e' sdiyahl* 'he left before I finished eating, I hadn't finished/stopped eating and he left', *di:yAX che:y GAXshishLG da:X q'unh q'e' sdiyahl* "I was still drinking tea and he left" (unusual gloss), but *\*di:yAX che:y (Xa:n') 'AxsshishLG da:X with or without Xa:n'* 'to completion' 'I had not yet drunk /finished drinking tea and' was rejected, and finally *?di:yAX k'uXAsahLG da:X* "I never eat it yet" as accepted by Lena, was evaluated by Sophie as "not too good". These later enquiries

merely confirm, from two other speakers, that *s*-perfective in the *di:yAX* construction seems possible, but questionable, and never spontaneous.

### 24.5.2 The question of *k'uda:d* 'nowhere'

The question of *k'uda:(-d)* as a negative word based on *da:-d* interrogative 'where?', on the pattern of *k'ude:* 'nothing', cf. *de:-d* 'what?', etc., was examined, too briefly, three times, only with Marie. The first time, 8/3/96, we have *k'uda:d* 'close by' as in *k'uda:d yiLinhih* ['he's close by'], where *k'uda:d* 'near something' is clearly the postpositional phrase *o-da:d* with indefinite object *k'u-*; but also *dik' dAda:d 'a'Le:G* 'it's nowhere', 'it's not anywhere' (with Marie's comment "it's hard to think of how to say 'nowhere'"), where in the latter *dA=da:d* is indeed the interrogative with *dA=* 'selfsame', as paired with other negative words, implying a possible ?*k'uda:d* 'nowhere'. The second time, 2/10/96, we have *k'uda:d, dik'uda:d* 'someplace, noplac', which is entirely ambiguous as either the postpositional phrase *o-da:d* 'near o' with *k'u-* indefinite object 'near something', without and with *dA=* (*~ di=*) 'selfsame', or as *da:-d* 'where?' with negative *k'u-* without and with *dA=* 'selfsame'. The third time, 8/19/98, we have only *dik' dAda:d qu'xtsu'dG* 'I can't sleep just anywhere', of no further help. In other words, each time there was an (implied or possible) negative *k'uda:d* 'nowhere', but we are still left without a single unequivocal instance of that in the corpus.

## 24.6 Other Negative-Like Constructions

Here we shall continue only with brief mention of three further constructions that could be considered negative in some sense.

### 24.6.1 Prohibitive

First is the standard Prohibitive, there being no negative imperative: The Prohibitive is always constructed with *ya'Xu:* 'don't!', which can also stand independently, plus the (positive) future. The subject is of course most frequently second person, but third person and even first person are also attested. The prohibitive *ya'Xu:* cannot be clearly analyzed, so is entered in the 1970 dictionary at the end of *y-*, where there is abundant documentation. Its meaning is to be glossed 'let it not happen, it must not happen (that S will V)'. Cf. the Cautionary Prohibitive in §24.2, also always Inceptive imperfective (Future), but negative with suffix *-G*, 'take care/precaution that S will not V!'.

24.6.2 *k'a:di'da*: 'useless to'

Second is the construction *k'a:di'da*: 'it is in vain, useless (that S V)', from *k'a:dih* 'gone, absent, lost', q.v. under *k'a*; plus *'ida*: ~. This introduces a clause with optative verb. Here also, there is no negative morphology.

(28) *k'a:di'da*: 'useless to'

- a. *'a'd k'a:di'da: 'a:nda' q'e' 'ixdiyah*  
INTENS useless.to here back ASP-1s-CL-go  
'I'll never come back here.' ('It's useless for me to come back here.')
- b. *'a'd k'a:di'da: q'e' 'iLits'inh=inh*  
INTENS useless.to again strong=HUM.SG  
'He'll never be strong again.'
- c. *'a'd k'a:di'da: q'e' da:-Lits'anh*  
INTENS useless.to again NC-strong  
'It (table) will never be strong again.'
- d. *k'a:di'da: 'Aw q'AdjX-da:d 'i-Xa' yAX 'idiyah*  
useless.to DIST hair.ribbon-area.of 2s-with around go  
'It'd never do for you to go around without your hair ribbon.'

24.6.3 *o-Xda:d* 'without'

A third negative-like construction is with the postpositional phrase *o-Xda:d* 'without'. This is certainly to be segmented *-X-da:-d*, for which see 1970 dictionary subentry under *da*:. The only negativity involved here, not explicit in the dictionary subentry, is that this often causes the verb to show negative prefixation, quite analogically, without negative suffix:

(29) *o-Xda:d* 'without'

- a. *'udAGAleh-Xda:d 'a'Linh=inu:*  
3-RFLX-mind-without be=HUM.PL  
'promiscuous women' ('they who are without sense')
- b. *'u-ni:k'-Xda:d 'a'Linh=inh*  
3-nose-without be=HUM.SG  
'He has no nose.'
- c. *giyah-gALA-Xda:d 'u-q' k'a'Leh*  
water-NC.liquid-without 3-on be  
'Mummy Island' (lit. 'something which is without water on it').

This partial negative morphology was not further checked, e.g. as occurring with verbs other than this particular Neuter imperfective, or for optionality of the negative prefixation.



## 25 CLAUSE-LEVEL SYNTAX

The present chapter concerns clause-level syntax, while Chap. 26 discusses complex or multi-clausal syntax. Syntax is the least well described part of Eyak grammar, for two major reasons. Inherently, modern Eyak syntax is not so complex as it is unstable, in a stage of evolution, probably not due, however, to its moribund state in the 20<sup>th</sup> century. At the same time, it is the least systematically investigated or documented part of Eyak grammar.

My own field priorities were rather clearly ranked in the order: 1) phonology, 2) lexicon, 3) morphology, a distant 4) syntax, and 5) discourse. According to what was practically a tradition, at least in Athabaskan, certainly obvious in Sapir's work, syntax, it seems, was expected to be discovered philologically through analysis of texts, provided such were abundant enough for that purpose. It turns out that such mystical expectations are in fact no more valid for syntax than for morphology, at best a rationalization. Informed systematic elicitation is either the only way or by far the most efficient way to determine the rules of syntax as much as it is for morphology, or even to document lexicon. Lack of informed systematic elicitation makes the present discussion much more complicated, and incomplete, leaving questions for the future that we can hope may at least in part yet be answered for Eyak.

A large part of the discussion of Eyak clause-level syntax is occupied with the enclitic series =*q*' (something like focus particle or topicalizer) and, to a lesser extent, the =*sh* enclitic series (yes/no interrogative), including the placement of these in the sentence. One reason for the inclusion of these enclitic series here is that their placement is definitively syntactically determined. Moreover, the choice of reduced demonstratives attached to those enclitics is likewise syntactically determined, insofar as it is determined by antecedent arguments. Thus, while properly a part of clause-level syntax, the grammar of these enclitics is discussed separately in Chap. 27.

As noted elsewhere, much of the grammar writing was based on the ledger (Krauss 1966a), done for the lexicon, with a grid for the inflectional and derivational morphology. All the texts up through 1965 were entered in the ledger, and, it was assumed at first, likewise all the elicitations. There remained the nagging suspicion that not quite all the elicitations had been entered from the field notebooks into the ledger. That suspicion was in fact that those not entered were precisely those elicited exclusively for syntax, e.g. 'man bites dog', 'dog bites man', the lexical and morphological properties of which were already abundantly documented. Writing the syntax chapters thus occasioned the first time the field notebooks were re-examined in decades. That re-examination revealed a goodly quantity of elicitations done for purely syntactic purposes. Those included many complex sentences, a number of sentences elicited purely for fuller syntactic types, such as SOV, or relative clauses. There were also attempts on at least ten occasions to disambiguate S-O relations, which are especially problematical in Eyak, as will be seen below. This re-examination of the field notebooks thus occasioned a serious rewrite of much of

this chapter.

Sapir, Li, and Hoijer hardly noted anything more of Athabaskan syntax than the obvious basic SOV order in sentence structure. The first steps beyond that, major and brilliant, were made by Ken Hale, especially in Navajo *yi-/bi-* pronoun usage and in preverb-conjugation dependencies, first in unpublished papers of the 1960s. As of yet, the closest to a full Athabaskan syntax must still be that by Rice (1989) for Slave.

For Eyak, the first bits or fundamentals of syntax can be deciphered, in retrospect, from Birket-Smith and de Laguna (1938: 556–564). Included there is some deliberate investigation of noun possession, some basic word order, even some preverbal order. These patterns are confirmable in Li and Austerlitz, but their Eyak work includes no explicit treatment of syntax.

In my fieldwork of the 1960s, agreement or concord was rather well documented and studied. That record includes noun-class and qualifiers (far more elaborate than Athabaskan), rules for classifiers in the verb (quite similar to those of Athabaskan), preverbs and conjugation choice (far less correlation than Athabaskan; documented some in the 1960s and some more later). These types of agreement are all dealt with in the relevant chapters of the Morphology above.

The 1960s fieldwork included hundreds of pages of texts transcribed, and abundant elicited sentences partly meant to determine phrasal, local and sentence word order. As the account of Eyak syntax as such was largely left for last, in more ways than one, much of the syntax is in fact documented in the dictionary. This is especially so for complex sentences with clauses subordinated by postpositions, under the entries for each postposition so used. Likewise, syntax below clause level is also covered in other chapters of the Morphology, all written before the present chapter. The phrasal word order and structure, noun phrases especially, and local order and structure, preverbals especially, is treated in the sections on nouns and verbs in the Morphology. Likewise with independent adjectives, gerunds and other deverbalizations, and in nominalizations (relativizations), there are subsections on the syntax of these, both internal and external, i.e. with relation to the rest of the sentence. Clause-level syntax specific to the optative and desiderative modes, for example, is treated in the relevant sections on those modes (§12.3.3 and §12.3.4, respectively). Complex sentence syntax specific to the conditional aspect, on the other hand, is dealt with in this chapter. Also syntax of negations and interrogatives is treated at some length in the chapters on negation and interrogatives, so those are directly relevant here as well. The chapter on interrogatives includes three full pages on sentence syntax of content questions, which certainly could have been included here instead. All this leaves certain aspects of basic pronominal argument structure of simple sentences, some especially problematical, to be treated here, along with basic sentence structure and word order.

The structure of complex sentences is also treated here, further below, in subsections for the different types of complex sentences. (At the same time, some complex sentences are treated in the chapter on negation instead of here.) In addition to these topics, and

some minor ones, e.g. verbless sentences, one more major topic is included in this chapter, as noted above. This is the set of enclitic particles: focus or topicalizing, those starting with *q'*-; interrogative, starting with *sh*-; and exclamatory, starting with *d*-. These enclitics are certainly an important dimension of Eyak grammar, something like discourse, which must be presented along with syntax, and left for last (Chap. 27).

In all fairness, and in spite of the problems and shortcomings in the treatment of Eyak syntax, at least in quantity the present chapter would have to be doubled in length, were it not for the information readily available in the Eyak dictionary and in other parts of this grammar, as noted above. This further coverage of syntax is also referred to, as appropriate, in the discussion below. In that way, altogether, syntax might take up more than 20% of this Eyak grammar.

Eyak syntax, moreover, has been the object of study by no fewer than two other linguists in relatively recent years, using data from this corpus. Jeff Leer published an important study of areal traits shared by Eyak with Haida and Aleut, rather than with cognate and neighboring Athabaskan and Tlingit (Leer 1991a). Then, Chris Donlay made serious study of the *=q'* emphatic series of enclitics (Donlay 2009, 2011, 2012). This work will also be discussed where it is relevant in the subsections below.

## 25.1 Definiteness status of Eyak syntax, and sources of ambiguities

We have no corpus of Eyak in actual spontaneous conversation, only snatches of such from narrative. The corpus of actual Eyak narrative, on the other hand, is fairly substantial, probably over eight hours' worth, some hundreds of pages, mostly spontaneous on tape, but also some dictated. From this we can get a good idea of Eyak narrative style and narrative sentence performance. This statement needs to be severely qualified, however, and in more ways than one.

Given the terminal stage of Eyak language history at which Eyak syntax is documented, Anna Nelson Harry happens to be the only speaker from whom we have any corpus of spontaneous narrative, recorded on tape rather than dictated. Anna was certainly a perfectly competent and still fluent native speaker. As shown in *In Honor of Eyak* (Krauss 1982), some of her texts demonstrate not only her routine colloquial narrative style, but also a high level of art, hence the subtitle *The Art of Anna Nelson Harry*. It must remain forever unknowable, though, the extent to which some "classical" or "deep" Eyak narrative style, of expert speeches or eloquent storytelling, might have shown significantly more connected syntax. Such might have included much longer stretches of connected syntax, and far more use of what might be called the "grammatical resources" of Eyak syntax. We must consider the unknowable truth value of the statement recorded by de Laguna that Eyak stories were supposed to be recited "word-perfect" and some, especially Raven cycle,

even sung (Birket-Smith and de Laguna 1938: 234). There does not seem to be a noticeable difference in Anna's syntactic performance from one text or type of text to another. All we have of Eyak spontaneous narrative is from one person, and that one person, Anna, must have spoken very little Eyak since she left Cordova, in 1938, for Yakutat, and spoke instead mostly English and the Tlingit she learned there. There must also be the issue that her Eyak reflected her personality, much more spontaneous, impetuous, creative, than methodical, deliberate.

This issue of length stretch of connected syntax leads even to a paradox. Part of the "Art" of Anna Nelson Harry might be supposed to be in the visually "measured" verses of her "poetry" as printed in the 1982 book with a new line for each "breath group" or "comma clause," based for the most part on the (edited!) version of the texts. "Edited" here means the omission of taped segments in parentheses and supplying of missing segments in brackets, as was explicit in the 1970 edition of those texts. In other words the 1970 edition showed the actual performance as well as its conversion to grammatically correct text, printed and then glossed accordingly. That 1982 presentation, by lines, accords nicely (and deliberately) with claims of the era, e.g. especially by Dell Hymes, of the actual nature of oral narrative art. One may wonder, at the same time, how that implied structure might disaccord with longer stretches of connected syntax, were such characteristic of some expert storytelling art. Such "classic" style with any syntactic intricacy or long "periods" as favored in Latin or German literature, or Aleut storytelling, for example, would not be easy to present in "poetic" lines generally much less than a page wide as printed in 1982.

Again, the reality of the syntactic structure in Anna's texts is remarkably far from what might be called the grammar or Eyak syntax. The grammatical resources of Eyak syntax seem to be very much *underused*. Instead, narratives make heavy use of extrapositioning. In the following, I describe this narrative norm which employs extraposition as "loose" (disconnected, "choppy") syntax, and contrast it with "tight" (i.e. connected) syntax. As we shall see in §25.2, sentences with actual overt SOV structure are fairly scarce in the narrative corpus. The usual syntactic structures (i.e. connected stretches) are shorter, e.g. SV or OV. (In the usual current terminology, this means that the sentence cores or main clauses are much of the time accompanied by peripheries, left and/or right. As will be noted below, this approach makes sentence division often quite arbitrary.) Very often the arguments, i.e. S and O, are represented not by overt nouns or noun phrases, but rather by pronouns and enclitics, and those happen to be identical for third person subject and object in Eyak. This is not to mention the extrapositions, to the left or right, which moreover are sometimes not clearly distinguishable as such phonologically. This gives rise to some third person subject-object ambiguity, especially pronominal.

For Eyak, incidentally, the terms Subject and Object happen to work perfectly well, as they do for e.g. English, unlike the case e.g. for Tlingit, which shows some ergative alignment patterns. Therefore the classic or archaic terminology as taken up for Eyak in the early 1960s, is retained here throughout. (There is no need to change to 'topic', 'agent',

and the like.)

There is no reason to believe that the speakers differ from each other more significantly in syntax than they do in any other way. As we shall see in §25.2, though, the texts dictated by Lena and Marie often show fuller or tighter structure, being relatively “planned,” deliberate, premeditated, in the necessarily slower dictation process, than do the more spontaneous tape-recorded ones from Anna. All the texts are of course fully glossed and the glossing is verified by native speaker judgment and/or narrative context. However, for priority “reasons” noted above, I failed to address the pronominal ambiguities systematically enough in the field with the speakers to establish the “rules” of Eyak syntax as definitively as I might have. The result here is that parts of the pronominal syntax have to be addressed philologically from the corpus.

As far as we can tell, modern Eyak lacks a distinction between different third person, thus producing ambiguity. There is no homophony between pronouns for first and second persons: subject, object, oblique object are always distinguishable. For third persons, however, there is considerable homophony and frequent ambiguity. The causes or factors producing this ambiguity are multiple but are at the same time identifiable. The list is quite long, almost conspiratorially so, it would seem, consisting of at least eight factors.

First, there is no contrast in form between subject and object in the demonstrative pronouns or the reduced form of those in enclitics: *'anh* and *=inh* ‘he/she, him/her’, *'ahnu:* and *=inu:* ‘they/them (human)’, *'Aw* ‘that/those/it/them’, *'Al* ‘this/these’, for both subject and object.

Second, the spread of the enclitics *=inh* and *=inu:* from relativizer origin to subject and object indistinguishably, and to oblique object as well. The relativizer for non-human is zero.

Third, demonstratives are used both as pronouns and as determiners to nouns, producing homophony of demonstrative pronouns and determiners, unless differentiated by intonational phonetics, that aspect of the phonology being inadequately understood.

Fourth, the line between “tight” and “loose” syntax, extrapositions and redundancies, can be unclear, the “loose” type distinguished only by break which may be represented to differing degrees or no degree by audible pause or some intonational mark. The frequent combination of these factors can produce considerable uncertainty.

Fifth, there are two types of movement of argument out of the basic SOV order. One is rightward movement of S or O to follow V in the formation of relative clauses. The other is leftward movement or fronting of the object to precede the subject with *=q'* topicalizing enclitics (and/) or *=sh* yes/no interrogative enclitics. Fronting also occurs necessarily with *wh*-interrogative pronouns, whether S or O, as these are homophonous for S and O.

To these five may be added three more factors, interacting some with the above, also affecting syntax, in part separately. First, there is no more distinction in Eyak than in English between different third persons. When Lena, a born grammarian, was asked to differentiate between the three meanings of ‘his’ as in ‘he told him to paint his house’,

very much out of character, she responded to the effect “You should be paying me ten dollars an hour [instead of two] to answer questions like that!”

Compounding that is the strong tendency for the sequence *-u: 'u- > -u:-*, so *'ahnu:* ‘they/them (human)’ and *'uta:* ‘his (etc.!) father’ is very often homophonous with *'ahnu:ta:* ‘their father’. Likewise *'ahnu: 'utl'* ‘they’ and ‘with it/him/her/them’ becomes homophonous with *'ahnu:tl'* ‘with them’.

And finally, to these may yet be added the homophony in the same verbal prefix position of the indefinite pronoun *k'u-* as both subject and object, so that e.g. *k'uXAsahL* is both ‘something ate it’ or ‘it ate something’.

In contrast, Athabaskan syntax is both complicated and clarified, in an interesting and altogether different way from the Eyak, by the PA *\*yə-/wə-* pronoun prefix contrast. At the same time, in some Athabaskan, widely, e.g. Han and Kwahioqua-Tlatskanai, there is also some relativizer spread, at least to the subject, sometimes in the form of “heavy” or voiced stem-final consonants.

## 25.2 Basic Word Order and Syntactic Structure

The basic word order or syntactic structure of the transitive Eyak sentence is clearly SOV, and with it goes predominant right-headedness. This is evident in the examples in (1). The structure here will be seen as a combination of a sequence of constituents, and a certain amount of mostly right-headed tree-like structuring within those constituents. There is a lesser amount of tree-like structuring of those constituents themselves within the clause. To begin with, simple verbal sentences are treated. Basic word order can be seen to be SOV (1).

(1) Simple sentences showing basic SOV word order (Lena, V.65)

- a. *'anh Lila: 'Aw XAwa: sAshehL*  
PROX man DIST dog kill  
 ‘The man killed the dog.’
- b. *'Aw XAwa: 'anh Lila: sAshehL*  
DIST dog PROX man kill  
 ‘The dog killed the man.’
- c. *'anh Lila: '=sh 'Aw XAwa: sAshehL*  
PROX man=Q DIST man kill  
 ‘Did the man kill the dog?’
- d. *'Aw XAwa: =sh 'anh Lila: sAshehL*  
DIST dog=Q PROX man kill  
 ‘Did the dog kill them man?’

The S[ubject] and O[bject] sectors can consist of a noun (= nominal, henceforth ‘noun’), more complex noun phrase, demonstrative pronoun, or be empty. As noted, they are mostly right-headed, with the noun rightmost in the noun phrase (except for dependent adjectives, and two postpositional phrases for noun-possession, described in the subsection below, §25.3, on noun phrases with possession). Noun phrase structure can itself be complex. Some of that is described in Chap. 18 on nominals, some also in the subsection on relative clauses below (§26.1). Noun phrase structure can also include determiners, leftmost, which happen to be homophonous with demonstrative pronouns, as noted. A demonstrative pronoun can also often represent the whole constituent. Or a whole constituent may be represented by zero, as noted.

Adverbs or adverbial phrases are somewhat more freely placed or less bound syntactically, except insofar as they are attributive to the head, in which case they may also be part of the sector.

The basic SOV word order needs to be elaborated in two ways. First, an I[ntrductory] constituent should be included, always first, thus ISOV. The I constituent may be empty, or it may consist of one or both of two parts. This first part is a connective, one of the several words or phrases equivalent to ‘and so, then’ and the like. The second part may be one or more adverbs (including demonstratives and/or locationals), especially of place or time, referring to the whole rest of the sentence. Adverbs occur mostly in the I sector, but may also occur in subsequent sectors insofar as they are attributive to the head of those sectors.

Second, the V sector should include two subconstituents attributive to the verb. These two are C[omplement] and P[reverbal], directly preceding the verb itself, in the order C-P, thus I S O [[C P] V]. (The term “Complement” here refers to a verb constituent and must not be confused with the use of that term in other contemporary work in syntax. Here it is confined to the use consigned to it decades ago specifically for Eyak.) The Complement is leftmost in V, and is limited in occurrence to where the verb is one of a very few verbs of identity or naming, for which see §25.2.1.

The Preverbal constituent is closest to the verb itself. Filling the Preverbal constituent are zero or one or more preverbal morphemes of three classes: postpositions with their object, preverbs, and pronouns. Two of any of these is quite common, and we have instances of at least four. These are detailed below and in the subsections on those morpheme classes. The postpositional phrases usually precede preverbs, and always do if the oblique object is more than pronominal, i.e. an overt noun or noun phrase. The Preverbal then especially comes closer to ranking as a sector between Object and Verb. (In Athabaskan there can indeed be a problem in the status of postpositions, between those with pronominal objects versus nominal, in considering the postposition joined with the verb or not.) The Eyak Preverbal constituent can be best considered a subconstituent of the Verb.

Given this, a full basic word order formula for the simple (transitive) verbal sentence is I S O [[C P] V], as noted. Any or all of the constituents except the last, V, can be zero. Moreover, for some purposes, e.g. negation or scope thereof, there may be some point in seeing

still deeper syntactic tree-like structure in the simple sentence, bracketing to include O more closely with V than with S, thus I S [O [[C P] V]]. For this, in fact, see especially §24.3.3.3 on the syntax of negation in verbal sentences or phrases. There the data clearly show the further bracketing of O with V, even reducing some of the ambiguity shown to arise between S and O shown here below. A briefest summary for the negation is that with the basic negation frame *dik'* ... -G (where -G is suffixed to the verb), the norm is to place the *dik'* after S and before O. I. e., the whole predicate is negated, not the whole sentence.

The whole Eyak corpus, given the nature of Eyak syntactic practice, contains no sentence including all those elements, with all these constituents filled, unless by zero. The actual closest to that is not spontaneous but a deliberate elicitation, obviously, in (2), showing the order S O C V.

- (2) 'anh xi:l 'Aw XAwa: dAkinh 'u-'sA-L-Xa'L  
 HUM.SG shaman NHUM dog stick 3-DIR-PFV-CL-turn.O.into.C  
 'the shaman turned the dog into a stick' (from Lena)

That could (but wasn't) easily and safely be further filled, e.g. to include a connective Introductory constituent and a Preverbal constituent containing postpositional phrase with over noun, as in (3), showing order I S [O [C P] V].

- (3) ['u:ch'ahd q'AW]<sub>I</sub> ['anh xi:l]<sub>S</sub> [['Aw XAwa:]<sub>O</sub> [dAkinh]<sub>C</sub> [si-ya:n'a:  
 then HUM.SG shaman DET.NHUM dog stick 1s-mother  
 q'e']<sub>P</sub> ['u-'sA-L-Xa'L]<sub>V</sub> ]<sub>VP</sub>  
 for 3-DIR-PFV-CL-turn.O.into.C  
 'then the shaman turned the dog back into a stick for my mother' (constructed)

However, as noted, such syntactic resource is hardly used in practice, even in narrative speech style. The norm is far "looser" syntax than that, in much shorter sequences, broken by more or less audible pauses or intonation discontinuities. In other words, extraposition occurs with great frequency, in what is probably the majority of sentences, certainly so in spontaneous text. Thus "tight" sentences with more than one or two of the constituents before the verb actually filled are rare. Sequences of filled SV or of filled OV are frequent, but filled SOV is far less so.

We need to keep the perspective of the looseness of the syntactic norm, and will return to that, but begin the exemplification with fuller sentences. A very nice example is (4), showing S O [P V]. Almost all stems are monosyllabic.

- (4) ['anh LinhGih k'u-'ehd]<sub>S</sub> ['Aw t'ahL]<sub>O</sub> [[giyah-ya'X]<sub>P</sub>  
 HUM.SG other INDEF-wife that leaf water-into.broad.opening  
 [yAX]<sub>P</sub> [q'e']<sub>P</sub> ti:LA-tsu:x ]<sub>VP</sub>  
 downward back QUAL-thrust  
 'That other wife thrusts the leaf back down in the water.'



It is particularly worth noting that (4) is from a text dictated by Lena, thus much more “thought out” or planned than is usual from Anna on tape. Another such sentence from Lena is (5), showing I S O [P V].

- (5) [wAX q'Aw]<sub>I</sub> ['anh sAqe:ts'Akih]<sub>S</sub> [dA'u:d ta:-ya'-d]<sub>AP</sub> ['Aw  
 thus TOP HUM.SG child right.there path-in-at.rest DET.NHUM  
 ye's]<sub>O</sub> [[ya:n']<sub>P</sub> sA-Lyah-L]<sub>VP</sub>  
 potlatch.leftovers rest.on.surface PFV-handle.in.container-PFV  
 ‘Thus the child set down the potlatch-food right there in the doorway.’

Here, the adverbial phrase *dA'u:d ta:ya'd* could be moved elsewhere, probably best after O to the start of P. Very similar to that, also from Lena, elicited, is (6), showing S O P V.

- (6) ['Aw XAwa:-shiyah si-Xa']<sub>S</sub> [Lich' gah-Xye'X]<sub>AP</sub> ['Aw si:nL  
 DET.NHUM dog-bad 1S-with every day-all.long DET.NHUM shoe  
 si-Xa']<sub>O</sub> [[ya']<sub>P</sub> qA-sA-L'a'tl'-L]<sub>VP</sub>  
 me-with completely PL-PFV-chew-PFV  
 ‘That bad dog of mine all day long chewed my shoe to bits.’

Here the temporal adverbial phrase *Lich' gah-JX-ye'X* precedes the object (*si:nL* ‘shoe’), but it could be moved to I or P. The postpositional phrase *siXa* ‘1s-with’ is syntactically ambiguous, as it could be either part of the object as possessive, or(/and!) could be the first part of the predicate, as a preverbal, “on” me’. (See §25.3 for further on the significance of this.) We have a few sentences (cf. (7)–(9)) with relatively full syntax [i.e., containing multiple full noun phrases] in the notebooks elicited specifically as such.

- (7) with nominal S and O  
*XAwa: giyah dAlah*  
 dog water drink  
 ‘A dog is drinking water’ (I 26 L)
- (8) with nominal S, O and P
- 'anh Lila: q'ahsh XAwa:-ch' sAltahL*  
 PROX man bone dog-to gave  
 ‘The man gave a bone to the dog.’
  - XAwa: du:sh lis-da:q' gusALdahL*  
 dog cat tree-up chase  
 ‘a dog chased a cat up a tree’ (V 65 L)
  - 'Aw ku'lAw (XAwa:) 'Aw ya:kuts'g (XAwa:) sAqahL*  
 PROX big dog DIST little dog bit  
 ‘The big (dog) bit the little (dog).’ (V 66 L)

- (9) with multiple nominal P

- a. *da:na: 'u:d shdu:lihG-da:q'd si-ya: ya:n' dAsALahL=inh*  
 money there table-on 1s-for down set=HUM.SG  
 'He set money down for me on the table there.'
- b. *da:na: si-ya: 'u:d shdu:lihG-da:q'd ya:n' dAsALahL=inh*  
 money 1s-for there table-on down set=HUM.SG  
 'He set money for me down on the table there' (V 66 L)

A few more such sentences were elicited including relative clauses (see §26.1).

Sentences with syntax so full and tight are, as implied, noticeably rarer in Anna's spontaneous taped texts than in Lena's dictated ones. A few sentences with overt noun S and O may be noted, as in (10).

- (10) a. *'anh k'u-qa' 'AXAkih 'u-Xa' tsa' sALXahdL*  
 HUM.SG INDEF-husband canoe 3-with down.to.shore dragged  
 'The husband dragged his canoe down to shore.' (Anna)
- b. *Johnny 'u-yAqa'ts' sALxut'L*  
 J. 3-hand shot  
 'Johnny shot his (own) hand.' (Uncle.45)

Example (10b) is of maximum simplicity, absolutely simple SOV, respectively. Here, incidentally, the 'u- of 'his hand' happens to be 'his (own)', only because the fact was otherwise known. There may at the same time be a correlate here, that in Anna's "unplanned" narrative, such style does not easily accommodate to more than one overt argument except in the simpler sentences, where not much else is going on. Otherwise the usual extrapositions start to take place.

Extrapositions are a norm however even in the simplest of transitive sentences, such as

- (11) *'Aw qe'gu:l 'Aw shAshehL, 'Aw radio, 'Aw shAshehL*  
 DET thunderbird NHUM kill DET radio NHUM kill  
 'the thunder(bird)/lightning killed it, the radio, it killed it'.

The second and fourth 'Aw are demonstrative pronouns for the object (whether as P or O cannot be determined). The first and third 'Aw are determiner. The object noun phrase 'Aw radio is extraposed, equally rightward for the first verb, and/or leftward for the second. It seems arbitrary to interpret the stretch, two sentences, both with loose syntax, one way or the other, e.g. 'The thunder, it killed it. The radio, it killed it.' The reason the sentence or stretch was not instead *'Aw qe'gu:l 'Aw radio shAshehL* 'the thunder killed the radio' as in the preceding sentence must, it seems, be due to the state or nature of modern Eyak syntax rather than to disuse of the language.

Likewise, even in intransitive sentences, extraposition is just as likely, also in either direction. Thus for example in perfectly normal *sAsinhL(inh)*, *'anh qe'L*, *sAsinhL(inh)* 'she died, that woman, she died, V, S, V., it seems quite arbitrary to decide whether the noun

phrase subject, belongs with the first verb or with the second. Hence also the reason for avoiding the terminology involving left and right “periphery.” If the second verb lacks the =*inh* enclitic, and at the same time the second comma is inaudible, creating a sentence with “tight” syntax, *'anh qe'L sAsinhL*, even then that interpretation is not absolutely required. Such is the nature or state of modern or attested Eyak syntax.

### 25.2.1 Notes on sentences with Complement

The meaning of the term Complement for Eyak, admittedly old-fashioned, is to be clarified in the following. The few verbs of being or identity or naming which take a Complement are listed in (12).

(12) Complement taking verbs

C *-Le(')* ‘be C’

C O-*'-l-L-Xa'* ‘make O be C’<sup>1</sup>

C O-*'-l-'e* ‘name O C, call O C’

C O-*'-l-LA-le(')* ‘think O C’

Only the first of these, C *-Le(')* ‘be C’ is intransitive. (This verb is to be sharply distinguished from *-t'e' ~ 'be'* which takes not a direct complement, but a preverbal, especially a postpositional phrase, e.g. comparative *o-ga'* ‘like o’). The Complement must be a noun or noun phrase, not e.g. a demonstrative pronoun. This C can also be an independent adjective used as a noun, e.g. *k'udzu:* ‘(something) good’, *k'ushiyah* ‘(something) bad’, or positive dimensional *k'u'lAw* ‘(something) big’, negative dimensional *ya:kuts'g* ‘(something) small’. For these see Chap. 19 on adjectives, including §19.2 on their syntactic function. A relatively full example is *sita:' 'Aw XAwa: k'udzu: 'u'siLXa'L* ‘my father made the dog (be) good’, elicited from Lena. Note also that the classified noun complement does not entail corresponding class-mark in the qualifier of the verb, as in *yahdsh da'li:LXah* ‘do you have a house?’ (*d*-class O). Here the verb is the O-*'-l-L-Xa'* theme where O is filled with unique *dA-*, not a class mark, which would combine with the *l-* qualifier. The object of the English gloss is C in Eyak, not O, thus ‘have C’. Therefore the verb is not *\*da'dli:LXah* including *d-* qualifier, which it would be only if the O were a *d*-class noun. This shows that *yahd* ‘house’ (*d*-class) is not the object but a complement. The Complement can also be a number of adverbial or preverbal items that do not act as S or O, as in *'uta:' 'Ashdih 'Aw 'u'li:Xinhinh* ‘his father wondered about it’ (< ‘his father keeps it being unknown’), with many more examples under this verb theme in the lexicon.

Since C also cannot be simply a pronominal prefix or a preverbal pronoun, e.g. a demonstrative, for first and second persons C must be the independent pronoun, *xu:* ‘I’, *'i:*

<sup>1</sup> Suppletive causative of the preceding, including the unique theme C *da-'-l-LXa'* ‘have C’.

‘you sg’, *GAyAG* ‘we’, *IAXi*: ‘you pl’. Attested examples are *'i: xiLeh da:X* ‘if I were you’, *di'wAX xu: 'a:nd da'li:LXah* ‘you still have *me* here’. For further examples generally, see the lexicon under the stems *Le(')*, *Xa'*, and the other relevant verbs. For third person pronouns we lack examples. For ‘if I were he’ it might well be *'a: xiLeh da:X*, but explicit pronominal confirmation for e.g. John *k'udzu: yiLeh* ‘John is good/well’ probably cannot be John *\*?'Aw yiLeh* for ‘John is that, *Jean l'est*.’

There are many examples of sentences with complements easy to find in the dictionary (Krauss 1970a) under the relevant verbs. One interesting case with S C V is (13). A sentence with indirect reflexive is (14).

- (13) [*'u-ni:k'*]<sub>S</sub> *'u-wa: 'AdAX dA'wAX [Ga:ndich'ich'g]*<sub>C</sub> [*yiLeh*]<sub>V</sub>  
 his-nose him-for however still bird is  
 ‘His nose however is still a bird(’s nose).’ (Marie, dictated)

- (14) [*'Al Ga:ndich'ich'g-yu:*]<sub>O</sub> [*'u-kuwa'na:G*]<sub>C</sub> *'Aw* [*'u-'LiXah*]<sub>V</sub>  
 DET.NHUM bird-PL his-partner DET.NHUM he-treats]  
 ‘He treats the birds as his (own) partner.’ (Anna, text)

In (14) C is *'ukuwa'na:G* ‘his (own) partner(s)’, adding D- element to the classifier, and *'Aw* either refers to S (Raven) or redundantly to O. The reflexivity shown in the vocalized classifier of the verb, *Li-*, also shows, most significantly, that the C is unlike the O sector but like the Preverb sector. Unlike (10b) above, where the classifier in the verb correctly remains non-syllabic, here ‘his own partner(s)’ in C does trigger vocalization of the classifier. This makes the Complement more like the preverbal, in that where the object of a preverbal preposition is coreferent with the subject, that triggers vocalization of the classifier.

This behavior, of C more like P than like O, correlates too with the fact shown above, that classified nouns as C do not trigger corresponding class mark in the verb, as noted in *yahd da'li:LXah* ‘he has a house’ above. This too makes C more like P than like O; one may say, literally “closer” to P than to O.

Basic word order may be somewhat less rigid for C in certain cases than for S and O. We have the “normal” sentence (15a), with O C V order, immediately followed by (15b) with C O V order.

- (15) a. [*'i: 'i-dAGAleh*]<sub>O</sub> [*'i-ya:*]<sub>P</sub> [*k'udzu:*]<sub>C</sub> [*'u'la:xiLXah*]<sub>V</sub>  
 2s 2s-mind 2s-thing good OPT.1s.make  
 ‘That I might make you happy.’ (lit. ‘make your mind good’)  
 b. [*k'udzu:*]<sub>C</sub> [*'i-dAGAleh*]<sub>O</sub> [*'u'la:yiLXah-wahd*]<sub>V</sub>  
 good 2s-mind OPT.make-for.the.sake.of  
 ‘In order that it make you happy.’

This reverse (C S V) order is confirmed e.g. in (16).

- (16) [k'ushiyah]<sub>C</sub> [ 'u-dAGAleh ]<sub>S</sub> [GA-Le']<sub>V</sub> da:X  
 bad her-mind COND-be when  
 'When her mood was bad.' (A25.138)

### 25.2.2 Pronouns in the preverbal constituent, especially demonstratives

Overt personal pronouns for first person singular and second person singular and plural S and O occur as prefixes in the verb word itself. First person plural subject *da:* and object *qa:* occur as preverbs. Third person pronominal subjects and objects, on the other hand are all zero within the verb, so if overt as demonstratives, they may appear in the preverbal constituent, as noted in Chap. 16. This is in addition to the possibility that they may appear as homophonous demonstratives in the S and O constituents, as shown below (§25.2.4). Thus, in P, as mentioned, we have specifically first person plural subject *da:* and object *qa:*; reciprocal object 'iLu' and sometimes reflexive object 'Ad (also a prefix, ambivalently). There we may also have all non-zero third person pronouns, for both S and O. Such third person pronouns are necessarily the four demonstratives: non-human distal or unmarked 'Aw (singular or plural), proximal 'Al, marked (singular or plural); and human singular 'anh, plural 'ahnu. The co-occurrence of these items with the rest of the preverbals is discussed in §16.7. That covers the co-occurrence of these pronouns with the rest of the preverbals, along with the internal syntax of the whole preverbal sector. In view of that, what is needed here is an examination of the data specifically for subject and object in the case of the four third person pronouns, the demonstratives. (The personal pronouns distinguish between subject and object in 1p *da:* and *qa:*; the reciprocal and reflexive are object only.) Since the two pairs of third person demonstratives, non-human 'Aw and 'Al, human 'anh and 'ahnu: are not themselves distinguished for subject opposed to object, this can and does become a major issue for Eyak syntax. As we shall see in §25.2.3, it indeed becomes a major issue especially with the spread of the human relativizing enclitics =inh singular and =inu: plural into the argument business. To this issue must yet be added the homophony of the demonstratives as determiners and as pronouns. These ambiguities have already been mentioned above, and will be discussed further here.

At this point, we come to what may be the scene of my very worst offense of failure to document the Eyak language as fully as possible. At no point did I systematically elicit full exemplification of the forms needed to determine the rules of Eyak syntax regarding pronouns for subject as opposed to object. (Throughout the present discussion, the simple examples given here are not or may not be actual sentences attested in the corpus. That is, some of the examples have been constructed for the purposes of exemplification. The reason is strictly for convenience of the writer and reader, with simple repetitive vocabulary. The sentences must be correct, accordingly to my knowledge of Eyak.)

With intransitive verbs, as noted, the subject-object issue does not arise, of course. It is possible for the verb alone to constitute a sentence: *tsu'd* 'it is sleeping'. This is possible because the simple (non-demonstrative) pronoun for third person non-human singular or

plural subject (or object) is zero. With demonstrative pronouns or overt nouns with or without demonstrative determiners as subject, we have phrases such as (17).

- (17) Intransitives with and without demonstrative determiners (constructed)
- a. 'Aw *tsu'd*  
DIST sleep  
'It is sleeping.'
  - b. 'anh *tsu'd*  
HUM.SG sleep  
'He is sleeping.'
  - c. XAwa: *tsu'd*  
dog sleep  
'a dog is sleeping.'
  - d. 'Aw XAwa: *ts'ud*  
DIST dog sleep  
'the dog is sleeping.'
  - e. dAXunh *tsu'd*  
person sleep  
'a person is sleeping.'
  - f. 'anh dAXunh *tsu'd*  
HUM.SG person sleep  
'the person is sleeping.'

In these intransitives, where demonstratives are combined with the noun subjects, preceding them, it is clear that the demonstratives here must be determiners for the nouns, not separate pronoun arguments.

With transitive verbs, and two arguments, complications of ambiguity arise. These will be treated further below in §25.2.4.

### 25.2.3 Relativizer enclitic spread, ambiguities

As already noted, the picture here is complicated also by relativizer enclitic spread. Since the relativizer for non-human subject is zero, then ('Aw) *tsu'd* 'it is sleeping' can also mean 'that which is sleeping', and since relative clauses are right-headed, ('Aw) *ts'ud* XAwa: is '(the) dog which is sleeping'.

For humans, however, the relativizer cannot be zero but must be enclitic =*inh* human singular (HUM.SG) or =*inu:* human plural (HUM.PL), cf. (18a).

- (18) a. ('anh) *tsu'd=inh* dAXunh  
HUM.SG sleep=HUM.SG person  
'(the) person who is sleeping'

- b. *'anh tsu'd=inh*  
 HUM.SG sleep=HUM.SG  
 '(that human) who is sleeping'
- c. *'anh tsu'd*  
 HUM.SG sleep  
 'he is sleeping'
- d. *tsu'd=inh*  
 sleep=HUM.SG  
 '(a human) who is sleeping' (with obligatory enclitic =*inh*)

A simple intransitive sentence like (18b) with both human singular demonstrative pronoun *'anh* and human relativizing enclitic =*inh* can in principle only be a relativization, since with only one argument, explicitly the demonstrative pronoun *'anh* which has to be the subject, the =*inh* enclitic cannot also represent the subject so must still be a relativizer. Unless redundancy is allowed—it is certainly not preferred—or there is a pause to disconnect, (18b) must only be a relativization.

However, if a singular human subject is pronominalized to *'anh*, there is the optional rule, very frequently operating, that a form such as (18c) is realized as (18d). This is the relativizer spread to subject. As a result, the S constituent must be empty, and *'anh* should be absent from P. Likewise, for 'they (humans) are sleeping', we have *'ahnu: tsu'd* realized as *tsu'd=inu:*, with no overt subject preceding the verb in the result.

This optional rule or innovation results in an ambiguity between relativized noun phrase 'they who are sleeping', and verb 'they are sleeping'. This may seem trivial in the larger scheme, considering that the ambiguity arises only where the verb serves as head, since a noun head would follow the verb, not precede it, as in (19a).

- (19) a. *tsu'd=inu: qe'LGAYu:*  
 sleep=HUM.PL women  
 'women who are sleeping'
- b. \* *qe'LGAYu: tsu'dinu:*

It is quite a different matter, though, with transitives. As noted, the optional rule of relativizer spread operates just as well on object as on subject. Therefore in transitive sentences, inherently with two arguments, this rule produces much more significant ambiguity. For example, with only one argument preceding the verb in (20) it is unclear whether the demonstrative pronoun *'anh* refers to the object or subject, and whether the relativizer =*inh* indexes subject or object.

- (20) *'anh sA-sheh-L=inh*  
 HUM.SG PFV-kill-PFV=HUM.SG  
 'He/she killed him/her.'

In fact, in part because of homophony of subject and object demonstratives, it is also unclear whether *'anh* occupies the S, or O, or P constituent.

- (21) *qe'L sAshehL=inh*  
 woman kill.PFV=HUM.SG  
 'S/he killed a woman.' or 'A woman killed him/her.'

Note the point arising in the discussion of negation, which shows the basic syntactic structure bracketing O with V in S [O V], noted also above, described §24.3.3.3. There it is shown that the positioning of the negative word *dik'*, after the subject and before the object, can partially disambiguate the type of sentences discussed here. E.g. *lixah dik' sAshehLGINh* must presumably mean only 'the grizzly bear didn't kill him' and *dik' lixah sAshehLGINh* must presumably mean only 'he didn't kill a grizzly bear'.

In the case of '*anh qe'L shAshehLinh* with demonstrative '*anh*', we come to a different level of ambiguity because of the dual function of demonstratives as determiners or pronouns. Where '*anh*' is interpreted as a determiner, both the predicate and relative clause readings are possible (22a) (see §26.1), whereas parsing '*anh*' as a demonstrative pronoun admits only the relativized reading (22b).

- (22) a. [*'anh qe'L*] *sAshehL=inh*  
 HUM.SG woman killed=HUM.SG  
 'S/he killed the woman.' or 'S/he who killed the/that woman.'
- b. '*anh [qe'L sAshehL=inh]*  
 HUM.SG woman killed=HUM.SG  
 'S/he who killed a woman.' (or, less likely, 'S/he whom a woman killed.')

(Further 's/he who killed the/that woman' or 's/he whom the/that woman killed' would presumably be '*anh [anh qe'L sAshehL=inh]*', as the sequence '*anh anh*' is allowable because they belong to separate constituents, while it may not be otherwise. See also §25.2.4 for more on the demonstrative determiner and pronoun ambiguity.)

As a side issue, relativizer spread could indeed give the naïve learner looking for paradigms the reasonable impression that the personal conjugation might include the endings *=inh* and *=inu:*, at least where there is no subject noun or pronoun for the third person; so e.g. for *tsu'd* 'sleep': 1s *xtsu'd*, 2s *yitsu'd*, 3s *tsu'dinh*, 1p *da: tsu'd*, 2p *lAXtsu'd*, 3p *tsu'dinu:*. This is essentially an illusion, however, as will be demonstrated below.

The impression that the enclitics *=inh* and *=inu:* refer here to the third person human subject ignores that fact that these enclitics can refer equally well to the human object of the verb. Not only that, however, but they may refer also even to the human indirect or oblique object of a postposition or possessor of a noun. This is so provided that those human arguments are represented not by a noun or demonstrative pronoun but by zero (subject, object), or personal pronominal prefix ('*u-*, not a demonstrative) as possessor or postpositional object. To demonstrate this oblique use, we start here with the first person subject, avoiding combined third person subject and objects, direct or oblique. Sticking to intransitives so also to oblique objects, we have (23).



- (23) a. *dAXunh-Xa' x-tsu'd*  
 person-with 1s-sleep  
 'I am sleeping by a person.'
- b. *'anh dAXunh-Xa' x-tsu'd*  
 HUM.SG person-with 1s-sleep  
 'I am sleeping by that person.'
- c. *'anh-Xa' x-tsu'd*  
 HUM.SG-with 1s-sleep  
 'I am sleeping by that (singular human)' / 'I am sleeping by him.'

However, if the postpositional object (o) is not a demonstrative pronoun, but the simple third-person *'u-*, we have (24), with the enclitic *=inh* indexing the pronoun *'u-*.

- (24) *'u-Xa' x-tsu'd=inh*  
 3-with 1s-sleep=HUM.SG  
 'I am sleeping by him.'

Likewise, in (25a), where the demonstrative *'anh* refers to the possessor, there is no relativizer on the verb, but in (25b) with the same meaning, where the possessor is expressed by the simple third personal pronoun, the relativizer appears.

- (25) a. *'anh-ta:'-Xa' x-tsu'd*  
 HUM.SG-father-with 1s-sleep  
 'I am sleeping by his father.'
- b. *'u-ta:'-Xa' x-tsu'd=inh*  
 3-father-with 1s-sleep=HUM.SG  
 'I am sleeping by his father.'

The same pairing is found with a third plural possessor:

- (26) a. *'anhnu:-ta:'-Xa' x-tsu'd*  
 HUM.SG-father-with 1s-sleep  
 'I am sleeping by their father.'
- b. *'u-ta:'-Xa' x-tsu'd=inu:*  
 3-father-with 1s-sleep=HUM.PL  
 'I am sleeping by their father.'

We do have at least one instance of the *=inh* enclitic where there is no grammatical justification for it evident, no antecedent within the sentence:

- (27) *GALAtsAtl'-tah, q'e:dah de:ga'dAw qa' di:'-yahL=inh*  
 land.otter-skin simply how.many up.out PREV-piled=HUM.SG  
 'Land-otter skins, simply how many were piled up' (Anna 33.41)

The context for (27) is about a man, and both the preceding and following sentences have verbs with *=inh* in reference to him, whereas the translation of (27) makes no reference to

this participant. Perhaps another such example is in one of the few snatches of song text we have:

- (28) *ts'Al-X*                      *s-Li-du:ts'-L=inh*  
 bone-by.means.of PFV-CL-snot-PFV=HUM.SG  
 'it has dry-snotted to bone [on her?]' (Marie 72.40)

In (28) the subject of the verb, which seems to be poetically derived from the noun *du:ts'* 'dried nasal mucus' seems hardly to be the girl herself. The preceding sentence of the song text, similarly ending with *=inh* includes as postpositional phrase *'uni:k'-yAX* 'under her nose', which is the antecedent justifying the preceding *=inh*. That may very well be considered to "carry over" to the next sentence in this case. There are perhaps further such sentences in the corpus, but they are certainly rare, which may be said to be "stretching" Eyak grammar.

The rules for relativizer spread with non-third person subject in transitive verb sentences are equally tractable. Examples of this are presented in (29).

- (29) a. *XAWa: 'u-Xa' shi-sheh-L=inh*  
 dog 3-beside 1s-kill-PFV=HUM.SG  
 'I killed his dog.'  
 b. *'u-ni:k' GA-x-'inh=inh*  
 3-nose THM-1s-see=HUM.SG  
 'I see his nose.'

Thus, the spread in use of relativizer enclitic applies equally to the direct and oblique object as it does to the third person subject.

This much clarity remains even with a third person subject and third person direct or oblique object if the arguments are both or all represented by nouns, noun phrases, or demonstrative pronouns. For this, cf. (30), where both argument sectors are overtly filled by nominal phrases or demonstrative pronouns.

- (30) Sentences with both argument sectors filled
- a. (*'anh*) *Lila: ('anh) qe'L-Xa' tsu'd*  
 HUM.SG man HUM.SG woman-with sleep  
 'man is sleeping by woman' (intransitive with or without demonstratives or determiners)
- b. (*'anh*) *Lila: ('anh) qe'L shAshehL*  
 HUM.SG man HUM.SG woman killed  
 'man killed woman' (transitive)
- c. (*'anh*) *Lila: ('Aw) ts'iyuh shAshehL*  
 HUM.SG man DIST black.bear killed  
 'man killed blackbear' (transitive)

- d. (*'Aw*) *ts'iyuh* (*'anh*) *Lila:' shAshehL*  
 DIST black.bear HUM.SG man killed  
 'blackbear killed man' (transitive)
- e. (*'anh*) *Lila:' 'anh shAshehL*  
 HUM.SG man HUM.SG killed  
 'man killed her'
- f. *'anh 'Aw shashehL*  
 HUM.SG DIST killed  
 'he killed it'
- g. ? *'Aw 'anh shAshehL*  
 DIST HUM.SG killed  
 'he killed it' (this pronoun sequence perhaps unattested)

Examples with two demonstrative pronouns (30fg) are clear if the pronouns are seen to occupy S and O sectors, respectively, perhaps also if both are seen to occupy P, but not if one is seen or can be seen to occupy O and the other P. These possibilities were not investigated. Perhaps also \*?'*anh 'anh shAshehL* 's/he killed him/her' and \*?'*Aw 'Aw shAshehL* 'it killed it', meaning perhaps clear, are not attested. This may be not only because no attempt was made to elicit such pronoun sequences, but because such sequences of two of the same demonstrative pronouns may be unacceptable.

In any case, as noted above, sentences in "tight" syntax with both arguments, the subject and object, overt before the verb, are not frequent in the corpus. Far more frequently, one or the other, if overt, is extraposed. Instead of a form with two demonstrative pronouns (31a) we are at least far more likely to get a form with a single demonstrative pronoun and a relativizer (31b).

- (31) a. \*?' *'anh 'anh shA-sheh-L*  
 HUM.SG HUM.SG PFV-kill-PFV  
 'she/he killed her/him'
- b. ? *'anh shA-sheh-L=inh*  
 HUM.SG PFV-kill-PFV=HUM.SG  
 'she/he killed her/him'

Since *=inh* in (31b) may refer to the object just as well as the subject, then presumably *qe'L shAshehL=inh* may mean 'she/he killed a woman' or 'a woman killed her/him'. Presumably *'anh qe'L shAshehL=inh* can likewise mean 'she/he killed the woman' or 'the woman killed her/him'. Conceivably one type of reading may be preferred over the other, but this was not tested in the field.

With only one overt argument for a transitive verb, e.g. *XAwa: shAshehL* 'it killed a dog' is perhaps a preferred reading, to 'a dog killed it', as this is in any case easily disambiguated with *XAwa: 'Aw shAshehL* 'the dog killed it', unambiguously. For the same reason *'anh shAshehL* might preferably be read 'it killed him' to 'he killed it', as this is easily disambiguated with *'anh 'Aw shAshehL*, as opposed to *'Aw' 'anh shAshehL* 'it killed him'.

The reason for this is probably not grammatical but merely circumstantial: (i) as noted, overt SO sequences are in fact not frequent in the corpus, including such sequences of demonstrative pronouns; (ii) inanimate or non-human subjects acting on human objects are far less common than the reverse; (iii) evidently no attempt was made to elicit and determine preferred readings of such sequences.

Nevertheless, it could be argued that proving the ambiguity we do have at least one perfectly simple counterexample of a non-human subject acting on a human object in the corpus:

- (32) 'Aw sA'ehL=*inh*  
 DIST married=HUM.SG  
 'It (octopus) married her' (A20.31)

It could be argued, on the other hand, that in the the subject 'Aw in (32) is not in the preverbal position but far to the left in the subject sector. Such an interpretation might be suggested by the repetition sequence in (33), without =*inh*.

- (33) *qid* 'anh sAAGL, 'ahnu: *qid* sAAGL  
 down.off HUM.SG threw HUM.PL down.off threw  
 'They threw him down off, they threw him down off.' (A7.35-36)

Note here that in the first clause in (33) the demonstrative pronoun 'anh 'him' follows the preverb *qid*, while in the second clause the subject 'ahnu: 'they' precedes *qid*, so that the demonstrative subject could be seen to fill the subject sector instead of being preverbal. It definitely does not have to be so seen, however, but it could just as well also be preverbal. In (34) the subject demonstrative 'ahnu: 'they' follows a preverbal postpositional phrase:

- (34) 'Aw 'AXAkih-ya' q'uhnu: 'ahnu: GA-L-Xe'dz-L  
 DIST canoe-in 3p HUM.PL INCEP-CL-carry.on.shoulder-PFV  
 'They were shouldering her along in the canoe.' (A25.10)

That phrase could be said to be fronted in addition to being topicalized with *q'uhnu*; making the subject demonstrative 'ahnu: itself redundant. More likely expected would be the object 'anh 'her', especially since no enclitic =*inh* for 'her' is present.

Soon after that in the same text in (35) we have a still more explicit redundancy for the subject, repeating the subject instead of the more grammatically expected 'Aw for the object 'it' (canoe) in the preverbal sector.

- (35) 'ahnu: 'a:ng-ALA'a:n' 'ahnu: GA-L-Xe'dz-L  
 HUM.PL river-coming.upon HUM.PL INCEP-CL-carry.on.shoulder-PFV  
 'They carried it along to a river.' (A25.14)

The argument that the demonstrative occupies the subject sector could be made for 'ahnu: 'u'di:Lqe'dX(*inh*) 'they ask him/her' (several times: L18.52, A25.111, L41.7, L53.21).

Likewise for (36b) and (36c) This argument can not be made, however, for (36a), where the last *'ahnu:* subject, following the object, though redundant, must be preverbal..<sup>2</sup>

- (36) a. *'ahnu: 'anh qe'L-Akih 'ahnu: sALku:n'dL*  
 HUM.PL HUM.SG woman-DIM HUM.PL grabbed  
 'They grabbed the girl.' (A23.80).  
 b. *'ahnu: sALku:n'dL=inh*  
 HUM.PL grabbed=HUM.SG  
 'They grabbed her' (A23.81)  
 ...  
 c. *'ahnu: sALku:n'dL da:X*  
 HUM.PL grabbed and  
 'They grabbed her and...' (A23.83)

Another example with a subject pronoun explicitly following a preverbal is (37), though here the preverbal is a postposition rather than a preverb and the object is reflexive.

- (37) *'u-lah 'Aw 'Ad=sLi-tl'ihL*  
 3-around DIST RFLX=ASP-wrapped  
 'It [octopus] wrapped itself around her' (A20.11)

That there is no enclitic *=inh* spread in this case in spite of the *'u-lah* 'around her (human)' merely shows, once again, the the enclitic spread is purely optional.

The lack of perfect minimal pairs to constitute direct proof that e.g. *'Aw shAshehLinh* 'he killed it' can also mean 'it killed him' should be considered only my fault. The degree to which, the sentence can literally "just as well" mean 'it killed him', in spite of the statistical preponderance of human subject in such cases, remains open to question. Moreover, it appears from some of the above that even *'Aw shAshehL* could be ambiguous; it normally means 'S killed it', but this is only to some degree the preferable reading, and it could also potentially be read 'it killed O'.

The clearest or most direct way to disambiguate for subject and object is to use both nouns overtly in connected SO order, thus *XAwa: Lila: 'sAqahL* 'dog (*Xawa:*) bit man (*Lila:*)'. (See also (1) above.) Probably also both pronominalized *'Aw 'anh sAqahL* 'it bit him' is almost as clear. Further, *XAwa: 'anh sAqahL* with only the object pronominalized is at least much more likely to be read 'dog bit him' than the reverse. Likewise *qe'L 'Aw sAqahL* 'a woman bit it', *XAwa: 'Aw sAqahL* 'a dog bit it' or *qe'L 'anh sAqahL* 'a woman bit him/her'. In other words the relative order of overt subject and object may be, without relativizer spread, a dependable guide in connected syntax.

<sup>2</sup> These three instances are almost consecutive in Anna's text, to which the reader is referred for an idea of typical spontaneous performance and narrative discourse structure. See below, at the end of this section, for further consideration of the status of *'ahnu:*.

We have at least one clear example of routine but deliberate disambiguation in an intransitive sentence:

- (38) *wAX 'anh-tl' dAleh, 'u-'ehd-tl' wAX daleh*  
 thus HUM.SG-to say, 3s-wife-to thus say  
 '[She/he] said this to he/her, [he] said thus to his wife'.

Here, in conversation between spouses, the human singular demonstrative pronoun *'anh* in the first clause could refer to either spouse. This is resolved in the second clause by then supplying *'u-'ehd* 'his wife' as the explicit object of the postposition, interestingly, rather than supplying e.g. *'u-qa* 'her husband' as subject. Perhaps this is because the subject has no pronominal antecedent in the first main clause.

Finally, we may conclude this subsection with an especially interesting syntactically rich example sentence, in a text dictated by Lena:

- (39) *'ahnu: GA-she=:X 'ilinh=inh, 'u-LAX xi:l 'ahnu:*  
 HUM.PL INCEP-kill=DESID wanted=HUM.SG 3-this.way shaman HUM.PL  
*yiLeh=lehd*  
 be=because  
 'They wanted to kill him, because he was more of a shaman than they.' (56.21)

This is a doubly complex sentence, so presented somewhat out of order, before any presentation of complex sentences. The first clause in (39) is itself complex, with desiderative verb *GA-she:X* 'that they kill him' subordinate to *'ileh* 'they wish'. The second clause is subordinated to the postposition *o-lehd* 'because of o'. Both these aspects of the complexity are accounted for in some detail in the subsections below on complex sentences with subordination by postposition and with subordinate clause in desiderative mode (§26.5). The second clause, extraposed subordinate, has its own internal interest, *'ulAX xi:l* 'more of a shaman than they' being the complement of the verb *yiLeh* 'is', where *'ulAX* 'more than they' here precedes *xi:l* 'shaman' rather than follows it in preverbal position. This is clearly because the postpositional phrase here is attribute to *xi:l* 'shaman', in accordance with the basic right-headedness of Eyak syntax.

Most interesting of all, and the reason for presenting (39) here, is the use and positioning of the demonstrative pronoun *'ahnu:* in both clauses. The *'ahnu:* of the first clause is easier to explain, especially in view of the ambiguities described in this subsection. The first clause of three words looks as if it should mean 'he wanted to kill them', given that the human singular enclitic *=inh* is attached to the main verb, and the *'ahnu:* could most certainly be the object of subordinate desiderative *GA-she:X* 'kill'. It is important to note that this sentence is from a text dictated by Lena, glossed and reviewed by her. This gives it a high degree of authenticity, including the translation, also confirmed by the narrative context. Therefore, what we see here is the spread of the enclitic use from the subordinate verb, where it cannot be used, to the main verb. Such spread in complex sentences will be discussed in §§26.2–26.6, but here it is indeed interesting that the *=inh* 'him' referring to

the object of the subordinate verb is attached to the main verb *'ileh* 'want'. Certainly *'anh* *GAshē:X 'ilinh=inu:* 'they want to kill him', with singular demonstrative pronoun *'anh* and plural enclitic *=inu:*, would also be correct, and perhaps more to be expected, insofar as linearity is to be expected of language. This is certainly a nice counterexample to that.

The *'ahnu:* of the extraposed subordinate clause is harder to explain than the *'ahnu:* of the main clause. For 'because he was more of a shaman than they', *'ahnu:lAX* [or *'ulAX*] *xi:l* (*'anh*) *yiLe:lehd* should certainly be expected. The attested form looks like a genuine error that somehow was allowed to stand. The reason for the error, or the reason for considering the sentence somehow to be correct, would have to be that the plurality of the subject pronoun of the intransitive verb is somehow a reference to the *'u-* of the *'ulAX*, and/or due to some optional rule favoring *'ahnu:* over *'anh* in pronominal positions in some way. Note, for example the same favoring of *'ahnu:*, repeatedly, in examples (??) and (??), and further examples of that, above in this subsection. There may indeed be some dominance principle attached especially to the use of *'ahnu:* among the demonstrative pronouns.

There is highly significant previous literature on this subject, looked at in a different way, by Leer (1991a). This article appeared 22 years before this chapter was first drafted. The Eyak data in the article are from personal communication with me and Leer's reading of Krauss (1965). The import of the article is of course far broader than the present discussion, implying contact between Eyak, Aleut, and Haida on the basis of this typological trait. Leer calls it "promiscuous number marking," and claims that to be "strong" evidence for diffusion between these three genetically unrelated languages. This argument is strengthened by another typological trait that Leer calls "periphrastic possession constructions," for which see §25.3.1 as well. The article deals also with Tlingit and Athabaskan, showing that Tlingit shows a part of the promiscuous number marking but not the periphrastic possession, Athabaskan shows neither (in spite of a misprint in his summary), and Chugach neither. Leer is dealing strictly with diffusional phenomena, not genetic relationships. It is all the more significant that his claims concord neither with genetic relations nor with historically known geographic configurations.

Leer calls the number marking, for human arguments only, i.e. *=inh* and *=inu:* in Eyak, representing *'anh* and *'ahnu:*, "promiscuous" because they may refer to subject, object, or oblique object, indistinguishably. He not only presents the basic facts insightfully, but provides an unexpected historical or areal perspective. Also more generally, he provides perspective, that this is a "strong" trait, far from routine, along with the lack of labials, involving other languages in the area, and along with the "periphrastic possession," for which see §25.3.1.

The present discussion provides more detail, especially on ambiguities arising in connection with what is here called relativizer spread. For instance, the example Leer cites (40) as meaning only 'her dog killed them' (Leer 1991a: 166), however, the human referent can also be subject in this example.

- (40) *XAwa: 'u-Xa' 'ahnu: shA-sheh-L=inh*  
 dog 3s-with HUM.PL PFV-kill-PFV=HUM.SG  
 or 'they killed her dog'

Leer (1991a) does not consider the historical origin of this use of the enclitics, or their identity with these enclitics as relativizers. Historically, the Eyak singular human =*inh* relativizer must be cognate with the Athabaskan \* $\text{-}\text{\textcircled{a}}\text{n}$ . The plural is presumably from \* $\text{-}\text{\textcircled{a}}\text{n-yu}$ ; cf. the Eyak suffix *-yu*: specifying plural for both human and non-human nouns, not cognate with the Athabaskan human plural relativizer \**-ne*:. Synchronically, the demonstratives *'anh* and *'ahnu*: are presumably the full pronominal forms, while =*inh* and =*inu*: are enclitics reduced from those.

### 25.2.4 Demonstratives as determiners and as pronouns, ambiguities

Before continuing with subject-object syntax, there is the second type of ambiguity inherent in demonstratives to elaborate at this point, the homophony of all demonstratives as determiners and as pronouns. As noted above (§25.2.3), a sentence such as *'anh qe'L shAshehL* in (41) can be parsed in two ways, depending on whether *'anh* is read as determiner to the object, or as a separate subject demonstrative pronoun.

- (41) a. [*'anh qe'L*] *shAshehL*  
 HUM.SG woman killed  
 'it (non-human) killed the woman'  
 b. *'anh* [*qe'L shAshehL*]  
 HUM.SG woman killed  
 's/he (human) killed a woman'

Likewise (42) has two readings, as the determiner agrees with the noun as plus/minus human, as also in the preceding (41).

- (42) a. [*'Aw XAwa:*] *shAshehL*  
 DIST dog killed  
 'it killed the/that dog'  
 b. *'Aw* [*XAwa: shAshehL*]  
 DIST dog killed  
 'it/that killed a dog'

Where the determiner disagrees with the noun as plus/minus human, as in (43), only one reading is possible.

- (43) a. *'Aw qe'L shAshehL*  
 DIST woman killed  
 'it killed a woman'



- b. *'anh XAwa: shAshehL*  
 HUM.SG dog killed  
 'he killed a dog'

The demonstratives can also be determiners for possessed nouns, e.g. *'anh 'uta:* 'that father of his'. Here the demonstrative refers to the noun *ta:* 'father', not to the possessor represented by *'u-*. A demonstrative for the possessor would be *'anhhta:* 'father of that one human'. The possibility of the combination *\*?'anh 'anhhta:*, with demonstrative determiner for both possessor and possessed, is probably not attested, and perhaps not admissible. (Cf. *\*?'anh 'anh shAsheL* above.) However, this structure also gives rise to the ambiguity of *'anh 'uta:* *shashehL* which could mean 'it killed that father of his', or 'he killed his father' (i.e. 'his own' or 'another's', moreover, as in English.)

With postpositions this parsing ambiguity does not apply, as in *'anh 'uXa* 'he with him', the demonstrative can refer neither to the postposition *o-Xa* 'with o' nor to the postpositional object if only a personal pronoun, here *'u-*. The demonstrative here has thus to be parsed as a separate argument and not attribute to *o-Xa*. (Also, the lack of distinction between reflexive and non-reflexive possessive prefix introduces yet another type of ambiguity.)

However, there is a relevant difference in relativized nominalizations, especially lexicalized ones, such as *o-Xa* *wAX 'i:t'inhinh* 's/he lives with o; o's spouse'. In this case *'anhXa* *wAX 'i:t'inhinh* 's/he lives with that (one human); s/he who lives with that (one human)' may perhaps even be 'a spouse of his/hers', but almost certainly 'that spouse of his/hers' can only be *'anh 'uXa* *wAX 'i:t'inhinh*. That *'anh* would itself become in turn ambiguous in *'anh 'uXa* *wAX 'i:t'inhinhXa* *sAsinhL* 'his/her spouse died on her/him' or 's/he died on her/his spouse', including all the coreference ambiguity of the English as well.

### 25.2.5 Third person differentiation with o/P

Eyak is somewhat like English in not fully distinguishing between different third persons. In spite of Lena's disinclination to differentiate the meaning of 'his' in 'he told him to paint his house', in notebook III 44-45 this issue is partly addressed with her, with some success. There we have *'uyAq'a'ts'[ch'] dla:Xit'inhinh* 'he<sub>i</sub> is looking at his<sub>i</sub> (own) hand', as opposed to *'anhYaq'a'ts'[ch'] dla:Xit'inhinh* 'he<sub>i</sub> is looking at his<sub>j</sub> hand'. Likewise *'Aw du:sh 'uXA* *lALts'in'tl'ginh* 'he's hitting his own cat', *'usha:w kusinh* 'he<sub>i</sub> is washing his<sub>i</sub> hair', *'anhsha:w kusinh* 'he<sub>i</sub> is washing his<sub>j</sub> hair'. Retrospectively, as this was still only the second summer of fieldwork, the conclusion needs to be somewhat qualified. That the *'u-* is necessarily reflexive is questionable; more likely that is only a preferable reading. It does indeed contrast to the non-reflexive reading of *'anh-* as a possessor, especially given that the verb has the *=inh* enclitic for the subject, which cannot or preferably should not be coreferential with the *'anh-* as possessor. The next entry is *'anh 'usha:w kusinh* 'he<sub>i</sub> is washing his<sub>i</sub> hair', which is not well controlled, probably incorrect or redundant, or would correctly be a relativization 'he who is washing his hair'. The next entry goes

off into indirect reflexivity, (*'anh*) *sha:w dAkus* 'he is washing his own hair'. Questions not asked were, for example, the meaning(s) of *'anhyaq'a'ts'ch' dla:Xit'eh*, and *'anhsha:w kus*. Without grammatical means to disambiguate different third-person referents, their differentiation is relies on the context.

### 25.2.6 Further ambiguities compounding

Examples of ambiguity involving subject or object with an oblique object, and/or combinations of the ambiguities demonstrated above could easily take up much more space. Along with all this must be considered also the third major type of ambiguity, the often unclear line between tight and loose syntax. This is no more than a repetition of the point that less than perfect "tight" performance is the norm in Eyak syntax.

More often than not the reality is that there will be pronominalization and relativizer spread, and "loose" syntax. The verb may be e.g. *sAqahLinh* 'A bit B (one human involved as subject or [oblique] object)' to begin with, or *'Aw sAqahLinh* 'A bit B (one human and one or more non-human involved)'. The verb, subject, and object, e.g. 'dog' and 'man', may come in any order, with or without really identifiable pauses in between. So with e.g. *'Aw sAqahlinh*, *'anh dAxunh*, *'Aw XAwa*; it is entirely unclear which is S and which is O, except for the known context, quite as in French, for example, *il l'a mordu, l'homme, le chien*.

In addition there are further sources of ambiguity mentioned above. The fact that Eyak is like English in not distinguishing different third persons was illustrated vividly by Lena's comment quoted above that that is beyond any Eyak grammar she was being paid to consider. Likewise in *Johnny 'uyAq'a'ts' sALxut'Linh* 'Johnny shot his (own) hand', to where we may replace the anatomical object with a kin term object, e.g. *'u'ehd sALxut'Linh* 'he shot his (own) wife', which probably cannot become indirectly reflexivized. Oblique objects as objects of postpositions coreferent with the subject are routine, as in *XAwa: 'uXa' shAshehLinh* 'he killed is (own) dog' (Lena), which could just as easily be read 'A killed B's dog'. More examples of such compounded with other ambiguities abound, some shown below.

The indefinite verbal prefix is homophonous for subject and object, so *k'uXAsahL* means 'it ate something/someone' and 'something/someone ate it', equally *k'uXAsahLinh* can mean 'he ate something/someone' and 'something/someone ate him'. Besides the subject and object, *=inh* may also refer to an oblique object. For example with *o-Xa* 'in close relation to o, belonging to o, in o's care, to o's dismay', we may have *siXa' k'uXAsahL* 'something/someone ate it belonging to me; it ate something/someone belonging to me', but also e.g. *'uXa' k'uXAsahLinh*, where the *=inh* may refer to the subject (if *k'u-* is the object), object (if *k'u-* is the subject), or a singular human argument concerned with the event.

The other source of ambiguity mentioned in (§25.2.3) was the phonological weakening of the sequence *-u: 'u- > -u:-* common in *'ahnu: 'u- (> 'ahnu:-)*, where *'u-* is the simple third person oblique personal pronoun prefix. So e.g. *'ahnu: 'uXa' k'uXAsahL* 'they

ate something belonging to him/her/it them' and *'ahnu:xa' k'uXAsahL* 'it ate something belonging to them (human); something/someone ate it belonging to them (human)' become homophonous. The latter can thus also mean 'they ate something belonging to hum/her/it/them'.

There often appears to be a redundancy of pronouns. Often such are recognized as extrapositions or parts of such, and are marked off with commas, but for reasons of phonetic indefiniteness, and/or simply inconsistency in editorial practice, no such breaks are marked. A few examples are offered here. In *'Aw q'Aw ch'i:leh 'Aw dAXunhyu:xa' 'Aw shAch'uL* 'then Raven stole it from people' (A9.84), the first *'Aw* is part of the Introductory; the second *'Aw* might be the object (it cannot be determiner for plural human oblique object); but then the third *'Aw* is redundant for either the object or subject. A comma therefore might belong after the subject *ch'i:leh*, so the second *'Aw* might repeat the subject. That is not consistent with the following sentence in the text, though: *'Aw k'uq'AX Ge:ts'gAXAG'a: 'Aw 'Aw shAch'uLinh* 'he stole the fat for magpie'. Here the subject, Raven, not repeated, is referred to only by the *=inh* enclitic for singular human, showing that Raven now is treated as human. The second sentence has more of the same redundancy, also three instances of *'Aw*, none of which is consistent with the subject, unless Raven is both human and not. That is quite possible, but in any case at least preverbal instance of *'Aw* is redundant. Placement of inaudible commas is not easy for either sentence. A third and simple case of three *'Aw* from Anna is *'Aw 'Aw wAX 'Aw sALiL* 'they did thus to it', with non-human subject and object. The first and second could be subject and object, the third maybe more likely object. One is in any case redundant, but choice of which is arbitrary. Another example can be found even in dictation by Lena: *'anh LinhGih k'udi:q' 'anh ya'X sAXe'ts'Linh* 'the other Aleut picked him up onto his shoulders'. Here the subject is marked with the first *'anh* as determiner, and the presence of the phrase, *'anh LinhGih k'udi:q'* 'the other Aleut' as subject presumably precludes the use of *=inh* enclitic to the verb in reference to the subject. The enclitic should therefore refer to the object, but we should expect the second *'anh*, preverbal pronoun to be that already. One of those two is redundant, but the choice arbitrary. This type of ambiguity also is nothing unusual.

### 25.3 Syntactic structure of noun phrases with possessives

There are two basic types of noun, possessed and non-possessed, the former taking P-prefixes, the latter not. A few nouns can be both. For details, see Chap. 18 on nouns (nominals). Possessed are all kin terms, some anatomical terms (but not all), and part-nouns, only. All other nouns are non-possessed, allowing no P-prefixes,

There are three postpositions used for possession, *o-ya'*, *o-a:*, and *o-Xa'*, and two basic possessive constructions, possessor postpositional phrases preceding or following the possessed noun. If the possessor is an overt noun itself, that must precede the possessed noun. If the possessed noun is itself a possessed noun, it merely is attached to the possessor

noun, as *qe'L-ni:k'* 'woman's nose', *qe'L-ta:* 'woman's father', *siqa'-ni:k'* 'my husband's nose', etc. If the possessed noun is non-possessed, the overt noun possessor becomes the object of the postposition *o-ya'* preceding, e.g. *qe'L-ya' yahd* 'woman's house', *siqa'ya' XAwa:* 'my husband's dog'. Likewise if the possessor is not a simple personal pronoun, but even a demonstrative, it still takes *o-ya'* preceding the noun, e.g. *'anhya' yahd* 'her house'. Likewise, if the possessor is a personal pronoun prefix emphasized or supported by an independent pronoun then that too precedes the noun, e.g. *xu: siya' yahd* 'my house'. (Otherwise, if the possessor is a simple personal pronoun, the postpositional phrase must follow, with the postposition *o-Xa'*, as in *yahd 'uXa'* 'her house', *yahd siXa'* 'my house', for which see immediately below.)

If, on the other hand, the possessor is not an overt noun itself, but merely a personal pronoun (unemphasized), that personal pronoun becomes the object of a postposition that then follows the possessed noun. If the possessed noun is itself possessed, then the postposition is *o-a:*, as *sini:k' siya:* 'my nose', *siqa' siya:* 'my husband', *siyaq'd siya:* 'my insides'. If the possessor is a personal pronoun and the possessed noun is non-possessed, however, then the possessor becomes the object of the postposition *o-Xa'* after the possessed noun, as *yahd siXA'* 'my house', *XAwa: siXa'* 'my dog', *le:L siXa'* 'my hair'.

It appears, however, that we may have at least one counterexample to this last, in an elicitation from Lena, *dAL 'iya: gAlAts'u'ts'g* 'it's sucking your blood'. Here *dAL* is treated as a possessed noun, instead of the expected *dAL 'iXa' gAlAts'u'ts'g*. Lena had accepted a proposed *?sidAL* for 'my blood', which Marie rejected, but note that in the exceptional elicited sentence Lena, inconsistently, did not offer an expected grammatically consistent *?'idAL 'iya:* 'your blood'.

The choice of prefixal vs. postpositional object possession may correspond to an alienability distinction, as in (44b), with postpositional possession used for the alienable.

- (44) a. *si-tse'*  
1s-meat/flesh  
'my flesh' (body part)
- b. *k'u-tse' si-Xa'*  
INDEF-meat/flesh 1s-with  
'my meat (that I bought at the store)'

If the possessed noun followed by *o-ya:* or *o-Xa'* is itself the object of a postposition, then that reinforcing postpositional phrase still follows the resulting postpositional phrase, e.g. *dA'uchu:shiyahXa' 'uwa: sAdahLinh* 'she stayed with her grandmother', *Li'q' ya:yu:tl' 'uXa'* 'with all his things', *tsa'k'ti:nAd 'uXa'* '(leaving) his glove'. For further exemplification and discussion, see §25.3.1 below.

The basics in syntax of noun possession is summed up in table Tab. 25.1. Note that the following postpositional phrase *o-a:* is a mild reinforcer, optional and redundant, for possessed nouns (kin or anatomical), whereas the *o-Xa'* is the only routine pronominal possessor for non-possessed nouns.

**Table 25.1:** Basic syntax of noun possession

Possessor	Possessed noun		Non-possessed noun	
	-ni:k' 'nose'		yahd 'house'	
Simple pronoun ('my')	si-	-ni:k' (siya:)	yahd	siXa'
Emphasized pronoun ('my')	xu: si-	-ni:k' (siya:)	xu: siya'	yahd
Another noun (qe'L 'woman's')	qe'L	-ni:k'	qe'Lya'	yahd

However, there is an important semantic distinction overriding the oversimplified statement that possession for “non-possessed” nouns is reinforced by following *o-Xa'*. Here a distinction between alienable and inalienable possession does indeed continue to apply, where in the case of inalienable possession the reinforcing postpositional phrase is still *o-a*; even though the noun is morphologically non-possessed. We thus have e.g. 'Aw *shahG'uwa*: 'their slime (of fish)', even 'Aw tubes *'uwa*: 'its tubes' and 'Aw battery-*dAg 'Awa*: 'its battery too' (of radio), referring to integral parts. It is especially interesting to note here the disagreement between semantic and morphological structure, clearly showing the results of evolution in Eyak, in the process of losing a large part of the morphological noun possession system much more fully preserved in both Athabaskan and Tlingit.

Incidentally, but not essential here, is that (inherently) possessed nouns (45a) may more often take demonstrative determiners referring to the possessor or to the possessed noun than do unpossessed (i.e., not inherently possessed) nouns (45b), since demonstratives are both independent and attributive.

(45) Demonstrative determiners in possessive constructions

a. with obligatorily possessed nouns:

*qe'Lni:k'* 'a woman's nose, a nose of a woman'

*'anh qe'Lni:k'* '[the /that woman's] nose'

*'Aw qe'Lni:k'* 'the/that [woman's nose]'

b. with other (alienable) nouns:

*qe'Lya' XAwa*: 'a woman's dog'

*'anh qe'Lya' XAwa*: '[that woman's] dog'

*'Aw qe'Lya' XAwa*: 'that [woman's dog]'

*'anhya' XAwa*: 'a dog of hers'

*'Aw 'anhya' XAwa*: 'that dog of hers'

Also with following postposition *'Aw XAwa: 'uXa'* 'her dog' or 'that dog of hers', where English does not allow a determiner in the same way. However, \*?'Aw *'anh qe'Lni:k'* 'that nose of that woman' and \*?'Aw *'anh qe'Lya' XAwa*: 'that dog of that woman' may not be acceptable, i.e. for some reason are not attested.

Since demonstratives are pronouns as well as determiners, given the antecedent in the context, it is presumably possible to delete a noun with a determiner, whereupon the determiner becomes a pronoun, as in (*'Aw yahd 'uXa' k'uda'lAw*) *'Aw siXa' ya:dAkuts'g* ('his house is big',) mine is little'. Likewise, presumably (*'uni:k' 'uwa: k'u'lAw*) *'Aw siya: ya:kuts'g* ('his nose is big,) mine little'. As noted above, however, such ellipsis is probably not favored in Eyak.

These noun phrases remain such even with following possessive postpositional phrases in sentence syntax; i.e. those postpositional phrases are not parts of the preverbal sector. Thus it may be possible to say ?*'Aw XAwa: siXa' siXa' sAsinhL* 'that dog of mine died on me', or ?*sini:k' siya: siya: GALXAwa'sL* 'my nose itches me'. These were not tested.

These questionable sentences do suggest in any case a possible source for the second of the two exceptional post-head postpositional phrases discussed above, *o-a:* and *o-Xa'*. At least for the latter, consider the non-verbal sentence *'Aw da:na: siXa'* 'I have the money on me' < 'the money (is) with me (German *bei mir*)'. Thus *'Aw XAwa: siXa'* 'the dog's at my place, in my care' might become 'my dog' without becoming a relativization of the zero verb (see §25.4 on verbless sentences), ?\**'Aw siXa' XAwa:* 'that dog which is at my place, that dog (which is) in my care', right-headed, which was never tested. A similar basis for *sini:k' siya:* 'my nose' seems doubtful, \*'my nose (which is) for me'. As a conceivable basis for this cf. instead *sini:k' siya: XAGAwa'sL* 'my nose itches (me)' and *siya: yik'a'd* 'it hurts me'. Thus a frequent pattern *siyAq'd siya: yik'a'd* 'my insides hurt (me)' might come to allow the parsing [*sini:k' siya:*] *yik'a'd* 'my nose hurts' as well as the original *sini:k' [siya: yik'a'd]* 'my nose hurts me'. In any case, a sentence like [*si'ehd siya:*] [*siya: dAxa:gL*] 'my wife works for me' must be acceptable. Perhaps more relevant for this construction with *o-a:* as possessor for possessed noun, however, is the clear use of *o-a:* in the partitive sense 'some of o', e.g. *'uwa: k'uXAsiyahL* 'I ate some of them'. Though this was not tested, it is very probable that ?*siya: k'u:k'a'd* 'something (of my anatomy) hurts' is a good sentence.

### 25.3.1 Leer on Eyak noun possession

Here, again, we have some very interesting discussion in Leer (1991a) in connection with relativizer spread. In it Leer deals also with the history (and parallelism with Haida) of the unpossessed noun and following *o-Xa'* construction. He calls this "periphrastic possession." He cites four nice Eyak sentences (46).

(46) Leer's "periphrastic possession"

- a. *XAwa: 'u-Xa' shAshehL=inh*  
 dog 3-with killed=HUM.SG  
 'he/she/it killed her/his dog' / 'her/his dog killed her/him/it'

- b. *da:na: si-Xa' dA-sh-A-ch'u'L=inh*  
 money 1s-with on-1s-stole=HUM.SG  
 'He stole money from me.'
- c. *'Aw tl'A'a:G-ya' 'u-Xa' sAtahL=inu:*  
 DIST basket-in 3-with lying=HUM.PL  
 'It is lying in their basket'
- d. *'Aw XAwa:-shiyah si-Xa' 'Aw si:nL si-Xa' ya' qAdAsA'a'tl'L*  
 DIST dog-bad 1s-with DIST shoes 1s-with up chewed  
 'My lousy dog chewed up my shoes.'

Example (46a) correctly shows the S/O ambiguity, but avoids the undifferentiated third-person ambiguity. Leer considers *XAwa: 'uXa'* a noun phrase constituent. He shows that (46b) can be parsed in two ways, one with the *siXa'* as preverbal, in the verb constituent, or otherwise as part of the noun phrase. This is certainly a different kind of ambiguity from that in the first sentence. (46c) is not at all ambiguous, where the enclitic *=inu:* can only relate to the pronominal *'u-* of *'uXa'*, thus necessarily 'their basket'. The further interest of this example is what he calls the "mismatch between the morphology and the syntax," in that the 'basket' and 'their' is interrupted by the postposition *-ya' in'*. Finally, after some further consideration of the parallelism with Haida, Leer goes back to (46b) and considers that it shows a change, by what he calls "syntactic abduction," of movement of the postpositional phrase *'uXa'* from membership in the verb phrase constituent into the noun phrase constituent. He then proves his point with (46d), where the *siXa'* following 'lousy dog' is part of the noun phrase with 'dog', separated from the verb by another such noun phrase. This is not the same proof as in *'Aw XAwa: siXa' siXa' sAsinhL* 'my dog died on me', mentioned above but not tested, but it shows Leer's thinking along much the same lines. For Leer, in any case, this is only part of a much larger historical picture that his article presents.

We have an interesting sentence in this regard where the focus enclitic interrupts the periphrastically possessed noun phrase. In late notes from Marie, August 3, 1998 we have *XAwa: q'uhnu: 'uXa' sAsinhL* 'their dog died', while *\*XAwa: 'uXa' q'uhnu: sAsinhL* is "not good." The meaning here appears to be, or is glossed as, the routine possessive, as opposed to 'dog in their care died on them'. This would appear to be strong evidence of at least two points: 1. that *XAwa: 'uXa'* cannot fully be taken as a single constituent, and 2. that the enclitic must come after the first constituent of the sentence (not counting introductory or connective). A third point might well be also that *'Aw XAwa: siXa' siXa' sAsinhL* 'my dog died on me' might well still be unacceptable. See Chap. 27 on the placement of *=q'* and *=sh* enclitics for more, especially in connection with the second point.

Belated examination of use of *o-a:* further supports the observation that both possessive *o-Xa'* and *o-a:* postposed to the noun can be interrupted. We note *'Aw battery-dAg 'uXa'* 'its battery too', where the enclitic is attached to *battery*, not to *'uXa'* (probably impossible). In (47) we also have an interestingly challenging passage from Anna's text.

(47) Property Woman (*k'uXe:gAXts'*) 12–14

- a. *sAqe:ts'Akih GAXe:L=inh,*                      *qe'L*  
 child                      carry.on.back=HUM.SG woman  
 'She's carrying a child on her back, a woman.'
- b. *'Aw q'unh 'anh sAqe:ts'Akih 'Awa;*  
 DIST HUM.SG child DIST                      3.of  
 'Then as for that child,'
- c. *'u-Xa' 'i-dAGAlehyAq' qa'leh.*  
 3-with 2s-please                      will.be  
 'it will please you.'

The *'uXa'* in (47c) is not translated, but footnoted with a discussion of whether or not it can be translated, "if it belongs in the sentence at all," as 'on' her, in the sense of 'contrary to her will'. First, it is clear that *'Awa:* (= *'uwa:*) must be in the common contrastive use, correctly interpreted 'as for the child' (as opposed to the woman), since *sAqe:ts'Akih* is not a kin term or integral part of the woman. With the comma following, *'uXa'* becomes difficult to translate except as 'to her displeasure you'll like the child.' If, however, the comma pause is removed, the result is to be translated 'you'll like her *child*' (if not her). The passage would thus show that even though interrupted by hesitation, a possessed noun phrase of the form *N o-Xa'* can be interrupted by contrastive *'Awa:*, not just by postposition or enclitic. This is further evidence of Leer's "mismatch between the morphology and the syntax" or "syntactic abduction."

## 25.4 Non-verbal sentences

There is a limited set of types of verbless sentences, consisting of nominal or pronominal subject and, as predicate, a postpositional phrase or locational, or a complement (C). If a verb were to be supplied, it would be some kind of verb of 'being', Eyak *-Le()*, perhaps, *-t'e'~*, or intransitive classificatory. Another type of such sentences is copular, which occurs only with the enclitic series, *=q'*, *=sh*, and *=d*. This will be taken up only after discussion of those enclitics in Chap. 27. Some simple examples of this non-copular type of non-verbal sentences are presented in (48).

## (48) Non-copular, non-verbal sentences

- a. *xu: lixah*  
 1s grizzly.bear  
 'I am a grizzly bear.' (II 93 L)
- b. *da:na: si-Xa'*  
 money 1s-with  
 'I have money.'



- c. *dAXk'ih XAwa:=d 'i-Xa'*  
 how.many dog=Q 2s-with  
 'How may dogs do you have?'
- d. *'Aw XAwa: si-Xa'=sh 'a:nd*  
 DIST dog 1s-with=IRR here  
 'Is my dog here?'
- e. *xu: 'a:nd*  
 1s here  
 'I'm here.'

Word order within these constructions is free, as implied by the test of negation scope with Sophie in 1987. In (49) the meaning is unchanged regardless of word order and position of the negative suffix -G.

(49) Scope of negation with non-copular, non-verbal sentences

- a. *dik' 'i: si-ya:n-G*  
 NEG 2s 1s-mother-NEG  
 'You're not my mother.'
- b. *dik' 'i:-G si-ya:n*  
 NEG 2s-NEG 1s-mother  
 'You're not my mother.'
- c. *dik' si-ya:n 'i:-G*  
 NEG 1s-mother 2s-NEG  
 'You're not my mother.'
- d. *dik' si-ya:n-G 'i:*  
 NEG 2s 1s-mother-NEG  
 'You're not my mother.'

It is probable, though, that the latter pair in (49cd) should be glossed more correctly 'my mother is not you'. We have twice in texts from Anna, 51.53 and 61.019, *dik' dAXunh qi'G*, translatable variously as 'it was a place with no people, no people were there, a place with no people, nobody there', implying in any case a verbless sentence, nominalizable. Here the peculiar preverb *qi'*, from PAE \*q<sup>w</sup>ə-'e', a postpositional phrase, place of (absent) oblique object' acts as predicate. For further on this, see *qi'* in the dictionary. See also §24.3.2 for further examples in that connection.

We also have e.g. *'a:nd xu:* (even *'a:ndAxu:*, for which cf. also §27.10) for 'I'm here' which might imply that the order of subject and predicate is reversible in these sentences. (Cf. (49), 'you're not my mother' above.) For many more examples of such verbless sentences, see the dictionary entries e.g. for *xu:* 'I' and the other independent personal pronouns. One such is *xu: siXa' XAwa: k'udzu:*, 'i: 'iya' k'ushiyah 'my dog is good, yours is no good', with adjectives as complements. These sentences can also become subordinated, as in (50).

- (50) a. *dA'wAX 'a:nd xu:=dAwa; 'Ad-ya:n-dA-kus*  
 still here 1s=while RFLX-hand-CL-wash  
 'while I'm still here, wash your hands!'
- b. *dik' xu: 'a:nd-G=dAwa:* 'before I'm here, while I'm not here' (Sophie in  
 NEG 1s here-NEG=while  
 1987.63)
- c. *dik' xu: 'a:ndG da:X*  
 NEG 1s here-NEG and  
 'while I'm not here' (Sophie in 1987.63)
- d. *dita:dz 'itl' 'u'siXahL 'Aw yahd k'u-dA-shiyah* 'I told you long  
 long.ago constantly 1s.said DIST house NEG-NC-bad  
 ago that house is no good.' (cf. (31c) above)

Here we also see further evidence of flexibility in order between subject and predicate.

This includes a number of types of verbless negative sentences, both non-copular and copular, which are not included here.

There is one special development with at least the locational *'u:d* 'there' in this type of sentence, where if a verb were present, it would be in the optative. That is with the proclitic *dA=* 'selfsame' for *dA'u:d* 'right there' all with enclitic *=inh* or *=inu:*. This had been otherwise attested, but it was further investigated with Sophie 1987.36. From her we have confirmed *dA'u:dinh* 'let him stay there', and *dA'u:dinu:* 'let them stay there'. However, she rejected *\*dA'a:ndinu:* 'let them stay here', apparently confirming that *'u:d* is the only form that can be treated this way. At the same time, though, she apparently offered *dA'a:nd qa:qin'inh* 'let him stay right here among us', and *dA'a:nd qa: qa'inu:* 'let them stay right here among us'. In the latter I have umlaut in *-qä'inu:* and the comment "uncertain of umlauting", i.e. that Sophie was uncertain about the effect of nasal umlauting. Such uncertainty, with a simple-looking colloquial phrase, must remind us that we were dealing with the edges of Eyak grammar, or perhaps more exactly, with the edges of memory of Eyak grammar. Sophie had rejected *\*dA'a:ndinu:*, yet is here remembering an elaboration of that very proposal. It is very unlikely that I would myself have suggested such an elaboration of what she rejected, but must have offered that herself as something she remembered, or thought she remembered. Therewith she opened a much broader field of possibilities for exceptionally non-verbal constructions to which the enclitics *=inh* and *=inu:* might conceivably be attached, apparently with an optative meaning, 'let S be (in location)'. There is no other hint of such further possibilities in the Eyak corpus.

There is one further verb enclitic attested with *dA'u:d*, probably to be identified with the *=uh* object for imperatives, 'it', as. e.g. *Xa:ne:huh* 'eat it!', used also with the interjection *'AlAX* 'gimme!', i.e. *'AlAXuh* 'gimme it!'. Thus *dA'u:duh* 'let it go! (run away)' (I 126 L, probably also 'let it be! (stay that way)'). For an alternative interpretation morphologically,

but related, cf. the exclamatory enclitic =*duh*, dealt with below, implying *dA'u:dduh* > *dA'u:duh*.



## 26 COMPLEX CLAUSES

### 26.1 Relative clauses

As one would expect, simple relative clauses are abundant in Eyak, while more complex relative clauses are rare: the more complex, the rarer. Given the nature and history of documentation of the language, the frequency difference is exaggerated in spontaneous speech, i.e. tape recording of texts from Anna, and mitigated only by deliberate elicitation. Given the research priorities, elicitation of relative clauses was not extensive.

Relativization is morphologically unmarked, marked by a zero enclitic, for non-human arguments, i.e. inanimate or animal. (For some animals in traditional narrative, e.g. Raven, however, treatment is often inconsistent, sometimes as human.) The marking refers to subject of intransitive verbs, but to subject or object of transitives, often indistinguishably. Thus *tsu'd* 'is sleeping' likewise means 'that which is sleeping', but not 'he who is sleeping', as that must be *tsu'dinh* (also 'he is sleeping'), and 'they (human) who are sleeping' must be *tsu'dinu*: (meaning also 'they are sleeping'). More complicated are relativizations of transitive verbs, as e.g. *Xah* 'is eating O' can in principle be relativized as either 'that which is eating O' or 'that which S (non-human) is eating', *Xinhinh* 'he who is eating O' or 'he whom S (non-human) is eating'.

As shown in some detail in Chap. 18, relativized verbs constitute a significant portion, probably at least a third, of Eyak nouns, referring to inanimate (1a), non-human animate (1b) and humans (1cd).

- (1) a. *dAq'a:g* 'fire' < 'that which keeps burning'
- b. *dALAxε:g* 'groundhog' < 'that which whistles'
- c. *'isALYahLinh* 'elder(ly person)' < 'he who is old'
- d. *sAsinhLinu*: 'dead (people)' < 'they who are dead'

Such relativizations routinely serve as arguments, the more lexicalized they are the more routinely. This includes serving as postpositional objects, e.g. *sAsinhLinu:ya' XAwa*: 'moth' < 'dead people's dog', *Xa:ndiyahlu'qa*: 'for food' < 'in quest of that which may be eaten' (optative, degree of lexicalization questionable). For more of these see further below. On occasion, such relativization is permeable to the syntax and can allow alternative parsing, as in (2), where the relativized verb appears with negative suffix and modified by an adverb.

- (2) *dik' XAtl'-ye'X dAq'a:g-G dAq'a:g*  
NEG night-all.long burn-NEG  
'a fire which doesn't burn all night' < '[not all night it burns] it burns' (65.44A)

The latter interpretation parses the stretch as a relativized noun phrase, including negative verb phrase, where the head itself happens to be a relativized verb. In the latter parsing here we see a noun as head of a noun phrase to which a preceding relativized verb is attribute,

constituting in other words the standard right-headed noun phrase. Further such noun phrases are cited in (3), especially with lexicalization.

- (3) a. *'anh 'i:nsALyahL=inh qe'L*  
 HUM.SG grow.old=HUM.SG woman  
 'that/the old woman'
- b. *k'uqu'wAshinh=inh Lila:' 'AxdjinguG 'Adu'dA'inh=inh*  
 hunt=HUM.SG man A be.named=HUM.SG  
 'a hunting man is named 'AxdjinguG'.

Simpler sentences like those in (4) presumably should have been easy to elicit, but were not. Unfortunately, such are not easy to find in the actual corpus of spontaneous speech.

- (4) a. ? *'a:nd sAdahLinh qe'L* 'woman who is staying here'  
 b. ? *'Aw 'u:d tsu'd XAwa:* 'the dog sleeping there'  
 c. ? *'anh 'Aw te'ya' XAsahLinh dAXunh* 'the person who ate the fish'  
 d. ? *'ah 'Aw Xinhinh dAXunh* 'the person who ate it'

We do find a few clear examples of such noun phrases, with demonstratives in leftmost position of the phrase, referring to that head noun in rightmost position of the phrase, e.g. *'anh k'uXe:gAXts' sALku:n'dLinh dAXunh* 'the/that person who grabbed Property Woman'. In *'Aw q'Aw dAXunhyu: shashehL q'Aw dla:q'Aya'* 'the/that mountain goat which people killed' we have the same, but the head noun is instead the object of the relativized verb. Perhaps the only attested example of a noun phrase itself as the constituent of a verbal sentence is *k'uqu'wAshinhinh Lila:' 'AxdjinguG 'Adu'dA'inhinh* 'a hunting man was named 'AxdjinguG', a text-initial sentence. No doubt easy to elicit would have been e.g. *'anh te'ya' XAsAhLinh qe'L sAtsuhdL* 'the woman who ate the fish went to sleep'.

There are a few sentences in the corpus elicited specifically for relative clauses with a noun as head: *'Aw 'i:nsLiq'AXL XAwa: 'Aw 'i:nsALk'in'L XAwa: sAqahL* 'the fat dog bit the skinny dog' (V 66 L). More telling are the examples in (5), which show that the head now must occur at the right edge of the relative clause.

- (5) Elicitations of relative clauses
- a. *'Aw du:sh siXA sAqahL XAwa: sishehL*  
 DIST cat my bite dog 1s.killed  
 'I killed the dog that bit my cat'
- b. ? *'Aw XAwa: sishehL 'Aw du:sh siXa' sAqahL*  
 DIST dog 1s.killed DIST cat my bit  
 'I killed the dog, it bit my cat' (not: 'I killed the dog that bit my cat')
- c. \* *'Aw XAwa: 'Aw du:sh siXa' sAqahL sishehL*  
 DIST dog DIST cat my bit 1s.killed  
 intended: 'the dog my cat it bit it I killed it' (totally wrong, V 86 M, L)

Likewise 'Aw 'i:nsALk'in'L XAwa: shishehL 'I killed the skinny dog' is more acceptable ("better") than 'Aw XAwa: 'i:nsALk'in'L shishehL 'the dog is skinny, I killed it', the latter of which was judged as really two sentences (V 87 M and L).

There are no doubt such noun-headed relativizations which border on lexicalizations, e.g. *qa: kahL XAwa: 'dog which barks at us/people'* (V 61 L).

More frequent, for some reason, though still not exactly abundant in the corpus, are relativizations without a noun as head of the phrase (headless relative clauses). Such constructions are obvious in examples (6)–(11) where they themselves serve as arguments in verbal sentences.

(6) Headless relative clause with intransitives

- a. 'anh ya:GALA'a:gd sAdahLinh tsin'dAleh  
'the (person) sitting in the middle was speaking'
- b. 'Al gehsdah 'i:t'inh[inu:] 'Aw shAshehL  
'these poor (people) whom that (Giant Rat) had killed'

In (6b) the demonstrative pronoun 'Aw unexpectedly(?) refers to the subject, where object is usual.

(7) Headless relative clause with transitives

- a. ['Aw shAshehL ] 'Aw Lmahd  
DIST kill DIST cook  
'that which it has killed it cooks'
- b. ts'id ['Al dALAxε:g=yu: Xah ] Xinh=inh  
only PROX groundhog=PL whatever eat=HUM.SG  
'he eats only this which these groundhogs eat'

(8) Headless relative clause as verb with complement

- dik' q'ahsh yiLeh XahGinh  
'doesn't eat that which is bone(y)'

In (9a) the relative clause is the object of the postposition o-wah 'potential o'.

(9) Headless relative clause as object of postpositions

- a. 'i:shinh=inh-wah ya:'e:X  
kill.OPT=HUM.SG-potential look.for  
'in search of that which he may kill'
- b. 'Al dAXunh-yu: Xah-ga' k'u-Xinh=inu: a  
PROX person-PL whatever-like INDEF-eat=HUM.PL  
'like these things which people eat'

(10) Headless relative clause in non-verbal sentences, as subject of interrogative

*tla:X 'ahnu: 'AdAwi'L 'idALinh=inu:*  
 where HUM.PL war      happen=HUM.PL  
 'where are those marauders?' < 'where are they who wage war?'

- (11) Headless relative clause complement in copular

*dA'wAX q'Aw ts'iyuh'e:X yAX 'iLA'a:nXinh q'A'anh*  
 'just looking for blackbears he was' < 'he's he who is just looking about for  
 blackbears'

There may happen to be no relative clauses where the relativized argument is an oblique object in a periphrastic possessive. Such an absence is presumably only due to statistical infrequency. A relativized oblique argument is easy to hypothesize, as e.g. *'anh* [[*'Aw XAwa: 'uXa'*] *shishehLinh*] *dAXunh* 'the person whose dog I killed', or *'anh* [[*'Aw*] *'anhya' XAwa:*] *shishehLinh*] *dAXunh* 'id.' Likewise *'anh* [[*'anh qe'L*] [*'Aw XAwa: 'uXa'*] *sAshehLinh*] *dAXunh* 'the man whose dog the woman killed', etc. Similarly, *'Aw* [[*'Aw XAwa:*] [*'uq' sAdahL*]] *Le't* would be 'the box on top of which the dog is seated', or to take it a step further, 'the woman on top of whose box the dog is seated' would presumably be *'anh* [[*'Aw XAwa:*] [*'Aw Le't' 'uXa'*] [*'uq' sAdahLinh*]] *qe'L*. The last might not even be understood, let alone actually uttered. In fact the absence even of the preceding sentence should not be surprising for the actual Eyak corpus.

In (12) there is a nice example of a noun-headed relative clause. Here, the head is an inanimate noun, *xitl'* 'snow', and the *=inh* relativizer refers to an oblique object in *'utl'* 'with him'.

- (12) *'u-tl' tsa' lAXAdla:GALA'AdzL=inh xitl'*  
 3-with down avalanching=HUM.SG snow  
 'snow that was avalanching down with him'. (23.135)

We have at least one example of a relativization within a relativization, in Birket-Smith and de Laguna (1938: 554), from Galushia Nelson.

- (13) *dik' GAdA-'a:n-G=inh yAX dAku'dX=inh*  
 NEG see-NEG=HUM.SG around send.on.errand=HUM.SG  
 'unseen messenger < 'he who is sent about on errands who is not seen'

Both verbs in (13) are passives, and both are glossed as lexicalizations. Regardless of the degree to which they may in fact be lexicalizations, the phrase does indeed show that such syntax is possible in Eyak.

In the section on nouns there are major subsections, totaling nine pages, on relativizations. There must be a least 500 nouns in the Eyak corpus that are relativizations, more or less lexicalized. Most of these are in the Active imperfective mode, many of those being usitative derivations, necessarily in the Active imperfective. A minority, ca. 65, are in other mode/aspects, and these are especially discussed and exemplified as such in that subsection (§18.12.2). Many such nouns involve more than a relativized verb word, including transitives with object, preverbals, etc. The internal syntax of those is discussed in the section on



nominalization of verbs to some extent (§18.12). Only a very few, however, are themselves noun-headed, as is the case in the discussion here as well. A major discussion is reserved there, however, for questions regarding degree of lexicalization, especially in connection with what may translate as possession, e.g. *sid k'u'li:Lga'ginh* ‘my teacher’ < ‘he (who) teaches me something’.

The problematic question of parsing for subject and object treated at some length above also rises in relativized clauses. We have, for instance, *'ahnu: 'iLch' lAXsAtl'inhLinu: q'uhnu:* ‘those whom you (pl) tied together’ where by morphological definition the subject has to be the second person plural. We also have *'anh shAshehLinh* ‘the guy that killed him’ as glossed by Lena, with ‘the guy that he killed’, evidently untested. In view of that the question of the alternative gloss certainly arises but is not answered. The interpretation of relativized clauses with transitive verbs for subject and object of the verb was evidently not further investigated during the 1960s, but was finally investigated three times with Marie, late. The results present some difficulties of interpretation or evaluation that are characteristic of attempts to work at this level with the last speaker of Eyak at such a late stage of her life, so perhaps for that reason itself are worth describing in some detail.

The first time was 2-7-96, testing *'anh XAwa: sAqahLinh dAXunh ya:n' sAtehL*, which Marie said meant both ‘the guy that a dog bit went to bed’ and ‘the guy that bit a dog went to bed’. A presumable disambiguation, *'anh XAwa: 'anh sAqahLinh dAXunh ya:n' sAtehL* (to mean specifically ‘the guy that a dog bit “him” went to bed’) Marie said meant both equally also, but “doesn’t sound good.” That response might be incorrect (cf. below), though, and may well distractingly reflect a mental translation into English. Then *'anh dAXunh sAqahL XAwa: sAsinhL*, which Marie said meant ‘a dog that bit the guy died’ and ‘a dog that the guy bit died’ both equally, but [*'anh [XAwa: sAqahLinh] dAXunh] sAsinhL* means only ‘they guy that a dog bit died’. The reason for the latter is because *'anh* (human) cannot be a determiner for ‘dog’ (non-human) so must imply the bracketing shown.

On 8-3-96 Marie said that *'anh 'ahnu:lAX 'isAL'anhLinh dAXunh sida' sahL* means ‘the guy that saw those people came to me’. That has to be correct since *'ahnu:lAX* specifies the human plural (oblique) object—making the question posed by me stupid unless one considers the reading *'ahnu:[ 'u]lAX*. At the same time she rejected *'anh 'ulAX 'isAL'nhLinu: dAXunh sida' sahL*, even though that must correctly mean ‘the guy who saw them (human pl) came to me’ and presumably also ‘the guy whom they saw came to me’. Further, *'anh sAsuhLinu: dAXunh sida' sahL* ‘the guy who massacred them (human pl) came to me’ Marie said was a “shortcut,” because the plural obviously has to be the object of that verb with plural object meaning, whereas *'anh 'ahnu: sAsuhLinh dAXunh sida' sahL* for that she said is a “good” sentence. The reason for that is of some importance, evidently reflecting that the enclitic *=inh* as subject and *'ahnu:* as object is a preferred reading, even though the verb ‘kill pl O’ already requires that reading. Finally, that day, we have the accepted pair *XAwa: shAshehLinh dAXunh* ‘person who killed a dog’, which must be a preferred reading, and *XAwa: 'anh shAshehLinh dAXunh* ‘person whom a dog killed’

(‘a dog killed him person’), clearly a correct disambiguation, confirming the correctness of that in the previous session, when it was rejected.

The last time, Sept. 25 1996, Marie said *'anh XAwa: sAqahLinh dAXunh sAsinhL* means both ‘the guy who bit a dog died’ and ‘the guy whom a dog bit died’, confirming the answer of the first session. She offered the disambiguations *'anh q'A'anh*, *'Aw XAwa: q'unh sAqahL* ‘that’s him, he bit a dog (it’s a dog he bit)’, and *'anh q'A'anh*, *'Aw XAwa: q'Aw 'anh sAqahL* ‘that’s him, he bit that dog (it’s that dog he bit)’. This not only shows that the ambiguity extends to relative clauses, unsurprisingly, but also that modern Eyak syntactic practice does not favor exploitation of potential syntactic resources. Rather, it distinctly favors exploitation of resources at what might best be called the level of stylistics of actual performance, or “loose” instead of “tight” syntax.

From Marie 8-3-98, we have what might be a minimal pair in *XAwa: shAshehLinh dAXunh* ‘a person who killed a dog’, and *XAwa: 'anh shAshehLinh dAXunh* ‘a person whom a dog killed’. More strictly speaking, however, the first phrase may be ambiguous, while the second is a clear disambiguation. Earlier on that date, *'anh XAwa: sAqahLinh dAXunh sAsinhL* is more ‘the guy who bit the dog died’ than ‘the guy whom the dog bit died’, which would be better and thus disambiguated as *'anh XAwa: 'anh sAqahLinh dAXunh sAsinhL*.

## 26.2 Complex sentences with postpositional subordination

As noted briefly in Chap. 16, there are no conjunctions in Eyak. Instead, postpositions are used as subordinators of whole sentences, turning them into subordinate clauses. This probably accounts for the formation of the majority of what are treated here as complex sentences. This use of postpositions is part of the right-headedness of Eyak syntax. Accordingly, it makes the formation of such complex sentences simple or easy, in the sense that it requires no more planning than the addition of the postposition to the verb at the end of the sentence. To be exact, it requires no planning until the completion of the final syllable of the sentence to be subordinated, the verb stem itself. To that no enclitic may then be added. The stem must be directly followed by the subordinating postposition. The explanation of this, that no enclitic may be added, is not obvious, unless it is simply that relativizer “spread” (to non-relative use) is an innovation that was blocked in verbs subordinated by postpositions. That then justifies specifically the choice of the term “spread.” An alternative interpretation might be that the subordination deletes the enclitic. Conceivably, further study of pronoun configurations in the subordinated clauses might reveal something more of the history and/or rule ordering, if there are significant differences between those in those and clauses not so subordinated.

Because of the rule that verbs subordinated by postpositions cannot take the spread relativizing enclitic, it was not without some effort that actual (non-lexicalized) relativizations could be elicited with the enclitic as the object of a postposition. Apparently

the only efforts to elicit such were late, with Sophie and Marie, and the conjunction-like postposition *da:X* in (14).

- (14) a. *na:w qAsdilahL=inu: da:X gi:wa: qAsdilahL=inu: Li'q' qAsAsinhL*  
 whiskey drank=HUM.PL and beer drank=HUM.PL all died  
 'those who drank whiskey and those who drank beer all died' (Sophie, elicitation)
- b. *tsin'dAleh da:X k'uXinh=inh*  
 talk and eat=HUM.SG  
 'he's talking and eating (something)'<sup>1</sup> (Marie, elicitation 9-25-1996)
- c. \* *tsin'dAlinh=inh da:X*  
 talking=HUM.SG and
- d. *tsu'd=inh da:X tsin'dAlinh=inh*  
 sleep=HUM.SG and talk=HUM.SG  
 'he who is sleeping and he who is talking'
- e. *'anh tsu'd=inh da:X 'anh dAxa:gL=inh 'iLdAGe:'GAYu:*  
 DIST sleep=HUM.SG and DIST work=HUM.SG brothers  
 'the guy sleeping and the guy working (are) brothers'

Marie then rejected outright the form with the subordinate verb relativized by the enclitic (14c), not recognizing the possible translation 'he who is speaking and (someone else)'. However, she then accepted both the form with the main verb relativized by the enclitic (14d), a much clearer request, as well as the non-verbal sentence in (14e). The further point of this is that it was much easier to elicit a verb relativized by enclitic as object of postposition where that is followed by a verb that is not with the same subject. In fact that might well be unacceptable with coreferentiality; e.g. *\*?tsin'dAlinhinh da:X k'uXinhinh* for 'he who is talking and eating' (coreferential) may be impossible. This further question was not sufficiently pursued.

As can be seen from the discussion in Chap. 16, out of 72 preverbals that are attested as postpositions, only about 18 (or at least one fourth) of these are attested as subordinating verbal clauses. Surely the reason for most of the difference is purely semantic, especially where the postposition has a specific spatial reference unlikely to refer to the relation between two verbs. At the same time, it should be noted that no special or systematic effort was made to elicit such postpositional use as head of verbal clauses, e.g. for *o-XAw* 'simultaneous with', *o-u'X* 'less than o', *o-q'As-d* 'from/against (doing) o' perhaps promising candidates.

It so happens, on the other hand, that the dictionary does a thorough job of listing the postpositions and their use as subordinators of verbal clauses. It provides full

<sup>1</sup> Probably verbal, as opposed to 'he who is talking and he who is eating (something)', also coreferential. (Cf. however here further below.)

documentation of all such use, explicitly for all but the few most commonly used. Even for those few, explicit exemplification is abundant, and the rest are listed by text and sentence number. In this way, the syntax of complex sentences is rather well documented, with explicit discussion of that syntax as appropriate, e.g. in regard to use or sequence of mode-aspects. Some of this is alluded to in the discussion in the chapter on preverbals. The list of subordinating postpositions is repeated in (15).

## (15) Subordinating postpositions

<i>o-da:X</i> ‘and, if/when o’	<i>o-ya:X</i> ‘lest o’
<i>o-d-wa:</i> ‘pending o’	<i>o-t’a’X</i> ‘distracted by o’
<i>o-lehd</i> ‘because o’	<i>o-y-Xa:q</i> (under <i>-Xa</i> ) ‘thanks to o’
<i>o-wahd</i> ‘in order to o’	<i>o-’ihd</i> ‘after o’
<i>o-Xa</i> ‘for o’	<i>o-wa:LX</i> ‘in accordance with o’
<i>o-ch</i> ‘until o’	<i>o-’e:X</i> ‘in search of o’
<i>o-ch’ahd</i> ‘after o’	<i>o-X</i> ‘in relation to o’
<i>o-LAX</i> ‘more than o’	<i>o-dahd</i> ‘(hear) sound of o’
<i>o-ga</i> ‘like o’	

The glossing in (15) is minimal. The meaning of most of the 18 is predictable from the primary meaning of the postpositions as such, allowing for the expected extensions of spatial to temporal glossing e.g. for *o-ch* ‘toward’ > ‘until’, *o-ch’ahd* ‘from o’ > ‘after o’, also *o-t’a’X* ‘behind o’ > ‘distracted by o’, *o-ya:X* ‘avoiding o’ > ‘lest o’. These changes do not in fact even go beyond extended meanings of the postpositions themselves as such. The length of this discussion can appropriately be greatly shortened by referring to the entries for these items in the dictionary. For another postposition to add to the list above, *o-LAX* ‘beyond o’, see §26.7.

The clause subordinated with the postposition may either precede (16a) or follow (16b) the matrix clause.

- (16) a. *’Aw Gudjih=Yu:=qa’ yAsa’yahL-lehd, dik’ q’e’ ’ALA’e:k’-G*  
 DIST wolf=PL=among be.in.position-because NEG again marry.CUST-NEG  
 ‘Because she had ended up amongst the wolves, she couldn’t remarry.’  
 (25.152A)
- b. *’ahnu: GAshe:X ’ilinhinh ’u-LAX xi:l ’ahnu: yiLeh-lehd*  
 HUM.SG 3p.kill.DESID 3p.wish 3-this.way shaman HUM.SG be-because  
 ‘They wanted to kill him because he was more of a shaman than they.’ (56.21L)

Most exceptional is the by far most frequent of these subordinating postpositions, *o-da:X*. Though *o-da:X* is still definitely a postposition, it is by so much the most frequent and

the most general in meaning that it was first thought of as a conjunction, and written not as a bound morpheme but as a separate “word,” so preceded by space. This convention, for *o-da:X* alone, has been maintained throughout. Perhaps the only real justification for such exceptional treatment is the fact that the speakers were able, unsurprisingly, to isolate it, to pronounce *-da:X* in isolation, about as well as English ‘and’. It can be used to conjoin simple nouns, e.g. *sLi'mahdL da:X ma:sdla:* ‘bread and butter’, *na:w da:X gi:wa:* ‘whiskey or beer’, i.e. ‘and/or’ in both cases, obviously. It can be used to conjoin relativizations, as shown above in the example from Sophie (this section). But unlike most other postpositions, most often, by far, it is used to conjoin two sentences. More correctly, it changes the sentence it heads into a subordinate clause. In the texts it is nevertheless glossed as ‘and’, though more ideally that clause should be translated as some kind of participial. As head of clauses with verbs in the conditional aspect, *o-da:X* is glossed ‘if/when’, with no real difference between ‘if’ and ‘when’—indeed with no real difference between ‘and/or’ and ‘if/when’ for that matter, as that difference is indicated by the conditional aspect itself. The postposition is defined as the same dictionary entry in all cases. In fact it is entered as a subentry under *da:₃*, which is essentially a postposition with its own internal constituents, *d-* initial, *-a-* augment, *o-da:* ‘near o’, and here *-X* final ‘in non-punctual contact with o’.

That dictionary entry goes into great detail on this postposition that looks like it is evolving into a conjunction. There *da:X* is listed as a “conjunction.” That subentry occupied eight pages in the 1970 format, two and a half pages conjoining nouns, noun phrases, numerals, postpositional phrases and five and a half pages directly relevant to complex sentences, connecting verbs or verb phrases. Those five and a half pages contain detailed information and documentation especially of the status of *o-da:X* as a postposition evolving into a conjunction, of the instances with pause preceding and/or pause following. It even includes a very few examples of verbs with the relativizing enclitic followed by (pause and) *da:X*, so few that they can be regarded as mistakes, i.e. change of plan. Extraposed instances of clauses subordinated by *da:X* are not unusual (as is true of other postpositions as well), as in (17a), certainly the same meaning as (17b).

- (17) a. *GAx'inh=inh 'a:nch' Ga:L da:X*  
 ASP-1s-see=HUM.SG here walking and  
 ‘I see him coming here’
- b. *'a:nch' Ga:L da:X GA-x-'inh=inh*  
 here and walking ASP-1s-see=HUM.SG  
 ‘he’s coming here and I see him’.

Another extraposed instance with Active conditional: *de:chi:d da: da'qe'li:LXa:* ‘*AdiXd ya' Axdah da:X* ‘what ever will we have if I start saying put indoors?’’. This is Raven speaking to his to wife, affectively (A 11.54); here contrary-to-fact, glossable also ‘what ever would we have if I were to start staying put indoors?’’. Here also the extraposition may be partly motivated in order to front the clause starting with the interrogative *de:-chi:-d* ‘what ever?’ A more ordinary instance is (18), which shows how inappropriate the gloss ‘and’ still can be.

- (18) *si-dA-'u:G-xah sAliL xu-ku:n-sA-gu'k'L da:X*  
 1s-NC-breath-removal happen 1s-abdomen-ASP-punch and  
 'I got the wind knocked out of me when he punched me in the stomach'

As a note on contrary-to-fact conditionals, there seems to be no distinction for such in Eyak. For example, *'i: xiLeh da:X* 'if I were you' is indistinguishable from 'if/when I am you', here equally with Neuter imperfective, or conditional *dAGAxcheh da:X k'uqu'Xi:yah* 'if I got hungry I'd eat something, if/when I get hungry I'll eat something'. These are treated under *da:X* in the dictionary, and mentioned in the "tense sequence" below. There is, however, one especially interesting use of the "yes/no" interrogative enclitic in combination with *da:X*, mentioned also in §27.3.2. This is the unique sentence from Lena (VI 143) *wAX 'u'xLileh da:Xshuh wAX qu'xLih*, glossed 'if I'd known (I'd ruin it) I wouldn't have done that to it', more exactly 'do I know that? and I'll do that to it', i.e. 'knowing that would I have done that to it?'. This must be a special use of the enclitic =*shuh* with *da:X* for a contrary-to-fact condition, though the subordinate verb is the usual Neuter imperfective, not conditional, and the main verb clause is not negative.<sup>2</sup>

There is only one other postposition distinctly acting like *o-da:X*, evolving from postposition to something like a conjunction. That is *o-d-wa:* 'pending o, before o', almost certainly with *d-* qualifier, derived from *o-wa:* 'before o'. Much less frequent than *o-da:X*. Documentation of *o-d-wa:* subordinating verb clauses occupies three and a half pages of the 1970 dictionary. That detailed account includes also its occurrence with and without pause before and after. One important difference between *o-da:X* and *o-d-wa:*, however, is that the latter is very often attested as sentence-initial with demonstrative 'Aw as its object, in *(dA-)'Aw-dAwa: q'* with enclitic =*q'* 'after that' (for glossing see dictionary entry). At the same time, though *o-da:X* is often followed by =*q'* enclitic as connector to the following main clause, there is no such introductory connector *\*?'Awda:X q'*, for significant but unclear reasons, somehow implying that *o-da:X* has evolved more toward being a conjunction than has *o-d-wa:*. One might, however, still then expect *\*?'o-da:X q'* in some use as a connector, but there is evidently no such attested. Exactly that might have been accepted if it had been tested. In any case it could hardly have been of high frequency, and no fully clear line can be established here between conjunctions and subordinating postpositions.

The rest of the postpositions, over a dozen as listed above, that serve as subordinators of verbal clauses, do so merely as part of their function as postpositions. No more is needed here than reference to those entries in the dictionary. Some differences between them are significant, especially in respect to the verbal mode-aspects to be found in the clauses they subordinate. These differences, however, are predictably determined by their semantics, e.g. that *o-wahd* 'in order that o' for unrealized events takes optative, *o-da:X* in the sense

<sup>2</sup> See also *-le(')* in the dictionary, especially the entries under *O-'LA-le(')* from Rezanov (1805) with gloss 'unintentionally'.

of 'if/when' takes conditional. All this is well described in the dictionary. The one item which is most surprising is *o-ya:X* 'avoiding *o > lest o*' in that it regularly takes the verb in the customary derivation. There is no clear explanation for this in the rest of the semantics of the customary derivation at all. This was certainly noticed during the fieldwork, but not explained.

The rest of the subordinating postpositions, like *o-da:X* and *o-d-wa:*, are not uniform in the degree to which they also function as introductory connectors for a following sentence. For example, *o-lehd* 'because (of) *o*' is found very frequently as the introductory connector *'Awlehd q'* 'therefore', in addition to its function as subordinator 'wherefore'. At the same time, *o-ch'ahd* 'from *o > after o*' is not so attested (*\*?Awch'ahd q'*), but is very frequent instead with the demonstrative locative *'u:-* 'there' as *'u:ch'ahd q'*, 'after that, then', as in fact *'u:ch'ahd* 'thence, from there' is often also temporal itself 'after that'. For further information in this regard on each postposition, reference is here made again to the dictionary.

### 26.3 Complex sentences with *'ida: ~ 'idA-*

The only other non-zero non-postpositional morpheme involved in the production of complex sentences is *'ida: ~ 'idA-*. The two allomorphs are in free variation, *'ida:* being phonologically independent, the *'idA-* combined. This item must etymologically be two morphemes, *'i-da: ~*, both homophonous with several other morphemes, but neither easily identifiable with any of those. At the same time, the combination may be especially relatable to the indeterminate object prefix allomorph *'ida'-* of the verb in the directive derivation, equivalent to *'idA'-*. The *'i-* is in turn certainly to be identified with the *'i-* of the indeterminate object in non-directive verbs, and the *dA-* is almost certainly to be related to the also equally inexplicable *da'-* of the unique directive theme *C dA'-l-L-Xa* 'have C'. Cf. also *'ida'ya:lAX* 'too (excessive)' including *ya:lAX* 'thing' as object of *o-lAX* 'more than *o*'.

This morpheme is syntactically unique, so difficult to classify. The reason for including it here is that it figures prominently in the formation of complex sentences, so might be called by some a "complementizer," though that term is not appropriate in that it is not directly relatable to what is called a "complement" here in Eyak syntax. It is in any case the closest morpheme to a complementizer there is in Eyak. It has in common with nouns that it is attested with the suffixes *-yu:* for plural and *-kih* for diminutive.

Its meaning is rather abstract, ranging from 'so (much so) that' (19) to 'the degree to which' (20) to 'whether or not' (21) to 'how, the manner in which' (22) to 'what' (23). The morpheme *'ida: ~* was not included in the dictionary (Krauss 1970a), hence the amount of exemplification given here. In this example and the following examples in this section, the morpheme is arbitrarily glossed as *SUB* "subordinator," though its precise function is difficult to characterize.

(19) *'ida*: ~ 'so (much so) that'

- a. *(d=)'idA-si-ga'L / (d=)ida: si-ga'L*  
 (selfsame=)SUB-1s-tired (selfsame=)SUB 1s-tired  
 'I'm so tired that...' (optional *dA*= 'selfsame' without change of meaning)
- b. *d=i'dA k'usAXahL la'q' sAqAts'Linh*  
 selfsame=SUB ate burst  
 'He ate so much he burst.' (III 30 L)
- c. *'ida: xan'Lq' k'u-XA-sahL la'q' sAqAts'L* 'He ate so very much that he  
 SUB very INDEF-ASP-ate burst  
 burst.'
- d. *'ida: dAshAche'L q'Aw wAX 'i-la:X-e'X k'uGAdA'eh*  
 SUB hungry EMPH thus 2s-eye-in see.something  
 'You're so hungry you're having hallucinations.' (something is seen in your eye)

Example (20a) also shows the clause introduced by *'ida*: ~ following, though the syntax is disconnected. Examples (20bc) show use of *o-ga'* subordinating.

(20) *'ida*: ~ 'the degree to which'

- a. *k'ude:dah 'AdLa'ya:=G, 'Aw qe'gu:l, 'ida: 'u-dahd 'u'ditah*  
 no.way move=NEG DIST thunder SUB 3-from heard  
 'They couldn't move (were startled), that thunder, such a sound was heard from it.'
- b. [*d=*] *i'da: GAlitah[-ga']*  
 selfsame=SUB ASP-2s-lie.prone-like  
 'For so long as you live'<sup>3</sup>
- c. *'Aw q'Aw Li'q' qe'LGAYu:, 'ida: guLit'u'-ga' q'Aw 'Aw XAWa:*  
 DIST EMPH all women SUB many-like EMPH DIST dog  
*d=i'da: 'iLit'u'-ga' 'Aw-djehX GAqa:L=inu:*  
 selfsame=SUB many-like DIST-ear bite=HUM.PL  
 'Then all the women, so many as they were, were biting the ears of those dogs so many as they were.'
- d. *di'da: 'iL-da:X 'idit'inh=inu: (qe'LGAYu:)*  
 SUB RECIP-different.from be.like=HUM.PL (women)  
 'All kinds (of women)' < 'so different from each other as they are'
- e. *ts'idwAX 'ida:=kih LAXAdiyah q'Al 'u-yAq'd*  
 only SUB=small 3-in  
 'Just this small bit (of roe) (was) in it', with *-kih* diminutive also a non-verbal sentence, i.e. postpositional predicate.

<sup>3</sup> With *dA*= 'selfsame' and *o-ga'* 'like o', supplied by Lena.



The examples in (21) end with a verb phrase subordinated by the postposition o-'e:X 'in search of'.

(21) 'ida: ~ 'whether or not'

- a. 'ahnu:-ch' 'iL'a:nk'inh, 'ida: tsu'd, k'utsu'd-'e:X  
 HUM.PL-to look.at SUB sleep INDEF-sleep-in.search.of  
 'He keeps looking at them, whether they're sleeping, in search whether someone is sleeping.'
- b. 'anh k'u'ehd t'ahL giyah-ya'X ti:lAtsu:xk', ida: 'u'ehd ch' 'anh  
 HUM.SG INDEF-wife feather water-in dip SUB 3-wife to HUM.SG  
 dAsAliL-'e:X  
 speak-in.search.of  
 'That wife would dip a feather in water, to see if he had spoken to his (former) wife.'

The examples in (22) all begin with dA= 'selfsame', and least in (22a) indicate the accord between the two components.

(22) 'ida:~ referring to manner

- a. dA='Aw 'a:n 'ida: yAX gu:ndi'ah, 'u-wa:LX q'uhnu: yAX  
 selfsame=DIST river SUB PERAMB flow 3-according.to 3p PERAMB  
 dAqe:X  
 go.by.boat  
 'The very way the river courses about, following that they boat about.'
- b. dA='i:nsALyahLinh 'ida: qa:-tl' 'ida'Xah q'Aw  
 selfsame=old.person SUB 1p-to tell EMPH  
 'That's just the way the old person told us.' /  
 'That's just what the old person told us.'
- c. dA=Li'q' 'Aw 'ida: 'u-lah 'ida-'k'uXah  
 selfsame=all DIST SUB 3-about SUB-THM-INDEF-tell  
 'Just everything which someone tells about it.'

Note also that in all these instances in (19)–(22) above, in spite of the English glossing, the free morpheme 'ida: does not fill an object nominal or pronominal role, but an adverbial one. This is often more closely translatable as 'how', as especially in 'Aw'a:n' 'Adi:lihsLi'yahL, 'ida: qa'leh "he figured out a way to do it", 'he thinking came upon how he'll do it', 'idAk'udAqah 'u'lixilGah 'I know how to count' < 'I know how something is counted'. This last also shows use of passive, common in Eyak in such constructions, along with gerunds. We have a minimal pair in 'u'lixilGah 'idA'a:nda' q'e' sdiyahl 'I know how he came back' as opposed to 'u'lixilGah 'a:nda' q'e' sdiyahl 'I know (that) he came back' (IX 145 L). It is likewise confirmed that 'ida: ~ cannot correctly be used simply as subordinator 'that' in 'iGax'eh k'uXi:yah 'I see you eating' < 'I see (you) that you are eating (something)', which cannot be \*'iGax'eh 'idAk'uXi:yah (V 19 L).

Most often of all, *'ida:* ~ is glossable by ‘what’ even more than ‘how’, though still adverbial, not nominal, with verbs like *-’l-L-ga’* ‘know’, or *-’l-’e* ‘call O C’ a complement thereto, also *-le* ‘act, happen’, *d-le* ‘say’, *tsin’-d-le* ‘speak’, *-’-Xa* ‘tell’, *tsin* ‘sing’, *'i-tsi:ndz* ‘dream’. A few such examples are given in (23).

(23) *'ida:* ~ ‘what’

*'ida:* *'anh sAliL dik' 'u:la'Lga:G*

‘She doesn’t know what happened to him.’

*'ahnu:tl' 'Aw 'a'Xah 'Aw Gu:djihwAlahyu: 'idA'utl' dAleh*

‘She told them what the Wolf-People said to her’

*'ida:* *da: dAsAliLsh di:Lch'a:q'*

‘Did you hear what we said?’

*'ida:* *dAsAliL dik' 'u:la'xLga:G*

‘I don’t know what he said.’

*'Aw'a:n' 'Adi:lihsLi'yahLinh 'ida: 'itsi:dz*

‘She thought of what she dreamt.’

*'uk'ah 'i:nsitahL—de:[d]—'idA'Adu'dA'eh*

‘I forgot—wha[t?]-what it’s called.’

The last sentence is especially interesting, with something like the same change as shown in the English glossing. See also in §26.7, however, for further use of interrogatives in complex sentences. The suffixation of *-yu:* ‘plural’ in *'ida:yu: silah tsin'dAleh* (also with *dA=* ‘selfsame’, *di'da:yu: silah tsin'dAleh*) ‘that’s how he speaks of me, he says such (awful) things about me’ nevertheless shows a nominal trait in *'ida:~*.

*'ida:* ~ is probably most often attested with the verb theme *d-le* ‘say’. Its potential positions in the clause was (partly) tested with Lena, the results demonstrated in (24).

(24) *'ida:* ~ with *d-le* ‘say’

a. *'u'lixilGah 'anh 'ida: si-lah dAleh*

I.know.it HUM.SG SUB 1s-about say

b. *'u'lixkLgah' 'anh 'idA-si-lah dAleh*

I.know.it HUM.SG SUB-1s-about say

c. *'u'lixkLgah 'anh si-lah 'ida: dAleh*

I.know.it HUM.SG 1s-about SUB say

d. *'u'lixLgah 'anh si-lah 'idA-dAleh*

I.know.it HUM.SG 1s-about SUB-say

‘I know what he said about me’

We can see also that *'ida: 'anh...*, *'idA'anh...*, *'u'lixilGah 'idAsilah dAlinhinh* etc. are equally correct. We know furthermore that the main verb *'u'lixilGah* can follow the *'ida: ~* clause. A most interesting question, however, is whether with that clause preceding, and ending

with *dAleh* (not *dAlinhinh*), the main verb can be *'u'lixilginhinh*, taking the relative enclitic spread to that. For more on this see further in §26.5.

Another question remains: whether *'ida: ~* can simply be glossed with the English clause-subordinating 'that' or 'whether'. There is at least one instance so translated, with 'that': *ts'idwAX 'idA'a-nda' q'e' sdiyahl sitl' dAlinhinh* 'he said to me only that he came back here', but it is possible, in fact probable, that this sentence might more exactly mean 'he told me only how he got back here'. Another example is explicitly glossed 'whether': *dik' 'u:la'xLga:G 'ida: 'a-nda' qu'wah* 'I don't know whether he'll come here' (VIII 58 L).

We have explicit evidence that *'ida: ~* cannot be used for the object of a transitive verb: *\*'u'lixilgah 'idAqu'xtsah* for 'I know what I'll buy' was explicitly rejected by Lena (IV 19), in favor of *'u'lixilgah de:d qu'xtsah*, or, presumably *'u'lixilgah 'Aw qu'xtsah* 'I know that which I'll buy'. Likewise *'iGAX'eh 'Aw 'u'sAtsahL* 'I see (you) that which you bought', *'iGAX'eh de:d 'u'sAtsahL* 'I see (you) what you bought', but not *\*'iGAX'eh 'idA'u'sAtsahL*; *'iGAX'eh de:d XAsahL* 'I see (you) what you ate', but not *\*'iGAX'eh 'idAXAsahL*. Also, according to the same pattern, *k'e:d* 'how?' can apparently substitute for *'ida: ~* in intransitives, e.g. *'u'lixilgah 'idAyileh* or *'u'lixilgah k'e:d yileh* 'I know what you're doing'.

The following example has the *'ida: ~* clause sandwiched between two clauses which both could form a complex sentence with it: *'Aw qu'li:Lginhinh te'ya'yu:[.] 'ida: dAXunh yiLe:[.] 'Aw qa:tl' qa'Xinhinh* 'he'll know, what kind of people fish are (how fish are people), he'll tell us'. The commas are supplied to delimit the clauses in that what was apparently delivered as single sentence; the decision of how to divide this into two sentences would be arbitrary. A further example here shows something like the same or the opposite, this time with commas, typical disconnected syntax: *'itl' 'a'xXa:k', qe:dah 'itl'a'xXa:k', 'ida: k'uqa'leh, q'e:dah k'uqa'[leh], 'itl' 'uxXa:k'* 'I keep telling you, simply what will happen; simply what will happen, I keep telling you'. At the same time, it confirms how optional the clause order is.

More on the subordinative use of *'ida: ~* is to be found below at the end of §26.7 below.

There are at least a few examples of *'ida: ~* in clauses also subordinated by a postposition. In two cases the *'ida: ~* is preceding by proclitic *dA=* 'selfsame' and the meaning is temporal. The first is subordinated by *da:X: di'dA'a-nda' siyahL da:X k'ushiyah 'ula'X dAsa'yahL* 'as soon as I got here he got mad' (III 24 L). The second, verbless (for which see §25.4) is subordinated by comparative *o-ga* 'like o': *di'dA'i: 'a-ndga' 'a-nd qu'xdah* 'as long as you're here I'll stay here' (IX 157 L). A third, already cited, entails double use of the *'ida: ~* phrase: *'Aw q'Aw Li'q' qe'LGAYu: 'ida: gu:nLit'u' q'Aw 'Aw XAwa: di'da: gu:nLit'u'ga', 'AwdjehX GAqa:Linu:* 'then all the women, as many as there were of them, were biting their ears, of as many as there were of the dogs' (60.3A). Another, also cited above, is *dA'Aw 'a:n 'ida: yAX gu:di'ah 'uwa:LX q'uhnu: yAX dAqe:X* 'they boated about following just how that river flowed about' (68.1A). In this instance the *'ida:* is accompanied by the proclitic *dA=* 'selfsame' but separated from it by the subject noun *'a:n* 'river'.

The same morpheme *'ida:* is also found in the combination *k'a:di'da:* 'never, useless to' plus verb in optative, described in the chapter on negation. This is presumably the same

morpheme even though the allomorph *-i'dA-* is not attested. It was probably never tested, but the variant *-i'da:* is so frequent that it may indeed be the only alternative. The semantics are certainly plausible, given that *k'a:d-* is plainly from *k'a:dih* 'absent, lost', q.v. as a basic negative word in the dictionary, for full documentation.

The allomorph *'ida:* ~ is also found with diminutive *-kih* and with a relativized verb in noun phrase subject of a verbless sentence: *ts'idwAX 'ida:kih lAXidiyah q'Ama: q'Al 'uyAq'd* 'just this small-sized bit of roe [was found] inside it' 10.15A. The same is found with *-yu:* 'plural' in *di'da:yu:* [or *'ida:yu:*] *silah tsin'dAleh q'unhAw* 'in such ways he speaks about me (behind my back!)'.

## 26.4 Complex sentences with *-le(')*

Three verb themes with the stem *-le(')* are frequently the head of complex sentences, of two main types. The first is illustrated in (25)-(27). With Neuter imperfective theme C O-' *LA-le(')* 'S believe O C', where the complement can be a verbal clause, we have (25). Here the object is 1s and the complement is '(that) I'm working'.

- (25) *x-dA-xa:gL xu-'Lilinh=inh*  
 1s-CL-work 1s-believe-HUM.SG  
 'He believes that I'm working.'

With the theme *'AnahshAkih o-XA' 'i-leh* 'S like o' we have (26). Note that (26b) employs optative for unrealized event.

- (26) a. *'AnahshAkih 'uXe'linh=inh 'uw-a: x-dA-xa:gL*  
 desired like=HUM.SG 3-for 1s-CL-work  
 'He likes it that I'm working for him.'  
 b. *'AnahshAkih 'uXe'xleh 'u-LAX 'i:xiL'eh*  
 desired 1s.want 3-THM 1s.see  
 'I'd like to see it.'

With C-Xa' *'i-le* 'S want to V':

- (27) *'a:nd xu'ya:yiLqah-Xa' 'i-x-leh*  
 here camp-COMP THM-1s-want  
 'I want to camp here.'

In (27) the subordinator is *o-Xa'*. In (25) and (26) the subordinator is zero, but the sentence is complex. For more of this type see the themes under *-le(')*, *'i-leh<sub>4</sub>*, and further below §26.7.

A second type is also with the theme *'i-leh* under *-le(')*, but with the desiderative mode. The basic meaning of the theme 'S be in state of mind', as glossed in the dictionary.<sup>4</sup> Discussion of this type, with desiderative mode, follows immediately below in §26.5.

At the same time, also under *'i-leh* are complex sentences with the subordinate clause in the optative instead of desiderative, *'i-leh<sub>6</sub>*, and occasionally even a hybrid mode, optative with desiderative suffix *-X*, q.v. under *'i-leh<sub>7</sub>*. The former might be analogical or innovative, and the latter certainly is.

Finally, there is one instance with subordinate clause in the Active perfective: *di'wAX sidahL 'ixleh* 'I wish to stay seated' < 'I wish that I am still seated', elicited from Lena. This was evidently to confirm an unusual or affective hortatory use of that Active perfective in text from Anna (20.54, 55). Probably no further such instances of Active perfective are attested.

## 26.5 Complex sentences with subordinate clause in desiderative mode

The first mode-aspect that was mentioned as specialized in the formation of complex sentences was the conditional, cited in the subsection above on complex sentences with postpositional subordination (§26.2), as subordinated by *o-da:X*. In this connection see also §12.3.1 on the conditional aspect. This shows that while usually subordinated by *o-da:X*, not only are other subordinating postpositions possible, but the conditional aspect also occurs independently, relativized, e.g. 'anybody that...'

The second such mode-aspect is the desiderative mode, which is usually subordinated as part of a complex sentence. The desiderative also has, far less frequently, an independent use, the hortatory desiderative, probably obsolescent: e.g. *li:xa:Xinh* 'may he grow!' (said when a child sneezes). Unlike the conditional, the desiderative stem is suffixed, with *-X*, which might ultimately be identified with the postposition *o-X*. In any case this can no longer be looked at as a subordinating postposition, as the example *li:xa:Xinh* shows, that when independent the spread relative enclitic *=inh* may follow the *-X*. That no such enclitic may follow the *-X* in a subordinate clause is as expected.

Whatever the origin of the desiderative suffix *-X*, that clearly contrasts with the postposition *o-X* 'in relation to *o*'. This postposition is attested, though not often, as a subordinator with Active and Neuter imperfective verbs in at least two instances: *'i:gahX k'udAxLch'a:q'* 'I hear you dancing', and *ya'Xu: k'ulAX 'ilAXit'ehX 'Adqu'lAXLAdje:dj* 'don't (you pl) brag that you (pl) are more powerful than someone'

As noted in the subsection immediately above, the theme *'i-leh* 'want' under the stem *-le(')* heads many complex sentences with subordinate desiderative verb clauses, e.g. *'ulAX*

<sup>4</sup> The *'i-* is identified in 1970 with the Neuter prefix, but erroneously. Morphologically unique, if identifiable with anything, that might best be the highly abstract *'i-* of *'ida: ~*.

'iGAXL'e:X 'ixleh 'I want to see it, I wish that I see it', 'a:nd xu'yAGALqa:X 'ixleh 'I want to camp here < I wish that it dawn on me here'. Many more instances are listed under 'i-leh<sub>5</sub> in the dictionary, where the subjects of the two clauses may be the same or different.

Of special interest here are two instances where the relativizing enclitic has spread to the head verb 'i-leh from the subordinate desiderative. These are *Gi:she:X 'iXe'xlinhinh* 'I want you to kill him < I want for you that you kill him', elicited from Lena, and 'ahnu:GAshe:X 'ilininh 'they want to kill him < they want that they kill him' in dictated text (56.21) from her, with both coreferential and non-coreferential subjects. It is clear as a basic rule that the enclitic cannot appear on the subordinate verb, but interesting to see that it can then spread to the head verb. This is further attested in the elicited sentences *dAGAtse:X 'uXe'xlinhinh* 'I want him to buy it', and *qAdAGAtse:x 'uXe'xlinhinu:* 'I want them to buy it' (II 93). It remains to be seen how widely this may happen in complex sentences, especially considering that there was no attempt to investigate this as such in the field.

Another verb theme that is especially often the head of complex sentences with subordinate desiderative clause is *d-le* 'say', especially with *o-tl'* 'tell o to...'. This theme occupies 14 pages in the 1970 dictionary format. About half way through that, on the seventh full page, it is observed that subordinate desiderative clauses are attested apparently only with *d-le* in the Active imperfective, even where the perfective might be expected. A half dozen examples are given, with the subordinate clause in both positive and negative, e.g. *dik' 'Aw Xa:xa:XG sitl' dAlinhinh* 'he told me not to eat it'. Then a list of 27 verb stems and themes is given, which may be found as subordinated under *d-le* in the desiderative mode. Nearly all those are like the preceding, 'he told me to...'. None are like the two key items in the previous paragraph, which are certainly sufficient to show the spread to the head verb. The syntactic significance of these was definitely not understood while fieldwork was possible. For example, given the two examples shown here, *Gi:she:X 'itl'dAxlinhinh* 'I said to you you should kill him' must certainly be correct, so likewise *GAshe:X 'utl' dAlinhinh* 'I told him to kill him' where the =inh refers to the object of *o-tl'* 'with o' (here better translated as 'to o') and the subject of 'kill O', and/or to the object thereof. The question that remains, however, is whether a sentence like *\*?tsu'd 'u'lixilginhinh* 'I know he is sleeping' is possible on the same principle, applying to the type of complex sentence discussed below in the subsection immediately following.

§12.3.4.3 covers some of the same ground as here, but in addition a few other types of desiderative use, one of which involves complex sentences, *P-dAGAleh -t'eh'*, 'have a mind to...'

## 26.6 Complex sentences with the preverb *qi'*

The preverb *qi'* has special syntactic qualities. Its meaning is relative, 'place where', also extended to 'time when'. In Krauss (1970a) its etymology was not understood. It is now clearly seen as a reflex of PAE \*q<sup>w</sup>ə-'e', a postpositional phrase with the pronominal \*q<sup>w</sup>ə-

'place, event' as object of o-'e' 'in place of (absent) o'. Otherwise, however, Krauss (1970a) gives a goodly full account of this preverb, quite explicitly about its syntactic peculiarities, in twelve pages total. Of these eight cover its use as relative locational, and two and a half as relative temporal. Its unique qualities include its positioning in the basic word order system, the conditions under which it is found as preverbal, after and before the complement (C), also before the object (O), and even before the subject (S). As a preverb *qi'* is itself found with preverbal finals *-ch'*, *-ch'ahd*, *-d*, *-dAX*, and *-da'* in accordance with the verb heading the clause in which it occurs. That relativized verbal clause may then itself be subordinated by a postposition as part of a larger complex sentence, e.g. *dik' qi'ch' shA'a'ch'L 'uXa 'u:la'dAga:G* 'It wasn't known what was their place to which they went'. Here *qi'ch' shA'a'ch'L 'uXa'* 'place to which they went' is a noun phrase with following a possessive postpositional phrase with o-*Xa'*. A nice temporal example is *qi' qu'xsinh da:X qu'xsinh* 'when I die I'll die; of I die, I die'. Cf. *qi'ch' 'ixisinh qu'xdAxa:gL* 'I'll work until I die' (Lena). One of several examples where both *qi'* and the clause or object of postposition is *qi'ch' 'ahntl' 'a'q' shA'a'ch'Lda:x* 'at/near the place towards which he went out with him'. Likewise, including the whole sentence, to give a very nice example of typical full-fledged Eyak syntax at work: *ne:tl'kihga' q'unhAw, qe'LAKih 'u:dAX 'uch' 'a'q' sahL, 'Aw dALaxwe:g qi'dAX 'uXa' li' XAdla:sa'yahLch'ahd* 'pretty soon then, a girl came out to him, from the place along which the groundhog had run in on him'. Here the sentence begins an with introductory connective, the main clause shows S P V (with P including an adverb, postpositional phrase, preverb), and is followed by an extraposed subordinate clause as the object of a postposition, itself S P V (with P including again the same).

## 26.7 Other complex sentences, with zero subordinator

This a third type of complex sentence, or perhaps simply other types of sentence with subordinate clause than desiderative, with no subordinating morpheme such as a postposition or *'ida: ~*. At least partly because no systematic attempt was ever made to investigate these, there is sometimes no clear line between such complex sentences and sequences of two sentences. For instance, we have *'a:nch' Ga:L da:X GAX'inhinh* 'I see him coming < he's coming here and I see him', also *Gax'inhinh 'a:nch ga:L da:X*, no doubt in response to the elicitation of 'I see him coming', and *'Aw ts'iyuh XAwa: siXa' shAshehL Gax'eh* 'I see that the bear killed my dog'. Further possibilities were evidently not investigated, e.g. *'a:nch' Ga:Linh. GAX'inhinh* 'He's coming. I see him' must certainly be correct, as two sentences. Certainly correct must be *'a:nch' Ga:Linh GAX'eh* 'I see him who is coming here' with relativized object. Here the most interesting remaining question is about the status of *'a:nch' Ga:L GAX'inhinh* 'I see (that) he is coming here', presumably a very basic type of complex sentence, where the enclitic is not for 'I see him' but rather is spread from the subordinate clause, which cannot take the human singular enclitic =*inh* on *Ga:L* 'is coming'. In a sentence like this, then, that enclitic has become something like a

sentence-completion marker. This might well be the motivation for the spread in the first place, to distinguish the clause as non-subordinate, where the enclitic is precluded.

Since this type of subordination is not marked by any morpheme, there is no dictionary entry that is dedicated to the examples needed. The search of the corpus for such entails a check through about twenty verb themes that are likely to subordinate clauses, such as verbs of perception, cognition, emotion ('I'm happy that...'). The search revealed only about twenty sentences strictly of this construction, and not a single instance of enclitic spread to the head verb. This is probably not significant, as the ca. twenty such sentences included only one or two which would definitively show the spread. One is *dik' 'anh qu'xshehG k'u'xLileh* 'I did not intend to kill him', lit. 'I believe I won't kill him'. This in no way shows, however, that *?dik' qu'xshehG k'u'xLilinhinh* would not have been acceptable. All the other examples are non-criterial for the spread, e.g. *xuqa'sheh k'uLilinhinh* 'he intends to kill me', *xdAxa:gL xu'Lilinhinh* 'he believes I'm working', and several other examples under O-'LA-le('). These do at least show that the zero subordination is a basic syntactic type for complement clauses with these verbs. There are several more examples under O-G-'e ~ 'see O', e.g. *'iGAX'eh k'uXi:yah* 'I see you eating' < 'I see (you) (that) you're eating (something)', and under O-'L-ga' 'know O', e.g. *yiLda:s 'u'lixilGah* 'I think it's heavy', *'u'lixilGah 'u'liL:gah* 'I know that you know it' (IX 145 L), and *'u'lixilGah 'anh silah tsin'dAleh* 'I know that he's talking about me'. This last might be eligible for relativizer spread, but given the extraposition, that the subordinate clause follows the main verb, *\*?'u'lixilGinhinh silah tsin'dAleh* seems unlikely. That the second verb is subordinate is most likely, however, since it has no =*inh* enclitic, even though that ends the sentence. Note, further, that with transitive main verbs like O-G-'e ~ 'see O', O-'l-Lga' 'know O', and 2s object, for example, that the main verb may either be that 2s or may be third person ('it'). The result need not be considered two sentences in either case.

The verb O-'G-'e ~ 'see O' is irregular, in that all mode-aspects other than the Active imperfective require the suppletive theme o-LAX *'i-L-'e* ~ '< travel (sightsee) beyond o'. Accordingly, we have the complex sentence with postpositional subordination in *'anh Lila:'GAqe:LLAX 'isAL'anhLinh* 'he saw the man boating along', in this way adding another postposition to the subordinating list above.

Under the verb O-'q'e:' 'try O' there are examples of zero subordination of clauses in the optative mode, listed here as (28). (Cf. §12.3.3 for the optative, which involves the morphophonologically complex element AN-.)

(28) Zero subordination with O-'q'e:' 'try O' (optative)

- a. *si-sa' 'i-li-L-ts'in'tl'-g 'u'sAq'e:L=inh*  
1s-mouth AN-face-CL-slap-REP tried=HUM.SG  
'He tried to slap me in the mouth.'
- b. *'a'q'e:'-k' 'Aw gALA-t'a'X li' 'i:y-ah*  
try-CUST DIST liquid-behind into.cavity AN-go  
'He keeps trying to go behind the water(fall).'



- c. 'u'dAq'e:'-k', 'u'dAq'e:'-k', qa' 'i-didja'  
 be.tried-CUST be.tried-CUST out AN-be.jerked  
 'It kept being tried and tried that it be jerked out'

(28c) is a nice example of Eyak passive. The use of the optative here is no doubt a function of the semantics.

The verb that in a sense is the most productive of complex sentences is *d-le* 'say'. In that sense too it is most often sentence-final, following the quote itself, but that by definition is its only syntactic connection with a direct quote. This theme is treated above in its frequent further use as 'tell o to', with a subordinate clause in the desiderative. There is indeed the possibility also of indirect quotation, shown in at least one example. This is found, interestingly enough, within a direct quotation, 32.33 "*dALich* 'q'unh qa:Xahd qu'wa;," *dALinhinh*, translated "Forever he is going to go away from us," he says'. The question here of attaching =*inh* to the subordinate verb is moot because of the =*unh* on the =*q*' enclitic emphasizing *dALich* 'forever'. Indirect quotation was not investigated as such in the field, e.g. for the possibility of ?*qu'wah dAxlinhinh* 'I say he will go' as well as presumably correct *qu'winhinh dAxleh*. Perhaps second in frequency, after *d-le*, is O-'*Xa* 'tell of O', e.g. *dita:dz 'itl' 'u'siXahL* [or 'a'xXah] 'Aw *yahd k'udAshiyah* 'long ago I told you that house is no good', with verbless subordinate clause.

Finally, under the entry O-'*l-Lga* 'know O' and O-G-'*e* ~ 'see O' it is clear there was a certain amount of investigation of complex sentences for the distinction between 'know what...' and 'know that...'. This revealed what might appear to be one other zero subordinator type, where the subordinate verb has the enclitic, giving the impression that the clause is relativized 'that which you told him of it'.

- (29) 'u'-*li-xi-L-gah* 'Aw 'u'-*tl'* 'u'-*sA-Ø-XahL=inh*  
 3-THM-1s-CL-know DIST 3-with 3-ASP-2s-tell=HUM.SG  
 'I know what you told him of it' / 'I know that you told him of it' (Lena)

The second gloss is questionable, unless there are two sentences. Only the first gloss is confirmed by (30).

- (30) 'i-*GA-x-'eh* 'Aw 'u'-*sA-Ø-tshL*  
 2s-THM-1s-see DIST 3-ASP-2s-bought  
 'I see what you bought' < 'I see you that which you bought' or perhaps 'I see you.  
 You bought that.'

In (30) it almost looks like the 2s subject of the subordinate verb is spread to the main verb as object, in the same way as the human singular enclitic is spread. Further data seem to be lacking.

This investigation yielded further such forms, e.g. 'i*GAx'eh* 'i*dAyileh* 'I see what you're doing' < 'I see you how you're acting', and likewise 'i*GAx'eh* 'i*da: XAsahL* 'I see what you ate' < 'I see you what you ate'. Moreover, for the latter Lena also offered 'i*GAx'eh*

*de:d XAsahL* ‘I see what you ate’ < ‘I see you what you ate’, perhaps really < ‘I see you. What did you eat?’. This is supported by *’u’lixilGah de:d qu’xtsah* ‘I know that I’ll buy’ < ‘I know it. What will I buy?’, and *’u’lixilGah k’e:d qu’xleh* ‘I know what I’ll do’, which Lena says means the same as *’u’lixilGah ’ida: qu’xleh* ‘I know what I’ll do’. Clearly here interrogatives can be used as well as *’ida: ~*, but it is unclear whether or not this is an innovation under the influence of English. Further, we have e.g. both *’u’lixilGah k’e:d yileh* and *’u’lixilGah ’idAyileh* ‘I know what you’re doing’, but note here the third person object instead of second, *’i’lixilGah* ‘I know you...’, which would be parallel to *’iGAX’eh* ‘I see you...’ above.

For more on the syntax of interrogatives, see Chap. 23. The use of interrogatives mentioned here is additional to what is discussed there.

There remain also the following unanswered questions. First, it is clear that *’idAk’uXasahL ’u’lixilGah* means ‘I know what you ate, I know how much you ate’, possibly even ‘I know whether you ate’, but it remains unclear whether it can also mean ‘I know that you ate (something)’. We have at least one example that it might, but judging from the statistics, that might be inaccurate glossing. Second, we know from the subsection immediately above that *yitsu’d ’u’lixilGah* ‘I know (it) that you’re sleeping’ is correct, and perhaps also *yitsu’d ’i’lixilGah* ‘I know you that you’re sleeping’, perhaps as one sentence. We also know that *tsu’d ’u’lixilGah* ‘I know that he’s sleeping’ is certainly correct, and that *\*tsu’dinh ’u’lixilGah* ‘I know that he’s sleeping’ cannot be correct as one sentence. Presumably *?tsu’d ’u’lixilGinhinh* ‘I know that he’s sleeping’ should also be correct, but we lack proof as evidently that question was never asked.

## 26.8 “Tense” sequencing

From an Eyak point of view, since the language is tenseless, as several times noted, tense sequencing is not a grammatical subject, and should be covered in the semantics of mode-aspect. However, we have documentation of this being explicitly investigated with Lena, in the following elicitations. Testing the future, *’iqe’xgah da:X siqa’ ya’ sAga’L* ‘I was going to dance but my husband got tired out’ is the same as ‘I will dance...’ Testing the present, *’ixgah da:x siga’L* ‘I was dancing and I got tired’ is the same as ‘I am dancing...’. A third item is more specific: *’iGAXgah da:X xga:k’* ‘when I dance I get tired’ merely confirms that the inceptive conditional applies also in the customary sense, rather than taking the customary *-k’* suffix, so meaning inherently also ‘whenever I dance’. There are further examples for the tenselessness in sentences that are not complex, cf. (31)

(31) Tenselessness in non-complex sentences

- a. *giyah gAli:tl’eh, dA’Awtl’ da: yAX sdiwehL*  
water liquid.is.cold nevertheless 1p around we.swam  
‘The water is/was cold, nevertheless we went swimming.’ (Lena)

- b. *giyah gAli:tl'eh da:X q'a:l 'Awa: dik'*  
 water liquid.is.cold CONJ now of.it NEG  
 'The water is/was cold but now not.' (Lena)
- c. *dita:dz 'itl' 'a'xXah 'Aw yahd k'u-dA-shiyah*  
 long.ago constantly 1s.say DIST house NEG-NC-bad  
 'Long ago I am telling you that house is no good.'

This principle applies also to contrary-to-fact conditionals, e.g. *'uga' 'ixLits'ah da:X 'Aw ya'X qu'x'ah* 'if it were strong enough I'd pick it up', = 'if I'm strong enough I'll pick it up'.

A fair amount of exemplification is offered in the discussion here on complex sentences, where comment on the choice of mode-aspect in the subordinate clause is only secondary. The rationale for this is that that choice is a function of the semantics of the postpositions for the clauses subordinated by postpositions, and the accounting for those is found in the dictionary. The rest, including the subordinate clauses in the desiderative and conditional, is a function of the semantics of those mode-aspects, so is discussed in the sections on those in verb morphology. Likewise the optative, e.g. with the verb O-'*q'e:*', should be explained by the semantics of the optative. Admittedly, however, such are at least legitimate questions of mode-aspect sequencing in complex sentences.



## 27 ENCLITIC SERIES

*Editors' note: This chapter was incomplete at the time of Krauss' passing. We present it here with only minimal additions, mostly in the form of interlinear glossing of examples and expansion of the final section on copular enclitics (§27.10). In particular, we have not attempted to remove all of the existing redundancy. Most of the chapter in its current form reads something like a listing of lexical forms, which the author justified because enclitics were omitted from the 1970 dictionary.*

Eyak has three series of enclitic particles with an important function that is here treated as part of syntax. There is no question about the obvious morphological unity and unity in syntactic function of these enclitic particles. They either take up a significant portion of the syntactic description of Eyak, or belong in a section of their own, somewhat arbitrarily. The theoretical consideration of their relationship to Eyak pragmatics and/or discourse will remain beyond the scope of this grammar.

Though the basic morphology of the three series is very similar, historically unified to begin with, the actual usage is evidently in a state of evolution, rather dissimilar between the three. The corpus includes probable historical documentation of change, as will be shown further below.

These three series of enclitics were not listed in the dictionary, or in the ledger, being treated as affixes rather than stems. In terms of frequency in the corpus, however, there is a significant difference between the =*q'* series and the =*sh* and =*d* series, in that the =*q'* is vastly more frequent than the others. It occurs at least 1,500 times in the texts alone, while the =*sh*, it turns out, occurs perhaps only ca. 250 times altogether, and the (non-interrogative) =*d* even fewer times. By sheer chronological luck, just as the writing of this chapter was nearing the end of the treatment of the =*q'* series, the whole corpus was becoming digitally searchable through the work of Guillaume Leduey, including not only the lexical files, but even the bulk of the supplementary (post-1965) texts. Thus, Leduey was able to furnish a more or less complete listing of the =*sh* and =*d* enclitics instances for the writing of this part of this chapter.

### 27.1 Morphology of enclitic series

The morphology of the three enclitic series is quite simple. These are composed first of a single obstruent, =*q'*, =*sh*, or =*d*. The first and most common is =*q'*- for focus, to which must be affixed a reduced demonstrative pronoun. The second is =*sh* 'yes/no question', to which may be attached a reduced demonstrative pronoun. The third is =*d* 'exclamatory', to which must be attached a reduced demonstrative pronoun. This =*d* may or may not be identified with the =*d* enclitic that is required with content questions, to which may be attached the same set of reduced demonstrative pronouns, discussed in the chapter on interrogatives.

The reduced demonstrative pronouns are =Aw from 'Aw 'non-human, distal or unmarked', =Al from 'Al 'non-human, proximal', =unh from 'anh 'human singular', =uhnū: < 'ahnū: 'human plural' (see Tab. 9.3). There is also the combination =unh=Aw. This is common, but is almost the only such combination of reduced demonstratives attested. This happens to be attested mainly with =q', but only a few times with =d and =sh (interrogatives). There is, however, one attestation of the combination =q'=unh=Al, which implies the likely possibility as well of ?=sh=unh=Al and of ?=d=unh=Al, neither attested as no attempt was made to elicit such.

If none of these reduced demonstratives are attached to =q' or to =d, then instead we have =q'-uh or =d-uh, whereas =sh may stand alone or be affixed, as =sh-uh. The reason for the difference is not clear, perhaps phonological, that =sh is a fricative. However, the =d with interrogatives, with which this =d may be identified, may also stand alone. The -uh is probably to be identified with the =uh enclitic, 'non-human' object, that is unique to imperatives.

The reason for the reduction of 'anh and 'ahnū: to =unh and =uhnū: specifically with the vowel /u/ is not at all clear. (Cf. =inh and =inu: relativizers with verb stems treated in §27.2.3, though those may be from PA \*-y-əŋ; cf. Athabaskan.) There is a temptation to see =q' as from \*=q'w-. Cf. the Minto particle k'u, very frequent and probably cognate, also Navajo -go, also probably cognate. That would explain the /u/, if =d-uh and =sh-uh are analogical, but then there is =uh, independently, just mentioned. That =uh may be a further reduction of 'Aw, the least marked demonstrative of all, possibly relatable to third person possessive prefix 'u- < PAE \*\*wə-.

The =q' enclitics are written with space preceding, inconsistently with =sh and =d. This is merely continuation of convention from the 1960s, maintained here for no other reason.

Treatment of these enclitic series will begin with the non-copulars, i.e. not =q'A, =shA, =dA plus full demonstratives, but =q', =sh, =d in that order, bare or with reduced demonstratives attached. Next will be combinations of these series, =sh=q', =sh=d possibly =d=q' and conceivably even =sh=d=q', non-copular and copular, then finally the copulars, including discussion of copular clauses.

Here I should add that these enclitics are always word-final, that nothing is ever attached to them—almost never. There are, however, five forms in the whole corpus which appear to be exceptional to this rule, all with the enclitics apparently as object of the comparative postposition o-ga' 'like o'. One is 'u:ch'ahd q'Awga'; the other four are da:ch'ahdduhnū:ga', da:ch'ahddAwga', and k'e:wAXdunhga' twice. As noted in the treatment of o-ga' under §16.10.13, here is the temptation to attribute these to ellipsis of 'u-ga' with the preceding, as is often the case with =inu: 'u- > /inu:/, but the phonological simplicity of this is lacking in four of these instances, and such ellipses are otherwise unattested. It seems best to attribute these instances to a unique morphosyntactic property of the comparative postposition o-ga', lacking other explanation. Full documentation is

provided under o-ga' in §16.10.13. This matter was obviously not adequately investigated in the field.

## 27.2 Syntax of =q' enclitics

The =q' enclitics were originally called =q' "emphatics" and this remains as good a name as any. That naming also avoids issues that might be raised by the choice between "focus" and "topicalizer." These enclitics are obviously composed of two morphemes. The =q' needs to be discussed in terms of what grammatical or syntactic classes it attaches to, and the reduced demonstratives that attach to the =q' need to be discussed in terms of what they refer to.

### 27.2.1 Placement of =q' enclitics

The enclitics of the =q' series may be attached at the end of any sector or constituent as such of a sentence. Within the hierarchy, this includes not only the Introductory and Subject, but also the Object, or Complement, or even Preverbal, including preverb, and also the Verb itself. However, not counting the Introductory, only one such enclitic may occur in a syntactically connected stretch. It also appears probable that that enclitic must occur on the *first* constituent or sector of that stretch, not counting Introductory.

In order to demonstrate the function of =q', I use Anna's narrative text "Raven Stages War" (Raven cycle, text 7). That happens to be of medium length, shorter than Anna's other Raven texts, but probably quite typical in its use of this enclitic. It is presented as 45 sentences long, in 74 connected syntactic stretches. It includes a total of 18 instances of the =q' enclitic. These are distributed somewhat unevenly, which also seems typical. The first 12 sentences include 7 instances, the next 11 sentences none, and the next 14 sentences include all the rest, 11 more instances, the last 6 sentences being without =q'.

Here in (1) all the sentences or stretches containing =q' enclitics will be presented with interlinear glosses.<sup>1</sup> The enclitics are bolded in the text and glossed as EMPH ('empahtic'), with no distinction between the various forms of the emphatic. (The choice of reduced demonstrative occurring with =q' is discussed in §27.2.2.) Words or constituents marked with =q' enclitics in Eyak are underlined in the free translation. The meaning or translation thereof is something like mild emphasis, not consistently rendered in the free translations in Krauss (1970b, 1982) as postposed 'it is' or sometimes fronting. The relevant stretches are presented herewith in this way, with commentary, first with regard only to the placement of =q' itself.

<sup>1</sup> "Disfluencies" are enclosed in parentheses, while material inserted but not spoken is enclosed in square brackets.

(1) “Raven Stages War” by Anna (Raven cycle, text 7), sentences with =*q*’

1. *dAXunh-yu: q’Aw sAlahL*  
person-PL EMPH move.camp  
‘People had camped.’
- ...
6. *’Aw q’Aw ch’i:leh q’Aw ’ahnu:-da’ sahL*  
DIST EMPH Raven EMPH HUM.PL-there go  
Then Raven came to them.

In the first line of (1) the enclitic =*q*’ marks the subject, first constituent. Later in line 6, the first *’Aw* is the unmarked (distal) demonstrative in the most common of all connective Introductory phrases, *’Aw q’Aw*, where the *’Aw* is quite abstract, merely a discourse marker, ‘then’. This is itself followed by ‘Raven’, allowed as a second =*q*’ only after the connective Introductory, as noted above.

- (1) 8. *’Aw q’Aw ’Aw-lAX ’isAL’anhL, ’Aw dAla’d ’i:LahL=yu:*  
DIST EMPH DIST-THM saw DIST hanging pl.animate.in.position=PL  
Then he saw them, the goods hanging up. ‘that he saw them (Raven, goods),’
9. *’u:-ch’ahd q’e’ sdiyahl da:X q’Aw*  
3-from back go.back and EMPH  
‘Then he went back and then’
10. *wAX q’unhAw ’Adi:lihsLi’yahL*  
thus EMPH he.thought  
‘Thus he thought.’
11. *listsin’da’X qAXa’yah q’unhAw ’iL-t’a’ ’i:nsAL’ahL*  
chickadee EMPH RECIP-behind gather  
‘He gathered chickadees together’
12. *’Aw ’iL-t’a’ ’i:nsAL’ahL da:X q’Aw*  
DIST RECIP-behind gather and EMPH  
‘He gathered them together and’

The passage above begins in line 8 with the same connective *’Aw q’Aw* as in the preceding. In line 10 ‘thus’ is literal here, indexing the complement, i.e., Raven was thinking, though often that can serve as connective Introductory. In line 12 =*q*’ is attached to the whole clause subordinated by *da:X* ‘and’, turned thus into an Introductory to the main clause.

- (1) 24. *’AwdAwa: q’uhnu:; (’a; ’uX,) ’uX(,) k’usi:k’ ’uXa’ yAX sAkugL*  
pending.that EMPH HEST HEST HEST weapon 3-with around broke  
‘Then, his weapon broke apart.’
25. *’Aw-lu’qa: q’unh ’AdiX q’e’ [sdiyahl]*  
DIST-in.search.of EMPH inside back went  
‘He went back inside[,] to fetch that’



In line 24 'Aw-dAwa: 'pending that, then' is a frequent Introductory. In line 25 =q' is attached to the postpositional phrase 'Awlu'qa: 'in search of that', which is the first of three preverbal, separating it somewhat from the next two, both preverbs 'AdiX 'indoors' and q'e' 'back', as implied by the comma in the translation.

- (1) 27. 'Aw **q'unh** 'Aw-lu'qa: 'AdiX q'e'(.) [sdiyahL]  
 DIST EMPH DIST-in.search.of inside back went  
 'that he went back inside to fetch that'
28. ts'id ch'i:leh=shiyah **q'Aw** 'u:d  
 only Raven=bad EMPH there  
 'Only Raven was there'
29. 'u:dAX **q'unh** q'e' 'a'q' sdiyahL  
 then EMPH back outside go.back  
 'Then he went back outside'

Line 27 repeats the preceding, but here with =q' in the connective Introductory. In line 28 'only Raven' functions as a constituent, here as an argument of a verbless clause, with locational adverb 'U:D 'there' as predicate. This might equally be translated as 'it's just Raven there'. In line 29 'u:dAX q'uh is a connective Introductory, one of the most frequent, with meaning of locational adverb 'u:dAX '(movement) along there' extended to temporal, 'then (after and/or during that)'.

- (1) 33. 'Aw **q'uhnu**: 'Aw-ya' 'Aw sALAGL=inu:, 'Aw Xe:-ya' da:X, 'Aw  
 DIST EMPH DIST-into DIST threw=HUM.PL DIST oil-into and DIST  
 dAda'd yAX sAXehL=inh.  
 lid around carry.in.pack=HUM.SG  
 'Then they threw him into it, into the seal-oil and, they tied a lid down on  
 it/him.'
34. 'Aw dAda'X yAX sALXehL da:X **q'uhnu** ('Aw), 'Aw sAXehL,  
 DIST x around tie.with.rope and EMPH DIST DIST tie.with.rope  
 Xi:d 'itl'-a:na'q'-Ach'.  
 yonder mountain-on.top-from  
 'They tied a lid down on it/him and, they back-packed it, yonder onto a  
 mountain-top.'<sup>2</sup>
35. Xi:d 'itl'-a:na'q'-A-ch'ahd **q'uhnu**: 'ahnu: (qid 'anh) 'anh  
 yonder mountain-on.top-toward EMPH HUM.PL down.off PROX PROX  
 qid sALAGL.  
 down.off threw  
 'From yonder mountain-top they threw him down.'

<sup>2</sup> For the distinction between the similar-looking themes -XehL 'carry in pack' and -L-XehL 'tie with rope' see the discussion in §18.13.3.4.

36. *'anhu: qid sALAGL, 'Aw (la:sA'ah,) tsa:'L-tl'.*  
 HUM.PL down.off threw DIST cauldron food.box-with  
 'They threw him down, with the bent-wood food-box.'
37. *Xi:d yina:'d ya:n' disLiqahGL da:X q'Aw, q'e:dah*  
 yonder at.bottom.of down wooden.object.fell and EMPH forthwith  
*ya' sAqu'tl'L.*  
 completely broke  
 'Way down to the bottom it fell and then, immediately it broke to bits.'
38. [*'Aw*] *q'Aw ts'id ch'i:leh q'Aw, (ya'X,) 'u:-ch'ahd*  
 DIST EMPH only Raven EMPH into.broad.opening 3-from  
*ya'X dAsALK'a't'L.*  
 into.broad.opening flew  
 'It was just Raven, he he flew away from there.'

Line 33 above begins with the common connective. Line 34 begins with a clause subordinated by *da:X* to which *=q'* is attached, making it Introductory to the main clause 'they back-packed it'. Line 35 starts with repetition of rightward extraposed adverbial phrase of 34, repeated (with 'from' instead of 'onto') to which *=q'* is attached as Introductory. Line 37 starts with clause subordinated by *da:X* to which *=q'* is attached as Introductory to main clause. Line 38 is outright ungrammatical, itself beginning with *=q'Aw*, an error, disfluency, therefore a connective [*'Aw*] should be added before *q'Aw*, then followed by (disconnected) subject phrase 'just Raven'. Such instances are rare.

This text happens in fact to be a quite typical example, not only in the somewhat uneven distribution of *q'* emphatics, but also statistically in the types of placement thereof (with the exception of the start of line 38). The locus of the placement of the *q'* emphatics in this text is summarized in Tab. 27.1. Note the frequent use of grammaticalized demonstrative in *'Aw q'Aw* as a discourse marker. At the other extreme of length or complexity, there are three instances of whole clauses subordinated by *da:X* 'and', thus converted to an Introductory, all with *q'* attached, all of which also happen to be followed a pause (indicated by comma). It is especially common for this *da:X* to take the enclitic, and equally common for it to be followed by pause, given the length of the clause and the naturalness of syntactic break in this connection. For more detail on this see especially the data on *da:X* in the dictionary. The rest of the *=q'* enclitics are attached to an Introductory connective, an initial postpositional or adverbial phrase, or a Subject constituent, all perfectly ordinary, some especially common.

The text in (1) serves well enough as an introduction to the subject of the placement of *=q'* enclitics, though it does not provide examples of quite all types of such placement. These need to be taken up, especially in view of the major question that remains, about the basic principle of *=q'* use. It is clear that no more than one *=q'* enclitic may occur in a connected syntactic stretch (not counting such on an Introductory constituent, which is a given). The major remaining question is whether that one *=q'* enclitic must be attached to the first constituent (beyond I) of the sentence. We have abundant examples of *q'*

**Table 27.1:** Distribution of *q*' emphatics in the text "Raven Stages War."

Locus	Count	Lines
'Aw distal	5(6)	6, 8, 24, 27, 33, possibly 38
dAX 'and'	3	12, 34, 37
Introductory (other than 'Aw)	2	24, 29
Initial postpositional/adverbial	3	10, 25, 35
Subject	4	1, 6, 28, 38

emphatics marking a subject or object constituent when only one of those constituents is present; however, we have no examples of *q*' emphatics marking subject or object when both subject and object are present in the sentence. It seems clear that S O *q*'-V should be entirely grammatical, because S is the first constituent (not counting I). The big question is whether S O *q*'-V is grammatical. This was evidently never tested. It was never realized during the period of field investigation that simple basic overt SOV is itself so uncommon that there happen statistically to be zero such instances with =*q*' enclitics. In this connection there is plenty of indirect evidence that S O *q*'-V would be grammatical. We can only try to answer indirectly whether S O *q*'-V would be grammatical or whether the rule is that =*q*' must be on the first constituent.

Concerning =*q*' placement, basically two checks were made in the writing of this grammar, of the 1963–5 tape-recorded corpus of texts from Anna. The first was partly statistical, of all her Raven texts (506 sentences total), summarized in Tab. 27.2. By far the largest single group was marking an Introductory. Of the three instances of =*q*' after the verb itself, two were sentence-initial or clause-initial. It may well be that these statistics reflect merely or mostly what types of elements are most likely to occur as sentence- or clause-initial. There was one exception, 11.62, after non-initial verb, to be discussed below.

**Table 27.2:** Distribution of *q*' emphatics in Anna's "Raven" texts.

Locus	Count
Introductory	91
initial S	33
initial O	10
dAX 'and'	24
Initial postpositional/adverbial	21
adjective	4
Complement	2
Verb	3

There was one other item, however, which seems to break the initial rule in a basic way, inexplicably, shown in (2). This example clearly shows the =*q*' emphatic *q*'Aw following the postpositional phrase *lu:di:'d* 'on the tide-beach', i.e. not marking the initial constituent.

- (2) *ch'i:lehshiyah lu:-di:'d q'Aw sAdahL*  
 Raven beach-on EMPH stay  
 'Raven was staying on the tide-beach.' (10.1)

It might be possible to interpret the first two words of (2) as a verbless clause, 'Raven [is] on the tide beach', and thus interpret *q*'Aw as marking this initial clause. At the same time, this is the initial sentence of a whole Raven cycle that Anna was asked to recite. It is therefore conceivable that this exceptional sentence is almost some kind of title, *ch'i:lehshiyah lu:di:'d* "Old Raven at Tide-Beach", with verb added. Such a flourish might easily be considered within Anna's range of storytelling artistry.

As possible support for this, consider (3), uttered with a memorable intonational flourish, high pitch on long *-qe:L-*.

- (3) *GAqe:L=inu: q'-uhnu:*  
 boating=HUM.PL EMPH-HUM.PL  
 'they were boating along' (28.1)

This text seems to start with a verb, as translated, but with enclitic *q'uhnu:* following. The following stretch tells who the subjects are, extraposed. Conceivably this is a special style for starting a story, and/or it may be better seen as a relativization, since the human plural human demonstratives are present in both the verb and the enclitic. Thus 'they who were boating along', followed by the subject, then pause, then third stretch with the (elaborated) same verb again.

A second check was made, through the entire corpus of Anna's 1963–5 tape-recorded texts, for a still broader pool of =*q*' placements. The main revelation there was that when =*q*' is attached to verb itself, there is a startling disproportion of items where it is in fact difficult to see the verb or stretch ending in verb as a single syntactic entity other than as a sentence with more than one constituent internally. There were four instances, twice in two texts where the verb word is itself initial.<sup>3</sup> On the other hand, there are seven instances where this clearly appears not to be the case, i.e. where =*q*' follows a non-initial verb.

These seven instances of =*q*' enclitic attached directly to a verb that is clearly not initial are certainly a special use of that, and deserve each to be examined here. The first is shown in (4), occurring in the middle of a long list.

<sup>3</sup> Text 9, lines 37 and 118; text 68, lines 69 and 71.

- (4) ..., *sahx-wAlahyu; ne:tl'-da:X 'u-'a:n'* 'isAL'anhL q'unhAw, *tsi:wAlahyu;*  
 cockle-people first-and 3-encounter came EMPH mussel-people  
 ...

'... cockle-people, first he came upon them, mussel-people, ...'

(Text 11, Line 62)

A better punctuation for the translation would probably have been to put the interruption in brackets, possibly better to reflect the function of the =q' enclitic here. The 'them' may more probably refer to the preceding, but this is not certain either.

The second is in (5). This happens to be written as one sentence instead of two, for some reason, with the first clause translated almost as if that were subordinated by *da:X* (*q'Aw*).

- (5) 'Aw *gutl'ah da:X* 'Adu'gudla:Li'ahL q'Aw, 'u-yA-ch'  
 DIST tail and hang.onto EMPH 3-hand-in DIST apart  
 'Aw *yAX shALdja'L=inh*  
 broke=HUM.SG  
 'As he hung onto her tail, it broke off in his hand.' (23.33)

The next three instances are all clustered in the same text, text 32, "Drowned Grandson Visits Grandfather as Land Otter," shown in (6). All three instances occur within a stretch of 25 sentences in a text that is 50 sentences long. The introductory footnote makes the point that "The style of delivery is mostly very subdued, highly charged emotionally." This is not surprising for a culture in which drowning is an all too common fate, and land otters are very much feared as supernatural, especially as embodiments of the dead. This background may well provide some clues to the special nature of these sentences with final =q'. All three, moreover, are in direct quotes.

- (6) =q' emphatics with non-initial verb in Text 32

21 *dAqi'dAx 'Adlah 'u'xsditahL q'Al, lAXqa'ch' q'e' GAXda:L q'Aw* ...,  
 as.soon.as ? ? EMPH ? back come.back EMPH

"This was as soon as I found out about myself, I was coming back to your midst. ..."

35 *dA'wAX k'e:'shAw 'i:ntsi:ndz q'Aw, 'u-tl' duxleh*  
 thus maybe 2s.dream EMPH 3-to 1s.said

"Perhaps it was you were just dreaming," I said to him."

46 *dA'Al Xa:'d-AX-yu: 'u:-nAX k'u-da'ya:-k' q'Al 'a'd*  
 this.very outdoors-motion-PL 3-head INDEF-interfere-CUST EMPH very  
*yi'a'd, si-ya: yik'a'd,*  
 very 1s-for sick

'This misery of his all around outside it is that hurts a lot, that hurts me.'

Line 21 is from the returned grandson. There are in fact two clauses ending with =q' enclitic after the verb. The first may be considered a nominalization with the special

preverb *qi*, which may be considered relativizing, ‘place where’, here used temporally, with proclitic *dA*= ‘selfsame’ and *-dAX* final, ‘movement within’, here translated ‘as soon as’. That clause may itself therefore be considered a single and initial constituent. The second, however, less easily so, at least in that we have abundant examples of a Preverbal consisting of postpositional phrase, here *lAXqa’ch* ‘to amongst you’, to which =*q*’ is attached, preceding the verb.

Line 35 of (6) is Anna quoting herself, where the =*q*’ is translated ‘it was’, thus ‘perhaps it’s that you were dreaming that’. Such English is an attempt to convey stepping back from the whole sentence as an idea.

Line 46, is still more clearly along this line, quoting the grandfather. The clause *Xa:’dAXyu: ’u:nAX k’uda’ya:k* ‘the misery of his all around outside’ is bracketed by the proximal demonstrative *’Al* (with proclitic *dA*= ‘selfsame’) and matching =*q*’ enclitic *q’Al*. The translation in Krauss (1970b) senses the syntactic structure, ‘The very idea that...’, put even more strongly than in line 35 of (6), itself serves as the subject of the verb phrase *’a’d yik’a’d* ‘greatly it hurts’. Within the quotation, after comma, the verb is repeated with specification of whom it hurts, thus considered an extraposition rather than separate sentence, the English ‘that’ being the relative with reduced vowel.

There are perhaps three special factors involved in these three special instances of the =*q*’ enclitic in (6). They are all in quoted conversation, all in the same highly emotional text, and all may seem to be stepping back to look the verbal stretch as an idea practically as a single subordinated constituent. This last factor functions least clearly in the line 35, more clearly line 21, and most clearly, perhaps quite literally, in line 46.

The sixth instance of =*q*’ enclitic attached directly to a non-initial verb, shown in (7) is the most difficult to explain. The sentence begins with a connective Introductory marked by an emphatic, followed by the extraposed subject, then ‘they (customarily) kick him around’, where the demonstrative pronoun *’ahnu: HUM.PL* indexes the subject, but the object is zero. That it itself, is not at all unusual. However, the object could have been referenced in the final emphatic using the reduced form of the human singular *unh*, i.e. *q’unh* rather than *q’Aw*. Why it is not might have to do with the special function of this *q’Aw*, but that function remains especially unclear in this sentence.

- (7) *’Awlehd q’Aw ’u-XAwAX-GAyu: ’ahnu: yAX ’iLAta:tl’-k’ q’Aw (q’-)*.  
 DIST-because EMPH 3-older.brother-PL HUM.PL PERAMB kick-CUST EMPH  
 ‘That’s why his older brothers would kick him around.’<sup>4</sup> (50.12)

The seventh instance, on the other hand, is much like (5) above, this time also in a quote. This is translated as two clauses, but with comma between, the enclitic translated as ‘it is’. Clearly this is as though the first clause were subordinated, ‘As he was playing with another child, the rifle went off.’

<sup>4</sup> The final =*q*’ is on tape but editorially to be deleted, as detracting from well-formedness.

- (8) ... *dA='u-ga'*      *sAqe:ts'Akih-tl'* 'ALdah leh *q'Aw*, 'Aw *xut'L q'Aw lahdz*  
 selfsame-3-like child-with      playing      EMPH DIST rifle      EMPH forward  
*sLidlahGL* ...  
 explode  
 'A child like himself he was playing with it is, the rifle went off.' (61.41)

The vast majority of instances of =q' are initial or in a qualified sense initial, in that they must be attached to the first "constituent" (not counting I) of the sentences. Noted, however were the "Old Raven at Tide Beach" and the seven instances of sentence- or clause-final ones after the verb. The second check through Anna's 1963–5 texts revealed a few more instances that might be seen as needing examination as exceptions to the general rule. A simple case (9). Here 'anh is the demonstrative pronoun object of passive 'killed' followed by the adverb *ne:tl'* 'soon, first', but the order evidently shows that *ne:tl'* is the head of the constituent 'he was the first (to be killed)', rather than 'the first thing that happened (was that he was killed)'.

- (9) 'anh *ne:tl'* *q'Aw shdishehL*  
 PROX first EMPH killed  
 'He was the first killed.' (25.108)

Another clearer example is (10), with the adverb *dAwa'd* 'quickly' as head.

- (10) 'i-lAX      *dAwa'd q'Aw 'i:nsALxahL*  
 2s-beyond quickly EMPH grow  
 'he grew faster than you' (Lena, elicitation)

More complex but still clear is (11). This is simply a postpositional phrase with two overt oblique objects preceded by adverb routinely attributive to what follows.

- (11) *ts'idwAX 'Aw XAt'a:[-tl'] da:X XAwa:-tl' q'unh 'AdsLilahLinh*  
 only      DIST adze-with      and dog-with EMPH he.saved.self  
 'It was only with that adze and a dog that he saved himself.' (33.4)

Another type but still clear (12). (The two false starts are self-explanatory. The phrase is 'AdlAXahd 'in their own mind' and 'AyAG, the independent pronoun for third person plural, clearly the head.

- (12) ('Aw *qa'*) 'AdlAXahd      ('Aw,) 'AyAG *q'unhnu: 'Aw qa' dla:shdidja'*[L].  
 HEST HEST in.their.own.mind HEST 3p      EMPH DIST out pulled  
 'They thought it was they (themselves) who pulled it out.' (50.31)

Cf. the nice 'Aw *q'Aw 'AyAG 'uwa: q'unhu: q'e:yAXAch' tsin'dAleh] dik' 'Aw 'u:la'Lga:G*  
 'that they are the ones who talk backwards they don't know' 68.119, with 'AyAG followed by contrastive partitive 'uwa: (*qu'il en était eux qui ...*.)

Less clear is (13). This example looks something like (2), with q' emphatic following a preverb that is neither initial nor phrase-head.

- (13) *di'dah dik' q'e:dah ya:n' q'unh dAsLAqahGL[-G]*.  
 really not straightaway down EMPH she.fell-NEG  
 'She didn't fall down quite right away.'<sup>5</sup> (61.114)

A footnote in the original points out that the recording sounds phonetically not like *q'unh dAsALqahG* but like *k'udAsLAqahG*, with 'someone' as subject. That solves the strange problem with *q'unh* but does not fit the text semantics of the text. Nevertheless then, the problem still arises because that interpretation must have been supplied by Lena in the editing of the text. Since that too has to be taken seriously, the problem is unsolved.

We have a few more types of examples of especially interesting placement of =*q'* enclitic. In (14) we have two nice relative clauses with an overt noun object as head, where the enclitic follows the relativized verb clause rather than the noun itself. This is really quite unexpected, considering that the noun-headed relative clause is itself definitively a constituent.

- (14) 'Aw q'Aw dAXunhyu: shAshehL q'Aw dla:q'Aya', dAXunhyu: shAshehL  
 DIST EMPH people kill EMPH mountain.goat people kill  
*q'unhAw ts'iyuh*  
 EMPH black.bear  
 'then mountain goat that people killed, blackbear that people killed.' (9.104)

The rest of these examples are not in taped texts but in later elicitations from Marie and her sister Sophie, in late efforts to investigate this syntax. These efforts were more incidental and momentary, even desultory, hardly extended or systematic. The results are mixed. The first of these examples is (15).

- (15) Sophie, elicitations June 21, 1987
- a. *dik' si-ya:n q'Aw ya'd sALtahL*  
 not 1s-mother EMPH concave handle.elongated  
 'it wasn't my mother who emptied it'.
  - b. 'Aw XAwa:-tl' si-Xa' 'u:da' sahL=inh  
 DIST dog-with 1s-glposs there went=HUM.SG  
 'he went there with my dog'
  - c. 'Aw XAwa:-tl' q'unh si-Xa' 'u:da' sahL  
 DIST dog-with EMPH 1s-glposs there went  
 'he went there with my dog'
  - d. *dik' 'Aw XAwa:-tl' si-Xa'G q'unh 'u:da' sahL*  
 not DIST dog-with 1s-POSS-NEG EMPH there went  
 'he went there not with my dog'

<sup>5</sup> The negative verb suffix -G must indeed be supplied to the verb, as the prefixation *dAsLA-* is itself negative (as positive would be *disLi-*).



(15a) was evidently an attempt to investigate scope of specific negative marked with =q', along with confirmation of the phonological rule that deletes negative -G suffix before the =q', nothing surprising. Just preceding that, however, we have the (15bc), simply to show that the =inh is replaced by the =q'unh. At the same time, however, this happens to show, quite spontaneously, that the =q'unh is placed after the 'Aw XAwa:tl' 'with that dog' and before the "periphrastic" possessive siXa' 'belonging to me'. In my field notes this is followed by the comment "not necessarily with my permission", where the "with" is crossed out in different ink and replaced with "without." I must have noticed the question raised by the placement of q'unh, and got confirmation that this could have happened 'without my permission', i.e. that the siXa' belongs with the verb rather than the 'XAwa:(-tl)', at some time, perhaps much later, by the correction, without Sophie, confirmed that this also could mean the siXa' might still be the simple possessive. After that, still because of interest in the negation, we have (15d), where this time the =q'unh follows the siXa'G, basically contradicting the order of the preceding. There is certainly the distraction of the negation bracketing, possibly causing a "mistake," or possibly the bracketing implied by the =q' is also acceptable for simple possession.

Additional examples from Marie are in (16). In a moment of attention to =q' placement, we have in (16a) a very nice confirmation of the rule that =q' must attach to the initial constituent, in an extremely common sequence, wAX o-tl' d-le 'say thus to o'. In another golden fieldwork moment, this is followed by (16b). Together these examples appear to be ideal confirmation of the general initial constituent rule for the attachment of the =q' emphatic.

(16) Marie, elicitation August 3, 1996

- a. wAX q'unh 'u-tl' dA-x-leh  
 thus EMPH 3-to THM-1s-say  
 'that's what I said to him'  
 \* wAX 'utl' q'unh dAxleh
- b. XAwa: q'unhnu: 'u-Xa' sA-sinh-L  
 dog EMPH 3-with ASP-die-PFV  
 'their dog died'  
 \* XAwa: 'uXa' q'unhu sAsinhL

However, we have at least one example of the =sh enclitic in (25) below showing the siXa' as part of the subject, not of the predicate, with the enclitic following not preceding siXa'.

There are definitely some exceptions to this rule of =q' enclitic placement following the initial constituent, as shown above. Put another way, there is evidently some flexibility in what is to be seen as a "constituent." We can even look at the =q' as sort of a marker, a closing bracket, for defining what a constituent is. In view of all this one might best even rename the =q' emphatic something more like initial constituent marker or rather "featurer." Accordingly, one might be able to answer, or at least approach differently the

questions raised above, e.g. especially whether  $S O q' \_ V$  would be possible. The answer is very probably not, since  $S O$  cannot form a sentence, unlike  $S P$ .

At the same time, this brings up the question of a possible fronting process, e.g.  $S O q' \_ V > O q' \_ S V$ . This was never deliberately tested, and the result would be homophonous with  $S q' \_ O V$ . For example, the standard SOV word order (17a) is unlikely to be acceptable with emphatic following the object (17b), but the question arises whether the fronted version (17c) could also have a reading with the mouse as object, emphasized, i.e.  $O q' \_ S V$ .

- (17) a. 'Aw *du:sh* 'Aw *Lu:ndiyahs* *XAsahL* 'The cat ate the mouse.' (constructed)  
 DIST cat DIST mouse ate
- b. \* 'Aw *du:sh* 'Aw *Lu:ndiyahs* *q'Aw* *XAsahL*  
 DIST mouse DIST cat EMPH ate
- c. 'Aw *Lu:ndiyahs* *q'Aw* 'Aw *du:sh* *XAsahL*  
 DIST mouse DIST cat ate  
 'The mouse ate the cat.'  
 ? 'The cat ate the mouse.'

As it turns out, this very question was addressed, in notebook VII 5 with Lena, however accidentally. This was in connection with content questions, which all have to be fronted, even as object, as discussed in the syntax section of the chapter on interrogatives, producing  $O S V$ . That discussion includes example (18).

- (18) a. *de:=d-(A')Aw* *XAwa: sAqahL*  
 what=Q-DIST dog bite  
 'what did the dog bite?' (Lena, VI 5)
- b. *du:sh* *q'(A)'Aw* *XAwa: sAqahL*  
 cat EMPH dog bite  
 'the dog bit a cat.' (Lena, VI 5)

Admittedly, the phrase *XAwa: sAqahL* is not written out in the notebook, but is represented by the usual (ditto) line parallel to the actual *XAwa: sAqahL* written out in the line immediately above. There is no mark or comma indicating a pause. Thus here, very probably, is the answer, that where emphatic *q'(A)'Aw* is attached to the object,  $*S O=q' \_ V$  becomes  $O=q' \_ S V$ , with obligatory fronting of  $O=eq'$ . This result is homophonous with 'the cat bit the dog', at the same time, incidentally, as the question itself, *de:d(A)'Aw* *XAwa: sAqahL* must mean also 'what bit the dog?' as well as 'what did the dog bite?'

Further, we have evidence in (19) that elements other than  $S$  and  $O$  can also not be fronted without a  $=q'$  emphatic. While Lena reject the fronted demonstrative '*u:da*' in (19b), she accepts the fronted version with the emphatic in (19c). The reason for outright rejection of (19c) is not absolute, as hypothetically the demonstrative '*anh*' could be interpreted as part of  $P$ , '*u:da*' not, but the sequence is certainly not preferable without e.g.  $=q'$ .

- (19) a. 'anh 'u:da' sahL  
 HUM.SG there went  
 'he went there' (Lena, VI 4)
- b. \*?'u:da' 'anh sahL  
 there HUM.SG went
- c. 'u:da' q'Aw 'anh sahL  
 there EMPH HUM.SG went  
 'he went THERE'

Most importantly, this fronting process implies, at least in principle, that any sequence of  $X=q' \_ Y V$  can be parsed not only with  $X$  as subject and  $Y$  as object, but also the reverse. This adds yet further subject-object ambiguity to Eyak syntax. The actual frequency of this fronting or S/O inversion is evidently rather low. It certainly is low in the elicited corpus. Unlike the ambiguity with fronting of the object with =sh yes/no enclitics, or of the object represented by wh-interrogative pronouns, for which there was at least some deliberate elicitation, the fronting of the object with =q' was documented only accidentally. Possibly there are instances of such fronting in the texts, but those are no doubt few.

### 27.2.2 Choice of reduced demonstrative with =q'

Discussion of =q' enclitic has so far dealt only with their placement, without regard to the choice of reduced demonstrative attached to the =q'. The =q', as noted, and unlike =sh, requires such an attachment. The attachments are -Aw from 'Aw 'it, that', -Al from 'Al 'this', -unh from 'anh 'he, she, him, her', -uhnū: from 'ahnū: 'they, them (human)', and the combination =unh-Aw from 'anh and 'Aw. (There is also the combination =q'-unh-Al, which happens to be attested only once. For more on combined attachments see §27.2.5.) There is a sixth attachment, =uh, presumably 'none of the above', which might be identified with the enclitic sometimes attached to transitive imperatives -uh 'it', referring to the object. This is relatively rare, compared to the use of -uh with =sh.

Some combinations are semantically impossible. Since q'unh includes a reduction of 'anh, it is not compatible with 'anh to refer to a single referent, i.e. in intransitives. The sequence 'anh q'unh in (20b) requires reference to two human subjects and the intransitive allows for only one.

- (20) a. 'anh q'Aw 'u:d[a'] sahL  
 HUM.SG EMPH there went  
 'he went there' (VII 4L)
- b. \*'anh q'unh 'u:d[a'] sahL  
 HUM.SG EMPH there went

We shall now look back at the Raven text (1) first examined above for the placement of the =q' enclitics, here for the choice of attached demonstrative. The first four instances

all show *q'Aw*. In line 1 the *-Aw* refers not to the *dAXuhnyu*: 'people' to which it is attached, nor to anything preceding, but more generally to the situation, i.e. the start of the story, as if to enunciate a title. In line 6, the first *-Aw* is in a connective Introductory, 'then', again abstract in reference, and the second may refer to Raven, though as we shall see, Raven can be considered both human and non-human. In line 8 we have the same connective Introductory, with *=Aw* even though the translation used 'he' for Raven. In line 10 the *q'unhAw* appears to refer to abstract 'thus' (what Raven thought) and to the human singular subject, Raven. In line 11 the combination *q'unhAw* appears to refer, appropriately, to the non-human object 'chickadees' and the subject, Raven, as human singular. In line 12 the *q'Aw* can only refer abstractly to the preceding clause subordinated by *da:X*. The next, line 24, is the connective Initial, *'AwdAwa: q'uynu*: 'while that was going on', where the *=ynu*: definitely refers to the immediately preceding sentence, involving plural humans, while line 24 itself has no such referent. The *q'unh* in line 25 *q'unh* refers to the subject, Raven. The *'Aw q'unh* in line 27 is a connective Introductory 'then', where the *=unh* refers to the subject, Raven, of the preceding sentence and/or of the sentence it introduces. In line 28 the *q'Aw*, unless abstract, presumably can refer only to the subject, Raven, thus evidently treated as non-human. In line 29 *'u:dAX q'unh* is a connective Introductory 'then', where the *=unh* refers to the human singular subject (Raven) of the preceding sentence and/or sentence it introduces. In line 33 the *'Aw q'uynu*: is a connective Introductory, with *=ynu*: referring to human plural subject of the sentence, not to anything in the preceding sentence. In both line 34 and line 35 the *q'uynu*: refers either to the subject of the preceding sentence and/or to that of the sentences itself. In line 37 the *q'Aw* refers abstractly to the subordinate clause and/or to *tsa:'L* 'food-box', the subject of both the subordinate clause and main clause. In line 38 the *q'Aw* refers either abstractly or to the subject, Raven.

Note herewith that there is a certain amount of indefiniteness in the references for the demonstrative elements with the *=q'* enclitics. There are clear examples of referents that can only be called abstract, or seen as a clause or as an event. Further, there are clear examples of the element referring to specific preceding arguments, i.e. of the preceding sentence, and likewise examples referring specifically to arguments following in the sentence. Therefore, in fact, in the very process of writing the above paragraph, in view of all these possibilities, I found myself writing "refers to A and/or B."

There is also a certain amount of indefiniteness in the extent of context relevant to choice of reduced demonstrative with *=q'*. For example, in Raven text 10.116 we have what is treated as a whole verbless sentence, *ts'idwAX ya:lAXakuts'gkih q'unh*, translated 'There was just a little bit (of roe left)'. This is the only good treatment of this utterance. The preceding sentence is *q'Ama: q'unhAw li' lAXAsLi'ni:q'L* 'he (Raven) had swallowed the roe down', so this has to refer to what is left. The following sentence starts *wAX q'unhAw wAX 'anhtl dAleh* 'thus he said thus to them' with a quotation, so cannot be connected to that in question. The sentence in question, or utterance, ends with *q'unh*, referring to a human singular, surely Raven, even though there is no grammatical reference to Raven in the utterance itself. There obviously is such reference in both preceding and following sentences. Either neighboring sentences must at least sometimes be considered for references in these

enclitics, or this utterance is ungrammatical, incomplete, in spite of the translation, which was at least verified by Lena.

This brings us to the work of Chris Donlay, whose MA thesis, entitled “Losing track: Indeterminacy and referential erosion in the unmarked demonstrative in Eyak,” studied the use of =q' emphatics in narrative discourse (Donlay 2012). The basic point of this thesis is made already in the title, showing, as is often the case cross-linguistically, that demonstratives may lose their specific demonstrative function and become grammaticalized. In the process of showing this for Eyak, Donlay makes a relevant and very useful contribution to the study of Eyak, especially by careful statistical study of the referentiality of the reduced demonstrative morphemes attached to these =q' emphatics. It is in fact a privilege for us to have this, including the sense that it goes significantly further into the subject of =q' emphatic demonstrative choice than this grammar would likely itself have gone. As noted, Donlay's purpose is cross-linguistic, investigating this aspect of Eyak in connection with general linguistic processes, here the evolution of demonstratives or grammaticalization of those into something less than demonstratives. By its nature, the work is heavily statistical.

Donlay's Eyak corpus is the texts in *In Honor of Eyak: The Art of Anna Nelson Harry* (Krauss 1982), all but the tenth text, which is sung. He therewith uses the edited version of those texts, not exactly that of the 1970 texts or final publication of the Eyak texts. The texts in Krauss (1982) total 1032 sentences, or 1891 lines. In these, Donlay counts 432 tokens =q' emphatics. Note that this proportion is similar enough to the 18 =q' enclitics of the 45 sentences, 74 lines, of text 7 studied above, and to the count made in the first check of the corpus mentioned above, of all Anna's taped Raven texts, 505 sentences, with 202 instances of =q' enclitic, both averaging one =q' emphatic for exactly 40% of sentences.

The totals for each reduced demonstrative in Donlay's corpus are shown in Tab. 27.3. The great disparity between q'Aw and q'Al accords with the point mentioned above (§27.2.1), that 'Aw 'that' is distal or unmarked, whereas 'Al is proximal and marked as such. Donlay (2012), of course does not contain specific record of all the reference assignments he made. His approach has to have been somewhat different from the above analysis of the reduced demonstratives in text 7, at the very least in allowing for only one referent per simple demonstrative (i.e. not counting compound q'unhAw). In other words, his approach assumes a higher degree of definiteness in this regard than does mine. Donlay then comes up with a table of “referential” vs. “non-referential” incidences of each reduced demonstrative.

The differences in the ratios are not considered statistically significant. “Referential” means an appropriate referent is found; “non-referential” that no appropriate referent was found. In other words, Donlay seems to have found a (single, or at least one?) appropriate referent for 93.3% of those reduced demonstratives.

Another point that Donlay makes is that the q'Aw total is greatly swollen not only because it is unmarked, but also because q'Aw much more than the others is evolving, becoming grammaticalized. Of the 137 “referential” incidences of q'Aw, 38 are as “dummy.”

**Table 27.3:** Tokens of referential vs. non-referential use of reduced demonstratives with emphatic =*q'* (after Donlay 2012: 27).

	Referential	Non-referential	Total
<i>q'Aw</i>	137	14	151
<i>q'Al</i>	13	0	13
<i>q'unh</i>	88	5	89
<i>q'uhnu:</i>	78	2	80
<i>q'unhAw</i>	87	8	95
Total	403	29	432

This is something like the “abstract” incidences referred to above, and/or, as stated by Donlay (2012), “This use suggests that *Aw* is present simply because the *q'* cannot stand alone; in other words it is a dummy morpheme” (33). Donlay is certainly right that this does indeed show the “semantic erosion” of *'Aw ~ -Aw*.

However, Donlay is not quite right that the =*Aw* is present “simply” because the =*q'* cannot stand alone. The =*q'* indeed cannot stand alone, but there is one other form, *q'uh*, possible for =*q'*. This is the relatively rare sixth item mentioned above at the beginning of this subsection, to which evidently I never called Donlay’s attention. This *q'uh* certainly conforms to the morphology of the enclitics generally, no matter how rare. Conceivably, it is analogical, though that seems unlikely. In any case, the =*uh* is certainly much rarer with =*q'* than it is with =*sh* or =*d*. Donlay is certainly correct about the spread of *q'Aw* as a “dummy.” It is thus entirely possible at the same time that this spread has been at the expense of *q'uh*.

Donlay’s work certainly merits further study for a full account and understanding of these =*q'* enclitics. Much more detail and insight is to be found there, given but short shrift here. This applies not only to Eyak syntax, but also beyond that to discourse, beyond the scope of this grammar, and/or to what might be termed Eyak stylistics. For instance, the very unevenness of the distribution of the =*q'* enclitics might be a correlate of some kind of “mood” in the style of the recitation of Anna’s texts.

A full listing of attested *q'uh* enclitic follows in (21), merely 9 instances. Only one of these (21a) is in an elicitation; the rest are all in texts from Anna.

(21) Complete list of =*q'uh* enclitic examples

- a. *'u-lah ya: q'uh k'usALe'L*  
 3-about thing EMPH came  
 ‘he got into trouble < ‘a thing came to be about him’  
 (Lena, elicited, under *Le(')* 3b. in dictionary)

- b. *te'ya' da: wAX Lih da:X q'uh, (-nu:)*  
 salmon 1p thus gather and EMPH  
*'u'-we:shGA=shiyah-da' sahLinh.*  
 3-maternal.grandfather=DIM-front.of came  
 'After that summer came and, we were fishing and then, he came to his  
 grandfather.' (32.5)
- c. *'Aw-lehd q'uh dik' 'a:nd lAXda' dAwa'd q'e' 'AxsdahL[G]*  
 DIST-because.of EMPH not here 2p-to quickly back 1s.come  
 'That is why I did not soon come back to you here.' (32.20.)
- d. *dAtli: q'uh k'ula:Gih 'isA'ehL*  
 already EMPH someone.else marry  
 'Already another has married you.' (33.76.)
- e. *'AXAkih Xa:n' sALiL da:X q'uh, dAtli: 'Aw Xa:n' sALiL, 'Aw*  
 canoe finished make and EMPH already DIST finished make DIST  
*'AXAkih*  
 canoe  
 'He made a canoe and then, already he had made it, the canoe.'  
 (*Ravens and Mother-Of-Pearl Canoe* 8)
- f. *'a:nch'a:-ch'=shuh q'uh da:X sAqehL*  
 across-to=apparently EMPH and boated  
 'He boated across in this direction apparently.' (*Giant Strawberry* 14)
- g. *'u:d 'i:nsdi'ahL da:X q'unhnu: dA='u:-ch'ahd q'uh dik' 'u:d wAX q'e'*  
 there wiped.out and EMPH selfsame=3-from EMPH not here thus again  
*'a'dAt'u:-G, digiLXah*  
 be-NEG Mummy.Island  
 'They were wiped out there and since then they have not lived there anymore,  
 (at) Mummy Island.' (*Wars with Aleuts* 42)
- h. *'ahnu:-wa:LX q'uh gu:dAg 'u-lah q'e' k'u'sditahL, 'ahnu: k'udi:q'Ayu:*  
 HUM.PL-from EMPH again 3-about back find.out HUM.PL Aleuts  
*'i:ya:G-ch' q'e' 'Adla:GALA'e:L=inu:*  
 Eyaks-to again sneak=HUM.PL  
 'From them again it was that people found out about it, that the Aleuts were  
 sneaking up on Eyak again.' (*Wars with Aleuts*. 58)
- i. ... *'Aw lixah q'uh 'anh qe'L 'u' dAsALqe'dL, ...*  
 DIST grizzly EMPH HUM.SG woman 3 asked  
 '... her brother and then the grizzly-bear asked the woman, ...'  
 (*Woman Who Married a Grizzly* 74)

From (21) it can clearly be seen that =*q'uh* behaves like other =*q'* enclitics in its placement and function. It does indeed appear simply to be non-referential. In the one elicited item (21a), one human is involved, in *'u-* object of *o-lah* 'about o', yet we have

=*q'uh* instead of =*q'unh*. Likewise in the attestations from Anna's texts, there are singular or plural humans involved, but =*q'uh* is non-referent to them. Note also, however, that only three (21bcd) of the textual attestations are from the 1963–5 corpus, whereas there are five from the supplementary corpus of texts from Anna. Since the supplementary corpus is much smaller, the rate of incidence of =*q'uh* in them is quite significantly higher. Most of the main corpus was transcribed with the help of Lena from the beginning of the process, with her repeating as closely as possible what was on the tape, whereas the supplementary texts were first transcribed without her help, only (partly) checked with her later. It is entirely possible that the far lower rate of =*q'uh* in the main corpus is due to an influence from Lena repeating the texts, phrase by phrase, herself tending to change some instances of =*q'uh* to =*q'unh* or =*q'Aw*, and my going along with that. Obviously, more exact statistics could be gotten from the sound files themselves. Most important here, however, are the general tendencies and the fact that there is a great deal of flexibility in the choice of reduced demonstrative pronouns attached to the =*q'* enclitics.

### 27.2.3 Reduced demonstratives with =*q'* and verbal enclitics =*inh* and =*inu*:

There remains one more important issue regarding =*q'* emphatics, namely the syntactic relation between these and the enclitics =*inh* and =*inu*: that attach to the verb. It could certainly appear there there is a process whereby the verbal enclitics are replaced by the =*q'* enclitics, especially given that either type of enclitic can refer to the subject, object, or oblique object. Thus e.g. S V =*inh* could be replaced by S *q'unh* V, or by S V -*inu*: S *q'uhnu*: V, keeping the two types of human enclitics in complementary distribution. This could be the case in sentences 24, 25, 27, 29, 34, and 35, and in the *q'unh*- part of that in 10, of text 7 analyzed above. In sentence 33, however, we have both -*inu*: and *q'uhnu*: on the verb, albeit in a minority of instances, 1 as opposed to 6. The opposite, such enclitic neither with =*q'* nor on the verb, with humans involved, is not necessarily attested in this text, for two reasons. One is that Raven is not necessarily treated as human, nor even treated consistently as human or non-human in a given text. The other reason is that there are several instances of *q'Aw* that refer to Raven or could refer to Raven, which evidently preempt =*inh* on the verb. This is so possibly in some cases because they treat Raven as non-human, or because the *q'Aw* preempts =*inu*: on the verb, just as *q'uhnu*: does for human plural in 6 of the 7 instances of that. This text is therefore not a good sample for the reverse of the two-enclitic exception. There are, however, many examples of this type of exception too in the texts, probably much more numerous than the exception with both types of enclitic, i.e. the types with human subject, object, or oblique object, and neither *q'unh* or *q'uhnu*: nor =*inh* or =*inu*:

Note in (§27.3.7), that these combine with preceding =*inh* or =*inu*: much more often than do the =*q'* enclitics. With =*sh* we have many instances e.g. of =*inh* + =*shuh* > =*ishunh*. With the =*q'* series, however, the result is almost always -Ø-*q'*-, but note at least once -



ih=q' - in *li:LgehGLihq'unhAw* 'he's lonesome (that what's wrong)' from Lena, notebook VI 145.

#### 27.2.4 Text samples of particular interest

We may round out this discussion by citing a few short sections of text that are both typical and interesting for the use of these enclitics. In (22) we have, as the end of a direct quote, from a woman married to an octopus:

(22) *Woman and Octopus*, Text 20

64. *wAX q'-unh-Aw*                    *'u-tl' dAxleh.*  
 thus EMPH-HUM.SG-DIST 3-to 1s.said  
 'Thus it was I said to him.'
65. *wAX q'-uhnu:*            *'u-tl' dAxleh.*  
 thus EMPH-HUM.PL 3-to 1s.said  
 'Thus it was I said to them.'
66. *'Aw-lehd*    *q'-uhnu:*    *dA'a:nch' si-d*        *sAle'gL.*  
 DIST-because EMPH-HUM.PL here    1s-PUNCT be  
 'That is why they let me be [right] here.'

Both *q'unhAw* and *q'uhnu:* refer to her husband's fellow octopus-people (treated as humans). Ling 65 of (22) simply repeats the first, changing the reference, from =*unh=Aw* to =*uhnu:*. It is hard to say that the first enclitic *q'unhAw* is definitely wrong or non-referential, since the =*unh=Aw* is the only explicitly double-reference demonstrative we have, there being none such that contains =*uhnu:*. In any case the wife changes or further specifies the reference, perhaps for that very reason, Anna sensing this very lack in Eyak grammar.

Another passage in the same text is also especially interesting, not only for the enclitics themselves, but for those as part of syntax more generally.

(23) *Woman and Octopus*, Text 20

83. *'Aw q'-Aw,*    *'Aw=sh=unh*    *q'-unh-Aw,*            *yahd*    *q'-Aw*  
 DIST EMPH-DIST DIST=Q=HUM.SG EMPH-HUM.SG-DIST into.open EMPH-DIST  
*sAqehL.*  
 boated  
 'Then, evidently, he boated out to sea.'
84. *dA'a: q'-Aw*        *mistake wAX sALiL.*  
 then EMPH-DIST            thus did  
 'Then he himself made a mistake.'
85. *'Al*    *qe'yiLteh-tl' qa'ni:* *sALyahL.*  
 PROX whale-with fought  
 'He fought with this whale.'

86. 'Aw *q'-unh*                    'Aw *qe'yiLteh* 'anh-LAX    sAt'u'L.  
 DIST EMPH-HUM.SG DIST whale    HUM.SG-over prevail  
 'The whale got the better of him.'
87. 'anh *shAshehL=inh*.  
 HUM.SG killed=HUM.SG  
 'It killed him.'
88. 'Aw *tsa:le:Xquh shAshehL=inh*, 'Aw *qe'yiLteh*.  
 DIST octopus    killed=HUM.SG DIST whale  
 'It killed the octopus, the whale.'
89. 'u:ch'ahd *q'-unh-Aw*,                    'u-wudkihGA=yu:-da' *q'e'* *sdiyahL*,  
 after.that EMPH-HUM.SG-DIST 3-sister=PL-to                    back went  
 'After that then, she went back to her sisters.'

Sentence 83 begins with the most general connective Introductory. This is followed by another such phrase, with a combination of enclitics, the first the interrogative =*sh* enclitic followed by =*q'* enclitic. As will be seen in §27.6, this combination is to be translated 'evidently, apparently, I suppose'. The third and only verbal phrase of this sentence is a simple verb with preverb, *q'Aw* attached to the preverb. Only the second phrase contains reference to the octopus-husband as a human, in both the =*shunh* and the *q'unhuw*. Note further that the space before *q'unhAw* is artificial. In 84 we have *q'Aw* on the *dA'a*: 'he himself', and no reference to the octopus-husband as human. In 85 we likewise have no such reference, with no =*q'* enclitic at all, perhaps an instance of human subject with neither =*unh* nor =*inh*. In 86 the connective Introductory with *q'unh* contains reference to the octopus-husband as human, and again in the oblique object demonstrative pronoun 'anh-LAX 'better of him' rather than 'u-LAX. 87 is interesting in having two references to the humanness of the octopus-husband as object, in the demonstrative pronominal object and in the =*inh* enclitic to the verb. This may be a grammatical error, as certainly the whale is not here considered human. In 88, since we know that it is the whale that killed the octopus, the 'Aw must be the subject pronoun referring to the whale, not a demonstrative referring to the octopus-husband object. This must be the interpretation since we know the octopus-husband is consistently treated as human, as confirmed both by the =*inh* enclitic to the verb thus referring to the object of the verb and by the subject then specified in the following extraposition, where the whale is shown with the 'Aw non-human demonstrative attribute. In 89 the Introductory may be a connective, as translated, 'after that then', or it might be more literal, non-temporal, 'from there'. The *q'unhAw* may refer to the wife, and/or conceivably to the octopus-husband's sisters, plural, if also considered human.

These passages may be considered to typify the uncertainties or flexibility in this aspect of Eyak syntax. This is complicated perhaps to some extent because of the mixture of humans and non-humans, including the inconsistency of reference in this regard to animals as related to humans in this type of narrative.

### 27.2.5 *q'unhAw*, *q'unhAl*, and other compound enclitic attachments

The combination *q'unhAw* is quite frequent, as mentioned, and was carefully considered by Donlay. In principle, as it combines two reduced demonstratives, it should have two references or refer to two arguments. This is certainly the case most of the time, and is carefully covered by Donlay. There appear a few instances, however, where the second argument, it might be said, is much more abstract or extraneous, referring to the matter or situation itself. This is clearly shown from Lena, notebook VI 145, *li:LgehGLih q'unhAw* 'he's lonesome (that's what's wrong)', which happens to be in answer to *li:LgehGLihshunhAw* 'is that's what's wrong with him, lonesome?' (showing the same attachment combination with =sh, q.v. §27.3).

Note, at the same time (ibid.), for where the concrete argument is second person, we have the copular *q'A'Aw*: *li:L gehGL q'A'Aw* 'you're lonesome (that's what's wrong)', in answer to *li:LgehGLshA'Aw* or *li:LgehGLshAw* 'is that what's wrong with you, lonesome?'

As for *q'unhAl*, Donlay could not have been aware of the single instance of that in the corpus, notebook VII, page 5, from Lena, in an extensive (two-page) session on enclitics. This one attestation is *'Al q'unhAl 'a:nda' sAltahL* 'this is the one he brought here'. Here we have the doubly proximal context *'Al* 'this' and *'a:nd-* 'here', both likely to evoke =*Al*, plus the transitivity for both subject and object as the two explicit arguments referred to.

This item was not followed up. 'Is this what he brought here?' might well have elicited *?AlshunhAl 'a:nda' sAltahL*, and 'Who brought this here?' *?du:dunhAl 'a:nda' sAltahL*.

At the same time, however, there is in principle the possibility of reverse readings for subject and object, thus 'It's who this (thing, creature) brought here', 'Is it who this brought here?', 'Whom did this bring here?'. It happens that the verb in this case would have to be changed from *O-(l)ta* to *O-te* for 'handle human O'.

Donlay's thesis pays considerable attention, as mentioned, to the references for *q'unhAw*, pp. 15-16, 27-29, and especially 23-26. There he notes that only 56% of the 73 criterial instances of *q'unhAw*, far lower than for any other =*q'* enclitic, refer exactly to what is implied by the reduced demonstrative(s) themselves, i.e. to a singular human plus non-human. Moreover 27% refer to two humans, i.e. two different human arguments. Donlay further points out that for *q'uhnu*, 78 of the 80 instances thereof refer to a "single plural [human] entity, such as 'children' or 'Aleuts'" rather than a combination of singular entities [arguments] such as 'man' and 'woman'. Only the dual [i.e. compound] enclitic is used for the latter pattern; it has evolved to fill a specific niche in the paradigm." This niche, presumably, is for two arguments, both human, which is filled by the compound *q'unhAw* also, rather than by *q'uhnu*, which presumably is restricted in reference to a "single plural identity."

There remains the question of what happens in the case of a "single plural [human] entity" in combination with another argument, human or not, plural or not. Put differently, it is a question whether there should be such compounds as *\*?q'uhnu:hAw* or *\*?q'uhnu:hAl*.

No such are attested. Such may be phonologically unlikely or likely to contract to *\*?q'uhnu:w*, hard to distinguish from *q'uhnu:*, and *\*?q'uhnu:l*, unattested. It may indeed be the case that the “niche” for a single plural human entity plus any other argument may be occupied by *q'unhAw*, thus the enclitic type for all sentences with more than one argument including a human one, rather than by *q'uhnu:*. Further study of the corpus may yield such a conclusion.

Donlay does in a way address this question in a footnote, but mentioning the possibility that *q'unhAw* evolved from *q'uhnu:* plus *=Aw*. “However, in actual use only 16% of the tokens [of *q'unhAw*] point to plural rather than singular human referents, even though the frequency of the two human enclitics is roughly the same [*q'unh* 93, *q'uhnu:* 80].” This does at least imply that for plural human argument plus any other, the enclitic is also the *q'unhAw* combination type.

### 27.3 Enclitics with *=sh* (polar interrogative)

In older manuscripts, the initial element of these enclitics is written *-sh* with hyphen preceding simply because, unlike *=q'*, there was never any artificial convention of writing them separately. The element is written without hyphen following because, unlike *=q'*, *=sh* can stand alone with no reduced demonstrative as second element, simply as *=sh*, frequently. That is why there was never any convention of writing it separately.

The function of *=sh* is to mark a polar (yes/no) question, so that it might best be named the interrogative enclitic. This subject is left for treatment here rather than in the chapter on interrogatives because it is morphologically and syntactically in a class with the *=q'* enclitics, and its behavior is to be understood only along with that of the *=q'* enclitics.

The placement of *=sh* in the sentence is in principle, i.e. *mutatis mutandis*, the same as that for *=q'*, after the first syntactic constituent. The issue of Introductory with its own *=q'* enclitic probably does not enter here. The samples in (24) are invented.

(24) Enclitic *=sh* with verb *sAsinhL* ‘it died’

*sAsinhLsh* or *sAsinhLshuh* ‘Did it die?’

*dAtli:sh(uh) sAsinhL* ‘Did it die already? Is it already dead?’

*'Aw XAwa:sh(uh) sAsinhL* ‘Did the dog die?’

*'Aw XAwa:; sAsinhLsh(uh)* ‘The dog, did it die?’ (with extraposition)

*'Aw XAwa:sh(uh) 'iXa' sAsinhL* ‘Did your dog die?’ (parallel to the case with *=q'*).

The putative form *\*?dAtli: sAsinhLsh(uh)* is probably unacceptable, except perhaps as ‘Do you mean the fact/subject that it already died?’. That would be parallel to the exceptional *=q'* emphatic almost denoting a title, like ‘Old Raven at Tide Beach’.

The verbless sentence in (25) definitively shows that the *o-Xa* possessive construction following the noun is at least optionally to be seen as part of the subject noun phrase rather as preverbal in the predicate.

- (25) [*'Aw XAwa: si-Xa'*]<sub>NP</sub>=sh 'a:nd  
 DIST dog 1s-with=Q here  
 'Is my dog here?' / 'Is that dog of mine here?' (VI 49)

As seen in these examples and as noted above, =sh is quite unlike =q' in that it can stand alone (without a suffix). It is also quite unlike =q' in that =uh is very frequent as a non-referential second element, whereas with =q', =Aw has almost completely usurped that role. An interesting item is 'i:shuh 'You? Is it you?' as the standard for 'Hello' to singular, verified by at least Lena and Marie, probably from all speakers I worked with. Note, however, Strange's 1786 *Esht-est-esh* "Ho! you! Do you hear" calling to one. That certainly contains 'i:sh, at least twice, without the =uh. (See also §27.7 on =sh=d- combinations.) At the very other end of the history we have 'i:shu:, or perhaps English [ijʃəw], the usual pronunciation of Eyak language learner children and grandchildren of Marie. They are quite certain that is what they heard from her, also verified by both Lena and Marie, thus evidently reflecting 'i:shAw (= 'i:shuw) rather than 'i:shuh.

There are probably fewer than 300 instances of =sh enclitics in the corpus, far fewer than =q' enclitics. Of these about 30 are followed further by =q', to be treated in the subsection immediately below. Many of the instances of =sh not followed by =q' are presented here, since they are not listed in the dictionary. Here will be listed first those with no reduced demonstrative or =uh, then =sh=Aw, =sh=unh, =sh=uhnū:, in that order. There are at least 29 more examples from Lena in notebook V 64-66 (none copular, =shA-' it happens). There are 16 more in notebook VI 144-145, 15 more VII 4, and 17 more X 39-41.

The enclitic =sh is found also, etymologically, in a few other morphemes, all fully documented in the dictionary. One *k'e(:)'*=sh 'perhaps, maybe, approximately, probably', of transparent composition, with *k'e:-* 'how' and the interrogative marker. Another is the enclitic =sh-gahX, taking optative mode, where the -gahX is of unclear identity. A third is =sh=dAg, also enclitic, as interjection, where the =dAg is clearly the enclitic =dAg 'also', q.v. under -dAg ~ in the dictionary. (Note there that =sh may combine with =dAg ~ in either order, with the meaning 'also'.) A probable fourth is 'Ashdih 'whereabouts unknown; I don't know'; for -dih cf. the Athabaskan enclitic \*=dən 'place where'.

### 27.3.1 =sh

This list is incomplete, lacking any instances from elicitation. As it is, there are 19 examples in the searchable text corpus of =sh alone, nothing attached. Of these, four are followed by =q', for which see §27.6. The other 15 are presented in (26). All of these forms express doubt or uncertainty, or unrealis mood.

- (26) Examples of enclitics with =sh alone (no suffix)
- a. *te'ya'sh sa'mahdL*  
 'has the fish cooked?' (6.11M)
  - b. *q'ahsh dAtli:shuh q'uw 'Aw ya:X GAle:gL*

- ‘apparently already by now he’s eating it up’ (10.135A)
- c. *dlAGA’i:sh Lila:’ yiLeh*  
 ‘are you the only man existing?’ (10.188A)
- d. *xu’li:Lgahsh*  
 ‘do you know me?’ (10.225A)
- e. *’anh qe’Lsh ’a:ndAX lahdz sahL*  
 ‘has that woman gone out along here?’ (11.94A)
- f. *’anh qe’Likhsh ’a:ndAX lahdz*  
 [*sahL*] ‘has the girl gone out along here?’ (11.96A)
- g. *’Aw Xi:d ’AdA’anhsh GALAX’eh*  
 ‘do you see that yonder mainland?’ (14.3)
- h. *k’a:di’da:sh ’u:dAX ’ika’ ’AdiX ’ixiyah*  
 ‘may I never go in there with you?’ (23.43A) (note use with optative mode)
- i. *dAXunhsh ’a:ndAX lahdz sahL*  
 ‘did a person go out by here?’ (29.44A)
- j. *dAXunhlAXsh ’isAL’anhL*  
 ‘did you see a person?’ (29.50A)
- k. *xu:sh ’idah.*  
 ‘Am I alright?’ (34.5M)
- l. *dik’ da: ’u:la’LgaG, ... te’ya’sh k’ut’u’ qa’Le’*  
 ‘we don’t know, ... whether the fish will be many’ (62.16G, syntax loose)
- m. *ta:dzsh, q’a:lsh*  
 ‘[do you mean] long ago?, [or do you mean] nowadays?’ (68.66 A)
- n. *’Aw lissh dAGi:’eh*  
 ‘do you see that tree?’ (71.5LM)
- o. *’u’la:lAXiLgahsh de:dA’Aw*  
 ‘do you know what they are?’ Wolverine People. (53A)
- p. *k’u’xLte:Xsh ’ixleh*  
 ‘I want that I should be carrying something (inert)’ (72.39L)

The last item in (26) is Raven’s song inside the whale, sung, and highly poetic. The =*sh* is attached to the verb in the desiderative mode, and apparently has no interrogative meaning, unless perhaps as mocking understatement.

We also have ca. 150 examples with =*sh* from the elicitations, almost all not involving third persons, with second person subjects especially frequent. Many are one word, the verb, or negative thereof, starting with *dik’sh*. Clearly there is no phonological constraint, e.g. *’ALAXtsu:dgk’sh* ‘do you (pl) sleep?’ (customary), *GALA’AshgXsh ’i:leh* ‘do you want to sneeze?’ (desiderative), where the clustering does not motivate =*shuh*. Clearly =*sh* is generally more common than =*shuh*, at least five times more common not only in elicitations but also in text.

The placement of =sh in the unlisted elicitations is quite consistently on the first constituent or even first word of a clause, including not only negative *dik'* but also preverbals, at least postpositions, as in 'Ad'e'ch'sh q'e' qu'yidah 'will you go back home?' (Marie), 'iXa'sh k'a:dih sALe'L 'Did you lose something?' < 'Has it in close relation to you become lost?' (Lena). Likewise in Rezanov's (1805)'s ch'a'sh 'i: 'u'sdi'ehdzL 'did you summon him (to yourself)?'. The only exception is 'Awa: k'u'sAtsahLsh 'did you buy any (of them)?' (Lena), maybe in respect to the partitive construction. (Cf. in fact the following.) With pronouns or preverbs it appears there is more flexibility in the placement of =sh, either on the pronoun or preverb, or on the verb: 'Ad( )lisdik'in't'Lsh or 'Adsh lisdik'in't'L 'did you scratch your (own) face?' (Lena); ya'sh sa'mahdL or ya' sa'mahdLsh 'did you get burned?' (Marie). At the same time, for 'is he walking about?' we have \*?yaXsh da:Xinh rejected in favor of ya:Xshunh da:X or yAX da:Xishunh by Marie (V 71), given the principle that the enclitic should not be divided, but occur all in one place, after the first constituent, whichever way that is defined. Note the placement of =sh in the verbless sentence 'Aw Xawa: siXa'sh 'a:nd 'is my dog here?' (VI 43), after the postpositional phrase following the noun in the possessive noun phrase subject rather than before it, which would put the siXa' in the predicate.

There are eight more examples from Lena in notebook V 64-65, one *xuqu'yishe:sh* 'are you going to kill me?', five more in VI 144-145, and three more in VII 4, 'anhsh ki:nX 'is he weeping?', 'ahnu:sh ki:nX 'are they weeping?', 'anhsh 'u:da' sahL 'did he go there?'. One more example is in X 4, *dAshAche'Lsh* 'are you hungry?'

### 27.3.2 =shuh

There are 35 examples of =sh with -uh attached in the searchable corpus. Of these, five are followed by =q', for which see §27.6. These appear to be fully equivalent to the preceding, =sh without -uh. No phonological conditioning for zero ~ =uh is obvious, either. The other 30 are presented in (27), along with five more examples of =shuh in notebook from Lena (28), in a major investigation of the use of this enclitic.

(27) Examples of enclitic =sh-uh in text corpus

- a. 'i:gishuh 'Awa: k'uqu'Xi:yah  
'will you eat any of it?' (41.7L)
- b. XAsahLshuh  
'did you eat it?' (Marie)
- c. 'i:shuh  
'hello' (Lena, Marie)
- d. dik'shuh 'u:la'lAXLga:G  
'don't you (pl) know (it)?' (Lena)
- e. 'u'yiLqahshuh  
'are you counting it?' (Lena)

- f. *GALAX'inhinhshuh*  
'do you (pl) see him?' (Lena)
- g. *hu:lshuh qu'li:LXah*  
'are you going to sell it?' (Lena)
- h. *dAtli:shuh 'Awga' 'a'GAXda'L*  
'am I big, old enough yet?' (Marie)
- i. *'Adshuh ti:ndA'eh*  
'are you wearing it over your shoulders?' (Lena)
- j. *Xu'shuh sALyahL*  
'did you find out (about it, him)?' (Lena)
- k. *qi'shuh GAdi:tl'eh*  
'is it a cold place?' (Lena)
- l. *Gi:LGu'shuh*  
'are you warming it up?' (Lena)
- m. *yiLGu'shuh*  
'are you warming it up?' (Lena)
- n. *'AnahshAkihsuh 'AwXe'lAXleh LAXa: 'ixdixa:gL*  
'do you (pl) want me to work for you?' (Lena)
- o. *'u'qALAXLixa:sinu:shuh*  
'are you afraid of them?' (Lena)
- p. *qu'li:Lxa:gshuh*  
'will you make it grow? (said in pity for undersized animal)' (Lena)
- q. *'u:dik'ahch'shuh qu'gu:Ldah*  
'will you chase it away?' (Lena)
- r. *'iLka'shuh 'i:nsALsidL*  
'did you set them (pl. paddles) side by side (with blades in same direction)?'  
(Lena)
- s. *dik'shuh lAsLgehGLG*  
'didn't you get lonesome?' (Marie)
- t. *lAsALgehGLshuh*  
'did you get lonesome?' (Marie)
- u. *'Awshuh sAgAwi'L*  
'did you feel it?' (Lena)
- v. *dik'shuh 'u:la'yiLga:G 'anh 'ida: 'ilah dAleh*  
(or *'anh 'ilah 'ida: dAleh, 'anh 'ida'ilah dAleh, 'anh 'ilah 'idAdAleh*) 'don't you  
know what he's saying about you?' (Lena)
- w. *'uga'shuh Lits'anh q'Al 'i:t'ah*  
'are you strong enough to carry this?' (Lena)



- x. *dik'shuh qu'yitsahG*  
'won't you buy it?' (Lena)
- y. *dik'shuh 'Awa: k'a'stsahLG, dik'shuh 'Awa: k'u'stsahLG*  
'didn't you buy any?' (Lena)
- z. *qe'LG Ayu:shuh qi'*  
'women there?' (10.228A)
- aa. *'anh, dA'i:shuh 'a:nda' q'e' sdiyahL*  
'ah, is that actually you come back here?' (25.104A)
- bb. *siLt'ik'Lshuh*  
'did I get it?' (27a.7L)
- cc. *q'Ale', ch'i:leh qid GALAG, lihXda:=d=shuh ya' qa'dah*  
now.then raven down raven.call quiet-Q-EMPH to.rest go  
'now then, throw the ravens down, (to see) will they quiet down.' (28.60A)

(28) Examples of enclitic =sh-uh (from Lena in notebook V 64-66)

- a. *XAsahLshuh*  
'did you eat it?'
- b. *XAlAXsahL*  
'did you (pl) eat it?'
- c. *'Awshuh XAsahL*  
'did it (dog) eat it?'
- d. *qu'yishehshuh*  
'are you going to kill it?'
- e. *'u:ch'ahdshuh ya'X sALtehL*  
'did you pick it up from there?'

Lena's examples are often second person subject, as minimal pairs with third person =shunh. There are five more examples of =shuh in notebook VI 143–145, e.g. *dik'shuh 'u:la'yiLga:G ...* 'don't you know ...?', *shishehLshuh* 'did I kill it?'. There is one more example of =shuh in notebook VII 4, *'u:da'shuh sahL* 'did it go there?', and one more in notebook X 44, *dAshAche'Lshuh* 'is it hungry?'. At least three more with *q'ah* 'already, finally', q.v., are in the dictionary.

There is an especially interesting use of =shuh after the subordinator *da:X* in VI 143 from Lena: *wAX 'u'xLileh da:Xshuh wAX qu'xLih* 'If I'd known (I'd ruin it) I wouldn't have done that to it'. More literally 'do I believe that? I'll do that to it', with Neuter imperfective in the subordinated clause, and no negative in the main clause. This is an interesting and potentially important use of =sh as something beyond mere yes/no interrogative, and is perhaps special to contrary-to-fact conditional.

## 27.3.3 =shAw

There are 25 examples of =sh with reduced 'Aw > -Aw, usually spelled -uw, in the corpus. Of these, two are followed by =q', for which see §27.6. Also wAX k'e:shAw 'probably' < 'perhaps so' from Anna, June 9, 1971. Note further 'AlshAw 'is this it?', from Sophie on 1982 slip, and 'AwshAw 'is that it?, is it that?', but not 'AlshAl or \*'AwshAl at all, rejected by Marie. This is no doubt because the subject of the equation, English 'it', must be unmarked, therefore the demonstrative 'Aw and not 'Al.

In the absence of any intransitives with non-third person subject, or with overt third person subject, it is not possible to show whether the reduced demonstrative, has become so very often non-referent with =sh as it has with =q'. (In the intransitive 'uli'shuw 'idi:Lah 'do you hate it?' there is the minimal 'u- oblique object pronoun to which the -uw may refer.) Possibly 'i:shuw 'hello < 'you?' insofar as that may not be the same as copular 'i:shA'Aw 'is it/that you?' could be such an example of non-referentiality. See §27.10 on copulars. The list of attestations follows in (29).

## (29) Attested items with =shAw/=shuw

- a. dAq'e:dahshuw te'ya' 'iXa' – 'a:n, dAq'e:dah q'Aw  
'is that all the fish you have? – yes, that's all' (Lena)
- b. XAsahLshuw  
'did you eat it?' (Marie)
- c. sdi'mahdLshuw  
'is it (has it been) baked?' (Lena, Marie)
- d. 'uli'shuw 'idi:Lah  
'do you hate it?' (Marie)
- e. 'i:shuw  
'hello' (Lena, Marie)
- f. di:yAXshuw Ga'mahdLG  
'isn't it baking yet?' (Marie)
- g. dik'shuw 'u:la'lAXLga:G  
'don't you (pl) know?' (Lena)
- h. tsa'shuw yiLeh  
'is it deep?' (Marie)
- i. ts'a'shuw GAl'e'L  
'is it getting muddy?' (Lena, Marie)
- j. dik'shuw ts'a' 'a'Le:G  
(or 'Al'e:G) 'isn't it muddy?' (Lena, Marie)
- k. siLxut'Lshuw  
'did I hit it?' (Lena, Marie)

- l. *dik'shuvw 'AxsLxut'LG*  
 'didn't I hit it?' (Lena, Marie)
- m. *'u:dshAw lA'ah*  
 'is that where it (hat) belongs?' (Lena)
- n. *dAXu'shuvw wAX silah dAleh*  
 'is it true it's saying thus about me?' (1b.8, Marie)
- o. *'idahshuvw 'i:t'e:*  
 'is that nice?' (9.31, Anna)
- p. *'u'li:Lgahshuvw, 'ulehd dik' k'ulish:k'G*  
 'do you know, why you don't kill anything?' (23.9, Anna)
- q. *'idahshuvw*  
 'is that right?' (27b.6, Anna)
- r. *'i:gishuvw 'Awa: k'uju'Xi:yah*  
 'will you too eat any of it?' (41.7, Lena)
- s. *Gi:'ehshuvw, 'Ama:*  
 'do you see them (fish), Mother?' (46.29, Marie)
- t. ... *q'ahshuvw Gi:'eh '...* do you finally see it (canoe)?' (71.3, Lena, Marie)
- u. *ch'id LinhGihshuvw ts'iyuh da:X lixah da:X dla:q'Aya'*  
 'is there only one blackbear or grizzly-bear or mountain-goat?' (Ravens and Mother-of-Pearl Canoe. 65)
- v. *ch'id LinhGih XAtl'shuvw 'Aw dAsAL'ehdgL, lAGtli:X*  
 'in only one night you dried it, halibut?' (9.130, Anna)
- w. *ch'id LinhGihshuvw yiLe:, te'ya'le:*  
 'exists there only one, king salmon?' (10.157)

There are four more examples of =shAw in notebook V\*II 4 L. Note also, notebook VI 145, from Lena, *li:LgehGLshAw* 'is it that you're lonesome?', where the =shAw refers not to the subject, but extraneously, to the situation. This is matched by a copular =shA'Aw, q.v. under §27.10 on copulars.

There happen to be no fewer than three examples of *ch'id LinhGihshuvw* 'only one?', placed at the end of the list under =shuw. The phrase may well be something of an idiom, and is interesting with regard to placement of =shuw. In the first case the head is a sequence of three nouns, and the =shuw is placed leftmost, before even the first noun. In the second, the =shuw follows the single head noun, and in the third, =shuw follows *LinhGih*, the head noun extraposed after the verb. This placement, including the reduced demonstrative, was further confirmed with Sophie in 1987, who preferred *tli:shunh sAtsu'dL* to *tli:sh sAtsu'dLinh* for 'has he already gone to sleep?'.

## 27.3.4 =shunh

There are 26 examples of =shunh in the searchable corpus. Of these, eight are followed by =q', for which see §27.6. The other 16 are presented in (30).

## (30) Examples of =shunh

- a. *yik'a'dishunh* – 'a:n, *yik'a'dinh*  
'is he sick? – yes, he's sick' (Lena)
- b. *k'a'dshunh ya' sa'yahL* – 'a:n, *k'a'd q'unh ya' sa'yahL*  
'did he go crazy? – yes, he did' (Lena)
- c. *dAche:lyAXa'shunh sa'yahL* – 'a:n, *dAche:lyAXa' q'unh sa'yahL*  
'did he starve? – yes, he did' (Lena)
- d. *dik'shunh 'a'k'a'dGinh* – 'a:n, *dik' 'a'k'a'dGinh*  
'isn't he sick?, he isn't sick, is he? – no, he's not sick' (Lena)
- e. *dAche:lyAXa'shunh sa'yahL*  
'did he go hungry?' (Lena)
- f. *'u'li:Lginhinhshunh*  
'do you know him?' (Lena)
- g. *dik'shunh 'u:la'yiLga:G*  
'don't you know him?' (Lena)
- h. *'uda'yAsALqahLshunh*  
'did he get stuck without food?' (Lena)
- i. *'ulAXshunh 'i:nL'a:k' dAqa:yu:*  
'do you (cust.) see him sometimes?' (Lena)
- j. *si'e:Xshunh 'i'di:Lqe'dX*  
'has he been asking you about me?' (Lena)
- k. *si'e:Xshunh 'ida'di:Lqe'dX*  
'has he been asking (people) about me?' (Lena)
- l. *'a'q'shunh XAdla:sALyahL*  
'did you run him out?' (Marie)
- m. *Gi:'e:k'ihshunh*  
'do you (cust.) see him?' (Lena)
- n. *'ulAXshunh 'i:nL'a:nk'*  
'do you (cust.) see him?' (Lena)
- o. *dik'shunh 'ulAX 'i'yiL'a:nk'G, lahq'dAXyu:*  
'don't you (cust.) see him, around town?' (Lena)
- p. *'Ad'e'da'shunh q'e' qa'dah*  
'will he get back home?' (Marie)
- q. *'a:gidugshunh*  
'he/him/she/her too?' (Lena)

- r. 'u'li:Lginhinhshunh du:d  
'do you know him who it is?' (52.24)

A further example with reduced verbal enclitic, notebook VII 4 L, is *ki:nXihshunh* 'is he weeping?' (< 'anhsh ki:nX). Another important pair of examples is *yAX da:Xishunh* 'is he walking about?' or *yAXshunh da:X* 'id.' from Marie (V 71), while rejecting *\*?yAXsh da:Xinh*, which violates the principle that the enclitic with reduced demonstrative should not be separated, but occur together in one place.

There are ten more examples of =sh enclitics in notebook V 64-66, including 'a:nda' q'e'shunh sdiyahl 'did he come back here?' (as well as 'an:da'shunh q'e' sdiyahl). There are four more examples of =shunh from Lena in notebook VI 144-145, including *shishehLihshunh* 'did I kill him?', 'AdXa'd ya'Xshunh... 'did he suddenly...?', showing 'AdXa'd ya'X as (at least potentially) a single constituent. There are two more examples of =shunh in notebook VII 4 from Lena.

We have one instance of two =shunh in a single sentence: 'anh Lila'shunh 'idAGe'shunh 'i:sAgu'k'L 'did that man punch your brother?' from Marie (V 120). The status of that was not checked, with Marie or any other speaker, so may be dubious.

### 27.3.5 =shuhnu:

There are four examples of =shuhnu: in the corpus. Of these, one is followed by =q', for which see §27.6. The other three are presented in (31).

(31) Examples with =shuhnu:

- a. xu'wAqe'dinu:shuhnu:  
'are they asking about me?' (Lena)
- b. 'u:ch'shuhnu: qa'qeh  
'will they go there?' (Lena)
- c. k'ude:dahshuhnu: 'uqa' dAXunh 'Adu'la:LAXa:k'G  
'can't you turn yourself into a person amongst them?' (10.238, Anna)

An example with reduced verbal enclitic, VII 4 L, is *ki:nXishuhnu:* along with non-reduced *ki:nXinu:shuhnu:* 'are they weeping?' < 'ahnu:sh ki:nX.

There are two more examples from Lena in notebook V 64-66: 'Awshuhnu: XAsahL 'did they eat it?' (which might also mean 'did it eat them?'), and 'a:nda'shuhnu: q'e' qud'dA'a'ch' 'will they come back here?'. Note 'ahnu:sh 'ahnu: shAshehL 'did they kill them?', instead of 'ahnu:shuhnu: shAshehL, probably also correct; then 'ahnu:sh 'Aw shAshehL 'did they kill it?' instead of 'Awshuhnu: shAshehL 'did they kill it?', which might mean 'did it kill them?' as well.

## 27.3.6 =shunhAw

There are only three examples of =shunhAw.

(32) Examples with =shunhAw

a. *li:LgehGLishunhAw*

‘Is that what’s wrong with him, lonesome? (‘Is it that he’s *lonesome*?’) (Lena VI 146)

b. *'anhshunhAw shAshehL*

‘Did he (actually) kill him?’ (as opposed to plain yes/no)

c. \* *'u:da'shunhAw sahL*

‘Did he go there?’ (Lena VII 4)

Example (32c) is unacceptable, evidently because the sentence is intransitive. However, that is potentially contradicted by (32a), unless that is explained by the special gloss. Hypothetically then, this last instance might become acceptable with the gloss ‘is that where he went to?’; cf. instances with *-q'unhAw* above.

## 27.3.7 =inh and =inu: plus =sh

Interaction between =sh enclitics and verbal enclitics =inh and =inu: is of some interest. There are enough data so that the principle that =inh and =shunh, or =inu: and =shuhnu: should (perhaps) be in complementary distribution can be examined. There is one example of both present, in (33), as opposed to 14 examples with =shunh or =shuhnu: and no enclitic on the verb, though a non-overt human third person is involved.

(33) *dik'=shunh 'a'ka'd-G=inh*  
 not=Q=HUM.SG sick-NEG=HUM.SG  
 ‘Isn’t he sick?’

At the same time, of course, there are many examples with =sh or =shuh or =shAw with no =inh or =inu: on the verb either, though a non-overt human third person may be involved. Where the =shunh or =shuhnu: is attached to the verb, however, the picture appears to be quite different. There seem to be no examples of =shunh or =shuhnu: fully replacing =inh or =inu:. Of the relevant examples, all five have either both enclitics fully, as in *xu'wAqe'dX=inu:=shuhnu:*, or *'u'li:Lginh=inh=shunh* (twice), or some reduced form of =inh, in *yik'a'd=i=shunh*, and *Gi:'e:k'=ih=shunh*. This score of 5 out of 5 is surprising and perhaps significant, that double or partly double enclitic is favored over the attachment of =shunh or =shuhnu: directly to the verb. In fact there are also examples of such double enclitics with =shuh as well as with =shunh or =shuhnu:, namely *GALAX'inh=inh=shuh* ‘do you (pl) see him?’ and *'u'qALAXLixa:s=inu:=shuh* ‘are you afraid of them?’. (There are no such examples with =shAw.) It is interesting to compare this strong tendency to combine

=sh enclitics with preceding =inh or =inu; notably stronger than that for =q' enclitics so to combine with them, q.v. above.

Not in the corpus, not entered in the ledger, are six further examples relevant here:

(34) More examples with =sh and (reduced) =inh or =inu: (Marie, V 70)

- a. *tsu'd=i=shunh*  
'is he sleeping?'
- b. *dAshAche'L=i=shunh*  
'is he hungry?'
- c. *qu'wAsinh=i=shunh*  
'will he die?'
- d. *shAshehL=i=shunh*  
'did he kill him?'
- e. *(qA)sAsuhn=inu:=shuhnu:*  
'did you kill them?'
- f. *'iLu'shuhnu:qAsAsuhL*  
'did they kill each other?'

Note the lack of nasalization on the reduced enclitic =i even in (34c), where the stem *-sinh* 'die' itself has nasal vowel. Note also, V 64-66 from Lena, *sAshehLinshunh* 'did you kill him?', and *qu'yishinhinshunh* 'are you going to kill him?'.<sup>6</sup> Note *shishehLihshunh* 'did I kill him?', notebook VI 144 from Lena. There is one more in notebook X 44 L, *dAshAche'Lishunh* 'is he hungry?'. There are a dozen more examples of =shunh and =shuhnu: in the examples listed above under =shunh and =shuhnu: themselves, all with more or less reduced form of the verbal enclitic retained. There are evidently none then of the 23 relevant examples where the verbal enclitic is completely replaced, e.g. *\*?ki:nXshunh* 'is he weeping?', but the reason for that absence is not certain, as such forms were evidently never tested.

The =sh may also be used in a subordinate clause where it might be translated 'whether', where the main verb is e.g. 'know', as in (26l). Also (27cc). On the other hand these could perhaps be seen simply as separate sentences. Cf. however the special use of =sh with the subordinator *da:X* with O-'LA-le(') 'believe O', perhaps as a kind of contrary-to-fact conditional.

<sup>6</sup> The spelling *-in-* merely reflects the original transcription, with tilde. Nasalized reduced vowel is non-canonic, and in any case non-distinctive. Cf. e.g. the morphophonemic rule *-inh-' > -i'* as in *-inh-'LAw > -i'LAw*.

## 27.4 Interrogative enclitic =*d*

This set of enclitics is associated with the interrogatives *de:-* ‘what?’, *du:-* ‘who(m)’, *dAX-* ‘how?’, *da:-* ‘where?’, *k’e:-* ‘how?’, and *tla:X* ‘where?’. It is therefore extensively exemplified in §23.4 in the chapter on interrogatives. What is not discussed there is the use of demonstratives and reduced demonstratives with =*d* interrogatives, or that and the question of the relationship between =*d* interrogatives and =*duh* ~ exclamatory shown below (§27.5).

Quite clearly the full range of demonstratives, full and reduced, must be possible with =*d* interrogative: i.e. =*d* alone, =*duh*, =*dunh*, =*duhnu:*, =*dAw*, =*dAl*, =*dunhAw*, (hypothetically) =*dunhAl*; =*dA’anh*, =*dA’ahnu:*, =*dA’Aw*, =*dA’Al*. The same rules of course apply here as with =*q’* and =*sh*, depending on the referents in the clause. Examples, as noted, can be found in Chap. 23, and full documentation can be found in the dictionary under the six interrogatives mentioned above. The question here is the degree to which this =*d* is to be identified with the “exclamatory” =*duh* treated in some detail in the subsection below (§27.5). There it will be seen that the variability of attached reduced demonstratives is far less than for =*d* interrogative, though a historical relationship seems very likely.

## 27.5 Exclamatory =*duh* ~

This enclitic or enclitic series may be identified in some way with the =*d* enclitic series attached to or associated with wh-type interrogatives, q.v., treated at some length in Chap. 23. The enclitic or enclitic series treated here is any case quite different. Semantically it has nothing to do with interrogation, it is not attached to interrogatives, and it has a somewhat exclamatory meaning, as will be shown below. Syntactically it is also very different from the =*q’* and =*sh* enclitic series in that it attaches to the verb or final constituent of the sentence or phrase, not the initial constituent. Morphologically, it never takes the simple shape =*d*, but is usually =*duh* when not followed by a (reduced) demonstrative. In fact there is some question as to whether it is or is becoming invariable =*duh*; that the variants =*dunh* or =*duhnu:* are of questionable status. Clearly it is acceptable that =*duh* be attached to the verbal enclitics =*inh* or =*inu:* as such, rather than that it replace them as =*dunh* or =*duhnu:*. This is attested already in Rezanov (1805).

In fact, this enclitic is relatively rare in the 1963–5 corpus, where it is attested only 13 times. Clearly, there was little attempt to investigate it thoroughly during the main field-work period. The degree to which it came up spontaneously is altogether unclear. There is no question, however, that it came up in connection with re-eliciting Rezanov, as there it occurs at least 25 times. There was no indication that it seemed “old-fashioned,” and inclusion of it seemed quite unproblematic in re-elicitation of the Rezanov forms. The statistics, however, strongly suggest that use of =*duh* has changed through time. This explanation, rather than a geographical dialect difference between Yakutat and Copper River dialect,



is supported by that fact that =duh also occurs twice in Furuhjelm (1862a), which must be from Copper River. Twice in Furuhjelm is virtually the same frequency per elicitation as 25 times in Rezanov. The 13 times in the 1963-65 corpus is significantly far lower a rate, and both corpora (Russian and modern), as elicitations, without looking for =duh, are quite comparable. It is also very significant that all 13 attestations in the modern corpus are in elicitations, there being not a single example of exclamatory =duh in any of the texts.

Since this item is rather sparsely attested, about 45 times in total, and not included in the dictionary, full documentation will be presented here, starting with Rezanov. The majority of attestations are in fact from Rezanov. The items are presented in (35) in the order found in Rezanov, which is more or less alphabetical according to the Russian gloss. That original gloss will be found here in parentheses, with its English translation, often significantly different from that of the actual form obtained. Where the interpretation is uncertain, incomplete, or impossible, the entry begins with the original Russian transcription. In all or at least most cases, the interpretation is verified or in fact as supplied by Lena.

(35) Attestations of =duh in Rezanov (1805)

- a. 'a'd k'ulAX 'i:t'eh yiLinhinhdudh 'he sure is powerful' (бедной (biednoi), 'poor')
- b. k'u'lAYAduh 'it's big' ('велик', 'big')
- c. GAdla:'a:wduh 'it's far' ('далеко', 'far')
- d. оуыатохетеыту (<ouyatokheteytu>) 'Awya'd wAX 'i:t'ehdudh (?) 'it's that way in it' (?) ('ест ли?', 'is it (so)?') yAX sA'ahLduh 'sun has set' ('зря вечерная', 'sunset')
- e. ухатилету (<ukhatiletu>) ...-le...duh ('зделать', 'to do')
- f. 'уyAq' L...duh '... in it' ('заряжено', 'loaded') three letters illegible in microfilm, but probably legible in the original
- g. 'idahduh 'fine' ('ладно', 'OK')
- h. 'a'd yiwa'q'duh 'it's very shallow' ('мель', 'shallow')
- i. 'ishguGdahduh 'untruthfully' ('напрасно', 'wrong')
- j. dik' wAX k'u'xLANe:Gduh 'I don't believe so' ('ненарожно', 'unintentionally'; note use with 1s)
- k. dAla'Gduh 'it's weak' ('не крепко', 'not strong')
- l. duxLch'a:q'Gduh 'I'm deaf' ('не слышу', 'I don't hear it', note use with 1s)
- m. ki:nXinhduh 'he's crying' ('плахал', 'he wept')
- n. dAqi:kih Gi:'ehdudh 'you see nothing' ('просторно', 'spacious'; note use with 2s)
- o. dAwa'duh < dA-wa'-duh?, dAwa'dduh?, dAwa'd-uh? 'hurry!' (twice, for 'скоро', 'soon', 'тогхастъ', 'immediately')
- p. 'a'd dAwa'duh 'greatly hurry' ('скорее', 'faster')

- q. *duxLch'a:q'duh* 'I hear it' ('слышу', 'I hear'; note use with 1s)
- r. *qa' dAsAq'ahLduh* 'it burned up, burst into flame' ('сожеч', 'to burn up')
- s. *sitehLduh* 'I slept' ('спал', 'slept'; note use with 1s)
- t. катухъетухуескету (<katux'etuxuesketu>) ...*duh* ('туго', 'taut')
- u. *XAda'ya:hGduh* 'it's dull' ('тупо', 'dull')
- v. *dA'u:dinhduh* '(leave him be) right there' ('тут', 'there')
- w. *'idah sAliLduh* 'it got nice' ('чисто', 'clean')
- x. *'a'Lda:sGduh* 'it's light' ('легко', 'light (not heavy)')

From the list in (35) it is clear the meaning of =*duh* can at most be mildly exclamatory, given their frequency in this elicited corpus by Rezanov, virtually excluding the possibility that the meaning can be with much surprise or urgency. Very possibly, the frequency could come from difficulty in understanding of what was asked and possibly be interpreted 'Ah, this is what you mean!', although that possibility is limited by the modern attestations.

There is no sign of nasalization implying =*dunh* in any of the Rezanov transcriptions. At the same time, there are three instances of double enclitics, =*inh=duh*, in the first item *'a'd 'ulAX 'it'eh yiLininhduh*, in *ki:nXinhduh*, and even with the non-verb *dA'u:dinhduh*. Note that there is no tendency to attach =*duh* to non-final constituents, as shown in *dAqi:kih Gi:'ehduh* and *'idah sAliLduh*.

There are no instances of =*duh* in the other Yakutat or Russian sources, except for Furuhielm, where, as noted above, there are two: 'evening' *XAtl'duh* and 'bad' *k'ushiyahduh*. The frequency of =*duh* in Furuhielm, in 2 of 161 entries, approaches that in Rezanov, as does its use, hardly exclamatory, except for the situation that such linguistic work was being done at all!

In the modern corpus, there are the twenty instances of =*duh*, shown in (36), all from Lena in elicitations.<sup>7</sup>

- (36) Instances of =*duh* in the modern corpus, from Lena in elicitation
- a. *ki:nXiduh* 'he's crying (rush to him)!'
  - b. *ki:nXinu:duh* 'they're crying (rush to them)!'
  - c. *xuGAqa:Lduh* 'it's biting me!'
  - d. *qa'nu:Xa'X GA'a'ch'Linu:duh* 'they're getting into a fight!'
  - e. *sa'mahdLduh* 'it's cooked (done, already)!'
  - f. *XAdli:'ya'duh* 'run!'
  - g. *qa' sLiduxLduh* 'it (shot seal) floated to surface!'
  - h. *dAqi:kihduh* 'all gone!'

<sup>7</sup> Thanks to Guillaume Leduey for identifying these instances.

- i. *dik' wAX 'u'xLAla:Gduh* 'I didn't realize that'
- j. *dik' wAX 'u'xLAla:Gduh wAX siLiL* 'I did it unintentionally < I didn't realize it, (but) I did it'
- k. *'iya'duh (q'ah)* 'now go (finally)!'
  - l. *dAtli: 'a:nch' GAqe:Liduhnu*, and *dAtli: 'a:nch' GAqe:Linu:duhnu* 'they're coming already! (by boat)'
- m. *ya'X qa' 'a:k'duh* 'he would climb up'
- n. *dA'u:duh 'idilinhinh* 'let him drink it'
- o. *dA'u:duh 'idila:k'inh* 'let him (customarily) drink it'
- p. *dA'u:duh 'ALdah 'i:linhinh* 'alright let him play'
- q. *k'a:diduh* 'no more' (cf. *k'a:dih* 'missing, absent')
- r. *k'a:diduh qa: qa'Lxut'inu:* 'they're shooting around all over at us' ('they will never? (actually) shoot us')
- s. *q'ahduh la:; q'ahdu'la:* 'goodbye' (Lena, later rejecting =duh variant; cf. Galushia Nelson *qatu:la*, and *q'ahdi'lah* 'goodbye')
- t. *q'ahduh qu'xah* 'I'm (really) going now, finally'

Not counting the items with *dik'* NEG (36ij), the other 18 instances appear to be unconnected with the process of interpreting the Rezanov forms. Note the use with imperatives, twice, in (36f) and (36k). The latter is the only instance where =duh is not sentence final, with *q'ah* following. See the dictionary for the special syntactic use of *q'ah* with imperatives. (36a) shows the reduced form of the verbal enclitic =inh, without the nasalized morpheme transferred to the =duh. (36b) shows =duh attached to the verbal enclitic as such, this time =inu:, so *ki:nXinu:duh* 'they're crying (rush to them)!', with a nice gloss for explaining the force of =duh. (36t) shows the combination too, with reduced allomorph of the verbal enclitic, here maximally reduced, =inu: > =i the first time, unreduced the second time. Further, it does not only that, but shows the variant =duhnu: for third person plural human, raising the whole question of variability, =duh ~ =duhnu:, presumably ~ =dunh, perhaps even ~ =dAw.

This last is confirmed in *q'ahdAw* 'finally', in text 33.54 from Anna. Further, *q'ahduh qu'xah* 'I'm going now, finally' from Lena, and *q'ahduh la:* 'goodbye' from Galushia Nelson (de Laguna and Reynolds 1933), confirmed by Lena. This enclitic is presumably further attested in reduced form -dA- with further enclitic *q'Aw*, *q'unh*, or *q'uynu:* in *q'ahdAq'Aw* etc. 'finally', q.v. in the dictionary under *q'ah* ~ 1c.

The question of variability of =duh is implied by its very existence as an enclitic, thus potential analysis =d-uh, therefore =d-unh, =d-uhnu:, =d-Aw, even =d-Al? The latter two were never investigated, but =duhnu: arose spontaneously. The question was investigated in later fieldwork, but only briefly, twice, and only for =dunh and =duhnu:. From Lena, 13/6/71, at the end of the session, we have *'u:da' sahLinhduh* 'he went there', then *'u:da'*

*sahLi(n?)'dunh*, apparently with /' / over what may be crossed-out <n>. This apparently confirms =*dunh* as an alternative for 'he went there', with some kind of reduction of the verbal enclitic =*inh*. That is followed by '*u:da' shA'a'ch'Linu:duh* 'they went there', and then \*'*u:da' shA'a'ch'Lduhnu*. This pair confirms the invariable =*duh* in enclitic sequence but then rejects the proposed =*duhnu*: variant, at least as completely replacing the first enclitic. That is otherwise inconsistent with the last item above, confirming =*duhnu*:. It is quite possible that the variants =*dunh* and =*duhnu*: are now allowable only in combination with some form of the verbal enclitic =*inh* or =*inu*:, however reduced (to =*i*). Those four forms are followed by '*u:da' qu'winhinhdudh* 'he'll go there', which only confirms use of =*duh* with future. Finally, from Sophie, 1987, p. 64, we have '*anh Lila:\**'*du(n)h sA'ehL\*du(n)h* 'that guy married her!', apparently rejecting the variant =*dunh* altogether. The notation seems to mean that Sophie rejected also \*?'*anh Lila:'duh sA'ehL* i.e. =*duh* on the first constituent, which is interesting. It also means she rejected '*anh Lila:' sA'ehLduh*, but that rejection cannot be justified.

## 27.6 Combinations of =*sh* and =*q'* enclitics

There are 25 examples of the enclitics of the =*sh* series combining with those of the =*q'* series in the text corpus. They always have the meaning 'apparently, evidently, presumably, probably, no doubt, must, one may suppose'. The order is perhaps always =*sh* first, =*q'* following. The possibility of the reverse, however, was not tested. The =*sh* is variable as usual above, =*sh*, =*shuh*, =*shunh*, =*shuhnu*:. The =*q'* series is apparently limited, however, at least in the attestations, to *q'Aw* most of the time, i.e. 15 of the examples, but also twice *q'unhAw*, once *q'Al*, and five times copular *q'A-* (with '*Aw*, '*anh*, '*ahnu*:. Since the possibility of the reverse order =*q'*=*sh* was not tested, it is conceivable that if the reverse order is possible, then the variability of the two enclitics would also be reversed.

The placement of =*sh=q'* is on initial phrase-constituent, as for =*sh*. Even in the case of *qe'LGAYu:ch' yAX dAqe:Xinhsh q'A'anh* 'he was boating "around" to the women one may well suppose' in text 43c.13 from Lena this is so. In her witty dictation the combination attaches in fact to a relativization, and a more literal gloss should be 'one who was boating "around" (in fact) toward those women he presumably was.' For the copular *q'A'Aw* rather than *q'Aw*, see §27.10. The other copulars are given in (37).

### (37) Other copulars

- a. *k'ulAX 'i:t'inhinhtsi:sh q'A'Aw*.  
'She must have been a chief's daughter' (11.98A)
- b. *ch'i:lehya' 'AXAkihsh q'A'Aw*  
'That must be Raven's canoe' (Raven and Mother-of Pearl Canoe 39 A)
- c. '*AdLa'ni:q' dAXunhyu:sh q'A'ahnu*:  
'they must be Gull-People' (Raven Cycle III.58 A)

- d. *q'ahsh 'Aw lixahsh q'A'Aw. 'Aw lixahsh q'Aw 'ulAXAde:'d 'uqa' 'Aw yiLeh*  
 'Sure enough it must have been a grizzly bear. Apparently the grizzly bear was her husband in her eyes.' (Woman who Married a Grizzly Bear. 29-29 A)

Example (37d) is two consecutive sentences, the first of which is copular. It is of special interest in having two instances of =sh, the second combined with copular *q'A'Aw*, and the first after Introductory *q'ah* 'already, finally', highly idiomatic, frequently with =sh and =sh=q', q.v. in dictionary under *q'ah* ~, here glossed 'sure enough'. The second sentence shows the usual non-copular form.

The rest of the textual attestations of combinations of =sh and =q' are given in (38) through (41).

(38) Remaining attestations of =sh=q'

- a. *tsa:dla:t'a:Xdsh q'Aw*  
 'probably a chamber under a rock' (20.27A)
- b. *dALAxwe:gyu:sh q'Aw xiLeh*  
 'groundhogs I suppose I must be' (23.116A)
- c. With =sh=u=q':
- d. *q'ahsh dAtli:shuh q'uw 'Aw ya:X GAle:gL*  
 'apparently already by now he's eating it up' (10.135A)
- e. *tsa:le:Xquhluwshuh q'Aw*  
 'it must have been a big octopus' (20.67)
- f. *dAtli:shuh q'Aw 'utl' qid k'ulAXAdla:sLi'AdzL*  
 'it must already have avalanched down over him' (23.143A)
- g. *k'uq'AXkihshuh q'unhuw*  
 'a bit of fat apparently' (49.131A)
- h. *'a:nch'a:ch'shuh q'uh da:X sAqehL*  
 'he boated across in this direction apparently' (Giant Strawberry.14A)

(39) Remaining attestations of =sh=Aw=q'

- a. *q'ahshuw q'Aw 'Aw ya:yu:*  
 'no doubt it was that stuff' (11.10A)
- b. *dAtli:shuw q'uw xah lAGAdA'a:L*  
 'already summer was passing apparently!' (43.32M)

(40) Remaining attestations of =sh=unh=q'

- a. *'Awshunh q'uw ts'id 'anhku:lAyAq' sAle'gL*  
 'apparently he just clawed into its belly' (8.7A)
- b. *'Aw q'Aw, 'Awshunh q'unhuw, yahd q'Aw sAqehL*  
 'then, evidently, he boated out to sea' (20.83A)

- c. *q'ahsh 'Aw dAni:gihshunh q'Aw, 'Aw Lqa't'g*  
 'by now that moose no doubt, she's boiling it' (27b.26A)
- d. *'u'ehdshunh q'Aw, 'i'inhinh q'A'anh*  
 'his wife apparently, he was a married man' (33.56A)
- e. *'ahnu: qe'LGAYu:tl'shunh q'Aw*  
 'with those women it must be' (47b.15A)
- f. *yAXAch'q'unhuwshunh q'Aw dAtse:q'k'inh*  
 'he would apparently wet his bed' (50.10A)
- g. *dAtli:shunh q'uw 'Al qa:ta:' 'utl' tsin'dAleh*  
 'already apparently God had been speaking to him' (51.39A)
- h. *'a:ndshunh q'Al, siyAdkih*  
 'she must be here, my sister' (*Woman Who Married a Grizzly*, 56A. Note here that the *q'Al* is commonly associated with the proximal demonstrative locative *'a:nd.*)

(41) Remaining attestations of *=sh=uhnu:=q'*

- a. *'utl' 'AdAwil 'iqe'di:Lihinu:shuhnu: q'Aw, 'uch' GAXa:L*  
 'they were apparently going to make war with them, their belligerent fleet was approaching thither' (7.18A)

There are a few elicitations to be found in notebook VIII, page 77, from Lena: *'ahnshq'A'anh* 'it must be he, I suppose it's he', *'Awshq'A'Aw* 'I suppose it's that', *'Awlehdshq'A'Aw* 'so that's why; that must be why'. All three are copular. The first gloss of the last is important, implying that all instances are also glossable in that way, to the effect 'so (now I see,) that's what it is/must be', etc. Note VI 151 *'Awsh q'A'Aw 'sh* 'that's what it is!' and *'anhsh q'A'Aw* 'so that's who it is!' from Marie.

Many of the textual attestations of *=sh=q'* are merely nominal, but two of those with verbs are of special interest. In *yAXAch' q'unhAwshhunh q'AW dAte:q'k'inh* 'he would apparently wet his bed' (customary), we have *yAXAch'* '(repeatedly) under self' followed not only by *=shunh q'Aw*, but the *=shunh* is itself preceded by *q'unhAw*. Thus we might have hypothetically the reverse *=q'=sh* in *q'unhAwshunh*, though that is then followed by *q'Aw*, possibly in correction. If that is not a correction, the form, however rare, opens up a whole range of possibilities of enclitic combinations that is otherwise unattested and not investigated. Note further that the verb itself has *=inh* attached, another example showing that not only *=q'* but also *=sh* is not necessarily in complementary distribution with the verbal enclitics. Finally, we also have the last item, with *'iqe'di:Lihinu:shuhnu: q'Aw*. This shows, unsurprisingly, that *=shuhnu: (=q')* combines with the verbal enclitic *=inu:*, just as *=q'uhnu:* does, rather than replace it. It is also possible, especially if the whole sentence is to be seen as one single sentence rather than two, that the phrase in question is a relativized nominalization. That would then serve as subject of *GAXa:L*, however redundantly, since

the -*Xa* itself means ‘fleet of boats (presumably belligerent) moves’, identical with a Tlingit verb, probably a loan.

## 27.7 Combinations of =sh and =d enclitics

The combination of interrogative enclitics, =sh=d-, in that order, ‘I wonder’, is commonly attested with interrogatives: *de:shdA’Aw* ‘I wonder what it is, what could it be?’, *de:lehshdAw* ‘I wonder why’, *du:shdunh* ‘I wonder who’, *du:shdA’anh* ‘I wonder who he is’, *k’e:shdunh sAlil* ‘I wonder what he did, what could have happened to him?’, *da:shdunh* ‘I wonder where he...’. See further the other subsections on enclitics in this chapter. The combination of enclitics =sh and =d-, in that order, is clearly attested only fourteen times, and only with interrogatives, in fact only with *de:-*, *da:-*, and *k’e:-* in the searchable text corpus. Lack of *du:-* must be purely by chance, probably also *dAX-k’-*. The meaning is clearly ‘I wonder (what, etc.)’. The textual attestations are given in (42).

(42) Textual attestations of combinations of =sh and =d

*de:shdAw*

‘what might that be?’ (36.26A)

*de:lehshdAw Li:k’, sikuwa’na:GAyu:*

‘I wonder why He does it to them, my kinfolk (70.2A)

*de:lehshdAw wAX siliL*

‘I wonder why it has thus befallen me’ (70.3A)

*de:lehshduhnu: wAX liLilah*

‘I wonder why their faces are thus’ (24.34A)

*k’e:’wAXshduhnu: wAX ’i:t’eh*

‘how come, I wonder, are they that way?’ (24.33A, in the dictionary under *k’e:...-d* 4b.)

*ditl’a’g siXa’, da:dAXshduw yAGa’ya:L*

‘my letter, (along) where, I wonder, is it going?’ (Marie);

*k’e:lehshdAw*

‘I wonder why’ (Sophie, 1987, p. 57)

*’ulah yAX’Adi:lihXLa’ya:X, k’e:’shdAw siAlil*

‘I thought about it, I wonder how it happened to him’ (61.{7} A)

Four elicitations are to be found in notebook VIII 72, from Lena: *du:dA’anh* ‘I wonder who that is’, *de:shdA’Aw* ‘I wonder what that is’, *de:lehshdA’Aw* ‘I wonder why that is’, *de:wahshdAw* ‘I wonder why (what that’s for)’. Also (VII 71) *da:dshdunh* ‘I wonder where he is’ where the final of *da:-d* is postpositional (‘at rest, in punctual contact’), *’a:ndshduhnu:*

*sAq:GAyu: quh* ‘do the children sit here?’ (Lena). Note that the first three examples have *-dA-* and full allomorphs of the demonstratives. Such are the copular variants of the enclitic series, to be treated below.

Note that the *=sh* enclitic in these combinations is only *=sh* itself, without any reduced enclitic, as far as is attested. No attempt was made to test for reduced enclitic on the *=sh*, but it may be that none is possible, given that there are 13 instances of *=sh=d-*, none with attachment to *=sh*. The *=d*, on the other hand, is presumably fully variable, with *=Aw*, *=unh*, and *=unhnu*: attested, *=unhAw* absent by chance.

The *=d* enclitic is here obviously of the interrogative type, q.v. (Chap. 23). This may or may not be considered the same morpheme as the *=d* in *=duh* exclamatory, q.v. §27.5. Evidently not tested was the combination *=sh=d-* without interrogatives, e.g. *\*?te'ya'shdunh XAsahL* ‘I wonder whether/if he ate the fish’ or *\*?XAsahLshdunh* ‘I wonder whether/if he ate it’.

A possible further instance may be in *'Ashdih*, interjection of uncertainty, lack of knowledge, q.v. §21.3. Still another might well be in the 1786 vocabulary of Walker and Strange, <Esh-est-esh and Essht-est-esh> ‘Ho. You. Do you hear, calling to one’, evidently combinations of *'i:-sh* ‘is it you?’ and *'i:-sh-d* ‘I wonder if it’s you’, cf. modern *'i:shuh* ‘hello’ and presumable *'i:shduh* ‘I wonder if it’s you’, without the *=uh*, spoken perhaps not by Eyaks but by Chugach knowing some Eyak, who saw the ship coming coming from the Eyak direction.

## 27.8 Possible combination *=d* and *=q'* enclitics

There is no overt synchronic combination of *=d* and *=q'* enclitic series. However, the adverb *q'ahdAq'* ‘finally’ may be a reflex of just that. For full documentation of the form, see 1c. under *q'ah* ~ in the dictionary. This may be a reduced form of *q'ah-d(-uh)* or of *q'ah-d-* with epenthetic *-A-* plus *=q'*, attested as *=q'Aw*, *=q'unh*, *=q'unhu*. The *-dA-* cannot be a classifier or qualifier, nor can it be *dA=* ‘selfsame’ or indeterminate postpositional object, as enclitic *=q'* cannot be a stem, leaving *=d* enclitic the only likely historical possibility. It is probable also that overt combinations of *=d* and *=q'* enclitics were never tested, but the complete lack in the corpus of such, other than this historical possibility, must be statistically significant.

Finally, given that we have enclitic series combinations where *=sh* precedes *=d*, where *=sh* precedes *=q'*, and possibly one where *=d* precedes *=q'*, it follows that there may well be a transitive ordering of the three series, *=sh=d=q'*. This could possibly have been established by testing the form *?q'ahshdAq'Aw* with all three, or e.g. *?q'ahshdAq'unhu: wAX sAlil* ‘I suppose that must in fact finally happened to them’ or the like. Such a test was never done.



## 27.9 Historical summary for enclitic series

Toward a unified picture of the state of the enclitic series, it seems best to say the following. It seems probable *a priori* that exclamatory =*duh* is part of a series of enclitics, including at least =*dunh*, =*duhnu*·, and =*dAw*, that is advancing in evolution toward invariable =*duh*, rather than the reverse, that =*dunh*, =*duhnu*·, and =*dAw* were analogical innovations from invariable =*duh*. Part of that reasoning is parallelism with the =*sh* series of enclitics, which often combines with =*inh* and =*inu*·: while at the same time fully retaining its variability parallel with the variability of the =*q*' series. The =*sh* series is at a less advanced stage of evolution toward invariability than is =*duh* (-). Further, the role of the particular variant with =*uh* is clearly evolved toward minimal with *q'uh*, still robust with =*shuh*, and expanded to near exclusivity with =*duh*. Likewise, the tendency for the enclitic to combine with some retention of preceding verbal =*inh* and =*inu*· is weakest with =*q*', stronger with =*sh*, and strongest, perhaps mandatory, with =*duh*.

## 27.10 Copular uses of the enclitics

As mentioned in §25.4, there is a special type of non-verbal sentence that involves a form of the three enclitic series =*q*', =*sh*, =*d*, plus “copular” -*A*-, followed by a full (non-reduced) form of the demonstrative pronoun. This results in a total of twelve possible forms, though only nine of these are attested (see Tab. 27.4). The forms translate as English ‘to be’, hence the label copular. Attestations of the resulting forms vary widely in frequency. A search of the text corpus and the field notes reveals a total of 228 examples of copular enclitics.

**Table 27.4:** Tokens of copular by enclitic series and demonstrative.

		demonstrative				
		' <i>Al</i>	' <i>Aw</i>	' <i>anh</i>	' <i>ahnu</i> ·	total
enclitic	<i>q</i> '	18	106	61	15	185
	<i>sh</i>	0	7	4	0	11
	<i>d</i>	0	12	18	2	32

By far the most frequent copular is the =*q*' series, accounting for 185 tokens, or 81% of the total. The majority of these employ the distal (or unmarked) form, *q'A'Aw*. In fact, this single form accounts for 46% of all copulars. The complete absence of *shA'Al*, *shA'ahnu*·, and *dA'Al* is no doubt due merely to chance and lack of systematic elicitation.

It may be best to say that there are in fact two poles of use of the copular. One pole may be labeled “pure” copular, where the copular ends the otherwise verbless sentence, or sentence where a verb is only in subordinate clause. The other pole may

be labeled “subordinated” copular, in part not clearly distinct from enclitic with reduced demonstrative. First the pure copular will be discussed.

Example (43) shows the copular occurring with enclitic series =*q'*, together with a proximal, distal, human singular, and human plural demonstrative, respectively. None of these examples contains a verb. Rather, the copular asserts the existence of the single nominal argument, which is further indexed by the demonstrative.

(43) Examples of “pure” copular with enclitic series =*q'*

- a. *xu=q'-A-'Al*  
1S=EMPH-COP-PROX  
'It is me.'
- b. *k'ugudA'luw ma:=q'-A-'aw*  
big lake=EMPH-COP-DIST  
'It was a big lake.' (Loon 130)
- c. *qe'L=q'-A-'anh*  
woman=EMPH-COP-HUM.SG  
'It was a woman,' (Wolf 96)
- d. *dik' dAXunh=yu:=G=q'-A-'ahnu:*  
NEG people-PL=NEG=EMPH-COP-HUM.PL  
'Those aren't people.' (Wolverine 2)

With the =*d* enclitic series the copular forms wh-questions, as in (44). Here the questioned referent is again indexed by the demonstrative.

(44) Examples of “pure” copular with enclitic series =*d*

- a. *de:=d-A-'Al*  
what=Q-COP-PROX  
'What is this?'
- b. *de:=d-A-'Aw*  
what-Q-COP-DIST  
'What is it/that?'
- c. *du:=d-A-'anh*  
who=Q-COP-HUM.SG  
'Who is he/that?'
- d. *du:=yu:=d-A-'ahnu:*  
who=PL=Q-COP-HUM.PL  
'Who are they?'

More complex examples are found in (45).

- (45) a. *de: 'Ana:shah=d-A-'Aw*  
what flower=Q-COP-DIST  
'What (species) is that flower?'

- b. *du: Lila:’=d-A-’anh*  
 who man=Q-COP-HUM.SG  
 ‘What man is that?’

While copular enclitics formed from demonstratives are most common, copular constructions can also be formed with word forms, including independent pronouns (46a) and interrogative particles (46b).

(46) Copular -A- followed by non-demonstrative forms

- a. *du:-d-A-’i:*  
 who-Q-COP-2s  
 ‘who are you (sg)?’
- b. *du:-d-A-’u:d*  
 who-Q-COP-there  
 ‘who’s there?’
- c. *du:-d-A-’anh*      *’a:nd sAtehL*  
 who-Q-COP-HUM.SG here lying  
 ‘who is he (who) is lying here?’

This use can apparently be extended e.g. to (46c), actually preferred to the more standard *du:dunh ’a:nd sAtehL* (without copular) by Marie 8/3/96.

Less “pure” forms of the copular occur within subordinated constructions, as in (47), where they behave very much like demonstratives.

(47) Copular enclitics occurring in subordinated constructions

- a. *’a:nd=q’-A-’Aw*      *lAXA-x-L-’yah*  
 here=EMPH-COP-DIST NC-1s-CL-object.in.container  
 ‘Here it is I keep (container of) berries.’
- b. *t’its’=q’-A-’Aw*      *qu:, ’Aw ge:Lta:g*  
 ice=EMPH-COP-DIST pl.sit DIST seal  
 ‘[on] the ICE it is, they sit/stay, seals’ (George)
- c. *’Aw Xe:=q’-A-’Aw,*      *ke:Lta:g Xe’*  
 DIST oil-EMPH-COP-DIST seal oil  
 ‘It was that OIL, seal-oil.’ (9.158A)

These examples give some insight into a possible grammaticization path toward the enclitic series followed by reduced demonstratives. The copular as in (47) may serve historically as an intermediate stage prior to the emergence of “emphatic” focus or topicalizing forms with reduced demonstrative, e.g. *q’Aw*. Hence, the copular instead of reduced =*q’* enclitics must be the equivalent of extrapositioning. Their extreme frequency in George Johnson’s text dictations for Li is not ungrammatical, or mistranscription by Li, but merely George’s choppy or hesitant or halting style, from rustiness. It is not clear how

or when e.g.  $q'-'anh > q'unh$ , but it is indeed probable that the PAE was  $*q'w-$ ; cf. Minto  $k'w$  and Navajo  $-go$ , hence the labialization. The labialization in  $=shu$  and  $=du$  must therefore be analogical to  $=q'u$ . This must be a better explanation than that  $q'unh$  comes from copular  $q'A-'anh$  for two reasons. First and foremost, the labialization becomes harder to explain with intervening copular  $-A-$ . Second, there is no question that the copula is a morpheme as such, because of  $'a:nd-A-xu$ ; for example, and there is no need to posit an original copula for the reduced use of the  $=q'$  in sentence syntax. On the contrary, it seems much easier to consider the copular as an extraposition in sentence structure. The main problem is  $=sh-u$ ,  $=d-u$  labialization, unless perhaps in relation to or influence of unmarked demonstrative  $'AwA$  and/or oblique pronominal prefix  $'u-$ . This is possibly segmentatable as  $'anh < 'A-nh$ ; cf.  $=inh$ , Athabaskan  $*-\text{ɔn}$ .

Further study is needed on this topic before we can come to a conclusion as to the origin or function of the copular enclitics and their possible role as a source for the enclitic series.

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