

EYAK GRAMMAR DRAFT IN PROGRESS: CONTENTS AND INTRODUCTION  
November 18, 2010

Now in its fourth year, 2007-2010, the draft of an *Eyak Grammar* is being made available on the web, as a work in progress. My “Eyak: a Preliminary Sketch” in *Canadian Journal of Linguistics* 1965 is so far all I have published on Eyak grammar. That brief sketch is correct or valid as far as it goes, and the present files do not yet attempt to replace it, for the most part, but rather supplement it. For example, two of the verb mode-aspects, imperfective and perfective, are not yet written up here, as they are covered in the 1965 sketch. They remain to be redone here, of course, but prioritization has been given to what was not covered there.

Following is a descriptive list or table of contents of the current draft.

A. Front matter, currently 4 files: **1.** “A History of Eyak Language Documentation and Study: Fredericae de Laguna in Memoriam” *Arctic Anthropology* 43.2.172-218, 2006, is a fairly thorough treatment of the subject, 1778-2006, to be included with revisions. That is included here both as pdf, and as text, 36 pp., without the plates; also **2.** “Addenda to History” 3 pp. **3.** “Introductory Considerations for Grammar” 5pp., is an informal listing of comments or thoughts to be included or elaborated on for more formal introduction, including comments on field methods, shortcomings, needs for editing, etc. **4.** “Grammar remaining” 3 pp., is a running list of subjects for grammar yet to do, checked off and remaining. That is of course not to be included in the final draft, except for one section which needs to be separated out for verb morphology, an important redefinition of the positions of the entire verb prefix complex.

B. Phonology. The very basic phonology, especially phoneme inventory and basic articulatory phonetics is covered in 1965 and not repeated here. Here are 5 files on further phonology and morphophonemics. **5.** “Prosody” 3 pp., comments on word-accent or syllable-weight, and intonation, the only such written. **6.** “Stem-final Consonant Clusters” 6 pp., expansion of the 1965 interpretation. **7.** “Disyllabic and Sonorant-Final Stems” 4 (+ 10) pp., treatment of disyllabic (sonorant-medial) and sonorant-final stems; currently appended to this is a 10-pp. version of the “l ~ n Alternations” file, some of which may not be duplicated in that file. **8.** “Notes on Phonology” 4 pp., on reduced vowel contrasts, a complex issue, different in prefixes from those in stems; and morphophonemics of certain verb prefixes, especially ’i-, ’A-, and further agenda for verb prefix phonology. **9.** “l ~ n Alternations, etc.” 16 pp., a prominent and complex aspect of Eyak morphophonemics, including several related issues in Eyak verb prefix phonology.

C. For the verb-prefix complex, not counting reinterpretation of whole complex mentioned in A.4. above, there are 2 files, **10.** “Future and Directive Prefixes” 2 pp., and **11.** “Further Comments on Verb Prefixes” 5 pp., both especially on ‘future’ qu’- ~, and directive ’u’- ~, closely related, the latter file including comments on direct object prefixes also. A combination of these two files and the last two files listed under B. above, and the section of the last file under A., provide as advanced an understanding of the structure and history of the Eyak verb prefix as is currently possible, before comparison with Athabaskan and Tlingit..

D. Verb theme classes and mode-aspect. 2 files on a subject that was poorly developed during the main period of fieldwork, seriously investigated only much later

and adequately defined as such as such only during the period of writing the grammar. The main file for that is **12**. “Verb Theme Classes” 7 pp. This needs to be considered together with **13**. “Mode-Aspect and Theme Classes” 4 pp., an evaluation of the definition of verb theme classes in terms of usage of mode-aspect prefixes, e.g. GA-, ’i-, ’A-, discussion of problems therewith.

E. Mode-aspects not fully covered in 1965 (i.e. all but imperfective and perfective aspects) are more fully covered in 5 files here: **14**. “Conditional” 5 pp., including conjugation choice quite peculiar to this aspect alone, also independent relativized and subordinated uses; **15**. “Imperative” 13 pp., including detail about complex stem allomorphy, prefixation, conjugation choice with telic and atelic preverbals; **16**. “Optative” 4 pp., especially conjugation choice with preverbals, also obsolete s- optative; **17**. “Desiderative” 5 pp., including conjugation choice, and hortatory and subordinate uses.

F. Some of the verb theme classes are shown in some detail: not the Action class, by far the largest, default or unmarked; or Motion class; or Classificatory and Postural classes, both of very limited membership, fully listed in the files under D. above; but here are 3 files particularly for all the stative classes: **18**. “Inceptive perfective stative” 6 pp., limited membership; **19**. “Active (s-) perfective and Neuter perfective statives” 9 pp., not fully separable but combined on a cline; **20**. “Neuter imperfective stative” (inherently stative) 12 pp., limited membership, including also 3 types of Neuter imperfective derivations.

G. Conjugation-imposing verb derivations. There are at least 10 verb derivation processes which impose a particular conjugation on a verb theme. These are treated here in 7 files, as the 3 which impose Neuter imperfective are treated in the file of that name mentioned above. All the rest, except the progressive, impose the Active conjugation. They can combine, as shown, producing multiply derived themes: **21**. “Usitative” 5 pp., unmarked, very productive especially of relativized nominalizations, imperfective only; **22**. “Reptitive” 11 pp., marked only with -g suffix, very productive, different degrees of thematization, varying semantic effects; **23**. “Persistentive” 7 pp., marked only by stem-vowel expansion; **24**. “Customary” 11 pp., marked by stem-vowel expansion, -k’ suffix, and zero, ’A-, or ’i- prefix; **25**. “qAXA- Multiple” 2pp., marked by qAXA- qualifiers; **26**. “Perambulative” 16 pp., marked by preverb yAX, DA- classifier, -X to stem in Active imperfective, for motion without direction, highly productive; **27**. “Progressive” 6 pp., imposing Inceptive perfective, GA- conjugation prefix with -L suffix to stem, as in Athabaskan. (The usitative and progressive are special, each having no affixation or allomorphy special to them, each being merely a conjugation and aspect basic to one theme class displaced to the other, Action and Motion).

H. Other verb derivations, not imposing specific conjugation, and marked by conjunct derivational prefixes. The only file so far done is **28**. “Directive” 15 pp., marked by (’)(u-~)’- in position immediately following direct object, earlier named “semitransitive” (action directed “at”), or “conative”, as also throughout Athabaskan. The two major files yet to do are the “Qualifiers,” derivational and thematic, complex (some 15 potential elements) and highly productive (much more so than in Athabaskan); and “Classifiers,” likewise derivational and thematic, complex and productive, but with far fewer elements than the qualifiers.

I. Derivations that make nouns of verbs, nominalizations. These are of 2 main types, deverbalizations, and nominalization by relativization. Deverbalizations delete all conjugation and mode-aspect prefixes, subjects, and classifiers as well. These are currently treated in 3 files: **29**. “Acquisitional” 4 pp., marked by -ch’-L suffixation to stem, of very limited productivity; **30**. “Gerund and Verbal Noun” 17 pp., variously marked, including ’is- prefix, -l and -L suffix; also extensive addenda on “Verbal Noun,” with zero prefix and suffix, therefore partly indistinguishable from gerunds; **31**. “Instrumental” 13 pp., marked by -L suffix, so also partly indistinguishable from gerunds; ranging from bare stem plus -L to “instrumentalization” of relativized verb phrases, e.g. typically ‘that by means of which something is V’d’; the first subsection thereof includes lexicalized nominalizations from such relativized verb phrases, which belong therefore also in a section of the next file below.

J. Nouns and noun phrases are currently treated in one large all-inclusive file, **32**. “Nouns” 43 pp. This file includes basic nouns in cross-classified subsections, both with and without qualifier prefixes, both possessed (kin and anatomical) and unpossessed, possessed with -L- prefix (some also -L suffix), and detailed treatment of nouns, relatively few, found both possessed and unpossessed. Further sections and subsections deal with types of noun phrases, including compounding; nominalization by relativization of verb phrases of all types, in some detail, including the internal syntax thereof; other types of nouns, i.e. loans (ca. 200, from Tlingit, Chugach, Russian, Chinook Jargon, Ahtna, broader diffusions of unclear origin or directionality; and older English), and about 20 unanalyzables.

K. Minor grammatical categories, currently 3 files: **33**. “Adjectives” 9 pp.; **34**. “Numerals” 8 pp.; and **35**. “Interrogatives” 8 pp., all interrogative pronouns for wh-questions (but not yes-no), including syntax thereof. Remaining categories are adverbs and exclamations, pronouns and demonstratives, clitics.

L. File **36**. “Negation” 19 pp., of all kinds, including e.g. prohibitives, including all syntax special to negation.

Tasks remaining are rewriting and expanding parts of 1965 sketch to fill in and fit in with the above, e.g. basic phonology, imperfective and perfective aspects, variable stem classes, closed stem stem vowel reduction, irregular verbs (very few); also as mentioned above, qualifiers and classifiers, both major, and minor categories mentioned above. There remains also one major and complex grammatical category, the preverbals (postpositions and preverbs). Syntax special to any of the subjects covered above is included in the enumerated files, but much of the more basic sentence syntax remains to be described, including also the discourse level, involving especially the enclitics system. Then of course all the files need to different degrees to be rewritten and reorganized, coordinated, and edited.

Given the present format, 8 ½ x 11’, which is also in principle throughout maximally compact run-on presentation style, rather than tabular with more white-space, continuing as is, the total number of pages to cover this remainder would be ca. 200. Adding that to the total ca. 310 in the grammar here so far, and counting ca. 50 for the front matter, the final total would be well over 500 pp. However, in less compact format, the total could easily become double that.

# A History of Eyak Language Documentation and Study: Fredericæ de Laguna in Memoriam

Michael E. Krauss

*Abstract.* Frederica de Laguna is generally considered the person who “discovered” Eyak. This paper chronicles a parade of characters who recorded Eyak in (over 9) vocabularies (1778–1862) and even phonographically (1899); more who defined or mapped it, even (1863) in color. Freddy’s fieldwork of the 1930s is then discussed, and finally that of linguists after her (1940–2006). This is a history full of ironies that should entertain the reader appreciative of humanistics, human foibles, and the history of science.

Frederica de Laguna stumbled upon Eyak, i.e. (re-)“discovered” Eyak, in 1930. However, she was by no means the first to stumble upon Eyak. That honor goes to William Anderson, in 1778, the first person ever to write down an Eyak word. In fact, then from 1778 to 1885 there are over 20 written sources of various kinds, documenting or defining, or mapping the Eyak language. Of these sources, six are mere individual or a few words, identified as Eyak or not, but six more are formal vocabularies of Eyak as such, ranging in length from 80 to 1,128 words transcribed during the Russian period. Of these formal vocabularies, one was published in English, and two more, including the 1,128 words, were published in German. Moreover, there are at least nine sources explicitly recognizing Eyak as a separate language. Two of those are well-known maps, dated 1796 and 1863, the latter published in color, no less! The other sources, no fewer than eight, are discussions of Eyak as such and its genetic relations. Six of these were published—mostly in German. Eyak was thus very well recognized and documented by the standards of the time, when Franz Boas arrived from Germany upon the American scene. Never-

theless, when in 1930 Frederica de Laguna, Boas’s student, came to Cordova, Alaska, to outfit for Chugach Eskimo archeology, it was mere chance that she then first learned about Eyak. This is a history full of ironies. I hope to do justice to them for the reader appreciative of humanistics and the history of science. Given that even science is still done by human beings, in chronicling the remarkable parade of characters involved with Eyak, inevitably certain human traits that affect this history are too lively to conceal. I give up, and unapologetically hope that the result may be entertaining and instructive. For the Eyak contribution to this history we have not a single person’s name, unfortunately, until all that changed with Freddy in 1930. A stylistic note: in his old age Krauss calls all females by their first name, and males, including himself, by their last.

The first part of this paper, the longest and most detailed, deals chronologically with the rich pre-1930 history of Eyak language work, completely unknown to Freddy, harping on that. The second section deals with the period of her Eyak work, and the last is a summary of work done after her.

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## The Pre-Russian Period, 1778–1791

The Russians' first direct contact with Alaska Natives was Gvozdev at the Diomedes and King Island in 1732; Bering's first landfall, 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 40 years, until the 1780s, and did not establish installations near it until the 1790s. In the meanwhile, from 1778–1791, at least four foreign expeditions made significant contact at the extreme ends of Eyak territory, two English at the Prince William Sound end (Anderson and Walker-Strange), and one English (Colnett) and one Spanish (Malaspina) at the Yakutat end. This was enough to write down Native Alaskan words including some Eyak, or to notice Eyak as being different (Colnett). The Eyak words from Prince William Sound, collected in 1778 and 1786, were an admixture in formal Chugach vocabularies, not recognized as Eyak, as was the ethnonym collected at Yakutat as part of a formal Tlingit vocabulary. Here we shall deal only with those sources, not with those that may have had direct or indirect contact but show no evidence of Eyak language data or recognition of Eyak as a separate language from Chugach and/or Tlingit.

### Anderson 1778

William Anderson (b. 1750, d. 1778) was James Cook's surgeon and naturalist on the *Resolution* in Alaska. This young Scot, not yet thirty and dying, was most certainly one of the very 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, on August 3, 1778. 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 John Douglas for Volume II of the published *Voyage* (Cook 1784). This includes, pp. 375–376, a "Vocabulary of Prince William's Land," a list of 25 entries. Of these, the last 8 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 this must be his very last work. Of the remaining 16 words on the list, 10 are identifiable uniquely as Chugach Yupik, 2 could be either Yupik or Eyak, and 3 are not identifiable as Yupik but could well be Eyak. The best example might be *Akashou*, 'What's the name of that?', possibly Eyak 'a:k'e:shəw 'he/she/it maybe?' or 'anh k'e:shəw 'he/she maybe?', meaning roughly 'Do you mean him/her?', hardly a poor response, given no common language. The year 1778 is 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 nineteenth century. If the words were not from Eyaks directly, it could be that the Chugach were using some Eyak words they knew, in order to communicate better with the English, especially since the Chugach 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 Eskimo-Aleut vocabulary, which for "Sandwich [Prince William] Sound" includes only the Tanaina numerals plus *Aa* for 'Yes, or Aye' (which could be Yupik or Eyak) and *Akashou*, here with a macron over the second *a* and an accent mark after it, glossed 'What call you that?' It is thus an independent source from that published, and is for some reason very partial. Of course it raises still further question as to what was in the lost Anderson journal, of which perhaps only this hodgepodge remains. It is thus quite unclear just how accidental the potential Eyak entries were.

### Walker and Strange 1786

Eight years after Anderson sailed 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 (b. 1753, d. 1840) under the military command of Alexander Walker (b. 1764, d. 1831) in the *Experiment* and the *Captain Cook*. Inspired by Cook's *Voyage* (1784), their expedition, though basically commercial, also had scientific goals, and had also put in at Nootka, where they too collected a large Nootka vocabulary, before they sailed to Prince William Sound. They were in the sound from August 29 to September 16, 1786. Both men kept journals, but neither of these was published until the twentieth century. Strange's appeared in 1928 (then again in 1929, reset, in Madras; Strange 1928 and 1929; the vocabulary is on pp. 54–57). Walker's was not published until 1982 (nicely, with informative apparatus and background;

Walker 1982, vocabulary on pp. 156–160). Unlike the unfortunate case of Anderson, we also have at least five manuscripts including the vocabulary, though still not the original. For Strange we have three manuscript copies in the Tamil Naidu Archives, Madras, number not given (from which the 1928–1929 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 St8, pp. 15–19. For Walker we have mss. 13776–13781 at the Scottish National Library, of which at least two include the vocabulary, ms. 13778, ff. 90v–92v, and ms. 13780, ff. 113r–114v. Walker himself states the original is lost. The 1982 publication is from the more fully prepared ms. 13780, but the vocabulary is from ms. 13778, presumably being closer to the original.

It seems quite clear that the author of both the Nootka and Prince William Sound vocabularies was Walker, and not Strange. Strange was the businessman and entrepreneur, who evidently could see, however, the importance or desirability of including vocabularies in his report. The young Walker, on the other hand, savored contact with the Native Americans, took real interest in ethnology, and during his career in India became a prominent authority on Indian languages and culture.

Most of the entries in the Prince William Sound vocabulary are of course clearly identifiable as Chugach, but there are eight which are much more probably Eyak, and not (or hardly) identifiable as Chugach. 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 entries in Walker are (W) *Konee*, (S) *Hoonee* (Strange 1929, but Strange manuscript *Koonee*) ‘to rain’, modern Eyak *k’uleh*, from older Eyak *\*k’unek* ‘rain’; the closest possible Chugach would be *qaniq* ‘snow’. An example of the clustered entries is (W) *Esh-est-esh*, ‘No. 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:sh(d[uh]), ’i:sh(d[uh]), ’i:sh*, where *’i:sh* is *’i:sh* ‘you (singular) (interrogative)’, i.e., ‘You?’, cf., modern Eyak *’i:shuh* ‘Hello’, literally ‘Is it you (sg.)?’; and the *’i:sh(d[uh])* is roughly ‘I wonder if it’s you (sg.), could it be you (sg.)?’, probably truncated. They both also have *Kai* and *Agalshou* (Strange manuscript; but Strange 1928, 1929 *Agalchou*), for ‘What is that?’, probably in an attempt to relicit Anderson’s *Akashou* ‘What call you that?’, as they certainly had a copy of Cook 1784. The results were *k’e:’[t]* and *’æg-*, *’əlshəw* (where *-g-* is a spirant gamma about to become a *-w*), thus, roughly, ‘How?/Wha-?’ and ‘[You mean] tha-, this?’, again with truncations, giving a pretty vivid picture of these attempts at communica-

tion. Without going further into linguistic detail, suffice it to say that possibly Anderson (in 1778) and even more possibly Walker-Strange (in 1786) had even an Eyak subsection in their lost manuscripts of original Prince William Sound vocabularies, 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.

### Colnett 1788

The last British source, of a new kind, is James Colnett (b. 1755?, d. 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 (1972:128–132) quotes from the manuscript, about Yakutat (here quoted from Colnett 2004: 225): “At this place appears to commence a different Nation from those residing 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 that he heard in Prince William Sound, of which he had even written a short vocabulary. Freddy adds: “Unfortunately no [Yakutat] vocabularies are given” (de Laguna 1972:130). 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 if it had been published.

### Malaspina 1791

We do not know for certain that there were Eyaks near Prince William Sound before Russian penetration there, except insofar as we can tell from Anderson and Walker-Strange. At the other end of known Eyak territory, however, we have plentiful evidence that Yakutat Bay was still (partly) Eyak. Just before Russian penetration of Yakutat, we have one more “pre-Russian” contact and source for Eyak language there too, the major Spanish expe-

dition of the *Descubierta* and *Atrevida* led by Alessandro Malaspina. Malaspina (b. 1734, d. 1809) was a very able Sicilian, in Spanish service. His expedition, the most ambitious the Spanish ever sent to Alaska, was clearly meant to be the Spanish answer to Cook and his scientific accomplishments. Malaspina was in Yakutat Bay for ten days, June 27 to July 6, 1791. After his return to Spain he was working on the expedition results (1794–1795), but ran badly afoul of Spanish politics, was imprisoned (1795–1803), his papers were seized, and the results of his expedition were long mostly suppressed.

Finally in 1885 a report appeared including a Yakutat vocabulary, “Vocabulario del idioma [Puerto] Mulgrave,” in *Viaje Político-científico alrededor del Mundo . . . desde 1789 a 1794* (Malaspina 1885:349–351). This turns out to be a nearly pure—except for one item—Tlingit wordlist, of 126 entries, in Spanish alphabetical order, plus 26 numerals. Of the 126 words, over 100 can be clearly identified as Tlingit, and almost none of the rest look like Eyak. One might wonder at this absence of Eyak admixture, given the still prominent presence of Eyak at Yakutat in 1791. However, the explanation is all too clear, from the introduction to the vocabulary. The 1885 version of that is as follows:

En la formación del corto Diccionario que aquí se agrega, no nos hemos tampoco apartado del método lento y reflexivo, que nos habíamos propuesto: muchos Oficiales han formado por sí un Diccionario separado, y confrontados éstos no se ha admitido voz alguna, la cual no tuviese la sanción general ó no descubriese de dónde dimanaba una ú otra contradicción. [In compiling the short vocabulary added here, we still did not depart from the slow and thoughtful method we have 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 1885:349–351)

This standardization surely was no trivial task in itself, if the officers were, indeed, working separately rather than looking very intently over each other’s shoulder. The chance that any two would independently come up with the same words 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 many or most of the rejected words were Eyak is of course very high—

perhaps even whole lists of the greatest interest were thus lost.

It therefore became a high priority to search archives, to find any “pre-purified” Malaspina Yakutat wordlists. Krauss’s search, mainly in 1978 and 1991–1993, revealed no fewer than nine manuscript 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, Bauzá Collection, ADD. 17.631, pp. 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 Bauzá, at other repositories, but both these too are Tlingit only.)

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 canoer headed toward Yakutat: “his language differed somewhat from that of the natives of Port Mulgrave” (Ortiz 1943: 161). Wallace Olson (personal communication, 2002) reports a Bauzá manuscript account of the same contact, more detailed about the canoer’s language, as follows: “Era un joven de buena estatura, y de fisionomía muy semejante a los de Mulgrave: el idioma parecía no ser el mismo; pues no contestaba a varias palabras que se le dijeron en aquel; parecía habé, y manifestó muchas complacencias en los regalos 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 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 in their characterization of the man’s language from “the same as” or “similar to” that of Port Mulgrave, to “different,” see Olson 2002:371 (Malaspina, “same”), Olson 2002:418–419 (Viana, “differed somewhat”), Olson 2002:430–431 (Bauzá above), Olson 2002:446 (Bustamente y Guerra,

“similar”), Olson 2002:459–460 (Tova Arredondo above). No standardization here!

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 *dəxunh*. There the *d*- corresponds exactly to Spanish *T*-, *-ə* (Eyak indistinct short shwa) gets written, unsurprisingly, with an *-e*- or *-u*-, *-x*- (Eyak voiceless back velar fricative) is very close to Spanish *-j*-, and *-unh* (nasalized *u*, followed by *h*-like aspiration) is fairly close to Spanish *-un*. In short, *Tejun* or *Tujun* is the very most likely result of any attempt to write *dəxunh* in Spanish. That Eyak word means ‘person, people’ (as opposed to animals), or ‘Eyak(s)’ (as opposed to other peoples). The word *dəxunh* is itself unanalyzable in Eyak; it is probably a diffusion from Yupik *taru* (where *-r*- is the voiced back velar fricative), meaning ‘person,’ usually used by shamans in rituals; 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*-. This word is also the only Eyak word—perhaps better, the only word of Eyak origin—in the entire “purified” Malaspina Yakutat Tlingit vocabulary. There it is listed, under *N*-, as “*Nombre de la Nación ó Tribú*,” 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 as either Eyak or Tlingit. It must derive from the Spanish versions of the ethnonym shown above, especially the *-ne*. The interpretation “[Chief] Juné’s people” (cited in de Laguna 1972:144) may well be inspired by Spanish *de*(!). It cannot be justified by any *Te*-like prefix 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!

## The Russian Period, 1792–1867

Malaspina’s 1791 expedition marks 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. At the other end of Eyak territory, at Yakutat in 1795, the Russians asserted their presence also much more ambitiously, establishing a veritable colony. The history of that colony was short (ten years) but nasty and for the Eyaks espe-

cially 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.

## Purtov and Kulikalov 1794

The year before the Russian colonization of Yakutat itself, Egor Purtov and Demid Kulikalov (d. 1806)—neither perhaps a very savory character—were leading a sea-otter hunting fleet of 500 baidarkas from Kodiak toward Yakutat. They 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 (de Laguna 1972:161–163; Grinev 1993:75–76; Tikhmenev 1863:82, 1979:162–63), and at Yakutat, but the manuscript source, including the censuses themselves, not published, is at the Tentral’nyi gosudarstvennyi arkhiv drevnikh aktov, (Fond 1605, Opis’ 1, Delo 352, ff. 12–17v). The Kaliakh census (a “*Kopiia*”) lists the names and ages of heads of families, their wives, their sons and daughters, and in some cases notes status as hostage or prisoner (slave). The Kaliakh list includes 83 such names, including 11 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 of course also very deficiently transcribed. Still, a few names from Kaliakh can be interpreted as Eyak with some confidence, e.g., *El’kunt* is *’əlku:n’t*, (where *-l-* is the voiceless lateral fricative) ‘grab it!’ (a 25-year old man), *Shiia* is *shiyah* ‘bad/cute’ (a six-year-old girl), and *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 twentieth 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 near the Yakutat end, is clearly recognizable as primarily 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.





Figure 1. Right section of Shelikhov's 1796 map. From Shelikhov and Pierce 1981. Endpaper.

## 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 (b. 1748, d. 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 in 1795, somehow this map, attributed to him, appeared (Fig. 1). We know of at least two basic versions of this map, one with eight small detail insets or cartouches along the bottom and a long legend set off by a scrollwork border, and a second without the cartouches and the same legend set off by a tree and vegetation figure. It is entitled “*Karta morskaiia severo-vostochnoi Aziiii, i severo-zapadnoi chasti Ameriki . . .* [Maritime map of northeast Asia and the northwest part of America . . .].” This map is memorable for Alaska especially in two ways. It includes on Seward Peninsula and Norton Sound (and beyond) over 50 of the

80 Inupiaq place-names gathered by Kobelev from an elder on Diomede in 1779 and first published in 1783. Most originally, however, it includes ethno-linguistic borders along the Pacific coast, dividing that clearly into five sectors labeled vertically as follows: *KO-NIA-GI* across Central Yupik, Alaska Peninsula, and Kodiak, respectively (= Yupik); *KE-NAI-TSY* along the west side of Cook Inlet (= Tanaina); *CHU-GA-CHI* over Prince William Sound; *UGA-LAX-MIU-TY* right where it belongs, between Prince William Sound and Yakutat (= Eyak!); and *KO-LIU-ZHI* beyond (= Tlingit) (Fig. 2). The scrollwork version lacks the *Kenaitsy* label itself, and has Eyak as *UGALAX-MIUTY*. Aleut is not labeled on either map, the tree, or the scrollwork. 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, was 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



Figure 2. Detail from Shelikov map.

Laguna 1972:112–138). Their reports must have made it clear to Shelikhov that *Ugalakhmiut* was a distinct group of some kind, though it is not so clear to what extent the distinction was based on language itself.

The name *Ugal(i)akhmiut* (with many variants) clearly comes from Chugach *Ungalarmiut* ‘those who live to the East.’ 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 to Eyak. The real Chugach name, at least in the twentieth century, for the Eyaks specifically was *Qiggwanat*, literally ‘those to be raided, raidables’ (personal communication, Jeff Leer), a name that never got into the literature. —*Ugal(i)akhmiut* with Russian plural *-y* often (redundantly!) added, became the standard “official” Russian name for Eyaks, along with also the Russified equivalent thereof, *Ugalentsy*. Chugach *Ungalarmiut* is accented on the second and third syllables, so allows for much variation in the transcriptions of the first, which often appears as *A-*, or as nothing.—The *A-* variants sometimes lead to confusion with *Aglurmiut* (*Alegmiut* = *Agliogmiut*) of Bristol Bay, not related. With the initial syllable completely gone, the lip-rounding from the *-ng-* preceded by *U-* remains, with resulting “Wala-” (see especially Birket-Smith and de Laguna 1938:328–340 in this connection).

Shelikhov’s map shows conclusively that the Russians by 1796 had defined Eyak (language or not) quite clearly. His map itself though was not published until the twentieth century. The scrollwork variant was first published in Efimov (1964, map no. 184), but the tree variant was published before that, in Andreev (1948:378–379); also the Alaskan part was published as an endpaper in Shelikhov and Pierce (1981). From the literature it appears, somewhat unclearly, that there are four versions of this map in Russian archives: 1) that in Efimov 1964, with scrollwork and cartouches, held in Moscow Tsentral’nyi (Gosudarstvennyi) Voenno-Istoricheskii Arkhiv (Fond VUA, Delo 23461); 2) that in Andreev 1948, with tree, no cartouches, in the same archive (no number given), but then Andreev 1948:379 mentions another copy there “without cartouches;” 3) held in St. Petersburg, Tsentral’nyi Kartograficheskii Proizvodstva Voenno-Morskogo Flota (Fond Starinnykh Atlasov, Portfel’ 4, No. 1301), possibly with scrollwork and cartouches; and 4) in St. Petersburg Public Library, Manuscript Division (Map No. 1406, a copy by Kozhavin). Krauss has seen only the last, not in color, but it is possible that any of the first three are in color. 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;

used by A. von Humboldt 1811:347–349). 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 of North America, in French, German, and English, from 1822 at least to 1875. This includes an American one of 1867, very clearly showing “OOGALAK-MUTE” along the Copper River to Yakutat stretch. Probably the first American version and a particularly important one was Albert Gallatin’s color map of North America published in 1836 with his ground-breaking classification of Indian languages, certainly a hallmark in the history of American linguistics. Meanwhile, the 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, e.g., in omitting Aleut. See also Verman in Tikhmenev (1863), listed separately below.

### Tarkhanov 1796–1797

Our next known source after Purtoy-Kulikalov of actual Eyak language data happens to come from the very same spot as theirs, Kaliakh, two years later. Geologist Dmitrii Tarkhanov, who had helped build the fort at Yakutat, started from the new colony October 7, 1796, on a journey on foot along the coast to and up the Copper River, through Eyak territory, with Native companions, including Eyak speakers. His journal lay long forgotten at the St. Petersburg Public Library (Manuscript Division, Sbornik Q.IV.311) until attention was drawn to it by Grinev (1987, 1997). It has not yet been published. Krauss examined it in 1988 and 1990, when he obtained a photocopy, with the help of Nikolai Vakhtin. The part of its 67 pages that concerns us most here describes Tarkhanov’s lengthy stay at Kaliakh, November 27, 1796 to February 4, 1797, including an exploration of the Kaliakh River January 3–18. On pages 28–30 of the journal Tarkhanov gives the names and description of five tributaries to the Kaliakh, four of which are easily enough identifiable as Eyak, especially because they are not proper names of specific tributaries, but in fact generic Eyak terms: 1. *Chakh* is *ch’a:x* ‘muddy/silty water’, 2. *Kats* is *q’ats* ‘slough’, 3. *Lakh* is *ləq* ‘ashore, up from shore’, and 4. *Ikalaki* must be *’a:n-gələ-kih* ‘small river,’ where *-kala-* is the expected classmark *-gələ-* for anything liquid, *-kih* is ‘small’, and *I-* is a mistake for *A-*, for *’a:n-* (with long nasalized *a*) ‘river’, given that Cyrillic *i/I* and *a/A* are very easy to confuse in copying, much like English curvilinear *a* and *u* are, depending on how much the top is closed. Number 5. *Kastye* is not clearly identifiable. In addition, Tarkhanov adds one noun, *sak* for *sa:k* ‘eulachon, candlefish,’ which is the same

in Eyak and Tlingit, and writes several times in various spellings the name of the Kaliakh itself, *całyax* (where *ç* 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 eighteenth century—not too spectacular a contribution for the man who must have heard incomparably more Eyak than any other European of the time.

### Davydov 1802–1806

Personable Gavriil Ivanovich Davydov (b. 1784, d. 1809) was an intrepid young naval officer and keen observer of 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, more adventurous, along with Rezanov (see below), by summer 1805 he was back in Kodiak for a month (July 21–August 20), then he traveled to Sitka (August 25–October 15), then to Kodiak again and back to Sitka (where he stayed November 7 to February 26, 1806). He accompanied Rezanov from Sitka 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 publication (Davydov [1812] 1977) contains his journal for the first trip, and Volume II is all (very valuable) ethnography of Kodiak. Two vocabularies are most mysteriously appended to Volume II, without any information on date or place of collection. The first vocabulary is Yakutat Tlingit, the second is Tanaina Athabaskan, and there is no Kodiak! It appears certain that Davydov did this work with displaced speakers of these two languages at Kodiak or Sitka or both, as there could have been such speakers at either place. Rezanov definitely did his six vocabularies (see below), 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. Perhaps favoring that possibility is the fact that his Tlingit vocabulary is clearly from Yakutat, entitled “*Slovar’ narietchii narodov, nazyvayemykh Kolozhami, obitaiushchikh mezhdou zalivom Chugachoi i Iakutatom* [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 merely bicolonnar, the first labeled *Ruskiia*, the second *Kaliuzhskiiia*, not according to the promising title (including even different spelling for the ethnonym, *Kolozh-* and *Kaliuzh-*), and every sin-

gle entry of this substantial 317-word list is Tlingit. Finally, though, to the seventh-to-last entry, for ‘dog,’ Tlingit transcription *Ketl’*, is added in parentheses, *po lakut. xauva* [in the Yakutat language *xauva*], i.e., that the specifically Yakutat [Eyak] word for ‘dog’ is *xəwa*:. 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. Krauss has not found reference to Davydov’s manuscript papers. 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.

### 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. The Russians took Alaska’s Native languages very seriously, not only as objects of scientific study, but also they 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 them important to define, even more or less officially. 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. A comparable case in today’s Europe would be Norwegian and Swedish, which are really one language for practical speaking purposes (though different in spelling, and of course politically!), and if there are really two languages there, it is more because there are two main types of Norwegian. For Alaska, partly 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 a few mostly accidental scraps or crumbs that it takes our sophisticated linguistic retrospect to identify. Perhaps with the one exceptional Davydov word, anything more than that had in fact been tossed by Malaspina, and maybe by Davydov too.

Between adventures in Japan, and later in California, enter the imperialist Rezanov, on an inspection tour of his (deceased) father-in-law Shelikhov’s colony. *Kammerherr* (Chamberlain, Plenipotentiary) to the Emperor himself, Rezanov was obviously competent and ambitious. After visiting the Aleutians and Kodiak (see Davydov above), Rezanov spent an increasingly uncomfortable six months in Sitka, August 25, 1805 to February 25, 1806, after which he left, understandably, for his California venture. It is clear that during his stay in Sitka he wrote his magnificent dictionary. The title here reads “*Slovar’ unalaskinskago, kad’iakskago, kinaiskago, koliuzhskago, ugaliakhmutskago i chugatskago iazykov, po Rossiiskomu Alfavitu sobrannyi dvora EGO IMPERATORSKAGO VELICHESTVA dieistvitel’nym, Kamergerom, Sanktpeterburgskikh IMPERATORSKOI Akademii Nauk i vol’nago Ekonomicheskago obshchestva chlenom i kavalerom, Nikolaem Rezanovym, vo vremia puteshestviia ego po Aleutskoi griadiie i Severo-Zapadnomu beregu Ameriki 1805go goda.*”—A fair copy ends instead after his name “*v pol’zu v novoi Chasti sveta obitaiushchikh—1805 Godu. Na Severo-Zapadnom beregu Ameriki, v porte Novo-Arkhangel’skom.* [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, cavalier and member of the Saint-Petersburg Imperial Academy of Sciences and Free Economic Society, Nikolai Rezanov, at the time of his voyage along the Aleutian archipelago and Northwest coast of America of 1805.—(fair copy) for the use of the inhabitants of the new world. In 1805. On the Northwest coast of America, at Port New Archangel (Sitka)].”

In his letter of transmittal of this work to the officers and stockholders of the Company, dated November 6, 1805 and first published in Tikhmenev 1863:215–216, 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, in hopes that it would be used in the American schools and by Company personnel, perhaps also in Russia for science.

In sheer size alone this is an amazing work, containing six parallel vocabularies averaging about 1,150 entries, approximately 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. 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. However, if Re-

zanov had 50 days for the work, that 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 certainly 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. Thus the pages must have been written in that order, all six columns across, rather than each language separately down each column, no column being neater than another. Thus 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 by two matters. One is the extra time the copying from the original field notes into the parallel columns would take, but another is that in each column there are corrections, on each page, revisions which Rezanov could have made only with the speaker present. Does this mean that Rezanov had time to check the whole re-copied 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.

The Eyak column will provide a good example for the phonological quality of Rezanov’s transcriptions. These are woefully inadequate, yet rather good for their time on the part even of those persons who might be called linguists of those days in dealing with Native American languages. For example, the Eskimo-Aleut languages distinguish (only!) two *k*-like sounds, *k*, as opposed to uvular or back-velar *q*, which the writers of course failed to distinguish. However, Eyak distinguishes in fact not just two but six (!) *k*-like sounds (like-wise Tlingit and Tanaina), in a perfectly structured system of front and back, plain or aspirated or glottalized (thus  $2 \times 3 = 6$ ) *k*’s. In Eyak these are written here *g k k’*, *g q q’*. These are all, of course, written by Rezanov as *k*, lamentably. Eyak also has front and back versions of the *kh*-like sound in Russian and German (Tlingit has four), written only *x*. Eyak carefully distinguishes, as do also Tlingit and Tanaina, three varieties of all its stop-

consonants: plain, aspirated, and glottalized. The Russians wrote these only as one: thus they wrote *d* and *t* and *t’* all alike as *t*; *dl*, *tl*, *tl’* all alike as *tl*; *dz*, *ts*, *ts’* all alike as *ts*; *dj*, *ch*, *ch’* all alike *ch*; *g*, *k*, *k’*, and, still more lamentably, as noted above not only those but also *g*, *q*, *q’*, all alike as *k*, thus only one symbol for six different *k*-like sounds! Eyak further has vowel length, extremely frequent voiceless barred-*l*’s, *h*’s, and glottal stops, which never get distinguished or shown, simply because the Russian sound system lacks them altogether and therefore its writing system has no means to handle them. Eyak nasalized vowels are written very erratically. All this of course makes Rezanov’s Eyak (and Tlingit and Tanaina) very hard to interpret even where the translations are reasonably accurate—Eskimo-Aleut somewhat less hard.

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 he can, within those limits. Here are a very few examples. The very first two entries are Russian *babka* ‘old lady, grandmother,’ Eyak *kaaken* for *qa:k’inh* ‘our (paternal) grandmother,’ and Russian *babka povival’naia* ‘midwife,’ Eyak *xukukhteish*, for *xu:qu’xdəyahsh*, which in fact means ‘I [not someone else] am going to have a baby,’ relatable perhaps to the Russian, but not so closely as the preceding entry. 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 *liud* ‘people’ the Eyak transcribed was *tyts*, for *t’əts* ‘ice,’ which in Russian is *liod*, the vowel misheard. Still, taking *Shchekotno* ‘it tickles, tickly’ as perhaps a nice example of an item not easy for a non-Eyak ear to hear clearly, Rezanov’s Eyak *khui’khakhchi* is not a bad effort for *xuyəḷxa’χch’inh*, which means ‘he is tickling my hand.’ Rezanov’s form not only gives a vivid picture of exactly how the work was being done with gestures, but his precise spelling also may even represent a perfectly plausible nice archaism, for “generic” tickling—unless Rezanov has failed here to hear yet another consonant, between the *-ch’*- and the *-inh*, either *-χ-* for ‘around, here and there,’ or *-g-* for ‘repeatedly, in the same spot,’ a distinction which seems to be required in the more recent stages of Eyak.

While Rezanov’s vocabulary is perhaps not very rich particularly in local flora-fauna, or in items and concepts special to Native culture, it is rich in Russian items such as muskets, musketballs, canons, anvils, pieces of eighteenth-century clothing, or vodka (*kakh’al’tseiats’-kaia*, for *qa:xa’hts’iya’ts’ giyah*, approximately ‘water at the ultimate stage of decomposition on us, utterly decomposed/rotted water’). It is of course hard to tell in some cases whether the responses are *ad*

*hoc* spontaneous descriptions, or established usages. Though there is often more than one form of a verb, there are no conjugations, and though often there are phrases, e.g., the “vodka” case, from which a little syntax could be deduced or recognized, there are no running 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.

Rezanov appends to the rougher copy a draft introduction to the dictionary, addressed to the officers and stockholders of the company. Then (Krauss’s translation): “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 Eskimo-Aleut], but the Kolyuzh 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.” Rezanov thus emphasizes the care he took, and takes special interest in the practical need for developing new terminology, even revealing, in a nice diplomatic 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 therefore also proves abundantly to us that Eyak dialect variation, at least that surviving to 1805, was

minuscule indeed. What differences there are between Rezanov’s 1805 Yakutat and twentieth-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: *Briukho* ‘belly, paunch’ *kagott* for *qa:wət’*, 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 *wət’* meaning only ‘vomit,’ thus perhaps a (rare) example of a difference that could not be explained by time.

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 enlightenment purposes. Rezanov’s dictionary of course 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 twentieth 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, probably while Rezanov was still at Sitka, maybe still doing the language work—the news did not reach Sitka until February 1806, by which time that work was long done—the Yakutat and perhaps other Tlingits, believing that the Eyaks had gained the better part of the booty, proceeded in turn to massacre the Eyaks there (see de Laguna 1972:173–176; Grinev 1988, 1989). 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 below), but by 1820 our Eyak documentation comes from the Copper River end only.

Rezanov died in Krasnoiarsk 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, Manuscript division (Fond 7 [Adelunga], Opis’ 1, Delo 139), 67 six-column-wide pages or spreads. In that same file is the fair copy probably sent October 6, 1805 from Sitka to St. Petersburg, and another fair copy. 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 he has had his

share of detractors. A contemporary instance is the Russian-Alaskan scholar Lydia Black (1989:100–101), who does not believe Rezanov personally could have done the work, in spite of the rough manuscript and introduction in his handwriting, and other evidence, but rather that he must have gotten someone like Monk Gideon, priest and educator at Kodiak, whom Rezanov could not persuade to visit Sitka and whose handwriting is unmistakably different, to do the work and then appropriated it to himself. Far more consequential, 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. Those so inspired with enmity included 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 (Kruzenshtern or Krusenstern 1813, in German). Kruzenshtern was an admirer of Davydov; 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 the Alaskan vocabularies are based on Davydov's and include from Rezanov only the equivalents thereto, namely 171 Tlingit items and 218 Tanaina. Rezanov's dictionary was (and is still) in the Adelung collection (now Fond Adelunga at the St. Petersburg Public Library; see *Mithridates* 1816 below). Kruzenshtern does include a comment made by Adelunga on Rezanov's dictionary, calling it "an extremely valuable collection of about 1,200 words in the six so far known major languages of the inhabitants of New-Russia, viz. Unalaska, Kenai, Chugaz, Ugalächmut, and Koliusch . . . still unpublished . . ." (Krusenstern 1813:x). Nothing of the Eyak is included, presumably because Davydov 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), 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 (see Radloff 1857, below) and the Tanaina (by Radloff and Schiefner in 1874).

In 1954 Knut Bergsland, distinguished scholar of Aleut in Norway, managed to get a microfilm copy of the rough version. About 99% of Rezanov's Aleut forms can be accounted for in Bergsland's 1994 Aleut dictionary. The Alutiiq dictionary soon to be published by Jeff Leer in Fairbanks can account for something approaching Bergsland's success now for the Kodiak and

Chugach, and Leer's ongoing work with Tlingit may approach the level with Alutiiq. Krauss can interpret or at least partly interpret up to 97% of the Eyak, and James Kari is currently working on the Tanaina. A complete publication of the whole work, with the appropriate interpretations, explanation, and apparatus, long envisioned by the Alaska Native Language Center remains too much of a luxury for the Center to allow itself under present conditions.

### Anonymous 1810

We can only date this vocabulary to within the range of late 1808 to late 1811. Because we know it preceded Baranov 1812 below, the cover letter for which is dated February 20, 1812, the latest date for this vocabulary 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 by Kuskov from December 15, 1808 to August 2, 1809. He was back in Bodega Bay in November 1811, but not for 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 vocabulary and one or more of the Alaskan vocabularies in the compendium, but 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 (Fond 7 [Adelunga], Opis' 1, Delo 146), where it was unexpectedly discovered by Krauss in 1990. The title page reads "*Slovar' obitaiushchikh narodov v vedenii Ameriko-rossiiskikh Kompaniiskikh Zaniatii Sostoishchikh* [(approximately:) 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's work, nor is the same ink or quill used throughout. Down through the pages it is quite uniform and neat, with relatively few corrections, spottily distributed, so is unproblematically a copy of ear-

lier manuscripts. Though similar in format to Rezanov's work, it is not derivative thereof, but presents primary data throughout. The first column is the Bodega Miwok, the next Fox Island Aleut, then Kodiak Alutiiq, then Sitka Tlingit, then "*Slova zhitelei Beringova zaliva* [Words of the residents of Bering Bay]," i.e., Yakutat Eyak, then Kenai Tanaina. Here again are the "official" languages, now including Californian Bodega Miwok, and not the (redundant?) Chugach. 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 items and Kodiak 555, i.e., much more past the numbered part, while Tlingit has about 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., it is richer in fauna-flora terms, having around 140 such items.

Most interestingly, not only the label but also the content of the Eyak column clearly shows it is from Yakutat. One sign of that is that it too has 'belly' as *kavvat* (cf., Rezanov *kagott*) for *qa:wət'*, the one item that is specifically Yakutat and not Cordova Eyak. More interestingly, 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 it had been in 1805 (Rezanov), perhaps only five years earlier. This is especially evident in the fact that of the 285 words in that list, at least 41 are new Tlingit loanwords. These include not only new items or concepts, which, if present in Rezanov 1805 are Eyak neologisms, replaced by Tlingit (e.g., for brass, rigging, mast, cannon, pistol, gunpowder, bullet-lead, cloth, tobacco, smoking-pipe, cloth blanket, mirror, scissors, paper), but, even words for traditional Native items for which we naturally have good Eyak words (e.g., 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, dip net, deer or caribou fat, arrow, quiver, comb, earthquake). This is an obvious sign that Eyak was rapidly giving way to Tlingit at Yakutat in 1810.

## Baranov 1812

The preceding was still not the end of Yakutat Eyak documentation—quite. At the same time Krauss unexpectedly found the anonymous multiple vocabulary, he also found at the St. Petersburg Public Library, Manuscript Division (Fond 7 [Adelunga], Delo 143), a document closely related to Delo 146, but later and shorter, with the library title "*Sitkhinskii Iazyk, materialy sobrannye A..A. Baranovym 1812* [Sitka language, material

collected by A. A. Baranov, 1812]," and on the document itself a title and transmittal page in German, to the effect "Language of Sitka, Ben[jamin] Cramer has the Honor to deliver the word[li]sts ordered for State Councillor von Adelung from Sitka Island. 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 deals with three languages; the last half is for Alutiiq, the first for Tlingit and Eyak combined. The first two pages are a printed form, first for the Lord's Prayer and the second with 70 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 anonymous 1810 document, 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* 1816 (see below); 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 the 1816 publication, and the beginning of published academic literature explicitly including Eyak words, and showing Eyak as a separate language (see *Mithridates* 1816 below).

## Mithridates 1816

This source is named here 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's data, the first publication of any of that. The authors are leading men of the time, Johann Christoph von Adelung (b. 1732, d. 1806), and Johann Severin Vater (b. 1771, d. 1826); also involved are Johann Christoph's nephew Friedrich von Adelung (b. 1768, d. 1843), and both broth-



ers Wilhelm (b. 1767, d. 1835) and Alexander von Humboldt (b. 1769, d. 1859). King Mithridates VI of Pontus (b. 132, d. 63 B.C.) 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 and three parts. Parts 1 and 2 are in the first volume, published in 1813, and Part 3, that for North American languages, is in the second volume of Volume III, published 1816.

This whole compendium was truly a great and famous work for its time. The elder Adelung had already died 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 the Rezanov material, 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* III (3:218–229) has a goodly section on Tlingit, comparing vocabularies, including Rezanov's, and then on pages 228–238 there is 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 übrigen durchaus verschiedene sey* [that their language is one altogether different from others].” On pages 230–238, 30 words of *Ugaljachmutzi nach Rezanoff*, all now of course written in German transliteration of Rezanov's Russian are 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. These are then followed by 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 and prestigious work.

The Swiss-American Gallatin, friend of Alexander von Humboldt as well as of Thomas Jefferson, in his classification of American languages (1836) begun in 1823, of course uses *Mithridates* and Rezanov's Tanaina and Tlingit, but not his Eyak, so only mentions Eyak (Gallatin 1836:14). Gallatin (1836:14) also has Eyak (*Ugaljachmutzi*) on his map (see Shelikhov 1796 above), but has no

comment on its separateness. (See Wrangell 1839 below for the next and greatly amplified stage of this public information in German.)

### Khromchenko 1823

We now come to the period when new Eyak information comes from Russians at the Copper River end of Eyak territory, as the Yakutat end is disappearing or gone. The first such word list was the third unexpectedly found in 1990 by Krauss in the Adelung collection, St. Petersburg Library, Manuscript Division (Fond 7 [Adelunga], Opis' 1, Delo 145). The manuscript is the work of Vassilii Stepanovich Khromchenko, or Khramchenko (d. 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 is probably 1823 and the latest 1825. The manuscript is undated, but is clearly a copy of Khromchenko's work in a disciplined scribal hand, not Khromchenko's. We have copies of Khromchenko's Eskimo manuscript from the Perm' library, but not the rest. This manuscript is in two sections, each in parallel columns; with Russian plus five Eskimo languages in one, and then Russian plus the four Indian languages in the other: *Tynsnakoan* (Ahtna), *Ugalents*, *Sitka-Khan*, and *Innon* (Indians of Rumiantsev Bay, i.e., Bodega Miwok). The attribution is “*Sobran Leitenantom Khramchenko, byvshim 5 liet v Kolonii Rossiisko-Amerikanskoj Kompaniii* [Collected by Lieutenant Khramchenko, having been five years in the colony of the Russian-American Company].”

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. A careful check shows, however, that when Eyak duplicates for Ahtna (29 cases) and switches are 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 in Ahtna. There are no Tlingit loans. Obviously the Eyak is Copper River dialect, even though the title page might imply the Eyaks 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.

### Wrangell 1839

Ferdinand Petrovich von Wrangell (b. 1796, d. 1870), of Baltic nobility and a distinguished naval officer who had already traveled extensively

also in the Arctic, served as governor of Alaska in 1830–1835. As a man of letters and science he wrote invaluable reports on Alaska and its peoples, which were published in Russian and German; the German edited and published by his friend von Baer in 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 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 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 11 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* (*ya:-t* and *ya:-[q’-t]*), and ‘blood’ *Tell* and *Tedlch* (*del* and *dəŋ*), the first such ever shown for Athabaskan-Eyak (Wrangell 1839:96–99). The book also includes a fold-out table, facing page 258, entitled “*Vergleichende Wörter-Sammlung aus 8 Sprachen der Bewohner von Nordwest-Amerika, von dem Contre-Admiral von Wrangel* [Comparative Table of Eight Languages of the Inhabitants of Northwest America, by Vice-Admiral von Wrangell].” The table lists, 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.

Wrangell’s Eyak vocabulary was also included in Radloff 1857 (see below). Editor von Baer discusses the Gallatin 1836 work and map extensively, including a discussion of genetic relations (Wrangell 1839:283–289), albeit vaguely, with Gallatin’s newly defined [Northern] Athabaskan and Tlingit-Eyak-Ahtna-Tanaina-Ingalik-Kolchane [Tanacross].

## Veniaminov 1840

Ioann (Ivan) Evseevich Veniaminov (b. 1797, d. 1871), later (St.) Innokentii, had spent ten years in the Aleutians, when in 1834 Wrangell called him to Sitka, where he remained until 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. He came to St. Petersburg in 1839 to oversee publication of a number of his works, written in Alaska.

Two publications with overviews of Alaskan languages, including Eyak of course, were printed in 1840 (Veniaminov 1840a, 1840b), and one more in 1846. *Zapiski ob ostrovakh Unalashkinskago otdiela* [Notes on the Islands of the Unalaska District] (Veniaminov 1840a) is three volumes of “notes” on the Aleutians etc. In Volume III:v, the *Ugalentsy* are recorded as living near Mt. St. Elias (Yakutat), and number no more than 150 persons, as of 1834. On page 139 Veniaminov says Alaska has 6 languages: Unalaska, Kad’iak, Kenai, Yakutat, Sitkha, and Kaigan, i.e., Aleut, Yupik, Athabaskan, Eyak, Tlingit, and Haida, a sophisticated breakdown. “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’s 1839 publication 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 Ugalents, as two dialects of one language, each group of 150 souls. He is aware that the community of 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 as he guessed, but rather by 1840 was very possibly quite extinct. These statements are exactly repeated in Veniaminov 1846. In Veniaminov 1840a: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 *Sostoianie pravoslavnoi tserkvi v russkoi Ameriki* [The State of the Orthodox Church in Russian America] (Veniaminov 1840b:44–45) Veniaminov points out that of the six Alaskan languages, “Yakutat” is the smallest, specifying or guessing 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 learned that Tlingits lived “near Mount St. Elias; thence to Prince William Sound is an-

other language;” (Simpson 1847:89), demonstrating that we have this information, common knowledge, printed also even in English, indirectly from Veniaminov or before.

### Radloff 1857

Leopold Radloff (Lev Fedorovich Radlov; b. 1818, d. 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 *gimnaziia* Latin and Greek teacher, administrator, and museum curator. In the last decade of his short life, he worked extensively on Tlingit (including a year, 1862–1863, with an elderly native speaker brought from Alaska for the purpose), published on Haida, Tanaina (from Rezanov), and published *Über 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 20 pages are Radloff’s introduction, and the rest is Rezanov’s Eyak, alphabetized by the German translations, though (wisely) keeping the original Cyrillic Eyak transcription. The work is done rather carefully and accurately, except that for some reason 60 of the original entries are missing. It includes not only most of Rezanov, but also Wrangell’s material, which after all was the only explicitly Eyak material thitherto in print—not counting Davydov’s ‘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.

The first 20 pages are Radloff’s introduction. The first four pages of that give his discussion of the position of Eyak, i.e., its genetic and diffusional relationships to other languages. He concludes clearly that the Eyak language is not genetically related to Eskimo, but it is to Kenai in the narrow sense (Tanaina) though indirectly, with Atna and Kolchane (Tanacross, from Wrangell) as intermediate languages, and somehow perhaps related also to other Alaskan Athabaskan (Kenai in the broader sense) and (the rest of) Athabaskan itself. He also concludes that Eyak is genetically related to Tlingit, but also diffusionally, just as Wrangell had said. Radloff attempts to fine-tune these relationships, but cannot add significantly to previous understanding of the position of Eyak.

The remaining 16 pages of Radloff’s introduction are poor discussions of Eyak sounds and grammar. It does not appear that the man has 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 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 ideas should be aspired to with Native American languages. However, because these languages were not written down by native speakers, but rather by Europeans who could not hear or transcribe accurately the complex Native American sound systems so different from European, transcriptions then available were vastly inferior to the European ones. They were underdifferentiated, overdifferentiated, inconsistent, too vague and impressionistic for the kind of rigor achievable in Indo-European studies. 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 he had of course had paltry results. Radloff did manage to recognize the noun-prefix for ‘my,’ and even for ‘our/human’ *ka-* (i.e., *qa:-*), but even the ‘I’ subject of a verb (usually *-x*) was beyond Radloff to identify. In the end, one has to say that Radloff’s main contribution to Eyak was merely to make Rezanov’s vocabulary available in print in German, the first publication ever on Eyak itself.

### Buschmann 1855–1863

Radloff was not the only man of his time publishing in German on Eyak. Johann Karl Eduard Buschmann (b. 1805, d. 1880) was a Berlin librarian, friend of the von Humboldts, who worked with them in Mexico 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 since he was in touch with Radloff, the three after 1857 show the difference.

In his first publication Buschmann cites *Mithridates* 1816, Gallatin 1836, Wrangell 1839, and Veniaminov 1840a, but cannot add to those (Buschmann 1855:233–235). The second publication (Buschmann 1856:253, 260–319) repeats the previous statement, citing the same authors, and adds a major comparative table of 260 items as (insofar as) found in Athabaskan languages (narrower sense): Chepewyan, Tahkali (Carrier), Kutchin, Sussee (Sarsi), Dogrib, Tlatskanai, Umpqua, Navajo, T[*J*]icorilla; the “Kinai” (broader sense, i.e., Alaskan Athabaskan, minus Kutchin): Kinai, At-

nah, Ugalenzen, Inkilik (Koyukon), Inkalit (Ingalik), Koltschanen (Tanacross); and Koloschen (Tlingit). Hence Eyak belongs somewhere in the “Kinai” branch of this three-branched family.

In his third publication Buschmann summarizes the history of Eyak language studies up to then, adds Radloff’s Rezanov—received April 22, 1858, but does not do much with it, critiques *Mithridates*, suggests comparisons between Athabaskan-Kinai-Tlingit and Aztecan, and compares Rezanov from *Mithridates* and from Radloff (Buschmann 1859:683–689). Such unproductive enterprises as comparing Aztecan with Athabaskan-Eyak-Tlingit were attractive not only because Buschmann had been in Mexico and studied Aztec, but because phonological precision was so lacking that any languages that had, for example, frequent “*tl*”s at the end of words, as did Eyak and Aztec, were fair game for comparison, and if proven to be related language families, especially at so long a distance, would be exciting, and a feather in the linguist’s cap. In fact, W. W. Turner of the Smithsonian had done just that in 1852, by showing Apache-Navajo related to Athabaskan languages far to the North.

In the fourth treatise 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 (Buschmann 1860:513–515, 541–581). 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 Eyak, using Rezanov from Radloff, Buschmann reasserts the specialness of Eyak and tries naively 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 (Buschmann 1863:232–235).

Beyond Buschmann, the Englishman Robert Gordon Latham (b. 1812, d. 1888) might be mentioned. He is an example of several Europeans outside Germany as derivative sources, who discussed the linguistic position of Eyak, often with data, in well-known publications in English—the American Gallatin and the the British Latham.

## Furuhjelm 1862

We now come to the sixth and last Russian Eyak vocabulary, this one being transitional to the American. In fact it was requested by an American

and appeared only in American publications. Johan Hampus Furuhjelm (b. 1821, d. 1909) was the second-last governor of Russian America, 1859–64. George Gibbs (b. 1815, d. 1873) was an American lawyer, geologist, naturalist, ardent philologist, and Smithsonian Institution officer, who had spent the years 1848 to 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 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” (National Anthropological Archives [NAA] ms. 371). 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]” (NAA ms. 528). Krauss had earlier thought that this Eyak vocabulary must have been done by Abbot Nikolai Militov during one of his summer missionary visits of that period from Kenai to Copper River. However, 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 6-page Smithsonian “Comparative Vocabulary” form of the time, 180 (182) words, sent by Gibbs, with 161 words filled in (NAA ms. 527). 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, as seen, for example, in the first entry ‘man’ *Lilia* for *hila*:’, where the *-ia-* reflects the original Russian vowel. A nostalgic entry is ‘thou’ *Ishu*, for ‘*i:shuh* ‘is it you (sg.)?’ (also ‘Hello,’ cf., Walker and Strange 1786). 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’, *Tchiishk*, which is clearly *chi:shk* meaning ‘gravel,’ probably a reference to the site at the Cordova end of Eyak Lake, in fact, as in the place-name *chi:shk qi’ k’u:teh* (‘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 “Yacoutat” vocabulary since 1862, Gibbs still considered Eyak an especially important language for further investigation.

Gibbs was in touch with William Healy Dall (b. 1845, d. 1927), a very major U.S. specialist in Alaska. In his tome *Alaska and Its Resources* (Dall 1870:550–551), Dall presents a short 37-word comparative table of Alaskan languages, presenting 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” column is Eyak from Wrangell 1839. 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. 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 11 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, here with Dall’s respelling of Wrangell, *Yakulkutzku* and *Yakutschk* for ‘small’ (Eyak *ya:kuts’k*), and *Khutak* and *Hoo-oo* for ‘I’ (Eyak *xu:[-dək]*) for ‘I (too).’ This is surely not enough left for Dall to notice that his “Yakutat Tlingit” and “Ugalentsi Tinne” 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 . . .” (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). Here Gibbs is obviously re-

sponding 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 list of Eyak words, sent by Furuhjelm 1862, was first fully printed, finally, four years after Gibbs’s death (Dall 1877:122–133). It was presented as the first “Tlingit” dialect in a sort of comparative Tlingit vocabulary of five parallel columns, without question or comment concerning the Yakutat that invariably sticks out like a sore thumb as different from the rest, e.g., item one, ‘Man’ *lilia - ka - kah - kah - kha*, i.e., Eyak *hila:*; Tlingit *qa:*. 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 60 years, until 1930, was well under way. Dall is much to blame for that.

### Verman 1863

Fedor Karlovich Verman (Wehrmann) was in Alaska 1854–1861 as a naval officer. Petr Aleksandrovich Tikhmenev (b. 1820s, d. 1888) worked in St. Petersburg as the Company historian from 1857 to 1863, when he published a two-volume definitive history of its affairs (Tikhmenev 1861–1863). In that is published a most remarkable color map entitled *Karta tuzemnykh narietchii na Aleutskikh ostrovakh i severozapadnom beregu Ameriki, s karty, sostavlennoi sostoiaishchim na sluzhbie Rossiisko-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-Lt. Verman, 1863] (Fig. 3). (An original, not seen by Krauss, is reported in the Archive of the Russian Geographical Society, St. Petersburg, Razryad III, Opis’ 1, No. 232.) 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 shown in blue, Eskimo in red-pink, Tlingit in brown, with a lighter brown used for the Yakutat dialect thereof. 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 by including two varieties of interior Athabaskan. Eyak (Ugalenskoe) itself is colored gray and placed geographically right where it belonged in

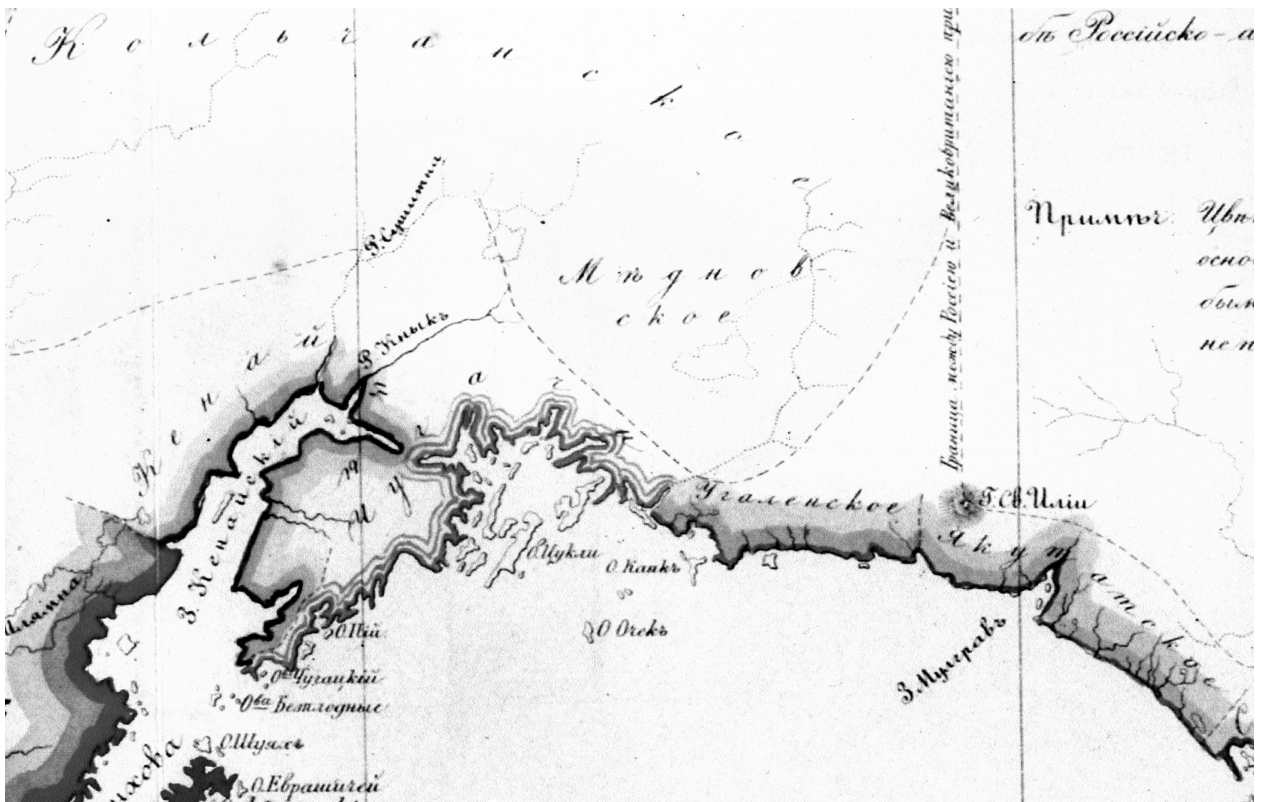


Figure 3. Detail from the Verman map. From Tikhmenev 1863, original in color.

1863, along the coast, no longer from Yakutat (Z. Mul'grav), but now from about Kaliakh to about the mouth of the Copper River with division lines as well as shown with color. This map is far from alone at the time in showing Ugalents as a separate entity, this having been done ever since Shelikhov 1796. Still, 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 also draws as dramatically clear a picture as can be of the exact 1863 position of the Eyak language.

### Summation of Russian Period

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 being 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. Of the six formal Russian vocabularies of Eyak, two appeared in German publications (Rezanov, with about 1,100 words, and Wrangell with 97 words) and the last (Furuhjelm, 161 words) appeared in American publications (1870, 1877), where it was sadly misrepresented.

This may also be the best place to mention that in the Russian Orthodox Church records there are many Eyak personal names, starting in the Kodiak records for 1843 and 1844 (including a total of 14 Ugalents names). From 1846 to 1870 these names come from the Kenai vital statistics records (about 300 instances, of about 180 different Ugalents names). There then seems to be a gap, and another group appears, from Nuchek, 1894 to 1907, containing both vital statistics and confessional records (total about 380 instances of about 150 different "Agalents" names from Eyak and Odiak and a few from Katalla). This 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, basically Eyak only, very marginally Katalla, and 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 Purto and Kulikalov 1794, Eyak personal names in inadequate orthography are very difficult to identify, let alone interpret. However, copies of all this material are also included in the Alaska Native Language Center Archive (ANLC) for Eyak, with excerpting of the names by Krauss and identification of perhaps a quarter of them. Their ultimate historical value for Eyak is of course yet another matter. Finally, the *Index to Baptisms, Marriages, and Deaths in the Archive of the Russian Orthodox Greek Catholic Church in Alaska* (1964–1973) includes Eyak personal names from 1845 to 1893 under Kenai, which may help fill in the gaps, and from 1894 to 1907 under Nuchek.

## The American Period, 1867 to Present

The very first American mentions of Eyak after the purchase of Alaska were not wrong about the language, for example distinguished geodesist and astronomer George Davidson (b. 1825, d. 1911), writing November 30, 1867 (Davidson 1868:293) stated: “The natives inhabiting the coast between Yakootat and Prince William Sound are called Oogalentz, and number about thirteen [!] hundred souls [which sounds like Veniaminov, and thirteen for three]. They have their own language . . .” 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. Dall was joined in this mistaken assumption by several others, such as Petroff, Abercrombie, Emmons, and Swanton—though not by Bancroft and Powell, who, like Gallatin, mention Eyak and quoted sources, but did not make misleading speculations or conclusions. Unfortunately, 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 by Petroff, showing Oogalakmute as a mixture of green-red for Eskimo-Thlinkit, now restricted to the Cordova area. For this confusion, much of which is painfully chronicled by Frederica de Laguna, see Birket-Smith and de Laguna (1938:327–337). For further reading on that see Pinnow (1976:31–40) and Johannsen (1963), which indiscriminately list derivative sources, including even opinion statistics. Finally, see the Hodge *Handbook* (1910:862–863), for an eloquent epitome of the confusion. Rather than repeat or elaborate that mess here, we shall confine ourselves to the two major exceptions which are, in fact, holdovers from the previous “German” period.

## Jacobsen 1883

Johan Adrian Jacobsen (b. 1853, d. 1947) was a Norwegian seaman and entrepreneur, who spent the period 1881 to 1883 traveling widely in Alaska and collecting artifacts for the Berlin Ethnology Museum. He spent July 28 to August 11, 1883 in Eyak country, at Eyak, Alaganik, and Cape Martin, buying artifacts and making observations. His artifact-acquisitions 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 belierend—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 gehörend* [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 of how far assimilation to Tlingit was progressing in 1883. However, six years later, after the establishment of the canneries in that last Eyak stronghold and 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 twentieth 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, upon arriving at Eyak, Jacobsen writes, “These people must speak an entirely different language [from the Chugach] . . . Their language is the most incomprehensible 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 (1887), and finally in English, a good summary quote from which (1977:207) 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’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.

### Krause 1885

Aurel Krause (b. 1848, d. 1908) and his brother Arthur (b. 1851, d. 1920), on an expedition for the Bremen Geographical Society, spent some five months in Tlingit country December 12, 1881 to 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, of course, including that on groups neighboring Tlingit. In that (1885:323–325, here from the English translation, Krause 1956:218–219), Krause reviews the literature on Eyak, noting from Wrangell that “their language is supposed to differ from the Kolushan but to have the same roots,” and

Dall’s opinion that the Ugalenzen belong to the Inuit 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 Atnahs, and Athapascan people belonging to the Kinai, and finally the Kolushans, their languages shows little relationship to the first two. It can be stated with certainty that there is no relationship between the Eskimo dialect and Ugalachmut.” (Krause 1956:218–219)

However Radloff found among the 1,100 recorded words of Ugalachmut from the vocabularies of Resanov about 40 which bear phonetic and structural resemblance to Tlingit words. 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 in Berlin helping Captain Adrian Jacobsen with his Alaska collection! It is even more ironic that Boas, who was soon to make his first field trip to the Northwest Coast in 1886, and was to study Tlingit first in Victoria in 1888, evidently did not then notice, or perhaps never noticed, 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 published in 1916–1917, 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 surprising, considering that Boas placed very high value on salvage fieldwork on languages nearing extinction and considering for example, his own heroic work on Tsetsaut in 1894 and on Chemakum in 1890. During the Jesup Expedition years, 1897–1902, one might especially have expected some such attention, but in fact Alaska was basically skipped, supposedly on the grounds that it had been relatively well covered by Nelson in Beringia and Krause in the Southeast. So Eyak was ignored for 60 years.

### Harriman 1899

The next episode in this ironic history is in an entirely different category, the “Harriman cylinder.” In summer of 1899 Edward Henry Harriman (b. 1848, d. 1909), powerful railroad magnate and financier, chartered a luxury ship, the *George W. Elder*, for a vacation and “scientific” cruise to Alaska. This crass tycoon invited along family members, including young Averill plus a couple dozen of America’s scientific and artistic elite including the naturalist-conservationist writers John Burroughs, John Muir, and George Bird Grinnell—Grinnell being the closest to an ethnologist of the group, as well as C. Hart Merriam and our major Alaska expert Dall. Both Merriam and Dall were vocabulary-writers, but not on this trip. Young Edward S. Curtis also graced the group but was a 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 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 outsized cylinders five-inches in diameter. Those did not play any longer than the usual 2½ minute ones, 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, Anthony Seeger, then of the Indiana University Archive of Traditional Music, brought along a Harriman cylinder especially to find if anyone could identify its language. Krauss is very proud to have guessed that it sounded like Tlingit played backward. Seeger reversed the cylinder on the mandrel (not tapered), and the cylinder indeed proved to be Tlingit, one of those made, as described in Goetzmann and Sloan (1982:92), in the Governor's Mansion at Sitka, June 17, 1899, at a formal reception by Governor Brady. There is one cylinder of song, and one of speech by two Tlingit men (followed by one by Brady). The two Tlingit speeches are routine fine specimens of proud Tlingit oratory. The sound quality is such that they were perfectly easy to transcribe (transcription by Dauenhauer and Dauenhauer 1990:156–181, 325–327). The 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 1901:185). June 24–28, 1899 the ship was at Orca cannery near the present Cordova, for repairs.

In 2001 Krauss's 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,” possibly also “Dining Saloon,” 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.

Krauss made additional efforts to locate more of the Harriman cylinders (for example, at the University of Indiana archive, Heye Foundation Na-

tional Museum of the American Indian, and at 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. Krauss's efforts have so far met with failure. The centennial of the expedition was well observed, with much publicity. There was even a reenactment. No attention whatever was given to the matter of cylinder recordings. Harriman's great-grandson David H. Mortimer, Harriman family historian, very kindly checked his contacts (personal communication September 2005), even asking his aged mother, but no trace or memory of the missing cylinders has yet been found.

## Frederica de Laguna

Frederica de Laguna had been a Ph.D. student under Boas at Columbia since 1927, went to Greenland 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 Kaj Birket-Smith, originally to the Shumagins, but they changed their plans and went 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. At most they might have been familiar with the confused garble in the 1910 *Handbook*. Boas himself was presumably no better informed on Eyak than that either, in spite of all the preceding publications so pointedly chronicled here. Freddy 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.

## Expedition of 1930

At the last minute, ill health forced Birket-Smith to cancel, but Freddy went anyway, with her brother Wallace, a geology student, to 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 South-eastern Alaska, and the Eyak.

“Those Eyaks are altogether a different breed of cat 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* (Anonymous 1910, vol. 2:862) that the Eyak were a small group of Chugach 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 2000:36–37)

Since this disclosure was news to Freddy in 1930, and there had been no mention 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 Freddy’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 probably never discussed with her by Krauss.

The de Lagunas must immediately have followed Cloes up and met 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, looking for house sites. Concerning this, Krauss has copies of twelve small notebook pages from 1930 and one page of Eyak vocabulary possibly from that summer. The de Lagunas 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, finding Old Chief Joe “aloof.” They realized that the remaining Eyaks were few and deserved further investigation. Not the least reason for this was the understanding that Eyak culture and *language* were distinct from any other (Chugach, Tlingit, Ahtna). In fact Freddy thereupon came to the hypothesis that Eyak was an Athabaskan group from the interior which 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* (1934b:156): “I reached the conclusion that the Eyak are an Athabaskan-speaking people who have pushed down the Cop-

per River to its mouth . . . This hypothesis, formulated in 1930, has been supported by the results of our ethnological studies in 1933.” In other words, it was not until some time *after* the 1933 expedition that Freddy explicitly understands the real position of Eyak, that it was not what might be called “just another” Athabaskan language.

We have a letter from Freddy 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 Freddy 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 and said to know many stories, died that next winter. We have the good fortune, however, that young Annie 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 tape recordings of Annie telling those stories much later to Krauss in Eyak (see Krauss 1970a, 1982).

## Expedition of 1933

Whatever her intentions or priorities, during the summers of 1931 and 1932 Freddy 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 published a “plan for an archeological expedition to Alaska for the summer of 1933” in the Danish geographical journal for that year (Birket-Smith 1933), involving Freddy, with no mention whatever of Eyak. Birket-Smith had recovered, and the expedition now also

included a graduate student from the University of Washington, Norman Reynolds, along with Freddy's brother Wallace, and her mother Grace. The 1933 priorities remain clear at least from Birket-Smith's reports: "*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 første tid til studiet af 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 1935a:191, 192; also similarly in German, Birket-Smith 1934:284–285), and "On April 27th 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). Freddy dates that departure May 14 (1956:ix), but the *Cordova Daily Times* reports it on May 11. Thus their main session with Eyak lasted at most 15 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 spent with Eyak after that in the summer of 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 to Cordova on August 25; 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:x). Therefore, aside from the Eyak tales on the boat, the sum total time for Eyak was less than three weeks.

Throughout, their main informant and interpreter was Galushia Nelson (b. 1889, d. 1939) (Fig. 4). 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 1935b:89–94, Birket-Smith and de Laguna 1938:8–10, and Krauss 1982:15–17. Given his per-

sonality 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 between the age of 12 and 22, his active command of the Eyak language was somewhat limited or faulty, according to later memory. Galushia's wife Annie also played a crucial role in 1933, as well as in this entire history since (Krauss 1982). Others were Old Man Dude and Johnny Stevens.

## 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 . . ." Next Freddy published two pages about Eyak ceremonial paddles she had gotten for the University of Pennsylvania Museum (de Laguna 1934a:57–59). There she remarks, in connection with her Athabaskan hypothesis, that "they do speak Athabaskan, but theirs is a very divergent dialect"—a key point, to which we shall return. The next publication was Birket-Smith's "preliminary report on the Danish-American expedition to Alaska," in Danish (Birket-Smith 1935a), 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." Also in 1935, Birket-Smith published his *Guld og Grønne Skove* [Gold and Green Forests] (Birket-Smith 1935b) for Danish popular consumption about the expedition. About one-tenth of the book gives an account of their findings on Eyak, and also some revelations about the situation and treatment of the Eyaks in Cordova in 1933, giving a much more intimate glimpse of that than the main joint publication. Krauss has translated that subsection, with the feeling that it deserves to be more widely known. 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 Freddy's 13-page "Preliminary Sketch of the Eyak Indians . . ." (de Laguna 1937).

In all fairness, even though it is abundantly clear that Birket-Smith himself before the 1933 expedition showed not the least enthusiasm for the Eyak part of the expedition, one might wonder in the first place why he then came to the area two



**Figure 4. Members of the expedition with Galushia Nelson's family, Cordova, 1933. Left to right: Galushia Nelson, Johnny Nelson, Anna Nelson, Norman Reynolds, Kaj Birket-Smith, and Frederica de Laguna. Photograph courtesy of Michael E. Krauss.**

weeks before weather was to allow the Chugach archeology. More important still is that he not only went along with the Eyak phase, and made a major contribution to the 1938 book, but also in his reports afterward, shows a real personal enthusiasm for what was accomplished. At the very least it must be acknowledged that Birket-Smith was a very "good sport" about the Eyak, and no impediment to it. Still, one might wonder what this history would have been if Birket-Smith instead of Freddy had gone to Cordova in 1930.

The archival results are very disappointing, in that most of the field notes or papers of Birket-Smith, Norman Reynolds, and Frederica de Laguna herself, it seems, have been lost. From Birket-Smith all we have are two pages of 30 Eyak words and names copied by L. L. Hammerich out of an original text of 20 pages, probably in the 1950s. It was sadly confirmed by the Ethnographic Mu-

seum in Copenhagen and by his son to Krauss that Birket-Smith had destroyed all his ethnographic notes in his old age. Krauss 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 Freddy kindly sent Krauss Xerox copies of all the notebooks that contained Eyak linguistic material, even bits thereof. That collection consists of 12 pages from the 1930 Alaganik trip, no language, except perhaps one loose page; six small notebooks from 1933, 122 pages in her hand plus, interspersed, the 24 mentioned in Reynolds's; and 5 larger notebooks, 83 pages, all in her hand. Though there must have been more, neither the materials in possession of Freddy's literary executrix Marie-

Françoise Guédon, nor the materials taken to the Smithsonian National Anthropological Archives by Robert Leopold, reportedly contain any Eyak notebooks whatever, not even the originals of those Xeroxed for Krauss. Apparently there had never been any field journals or diaries kept during the 1930 or 1933 expeditions by Freddy either, or those too have disappeared.

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* (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, pages 17–242, for "Description of Eyak Ethnology." Given the format of the pages, at roughly a 1,700 character-count, that might not be more than 65 pages in the format of this journal. It is also virtually the last work ever done on Eyak ethnography. Not so for Eyak language, fortunately.

## Linguistic Results

The 1938 book does include, however, 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, then an Eyak vocabulary of not much more than 500 entries, nine pages of grammar and phrases, and seven pages on kin terms (from Annie Nelson). Not all, but most, of the remaining archival material in Freddy's hand or in Reynolds's is here, but there is more here than in the notebooks too. We also have a 41-page typescript version of that appendix, very much refined from the notebooks, preparatory to the printing, probably datable to 1934, prepared by Freddy. "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 one short text in Reynolds's hand, the very first written down in the language, later edited by Krauss in 1966.) 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. Freddy had training from Boas, and Reynolds had 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 barred *l*'s, *q*'s, *x*'s, an apostrophe for both glottal stop and glottalization, *c* for *sh*, and the like—gave the impression of much greater accuracy and credibility than they truly deserve, how-

ever, 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 Krauss was never able to convince Freddy about. First, that her own transcriptions were fully as good as Norman Reynolds's (though Krauss had a clear basis for comparison from those pages of field notes), and 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, that attested dialectal variation within Eyak was minimal, even considering Yakutat, which she only became aware of later, after 1949. It seems doubtful that she had by then also been aware of and misled by the Veniaminov statement, of a "Yakutat" and Ugalents dialect, discussed above.

We have an undated letter from Freddy 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 which 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. . . . (Boas 1972:745)

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 determine whether Freddy had first addressed Boas or Sapir about Eyak. Birket-Smith's *Guld og Grønne Skove* (1935b) has a foreword dated April 1935, and on p. 102 concludes the Eyak section:

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 lan-

guage, 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, and 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's report had been very swift, the same month as Sapir's letter. Freddy's appears in her 1937 "Preliminary Report," much less dramatically. "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." Sapir may have gotten or given this impression because he was intimately expert in some 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 Freddy'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 fact, taken at face value, Freddy's statement is more correct than Sapir's. In any case, however ironically, American scholarship was finally catching 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 from 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 of course 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 that with Sino-Tibetan, Sapir was far more preoccupied with Comparative Athabaskan at most, more in fact just with Navajo itself. At the 1984 Sapir Centenary Conference in Ottawa, Krauss remembers Freddy's surprise that he had nothing to say about Sapir and Eyak. By that time,

Mary Haas had explained to Krauss, 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" (see Krauss 1986, for more on Sapir in this respect).

Ironically also, the *magnum opus* on Eyak, the joint 1938 book, 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 Comptroller 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 the 1938 book was such that the 1935 Sapir revelation came too late, though not too late to be included in the 1937 "preliminary" report.

Nothing came of the proposed follow-up. Freddy continued to recommend Reynolds to do the work. Boas and Sapir were polite, but they kept stipulating that the work be done by someone trained in Athabaskan and the like. Mary Haas (Swadesh), then a student of Sapir's at Yale, was nominated. In the ACLS Bulletin No. 25, July 1936 (courtesy of Victor Golla) Boas's "Progress Report" for 1935 notes:

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 Krauss 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 came, unfortunately, to nothing.

Much then intervened, including Sapir's death, Boas's death, and World War II. Though Freddy 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 1972 masterpiece on Yakutat, and is made very clear in her 1990 *Handbook* chapter on Eyak. Thus, finally, Russian knowledge is regained, though still without the full realization that the Russians had all this clearly figured out in black and white, and even in color.

Freddy's thinking was never static; it was always in motion. This certainly was no less true of her thoughts about Eyak. As of April 1930, what little she knew was at most (1) the Americans were confused by and mistaken about Eyak, believing it some kind of mixture at Cordova, then 2) that Eyak was a separate Athabaskan language that had come downriver to Cordova, or somehow that Eyak was a specially divergent Athabaskan language, then 3) from Sapir that Eyak was an intermediate branch of Na-Dene between Tlingit and Athabaskan; then, in a new direction, 4) that Eyak had been the language of the coast at least as far as Yakutat. A few months before her death, Krauss visited Freddy for the last time, and she alluded to new ideas, 5) 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. It now remains for Marie-Françoise to pass Freddy's last thoughts on Eyak on to us.

### Note on the Name Eyak

It is altogether clear that the origin of the name "Eyak" is the local Chugach Eskimo name of the Eyak village site near the mouth of the Eyak River on Eyak Lake at Mile 6, in Chugach *Igya'aq*. In this the initial *I* is pronounced as the *-i-* in *sing*, the *-g-* as a voiced fricative gamma, and the *-ya'aq* has not the vowel of *yak* as in the English pronunciation of the name, but rhymes more or less rather with *hawk*, except that the final consonant is of course the Eskimo-Aleut back velar *-q*, not mid-mouth English *-k*. Both syllables are accented, the first with a vowel of short duration, and the second is of quite long duration, because the *-a'a-* is in fact the result of the dropping of an old back velar voiced fricative Eskimo-Aleut *-r-* (as e.g., Parisian "r") in an older form of the word still widely found as such in Yup'ik, *igyaraq*. The word *igyaraq* or *igya'aq* has 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 *-u-* represents the *-u-* of English *dug* and the second *-g-* represents the *-r-*.

The first non-Russian spellings of the name were written *Ihiak* (Petroff in 1880 [1884]), *Iggiak* (Jacobsen 1883 ms.), but by the time Americans were on the scene, it was already *Eyak* (Abercrombie in 1884 [1900]; Allen in 1885 [1887]). Harriman, as we have seen, wrote *Eyak*. Probably because it was never spelled *\*Eyawk* or the like, the local English became *Eyak* with the second syllable vowel as in *yak*, a "spelling pronunciation." That has remained also the "standard" [!] academic pronunciation, though Krauss often heard it

pronounced with the first syllable as in *eye*, as that "spelling pronunciation" evidently had some currency in "outside" academe. Krauss heard that for example from Harry Hoijer in the 1960's, who may have gotten it from Sapir, for all we know.

Obviously, the original name *Igya'aq* was given to the village site because it was first occupied by Chugach. When that site was taken over by the Eyak Indians, possibly as early as some point in the eighteenth century, the Chugach name was retained by them, adapted as *'i:ya:q*, somewhat predictably. The gamma is gone, into the lengthening of the first vowel, since the Eyak language has no gamma. The English spelling Eyak could perhaps come equally well from the Eyak *'i:ya:q* or Chugach *Igya'aq*. Harriman's "Eyak Indians" may only have been his spontaneous phrase and/or it might, by 1899, already reflect some established local English usage. Certainly, that latter was so by 1930 and by that time Cordova was also the only place left where the Eyak language was spoken. It was therefore entirely natural and logical that, through Frederica de Laguna, "Eyak" became the American name for the people and language.

There is some irony in this history too, that it is the Chugach village name that became the definitive academic name for the Eyak Indian people who made their "last stand" at that site, to be (re-) "discovered" there by Freddy 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, real question locally of who the "Eyaks" really are. "Eyak (Village) Corporation members" is factually definable, but "Eyaks" is now a name becoming ambiguous with an irony that is painful.

### Eyak Language Work after de Laguna

Given the preceding history, clearly no modern linguistic fieldwork was done on Eyak until after Frederica de Laguna did her work of the 1930s. Beginning in 1940, however, there have been four significant contributions. The first three involved brief periods of a month or so of fieldwork: Harrington in 1940, Li in 1952, and Austerlitz in 1961, all of whom produced documentation of much better quality and greater quantity than their predecessors. Harrington's work with Eyak was done quite "independently," i.e., in no collegial sense, so is motivated rather exclusively by whatever moved Harrington (see below). Li's and Austerlitz's



Figure 5. George Johnson and his wife Annie in 1949. From de Laguna 1972, Vol. 3, Plate 3. Photograph courtesy of Michael E. Krauss.

work is part of the larger (pre-Chomskyan!) academic perspective. Krauss's is in a different class altogether, being a long-term commitment, and the only such. This last phase of our history will be dealt with in less detail, in part because there is so much more of it, but also in part because it is anticlimactic, after Freddy's work.

### Harrington 1940

John Peabody Harrington (b. 1884, d. 1961) worked for the Smithsonian. This man very probably was the last to write down more dying languages than any other individual in linguistic history. He certainly must be given credit for being early to recognize the enormity of the American language extinction tragedy, and for doing something about it. Not a nice man, he is reputed, for instance, to have made a habit of instructing his language consultants never to work with other linguists after him. He had a paranoid streak and was quite secretive with his work. Anti-Semitic as well, he was predictably resentful of Boas and Sapir. At the same time, he evidently felt a need to publish on comparative issues, including Athabaskan and Tlingit,

in order to make his mark, in his own way, in that arena also. Fortunately, his publications are a very minor part of his accomplishments, which must be recognized for what they truly are, namely an incomparable corpus of terminal or near-terminal documentation of American languages. Eyak became one of those languages. Harrington must certainly have heard of Eyak through Freddy, though no acknowledgement of that is evident. He did his work on it in 1940 without her knowledge. Harrington had already spent 33 years recording Native languages of the American West, including extensive work in Athabaskan, by the time he came to Yakutat to work with George Johnson, and was already familiar with Tlingit since 1939, having worked with two speakers in Seattle.

George Johnson (Fig. 5) was born 1892 probably at Bering River Village and came to Katalla as a child. Eyak presumably was his first language, but Tlingit surely was a close second. We do not have the date of his moving to Yakutat, but Johnson told Krauss 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 dom-



inant language in 1940, much steadier than his Eyak.

We have a good account of Harrington's work with Johnson in Elaine L. Mills's 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 instead having to go to Yakutat to work with him. He stayed there from May 12 to June 14, 1940, working "eight hours a day" with Johnson (Johnson told Krauss "about six hours."). There is no question of Harrington's interest in Tlingit. In fact he ended up writing a paper on comparative Athabaskan and Tlingit, his so-called "Phonematic Daylight in Lhiinkit, Navajo of the North" (Harrington 1945)—in which Eyak does not figure. The article is a competent enough presentation of Tlingit phonemes. However, that had already been done remarkably well by Boas in 1917—ignored by Harrington. What few comparative remarks Harrington makes in the article show he has no idea whatever of real comparative method, the rigorous process that had become so well established by then in linguistics to show genetic relationship, e.g., through regular sound correspondences, as opposed to vague surface resemblances. It seems certain that Harrington's reason, at least his original reason, for working with Johnson was that Johnson was bilingual with Eyak. (Perhaps, very secondarily, it might also have been that Johnson represented the Yakutat dialect of Tlingit, but not that Johnson was known for being an exceptional font of Tlingit knowledge.) Clearly, the material Harrington got from Johnson is predominantly Tlingit, the Tlingit normally given first, ("Y." [Yakutat]), then the Eyak equivalent, if any ("C." [Cordova]). The latter is often missing, or merely noted or dismissed as "= Y.", while the former is perhaps never missing. One cannot tell, however, that Harrington was disappointed or frustrated that he was getting less Eyak, and less good Eyak, than Tlingit, or, from this material, just what the nature of Harrington's interest in Eyak, as such, was. Here Eyak seems to be, after all, just an accompaniment, where available, to the Tlingit. It is obviously dangerous to play guessing games on a psyche like Harrington's, but apparently he lost interest in or gave up plans for using the Eyak comparatively. Hence Harrington never published on it. Harrington was of course a good sleuth for finding last speakers, but never seems to have considered going to Cordova, where he had to know there were of course several more speakers, or working with Annie 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 (1942 51–52):

Dr. Harrington then proceeded in May to the study of the Atchat, or Eyak, Tribe, which was found to have occupied the entire eastern half of the Gulf of Alaska, a stretch of coast 350 miles long, extending from Prince William Sound in the west to Lituya Bay in the east. This tribe has earlier been called Ugalenz 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.

There is no Eyak ethnonym remotely resembling *Atchat*. Rather, that must be the Eyak demonstrative 'a:nch'aht 'from here, hence', or possibly, from Johnson's Eyak, 'a:nch'a:t 'this side'. Freddy might, in the end, have agreed that Eyaks once lived as far south as Lituya Bay, but not on the evidence Harrington could have had. Harrington is, of course, right that Eyak is related to Canadian Athabaskan and Navajo more closely than is Tlingit ("the island language"?), but this is hardly new.

Definitely, Harrington's interest was overwhelmingly lexicon. He transcribed no texts and got very little into the grammar. He did, though, take a very broad interest in the natural history, especially flora and fauna, and place names. His notes are full of local lore of many kinds, including current salmon prices, but they could hardly be considered either 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 essentially adequate ones for Eyak ever. If they were the last we had, we could at least verify with them 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 the corpus, so in this respect too, Harrington surpasses all previous Eyak work. In terms of sheer paper bulk, it should be added, 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, a good hundred sheets a day. One section, of 221 pages, is quite different from the rest, being a rough typescript draft, with the title "Southern Peripheral Athapaskawan in Alaska and Canada," "By John P. Harrington and Robert W. Young." Late in 1939, Harrington had traveled in Canada with Young, working on Sarcee, Car-

rier, Sekani, Beaver, and 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 that or of Robert W. Young. All that is present is the Yakutat fauna and flora information, including terminology from Tlingit and Eyak. By far the longest part is a disquisition on salmon, most of that with no Tlingit or Eyak at all—89 pages, other fauna an additional 89 pages, flora 41 pages. Throughout 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. Freddy became aware of it only when George Johnson told her about it in 1949. She never saw it until Krauss sent her copies, as it was being prepared in the 1960s for microfilming.

### Fang-Kuei Li 1952

Fang-Kuei Li (Li Fang Kuei, Li Fanguai; b. 1902, d. 1987) came first 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. (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!"), Li worked nearby on Wailaki and Mattole (no tones either). His Ph.D. dissertation (1930) was the 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 the reverse of what Sapir expected from what he had found in Sarcee (1922), Kutchin (1923), and Navajo (1926). Krauss believes 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"—not vowels! (Li 1930). 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 Tai languages. He returned to the U.S. in 1949, and remained in Seattle until his retirement in 1969, when he went to Hawaii.

After Freddy's first summer at Yakutat in 1949, realizing that Eyak had been there—and was still there in the sense that two Eyak speakers originally from Katalla (George Johnson) and Cordova (Anna Nelson Harry) lived there—and in prepara-

tion for a much wider investigation there in 1952, she took the brilliant initiative to enlist Fang-Kuei Li from Seattle to work on Eyak language. She got a grant from Wenner-Gren to support Li for that, separately, but in connection of course with her larger project.

Li spent about six weeks in Yakutat and then Cordova, June-July 1952. In 1965 Li kindly allowed Krauss to make Xerox copies of all his Eyak notes. We have two notebooks from George Johnson, 41 pp. and 22 pp., then one from Anna Nelson Harry, of 42 pp., and then one from Minnie and Scar Stevens in Cordova, 24 pp. The Johnson notebooks contain about 750 words and phrases, and six texts, the Anna one about 700 words and phrases and one text, and the Stevens one about 480 words and phrases. The Li materials thus then constituted not only the most extensive Eyak lexicon, but also included seven texts, 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, but using a system obviously from Sapir.

The Johnson texts are extremely halting or "stiff," especially at first, but limber 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. Li's work with Minnie and Scar Stevens, mother and father of Sophie and Marie—the last two speakers of Eyak, 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 Xeroxed 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 contents thereof 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.

Li's only publication from this work is the four-page article (Li 1956) comparing the *-ł* instrumental noun suffix in Athabaskan and Eyak. 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 does not, however, take the time to make them explicit. “Eyak is not a tonal language.” On the top of his first page of 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.” 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—unless of course it was Freddy: Eyaks “do speak Athabaskan, but theirs is a very divergent dialect.”

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 Freddy to thank for getting Li to do it.

### Austerlitz 1961

Robert Paul Austerlitz (b. 1923, d. 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 to be documented by yet another distinguished linguist, this time on something of a “lark,” by Austerlitz, who, unlike Li, had no particular experience in any languages related to Eyak.

Krauss 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, he had obtained funding for basic survey and documentary work from the National Science Foundation, with a generous grant of \$38,000 (in 1961 dollars). Krauss 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 Krauss and Austerlitz were corresponding about Athabaskan; in July Catharine McClellan, a major disciple and col-



**Figure 6. Lena Saska Nacktan, around 1960. Photograph courtesy of Michael E. Krauss.**

league of Freddy’s, who had worked with her in Yakutat, strongly suggested Eyak to Austerlitz and by the end of that month he wrote Krauss he was “sold on Eyak.” Reviewing that correspondence, Krauss is reminded that he was merely happy to have Austerlitz to do anything, and cannot take the credit for the decision that Austerlitz work on Eyak.

Krauss insisted that Austerlitz get immediately in touch with Li, who responded helpfully and, on his way to Alaska, Austerlitz spent from August 17th to the 20th in Seattle, conferring with Li. August 20th to the 22nd Austerlitz was in Yakutat, August 22nd to September 19th he spent in Cordova, then September 19th to the 22nd he was again in Yakutat, so he really had about one month in all for the 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, with Lena Saska Nacktan (Fig. 6) and Marie Smith (Fig. 7). Lena Saska Nacktan (b. 1902, d. 1971) had been married, for the last time, to a Chugach man, but was by this time divorced. She enjoyed speaking Eyak. In the last few years before 1961, she had spent a lot of time talking and refreshing her Eyak with Minnie Stevens. Li had worked briefly with Minnie and her husband Scar Stevens in 1952. Minnie was the last of the “old



**Figure 7. Marie-Smith Jones. Photograph by Kiyoshi Yagi, 1992. Courtesy of Michael E. Krauss.**

generation,” born perhaps before 1880, and certainly the last person who routinely spoke Eyak. So it is correct to say that the era of routine or traditional conversation in Eyak ended when she died in March 1961, a few months before Austerlitz’s arrival. However, not only was Lena’s Eyak still “refreshed”, but “Grandma Stevens” had continued to speak Eyak with her daughters Sophie (b. 1911, d. 1992) and Marie (b. 1918), who thereby became the last two speakers of Eyak.

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 included special effort on systematic flora-fauna work, which is perhaps his most important contribution. Austerlitz also attempted to go into the grammar to an extent, perhaps a bit more than did Li, but with less background for it. He also got a small amount of 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 Auster-

litz 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 Christmastime 1961, but other priorities intervened, and Austerlitz could not continue with Eyak.

### 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 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, to make much headway into Eyak grammar, or to get any 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 25% 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.

### Krauss 1961 to Present

Michael Krauss (b. 1934) has always gravitated toward the cause of minority and endangered languages. His training in linguistics, 1953–1958, perhaps most influenced by André Martinet at Columbia and Paris, was at the very end of a “classical period,” when 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. Inspired by Edouard Bachellery at Paris, Krauss took to Celtic,



**Figure 8. Sophie Borodkin and Michael Krauss in 1987. Photograph courtesy of Michael E. Krauss.**

and spent 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 good things: it rubberstamped Krauss's dissertation, and prevented him from straying down the street too much to MIT. Krauss then spent two postdoctoral years, 1958–1960 on Iceland and the Faeroe Islands. The marginal survival of Gaelic and the spectacular strength of both Icelandic and Faeroese had a profoundly formative effect on Krauss's approach to language. The University of Alaska hired him from the Faeroes 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 Krauss, given his experience and agenda. His "bread and butter," however, he found was teaching French and heading a department newly organized as Linguistics and Foreign Languages. Alaska Native language work was to be supported by 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?).

Krauss 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 he himself began his career with Athabaskan at Minto, near Fairbanks. He also visited the fieldworkers, including Austerlitz in Cordova, where he met Marie Smith and Lena Saska Nacktan, and made his first few Eyak transcriptions, especially to establish or confirm some basic sound correspondences between Eyak and Athabaskan. In 1962 Krauss continued his Athabaskan fieldwork, a statewide survey to begin to define Alaskan Athabaskan languages. By 1963, however, Krauss realized that the urgent



**Figure 9. Mike Sewak, around 1964. Photograph by Michael E. Krauss.**

Eyak work was not going to be done by Austerlitz or anyone else with the experience Krauss by then had with Athabaskan, so he determined to commit himself to Eyak—on a long-term basis.

Krauss's primary Eyak data, in the form of field notes, so far span the period 1961 to 2006, 45 years. These need, however, to be classed into three phases: 1) Intensive—1963–1965, 2) occasional or intermittent—1971, 1972, 1980, 1987, and 3) epilogue 1993–. We shall return to the chronology after an account of the Eyak speakers then still alive. Needless to say, Krauss 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 in Anchorage, Fairbanks, Juneau, and Seattle. In the 1960s there were still in fact six, as follows: Anna Nelson Harry and George Johnson at Yakutat; and Lena Saska Nacktan, Marie Smith, Sophie Borodkin (Fig. 8), and Mike Sewak (Fig. 9) at 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 “Sea-walk”) (b. ca. 1880, d. ca. 1966) was from Bering River Village-Katalla. By 1963 he was blind and mostly deaf, living in the Cordova hospital, speaking mostly Tlingit and English, with very partial recall of Eyak.

Here Krauss has 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 Krauss to that end. Looking back at that record, Krauss considers himself exceedingly fortunate in that regard, among others, to have been in the right place at the right time in order to preserve as much has proved



**Figure 10. Michael Krauss and colleagues in Cordova, in 1961. Left to right, clockwise: Michael Krauss, Lena Saska Nacktan, Jane Krauss, Robert Austerlitz, and Irene Reed. Photograph courtesy of Michael E. Krauss,**

possible at such a late date, thanks of course to the good will of every single person who remembered any of the Eyak language. As a result, Krauss was able carry out his fieldwork with extreme efficiency and luck (Fig. 10).

### **Eyak Speakers 1961 to Present**

Here follows an account of the Eyak speakers still alive as of 1961, and of Krauss's work with each.

#### *Anna Nelson Harry*

Anna Nelson Harry, then of Yakutat, was 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 Krauss, who remembers with great pleasure getting over the hump of beginning to converse and work in Eyak with her. She also had a highly creative personality, and spoke with verve and “creativity”

in Eyak. That creativity included an ability to take something like poetic liberty with Eyak, to etymologize imaginatively, or even answer questions that way when Krauss 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 and her profound literary art). 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. At the same time, Krauss 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 group, Li, and Austerlitz. Krauss worked directly with her in 1963, 1965, 1971, and 1972. In 1971, as Krauss was walking out of her house for the last time, she muttered to herself—as if to teach him a lesson—“*te’ya’ xæsiyah*,” which caused Krauss to wheel about. *Te’ya’ xæsiyah* would mean ‘I ate a fish,’ but this sounded odd, and lacked that final consonant, so could not be accounted for by the Eyak grammar, all of which Krauss thought he knew by then. He double-checked and, as she took out a frying-pan, Anna confirmed that he had heard aright, 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, some old people used to talk that way, and cautiously came up with some further examples of that type of verb conjugation, confirming a whole “new” obsolescent Eyak conjugation, named now the “*s*-optative,” which is starting to turn up now also, marginally, in Athabaskan as well.

### George Johnson

George Johnson, of Yakutat, though quite rusty in Eyak, not having spoken it regularly since before he was twenty, or for 50 years as of 1961, was already a grizzled veteran of linguistic work with Harrington and Li. 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 Krauss. Krauss does remember Johnson protesting that he had “taught Harrington all he knew.” Krauss should have asked Li and Austerlitz if he said the same thing to them. Krauss worked with Johnson only in 1963.

### Lena Saska Nacktan

Lena Saska Nacktan was probably the most important of all the Eyak speakers for Krauss during the

intensive fieldwork phase. Though still babysitting grandchildren, she seemed to have the most time and above all the most inexhaustible patience. It seems she had taken deliberate pains to keep up or refresh her Eyak, as noted above, with Minnie Stevens, sharing a certain kind of interest in or value for the language, even for its actual structure. There were many special rewards in working with her. For example, it was she who told Krauss, when he must have slacked off momentarily and asked a question that could be considered redundant: “*dik’sh dətli: əw ’u:la’yilga:q q’ah* [shouldn’t you already be able to figure that one out by yourself by now]?” At the same 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 that Krauss had prepared during the intervening academic year, e.g., checking derivational possibilities of verbs.

Lena could be perfectly objective or detached. “I died yesterday” would be no problem. There was one lapse, when Krauss was uncertain about vowel length in negative future forms, 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 remarks such as “‘*a’t siləqahyəq’t əsh k’ute’kkga’ ’ədu’xdəgəwih* [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,” and would 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 Krauss went over all but the latest of Anna’s taped texts, with great care and objectivity, e.g., even helping to explain with truncated sentences or words 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’k*.” 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 1963.

At one point Krauss observed that there seemed to be no Eyak equivalent to the plentiful supply of auxiliary verbs in English indicating unexplained obligation, such as “I must/should/oughta/gotta/hafta/better go,” which Lena agreed Eyak seemed to lack. When Krauss pressed her on this, she answered, “Well, I guess then you’d have to say what’ll happen if you don’t go.”

Toward the end of the intensive fieldwork period, Krauss was calculating that he had salvaged or resurrected a very large proportion of the Eyak vocabulary left in living memory. He had tried his best to not only to write down what was offered, e.g., randomly in texts, but also, of course, to get as much as possible through guided elicitation, of two types. First, 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 is elicitation guided both semantically and phonologically. A first and most obvious subtype of that is checking previous Eyak data. By 1963 Krauss had a copy of all the data noted above in this long history, including by 1964 also Li’s and Austerlitz’s. 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 Y?”, 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, and, of course, 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 via 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.—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.

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 “words” by the permissible order of permissible sounds that the language might allow: “do you have any word that sounds like X (meaning anything)?”—in order to look for allowable sequences not yet attested as words or parts thereof. This of course involves many thousands of possibilities, as if systematically going through English, getting to *g-d* (*god, good, goad, guide, gad; goood? gowd?, gid?, geed??, ged??, gud?? . . .*), 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, Krauss offered a bonus for each new stem so discovered, and with a week of such tedious work, Lena came up with about 50 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.

### Marie Smith Jones

Marie Smith Jones (née Stevens) was the youngest Eyak speaker and is now, age 88, the last speaker of Eyak. The first to work with her was Austerlitz—as Li was able to work with her mother and father. 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 is more limited to household conversation, which she kept up with her mother until her death in 1961. She considers what is conventionally referred to as “deep talk” beyond her. Since 1961 she has used or spoken Eyak mainly with Austerlitz and Krauss, as she did not speak that frequently with her older sister Sophie. Since Sophie’s death in 1992 Marie has worn the mantle of “last speaker” with grace and dignity. Krauss worked with her in 1963 especially, also in 1964 and 1965, then again in 1980 to do some belated checking of verb classes (by checking what conjugations can be used with them), which she helped greatly with. She continues to help to the best of her ability with remaining questions which occur to Krauss.

### Sophie Borodkin

Sophie Borodkin (née Stevens) was largely bypassed by both Austerlitz and Krauss, in part because there were speakers easier to work with in Cordova in the 1960s. Austerlitz advised Krauss that because of her situation at the time it was hopeless to try to work with her. However, much later, in 1987, Krauss found her to be in substan-



tially better condition and spent a very productive week working with her in Cordova. She had a certain amount of new vocabulary, and perhaps most important, she was able to use and explain some very important absolutely basic, but infrequently used (or infrequently elicited!), forms of verbs. Finally, working with Sophie, Krauss learned also, or rather confirmed for himself, that every remaining speaker of a language in a situation like that of Eyak is potentially the source of important new information and insight.

### Mike Sewak

Mike Sewak's name came up only when, after considerable insistent inquiry, Lena was moved to say, "maybe Mike Sewak still knows some Eyak." Sewak, too, was glad to be approached, and tried his best in spite of being not only quite blind, but fairly deaf as well. Like George Johnson, the only other male Eyak speaker after the 1950s, Sewak was born in Bering River village, maybe a dozen years earlier than Johnson. That village gave way to the development of Katalla, and was already thoroughly bilingual Eyak-Tlingit, if not dominantly Tlingit-speaking by 1900. After the disintegration of Katalla in 1912, there would certainly have been little occasion for Sewak (or Johnson) to speak Eyak. Sewak seemed 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/ was more like Tlingit (or European) *e* than everyone else's (which was more like the English *a* in *bad*), no doubt due to Tlingit influence. Sewak's Eyak was far rustier than Johnson's. Most important is that Sewak had two separate sounds, a *g* and a *gw* that were consistently distinguished in his speech, whereas in the speech of all other modern Eyak speakers, those two originally different sounds are no longer distinguished. It is not clear whether Sewak still distinguished them exactly as they had been in the old language, whether a given word had *g* or *gw*, but, since Tlingit still clearly distinguishes them, under that influence Sewak kept or somehow reinstated that distinction in what he remembered of Eyak. In 1963, 1964, and 1965, Krauss visited Sewak, and 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'ts*," i.e., 'my tongue is \_\_\_\_\_,' which Krauss had to take to Lena to understand: "Oh yes, that's an old word I haven't heard in years. It means 'stiff'." In other words, in the very act of complaining to Krauss that he felt tongue-tied, Sewak salvaged another Eyak word (to boot, prob-

ably a good cognate with one in Athabaskan meaning 'hard').

## Chronology and Results of Krauss's Eyak Work

The first phase—intensive—of Krauss's Eyak work began in 1963, when he determined to make that commitment himself, and ended in 1970. During that entire period, Krauss 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. His Eyak research, as had been his more general projects of 1961–1962, was funded entirely by the National Science Foundation throughout. The period then can be subdivided into 1963–1965, during which he combined (phenomenally!) productive fieldwork during the summers, with work-up and preparation for the next field season during his "spare time" in the winters. A fairly clear record of that can be found in Krauss's field notebooks, annual reports, and proposals to NSF. Reviewing the reports and proposals not only reassures Krauss that a decent record of that history remains, which it is not necessary to detail here, but it also reminds Krauss how lucky he was in those days to work as productively in the field with these Eyak speakers as he did, being reminded that his repeated claims of success were, in fact, true. He is profoundly grateful to them.

The 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 was spent in Cordova and Yakutat, with Lena, Marie, Sewak, and Anna; for a grand total of barely half a year in direct contact with Eyak. The days averaged between five and nine hours of actual fieldwork time. This was only possible because of the good will of the speakers, on the one hand—most especially Lena's patience, and because Krauss 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 an actual 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 12 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 very systematically the prepared enquiries in order to fill out the noun-classes and derivational potential of the verbs for the lexicon. By that time over 1,100 stems and basic elements 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. The sum total of connected text was decent but not abundant, about the total length of the Book of Genesis. 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 language itself—though coverage of possible Eyak oral literature was, of course, another matter.

In view of all this, in summer 1966 Krauss decided to draw the line, not to return to field-work, but, having ledgered the third summer's results (now a file of 4,000 sheets), to begin composing the Eyak dictionary from that. In 1964–65 he had published a sketch (Krauss 1965), 20 printed pages, of the grammar, which remains almost entirely correct as far as it goes. That remains to this day the only published grammar for Eyak, but Krauss then felt and still does strongly feel that the dictionary and texts, as prepared in that second part of the intensive period from 1966 to 1970 along with the ledgers, do readily provide the information necessary for someone, with a start from the 1965 sketch, to construct a rather full detailed grammar of Eyak, whether Krauss lives to do that himself 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, Krauss first typed all those texts, numbering 80 (including duplicate versions), on a typewriter with specially designed characters for the relatively technical alphabet he was then using. These include the one brief text in Reynolds's hand from 1933, the eight from Li in 1952, the three from Austerlitz in 1961, and the rest dictated to Krauss by Lena (27), Marie (14), and Anna (1); and the largest part by far coming from Anna on tape (24 texts, itself about 6 1/2 hours of speech). The total percentage of that text corpus from Anna is over 70%. The sequence is arranged by and divided into the categories of Raven Cycle (pp. 66–222), Animal Tales (pp. 223–441), Land Otters (pp. 442–476), Mythical Beings (pp. 477–543), Cautionary Tales (pp. 544–579), Legends of People (pp. 580–674), Wars (pp. 675–700), Witches and Shamans (pp. 701–726), and Miscellaneous Ethnographical (pp. 727–912). The format is double-

spaced, 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. The main editorial devices are 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 very exactly what is on the tape, while reading in the brackets and leaving out the parentheses, one gets the fully edited text. This work was done May 20–December 10, 1966.

The dictionary was organized and first handwritten from the ledgers and typed—perhaps the first third—by Krauss, the rest by Irene Reed, during 1967–1969. The writing-out and typing was only 90-some percent complete with mainly the verbs ('singular goes,' 'plural go,') classificatory plural object verb stems and various other items listed in the foreword to the typescript. It fully includes 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, of course, been checked.

The work was typed double-spaced on approximately 3,300 pages (with perhaps 200 pages to go), Eyak-to-English, technically organized, by stem. It was also provided with an English-to-Eyak index, on about 10,000 file-slips. Krauss figured then and still believes that that dictionary (when finished) will include well over 90% of the lexicon left in living Eyak memory as of the 1960s, perhaps in the high 90's—and of course as time goes by, sadly, it will necessarily become 100%. An estimate of the number of lexemes or entries is perhaps about 7,000 in a fairly strict sense, not a bad score for a language in the relic-like state of Eyak. Coverage of subjects like kin-terms, for example, is 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.

Krauss is 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 (no explanation), thus

no dictionary, and no grammar were available—only whatever happened to get mentioned. The Old Testament is an amazing 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, linguistic—Eyak is documented better than Hebrew was not so many years ago, leaving in principle the technical possibility for reviving Eyak too, insofar as Eyak also might ever have the social resources.

During his sabbatical at MIT 1969–1970, Krauss had both the Eyak texts and dictionary materials Xeroxed, 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 page 760 (plus the German and Russian for Rezanov, ending on page 782). That work was thus physically reduced to just over a ream of paper, printed in fifty copies, which could be bound in a single portable volume. Given that Krauss's personal goal was and remains the documentation itself, preservation of the record rather than publication as such, especially where the real need in the academic community is felt by a small number of persons and the number of those interested now remaining in the Native community is also small, Krauss felt that this specialized need was fulfilled, more or less, by the very limited form of publication made in 1970. More complete publication had not only the roughly 200 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 Krauss, that resulted in the postponement of a final edition of the dictionary.

By the late 1960s the political scene was changing for Alaska Native languages. In 1967–1968 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 the course added to the University Yupik curriculum called “Yupik Language Workshop,” where “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. By 1972 the result was Alaskan legislation mandating Native language use in schools and the establish-

ment of the Alaska Native Language Center with Krauss as Director in Fairbanks. Priorities of the new opportunities and obligations severely limited Krauss's time for Eyak for the 29 years he headed the Center.

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 Krauss in 1971 transcribed as 14 pages of text. In 1971 Krauss was able to return to Yakutat (June 9–12) for more fieldwork with Anna, which included 50 more pages of text. Krauss was then able to check that with Lena in Cordova on June 13, his last session ever with her. The next year (June 14–18, 1972) Krauss had what turned out to be his last meeting with Anna in Yakutat and recorded 82 more pages of text. For the final editing of that, without Lena, he was now on his own. In 1973, Jeff Leer and Karen MacPherson taped about 40 more minutes of text from Anna in Anchorage, another 13 texts, then transcribed by Krauss. All told, these supplementary texts from Anna add about another 20% to the corpus.

Also during the period 1964 to 1981 Krauss wrote about ten academic articles and monographs on Comparative Athabaskan-Eyak, in which Eyak figures prominently, of course. These can be found listed in Krauss's recently published bibliography (Krauss 2006).

By 1980 it had become clear to Krauss that probably the most severe shortcoming of his Eyak work was that he had neglected to define clearly the different classes of verbs in Eyak according to basic criterion of which different conjugations are used with them in the present according to whether they are active, stative, progressive, etc. In summer of 1980, May 27–29 in Anchorage and June 16–19 in Fairbanks, Krauss was able to go systematically through a large proportion of these with Marie, who rendered a major service in filling in this gap. This had been a shortcoming on Krauss's part, and Marie's fundamental grasp of Eyak was exactly what was needed to help with that.

In 1982, on the occasion of Anna's death, Krauss 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 as carefully as possible 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 form. Krauss 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; and they are not merely suffused with her own personality, which is of course what gives traditional oral literature its artistic quality. In fact—and this is a point not adequately presented by Krauss in 1982, in spite of the fact that he had been pondering Anna's stories for years in efforts to understand them layer by layer—since Eyak society was long 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 no longer any traditional or 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 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 she is speaking to the world, as only Anna can from her Eyak perspective, about such matters as the fate of nations, good, and evil. The book is offered in deep humility to the memory of Anna and to Eyak. Krauss also remembers with great pleasure and cannot resist quoting Freddy's remark to him, "that's a good book."

During the 1970s and 1980s, Krauss was of course preoccupied with the whole Alaska Native language situation, including, increasingly, the fundamental relationship with the same and related languages in the North, now especially Russia—a relationship which had been almost totally cut off by the Cold War. Finally, however, in 1989, Krauss was able to return to Cordova, June 20–24, to work with Marie's sister Sophie, for the one and only time. That too was a pure delight, just getting to know Sophie and to hear Eyak from one more person. Moreover, as noted above, the Eyak Sophie remembered proved to include certain very fundamental verb usages which had not been elicited from anyone else, and which cast significant light on the basic system of Eyak verb classes.

In 1990, Krauss made a long visit to Lenin-grad, in part to visit Soviet archives there, which contain still the bulk of the Russian work done on Alaskan languages. There he had the pleasant surprise to find three "new" Eyak language manuscripts, Anonymous 1810, Baranov 1812, and Khromchenko 1823, described above. These of course provided just that much more inspiration to write the present history. Virtually all the material in them could be fairly readily identified from the rest of our data, but they provide interesting conti-

nity to our history between 1805 and 1839, with Eyak declining at Yakutat, and becoming prominent in the Cordova area instead.

We now come to 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. Krauss has remained in touch with her, has visited her 15 to 20 times during the period between 1992 and 2006, and has often spoken to her on the phone. The relationship has become, of course, increasingly social and personal, but there are Eyak work sessions too, bringing new information and understanding. Krauss recalls, with unending amusement, that one of his early proposals to NSF, ca. 1963, noted, with sincere concern, that there were very few speakers of Eyak left, "and the youngest of them is already quite elderly," referring of course to Marie—who was then 45 years old and seemingly quite ancient to Krauss, then 28. Marie was, moreover, afflicted with a terrible hacking smoker's cough, and did not seem long for this world. Forty-three years later Marie still has the hacking cough, but is more often worrying about Krauss's health than the reverse. Krauss could feel some satisfaction should Eyak outlive him. He is in fact determined that in some important sense the Eyak should indeed outlive both himself and Marie (Fig. 11).

The Eyak Preservation Council, a fractious Eyak Indian splinter group of the Eyak Village Corporation, under the leadership of Dune Lankard of Cordova, grandson of Lena Saska Nacktan, with the help of Carole Hoover and others, has been militating to prevent the destruction of Eyak traditional lands, especially by logging. The Council has also moved to provide support for the preservation of Eyak history, culture, and language. It has particularly engaged the talents of Laura Bliss Spaan of Anchorage, to do videotaping where possible of Marie speaking Eyak with Krauss on a number of occasions. One such occasion in particular was in 1995, when a memorial potlatch of sorts was held in Cordova to mark the return or repatriation from the Smithsonian of an Eyak skeleton. Freddy was there, 65 years after her fateful visit of 1930. Dune Lankard's message was made clear, and Freddy, Marie, and Krauss were somehow put together in a very touching film by Laura Bliss Spaan, entitled *More than Words* (1995, 60 minutes) and featuring the situation of the Eyak language. Since then, Laura has filmed Marie and Krauss several times, and has also filmed a series of presentations by Krauss on the Eyak sound system, writing system, and how to use the dictionary, as well as basic grammar, both for the record and for practical purposes for anyone wishing to learn Eyak or to use the extant materials.

The Eyak Preservation Council also supported the digital reproduction of the entire pa-



**Figure 11. Marie Smith and Michael Krauss in 2006.**  
Photograph by Molly Lee, courtesy of Michael Krauss.

per archive, patiently and devotedly done by Karl Bergman, of the Eyak section of the Alaska Native Center Archive. As this is the ultimate record and result of all the work that has been done on Eyak, it deserves description as the final section of the present history.

The Eyak archive fills an entire five-shelf bookcase, containing about 15 linear feet of written material. All the material previous to Krauss, i.e., Anderson 1778 to Austerlitz 1961, fills the top shelf. The contents of that are, in fact, well accounted for or described in some detail to constitute most of this history. The second shelf from the top includes Krauss's 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 third or middle shelf contains 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 Krauss of various aspects of Eyak grammar, phonology, verbal affixes—done mostly between 1963 and 1969, stem lists, studies in format for a final published dictionary, and supplementary texts from Anna.

(Those materials, to 1980, are catalogued and described in Krauss and McGary 1980.) Some of that spills over to a fourth shelf, or the second from the bottom, that is occupied mostly by files of historical material. In this respect the Eyak section is exceptional for the Archive, in that Krauss has collected—though not catalogued—not only all linguistic material he could find for a given language, but here also historical, not necessarily containing anything about the language, partly because of his special interest in Eyak but also because such material is relatively limited. That part is in seven substantial files, 1783–1789, 1790–1799, 1800–1867, 1867–1879, 1880–1889, 1890–1899, and 1900-. The bottom shelf is occupied mostly by the dictionary ledger-concordance files. 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.

Krauss does hope he may last long enough to publish more on Eyak, even edit a final version of the dictionary. More importantly, however, he feels that with the preservation of this archive, a full and worthy record of the Eyak language and intellectual heritage of the Eyak people will be preserved for future generations to study and cultivate. It is an interestingly unanswerable question, how much of this would exist today, were it not for Frederica de Laguna.

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Addenda to Krauss 2006 History of Eyak Language Documentation and Study, especially with a view toward republishing as front matter to Eyak grammar book.

Marie Smith Jones, last native speaker of Eyak, died January 21, 2008, at her home in Anchorage. With her death on that day the Eyak language became extinct.

In view of the following, it also appears that Marie Smith Jones was indeed also the last surviving person of full Eyak ancestry. The second-last was Evelyn Dude Navarro, long of Juneau, who died there September 24, 2004. She was the daughter of William and Mary Dude, born in Cordova October 23, 1928. Krauss had interviewed her once in Juneau, to determine if she spoke any Eyak, and concluded quite confidently that she did not. She had been reasonably forthcoming and cooperative, but as far as Krauss can remember, did not appear even to understand any Eyak. As her obituary in the Juneau Empire also shows, she had no strong interest in her Eyak background. This may in fact reflect negative attitudes toward it.

As noted, with the death of Minnie Stevens, mother of Marie and Sophie, in March 1961, any regular conversation in Eyak ceased, just before Austerlitz and Krauss arrived on the scene. Therefore, the youngest persons who could even remember hearing spontaneous use of the Eyak language would by now have to be close to 60 years of age.

Reviewing his 2006 article, Krauss can offer some further perspectives on that history. The history can be divided rather neatly into four periods which are surprisingly distinct according to the nature of the primary data collection, dated and labeled as follows: 1778-1803 "Exploratory Incidental," 2. 1805-1862 "Formal Russian Vocabularies," 3. 1867-1933 "Ignorance/Incidental," 4. 1933-2007 "Linguistic documentation."

The first period, 15 years of initial exploration (Anderson 1778, Walker-Strange 1786, Malaspina 1791, Tarkhanov 1796, Davydov 1803) produced records of one to eight Eyak words or phrases, essentially on an accidental basis, not counting Purtov-Kulikanov 1794 census personal names; 6 sources in all, the first two from the Cordova end, the next four from the Yakutat. From external sources of this period, and up to a dozen glossed forms, we would know that Eyak was a separate language, but data would be insufficient to determine anything more.

The second period, 60 years of Russian colonial contact (Rezanov 1805, Anonymous 1810, Baranov 1812, Khromchenko 1823, Wrangell 1839, Furuholm 1862) produced a remarkable record of no fewer than six known formal vocabularies, all explicitly of Eyak as such, the first three from the Yakutat end, as Eyak approached extinction there, the next three, and of course all work after that, from speakers from the Cordova end. Rezanov was by far the largest, 1138 items, but the succeeding five (285 + 86 + 96 + 81 + 161) total another 709, all of course with much duplication. Documenting however poorly, perhaps us to 15% of Eyak lexicon, 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 suppression of the language itself. The only documentation was foreign and incidental, Jacobsen and secondary German scholarship,

personal names in Russian Church records, continuing since the 1840s, and the American tycoon Harriman's 1899 phonograph cylinder, lost.

Finally, de Laguna's visits of 1930 and 1933, when the youngest Eyak speaker was already 12 years old, touched off the period of serious modern linguistic documentation of Eyak, by a series of four professional linguists, Harrington 1940, Li 1952, Austerlitz 1961, and Krauss 1961 to present. With Reynolds and Birket-Smith, de Laguna collected ca. 600 words and phrases from Galushia Nelson and Old Man Dude, one short text; Harrington ca. 1500 words from George Johnson; Li ca. 2000 words (and 2000 slips, partly overlapping total) from George Johnson, Anna Nelson Harry, Scar and Minnie Stevens, and eight texts from George Johnson; Austerlitz perhaps 4000 words and phrases from Anna Nelson Harry, Lena Saska Nacktan, and Marie Smith, one text. Thus by 1961, perhaps 35% of remaining Eyak lexicon was documented, and something approaching that proportion of Eyak grammar was philologically decipherable. Finally, Krauss 1961-2007 recorded ca. 30,000 words and phrases and ca. 100 texts from those last four speakers (Johnson, Anna, Lena, Marie) plus Mike Sewak and Sophie Borodkin, completely checking the previous corpus and quadrupling it, including as much information as possible from living memory for a comprehensive grammar of Eyak as well as lexicon.

Correction of details on extinction of Yakutat Eyak. According to de Laguna 1972:79, 227, 261-270, 1990.195, and Grinev 1989.5., 2005.146, 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, after an unsuccessful attack on the Eyak fort k'udELt'ihXL on the Situk River in winter 1805-6, then in 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 advance of Tlingit to the north.

Addition to Purtov-Kuliakov 1794. It is unfortunate that I obtained somehow only the last 6 leaves. ll. 12-17v of the RGADA ms. L. 12 appears to be that last page or 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 'kopiia'. On ll. 12v-13 is the census of Tattleia, (chief Sal't'khu), done in "May," no day date. Tattleia, a village for which 72 names are listed, is otherwise unknown. It is an Eyak village which Grinev figures to be in or near Comptroller Bay, where the expedition spent the period 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 Tattleia 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 Tattleia or 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 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 Tattleia (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 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-Kulikalo 1794 expedition. Grinev understandably states that Purtov and Kulikalov took a census at Kaliakh just as they had at Tatileia, 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 so in the RGADA ms. One might therefore think the Tatileia and Kaliakh censuses are somehow one and the same. However, the actual Tatileia one has chief Sal't'khu, with date "May", while the purported second one, Kaliakh, has chief Tskek" and date June 3. (In any case it is hardly excusable that in writing the history I forgot the list is from Tatileia, not from Kaliakh, as I had clearly annotated on the Xerox I have of ll. 12-17v.) The resolution to this question, if there is to be any, will have to wait until I can see the missing pages of the narrative in RGADA ms. ll. 6-11v.

To here dated 12/15/08. Addendum 6/17/09

Retabulation shows that the total Eyak text corpus, including supplementary texts (adding about 13% to the earlier total), shows a count of ca. 450,000 to 500,000 characters in English translation. That 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 page 210 of the 2006 article, that the text corpus was only the size of the Book of Genesis alone, a serious miscalculation. Not including the supplementary texts of course does not account for such an underestimate.

Other corrigenda to 2006:

p. 173[, column ]B, l[ine ] 7: insert space between 'a: and k'e:'shAw

p..124A l 28: insert number of entries, 'the ca.120 entries'

p. 210B l 19-20: change to: with the exception mainly of the verbs 'singular goes', 'plural go', 'handle plural O', classificatory...

Addendum 6/1/10, too near the end of p. 198 or after first paragraph on Li, p. 202.

Harry Hoijer wrote the introduction to *Linguistic Structures of Native America*, 1946, a book which included his own sketch of Chiricahua and Li's of Chipwyan. In that introduction, p. 12, Hoijer provides an interesting and representatively quaint statement, the only one we have which sums up the state of knowledge about Eyak among knowledgeable Americanist linguists during the period from 1938 until Li's fieldwork in 1952. It must come from some awareness of the 1938 book and what Hoijer somehow had heard in 1934 or later from Sapir (who died in 1939). Hoijer's 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." By 1946 Eyak was remembered by 10-12 people. -- Harrington's 1940 work, in spite of his 1941 statement in the *Smithsonian Annual Report*, was presumably unknown to Hoijer, as it certainly was to de Laguna and Li, as late as 1961.

## GRAMMAR, Intro comments

Include update of 2006 history of study of Eyak

History of my own grammar work. At first of course grammar as well as lexicon, but 2<sup>nd</sup> and esp 3<sup>rd</sup> main session lexical as I approached deadline, especially because of comparative value for NaDene, given that grammar was easily shown cognate even w TL, but lexicon the challenge. Then my priorities had to change and broaden, lg. communities, others' work, statewide resp., development of ANLC, SLI viability, archive, endangerment. UAF "role," constant struggle, usurping my energy as all speakers died, so never got to go over everything for grammar questions and further fieldwork on grammar in time. Finally gave up w ANLC, back to NSF for others' work, and only back to Eyak as Marie was too old, dying, before concentrated even partly back on writing grammar, 2008?.

Good philologist, so getting used to what is now philology on my own work. Gave up writing "unfortunately/ alas" about "inadequately investigated" on every page. Point out gaps, but be glad so much is there. Sort of hoped pure quantity and luck would cover everything. Inflectional morphology very nearly so, exc. e.g. 'iLu'#'u' - > "iLu' - ?. Derivational morphology pretty good but many questions, yet still better coverage than most (all?) Athaskan lgs. Syntax most poorly covered in field, and put off to last in grammar, if I can work long enough, trusting a lot to texts, after old tradition, I hope not too foolishly. (Syntax not heavily exploited in Eyak style, loose rather than 'tight') Doing philology on my own notes, often end up spending disproportionately much space on a very few forms to fill in gaps.

Never had training for any kind of fieldwork. Had sense to date each day and identify informants. Too early to tape easily, only for text from Anna. Would have been valuable for sessions, esp. though for speakers' sureness, and esp. because I didn't have the sense, worst fault, to record negative responses, no word for, can't remember, can't say \*... But do believe in phonemic transcription as adequate for grammar and lexicon.

Lg. dead for spontaneous conversation. I felt not arrangeable, logitically, best most outgoing Anna in Yakutat, could have paid for her to come to Cdv. During busy summer? Winter had to teach in Fbx., grant money? Lena, Marie, Sophie personal relations, difficult, drinking, my own social engineering limits and tech. limits. Didn't happen until too late for me and Marie with Laura Bliss-Spaan.

Need to calculate from field notebooks exactly how many hours I had with speakers 1963-4-5, much less 1961, later Lena 1 or 2 days 1971, Anna 1971, 1972, Sophie 1987, Marie throughout. Probably not a total more than 16 wks x 40 hrs those 3 years = 640 hrs + max 60 hrs = 700 hrs. Equiv to ideal "living", say 12 contact hrs/day, max 2 months. No spontaneous conversation to hear or participate in ever. Was just getting fluent enough myself, because of spending all the time I had not taken by UAF duties immersing myself in working on my matls., to speak, especially w Anna 1971-2, though had to yell because of her deafness.

Grammar can write only informally, feeling way along linearly in a multi-dimensional realm. Organizational problems as they come.

Technical or editorial jobs for editor. Type in present orthography, but convert to technical? L to barred l, A to shwa, G to small cap G, X to underdotted X, n to nasalization, ' to dotless '?, digraphs same as 1970? Stem-shwa to e? All shwa to e or a? qa''a- vs. qa'a-, da-'waX, etc?

Heading and subheadings style. Numeration therewith? Especially for cross-refs. Pull those out by global search for 'above, below, chapter, (sub)section'.

Consistency: of date styles, - -, //, numbers/numerals etc. Above all terminology, much more, including final format. I realize I write block-paragraph run-on style where many others give example and lists in vertical or tabular style. Hard for me both because of natural proclivity, avoid waste of white space, flexibility instead of uniformity, and maybe most because of uneven style of commenting on each item, sometimes most entries more than one line long with comments.

Cross referencing by chapter titles and numbers, subsection titles and numbers, etc., and references to other works, especially Eyak dictionary or my own other articles, all needs doing in standard consistent style.

Tendency initially to write long turgidly constructed sentences, which I only inconsistently get around to fixing. Eg. sentences more than 3 lines long still need to be broken up.

I'm writing in a lot of very tentative things, including also aside comments, in double-bracketed bold italics, not only of dates etc. that need to be filled in, but also comments on grammar-writing that need to be collected or considered here or throughout.

Likewise very inconsistent or informal about mixing diachrony with synchrony, putting historical/comparative wherever I feel like it. Believe history explains more than synchrony can?

I've left out documentation of what speaker, most of the time, except where I considered that relevant or desirable, also whether elicitation or text. That can always be found in the dictionary. Maybe it should be added into the grammar text, but I left that out. Also Very inconsistent on post-1970 data, should consistently add ref since that's not in the dict or ledger, or should be added to ledger. MOST of the grammar data are checked only from the ledger, except where I remembered I'd specifically investigated that post-1970. Further, what's in the ledger (so in the grammar from there), does give the text-sentence number references in the ledger, but I never copied those numbers into the grammar. Also, the dictionary is "faulty" in not rewriting and including in the entries themselves many of the textual occurrences, just writing in the text-sentence numbers, so leaving out many of the more contextually more interesting examples, but consistently including all the elicitation instances. The ledger, but not the dictionary, shows all the multiple attestations, e.g. MMLMLAMLLMSG, but the dictionary only (max) LMASG.

Neither the ledger nor the dictionary shows the original field notebook number and page or date, which would of course be the ideal for getting the original and original context of everything. I confess I've never gone back to the 1960's notebooks to check further. The 1960s' ledger was done during by best days and sharpest memory, I trust it, and it seems to do a decent job of including comments like "L prefers x" "unsure of" etc.

"Confession" of how much later insights as I do grammar. Both appalling and amazing. Couldn't see forest for the trees, even in some phonology, e.g. l~N rule, \*qw-A-'- prefix business etc. Lots of satisfaction, along w casualties, -ts'u-, 'iLu'-u'- etc.

Completeness of extant documentation issues.

1. Need to include all my own post 1970 fieldnotes or transcriptions.
2. All Li and Austerlitz also. A big job. They were certainly carefully gone over for lexicon, but not for grammar. True, they won't yield much grammar, as they include probably no systematic investigation of grammar that I hadn't done, but there could be something randomly there to fill in a blank, and at least some more statistics. Only other speakers represented there are Scar and Minnie Stevens a bit in Li.
3. Other earlier works to be included a complete "concordance/ledger" or databgase corpus are
  - A. 1810 anonymous,
  - B. 1812 "Baranov" and
  - C. ca. 1820 Khromchenko, though carefully gone over, likewise
  - D. much of Harrington 1940, likewise gone over for lexicon, and not likely either to include anything additional for the grammar.
  - E. For the record also the pre Rezanov shreds mentioned in 2006.
  - F. Somehow I suppose also all the 1794 personal names, and names from the Russian church records, but that really belongs somewhere in a supplement to the dictionary, as most of that can't be identified. Need to mention here too that my own place- and personal and dog/cat names got lost in the move to Brooks, but that those got scanned before and are on the discs, primary material. The unanalyzed names need to be added to the dictionary itself, presumably even those clearly of Yupik, Tlingit, or other origin. Nothing for the grammar in those, though
4. There is some chance that there may be some more linguistic data in the de Laguna missing original notebooks at Guedon's, and certainly more background data in those we should have. Needs to be followed through.
5. There are several recordings to transcribe, not yet done.
  - A. The 1899 Harriman cylinder, which efforts should still be made to find.
  - B. Some Austerlitz tapes, including that of the 1 text he transcribed and I reconstructed. But A reports, somewhere in the Xeroxed notes I have from him, at least a few minutes from Marie(?) he didn't get transcribed.

C. I don't think Li made any tapes, but that needs to be checked. All the texts he transcribed from George Johnson I reconstructed, but conceivably they're on tape. UW? UH?

D. Laura Bliss-Spaan has copies of all videotapes, including outtakes just as importantly as the rest, of Marie speaking. That includes, incidentally, one of her not with me but on a TV program telling a story in Eyak while in fact reading (visibly, at least partly so) from my 1970 transcription (of one of her own short texts). All of that I still need get from Laura connectedly, to transcribe.

Need to say something about examples, why not usually specified who from, (that's in dictionary, ledger, and field notes. Also, the ones I made up myself, "presumable", \*?

Why no paradigms as such, fully written out: difficulty of defining "paradigm", artificial, arbitrary, redundant, to do that for all persons, reflexive, reciprocal, indefinite, indeterminate, - inh, -inu:; causative, passive, derivations; too many variables. Maybe could "construct" "full" paradigms, but didn't seem appropriate to actually go through those redundant motions in the field, but better to get the rules and key items needed for different types.

Need to say something about status of glosses, convention ' \_\_\_ ', not literally what speakers said in English, but interpretation of what they said, in my own English for glosses. Sometimes include exactly or more exactly what they said in English in double quotes. Use of ( ) complex and not consistent, extra info supplied, but sometimes meaning optional, etc.

Certain things done loosely, e.g. phonological variants ignored where not relevant, gu or gA, glosses simplified or picked for relevance, etc.

For editor. I tried to avoid starting a sentence with Eyak words or even English glosses. That could be changed if we end up with special typefaces for Eyak (e.g. bold) and/or glosses. Sometimes tried to avoid widowed hyphens at end of line, or parentheses, but gave up 6/10 with view that all those may be changed anyway, and it'll be editor's job in the end to avoid all kinds of widowing anyway.

FURTHER COMMENTS elsewhere (originally at end of Neuter imperfective)

Late recognition of inadequate insights during fieldwork period. better late than never. Now it's just philology.

One reason for poor understanding of verb theme classes was interference from unrecognized class-shifting derivational processes, which gave impression of much more looseness and variation in conjugation-choice, vagueness obscuring classes. E.g. some Neuter imp also Active imp, from usitativization. Check. esp 4. above. Full recognition



of conjugation-choosing derivations as such came only after Marie could hardly work, 2006 or 7.

“Dynamic hodgepodge” applies to grammar generally

Statement needed on use of English tenses: e.g. “the Eyak Neuter imperfective IS...”

Further comments on glossing,, use of S, O, it/he/she, <, <<, or ( ‘ ’), rel in relati

To pull together all unanswered questions, global check of “unexplored possibility, systematically investigated, question asked, potential productivity, attempt to elicit, check(ed), etc., unfortunately, alas”

Likewise for cross referencing, global checks on above, below, section subsrction chapter file

## GRAMMAR REMAINING

Eyak grammar remaining to write: morphology. Perspective July 21, 2008. May 24, 2009. Italicized material done. Can be omitted from list.

So far done: 1965 sketch, need to redo, integrating with recent work 2007-8  
*Recent work done on basic verb conjugations (inflectional morphology) and conjugation choice: 1 imperative, 2 optative (less finished), 3 desiderative mode, 4 conditional aspect.* Need to integrate imperfective and perfective aspects from 1965.

*Recent work done on nominalizing derivations, or deverbalizations: 1 gerund, 2 instrumentals, 3 acquisitional. (Relativization is partly covered in instrumentals, but rest if it needs coverage in syntax. Done in noun file.) This then covers a large part of what's needed for the formation or morphology of nouns and noun-phrases, beyond the basics covered in 1965. Recent statement on noun-compounding (relatively limited) is now done. 11-10 Nouns now done too.*

New statement needed on verb prefix template and zones. Outline follows here

Zones There are four zones, each with its own semantic and functional unity: A. Object, with problematic details on 'i(dA)- and k'u-. relative positions. B. Directive and 'future' qu'-. C. Thematics/qualifiers, including -i:lih and qA-. D. Conjugation markers, Subject, Classifiers and \*ngyi- Zones A and B each have a maximum of 2 subpositions, Zone C has 6, and Zone D has 4. There are overlappings and metatheses between some subpositions, but only one instance once of such between zones (B directive and C2). 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, C5-10, D11-14.

Zone A. Direct objects, inflectional, 1s xu-, 2s 'i-, 2p lAXi-, k'u- indefinite (also as subject), 'i(dA)- indeterminate (co-occurring with k'u-, order problem).

Zone B. Directive (u)'- and 'future' qu'-. historically related, co-occurrence problematical, with strong phonological parallels between the two, in spite of (superficial) semantic and functional differences, the directive being derivational or thematic, the 'future' inflectional. -- Zones A. and B. covered in 1965 and in "Some thoughts" and "Further comments" files; now also complete "Directives" file..

Zone C. Subdivided in clear order, and all derivational 1. -i:lih 'mental', 2. qA- 'plurality' of subject, object, action ("promiscuous"), 3.-6. gender, anatomical, thematic; 1. and 3.-6. do not co-occur. 3.: ti-, qi-, ku-, Xu-, djAXA-, lAXA-, k'ush-, ch'a:n-, tsin'-, as incorporated reduced anatomical nouns; then 4. y-, gw-, G-, then 5. d-; then 6. l- (, s-?); order of X- problematic? X-lX-, X-dl-, but dl-X- too. -- Qualifiers (Zone C3.-6.) are extensively listed/sorted in 1968a ms file; see also 1965 and 1968 articles; for -i:lih see dictionary 1970, but qA- 'plurality' needs statement.

Zone D. Subdivided problematically, with interaction and metatheses 1.-4. 1: conjugation markers GA-, a'- A-, 'i- clearly, sA- very partly; then 2: subjects 1s x-, 2s (y)i- ~ zero, 2p lAX-; then 3: sA- mostly, (y)i- neuter/optative partly; then 4: classifier +/-L+/-D, but +D-i,- always. -- Covered in 1965, and 1969, sonorant monograph, recent

files for conjugation markers. Whole zone zeroed out in instrumentalization, gerunds, acquisitional, see recent files.

Stems. Basic shapes of canonic stems. C, only some pp's: -d, -tl', -X, -q'. CV~ (where C includes zero), verbs only. CV/~ (i.e. CV' in perfective), verbs only. Invariable CVh, CV', CV:' nouns and verbs. CVC and CvC, nouns and verbs. CV: nouns only, and only from PAE \*CVR?

*Disyllabic sonorant-internal "broken" stems partly covered in sonorant monograph, CVRV(C), but not entirely, e.g. CvRV(C) yes, where V2 is v, Vh, V', V:, but CVR- not clear, eg. ch'i:leh 'raven', di:ya' 'saltwater', cha'nik'L 'funny', i.e. CV:R-, CV'R? Definitely no CVhR-. Covered in VRV stem file*

*Stem-final CC (obstruent cluster) is mostly covered in recent file, important revision/expansion of 1965 statement, but it still leaves some interesting questions for PAE.*

Partial statement can be made about closed-stem variability for the few cases of CVhC ~ CV'C, needs doing. Open-stem variability covered by 1965 and recent mode/aspect files, CV~, CV/~, irregular Le/, le/, and le.

Documented and in need of listing and analysis is CVC reduction to CvC, e.g. verb Xe'tl' 'get dark', XAtl' 'night'. Expansion is mostly covered, all v > e:, but partly conflicting e.g. before -g, -k', or in -'i:L- 'pour' by late changes, or inauthentic? More study of data needed.

Much in 1960s files about phonetics and phonemic status of reduced vowels in stems, especially schwa (vs. I), supplemented (superseded?) by recent file "note on phonology".

*Suffixation well studied, e.g. -L perfective, -X perambulative, -g repetitive, -X desiderative, -G negative; -inh, -inu: relativizers Further listing/study of other X's needed. Few thematic negatives, recent list lost, redo. Done, along with all negation.*

Preverbs and postpositions (pvpps). Reflexive 'Ad may be only item of ambiguous status as preverb, basically disjunct but elidable? 'Adu' directive strictly conjunct. 'iLu' reciprocal strictly disjunct? Along with da:, qa: 1pl., q'e' then rightmost except for ~ q'e:-? Files from 60s extensive and important for internal morphology of pvpp stems and final elements (d X ch'), but study of that needs to be written.

*[[Verb theme classes and subclasses. Sketch recently written in 2 files, but needs consolidation of statements and filling out with more exemplification. Full list of Active statives (s-perfective, over 100) had been made but was lost. Least important to redo. Full lists of Neuter (imperfective) statives (70-some) and Inceptive (perfective) statives (50-some?) also had been made but were lost, redone too incompletely, and need to be redone again. May 24,2009. Active and Neuter perfective statives redone, together.]] Neuter imperfective redone. Inceptive perfective statives redone. Thus all statives done, redone.*

*[[Verb derivations are of 2 main types: nominalizing/deverbalizing (relative, gerund, acquisitional, instrumentals, covered in recent files), and non-nominalizing: A. Neuter, Inceptive, Active derivations, which require the verb theme to be Neuter imperfective, Inceptive perfective, or Active imperfective, respectively; also B., derivations which do*

*not specify theme-class, e.g. directive, valence raising and lowering with classifiers, indeterminate O, and of course Zone C prefixes.*

*The 2 Neuter derivations (anatomical and liability) need to be more fully listed with the above. All Active, Neuter, and Inceptive derivations done. May 24, 2009..*

*Inceptive is basically a single type, creating motion verbs of actives, with the idea of moving along while acting, or acting for a long duration. Well documented in the corpus, but needing statement with examples.*

*Active derivations are 7: 1) Persistives, need to list, including thematized persistives. e.g. 'yawn', and persistives of open stems e.g. xwe: 'I swim, insist.' from Sophie. List of ca. 60? was lost and needs to be redone. 2) Customary: study of optional 'A- prefixation for customary needs redoing, and expansion other than to e: further studied, as noted above. 3) Repetitive: breadth of use through conjugations and levels of thematization of repetitive needs to be studied (morphology simple, no special prefixes, confirmed). 4) Perambulative was covered in 1965 and some recent mode/aspect files, but needs basic statement. 5) Usitative: statement and examples on usitative needed e.g. 'a:nd xteh 'I sleep here', and further as noted in recent file on instrumentals. 6) qAXA- 'bit by bit'. 7) Perambulative, with yAX +D-stem-(X).]] All Active, Neuter, and Inceptive derivations done, May 24, 2009.*

*[[Full listing of directives (60-some) lost, needs to be redone, different shades of meaning and levels of thematization, relation to verb theme class, etc.]]-- Done, in latest file, August 2008.*

Predictable derivational use of classifiers partly covered in 1965 and 1969, but further statements needed, e.g. valence-raising L- with acquisitionals etc, instrumental o-X, displacement or serious change in shape of O, causatives; use of o-d in causatives, passives; valence-lowering D- with passives, reflexives, reciprocals. indirect reflexives, indeterminate O, q'e' in intransitives and 'eat', others?, reciprocals e.g. 'iLch' O-Xe; dA- rather than LA- in passive for instrumentals; middles; -L- with some nouns, etc. Then further study of thematic classifiers to top that off!

Thematic (Zone C) prefixing/derivation covered in 1968a file needs workup and integration into derivational "system," in need of better definition here.

*Interrogatives; de: what, du: who, da: where, k'e: how, dAXk' how many (lAXk' wAXk'), "when", tla:X etc., plus -chi:- etc., plus -d(-), chapter needed. All done.*

Minor categories: numerals done, demonstratives, adjectives (suffixal, e.g.- 'lAw, -kih) done), adverbs, exclamations, dA- 'ipse', miscellaneous 'i-, GA-, sA- prefixes, -G (-tl'G, 'ehd-G), -X suffixes need listing.

Enclitics: sh-series, q'-series, d-series, combinations sh-d-, sh-q'-; these plus -Aw, -Al, -uh, -unh, -unhnu, -unhAw;-shA-, -dA-, -q'A-, -shdA-, -shq'A-, these plus 'Aw, 'Al, 'anh, 'ahnu:. Chapter needed. Then syntax.

11-8-10. See "afterthoughts" to Inceptive perfective stative, most especially need to reconsider approach in Morphology of viewing all conjugational GA- and 'i- verb prefixes to be same morpheme, as attempt to see single meaning in either of these seems to be highly misleading, considering the difference in their use with e.g. imperative, conditional, customary, etc.

## 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.

### Intonation

Eyak is not a tone language, nor does it have distinctive pitch or even stress accent. It has intonation, of course, but that has not been studied as such. First, a few comments on intonation. Sources for that are on the audio recordings of Anna, some video also late from Marie, and from accent markings throughout Li's notes. Li obviously had an acute ear for tone, was looking for it, found none, but continued marking for pitch. Those markings deserve study. It would be interesting to see how they confirm what is remarked here. Intonation/breath groups are implied by both the line division in Krauss 1982 Anna texts, and by the comma and period use in Krauss 1970 text transcriptions. There is nothing complicated or distinctive-sounding in the Eyak intonation curve. Emphasis itself is marked by the enclitic marker system, especially the q'-emphatic or focus particle series, rather than by English-like stress and pitch phenomena.

In other words, again, Eyak phonology has minimal interest in prosodic distinctiveness. The distinctiveness or contrasts in Eyak are highly segmental. Pitch and energy are highly predictable from the segments. Length of vowels is contrastive, so defined outside of prosody and not notably affected by it; there are no geminate or long consonants.

### Syllabification

Syllables in Eyak can be directly counted by the number of vowels. 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. Thus in modern Eyak the differing outcomes of historical -AwA-, for example, are quite clear. (Here slash is typed for accent mark.) In 'AwA'ah/dah 'thank you', 2<sup>nd</sup> shwa is clearly present, contrasting with a \*'Aw'ah/dah. Even in the highly irregular dA'wAX (~ di'wAX) 'still, that very way', there is no trace of the etymological shwa 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 "connective" -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 shwa is present or absent in a given form.

For syllabification, the problem, if one wishes to call it that, is the division between syllables divided by more than 2 consonants, often the case, where the line would be arbitrary. In sa'yahL 'is situated', where C2 is a sonorant, though the morphological segmentation is saA-'yahL, the syllable division is very clearly sa'-yahL, and sa' - is closed (so underlying shwa is full /a/). The "closeness to the surface" of underlying-historical 'AwA-X is what permits the highly anomalous modern dA-'wAX, not \*da'wAX. This, plus the somewhat irregular or unusual phonology of the verbal future

prefix \*qWA-' - > qu' - ~ qa' - ~ -qe' -, so producing qa'-'a'ch' > qa'a'ch' contrasting with CA-'a'ch', is all that really justifies transcribing shwa as /A/ contrasting with /a/ (or /e/). There is in fact some really good argument for writing ("underlying") <a> for shwa in prefixes (e.g. sAtahL but sa'yahL), and as <e> in stems (because shwa regularly expands there to /e:/ in the customary). Doing that, all that would need to be disambiguated would be covered would be writing qa''V- for those futures and da-'wAX for that one adverb; the variant di'wAX leaves an unanswered question, whether in this one form there is a possible contrast between [di'wAX] and [dI'wAX]. In any case, the prosodic difference between reduced and full vowels is very important. That subject will be resumed, in connection with syllable weight, after the following point, which belongs in the basic phonological statement.

There can be no sequence of two vowels at the phonological surface of Eyak. Preventing this are rules such as epenthetic ' in qa:'a: 'for us', y and w in siya: for me' and 'uwa: 'for him'; underlying shwa is deleted before stem vowel, as in GA-a:-L 'is walling along' > Ga:L. Further, 'A-te:-uh 'handle it!' > 'Ate:huh. It could thus be argued that no word synchronically can end in a vowel; even final V: could be considered to end in inaudible /h/. Possibly a word ending synchronically in a sonorant, e.g. k'u:y 'wind', which in Rezanov is regularly written with final [a], was vowel-final, but no longer; see section in phonology on sonorants (current file VR(V) stems).

### Stress

For the prediction of phonetic stress or stresses in a word, syllable weight is most important, then also position in word and evidently the morphological criterion of stem. Stress is defined by greater energy and especially higher pitch on the vowel of the stressed syllable, except when that syllable is final. (Stress itself does not lengthen a vowel.) The big distinction for this prediction is between heavy and light syllable. The only light syllables are open syllables with reduced vowel. As there are no synchronic stems that are open with reduced vowel, all light syllables must be affixal. Given the general morphological structure of Eyak, light syllables are therefore mostly prefixal. Light syllables have less prominence, here called stress, than do heavy syllables in any given position in the word. There must also be some differences between varying levels of heaviness, probably V: over V' or Vh, and number of consonants or obstruents in the coda, however those are to be divided, but those differences must be relatively minor compared to heavy as opposed to light, and the other factors of position in the word and morphological status of stem.

Certainly in single word utterances -- which also make up a disproportionate share of the corpus! -- it is clear that word-final syllables, so also declarative sentence final syllables, characteristically have lower pitch. Here again, the vowel with the highest pitch or prominence will be written with / following. Where penult and final are both heavy, there is a markedly lower pitch on the final, higher on the penult, so e.g. ch'i:/leh 'raven', di:/ya' 'salt', te'/ya' 'salmon', sa'/yahL 'became situated', ... 'a'/t'u:G 'is not (so)'. This may even be the case when the penult is light, e.g. XA/wa: 'dog', sA/dahL 'sat', gi/yah 'water', ts'i/yuh 'black bear', ts'i/yux 'mosquito', ch'i/ya'tl'G 'frog', si/yahL 'I came', dA/leh 'said'. However, this final pitch lowering disappears e.g. with (-)da:X 'and' (itself a stem) added where the heavy final is transparently the stem, so then sAdahL/ da:X,

dAleh/ da:X, siyahL/ da:X, but probably not XA/wa: da:X, gi/yah da:X or even ch'i/ya'tlG da:X. (In ch'i:/leh da:X, di:/ya' da:X, te'/ya' da:X, the highest pitch does not move to S2 either.) There is thus apparently a distinction between syllables that are stems and those that are not.

Thus, there arises a question whether there may be a possible contrast in stress between disyllables that are clearly light prefix plus stem and those that are not clearly such, e.g. especially disyllabic (sonorant-internal) stems. There was some attempt to test this in the field, e.g. XA/wa: 'dog' as opposed potentially to k'uma:/ 'a mother' (< k'u-ma: < \*k'u-w-a:n), especially in non-final or non-isolated position, e.g. XAWa:dzu: 'good do' and k'uma:dzu: 'good mother', but insufficiently and with inconclusive results. It does indeed seem, however, that the contrast between k'umah 'se lion', giyah, or XAWa:, on one hand and k'uma: alone, on the other, or in e.g. 'Aw XAWa: sAsinhL 'that dog died' and 'anh k'uma: sAsinhL 'that mother died' is phonological as well as morphological, however unsure or marginal.

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- is the stem instead of the original morphological segmentation lA-xah, usitative 'it grows'. The same might apply to a possible contrast in Lila:' 'man', marginally(!) contrasting with LAni:'kih 'boy'.

It follows that in lexicalizations, where the etymological stem is no longer recognized as such, there is a shift, as in lAxah/ to li/xah. Thus k'u/leh/ 'something is happening', potentially contrasts with k'u/leh 'rain'. Further, etymological \*tsa:/lAyAX quh/ 'pl. (legs) stay under rock' > lexicalized tse:/le:Xquh 'octopus', not -quh/. Likewise ke:/Lta:g(yu:) or ge:Lta:G(yu:) 'seal(s)' < ?, but where the stem was probably -ta-, stress not -ta:/g. In the case of qe'/yiLteh(/) 'whale', however, still at least somewhat transparently < qa' yi-L-teh 'it is (always to be found) lying dead up out (of the water)', the stem may at least potentially be stressed.

There may be some rule required also to predict stress or prominence in sequences of more than 3 light syllables, e.g. the unusually long opaque stretch GAIA/XAIA/Xah 'tadpole', where -Xah is not treated as a stem. This is not \*GA/lAXA/lAXah(/), possibly due to some iambic meter or footing. In 'ugulAXAde:L/ 'its spine' already, however, the stem-stress evident on -de:L, even if not further identifiable, prevents the establishment of such metrics as \*?'ugu/lAXA/de:L/.

Otherwise, aside from the relatively marginal problems cited here, stress in Eyak is quite predictable, as falling on stems (always heavy) and on heavy syllables, much more than light (affixal only, open with reduced vowel).

In opaque sequences of heavy syllables, again considered here in isolation, there is a further noticeable pattern, of highest pitch on penult, e.g. q'ahdi'/lah 'goodbye, de:qi:d/Ga:G 'jaeger', and tle:sh/Xa:shi:sh/Xa: ~ 'dragonfly', the last probably because of a footing pattern established by the penult stress, and/or alternating syllable principle. Therefore potentially also tse:/le:Xquh/ 'octopuses'. That principle cannot apply to ni:ga:/dAshe: ~ 'kingfisher' because -dA- is light.

Closed syllables outweigh footing in 'uch'AXA/LyA/XdA/X

## STEM-FINAL CQPUQPCPV CLUSTERS

The system of morpheme-internal stem-final obstruent CC clusters given in Krauss 1965 needs to be revised. 1965 listed only x X plus ts' ch', and velar/uvular g k' G q' plus s sh, without including laterals. These two groups need to be expanded to 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: s sh L plus 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 of Xk', but lack of e.g. Xt', Xk', xt', xk', xq' makes one wonder about the canonicity of Xk'. The issue of these clusters is important 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, also + coronal (front) vs. - coronal (back). Allowed are thus back fricatives plus front ejective affricates, front fricatives plus ejective stops, back stops plus front fricatives.

Here follows the list of instances for all possibilities of each of the 3 cluster groups:

### **xts'**

ta'xts' 'special treebark, tree sp.'

Le'xts'-L 'wart'

### **Xts'**

LA-gAXts' 'be sticky'

la'Xts'-L 'star'

### **xch'**

(lack probably fortuitous)

### **Xch'**

dAmAXch'-L, qAmAch'-L 'rotten spot in ice'

-Guhd-XA-L-chAXch'-L 'kneecap'

-qAmAch' '(top) spins'; -IXd-qAmAch' '(child) stares at someone'

k'u-L-quhXch'-L 'lamp chimney'

O-L-XA'Xch'-g/X 'tickle O'; GA-LA-XA'Xch'-L 'dimple'

### **xtl'**

-Le'xtl' 'urinary bladder, gallbladder'

### **Xtl'**

GAXtl' 'swan'

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**gs**

gugs-g 'louse'

**k's**

(lack probably fortuitous)

**Gs**

LA-GAGs-g 'curl; get numb in extremities'

**q's**

-yA-L-tsaq's-g-L 'fingers', O-L-tsaq's-g 'cut O into fringes'

d-dA-si:q's-g '(dog) whines, whimpers'

sa:q's-g 'dulce' (TL Laq' Asg)

**gsh**

ch'ugsh-g 'skunk cabbage roots'

k'igsh-g 'plant' sp.', dla:-k'igsh-g 'berry sp.', var. k'ik'sh-

q'Ama:-lA-k'i:ngsh-g 'dry salmon roe', LA-k'i:ngsh-g '(scab) dries', lXd-LA-k'i:ngsh-g  
'sth. be wrong with eyes',

k'ahgsh-g 'scab', LA-k'ahgsh-g 'have scab'

-k'i::ngsh-, see -k'ik'sh-

we:gsh-g 'ulu'

**k'sh**

k'ik'sh-g see k'igsh-

k'i:nk'sh-g, k'in'k'sh-g, k'I'k'sh-, see k'i:ngsh-

d-LA-k'ik'sh-g 'squeak', var. -k'i:nk'sh-, -k'in'k'sh-, -k'i'k'sh-

**Gsh**

-dla:X-t'e'Gsh-g 'unripe berries'

dlAGsh-g 'dirt, mud'

-GAGsh-g 'be lopsided, flared', LA-GAGsh-g 'limp'

q'AGsh-g 'gristle'(?), LA-q'AGsh-g '(pelt) dries', lAXA-L-q'AGsh-g 'dogwood berries'

**q'sh**

LA-Gi:nq'sh-g 'squeak'

Ge'q'sh-g 'earwax'

O-L-yAq'sh-g 'pry O (mollusk) open'; O-lXd-L-yAq'sh-g 'rub O's eyes'

**gL**

(perhaps some unrecognized)

xa:gL 'work', dA-xa:gL 'work'

**k'L**

(perhaps some unrecognized)

k'e'k'L 'mink'

cha'nik'L 'funny'

**GL**

(perhaps some unrecognized)

djahGL needle'. O-djahGL 'sew O'

ts'AGL 'graphite' (Yakutat Tlingit ts'AGL)

dAdzahGL 'cane'

-dAXAGL 'gunwhale'

**q'L**

(perhaps some unrecognized)

-ga'q'L 'throat, neck'

**st'**

tl'ihst' 'devilclub'

gust' 'flames'

ka:st' 'storm, blizzard'

kAle:st' 'cross' (< TL kAne:sd, cf. 'squirrel')

**sht'**

chi'isht' 'fly eggs'

**Lt'**

(lack perhaps fortuitous)

**sk'**

duhsk' 'fallen(?) riverbank'

Le:sk' 'plank'

kAwAsk'-L 'canoe paddle', kAwAsk' (Rezanov, Anna)

**shk'**

duhshk' 'snipe, shorebird'

lA-GAshk'-L 'post, pole'

kushk' 'Steller's jay'

ka:shk' 'humpback salmon'

**Lk'**

-lAXAdA-L-t'ahLk' 'eyelashes'

-lXd-LA-t'a'Lk' 'flutter eyelashes', -G-LA-t'a'Lk' 'flutter wings'

Gl-dA-tsa'Lk' 'peck at ground', Ga:n-tsa'Lk' 'sparrow'

-ts'ahLk' 'throb', -gu-L-ts'ahLk' 'tailbone'

tsALk' 'squirrel' (cf. PA. \*tse:-lEG; TL tsALg, cf. 'cross')

**sq'**

qehsq' 'moonlight'  
 -IA-wahsq' 'temple (of head)'  
 -ni:sq' 'nostril'

**shq'**

(lack probably fortuitous)

**Lq'**

Le'Lq' 'down feathers'  
 xan'Lq' 'very'

Miscellaneous other clusters:

t'AXs. t'AXgs 'cottonwood' (from Athabaskan, t'AghAs)

-ts'ehXk' 'inner side of pelt'

chi'iyat'l'G 'frog' (cf. Athabaskan ch'a:tl')

tl'e'tl'G 'salmonberry sprout'

tsi:tl'G 'seaweed species?', < ts'i:(n)tl'Ga:leh 'crane, heron'

-l-tl'I'ts'G 'crown of head' (LLA, -G-d A, -0-d M)

-t'e'ts'G 'grip for'

tl'Ats'g 'snot, gelatin'

tsin'tl'g 'ashes, soot'

O-L-ts'in'tl'g 'slap O'

ts'a'tl'g 'drop', but -ts'a'tl'g 'drip' may be thematized repetitive

-djitl'g 'navel'

Cf. 'ehd-G XAwa: 'female dog', -'ehd-GA-yu: 'relatives on wife's side', -lah-G 'inhabitant' etc

qi:-dA-qe:tl'G 'barefoot' (negative, -qe:-tl'-G?)

Reviewing the three main groups, particularly the expansion of the system to include laterals, results appear mixed for the first group, but good for the rest. In the first group, back fricatives plus ejective affricates (front), there is only one item for each of the new possibilities: xtl' in 'bladder' certainly belongs, but Xtl' in 'swan' is adiffusion.

In the second group, back stops plus front 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 reexamined. We do have at least one kind of strong confirmation of the validity of KL clusters in the repetitives of 'sew', -djahGLg, and customary -dja:GLk', where the segmental order shows the -L-treated definitely as part of the stem

The third group, front 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' and tsALk' instead, confirming that -st' and -sk' are canonical stem-finals, definitively required(!), -sd and -sg being permissible only if morpheme boundary intervenes.

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 6 reduced (including 3 disyllables, here only) and 5 V', but 1 hXch' in that strange 'lamp chimney', and no V: at all' With back stops plus front fricatives there are mostly reduced (11) and long vowels (9), including 1 Vhg, and only 1 V' before G k' q' each. Most surprising is the third group, where in spite of the ejective stop, most common is Vh, 9 instances (4 of V:, 5 of reduced), and 4 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 4 of these with Athabaskan. Cognates are well attested for 'tickle' and 'ulu', where C2 is reflected, and for 'fly eggs', where C1 is; for 'plank' cf. Minto -lEsr and Hupa Le:sch'(!). Diffusions (4) are 'squirrel' Ath. tselEx, Tl. tsALg, 'swan' Tl. GAXL', 'humpback'; 'cross'.

In the miscellanea, -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 of course plentiful enough, given the free use of -g 'repetitive' on nouns as well as verbs, 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.

Further, -ts'ehXk' looks authentically native Eyak, suggesting that there might have been more CC's of the XK' type, back-back, just as the fricative plus ejective stop group with -t' allows front-front. Thus, hypothetically, either the first and third groups could be combined, so any fricative plus any ejective, stop or affricate, or the subgroup implied by -ts'ehXk' could be combined with the third, so any fricative plus any ejective stop, as done in the following maximal table. 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 5 more clusters lacking examples, as listed at the outset, so then 9 lacking examples of 33, the 5 more all of one subgroup, back fricative plus ejective stop. The -tl'G group expansion would add 4 to a dozen examples, but 2 clusters lacking examples out of 6, so

then a total of 6 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, a trait which 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.

#### MAXIMAL PATTERN OF ATTESTED AND POTENTIAL CC CLUSTERS

Attested clusters bold, "potential" starred italics

<b>xts'</b>	<b>gs</b> <i>*k's</i>	<b>ts'g</b>	<b>st'</b> <b>sk'</b> <b>sq'</b>
<b>Xts'</b>	<b>Gs</b> <b>q's</b>	<b>ts'G</b>	
<i>*xch'</i>	<b>gsh</b> <b>k'sh</b>	<i>*ch'g</i>	<b>sht'</b> <b>shk'</b> <i>*shq'</i>
<b>Xch'</b>	<b>Gsh</b> <b>q'sh</b>	<i>*ch'G</i>	
<b>xtl'</b>	<b>gL</b> <b>k'L</b>	<b>tl'g</b>	<i>*Lt'</i> <b>Lk'</b> <b>Lq'</b>
<b>Xtl'</b>	<b>GL</b> <b>q'L</b>	<b>tl'G</b>	
			<i>*xt'</i> <i>*xk'</i> <i>*xq'</i>
			<i>*Xt'</i> <b>Xk'</b> <i>*Xq'</i>

### FKJ NNCDK'CPF'UQPQTCPV/HK CN STEMS

There are least 2 types of Eyak stem that are more than monosyllabic. First are the disyllabics, with medial sonorant w m l n y between the syllables, second syllable 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.”

#### Disyllabics

All Eyak stems are monosyllabic, with the exception of about 80 stems which are disyllabic with a medial sonorant. That at least many of these stems are monomorphemic in origin is clear both from internal and comparative evidence, internal alternations such as -XAw'a's ~ -Xa:s 'itch', -shiyah ~ -shah 'bad', -ch'Alih ~ -ch'a:n- 'forearm', and comparisons such as q'Ama: 'roe' with PA \*q'un', ch'iyahd 'hat' with PA \*ch'AXd, kAna's 'wolverine' with PA \*(nEL-)chwin's < PPA \*kwen's. These are discussed at some length in Krauss and Leer 1981.93-97, 124-142. – Reviewing that, most of what I “rediscovered” in 2010 is already there, with minor differences in the statistics. For the moment, I shall not repeat that account in the grammar here, as it is well done there.

Further conclusions, not shown in 1991, might be that the T-series initials may have *no* true VRV stems, and that the TS-series, with 7 VRV stems, probably belongs with the other affricates TL- and TSH-, also having only VI/nV and VyV nuclei, no Vw/mV. The velars and uvulars, on the other hand, have all 3 basic sonorants, Vw/mV, VI/nV, and VyV, in relative abundance. This is especially so for w/m, given that both series are mergers, of \*K and \*KW, \*Q and \*QW. The statistics for each series, in the order w/m l/n y, are respectively T 0 0 0? (= 0? total); TL 0 4 1 (=5), TS 0 3 4 (=7), TSH 0 4 9 (=13); K 10 2 5 (=17), Q 14 9 6 (=29).

Further statistics for the sequences of RV (first vowel always reduced, A with variants Iy- and Uw-) are as follows (where full vowels are Vh, V', V:, V:'): li 2, le 2, na 9, nu 2 (= 15); w/mi 3, w/mA 10, w/ma 8 (= 21); yA 3, ya 13, yu 5, yi:ny 2 (= 23). Observations on this are that lA is absent because VIX results in V:nX (nasalization), presumably m and n are from w and l with nasal flowing, and w/mu and yi are absent. The most common V2 is a, after w/m, l/n, y, respectively, 8 9 13 (= 30); then A 0 10 3 (=13), even with 0 after l, for reasons noted; then, with no wu or yi, u 0 2 5 (=7) and i 3 2 0 (=5). (The 2 instances of k'Ayi:ny 'other' (~ k'inh) and q'Ayi:ny 'fog' are probably from nasal umlaut, < \*-ya:ny, where the absolute final y may be secondary; cf. the several instances of tsi:(n)(y), and Lila:' 'man' ~ LAni:'-kih 'boy'.) Note also the absence of w/me and ye, the only 2 instances with e being le.

There is a questionable residue of 9 items of the form CV:RV, some of which may be monomorphemic in origin, some not. The status of these needs to be determined, if possible by comparison with Athabaskan, in order to define fully what is canonic for Eyak stems.

Of these 9, 7 have medial y, and 2 have medial l. None have medial w, or m or n. Even with a corpus of only 9, the sequences seem severely limited, e.g. to 2 instances, strangely enough, of -e:yu', 2 of -i:ye:-, 2 of -i:ya'(-), 1 each of -iyA-, -i:leh-, -a:leh-. The only 2 items with any u are the rhyming tl'e:yu' 'hemlock' and ch'e:yu' 'wild celery

turned to wood'. Nothing, other than that both are plants, suggests any analysis. The only items with any e, beside the 2 preceding, are tsi:ye: 'industrious person' and di:ye:X- 'Calm Weather' in di:ye:X-tsi:y 'Calm Weather's daughter', also the only 2 items with both vowels long. The 2 with -leh are birds, ch'i:leh 'raven' and ts'i:tl'Ga:leh 'crane, heron'. Here -leh might of course be identified with the most frequent verb stem in Eyak, 'act, happen, do'. Though that would then leave ch'i:-, and at least -Ga:-, both unidentifiable. There are 3 more problematic items with -leh in the list of disyllabic or possible disyllabic stems: -n-dAleh 'horn, antler' (where the-dA- would have to be a classifier, unlikely; also cf. PA \*-de 'id.'), -dAGAleh 'mind' (if to be analyzed -dA-GAleh rather than -dAG-A-leh 'activity above [i.e. in the head]'), and especially Ga:-gAleh 'fish species' (< Ga:-g(w)A(-?)leh?; cf. ts'i:tl'-Ga:(-?)leh). The other 3 instances of this questionable type are di:ya' 'salt water', -xi:ya'X 'chin', and di:yAX 'not yet' (conceivably < \*dA-'e'-yAX 'before the vacant place of indeterminate object').

### “Sesquisyllabics”

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 with final vowel. First the demonstrative alternations as in lexicalized 'AwA-'ah-dah 'thank you', 'AlA-k'ah 'out of bed', 'AlA-sh-gahX 'would that', and in 'wAX 'thus, that way' (< \*'AwE-X), 'lAX, 'this way' (< \*'AnE-X) 'u:d 'there (< \*'AwE-d), 'a:nd 'here' (< \*'AnE-d), XA- yA-'u:d 'yonder', Xi:d 'yonder' (< \*XA-yE-d), XAshlAX 'closer' (< \*XA-shAnA-X), XAsha:nd 'closer' (< \*XA-shAnA-d). Clearly, the dA- 'ipse'-prefixed dA-'wAX and dA-'lAX that do not open the prefix to da'- show how close to the surface the first A of 'AwA- and 'AlA- remains. There is a prior rule that suffixed -X retains the second vowel as A. That operated before the surface elision of the first A. With suffixed coronal, on the other hand, the second A is elided, with the results 'u:d, 'u:ch', 'a:nd, 'a:nch'. The same rules apply to XA-shlAX XA-sha:nd, XA-shan:ch'. 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. 'Aw-X, 'Aw-d, 'Al-X, 'Al-d.

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 6 such primary sources: Rezanov 1805, Anonymous 1810, “Baranov” 1812, Khromchenko 1823, Wrangell 1839, and Furuhjelm 1862. Those will be abbreviated here by the year dates.

### Coda w and Y

The data are as follows, first for stems now ending in modern -w, 19<sup>th</sup> century -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. Most of the material is available in the 1970 dictionary, but 1810, 1812, and 1823 are not.

For demonstrative 'Aw 'that', the only clear instances are 1805 *au-*, as opposed to *u*, which could be either -Aw- or- u-, so also of course (-)u(-). No *auV* was noted; there are

no clear instances in other sources. There is one instance of q'Aw 'that' (focus), 1805 *kego*, to be interpreted [q'EYU], where [E] is a more closed shwa than [A], [Y] is a velar sonorant without rounding, and [U] is considered a reduced vowel in absolute final position, hypothetically not followed by [h], definitely not possible in modern Eyak. These descriptions apply also to the following.

By far the most instances are of -'lAw 'big': 1805 *-liaga* (6 instances; *ia* throughout always the single vowel *a* as following palatalized consonant, *ya*), *-lega* (2 instances), *-liuga* (1 instance), with the *l* heard consistently as palatal, *e* either as *ie* or *io*, so 6 to 8 instances without rounding, 1 to 3 with, always velar sonorant, and always final -A; 1810 *-liaga*, *-lava*, *-lyga*, *-laga-*, and 1812 the first two likewise, probably copied from 1810; 1839 *-lege*; 1862 *-liaga*, and *-lian*, transliterated from missing Cyrillic original, where *n* is a misreading probably not for *g* or *v*, including hard sign, but probably a vowel, hardly Cyrillic *i*, but Latin *u* probably from another missing intermediate ms. 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 *-lege* (where with first *e* might be *io*). The stem might have started to become monosyllabic by 1862. There were variants without any rounding, i.e. [-'lEYA], [-'lAYA], at least to 1862.

Similar phonetics appear to apply to -'a:w 'long', less well attested: 1805 *-aua* (2 instances), *-au-* (2 instances), 1810 *-aga*, 1823 *-au-*; no later instances. The loss of final -A may be earlier than in '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 shA/ 'head' with reduced vowel: 1805 *-shage*, 1810 *-shagi*, 1812 *-shagi*, 1862 *-shag*. Final vowel is high front, [-sha:yI], and there is no labialization through 1862, even as the final vowel is gone. The only other -w final is definitely a loan from Tlingit, wa:w 'herring', from Tlingit Ya`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 *u* except for a distinct syllabic pulse, though he has done so e.g. in 'long'.

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 3 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.

Stem-onset unrounded velar sonorant was also present in some 19<sup>th</sup> century Eyak, perhaps mainly in Tlingit loans such as 'herring'. Further, however, note 1805 *atygaXtu* for 'shallow', to be read 'a'd yiYa'q'-duh 'it's very shallow indeed', modern -wa'q', not a loan. Note also 1805 *kagott* 'belly' \*qa:-YwAt' (Yakutat dialect of Eyak) 'human/our belly', stem-initial sonorant surely rounded, but prominence of velarity still evident. All other instances of stem-initials now *w* were written *v* or *u*, not *g*, implying (Y)w. The contrastive status of unrounded stem-initial velar sonorant was unclear or marginal.

### Coda l

For demonstrative 'Al we have more distinctive documentation than for 'Aw: 1805 *ali*, *ali-*, *ale*, *ale-*, consistently with high front reduced vowel, 'AlI; the same may be in 3



color terms in 1810, ending in *iali*, *eli*, *elli*, ‘this (is) C’ where C is complement, unless those are instead to be read yiLeh ‘it is C’; also 1810 *teituul* ‘what is that?’, probably de:dAw ’Al ‘what is this?’; finally 1862 *alshu* ‘today’, evidently ’Alshuh ‘this one?’, showing the final vowel gone. Especially interesting is 1805 *tsyia* ‘bone’, modern unpossessed ts’Al, possessed *-tsali*, modern *-ts’alih*, where this unique echo of PAET possessive suffix, the modern contrast zero *-ih* appears to be represented as *a : i*, even though ’Al is *ali*, *ale*. The only other instance of *-A* is 1823 *xilia*, 1839 *xilla* ‘shaman’, modern xi:l. Another instance of *-I* is 1805 *kale-* ‘now’, modern q’a:l, and 1862 *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 ‘thunder, lightning’ (also ‘thunderbird’, probably < ‘sudden dance’, originally gerund qa’ ’ig(w)AwIV of qa’ \*’i-g(w)aw/ ‘dance up out’), modern qa’ ’ig(w)a/ ‘suddenly start dancing’, and irregular lexicalized *qe’gu:l*: 1805 *kekoul*, *kagiaul*, 1810 *kkakulu*, 1839 *kagaul*’; here the final vowel *u* of 1810 is colored by the preceding, otherwise gone, and the original *-a-* vowel of the stem is still showing. The only other final *-l* form is a loan from Tlingit: 1805 *xul-* ‘sale’, modern hu:l < Tlingit hu/n; 1810. Here again all 3 variants I A U of the final vowel are attested, it is difficult to determine what the potential contrasts were, if any, particularly in ‘bone’, where there was one in PAE-T, which remains the only instance of one, now zero *-ih*, in modern Eyak.

### Coda y

We have only 3 items from this literature showing coda *-y*: 1805 *k”-uia* (3 instances), *koiu-*, *-k”-oia-* (1 instance each), 1823 *kuia*, *kuie* (2 instances each), 1862 *kiui*, modern k’u:y, but also k’u:ya’lAw ‘big wind’ (rather than \*? k’u:y’a’lAw); 1805 *tsyia*, 1810 *tsyi*, modern tsi:y ‘mussel’; 1805 *tsyia*, modern tsi:ny ‘song’, *tsyieiax-* [tsi:NyEya’X] ‘while singing’. Here too are all three reduced vowels I A U, the U because of the preceding stem-vowel *u*:. Final *i* after a vowel can of course be read *-yI*, so all the forms here can be read with final vowel not dropped. Contrast status is unclear.

### Conclusion

In fact, the contrast status of reduced final vowels I A U here is indeed unclear. The whole range is attested after all 3 sonorants w l y. In fact even *e* or *E* is also attested after each sonorant. A statistical summary table of the philological results of the 53 noted incidences may be of some interest, by vowel transcription of *i e a u*, and zero, after w Y l y, respectively. After w: 0 0 0 4-8, 0-4, subtotal with reduced vowel 4-8, no vowel 0-4, as there is some uncertainty whether to consider *Vu* as *VwU* or as *Vw*; total 8. After Y: 1 2 13 3, 1, subtotals 19 and 1, total 20. After l: 3 3 3 1, 6, subtotals 10 and 6, total 16. After y: 1 3 6 1, 0, subtotals 11 and 0, total 11. Grand totals for *i* 5, *e* 8, *a* 26, *u* 3-7, zero 7-11, subtotals 42-46 all RV, 7-11 R#. Some observations of statistical significance are (A) that final vowels are much more frequent than zero, at least 4 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.

### l ~ n alternations

Though Eyak l is well known to correspond with Athabaskan n, and presumably 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', le:L 'hair'; k'uLdiya:nn (with oral vowel and sonorant segment n) 'grouse' (highly irregular, loan from Ahtna), siya:n (nasalized a:), 'my mother', q'a:l 'now', even 'ists'a:nl 'strength'; ya:nu' 'underwater, underground', presumable ya:lu' 'through a hole in a thing'. In the present orthography, except for the one grouse item, 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, neither following vowel nor preceding vowel, if present, being nasalized. Otherwise stated, n > nasaization of preceding vowel except where itself directly followed by a vowel (i.e. not followed by C or #).

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, in which \*n becomes nasaization of the preceding vowel, or remains n. The sonorant phoneme l in Eyak is merely the denasalization of sonorant n, voiced like all sonorants, and 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 5 lateral obstruents, dl tl tl' L L', but no voiced obstruents, and no voiced l whatever, except in some ideolects, where it is merely a denasalized variant of n.)

There is a general rule, now historic, that n > l/\_\_\_V, though there are some exceptions in word-initial and stem-initial position, reasons for which are by no means transparent. One reason might be, in some cases, that #nV- < \*#nEn-, to be considered later. For the moment, we shall not consider those exceptions. Again, the current orthography used in these grammar files 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.

The very basic rule is that nA > :n/\_\_\_[+cor], otherwise > lA. In principle, it looks better that for synchronic purposes that the alternation rule should start with underlying nA (> lA but > :n/\_\_\_[+cor]), it being a denasalization rule rather than nasalization, l > n. Such an approach is better not just because of the obvious history and comparison with Athabaskan, but also because of "naturalness:" conversion of shwa to length and nasalization between homorganic [+cor]'s, rather than converse approach, nasalization of l. Also because of further rules, e.g. VnEnV > VnV, which is much more natural than VIEIV > VnV!

Further rules regarding specific vowels: e.g. UnA > u:n, e > i/\_\_\_n. Why rule nA > 'i:n/#\_\_\_C[+cor] (specifically i:), but nA > lA/#\_\_\_ C[-cor]. Also dAlA > dla:, > dli:/\_\_\_?. Serious question of "underlying" synchronic A:E contrast may need to be considered. Also E: > i:? *[[Need to rephrase an examine further below. Also next paragraph.]]*

So rules are ordered 1. nA > :n/V\_\_\_[+cor], then 2. n > l/\_\_\_A, better than one single but "unnatural" rule lA > :n/\_\_\_[+cor]. Rule 2. would be very general but we don't want to

start a big bunch of stems with  $n > l$ , because some don't, still starting instead with  $n$ . Do we want to distinguish those as starting e.g. -nink' 'nose', -'nan'd 'lick' but -na'd 'tongue'?! The reality does not lend itself neatly to formal grammar, and a formal grammar is not our goal anyway. Better here to adduce historical explanation, that #nE has 2 outcomes, and stem-initial  $n$  vs.  $l$  is a complex problem that sometimes can't be explained, as far as we can presently see, including an explanation e.g. of the 'tongue ~ lick' alternation, or an etymology of ne:tl' 'soon' vs. le:L 'hair'.

Again, the very basic rule concerns the alternation VIAC ~ V:nC, the latter where C is coronal (obstruent or sonorant). This was not explicitly formulated until recently! 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], more often than -:nC[-cor], and never produces -n:C[-cor] where C is uvular. 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 30 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'). *[[Provide here list or better refs.]]*

### **l ~ n in verb prefixes**

The fully or freely inflecting verb prefix complex of course includes several prefixes which would determine l-n alternations, e.g. GA- inceptive, which for some reason always conditions IA-, without fail. 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, e.g. 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, note li ~ :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, which 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 5 from Anna in text), and "analogical" lAsAtahL or lisitahL 4 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 10 instances of lAsaL- or lisiL-, and only 1 of 'i:nsAL-, from Rezanov. 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 IA- before classifier coronals, we also get IA- before coronal

stem-initials in verbs (if not in nouns), e.g. GAIA<sub>t</sub>in<sub>h</sub>inh, GAIA<sub>t</sub>ah ‘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 lAlin<sub>h</sub>inh ‘he’s smiling’, for example, never li’X \*?’i:lin<sub>h</sub>inh, 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- ‘l’; e.g. along with dik’ li’X lAx<sub>s</sub>liLG ‘I didn’t smile’, dik’ ’i:nx<sub>s</sub>liLG; also ’idah Ga:nxLAl<sub>h</sub> ‘I’m clearing ground’, ’idah Ga:nxLiliL ‘I cleared ground’, dik’ ’u:ch’ ya:nx<sub>s</sub>di’yahL ‘I got stuck there’ (along with ’u:ch’ yAl<sub>i</sub>x<sub>s</sub>di’yahL), ’u:ch’ ya:nx<sub>s</sub>di’yahL ‘I’m stuck there’ (Neuter perfective), q’Ats’ya’ ’i:nx<sub>s</sub>LiAd<sub>z</sub>L ‘I fell into a slough’, Ga:nx<sub>s</sub>di’a:GL ‘I got weak from old age, tl’a’q’ ’i:nx<sub>s</sub>di’ahL ‘I hurt myself bad’, ’Ad<sub>t</sub>i:(n)sdi’ehL ‘I put a shawl on’. It is of course 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, 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 the ‘tide’ item, 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.

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) \*ngy or nasalized y, but the Athabaskan cognate of the Eyak n in question is coronal \*n, not the a 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. Example with reflexive: yAX ’AdI:nLAla’X = yAX ’AdlAlAya’X ‘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 extends 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 'udahd 'u'lisitaHlinh 'I heard him', but also 'udahd 'u'i:nsitaHlinh; from her also, spontaneously, ya'Xu: yAX qu'i:ndAla'X 'don't make faces!', si'uGL lah qu'i:nda'yah 'my heart will beat fast'; and from her the pair 'Adqu'lAXdAtah 'I'll smoke fish' but also, now analogically even before -x-, 'Adqu'i:nxdAtah.

Note further here, also in the file on directives, that in the directives, a third outcome is very common, that the l- qualifier, called "weak l", is deleted altogether, thus e.g. 'udahd 'u'sitaHlinh 'I heard him' (along with 'u'lisitaHlinh, 'u'i:nsitaHlinh), 'iLt'a'X 'u'liditaHl 'it's folded', also '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.

One other type of limitation on -:n- instead of -lA- might be after 2s object (and indeterminate object) 'i-, as in gerund 'ilAxa:g 'raising you' (though there it is also counterindicated by stem-initial velar). This would be in order to avoid homophony with 'i:n- < nA- itself alone. Examples of such 'ilAC[+cor] or 'iliC[+cor] can no doubt be found in the corpus, but perhaps none of 'i:nC[+cor] including 2s or indeterminate object. However, there is very probably no record of deliberate checking for such. *[[Delete this last paragraph.]]*

### **l ~ n in class-mark qualifiers with postpositions**

The l ~ n alternation works quite regularly and explanatorily with the small and seemingly irregular system of demonstratives, 'AwA- 'that, the' and 'AlA- 'this', together with the two contrasting postpositions or postposition-final elements, -d and -X. 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'. While this is so with -X 'areal' and -d 'punctual' as demonstrative finals, it is not so simple with postpositions o-X 'areal contact with o', -d 'punctual contact with o', or with the 3 other non-syllabic postpositions, o-ch' 'to o', o-tl' 'with o', o-q' 'on o'; or with other types of postpositions, including especially those beginning with -l- and with zero consonant.

These 5 non-syllabic postpositions seem to fall into 3 classes in combination with noun-class marking qualifiers l or ending in l, in a way that seems partly unrelated to the distinction [+/- cor] that is basic elsewhere. Here the only 2 of the 5 that behave exactly alike are o-tl' and o-q'. All 5 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 3 requiring lengthening of A to a:, the first 2 not, in an unexpected way that corresponds neither to [+/- cor] nor to [+/- ejective]. With l- class-mark these 5 separate into at least 2 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,  $-gu:natl'$  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  $-dli:nAch'$ ,  $-dli:nAX$  ( $-dli:na'tl'$ ,  $-dli:na'q'$ ).

What is clear here, aside from the probably analogical types like those with  $-lAd$ , all 5 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', or  $si:nAX$   $< *si-nA-nAX$  '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.

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-syllabics, e.g.  $o-da$  'arriving at  $o$ ',  $o-Xa$  'in relation to  $o$ ',  $o-ch'ahd$  'from  $o$ ', as well as others, 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  $l \sim n$  comes closer to following the basic rule with  $[+/- cor]$  than it does with verbs, the most common exceptions being some occasional instances of  $-(A)lA-/_ [+cor]$ . Thus, e.g. with  $'itl'$  'mountain', including special compounds (same rule), we have  $'itl'a:nsinh$  'behind a mountain',  $'itl'a:ntl'in'ts$  'summit of mountain',  $'itl'a:ndaht$  and  $'itl'a:ndAya'd$  place-names,  $'itl'AlAqe'L$  'mountain-woman',  $'itl'a:nt'a:X$  'inside a mountain', but also  $'itl'AlAt'a$  'behind a mountain',  $'itl'lAta:s$  'across over a mountain'. Likewise, with postposition  $o-dAG$  'above  $o$ ',  $si:ndAGd$  'above my head', also  $silAdAGd$ , and  $o-dahd$ ;  $o-dahd$  'pressed against  $o$ ',  $'u:ndaht$  'against his head', also  $'ulAdahd$ .

There is further complexity in the outcomes of  $l \sim n$  before postpositions beginning with the sonorant  $-l$ -, due to the fact that  $*-VnA-nV- > *-VnnV- > -:VnV-$ , so not  $*-V:nV-$ . We shall postpone further discussion of these postpositional instances, in order to include them with the discussion of  $l$ -initial stems and the  $l \sim n$  alternation more generally also in nominal, verbal, and adjectival instances. In fact, the complexity of  $l \sim n$  alternations with postpositions proves to be an excursus in the special case of that before the non-syllabic postpositions.

The question still remains as to the variation  $-a:- \sim -i:-$  in the long vowel before  $-:n-$ , e.g. in  $-a:nAd \sim -i:nAd$ , 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  $CA-$  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 zero  $> i:/C\_C$  with reciprocal  $o-$   $'iL-$ , 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 5 non-syllabic postpositions to add to the complexity. This type of zero > i: shift, plus e.g. -ti:nAX, plus could easily account for the analogical-:- variants mentioned above. The motivation for the dla: > dli: rule remains unclear, but is presumably connected. Finally, there is one postposition with zero initial o-a: 'for o; part of o (partitive)', 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 '3 tables' (d-class). So likewise with l-class mark la'da:na: ch'yahd 'hats' (l class), and la'ddli:na: dla:XA'i:md '2 buttons' (from Marie, though we also have LinG dla:na: ts:a '1 stone' from her, probably less correct). *[[Related also to-a:- ~i:- in imperatives, etc!]]*

### **l ~ n qualifiers and l ~ n stem-initials**

There are about 35 stems with stable or invariable initial l (2 of those with 'l), about 12 stems with stable or invariable n (2 of those with 'n), and about 8 stems attested with the alternation l ~ n (1 of those with 'l ~ 'n). Minor categories, e.g. exclamations, without prefixes, show no alternations, and even show minimal pairs, such as lah 'here (it is)!', nah (obscene insult, Galushiah 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. Statistical summary of these 4, in the order just mentioned: 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', mentioned above, is amply attested, and seem entirely resistant to the alternation, 1s lAXleh, 2s presumably li:leh, and 3s lAleh, lAlinhinh (not \*'i:neh, 'i:ninhinh, or \*'i:leh, or \*'i:nleh etc). The 2pl, incidentally, is la:lAXleh, by another general rule, extending lA-, preventing variation of 2pl lAX-. The one quasi-exception, also noted above, is the gerund, li'X 'i:ni:, spectacularly "regular", < \*nA-ne:-n, unavoidable and/or surviving lexicalized. Further, the lA- of this theme should probably tend to allow l ~ n stem-variation than would a transparent class-mark or anatomical qualifier. Though the lA- is very probably the anatomical 'head, face', so 'act li'X with face' is not entirely opaque, but there is no attested \*'li'X le, and 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 lexicaization.

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 3 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'.

Even more important here is 'lick', because, uniquely, it varies with the possessed anatomical noun -la't' 'tongue'. Whatever historical process produced that one such

alternation in Eyak is now opaque, 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 does not hold so obviously for labial sonorants: there are 20 verb stems with initial w-, and only 1 with 'w-; there is 1 verb with initial 'm but also 1 with initial m; even so, it could be said that the m's have a much higher proportion glottalized than the w's, as do n's than l's.)

Turning now to *noun* stem initials l and n, of the 10 noun stems with initial l, 4 (including -la't' 'tongue') have initial l, 5 are not attested with preceding vowel, some of which could therefore have underlying initial 'l, but only 1, -'lahs 'intestines', definitely has initial 'l. For that cf. Tlingit na's 'id.', possibly a cognate, or a loan (though Tlingit has no glottalized sonorants, making the Eyak 'l harder to explain). The 3 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 < -ni:k-yAq' 'inside of nose'. Given the long vowel, the initial nasal could be explained as from something like \*-nEnk'. Cf. further Athabaskan \*-nE-chEn-g 'nose' < 'face-smell-repetitive'.

There are 2 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 from of the very basic verb 'live, move, camp, subsist (in area)'. It should probably not be considered verbal, at least in lacking the appropriate relativizer, not usitative Active imperfective -linhinh, -linhinu:. This stem has 3 attested forms as -:nah. 2 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', partly opaque, < yA:-nah- ?. There is otherwise no noun of the form 'i:nV- or -:nV- (or 'i:IV- 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, 8 stems can be shown to begin with w, 4 more cannot be found with preceding vowel, some of which could therefore have underlying 'w, but only 1 definitely has 'w, -'we:sh-G- 'maternal grandfather'. The only regular noun with initial m at all is ma: 'lake', but cf. PA \*wEn; 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. In both these, the alternation works with full regularity, even across the glottalization in 'big'. With 'big', most instances referring to l-class nouns show -a:'nAw, with occasional variant -i:'nAw, and (Marie only) -la'lAw. With gl-class nouns we have regularly -gu:'nAw, ti:l- and qi:l- -t/qi:'nAw, dl- -dli:'nAw, anatomical -ku:l- 'belly' and -Xu:l- 'tooth', -ku'nAw and -Xu:'nAw, -Gl- 'land area' -Ga:'nAw. With 'few' we have, with l-, only ya:'a:nuhd and also analogical ya:lAluhdg 'few (of l-class)', and ya:gu:nuhdg 'few people' (with special gl-class mark for humans, used only with this and -t'u' 'many', k'ugu:nt'u' 'many people').

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' ; -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, anatomical 'head, face', and thematic/lexicalized. Here the noun-class marks remain "analogically" lA-IV, whereas the others come out -:nV-, #i:nV-. For 5 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 noun-class qualifier, result 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:lAlah '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 s:inah 'around my head', 'i:nah GAwe:g 'put a headband around your head', 'i:nah we:gL 'headband' (Galushiah Nelson). (These last two show, incidentally the homophony between \*i-nA-nah 'around your head' and \*zero-nA-nAh; thus, presumably, making the first into the usual indirect reflexive, and 1s, 'I'm putting headband on' would be 'i:nah GAXdAwekL.) Not surprisingly, then, a less obvious or more "thematic" or possibly lexicalized use of l- 'head'(?), is 'u:nah 'ixleh "'I think the world of him", 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'uddAGA'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 o-, 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 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:'indzkih 'our brother'. The other, also with zero o-, 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 o-, Neuter perfective causative, here apparently with explicitly anatomical 'head'. Another instance is 'itl'a:nahd sdxutl'L "snow slid down the mountain", so glossed, 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 o, 'i:na:'d 'up on a mountainside, hillside, steep place', in any case all o 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- 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 the file on preverbals and dictionary. 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, whereas e.g. 'i:na:'d < \*nA-na:n'

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-And. 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'-An 'from o', and the most recent point made by Leer *REF* that at least some instances of Eyak Vhd come from \*Vnd, in connection with Dene-Yeneseic.

1. ny in Xa:nliyah, Xa:ne:; also q'/k' Aye:n > Ayi:n > either Anyi: cf. e.g. sinya:n > Ani:, or > Ayi:ny, cf. tsi:n 'song' optionally > tsi:ny ; a/unh+yu: > a/uhnu:, inh+yu: > inu:

also umlaut leh > linhin, linhinu: (including denasalization of V/n, rule orders),  
LAqa:'inh,  
ts'a:nl,  
ch'an'winhin, Xi:nXi(n)h, XA:ngudi:nya:(n)

**for phonology, on n, n-y, etc.**

> -i:nA-, -a:nA-, -i:na'-, -a:na'-; --i-nah, -lA-qa' etc.; also ya:n', yAna:'-, ya:nu', ya:nahd etc.

Also, pv lahdz ~ -:ndz- 'forward', maybe only such case, -l-'lAw ~ -:-'nAw 'big', , -l-luhd~-:-nuhd 'few'. Also where wVn > mV, lVn > nV, V loses nasalization, not \*mVn, \*nVn. So also ts'i:n#+nu: > ts'i:nu: '6 people', neither vowel nasalized. Also leh+ih > linhin both vowels nasalized, leh+inu: > linhinu:, only 1<sup>st</sup> vowel nasalized! 'anh > 'ahnu:, not > \*?'anhnu:, i.e. 'anh loses nasalization?? In same way -inh + nu: not > \*-inhnu:, but loses -h-

Stem-initials not subject to same rules as prefixes or older alternations. Synchronic and diachronic rule ordering, e.g. -0a:n 'mother' siya:n but 'uma: just like \*wAn > ma: 'lake', but qa'winhin 'will swim' not > \*qa'minhin, and 'being strong'-ts'a:nl, not \*ts'a:(n) or \*ts'i:(n). Unique cases of -lahdz ~ -:ndz, also of -la't' tongue', -'na't' lick'. Also pp's -lah ~ -:nah, -la' ~-na', and case of -la: ~ -na:.

Also rule (\*nE-ny >) ny > nl (e.g. Xa:nliyah), related to ny > nn > n in 'ahnu: < 'anhnu: < 'anhnyu: < 'anh-yu:; -inu: < -inhnu: < -inhnyu: < -inh-yu:

In chapter on preverbals-pp's, deep segmentation in X, Xa' Xahd Xa:n', d da' dahd da:n'(?), da:X, ch' ch'a' ch'ahd, ch'a:X, ya' yahd ya:n' ya:X; dAG lAG yAG, dAGe' etc

NOTES 2 1PHONOLOGY, ON REDUCED VOWELS, ETC. 11-15-2008

While for full vowels Eyak clearly has 4 basic timbres contrasting i, e, a, u, for reduced vowels there are only 3, i, A, u. Moreover, the contrasts between the latter 3 are limited, and differ in status between stems and affixes.

In stems i and A contrast clearly after initial '-, without internal evidence of conditioning factor, e.g. 'itl' 'mountain', -'iL 'pour' (<PAE- 'ngy[I]L), 'As 'crab-pot (not \*'Atl' or \*'is, both also easily pronounceable). Likewise -'uG- as in sidA'uGL 'my heart', though there was a PAE \*Gw, there is no (other) evidence for such in any stage of Eyak.

There is a clear contrast also between i and u in Eyak stems with initial or final front velars, but that is related to the fact that there was until very recently a contrast between labialized and non-labialized front velars, especially in the case of g/gw and x/xw, still clear in Rezanov 1805 and in Mike Sewock's memory of Eyak into the 1960s.

There are also clear stable i/A contrasts in preverbals with back velars, e.g. qid 'down off', or 'AdiX 'in(side house)', though at least in the latter there is evidence of reduction from 'Ad-'e'-X '(movement within) own place'.

In stems otherwise, however, where there are no conditioning factors, e.g. between apicals, the i/A contrast is less stable, more artificial, in fact a "polarization" or something sounding more like [I] or more like [A] than anything in between, because of a combination of external factors: namely the reduced i/A contrasts just shown (plus those in affixes, not yet shown), plus that same contrast, quite stable, in both Tlingit and in English. For those reasons, the vowel in e.g. dAL 'blood' mostly varies as phonetic [dAL] or [dIL], rather than something in between, as. e.g. in some Athabaskan.. However, the vowel in the stem -shAsh 'sip' is more consistently [shIsh] rather than [shAsh], because of the palatal quality of sh. The stem in t'Ak'-L 'arrow', however, is either [t'Ik'] or, perhaps less frequently, [t'Ak'], or in fact something in between, sharply contrasting in any case with \*t'Uk'.

At a very different and deeper phonological level reduced stem-vowels might all be written E or even e, since the timbre of full e, low front [ae], is the one that never shows, except when any reduced verb stem vowel is expanded in the customary or persistive, to become full -e:-. (See chapters on Customary and Persistive for details.). It is true that in modern Eyak e.g. -Cux can also expand to -Cu:x instead of -Ce:x, likewise a stem -Cix to -Ci:x instead of -Ce:x, but this may well be an innovation. At the same time, the fact that the Tlingit s'us' 'harlequin duck' becomes in Eyak ts'Ats', i.e. [ts'Its'], never \*ts'uts', is very strong evidence that the i/A/u contrast is of limited status indeed.

In prefixes the contrasting status of the i/A/u triangle is also clear yet limited. E.g. sidahL 'I am seated', sAdahL 'you are/ he is seated', sita:' 'my father', 'ita:' 'your father', 'uta:' 'his father'. There are also three prefixes with initial rounded front velar, xu- 1sg object, k'u- indefinite subject, object, possessor, gu- class-mark or thematic prefix, which when lengthened (e.g. followed by A as in some imperatives) become xu:-, k'u:-, gu:-, showing that the rounded quality resides or remains in the vowel, rather than the consonant. The original rounding in the 1sg subject -x- can optionally show when that closes a CA- syllable, e.g. q'e' GAx(w)da:L, optionally indistinguishable from q'e' Guxda:L 'I'm walking back'. Otherwise, the timbre of -A- in the many prefix sequences

of CA- is the ordinary indistinct or ranging quality, details determined by environment. On the other hand, there is never any doubt of the presence and syllabicity of -A-.

Unlike the case at deeper phonological levels in stems, reduced vowels never expand to e: in prefixes. The most common expansion of A is before the Active imperative, initially 'A-, i.e. presumably -A- in non-initial position. There the result is Ci:, if no syllable intervenes between this presumed CA-A sequence and the stem, and C is not X. If a syllable does intervene (-lAX- 2 pl S, and/or -LA- or -dA- classifiers), or C is X, the result is then Ca:. The rule is in part shallow, though, in that Ca: is a somewhat tolerable alternative to Ci:, and Xi: is a frequent alternative to Xa:.(1/24/09: to intervening syllables should be added 2s subject -yi- in Active imperfective Customary, variant with optional -A-, resulting in Ca:yi-).

This rule may seem to parallel another important rule in the verb prefixes, where the sequence \*CA- must expand to Ci:- in the environment -'\_\_\_(x)(L)stem, for some unclear reason (where CA- is a qualifier [or qA- plural], and the -' is of the future or directive prefix). However, the i: rule applies here equally if C is X, whereas it does not in the imperative sequence. Moreover an unexpanded sequence CA(x)s(L)stem sequence can occur in negative s-perfectives, suggesting that these expansion rules are quite specialized to the specific prefixes in question, leaving us little enlightened about the underlying nature of these reduced vowel sequences. –

1/24/09 Revise the above. A clearer distinction needs to be made between prefixes of the shape 'V- and V- and (V).1. Imperative or optional Customary A-, sometimes written 'A- is certainly just A-. 2. Imperative, Customary, Active conditional, or indeterminate object of verb 'i- is certainly 'i- (not i-). 3. Negative 'A- is really (A-), and 4. comparative Neuter imperfective 'i- is really (I-) or even (A-).

One. Glottal initial for this A- is just secondary, in absolute initial position. Otherwise CA-A- becomes Ci:- or CA:- as shown above, and, perhaps most tellingly, it becomes 'a'- immediately preceding stems beginning with preglottalized sonorant, -'R-, e.g. 'a'ma:t'k' '(customarily) cooks', parallel with sA- > sa- as in s-perfective sa'yahL vs. sAtahL, a very regular and transparent alternation. This is what most convinces one that prefixal schwa should be identified as reduced /a/ rather than /e/. Perhaps because of this, and because of the exceptional case XA-A- usually > Xa:(n)- rather than Xi:-, other instances of CA-A- occasionally > Ca:- instead of Ci:-, analogically. , See conclusion below.

Two. The glottal stop initial of this is stable, such that CA-'i- always > Ci'-, Cu-'i- always > Cu'-, dla:'i- > dli'-

Three. What appears as 'A- in negative s-perfective is really (A-), appearing as 'A- only in absolute initial, e.g. dik' 'AsliLG 'didn't act', as opposed in fact to zero after CV-, e.g. dik' dAsliLG 'didn't say'.

Four. What appears as 'i- in comparative Neuter imperfective (and in Neuter perfectives) is really (i-) or even (A-), e.g. o-ga' 'ixit'eh 'I am like o', becoming zero in o-ga' lixit'eh 'I am like o facially'. The timbre i instead of A might well be only vowel harmony (originally) as in disiliL 'I said' as opposed to dAsAliL 'you said', even though 'you pl are like o' is o-ga' 'ilAXit'eh, which could be analogical.

A concluding statement needs to be made about identifying schwa as A in prefixes, and writing it here likewise as A in verb stems, whereas there E instead would have been

much more appropriate, since there it regularly expands to e:, which it never does in prefixes. In fact, there could be a good argument for writing it orthographically as e in prefixes without bothering to capitalize it (as I have chosen to do for several Athabaskan orthographies, e.g. Tanana, Koyukon, Tanaina). Instead, for Eyak, e.g. in 1982, I chose to write lower-case a for both stems and prefixes.

This entails, admittedly, an underdifferentiation otherwise never pointed out or discussed, but of which I'm keenly aware. That orthography underdifferentiates the full vs. reduced a/A contrast in one way. That contrast in sa'yahL and sAtehL, both written sa-, can still be made by predicting reduction before, -CV- but full before -'RV-, but not e.g. in qa'a'ch' 'pl will go', which should then be written qa''a'ch' so not to be read incorrectly \*qA'a'ch'.

There would be an ideal reality to such an orthography, lower-case a for schwa in prefixes, lower-case e in stems. The fact that e.g. qu'- 'future' is not shifted to qa'- immediately before zero initial in 'sg. go' is obviously connected, qu'-ah > qu'wah instead; cf. qa''a'ch' ~ qu'wa'a'ch' (using the ideal orthography).

There is a frequent shallow alternation in preverbal#verb juncture, related to all this, viz. that in certain frequent Ca'#'V- instances the result is Ca'V- [CA'V-]. Probably the most common are of the type o-ga'#'i:t'eh > o-ga'i:t'eh 'is like'([-gA'i:-], even [-gI'i:-]) and ya'#'ade: > ya'ade: 'sit still!' [yA'A-]. It should be noted that since initial glottal stop for the prefixes is secondary to begin with, these shallow rules are hardly unexpected. In some of the orthographies, I have instead transcribed these results with an umlaut over the preverbal vowel.

The umlaut device comes from one other such rule which seems somewhat less transparent and shallow. In the frequent and irregular verb 'i-le(/) 'have feeling/emation', the 'i- appears to be a thoroughly thematized indeterminate object. This combines very frequently, e.g., with the postpositional phrase o-Xa' 'in relation to o', and with the preverb qa' 'up out, emergent', with the result, perhaps always, Ca'#'i- Ce'- (cf. 3. above). I have often transcribed this with Ca'- and umlaut over the a, hence also the umlaut in the elisions described just above. E.g. 'idah ('well') 'iXe'xleh 'I like you' < \*?'iXa' 'ixleh, or 'ilah qe'xleh 'I love you' < \*?'ilah qa' 'ixleh 'I have a welling up of emotion about ou'. Here, however, as noted above, the glottal initial of this 'i- prefix is not secondary, but the rule is quasi obligatory. Cf. e.g. 'someone loves you 'ilah k'uqe'leh, incorporating the preverb, certainly ahistorical, rather than \*?'ilah qa' k'u'leh, though cf. also dik' 'idah 'iXa' q'e' 'ixdAle:G 'I don't like you anymore'.

2/10/09 – Notes /qa''a'ch'/ does not have released and rearticulated ', but rather ambisyllabic ', so that unless syllable boundaries are marked – not a good idea, that creates at a shallow level a/A “phonemic” contrast.

Also interesting to note that 'will go' is qu'wah and apparently never(?) \*?qa'ah (presumably untested; OK for 'will extend' or 'will handle round O'); nor ever \*qu'ah. Looks like opening of qu'- to qa'- does not apply directly before zero initial – need to check causative O-qa'Lah or O-qu'Lah. In any case either opening does not apply immediately before zero initial, and epenthetic w shows up in this exceptional case, or we have, for some reason, only the choice qu'wA- as in qu'wA'A'ch' (not qa'(')a'ch'), the wA- of course eliding with -ah. Interesting then too that 'will eat' is qu'Xi:wah (not -yah, must be analogical, not phonological), but 'will get lost' is qu'di:yah (phonological).

OTHER AGENDA TO BE ADDED

Need to write chapter on stem-vowel gradation, open and closed, including e.g. Xe'tl' 'get dark', XAtl' 'night'. Status of CV:'(C). Closed stems, especially reductions, survey of whole stem-inventory, and semantics, for any relatable CVC ~ CvC stems. Also expansions, including CVRV, e.g., XAwa's ~ Xa:s, siyu ~ su:, expansion of reduced v normally > e:, but also u:, i: next to (from) /front velars, and of -'iC, -'uC.

Need to write one more note on surface phonology, and phonology of 'Ad(-) reflexive.

Unstable contrast stem-finally between dl and dL (e.g. -L perfective, or instrumental), dj and dsh (i.e. < -d-sh interrogative) -- -d-d is clear, stable. Unstable or questionable is prefixal potential contrast between d.l and dl, dz and ds, dj and dsh, d.l and dl and d.L, all of course involving reflexive 'Ad-, including sh interrogative e.g. 'did he kill himself? 'Adshs(h)dishehL, vs, 'Ads(h)dishehL(-sh). Also, for ambiguous status of 'Ad(-). then especially Neuter perfective 'Ad 'isdi-'isLi-, 'Adisdi-/ 'AdisLi-, or 'Adsdi-/ 'AdsLi- ???!!!. Also question of 'Ad(d)(#)- e.g. with -gawi/ 'feel' (zero classifier), and results of 'Ad-d- and 'Ad-dl- e.g. 'sneak'. Ambiguous status (conjunct/disjunct) of (non-directive) reflexive pronoun was attested 1963-65, but forgotten, and not fully investigated.

Gather together 5 phonological files: Stem(-final C Clusters), VRV stems, n ~ l, prosody, these notes



## L ~ N ALTERNATIONS

Though Eyak l is well known to correspond with Athabaskan n, and presumably 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', le:L 'hair'; k'uLdiya:nn (with oral vowel and sonorant segment n) 'grouse' (highly irregular, loan from Ahtna), siya:n (nasalized a:), 'my mother', q'a:l 'now', even 'ists'a:nl 'strength'; ya:nu' 'underwater, underground', presumable ya:lu' 'through a hole in a thing'. In the present orthography, except for the one grouse item, 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, neither following vowel nor preceding vowel, if present, being nasalized. Otherwise stated, n > nasaization of preceding vowel except where itself directly followed by a vowel (i.e. not followed by C or #).

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, in which \*n becomes nasaization of the preceding vowel, or remains n. The sonorant phoneme l in Eyak is merely the denasalization of sonorant n, voiced like all sonorants, and 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 5 lateral obstruents, dl tl tl' L L', but no voiced obstruents, and no voiced l whatever, except in some ideolects, where it is merely a denasalized variant of n.)

There is a general rule, now historic, that n > l/\_\_\_V, though there are some exceptions in word-initial and stem-initial position, reasons for which are by no means transparent. One reason might be, in some cases, that #nV- < \*#nEn-, to be considered later. For the moment, we shall not consider those exceptions. Again, the current orthography used in these grammar files 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.

The very basic rule is that nA > :n/\_\_\_[+cor], otherwise > lA. In principle, it looks better that for synchronic purposes that the alternation rule should start with underlying nA (> lA but > :n/\_\_\_[+cor]), it being a denasalization rule rather than nasalization, l > n. Such an approach is better not just because of the obvious history and comparison with Athabaskan, but also because of "naturalness:" conversion of shwa to length and nasalization between homorganic [+cor]'s, rather than converse approach, nasalization of l. Also because of further rules, e.g. VnEnV > VnV, which is much more natural than VIEIV > VnV!

Further rules regarding specific vowels: e.g. UnA > u:n, e > i/\_\_\_n. Why rule nA > 'i:n/#\_\_\_C[+cor] (specifically i:), but nA > lA/#\_\_\_C[-cor]. Also dAlA > dla:, > dli:/\_\_\_?. Serious question of "underlying" synchronic A:E contrast may need to be considered. Also E: > i:? **[[Need to rephrase an examine further below. Also next paragraph.]]**

So rules are ordered 1.  $nA > :n / V\_ [+cor]$ , then 2.  $n > l / \_ A$ , better than one single but “unnatural” rule  $lA > :n / \_ [+cor]$ . Rule 2. would be very general but we don’t want to start a big bunch of stems with  $n > l$ , because some don’t, still starting instead with  $n$ . Do we want to distinguish those as starting e.g. -nink’ ‘nose’, -’nan’d ‘lick’ but -na’d ‘tongue’?! The reality does not lend itself neatly to formal grammar, and a formal grammar is not our goal anyway. Better here to adduce historical explanation, that #nE has 2 outcomes, and stem-initial  $n$  vs.  $l$  is a complex problem that sometimes can’t be explained, as far as we can presently see, including an explanation e.g. of the ‘tongue ~ lick’ alternation, or an etymology of ne:tI’ ‘soon’ vs. le:L ‘hair’.

Again, the very basic rule concerns the alternation VIAC ~ V:nC, the latter where C is coronal (obstruent or sonorant). This was not explicitly formulated until recently! 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 -lAC[+cor], more often than -:nC[-cor], and never produces -:nC[-cor] where C is uvular. 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 30 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’). **[[Provide here list or better refs.]]**

### **l ~ n in verb prefixes**

The fully or freely inflecting verb prefix complex of course includes several prefixes which would determine l-n alternations, e.g. GA- inceptive, which for some reason always conditions lA-, without fail. 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, e.g. 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, note li ~ :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, which 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 5 from Anna in text), and “analogical” lAsAtahL or lisitahL 4 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 10 instances of lAsaL- or lisiL-, and only 1 of ’i:nsAL-, from Rezanov. 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. GAiAtinhinh, GAiAtah ‘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’s 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- ‘l’; e.g. along with dik’ li’X lAxslilG ‘I didn’t smile’, dik’ ’i:nxslilG; also ’idah Ga:nxLAlah ‘I’m clearing ground’, ’idah Ga:nxslilL ‘I cleared ground’, dik’ ’u:ch’ ya:nxslil’yahL ‘I got stuck there’ (along with ’u:ch’ yAlixslil’yahL), ’u:ch’ ya:nxslil’yahL ‘I’m stuck there’ (Neuter perfective), q’Ats’ya’ ’i:nxslilAdzL ‘I fell into a slough’, Ga:nxslil’a:GL ‘I got weak from old age, tl’a’q’ ’i:nxslil’ahL ‘I hurt myself bad’, ’Adti:(n)sdi’ehL ‘I put a shawl on’. It is of course 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, 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 the ‘tide’ item, 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.

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) \*ngy or nasalized y, but the Athabaskan cognate of the Eyak n in question is coronal \*n, not the a 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. Example with reflexive: yAX ’Adl:nLAla’X = yAX ’AdlAlAya’X ‘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 extends 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 'udahd 'u'lisitahLinh 'I heard him', but also 'udahd 'u'i:nsitahLinh; from her also, spontaneously, ya'Xu: yAX qu'i:ndAla'X 'don't make faces!', si'uGL lah qu'i:nda'yah 'my heart will beat fast'; and from her the pair 'Adqu'lAxdAtah 'I'll smoke fish' but also, now analogically even before -x-, 'Adqu'i:nxdAtah.

Note further here, also in the file on directives, that in the directives, a third outcome is very common, that the l- qualifier, called "weak l", is deleted altogether, thus e.g. 'udahd 'u'sitahLinh 'I heard him' (along with 'u'lisitahlinh, 'u'i:nsitahLinh), 'iLt'a'X 'u'liditahL 'it's folded', also '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.

One other type of limitation on -i:n- instead of -lA- might be after 2s object (and indeterminate object) 'i-, as in gerund 'ilAxa:g 'raising you' (though there it is also counterindicated by stem-initial velar). This would be in order to avoid homophony with 'i:n- < nA- itself alone. Examples of such 'ilAC[+cor] or 'iliC[+cor] can no doubt be found in the corpus, but perhaps none of 'i:nC[+cor] including 2s or indeterminate object. However, there is very probably no record of deliberate checking for such. *[[Delete this last paragraph.]]*

### **l ~ n in class-mark qualifiers with postpositions**

The l ~ n alternation works quite regularly and explanatorily with the small and seemingly irregular system of demonstratives, 'AwA- 'that, the' and 'AlA- 'this', together with the two contrasting postpositions or postposition-final elements, -d and -X. 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'. While this is so with -X 'areal' and -d 'punctual' as demonstrative finals, it is not so simple with postpositions o-X 'areal contact with o', -d 'punctual contact with o', or with the 3 other non-syllabic postpositions, o-ch' 'to o', o-tl' 'with o', o-q' 'on o'; or with other types of postpositions, including especially those beginning with -l- and with zero consonant.

These 5 non-syllabic postpositions seem to fall into 3 classes in combination with noun-class marking qualifiers l or ending in l, in a way that seems partly unrelated to the distinction [+/- cor] that is basic elsewhere. Here the only 2 of the 5 that behave exactly alike are o-tl' and o-q'. All 5 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 3 requiring lengthening of A to a:, the first 2 not, in an unexpected way that corresponds neither to [+/- cor] nor to [+/- ejective]. With l- class-mark these 5 separate into at least 2 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:natl' 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 (-dli:na'tl', -dli:na'q').

What is clear here, aside from the probably analogical types like those with -lAd, all 5 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', or 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.

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-syllabics, e.g. o-da' 'arriving at o', o-Xa' 'in relation to o', o-ch'ahd 'from o', as well as others, 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 [+/- cor] than it does with verbs, the most common exceptions being some occasional instances of -(A)lA-/\_ [+cor]. Thus, e.g. with 'itl' 'mountain', including special compounds (same rule), we have 'itl'a:nsinh 'behind a mountain', 'itl'a:ntl'in'ts' 'summit of mountain', 'itl'a:ndaht and 'itl'a:ndAya'd place-names, 'itl'AlAqe'L 'mountain-woman', 'itl'a:nt'a:X 'inside a mountain', but also 'itl'AlAt'a' 'behind a mountain', 'itl'lAta:s 'across over a mountain'. Likewise, with postposition o-dAG 'above o', si:ndAGd 'above my head', also silAdAGd, and o-dahd; o-dahd 'pressed against o', 'u:ndaht' '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:nlV-. 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. In fact, the complexity of l ~ n alternations with postpositions proves to be an excursus in the special case of that before the non-syllabic postpositions.

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 further the expansion of qualifiers CA- to Ci:- between future qu'- (also directive -') and verb stem when no vowel intervenes, related to the choice of -Ci:- (over -Ca:(n)-) in the

singular Active imperative with qualifiers in that same environment; also the rule that absolute initial \*nA > 'i:n/#\_\_C, etc., in verbs, already mentioned above. There is moreover an optional expansion zero > i:/C\_\_C with reciprocal o- '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 5 non-syllabic postpositions to add to the complexity. This type of zero > i: shift, plus e.g. -ti:nAX, plus could easily account for the analogical -:- variants mentioned above. The motivation for the dla: > dli: rule remains unclear, but is presumably connected. Finally, there is one postposition with zero initial o-a: 'for o; part of o (partitive)', siya: 'for me; part of 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 that postposition in the partitive sense, e.g. t'uhLga'da: shdu:lihG '3 tables' (d-class). So likewise with l-class mark la'da:na: ch'yahd 'hats' (l class), and la'ddli:na: dla:XA'i:md '2 buttons' (from Marie, though we also have LinGdla:na: ts:a '1 stone' from her, probably less correct).

### **l ~ n qualifiers and l ~ n stem-initials**

There are about 35 stems with stable or invariable initial l (2 of those with 'l), about 12 stems with stable or invariable n (2 of those with 'n), and about 8 stems attested with the alternation l ~ n (1 of those with 'l ~ 'n). Minor categories, e.g. exclamations, without prefixes, show no alternations, and even show minimal pairs, such as lah 'here (it is)!', nah (obscene insult, Galushiah 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. Statistical summary of these 4, in the order just mentioned: 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', mentioned above, is amply attested, and seem entirely resistant to the alternation, 1s lAXleh, 2s presumably li:leh, and 3s lAleh, lAlinhinh (not \*?'i:neh, 'i:ninhinh, or \*?'i:leh, or \*?'i:nleh etc). The 2pl, incidentally, is la:lAXleh, by another general rule, extending lA-, preventing variation of 2pl lAX-. The one quasi-exception, also noted above, is the gerund, li'X 'i:ni:, spectacularly "regular", < \*nA-ne:-n, unavoidable and/or surviving lexicalized. Further, the lA- of this theme should probably tend to allow l ~ n stem-variation than would a transparent class-mark or anatomical qualifier. Though the lA- is very probably the anatomical 'head, face', so 'act li'X with face' is not entirely opaque, but there is no attested \*'li'X le, and 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 lexicaization.

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 3 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'.

Even more important here is 'lick', because, uniquely, it varies with the possessed anatomical noun -la't' 'tongue'. Whatever historical process produced that one such alternation in Eyak is now opaque, 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 does not hold so obviously for labial sonorants: there are 20 verb stems with initial w-, and only 1 with 'w-; there is 1 verb with initial 'm but also 1 with initial m; even so, it could be said that the m's have a much higher proportion glottalized than the w's, as do n's than l's.)

Turning now to *noun* stem initials l and n, of the 10 noun stems with initial l, 4 (including -la't' 'tongue') have initial l, 5 are not attested with preceding vowel, some of which could therefore have underlying initial 'l, but only 1, -'lahs 'intestines', definitely has initial 'l. For that cf. Tlingit na's 'id.', possibly a cognate, or a loan (though Tlingit has no glottalized sonorants, making the Eyak 'l harder to explain). The 3 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 < -ni:k-yAq' 'inside of nose'. Given the long vowel, the initial nasal could be explained as from something like \*-nEnk'. Cf. further Athabaskan \*-nE-chEn-g 'nose' < 'face-smell-repetitive'.

There are 2 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 from of the very basic verb 'live, move, camp, subsist (in area)'. It should probably not be considered verbal, at least in lacking the appropriate relativizer, not usitative Active imperfective -linhinh, -linhinu:. This stem has 3 attested forms as -:nah. 2 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', partly opaque, < yA-:nah- ?. There is otherwise no noun of the form 'i:nV- or -:nV- (or 'i:IV- 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, 8 stems can be shown to begin with w, 4 more cannot be found with preceding vowel, some of which could therefore have underlying 'w, but only 1 definitely has 'w, -'we:sh-G- 'maternal grandfather'. The only regular noun with initial m at all is ma: 'lake', but cf. PA \*wEn; 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. In both these, the alternation works with full regularity, even across the glottalization in 'big'. With 'big', most instances referring to l-class nouns show -a:'nAw, with occasional variant -i:'nAw, and (Marie only) -la'lAw. With gl-class nouns we have regularly -gu:'nAw, ti:l- and qi:l- -t/qi:'nAw, dl- -dli:'nAw, anatomical -ku:l- 'belly' and -Xu:l- 'tooth', -ku'nAw and -Xu'nAw, -Gl- 'land area' -Ga:'nAw. With 'few' we have, with l-, only ya:'a:nuhd and also analogical ya:lAluhdg 'few (of l-class)', and ya:gu:nuhdg 'few people' (with special gl-class mark for humans, used only with this and -t'u' 'many', k'ugu:nt'u' 'many people').

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' ; -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, anatomical 'head, face', and thematic/lexicalized. Here the noun-class marks remain "analogically" lA-IV, whereas the others come out -:nV-, #'i:nV-. For 5 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 noun-class qualifier, result 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:lAlah '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 s:inah 'around my head', 'i:nah GAwe:g 'put a headband around your head', 'i:nah we:gL 'headband' (Galushia Nelson). (These last two show, incidentally the homophony between \*'i-nA-nah 'around your head' and \*zero-nA-nAh; thus, presumably, making the first into the usual indirect reflexive, and 1s, 'I'm putting headband on' would be 'i:nah GAxdAwe:gL.) Not surprisingly, then, a less obvious or more "thematic" or possibly lexicalized use of l- 'head'(?), is 'u:nah 'ixleh "'I think the world of him", 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-lAX k'u-d-'ya 'something is d- situated beyond / too much for o's head' as in si:nAX



k'uddAGA'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 o-, 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 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:'indzkih 'our brother'. The other, also with zero o-, 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 o-, Neuter perfective causative, here apparently with explicitly anatomical 'head'. Another instance is 'itl'a:nahd sdixutl'L "snow slid down the mountain", so glossed, 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 o, 'i:na:'d 'up on a mountainside, hillside, steep place', in any case all o of l-classes, 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- 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 the file on preverbals and dictionary. 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, whereas e.g. ’i:na:’d < \*nA-na:n’

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-And. 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’-An ‘from o’, and the most recent point made by Leer *REF* that at least some instances of Eyak Vhd come from \*Vnd, in connection with Dene-Yeneseic.

**Further phonological notes on n, nasalization, denasalization, n-y, etc.**

Assimilation of y after n in certain cases, ny > nl:

\*?Xa:nyiyah > Xa:nliyah 'that he eat it', etc.; optionally further > Xa:liyah/

Note also e.g. stability of -nl in -ts'a:nl in gerund of 'be strong'; only exception 'i:ni: in 'laughter' gerund of l-le:-l 'act facially' < \*nA-ne:-n.

With -yu: enclitic, nhy > nhn > hn after a or u, but > nn > n after i, not because of the timbre I, but because of the prosodic position suffix or enclitic to the verb stem. (Why that?) Note this creates another type of instance for reduced vowel of definite timbre [i], /i/, never reduced to A even after Q.

'anh+yu: (> \*'anhnu:) > 'ahnu:

-uhn+yu: (> \*-uhnnu:) > -uhnu:, but

-inh+yu: (> \*-inhnu: > \*-innu:) > -inu:

Notes on nasal umlaut in open verb stems:

no stems \*IVn or \*wVn, except from -inh-umlaut.

Basic umlaut rule, e.g. leh > linhinh, linhinu: (including denasalization of V/n, rule orders), but CV:', e.g.

LAqa:'inh optionally no umlaut on CV:'inh,

Only stem-vowel u not umlauted, but nasalized??

Leftward extension of nasalization in e.g. ch'an'[ng]win'inh, Xi:nXi(n)h, XA:ngudi:nya:(n)

Basic late rule, that vowel next to real /[n]/ always denasalized.

(Need? in symbols to distinguish, phonetically if not phonemically, for nasalization of preceding vowel from real n, not merely by having vowel following (complementary distribution), -- by showing nn at some stage, and later rule, all single nV > lv, only nnV > nV, so nVn > nnV > nV, also mVn > mnV > mV. No, doesn't help with VnyV > VIV!)

Where wVn > mV, lVn > nV. I.e. result isV loses nasalization, not \*mVn, \*nVn. So also ts'i:n#+nu: > ts'i:nu: '6 people', neither vowel nasalized. Also leh+ih > linhinh both vowels nasalized, leh+inu: > linhinu:, only 1<sup>st</sup> vowel nasalized! 'anh > 'ahnu:, not > \*?'anhnu:, i.e. 'anh loses nasalization?? In same way -inh + nu: not > \*-inhnu:, but loses -h-. By the way, -nu: 'human pl.' with numerals must be \*-n-yu: lexicalized to -nu: before becoming numeral enclitic.

Stem-initials are not subject to the same rules as prefixes or older alternations.

Synchronic equals diachronic rule ordering, e.g. -0a:n 'mother' siya:n (because there is no palatal nasal phoneme, even if phonetic [ny] becomes solid nasal), but 'uma: just like

\*wAn > ma: 'lake' (because there is solid phoneme m), but qa'winhinh 'will swim' [qa'([ng]w-), not > \*qa'minhinh, and 'being strong' stays -ts'a:nl, not \*-ts'a:(n) or \*ts'i:(n).

There is also a rule (\*nE-ngy >) ny > nl (e.g. Xa:nliyah), related to ny > nn > n in 'ahnu: < 'anhnu: < 'anhnyu: < 'anh-yu:; -inu: < -inhnu: < -inhnyu: < -inh-yu: (mentioned above as special type of assimilation)

The two items, 'fog' \*q'Aye:n > q'Ayi:n > [q'Anyi:n], and 'different' \*k'Aye:n > k'Ayi:n (cf. e.g. siya:n [sinya:n] 'my mother'); then also further > q'Ani: and k'Ani:, or > q'Ayi:ny and k'Ay:i:ny (cf. e.g. tsi:n 'song' optionally > tsi:ny, final -y not etymological, but optionally added to/-yi:n/#.)

### Rules for shwa-expansion, also zero-expansion or epenthesis, and underlying identities of shwa

Need section in phonology on the underlying types of shwa and zero, i.e. epenthesis of zero to i(:), and expansion of shwa to a: or to i: in prefixes, but to e: in stems (except some I > i:, some U > u:). Question of need to distinguish unmarked AIU from “full” or marked aiu, phonemically. Not really, except for tautosyllabic ' in qa'V < qa''V, and uniquely non-tautosyllabic ' in da/i-'w/lAX, by late rules. Tempting to write prefixal shwa as a and stem-shwa as e, qa''V and hyphen in ‘thus’ items. Need to cover the following observations.

Relationship between qu' > qa', 'u' > 'a' \_\_/(L-)stem and A > a \_\_'R as e.g. in sa'yahL, proving qu' < qwa-' and (')u' < (')wA; OR (q)wA' > (q)u'wA \_\_ (L)stem. Do we have any directives with 'R- stem and no intervening syllable, whereby 'u' > 'a''RV (>'a'RV) OR 'u'wa'RV? Checked, no -'R- stems are attested with directive except several themes with -'ya, all of which have intervening qualifiers, so no chance to test preceding question.

And ‘will get lost’ qu'di:wah must be analogical with qu'wah (there being no \*?qa'ah because of homophony with qa''ah).

Incidentally, the i in si'yahL must be hypothetically different underlyingly from that in siyahL, likewise in si'lahs ‘my intestines’ from that in sila't', likewise u in k'u'lahs from u in k'ula't'. Maybe to be heard more clearly in stress pattern V'/RV' compared to V'RV/, more than in timbre. Orthography change not needed. But dI-'wAX needs hyphen if not di'/wAX`.

In chapter on preverbals-pp's, deep segmentation in X, Xa' Xahd Xa:n', d da' dahd da:n'(?), da:X, ch' ch'a' ch'ahd, ch'a:X, ya' yahd ya:n' ya:X; la', :nahd, na:'; dAG lAG yAG, dAGe' etc.

Nota bene 'iL-ihd ‘apart’ !, where -hd alone itself is a postposition, where the epenthesis proves to be -i-, quite definitively.

There remains the problem that there are two more types of expansion of qualifier shwa in the verb prefixes: 1. in future and directive, > i: (including after X), but not expanded with intervening syllable before stem; and 2. > i: (usually, but usually a: after X), and > a: with intervening syllable.

#### *a: ~ i: choices in prefixation*

This is a significant challenge in prefix morphophono- > -Ci:- in qualifiers when no syllable intervenes between that and (L-)stem; whereas with intervening syllable, i.e. LA- or dA- classifier or -lAX- 2 pl S, there is no expansion of the qualifier. With 2s subject yi-, one could say either expansion to i: happens and 2s is absorbed, or that expansion doesn't happen and i: is an allomorph of 2s. This expansion, only with no intervening syllable, includes (lA)X- > (lA)Xi:-, and is called type 1.

Examples needed here of future and directive, without qualifiers, then with qualifiers, without and with syllable intervening before stem.

Second, the same *i:*, type 2, appears with qualifiers and no intervening syllable before the stem in the following (’A-) Active mode-aspects: (singular) imperative, desiderative, conditional, and ’A- customary, though in this type 2 there are the following differences: -a:(n)- appears regularly instead of *i:* after (lA)X- qualifiers, and occasionally (analogically?) after other qualifiers as well, though when attention is called to that choice, *i:* proves to be preferred after all. Further, when a syllable does intervene between the classifier and the stem, in imperatives, Active customaries, desideratives, conditionals (no t’i- type), and in all Active optatives i.e. with lA- and dA- classifiers, lAX- 2pl subject, and yi- 2s subject or yi- (or Li-, di- classifiers) of the optative, the expansion entails the appearance of -a:(n)- between the qualifier and the syllable before the stem. There is some discussion of these details in the optative, directive(?!) , and imperative and customary files, about choice of nasalized a:(n), most often after X, also y, rarely d-, never l-.

Examples in ’A- imperative, ’A-, Ci:-, Ca:- (~ Ca:n-) needed (including Xa:ne: eat it!’). Then:

Examples of ’A- conditional (along with ’i- conditional): ya’ ’Adah da:X ‘if she stays’, GAdi:tl’eh da:X ‘if place gets cold’, tsin’da:xleh da:X ‘if I (start to) speak’ (along with tsin’di’xleh da:X, with some discussion in conditional file), da:dAq’a:g da:X ‘as it starts to burn’, ’ida:xLAdah da:X ‘as I start to understand your speech’ (along with ’idi’xLAdah da:X), GAda:LAGu’ ‘as place starts to warm’ (along with GAdi’LAGu’ da:X), Xa:nliyah da:X ‘if you start to eat it’ (-ny- > -nl- also with 2s yi- as well as with optative yi-), Xa:nah da:X ‘if he starts to eat it’.

Examples with Active optative needed. Here only -a:- type possible because optative always has intervening syllable before stem, either yi- with non-vocalized classifier, or vocalized classifiers di-, Li-. Active optative prefix is always ’i- on surface in absolute initial, because of progressive assimilation or harmony with following -i-’s or analogy before -lAX-. Include Xa:nliyah ‘that he eat it’, -ny- with optative yi- > -nl-.

Examples with Active desiderative. Without qualifier: ’Axtsu’dX ‘that I sleep’, xu:she:X ‘that he kill me’. With qualifier: di:xLda’ch’X ‘that I drown it’, but ’Aw Xa:na:X ‘that he eat it’ (with nasalization); ya’X da:lAXLa:X ‘that you pl. lift them (d-class)’, Gala:xdAshahX ‘that I dig the ground’.

Examples with ’A- customary. Without qualifier: wAX ’Ale:k’ ‘happens, does so’, xu:nLku:ndk’inh ‘he grabs me (with nasalization). With qualifier: wAX di:le:k’ says so’, yi:Lqa:g ‘dawns’, but lAXa:nLYa:k’ ‘puts them (berries)’; sitl’ da:yile:k’ ‘you say to me’, dik’ k’u:lishe:k’G ‘you don’t kill anything’ (from nasalization), da:dAtse:Xk’ ‘it (d-class) is cut’.

Third, perhaps these expansions are not confined to verb prefixes, but operate also in the choice of a:n- with l- qualifier e.g. in ya:nahd < yA:-nahd, Ca:’nAw ‘big’ but dli:’nAw. Moreover, a:/i: choice with qualifiers before postpositions, e.g. dA-X > da:X, but lA-X > i:nAX. All absolute initials choose *i:*, zero-lA-X > ’i:nAX etc. even though homophonous with ’i- 2s object ’i:nAX. Straight-out optional epenthetic *i:* in ’iLX > ’iLi:X etc., and *i* in ’iL-ihd ‘apart’! Also #lA-C- nouns > ’i:nC- where C is coronal,

specifically initial of 'i:- timbre. Perhaps due to the basic universal of i sharing distinctive features of T (while a shares those with velars, back as well as front; note a after X in type 2). But why then e.g. \*ch'And > ch'ahd 'from' rather than \*ch'ihd, as 'iLhd > 'ilihd? A > a?, but some kind of zero > i? Also note \*'AnA-d > 'a:nd 'here', not \*'i:nd, why? Likewise 'a:ndAX, 'a:nch'ahd. That is a key question. Valuable simplifying insight for Eyak phonology, if answerable. Otherwise leaves opacity, but such appears unavoidable anyway, e.g. in complexity of l ~ n class marks with non-syllabic postpositions.

Sept. 8, 2010 – 2 main thoughts.

There is no sequence of A and n allowed in Eyak, no nA or An, on the surface. I.e. \*AnC > i:nC (due to T:i relation); nAC > lAC but there is a preceding rule VnAT > VnT > V:nT. But AnAT >? Cf. 'a:nd 'here'. That is certainly related to rule CA-A-CV-stem > Ca:CV-stem, but CA-A-(C-)stem > Ci:(C-)stem.

Another factor might be, instead of 2 kinds of shwa, abstractly, say A and E, we may posit a now abstract Y, the same back unrounded sonorant as still in some Tlingit, once also a phoneme in Eyak. Our main historical evidence is Rezanov's *lega*, modern Eyak 'lAw 'big', cf. also 'li/ 'be (too) big', also note the loans from Yakutat Tlingit /Y/, regularly now with Eyak w. That connects interestingly with the w in the futures qu'Xi:wah 'will eat' and qu'di:wah 'will get lost', with zero stem initials, where we should expect epenthetic y to appear in an i-a hiatus, not the w we see, hardly "natural" there. That w could in fact be motivated as reflecting Y. The backness of that be itself motivated by not a second kind of shwa as such, but perhaps by a back unrounded vowel (as opposed to front unrounded i:) which we can write Y: (or if preferred, I:), thus CY:-a > CY:Ya > Ci:Ya > Ci:wa. The question is then what is the source or motivation for CY:.. For one type, in the future and directive clearly, there is a rule that there must be 2 vowel morae between 'C- and the stem, so in 'CACA-stem nothing happens, but in \*'CA(C)-stem the A "becomes" i: -- why? -- does so also after XA-, and does not reflect nasal -- why? -- some kind of AY does not look very helpful here. -- In the other type, the (')A-imperative-optative-customary, CA-A-(C-)stem > \*CA-Y-(C-)stem ? > CY:(C-)stem > Ci:(C-)stem may be more helpful, but the difference after X and the +/- n aren't explained. Could there be any connection with the Athabaskan \*Ce' after qualifiers, even though that is there also before CV-stem (with d and l classifiers)? Probably not. Appears that this phonology is purely Eyak, and also may not be explainable by any kind of internal reconstruction. Still, identifying the w in qu'Ci:-w-a with that in *lega* 'lAw 'li/ and sonorant Y may well be a step ahead, another crack in brick wall here.

The special problem with d+l qualifier phonology may be part of the key and needs more examination in connection with the problems still unresolved. That dA- + lA- > dIV is certainly unique, but how and why do the dla: ~ dli: patterns differ from the other a: ~ i: ones? Also perhaps the only source of dli' is in 'i- imperatives etc., dli:-'i- > dli'-, dla:-'i- also > dli'?

**Verb prefix CV', and V'CV' > V:CV'**

How many sources are there of CV' in verb prefixes? One type, almost certainly, is the (u)' in the directive and the qu' ~ of the future, very probably including -' - "irrealis."

Another type we need to understand the origin of is the ' in Neuter negative a' -- irrealis? We must have the samemorpheme also in Neuter imperative and optative. Cf. further then Active perfective negative #'A-s- instead of sA-, which however disappears entirely with CA- qualifier. Cf. here certainly also Athabaskan. Clearly the positive Neuter and PAE perfective yi- (< ngyE-) is absent or deleted in the negative. Beyond that, however, to what extent are we dealing here with allomorphy, as opposed to different morphemes in the negative/optative/imperative/irrealis?

Further, need statement in prefix phonology and in directive about lengthening of V' in directive to V: with negative Neuter imperfective, e.g. dik' 'u:la'Lga;G 'I don't know (it)', dik' 'i:la'Lga:G 'I don't know you', probably obligatory, instead of \*?dik' 'u'la'Lga:G etc.. Some kind of prosodic constraint? Cf. though directive future where both prefixes are present, -V'qV'-, not > \*-?V:qV'-, for some reason, in spite of same prosody. Not tested. There is certainly no overall constraint, e.g. te'ya' 'fish'.

Also need to check on frequency of variant with both directive and future prefixes present, e.g. 'u'qu' as opposed to qu'. Presumably 2s object always 'i'qe'-, never just qe', but never tested. Probably always 'u'qa'-, never just qa'-?

**CV-'i- > CV'-**

Need to include rule in phonology that would show where verb-prefixal 'i- imperative and 'i- indeterminate O combine with preceding CA- to produce Ci'-, and CwA- or Cu- to produce Cu'-.



FUTURE AND DIRECTIVE PREFIXES – 07-27-07, July 2008 – Needs to be combined with “Further comments” and rewritten.

This explores morphophonemic and/or historic connections among Eyak verb prefixes 1. qu’- (also -qe’-, qa’-, qu’wA-) ‘future’, 2. PAE \*qWA- ‘place, event’, 3. ((’)u)- (or (’)a’- or -:-) ‘directive’, 4. qA- ‘plural’, and 5 ’A- or -a’- etc. ‘irrealis’

One. The Eyak ‘future’ conjugation (Inceptive imperfective) and the prefix that marks it, qu’- etc. exhibit a number of traits that indicate historical lateness within the Eyak verb system or artificiality and analyzability in terms of other Eyak verb prefixes.

First. The Eyak ‘future’ conjugation fits only rather artificially in the Eyak verb system, as the ‘Inceptive imperfective’, justifiable in the sense ‘inception not accomplished.’ There are 3 conjugations in Eyak: Active, Inceptive, and Neuter. Each conjugation has 6 basic (non-derived) modes or aspects: imperfective, perfective (with -L suffix), imperative (with two types of Active), optative (also 2 types of Active), conditional, and desiderative. One special trait of the ‘future’ or ‘inceptive imperfective’ is that whereas all the other combinations, especially of the 3 conjugations in imperfective and perfective, have limited uses depending on verb theme classes and subclasses, ‘Inceptive imperfective’ alone has totally free use in any class of verb, with of course the routine expected meaning of ‘future’ or the like – therefore a kind of superficiality, lateness, artificiality.

Second. The position of the ‘future’ prefix qu’- etc. is very different from that of all the other conjugation/mode prefixes in the Eyak prefix template. Whereas all the others follow the ‘qualifier’ prefix zone, the qu’- occurs far to the left of those others, preceding the whole ‘qualifier’ zone, including the qA- ‘plural’, left (or leftmost) of the ‘qualifiers’, so following only the direct object, indefinite k’u-, and, in a sense, the ‘directive’ (u)- etc. In fact it can (optionally) “coalesce” with the directive, a crucial point to which we shall return.

Third. The ‘future’ prefix qu’- is phonologically more complex than any other Eyak conjunct verb prefix, in two ways. Firstly, it has more segments, 3, than any other conjugation/mode marker, and secondly, it has much more morphophonemic variation than any other. Moreover, both the initial q and final ’ segments, and parts of the variation pattern, are also shared with other (relevant) prefixes, as will be shown.

The prefix should probably be segmented into the three segments q-, -u-, and -’-. The first is invariable, but could go back to either PAE \*q or \*qw. The second becomes -e-, with fronting by partial assimilation, immediately after prefixes ending in -i-, i.e. the indeterminate ’i-, 2sg ’i- and 2pl IAXi- objects; and immediately before -’-(L-)stem it becomes -a-, except where followed by 1sg -x(w)-, remaining then -u-. Before 2s yi- the -u- optionally becomes -i-, according to tempo, obviously a very late rule. This behavior is in any case not that of a “stable” or genuine full \*u, but more probably that of a less stable reduced vowel, A (schwa), which fronts to e after i, optionally (late) to i before ’yi, for some reason immediately before -’-(L-)stem is a (cf. behavior of ‘directive’ below), but remains u before -’-x(w)-(L-)stem because of that following labialization. Given that the u must or may have come from a reduced vowel, and that reduced vowel plus tautosyllabic ’ is non-canonic, two things follow: the labialization must come from PAE

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initial \*qw, not \*q, and the final ' must come from a morphologically separate segment, thus a sequence \*qWA-' .

The \*qWA- has a very plausible cognate in Athabaskan, homophonic and in the same general part or zone of the conjunct prefix complex, with the clear meaning 'place, event'; and the ' might well be a reflex of the 'irrealis', the exact phonology of which remains to be worked out. 'Event not realized' might be a plausible gloss for this 'future', just as good as 'inception not accomplished', even though the \*qWA- may have survived nowhere else in Eyak.

delete—Jeff – I've covered here so far 1. (except for the qu'wA- variant), and 2. 3-5. will have to come later. The qu'wA- will come with 3. the directive, along with the several other "parallels" between future and directive, and the all-important optional (details of statistics and style need examination) "coalescence" – i.e. non-repetition?!- of directive plus future. Also the "dainty dissimilation" (cf. te'ya' 'fish' just fine) in Neuter negative directive -V:Ca' - instead of "digraceful" -V'Ca' - may be same thing again. Is Ath directive tonally unmarked? 4. is mainly about the unique instance dik' 'ulah qu:la'ta:Ginu: instead of the expected 'u:qAla' - 'they not find out about it', and implications. Need some help with 5. irrealis. My eyesight is currently too poor for me to find and search article. What is PA, PAE, PAET? Probably should add 6., \*wA- 3s, Eyak only in p- and directive. – end of deletion

Conventions here are presumably transparent. A- instead of "at" for shwa because my computer is too funny with "at".

Added July 2008 – After writing the files on gerund, acquisitional, and instrumental, we note use of qu"~ in forms that otherwise allow no conjugation or mode/aspect prefixes, in fact that are derivations which delete all prefixes (including even the classifier!) between the thematic ("qualifier") prefixes and the stem. Thus gerund k'uqa'she:l- 'hunting' (avoiding premature mention of killing right away), likewise k'uqu'wAshe:ch'L ~ k'uqa'she:ch'L 'hunting' very frequently in the acquisitional, and 'udAt'a:Xd 'Adqu'li:ta'L 'smokehouse' < 'in the shelter of it (d-class)' + instrumental of 'Ad'-(l)dA-ta 'smoke or dry (O?) (fish, meat) (for self?)', which very spontaneously occurs twice in text from Anna, with what is unquestionably the "future" morpheme in a non-verb or devalization. The idea would appear to be that of "not counting your chickens before they're hatched" in all these uses, or more mildly in the 'smokehouse' case, 'putting fish or meat there so it WILL get cured.' Regardless of the semantics, there is no question that that is the morpheme occurring in these forms. This type of use of the morpheme adds powerfully to the arguments that the "future" prefix is outside the rest of the conjugation and mode/aspect system.

Added 10/7/10 – Note Lena's late [\*?]'u:d qu'li:xa:X 'it'll grow there', which seems to be a hybrid desiderative and 'future', q.v. under desiderative, there judged "almost certainly incorrect". Still, the very fact that Lena could utter that, implies that it is at least conceivable, again for the reasons stated above, and amplifying those reasons.

FURTHER COMMENTS ON SOME EYAK PREFIXES 8 July 2007 – somewhat edited July 18 2008. Need to be combined with “Some thoughts on 5 Eyak prefixes” and rewritten. Minor corrections 11-8-10.

On the future prefix I need to add (A) that that can be qu’wA- before (-L)-stem instead of qa’-, though qa’- is much more frequent. Exception is before -a ‘sg. go’, which must be qu’wah (never \*qa’ah or \*\*qA’ah). Further, though, ‘it’ll eat it’ is qu’Xi:wah from O-XA-a, with the expected expansion of qualifier shwa to i: before (-x)(-L)-stem, but also with -w- supplied for two reasons: 1. analogy with ‘sg. go’ (the only other zero-initial verb stem or theme without intervening classifier) instead of qu’Xi:yah, because 2. that is the form ‘you’ll eat it’, avoiding that homophony. – It seems very unlikely that ‘eat’ had some underlying initial -w- that for some reason survives only in that environment.

(B) Future has one other allomorph, the only one that does not have ’, in combination with the unique verb theme which can actually be incorporated as verb prefix, (’)(i):lih ‘emotionally, mentally.’ That is the only prefix (beside future and directive) which can occur between the qualifiers (including qA- ‘pl.’) and direct objects (and k’u-). When these cooccur the result is qe:lih-. Phonologically interesting, and also shows the future prefix is closer to the O (etc.) zone than to the qualifiers.

(C) We know that qu’- becomes qe’- immediately following any prefix ending in -i, i.e. ’i- ‘2s O’, ’i- ‘indeterminate O’, lAXi- ‘2pl O’, here by partial vowel assimilation to preceding vowel instead of following one as in the qe:lih above. However this change also occurs, one must presume analogically, when other material intervenes, in the following limited possibilities. Indeterminate O in directives is ’ida’- (no doubt related to ’ida: or proclitic ’idA- ‘that which; the fact that’). Note O-’-Xa ‘tell of O’, ’ida’Xah ‘tells story’, and ’ida’qe’Xah ‘will tell story’, and further ’ida’k’uqe’Xah ‘someone will tell a story’, not here -qa’Xah. Here again the explanation must be analogy. Finally, ‘I’ll tell a story’ is ’ida’qe’xXah (twice Marie, 3 times Lena; \*?’ida’qu’xXah not tested) meaning that the phonological and/or analogical effect of the -x- here does not override the analogical effect of the far-away ’i-.

Now we come to the directive. As pointed out, its position may well be the same as that of the future, so the qu’- etc. can represent the 3<sup>rd</sup> person or unmarked conjunct O simultaneously with the future in the directive, or they can sequence ’u’qu’- in what might be called duplication, rather than deletion of the default ’u’- directive by haplology in the other outcome. There are two more suggestions of this. (1) in a preliminary statistical survey, we find that even in elicitation the shorter version is more common than I thought, and in the texts it is much more common than the longer one, making that seem somewhat artificial or less spontaneous. (2) What is the motivation of dik’ ’u:la’xLga:q ‘I don’t know (it)’ instead of ’u’la’-, likewise dik’ ’i:la’xLga:q ‘I don’t know you’? Why not also then ’u:qu’-, ’u:qa’-, etc. Important question!. – Maybe not too much should be made of additional point (1), which could just be fast tempo relaxed haplology. (2) is trickier though, even though of course we know te’ya’ ‘fish’ and many other such sequences are just fine.

Somehow contrary to that is the fact that in the future the only mark of the directive with non-default O is the -' - itself, and that of course has to *precede* the future, thus 'i'qe'-, xu'qu'-, xu'qa'-etc., and not xu:qa'- etc., for some (important!) reason.

Now for a few comments on the morphophonemics of the directive. After some more preliminary inspection, I see these are even more similar to those of the future than I remembered. The u' becomes a' under almost all possible like circumstances. E.g. O-'-L-qa/ 'count O', ('u')qa'Lqah 'he'll count it', or, I suppose, ('u')qu'wALqah, likewise 'a'Lqah 'is counting it', or 'u'wALqah. In the directive one can even extend the same rule to -(x)(s)(L)-stem, as in 'I didn't count it' dik' 'a'xsLqa'Lq. -- The only difference is, I see, quite optional. Before 1s S one can optionally have the a', as maybe in the preceding, but there additional support may be coming from the negative morphology, but certainly in 'I'm counting it' 'u'xLqah is just as acceptable as 'a'xLqah.

The unique form from Anna's text dik' qu:la'ta:Ginu: 'they pl. not find out about it' instead of the expected(?) 'u:qAla'-, is perhaps not so surprising after all, considering that the sequence (')u:la'- is so fundamental, frequent, favored. Thus a metathesis of morphemes, including "deletion" of the' preceding the -u- (as also in 'Adu'-, 'iLu') is more "comfortable" than breaking up the -u:la', or saying \*?'u'qAla'-. The very questionability of the choice between \*?'u'qAla'- and \*?'u:qAla'- is therewith avoided. I don't now think of this particular item so much as a priceless rare "crack in the wall" of the template allowing a glimpse of some ancient older order or flexibility/disjunctivity or very different type of structure now lost, but rather just the favoring of the phonological sequence -u:la'- or -u:Ca'- in that part of the verb prefix complex. More likely just another example of grammar "leakage," or frayed edges of Eyak grammar. Maybe still testable with Marie, but probably not. I'll try to try. Lena had readily interpreted Anna's form for me, and I'm pretty sure I remember she explicitly approved it (e.g. "yeah, that's OK"). Alas I didn't explore the whole matter on the spot, and now it's probably too late, to expect Marie to patch the leak in my job.

There might seem to be little question that the 3<sup>rd</sup> person or default directive O u element is related to the 3s possessor and postpositional object wA-. There are other related wA- prefixes too, especially in wAsheh 'name' (cf. Ath. -(')u:zh(w)e-) and especially wAXah 'story', cf. 'u'wAXah 'tells of it.'

But note e.g. k'e:d 'Adu'dA'eh 'what's your name, comment tu t-appelles?' where the 2sg S is zeroed out, but where the -u' - is not third person but (logically) part of the reflexive direct O, here certainly 2sg, not \*\*'Adi-, though non-reflexive 2sg O in directive is 'i'-.

Presumably the initial '- is not original, especially in view of the following vagueness. The reciprocal direct O of ANY verb is fully preverbal 'iLu' including the -u' (while possessor and o of postposition is just 'iL-). 1pl. poss. and o of pp is qa:-; direct O is just qa:, fully preverbal, but which requires the 'u- starting the verb, only for directive, of course. -- Directive reciprocal is presumably 'iLu' 'u'-, but I need to check! One instance attested, 'iLu' 'u'-, but \*?'iLu'- not tested. w – Alas, Marie, in late attempt,

couldn't answer, and now it's too late. -- Reflexive 'Ad is self-contradictory. It *can* be preverbal, e.g. 'Adshunh sdishehL 'did he kill himself?' (also 'Adsdishelhshunh,). The directive reflexive, though, is always conjunct 'Adu'- . Note that in both the reciprocal and reflexive the -u' is directly added to the prefix, no sign of initial '. Obviously the 3<sup>rd</sup> person possessor and o of pp. 'u- is related to Athabaskan \*wA-, and presumably the '- there too is of the same shallow status, there being no need to reconstruct \*\*'wA-. The anomalous dA-'wAX and dA-'lAX 'that/this (very) way' cry for an explanation, but that must be, at least historically, dA-'AwAX and dA-'AlAX, of course containing 'Aw and 'Al, which we know from transcriptions through the whole Russian period ended with -wV and -IV, as did then *all* sonorant-final items, e.g. 'big' Cyrillic -lega over a dozen times (now -'lAw), where the Cyrillic -e- could of course be -(y)o-, but in which case one would expect the sonorant mid-gamma to have sounded like w and be written Cyrillic v at least occasionally, not the case). The final -X must be postposition of 'means; non-punctual contact'. (We still have some traces of the post-sonorant -V, e.g. 'AlA-sh-gah-X 'would that, I wish that', doubtless 'this-INTERR- gah-DESID'). Could be of course that the wA- is originally related to the distal (or unmarked?, certainly more frequent) demonstrative 'Aw 'that, the', 'u:d < 'AwA-d 'there'.

That reminds me of another rather obscured set, related, which I now see more clearly. We have the strange XAsha:nd 'over here' and XAshlAX 'closer'. XA- is a fairly common areal prefix, *maybe* cognate with Ath. \*qwA- too, but irregular if so. XA-sh-AnA-d and XA-sh-AnA-X, with naturally different outcomes due to the +/- shl- and -sha:n- have to be related, and obviously end in the pair -d/-X '+/- punctual', and +/- homorganicity. No idea what the -sh- is, but clearly the proximal demonstrative here has no '-. Then there are 3 other forms, Xi:d 'yonder, away', Xi:nXinh 'that guy over there', doubtless from Xi:Xinh, and severely reduced XAyA'u:d 'yonder (at rest)'. They've become somewhat messier even than the preceding pair, but clearly they must be all from XA-yA- plus the same -d/-X, and the third with distal demonstrative \*'AwA-d. The third shows symmetry gone: proximal loses '-', distal doesn't. Tempting to wonder if the -sh- and -yA- are related, as in Athabaskan, but no parallel whatsoever in Eyak. There are several yA- prefixes, none with clear meaning, certainly none reminiscent of Ath. yA-, notoriously missing in Eyak – except conceivably this one. The -yA- in Xi:t and Xi:X- here has also to be the stem, but the -sh- doesn't. There is no \*XAy(A')a:nt or \*XAshu:t, \*XAshwAX. I'm sure I've tried. Well, this is marginally relevant to the rest here, but interesting in itself.

This sort of covers it, with a few holes, and of course many questions, including the nature and possible role in all this of the irrealis, not even addressed here.

July 12, 2007. More checking and further observations.

I had indeed checked a little further with Lena, and confirmed that in addition to dik' 'ulah qu:la'ta:Ginu:, Lena can indeed also say either 'u:qAla'- or 'u'qAla'-. No surprise. That seems to be further support for the interpretation that the 3<sup>rd</sup> variant qu:la'- may be motivated merely by avoidance of the problematical choice between the first two, The problem with that is that the basic rule applies to V'Ca'- (becoming V:Ca'-, if and only if

V is O of directive or u of future, i.e. in that zone of verb prefixes). If qA- pl intervenes, speakers don't know what to do; grammar doesn't cover it (anymore?).

I had neglected to mention yet another really crucial similarity in the morphophonemics of future and directive. In both, the shwa of all following qualifier-zone prefixes, when no syllable intervenes between that and the stem, is expanded to -i:-, for some reason. Thus, O-'-IA-'e 'S calls O (C)', 'I'll call it C' is C ('u')qu'li.x'eh, 3s S is C ('u')qu'li:'eh, (The 2nd person Subjects, both syllabic, are interesting: in all these cases 2s is -u'li:'eh, either deletion of -yi- and/or bidirectional assimilation, while 2pl is 'u'la:lAX'eh, by rule in that zone that -CAIAX- becomes -Ca:lAX-).

The -' of both the future and directive does indeed seem very much like the -' that comes up in the negative (though also e.g. imperative) *Neuter*, e.g. yiLeh 'is', and 'a'Le:G 'isn't'. The 'a- part is of course from -A-, which is itself not part of the negative or irrealis, but part of a preceding prefix, or here a "peg" (?), as in sALtahL 'placed it', negative dik' 'AsLtahLq', but cf. dik' dAsLtahLq ditto, d-class O, still just -A-, i.e. with no trace of the 'A-. Irrealis needs comparative study for this.

Comments on the O zone. Aside from some fuzziness on the status of 'Ad reflexive and possibly 'iLu' recip. (cf. qa: 1pl O, completely disjunct/preverbal/proclitic), the rest of the O's are clearly conjunct, and no conjunct prefix can precede them, other than that very exceptional displaced q- treated above. In the non-directive the O's are 1s xu-, 2s 'i-, 3 zero, 2pl lAXi-, indef. k'u-, indeterminate 'i-; in the directive, respectively, xu'-, 'i'-, 'u'-, lAXi'-, k'u-', 'ida'-. That last peculiarity is dealt with above (and below). Also not counting the variations xu:-, xa'-, etc., likewise dealt with above. Complicating this, and in need of mention, is the k'u- indefinite but specific, as opposed to 'i(da')- indeterminate, non-specific, which can never be used as Subject, for which instead we get in a very real sense passive classifier dA-. The point here is that k'u- uniquely shows up in the O zone as Subject as well as O (as in Ath. , along with \*qWA- 'place, event), so e.g. k'uXah 'is eating sth.' but also 'sth. or someone is eating (it)'. Moreover, the k'u- as S can co-occur with O, but only with indeterminate O, in non-directive regularly as k'u'- from \*k'u'i- . (There are other cases of \*CA- or \*CU-/CWA- +'i-, as in 'i- imperatives, becoming CV'-.) With k'u- S and indeterminate O 'ida'-, however, the result is usually the opposite order 'ida'k'u()-, with the duplicated -' - probably more often present than not. Also, but perhaps least often, the result is the less puzzling k'u'da'-. So here is another situation not (or no longer?) covered by Eyak grammar..

It is furthermore interesting that with Eyak k'u- as S, the only O that can co-occur with that indefinite S is the indeterminate, however awkwardly in the directive. With other O's, i.e. 1s and 2s/pl O, the k'u- as S shows up disjunct as the o of pp. -d 'punctual contact with o; o as middle agent in causative'. For the latter meaning of the pp., e.g. te'ya' sid XAsALahL 'fed me fish', te'ya' k'ud k'uXAsALahL (presumably -- hope I can get Marie to say this) 'someone fed someone fish' or 'a fish fed someone something'?! Now, combining k'u- S with non-indeterminate O, e.g. 'something/someone (specific) scratched me' is not \*xuk'usAk'in't'L, or \*k'uxu-, but k'ud xusAk'in't'L. That is not a causative (which would presumably be k'ud

xusALk'in't'L 'made sth/someone scratch me'), but it is obviously related somehow, with the same o-d.

Finally the strange directive indeterminate O, 'i-da'- or rather 'i-dA-', with extra -dA-, might somehow be understandable in view of some combination of the following 3 points, especially the third: (1) indeterminate S in a sense is DA- in classifier (i.e. passive, where L- optionally becomes dA- rather than LA-, by the way), however far to the right; (2) dA- indeterminate o of pp's; and (3) 'ida: or 'idA- 'that which (abstract), what (non-interr.); the fact that', 'so much so that...', e.g. 'ida: Xi:yah or 'idAXi:yah 'u'lixilgah 'I know what you're eating; I know you're eating (it)'; 'idAsiga'L or 'ida: siga'L 'I'm so tired that...'

Many of these simple examples I've taken the liberty of generating myself, for these purposes. However, except as otherwise indicated, I'm confident they're correct.

## VERB THEME CLASSES

Eyak verbs are **inflected** for the following (not counting person and number): A. **Mode-Aspect**: 1. imperfective aspect, 2. perfective aspect, 3. conditional aspect, 4. imperative mode, 5. optative mode, 6. desiderative mode; B. **Conjugation**: 1. Active, 2. Inceptive, 3. Neuter.

Eyak verb themes consist of a stem plus zero to a small number of affixes which 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 follows: 1. action (any subclasses? -- largest, most open); 2. motion (or “durative”?): a. locomotion (largest), b. postural (limited), c. classificatory (limited); 3. stative: a. Neuter imperfective stative (limited), b. s-perfective (or Active) stative (largest; and/or in some cases Neuter perfective – perhaps together better “perfective stative,” more frequently Active than Neuter), c. GA-perfective (or Inceptive) stative (limited).

There are several types of **derivations**, thematic or productive, that apply to Eyak verb themes, on one or more areas of the verb-prefix complex. For instance, from left to right, (1) for valence on the classifier: valence- or transitivity-raising, L- [= barred l] in causative, intensive, instrumental, and/or the reverse, D-effect, i.e. vocalization of classifier, for passivization, detransitivization, reciprocity, reflexivity, reiteration; (2) on the “qualifier” zone, e.g. plurality, noun class, anatomical, and/or more or less thematic marks; (3) -i:lih- ‘mental’; (4) -’- directive, usually thematized; and of course (5) 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 which suffix or affect (choose allomorph of) the stem itself, and which also choose or impose conjugation. The largest subgroup of these, active derivations, choose the Active conjugation: 1. repetitive (-g suffix, very often thematized or lexicalized), 2. yAX-perambulative (preverb yAX, -X suffix in imperfective only, D-classifier), 3. persistent or insistent (expansion of stem-vowel, often thematized), 4. customary (as preceding, -k’ suffix, but not thematizable, and no perfective), 5. usitative, on motion verbs (no affix, simple Active imperfective), 6. qAXA-“emphatic plurality”, 7. many nominalizations. Three other such derivations choose Neuter (imperfective), both highly specialized, requiring ’i-conjugation prefix: 1. liability (suffixing -X), 2. anatomical resemblance (converting noun-stems), 3. “expressive” stativization (of limited productivity). Only one such derivation chooses Inceptive (perfective), but is very widely applicable, emphasizing locomotion/durativity, on action verbs se.g. “weep one’s way along, weep as a long process,” which could be called “progressive” or “processive,” and on stative verbs for transition, ‘is becoming.’

Negation can be used on all verbs 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 “be blind, deaf, numb, weak” etc.

In addition to many nominalizations or relativizations of verbs, there are also a few types of deverbalizations (verbal nouns, gerunds, acquisitionals, instrumentals) derived from Eyak verbs.



The above single page is a most important statement, all too succinct, for a large part of Eyak grammar, i.e. overview of verb system.

The following manuscript files are studies of the affix and stem morphology through the 3 conjugations of 1. imperative, 2. optative, 3. conditional, and 4. desiderative mode-aspects {1-30-08: 4 and 5 now rather fully worked up, 1 except for Sophie material, and 3 largely but only preliminarily worked up, with added summary on mode-aspects, typescripts} -- imperfective and perfectives being covered in 1965, 5. customary and 6. repetitive active derivations, 7. morphophonemics of the directive, 8. preliminary listing of directives and of qAXA-. Done earlier, this file also includes 9. an updating ca. 2005, of "remaining problems/questions on Eyak grammar" (4 pp. ms.), 10. an important study of Eyak verb theme classes, according to choice and use of conjugations and imperfective/perfective {1-30-08, much more advanced in typescript, here below}, cf. 1965 (2 pp.), 11. listing of Neuter imperfective/stative verbs, a limited class (up to 70, + 27 liability, + 7 anatomical resemblance instances attested), 12. listing of Inceptive stative verbs (ca. 35), 13. listing of attested persistives (including thematized ones), and 14. from the 1990s, dimensional/quantity neuter statives, absolute and comparative.

This file plus 1965 covers a large part of Eyak verb morphology.

MEK 2-25-07, 9/12/07, 1-30-08; 11-8-10 the above paragraph now outdated, i.e. all files mentioned now done, including all statives (Neuter imperfective, Inceptive perfective; Active and Neuter perfective together in one file), directives, Active derivations (usitative, qAXA-, persistive, customary, repetitive, perambulative), Inceptive perfective derivation (progressive).

Need to define verb theme vs. verb base. Theme is stem plus non-inflectional and non-derivational affixes. I.e. e.g. classifiers other than L and/or D- elements not clearly derived from e.g. causativization, instrumentalization, passivization, iteration, reciprocity or reflexivity, i.e. raising or lowering of transitivity; or qualifiers not clearly anatomical or class-marks; or directives, perhaps any; 'i:lih 'mental', in spite of clarity of meaning?; -g repetitive where thematized, etc. Gray areas should be fairly minimal, especially since some pains were taken to find simplest most "basic" form during elicitation. (Here, we shall see, "basic" is an unfortunate term.) – A major shortcoming in my original fieldwork was the very partial record-keeping of negative responses. One generalization I should therefore add here, however, is that I made a routine practice of trying to get minimal themes or bare stems from Lena, in order especially to isolate the meaning of the stem, i.e. try to elicit forms especially 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 assume that they could not be elicited.

Verb base is theme plus preverbals or transparent derivations which change "meaning" of a verb, making it another lexeme. This is a much grayer area, of course, and, ironically, a lot less "basic" than "theme" or "thematic" is. E.g. o-ch' O-ta 'move O to o' = 'give o O', or ya'X' O-ta 'move O up' = 'lift O' may be called lexemes mainly because English has 'give' and 'lift'. At the same time, it is useful to be able to consider such e.g. in predicting choice of conjugation in at least the imperative, as it is important

to predict choice of conjugation in the imperfective and perfective by establishing verb theme classes.

More study is needed still to define the term verb base, and to consider the possibility of “verb base classes.” The concept may hardly be useful, or useful any longer, given the complexity, variability, and haziness of classing preverbals on the principle of telicity.

There may be a minor verb-theme class, Neuter perfective (as well as Neuter imperfective) – also a stative, or more postural-classificatory, durative”, e.g. O-’-yl-ta ‘expect O’, o-yAq’ -da ‘be dressed in, wear o’, no durativized, unmarked s-perfective, as normal classificatory or postural? Need to check meaning of s-perfective, only ‘start to expect O’, ‘don o’? In any case, these are thematically derived, not simple themes. In a sense, no matter. Verb theme class is not assignable to stem itself, as e.g. there are Neuter statives like o-dahd O-’-l-ta from l-ta ‘move or position head’ which is itself not Neuter stative, so class is property of theme, and certainly not just stem.

A minor mode needing treatment is cautionary negative imperative, preverbal -q’ah or -q’A-, with Inceptive imperative, variable stem -CV:-G. Most or all instances are gathered under q’ah in ledger file. (11-8-10: These are all included un subsection under Negatives.)

Next step here expand main part of above page 1 statement, including from file 10. description of use of the 6 conjugation/mode choices for each theme-class, the conjugation/mode diagrams in 1965 covering the basic morphology thereof.  
MEK 11-12-07, done above and below 1-20-08

#### EYAK VERB THEME CLASSES 2-7-08, 2-17-08

Eyak verb theme classes are established on the basis of semantics and above all, here on the patterns of conjugation choices through the mode-aspects, basically the imperfective and perfective aspects. For detailed discussion of conjugation in modes and in conditional aspect, see Krauss chapters 2007-8 in the Eyak computer file. As shown in Krauss 1965, two aspects, i[mpfective] and p[erfective], and the three conjugations, A[ctive], I[nceptive], and N[euter], form a two-dimensional array of six combinations, which were displayed in 1965 as follows:

Ai	Ii	Ni
Ap	Ip	Np.

As we shall see, no verb theme class uses all 6 of these combinations. All use 4 or 5. For the purposes here of defining the verb theme classes according to use of these 6 aspect-conjugations, the Ii (Inceptive imperfective – “future”, inception not accomplished, i.e. ‘action/motion/state will happen (at any future time)’ ) is of no use, because it can freely be used with that meaning and only that meaning with any verb theme. The Ii moreover has no prefix in the aspect-conjugation slot, but rather has what appears to be in origin a sequence of three elements \*qw-a-’- far to the left of that slot, indicative of more recent extrasystematic origin, making the inclusion of the Ii relatively artificial to the system in question here. Further, the Np (neuter perfective) is the opposite of the Ii, in that the Np prefixes and -L stem-suffix fit it perfectly into the system, too

perfectly; in fact, the system is reinforced by it, in such a way that the Np too could be considered a relatively recent addition to an older system quite different from the modern one constructed as above, and which can be better defined only by comparison with Athabaskan and Tlingit. Use of Np is not helpful to the definition of theme-classes either, since it too can be used with all classes, including a few instances even Neuter imperfectives.. One might say that the use of Np is not so free as that of the Ii merely for semantic reasons, being specialized in the meaning ‘S is in a long-term (though not inherent) state’—See below, under Class 2b., for comments on the special, marked, often idiomatic or expressive meaning of Np.

According then to use of the 4 remaining and therefore criterial conjugation plus mode-aspect combinations, Ai, Ap, Ip, and Ni, 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 7 classes; or, far better in principle, as 3 classes, 2 of those with subclasses, as follows:

1. Action
2. Motion
  - a. Locomotion
  - b. Postural (animate)
  - c. Classificatory (inanimate)
3. Stative
  - a. Neuter imperfective
  - b. Inceptive perfective
  - c. Active and Neuter perfective

[[All sections below need to be filled out with exemplification. Started.]]

Examples are kept to the simplest. Cited are only instances of criterial conjugation and aspect combinations, enough to establish usage thereof clearly for each theme class; modal instances are omitted, both because these are in part much more complex, much less clear-cut, and much more variable or indeterminate. For usage in modes, see the chapters on modes. Not all examples may actually be attested in the corpus; some may be constructed by me; where I am not absolutely certain of everything, including the exactness of the gloss, the example is introduced by “perhaps”, with question mark at end.

Class 1. Action. This is by far the largest class, 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 easily shown to be a useful enterprise, due to the apparent indeterminacy of that choice as so far demonstrable from the data (between Active and Inceptive in the imperative – likewise in other modes). These themes use Ai, normally ‘is doing’, Ap ‘did’ (so is no longer doing). Ip is used only derivationally, ‘is carrying out action as a process prolonged through space or time’. Ni cannot be used, except in the “liability” and “expressive stativization” derivations. Many further action themes are derivative (-g repetitive, yAX-perambulative, persistent, -k’ customary, usitative). Exx. xLtsAX Ai ‘I’m cutting it, making a cut in it’ (generically, without regard to number or repetition of motions, type of object or instrument or result), siLtsAXL ‘I cut it’; Ip derivation GAXLtsAXL ‘I’m cutting it (along)’ (in the process of making a long cut in it).

Class 2. Motion. Ai can be used only in usitative and other Active derivations, Ni not at all.

Class 2a. Locomotion. This is by far the largest motion class, for movement of S from one place to another by any gait or means of transport. Ip means 'S is in process of so moving', Ap 'S has so moved, did so move', Np 'S has so moved and remains in place indefinitely, long-term'. This can include transitives, i.e. not only causatives, but 'S transports O'. Exx. GAXwe:L Ip 'I'm swimming (along)' (from one place to another), siwehL 'I swam' (from one place to another), Np lu: 'i:yahL 'he's gone beachcombing' (preverb 'tidal area' plus 'is gone', Np of -a 'sg goes (on foot)'); Ai 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)', Ip 'iGAXtl'i:L 'I'm transporting you along in boat', Ap 'isitl'i:L 'I transported you in boat', perhaps Np 'i:xitl'i:L 'I have you in my canoe on a trip (1 mile or 100 miles)''?

Class 2b. Postural (better positional?). This is a highly restricted class, of inherently intransitive very high-frequency themes: -da 'sg (animate) sits, stays', -te 'sg (animate) lies prone,' -tu'ch' 'pl (animate) lie prone', -'ya 'S is involuntarily situated'. Ap is for 'S is in position; got into position', Ip for 'S is getting into position', and Np for 'S is in position indefinitely, for some term'. Here and elsewhere 'for a term' means for an unspecified amount of time, e.g. 'S is in jail Np' could be for life or a 1-hour term, but some period, whereas 'S is in jail Ap' could be 'S went to jail and may be staying indefinitely or already is out'. I wish I had actually investigated this example; this is only my impression. Exx. sitehL Ap 'I'm lying (am prone), I've gone to bed; I went to bed', ya:n' GAXte:L 'I'm lying down, I'm getting into bed', Np 'ixitehL 'I'm bedridden, stuck in the hospital for some period'?; Ai derivations: usitative 'a:nd xteh 'here is where I lie, sleep, this is my sleeping-place', customary 'a:nd ('A)xte:k' 'I lie here, I (customarily) go to bed here', perambulative yAX xDAte:X 'I'm lying about'.

Class 2c. Classificatory. This is a highly restricted class, also of very high-frequency themes, both transitive (with animate S) and intransitive (inanimate S): -ta 'S handles, moves, places O (of certain shape, perhaps originally elongated); S (of that shape) is in position', -'a 'S handles, moves, places O (of certain shape, perhaps roundish); S (of that shape) is in position', -L-(y)a 'S handles, moves, places pl O; pl S are in position', -L-qa 'S handles, moves, places O (liquid in container); S (liquid in container) is in position', and, overlapping with 2b. O-te 'S handles, moves, places animate O', O-L-'ya 'S puts O in situation'. In these Ap is for 'S handled, placed, moves O; S is in position; got in position', Ip for 'S is handling, moving, placing O; S is moving; S is getting into position', and Np for 'S has put O in position long-term, keeps O in position; S is long-term in position'. Exx. sALahL Ap 'they (inanimate) are in position', siLahL 'I put them (inanimate) in position', 'i:LahL Np 'they are in position for some time', 'ixiLahL 'I am keeping them in position', Ip GAXLa:L 'I'm putting them in position'; Ai derivations: usitative 'a:nd Lah 'they belong here', 'a:nd xLah 'I I keep them here', perambulative yAX xLAya:X 'I'm moving them about'.

Class 3. Stative. The class cannot use Ai. (I have no record or memory I ever tried to elicit an Ai for any of these, so see if that could be used in any derivative way. However, the total lack of any such attested is probable evidence that Ai cannot be used with

statives.) It is inherently or mostly intransitive. There are three subclasses of statives, according to choice of Active perfective, Inceptive perfective, or Neuter Imperfective meaning 'S is in state', usually translatable in English with adjective.

Class 3a. s- or Active perfective stative. This is the largest class of statives. Ca. 100 members are attested. Ap is for 'S is in state; S got into state, became', Ip for 'S is getting into state, becoming', Np for 'S is in state long-term'. Ni cannot be used. States for this subclass seem to be less inherent, i.e. understood rather as the result of a process, than states in Neuter imperfective statives. Exx. disiche'L Ap 'I'm hungry, I was hungry; I got hungry', dAGAxche'L 'I'm getting hungry', Np dixiche'L 'I'm long hungry, stuck hungering'.(11-8-10. This was changed to combine with Neuter perfective stative.)

Class 3b. Inceptive perfective stative. This is the smallest most specialized class of statives. Ca. 35 members are attested. Ap is only for 'S became', Ip for 'S is in state; S is getting into state, becoming', Np (marginally attested) for 'S is in state long-term'. Ni may be marginally attested. The meaning has to do with pressure, grimace, roundness, curvature, etc. Several are transitive, e.g. 'hold O', 'bend O'. See further comments below. Exx. GALAGAmAk'L Ip 'it's round, it was round; it's getting round', sLiGAmAk'L Ap 'it got round'.

Class 3c. Neuter imperfective stative. Up to 70 members are attested. Ni is for 'S is' (gloss 'is in state' may detract from inherence of quality, e.g. dimensional). Ap is for 'S has become, became', Ip for 'S is becoming'; Np is marginally attested for 'S has become and remains long-term'. dAXunh xiLeh Ni 'I'm a person, I was a person', dAXunh siLe'L Ap 'I became a person, I was born', dAXunh GAXLe'L Ip 'I'm turning into a person', 'i'lixilGah Ni 'I know you, I knew you', 'i'lisiLga'L Ap 'I got to know you', 'ilGgAxLga'L Ip 'I'm getting to know you'.

#### COMMENTS ON STATIVE THEME CLASSES 1-29/30-08, 2-16-08

These are preliminary comments on s- Active perfective and possible Neuter perfective statives, a somewhat larger class than Ni and perhaps partly an open class. (Non-Inceptive, GA-) perfective statives (Ap and Np) may be a single category, where what look like possible Np statives, e.g. 'be dressed in, wear o', are just cases where Ap is unattested or much less frequent than Np, which can be considered something like a derivative in all cases. It looks like this Np derivation, so to speak, can be applied to all statives, maybe all themes, even Inceptive perfective statives {check -- I think I saw such in e.g. one of the uvular-initial Ip statives}, also Neuter imperfective statives. Np is attested in fact with most Ap statives. I.e. Np, though it is certainly a conjugation, may be seen as just a derivation, if in fact it is correctly attested on Ni and Ip stative themes. {Combine this with statement above about possible superficiality of Np in system. }

Naturally enough, there is a fundamental contrast between Ni statives and all? the perfective statives (even the Ip ones?). Ni statives are inherently stative, not expressing the result of a process. They are of course the only imperfective statives. They are mostly intransitive, but a few, e.g. 'know, believe, cause to be' are transitive. Often they are dimensional, e.g. 'thick, thin, short, strong'. In any case Ni's are seen not as the end-

result of a process. That is the realm of the perfective statives: there the usual is Ap; that marked as long-term end-result is Np; or, least frequently, that marked as a standoff, stativized process, balance, pressure, etc., is Ip. Of course all statives can also occur in the Inceptive perfective meaning ‘becoming’, i.e. transitional, processive.

Perfective statives, as noted, can all be seen as the result of a process as opposed to inherent qualities of the Ni, e.g. dimensional. 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 Ap whereas ‘cold’ is Ni – perhaps because it is technologically easier to warm something than to cool it. Some Ap’s, e.g. ‘be hungry’, a case par excellence, or, for more obvious reasons ‘swollen’, or several themes meaning ‘rotten’, are inherently the end result of a process. It becomes interesting though, to consider why, say, yik’a’d ‘is sick, in pain, feverish’ is seen as inherent state whereas, say, dAsAche’L ‘is hungry’ is seen as result of a process.

Further, unlike Ni statives, many Ap statives, about 40% in fact, are derivatives from nouns (or the like: e.g. some looking like Active imperfective verbs, e.g. lixah (<\*lAxah), la’mahd, dAchehg), meaning ‘be full of N, covered with N, be N-y’. [[11-8-10. Wrong kind of examples. Fix.]]

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 muddles of a transitive, e.g. a causative, whether such a transitive is attested or not. As such, they could make an open category of Ap (or Np) statives. However, at least some of these, where disambiguously attested, e.g. with 1 sg 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 definitively not passives. A few are reflexives, so definitely derived from transitives, but those could be also considered thematized reflexives. Thus probably perfective (Active and Neuter) statives are not literally an open category, but rather at least a somewhat limited one, with about 100 attested members (plus perhaps the 35 Inceptive), as opposed to up to 70 basic Ni’s. – There appears to be about the same variety of classifiers in Ni stative themes, i.e. L- (not just for comparative dimensionals), Li- (e.g. ‘strong’), di-, as appears in the perfective statives.

There are a few instances of statives where what is routinely a Ni is occasionally attested also as a perfective, or of routinely perfective statives with one or more instances of Ni [– exemplify –] -’yahG, others. Such should not weaken the case for the theme classes, but are only evidence either of natural confusion at the terminal state of the language, especially in response to uninformed elicitation, or evidence of possible derivational potential of the classes, where a clear-cut classification can be deliberately manipulated for derivational or idiomatic or poetic/stylistic purposes.

Addendum 11-8-10. Note in Neuter imperfective file dimensional theme la’q’ yitsidg ‘it’s thin’, also la’q’ GALAtsidzG ‘it’s thin’ Inceptive perfective stative (Lena, checked, as well as routine transitional ‘it’s getting thin’). This is important instance, evidently, of dual membership of a single theme, both stative, but viewed differently. Exact difference in meaning not checked with Lena.

## MODE-ASPECT AND THEME CLASSES

Mode-Aspect is a single inflectional category, quite clearly, but it can also clearly be divided into 3 modes (“moods”: imperative, optative, desiderative) and 3 aspects (imperfective, perfective, conditional) on two bases. One is semantic, in that the aspects refer to different stages of realization, and modes to desirability of act/event/state. The other 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, on the other hand, the difference between mode and aspect affixes is only partly clear, or relatively insignificant or abstract: it is true that -L perfective occurs only in aspect, likewise qu’wv- imperfective, and -X desiderative only in mode; but GA- occurs in both, likewise s(A)-, ’i-, (’)A-, (’)a’-, (-)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 6 can occur independently, even conditional aspect and desiderative mode, as shown, though those 2 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. Secondly, i.e. within the modes conjugation choice is clearest or most clearly dependent on theme-class and preverbals for the imperative mode, whereas it is less clearly so in the optative and desiderative, where it is more influenced by tendencies SPECIFY THESE for generalization or spread of certain preferences between Active and Inceptive according to theme class (Neuter being nearly lexicalized). Again, that leaves choice between Active and Inceptive imperative for action verbs without telic preverbals the most indeterminate of all. POSSIBILITY OF URGENCY/POLITENESS/STYLE/MEANING – INVESTIGATE.

Note the inconsistency in semantics and labels for the three conjugations, especially “Inceptive, beginning” in that that is grammatically chosen in the modes over the Active, ironically, by telicity, “reaching goal,” in the preverbs, whereas in the aspects Active perfective is, of course, more “realized” or finished than Inceptive perfective (sahL French *alla* “parfait”, Ga:L French *va/allait* “imparfait”). The apparently points again to the artificiality of synchronic Eyak “system.” This particular artificiality is related also to strange origin of “Inceptive imperfective” prefix \*qw-A-’, q.v. in remarks on prefixes.

Just learned that Marie died today, January 21, 2008.

1-27-08 further thoughts on conjugations – all purely philological now

USE AND MEANING OF GA-, 'i-, AND 'A- CONJUGATIONAL PREFIXES,  
attempted synthesis, unsatisfactory, needing revision

GA- “Inceptive” may be an acceptable label, though not ideal. The GA- prefix occurs in all mode-aspects except the imperfective aspect. In the perfective aspect “GA-Inceptive” refers to a process that has begun, is in process, as in GAxL ‘I’m walking along’, GAxLe’L ‘I’m becoming’, Gaxki:nX ‘I’m in the long-term process of weeping, or weeping along a distance’ (derivatively, as opposed to the simple act of crying, more abstractly or generically). In the imperfective aspect GA- cannot occur. Instead, for the so-called (perhaps artificially named) “Inceptive imperfective,” GA- is replaced in a position further to the left from that of the conjugation prefixes by a prefix originally a sequence \*qw-A-’- , referring to an act or event which has not yet begun but will begin in the future. In the conditional GA- refers to act or event or state which has not yet begun and which may (or may not) occur.

[speculation] In the modes GA- Inceptive refers to an act or event that is to happen as a process, as opposed to a simple act or event (Active). Hence it is naturally required or preferred in the modes, especially the imperative, with telic preverbals in all theme-classes, and – possible answer to question we can no longer get further speaker intuition for – as being naturally more polite or less demanding or imperious an imperative than is the Active imperative in e.g. ’u’GAtsa’ ‘buy it!’ (recognizing that as a process, involving expense of money, negotiation, or a favor) than ’a’tse: ‘buy it!’ (as an act, more abstractly), but only of slightly different meaning in ‘sleep’ (GAtsu’d ‘go to sleep, get to sleeping’, as a process, as opposed to ’Atsu’d ‘sleep!’, here not significantly more presumptuous than request for simple act). – [not speculation] In the modes there was certainly at least some levelling – probably a lot, but in any case much more in the optative and desiderative than in the imperative -- of the Active/Inceptive contrast in the response of speakers to my naïve or uninformed elicitation, but there are also at least some traces of that distinction in the imperative, e.g. in the statistics and glossing for the modes for s-statives, where ’A- can mean ‘be/stay’ and ‘become’ while GA- is more ‘become’, Inceptive ‘become’ being naturally the more common, referring to a process. The Neuter statives case is more complex, with Neuter imperative partly persisting, and for GA-Inceptive statives the usual imperative is, ’i-, q.v. below. For non-stative themes, use of GA- in the modes is more complex, described above, mixture of preverbal telicity, levelling trends, and meaning differences described above here.-- Still need better explanation about ’i-prefixed imperatives and conditionals? as kind of Active or Inceptive.

’i- may not properly be called either Inceptive or Active, so perhaps should be recognized as a fourth conjugation after all. ’i- as an aspectual conjugation prefix does not occur in the imperfective or perfective at all. (An apparently homophonous prefix occurs in the same position in all Neuter perfective and some Neuter imperfectives, but that is quite probably a different morpheme.) In the aspects, ’i- occurs only in the conditional (‘if/when’), better called “unrealized”?, where ’i- replaces or occurs to the exclusion of ’A-Active, and means act or event or state is in fact begun but is not carried out, is aborted, not realized, as opposed to GA-Inceptive, inception itself not realized. – No, this is sophistry, stretched rationalization, as in a better? sense, the ’i- refers to



something definitely started (inceptive?) and GA- refers to something not even started. In perfective aspect GA- is definitely started but not ended; and in the imperfective GA- does not occur at all. In the modes, most clearly in some imperatives, where GA- occurs, it goes with preverbal telicity, completion of process or attainment of goal.

In the modes, 'i- occurs mainly and most distinctively in the imperative. (In the optative it may not occur at all, and in the desiderative it is probably only an analogical spread from where it is most preferred in the imperative.) In stative theme-classes the 'i-imperative does not appear for the s-perfective (Active) stative or of course for the Neuter imperfective stative, but occurs only as the imperative for the GA-Inceptive perfective stative, a theme-class for a kind of stativized process, e.g. of isometric pressure, or curvature or grimace; there in fact it appears to be the only regular imperative, for some reason that needs to be explained. Though it would be formally possible to convert a GA-stative to an imperative by deleting the -L perfective suffix, apparently use of the Inceptive prefix again for an already begun or achieved state is incorrect, again ironically; instead the 'i- imperative, of a more abstract meaning, as we shall see, is used there.

The 'i-imperative occurs also in motion verb-themes, in a rather circumscribed way. In locomotion verbs it occurs in the abstract sense, e.g. to indicate pure mode of locomotion without reference to departure or goal, e.g. 'iya' 'walk! (not run or swim)', or with atelic preverbals, e.g. 'u:dAX 'iya' 'walk along there', not with telic preverbals, referring to arrival at a point, e.g. 'u:da' Ga:' 'walk thither, arrive there!' (not \*'u:da' 'iya'). 'i-imperative appears to be in complementary distribution in a similar way with 'A- Active imperative in locomotion themes with preverbal o-k'ah 'away from o', e.g. 'u:dik'ah 'a:' 'go away from there!' (That GA-imperative does not occur with that either may cast some doubt on whether GA-"Inceptive" does in fact refer to definite point of beginning or departure as well as goal or arrival.) It is also very odd that GA-imperative is not routinely used with preverbal o-ch' 'to/repeatedly at (as opposed to at rest in contact with o)' in locomotion themes, where 'i- is used instead, and in classificatory themes, e.g. especially 'give to o', where that preverbal definitely appears to be telic semantically, but where instead 'A-imperative is used instead. Since 'A-imperative is used in locomotion for definite departure and no arrival in the case of preverbal o-k'ah, and definite arrival with o-ch' in classificatory, it becomes clear that no single or fully reconcilable meaning/usage can be found for all conjugational 'A- prefixes; likewise probably for such 'i- and GA- prefixes. And/or telicity of preverbals is far from simple or clear inherently/semantically and differs e.g. even between theme classes or here even in subclasses, locomotion versus classificatory. I'm afraid we're still a long way from going as far toward such understanding as might have been possible or still might be philologically. Check though data for e.g. qa' Ga:' 'emerge!, walk completely out of depression/pit', probably also qa' Gaki:nX 'burst out crying!?', qa:nch' Ga:' 'emerge, walk further out (but not completely)?', \*?qa:nch' 'iya' meaning what?. Check late imperative data from Sophie. – Summarize that 'i-imperative does not occur with action verb themes at all – rather only in specialized ways with stative verb themes (GA-statives only, always), and with motion verb themes (without regard to departure or destination, except with o-ch' in locomotion); and only other use of 'i- is in conditional mode where inception is in fact realized and process aborted, as opposed to GA- conditional where inception is not realized (and may never be). Hard to reconcile.

Tentative conclusion, 1-29-08. Impossible and inadvisable to try to arrive at simple conclusion or synthesis of Eyak verb conjugation and mode-aspect system, e.g. consistent use or meaning of prefixes GA-, 'i-, or 'A- through the mode-aspects as defined. ('a'- and yi- of the Neuter and optative, on the other hand, are less problematical, as are the suffixes.) Allowing for the inconsistency/irreconciliability for those 3 prefixes, mainly, i.e. the complexity of their use, and the complexity of defining telicity for the preverbals, then the verb theme-class system holds together fairly well, as does the 3-conjugation plus the 6- (or 3+3)-mode-aspect system (=18 paradigms), allowing however for 4<sup>th</sup> conjugations especially in the imperative ('i-) and optative (obsolescent s-). This, it presently seems to me, is the simplest picture I can provide of this part of Eyak grammar: complexity mainly in use of those 3 prefixes, preverbal telicity, and 2 extra paradigms, and relative simplicity of verb theme-classes and paradigms (3 conjugations x 6 mode-aspects). The morphology itself (and morphophonemics) is a given, which I I presume is reasonably complete and accurate, hardly open to revision.

The major casualty is in my failure to get as precise a picture as was possible of the semantic or stylistic differences while Eyak was still alive, though certainly there was a great deal of levelling, at least in response to my naïve or uninformed elicitation, considering that spontaneous conversation was no longer taking place nor could easily have been arranged.

Some philologist in future generations might be able to improve or at least rebalance the present picture by redefining the theme-classes and/or conjugation/mode-aspect systems differently, but for the moment I shall have to leave it as is, with the complexity, inconsistency, or even contradiction, in the use especially of those 3 prefixes, and in preverbal telicity.

Better understanding can certainly be achieved in one very important way: historical-comparative, with Athabaskan and Tlingit (e.g. obvious Athabaskan cognates with GA-, s(A)-, yi-). The present picture is surely the result of considerable rearrangement and reinterpretation of some older picture, which presumably makes the necessary needed sense for better understanding of the present complexity or inconsistency, and obvious artificiality or superficiality of the synchronic picture.

## CONDITIONAL 2/1/2009

The conditional mode 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. The conditional has basically two syntactic uses. Most 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), e.g. – using here the Inceptive conditional, with GA- prefix -- ‘a:nda’ Gah da:X ‘if/when he comes here’, or hypothetical or contrary-to-fact ‘if he came/had come here’, as opposed to ‘a:nda’ sahL da:X ‘he came here and’, or ‘when he came here’; negative ‘a:nda’ GahG/Ga:G da:X ‘if he doesn’t 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 may also translate ‘whenever he comes here (I feed him [’ud k’uXAxLa:k’inh])’. 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’, Anna in text xAtl’ ya:n’ dAGa’yah-wahd ‘for when the snow falls’, perhaps a nominalization of the verb phrase, or an error, followed by the same phrase subordinated instead by da:X, perhaps a correction. 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 Ginhinh (qu’xLxut’) ‘(I’ll shoot) whomever comes in’ or, where that suffix is zero, ‘AdiX Gah (qu’xLxut’) ‘(I’ll shoot) whatever comes in’, and from Anna in text, GAqinhinh ‘whoever goes (by boat)’, te’ya’ ‘u:da’ dAG GALah ‘fish that swim up to there (are few)’, ‘uch’ GAtah ‘whatever they give him’

The Active conditional is inadequately documented. A most striking feature of the conditional mode is that the choice of conjugation prefix, between the Inceptive (GA-) and Active conditional, basic prefix ‘i- [[or evidently also ‘A-; see addendum]], is both clear and quite different from that choice in any other mode. ((2/01/09:In fact, keeping such terminology here results in what seems to be blatant misnomers – but see semantic rationalization 4th paragraph below. While the “Inceptive” use is as above, the “Active” use might be seen as having the literally inceptive sense)) ‘just as the event or situation began to take place (something else happened and it presumably was not realized)’. Thus 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, 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 [[see addendum, however]], merely because this paradigm is of relatively low frequency and fully systematic informed elicitation of it never took place, unfortunately. 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’, yAGALqah da:X “when it gets good and light” (Lena).

Though there are instances of both Inceptive and Active conditionals with the repetitive -g suffix, there are no conditionals in the customary, i.e. the customary is presumably precluded.

There are also Neuter conditionals, with at least 5 instances attested, 4 with the verb most consistently staying in the Neuter, -t’e/ ~: ’AnahshAkih ’i:lih’a’xt’eh da:X ‘I was just starting to be happy and’, ’uch’ dla:XA’xt’eh da:X ‘just as I was looking at it’ (both from Lena), wAX ’A’xLt’eh-ch’ahd ‘after I’ve kept them thus’, wAX ’i:lih’a’t’eh da:X ‘when they feel like it’, and dik’ ’ida’yiLa:G da:X ‘if you don’t hate’ (all from Anna in text). From the first two, the meaning appears clearly to be like that in the Active; 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’; and 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 my mind becomes/has become (fully?) well again’.

The conditional was earlier called “subjunctive” and is abbreviated “s” in the 1965-1969 ledger. The term “unrealized” might have been better for the purpose of rationalizing or justifying the terms “Active” and “Inceptive,” given the above description of its use, thus respectively, “activity begun but not realized” and “(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 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 3 aspects and 3 modes, rather than 2 aspects and 4 modes. In terms of the prefixes, however, the Inceptive GA- occurs in both the aspects and the modes with use more like that in the modes, and the Active ’i- has a homophone basic only to the imperative mode, though with a very different use (2/01/09: and some use in the desiderative mode and customary derivation, q.v.). In sum, it is perhaps not very useful to try to make a clear distinction between aspect and mode in the 6 Eyak mode-aspects.

## MRPHOLOGY, MORPHOPHONEMICS

All open variable stems take the basic form CVh in the conditional, whether of the CV or CV/ type. Occasional lengthening is possible, as just seen in the case of -t’u: above, probably expressive, and it occurs more often than not in the negative, -CV:G for -CVhG.

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/ ~, here as elsewhere), and silah qe'yile' da:X 'if you love me' (only attestation, Marie 2007).

Inceptive conditional prefix is unproblematic, GAx- 1sg, Gi:- 2sg, GAiAX- 2pl, GA- all others. With zero-initial stem, e.g. 'sg goes' the result is not lengthened, Gah.

Neuter conditional, as seen in the above attestations, is (')a'- as in Neuter imperative and negative, (')a'x- 1sg, (')a'yi- 2s, presumably (')a'lAX- 2pl, (')a'- otherwise.

The Active conditional prefix is basically 'i- in absolute initial, 1sg 'ix-, 2pl presumably 'ilAX- but not attested. Due to lack of sufficiently systematic elicitation, we cannot be absolutely sure we have 2sg attestation either, for reasons shown below. [[But note 'i:- in addendum.]] However, we do have clear attestations of 2sg with another verbal prefix, apparently homophonous, that for indeterminate O, 'i- (as opposed to k'u-, indefinite, but potentially specific O). Far to the left in the verb prefix-complex, that 'i- can be preceded yet by indefinite S, k'u-, with the result k'u'-, in the same way the result of 'i- imperative and of 'i- here preceded by CV-, e.g. k'u-, is k'u'-. In spite of its very different function – though with very conceivably kindred meaning of indefiniteness at least in the motion imperative – and correspondingly different position to the left of the qualifiers instead of the right, this pronominal 'i- has apparently the same phonological properties as do these mode-aspectual 'i-'s. Since that pronominal 'i- plus 2sg (with non-syllabic classifier) results in 'i:-, i.e. with mere lengthening, it seems reasonable to guess the 2sg of Active indefinite (with non-syllabic classifier) also to be 'i:- [[confirmed in addendum, unless that is underlying 'A- + 2sg]].

Where the Active conditional prefix is preceded by CA- or Ci-, the result is Ci'-, and Cu-'i- becomes Cu'-; 1sg is CV'x-, but 2sg and 2pl are not explicitly attested, 2pl being presumably CV'lAX-. Given the argument above, we should expect the 2sg to be CV:- (i.e. unless some unexpected order of rule application produces ?CV'- or even ??CV'yi-).

As noted above, this Active conditional prefix is homophonous with the prefix labeled the 'i-Inceptive of the imperative mode. Given that the use of that imperative prefix is restricted to motion verbs, where its distinctive meaning seems to be indefiniteness, i.e. move an indefinite distance, without regard to goal (except most strikingly in the case of locomotion verbs with o-ch' 'to o'!!), one may therefore perhaps not wonder that the same (rather than merely homophonous) prefix should be used in the Active conditional as described above. The problem then becomes the classification or naming of that prefix as a type of Inceptive for the imperative but Active for the conditional.

The situation with Active conditional is still further complicated by factors which bring in the use of an 'A- or schwa-type suffix, more or less homophonous with that for the Active imperative and desiderative, most often with Active derivations such as yAX-perambulative, -g repetitive, or preverbal ya' 'in/to a state of rest' which takes 'A-imperative with postural verbs. 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)!', replacing the Inceptive. Another such instance is LinhGih XAtl' 'u:d ya' 'AxLah da:X 'when I've kept them there one night'. Instances from yAX-perambulative: yAX 'i:nxdAk'in't' 'when I go around scratching (things)' (Marie, indeterminate O prefix 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; I was unaware at the

time of the question whether the prefix could have been GA- or 'i-); instances of 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 schwa-type prefix as in Active imperatives, at least optionally.

Beside the above, where the motivation is clear, there are instances of replacement specifically of the Active conditional prefix 'i- ~ by the schwa-type without those preverbals or Active derivations, all perhaps optional. E.g. Lena 'idi'xLAdeh da;X 'just as I was beginning to understand what you say' and 'ida:xLAdeh "just as I understood a bit of what you say" (both presumably in a customary sense, in an attempt to speculate on semantic a difference), GAdi'LAGu', 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 a I began to know him', Active from Neuter).

The same type of replacement, where the Active schwa-type 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' (Fang-Kuei Li from a very rusty George Johnson in text, if not a mishearing for Gadi'tl'eh); especially interesting is (gahG) di:'a'tl' da:X 'if you chew (pitch)' from Anna in text, definitely 2sg, in a customary sense, homophonous with Active imperfective, 'you're chewing pitch and...', but that is perhaps best understood as a confirmation of hypothesized 2sg Active conditional, 'if you take to chewing pitch'; 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. More a cause for concern than this paucity of Ci:(x)(L)-stem instances -- given the lack of informed or controlled elicitation -- are the two instances of unmotivated Ca:(x)(L)-stem instead of Ci:(x)(L)-stem: along with the expected tsin'di'xleh da:X 'as soon as I start speaking' we have twice from Lena tsin'da:xleh (not tsi'di:xleh), likewise 'AnahshAkih 'ida:xLih 'as soon as I start having a good time' (instead of 'idi'xLih or 'idi:xLih). This -a:- instead of -i:- is not uncommon in the imperative, and the fact that it is still less uncommon in the slim statistics we have for this infrequently used paradigm in the terminal stages of Eyak might well be insignificant, rather than suggest a prefix with properties different from that in the imperative. In addition to analogy with the regular -a:- where a syllable does intervene before the stem, we also have the case where the preceding thematic prefix is XA-, after which we have attested the expected -a:(n)- with the zero-initial stem 'eat': thus from Lena Xa:nah da:X 'just as he starts to eat it', Xa:(n)xah da:X 'just as I start t eat it', and even dik' Xa:nliya:G da:X 'if you don't (start to?) eat it', a 2sg instance with the 'i- ~ prefix replaced again with the schwa-type one, so we have no instances of ?Xi'xah 1s, ?Xi'yah or ?Xi'wah or ?Xi'ah 3 etc., or of 2s, unless that in the negative instance from Marie above.

We have possible instances, only in third person, of Active conditional with preceding directive -V'-, in sitl' 'ida'Xah da:X 'just as they start t tell me a story', and from Anna in text qa:tl' 'a'Xah da:X 'when S would (start to?) tell us (it) '. If these are in fact not Active imperfectives, or variants of Active conditionals with the schwa-prefix zeroed out

as in the imperative, then these show, for what it is worth, that the Active conditional 'i- is also zeroed out here, unless it is that in the negative instance from Marie above.

10/25/10 – Reviewing this. Need to say that this file is organized the way it is because of uncertainty in some morphological details, especially 2s of Active, better saved for last. Change to sentence 1, Conditional *aspect*, better than mode, discussed below. Insert at end of sentence 2: , relativized and subordinated.

Need to supply subheadings: after line 4 Subordinated Inceptive. Betw p 1 and 2, Relativized Inceptive. Betw p 2 and 3, Subordinated Active, Betw 4 and 5, Subordinated Neuter. Betw 5 and 6 something.

Need to revise morphology somewhat, pointing out in better perspective 'i- and 'A- choices, along with same in not only imperative, but desiderative and customary as well.

#### ADDENDUM

On 6-21-87 some late work was done with Sophie on the conditional, mainly a successful attempt to elicit relativized Actives, along with relativized Inceptives. Thus sich' 'i:tah dik' qu'Xi:xahG 'I won't eat what(ever) you give me', "OK too," along with sich' Gi:tah dik' qu'Xi:xahG 'id.'; likewise sich' 'Atah dik' qu'Xi:xahG 'I won't eat what(ever) he gives me'. "OK too – sounds good," along with sich' GAtah dki' qu'Xi:xahG 'id.' Sophie also offered on that occasion dAde:d sich' Git:tah da:X qu'Xi:xah 'what(ever) you give me I'll eat; if/when you give me anything I'll eat it', which is presumably to be parsed as subordinated Inceptive conditional.

It does not appear that an attempt was made therewith to elicit any relativized Neuter conditional, or any relativized 'i- conditional as opposed to the 'A- conditional shown here in the 3sg. and presumably 2sg. I.e. use also of 'A- prefix confirmed, but possible difference between 'i- and 'A- with 2sg not investigated, so some question hypothetically remains whether 'i:- could be either, or whether 2s with 'i- could be something other than 'i:-, most likely ??i'-. This whole question should or might best be treated in a general chapter on morphology, of verb prefixes, here 'i- conjugations, with 2sg, which would apply to imperatives (though not 2sg), conditionals, desideratives, customary.

## IMPERATIVE

This study is based almost entirely on the “1965-1969 ledger,” which is an essentially complete handwritten concordance of the Eyak corpus gathered in fieldwork 1962-1965, using also all previous work including especially Rezanov 1805. The concordance ledger has the advantage of flagging or tabulating inflection, conjugation, mode-aspect, etc. throughout in a readily visible format, very convenient for the present study. All fieldwork since 1965 adds perhaps another 30% to that of 1962-1965, so the ledger represents over ¾ of the total corpus, and that gathered since 1965 does not add significantly for the purposes of this study, especially the imperative. It does in places for some of the other mode-aspects, however, as will be noted where appropriate.

Many of the questions taken up in this study were not addressed in an informed way during the main fieldwork period 1962-1965, 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. All regular use of the language had in fact stopped in March of 1961, with the death of Minnie Stevens, mother of the last two speakers.

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 imperatives (2sg and 2pl), 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, choice of which is related to preverbs and postpositions, henceforth called preverbals.

Eyak has 3 main conjugations for imperfectives and perfectives, Active, Inceptive, and Neuter, to which correspond the imperatives with prefixes 'A-, GA-, and 'a', respectively. At the same time, there is a fourth imperative, with prefix 'i-. I used tentatively to consider this a subtype of Active, but now consider it 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-) stative verbs, an interesting fact not noticed before.

The following discussion will present first the morphology or morphophonemics of the imperative conjugations, then the choice of conjugation.

### IMPERATIVE PREFIX MORPHOPHONEMICS

The Inceptive imperative prefix GA- does not vary at all. In the singular it is GA-, with no overt element for 2sg, and in the plural it is GAIX-, with the usual 2pl -IAX- subject



prefix. There is no effect on or from following classifiers or preceding qualifier or other prefixes.

The 'i- subtype of Inceptive imperative is 2s 'i-, 2pl 'ilAX- in absolute initial position. This becomes -' following a vowel, i.e. -u'i(lAX)- > -u'(lAX)-, -i'i(lAX)- > -i'(lAX)-, and -A'i(lAX)- also > -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 below) in earlier fieldnotes or mss. In the 1965-1969 ledger 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 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 O or k'u- indefinite O .

The Active imperative prefix in absolute initial position is 'A- 2sg 'AlAX- 2pl. Following the vowel -A- or -a:- and with a syllable between it and the stem, the combined result is always -a:-, i.e. with syllabic classifiers -LA-, -dA-, and/or -lAX- 2pl S. With no syllable intervening, i.e. 2sg S and zero 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. 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:-.) After vowel -u- of 1sg O xu- and indefinite k'u-, or class-mark/qualifier gu-, the result is -u:-, sometimes nasalized. Because of the ambiguous position of 'Ad- reflexive O as preverbal or conjunct, an immediately following Active imperative can take the form either of 'AdA- or 'Ada:-, e.g. 'AdALAGu' or 'Ada:LAGu' 'warm yourself!'. With directives, a certain instance is sitl' 'a'Xe: 'tell me of it! (theme O-'-Xa 'S tells of O'), where the imperative prefix is absorbed, zero, and the 'u- 3 O 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 below).

#### MORPHOPHONEMICS: STEMS AND SUFFIXES

Suffixes. There is one morpheme which is suffixed only to the imperative stem of the verb, -uh. It otherwise occurs only with the enclitics -d- and -sh- interrogatives, -q'- topicalizer. This -uh is optionally present for 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 Rezanov 1805, Yakutat dialect; in fact it was probably first noted in re-eliciting from Rezanov, and was perhaps becoming obsolescent at Cordova in the last century, e.g. 'ita'uh 'take it!'. Likewise for human sg and pl direct object (or indirect object, or subject, unlike -uh), the suffixes -inh and -inu:, respectively, are used (in all mode-aspects, unlike -uh), with the usual nasal umlaut, whereby all vowels except -u- of open stems (i.e. stems ending in ' or zero (=h)) become -i(:)n-.

Stems. 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 3 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, or perhaps a better term, expansion, of CV' to CV:' either as expressivity, and/or as a property of the stem itself. Examples of 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!', xu:(n)Lla', xu:Lla:' 'save me!', all of which could presumably show such variation. 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! (and other Active instances) 12 times expanded (no -she'), Inceptive Gashe:' twice, Gashe' once. In themes with -tl'i 'bind' we have 23 instances of -tl'i:' in the Inceptive and 7 in the Active, none of -tl'i'; but in locomotion themes with the meaning 'transport in canoe', with 'i- Inceptive we have still 5 instances of expanded, but one short, xu'tl'i' 'take me in canoe!', i.e. only one instance in 36, no doubt analogical. With stem -le 'act' we have 22 instances of expanded -le:' and only 5 of -le' in the Active and GA-Inceptive, but both instances of the 'i-Inceptive 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 2 of -Li'. Finally, in the case of the zero- or vowel-initial stem -a 'sg goes', the Active imperative is 'a:' and GA-Inceptive is Ga:', whereas 'i-Inceptive 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 that the long vowel might come from the initial underlying sequence 'A-a-, GA-a-. Because 2pl S -IAX- 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 long vowel, but unfortunately the corpus lacks the decisive form with plural S.

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, presuming something like PAE \*tl'iw, likewise perhaps 'sg goes' and Athabaskan or PAE \*ha:w.

The second complicating factor I shall here call 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). It might have been called "umlauted" or "ablauted" or "lengthened", 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 of course be further "umlauted" to -i:n- before the suffixes -(h)inh and -(h)inu:). It seems possible that this e:-shift may have come from some \*e-like suffix, but no such 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 shows some instances of -tl'i:, never -tl'e:; O-Li (<O-L-le) on the other hand regularly has -Le:, but that is still clearly related to intransitive -le, as shown e.g. in the passive perfective sLiliL

E:-shift in stems occurs only in Active and Neuter conjugations, never in Inceptive (GA- or 'i-). It occurs in Active and Neuter stative themes, and of course most often of all in action themes. In motion themes, however, it occurs only in posturals and classificatories, never in locomotion themes. In postural and classificatory themes it is found particularly and often only with the preverb ya' 'to/in a state of rest', e.g. ya' 'Ade: '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 it cannot be found with 'sg goes' since that is locomotion, but it is quite frequent with O-X-a 'eat O', as s.g Xa:ne:, pl Xa:(n)lAXe: 'eat it!', actually regular, the -n- being a property of thematic XA(n)-. The shift to -e: itself can sometimes be blocked, again presumably as a property of the stem itself, e.g. -q'a 'burn', here -q'a:, not \*-q'e:; cf. Athabaskan \*-q'an, with final sonorant. Cf. also Eyak stem with nasalized vowel, Neuter stative 'a'Lats'a:n 'be strong!', never shifted.

Lengthened imperative stem-vowels are regular in fully variable open stems in the yAX perambulative Active derivation, 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 below, as though to show that the truly distinctive feature, beside the absence of -', of this imperative stem type, is the shift to e, rather than the length. The opposite may be true in the case of the yAX perambulatives.

#### VARIABLE OPEN STEM TYPES BY COJUGATION

He I shall sum up the variable open stem types that occur in the 3 basic conjugations, in the order Inceptive, Neuter, and Active, with special attention to problematic or irregular stems or themes.

Simplest for form of variable open stem is the Inceptive imperative, both that with the obvious GA- prefix, and also that with the 'i-, yet another reason to class the 'i-imperative as Inceptive, rather than Active, as seen above. All open stems here take the basic form CV' (or CV:' in some special cases described above), never 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 'S listens to o' (lit. 'has head against o'), for which we have 4 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 'to be'. 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. (Only 2 others are Inceptive, GAt'u', and none are Active; cf. the situation with optatives for this verb.). For C -Le/ 'S is C(omplement)' we have 11 instances of imperatives in the corpus through 1965, 8 of which are Inceptives, GAl'e', 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. extends' we have 8 (causative) instances of Neuter imperative, all from Lena, all of which have shifted stem -'e: in 7 instances, one 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 above, 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 non-prime stem -da 'sg sits, stays', 'AwyAq' 'a'de: 'wear/be dressed in tha!', 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 is either Ce: or Ceh, in about equal measure, probably in free variation, presumably thus e:-shift with especially frequent shortening and/or analogy with imperfective, especially judging from the case of -t'e/ ~.

There are no other verb stems which vary in the same way as -t'e/ ~: 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 \*-t'e (no final sonorant; but PAE presumably \*-t'ew. We cannot 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, and Neuter -'e: from -'a/, with occasional variants -teh and -'eh, along with Neuter imperative -t'eh, as well as the instances of -de: and -te: from -da and -ta cited above. It does indeed appear that Neuter imperative is fundamentally e:-shift, with frequent shortening. (Addendum 10-7-10. "Defective" verb stem -de: in 1970 Dictionary is to be reinterpreted as e:-shifted -da 'sg. stays', in dAwa'd 'a'de: 'hurry', q.v. in final addendum in file on Neuter imperfectives.

It is in the Active imperative that we have the greatest variety of open variable stem forms. We have mentioned the following: basic -CV', expanded 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 and Inceptive 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 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, Neuter perfectives have the form -CVhL, -CV:L, -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:.

### CHOICE OF CONJUGATION

We now come to the choice of imperative conjugation (Active, Inceptive, Neuter), and with that choice also of the two main types of Active, basic -CV and e:-shifted (both with variants), and of the two Inceptives, GA- and '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 theme-class and preverbals, combined. There here are seven rather distinct theme-classes or subclasses, as noted above ( ). There are a few hundred 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.

### STATIVE VERBS

The choice of imperative conjugation is relatively simple in stative verbs, especially as here the factor of preverbals is minimal. There are three subclasses of statives: Neuter (imperfective), Active (s-perfective), 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 many 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'e/wv-t'u/ '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(complement)' we have basically the reverse, 8 instances, of which 5 are Inceptive, two are Active, only one Neuter. This strange pattern prevails also for the optative in these two verbs (see below).

The imperatives (not abundant, often causatives) we have for Active or s-statives seem to prefer or require the Inceptive imperative: dAshAche'L 'is hungry', dAGache'

'be/get/stay hungry!' (Lena, rejecting \*di:che' Active imperative); lAshAwAdjL 'is ashamed', lAGAwAdj 'be ashamed!' (Lena, Marie); sa'li'ts'L 'is wet', GALli'ts 'wet it!' (Marie, Anna); sAla:'L 'is wet', GALla;' 'wet it!' (Lena, Marie). See next below, and below under 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 about 30 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 'i-Inceptive: e.g. di'ch'ehX 'open your mouth!' (10 instances, Lena, Marie, Anna), dAGAch'ehX (3 instances, Lena, Marie); di'dAgudj 'keep your mouth tight closed' (2 instances), da:dAgudj (Active, 1 instance); k'uli'Lxe:t' 'pout!'; gu'La:n' 'stand!' (10 instances), guGALa:n' (6 instances), gu:La:n' (4 instances); 'ilt'ux, -i'Lt'ux 'hold O!' (10 instances), 'Alt'ux, -i:Lt'ux (Active, 3 instances; no instances of GA-Inceptive); 'iLAXu'G 'strain to move it!' (5 instances, Lena, Marie, plus one instance each of Active and GA-Inceptive). A strong preference for the 'i-Inceptive imperative is thus the only clear pattern for Inceptive statives (38 instances of 'i-Inceptive to 10 of Ga-Inceptive, 9 Active)

It does not seem clear here either whether preverbal or exact meaning has any effect on choice of imperative of any statives.

## MOTION VERBS

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 3 classes: locomotion, classificatory, and add postural. These 3 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 imperative of both types, by prefix GA- 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.

## LOCOMOTION VERBS

Most revealing of all are the locomotion verbs, both by their semantic nature and variety of preverbal00s with which they so frequently occur. The most basic are e.g. -a 'sg goes, -'a'ch' 'pl go', -we 'swim', -qe 'go by boat', -Xa 'go in pl boats', -la 'move/subsist', also of course e.g. LA-Ga't' 'crawl', or the many which are derivatively locomotion, 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)'

Taking -a 'sg goes (on foot)', the three imperative forms are basically 'a:('A- Active), Ga:' and 'iya' (GA- and 'i- Inceptive, the latter with expected epenthetic -y-). There are over 150 examples in the corpus, none with -e:, except in yAX 'Ade: 'take a walk!', as expected in the yAX perambulative, 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 possibility was never checked. 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, 5 times from Lena). We also have 'a:', less consistently, with 'u:ch' 'thither', 3 times from Lena in text, but with that we also have Ga:' 4 times and 'iya' 5 times from her and once from Rezanov. It appears that by far the most or only consistent use of the Active imperative is with o-k'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 only consistent use of the Active imperative is in this very specialized sense. It appears, however, rather less restrictedly in Rezanov (where it is clearly distinguishable, of course, 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, 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!', below).

The vast majority of locomotion imperatives take one of the two Inceptives, GA- or 'i-. Where there are no preverbals, the beginning and end of the locomotion are not specified, for this more "abstract" sense of 'sg goes' the regular choice is 'iya'. Thus with preverbals such as o-ka' 'along with', o-lu'qa: 'to fetch, in search of o', o-a: 'for o', li'X, lAGe'X, DAGe'X '(movement in area) downstream, upstream, upland' (respectively), o-'ihX '(along) behind o', o-dALyAX '(along) ahead of o', 'iya' regularly appears. Significantly also, note 'iya' for 'walk (don't run)!', and 'iya' 'iya' as exclamation '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- Inceptive 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 GA- Inceptive imperative 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 of course to other basic or derived motion verbs, mentioned in the preceding paragraph, thus 'ilAX'a'ch', 'iwe', 'iqe', 'ilAXXa', 'ilAXla', 'iLAGa't', 'iXe', 'iqa', 'iLXe'dz', 'iLXahd', 'iLxuL', 'ile'g, 'ida', (presumably) 'iki:nX; 'ile'g 'grope your way along! (since you cannot see)'.

GA- Inceptive imperative 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 o-da' 'to (and reaching) o', k'iya' 'landing ashore', o-lu' ('Ash) '(completely) through hole in o', li' 'into closed end of o', ya:n' '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)', and many other preverbals with -d final 'punctual contact' (as opposed to -X 'non-punctual contact, movement within'), and even 'AlAk'ah 'up (out of bed)'.

## CLASSIFICATORY VERBS

Classificatory verbs are a small distinct class, with in fact only 4 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 of course 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 elsewhere in some detail (Krauss 1968), 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 4 basic imperative forms, 2 Active and 2 Inceptive: Active with e:-shfit, ’A-Ce:, Active with basic imperative stem form ’A-CV’; Inceptive GA-CV’, and Inceptive ’i-CV’.

Active e:-shifted ’A-Ce: is highly specialized and somewhat unstable, found with only two preverbs. With ya’ ‘to or remaining in a state of rest’ (with action verbs ‘completely’, telic), O-L-(y)a we have ya’ ’ALe: consistently, 4 times – note also t’a’ ’ALAYe: ‘put them in your pocket!’ (indirect reflexive) -- ya’ ’Ata: ‘set it!’ (Lena, e:-shift blocked to avoid homophony with -te ‘living being’?), ya’ di:’e: ‘set (egg)!’, ya’ di:Le:’ ‘set (eggs)!’. These also appear in the yAX perambulative ‘carry O around’, thus yAX ’A dA’e: (twice, once yAX dA’a:, with e:-shift blocked), yAX ’AdAte: (6 times, no -ta:), O-L-(y)a yAX ’ALAYe: ‘carry them around!’, yAX da:LAYe: ‘carry them (coins) around’, for O-L-’ya yAX ’ALa’ye: ‘carry it/them around in container!’. There are several other occasional unexplained instances of the e:-shift, none consistent, e.g. Rezanov ’Awch’ ’Ate: ‘take it to that!’ (Lena ’Awch’ ’Ata’), ’u:ch’ gudi:te: ‘steer boat thither!’ (Lena), ya’X ’Ate: ‘lift it’ (Lena, also ya’X ’Ata’).

Inceptive ’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 ’iLYa’ ‘take it (potlatch food in container)!’, ’iLa’ ‘bring them!, take them!’, ’ita’uh ‘move/handle it!’ in Rezanov twice, ’iLt’a’t ’ita’(uh) ‘hang it up!’ in Rezanov twice more, ’iLt’a’t ’iL’a’uh ‘hang it up!’ Rezanov again, Lena, also ’iLq’ qa:nch’ di’La’ stack them up on top of each other (logs)’ (also ’ALa’, Lena) and 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 ’A-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, though clearly the meaning of the abundant instances we have of e.g. sich’ ’Ata’, sich’ Ci:ta’ ’give me O’ can only mean just that, hardly ‘move O toward me!’; likewise of course with -’a’, -L-(y)a, -L-’ya. There are a 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 is also noted with some 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, e.g. 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, o-la'X 'on(to person over head, as dress)'.

In sum, note the major differences in imperative conjugation choice between locomotion and classificatory verbs. 1. Classificatory verbs can take the action type e:-shifted Active 'ACe:, mainly with ya' 'state of rest', while motion verbs cannot, presumably for semantic reasons. 2. With o-ch' 'to o', locomotion verbs take 'i-Inceptive, while classificatory verbs take 'A- Active, for unclear reason. (Transitivity difference is presumably not the reason, at least in that causativized locomotion imperatives still take 'i-, not 'A-. ) 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.

## POSTURAL VERBS

Postural verbs may be the smallest and least distinct subclass of motion verbs: -da 'sg sits, stays', -qu 'pl sit, stay', -te 'sg lies prone', -tu'ch' 'pl lie prone', and possibly the rather abstract and highly productive -'ya 'be involuntarily situated'.

In the Active conjugation of imperatives, the e:-shifted form for postural themes 'sit' and 'lie' is very common; the singular and plural for '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, lie still'. With yAX perambulative, on the other hand, for -da we have -de: twice, but -da: once, and for -qu 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-da:d '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' (e.g. '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.

A clearly locomotion theme we have with stems -da and -qu has the prefix string O-gu-L-, thus 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!'. Likewise the locomotion theme l-

qu 'pl run', e.g. 'u:ch' li'lAXqu' or la:lAXqu'. These behave of course exactly as do basic locomotion themes.

The case of -te is essentially like that of -da and -qu, with abundant instances of ya' 'Ate: 'lie, lie still!', versus e.g. ya:n' GAt'e' 'lie down, go to bed!', causative ya' 'ALte: and ya:n' GALte', 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 or pl)', which 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 being probably 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 above as one of the classificatory verbs. Unfortunately, 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 as, at least on semantic grounds, which should exclude it from both locomotion and classificatory. The imperatives we have, all derivatives, are qa' GALyin'inh 'wake him up!', also -yi:n'inh with expanded stem-vowel, 'ulah yAX 'Adi:lihLA'ye 'think about it! (o-lah 'about o', -i:lih- 'mentally', 'Ad-...-LA- 'reflexive causative', yAX perabulative, 'cause yourself to be mentally situated around about it!'), and, most puzzlingly, li'Lya 'get old!' (Lena) from s-stative l-'ya 'be/become old', where we should expect GA- imperative, not 'i-, as is usual instead with GA- Inceptive statives, as noted under statives, above.

## 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 'A- Active and GA- Inceptive, apparently never 'i- Inceptive or, of course, Neuter. In the case of fully variable open stems, usually 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 preverbals, 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 'A-. 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 dAGAle(:) 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 o f-Le/ 'be', rather than the expected Active e:-shifted imperative of O-Li, i.e. \*'ALe:). 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 Xaa: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, and with o-k'ah 'away from o' the choice is perhaps always Active (as for motion 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 3 instances of GAdAla', none of 'AdAla', but 1 each of expanded GAdAla:' and 'AdAla:', 2 of e:-shifted 'AdAle:, 1 of that shortened 'AdAleh, 1 with that shift blocked 'AdAla: (from Marie; cf. Athabaskan perhaps \*dA-nangw), and 1 of the "default" analogical 'AdAlah (or shift-blocked and shortened?, Lena). I.e. of a possible total of 8 forms (not counting 'i-Inceptive or Neuter, 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 -g repetitive, persistive, customary, and yAX perambulative, the imperative norm is Active; thus yAX 'Ade:/ AdAwe: 'take a walk/swim!' (\*?yAX GAda:/GAdAwe' 'be walking/swimming about all day long!' perhaps unacceptable, not checked). There are counterexamples, however, especially where e.g. the -g repetitive 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 '(cust) 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 seem 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.

OPTATIVE 8-14-07, 11-06-07, 1-21-08, 1-26/29-08, 11-8-08, 4-27-10,  
11-7-10

(Highly preliminary. This was first written before the study of the imperative, because it was – correctly – deemed easier. Some corrections were made 11-06-07, especially to bring the format more in accordance with that of the imperative, but more is needed, obviously the citation of actual forms and examples. However, less obviously, some substantive conclusions are still needed, most especially more detail on conjugation choice for different theme-classes of statives if possible and especially for the motion subclasses (locomotion, classificatory, positional); also these with preverbals, to see if in fact more parallels with the imperative in that respect can be detected, or if the changes cited have truly gone so far as claimed below.) All examples of negative optatives, collected together somewhere, need to be cited in the final section. Syntax and semantics needs to be added, e.g. use with -shgahX and -k'a' particles, o-wahd, o-ch', etc., nominalization k'uXa:liyah, Xa:ndiyah, qa:da:X 'iyinhinh 'priest' Sophie 6-21-87, exclamation 'i:yah, etc. Contrast with usage and meaning of desiderative.

#### CHOICE OF OPTATIVE CONJUGATION (to be revised, and moved below)

There are the three conjugations of optative, Active (Ao), Inceptive (Io), and Neuter (No), as expected from the basic pattern, of sorts, with imperfective and perfective. (This does not count the “s-optative,” an unexpected late-discovered infrequent subtype of what I consider the Active.) I was right in the impression I had that the choice of these conjugations did not in fact correspond fully with the choice of conjugation for imperatives, but wrong that that the choice between Ao and Io had become merely random.

The choice of No is *in part* determined by (and limited to) Ni (Neuter stative) verbs. The most general pattern, however, is that Ao has become the routine or unmarked choice for almost any theme-class, even with telic preverbals in verbs of locomotion or motion, though Io often shows, e.g. with Xu', Xa:n' 'finish, complete', ya:n' 'down', ya:X 'consumed', ya' 'to bits', at least as an alternative. I had copied in the pad for this study almost all incidences of Io, but certainly not of Ao, except as alternate to Io (an many cases to show with Xa:n' etc.). The symbol [=] means both Ao and Io are attested, with no preference or difference of meaning recorded. In some cases, however, Lena says Io is especially 'become' as opposed to 'be' (Ao – with -Le(') 'be', Li-ts'anh 'strong', -k'in' 'skinny', -xa 'grow' – Marie says the same here.) Lena also says that Io is more “contrary-to-fact”. but that is probably wrong, v. -Li-ts'anh, -sinh 'die'?. In many cases Lena merely *prefers* or finds Ao more natural than Io (e.g. da: dla:yiL'eh 'let's hide it' over -Gi: L-, but inconsistently, e.g. da: 'Adla: Li'eh [=] da: 'Adla:GALi'eh 'let's hide', with many more such cases not copied here.

Many stative verbs, though, do tend to use or prefer Io, including *some* Ni's (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 C', di-la' 'tough', ya:n' di:'yahL 'it's raining' Neuter perfective, -'a/ 'extend'; i.e. Inceptive optative is more common with Ni (and Np) verbs, also probably with s-statives, e.g. d-che/ 'be hungry', 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 I seemed to be able to elicit was Active da:digudj.

As noted, No, Neuter optative, comes up only in some Ni verbs, many Ni verbs seeming to prefer Io or Ao. The most consistent one by far to take No is 'i-t'e/ ~ 'be', with no Io attested, Ao rare, i.e. almost always No. Conversely, and very notably parallel here to the case of the imperative, -Le(') 'be' is rarely No, mainly Io or Ao. Li-ts'anh 'strong' is often No, but also Ao, Io.

As historical explanation of the present situation, I'd have to guess that optative has simplified or generalized mainly to Ao, in part regardless of telicity in non-stative verbs. Io, however, is or remains more frequent with statives, perhaps especially in the inceptive sense 'become'. Io occurs also as marked stylistically in songs CITE, for which see Anna's texts, also with -ma/ 'ruin' and a few other verbs. Neuter optative is on its way out, as is Neuter imperative, except almost always with -t'e/ ~, while C -Le(') has almost only Io/Ao. Active derivations, such as yAX D-stem-(X) perambulative, or -k' customary, regularly show Ao.

The present situation can best be explained as a process of change, of course. Probably Io was 'become', inceptive, originally, used especially with statives, now partly spread to action verbs as telic, like the imperative, and Ao 'be' has also spread to statives, including Neuter, largely replacing the Neuter optative.

#### MORPHOLOGY AND MORPHOPHONEMICS OF OPTATIVE

Open variable stems, including -CV/, are all -CVh in the optative, except for the irregular -Le(') 'be' and -le(') 'want, think, -Le' and -le', and the -CV: s-optatives from Lena and Anna. There is no optative suffix.

The optative prefixes (except s-optative) all contain two elements, the second of which is PAE \*ngyi-, 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 zero and L- classifiers.

The first element in Inceptive optative is the expected GA-, thus 1sg GAXi-(L-), GAXLi-, GAXdi, 2sg and 3 Gi:-(L-), GALi-, GAdi-, 2pl GAlAXi-(L-), GAlAXLi-, GAlAXdi-.

The first element of the Neuter optative is (')a'-, thus 1sg 'a'xi-(L-). Ca'xi-(L-), 2sg and 3 'a'yi-(L-), 'a'Li-, 'a'di-, 2pl 'a'lAXi-(L-), 'a'laXLi-, 'a'lAXdi-.

The morphophonemics of the first element of the optative is by far the most complex in the Active optative. In initial position it is regularly 'i-, thus 1sg is 'ixi-(L-), 'ixLi-, 'ixdi-, 2sg and 3 is 'i:-(L-), 'iLi-, 'idi-, 2pl 'ilAXi-(L-), 'ilAXLi-, 'ilAXdi-. The 2pl forms might seem to indicate that the first element has underlying vowel -i-, given that it is separated from umlauting (assimilating) influence of following -i- by the syllable -lAX-, but analogy could be a factor, and the following results with preceding CA-type prefixes further suggest this. With the many CA-type qualifiers, the result is perhaps most simply 1sg Ca:xi-(L-). Ca:xLi-, Ca:xdi-, 2sg and 3 Ca:yi-(L-), Ca:Li-, Ca:di-, 2pl Ca:lAXi-(L-), etc. Often, however, there is a nasal effect, i.e. either the -a:- is nasalized or in the case of -a:yi-, that sequence is changed to -a:li-. This never happens with la:- or dla:-, the l- evidently representing or "absorbing" the nasality. After d- the result is rarely nasalized, probably only by analogy. However, after X-, y-, the result is much more usually 1sg Xa:nxi-(L-), Xa:nxLi- etc., 2sg and 3 Xa:li-(L-), Xa:nLi- etc. After qA- 'plural' however,

we seem to have no attestation of the Active optative without the nasalization. After *gu-*qualifier (not after *guA-*!), 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 1s *xu:n-*, *xu:l-*, 2sg *'i:n-*, *'i:l-*, 2pl *lAXi:n-* *lAXi:l-*, indefinite *k'u:n-*, *k'u:l-*, indeterminate *'i:n-*, *'i:l-*. After the *-'* of the directive in 2sg(?) and 3 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 element is not clear, 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) and analogy; and after directive *-'* it is absorbed except for nasalization of *y* to *l* when that appears in second element. Possibly it may at some level be or have been simply *A*, though it never appears as such. (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. In the optative this is moot, as the second element always constitutes an intervening syllable.)

#### S-OPTATIVE

The *s*-optative can perhaps be classed as a second type of Active optative, since the same *s*-prefix (*si-* in 1s) occurs otherwise only in the Active perfective. It first was heard spontaneously, from Anna, late, “*te'ya* XAsiyah” “I think I’ll eat a fish”, but a dozen further instances were then elicited, especially from Lena in 1971, or are recognizable in Rezanov 1805 (at least 2 probable instances). Marie rejected such forms (“sounds goofy,” “sounds maybe like a Tlingit trying to talk Eyak”), but then Marie spontaneously uttered one herself in 2006: “*Li'q' ya:yu: 'a:nda' sAqah*” “[That dog] keeps bringing [carries in teeth] everything here – all kinds of junk”, quoting someone she heard so saying, perhaps in the sense ‘has a mind to’, which 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 last session with Lena, 6/71, we have *dA'a:ndshgahX ya sida:* ‘wish I could stay right here’, *dA'a:ndshgahX ya' sAda:* ‘wish he could stay right here’, *dA'a:ndshgahX da: ya' sAq:* ‘wish we could stay right here’. Most instances are 1sg or 1pl. One instance of 3<sup>rd</sup> person, *dA'a:ndshgahX ya' sAda:* ‘wish he could stay right here’ was accepted by Lena, but e.g. *\*te'ya' XAsa:* ‘he eat fish’ and *\*GAsu' 'AshgahX XAsa:* ‘wish he could eat dryfish’ were rejected by Lena. Finally, from the last session with Anna, 6/17/72, we also have *'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 first person than in third. Second person was not tested; nor were interrogatives or negatives.

Further, as noted, we have 2 or 3 apparent s-optatives from Rezanov: *tuchatukoseta* 'komu?' 'to whom?', almost certainly to be read du:ch'a'duh k'usitah 'to whom shall I give something?', or du:ch'a'd 'uw[a:] k'usitah 'to whom shall I give some of it?'; and *keide tate usit* "-a 'voice', probably to be read k'e:d 'idahd 'u'sitah 'how shall I hear (the sound of) you?'. These two items, both in interrogatives, support each other very nicely, and may well shed further light on the semantics of the s-optative, from a different dialect and/or era. However, since these 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 two forms is of course speculative and neutral; 'might' or 'am I supposed to', for example, might fit both at least as well. A third probable example, also clearly interrogative, is more problematical to interpret precisely: *tuchatkesse* 'nikuda?' '(to) nowhere?'; the first part most probably is du:ch'a'd 'to(wards) whom?' as above, and the last syllable may be e.g. (an allegro and/or trailing) siyah 'should I go', but the *-ke-* remains unaccounted for, unless *kesse* is to be read instead as (an allegro and/or trailing) k'Asah (< k'usah) 'should one go'. (In view of some of Lena's later forms, the vowel of the final syllable in all 3 cases might of course be read V: rather than Vh.)

This distinctly variant type of optative is no doubt a significant relic, showing that the superficial structure of the present larger system of Eyak verb morphology, particularly the 3 Conjugations, was once something quite different – as do also, for example, the extra 'i-imperative forms which also do not fit into that system.

ADD perhaps related use of Ap in dA'a:nd sidahL 'let me stay here' from Anna Octopus text

## NEGATIVE OPTATIVE

We have only about a dozen instances of negative optatives, none spontaneously offered, but only from elicitation from Lena, on several occasions. For 3 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." All forms have the usual positive prefixes, with the usual negative frame dik' ...-q. (These would be the only forms in Eyak where the \*ngyi- element occurs in negatives.) Three of the instances are Inceptive, all, it so happens, with comment: one "sounds funny" and two "sound okay." Of the Active instances, 2 "sound funny" and the rest are uncommented. – I also have a notation that I have 2 spontaneous instances, one from Anna, one from Marie. Need to recheck the corpus for the whole and get correctly all the instances.



## DESIDERATIVE

The desiderative mode was called the “(X-)infinitive” in the 1965-69 ledger, given that it is often translated into the English infinitive, as e.g. in Xa:n)xa:X (sitl’ dAinhiih) ‘(he told me) to eat it’. In the 1970 Dictionary 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, 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 repetitive -g, is not clearly attested with customary -k’, and precedes negative -G. Moreover, the desiderative -X suffix can by no means be classed as a subordinating postposition, at least because the desiderative may also occur independently in hortatory use, shown below. 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’, or as in o-X k’u-Le ‘o is born, comes into being, something becomes o’.

## STEM AND PREFIX MOROPHOPHONEMICS

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 hungry’, ’u’GAtsa:X ‘that he buy it’. (Throughout this section, glosses are routinely modified to begin with a neutral ‘that’ as a convention.) With -t’e/ ~ ‘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.

Prefixes in Neuter desiderative are (’)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.

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 the schwa type, (’)A-, combining with preceding Ci- or CA- to produce Ci:- where no syllable intervenes before the stem, otherwise Ca;- and Cu:- after Cu-. Thus ’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:xl’e’X ‘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’, ’utl’ la:xdAk’ahgX ‘that I play with him’, GAla:xdAshahX ‘that I dig the ground’. 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 ’i- prefix 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 the section on conjugation choice below.

In addition to the usual array of prefixes, Neuter (')a'-, Inceptive GA-, and Active (')A-, found also in the imperative and (as first prefix of two) in the optative, desiderative forms with -X verb stem suffix are also found with the same prefixes as those of the Active imperfective, i.e. zero, and Active optative, (')A-(y)i-. Examples and discussion of the status of these forms will be given further below.

### CHOICE OF CONJUGATION

Choice of conjugation in the desiderative mode is similar to that in the optative and imperative, yet another trait that distinguishes what might be considered the three modes, imperative, optative, and desiderative, as a class, semantically and morphologically different from the aspects, imperfective, perfective, and, possibly, conditional; semantically sharing the commonality of order, wish, desire, morphologically the basic prefixes Neuter (')a'-, Inceptive GA-, Active (')A-, and thirdly, 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', dAGALAdex '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'.

Choice of conjugation in desiderative motion verbs is also much like that in the imperative: Active (')A- in 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 -'a:nX) 'that he travel (about)', 'ich ' 'Axta:X 'that I give it to you'; GA- Inceptive with telic preverbals: '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' (effect of second preverbal overriding that of the first), ya:n' GAXda:X 'that I sit down', but 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", showing 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 than in the imperative. Choice of 'i- is also as in imperative: '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 'iGAX\ '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 of course with action verb themes that we find the least predictability or greatest instability. Where there are telic preverbals this is the least so, of course: Lena explicitly prefers 'Aw yAX GA xLchich'X 'that I break it (completely in two)' to 'Aw yAX 'AxLchich'X. Without such preverbals, we have a few instances where Lena explicitly prefers Active over

Inceptive: 'Axtsu'dX 'that I sleep' over GAxtsu'dX, 'i:xgahX 'that I dance' over 'iGAXgahX, 'Aw 'AxdAla:X 'that I drink it' over GaxdAla:X (but Marie twice k'uGuxdAla:X 'that I drink something'), at least one instance of no preference by Lena 'Aw li:xLmahX or lAGAxLmahX 'that I ruin it', numerous instances of both Active and Inceptive, meaning not distinguished: 'Aw Xa:na:X, XAGa:X 'that he eat it', xu:she:X, xuGAshe:X 'that he kill me', or, perhaps by chance, Active only: 'AxLchanhX 'that I smell it', 'Axlku:n'dX 'that I grab it', 'utl' la:xdAk'ahgX 'that I play with him'; or Inceptive only: wAX GAle:X 'that that happen', GAXLq'e'X 'that I put the fire out', da'lAGAxLXahX 'that it get it', dAXu'ya:X dAGAle:X 'that he tell the truth', and strangely enough, Inceptive desiderative from derivationally Active themes with repetitive -g (thematized or not): 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.

There are at least 9 instances in the corpus of desiderative -X suffixed stems with optative instead of desiderative prefixes: 'ixiLda:sgX 'that I weigh it', la:xiduhX, lAGAxiduhX 'that I flesh it', 'i:xigahX 'that I dance', 'i:ligahX 'that you dance', Xa:nliya:X 'that you eat it', 'i:qa:X 'that (dog) carry it in its teeth', ya' 'ixida:X 'that I be seated', ya' 'ixite:X 'that I lie' (all Lena), and Xi:ch' da: 'i:'a'ch'X 'let's go over there' (Anna). In the 1970 Dictionary such forms were labelled "hybrid," and correctly judged to be "almost certainly incorrect." See below for semantic and syntactic motivation.

## 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 for subordinating desiderative clauses are very few, but frequent, apparently only in the imperfective, following the subordinated desiderative clause, 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': 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': 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 o refers also to the subject of the subordinate derivative, reinforcing the change of subject: 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 the 1970 Dictionary. 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 using the desiderative in more of an appositive or adverbial way than subordinative: from Anna in text qa: GAqa:gX 'udAGAleh 'uwa: 'i:tin[h] 'her mentality [still wolflike] is to (try to) bite people', 'AdAdAshe:X 'udAGAleh 'uwa: 'i'tinh[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'.

#### HORTATORY DESIDERATIVE

While the vast majority of desideratives attested are subordinate as shown above, there were about 10 instances of an independent desiderative 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 another Raven 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 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 -inu: suffixed, 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), and finally *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 1962-65 corpus with zero prefix as in Active imperfective. In 1965 in connection with the usitative Active imperfective derivation 'u:d lAxah 'it (normally) 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', with 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", cf. *sidAwahd GAle:L* 'I'm getting full of it (food)', *o-wahd* 'for the sake of o', the thematic qualifier -dA- here probably 'orally', thus *sidAwahd* 'filling me', so 'that it not fill me' in a strong usitative or desiderative sense, 'it shouldn't/wouldn't ever fill me'.

Finally in 1971 I had a last chance to follow this up with Lena., however hurriedly and unsatisfactorily: after confirming the previous form, then *sidAwahd le:X* 'I get tired of it, it fills me' (usitative; 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* and *lAGAxa:Xinh*. She further offered '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 'they'll grow there' (almost certainly incorrect), while rejecting proposed 'u:d la:Xinu: 'that they subsist there', which should be correct, unless better with 'u:dAX or 'u:ch'.

Subsequently, the only relevant data are Anna 1972 'a:nch' 'iLa:Xinh 'have him come here, regular causative with expected prefix, Marie 1980 rejection of 'u:d lAxa:X, and Sophie 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 the expected prefixes. It may thus be that the zero-prefixes as attested in 8 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 zero prefixes are attested also only in the hortatory desideratives, not in the relatively numerous subordinate desideratives. Unfortunately, this problem was never systematically investigated, e.g. by trying to elicit any of the subordinates with zero prefix, or the zero-hortatory forms with schwa-prefix, or aggressive questioning of differences in meaning. Conceivably, the zero vs. schwa prefix may be a relic of an older grammar, or, at least equally probable if not in fact more probable explanation is that it 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. At the same time, of the reverse could of course 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 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, on the one hand, and on the other from the usitative, where there is a sense of right, propriety, appropriateness as well as unmarked norm.

In view of this, and in pushing the limits of memory of Eyak at this terminal stage, it seems hardly surprising that we should see such analogy and hybrids between the desiderative and optative and usitative.

[[I cannot help recalling in this connection a significant anecdote I used to tell, of a conversation with Lena at some point. Not so insightfully, I asked Lena how to express in Eyak such concepts as expressed in English by the abundant choice of auxiliaries such as ‘I should (or I must, I have to, I(‘ve) got to, ought to, better) go now’, as there seemed to be such a lack of such “words”(?) in Eyak. Lena acknowledged that lack, and mused, “I suppose you’d just have to say what’ll happen if you don’t go”! In retrospect, it is sad now to understand how ignorant I was of these subtleties of Eyak grammar.]]

## INCEPTIVE PERFECTIVE STATIVE

The Inceptive perfective stative is the subclass of statives with the fewest members, given its relatively specialized meaning, themes with only up to 40 stems so attested. By morphological definition, this class takes GA- conjugation prefix and -L perfective suffix, 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 GA-stem-L morphology with the meaning 'S is in state'. (Of course then 'S is getting into state' would take the same, 'S got into state' the Active perfective, 'S is in state for a term' the Neuter perfective, etc.)

This subclass of statives seems to share the basic idea of pressure, immobilized with counteraction, energy against a barrier, tension, isotonicity, 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 up to 40 different stems involved in the themes of this class, a large proportion are attested also in themes not of this class, and 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, especially where the glossing leaves ambiguity whether an action or a state is to be understood, e.g. in the case of 'I'm making a fist' or 'I'm leaning'. Some cases are disambuated by semantic probability, e.g. '(candle) is drooping', or by imperative attested with 'i-. Such uncertainties are noted throughout.

Perhaps most fundamental in a way are themes with stem -Xu'G: GALAXu'GLih 'he's exerting himself, straining hard', 'iLAXu'G 'exert yourself!' (also 'ALAXu'G, but Lena, then inconsistently, rejects xLAXu'G for 'I'm exerting myself', Active imperfective; the stem is frequently expanded, persistent xLAXu:G 'I'm exerting myself (in plural acts)', an Active derivation, which can be further derived by durativization, as Inceptive perfective again GAxLAXu:GL, but confronted with choice, Lena greatly prefers GAxLAXu'GL; in any case, the frequency of expended 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', ambiguous, but stativity of which is confirmed by 'iLt'a'X 'AdGaxLAXu'GL 'I'm huddled, having shrunk myself down into my coat (from cold)'. Note further 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 'S holds O' (in no specified way, most frequently in arms, presumably, e.g. embracing, hanging onto): GAXLt'uxL 'I'm holding it, hanging onto it', 'iLt'ux 'hold it!', indirect reflexive ch'a' 'AdX GAXLAt'uxLinh 'I'm holding him (baby) close (toward myself)', 'uX GuxLAt'uxL 'I'm clinging to it', all perhaps originally from a causative, cf. intransitive gudli:t'uxL 'it's taut, pulled tight' Neuter perfective, and 'ALt'ux 'pull on it!', 'Aw Lt'uxinh 'he's pulling on it'. Another such group is based on -le'g ~ -lu'g 'S acts with hand': 'iLu' ch'a' 'AdX GAdAle'gL (or GALAlu'gL) 'they're holding each other close', xu'GAL(l)u'gLinh 'he's holding onto me', cf. O-'-le'g 'S lays hands on O'. Here also belongs O-L-qa 'S holds O it teeth': GAqa:L 'it's holding it in its teeth', 'iqa' 'hold it in your teeth!' (also the same forms, by derivation, Inceptive perfective and imperative 'it's carrying it along in its teeth', 'carry it in your teeth!'), cf. action theme 'Aqa' 'bite it!'; likewise 'Aw dla:GALts'e'ts'Linh 'he's holding it (hot rock) in tongs', which by derivation could also mean 'he's transporting it with tongs', locomotion, for which cf. also action O-L-ts'e'ts' 'S crushes, mashes O'

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' ('I'm foot-crowded in them'), further but still Inceptive perfective stative, 'iGALq'e'sL 'it (odor, fog) is thick', causative with indeterminate O ('causes tightness, crowds'), 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 -qa'q' or -q'a'k' (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 which cf. especially O-q'a' in following paragraph. The glossing is somewhat ambiguous ('starting to choke?'), but classification is semantically probable.

Next might come a series of examples which refer to straightness, verticality, perpendicularity, right angle or static deviation from right angularity, for which cf. also the two immediately preceding items, deviation from horizontal level, or choking (from tightness, or from sideways obstruction?). Quite notable is that 'stand' (as a posture) is not postural, but definitely in this class: gu-LA-a:n' 'sg. stands', and gu-LA-'a'ch' 'pl. stand' (with suppletive stem -'a'ch' 'pl. go'): 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 in GAt'e'q'Lda:X '(S V's) in a straight line'. With productive stem also specialized in this class is O-q'a' 'S places O at angle': qAGAxq'a'L 'I'm standing them up (e.g. books, perpendicular to their most stable or normal position)', 'u:dAX 'AdGAdAq'a'Linh 'he's leaning there', 'AdlAGAq'a'Linh 'he's got his head tilted', reflexives; GAdAq'a'L 'it (e.g. boat, chair) is on its side', possibly passives; lAGAdAq'a'L 'axe' ('its head is set crosswise'), dla:GAdAq'a'L 'rock crevice (from rock set on side)'; lAXAGAxq'a'L

'I'm cross-eyed', not a passive. 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. intransitive Neuter imperfective yitl'a'dz 'it's tightly packed, firm, stiff'

Less clearly belonging with the above are the nominalizations GALAXa'Xch'XL 'dimple', nominalization, possibly passive, cf. O-L-Xa'Xch'-X 'S tickles O', and 'crevice' above; dAGAdAwa'L 'door' and GAdAwa'L 'curtain', derivation semantically unclear, with stem -wa'L 'hang suspended'.

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 square), also attested as lAGAQ'AshL but glossed only as 'it's getting bent out of shape'; cf. also gushAQ'AshL 'you're lame, you limp' (not 'you became lame'), counterindicating 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, of course, is GAqe:L 'something oval, elliptical', stem not clear (either -qe:L or -qe), used only as nominalization or Complement: GAqe:L yiLeh 'it's oval', dAGAQe:L shdu:lihG 'oval table'. Another nominalization is dAGALAshugL 'curved knife for wood-carving' 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 GAShe'gL 'it's getting crooked' ch'a' GAdAshe'gLinh dAXunh 'man who is getting bent over' indirect reflexive, t'a'q'ich' GAShe'gLinh 'he's "leaning" backward', causative GAXLshe'gL 'I'm bending it', not disambiguated, the only unambiguous stative elicited being Neuter perfective di:she'gL 'it (arrow) is not straight', so membership here is uncertain. Similar but of less uncertain membership, given the lesser likeliness of reference to an ongoing motion of 'becoming curved,' is yAX daGALAsht'gL 'it (board) is sagging' and yAX XAdAGALAsht'gL 'it (candle) is drooping', both with yAX 'downward', cf. shLisha't'gL 'it's pliable', 'i:nsLisha't'gLih 'his face is wrinkled'.

Perhaps most closely related here are 4 items that belong together. Nominzalization only is GALAduk'L 'hill, mound', cf. sLdiuk'L 'it has a hump, is humped'. 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 is GALAGu'k'Linh '(he's a) hunchback', GAXLAGu'k'L 'I'm a hunchback', cf. O-gu'k' 'S punches O', gu'k'L 'fist'. Almost certainly of this class also is yAGAXLAq'Aq'L 'I'm making a fist', though not itself disambiguated, especially as supported by 'utl' ya' yi'LAq'Aq' 'hold it tight in your hand! ('make a fist with it!'), in spite of Active perfective ya' yisLiq'Aq'Linh 'his hand is cramped closed' from Lena, and Active imperfective ya' yALAQ'Aq'inh ('id.') from Marie. A crucial difference here may be that the Inceptive perfective is voluntary pressure, the Active not. Cf. yAGAXLAGAGsgL 'my hand is getting cold and numb', qi:dAGAXLAGAGsgL 'my foot is getting cold and numb', and lisLiGAGsgLinh 'his hair



is curly' Active perfective stative, basic meaning perhaps 'curly', indicating 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 themes could be elicited: dAGAdAgudjLinh 'he has his mouth tightly closed, teeth clenched, and/or lips curled inward', di'dAgudj 'clench your teeth!', with d- qualifier 'oral'; k'ulAGALgu:nshLinh 'he's squinting', transitive, with indeterminate O and l- qualifier 'facial'; likewise k'ulAGALxe't'Linh (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!'; cf. however O-L-xut' 'S shoots O with gun', xut'L 'rifle', the simplicity of which is surprising considering the date of the technology, and the stem of which could easily be the reduced form of -x(w)e't'; 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', theme LA-xut'-g, elicited only in Active perfective and glossed 'got shriveled', possibly also of Inceptive perfective class as stative, if not prevented by thematized -g repetitive, an Active derivation, as in 'wrinkled' above. 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 frequent thematically expanded stem d-ch'e:X 'S yawns', an Active derivation, which 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 Xu:ndla:GALAgihdjL 'it (dog) is baring its teeth' with Xu:l- anatomical qualifier 'teeth', but cf. also lAXi:LgihdjLinh and laXAsALgihdjlinh 'something is wrong with his eye', Neuter and Active perfective statives, exact meaning but vaguely remembered. Less clear is dAGAdAGAGshgL 'his lower lip hangs loosely', obviously involuntary; cf. 'i:nsAGAGshgL 'it is misshapen, lopsided, flared', attested only as Active perfective, and GALAGAGshgLiinh 'he's limping (along)', attested only as locomotion theme.

The next 2 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', directive of O-LA-tsa 'O becomes visible', attested only as a passive, 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 Sewock, gloss for which, 'getting', not to be taken too literally, especially given Lich' 'always', though other Inceptive perfectives are glossed only as 'getting', e.g. sich' dAGAQ'e:k'Linh 'he's getting peeved at me', and stative 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 seem to belong exclusively or primarily to this class: GALch'iya'k'L 'it burns, smarts', with anatomical qualifiers

sini:k' siya: GALch'iyak'L 'my nose is smarting', yAGAxLch'iyak'L 'my hand smarts', IAGAxLch'iyak'L 'my face burns', IAXAGAxLch'iyak'L 'my eyes smart'. Likewise, with sonorant-internal stem, is GAXAwa'sL 'it's itchy, it itches', qi:idAGAxXAwa'sL 'my foot itches', often expanded, -Xa:s, so Active imperfective qi:dAxXa:s 'my foot itches (persistently)' but even that also qi:dAGAxXa:sL, though the receding is preferred by Lena; also transitivized with indeterminate O, still Inceptive perfective stative, sitl' 'iGAXAwa'sL 'it itches (with) me', sitl' 'iGAXa:sL 'it itching me for a long time', from Lena, 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 preverb ya' 'to a state of rest, completion', though the theme is also attested as Active perfective stative, siXe'sL 'it's infected'.

(Addendum 11-8-10. Lena la'q' GALAtsidzg 'it's thin' (checked as such; along of course with transitional 'it's getting thin'), evidently minimal pair with Neuter imperfective dimensional la'q' yitsidzg 'it's thin'. Difference in meaning not checked, presumably both states viewed differently, one inherent dimension, the other some kind of isometric balance, in any case an important instance of dual membership of single theme in different classes.)

Finally, an extreme but certain example must be the nominalization dAGALAdE:L, dAGAdAdE:L 'smelt, eulachon, candlefish' ('because it's transparent', Lena, "because it's shiny", Marie), also 'flashlight', from theme d-LA-de 'S emits light', with thematic d- qualifier 'fire, bright', normally Neuter perfective as stative, diLidehL 'it's glowing, it (light) is on', dAGALAdE:L 'it's starting to glow', disLidehL 'it flashed (once)'. The nominalization is possibly a passive from a causative, especially the form with dA-classifier; other related nominalizations are Active imperfective dAdAdeh 'flashlight', yAX dALAdE:X 'flashlight' (perambulative 'it shines about'), dide'L (< dAdE'L) 'lamp (aboriginal or modern)', instrumental. 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 moves along').

Perhaps a disproportionate number, 8 or over 20% of the themes involved above, are attested only in nominalizations (dAGALAdE:L, dAGAdAdE:L 'smelt; flashlight', GALAduk'L 'hill, mound', dAGALAshugL 'curved knife', GAqe:L 'oval', dla:GALAwE:gshgL 'kind of flat (ulu-shaped) rock', GALAXa'Xch'XL 'dimple', dAGALAwA'L 'door', GAdAwA'L 'curtain'), not counting IAGAdAq'a'L 'axe' (because of 'AdLAGAdAq'a'Linh 'he's got his head tilted'). This number of fossilizations 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' and -shug, for which cf. -du'k' and -she'g. An even larger proportion, about 10, of these takes the classifier LA-, a matter which should be referred to the study of transitivity and valence. Finally, 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, and the largest groups are mixed, especially

‘curved’, also ‘grimace’, but there 4 of 6 are exclusive or primarily Inceptive perfective stative. In other words, this class seems perhaps most to dominate in a highly specialized (“picturesque” or “emotional”) semantic area.

#### AFTERTHOUGHTS

Important realization here. Influenced by the stability or persistence of GA- as the “Inceptive conjugation” marker, I’d failed to realize that in fact the imperative prefix corresponding to the GA- of Ga:L ‘is walking along’ is not Ga:’ (used instead with telic preverbals), but is the ’i- imperative, ’iya’. That ’iya’ is not only the “abstract” (‘walk!’ – not eg. run), but also the imperative of the “progressive”, ‘walk along!’, the same thing as the ‘abstract’ at least in the case of locomotion. Good further example ’ile’g ‘grope your way along’, progressive derived from action theme ‘move hand’, presumably ’iki:nX ‘cry your way along!, cry all day!’ start (into process of) crying!’), and that ’i-, not the GA-, is the imperative of progressive or durativized GA-stem -L. Given that belated realization, it should come as no surprise that the imperative of this theme class, e.g. guGxLa:n’L ‘je suis debout’ should be gu’La:n’, GAxLt’uxL ‘I’m holding it’, ’iL’tux ‘hold it!’, not GALt’ux. Big questions remaining: 1) What does imperative GALt’ux mean as opposed to ’Alt’ux? 2) What, if any, is the connection between merely homophonous? GA- imperative (e.g. telic) and GA- (-L) progressive. Same question about GA- optative, and GA- conditional too. Optative conjugation choice may be pretty hopeless to define by now, probably overwhelmed in any case by the patterns left in the imperatives, but conditional is still amazingly clear, GA- simple ‘if/when’, but ’i- conditional very much “inceptive” ‘just as S was starting to V’ (something happened and S never got far Ving), quite the opposite of telicity with GA imperative. All this invalidates and requires a lot of rethinking of speculation in files trying to unify meaning e.g. of GA-. Also identification of ’i-, which never fit into Active-Inceptive-Neuter conjugation system, essentially a 4<sup>th</sup> imperative conjugation prefix, to begin with. “’i- Active” I’d called it at one point, but it matches with GA- “Inceptive perfective” motion (“progressive”), “Ip” stative just discussed, consider also meaning of ’i- conditional, and questions of terminology, “Inceptive” and “progressive”, “durative”, “processual”, e.g. ‘V’ing along, V’ing for long time’, also ‘starting to V, making process of that’, with action and motion verbs along with ‘becoming’ for statives. For action and motion verbs ’i- is the imperative corresponding to GA- -L Ip, but for GA- is probably the usual imperative (more than ’A-, check!, for Neuter and Active perfective statives, and ’i- for Ip statives.

[[11-8-10. Much of the above and below can be explained, and verb theme classification justified, by the later chapter treating GA- -L as the “Progressive derivation,” q.v. Still needed: revision of approach to morphology by trying to treat all GA- (imperative Inceptive perfective/progressive, optative, conditional, desiderative) and ’i- (imperative, conditional, desiderative, customary) prefixes as the same morphemes, any more than e.g.

(')A- (imperative, customary, conditional, desiderative). Just doesn't hold up semantically.]]

Need discussion somewhere of nature or fundamental validity (questionable?) of verb theme classification, and what is a derivation and what is basic/primary. E.g. perhaps O-qa 'S bites O' Active imperfective -- action verb --i is primary, but 'S holds O in teeth' Inceptive perfective -- stative -- may be so as well. Thus, some "themes" can be basically of more than one class. On the other hand 'S transports O in teeth' Ip -- locomotion -- is derived locmotive by durativization, and even 'S is in the process of gripping, starting to grip O in teeth' likewise durative by durativization', just as GAki:nXL, from basic Ai ki:nX, can be derived Ip by durativizaion into 'S is crying along the way; crying ally day long; starting to cry making a process of that', or 'I'm dying' or 'I'm falling (skydiving or not)' are likewise derived, also 'I'm starting to hear you, I hear you moving along' [!, confirmed by Marie 1980] are Ip durativizations. Not always a simple question, what is basic, what a derivation. -- In fact 'I'm holding it in my teeth' could instead be considered a derivation by "stativization/durativization" of either 'bite' or 'transport in teeth'. Much more thought needed on such.

## S-PERFECTIVE AND NEUTER PERFECTIVE STATIVES

The term “Neuter” for Eyak refers to the conjugation marked with the prefix (y)i- (< PAE \*ngyE-) in the positive imperfective and perfective, and which itself has a stative meaning. The only imperfective Stative verb theme class in Eyak is the Neuter imperfective, which is perhaps best distinguished semantically as referring to states that are viewed as inherent.

For states or qualities which are viewed as less inherent, as the result of a process, there are 3 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 (henceforth 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 that separate chapter. The s- and Neuter perfective Statives, on the other hand, overlap so much that it is easier and necessary to treat them together. While there are themes which seem definitively to choose s-perfective and themes which seem to choose Neuter perfective, there are so many which use 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 s- (Active) perfective has a non-stative use, marking the attainment of 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 s-perfective as opposed to Neuter perfective Stative is not a subject that was systematically investigated in the Eyak fieldwork. For many years, between the primary Eyak fieldwork in the 1960s until 2009, I had assumed the s-perfective was the “norm” relegating the Neuter perfective to some marginal status, almost as a derivation. I had in 2008 even made a preliminary survey of the ledger corpus, listing over 100 s-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 just as well, 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 well over 100 Statives of these two types, the largest number, 50-some, was attested in s-perfective only, the smallest, 30-some, in Neuter perfective only, and 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, the last (middle) number would certainly have been significantly increased at the expense of the other 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 in any case.

### Basic Function of S-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 s-perfective and Neuter perfective more generally, as those are certainly relevant to the choice between the two in Statives.

For one thing, the s-perfective is perhaps the most frequently occurring of all conjugations 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, of course, is the difference in the meaning of the s-perfective and Neuter perfective. The s-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. Thus sAdahL 'he is in sitting position' (or 'staying', 'behaving'), sAtehL 'he is in a prone position', sA'yahL 'he/it is situated', sAtahL, sA'ahL 'it is in position', sALyahL 'it (in container) is in position', sALahL 'they (inanimate) are in position' are all in effect Statives. More exactly, they mean (tenselessly) 'S is in position', or, at the same time, indistinguishably, 'S 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)'. Likewise the causative or transitive, e.g. siLdahL, siLtehL, siLyahL, siLtahL, siL'ahL, siLyahL, siLahL 'I put O in position, have put it there (where it may or may not remain)'. The Neuter perfective 'i:dahL, 'i:tehL, 'i:LyahL, 'i:LtahL, 'i:l'ahL, 'i:LyahL, 'i:LahL, on the other hand, has a much more marked meaning, (tenselessly) 'S is in position, and remains there for a period of time'; the period of time may be open-ended, or perhaps short, but of some duration, not momentary. Whereas with s-perfective, where the focus is more on 'S got or has gotten into position, where S may or may not remain', with Neuter perfective the focus is on 'S is in position for a period of time'. Accordingly, the causative of the Neuter perfective may best be translated 'S is keeping O in position', instead of s-perfective, where the focus is more 'S put or has put O in position'. By tenselessness, of course, the meaning in English can just as well be 'S was in position', 'S was keeping O in position', etc. With other non-Stative classes of verbs, i.e. Action and Locomotion, the s-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 below.

### S-perfective Pole

With this background, we may proceed to the use of these two conjugations in Statives. Starting at the s-perfective extreme, there are a few Stative themes which are very abundantly attested in the s-perfective. The best and strongest cases, arbitrarily exemplified here in 1<sup>st</sup> person sg., are dishiche'L 'I'm hungry' and siga'L 'I'm tired'. Both of these are attested in dozens of instances, all s-perfective, without a single spontaneous Neuter perfective. When a Neuter perfective was therefore suggested, e.g. dixiche'L, 'ixiga'L for 'I'm hungry', '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", even

including the 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 s-perfectives are clearly the unmarked forms, the Neuter perfectives clearly the marked. 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. Clearly, this proves some polarity. Though it is of course possible that each instance of s-perfective could or does mean also 'I got / have gotten hungry/tired', the absence of Neuter perfective here is statistically significant, as 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. sdiGuL 'it (a thing) s warm', xsdiGu'L 'I'm warm', GAdisdiGu'L 'place is warm', gulisdiGu'L 'water is warm', etc., attested over twenty times in s-perfective, and only once in Neuter perfective, namely a transitive (causative) reflexive 'AdxdiGu'L 'I'm keeping myself warm', just as clearly marked as the preceding statistically, 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 between Neuter imperfective and s-perfective Statives, compared to that between s-perfective and Neuter perfective Stative, as we shall see.

A few more examples at or toward the s-perfective pole: dAsAL'ehdgL or disLi'ehdgl 'S is dry', about a dozen instances, none Neuter perfective; sdili'ts'L 'S is wet' in about 8 instances, some of them 'got wet'; sAla:'L 'it got wet', sila:'L 'I got wet, damp', which should perhaps also be counted. This raises the question of whether, in the absence of Neuter perfective instances glossed 'S is in state' to contrast, s-perfectives which happen to be glossed 'S got into state' should be counted as s-perfective Statives just as well as those glossed 'S is in state'.

Clearly on the s-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 8 instances glossed 'is rotten' (none 'got rotten'), but also two in Neuter perfective, 'i:lSi'L 'is rotten', without comment indicating markedness. The two instances of 'got rotten (to extreme degree, unrecognizable)' are s-perfective sALts'iyats'L. 'Rotten (of wood)' is s-perfective 5 times, dishdichehgL, twice glossed as 'is rotten', thrice 'got rotten', and twice Neuter perfective, once 'is'; 'rotten (of fish buried in ground)' is once s-perfective, sALch'iyak'L 'got rotten', once Neuter perfective, 'i:Lch'iyak'wL 'is rotten'. For 'rancid, bitter' we have once lAXAsdiq'ihdjL '(berries) got rancid, bitter', once gu:nsdiq'ihdjL '(butter) is rancid', both s-perfective. For 'moldy' we also have s-perfective only, sdisi:nsL, twice 'is moldy', twice 'got moldy'. For 'weak, tender, i.e. starting to decompose', we likewise have only s-perfective, sdila'GL, once 'is', 4 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 s-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 s-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, positively correlated, with the fact these Statives seem significantly closer to the Neuter perfective pole than are e.g. 'tired, hungry'.

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 1938.231-232). There are copious instances, at least 70, of the s-perfective sAsinhL 'S died, S is dead'. Of these, about 30 are in elicitations, 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 s-perfectives glossed 'is dead', there are 6 of Neuter perfective 'i:sinhL (or the like) 'S is dead', all in elicitations, of course, and never glossed 'S died'. These 6 include the pair, with qA- pluralizer, qi:sinhL glossed "they're dead! (surprising)", dik' qa'sinhLG "they're not dead! (surprising)", from Lena. It appears that the surprising part is not the plurality, as the pair is accompanied by the same in s-perfective qAsAsinhL, dik' qAssinhLG, glossed 'they're dead, they died', 'they didn't die', minus the "!(surprising)". 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's worth, if we compare 'is dead' with 'is rotten' (all types), we have (not counting 5 nouns 'dead people's N') 10 instances of s-perfective vs. 4 (unmarked) Neuter perfective 'is dead', and 14 s-perfective vs. 4 Neuter perfective 'is rotten'. Thus 'dead' is about as close as or still less close to the s-perfective pole than 'rotten' is.

A few more details on 'die'. 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'; though not so attested it does probably mean 'S causes O to die'; the causative is attested, however, as 'S anaesthetizes O', once in s-perfective sALsinhL, and in the passive sLsinhL, 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 2 reflexive causatives, both s-perfective: 'AdsLsinhL 'he's playing dead' and GAdAgil 'AdsLsinhL 'the sun is in eclipse (playing dead)'; these 2 might be added to the total of instances of s-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 20 items that are attested only in s-perfective, and that only once or twice, i.e. in too few instances to be of any statistical significance, given the freedom of s-perfective use. (The number of examples attested in only Neuter perfective or in both perfectives not cited is under 10 in both categories.).



### Neuter Perfective Pole

At the opposite end of the cline are those themes which are found predominantly in the Neuter perfective and glossed 'S is V-ed', but of course also are found very readily in the s-perfective not in any marked sense but routinely glossed 'S became V-ed'. In this sense of markedness, the cline is not symmetrical. 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 s-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 'hungry', 'tired' at or toward the s-perfective pole, but 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 allows indifferently for a temporary or permanent state, as for 'hungry' or '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 S sits, stays', note also Active theme 'Awyaq' 'iLi'e'dzL 'is wearing those as shoes' ('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': qa' 'ixi'yahL 'I'm awake', k'ushiyah sila'X dixi'yahL 'I'm angry', sila'X k'udi:yahL 'I'm sexually excited', ya:n' di: 'yahL 'it's raining (coming down)', Xa:n' 'i: 'yahL 'it's ready/finished', th'ehd 'i: 'yahL 'it's open', k'a'dya' 'i: 'yahL 'he's crazy', and others, all also of course s-perfective sa'yahL for 'became'.

Examples of Neuter perfectives with classificatory stem: li:tahL 'has head in position' with various preverbals, 'it'a' 'i:lihxitahL 'I'm depending on you' (also Postural 'it'a' 'i:lihyiqhL 'we're counting on you'), 'i'yAlixitahL 'I'm expecting you'.

With Locomotion stem Neuter perfective seems to refer to a presumably limited period: 'Awtl' 'iLiAXa:n' 'ixdi'a'ch'Linh 'I'm racing him' ('with him in competition with each other pl are going'), 'iLq' qa' 'idi'a'ch'L 'they're mating' ('on top of each other up pl are going'), qa:qi:dla:GA'e' 'i:a'ch'Linu: 'they're following our track'; lu: 'i: 'yahL 'is gone beachcombing', dAtli: XAsha:nda' 'i: 'yahL 'already has come close'.

Only one stem in Active themes is well attested in Neuter perfective, namely the most general of all, -le 'act, do': Xu' li:liL 'moon (I-class) is full', 'utse'xah qi:liL 'they're skinny' ('their flesh removed they are'), qa' k'uuyi:liL 'someone dug (ditch)' ('up/out someone has acted with hands'), k'udzu:dah 'i:lihyiliL 'is in a good mood', k'usha:dah 'iXa' 'i:lihxiliL 'I'm disgusted with you'.

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. In fact it is the s-perfective Stative 'S got into state' so clearly extended to the meaning 'S is in state', e.g. 'S is hungry' that the Neuter perfective is then used only for the marked meaning 'is always hungry, remarkably hungry' – it is this type of s-perfective Stative which needs some explanation.

### 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 5 or more such instances are o-a: didi'yahGL 'S aches o', e.g. siyAq'd siya: didi'yahGL 'hungry' (Rezanov, 'my inside aches me'), Xe'X yAX xsdi'yahGL "I need to 'go' [excrete] bad" ('I need to go about a short distance outdoors'), 6 instances s-perfective, 3 Neuter perfective; 'it's cheap', s-perfective disLich'a:nGL thrice, Neuter perfective diLich'a:nGL twice; lisiLgehGL 'I'm lonesome' etc., s-perfective 6 times, lixiLgehGL etc. Neuter perfective 5 times; ya' sAga'L, ya' 'i:ga'L 'it's ruined' each 4 times; lAXAsAXAL etc. 'is drunk' 4 times s-perfective, lAXi:XAL etc. 3 times Neuter perfective. In these cases, though the glosses are the same, it may well be assumed that in the s-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 s-perfective and Neuter perfective, each only once or twice, with same gloss but presumably with same basic semantic difference, e.g.: lAXAsALgehdzL, lAXi:LgahdzL "something wrong with his eye"; sdixAXL, 'idixAXL 'tide is low'; lAXAdAsAqAshLinh, lAXAdi:qAshLinh 'his eyes are wide open'; 'ich' disiqe:k'L 'I'm peeved at you', sich' di:qe:k'Linh 'he's peeved at me'; sALq'u'L, 'i:Lq'u'L (latter Rezanov) 'it's damp'; 'i:nsdima'L "it's ruined", 'i:ndima'L "it's wrecked" (both Lena); lisiwidjL 'I'm ashamed' li:widjL 'you're ashamed'.

### Nominalizations

Both s-perfective and Neuter perfective Statives serve freely in nominalizations. Here statistically it is clear that a disproportionate number, something like half, are in Neuter perfective, compared with the general frequency of s-perfectives outnumbering Neuter perfective Statives.

Nominalizations from s-perfective Statives: dAXhunhyu: k'inhda:d sAdahLinh 'menstruant' ('she who is sitting in different place from people'), sLit'its'L 'rock candy' ('made into ice'), sditsugL 'swelling, "goose-egg"', sALts'ahsL 'semi-dry fish', sAsinhLinu:ya' XAwa: 'moth' ('dead people's dog'; plus 4 other such nouns, 'dead people's N'), sLi'mahdL 'bread' ('it is baked'), 'i:nsdile:L 'sawbill, cormorant' ('head is haired'), 'AdsLi'yahL 'giant' ('has gotten self situated, into situation'), k'uch'ahd 'i:lihsa'yahL 'amulet, that which gives good luck' ('is mentally situated from something'), disLi'ehdgL 'pilot bread' ('has been dried').

Nominalizations from Neuter perfectives: ts'a:tl'ya' 'i:dahLinh 'infant' ('he who is staying in baby-basket'), k'utl'a'q' 'i:dahLinh 'captain' ('he who is sitting in stern'), 'Aw

'uyAq' 'i:dahL 'his (present) clothes' ('that in which he is staying'), yAX dAxuLX qi' ya:nu' 'iditahL 'well' (where a keg is being kept below surface'), dAyAx dla:ditahL 'rainbucket' ('dl-class is kept under indeterminate object'), djAX k'uLitl'ihL 'sun halo' ('something is earringed'), sAsinhLinu: qi' ya:nu' 'idishahL 'cemetery' ('where dead people are buried beneath surface'), ya' 'i:qAts'L 'rags' ('that which is completely ripped up'), qi' qa' k'uyi:liL 'ditch' ('where someone has acted with hands up/out'), 'ahnu:[u]ch'a:X 'i:'a'ch'linu: 'his helpers' ('they who are helping him').

Only one nominalization is attested in both, perhaps in part because alternatives were not tested: lAXsdiXu'L, lAXAdiXu'L 'peach' ('hairy fruit'). This is from one of the many Statives themselves derived from nouns, for which see below.

### S-perfective and Neuter Perfective Statives Derived from Nouns

A large proportion especially of s-statives is derived from nouns, in the sense 'S is N-y, full of N'. Whereas just above, where a disproportionate number of Nominalizations from these 2 types of perfective Statives, half of about 20 are Neuter perfective, here, of a total of about 40 such Statives which are derived from nouns, over half are attested only in s-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 2 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 s-perfective vs. Neuter perfective frequency between the 2 levels of derivation must be statistically significant.

The 3 Statives derived from nouns which are or happen to be attested only in Neuter perfective are the following: liLitl'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' (-Ga:nsh- 'lower half of face').

The 20-some Statives derived from nouns which are or happen to be attested only in s-perfective are the following: sLit'its'L 'rock-candy' ('t'its' 'ice'), yixsLit'its'L 'my hands are frostbitten'; sLit'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, sdiGe'q'shgL 'it's clogged' (Ge'q'shg 'earwax'); ya' sdiGama'L 'it's full of maggots'; sAq'AgshgL, sLiq'agshgL 'has dry skin' (q'Agshg 'gristle'); 'Adi:nsdiwe:gL 'is wearing headband'; 'i:nsdile:L 'sawbill, cormorant' ('has hairs on head', le:L 'strand of hair'). Status as nouns of the stems of a few examples is uncertain: lAXAsiLxixL 'I have white spot on eye (clouded cornea?)', dAsALxixL, 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'); or with abstract stem of limited use: siGe'L 'I'm seasick' (cf. Ge'ga' 'Adu'xdAgawih 'I feel seasick'); xsdiGu'L 'I'm warm', GAdisdiGu'L 'place is warm' (Gu' heat; sweat); sa'li'ts'L, 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 sunbruned', cf. the preverb 'a'q' '(motion) out (of house)', e.g. 'a'q' sahL 'walked out'.

Probably fewer than 10 Statives derived from nouns are or happen to be attested in both s-perfective and Neuter perfective: qa' sAts'a'L, qa' 'i:ts'a'L 'it's muddy'; gu:nsAch'a:xL, guli:ch'a:xL 'water is silty'; shdich'e'L (twice), '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, lixLiq'AXL 'I'm fat'; sdiXu'L 'is hairy' (3 times), but lAXAsdiXu'L, lAXAdiXu'L 'peach'; sLiXishLinh (10 times, because of uncertainty of stem-form), 'iLiXishLinh (once) 'he's scarred'. In any case, 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 s-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 2 perfective in use and glossing: sALXe'tl'L usually 'it got dark, night fell' 18 times, especially in text, 'iLXe'tl'L 'it's dark, quite dark' (2), Lich' qi' 'i:LXe'tl'L 'where it's always dark', cf. XAtl' 'night' (reduced stem); sALse'L 'evening came', 'i:Lse'L 'it's evening' (each once), cf. se:L 'evening' (expanded stem); sALxa'L usually 'summer came' (8 times), 'i:Lxa'L 'it's summer' 5 times, including once Lich' qi' 'i:Lxa'L 'where it's always summer', cf. xah 'summer'; sALXAla:gL 'winter came' (3 times, no Neuter perfective). These statistics reflect the most basic pattern, where especially in narrative text s-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 glossed likewise glossed 'is'.

### Overlap with Inceptive Perfective Stative

Compared with the overlap between s-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 s-perfective and Neuter perfective Statives than are the latter from each other.

S-perfectives, insofar as they are or happen to be glossed the same as e.g. lAGaq'ashL 'it's bent at an angle; lopsided', yAGAxLAq'Aq'L 'I'm making a fist, my hand is closed'; GAdAXe'sL 'it's infected' (cf. XAs 'pus', reduced); GAXAwa'sL, GAXa:sL (latter Persistent) 'it itches', i.e. lAsAq'AshL, yixsLiq'Aq'L, siXAwa'sL, siXa:sL 'I have and itch', 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 s-perfective is also attested and glossed 'became, got'. On the other hand, there could be some genuine overlap.

There are likewise 2 Inceptive perfective Statives with s-perfectives similarly glossed, both interesting: lAXi:q'a'Linh 'he's cross-eyed', cf. 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'), cf. sida:d guGALa:n'Linh 'he's standing near me'. The latter pair is somewhat surprising: given that Inceptive perfective Statives are relatively few and seem to refer especially to 'pressure, distortion', so that 'stand, be standing' (along with '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 3 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, 'cross-eyed', whether it is the Inceptive perfective or the Neuter perfective which reflects the longer-term and/or more stable state, but rather that the Inceptive represents more the 'distortion', the Neuter perfective stasis over a period of time.

## NEUTER IMPERFECTIVE

The Neuter imperfective is a clearly defined class of stative verbs or verb themes, of limited membership. The number of those attested may be counted as 40 to 50, 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 which appear to be derived as nominalizations from otherwise unattested Neuter imperfective verb themes. In addition to these, there are three derivational processes which 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 90 items.

Open variable stems of Neuter imperfective verbs are always of the CV/ type, 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. (Such stems are not restricted to the Neuter imperfective theme category, but the Neuter imperfective does 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, CVhC elsewhere (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.

Neuter imperfective verbs are defined morphologically, i.e. affixally, by their occurrence with the positive Neuter prefix, basically yi- of position 4c, in the positive imperfective aspect. Thus yi- in combination with the vocalized classifiers dA- and LA- of position 4d results in di- and Li-, by metathesis, or by progressive vowel assimilation and deletion of yi-, in either case leaving zero in position 4c. In combination with 1s and 2p subject of position 4b the result is xi- and lAXi-; with 2s subject yi- the result is yi-, where it is probably simplest to say that the subject pronoun is deleted (as happens to that prefix in many other combinations). In the negative Neuters the yi- does not appear in any form at all; instead the prefix (')a'- appears in position 4a. Directly following any conjunct prefix of the form CA- or Ci-, and with non-vocalic classifier, the result is Ci:-, following Cu-, the result is Cu:-. With vocalic classifier the result is Cudi-, CuLi-, Cidi-, CiLi-, except after uvulars, which block the i-vowel harmony, thus e.g. XAdi-, qALi-.

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 a prefix of position 4a of the form 'i-. (Conceivably its underlying form might be 'A- if one attributes 'i- to vowel harmony, but since the 2p form is 'ilAXi-, one would there have to attribute the 'i- to analogy.) This prefix is deleted with any preceding conjunct prefix, so occurs in initial position only.

### 1. Verbs of being, 'have'

There are, accordingly, two fundamental verbs translating 'to be', both cognate and parallel to their Athabaskan counterparts. The absolute is in the construction C yiLeh 'S

is C[omplement]', where C is a noun, noun phrase, or adjectival: e.g. 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, 2p daXunh lAXiLeh 'you are persons etc.'; iterative is q'e' xdiLeh 1s, diLeh 2s and 3, lAXdiLeh 2p. Negatives are 'a'xLe:G, 'a'Le:G, 'a'lAXLe:G, q'e' 'a'xdALe:G, 'a'dALe:G,, 'a'lAXdALe:G – except that in this one verb for some reason the negative, quite anomalously, loses the second ', thus becoming 'A- instead of 'a'- most of the time, at least in 3, 'Ale:G instead of 'a'Le:G. 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:Linhhinh 'his sense exists, he's smart', ts'iyux k'u:Leh 'there are (lots of) mosquitos'. (Cf. also PA \*qu-:-le:-ngy, with 'area/event' prefix S instead of indefinite.) See Eyak Dictionary 1970 for full lexical account, and recent files for peculiarities in conjugation choice in imperative, optative, etc.

The comparative 'to be' takes the positive imperfective form 'it'eh 2s and 3, 'ixit'eh 1s, 'ilAXit'eh 2p, iterative q'e' 'idit'eh, 'ixdit'eh, 'ilAXdit'eh. The stem, being from PAE \*t'ew, ablauts to -t'u/. The negative imperfective is thus 'a't'u:G 2s and 3, 'a'xt'u:G 1s, 'a'lAXt'u:G 2p, iterative 'a'dAt'u:G etc.. Instead of Complement, this verb requires either an adverb, preverb, or a postpositional phrase, very often o-ga' 'like, as, equal to o'; e.g. k'e:d 'it'eh? -- 'idah 'ixit'eh 'how are you? – I'm OK/fine', wAX 'ixit'eh 'I'm that way, thus', 'a:nd wAX 'ixit'eh 'I live here', xitl'ga' 'it'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', k'ulAX 'it'ihnhinh 'chief' < 'he who is more than someone'. See Eyak dictionary 1970 for full lexical and morphological account, including ablaut pattern; see also recent files for peculiarities in conjugation choice in imperative, optative, etc.

The absolute 'be' C yiLeh above is exclusively intransitive, having no causative \*O-L-Le/ (> \*O-Le/). Instead, suppletively, there is the directive C O-'-l-L-Xa/ 'S causes O to be C, S turns O into C, S makes O C(-y)', and as a transitive most frequently an action theme, but also found as Neuter imperfective especially in the sense 'S keeps O (as) C': 'Aw Le't' 'uq' 'isda'L 'u'lixilXah 'I keep that box as a chair', and especially frequent in reflexive causatives 'S makes self C; S makes self C (with ulterior motive); S pretends to be C', e.g. 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, with indefinite O, 'S causes C to exist', e.g. yAX 'iLA'a:nXinh 'u:dAX k'u'li:LXinhninu: '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' < 'I keep money toward you', ya:q'd wAX 'ixLit'eh 'I wear it on my wrist' (indirect reflexive), especially frequent as reflexive causative, e.g. k'usha:dah 'Adi:nLit'inhinh 'he's making menacing faces, frowning' < 'causing himself facially to be badly'

Irregular, i.e. morphologically unique, is C da'-l-L-Xa/ 'S has, owns C', with the same stem as the suppletive 'cause O to be C', but with what appears to be only dA- as O of directive, instead of 'i-da'- (< 'i-dA-), usual indeterminate O of directives, uniquely minus the 'i- indeterminate O prefix. This behaves as an intransitive, with vocalized classifier in iterative, disjunct personal pronouns for semantic "Object," i.e. in fact

Complement, also with no class-mark for classified “Object,” further proving it to be not O but Complement: e.g. XahdL da’liXiLXah ‘I own a car’, XahdL q’e’ da’liLiXinhinh (not \*da’dli:LXinhinh) ‘he has another car’, i: da’liXiLXah ‘I have you (to depend on)’ (not \*’ida’liXiLXah).

## 2a. Dimensional

There is one subclass of themes which 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 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’.

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 k’u- indefinite to those of positive valence/dimension, and by suffixation 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 11 stems of these dimensional Neuter imperfectives constitute almost the entire 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, will be presented below in tabular form, in four columns, for gloss, positive absolute, positive comparative, substantivized adjective. Blanks signify not attested, i.e. rejected by Marie, though potentially not by all speakers. Numerals refer to footnotes.

	Absolute	Comparative	Adjectival
‘long’	1	1	k’u’a:w
‘short’	yidik’	’i:Ldik’	ya:dik’
‘broad, wide’		’i:LwAX	k’uwAX
‘wide, thick’	yicha’sh 2	’i:Lcha’sh	k’uchahsh
‘narrow, thin’	yitsidzg	’i:Ltsidzg	ya:tsidzg
‘very narrow, thin’	yidjidjg	’i:Ldjidjg	ya:djidjg
‘big’	yi’lih		k’u’lAw 1
‘little’	yikuts’g	’i:Lkuts’g	ya:kuts’g
‘very little, tiny’	yigut’g	’i:Lgut’g	ya:gut’g
‘many’	?yit’u’ 3	’iLit’u’	k’ut’u’ 4
‘few’	yilu’d	’i:Llu’d	ya:luhd(g)
‘deep’		’iLitsa’ 5	5
‘shallow’	yiwa’q’		5



Note here the relation of this table, particularly the forms in column 4, with the grammatical class, adjectives, in separate file.

1 See below for basic verb of extension, absolute 'i:'ah and comparative 'i:L'ah 'sg. S extends', with several important derivations, also Neuter imperfective. The adjectival k'u'a:w is clearly related to this, implying PAE stem \*'aw. Cf. adjective k'u-'lAw, verb-'li/. Rezanov quite regularly spells the adjective *lega*, where *e* might represent (soft l plus) o, but more probably e, since there appears to be no labialization in the (non-back) gamma-like sonorant (like that of Tlingit), in contrast to that of 'long', which Rezanov regularly spells *aua*. The verb and adjective for 'big' thus probably share a front vowel e or i, from proto-stem \*'ne- or \*'ni- plus syllabic sonorant gamma.

2 More often la'q' 'i:cha'sh, with preverb la'-q', and prefixed 'i:-, cf. verb 'extend'.

3 ?yit'u' rejected by Marie, and rightly so in view of comparative, but later accepted (3-8-96); ?di'tu' or ?Lit'u' were not tested.

4 In reference to humans requiring qualifier gu:n- (< \*gA-nA-), normally referring to liquids, here semantically quite irregular.

5 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' (Athbaskan \*-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 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' (not Neuter imperfective like 'iLitsa'), so both GAwa'q'L and GALAwa'q'L for 'it's getting shallow', sAwa'q'L and sLiwa'q'L for 'it got shallow', a parallel pattern for which is not attested for 'deep'.

## 2b. Verbs of extent

A small but productive subgroup closely related to the dimensional is the 3 verbs of extent, all of which require the 'i- of position 4a. The first two refer to linear extent, with basic zero classifier in the absolute, L- classifier in the comparative. The third, with basic dA- classifier in both absolute and comparative, 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/ 'S extends linearly' does there correspond an adjectival, shown in the table above as mentioned in footnote 1 thereto. For full lexical and morphological description of all three see 1970 dictionary.

'i:'ah (sg.) 'S extends (linearly)' (absolute), o-ga'/'-lAX/'-u'X 'i:L'ah 'extends as/equally far as / beyond / short of o' (comparative). This very productive theme applies primarily to singular S, also however to plural, though perhaps not originally, or perhaps best, to S 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 gl- class-mark qualifier), a streak (Xd-), even passage of time (Gl-), or distance overland (Gdl-), over water (gdl-); many further derived themes with qualifier, and, in reference to (columns of?) smoke, and to wind, 'i-d-L-'a/, with 'i- of position 1a (empty indeterminate O?), d- qualifier,.

'i:siid 'pl. S extend (linearly)' (absolute), 'i:Lsiid 'pl. S extend (linearly)' (comparative). Though frequent than the preceding, this is productive with e.g. qualifiers, and also in indirect reciprocals, e.g. 'iLqa' Xadidi'ah 'corner of log cabin' ('pl. (logs) extend between each other'), '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 S.

'idiyah 'S (non-linear) is of size', i.e. 'i-i- comparative Neuter imperfective, with dA-classifier, stem -a/, zero initial, epenthetic -y-, basically this one theme, though often e.g. 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)'.

### 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 'i- 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', 'ida'ya:lAX yiLda:s 'it's too heavy', ?'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, Active perfective stative, showing that hunger is viewed as the result of a process, whereas illness is not); GAdidiGu' 'it (place) is hot', perhaps the single example of Neuter imperfective as opposed to over 30 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', perhaps to be expected, as heating is an earlier technology than refrigeration); on the other hand, cf. de:Gu' 'steam bath', with unanalyzable de:-, possibly from \*da:-yi-Gu', cf. e.g. da:-(d) 'where(?)'. Very productive is liLilah, 'i:nLilah 'is facially' < l-IA-la/, e.g. k'udzu:dah 'i:Lilah 'you're good-looking' (see further, 6a below), One apparent pair of antonyms is very marginally attested: di:Lch'ich'X 'it (board) is rough' (Anna only), 'i:Llit's 'smooth cliff' (place-name, Lena only).

One item is problematic: yiLqAtl'X 'it's slippery', dik' 'a'LqAtl'XG 'it not slippery', di:LqAtl'X 'it (expanse of ice) is slippery', GAlil:LqAtl'X 'it (ground) is

slippery’, with suffix -X of unclear status; along with action 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 ‘is slippery’; that of ‘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 **6b** below.

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’: XAdi:(n)yanh (with thematized Xd- qualifier) ‘it’s sharp’; also though di:(n)yanh ‘stickleback (fish)’ and Xa:ngudi:(n)yanh ‘porcupine’ (with Xa:n- ‘back’ and gwd- ‘rump’ anatomical qualifier), thematic negative XAda(n)’ya:nG ‘dull’; dila’ ‘it’s hard, firm; difficult’, dik’ ’a’dAla’G ‘it’s not hard’, thematic negative dAla’G ‘it’s soft, flabby, disintegrating’, apparent Active imperfective, without negative Neuter prefix ’a’-; 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’ah ‘I’m that strong, strong enough, I’m as strong as that’ (comparatives confirming non-use of ’i-), thematic negative xLAch’a:nG ‘I’m weak’ (dik’ xLAch’a:nGG ‘I’m not weak), Active imperfective, with no negator and no negative Neuter prefix ’a’-, also, uniquely with shift of stem-initial -ts’- to -ch’-, not found otherwise in Eyak, or generally in Athabaskan, but characteristic in Tlingit (pejoratives); cf. also probable doublet without such shift LAts’a:nG ‘moulting duck’.

#### 4. Verbs of perception, aversion, etc.

This is the only subclass of Neuter imperfective stative 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, 5 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 postpositional phrase o-dahd ‘directly against o’, ‘S listens to o’ (literally), and/or ‘S heeds o’, such that there could be a pair with e.g. hypothetical Neuter perfective ’udahd lixitaL ‘I have my head against it’ and ’udahd ’u’lixitah ‘I’m listening to it, hear it; I’m heeding it’, also as opposed to dAxLcha:q’ ‘I hear it’, Active imperfective. The basic verb ‘S knows O’ is also a directive, but not derived, O-’-l-L-ga/, e.g. ’u’lixiLgah ‘I know (it) ’i’lixiLgah ‘I know you’, dik’ ’u:la’xLga:G ‘I don’t know (it)’. Not directive is xLideh ‘I understand it, know how to do it’, ’idixLideh ‘I understand you(r speech)’. Likewise O-d-LXAw/ ‘S believes O, agrees with O’ (cf. postposition o-XAw ‘simultaneous with’), d- qualifier ‘speech’ presumably thematized’, i.e. ‘what O says’, but also in Active imperfective, e.g. ’idixLXAwih, ’idAxLXAwih ‘I believe you, agree with you’, semantic difference unfortunately not investigated. Another theme of belief is directive C O-’-LA-le/ ‘S believes, thinks (rightly or wrongly) that O is C’ (stem -le/ ‘have emotion, feeling’, irregular, like that of C -Le/ ‘S is C’): e.g. ts’iyuh xu’Lilinhinh ‘he thinks I’m a bear’, sometimes with verb phrase as C: xdAxa:gL xu’Lilinhinh ‘he thinks I’m working’. (One other directive theme, ‘S believes O’ is dAXu’ O-’d-l-L-Xa/, e.g. ’i’dla:xilXah ‘I believe you’ is merely C O-’-l-LXa/ ‘S keeps O as C’, with additional qualidier 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 3 stems are involved, all with thematized derivational prefixes, in 5 basic themes. The one with only one theme is k'u-'-LA-tu/ 'S is lazy', with thematized indefinite O, no doubt with the idea aversion to something': e.g. k'uxLituh '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- (from unattested \*O-'-L-), and O-'-IX-L- directive with thematic IX- qualifier: 'Adu'Lik'i:nq'inh 'he's shy, modest, reserved' and xu'lAXLik'i:nq'inh 'he's shy with me, observes proper (e.g. cross-sibling) avoidance behavior toward me'; and with the same stem as noun xa:s 'taboo, strange, ominous, lucky thing': 'Adu'Lixa:sinh 'he's observing a taboo', xu'lAXLixa:sinh 'he's afraid of me, fears me'. The qualifier IX-, in origin clearly a reduction of the noun -la:X 'eye', is very common as a 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 IX- appears also in O-lx-L-Gehd 'S jounces, dandles O (baby, pet)' and above all in O-'-IX-L-tsi:ndz 'S dreams of O' derived from 'i-tsi:ndz 'S dreams', noun tsi:ndz 'dream', and in IX-XAL 'S is drunk, dizzy', q.v. following. Additionally here there is the intransitive IX-LA-Xa:s 'S is 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 (suffix -L-L > -L). In any case, the thematized IX- qualifier 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. Cf. however, also section 6c below. 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).

## 5. Nouns from unattested verbs

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'AXLiq:tl' 'nagoonberry (Rubus arcticus)', with unidentified ts'AX- and Li-qa:tl', cf. Ahtna dahts'enkaadle' 'nagoonberry', but irregular as a diffusion, also Minto nekodle 'raspberry', possibly < \*ngyE-qatl'E; di:tsi'G 'naked' used only as C, implying unknown verb and stem \*d-tsi'G, with d- qualifier.

Another is attested only as a complement: di:tsin'G 'naked', e.g. di:tsin'G yiLinhhin 'he's naked', implying d-tsin'G with d- qualifier, not usable as an intransitive, but only attested as transitive O-L-tsin'G 'S undresses 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 du:L, PA \*deL ‘crane’, \*dELEduL ‘make call of crane’ < PAE \*dewL, plus unknown Eyak \*xideh, but cf. also xLideh ‘I know how, understand it’, so originally \*du:LxLideh, imitative?. Another important animal term is qe’yiLteh ‘whale’, certainly from preverb qa’ ‘up out’ and -L-teh ‘dead, comatose S lies prone’, preverb unlauted by yi-, conceivably Neuter imperfective by stativization derivation, q.v. under **6c**, given that Eyaks did not aggressively hunt whales but took them in this state.

Some forms are attested with prefixal di- trivially alternating with dA-, especially preceding or following a front vowel, with di- the more frequent variant, implying Neuter imperfective with di- classifier, the dA- implying Active imperfective with dA-classifier or qualifier: thus e.g. XAdich’e:’, XAdAch’e:’ ‘red-tipped clam’, possibly indeed a Neuter imperfective in origin (though Xd- qualifier or class-mark is more productive than X-), especially in view of the following: ’i:nda:’ dich’e:’ ‘kingfisher’ < ‘face red’; from Anna only, ‘kingfisher’ being usually ni:ga:dAshe:, ni:k’a:dAshe:, for Anna also, with further variants; cf. -ni:k’ ‘nose’, Anna prone to folk etymology; note vowel and prosody parallel i:-a:-V-e:; cf. 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 such are doubtful: qi:yidich’an’k’, qi:yAdAch’an’k’ ‘Dungeness crab’, latter Mike Sewak only, perhaps archaic original, qi:-yA- anatomical qualifier ‘toes’, ’i-dA-ch’an’k’ ‘S clammers, moves along clutching’, with indeterminate O and dA- classifier, vowel shift possible from -i:y-, motion verb not likely as stative; dide’L ‘lamp’, Rezanov 1805 dAde’L, (dide’L almost certainly vowel shift, dAde’L being the regular instrumentalization of d-LA-de ‘S emits light’). Further examples of this type are qi:yidichanh ‘spider’ (‘smelly-toes’, Lena; cf. qi:ydAchanh ‘daddy long-legs’, Marie; LA-chanh ‘S smells’), Ga:ndichidjg ‘small birds’ (rarely Ga:ndAchidjg).

Most difficult is k’udi’lahG ‘chief of opposite moiety’, which looks like pure Eyak, Neuter imperfective, no condition for shift from dA- to di- classifier, k’u- indefinite S; there is, however, no known theme dA-’lahG or stem -’lahG; on the other hand, there is the common -lah-G ‘inhabitant of’ (cf. -la ‘subsist’ and e.g. ’i:ya:G-dA-lah-G ‘Eyak person’, pl. ’i:ya:GdAlahGAYu:), where unknown k’udi’- could be the identifier, or be k’u- indefinite o of unknown postposition o-di’, cf. also k’udi:q’ ‘Chugach person’.

There are a few problematical forms with initial ’i:-, which is homophonous with Neuter perfective prefixation but missing -L suffix, e.g. ’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. ’i:t’tits’L ‘it’s frozen’ Neuter perfective. More likely these are instead forms with initial ’i:n- from l- qualifier that have lost the nasalization, both from Lena, who often denasalizes, cf. e.g. ’i:nLch’iya’t’ ‘rotten fish-heads’, ’i:nLk’a’t’ ‘sea-urchin’, and q’Ama-lA-k’i:ngshg ‘dried salmon-roe (sac)’ (l- class).

## 6. Neuter imperfective derivations

There are three derivational processes which 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, here provisionally labeled “poetic stativization.”

### 6a. Anatomical resemblance

There are examples in the corpus of Neuter imperfectives of “anatomical resemblance,” derived from 7 anatomical nouns. (See also addendum, 7.) These all show the comparative Neuter imperfective prefixation with vocalized classifier ’i-Li- to the noun, and mostly the postpositional phrase o-ga’ like o’: thus, most simply, ’iga’ ’iLisa’dinh ‘he has a mouth like yours’, siga’ ’iLidjehXinh ‘he has ears like mine’, GAnuhga’ ’iLik’ahshinh ‘he’s duck-footed’, siga’ ’iLini:k’inh ‘he has a nose like mine’, siga’ ’iLila:Xinh, he has eyes like mine’. Two other include anatomical prefix that is also part of the noun itself: siga’ yiLIq’a’ts’inh ‘he has hands like mine’, ’AwLA’e: yiLIq’ats’inh ‘he has queer hands’, cf. -yA-q’a’ts’ ‘hand’; dAXunhyu:ga’ ’i:nLida:’ ‘owl species’ < ‘it has a face like humans’, cf. -:nda:’ ‘face’. Synonymous to the latter is dAXunhyu:ga’ ’i:nLilah < ‘it is facially like humans’, a basic Neuter intransitive descriptive (see under 4 above) with the same prefixation as here. Significantly, however, the -Li- prefixation does not occur in o-ga’ ’i:t’eh ‘S is like o’ with anatomical qualifier prefixes: siga’ qi:di:t’inhinh ‘he has feet like mine’, siga’ gudi:t’inhinh ‘he has a butt like mine’.

### 6b. Liability

Hare follows a n extensive if not full list of derived Neuter imperfective “liability” themes, all derived from action verbs, both transitive and intransitive. Certainly 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’; this -X is sometimes deleted before negative -G, or in favor of thematic -g repetitive, 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 S or O, but to potential plural acts or events.

Most, but not all, of the attested instances are from intransitives: LidAtl’X < L-dAtl’ ‘S gets hurt’, 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 ‘S swells (by soaking up moisture)’; k’ah lixLita’X ‘I’m forgetful’ indirect reflexive < o-k’ah l-ta ‘S forgets o’ < ‘S positions head away from o’; qi:nLidja’X, qAqi:liLidja’X ‘it (rope) breaks easily’, deleting preverb yAX ‘apart’ < yAX L-dja’ S jerks apart’, itself < (yaX) O-dja’ ‘S jerks O (apart)’; Lisi:nsX ‘it gets moldy easily’ < dA-si:ns ‘S becomes moldy’; Lisha’t’X ‘it wrinkles easily’ < LA-sha’t’ ‘S becomes pliable’ < -sha’t’ ‘id.’ (rare); LikugX, qALikugX ‘it breaks easily’, qAdiLikugX ‘it (stick) is brittle’ < -kug ‘S breaks’; Liki:nXinh (< -X-X-) ‘he cries easily, is liable to weep’, dik’ ’a’xLAKi:nXG ‘I’m no crybaby’ < -ki:nX ‘S weeps’; LiqAts’X ‘it’s liable to split, burst’ < -qAts’ ‘S splits’; Liq’u’tl’X ‘it’s fragile, likely to break to pieces’, dik’ ’a’LAq’u’tl’XG, dik’ ’a’LAq’u’tl’G ‘it’s not fragile’ < -q’u’tl’ ‘S breaks to pieces’; ’i:nLima’X ‘S (e.g. motor) keeps breaking down’ < l-dA-ma/ ‘S goes wrong’; lixLiwidj ‘I shame easily’ < l-widj ‘S is ashamed’, yAq’ lixLiya’X ‘I scare, startle easily, I’m jumpy’ < yAq’ l-a ‘S is startled, bewitched’.

Only two such themes are attested from verbs that are essentially transitive. These have the passive meaning ‘S is easily V’ed’, rather than ‘S is liable to V O’: yAX Lichich’X ‘it is easily broken, brittle’ < O-ch’ich’ ‘S breaks O’ (semantic quasi-suppletive transitive for -kug ‘S breaks’); LiXa’Xch’Xinh ‘he’s ticklish’ (< -ch’-X-X-), dik’ ’a’xLAXa’Xch’XG ‘I’m not ticklish’, dik’ ’a’LAXA’Xch’gGinh ‘he’s not ticklish (Marie).

Problematical is yiLqAtl’X ‘it’s slippery’ etc., entered under **4** above, not fully explained, suffixation perhaps as here, but prefixation as above. This derivation is not that here, i.e. the meaning is not ‘liable to slip’, is nor regular for that above, which are not derived. Very possibly this is a single example of a variant of this type of derivation, which unfortunately was not further investigated.

Also unfortunately, it appears that there may be no instances of these themes in anything but the Neuter imperfective, that 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.

### 6c. Expressive stativization

The last Neuter imperfective derivation to be recognized, alas too late, is perhaps applicable in principle to any verb class. Its existence must be presumed, however, from only three clear examples of far noticed in the corpus, all from Lena: ’AXa: ’Aw guli:Lts’unhinh ‘my how he guzzles that!’, (ts’u: / che:y) guli:Lts’unhinh ‘he loves to guzzle it (milk / tea)’, cf. O-ts’uh ‘S (especially infant) sucks O’, action, here with (redundant) gwl- class-mark qualifier ‘liquid’ in Neuter imperfective, also L-classifier, also ’AXa: diLiXAXginh ‘what a snorer he is, dik’ da’LAXAXgGinh ‘he doesn’t snore’, cf. dALAXAXgih ‘he’s snoring’ Active imperfective, 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,” not properly appreciated at the time of elicitation, so not further investigated in 1963-65, with one evidently exceptional deliberate elicitation in 1965, dALich’ di:chinhinh ‘he’s always hungry’, 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 condition that in normal cases can be readily changed, can be exceptionally be treated as inherent. Further examples might however be attested in some of the nouns discussed in **5** above, e.g. qi:yidich’an’k’ ‘Dungeness crab’, and especially qe’yiLteh ‘whale’. It is unfortunately impossible to know how productive this expressive derivation might have proven. – See following Addendum, **7**, for over a dozen further instances.

### 7. Addenda

To **6c**. In 1980, as I was closer to some understanding of the system of verb theme classes, and was working with Marie to investigate it further, I came much closer to testing the limits of Neuter imperfective use. Twenty-some hypothetical Neuter imperfectives for perfective statives were tested and rejected by Marie, e.g. \*ixiwidj ‘I’m ashamed’, \*dit’its’ ‘it’s frozen’, which clearly confirm the definition of Neuter imperfective seen as referring exclusively to inherent qualities as opposed to changeable states. However, Marie did not reject outright Lena’s gali:Lts’unhinh ‘guzzler’, but rather

indicated she had never heard such a thing; further, she could not decide that my proposed ?di:chinhinh 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 5 proposed forms which must herewith be counted as further valid examples of this derivation: xigah 'I'm [perpetually] tired, exhausted', dixigah 'I'm [permanently] tired of talking', xiguG 'I'm a liar', sitl' di:guG not glossed, but meaning in effect 'everything you say to me is a lie', where I have the notation "[possible] but not easy to say", and finally Lich' yiLq'uh 'it's always damp', where the explicit 'always' as explanation makes the form more easily acceptable, so much so that to that Marie added what must have been her own Lich' 'u:d qi' k'u:Lq'uh 'damp place' ('place where something is damp there always'). Clearly, such explanation and perhaps practice made the derivation somewhat productive for Marie.

Addendum 26 June, 2010. Also to be included here are relativizations besides qe'yiLteh 'whale', evidently ya'X gudli:'yah 'fountain' ('liquid is – perpetually – situated upward'), the place name 'itl'a:ndaht 'igudli:Ltah 'Eyak River' ('it keeps liquid against mountain'), and sid k'u'li:Lga'ginh 'my teacher' ('he repeatedly causes me to know something', quite exceptional for a repetitive Active imperfective derivation itself from a Neuter imperfective; if not analogical from that, instead of expected sid k'u'lALga'ginh).

To **6a**. Also in that 1980 process with Marie, the Anatomical resemblance derivation happened to be tested twice: along with siga' 'iLini:k'inh 'he has a nose like mine' she offered Neuter perfective siga' 'iLini:k'Linh, and on another occasion Neuter perfective siga' 'iLiLa'ch'Linh 'he has a stomach like mine' (but not \*?siga' 'iLiLa'ch'inh) along with siga' 'iLini:k'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 that the Neuter imperfective may be more natural or correct for her in the case of 'nose' for some reason than in the case of 'stomach (internal organ)'.

To end of **1**. In a class by itself, probably, is l-LA-la/ 'S is facially', a comparative, e.g. k'udzu:dah 'i:nLilinhinh qe'L 'pretty-faced woman', dik' siga' la'LALah 'you don't look like me(facially)'. See also **6a** for further and related examples.

Further addenda, 7 November 2010. Particularly in connection with **6a.**, further checking of the main corpus revealed yixa:s 'it itches [severely?, perpetually?]', from both Lena and Marie, a Neuter imperfective of a persistive, doubly derived from Inceptive perfective stative theme. From Lena also 'AdXa'd ya'X Litug q'A'Aw 'suddenly it's [alarmingly?] swollen', presumably very expressive. Later from Marie, 5-29-80, xu: 'Awa: xigah, 'ida'ya:lAX xigah 'I (for one, however) am tired, I'm too tired', from Active perfective stative, clearly expressive, and also yitl'eh 'it (e.g. fish) is cold', perhaps not expressive, and Liduk' 'it's humped', presumably not expressive, perhaps basic (cf. sLiduk'L 'it's humped' Active perfective stative, GALAduk'L 'hill', otherwise unattested Inceptive perfective stative relativized as noun ).

Finally, what was listed in the 1970 Dictionary as defective verb stem -de: should very probably be reinterpreted as a Neuter imperative allomorph of -da 'sg. stays', attested only in the expression dAwa'd 'a'de: 'hurry', with adverb dAwa'd 'quickly' and



use of verb them 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 with Marie, with understandably uncertain results.

### COMMENT NEEDED IN INTRO

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 I now see are not just a few nominalizations of \*t’ew, of the form t’uh, but in fact more widely, all applications of the Active derivation I’ve called “usitative”: which applies to these Neuter imperfective statives as well.

### NEUTER PERFECTIVE

The important question of the status and implied history of the Neuter perfective was never systematically pursued while there was still time, including its occurrence in Neuter imperfective themes. Though it was never deliberately elicited in such themes, careful examination of the corpus also reveals a small but sufficient number of these in a sufficient range of such themes virtually to assure us that the Neuter perfective can indeed be used with any theme class. Further, it is formed morphologically exactly like (comparative) Neuter imperfective prefixally and exactly like the Active (s-) perfective with suffix -L on the stem with the same affect on the stem, so possibly is analogous to the Active perfective in stem and suffix. Thus, having no morphology unique to itself, but only a combination of (comparative) Neuter imperfective prefix and Active perfective stem and suffix, suggests that the Neuter perfective may be a late development in the Eyak verb system, and in that sense, also being non-criterial in determining verb-theme classification, is of the same late vintage as the Inceptive imperfective (‘future’).

Also, there are some themes which appear to be fundamentally Neuter perfective, e.g. k’a:di(h) ’ixiLe’L ‘I’n lost; missing’, o-yAq’ ’ixidahL ‘I’m wearing it’, lAXAxiXAL (<-L-L) ‘I’m drunk’, i.e. are most often found in Np (rather than Ap, which just means ‘I got lost’ etc.). Neuter perfective might well be another stative theme-class.

In any case, meaning of Neuter perfective may best be described as ‘S is in state for a term’, as 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, and much less common Inceptive perfective stative ‘S is immobilized in non-changing state involving process of pressure, resistance, standoff, distortion’, also a kind of stativization, along with ‘is getting into (such a) state’. Neuter imperfective is an entirely different kind of stative, an inherent state, no process involved.

We do have the minimal pair for Neuter imperfective – Neuter perfective, in la’q’ yicha’sh ‘it’s thick’ and la’q’ ’i:chahshL ‘it’s thick’, the former presumably ‘inherently, or 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, having become so as the result of a process’.

## USITATIVE

The Usutative 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 unmarked Active imperfective, as though converting or displacing such themes to Action themes. Its meaning distinctively shows what may be called “usage,” hence the name. Thus e.g. Usutative Postural 'a:nd xdah 'I sit here, this is where I sit, this is my seat', as opposed of course to 'a:nd sidahL 'I'm sitting here', but also as opposed to Customary 'a:nd ('A)xda:k' 'I sit here (e.g. often, every Sunday, etc)'. Its meaning may seem very close to that of the Customary, but there is nonetheless this clear opposition in Eyak. This difference is most frequently manifest in the fact that the Customary is not used in lexicalized nominalizations, nouns derived from verbs, whereas by far the most frequent use of the Usutative is in nominalization, as will be discussed below.

First, however, follows a sample of non-nominal use of the Usutative. Clearly, the meaning differs from that of Customary in that the latter implies discrete events, the Usutative not, describable sometimes as a life-style, as opposed to a custom. As such it sometimes is used particularly in reference to personality, mind-set, mentality, especially in themes with prefix 'i:lih 'mentally'.

Postural verbs particularly can take the Usutative. e.g. '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', 'uqa'd dinhinh 'he stays/lives among them', lihXda:d ya' dinhinh 'he minds his own business, stays still silent', also 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'. Likewise plural te'ya'e'd da: quh 'we live on fish', 'a:ndshunh 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', 'u:d Xa:d Lteh 'he keeps him (e.g. dog) outside there', dA'a:nd da: tu'ch' 'we lie right here, this is our sleeping-place'.

With theme -'ya 'be involuntarily situated': Xa:n' xyah 'I'm all dressed up" (Lena, probably 'I'm a well-dressed person', 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'.

In addition to Postural themes, Classificatory themes are also found in the Usutative, (though more often in nominalizations derived from them, for which see further below): '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, 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:ndq'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'.

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: lah 'we live/camp here' (cf. e.g. 'a:nch' da: GAla:L 'we're moving (camp) here'), 'u:d xlah 'I camp there'. Likewise (comparative) Neuter imperfective 'be': 'idah 'i:lihxt'uh 'I have no cares; I'm happy, satisfied' (Marie, 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' (Marie; note lengthened vowel in negative), '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' (woman, after living with wolves, 'her mind is to bite us repeatedly (desiderative)'), 'Aw dza:nt' ch'yiahdda:X k'uta' 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:d 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 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. 4/3/2009

Usitives of Locomotion themes are marginally attested: sich'a:X 'inhinh 'my helper' (nominalization, < 'he who goes to my help', Marie 1980). Most are in late (1987) elicitations only from Sophie Borodkin, e.g. '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:, 'u:ch' xweh 'yes, I swim there', k'e:duh 'u:ch' yit'uh 'how do you get there?' (Neuter imperfective in Usitative evidently as Locomotion verb in interrogative of manner, not otherwise so attested, likewise k'e:duh 'u:ch' lAXt'uh 'how do you pl get there?'), 'u:ch' da: 'a'ch' 'we go there on foot', qa:qa' 'ah 'he "belongs" with us, goes among us', 'u:ch' da: qeh notated "cust[omary]" (cf. '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, Persistentive). There was some confusion between the Usitative and Persistentive in these forms, 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 further under Persistentive for these.

Still further from Sophie, transitive Locomotion theme: k'udAX GAxXe:LG 'I can't pack it (carry it on my back), "maybe it's too heavy, or you're too weak"; the usual Inceptive perfective, negative, as opposed to k'udAX xXehG 'I can't pack it, "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 with 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, where Usitative could be shown, contrasting with forms of an underlying non-Action theme

Examples of Usitative nominalizations follow. Several are derived from Postural themes: sAqets' Akih'uyAq'd dah, sAqe:GAyu: 'uyAq'd quh 'womb' (< 'baby/babies stays/stay in it'), xu: qi' xdah 'my place, place where I stay', tse:le:Xquh 'octopus' (< tsa:-lA-yAX quh 'they stay under a rock', or possibly 'it (with many appendages) stays under a rock'), GAdla:Lquh 'lungs' (< ?), qi' teh 'uXa' '(animal)'s den' (< 'its place where it lies'), ta' Lteh 'dead spawned-out fish' (< 'it lies dead in water'), qi' ya:nu' k'uGAdAteh 'grave' (< 'where someone lies under the surface in the ground'), 'uq' k'uteh 'bed' (< 'someone lies on it').

From -'ya 'is involuntarily situated' we have several Usitative nominalizations: e.g. lAXALAtug 'uq' Xa:nch' lAXa'yah 'table for rice (in church)', la'q' lAXA'yah 'old berries from last fall on bush', yAq' gula'yah 'bile', listsi'da'X qAXa'yah 'chickadees', leh Gala'yah 'year'

Most Usitative Classificatory themes are found in nominalizations: e.g. ya:nahd tah 'rug, covering' etc., ya: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' lAXAda'ah '(hard?) candy' (< '(berry-like) kept in mouth', qi' lA'ah 'place where it (hat) belongs', from L-(y)a plural object classificatory: XAdAG dALAYah 'fish-drying rack' (< 'they (d-class?) are put up above'), qihda:q' lAXALAYah 'cranberry species' (< 'they (berry-like) are on meadow'), 'uq' Ach' k'uqi:dALAYah 'foot-stool' ('one's feet are onto it with repeated motion', still Active imperfective), ta:sGALah 'belt' (< ?, cf. o-ta:s 'across over o'), -Xun:LAYah 'teeth' (-Xu:lA- ~ -Xu:n-anatomical qualifier 'tooth').

From verbs translating 'be' etc., 'subsist' etc.: 'i:nda:q' wAX dAt'uh 'mask' (< 'it is kept on face', qi' k'uch' k'udla:XAt'uh 'where one looks at something'; dAG lah 'rainbow trout, Dolly Varden trout' (< 'it swims upstream'), li' lah 'salmon trout' (< 'it swims downstream'), si'ihX lah 'my younger sibling' ('living after me'), sidALyAX lah 'my older sibling' ('living after me'), lah 'town, village', -lah-G(-A-yu:) 'inhabitant(s) of'.

There are evidently some nominalizations also from the (comparative) Neuter imperfective -'a/ 'extend', though most of these are interpretable with some difficulty: e.g. LanhdAyAq' qa' 'ah 'chimney' (< Lanhd 'uyAq' qa' 'ah 'smoke extends up out from in it'), yAX XAdAdA'ah 'candle' ('stick is made to extend downward'), qa' 'AdXALA'ah 'horseclam' (< 'makes itself extend out'), 'iLX 'ulu' k'udA'ah 'end-to-end joint' (< 'in contact with each other through hole in it something is made to extend').

Most nominalizations are probably Usitatives, perhaps for two reasons. One surely is the semantic, but perhaps another is that the Active imperfective, with zero prefix and zero suffix is obviously the least marked of any verb form. See examples above, plus a few more: lAXAdAdu'k' 'orange' (< 'berry-like is squeezed'), 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 grows in lake'), la'mahd 'berry' ('it ripens, cooks'), qa: Lyii:ninh 'doctor' ('he cures us'). For more Usitative nominalizations, from a variety of themes, see the chapter on Instrumentals. The first stage of instrumentalization is nominalization, for which a few dozen examples are cited. Some are also cited above, but most of those in that chapter are derived from more specialized verbs, mostly Acion verb themes to

begin with, so that Usitative is homophonous or indistinguishable from such themes, or from another point of view, perhaps, inapplicable to them.

Taking stock of the coverage here, Usitative is relatively well attested and identified with Motion themes (Postural, Classificatory, perhaps Locomotion), is presumably “moot” in the case of Action themes, and marginally attested, but interestingly so, with a few Statives: Neuter imperfectives -t'e ~ -t'u/ 'be', O-'L-Xa/ 'make O be', -'a/ 'extend', and Inceptive perfective -t'ux 'hold O', but unfortunately not so as recognized with any Active s-perfectives, e.g. hypothetical \*?dAxcheh 'I live hungry' (maybe like to be, or on a lifelong diet), \*?xLAdlAGshg 'I'm a dirty person, live dirty', unfortunately untested, but maybe there are some examples that could be identified. Likewise more Neuter imperfectives, hypothetical \*?xk'ahd 'I'm sickly' or 'live like a sick person', \*?xshah 'I'm a stingy person, believe in being stingy'. Even the Action themes in Active imperfective need to be examined to see if there are instances that could be called Usitative, e.g. 'u:d tsu'dinh 'he's sleeping there' might also mean 'he sleeps there, there is his sleeping-place'.

Addendum 2/14/09. A number of further examples were added where appropriate above from the 1980 notebook from Marie: here follow some more, which cannot be so added to the above without reorganization. qa: Lt'ik'inu: 'they shoot us' (i.e. people shoot wolves), definitely Usitative. From Neuter imperfective causative of 'be' (absolute): ts'iyuh 'Adu'lAxLAXah 'I am (make myself be) a blackbear (e.g. in a play, that's my role)'; from Neuter imperfective -'a/ 'extend', 'u:d qa' 'ah 'that's where it comes up' Further 'AwX 'Adu'gudla:LA'ininh 'he hangs on to that' (< 'folds self'), dAch' xtl'ih 'I keep it tied (to indeterminate o)', cf. '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'), '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', sid k'uLlininh 'he (always) gives me something to drink'; finally, xdAlah 'I'm drinking it; I drink it (normally, lifestyle)' quite explicit about the two different meanings, indicating that Usitative is also applicable to Action verbs.

Further discussion needed, in conjunction also with Progressive counterpart of this derivation, of cline or bipolarity in Action themes between types with Active imperfective and types with Inceptive perfective, and displacing or converting of one to the other by these derivations. Active Imperfective, Usitative, is much more abstract, categorical, timeless, while Inceptive perfective, Progressive, refers to act/event as a process of some duration, and/or longitude. In that way, e.g. both meanings of Active imperfective xdAlah is one thing, GAXdAla:L 'I'm continually drinking it, in the process of drinking it', even hypothetical 'starting to drink it', another.

Addendum 6/23/10. A large number of further usitatives from a wide variety of theme-classes is cited in the chapter on nouns. 11/8/10: Yes, this having been written before the file on nouns, many more examples are cited, from a wide -- even elaborate -- variety of theme-classes, including multiply derived ones. Here should be added, however, one expressive item which is not a nominalization, but usitative from s- or

Active perfective stative sALsi'L 'is rotten': 'iya:nXa' Lsih "your mother has a rotten vagina (insult)" (Galushia Nelson; 'it rots with/on your mother', here clearly emphasizing personality, life-style, rather than state as result of process).

Other names than "usitative" could have been chosen, including "normative" or in one sense best of all "generic," if one chooses to emphasize the morphological unmarkedness of the Active imperfective as well as the cline or lack of semantic distinction, mootness, in Action verbs between usitative and "actual" sense of the verb.

Further late examples from Marie, 6/10/80: k'ushiyah sila'X da'yah "I'm always getting mad" ('I'm an angry person'), qa'ni: da: Lyah 'we fight' (not = qa'ni: da: 'i:'yahL 'we are in a fight', Neuter perfective), dA'a:nd da: wAX t'uh 'we live here'. Further examples from Sophie, 1987: dik' dALAQahGG "it doesn't fall" (e.g. the sun does not fall to earth), dik' xsinhG "I'm not dead" ('I don't die', not = dik' GAXsihnLG 'I'm not dying'), 'u:ch'sh yiweh 'do you swim there?', 'a:n,'u:ch' xweh 'yes, I swim there'.

## 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, with varying semantic effects, and to varying degrees of thematization. Repetitive is attested not only in the Active imperfective, Inceptive imperfective, Active optative, imperative, conditional, desiderative (once), but also together with other derivations, such as Inceptive perfective Durative, Active Customary (frequent), Persistent and yAX perambulative.

### MORPHOLOGY

There is no distinctive prefixation in the Repetitive at all. The mark of the Repetitive is -g suffixed 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 Repetitive Customary suffix sequence is -gk', desiderative -gX, negative -gG, Customary negative -gk'G. In combination with -X perambulative the -g replaces the -X, so clearly belongs to that same suffixal position.

Beside the usual Active imperfective, documentation of the Repetitive is fairly abundant in the Active perfective, imperative ('A-), 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 Active, as expected. In one case 'AXa: diiLiXAXginh 'my, what a snorer he is', the Neuter imperfective is in fact a Neuter derivation applied to the Active theme.

Instances of Repetitive in the conditional happen to be sparse, perhaps only 6, 5 with 'A- Active prefixation: 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', but Li'q' ya:yu: yAX GAXLAts'itl'g da:X 'when I slap everything around' (Marie in text, the only GA- conditional, but also the one instance where the -g is fully thematized), leaving it unclear whether the 'A- 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 'A-, perhaps the latter. The one instance of desiderative GAXLda:sgX 'ixleh 'I want to weigh it' does not require such a shift.

Examples of Repetitive in nominalizations, in gerunds, and in combination with other Active derivations, Customary, Persistent, yAX perambulative, and Inceptive perfective durative or transitional will be given in later subsections below.

### SEMANTICS

The semantic effects of this derivation fall into a rather complex set of categories, to be outlined below.

#### Phonological motivation with -CC coda stems

In one class of forms the -g Repetitive has no semantic basis but only a phonological one. That is stems with -CC cluster codas consisting of g k' G q' plus s or sh, a total of 21

such stems, largely nouns but including some verbs and verbs derived from such nouns. For a full list see file “Stem Final Clusters.” It could be said that stems ending with these clusters simply require the addition of -g for “euphony,” e.g. gugs-g > gugs-g ‘louse’, so also sa:q’sg ‘dulce’, we:gshg ‘ulu’, dIAGshg ‘dirt’, Ge’q’shg ‘earwax’, k’ahgshg ‘scab’, verbs LA-k’ahgshg ‘have scab’, LA-GAGsg ‘curl’. Alone of all the sources, the speaker George Johnson of Yakutat often omits this -g, e.g. gugs, we:gsh.

Even without George Johnson or comparative Athabaskan-Eyak (e.g. Koyukon baas ‘stone knife’, not \*baask, cf. we:gsh-g), this -g must in any case be considered a suffix and to be the same suffix as Eyak -g repetitive, for three reasons: a) there are no CCC coda clusters that are not morphologically analyzable, b) it is never duplicated with -g repetitive, and c) there are other incidences of -g suffix with no specifically repetitive meaning, i.e. where the -g is completely thematized.

### “Fineness” for nouns and adjectives

There are over 20 nouns, some with verbs derived therefrom, not with final clusters, but to which the same -g without any repetitive meaning is suffixed, e.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’. Some are with optional -g, e.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). Some such nouns have further suffix, -L, sometimes optional, e.g. GanhdgL ‘spruce needle’ (Lena, Marie, Anna), Ganhdg (Lena, Anna), Ganhd (George Johnson only, rejected by Lena); shAXgL ‘frost’, with verb dA-shAXg ‘be come frosted’, or have optional -g and verb, e.g. tl’its’g, tl’its’ ‘dirt’, sdtl’i’ts’(g)L ‘is dirty’; tl’Adjg, tl’Adj ‘slush’, sdtl’AdjgL ‘is gelatinized’, gu:ntl’Adjg ‘jellyfish’, -gutl’Adjg ‘tailbone’. 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.

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 -g suffix, while 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 the table in the file on Neuter Imperfectives. Note that with these as Neuter imperfectives, the -g remains in yitsidzg, yidjidjg, yikuts’g, but not in yilu’d ‘few’.)

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.

### 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 which do not otherwise refer to repetitive actions or events. These show the core meaning or the



Repetitive, namely relatively rapid repetition on a single occasion, as opposed to Customary (repetition on separate occasions, at some kind of interval, long-term literally custom), or Persistent (deliberate discrete repetitions, or action on objects “one after another”), i.e. relatively rapid repetitions, or less deliberate, “intermittent, on and off, sometimes, often, in spells”, even ‘once in a while’, also often “keeps doing”, perhaps the most frequent gloss of all. The glossing is various, and was not systematically tested, of course, the general meaning being rather broad, but characterized as a range including the idea of less deliberate, less regular or less discrete, including also potential rapidity, i.e. smaller movements, thus connection with the preceding category of “fineness” 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 being that important, quite unlike the case with the Customary, for example. Examples follow, some very prosaic, some poetic or idiomatic: dAXLAdē’g ‘I understand it (speech) intermittently, understand bits’, cf. dixLideh ‘I understand (speech)’, Neuter imperfective; dALAdē:g ‘(light) flashes repeatedly, on and off’, dik’ dAsLAdē: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’ GAAdAta’g ‘it keeps coming back alive’, cf. GAAtah ‘it’s alive’; k’ut’a’ xLtu’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 3!’, cf. ’ALtsAX ‘cut it!’ (this is the only such instance with numeral plus ‘times’, perhaps nicely definitive, but evidently also ‘cut 3 times’ = ‘cut it into 4ths?’); 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. siga’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’, ’AdsdiLAGL ‘jumped’; yALqa:gga’ le:g ‘aurora’ (‘it repeatedly acts like it is repeatedly dawning’), ’iLch’a’ yALaqa:g Rezanov ‘every day’, i.e. ‘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 an off', 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, e.g. xu:LdAtl'g, xuGi:LdAtl'L 'you're hurting me'. In these examples the former presumably refers to repeated action and the latter a continuous process; likewise GAXLt'ich'L, xlt'ich'g 'I'm propping fish open'; lAGAXLda'ts'L, lAXLda'ts'g 'I'm making a basket design'; ya' GAXLwAL 'I'm splitting wood with wedge', once also ya' xLwALg; GAXwi'gL, 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'.

### “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: e.g. '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 'Ill 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 'sg go/walk', an easier mode of locomotion, we have the ordinary q'e:lAG 'Ada:g 'keeps walking back up ashore', as well as q'e' 'Ada:g 'keeps trying to walk back' (both with irregular 'A-), 'AdiXich' 'a:g 'tries to come in', 'ika:XAch' 'i'di:xa:g 'I'm trying to catch up with you', and 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', e.g.: 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'Linh '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)', Persustive; silAXa:nch' le'gginh 'he's trying to pet me'.

### Thematization

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: e.g. 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', even sich' 'Aw gulAXu:ts'inh 'he's splashing it (water) at me all the time'. Persistent; xwe'ts' 'I'm weaving it'; 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'; xLts'a:g 'I'm bailing it' (once Lich' xLts'a:gg 'I'm always bailing', 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 which tend to be highly repetitive but where a very clear distinction is made between single and repeated motions. One fine example is 'lick' almost always attested as repetitive, e.g. xLna't'g 'I'm licking it', but which fortunately was tested for the contrast, with the result xLna't' 'I'm licking it (with one single lick)', proof we have that the Repetitive for this verb is not lexicalized or thematized; cf. further sa'd yAX La'na't'X 'he's puahing it about in his moth with his tongue', where the -X of the yAX Perambulative is not replaced by a Repetitive -g further implies a non-Repetitive theme O-L-'at' 'tongue O'; cf. below and Chapter on yAX Preambulative, also noun -la't' 'tongue'. Other confirmed examples of this distinction between a single and repeated motions are 'AdxLiqa:'sgL 'I stretched (myself, after sleeping)', 'AxLAqa:'sg 'I'm stretching,' but in response to 'I'm stretching (one single stretch)' also 'AdxLAqa:'s; and dla:xtsu:xg 'I'm basting', 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', with d- qualifier 'oral noise' dLAXAXg 'is snoring', but in response to elicitation '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, e.g. 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.e. 'I'm moving something repeatedly with the end of a stick', for which we have no elicitation '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)'. 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', where only subjectivity or "external" cultural context, level of literacy, determines whether that is separate new theme.

### 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 which 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 single sneeze. (Cf. Athabaskan, e.g. Koyukon yELE'Usk 'sneezes'). With

this perhaps unique exception, the other themes attested only with -g suffix all seem to refer to activities that could be seen to involve fine repeated movements, e.g: xugudi:Lidg 'braid my hair!', 'Adguda:dALAdg 'braid your hair!'; perhaps a different stem: sdiLidgL '(tree) is dead; dry wood', dALAdg '(tree) is dying, drying'; xLASit'g 'I'm shivering (from cold)'; k'usuhdZg 'it's hissing, sizzling', sisuhdGLinh 'I hissed him (baby) to sleep'; GAXLACHadgL 'I'm staggering along, having hard time, barely making it' (Locomotion), dALACHahdginh 'he's stammering, blubbing (e.g. child while crying hard)' (Action); Xu:ndla:sAgihdZgL 'it bared its teeth/fangs'; lAXALgidjg 'it's drizzling; xga'ch'g 'I'm weak in the knees'; xLqa't'g 'I'm cooking it', LAqa't'g 'it's cooking, boiling; fermenting', sLiqat'gL 'it's cooked; fermented', GALAqa't'gL 'it's starting to boil', well documented; 'Aw Xa:shg 'it's gnawing it', k'uXa:shg 'beaver' ('it gnaws something'); siL'uhdZgL 'I'm a bit high', qi:dAxL'u:dZg 'my foot's been asleep (all day long)' Persistent, retaining Repetitive; dAdA'uhdG 'is laying egg(s)', disdi'uhdGL 'laid eggs, laid a single egg', noun k'udA'uhdG 'egg (of something)', it being unclear whether the verb is derived from the noun or the reverse; LAXAXg '(landed fish) is (still) quivering' noun XAXg 'fresh fish meat', same stem dALAXAXg 'is snoring', once elicited for 'snored (one single snore)' disLIXAXL without -g, if that is to be believed, then belonging not here but above, q.v.; 'ALts'in'tl'g 'slap it!', 'AdlixsLits'in'tl'gL 'I slapped my face', not tested for 'one slap'; xq'a':shg 'I make a clicking sound', not tested for single click; Lts'at'l'g, GALts'a'tl'gL 'its dripping, leaking', 'u:dAX sALts'a'tl'gL 'it leaked through there', gulALts'a:t'l'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 'taken (even one) puff!', so checked. With this last, given the full thematization, we have a Neuter perfective, 'iLX diLits'u'ts'gL 'they're stuck together (by suction)'.

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 sditAsgL 'trembled', but lAXAdAtAs(g) 'dice', k'uqi:lAtAs(g) 'yoyo', dAtAsinh 'he's trampling' (Marie once), Rezanov *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 dAxLsik 'I have hiccoughs', Rezanov *tuf'l'sykk* clearly to be read dAxwLsik'g with Repetitive, unlike the modern form, unless 'I'm hiccoughing repeatedly/intermittently' was meant.

More typical examples may be k'uti:lAXyAXg, yA(ya') xyAXg 'I'm softening it (skin) by rubbing', ya' GAXyAXgL 'I'm softening skin by rubbing it, all day long', 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.

### Partial thematization 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.

Typical examples: sid 'Alde'g 'teach me how (skill)', 'AdxLAd'e'g (= 'Ad[d] xLAd'e'g) 'I'm practicing' ('I'm teaching myself', i.e. 'repetitively causing myself to know how'), cf. Lideh 'knows how'; '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', cf. lAGAxxa:L 'I'm growing, growing up', 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', finally also even xulAGALxa:gLinh 'he's raising me' (with care, and long-term), durativized; li:Lq'AXg 'fatten him up!', cf. 'i:nsLiq'AXL 'he's fat'; dAxL'ehdg, dAGAxL'ehdgL 'I'm drying it', cf. dAGAL'ehdL 'it's drying', amply documented and fairly regular.

Some examples are less regularly Repetitive in the causative: 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). Nominalizations: 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 place-name 'where sea lions 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!', where the 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 Persistent 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., but 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 below, 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'.

### Other partial thematization of Repetitive

At least two Neuter statives take the Repetitive in mode-aspects other than the Neuter imperfective, i.e. in traditionals: yishah 'is stingy' becomes optionally Repetitive

GAXsha'gL, GAXshahL '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'. Likewise 'iLqa:nch' k'udi:LdjahGLg 'make a quilt!' ('sew things repeatedly among each other!'), cf. k'uxdjahGL 'I'm sewing something'; ya' 'i:nsLisa't'ginh 'his face is all wrinkled', cf. ya' sdisa't'L 'it's pliable' Active perfective stative, GALAsa't'L 'it sags' Inceptive perfective stative; 'ALq'a:shg 'iron it!', cf. sLiq'a:shL 'it's stiff, flat' may belong above as a regular causative; likewise 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'; likewise '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. yAGALAQ'Aq'Liinh 'his hand is closed, he's making a fist' Inceptive perfective stative; 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'.

### Freer variation with optional -g

Finally, and unsurprisingly, given the complexity above, there is a sizable array of verb themes which 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, although it would seem hardly escapable that the suffixed variant would suggest more repetitive action than that with zero, e.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 siyuhginu: 'keep killing pl'); yAX GAchich'LinH, yAX GAchich'gLinH 'he's breaking it (stick) apart'; 'ALshit', 'ALshit'g 'file it! (more generally 'abrade', where 'sawing' is more often Reptitive, 'wearing thin' more often zero, so perhaps a cline; cf. also lAsAshit'l'L 'is bald' always zero, 'uX k'ushit'l'gL 'saw', instrumental noun, always -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:ginh 'he stopped me', 'i:nsiLqahLinH 'I dissuaded him'. See below under Nouns and nominalizations for more examples of such variation.

### Nouns and nominalizations with Repetitive

The Repetitive has its fair share of nominalizations and nouns derived from it, as distinguished quite clearly from those 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 -g suffix -- 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: dAq'a:g 'fire', listed above, cf. dAGAQ'a:L 'it's burning', also 'uyAq' 'iq'a:gL 'stove', instrumentalization, 'in it indeterminate O is kept burning'; 'iLAdzanhg 'hummingbird', cf. 'iLAdzahn 'outboard motor boat', 'ixLAdzanh 'I'm yoioing' (with reference to humming noise); 'uX tl'ehd k'u'Ldja:dg 'key' (Rezanov, 'by means of it something is pried open' i.e. with repeated motion?, *ad hoc*?, 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' i.e. '(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', Gl- qualifier 'ground', -di- < dA- classifier, 'that which ... repeatedly on the ground', no known verb; 'uX k'ushitl'gL 'saw', instrumentalization, cf. above; 'uX 'iLch' k'udAgAXts'g 'glue' (by means of it things are repetitively glued to each other'), 'Adix da:X dAgAXts'g 'wallpaper' ('it is repeatedly glued to indeterminate o indoors'), 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'; Xich' dAdA'iLgyu; 'trash', i.e. 'things that are thrown away', cf. k'uya' di'iL 'dump it into something!'; dAxu'tl'g 'blowgun; balloon', see also 4 other nominalizations with -g and 2 without under O-xu'tl' 'blow O', 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', cf. k'uxa:shg 'it is gnawing something', inherently repetitive to begin with.

Some are nouns, rather than nominalizations, which consistently have -g suffix, whether derived from known verb themes or not: XahLg 'wand, rattle', cf. LXahLinh, LXahLginh 'he's shaking it (rattle)'; Xa'tl'g 'club' (7 times from 4 speakers), Xa'tl'gL (4 times from 2), Xa'tl'L (once), 'ALXa'tl' 'club it!', also Repetitive yinwa:yu: qa: lALXa'tl'ginu: 'shore patrol', i.e. 'sailors are repeatedly clubbing us over the head' (cf. 'police' above); XuhLg 'shovel', once XuhLgL, 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 with apparently optional suffix -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, ga'ts'gL, gats'L 'ladder'; dla:LXe:djg(L), dla:LXe:dj, dla:Xe:ch'g 'quartz' (dla:- qualifier, 'stone', no known verb). Also nominalizations: k'uqi:lAtAs(g) 'yoio', lAXAdAtAs(g) 'dice', dAlu' yAX Lxehd(g) 'strainer, filter' mentioned above, and da:X 'i:nLAXi'ts'(g) 'woodpecker', i.e. '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 -L instrumental kept, after the -g.

### Repetitive combined with other derivations

In addition to the various types of nominalizations shown throughout, above, the Repetitive is found also in the gerund, and in combination with other derivations, e.g. Active yAX perambulative, Customary, Persistent, and Inceptive perfective durative etc.

Examples of Repetitive gerunds are k'ah 'i:nsta:gL 'forgetting' (Rezanov), 'ilAxa:g 'raising you', k'uGadjgL 'paddling (a canoe)', 'iLiAXa:n' lAqu:g 'footracing'.

When the Repetitive combines with the Active derivation yAX perambulative, the -X suffix of that, which appears only in the Active imperfective, is replaced by the -g of the Repetitive. The two suffixes do not co-occur. This also confirms that the -g suffix is in the same position as the -X of the yAX perambulative: yAX 'AdxLAtsitl'g 'I'm skating, sliding about repeatedly', Li'q' ya:yu: yAX GAxLAts'itl'g da:X 'when I slap everything around', 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' (but see reverse example under yAX Perambulative implying prevalence of Repetitive suffix over Perambulative may be only statistical); finally the nominalization 'uwa:LX yAX k'udAqe:g 'compass' ('that according to which someone repeatedly boats about').

This excellent example, also of the point made above of preference for repetitive in some nominalizations, was from Lena, and not fully appreciated in the 1970 dictionary. There I wrote "-g-repetitive perhaps in error for -k'-customary." It is clear now from more careful 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.

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 and 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'.

Overlap between Repetitive and Customary use seems to go both ways, Repetitive used where Customary would be expected from the preceding at least once, qa: dzuxginu: 'they (humans) keep spearing us (wolves)'. The reverse, Customary where the Repetitive would be expected occurs much more frequently: 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. No. 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.

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 subsection “Persistent and Repetitive” in chapter “Persistent.”

Finally, the Repetitive is also found in combination with Inceptive perfective derivation in the transitional inceptive sense, e.g.: k'u'GALAtuhgLinH 'he's getting lazy', xulAXAGi:Lxa:sgL 'you're starting to scare me', 'u:ch' GAxLtl'a'gL or durative-progressive 'I'm going along making marks toward there', xuLAGALxa:gLinH 'he's raising me' (long term, with personal care).

## **PERSISTIVE**

The Persistent is an Active 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 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. They therefore should themselves have been aggressively tested 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 long and/or multiple actions.

### **MORPHOLOGY**

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.

### **SEMANTICS**

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 achieve or reach a goal, but rather to deliberate multiple acts. It is distinguished, further, from qA-XA- 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 motion verbs -a 'sg goes, walks', -'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 travelling by the specific mode indicated by the stem. Further, this is 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 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 "Persistent."

It should be noted that to some degree, the Persistent can be used in potentially all mode/aspects of the Active: imperfective, perfective, imperative, and optative. Lack of instances in conditional and desiderative is most probably fortuitous. Note further that the Persistent differs from the Customary also in being thematizable, whereas the Customary never is thematized. The Persistent also differs from the Customary in that the Persistent occurs in its share of nominalizations as well as proper names.

The Persistentive 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 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 'A- or 'i- prefixation. Customaries with zero prefixation can hardly be regarded as "Persistentive Customaries," however, given the freedom of variation between zero and at least 'A- in the Customary.

### Plurality of object and or actions

Grouping of examples of the Persistentive 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. First, plural acts on single object: *sishe:gL* 'I bent it in lots of places' (O-she'g 'bend O'), 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'. Here the sense is shifting to durativity or intensivity. This can progress even into further derivation with Inceptive perfective Durative: 'Aw ya:X GAle:gL 'he's eating it all up' (Anna, ya:X 'consumption'). The same doubly derived verb with plural object gloss *Xu' GAle:gLinh* 'she's making beds' (Xu' 'aright') was accepted by Lena, "but doesn't like this," surely not because of plural objects, but rather because of the double degree of derivation. 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. Some of these by semantic necessity refer to plural actions as well: *ya:nch' qAdla:siLdza:tl'L* 'I put a lot of stakes in' (O-dza'tl' 'drive O (stake)'), 'iLq' dAXe:d dog's name, "takes things apart" (Lena, but gloss should perhaps be 'comes apart from on one another, -XAd 'come apart'), One verb may be classic for this: *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 objects: *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, Persistent Durative, no objection), 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, 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 Persistent, O-L-Xe'dz 'shoulder O, pick up onto shoulder and/or 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)'; also yAX perambulative, yAX 'ALAXe:dz 'carry it about on you shoulder!' (more than once?).

Another verb, 'i-'e'dz 'move foot', O-'e'dz 'touch with foot' (cf. above, -le'g 'move hand, O-le'g 'touch with hand'), is fairly well attested in the Persistent, with reference to singular and/or plural object, with plural movements: 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', yAX perambulative 'u:dAX yAX xLA'e:dzX 'I'm moving them about there with my foot', 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)'), and one colorful quotation vividly remembered by Lena, 'ilA'e:dz da:X 'uXa'X 'isALxut'L, a reference to poor riflery, 'it (duck) was stepping (persistently!) on your head and you missed it'.

### 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: ya' da:LAdex '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 derivation, is sitl' 'iGAXa:sL 'it's itching me for a long time, longer than GAXXawa'sL 'I itch', also yisiXa:sL 'my hand long itched' (where -Xa:s is presumably the expanded form of -Xawa'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 stative, e.g. 'uwahd GAXLAXu'GL 'I'm straining at it', Persistent xLAXu:G 'I'm straining at it (long, with repeated efforts)', also once GAXLAXu:GL, 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 Persistent -'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 'i- prefix: dALA'u:G(inh), di'LA'u:G(inh) 'is breathing', sahdX disLi'u'GLinh 'he lived a long time' (surely durational yet not Persistent), likewise sahdXshgahX di'GALi'u'G 'I hope you live long', but dik' sahdX qu'di'xLA'u:GG 'I wont live long'; imperatives li'X di'GALA'u:G 'take a deep breath!' but ch'a' di'GALA'u'G 'take a deep breath', also dAqa:yu: qa:nch' di'LA'u:G 'take a deep breath every once in a while!' (where di'- could be from 'i- imperative), di'LA'u:G, da:LA'u:G, da:nLA'u'G 'breathe!', where 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!', but 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)!', but exceptional(?) 'Adya:ndA'u'G 'rest your hand!'

Perhaps unique in seeming to have a fully thematized Persistent is the Inceptive perfective stative -ch'ehX 'have mouth open', where the Persistent 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 duration, 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 Persistent itself also doubly derived with Durative dAGAxLch'e:XL 'I'm yawning constantly'. Finally this Persistent is often found with tsu'd 'sleep', 'sleepily' (adverbial): tsu'd disiLch'e:XL 'I yawned sleepily'.

### Persistent and Repetitive

There is a fair number of instances of Persistent 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."

[[Added Feb/ 13, 2009 In the case of one verb with thematized Repetitive, L'ts'a'tl'g, GALts'a'tl'gL 'its 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, in which 'id qu'xLde'g 'I'll teach you it' becomes '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:Anuh 'Aw 'i:tsu:ts'ginh 'OK I give up, let him smoke them,' Active optative. In another theme with that stem we have much freer variation between full and expanded ste: 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 'sticks, adheres to o by suction', appearing in Neuter aperfective s 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', but 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, as well as 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.

These 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 Reptitive is far less clear, not only with stem -ts'u'ts' ~ -t'su: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'AlAkih 'small bird species', anatomical -ni:k'AdAchu:ch' 'philtrum' (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'), also Repetitive 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 'breeding, tristing, crumpling'. One such theme, not freely used, is attested only in Neuter perfective: ya' 'i:ch'u ch'L 'it's all bent up,"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'.

[[Added 2/15/09 A unique them 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,

lAXaLxa: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']].

### 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. 'Adsdich'e'L 'it's rusted, rusty; it got rusty' (Active s- perfective stative). This is sometimes expanded, e.g. 'Adsdich'e:'L, same gloss, but once 'AdAdiche:'L 'it's got lots of rusty spots', Neuter perfective clearly with Persistent meaning. Then always with expanded stem are verb themes and some nouns referring to the color red Verbs: 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 dla:ch'e:'ga' 'like red-snapper', the standard for color 'be red'. [[Added 2/17/09 Note also ts'a:tl'g 'baby-nasket' (< 'diaper moss'), Ga:nt'a:tl'g 'muddy ground', cf. L-ts'a'tl'-g 'leak, drip' above.]]

There are at least two noun stems with vowels expanded as in the Persistent. One such is -dA-'U:G 'breath; life breath' (cf. above, and also -dA-'uGL 'heart', instead with reduced stem). The other is qu'LXa:d or qu'LXa:dL 'bow (for arrows)', with expanded stem from O-Xahd 'pull O', prefixation unclear. A nominalization but irregular in both showing -L 'instrumental' 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 Persistent. 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) 'pl extend through (holes in) each other'; cf. also dog's name above, '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').

### Persistent in locomotion verbs

This leads finally to field sessions, June 1987, with Sophie Borodkin. As mentioned above, she is the only source for what are included here, with some uncertainty, as Persistent of locomotion verbs. These involve not only expanded 'a:ch' 'pl go/walk', but the open variable stems -a: 'sg goes/walks', 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. -G negative. 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, qeh, weh, with non-expanded vowel of the Usitative, e.g. 'u:ch' da: qeh 'we boat thither' ('we go there', i.e. 'there is where we boat to'), as opposed to those with lengthened stem, e.g. 'u:ch' da: qe: "we're doing it now", i.e. 'we're going there by boat'. 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:c' xwe: "no thanks [for boat ride offer], I'm swimming there", i.e. most probably 'I insist on swimming there, going there by swimming'. The linguist's elicitation was partly uninformed at the time, unfortunately, especially with regard to the potential of Persistentive, It 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. 'a:nd xteh 'I lie here, this is my sleeping- place'). There were many inconsistent or uncertain responses at this stage of Eyak for Sophie However, 1. the very fact that she could utter e.g. da: qeh and da: qe:, and 2. utter those as distinct from each other, plus 3a. the non-expansion otherwise attested for the Usitative, and 3b. the expansion otherwise attested for the Persistentive, plus 4a. and 4b. the clear hints in those two instances about turning down a ride, so to continue the intended mode of locomotion, all together at least strongly suggest some kind of special meaning for the expanded stem which could be classed with the Persistentive.

### **O-L-ya:'**

There is one high-frequency Action verb theme O-L-ya:' 'handle O in pl acts', which should probably be regarded as a special thematized Persistentive version of the classificatory theme O-L-(y)a 'handle pl O', itself of course very frequent. The O-L-ya:' is phonologically irregular especially in having final -', whereas it is O-L-(y)a that is irregular in deleting -y- immediately after L-. The final -' of O-L-ya:', however, might be explained as follows. There is no phonological contrast possible in Eyak between -V:C' and -V:'C'; both are written -V:C': e.g. 'uma: 'his mother', 'uta:' 'his father', but 'with his mother' 'uma:tl', 'with his father' 'uta:tl'. The Customary of O-L-(y)a with D-element in 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, i.e. if it is not a remarkable coincidence, or is merely synchronically irregular with some other historical explanation.

[[2/26/09 add somewhere yAX 'ixe:t'[X?]L 'going about shooting' L]]



## 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 below 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.

### SEMANTICS

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 Ving’, e.g. by such repeated motions. 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, are Instrumentals, 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 chapter on Instrumentals. Though the matter was probably not specifically tested, both Instrumentals and Customaries are abundant enough that it seems clear and significant that no Instrumentals are attested with 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. Unfortunately, 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. 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. However, the absence of clear conditionals and desideratives, also perhaps not specifically tested, given the paucity e.g. even of imperatives, cannot be statistically interpreted.

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 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 OK if it takes place once)'. We have only 10 instances of such o-ya:X clauses, and 5 of them are with Customary, 5 without. The instances with Customary are the following: '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 5 instances with Customary are no more marked semantically as referring to action repeated at intervals than are the 5 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, but the statistics, 5 instances of 10, strongly suggest a special preference for the Customary, for some other reason, in clauses subordinated by o-ya:X, and just this one postposition, none other, as far as we know.

Addendum 4/28/10. We find that use of Customary with o-ya:X was further investigated 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 in Inceptive imperfective (future): 'Axk'a:dya:X dik' 'AxsdAlahLG 'I didn't drink it, lest I get sick (so I wouldn't get sick)', 'Axk'a:dya: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.

### SUFFIX AND EXPANSION OF STEM

Unique to and definitive of the Customary is -k' sffixed to the stem, in all cases. There is no other suffix -k' in Eyak.

The Customary shares, uniquely with the Persistentive, 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 non-nasality or nasality, 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 '). Such stems in principle expand to e: or probably all can (or could) so expand. There is therefore a strong argument that reduced verb stem vowels (schwa) should have

been represented with the symbol E rather than A, as Leer does for Athabaskan or Proto-Athabaskan. However, that 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 A/i/u reduced vowel contrast in stems beginning with ', a secondary contrast between u and i/A 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 [I] or iota (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 alpha, expands to e: (about 20 instances, e.g. -dAq' > -de:q'k', -XAL > -Xe:Lk'), invariably, with one exception, following.

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 verb stems, the following 7 are attested only expanded to e:: -dux 'float', -tug 'swell', -shux 'extend legs', -kus 'wash', -kug 'break', -xutl' ~ -xAtl' 'be blown by wind', -xuL 'roll'. None are attested with reduced vowel expanded only to u:, but the following 6 are attested with both e: and u:, often with preference for one or the other, itself very often inconsistent: -t'ux 'hold', -tl'ug 'knead', -dxux 'stab', -tsug 'swell', -xut' 'shoot with gun', and, interestingly, where initial labialized velar once overrides effect of uvular, -guG 'tell lie', for which we have from Sewock and Anna as -gwe:Gk', from Lena once as -ge:G, but who later momentarily prefers -gu:G.

We have only 4 verb stems with non-labialized front velar attested in the Customary: -giL 'shrivel' expanded to -gi:Lk', -gis 'roast' to -gi:sk', -sik' 'hiccough' to -si:k'k', and -t'ik' 'shoot with arrow', to -t'e:k'k' from Marie, but for which Lena then prefers instead -t'i:k'k'. These 4 perhaps best belong to the following category.

In verb stems with coronals only as initials and finals, the reduced vowel, varying between schwa and iota or [I] becomes e: and/or i: expanded in the Customary. Of 14 different stems of this type, 6 are attested only with vowel expanded to i:, 6 are attested only with vowel expanded to e:, and only 2 are attested with vowel expanded both to e: and i:; or if the 4 preceding with non-labialized velar are added, the figures become 9 with i: only, 6 with e: only, and 3 with both. The 6 with i: only are -t'ich' 'prop (fish) open', -ch'isht' '(fly) lays eggs', -shitl' 'abrade', -shish 'sip', -witl' 'be startled', -lits' 'be smooth'. The 6 with e: only are -t'its' 'freeze', -tl'ish 'br shiny', -Lid 'braid', -shiL '(fish) swim to surface', -wAs '(non-linear) move, change shape', -wAdj 'be ashamed'. The 2 with both i: and e: are -tis 'tremble, and -chich' 'break'. There appears to be no clearly identifiable phonological factor determining these statistics, nor personal between the two main sources, Lena and Marie. Most stems without front velars were elicited only once or twice (only one, 'sip', is attested 4 times), and it seemed inadvisable to elicit aggressively to determine more decisive preferences in what was clearly a grey 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 ' attested in the Customary with reduced vowel not A (always expanding to e:), namely -'iL 'pour', with PAE initial \*-'mgy-, the Customary is -'i:Lk'.

For disyllabic stems with internal sonorant no clear pattern emerges. There are 3 stems, all of perception, that appear to belong to one class, 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 negative -G suffix: -gAwi/ 'feel', -gAmi/ 'taste', and -XAwi/ 'believe'. For these we have Customary -gAwi:k (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 'kill many', -siyu ~ -si: ~ -su:, 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, 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 -GAMac' 'twist' (cf. -GAts' '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'), -shiya:k', -k'Awad:dk' and -XAma:k' in the Customary. Cf. however -XAwa's 'itch', presumably from some earlier \*-Xwa's; the frequent and thematized Persistentive of 'itch' is -Xa:s, having lost the original labialization in the Persistentive expansion. We do not have either attested in the Customary. If we did, 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 Persistentive and Customary.

This expansion for the Eyak Persistentive 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', clearly it comes from the PAE reduced rather than full forms. Conceivably reflecting an older pattern could be -si:k', the Customary variant of 'kill many', above, possibly from \*-siw, as opposed to the less frequent and newer(?) -siyu:k'. **{No – shouldn't PAE reduced result in \*?-su:k'?**

## PREFIXATION

As noted above, the Customary is sparsely attested in paradigms other than the Active imperfective, and in all these (other than the Active imperfective, and one instance of optative) it shows no special prefixation, only the stem and suffix.

## Inceptive imperfective

In the Inceptive imperfective, 'future', 20 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 file on Acquisitional), e.g. xuqa'she:k'inh "he's trying to kill me" (Lena), 'Aw qa'she:k', 'Aw qa'she:gak' '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: ya'Xu: qa: qu'wAsi:k'inu: 'they must not kill us', ya'Xu: q'e' qa: qu'siyu:k'inu: 'they must not kill us anymore' (both Anna in text). However, the future Customary is adequately attested with other verbs, often in text especially from Anna: 'u:ch' qu'wa:k' 'will go there' = 'will keep going there', 'ulAX 'iqe'yiL'a:nk' 'you'll see it', ya'Xu: ... qu'di:le:k' 'don't say ...', or in elicitations: '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' (perambulative), dik' 'iqe'xLXa:Xch'k'G 'I won't tickle (keep tickling) you'; 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'.

### Imperative

For the imperative Customary there are in the corpus 7 Active ((')A-) and 9 or 10 Inceptive (GA-), as noted, and no 'i- imperatives. Prefixation is as for non-Customary imperatives, including Active Ci:- from CA- prefixes 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!', ya:n' GAda:k' 'sit down!' (glossing here again not specifying 'at regular intervals' or the like); likewise, adding also repetitive, ya' 'Ate:ɡk' 'lie still!, keep lying still!, try to lie still!', ya:n' GAta:ɡk' 'lie down! etc.' from Lena in elicitation; another such pair, semantic motivation unclear, and one with added repetitive, probably showing little or no semantic weight for repetitive, 'u'li:tsa:k', 'u'GAtsa:ɡk' 'buy it!'. Further instances of Inceptive imperative: with -a 'sg. go' qa:de:leh Ga:k' 'visit us!', yAX GAda:k' 'walk about!, take walks!' (perambulative), with X-a 'eat': 'ud k'uGALa:k'inh 'feed him! (cause him to eat something!)'; of Active: wAX di:le:k' 'say thus!, reflexive with y-anatomical qualifier, -kus 'wash': 'Adya:ndAke:sk' 'wash your hands!' It is impossible to evaluate the lack of any 'i-Customary imperative here, which was unfortunately 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)!'.

### Optative

For the optative Customary, we have 11 instances of the Active and only 1 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. The possibility of Inceptive optative instead of Active in the Customary was evidently not tested as such, but came up spontaneously in elicitation with Lena, perhaps significantly, 'ixitsu:dk'wahd 'so that I might sleep, in order for me to sleep', then dAwa'dga'shgahX GAxitsu:dk' 'I wish I could (get to) sleep quickly/easily', where it seems likely that the latter is in nice contrast in the Inceptive or transitional sense. Further examples, showing that the prefixation in Active optative with Customary is the same as without: 'i:tsu:dk'inh 'he should sleep', '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', '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 'i- prefix as in the 'i- imperative, and, as we shall see below, also in Active imperfective Customary: from Lena in elicitation: diLich' 'Adk'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 ti:IA- class-marking qualifier, '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 following.

### Active imperfective

Probably about 95% 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 (non-negative) prefixation, not only in non-derived Active imperfective, zero always, but also zero always in Active imperfective with Repetitive, and in Usitative. With the Customary, however, not only does there appear to be essentially free variation, interchangeability, between zero and 'A- (and its allomorphs), but also, the prefix 'i- (and its allomorphs) can occur instead, albeit much less frequently. This 'i- is homophonous not only with 'i- indeterminate object pronoun of the verb, but, more relevantly, is homophonous also with the 'i- imperative and 'i- of the Active conditional and desiderative in the same position. This prefix is a most difficult item to attach any common meaning to. It is abstract and atelic in the imperative (except after o-ch' 'to/toward o' with locomotion verbs). With the Active conditional it specifies 'just as action/process is/was beginning'.

As we shall see, zero and 'A- alternate very freely in the Active imperfective Customary, with no observable difference in meaning, certainly tested. The frequency of one or the other may be relatable only to some influence of phonological environment. Though the zero is probably somewhat more frequent overall, the 'A- must in any case be always an option, though in negatives the 'A- is somewhat more frequent, in 41 instances, as opposed 30 with zero, of the negative instances. 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-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 otherwise show 'i- at all, it appears, or do so rarely, with clear preference for 'A-. 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'; likewise in Inceptive imperfective and Active optative perambulatives, no 'i-).

Therefore, in spite of the disproportionate number, nearly half, in yAX perambulative, of the 5% of Active imperfective Customaries with prefix 'i-, 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 (zero 'A-, 'i-) of the prefixation for Active imperfective Customary in one most frequent theme: wAX dAle:k' 'says thus' (zero, once from Lena, 7 times from Anna in text), and wAX di:le:k', wAX di'le:k' ('A- twice and 'i- once each from Lena). There of course many zero ~ 'A- doublets: wAX Li:k', wAX 'ALi:k' 'does thus to it' (zero more frequent); passive wAX dAle:k' 'thus is done to it', wAX k'u:dAle:k' 'thus is done to something' (A-); qa:nch' ki:shk' qa:nch' 'Aki:shk' 'dipnets it'; 'xshi:shk', 'Axshi:shk' 'I sip it'; dAxa:shk', 'AdAxa:shk' 'is butchered'; ya' xXe:ts'k', ya' 'AxXe:ts'k' 'I tenderize it'; ma:t'k', 'a'ma:tk' 'it cooks'; yAqa:k', yi:Lqa:k' 'day dawns'; lAXALya:k', lAXa:nLya:k' 'puts berries (usual -a:(n)- after X-); dAxle:k', da:xlek' 'says' (Lena, instead of di:xle:k', flexibility of rule). There is at least one zero ~ 'i- doublet: wAX le:k' 'does thus', Lich' wAX 'ile:k'inh 'he always does thus', and one 'A- ~ 'i- doublet: ya' gu:La:k', ya' gu'La:k' 'stands still'.

A few singlets with 'A- showing Cu:(n)-, Cu- objects: k'u:nLsh'iyak' 'it exhausts one', xu:nLku:ndk'inh, 'he grabs me'; and Ci:- and Ca:(n)- with qualifiers xudi:Lku:ndk'ih 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 miscellanea heading. A few singlets with 'i-: 'iLdja:t'k'inh 'he pries it', k'usahd 'AwyAq' da: li'Ldu:k'k' 'we stud liver into that', 'ALdah 'ixle:k' 'I play', wAX da: 'ile:k' 'we do thus', wAX da: di'le:k' 'we say thus', wAX 'iLt' 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'.

### *Second person singular subject*

Second person singular subject is of some special interest, in that with 'A- after qualifiers and no other syllable between that and stem, the result is Ca:yi-, not found in imperatives given that in those the 2 sg prefix is zero: 'uk'ah la:yita:k' 'you forget it', sitl' da:yile:k' 'you tell me' (cf. sitl' di:le:k', zero), dik' sitl' da:yile:k'G 'you don't tell me'. After Cu:(n)- objects the result is k'ui:li-: dik' k'u:lishe:k'G 'you don't kill anything' (cf. dik' k'u:she:k'G, zero). We have a doublet with zero and 'A- where 2sg pronoun itself is zero with vocalic classifier: 'AdLA'e:k', 'AdALA'e:k' 'you pretend to marry'. In absolute initial we have 2sg yi- and 'i-, where the latter is 'A-, or perhaps presumably also 'i-: yitsu:dk' 'you sleep', o-tl' ya' 'i:tu:ch'k' 'you lie with 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 below for other 2sg instances.

### *Indeterminate object*

Some instances of Customary with indeterminate object 'i- follow here. With zero: 'ixtsi:ndzk' 'I dream', 'idAXAma:k' '(dog) growls' Wit 'A 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 11 instances of zero, 'iL'a:nk', 9 of

'A-, 'i:(n)L'a:nk', and 1 only of 'i-, 'i'L'a:nk'. For some reason though, in the negative of that, we have 10 instances with 'i-: dik' ... 'i'L'a:nk'G, from Lena, Marie, and Anna, including one with 2sg subject dik'shunh 'ulAX 'i'yiL'a:nk'G 'don't you ever see him?'. We have none of zero or A- 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 directive, where it follows, 'ida'k'u-), the result is normally k'u'-, as in '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', but in the 4 Customary instances, for some reason we have no zero instances, presumably \*?k'u'L'a:nk', only one instance of 'A-: silAX k'u'i:nL'a:nk' 'someone sees me' (Marie), and 3 instances of 'i-, all negative: 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 for 'i- in the negative Customary shown above with this particular theme.

#### *yAX perambulative*

As mentioned above, it is in the Customary Active imperfective with yAX perambulative that we have the highest proportion with 'i- prefix. There are a few such instances without it, e.g. 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, dik' Xa:'dAX yAX dA'a:ch'k'G 'people don't go about outdoors, they don't go about outdoors'; there is one with 'i-, yAX k'u'da:k' and one with 'A-, yAX k'u:da:k' 'someone walks about' (both George Johnson), and perhaps another with 'A- and 2sg subject (here not zero with dA-classifier because of reinterpretation of monosyllabic zero-initial stem): yAX 'i:da:k' 'you take walks', if that is not to be interpreted 'i-. By far the most common here, however, is in any case the 'i- prefix, with about 25 instances, as noted above, e.g. 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', and with indeterminate object: silah yAX 'i'dAyu:kinh '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'.

#### **Customary applied to Neuter imperfective themes.**

Even though Neuter imperfective themes are inherently stative, we have a fair number of instances of that, about 40, to which the Customary derivation is applied. This derivation being Active, we should expect all these 40 instances to show Active prefixation. This is not quite the case, however, as 1 instance retains the positive Neuter imperfective prefixation, 3 retain Neuter negative, and 3 use Neuter negative or imperative prefix 'a-', surely analogical. About 7 have Ci:- or Cu:-, which could be either Neuter or Active with 'A-, and at least 27 are definitely shifted to Active imperfective, with zero, 'A-, or 'i- prefixes. Of the 4 unchanged Neuter imperfectives, 2 are with d-LA-de/ 'understand O('s speech)': diLide:k' 'understands O', dik' da: da'Lade:k'G 'we don't



understand O', but this theme duly becomes Active 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 'A-, in doublets: di:Lda:sk' '(d-class) is heavy' (also dALda:sk' Active imperfective with zero), guli:tl'e:k' '(liquid) is cold' (also gulAtl'e:k' Active imperfective with zero, GAdAtl'e:k' '(place) is cold', likewise). Some such themes are attested only changed unequivocally to Active imperfective: C 'Adu'LAXa:k', C 'Adu'lALAXa:k', C 'Adu'la:LAXa:k' 'makes self be C' (zero, zero, 'A-), dALAtsa:nk' 'is expensive' (zero), 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 zero). These are remarkable in losing length, -i-, expected from expansion rule in -'CA- with no syllable intervening before 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 'A of Customary.

The two verbs of 'being' present some analogical forms. The -t'e ~ -t'u is usually regular, duly shifted, generally with zero: wAX t'u:k' 'seays, dwells', sidAwa: t'u:k'inh 'he waits for me', 'uch' dla:Xxt'u:k' 'I watch it', k'ut'a' xLt'u:k' 'I use it', but k'ut'a' 'a'Lt'u:k'inh 'he uses it', the last two from Lena, the latter 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 such forms with initial 'A- and only one with zero, Le:k' (George Johnson). There are several more with equivocal 'A-: 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 'A-. Those plus the preponderance of 'A- 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'.

### Miscellanea

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 you "take walks early every morning"', unfortunately a direct quote with the imperative, rather than a desiderative. If such desiderative Customaries did exist, we should presumably expect than to have desiderative prefixation and expanded stem with suffix -k', plus -X following that, -k'-X, as happens with desiderative repetitives, -g-X.

There is at least one possible instance of conditional Customary in text: Ga:ndich'ich'gyAquhyu:, 'ulu'qa: da: yAX 'idA'a:ch'k da:X, 'uwAlahyu: qa:ch' dAGAleh da:X, dik' 'uXa' da: q'e' k'uLA'yahG, glossed ' little song-birds, when we go about in search of them, when their spirits talk to us, 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’, but the probable fact that there are no forms in the corpus like \*?GA’A:ch’k’ (other than imperatives) might be significant.

Though there are no lexicalized nominalizations in the Customary, there are at least 2 personal names in it: ya’a:k’ (< ‘goes into fits’), and dAqa’X ya:n’ya:k’ ‘wanders’ (< ‘(motion) among indeterminate o’, theme y-’ya ‘wander’, in customary with ‘A-, the usual for which would be yi:’ya:k’, by lax rule instead here ya:n-). There may be more such personal names, but unfortunately in the move of the archive the slips and file with personal names and place-names were lost, and have not yet been recovered. (Most or all could still be recovered from the field notebooks.)

### **Addendum on Conditional**

Returning to the chapter on the Eyak Conditional, finished at least a year ago, I am reminded that there I concluded, paragraph 1, that “the Inceptive conditional can [also] be used in the customary sense, so ’a:nda’ Gah da:X may also translate ‘whenever he comes here (I feed him [’ud k’uXAxLa:k’inh]);” furthermore, paragraph 5, that “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 the 1965-1969 ledger, abbreviated Is and As in the Conjugation-mode/aspect column, with da:X in the last column. Usually the main clause associated with the conditional is not included in the entry, but a good survey for main clause verb type can be conveniently enough done by checking the text and sentence number references for textual instances. Perhaps as many as half the instances of conditional are subordinated to main clauses with 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’, and 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 imperfective Customary, 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’, but 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, so that the conclusions just quoted should 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, 'ulu'qa: da: yAX 'ida'a:ch'k' da:X. Such 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, she uses instead the Inceptive imperfective ('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, '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 writing of the chapter on Customary was the fact that there is a fair amount of variation between 'i- and 'A- 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 'A- conditional, and that there is a zero and an 'i- or 'A- Customary (for all of which three no different meaning can be clearly discerned.) It is also true that there is a GA- and an 'i- and an 'A- 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 homophones, GA- 'i-, 'A-. That question is only further complicated, so far, by any pattern that might possibly be discerned in the Customary between zero, 'i-, and 'A-. Clearly, again, there is no difference in meaning between zero and 'A-. Between 'A- 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 'A-, while in the Active conditional, 'i- is at least somewhat more frequent than 'A-.

### qAXA- MULTIPLE

A minor Active derivation is qAXA- Multiple. Morphologically it is marked by a combination of zone 3 qA- pluralizer and XA- qualifier. The meaning is expressive emphasis on a plurality of subject, object, or action, often or usually with an element of derision and/or irritation. The following is an extensive sampling if not complete listing of the instances of this derivation in the corpus, all Active imperfective.

Most eloquent in regard to derision is the example dA'Alga'kih 'idiyah dik' qAXAXehGinh "he can't even pack little things" (Lena, 'even like these little-sized (objects) he doesn't backpack'), likewise qAXAinhinh 'he's packing (plural) little things' (Lena, derisive), dAXk'nu:duw qAXALah 'how many (lake dwarves) were carrying them! (plural small objects)' (Anna in text), 'Aw qAXAtinhinh 'he's carrying them (small objects)' (Lena, but note singular object classificatory theme). Less explicitly derisive may be dLAGshg k'uqAXALe' 'there's dirt all over' ('dirt exists plurally (in small amounts?)'), one of only two Active imperfective instances of otherwise Neuter imperfective -Le(') 'be' in the corpus; see also below), ya'[X?] qAXAdAsid '(sticks) stick up' ('d-class plurally extend (up?)'), also derived from a Neuter imperfective; listsin'da'X qAXA'yah 'chickadee(s)' (nominalization, < 'plural small things move situated among tree-tips'; "they fly in bunches from tree to tree", Lena). Expressive evidently more of irritation than derision is guG lahdz qAXi:LAG 'you you mistreat me with lies' (< 'you throw me forward bit by bit lyingly'). Perhaps not derisive is 'udAch' k'uqAXA'a'ch' Marie Smith-Jones's personal name, < 'people plurally come to the sound of her', sometimes expressed as 'people come from far and wide to hear her'; 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 is essential to semantics the qAXA- derivation. Especially as a traditional name in that case, reference here might originally in fact have been to multiplicity of offspring's vocal output.

Examples perhaps more purely of plurality rather than derision or irritation are ts'ahG wAX qAXALihinh: 'they're picking alders' (Marie in text), qAXAxwe:ch' 'I string them (fish-meat on sticks)', and ya'X dAqi:kihch' qAXALe' it (rainbow) dwindles upward to nothing' (cf. above), here probably in the sense 'bit by bit'. Further, in a rather general sense: 'Aw ch'i:leh Li'q' ya:yu:dah qAXAlinhinh 'that Raven does all sorts of things', with Li'q' ya:yu: 'everything' adverbialized.

Along with qAXAtinhinh above, there is the notation that Lena rejected proposed \*qu'qAXi:tininh '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 XA- qualifier, 'chickadees' might instead be merely a Usitative Active imperfective nominalization, with only qA- pluralizer 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 which 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: from Anna 1971: along with 'u:ch' 'iXe:l 'backpacking you sg there, carrying you thither on (my) back', as in the frame 'I'm getting tired of ...', we also have 'u:ch' xuqAXAte:l 'carrying me 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'? 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 the Multiple beyond the Active imperfective.

## yAX PERAMBULATIVE

### Name

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 Athabaskanist literature for a similar though not cognate derivation, and is nicely descriptive of a sector of its meaning that is best described as only exemplary, i.e. Applied to motions other than walking. 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 the 1970 dictionary, this derivation was called the “yAX-progressive,” but 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 because “progressive” is less accurately descriptive than is Perambulative.

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, also in Inceptive imperfective, Active perfective, imperative (always 'A-), optative, and least frequently, in conditional and desiderative. It is attested in combination with other Active derivations (Repetitive, Customary, Persistent, Inceptive durative and transitional, 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 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 1965-1969 ledger 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 a 1970 dictionary entry, yAX (superscript) 1, which provides a full listing of the themes with which this derivation is attested in the ledger, much exemplification and semantic information, to which this description may refer.

### Semantics

This derivation is most simply described by the gloss ‘to V about’ in British English, ‘to V around’ in American, with the former preferred 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’, yAX dA-a(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 yAX and this derivation can of course be bounded or limited by further preverbals, 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', variant q'e:-yAX 'back', and also in some cases without that, yAX can refer to 'reversal of motion, turn around', and especially with preceding 'iLya' 'into each other', 'iLya' yAX 'back and forth, to and fro'. Such further restrictions will be treated in subsections at the end of the more basic description.

### Morphology

Thus derivation has 4 morphological characteristics. Aside from (1) the preverb yAX 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-effect in some imperatives. This morphology will be demonstrated in the exemplification below, with default glossing 'V about'.

The positional order of yAX preverb is essentially indefinite, within the rightmost preverbal position, along with disjunct personal pronouns and q'e'. It tends, however, to be rightmost even in that position. For example, with 1 pl subject, da: yAX is more frequent than yAX da:, q'e:yAX more frequent than yAX q'e', and da: q'e:yAX is perhaps more frequent than other orders, all also acceptable, so long, probably as yAX and q'e' ~ q'e:- are not separated by da:.

Open variable stems of the form CV in Active imperfective take overt suffix -X with lengthened vowel, CV:X. Those of the form CV/ take overt suffix -X with V', 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, 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 7 times spontaneously from Lena, but the pair or alternatives yAX 'idAga'Xinh or yAX 'idAgahXinh 'he's dancing about' was elicited once each from both Lena and Marie. A superficially similar case is yAX 'iLachanhX '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 GAIALsha'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, yAX 'AdlALAla'X '(child) is pouting, making faces about' (reflexive causative; cf. 'iLga' liLilah 'they resemble each other, are like each other facially'), and yAX gAlAdA'a'X 'water is flowing all over, in several puddles' (Lena; from -'a/ 'extend', cf. yAX gAlidi'ah 'water is flowing all over', Marie, surely incorrect, remaining in Neuter imperfective).

### Mode-Aspects

Active imperfectives with CV stems follow: 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' ('causing my

mind 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 about) to you', 'iLu' yAX guLAqu:X 'they're chasing each other about'; yAX LAya:Xinh 'he's carrying them about', idiom yA k'uxLAYa:X 'I'm trapping (< 'I'm carrying something(s) about'); with prevarbals requiring L- classifier with 'sg go': siqi:yAga:G yAX xLa:X 'I'm tiptoeing about', yAX qAyuh La:Xinh 'he's going about fighting mad'.

Further examples of Active imperfectives, with closed stem: 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' ('causing myself to be blown about'), 'uyAq' yAX LAK'ahdX 'he has pains moving about inside him', from a Neuter imperfective stative.

One instance derived from Inceptive perfective stative; ya:X guLa:n'Xinh 'he's standing about, he's standing' (perhaps in contrast with ya' guGALa:'Linh 'he's standing still'. Negative, 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/: yAX xsidiyahL 'I took a walk', yaX xsdiwehL 'I went for a swim', yAX sdiqehLinh 'he boated about', yAX 'isLichan'L 'it sniffed about', da: yAX 'isidga'L 'we danced about'.

Inceptive imperfectives, occasionally with lengthened vowel, especially in negative: yAX qu'xdAqeh, yAX qu'xdAqe: 'I'll go boating' yAX qu'xdAweh, yAX qu'xdAwe: 'I'll go swimming', yAX qu'xdAdah, yAX qux'dAda: 'I'll sit about', dik' yAX qu'xdAqe:G, dik' yAX qu'xdAwe:G, dik' yAX qu'xdAda:G negatives with long vowels preferred by Lena, but 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, CV:G, so not a property 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. 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 'i:nLAMihinu: 'they'll get us hurt'(Lena), or yAX 'iqe'Lachanh 'he'll sniff about', but it is indeed CV' in yAX 'iqe'dAga' 'hell' dance about' (Marie) and yAX qu'Ga:xLasha' 'I'll dig about in the ground' (Lena), so leaving the question of an -X-deletion rule unanswered. For this, see further under optative and imperative.

Optative is always Active, sometimes also with lengthened vowel in CV stems: yAX 'idiyah 'let him take a walk', da: yAX 'idiqeh, da: yAX 'idique: 'lets 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: 'let's go swimming' (Lena, twice), da: yAX 'idiweh 'id.' (Marie, Lena, who then rejects -we:), 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 an -X-deletion rule.



Imperative is always Active, with prefix 'A-, and usually with e-effect on open variable stems of the form CV, thus e.g. 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!', 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-effect and lack thereof could have been elicited. The 2 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 rule of -X-deletion.

Conditionals are Active, with 'A- prefix, 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 'A- prefix, and desiderative -X suffix, 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'.

#### *Combination with other derivations*

The yAX Perhambulative is widely attested in combination with the Customary, where the Customary mode-aspectual prefixes, expanded stem and -k' suffix all prevail, together with preverb yAX and D-effect on classifier. Prominent is the 'i- prefixation in Active imperfective, e.g. da: yAX 'idAqe:k' 'we go boating', da: yAX 'idAwe:k' 'we go swimming. See chapter on Customary.

There are also instances of combination with Persistent: yAX 'ALAXe:dz 'carry it about on your shoulders!' (several trips?, Marie, cf. yAX xLAXe'dzX 'I'm carrying it about on my shoulders'), 'u:dAX yAX xLA'e:dzX 'I'm moving them about with my foot there'.

In combining with Repetitive, the -g of the Repetitive normally replaces the -X in the Active imperfective, as shown in several examples in the sections of the chapter on the Repetitive on thematization and Repetitive combining with other derivations. 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', Lna't' 'is giving it one lick', and -la't' 'tongue', 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.

Further derivation with Inceptive perfective in both durative and transitional senses in fairly well attested. Unsurprisingly, Lena in particular is ambivalent about the

acceptability of some of these instances: e.g. durative yAX GAda:L ‘he’s walking around all the time’, yAX GAdAqe:Linh ‘he’s boating about’ rejected (“you have to say yAX dAqe:Xinh even if he’s going around a lot”), yAX GAdAqe:Linh later accepted ‘he’s boating about “a long time”’, yAX gudAGAxATA: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’; transitional: silah q’e:yAX ‘Adi:lihGALa’ya:Xinh ‘he’s starting to think about me again’, ‘u’a:nch’ ‘Adi:lihGAXLa’ya:L “it’s coming to me”, I’m beginning to come upon it mentally’

There are a good number of gerunds attested, with -X suffix regularly overt, sometimes followed by -L, and with ‘is- prefixation in intransitives and classifier always deleted. E.g. yAX ‘isa:X ‘walking about’, yAX ‘is we:X, yAX ‘iswe:XL ‘swimming about’. For full listing see dictionary, 1970, under yAX (superscript) 1, and for full treatment, see chapter on Gerunds.

The yAX Perambulative has its share of use in nominalizations, some literal, some idiomatic, e.g.: yAX XAda’ya:Xyu: ‘birds’ (< ‘pl 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’ (< ‘are sent on errands’), k’uga’ yAX dAta;Xinh ‘snooty conceited person’ (‘she goes about with her 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 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!’).

### 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.), e.g. 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’, e.g. ‘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 e.g. yAX ‘u’la:dAte: ‘move it (attached) back and forth!’, ‘iLt’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). lah yAX XAXdAta:X ‘I’m switching sides paddling’. For more detail on these uses, see yAX (superscript) 1, subsections 2a.-c., in dictionary, 1970.

**Restricted lah Perambulative**

The preverb lah 'around, in circular motion' serves alone, as does yAX, with one basic 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, 'around', e.g. siXu:nLAYah lah da'ya:X 'my tooth is loose', 'anh lah da'ya:X 'the earth is quaking', dik' q'e:lah da'ya:XG 'it's not moving any more', k'udAX lah 'AdxLa'ya:XG 'I can't move', lah 'AdyAxLa'ya:X 'I'm waving my hand', lah 'Adya:nLa'ye: 'wave your hand!', causative reflexives. In non-relexive transitives, however, the lah Perambulative does not take D-effect in the classifier: lah dAxLYa:X 'I'm shaking it (tree)', lah dAGALya' 'shake it (tree)!' (also with GA- Inceptive imperative instead of Active 'A-), 'ugutl'ah yAX dALya:X '(dog) is wagging its tail'. For more detail see dictionary, 1970, -'ya 34.

Addendum: 3/4/09 Somewhere in ledger one or two examples of -gX suffix combination, Reperitive and Perambulative,, from Marie, perhaps early, and probably erroneous, given the usual replacement of -X by -g, and at least once the reverse.

## PROGRESSIVE

### Name

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 for 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 to CV/ and CV(′) results in CV′L. The basic meaning of the paradigm is ‘is moving along’ for Motion verbs, and the rationale for the label was that since GA- was the “Inceptive” conjugational prefix and -L was the “perfective” aspectual suffix, so that ‘is moving along’ means that the beginning of the movement is accomplished, thus ‘is going on, along’. (I.e., in contrast to Inceptive imperfective, ‘beginning not accomplished’, = ‘future’, however sophistic or artificial that may seem. This naming was given in order to parallel that contrast with Active and Neuter perfective and imperfective, in creating a two-dimensional pattern of 3 conjugations and 2 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 gamma prefix and -L suffix, and 2) it describes also perhaps as well as any single other term the semantic range of effects it has as a derivation.

### Status

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, 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 Inceptive perfective, 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, Usitative and Progressive, each having no morphological mark, Usitative formally identical with Active imperfective and Progressive formally identical with Inceptive perfective, 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 the Eyak grammar files/chapters of 2007-2009 (Action/Stative/Motion). 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 Krauss’s 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 before its extinction. 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.

### Meaning, Function

The meaning of the Inceptive imperfective and derivational use of the Progressive might be most generally described as act or event in progress, as continuing through a stretch of space and/or time. It is possible to subclassify examples of it into perhaps 3 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 essay. 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', *'u'lixiLgah* 'I know it', *u'lAGAxLga'L* 'I'm learning (of) it', Active perfective *disiche'L* 'I'm hungry', *dAGAxche'L* 'I'm getting hungry', 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 subclass. For locomotion it is very basic 'is moving along', *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 preverbals), 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', *GAXda:L*, *GAXte:L* alone as predicate being unattested and probably unusable without preverbal. Likewise, for classificatory themes its meaning for intransitives is 'is getting into position', and in transitives 'is 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, though hardly distinct subtypes. This is certainly true also with regard to use of the two paradigms in question here, Active imperfective and Inceptive perfective.

### 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* above 'I'm moving while in sitting or lying posture'. Here are examples of locomotion Progressive applied to Action verbs which would otherwise be in the Active imperfective. *'iqi:dAGALchan'L* '(dog) is tracking you' ('smelling your feet along', cf. presumed *'iqi:dALchanh* 'smelling your feet'), *siqi:dla:GA'e'X GALchan'L* '(dog) is sniffing along in my track'; *'idAGAxLch'a:q'L* 'I hear you (walking by)' (cf. *'idAXLch'a:q'* 'I hear you'), *'a:nch qi:dAGAxLch'a:q'Linh* 'I hear him coming' ('I hear his feet hither'); *sich'* *'iGaga'Linh* 'he's dancing toward me'; *'a:nch'a:X xulAGAtuxLinh* 'he's coming this way spitting at

me'; 'u:ch' GAXtl'a'gL 'I'm making marks thither' (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' (Ga:ndAXuhLg inh 'he's digging in the ground with a shovel' Repetitive thematized). Finally, a good example from a verb that is almost always Repetitive: xuGALna't'L 'he's licking along me (one lick covering some distance)', though this 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 lick it (one lick)' (elicited, 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'.

### **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, called 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.

#### *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, no \*xsheh, \*xsinh, \*dAxLAqahG, \*dAq'ah, \*dAxLq'ah for 'I'm killing (it)', 'I'm dying', 'I'm falling', 'it's burning', 'I'm burning it'. However, with the derivational process, one may take these as duratitized, i.e. view them as a process in progress, thus Progressive 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'. (Conceivably, themes like these might in fact be found in Active imperfective in Usitative derivations, e.g. \*??'a:nd k'uxsheh 'here is where I kill things' or hypothetical place-names: \*?qi' k'udAsheh 'place where things are killed', \*?qi' k'udALAqahG 'place where things fall').

Further examples of this type, momentaneous seen as process of some duration: xuGALku:n'dL 'he's (in the process of) grabbing me', 'iGAXq'a:L 'I'm lighting a fire' ('in the process of lighting indeterminate O on fire'); more often, these have preverbals: e.g. la'q' GAqAts'L 'it's bursting', qid dAGALAqahGL 'it's falling down off', yAX q:ilAGALdja'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)'. As noted above, the presence of the preverbal 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.

*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, with a variety of glossing, here shown mostly verbatim.

Many of the examples include relevant or explanatory temporal phrases or adverbs: *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’GAXxa:L* ‘I’m telling a long story’ (cf. *’ida’xXah* ‘I’m telling a story’); *k’uGAXXehdzL*, *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:chLinu:* ‘they’re picking berries’); *diLich’a’* *’iGAdAGama’L* ‘(dog) is always growling (i.e. lengthily)’; *k’uGAXLmahdL* ‘I’m baking (something) 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, 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 saying such nasty things to it’; *dAtli: sahdX wAXyu: Gale:L* ‘has already long been doing such things (acting such ways)’, *Li’q’ ya:yu:dah ’ulu’qa: Gale:L* ‘he’s doing everything to get her’; *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’, *XAlAXAGa:Linh* ‘he keeps eating them (berries)’; *k’ut’a’ GAXt’u’L* ‘I’m using it up’; *’itl’ dAGAXdAdza:Nts’L* ‘I’m begging you 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: *xu’lAGALts’in’tl’gLinh* ‘he’s slapping my face all the time’; *gahXye’X GAXLA’AshgL* ‘I’m sneezing all day long’ (cf. *gahXye’X xLA’Ashg* ‘id.’). There are even examples of this with Persistives: *qi:dAGAXxa:sL* ‘my foot 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 Persistentive).

*Intermediate examples*

Between these extremes, 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 more generically or abstractly without regard to space or time. A few examples paired: *GAXLdu’k’L* ‘I’m squeezing it’ (cf. Inceptive perfective stative, e.g. *GAXt’uxL* ‘I’m holding it’), *xLdu’k’L* ‘I’m squeezing it, milking it’ (i.e. reference only to specific nature

of act); lAGAxdu'L 'I'm fleshing it (skin)', lAxduh 'id.'; 'Awqa'ch' GAXtsu:xL 'I'm pushing it between them', guxtsu:X 'I'm threading a needle (thrusting a filament)'; GAXtsAXL 'I'm cutting it' (e.g. large piece of cloth, in the process, being part-way through it), xtsAX 'I'm cutting it' ("that's what I'm doing"); xuGAdAk'in't'L 'I'm being scratched', 'AddAk'in't'inh 'he's scratching himself'; 'u'xLqah 'I'm counting it', 'u'GAXLqah'L 'id.', but almost always the former, whereas reflexive with y-anatomical 'count on one's fingers' in 3 instances was twice in Progressive; GAXLXehL 'I'm handling blankets' ("in one bunch"), xLXehL 'id.' ("one by one"); GAXXAsL 'I'm carving it', xXAs 'id.'; lAGALma'Linh 'he's spoiling it', lAminhinh 'id.' (Lena, former 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)'); ya' lAGAXLwa'L 'I'm grinding it up', ya' lAXLwa' 'id.'; ya' GAXLwAL 'I'm splitting it with at wedge', ya' xLwALg 'id.' (Repetitive); GAXwi'gL 'I'm hanging them up' (Anna), xwi'gg 'id.' (Lena, Repetitive, \*xwi'g rejected); GAXwe'ts'L 'I'm weaving it', xwe'ts' 'id.' (Lena, latter preferred or more spontaneous); dAGAXlits'L 'I'm smoothing it', dAXlits' 'id.'; si:nL siXa' GAXtl'i:L 'I'm tying my shoe(lace)s', si:nL siXa' xtl'ih 'id.'; t'its' dAGAq'u'tl'L 'ice is breaking' ("I see the ice breaking"), t'its' dAq'utl' 'id.' ("I know it's breaking, or hear it breaking, but don't see it", i.e. process seen vs. more abstract concept, Marie); with thematized Repetitive: 'Aw (ya') GAXyAXgL 'I'm softening skin (completely)', 'Aw (ya') xyAXg 'id.'

### 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, 'become', e.g. dAGAXshe'L 'I'm getting hungry, becoming hungry'. As noted also, the name Inceptive perfective, meaning that the beginning of the act or even has taken place so is in process seems to be indeed appropriate, especially for the so-called transitional, as that could presumably in every case also fit this 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 here is exemplified the transitional/inceptive use of the Progressive, and further below some contrasting examples will be given: 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'), dAGAXLXawi'Linh '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'; lACA'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', GAdAxit'l'L 'it's starting to snow', o-ga' GAle:L 'is becoming like o' (many instances, including also verb clause as o: sAsinhLga' GAle:L 'he's acting more and more like he's dead', cf. sAsinhLga' xleh 'I'm acting like I'm dead'; see also below).



### Contrasting subtypes

Finally, some instances of contrasting use of Progressive subtypes with the same or similar verb themes, beginning with the transitional/inceptive contrasting with duratives: dAGALade:L ‘it’s starting to glow’ (diLidehL ‘it (light) is on’), dAGAxLde:L ‘I’m turning the light on’ (durative 1); GAxtsuhdL ‘I’m falling asleep, going to sleep’ (xtsuhd ‘I’m sleeping’), gahXye’X GAtsuhdLinh ‘he slept all day’ (durative 2); k’uGAtsi:NLinh ‘he’s starting to sing (something)’, ‘he keeps singing’ (durative 2); GAXxa:sL ‘I’m starting to itch’, cf. above siqi:dAGAXxa:sL ‘my foot itches continuously’, etc. (durative 2; applied to Persistentive); ’AwlA’e: dAGAle:L ‘he was starting to say the wrong thing’, ’AwlAX ’iLch’ dAGAdAle:Linu: ‘they’re getting into a heated argument over it’, cf. wAXyu: dAGAle:L “he’s saying such things” etc. above (durative 2), wAX GAle:L ‘it’s taking shape’ (Rezanov ‘beginning’), ‘it’s happening, it’s going on (thus)’ (durative 2); wAX GAXLi:L ‘I’m beginning to make it look right (be thus)’, ‘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. xLih ‘I’m making it, will definitely succeed”), yahd Xu’ dAGAXLi:L ‘I’m starting to build a house’.

Examples not involving transitional/inceptive: GAqa:L ‘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); gahXye’X lAGAdAk’ahgLinh ‘he’s playing all day’ (durative 2, lAdAk’ahginh ‘he’s playing’), ’u:ch’ lAGAdAk’ahgLinh ‘he’s playing (some game moving) in that direction’ (locomotion). Presumably lAGAdAk’ahgLinh could also be glossed ‘he’s beginning to play’. Even without a minimal triplet, it appears clear enough that the Progressive has at least 3 contrasting semantic subtypes of use: locomotion, durativity (1 and 2), and transition or inceptivity.

### Nominalizations

At least two nominalizations with this derivation have been noted: dAGALade:L or ddAGAdAde: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 of someone being tickled would highlight dimples. Cf. chapter on Inceptive perfective stative. Beside these, about 5 more Inceptive perfective nominalizations are listed on p. 4 of the chapter on Inceptive perfective statives, though less clearly involving the semantics of the Progressive derivation.

## THE EYAK DIRECTIVE

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’. The name ‘directive’ will now also be used for the same derivation and prefix in Eyak. That name is far more appropriate and descriptive a term than ‘semitransitive’ used in Krauss’s 1965 grammatical sketch of Eyak. It appears that that was the first name given to it in the published literature, 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.

The Eyak directive was not investigated in a fully systematic way before it became too late. 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.

### MORPHOLOGY

The directive is marked by a prefix 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), 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 Group 8. below. In one theme alone we have da’- (see da’-L-Xa/ ‘have O’ in Group 4. below). 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 ‘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 ’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-, e.g. -dA- becomes -di:-, or -u:- instead of -u-, e.g. -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, discussed in the recent files “Some thoughts” and “Further comments”. For further details of the morphophonemics of the directive, see also recent files on the modes/aspects.

In addition to the ’u’- in third person object, i.e. zero conjunct object, it should be noted that with ’Ad reflexive, which has an ambiguous status as a preverb, 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. Unfortunately, the seemingly probable alternative, e.g. \*?'iLu'sLits'AXLinu:, 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 \*wE-, Eyak 'u-, pronominal third person object of postpositions and possessor. Compare further, however, the two Eyak nouns with fossil prefix, wA-: wA-Xah 'story' and wA-sheh 'name'; the two directive verbs (both under semantic class 4. below) O-'-Xa 'tell of O', O-'-l'e 'name O'; and the Athabaskan noun and verb \*o-(')u-zh(w)-E' 'o's name', \*O-u-zh(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 also a link also with some special PAE prefix to be reconstructed \*wE- ~ -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.

#### **DERIVATIONAL FUNCTION, SEMANTIC GROUPS**

Most directives are transitive (but see parts of Group 2. and Group 3. below, with "empty" direct object)

The directive operates mainly on Action verb themes, also some Neuter statives, and classificatory themes, but not (except for the last group, 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. Up to about 90 Eyak verb themes are attested with the directive. About a quarter of these are directly matched with a non-directive, 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, including thematic prefixes, preverbs, and/or postpositions, with semantic differences that are much less predictable.

Directives fall into 7 or 8 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 which 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 which occur both with and without directives in all 8 groups, but Groups 1.-2. and 7.-8. have only stems which occur in both directive and non-directive themes.

**Group 1.** The first group 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’:

- O’-ta’tl’ ‘kick at O’ < O-ta’tl’ ‘kick O’
- 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-L-ts’in’tl’ ‘slap O(’s 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 9 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 “superaspect” 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 Slave 1989), 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. below, Neuter imperfective always ’u’lixilgah ‘I know it’, with 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 l- which is optional especially with Active (s-) perfective will be called henceforth for our purposes “soft (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.

**Group 2.** The second group 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 soft -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. Soft -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.

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 'my hand is paralyzed around it' ('I'm hand-creased up around it', passive)

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 extends'

The following 5 or 6 items are derived from intransitives but appear at least formally to be transitive, with "empty" directive object 'u'- (see also some items also in Group 3. below). Following these are reflexives and items with indeterminate O of uncertain status. Note the thematic gdl- qualifier in the preceding and 4 of the below, possibly soft -l- plus gd-anatomical 'rump'.

O'-xuL 'S (motor) turns over (once, but does not start)' < -xuL 'S rolls, revolves'

yAX O'-dl-xuL 'S (boat) capsizes' < -xuL 'S rolls, revolves'

O'-l-'ya 'one side of S droops (as in 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'Lya:k' 'they (paddles) (customarily) each curl up' (reflexive, < O-L-ya:' 'move pl. O one by one')

da:X 'i'-gdl-gehdz 'S barely hangs on' ('to indeterminate o of o-X', with 'i'- of unclear status, see Group 8. below, to which it may more properly belong) < -gehdz 'S is pitiable'

'ida-'-L-'a/ 'S (wind) changes direction' (cf. 'fold') < 'i-d-L-'a/ 'S (wind) moves'

**Group 3.** 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 about it, guessing about it, dreaming about it. Treated first here is a subgroup about perception which is transparently derivational like the first two groups, though still rather irregular:

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)

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)

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:

O-'-gAwi/ 'feel O (abstract, not tactile)' < 'Ad O-gAwi/ 'feel O'

'Adu-'-dA-gAwi/ 'feel a certain way' (reflexive, with adverb)

Many of the directives in the rest of this group are fully thematic, i.e. they do not  
occur at all without the directive:

O-'-dji'd 'guess about O, at O (e.g. riddle)'

O-'-L-qa/ 'count O'

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. below) <  
'i-tsi:ndz 'S dreams' (indeterminate O)

Whereas the preceding are all Action themes, most of the following items are Neuter  
statives:

O-'-l-L-ga/ 'know O (fact, thing, person)'

o-dahd O-'-l-ta 'hear o, listen to o' < l-ta 'S has head in position', o-dahd 'pressing  
against o'

o-dahd O-'-l-L-ya:' 'hear o pl. times, hear o one after another' < as above, < O-L-ya:'  
'move pl. O in pl. acts'

o-lah O-'-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-'-LA-le(') 'believe, think O to be C' (Neuter stative, e.g. 'uta:' xu'Lileh 'thinks  
I'm his father') < 'i-le(') 'S has emotion' (indeterminate O)

o-X O-'-LA-le(') 'be aware of o, realize o' (Neuter stative)

The items above with postpositional phrases are only formally transitive with  
"empty" 'u'- directive object (cf. some items in Group 2. above). These directives relate  
instead to o, the indirect object of the postposition, or to C, complement.

**Group 4.** The fourth group is also one of the 3 larger ones, concentrated in a semantic  
area which shades somewhat toward that of the preceding and following groups, and  
which 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.

O-'de'L 'hoard, keep O possessively; boss O'

o-X 'Adu-'dA-de'L 'store, save o up' (reflexive)

O-'d-de'L 'boss O (with oral commands)', usually yAX O-'d-dA-de'L 'boss O about' (perambulative), yAX k'u'dA(dA)de'Linh 'square-dance caller' ('he who orders one about')

O-'ye:X 'train O (e.g. person, dog)', usually yAX O-'DA-ye:X (perambulative)

O-'tsa 'buy O'

O-'le'g 'seize, grab, take O' < O-le'g 'touch O with hand' < -le'g 'S moves hand'

Xu' O-'d-L-'a/ 'decide on, plan O' < -'a/ 'sg. S extends', causative, with d- 'speech', Xu' 'right, complete'

O-'L-la 'save O from danger', yaX O-'LA-la 'keep O safely about, hidden' (perambulative), 'Adu-'LA-la 'hide self, flee danger' < O-L-la 'save, rescue O' < -la 'S subsists, dwells, lives'

The following major 2 items are both with the same stem or a homophonous stems, found only with these directives:

C O-'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 'the shaman turned a stick into a dog'

C da-'l-L-Xa/ 'S has C, gains possession of C', anomalous in lacking the 'i- of 'ida'- indeterminate object; intransitive, with D-effect on classifier in iterative, no class-mark for "Object" (i.e. C): e.g. XahdL q'e' da'LiLiXinh 'he has another car', 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, s'appeler C', reflexive

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

'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, unless assignable to Group 2., with idea of meat or strips hanging folded, cf., O-'l-ta 'fold O' in Group 2, but classifier of that is zero

**Group 5.** 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; 3 of 5 stems have no non-directive themes.

O-'qe'd-X 'inquire, ask about O'

O-'d-L-qe'd-X 'ask, inquire of O', with d- 'oral, speech'

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-gehdx Group 2., and Group 8.) < o-tl' d-le 'S says to o'

**Group 6.** This is a small cohesive group, the central idea of which seems to be aversion, fear, taboo; 3 of 5 stems have no non-directive themes.

O'-lX-L-k'i:nG 'be shy, modest, reserved towards O',

'Adu'-l-LA-k'i:nG 'be shy, modest, reserved', reflexive

O'-lX-LA-xa:s 'fear O' < lX-LA-xa:s 'S is afraid' (Neuter stative)

O'-L-xa:s 'follow O (taboo)'

k'u'-LA-tuh 'be lazy' (Neuter stative), with thematized k'u- indefinite object (cf. k'u'-Xdl-a 'S staggers' at end of Group 8, 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' < 'developed aversion thither', reflexive

**Group 7.** 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 for 'day' gah, 'summer' xah, 'evening' se:L All are derived from non-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'

**Group 8.** 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 'i- 2s object from 'i- indeterminate object, given that those are homophonous in the non-directive, i.e. the vast majority of instances, both being 'i- in that same prefix position. 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.

From 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-. E..g. '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'.

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 zero 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 zero 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' (Unfortunately, '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, X 'idAkus 'X is doing the laundry'.)

A source for support also 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 to proclitic 'idA-, thus 'idAxxkus 'what I'm washing; (that) I'm washing it', 'idAsiga'L 'I'm so tired...', so providing a frequent disjunct proclitic 'idA- sequence 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 3 rather high-frequency themes with the conjunct string 'i-dA-, where the second morpheme is not the dA-classifier (of Zone D.) but the d- thematic 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 GA- and sA- conjugation-aspect markers, resulting in frequent sequences 'ida'-. The third is 'i-d-le 'S (activity, event) goes on, happens'. This third is of course also frequent in the causative 'i-d-L-(l)i 'S carries on O (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 'S knits O', e.g. ch'iyahd 'iya: 'iqe'di:xLih 'I'll knit a hat for you', where also the expected l- gender marker for 'hat' does not appear, can not appear. Moreover, with k'u- indefinite object, for e.g. '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'uqu'di:xLih, where the 'idA- now appears not at all as conjunct indeterminate object (at least in appearance) plus d- thematic 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 recent 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-dA- thematic 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. is precisely that which still begins with just that form 'i'-, now of a status quite different from the "regular" modern 'ida'- indeterminate object of the directive. The

form 'i'- is now specialized for some reason in this Group 8., of 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', it therefore being probable that in this instance o-'ih-X-A-ch' would have been equally or more correct). Most of these show a thematic d- qualifier 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. S walks', -'a'ch' 'pl. S walk', Xdl-'ya 'sg. S runs', -we 'sg. S swims'. Others would surely be possible. The postpositions with (-A-)ch' are normally used with the Inceptive perfective ('progressive'):

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, gains 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 catches up with, gains on o swimming'

o-ka:X(Ach') 'i'-Xdl-'ya 'sg. S catches up with, gains 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 pulls away from o running'

o-'ihch' 'i'-d-'ya 'S falls behind o (running?)', attested only once, either missing the Xdl- in 'sg. S runs', and misused for 'pl. S run', or perhaps more likely, more general or abstract, from -'ya 'S is involuntarily situated': 'u'ihch' da: 'i'dAGa'ya:L 'we're falling behind him' (Lena), cf. the first following

The next five items are Action intransitives, typically in Neuter perfective as statives, also with thematic d- qualifier, 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.

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'-gdl-gehdz 'S barely hangs on, hangs on or together by a thread', also entered above in Group 2., but perhaps belonging more properly to this group, < -gehdz 'S is pitiable', Active s-perfective stative, with dA- indeterminate o as o of o-X, other o not tested, cf. the following

(o-lu'qa: o-tl') da:X 'i'-d-le 'S begs (o of o-tl', for o of o-lu'qa:)', also entered in Group 5. above, along with other themes for 'beg', da:X perhaps thematized, not tested for meaning, cf. the preceding

o-X 'i'-IXdl-XAL 'o gets half drunk and liquor runs out', i.e. 'S (supply of liquor) runs out, leaving o only partly drunk' < IX-XAL 'S is drunk, dizzy'

o-X 'i'-IXdl-we'q' 'o gets half drunk and liquor runs out', i.e. 'S (supply of liquor) runs out, leaving o only partly drunk' < -we'q' 'S runs 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 object of the directive:

k'u'-Xdl-a 'S staggers (drunkenly)', by chance attested only in perambulative yAX k'u'-Xdl-dA-a 'S staggers (drunkenly) about'; < -a 'sg. S walks', with k'u- indefinite thematized as object of directive, not indeterminate, confirmed by Marie in checking that 'future' here is not -qe-, but rather -qu' (cf. k'u'-LA-tuh 'be lazy' in Group 6., the only other directive attested with thematized k'u- indefinite object)

yAX k'u'XAdla:dA'a'ch'Linu: 'they're staggering drunkenly about', plural of above

### **COMPARATIVE ATHABASKAN ADDENDUM, AND MORAL TO THE STORY**

Here I indulge in some comparative Athabaskan considerations, not only the better to explain the Eyak directive, but also because the Eyak can explain the Athabaskan, or at least provide a the basis for producing a better account of the directive than so far exists for any Athabaskan language, so far as I am aware. 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 -u- vowel, also in Slave, Chipewyan, Tahltan, Tsetsaut, Beaver, Sekani, Carrier, Chilkotin, 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 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 below.) 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.

The impression I get from a very quick and superficial tour of the published literature is that the average Athabaskan language has about the same size inventory of directives as does Eyak. Further, the Athabaskan languages appear to have the same combination of productive use as in Eyak Group 1., e.g. 'shoot at', and of thematic or lexicalized use shown in the other Eyak groups, what Keren Rice (2000.429) calls "frozen conatives."

### **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. It therefore becomes even more inappropriate to call the Eyak directive a qualifier.

However, the current practice in Athabaskan is indeed to call the \*tE- component of the Athabaskan ‘future’ \*tE-ghE- a qualifier, so also the \*-u- ‘directive/conative’ preceding it. Unlike the Eyak qu’- of exactly the same position though, the Athabaskan \*tE- does not itself alone constitute the ‘future’. Further, it combines not only in \*tE-ghE- for the ‘future’, but it also combines with the s-perfective as \*te’s- for the ‘inceptive perfective’. It thus combines in two uses which are aspectual, inflectional, as opposed to the basically thematic or derivational qualifiers. However, at the same time, the \*tE- can also stand alone, derivationally like a qualifier, with the meaning ‘forward’, nicely epitomized in the theme \*tE-zhweq’ ‘spit’, as opposed to \*-zhweq’ ‘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 \*tE- (plus ghE- or’-s-), of different origins and meanings. Both separate the directive from the qualifiers. In Eyak this is still so, whereas in Athabaskan \*tE- 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 tE- with the dE- qualifier – not in combining with any others -- there seems to be a metathesis, resulting in dEtE- instead of tEdE-, mingling \*tE- 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’- (< or = wA-’-; see final paragraph of section on morphology of the Eyak directive, above, plus “Some thoughts” and “Further comments” files). That \*qWA- is then with equal probability cognate with the Athabaskan prefix of that exact same form, \*qWE- = \*qU-, 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 Jette 1906 (for which see the end of this addendum). There seems to be no cognate at all in Eyak for Athabaskan \*tE- ‘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.

### **Semantics of the Athabaskan directive**

**Some recent studies 1989-2007.** We turn now to the semantic function of the Athabaskan directive. Perhaps the fullest contemporary account of the directive we have there is in Hargus 2007.392-394, for Witsuwit'en, nearly two pages. Hargus calls it simply the "u- qualifier," out of respect for the terminology of Jules Jette (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 above, 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 (1990.68-69), with 17 examples under the verb prefix called "u conative." There under "thematized conative, attempting" are listed e.g. 'call O's name', 'buy O'. This can be explained by Kari's tendency toward semantic associations that some would consider to be 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 n- aspectual prefix), "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 n- aspect, 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 Slave grammar (1989.599-601), the earliest of the recent accounts, lists only the "u- n, n, n, conative," as an "aspectual prefix" (requiring n- aspectual). She gives the 6 examples 'shoot at', 'throw at', 'take swipe at with axe', 'call to', 'try', 'shoot at with slingshot'. Understandably prominent, at least 4 of the 6 examples, are what Kari (1990) would call the 'directive'. Rice includes therewith 'try' and 'call to', without comment, and none of the many other more themtized items, which Rice in 2000 would distinguish as "frozen conatives," corresponding to those in the Eyak groups other than Group 1. that are of course also present in Slave.

The Young-Morgan-Midgett *Analytical Lexicon of Navajo* (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. yi/ni/shta<sup>N</sup>: I have hold of it / shotaN<sup>7</sup>: he has hold of me.)" [Here the slash is their high tone mark in Navajo, and N is nasal hook under preceding vowel. The numeral is a superscript.] 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

di14- they call “a ‘catch-all’ for di- prefixes that, even speculatively, cannot be assigned to any one of the foregoing categories” [i.e., di- number 1 through 13?]. The only example offered is ‘have hold of’, to show the -o/-. The morphophonemics of the -i/n(i)/- ~ -o/- variation are not explained; the persistent high tone reflects 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. (Earlier, we have e.g. the Hoijer[-Sapir] *Navajo Lexicon* 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* 1951.255-257. The phonological evolution of the prefix in Navajo is of course connected with that in Sarsi, -i/-, 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 at least 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 n- aspectual and/or n- qualifier 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-, discussed above, and probably therewith also relatable to the n - aspectual, etymologically different, but possibly arising out of reidentification of the gender prefix as the aspectual one. We shall return briefly to this particular in connection with Koyukon below, as we continue backward in the history of the study of the subject.

**Studies 1930-1970, Golla.** About 20 years before the present improvable state of the study of the directive in Athabaskan, we have Victor Golla’s dissertation on Hupa grammar (1970.145-147, 163-164), 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 with thematic O-o11- are semitransitive themes.” His “11” is subscript referring to prefix position number away from the stem, disjunct object of postposition, which he acknowledges is “somewhat arbitrary.” Golla notes at the same time that the -o- follows the conjunct deictic subject k’I- (same as Eyak k’u-). The -o- is rather also just a conjunct prefixal element which changes e.g. 2s object nE- 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 4 examples where the semitransitive is shown as a semantically predictable derivative of ‘shoot’, ‘kick’, ‘club’, ‘push’ (> ‘point at’). He then gives 4 more with “more abstract meaning,” ‘count’, ‘know’, ‘buy’, ‘call by name’, no doubt corresponding especially to his ‘thinks about’ group. Krauss 1965.172

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 4 nice examples of those which have exact counterparts in Eyak, semantically, although none of the stems in those 4 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 (1930.54), 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 5 stems: ‘spear at’, ‘know’, ‘ask’, ‘shoot at’, ‘listen to’. It may be that Li 1930 is the only recognition that this prefix received in the entire Goddard-Sapir(-Li)-Hoijer literature of Athabaskan language study.

Golla’s Hupa sketch (1996.373), most of which was probably written in the 1970s, still considers the prefix disjunct and calls it ‘semitransitive’, but in 2001.853 Golla 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, Jette 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 which finally appeared in 2000, pp.12-13, Kari should be given credit for providing the second most extensive presentation available in print, with 27 examples (after Hargus’s 32 for Witsuwit’en and his own 17 for Ahtna 10 years earlier). He lists the -u- ‘conative’ 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: 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+nE, where the -nE- is still a qualifier, still in the position corresponding exactly to that in which we find the cognate Eyak soft -l-. The next subentry is listed as an “aspectual derivational string,” specifically “n-momentaneous” (requiring n- aspectial prefix). This Kari glosses ‘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.). 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 Jette, working with Koyukon at the beginning of the last century, writing in 1906, and who never took a course in Linguistics. Jette wrote a century ago what must be the best description yet of the semantics of the directive, as quoted in the 2000 dictionary: “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 ms. dictionary: “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 Jette here is seeing the big picture, not just the strict conative ‘try to’, so productive in Koyukon. Jette’s insight is beautifully suited to Eyak as well as to Athabaskan.

After Jette 1906, Golla in 1970 does next best. Far behind is Krauss, not only with his 1965 ‘semitransitive’, 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 chapter. 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 a moment either the history of a language or the history of its study



## **ACQUISITIONAL** *[[this needs somehow to be combined or included with file on gerunds]]*

What I have named acquisitional is a nominalizing derivation 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 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.

## **MORPHOLOGY**

### **Suffixation**

Attested forms regularly show the 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 gerund and instrumental suffix. This unique suffixation is definitive of the acquisitional. Both the morphological and syntactic definition of the acquisitional are somewhat questionable, especially with regard to the distinction between that and the gerund, at least those with closed stem and suffix -L. For this, see Addendum below.

Of the 6 stems attested with in Acquisitional, 5 are of the type CV, here taking the form -CV:-ch'-L. The Acquisitional for 'shoot O (with gun)', -xut' takes the form -xe:t'-ch'-L, thus definitively showing or at least suggesting that this derivation requires expanded stem.

### **Prefixation**

As with gerunds, all classifiers are deleted, as in k'ula:ch'L 'drinking' < O-dA-la, shug 'ule:ch'L 'picking strawberries' < O-L-(l)e, o-lAX 'i'an 'seeing o' < o-lAX 'i-LA-'an, ge:Lta:gyu: 'uxe:t'ch'L 'shooting seals' < o-L-xut'. As with gerunds, there are no mode-aspect prefixes, except, as also the case with gerunds, 'future' qu'- is usual with O-she 'kill O', k'uqa'she:ch'L, k'uqu'wAseh: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 the gerund, k'uwah.

All attested forms are transitive. The pronominal object forms are as in the gerund, except that first (and presumably second) person forms cannot be used, e.g. proposed \*xuxe:t'ch'L 'shooting me', 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', k'uqu'wAse:ch'L, k'uqa'se:ch'L, k'ushe:ch'L 'hunting' (in order for frequency, the first in the by far the most frequent acquisitional in the Eyak corpus). In one case we have a theme with indeterminate O, for some reason the unique irregular or suppletive theme o-lAX 'i-L-'e ~ -'an used for all mode-aspects of 'see O' (O-G-'e ~ -'an) in other than Active imperfective, sikuwa:nahGAYu:lAX 'i'a:nch'L 'seeing my friends' (\*?O-G-'a:nch'L not tested). We also have at least 4 instances of overt direct object: ge:Lta:gyu: 'uxe:t'ch'L 'shooting seals (with gun)', ke:Lta:gyu: 'uqa'se:ch'L and ke:Lta:gyu: qa'she:ch'L

'hunting seals', and shug 'ule:ch'L 'picking strawberries'. In at least 3 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 gerunds and verbal nouns, 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 4 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]. No systematic investigation of 'u- ~ 'A- ~ zero- was done here.

We have one instance of overt subject in lixahyu: qu'xse:ch'L qu'xLah 'I'll go hunting grizzlies' in a later investigation with Lena, but this is almost certainly an incorrect form, showing the uncertainty encountered in pushing speakers' memory of this derivation.

## SYNTAX

Most characteristic, perhaps definitive, 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 of course attested in relative abundance, always with the L-classifier. Further examples: k'ula:ch'L qu'xLah 'I'll go drinking', sikuaw: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 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 sAqehhLinh, 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 'AdLishehL 'he killed himself with a gun' ('Adsdishel 'he killed himself'). Thus also, we have Lena's gerund yAX 'ixe:t'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 'ixe:t'[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. Beside these acquisitionals and/or constructions with postpositional o-X, most notable for taking the L-classifier in (non-causative, i.e. still intransitive) locomotion verbs are the postpositional o-'e:X 'in search of o', itself

probably a derivative with postposition-final element -X 'in non-punctual contact with, motion within o', e.g. 'u'e:X qu'xLah 'I'll go looking for it', and the preverb qAyuh 'to fight, looking for a fight, belligerently', e.g. qAyuh qu'xLah 'I'll go looking for a fight'. Thus may be rounded out a general semantic area of elements that, like the acquisitional, trigger L-classifier in locomotion verbs.

### **O-L-le:ch'L 'pick berries'**

There is one verb theme which strikingly resembles the acquisitional both in meaning and in form O-L-le:ch'L 'S picks 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 of course the same suffixation as in e.g. -she:ch'L. (Alternatively, this could conceivably be a different stem, -le:ch', which might be cognate to Proto-Athabaskan \*-ngwAdj 'pluck'. However Eyak -l- does not regularly correspond with the PA labialized palatovelar sonorant \*-ngw-. 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.) Indeed, we 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: e.g. xLle:ch'L 'I'm picking berries', k'uqu'xLle:ch'L 'I'll pick some (berries)', Li'q' sLile:ch'L, Li'q' sdile:ch'L 'they've all been picked', shug 'ALle:ch'L 'pick strawberries!', even xLle:ch'Lk' 'I (customarily) pick them (berries)'.

Most probably, this theme is a unique back-formation on the (only once elicited) O-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.

### **ADDENDUM: UNCERTAINTY, 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 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, then also lixahyu: qu'xLt'ik'ch' qu'xah 'id.', 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 'id.', but almost certainly incorrect, including 1sg. 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 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 'ixe:t'XLX qu'xLah (for what should presumably be yAX 'ixe:t'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 a gerund instead of acquisitional, 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.

***[[keep this for verb prefix notes, on history of qu'~ 'future'***

In contrast with the acquisitional morphology, for the moment, in part to demonstrate that, and also to show the further thematized use of the exceptional future prefix, note the following merely relativized derivations of O-she 'kill O (future)', i.e. 'hunt': k'uqu'wAshinhinh Lila:' 'a hunting man, hunter' ('man who is going to kill something'), and 'uX k'uqu'xLshehyu: 'my hunting gear, weapons' ('things with which I'll kill something'), likewise 'uX k'uqu'yiLshehyu: 'your weapons', inflected with subject pronouns, and with 'u-X 'by means of it/them', which requires L-classifier, also present, quite distinctly unlike the acquisitional, though still with the thematized future prefix. Cf. further 'utl' k'uqu'xsheht'ahL 'my hunting-leaf' ('with it I'll kill something leaf') from Anna in text, weapon used by Lake-Dwarf, where the postposition though is o-tl' 'with o', non-instrumental, so not taking the L-classifier in the relativized verb.]]

## EYAK GERUND

The Eyak gerund is a nominalizing derivation 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, so that we have in the corpus only about 100 instances of it in 80-some different forms. Nevertheless, it will be seen that we can present a fairly satisfactory description of the Eyak gerund.

### 1. MORPHOLOGY

The most striking morphological essential of the Eyak gerund is that no prefixes in the four positions between the stem and the thematic or qualifier zone can occur. That is, there can be no conjugation or mode/aspect markers, no subjects, and no classifiers. Most remarkable of all is the non-occurrence, in fact deletion, of classifiers, since those are often thematic or essential to the theme, and/or are markers of valence or transitivity, to which the gerund itself is otherwise quite sensitive, as will be seen in both the suffixal and prefixal differences between transitive and intransitive gerunds.

#### 1.1. Stem and suffix morphology

##### a. -l suffix to open stems

Most characteristic of the gerund, in fact almost unique to it, is the suffix -l to open stems, whether of the CV or CV/ type, with the result CV:l in both cases: e.g. suffixed to CV: 'isda:l 'sg. sitting', 'iste:l 'sg. lying', 'ista:l 'sg. inanimate being in position', k'utsi:nl 'singing something', 'isqe:l 'boating', 'isqu:l 'pl. sitting', k'uXe:l 'carrying something on one's back', -le:l 'doing', k'ula:l 'drinking something', yAX 'i'a:nl 'traveling about' (error for yAX 'i'a:nX), -ya:l 'handling pl.', k'uqa'she:l 'hunting', o-d k'uXa:l 'feeding something to o', 'isa:l 'sg. going', qa' 'isya:l 'staying awake'; likewise to CV/: 'ist'u:l 'being', li'X lAt'u:l 'smiling, o-ch' dla:XAt'u:l 'watching o', dAche:l 'hungering, hunger' -ts'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 probable case of li'X 'i:ni: 'laughter' and possible case qa'ni: 'fighting' see **2.a** below and addenda **3.b**, where we may well have had such an -n (< \*-n-ne:-n).

##### b. zero suffix to open stems of transitives

With some of these same open stems, and with some other open stems, whether CV or CV/, perhaps in transitives only, so never with prefix 'is-, instead of -l the suffix is zero, and the stem CVh. Thus k'utsinh (cf. k'utsi:nl above **1.1.a**), k'ulah (cf. k'ula:l, the former more common). 'ulah 'drinking it', k'uwah 'eating something, meal' (-X- deleted; cf., o-d k'uXa:l above **1.1.a**, former probably more common), 'uwa: (Anna 1971), 'Awah 'eating it', also k'ushah 'digging something', 'igah 'dancing', and probably wAXah 'story' < 'telling of it' (see below **1.2.f**). There was no systematic attempt to check the possibility of CV:l instead of CVh, or the reverse. Nevertheless, the absence of the CVh in the many instances of open-stem intransitives, the 8 attested different forms being only in transitives, may well be statistically significant.

### c. 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 of course be suffixed to open stems as well as closed, thus closing open stems, to which -L gerund then may be suffixed. It might also be considered somewhat remarkable that the -X perambulative suffix occurs overtly in the gerund, given that it takes a zero allomorph in all paradigms other than the Active imperfective; the perambulative is further marked by always requiring -dA- or -LA- classifier, which is unfailingly deleted in all clear instances we have of the gerund, thus leaving only the preverb yAX, along with suffix -X (though missing in one or two cases), to signal the perambulative.

With closed stems the gerund suffix is zero or -L. Zero appears to be the more frequent, but there was no systematic attempt to check the possibility of one instead of the other. The choice may seem superficially parallel to that between zero and -l for open stems, but that is very probably only an illusion. For one thing it is not justified by the phonology, in that there is otherwise in Eyak no alternation between the obstruent -L and the sonorant -l, there being no voicing of fricatives in Eyak, the sonorant l alternating instead with nasalization and n, and descending historically from PAE \*n. Such a parallel is not justified either from a morphological point of view, as the zero variant is just as frequent in the intransitives as in the transitives, unlike the zero with the open stems. Moreover, unlike the sonorant -l suffix, which is almost unique to the open-stem gerundive, there are several other obstruent -L suffixes to both nouns and verbs in Eyak, most notably here the -L instrumental, also the only other suffix which co-occurs with the prefix 'is-, otherwise unique to the gerund (see below 1.2.a). Finally, with open-stem gerunds the -l suffix occurs more frequently than the zero, in part from occurring more freely, in intransitives as well as transitives, whereas with closed-stem gerunds the zero is much more frequent than the -L, even in intransitives.

Thus, obstruent -L-suffixed closed-stem gerunds which happen to be attested only with -L are relatively few, 3 or 4: o-yAX 'isyahGL 'o being a pest', 'ilAt'a'q'l 'trout-fishing (with hook)', 'Adi:ntl'a'gL 'face painting' (basket decoration pattern, Galushia Nelson). A fourth might be Rezanov's *koinstakl'* 'to forget', most likely to be read [ʔu]k'wah 'i:nsta:gL 'forgetting repeatedly', not verified, from base o-k'ah l-ta 'forget o' (< 'position head away from o').

Here follow the 5 examples which happen to be attested with both zero and -L gerund suffix; these for some reason include perhaps a disproportionate share of perambulatives: yAX 'isqe:X, yAX 'isqe:XL 'boating about', yAX 'iswe:X, yAX 'iswe:XL 'swimming about' (the former more frequent, including an instance in Rezanov), k'uGAdjg, k'uGAdjgL 'paddling' (repetitive thematized, < 'move O laterally with end of stick'), lAgehG, lAgehGL 'being lonely'; and yAX 'ixe:t'LX qu'xLah 'I'll go shooting about' (Lena; persistent, with expanded stem, for expected yAX 'ixe:t'XLX qu'xLah), along with yAX 'isxut' 'shooting about' (also Lena, not persistent; with analogical -s- from intransitive, with correct indeterminate object prefix, and missing perambulative suffix, for yAX 'ixut'X, zero instead of -L suffix.).

Further examples of closed stems, the 20 with only zero gerundive suffix attested are far more common than the reverse, perhaps significantly so, in both intransitives and transitives: 'iski:nX 'weeping', 'ich'u' 'stealing', sAqe:GAyu: 'ulAxa:g 'raising

children', 'ilAxa:g 'raising you' (repetitives), sAqe:GAyu:xa' qe'le' 'babysitting' (open variable stem, irregular, here treated as closed with -'), dAq'e:k' 'being in a huff', gahG dA'a'tl' 'gum-chewing', dAtux 'spitting it, on it' (Rezanov), 'iLt'a:nch' k'uya:' 'gathering things', 'isqa:' 'shouting', 'istu:ch' 'pl. lying' (persistive, expanded stem), lAXisxwa:s 'being afraid', 'iLlAXa:n' lAqu:g 'race-running' (repetitive), yAX XAdla:'ya:X 'sg. running about', yAX 'isa:X 'sg. walking about, yAX 'Adi:lihya:X 'thinking', yAX 'u'wA'a:nX 'looking about for it', yAX 'ists'i:nGX 'dipping fingers about' (perambulative), lAwidj 'being ashamed'.

Note herewith that the gerund allows a seemingly full or wide range of derivational stem morphology, i.e. it allows both repetitive and perambulative suffixation, and persistive expansion; expansion with customary -k' suffix unfortunately was not tested.

## 1.2. Prefix morphology

### a. 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, Neuter perfective), and -s- (Active perfective). As noted above, this 'is- is shared only with a few instrumentals, together with an -L suffix, which also may well be the same as the -L suffix in some closed-stem gerunds: e.g. the instrumentals 'uq' 'isda'L 'chair' < 'on it thing to sit' (cf. further da'L 'canoe seat'), 'uq' 'iste'L 'bed' (cf. further te'L 'mat'), 'uya' 'istu'ch'L 'blanket'.

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 20 forms, listed in **1.1.a** and **1.1.c** above: 'isda:l 'sg. sitting, 'iste:l 'sg. lying;, 'ista:l 'sg. inanimate being in place, 'isqe:l 'going by boat', 'isqu:l pl. sitting', 'iswe:l 'swimming', 'isle:l 'doing', qa' 'isya:l 'awakening, 'isa:l 'sg. walking', qe'sa:l 'sg. going up', yAX 'isa:X 'walking about', 'ist'u:l 'being'. 'ists'a:nl 'being strong'; o-yAX 'isyahGL 'o being a pest', yAX 'isqe:X(L) 'boating about', yAX 'iswe:X(L) 'swimming about', yAX 'ists'i:nGX 'dipping fingers about', 'iski:nX 'weeping', 'isqa:' 'yelling', 'istu:ch' 'pl. lying', 'isxa.gL 'working' (if from 'isxa:gL-L). There is one instance of non-prefixed intransitive gerund missing the 'is-, in 'ALdah le:l, along with correct 'ALdah 'isle:l 'playing', but the reason for the former is that 'ALdah, actually an adverbial in the theme 'ALdah -le 'play (actively, outdoors)' is being treated analogically as a direct nominal object of O-Li, the irregularly related transitive, < \*O-L-le, regular gerund of which is le:l (cf. below **1.2.b**, **1.2.e**).

### b. possible use of 'is- in transitives

It appears in fact that the 'is- prefix seldom occurs with 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 to slide about', conceivably because it is derived from yAX 'ists'itlX 'sliding about', an unattested but likely frequent gerund; cf. 'uya' yAX 'Adists'itl'X 'skates', 'in them thing to cause self to slide about', an instrumental like the above **1.2.a**, 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 the latter, thus showing secondary or superficial status of the '-i-', unlike that of the '-i-' of the indeterminate object or of imperative 'i-', cf. **1.2.c** 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'.

Another apparent example of 'is- in a transitive is 'u:ch' 'ista:l 'Awa: 'taking it there'; note the reverse probable error yAX 'ute:X 'carrying it (sg. animate) about', both from Lena. The only other such errors, seem to be '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. **1.2.a**, **1.2.e**), and for which we expect 'Aw wAX ('u)le:l or ('A)le:l, and the yAX 'isxut' (Lena) for expected yAX 'ixut'X, explained above **1.2.a**, along with correct yAX 'ixe:t'[X]LX. Most likely, these forms merely show some degree of uncertainty about this relatively infrequent derivation for the last speakers of Eyak.

### c. -is- vs. zero with thematic prefixes in intransitives

Use of 'is- seems most uncertain in the case of intransitives with thematic ("qualifier") prefixes. Usually (9 of 11 instances) there is no ('is- together with such prefixes, but we do have 2 or 3 forms where it does co-occur, and in these cases it comes following that thematic prefix. These at least show that the prefixal position of 'is- is between the thematic ("qualifier") prefix zone and the stem, in the place of the four prefix positions (conjugation and mode/aspect, subject, classifier) which are always otherwise empty. One example is in dists'a:nlch'iya', followed by 'ists'a:nlch'iya' 'Strength-Master, Giver of Strength', in 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, dists'a:nl clearly shows -is- following a thematic prefix. Another example of such a sequence, probably altogether correct, is lAXisxwa:s 'being afraid' (Rezanov, 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 'i-, on the other hand, shows itself unstable and superficial in deleting completely, again, cf. above **1.2.b**, unlike the '-i-' 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 '-i-' is superficial, while the -i- quality of the vowel proves to be basic. The third example is again from Rezanov, unconfirmed, probable reading [u]k'wah 'i:nsta:gL 'forgetting repeatedly', see above **1.1.c**.

The 10 examples of the gerund of intransitives with thematic ("qualifier") prefixes and without ('is- -- for some reason much more common -- 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', dAq'e:k' 'being in a huff', 'iLlAXa:n' lAqu:g 'racing', tsin'dAle:l 'speaking. yAX XAdla:'ya:X 'sg. running about', lAgehG(L) 'being lonely, lAwidj 'being ashamed', lAXAXAL 'drunkenness' (Anna 6-17-72). Statistically these would seem to be the norm, but no systematic attempt was made to test the possibility of



including -is- in these instances, or the reverse for the above cases, so use of (')is- must unfortunately remain unclear in this respect for intransitive gerunds.

#### **d. transitive gerund object prefixes**

For transitive gerunds, on the other hand, with the uncertain exceptions mentioned above, the 'is- prefix is not used. Instead, object prefixes appear, but in third person there seems to be some uncertainty whether those are direct object prefixes (O) or postpositional object prefixes (o, the same as possessive). Much of the time it cannot be determined whether those object prefixes are of the former or latter type, since those are homophonous in the cases of indefinite k'u-, 2sg. 'i-, 1pl. qa:(-); however, in the case of 1sg., 2pl., third person, indeterminate, reflexive and reciprocal, there is a difference, the direct object being xu-, lAXi-, zero (but 'u'- in the directive), 'i-, 'Ad(-), 'iLu', as opposed to postpositional/possessive si-, lAX, 'u-, dA-, 'iL-, respectively. We have the following instances for the homophonic object prefixes: k'utsi:nl, k'utsinh 'singing (something, a song)', k'ushah 'digging (something)', k'uwah 'eating (something), a meal' (with thematic X- deleted), o-d k'uXa:l 'feeding (something) to o', k'uGAdj(L) 'paddling (canoe)', k'u'tu:l 'laziness (aversion, to something)', k'u'wAqah 'counting (something)', k'u'wa'ya'X 'begging (someone) to go along', k'uXe:l 'backpacking (something)', k'ulah, k'ula:l 'drinking (something)', 'iLt'a:nch' k'uya:' 'gathering (things)', k'uqAte:l 'carrying (living thing), pl. acts'; 'iqAXAte:l, 'iqAte:l 'carrying you sg., in pl. acts', 'iXe:l 'backpacking you', 'ilAxa:g 'raising you sg.'; 1pl. object not attested.

However, for the criterial, non-homophonic, instances, of 1sg., 2pl., 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: xuqAXAte:l, xuqAte:l 'carrying me, pl. acts', lAXiqAXAte:l 'carrying you pl., one after another', and several instances of indeterminate object: 'ich'u' 'stealing', 'igah 'dancing', sAqe:GAyu:XA' qe'le' (<qa' 'ile') 'babysitting', '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'; 'Adi:ntl'a'gL 'face-painting' for reflexive; reciprocal unattested.

#### **e. third person object: zero, 'u-, or 'A-**

However, with third person objects, where in accordance with the preceding we expect zero rather than 'u-, the results are far less clear. We have 4 examples with zero, consistent with the above: dAtux 'spitting it, on it' (Rezanov), gahG dA'a'tl' 'gum-chewing', yahd Xu' dAleh 'house-building', and 'ALdah le:l 'playing' (presumably incorrect, along with correct intransitive 'isle:l, treating opaque 'ALdah as nominal object instead of adverbialization; see above **1.2.a**, **1.2.b**) At the same time, however, we have 2 or 3 examples with what was transcribed 'u-, thus apparently with the third person postpositional object or possessive instead of zero direct object of verb: gi:wa: 'ulah 'drinking beer', sAqe:GAyu: 'ulAxa:g 'raising children', possibly also yAX 'ute:X 'sg. lying about' if misglossed for 'carrying it (animate) about'. This inconsistency is further complicated by a prefixal 'A- in forms transcribed as 'Awah 'Awa: 'eating it', where the initial 'A- of both is in fact indistinguishable from 'u-, preceding the -w-, cf. also k'uwah < k'u-ah, and 'Awa: 'for/of it/that' itself certainly either < 'u-a: 'for/of it' or 'Aw-a:

'for/of that', optionally and usually homophonous. Moreover, we do also have at least 3 different forms with a gerund prefix 'A-, which, if not an outright mishearing for 'u-, is not conditioned or neutralized by preceding -u- or following w, but instead is an optional but unexplained 'A- prefix in the absence of any other prefix: thus 'AXAkih Xu' 'Ale:l 'making a canoe' (3 instances), te'ya' wAX 'Ale:l '(commercial) fishing' 'u:ch' 'Aya:l 'taking them there'. To these might be added an alternative interpretation of the 'Awah instance above, i.e. 'A- possibly also the case of sAqe:GAyu: 'ulAxa:g above, conditioned by preceding -u:, or the reverse in the case of 'AXAkih Xu' 'Ale:l, with mishearing of 'A- for 'u- after Xu'. In any case there do appear to be phonologically contrasting cases of 'u- and 'A- in at least gi:wa: 'ulah and 'u:ch' 'Aya:l. (Cf. also the instrumental with overt object and 'A-, ts'ik' 'uX 'Ak'uhdL 'dishcloth'). According to the results in criterial non-third persons we should expect zero in either case. Moreover, in Eyak, unlike some Athabaskan, we do not expect third person possessive prefix with overt possessor; rather, we expect e.g. John-ta: 'John's father', not \*John 'uta: 'John, his father', whereas here we have e.g. gi:wa: 'ulah 'beer, its drinking'. Thus, the 'u- here is quite inconsistent even with ordinary Eyak possessive morphosyntax. At the same time, of course, given the terminal state of Eyak and the obsolescence even in that context, as noted above, of the gerund, we should perhaps not be puzzled at by such inconsistency or possible analogical formations.

Note also, in chapter on Acquisitionals, which needs to be combined with this one in some way, that in the subsection on prefix morphology items with overt object and 'u-object prefix are noted, all or four such instances with preceding labialization which could account for 'u- rather than 'A-. Note further in Addendum 5. below in subsection External syntax etc., several more instances of 'u~ 'A~ zero prefixes to verbal nouns with overt objects.

#### **f. third person object of directive, wAXah**

Finally, we have two possible instances of third person object of directives, which presumably could not be criterial, with 'u'wA- (or 'a'- ?) expected in any case. The only certain example is yAX 'u'wA'a:nX 'looking about for it', as expected.

Note also, however, the exceptionally interesting noun wAXah 'story', which could well be from the (unattested) regular gerund 'u'wAXah 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 'S camps'), the only other likely instance, related to a directive, is in wAsheh 'name', which has cognates in Athabaskan (e.g. Minto -uzra'), but for which no corresponding Eyak verb is attested, 'call O; name O' being the theme O-'l-'e (a directive, though, as in Athabaskan). The hypothesis here is that this wA- is the second half of the optional variant 'u'wA- of or alternative to the allomorph 'a'- of the third person object 'u'- in the directive, required for some reason where no syllable intervenes between that and the stem, as in 'a'wALXah or 'u'wALXah 'is telling of it', cf. 'u'yiLXah 'you're telling of it'. (– The same peculiar allomorphy applies to the future or "Inceptive imperfective" conjugation and aspect prefix qu'- ~ qa'- ~ qu'wA-). The -wA- provides or is the syllable needed to allow the -u'- allomorph in both cases. 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 possessive or postpositional but of verbal object prefix, as in the 2 instances we have of 1sg. and 2pl., 10 of indeterminate object, and 3 instances of zero for third person object. 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 of the issue in English, ‘... him drinking’ vs. ‘... his drinking’, but in Eyak we are dealing with the object, not the subject, and any role here for English influence in either direction is highly unlikely.

## 2. SYNTACTIC USE OF THE GERUND

Whatever its internal syntax, and problems just mentioned in that regard, it is clear enough that the Eyak gerund 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.

### a. prohibitive

To begin with, we have several examples of the gerund in non-verbal sentences, with the prohibitive particle ya’Xu: ‘don’t!’, mostly from Rezanov, no fewer than 8 times. Eyak has no negative imperative at all, but rather a prohibitive, with ya’Xu: plus (positive) future (“Inceptive imperfective”) of the verb, ‘prohibit that you will....!’, e.g. ya’Xu: qu’lAXi: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: lAXisxwa:s ‘no fearing!’. Most of the time, however, he got *Iakho* followed by *k”-a* or *kh”-a* or simply *k”* or *kh”*”, clearly the particle q’ah ‘now!’ (expression of urgency or impatience), possibly with the -a- devoiced, and/or reduced to proclitic q’(A)-. So for ‘don’t spit!’ ya’Xu: q’ah dAtux ‘no spitting!’, for ‘don’t row!’ ya’Xu: q’(ah) k’uGAdjg ‘no paddling/stroking!’, ‘don’t ask!’ ya’Xu: q’(ah) k’u’wa’ya’X ‘no begging to go along!’, ‘don’t swim!’ ya’Xu: q’ah yA[X ’i]swe:X ‘no swimming (about)!’, ‘don’t laugh!’ ya’Xu: q’(ah) li’X ’i:ni: ‘no laughing!’ (see above **1.1.a** and addenda **3.b**) and ‘don’t fight!’ ya’Xu: q’ah qa’ni: ‘no fighting!’ (see **3.b** below). The prohibitive construction ya’Xu: q’ah plus gerund, and several of the examples, were confirmed by modern speakers, but for some (unexplored) reason were not offered spontaneously, so may reflect some degree of dialectal difference between Yakutat and Cordova, and/or historical difference between 1805 and 1965.

### b. subject

The largest number of attestations of the gerund 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/ ‘S tires 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, 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'.

### c. object of verb; object of postposition or adverbializer, possessor

There are accordingly fewer attestations of gerund as object: e.g. '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)!', also non-gerundive. 'ida: yAX k'udAwe:X sid 'ALde'g 'teach me how one swims about!'.

Use of gerund as object of postposition was never investigated by elicitation. Examples are few but interesting: gerund as o 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'; as o of o-X in yAX 'ixe:t'[X]LX qu'xLah 'I'll go shooting about' (see chapter on acquisitional); as o 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 singing'; 2 instances from Anna in text as o of o-Xa' 'relating to o', 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', and k'uqa'she:lXa' 'for the purpose of hunting, for hunting' (see addenda below, 3.c), and, more predictably, in mAgAG 'idAle:lXa' 'AnahshAkih 'ilinhinh 'he likes playing checkers'; as o of o-ya:q' 'because of' < o-y-q' 'on hand of', lAXAXALya:q' 'because of drunkenness' (Anna 6-17-72); as o of o-ch' 'toward o', yAX 'iswe:Xch' yaX xdsi'yahGL 'I got urge to go swimming'.

We have also 3 clear examples of the gerund as subordinated to (as o of?) -dah, the adverbializer: 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's lonesome (e.g. place)' < 'something is being lonesomely' (cf. above).

As o of possessed noun, forming possessive noun compound, we have half a dozen examples of the gerund as o of o-ch'iya' 'master of, expert at o, big o-er': k'u'tu:lch'iya' 'lazybones' < 'master of being lazy', yAX 'isa:Xchi'iya' 'big walker', k'uwahch'iya' 'big eater', 'ich'u'chiya' 'master at stealing things, thief; whiskeyjack, camprobber', 'ists'a:nlch'iya', dists'a:lch'iya' (latter possibly in error, see above 1.2.c) 'Giver of Strength < master of being strong'; dAq'e:k'wch'iya' 'crabby, irritable person' (Rezanov).

## 3. ADDENDA

### a. 'ishguG

Very similar to the otherwise non-prefixed intransitive gerunds with 'is-, we have an abundantly attested form 'ishguG. 'lie, falsehood, deception', which could well be the gerund of the verb -guG, -gwAG 'lie', many times adverbialized in 'ishguGdah 'falsely' e.g. with the themes d-le 'say', O-'L-Xa/ 'tell of O'. Only once is it transcribed with 'is- (Marie); from all others, including 5 instances from Rezanov, it is always 'ish-. Nonetheless, this may well be, or have been, the gerund of -guG, especially given the labialization of stem-initial -g-, still sometimes to be heard as such in -g(w)e:Gk', the

stem of the customary, with expanded vowel -- and given above all that 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*, well attested in Tlingit. 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.

Along with 'ishguG, there is also the noun guG 'lie', which can also be adverbialized as guGdah, but which probably cannot be a gerund, since intransitive non-prefixed gerunds otherwise require 'is-. Thus there also exist nouns related to intransitive verbs, e.g. tsu'd 'sleep', k'ahd(L), k'a'd 'illness', which contrast morphologically with and very probably are not to be considered gerunds.

### b. li'X 'i:ni:, qu:lAXA'ah, 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. Nearly certain to be such is li'X 'i:ni: 'laughter', as in Rezanov's prohibitive 'don't laugh!' ya'Xu: q'(ah) li'X 'i:ni: 'no laughing!', from the. theme li'X l-le 'laugh', presumably with unique preservation here of nasal stem-initial, due to 'i:n- allomorph of thematic l- 'facially', stem -le 'act', very probably also the -l gerund suffix, with nasal umlaut of -e:- to -i:-, i.e. \*(A)n-ne:-n > 'i:ni: (see above 1.1.a, 2.a). 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 -ni: is to be expected, as Eyak seems not to allow nasalization after nasal stem-initial; cf. 'uma: 'his mother' (not \*'uma:n or \*'uwa:n, stem -a:n). 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.)

Another gerund might be qu:lAXA'ahch'iya' 'mean guy', from qu:lA- 'belligerent', XA-'ah (opaque, X- thematic, -'ah probable verb stem), -'ch'iya' ('master at o', see above 2.c)

Perhaps related to qu:lA- is the form qa'ni: 'fight', functioning as a noun, object of postposition in the theme qa'ni:Xa'X -a 'go to, get into fight', as O of qa'ni: O-L-'ya 'S fights', and in the Rezanov prohibitive 'don't fight!' ya'Xu: q'ah qa'ni: 'no fighting!'. Phonological relation with qu:lA- is unclear. The qa' might instead be the preverb qa' 'up out, suddenly', the verb stem might be an otherwise unattested -'ni:, or it might be -ni: if we have another theme l-le like the one above (in li'X 'i:ni:, where it means 'act facially'). 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', attested gerund 'ig(w)ah (see above 1.2.d), a transitive with thematized indeterminate object, 'g(w)a-ing things', opaque. Possible semantic connection may be sound of drums, but -gu:l instead of unattested -g(w)a:l is not explained. Rezanov twice

has *Kegoul'* for 'lightning', which might instead imply a stem -gAw (cf. O-gAw(i)/ 'feel O'); Wrangell has *kagiaul'* (where ia is the ya vowel) for 'thunder', which may confirm that interpretation of the Rezanov's stem, or may be a transposition (we lack Wrangell's manuscript) for *kaiagul'* for qa'igu:l or qa'igAwl.

### c. 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 'a'q' 'a:k', k'uqa'she:k', k'uqa'she:lXa' 'it (giant rat) would go (customarily) out, 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 ya'Xu: xuku'yisheh 'don't kill me!', sishehL 'I killed it', k'uqa'sheh 'it will kill something', 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 seems to allow the lexicalization or thematization of the so-called future paradigm or "Inceptive imperfective", i.e. the imperfective aspect of the Inceptive conjugation. That paradigm takes a conjugation and aspect prefix which is in fact very different both in form and in position from that of the prefixes otherwise marking conjugation and mode/aspect combination; that "future" prefix occurs to the left of the thematic prefix ("qualifier") zone, thus far to the left of the position of other such conjugation and mode/aspect prefixes, which is always empty in gerunds. As noted above, the prefix for the future behaves very similarly to the that for the third person directive object 'u'~; it can moreover either co-occur with that, immediately following, or more often even coalesce with it, e.g. ('u')qu'wALxut', ('u')qa'Lxut' 'will shoot at it'; in fact those two prefixes, morphophonemically peculiar in the same way, 'u'- directive third person object, and qu'- "future" are so entangled, diachronically and synchronically, that it is hard to be sure whether they "coalesce" or the reverse, partially duplicate. -- 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 (with its possible ancient relation to the directive), the prefix that distinguishes between 'kill something' and 'go hunt (and maybe, with luck, be going to kill something)' would be called for indeed. Thus, the gerund k'uqa'she:l 'hunting, killing something (future)' allows the one conjugation and aspect prefix that is so very different from the others and occupies a position following or the same as that of directive object prefix, in the prefix zone of slots that are freely fillable in gerunds. (Cf. separate chapter on acquisitional, and 'udAt'A:Xd 'Adqu'li:ta'L 'smokehouse' in chapter on instrumentals, and chapter on qu'- and related prefixes.)

## 4. SUMMARY

The gerund is a nominalizing derivation which converts a verb or verb phrase into a noun or noun phrase.

Internally, while the gerund allows all the prefixes in the object zone and thematic ("qualifier") zone of the verb, the four positions between the thematic ("qualifier") position and the stem are eliminated, constituting for the gerund a "forbidden zone," except for the 'is- in intransitives. Thus the gerund is unmarked for conjugation and

mode/aspect (except for Inceptive imperfective, which occurs in different position from the rest), unmarked for subject, and, even more remarkably, the gerund zeros out all classifiers, however otherwise essential those valency markers may be to the theme -- yet transitivity retains very important function in gerund morphology. For example, the gerund retains object prefixes as well as other thematic (“qualifier”) prefixes, and distinguishes between intransitive and transitive both in prefixation and in suffixation.

In suffixation the gerund takes a highly characteristic suffix -l on open stems, in both transitives and intransitives, requiring it in intransitives, but not in transitives, where it is commoner than zero but apparently optional. To closed stems it suffixes zero or -L, optionally, with zero clearly the more common, in both transitives and intransitives, equally, indifferently; the obstruent -L suffix is moreover very unlikely to be related to the -l one.

The gerund allows other derivations, e.g. those that suffix to the stem -g repetitive, and -X perambulative, as well as stem-vowel expansion for the persistentive.

In prefixation the gerund is characterized by the prefix 'is-, unique to the gerund (and a few instrumentals, a related derivation, which also suffixes an -L), The 'is-, however is not prefixed to transitives, but only to intransitives, where it is required when there are no other prefixes, but with thematic prefixes it usually does not appear, with some exceptions, in which case it follows the thematic prefix with the allomorph -is-.

In transitives, the regular direct verbal object pronoun prefixes consistently appear, not the postpositional object prefixes (= possessive prefixes), with the partial exception of the third person object pronoun, where instead of the expected zero, sometimes the 'u- of the possessive appears, or a 'A- of unclear status and identity.

A few questions that might have been answerable will have to remain unanswered, for lack of systematic inquiry some decades ago: e.g. perhaps most notably, 1) on the third person object just mentioned, 2) whether the customary derivation can be used (stem-vowel expansion, and suffix -k'), 3) how much choice is allowed for zero suffix instead of -l in transitives, 4) how much choice of -is- is allowed in intransitives with thematic prefix, 5) how much the use of the future (“Inceptive imperfective”) prefix is allowed beyond the one attested instance k'uqa'she:l 'hunting'.

## **5. ADDENDUM ON VERBAL NOUNS (5-18-10) and overlap with instrumentals**

It should have been predicted, from the fact that there are both open and closed verb stems with zero suffix in gerunds above (1.1.b.-c.), and certain conditions allowing zero prefix with both intransitive and transitive gerunds above (1.2.c.-e.), that there could and perhaps should also be gerunds with both zero prefix and suffix, i.e. bare verb stems as gerunds. In the process of scanning the ledger corpus for nouns, in preparation for writing the chapter on nouns, a few dozen such did of course come to light. These are to be called verbal nouns. Many are from Rezanov, i.e. first attested in Rezanov, further suggesting that gerunds were more freely used in Yakutat 1805 than Cordova 1965. The relative frequency of these forms in Rezanov may have something to do with the fact that Rezanov's glosses or elicitations are in the infinitive, he certainly being 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.

They are derived from both intransitive and transitive themes. That they are so derived can be shown with basic themes requiring non-zero classifier, by the fact that the

classifier is deleted in the verbal noun, e.g. dAtl' in dAtl'yAXa' GA'ya:L 'he's succumbing to an old disease, injury', from L-dAtl' 'suffer injury'; 'Gu' 'warmth; sweat', Gu'ya', Gu'yAq'd 'in warmth', from dA-Gu' 'S is warm', usually Active imperfective stative, cf. instrumental Gu'L 'blanket'; qahdX 'cough' in qahX 'AdGAXgAwi'L 'I'm catching cold (feeling a cough)', from LA-qahdX 'S coughs'; qa:' 'yelling' in qa:'dahd 'yelling voice', from LA-qa:' 'S yells'; qa'dg 'boiling' (with repetitive suffix), Rezanov 'to cook', la'mahd da' qa'dg 'canned fruit', i.e. 'boiling (declassified) berries into jar/can', cf. next, from LA-qa'dg 'S cooks, boils, O-L-qa'dg 'cook, boil O', passive O-dA-qa'dg 'O is boiled'. More of these can be shown with qualifier prefixes: da' lAXAqa'dg 'berry preserves', i.e. 'boiling (of berries) into jar/can'; dAxe:g 'whistling noise', from d-LA-xe:g 'S whistles', cf. relativized Active imperfective dALAXe:g 'marmot, "whistler"'; yAqah 'daylight, dawn, morning', from y-L-qa '(daylight) dawns', also yAqe:X 'tomorrow' (-X suffix and derivation unclear); dA'a:t' 'bawling' in dA'a:t'ya'X Ga:Linh 'he's walking along bawling, in a bawl' and XAwa:yu: dA'a:t'dahd 'dogs' howling noise' from d-dA-'a:t' 'S bawls, howls'.

There are of course several more verbal nouns of the same type but which can therefore be said to be derived from basic verb themes with zero classifier, so cannot be shown in minimal pairs contrasting with non-zero thematic classifiers. They are at the same time then homophonous with the third person Active imperfective of the verb, and at least in some cases could hypothetically be (usitative) relativizations thereof. These come from a wide range of theme types. E.g. intransitive Neuter imperfective stative: th'eh 'chill, coldness, cold (illness)'; intransitive action themes: tse'q' xusALga'L 'I need to urinate' < -tse'q' 'S urinates', Xa:s 'itch' < -Xa:s 'S itches' (persistent), with d-thematic qualifier, dAq'e:k' 'angry, anger' (Rezanov), dAq'e:k'ch'iy'a' 'nasty, snappy person' d-q'e:k' 'be irascible'; transitive action themes: tl'i:ts'- in tl'i:ts'ga' 'AdiLit'inhinh 'he (baby) is soaked (with urine)' < O-tl'i:ts' 'soak O', tsi:ndz 'dream' < O-tsi:ndz 'dream of O', tsi:nG-ta.' man's name' < O-tsi:nG 'grab bunch of O', wa'ts' 'weaving' < O-wa'ts' 'weave O', yahddAt'a'X 'ehdz 'in-house potlatch' < O-'ehdz 'summon, invite O', with and without class-mark qualifier: gahG dA'a'tl' '(act of) chewing gum', 'a'tl'yA'e'd 'bite-mark' < O-'a'tl' 'chew O'; intransitive Active perfective statives: gehsdah 'poor, pitiable' (adverb) < -gehdz 'be poor', Ge' 'seasickness' in Ge'ga' 'AdxdAgAwih 'I feel seasick' < -Ge' 'be seasick'; intransitive locomotion: Xa: 'movement of fleet of canoes; war' < -Xa 'fleet of canoes moves', a loan from Tlingit; and at least one instance for which no verb could be elicited, but which semantically seems to belong to this class: Xanhga' '(feel) like bursting into tears', Xanhdah k'u:t'eh 'place has very sad memories' (Lena heard Minnie Stevens say), Xanh o-la'X d-'ya 'crying fit comes upon o'. Finally, one possible segmentation, -dAG-A-leh, of -dAGAleh (noun) 'mind' could be added here, as o-dAG 'above o' postposition as preverbal and -leh 'act' (verbal noun), for the -A- of which see the items with o-dAG- in the chapter on instrumentals.

Possibly to be added here, in addition to tse'q' 'urinate' are e.g. wAt' 'vomit', ch'e' 'feces', tux 'spit', kus 'urine for washing', listed under nouns in the subsection on nouns, here body products, which can occur both possessed and unpossessed. Stems which can be considered both verbal and nominal are an open category.



The above constitute an additional morphological category, lacking both overt gerund suffixes (-l and -L), and prefix ((')is-), so are mostly additional to those listed in the earlier written chapter on the gerund. The following, however, have affixation treated either in the earlier part of this gerund chapter, or affixation which is treated in the chapter on instrumentalization, so show the linkage between instrumental and gerund.

Treated earlier here (**1.2.d.**) were gerunds of transitives with overt object pronouns and zero suffix, to which may be added k'uAduh '(act of) fleshing (something, i.e. skin)' (Rezanov, not included in dictionary), with "open" but invariable stem, to which Lena therefore rejects the suffixation of -l (\*-du:l, \*-duhl). It is not clear whether this is "homophonous" or a minimally contrasting pair with k'u:nduh 'unfleshed skin', quite coincidentally, by non-application of optional rule (\*nA >) lA > n/V\_\_T where T is coronal verb stem initial or classifier, from theme O-l-duh 'flesh skin'. Also to be added here is k'u'wAqah '(act of) counting (something)', from the directive O-'-L-qa/ 'count O'; \*?k'u'wAqa:l, \*?k'a'qah, \*?wAqah etc. were not tested; cf. wAXah 'story' earlier above (**1.2.f.**). Note also 'ALqah '(act of) playing cards', probably same stem, and where 'AL- is a segment perhaps not to be identified with verbal prefixes or L classifier, in spite of its appearance; cf. 'ALdah 'play (game)'.

#### **Zero ~ -l suffix to open stems**

Also to be added here to the types of gerund discussed earlier above under **1.1.a.** and **1.1.b.** with open variable stems which are, most interestingly, attested both with and without the suffix -l. Earlier, they seemed to be in complementary distribution, but that is not quite the case. One theme which is attested both ways is k'utsi:nl and k'utsinh '(act of) singing (something, i.e. a song)', which may optionally(?) have different meanings; we have both k'utsi:nl and k'utsinh xugaIGA'L 'I'm getting tired of singing' from Marie, and k'utsi:nl(A)ya'X -a 'go along/about singing', but k'utsinh is also glossed 'song' and 'phonograph record, phonograph player'; in addition we also have what may be the bare verbal noun tsi:n(y) 'song' (Lena, Rezanov *tsyia*), that too also glossed 'phonograph record'. The exact ranges of meaning of these 3 forms were, it can be seen, not adequately tested. Also to be added, certainly, is the very productive -'ya 'be involuntarily situated', 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 at least 5 verbal nouns: 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'; dAlu' qa' la'yah 'boil, carbuncle'; la'q' lAXA'yah 'old berries'. These together may begin to give some idea of the semantic difference between gerund and verbal noun; if e.g. \*?la'ya:l (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'. Certainly to be considered here is the closed stem verbal noun ki:nX 'weeping, howling; tears' from intransitive -ki:nX 'weep'. For this we have a minimal pair with the gerund 'iski:nX as in 'iski:nX xugALga'L 'I'm getting tired of crying'. The verbal noun has the extended meaning 'tears' (as gl- 'liquid' class noun, cf. Gu' 'sweat', from 'heat'), probably not to be expected from a gerund. However, the verbal noun is also evidently preferred here over the gerund as o of postposition, e.g. in

ki:nXya'X yAX da:Xinh 'he's walking around crying' (cf. the gerund in k'utsi:nAyA'X yAX da:Xinh 'he's walking around singing'), with o-ch'iya' 'master of o' in ki:nXAch'iya' 'crybaby' (cf. the gerund in yAX 'isa:Xch'iya' 'big walker'), or even as subject ki:nX 'ula'X di:'yahL 'he has an urge to cry', ki:nX Xa:n' si'yahL 'I got over a crying spell' (intransitives, cf. the transitive 'iski:nX xuGALga'L 'weeping is tiring me, I'm getting tired of crying'). Conceivably syntax may provide some better explanation than semantics of the difference between verbal nouns and gerunds.

#### **-L or zero ~ -L suffix to closed stems**

Of still broader import regarding morphological and/or semantic categories are the closed stem verbal nouns that have suffixed -L or sometimes have suffixed -L, as these connect with those listed with suffix -L in the chapter on instrumentalization. It was noted that some of the instrumentals listed there, e.g. tsahgL 'legend' from O-tsahg 'tell legend of O' could be taken just as easily as the act or even result of the action as well as the means or instrument of the action. The difficulty of drawing this line is well exemplified by the verbal nouns to be added here.

Furthermore, just as it is shown (1.1.b.) that closed-stem gerunds occur or are attested with both -L suffix and with zero, and some with either, and those with zero are by far more frequent, unsurprisingly, verbal nouns can be shown to be quite similar in this respect. Over 20 such verbal nouns are already cited above, attested only with zero suffix, but about 9 more are attested sometimes or only with -L suffix.

#### **Semantic contrast potential between gerund, verbal noun, instrumental**

Before going on to deal with the connection between -L-suffixed verbal nouns and instrumentals, we shall consider first plus-minus -L suffix and any potential function or meaning to the difference. The conclusion under the circumstances must be that we can discern no such, either because there was none, or because the matter was inadequately investigated. We have only the statistics. There was perhaps no attempt to elicit -L where only zero is attested, or zero where only -L is attested.

There are only 4 additional verbal nouns attested with -L and not zero. One, suhgL, is attested 15 times, mostly from Lena, but also from Rezanov and Galushia Nelson, but only adverbialized as in suhgLdah O-Le 'seriously injure O'; another is ca'nik'L 'funny thing, joke', attested 7 times. Two more are clearly from attested verbs: dje:gL in dje:gLga' 'i:t'eh 'it's a mess, all tangled up' and with gu- class-mark 'filament-like' qualifier gudje:gL 'cat's cradle' (Galushia Nelson) from O-L-dje:g 'tangle O'; and 'uhdzL in 'uhdzL siXa:N' yAx wAX sAliL 'I got shivers all up and down my spine' < 'shivers acted downwards the length of me', from L-'uhdzg 'S tingles', with -g repetitive.

The following, about 5 items, are attested with both zero and -L. Abundantly attested is tsu'd 'sleep', so with zero suffix 15 times (including Rezanov, Wrangell, Furuhjelm), but once with -L from Lena (though 8 other times from her with zero). Likewise k'ahd 'pain, sickness, fever', 8 times with zero (including Rezanov, Galushia Nelson) and 9 times as k'ahdL; however, those 9 are once from Marie and the rest are 9 consecutive elicitation from Lena adverbialized in k'ahdLdah, which may merely be a phonologically motivated preference. Very interestingly related to that is k'a'd 'illness', but especially 'insanity' in k'a'dya' -'ya 'go crazy', attested only with zero suffix, many times, a verbal noun which belongs above with the other 20 attested only with zero

suffix. Minimally attested with both -L and zero are two more verbal nouns, both from Lena: ts'u:( )lAwa'L 'ice cream' < 'grinding up of milk', later ts'u:( )lAwa', perhaps as a "correction;" the grinding concept may well come from cranking a home ice-cream making machine; conceivably the form with -L might better refer to the machine ('grinder'), that without to the ice cream. Another possible "correction" might be lAgehGLdah k'u:t'eh 'lonely place', later lAgehGdah k'u:t'eh or lAgehGga' k'u:t'eh; note again here also the -L especially with adverbializer -dah. Finally, tsahg 'legend' (< O-tsahg 'tell legend of O') we have from Galushia Nelson and Lena each once with zero, but 3 times from Marie as tsahgL; cf. that listed as an instrumental in the chapter on instrumentalization.

In the chapter on instrumentalization, it should be noted that about 20 of about 70 instrumentals listed there in sections **3.b.** and **4.** have the suffix -L in parentheses, i.e. the suffix is optional. Given that these were first noted for a chapter on instrumentals, though for some the semantics are at least questionable, it is hardly surprising that the statistics are something like the inverse of the rate of incidence of suffix -L for verbal nouns. In this light many of the instrumentals listed in that chapter as such need to be re-examined as verbal nouns, and the problem of the relation or distinction between -L instrumental and -L gerund or verbal noun needs to be better understood. Included therewith should be the question of -L instrumental which yields CV'L from variable open stems as opposed to that which yields CVhL. One thing clear is that the instrumental suffix is always -L, even with variable open stems, except sometimes zero with closed stems, though much less often than is the gerund or verbal noun. The gerund uniquely has -l on open variable stems, and for closed stems that and the verbal nouns have zero or -L (conceivably related to the -l, but not probably), zero being much the more frequent. We have one very obvious and unsurprising minimal pair, Gu' 'warming, heat; sweat' and Gu'L 'blanket, instrument for warming'.

### **Prefix 'ish-**

Finally, also as addenda to earlier addendum **3.a.**, are the following. The statistics for the abundantly attested gerund with unique allomorph 'ish- for the gerund prefix 'is-, and verbal noun without 'ish- should be noted. Without the adverbializer -dah we have 5 instances of the verbal noun guG 'lie' (2 of those as o of postposition), and only 2 of the gerund 'ishguG (one of which is from Rezanov). Adverbialized, on the other hand, we have 7 instances of the verbal noun, guGdah, and fully 15 of 'ishguGdah (including 4 from Rezanov). It should be duly noted, moreover, that all 29 instances are without the -L suffix.

In this category, incidentally, was mentioned 'ishta: 'long ago' as the only other item with the potentially pejorative -sh- instead of -s- (cf. Tlingit). 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 open-stem gerund 'ishta:l.

### **External syntax; 3<sup>rd</sup> person object prefix; adjectivals**

Further comments on the syntax of this additional material should be included. Of the 8 instances of "gerund" in prohibitive in Rezanov, at most 3, 'don't swim!', 'don't

laugh!', and perhaps 'don't fight', have overt gerund affixation. The other 5, closed stems lacking both -L and 'is-, could be reclassified as verbal nouns. For the most part, the additional verbal nouns merely add to the exemplification of gerunds as subject and object and o of postpositions and (especially!) adverbializer, or possessor of -ch'iya' 'master of'. One interesting such addition is several instances as o of o-ga' 'like o, same as o' and in that connection especially one instance of o-lAX 'more than o', in k'ahdga' 'sickly' and k'ahdlAX 'sicker' (therewith probably also, presumably k'ahd'u'X 'less sick').

Perhaps most important, however, are additional instances of overt noun object of verbal noun with the verbal noun and without object prefixation: la'mahd da' qa'dg 'berry preserves' < 'boiling (of) berries into jar', ts'u:( )lAwa'(L) 'ice cream' < 'grinding (of) milk'; or even overt subject in XAwa:yu: dA'a:t'dahd 'sound of dogs( ) howling'. These can be added to the 4 instances cited earlier above (1.2.e.), e.g. gahG dA'a'tl' 'gum-chewing' as instances of "gerund" (i.e. verbal noun) with overt noun object and zero object prefix. Note, however, the contrast with the overt noun object and 'u- or 'A- prefix in the instrumental t'sik' 'uX 'Ak'uhdL 'dishcloth' and regularly in the gerunds earlier above, e.g. gi:wa: 'ulah 'drinking beer', which might be supposed to suggest a morphological contrast between gerunds (or instrumentalizations) and verbal nouns. Conceivably both 'ice cream' and 'dogs' howling' could both come from or easily enough be misheard for the sequence -u:( )'u-, but not e.g. 'gum-chewing'.

In this connection also the final section in the chapter on adjectives "Adjectival use of themes other than Neuter imperfective" also needs to be revised, so e.g. sa:q'sgdA'ehdg 'dried dulse' should perhaps be reinterpreted as verbal noun phrase sa:q'sg dA'ehdg '(result of) drying (of) dulse'; likewise perhaps dA'e:dzg 'dried fish meat', as in te'ya'le:( )dA'e:dzg 'dried king salmon meat', q.v. in dictionary 1970. In any case, the classifier is deleted in these forms as in gerunds and instrumentals. Note further another "adjectival use" of verb theme, listed in the instrumentals chapter at the end of 4. "-L-stem-L", -L-ga'L 'old worn-out', from -ga/ 'S tires/wears out', where the -L- is presumably not a classifier, e.g. ch'iyahd( )lALga'L 'battered old hat', so also belonging here, further connecting all categories in that chapter to this one.

### 'is- prefix

Finally, still further relating the morphology of gerunds to that of instrumentals is that even the prefix 'is- is not unique to gerunds but is shared at least to some extent with instrumentals. Not only do we have the three instrumentalizations 'uq' 'isda'L 'chair', 'uq' 'iste'L 'bed' (cf. da'L canoe seat' and te'L 'mat', 'uya' 'istu'ch'L 'blanket', but also a fourth in 'uya' yAX 'adistsitl'X 'skates', "zero [instead of -L instrumental] suffix, Marie, << in it (with opening at top) cause self to slide about', perambulative reflexive causative of -tsitl' 'slide', intransitive, therefore, perhaps irregularly, with -is- as in the intransitives cited above".

**Addendum** 6/12/10. In writing up the subsection on "Unpossessed nouns with qualifers" in the chapter on nouns, more items classed a nouns came up which might as well or better be seen as verbal nouns, gerunds, or instrumentals, so those also should be considered here.

dA-'e:'sh need to be added to verbal nouns, < O-d-'e:'sh 'string O', sahx dA'e:'sh 'dried cockles on a string', and dA-'e:'sh te'ya' 'dried salmon on a string' Lena, but understandably wrong either for relativized dAdA'e:'sh te'ya' 'salmon which are strung', passive, or te'ya' dA'e:'sh, as I noted (even if I wasn't so conscious of verbal nouns at the time) in the dictionary.

k'u:-n-da'-ch' gah 'prayer' ('dance towards one's head-front')

## INSTRUMENTALS

There are three derivational nominalizing processes for forming instrumental nouns from verbs (or verb themes or verb bases). One is simple relativization of the verb phrase, e.g. 'uq'Ach' k'udAts'AX 'anvil' < 'that on which something is pounded', relativization with zero suffix for non-human subject and object, of 'something is pounded on it', from theme O-L-ts'AX 'strike O'. This simple relativization might best even be called "pre-instrumental." There is certainly a semantic cline between what may be considered an instrument as opposed to mere nouns or noun-phrases. Possibly a line could be drawn according to the possibility – unexplored – of applying the instrumentalization derivation to these "pre-instrumentals." The second process is this instrumentalization of such relativizations by deleting all elements (including the classifier) in the prefix position zone between the thematic prefixes and the stem, and suffixation of -L to the stem, a process closely related to that in the formation of the gerund and of the acquisitional; e.g. 'uq'Ach' k'uts'AXL 'anvil', further derived from the preceding, exactly the same meaning; or 'uX k'udzu:xL 'awl' < hypothetical 'uX k'udAdzu:x 'that with which something is pierced', theme O-dzu:x 'pierce O' The third process is use of the verb-stem alone, with an -L suffix, presumably related to the -L of the preceding type, e.g. dzu:xL 'spearpoint'.

These three types of instrumentals will be taken up in the order given above. The first type, though morphologically the most complex, is in a sense the simplest. The second, being merely a further derivation of the first, is next simplest. The third, just the verb stem, sometimes thematic prefix, plus -L suffix, it will be seen, is the most complex to present, being essentially more abstract, and involving a variety of both semantic and phonological processes that are less concrete to account for.

### 1. RELATIVIZATION

As instruments are essentially non-human, and the only overt relativizing suffixes are (anaphorical) 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 posposition 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-stem '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 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 k'u- 'something' as object, but some are active, with k'u- 'someone' as subject, as is of course 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 here, especially to include items which, or items similar to which, are attested as further derived instrumentals of the next category, instrumentalizations, to be shown on the next section (2.) below. Thus e.g.: 'uX wAX k'udAleh(yu:) 'tools and materials (pl.)' < 'that/those by means of which something is made', '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) chiseled' (cf. 'uX k'udza'tl'gL 'chisel', 2. below), 'uX 'iLch' k'udAgAXts'g 'glue, paste' < 'that by means of which something is stuck together', 'uX k'udAqah 'pliers' < 'that by means of which something is gripped (as between teeth)' (cf. 'uX qa' k'uqa'L 'pliers' 2. below), 'uX k'udAq'Ats' 'pincers' < 'that by means of which something is pinched' (cf. 'uX qid k'uq'Ats'L 'candle-snuffer', 2. 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', 2. below), 'uyAq' k'uda'mahd 'oven' < 'that in which something is baked', 'udAyAq' [k]u'xu'tl'g 'fife' Rezanov < 'that with sound into which one repeatedly blows', 'udAyAq' Ach' k'u'xutl'g 'bugle' < 'that with sound continually into which one repeatedly blows', 'uX k'udAwa'ts' 'whip' < 'that by means of which someone is whipped' (cf. wa'ts'L'whip', 3b. below), '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', 3a. below), 'utl' k'uXAdah 'pepper' < 'that with which something is eaten', 'uda:q' Ach'ahd k'uXAdah 'table' < 'that (d-class) from the surface of which something is eaten', 'uX k'uti:lAdAsinhXg 'skin-scraper' < 'that by means of which something skin-like is scraped', cf. 'razor', 2. and 3. below, 'uq' Ach' k'udAts'AX 'anvil' < 'that on(to, with repeated movement) which something is pounded' (cf. 'uq' Ach' k'uts'AXL 'anvil' 2. and 5. below), 'uq' Ach' t'a'q'e'ch' k'udAGAdjg 'oarlock' < 'onto it backwards something is paddled' (cf. 'uq' Ach' k'uGAdjgL 'oarlock', 2. below), 'uya'X k'udAkus 'washing machine' < 'that (with broad opening at top, movement) in which something is washed' (cf. 'uyaX 'AdlAkus 'washbasin', 'uyAX 'ikusL 'washing machine' and GAlAkusL 'scrubbrush', 2. below), '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', 1. above, 'uX k'udAxu'tl'L 'bellows', 2. below). With at least one stem the expanded (persistive) form is used: 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 face' (cf. 'towel' and 'dishcloth', 2., and k'uhdL 'moss', 3b. below), 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', 3a. below)

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: 'uq' k'uteh 'bed, sleeping-place' < 'that on which someone lies' (cf. 'uq' 'iste'L 'bed', **2.**, and te'L 'mat', **3a.** 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) in which someone lies'. Somewhere within what must be a huge semantic gray area between simple relativizations and instrumental would be sAqε:ts'Akih 'uyAq' dah or sAge: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).

## 2. INSTRUMENTALIZATION

Most closely resembling the gerund is the derivation from relativizations of the type above from the few postural intransitives we have, showing the same 'is- prefix in the prefix zone which is otherwise empty here in this second type of instrumental, as it also is in the gerund . The difference here is that instead of suffixing -l to an open stem with the result CV:l, the derivational process of instrumentalization suffixes -L, with the result CV'L, thus 'uq' 'iste'L 'bed, sleeping-place', synonymous with 'uq' k'uteh 'that on which someone lies', **1.** above; cf. also the gerund 'uq' 'iste:l 'lying on it'. Thus also 'uq' 'isda'L 'chair, seat', and 'uya' 'istu'ch'L 'blanket' < (unattested) 'uya' k'utu'ch' 'that (with broad opening at top) in which someone (pl.) lies'. Those are the only intransitive instrumentalizations with prefix 'is- that we have. One other form, with Gl- 'thematic 'passage of time', k'uGa:nta'L 'soul' might somehow be parsed as 'instrument by which someone lives', but more likely is from (unattested) k'uGa:ndAtah passive causative 'someone is kept alive, made to live'.

By far the most typical instrumentalization is from the usual type shown in the section above, with postpositional phrase, passive verb, but with dA- classifier of course deleted, and -L suffixed to open stem; to closed stems -L is usually suffixed, but not always. Many of the examples cited may be compared with related forms in the first class as shown above (**1.**) and/or in the third shown below (**3.**). Also, it will be seen that a disproportionate share of the items in this second class are from Rezanov, for which the modern informants often offered interpretations that are cited in the first class, thus implying some difference in preference, dialectal and/or chronological, for the relativizations over the instrumentalizations thereof. A large proportion of these are cited, as follows: 'uq'ach' k'uts'AXL 'anvil' (Rezanov, cf. 'uq'Ach' k'udAts'AX, **1.**above), 'uX k'utl'a'gL 'ink' (Rezanov, verified, << O-L-tl'a'-g 'make marks on O'), 'uya'd k'ut'u'L 'container' (Rezanov, verified, << 'in it (with broad opening at top, at rest) something is kept'), qa:lah wAX qu't'u'L 'fence around grave'(see **4.** below), 'uX k'udza'tl'gL (Lena), 'uX k'udza'tl'g (Marie, with zero suffix) 'chisel' (cf. 'uX k'udAdza'tl'(g) **1.** above and dza'tl'(g)(L) **3b.** below), 'uX k'udzu:xL 'awl' (Rezanov and Lena, cf. dzu:xL **3b.**below), 'uya' yAX 'Adistsitl'X 'skates' (zero suffix, Marie, << 'in it (with opening at top) cause self to slide about', perambulative reflexive causative of -tsitl' 'slide', intransitive, therefore, perhaps irregularly, with -is- as in the intransitives cited above), 'uX k'utsa'L 'plane' Rezanov only, and for some reason not in Eyak dictionary 1970, *oxkotsaal'* where the double -aa- in the stem reflects -a'-, probably very clearly pronounced even with echo vowel; cf. tsa'L **3a.** below), '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) self scrapes face', cf. 'razor' 3b. 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. 'uX 'Adk'u:nLak'u:d 1. above and k'uhdL 3b. below), 'uX k'udAxu'tl'(L) 'bellows' (Rezanov; final -L here indistinguishable from zero; cf. dAq'a:g 'uX dAdAxu'tl'g 1. above), 'uX qa:nch' k'uxuLg 'corckscrew' (<< 'with it something is repeatedly turned upwards out', lacking -L suffix), 'uq'Ach' k'uGAdjgL 'oarlock' (cf. 'uq'Ach' t'a'q'e'ch' k'udAGAdjg 1. above), 'uX ka k'uqa'L 'pliers' (Rezanov, ka perhaps qa' 'up out'; cf. 'uX k'udAqah 1. above), 'uya' lAXAqAtl'(L) 'mortar and 'uX lAXAqAtl'(L) 'pestle' (both Rezanov, << 'that in which granular is rubbed' and 'that by means of which granular is rubbed', both unverified), 'uX qid k'uq'Ats'L 'candle-snuffer' (Rezanov, cf. 'uX k'udAq'Ats' 1. above, here << 'that by means of which something is pinched off', unverified), 'uX k'uq'a:'shgL 'pressing-iron' (<< O-(L)-q'a:'sh-g 'smooth O flat'), 'uyAq' 'iq'a:gL 'stove' (Anna, cf. 'uyaq' k'u'Lq'a:g 1. above), 'uyAq' q'a'L 'oven' (Rezanov, << O-q'a 'burn O', more probably belonging 3a. below in the third type), 'ugu:nAX k'uXe'L 'paint' (<< o-gl-X O-L-Xe' 'grease/paint O by means of o (gl-class, liquid)'), 'uX 'AdlAXe' 'mountain goat fat for face' (Galushia Nelson, << 'with it self's face is smeared', lacking -L suffix), 'Adi:ntl'a'gL 'face-painting' (basket-decoration pattern, Galushia Nelson; << 'self face markings'; more result than instrument, and more probably a gerund instead), k'uXehL (= k'uXehLL) 'rope' (<< O-L-XehL 'tie O', cf. XehL 'backpack', 3a. below), 'uX ya' k'uXehdzL 'meat chopper' (<< ya' O-Xehdz 'chop O up'), 'uyAq' yAX k'u'an'L 'telescope' (Rezanov, << O-'-'an 'look at O'), 'utl' dAlu' qa' k'u'a'L safety-pin' (<< 'with-it through-hole up-out something-is-put/extends'?, cf. 'ring', 'necklace', 'lantern', 'hip', 3a. below), 'uX GAlAsha'tl'L 'broom' (<< O-Gl-dA-sha'tl' 'sweep O (floor)'), 'uX GAlAkusL 'scrubbrush' (<< O-Gl-kus 'wash O (floor)'), 'uya'X 'AdlAkus 'washbasin' (<< 'in it (with broad opening at top) self's face is washed'; zero suffix), 'uya'X 'ikusL 'washtub' (cf. above 'uyA'X k'udAkus 'washing machine', 1. above, and 'idAkus 'do laundry', with indeterminate object), 'uya'X yAX k'u'ya:gL 'dye' (<< 'in it downward, -L-'ya-g 'repeatedly be situated in vessel'), 'uya' yAX k'uya'L 'tray' (Rezanov, << 'in/on it downward some things are put'), 'uyAq'Ach' k'uya'L (or k'uya:'L) 'storage-box' (Rezanov, << 'repeatedly into it (enclosed) some things are put'), 'uX ya'd k'uya:' 'pier' (<< 'by means of it some things are unloaded one after another out of boats'; with zero suffix), 'uq'Ach' da:X 'ita'L 'stretching-frame' (<< 'on it (continuously) across indeterminate O is put'; cf. da:X ta'L 'stretching-frame'. 3a. below), 'uX dAda'd k'uXAdAta'L 'key' (Rezanov, << 'by means of it something is opened', cf. 'Aw Le't' dAda'd XAdAsAtahLinh 'he opened the box'; so this is very possibly a spontaneous coinage by speaker observing 1805 demonstration; modern 'key' is gAlu:dj, loan from Russian); 'udAt'a:Xd 'Adqu'li:ta'L 'smokehouse' (<< 'in the shalter of it (d-class), Ad-O-'-l-d-A-ta 'smoke O (fish, for self(?)); note the use of qu'-' 'future' here, as well as in gerund k'uqa'she:l hunting' and acquisitional k'uqu'wAshe:ch'L 'to hunt'); k'u:ta'L 'floor' (analysis unclear, especially : in prefix; correctness uncertain; cf. qu'Lta'L 'floor', 4. below).

Note that of the 34 closed-stem examples cited here, only 6 are clearly with zero instead of -L suffix. However 17 of the 34 are from Rezanov, always with -L, or possibly so, so all 6 definitely with zero are from the more modern speakers, as opposed to 11

with -L. Note that the zero/-L proportion here is nearly the opposite of that for the closed-stem gerunds, where zero is by far the more frequent.

It is certainly also noteworthy that over half of the total of the instrumentalizations cited here are from Rezanov, 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 the dialectal and/or chronological difference in preference mentioned above.

We have one item, ts'ik' 'uX 'Ak'uhdL 'dishcloth', from Anna, which is difficult to assign, either to this instrumentalization group, or to the following group, with overt specific object tsi'k' 'dish', 'uX 'by means of it', k'uhdL 'wiper' (see **3b.** below) prefixed (or joined) with 'A-, highly reminiscent also of that which occurs in some gerunds with overt object. Cf. also the "connective" -A- in e.g. XAdAG-A-dAya'L 'fish-drying rack', **3a.** below.

### 3. -L-SUFFIXED STEMS

This third type is by far the largest and most difficult to define rigorously, for several reasons. First, there are a number of suffixes of the form -L. Some of these are of course easy to define as different from that for instrumental, most notably that for all perfective verbs. Less easy are the following, in the absence of the prefix morphology that characterizes the previous two types. For type one we see the full verb morphology of the relativized Active imperfective verb phrases, including postpositional phrase, k'u- object or less frequently indeterminate object 'i-, or overt object, dA- classifier from passivization, or less frequently, non-passive, with k'u- subject. For type two we see the same k'u-, 'i-, or overt object, no classifier, and postpositional phrase, plus open stem as CV'L, closed stem sometimes with zero, but much more often with -L.

With only the -L, or zero(!), to distinguish an instrumental from other nouns, distinguishing the former obviously becomes more difficult. Semantics is often a help, but not always. First there is the huge semantic gray area, e.g. xa'ch' 'knot, something tied' (Lena once) but more often x(w)a'ch'L (Rezanov 3 times, Lena once; cf. 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), or tsahgL 'legend' (Marie only, three times), also tsahg (Lena, Galushia Nelson 1938 *tsa:q* presumably to be read tsahg 'story'; cf. O-tsahg 'tell O (legend)', raising the question whether the legend is the means rather than the result of the action); note also 'vomit', usually wAt', once wAt'L, wAt'-ga' 'like vomiting, nauseated', -wAt' (possessed) 'vomit' (Lena), 'belly, stomach' (Rezanov, Anonymous 1812, also PA; Eyak verbs -wAt' 'vomit', O-L-wAt' 'vomit O').

Then there are many further instances with apparently optional -L where the noun is clearly enough an instrument, e.g. Xa'tl'gL, Xa'tl'L, or Xa'tl'g 'club' (cf. O-L-Xa'tl' 'club O'), where Lena once specifies that Xa'tl'g "sounds better", or XuhLg 'shovel' 18 times with zero, including Rezanov, once XuhLgL (cf. O-XuhL-g 'shovel O'), raising the possibility that at least with closed stems, zero suffix is in fact an optional variant of -L, as it certainly is with closed stems in the type above, and in the gerunds with closed stems. That then raises the question whether nouns with closed stem that have no -L suffix or usually no -L suffix and are in the gray semantic area, are in fact also instrumentals: e.g. 'sleep' almost always tsu'd, 13 times (including Rezanov, Wrangell, Furuhjelm), once tsu'dL, 'pain, illness' k'ahd, k'a'd 90% of the time, k'ahdL, k'a'dL

10%, implying perhaps that -L is analogical. In the same way never with -L but not tested for acceptability with -L, we also have ki:nX ‘weeping, tears’ (-ki:nX ‘weep’), or even e.g. gahG ‘pitch’ (O-L-gahG ‘glue/smear O with pitch’). Thus, with or without -L, we have the question whether e.g. ‘knot, legend, vomit, sleep, pain, weeping/tears; pitch’ are the cause/means or the result of the verbal event/action. We certainly also have the question whether the noun is derived from the verb, or the verb is derived from the noun, or the possibility that some Eyak stems can be inherently both. It is also clear that these semantic questions and analogy are something of a problem for Eyak speakers as well, as we see e.g. in the case of ‘barbed or pronged harpoon/spear head’ xahd 12 times (Lena, Marie, Sewock. Anna, Galushia Nelson, Jakobsen), but xahdL from George Johnson (3 times); the only verb that could be elicited with that stem is O-L-xahd ‘make O into xahd’, where clearly the verb is derived from the noun, an example of the only such productive process for a fair number of noun stems; thus Johnson’s -L has to be analogical.

### a. Open Stems

At the other end of the definability scale, we have of course a few very clear instances of -L instrumental nouns simply derived from the stem of verbs. First we have open stems, with the result CV’L: te’L ‘mat’ (cf. -te ‘sg. lies’, also ‘uq’ k’uteh, **1.**, ‘uq’ iste’L ‘bed’, **2.** above), and da’L ‘canoe seat’ (cf. -da ‘sg. sits’; also ‘uq’ ’isda’L ‘chair’, **2.** above), from intransitive verbs; and from transitives: sha’L ‘digging-stick’ (cf. O-sha ‘dig for O’), xa’L ‘skinning/peeling stone’ (Sophie 6/21/87, O-xa skin/peel O, e.g. alder, wild celery’, i.e. non-animal O?), da:X ta’L ‘stretching-frame’ (Rezanov, << ‘across is put’; cf. ‘uq’ Ach’ da:X ’ita’L ‘skin-stretching frame’, **2.** above).

Accordingly, it is conceivable that the word for ‘woman’, qe’L, was originally such a form, i.e. \*qe-’L ‘means for producing children’, in view of the peculiar -sA-qe:(-)G ‘man’s son’, sA-qe:(-)ts’-A-kih ‘child’, sA-qe:(-)G-A-yu: ‘children, and PA \*ch’wEn’-qe: ‘woman’, where \*ch’wEn’- means ‘female’. Another very basic noun, ca’L ‘knife’ is very probably of such origin, cf. ’uX k’utsa’L ‘plane’, **2.** above, tsa: ‘stone’, O-Xd-tsa ‘sharpen O’, GAsAtsah ‘wood shavings’.

Allowing for thematic prefixes and some semantic leeway, we also have e.g. dide’L ‘lamp’ (cf. d-LA-de ‘emit light’, dAdAdeh ‘flashlight’, **1.** above; d- thematic prefix, vowel of -i- quality probably a sporadic shift, from vowel-harmony with -e-, which was perhaps still -A- in Rezanov *tyt’-eil’* dAde’L); dla:sha’L ‘fortress’ (cf. O-dl-sha ‘fence O in’), anatomical thematic prefixes k’ushtl’i’L ‘garter’, djAXAtl’i’L ‘earring’ (cf. k’ush- ‘leg’, djAXA- ‘ear’, O-tl’i ‘tie/bind O’). Allowing for postpositional phrases: ’uyAq’ q’a’L ‘oven’ (Rezanov, cf. ’uyAq’ k’u’Lq’a:g and ’uyaq’ ’iq’a:gL ‘stove’, **1.** and **2.** above), XAdAGaya’L ‘fish-drying rack (XA-dAG ‘area above’, -A- ‘connective’(?), cf. ts’ik’ ’uX ’Ak’uhdL ‘dishcloth’, **2.** above), O-L-(y)a ‘put pl. O’), k’udAGAdAya’L ‘smoking rack’ (k’u-dAG ‘above something’, -A-, O-d-L-(y)a ‘put pl. d-class? O’), la’X dAya’L ‘necklace’ (la’X ‘down over head’), la’X lAXAdla:ya’L ‘bead necklace’ (O-lXdl-L-(y)a ‘put series of IX-class (berry-like) O’).

Whatever the complications, especially in the semantics of some instances, it is quite clear that in addition to the instrumentalizations above, there is a third type of instrumentals derived from verbs minus anything in the prefix zone between the thematic prefix zone and the stem, with the -L suffix on open stems resulting in CV’L, and also

without anything in the object zone or any k'u-. However, there is still one further complication even to this, as we have at least one instance of a perfectly regular open stem of the basic form CV, that is -Xe of the theme O-Xe 'backpack O' (e.g. GAxXe:L 'I'm backpacking it along'), where the noun that we accordingly expect to be \*Xe'L is in fact instead invariably XehL 'backpack; burden carried on back', of which we have many instances. It is true that \*Xe'L was never tested with Eyak speakers, nor was a careful enquiry made about any difference between the burden itself and the means or materials aboriginally used to secure the burden -- though we have above in the first group 'uX yAX k'udAXe:XL 'backpack' and 'uyAq' yAX k'udAXe:X 'pack-strap, tumpline' (the glosses for which, it seems, should be switched). Still more importantly, it is also true that the Athabaskan cognate shows unmarked tone, corresponding with Eyak XehL or \*Xe:L, definitely not with \*Xe'L. At the same time Athabaskan regularly shows marked PAE \*te'L 'mat', confirming exactly the difference between Eyak XehL and te'L, a kind of classic minimal pair also in Athabaskan.. Nevertheless, these correspondences do not work e.g. in the case of Eyak -tl'i'L (PAE \*-tliw-), for which Athabaskan invariably shows tonally unmarked PA \*tl'u:L. 'rope'.

On the subject of 'rope', the Eyak is the peculiar form k'uXehL, with invariable prefix k'u-. Cf. also the verb O-L-XehL 'tie O with rope, bundle O up, roll O up'. The k'u- prefix can only be explained as instrumentalization k'u-XehL-L of a presumable k'u-L-XehL 'that which ties something', from a theme which looks very probably itself built with a stem which is a lexicalization of the instrumental from 'carry O as burden on back'.

Other open-stem instrumentals of the form CVhL instead of CV'L are hard to find. One may be tsi'lahL 'pillow; comb'. Cf. -tsin' 'neck, nape', classificatory -'a 'is in position', PA \*-tsi' 'head', same verb stem, PA \*tsi'a:L 'pillow, headrest', with tonally unmarked stem. The Eyak -l- clearly comes from the nasalization in -tsin', absent in PA. Obviously, more comparative Athabaskan and Athabaskan-Eyak work needs to be done to list and explain the instrumentals of this type with and without constriction in the stem.

Before moving on to closed stems, we round out the picture on open stems with four forms ending in -'a'L, presumed in the 1970 dictionary to be from stem -'a/ 'sg. extends' rather than classificatory -'a 'sg. is situated' or 'is placed', whatever the semantic complications: ya:n' dA'a'L 'ring (for finger)' (<< ya:n' 'down', 'd-class extends' or 'is caused to extend'), dAga'q'LdAlah 'a'L 'necklace' (dAga'q'L-dA-lah 'around neck'), dAXAyAX yAX XAdA'a'L 'lantern' (Rezanov, confirmed by Lena, cf. yAX XAdAdA'ah 'candle' << yAX 'down (into socket) it (Xd-class) is caused to extend'. dA-XA-yAX 'in area underneath', i.e. 'instrument for having candle under?'); also -gu'a'L 'hip' (cf. gu-dA- anatomical thematic 'buttocks', -gunAgAG 'hip' opaque but segmentable -gu-nA-gAG, PA \*-djwa:dE 'leg').

### b. Closed Stems

Closed stems from identifiable verb themes with -L instrumental suffix are rather plentiful. Of course in these cases 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 7 instances

with -L (and 3 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 10 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 variables, -L does not correctly go with CV'C.

The following are simple examples of -L-suffixed verb stems: duxL 'deadfall' (LA-dux 'collapse; be still', O-L-dux 'trap O in deadfall'), t'i'ch'(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)'), Le'xts'L 'wart' (DA-Le'xts' 'have wart'), 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', 2. and 1. above), dzu:xL 'spearpoint' (O-dzux 'stab O'; cf. 'uX k'udzu:xL 'awl', 2. above), dAdza(n)hGL 'cane' ('Ad-LA-dza(n)hG 'walk with cane'), 'i:ndzinhG(L) 'tentpole' ('Ad-LA-dzinhG 'pole self along' (Lena uncertain, cf. preceding, and lAGAshk'L 'pole' below), ts'a:gL 'bailer, dipper' (O-L-ts'ag 'bail O'), qa:lAGa:nsh[d]AXu' sinhXgL 'razor' (Rezanov, 'our/human hair of lower face scraper', cf. 'uda:X 'AdlAsinhXg(L) 'razor' 2. above), dja:t'L 'crowbar' (O-L-dja:t' 'pry O'; cf. 'uX tl'ehd k'u'Ldja:t' 'key' 1. above), chAGL 'fork(ed stick)' (O-L-chAG 'handle O with fork'), 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'), k'uhdL 'moss' (O-L-k'uhd ~ -k'u'd 'wi[pe O', noted above), k'uwahdjL 'nail' (O-(L-)k'uwahdj 'nail O; drive O (nail)'), 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'), 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'), 'udAXAGL 'gunwhale of it (boat)' (d-XAG 'be carved (d-class)'), wa'ts'(L) 'whip' (O-L-wa'ts' 'whip O'; cf. 'uX k'udAwa'ts' 'whip', 1. above), -'uGL 'heart' (di'-LA-'u'G 'breathe, be alive, -d-'u:G 'life-breath'), k'ahdL 'pain' (-k'a'd ~ -kahd 'be ill, feverish', noted above), shAXgL 'frost' (dA-shaXg 'be frosted'), XAsL 'carved design' (O-XAs 'carve design in O, carve O (design)', a rather extreme example of the result end rather than means end of the semantic scale), XAdAchich'L 'corner' (O-chich' 'break O'), kugL 'wood (for fuel)' (-kug 'break'), kihshL 'dipnet' (O-kihsh 'scoop O (fish with dipnet)'), dAchehg(L) 'rotten wood' (d-LA-chehg 'wood rots'), dje:gL-ga' 'tangle-like' (O-L-dje:g 'tangle O', -dje:g 'be tangled'), dju'k'L 'thwart, canoe crosspiece' (O-L-dju'k' 'make, install crosspiece'). In addition, there are 3 examples where the -L is also found throughout the conjugation of the verb itself: djahGL 'needle' (O-djahGL 'sew O', never \*-djahG), xa:gL 'work' (once, almost certainly in error, xa:g; dA-xa:gL 'work', never \*dA-xa:g, cf. 5. below), qa't'L 'patch' (O-L-qa't'(g)L 'patch O'); in the case of '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 'sew' and '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). Again, whatever the semantic complications, we see here some 40 examples of an -L-suffixed noun clearly

associated with a verb of related meaning. All the examples derived from or associated with a transitive verb are nouns of a concrete nature, as opposed to the gerunds, whereas those from some of the intransitives (e.g. k'ahdL 'pain', xa:gL 'work', tsu'd 'sleep') tend to be more abstract and like verbal nouns.

Several more of these -L-suffixed nouns are with stems which cannot be identified with any verb. In probably almost 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: ga'ts'(g)L 'ladder' (Rezanov ga'ts'g), kuhsL 'apron' (but cf. Athabaskan \*-ku'ts' 'handle cloth'), 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), Gu:dz(L)-qa' 'joint (anatomical)' (o-qa' between o'), da:n'L-ga' 'slowly' (o-ga' 'like 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'); some have thematic prefixes: dla:Xe:ch'(g)(L) 'quartz' (perhaps dl-class 'stone'); here perhaps also tsa:'L 'bentwood box', if suffixed, k'u:ndja'L, k'ugu:ndja'L 'milt, semen' (l-, or gl- 'liquid'; cf. possibly -dja' 'move O abruptly').

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 "euphonicly" motivated, as Eyak, ironically enough, 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: dAmAXch'L, qAmAXch'L 'rotten spot in ice', ta'Xts'(L) 'special bark or tree species', la'Xts'L 'star' (16 instances, from Rezanov on, la'Xts' Sewock only), kAwAsk'L 'paddle', lAGAshk'L 'pole' (cf. 'i:ndzinhGL 'tentpole' above), dla:GaAshk'L '(series of) fenceposts'.

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), suhgL-dah 'hurtfully', cha'nik'L 'funny'; cf. dzaahGL 'needle', xa:gL 'work' above.

#### 4. FORMS WITH -L-STEM-L

Finally, there is one more category of nouns, all bound, with -L suffixed to the stem, which begin with a possessive pronoun or noun, then frequently a thematic prefix, often anatomical, then L-classifier(!?), plus stem with -L, stem sometimes identifiable, sometimes not, explained here insofar as possible. Since it appears from the above that the two L-affixes are mutually exclusive in instrumentals, and -L instrumental excludes in fact all classifiers, and the following have only the L-, never the other classifiers, it could perhaps be argued that the -L- here is only a homophone, otherwise unidentified, and not the L- classifier itself.

Probably over 30 in number, these -L-stem-L forms appear mainly to be anatomical, or part of or especially appendage of something, often animal or plant, often with d- thematic or class-mark, e.g. -LXa'L 'handle' (< -Xa/-L ? or < -XA'L-L), -dA-LXa'L "'button" (of clam)', -LXahd(L) 'cable, string' (see qu'LXa:dL 'bow' below), qu'LXa'dL[L]xahdL 'bowstring', -LXAdjgL 'skeleton', -dA-LXAdjgL '(dead) body;

container', -dA-Lt'Aq'L 'collarbone' (cf. LA-t'Aq' 'jump', t'a'q'-L 'fishhook', or -te'q' 'be straight'), -dA-Lts'u:xL 'philtrum' (cf. ts'u:x 'barnacle', -L-ts'u:X 'have cyst'), -yA-(L)tsAq'sgL 'fingers' (y- anatomical 'hand'; O-L-tsAq'sg 'make O (fringes)' appears derived from noun), -yA-(L)ts'i:nGL 'little finger' (O-L-ts'i:nG 'dip O'), -yA-LXahdzL 'claws, nails', -qi:yA-LXahdzL 'tonenails', -qi:yi-(L)tl'ish(L) 'toes', -Guhd-XA-LchAXch'L 'kneecap' (-Guhd 'knee', X- thematic), -ni:k'-A-dA-Lxa'ch'L 'nose-septum' (-ni:k' 'nose', -xa'ch'L 'knot'), -qe:s-gu:n-LGAmAdL 'anklebone' (-qe:s 'Achilles tendon', gl- class or thematic), -dA-Ldje:(L) 'eggyolk', -dA-Lxix(L) 'eggwhite' (cf. k'uxix 'bald eagle, dA-L-xix 'egg turn to chick; cataract develop'), -lAXA-LxixL 'white of eyes' (IX- anatomical 'eye'), -lAXALt'u:ch'L 'pupil of eye' (cf. dALt'uch'(g) 'black (substance)'), -lAXA-Ldu'tl'gL 'eyelid' ((O)-L-dAtl' 'hurt (O)', cf. Athabaskan \*-dEtI' 'shake, strike', Minto -noxducla' 'eyelid'), -dA-Ldzits'L 'calyx' (O-lXd-L-dzits' 'remove calyx from O (berry)'), k'u-dA-Lt'ihXL 'nest' (tl'ihX grass; start of basket'), k'u-lAXA-Lshitl'gL 'sawdust' (cf.'uX k'ushitl'gL 'saw', **3b.** above), k'u-LquXch'L 'lamp-chimney' (no explanation!, in spite of recent origin), ni:-Lts'is(L) 'porcupine's hole'. Finally, on a comparative basis, we have at least one important example with possible open stem, -Lt'ahL 'leaf; feather, plumage', cf. PA \*-t'an' 'leaf, plume eather' (also Eyak O-t'ahL 'make love potion to harm O' must be a derivative from the noun; see also discussion of Eyak t'ahL under nouns that can be both possessed and unpossessed).

As some hint of possible explanation of the above items, it may be helpful to note that there are a number of semantically similar items without either the -L suffix or the L-classifier, e.g. -yA-q'a'ts' 'hand', -yA-ku:nch' 'thumb, -qi:yA-ga:g 'big toe', or with the L-classifier and no -L suffix, e.g. -L-tah 'skin container (cf. -tah 'skin, pelt (anatomical)'), -dA-L-tah 'shell', -dA-L-ts'Alih 'shell' (cf. -ts'Alih 'bone (anatomical)'), -lAXA-L-ts'Alih 'pit (of fruit)'. These can perhaps cast some light on the origin of the group above with both instrumental or instrumental-like -L suffix and the L-classifier which is regularly deleted, it is clear, in the instrumentalizations above.

Further, there are a few problematical forms of this type that can be considered now here. One is qu'LXa:d(L) 'bow (for arrows)', probably with persistive expansion of stem O-L-Xahd 'pull O' (O-L-Xahd 'draw O (bow)', see also -L-XahdL 'cable, string' above, and for qu- the following). For 'floor' (presumably of boards) Rezanov has *kool'taal'*, clearly to be read qu'Lta'L, for which modern speakers have qu'ta'L, and once k'u:ta'L (analysis problematical, see **2.** above). The same qu'-, clearly not that of the 'future' (which in such position would be qu'wA- or qa'-), recurs only in qa:lah wAX qu't'u'L 'fence around grave' (<< 'around us, qu'-, and cf. wAX -t'e 'be thus; dwell', cf.'uya'd k'utu'u'L 'container', **2.** above), and qu'wa'L 'drape, curtain' (possibly < -wa'L-L, cf. O-L-wa'L 'suspend O over aperture').

Lastly, here might be mentioned the one adjectival form belonging in this group, -l-ga'L 'old worn-out', e.g. si:nL'Alga'L 'beat-up old shoes, chi'yahdlALga'L 'old worn-out hat', kAna:'dLga'L 'battered old coat', cf. -ga/ 'be tired' O-L-ga/ 'tire O'.

## 5. PREVIOUS LITERATURE!

It so happens that this subject actually has previous literature. 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* Volume 3, Part 3, pages 211-213 (1816). The authors recognize that in Tlingit and especially Eyak, from Rezanov's manuscript lexicon including nearly 1200 Eyak words, a *tl* ending is remarkably frequent, extraordinarily frequent in Eyak. No doubt given especially the Humboldt brothers' interest in the origin of Native Americans, and Alexander'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 which 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: *keel* 'girl' (with dieresis over the second *e*, from Rezanov *keell*'), the second *e* non-palatalizing, thus even reflecting the glottal stop), i.e. *qe'L* 'woman', see above, and *katakkl* 'throat' (Rezanov *katakkl*'), 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* 1859 (written 1854-59), pp. 664-665, following up on the Humboldts, repeats the 19 Mexican-Eyak comparisons from *Mithridates*, and 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. 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*, 1857, at the very end of his introduction, page 488, does indeed recognize the suffix, and correctly so, to wit: "*al*', *tl*', *kl*', *xl*' suffixed to verbs appears to form nouns, e.g.: *xotl*' 'rifle', from *al*' *xot*" 'to shoot'; *oxkotsoxl*' 'awl', from infinitive *sytsoxl*', imperative *atsuxu*, 'to stab'; *ochoxkutsaal*' 'anvil', *atstsaxu* 'to pound', *tsaxl*' 'knife', *al'tsax*' 'to cut', *kal*' *koazhaxo sykl*' 'razor', from *illokoshka sykl*' 'to shave self; cf. further 'towel' [*oxotlekoul*'] with the verb forms for 'wash' [e.g. *oxotle katakuz*"], thus also *syl'xoutl*' 'wet' and *il'xo-u* 'make wet'. Indeed also very many nouns end with this *l*' in common with their corresponding verbs: cf. e.g. 'comb' [*tsylliadl*'] and e.g. *atsyntaliatl*'], 'begin(ning)' [*ox kale etl*'], second *e* non-palatalizing, and *ox cal' etl*'], *e* likewise], 'work' [*xotty xakl*'] and *xakl*'], 'bellows' [*oxkotexutl*'] with 'blow' [*auia koutyxutl*']."

Of these 11 comparisons by Radloff, 5 are in fact quite valid, so will be found in the sections above. Certainly valid are *xut'L* 'rifle' and 'AL*xut*' 'shoot it!'; 'uX *k'udzuxL* 'awl' and *sidzuxL* 'I stabbed it', 'Ad*zuxuh* 'stab it!'; 'uq'Ach' *k'uts'AXL* (miscopied) 'anvil' and 'Ats'AX*uh* '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 'awya' *k'u'dAxutl*' 'someone is blowing on it (d-class)'. Probably not valid is *tse'L* 'knife' and 'Alts'AX 'cut it!'. All the rest are definitely not valid: 'uX 'AdlAk'uh*dL* '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.

Radloff was of course very familiar with *Mithridates*, 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, 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" (*IJAL* 22:45-48, 1956). It is almost certain that Li never saw Radloff (or *Mithridates* or Buschmann). – In fact, very evidently, Boas, Birket-Smith and deLaguna, Sapir, so also Li, were quite unaware of all such earlier Eyak language work --. Moreover, Li had not done any Athabaskan fieldwork since 1929 or any publication on it since 1930 (except for his masterful sketch of Chipewyan published in 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 8 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. 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." 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 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.

## 6. ADDENDA

It has been noted already above that there are important morphological resemblances and relations, in fact overlap, between gerunds and instrumentals: that both the affixes 'is- and -L are to be found in both gerunds and instrumentals. Both gerunds and instrumentals (including also the -L-stem-L items, incidentally) share the alternation -L ~ -zero, though with different frequency. Furthermore the semantic difference between them is by no means sharp or clear. The "instrumental" tsahg(L) 'legend' (cf. O-tzahg 'tell legend of O'), for example, could of course be the act or result of telling a legend, though it also be seen as the means of telling a legend; and XAsL 'carved design' (cf. O-Xas 'carve design in O, carve O (design)'), is noted as "a rather extreme example as the result end rather than the means end of the semantic scale."

In the process of scanning the corpus in view of the grammar for nouns, 30-some more items stood out as verbal nouns. These further join the instrumentals and gerunds together. Instead of revising the chapter on gerunds, however, an extended addendum was added on to that chapter, with much reference to this chapter.

[[Addendum 6/12/10. Further, in writing up the subsection of the nouns chapter on “unpossessed nouns with qualifiers”, it became clear that many items classed simply as nouns could also be interpreted as verbal nouns or instrumentals, so those too should be considered here. Presumably to be added here only, having-L or optionally so, with l-thematic qualifier, are 3 semantically similar items, 'i:dzinhG(L) ‘pole’, cf. 'Ad-LA-dzinhG ‘pole self along’, lAGAshk'L '(totem) pole’, with no attested verb stem, and (dA-)dza(n)hGL ‘cane’, 'Ad-LA-dza(n)hG ‘walk with cane’.]

In addition to that addendum, fully relevant to this chapter, the following items should also be explicitly added (or compared) to the instrumental side of the continuum. For ‘fish-drying-rack’ and ‘smoking-rack’, k'udAGAdAya' and XAdAdAya'L (< attested relativization XAdAGALayah ‘id.’), which should very probably be synonyms, we also have qu:ndAGAdAya'L ‘id.’ (< qu:n-dAG ‘above the fire’). Though these 3 can all be seen as devices for curing fish, in fact each means explicitly the result of the act of placing d-class objects (sticks) at some height above something or an area or a fire. The two forms for ‘necklace’, la'X dA'a'L and la'X lAXAdA'a'L ‘bead necklace’, can be taken only as the result of putting something down over one’s head, hardly as an instrument of any kind. More as an instrument is 'utl' 'iLlah 'Adlitl'i'L ‘hairpin’ (from Anna 6/19/871, ‘with it around each other (something having to do with one’s own head) is bound’, presumably derived from a reflexive, but much more like an instrumental; its status in Eyak is unconfirmed, smacking possibly of Anna’s glib creativity. At the opposite chronological end are two very interesting forms from Rezanov: *uiax*” *exaal*’ ‘telescope’, with *e* non-palatalizing, but the form is still most probably to be read 'uyAq' yAX ('A?')an'L < ‘in it looking about’; and *utak*”-*oiaxokl* ‘sail’, most probably to be read 'ut'a' k'u:y( ' )AXu'GL or \*?k'u:yA Xu'GL < ‘behind it wind blowing’. Both of these look semantically much more like verbal noun phrases than like instrumentals or instrumentalizations.

Perhaps even more interesting are the 3 ‘fish-curing rack’ forms and 2 last Rezanov forms for the evident -A- in all 5 between the preverbals and the verbal noun. In the first 3 the -A- might simply be thought to be simply epenthetic after -dAG ‘above’ according to some phonological rule specific to verbal noun or instrumental formation, but no motivation for that is easy to see. (However, cf. dAG and lAG in 1970 dictionary.) To these 3 should be added at least dAGAdA'A'L ‘steep dangerous place’, with dAG ‘above’ as preverb, and -'a/ ‘sg. S extends’ with d-qualifier, -L gerund suffix, not instrumental; and perhaps also the best possible segmentation o-dAG-A-leh of the noun -dAGAleh ‘mind’ mentioned as verbal noun in the addendum to the gerund chapter.

In the 2 Rezanov forms the reading is very problematical. In ‘sail’ is included ‘wind’, which like all sonorant finals of 1805 is usually written with some final vowel following the sonorant, presumably A, but which could not have formed an absolute final open syllable according to any rules at least of modern Eyak, cf. k'u:y, though k'u:ya'lAw ‘big wind’; thus in this case the -A- may well belong to ‘wind’ rather than to ‘blowing’. In ‘telescope’ the stem itself must be -'an'L, where Rezanov is missing the nasalization, though he often catches that, writing *n* after the vowel; true, he often also catches the glottal stop after the vowel, as indicated by doubling the vowel, as though hearing an echo after a presumably very careful pronunciation; since he missed the nasalization, however, it seems less likely he is hearing such a pronunciation, stem loud and clear, than that he is hearing a clear 'A-'an'L with clear 'A- prefix instead.

### 3<sup>rd</sup> person pronominal object

These forms with potential 'A- need to be considered in the discussion of those with 'A- shown in the subsection 1.2.e “third person object prefix zero, 'u-, or 'A-” in the chapter on gerunds. Given that no items with 'u- third person direct pronominal object are listed in the present chapter, but only zero and possibly 'A-, the presence of instances of 'u- for that in gerunds might possibly differentiate gerunds from instrumentals. Perhaps more likely, however, it is an indication that the one surest-looking instance of 'u-, in gi:wa: 'ulah ‘drinking beer’, is in fact analogical, that gerunds too more properly have only zero (or 'A-), the 'u- being only 3<sup>rd</sup> person possessor and object of postpositions. In that way, then, the 3<sup>rd</sup> person direct object of gerunds as well as instrumentals is consistent with the 1<sup>st</sup> and 2<sup>nd</sup> person objects of gerunds.

### Internal syntax of gerunds, verbal nouns, instrumentals

Again, gerunds, verbal nouns, and instrumentals do not differ from each other in their (external) syntactic use in the sentence. The interest here is the internal syntax of instrumentals and instrumentalizations, along with that of gerunds and verbal nouns, how they may differ from each other in that respect, and in how their internal syntax may differ from other sentence structure.

In both gerunds or verbal nouns, on one hand, and in instrumentals and instrumentalizations, on the other, there are numerous instances of preverbals, both postpositions and preverbs. In fact there are of course instances of both postpositions and preverbs together, at least in instrumentals, e.g. dAXAyAX yAX XAdA'AL ‘lantern’ (Rezanov), 'uX dAda'd k'uXAdAta'L ‘key’ (Rezanov), 'uX qid k'uq'Ats'L ‘candle-snuffer’ (Rezanov), 'uX qa' k'uq'Ats'L ‘pliers’ (Rezanov), 'uX qa:n'ch' k'uxuLg ‘corkscrew’, qa:lah wAX k'utu'L ‘grave’, 'uya' yAX k'uya(:)L ‘tray’, and in 'uya' yAX 'Adistsitl'X ‘skates’, if not a gerund. Note that the order appears to be postpositional phrase preceding preverb, consistently, perhaps more so than generally in sentence syntax.

Moreover, there are several instances where also the line between postpositions and preverbs is blurred, for important reasons to be treated in the chapters on preverbals. Very many preverbs and postpositions, in fact most, are obviously the same morpheme, where it can be seen that the preverb is derived from the postposition. In the preverb the o of the postposition is deleted, as is regular and productive in indirect reflexives. We have at least one instance, leh GAAla'yah ‘year’ where the preverb is attested as such only in the verbal noun, derived from the theme o-leh GI-'ya ‘year passes for o’, therefore a definitive example of preverb deriving from postposition.

In addition to preverbals, in both the gerund- and instrumental-type categories, we have some instances of overt nouns as indirect object, and as subject and/or object of the underlying verb or verb theme. These are, however, not numerous, ca. 17 examples, as the internal syntax of these categories was inadequately investigated. (It is unclear how much could have been done, especially on the gerund side, by the 1960s.)

We have two instances where the overt noun is indirect o of postposition. The “instrumental” is dAga'q'LdAlah 'a'L ‘necklace’, where the possessor of -dAga'q'L ‘neck’ is deleted; though listed under instrumentals, this is hardly semantically such. The gerund is sAqe:GAyu:XA' qe'le' ‘babysitting’, where qe'le' < qa' 'ile', so another

instance of postposition plus preverb. Note that in both the composition is as expected, not \*dAga'q'L 'ulah..., \*sAqe:GAyu: 'uXa'...

We have what is clearly the direct object of instrumentals, semantically, in ts'ik' 'uX 'Ak'uhdL 'dishcloth', and in qa:Ga:nshdAXu' sinhXL 'razor' (Rezanov), where the possessor in qa:-Ga:nshdAXu' 'our whiskers' is not deleted. We likewise have the direct object of verbal nouns in gahG dA'a'tl' 'gun-chewing' and ts'u: lAwa'(L) 'ice cream' ('grinding up of milk'). Listed under gerunds (1.2.d-e) are also mAgAG 'idAle:l 'playing checkers', 'Aldah ['idA]le:l 'playing cards', 'AXAkih Xu' 'Ale:l 'making a canoe', with 'A-, and two with 'u-, sAqe:GAyu: 'ulAxa:g 'raising children' and gi:wa: 'ulah 'drinking beer'. The 'beer-drinking', rather 'beer its drinking', ungrammatical-looking, yet where the 'u- can not easily be considered a phonetic mistake, could also otherwise be taken as verbal noun, like gahG dA'a'tl' 'gum-chewing', were it not for the 'u-.

Certainly in XAwa:yu: dA'a:t' 'dogs' howling' we have, on the other hand, the overt subject of a verbal noun; also in sAqe:ts'Akih 'uyaq' dah and sAqe:ts'Akih 'uyAq' quh 'womb' (<? 'child stays in it' and 'children stay in it'), which were listed as mere (usitative Active imperfective) relativizations in the instrumentals chapter, but which in fact are homophonous or indistinguishable from verbal nouns, of intransitives, and at least dubious as instrumentals semantically. Clearly not instrumentals, but verbal nouns, are sa:q'sg dA'ehdg 'dried dulse', te:'ya'le: dA'e:dzg 'dried king salmon', and la'mahd da' qa'dg 'berry preserves', which could all be either the subject of an intransitive or the object of a transitive, as might also be the literal gloss of e.g. the first in English, 'drying of dulse', or last 'boiling of berries into jar'.

Also probably to be considered here, at least etymologically, with Athabaskan cognate \*tsi'aL 'pillow', cf. \*-tsi' 'head', is Eyak tsi'lahL 'pillow; comb'. The tsi'l- is certainly to be identified with -tsin' 'neck, nape', a perfectly regular anatomical possessed noun, with possessor zeroed out. (Unlike the Athabaskan, the Eyak -tsin' cannot be used as or reduced to an incorporated noun, as can -la:X ~ -lAXA- 'eye' or -djehX ~ -djAXA- 'ear'). The nasalization of the stem-vowel, absent in Athabaskan, clearly accounts for the initial -l- of the second syllable of the Eyak. The -(l)ahL may well be from the PAE classificatory 'round object' stem, with a suffix -L of the non-glottalizing type as in XehL 'backpack' (cf. PA \*XeL 'id.'). Clearly the meaning of the whole is somehow 'headrest', though it remains of course unclear whether that whole is more precisely a 'resting of the head', itself as (roundish) subject or object, or is 'something roundish placed in or being in position (as an instrument for?) the resting of the head'.

Finally, note that in the 5 instances we have of both overt subject or object and preverbal (postposition or preverb), viz. t'sik' 'ux 'Ak'uhdL 'dishcloth', sAqe:ts'Akih 'uyAq' dah/quh 'womb', 'AXAkih Xu' 'Ale:l 'canoe-making' and la'mahd da' qa'dg 'berry preserves', it happens that the noun precedes the preverbal, as in sentence syntax. Most striking, however, is Rezanov's 'ut'a' ku:ya Xu'GL 'sail' (< 'behind it wind blows'), with postpositional phrase 'ut'a' 'behind it' fronted to precede subject k'u:ya 'wind', noted above. (Cf. the case of sAqe:ts'Akih 'uyAq' dah 'womb', <'child stays in it'; if e.g. \*?'uyAq' sAqe:ts'Akih dah had been tested, chances are that would have been accepted, likewise perhaps \*?'uyAq' sAqe:ts'Akih da'L, though deemed "deep talk".)

## NOUNS

Nouns are of course a huge grammatical and syntactic category. They are of three types, basic nouns, noun phrases, and nominalizations from verbs or verb phrases. Basic nouns and noun phrases will be the subject exclusively of this chapter, but a large proportion of nominalizations (*deverbaizations* and *relativizations*) are already listed and dealt with in other chapters of Eyak grammar, most notably the following. **[[*This introductory section, terminology (e.g. basic/stem nouns; noun phrases / compounds; and organization involving especially nominalizations) will need to be revised as the grammar progresses. Glosses usually non-relative*]]**

### Deverbalizations

Deverbalizations, as opposed to relativizations, delete all classifiers, conjugation prefixes, and aspect affixes. Three other files or chapters earlier written are on derivational processes on verbs which by their nature also produce nouns, basically four types of deverbalizations. 1. *Gerund*, including various subtypes, already obsolescent (ca. 80 examples). 2. “*Acquisitional*”, of very limited attestation, perhaps to be combined as a subtype of gerund. 3. The chapter on Instrumentals first deals with mere lexicalized relativizations (e.g. ‘that by means of which the floor is swept, broom’ (30-some examples, very partial listing); it then shows *instrumentalizations*, by a further derivation which deletes all mode-aspect and classifier prefixes of the verb, and at the same time adds -L suffix at least to open stems, some closed stems (ca. 40 examples, a fairly complete listing); it then deals with *instrumental nouns*, i.e. prefixless verbal stems with -L instrumental suffix (fairly complete listing, ca 100 examples). Many of these apparent instrumental nouns with -L “instrumental” suffix are by no means so clearly instrumentals semantically, so there is some overlap between these and the type of gerund which needs to be added to that chapter, to be called *verbal nouns*. In the noun excerpting, up to 48 more forms were noted which might be called verbal nouns, i.e. bare noun stems, without -L suffix, or such with only O and/or qualifier prefixes, which cannot be distinguished from the type of gerunds lacking both the -L suffix and ’is- prefix. Thus those 3 categories of deverbalization above need to be combined with a 4<sup>th</sup>, verbal nouns. That is, what were called gerunds but are lacking both ’is- and -l (or -L), those with both -L and zero suffix, and the newly listed 48 verbal (all without -L), and all “instrumentals” (with -L) that are not clearly instrumentals semantically -- all these need to be reconsidered together. The results may entail some reclassification, and/or show considerable overlap or semantic continuum of types. Thus only Acquisitionals, Gerunds with ’is- and/ ’or -l, and instrumentals with -L that are clearly instrumentals semantically, might be clearly distinct subclasses morphologically. Further, for the others with no -L suffix, there may also be homophony with (zero classifier) Active imperfectives, which needs to be considered. (By zero suffix here I mean rather no -L suffix, so e.g. especially -g repetitive could be allowed, or even -L as final of CVCC stems, e.g. -xa:gL ‘work’.)

### Relativizations

Relativizations, as opposed to deverbalizations, retain all verbal affixes, add zero relativizing suffix for non-human subject or object, add -inh for human singular subject, and -inu: for human plural subject. There are five more chapters or files on verb

derivations or classes which include subsections on nominalizations by relativization. There are enumerated here, counting the first 3 on deverbalizations, mentioned above. Thus 4. *Usitative* (Active imperfective), the derivation which generates by far the largest number of nominalizations. In fact the usitative derivation is found much more widely in such nominalizations than in actual verbal use 5. *Repetitive* (also Active imperfective), especially the 3 subsections entitled “Phonologically motivated -g with -CC clusters” (see further also chapter on stem-final clusters), “Fineness’ for nouns and adjectives” (ca. 16 exx.), and “Nouns and nominalizations with Repetitive” (ca. 36 exx.). 6. Two examples are listed in the last section, “Nominalizations” under the *Progressive* (Inceptive perfective) derivation. 7. A dozen examples are listed in the section “Nouns and Persistent” in the chapter on *Persistent* (Active imperfective). 8. Finally, up to a dozen examples are listed under “Nouns from unattested verbs”, along with some such under attested verbs, in the chapter *Neuter imperfective*.

The nouns in these 8 nominalization categories, derived from verbs, number up to 400, as will be seen below. Nominalizations listed in the recent survey for nouns overlap surely in some proportion, but there are also many in some of the categories above that should be added to those categories. Furthermore, however, there are other interesting categories of nominalizations that are not listed above, e.g. perhaps most notably Active (s-) perfective nominalizations, not very common, many of which pertain to prepared foods, many (but not all?) modern, e.g. sLi’ mahdL ‘bread’, disLi’ehdgL ‘pilot bread’.

In the definition of nouns or lexemes which are derived from verbs, to be qualified lexically as nouns, the question of lexicalization obviously arises. Throughout the sections below on the various types and subtypes of nominalization, there is some discussion about lexicalization status and the productivity of lexicalization for the types and subtypes. At the end of these sections a section follows on the morphosyntactic properties of the lexicalization process itself. For lexicalization of nouns modified by adjectives, however, not considered here, see the chapter on adjectives.

***[[All this is now incorporated and these 2 paragraphs, as well as the separate files they refer to, are to be deleted.]]*** Aside from nominalizations, one chapter already written deals with nouns not derived from verbs. 9. *Noun Compounding*, which shows that this process is quite limited, to three types. Compounding of possessed nouns is of course unlimited, e.g. ‘my father’s maternal grandmother’s nose’. Otherwise there are only two semantic types, of compounding of two free nouns, XY: a. for ‘Y- (composed of) X’, e.g. ‘wood(en) spoon’ (many examples), and b. mythical or ceremonial items, mostly associable with Tlingit, e.g. ‘Raven House’ (far fewer examples).

Finally, there is a brief and tentative chapter on 10. *Lexicalization*, on whether person inflection is eliminated in truly lexicalized nominalization, e.g. ‘my helper’ must be ‘my “he who helps one”’ as opposed to ‘he who helps me’. ***[[Now incorporated here]]***

### **Nouns stems vs. verb stems**

A statement is needed on 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', sdiduhdzL '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 chapter on -CC stems).

The most salient phonological difference between noun and verb stems is in the presence of noun stems of the basic form CV:, 18 such nouns, 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-expanded, -Ce:, 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 where Raven made a lake'. Here insertion of -' proved necessary, confirmed in k'uqu'xLma:' 'I'll make a lake'. Perhaps any semantically fit noun stem can be used as a verb stem by such derivations. The process does not entail any change in the stem, except in the case of CV:, as in the instance of duhdz 'porch' noted above.

### Statistics

Here follows a preliminary statistical picture from ms. 30-page survey of the 1965-69 concordance ledger corpus. 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 are approximate, rounded slightly upward.

Unpossessed stem, in some cases with repetitive suffix -g, some with -L	200
Same, with instrumental suffix -L	100
Same, with qualifier prefix, a few also with suffix -L	40
Same, with qualifier prefix, prefixal -L-, several also with suffix -L	10

Subtotal	350
Possessed stem, a few (2?) with suffix -L	75
Same, with qualifier prefix	70
Same, with qualifier prefix, prefixal -L-, many also with suffix -L	50
Subtotal	200
Possessed ~ Unpossessed	25
Total above	575
Deverbalizations	
Verbal nouns	40
Instrumentalizations	40
Gerunds, Acquisitional	90
Subtotal	170
Relativizations	
Active imperfective (by far the least complete, < 40%?)	225
Active perfective	15
Inceptive perfective	15
Neuter imperfective	25
Neuter perfective	10
Subtotal	290
Total counted	1,055
Loans, non-canonic unanalyzable	300
Compounds, other NPs including possessed, specialized types of unpossessed, o-pp + N, lexicalized N + adj., etc.	400??
Othet uncounted (incl. post-1970), especially Ai relativizations	400??

### **Noun-classification or gender**

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 1965, then for Athabaskan and Eyak in Krauss 1968. This classification is manifested in what I have called *class-marks* since 1965. Noun classification is one of the three functions of the set of prefixes which in Athabaskan and also Eyak called *qualifiers* (after Jette 1905). Earlier in Eyak I called these “Position 5” (verb) prefixes. (Beside noun-classification, the other two functions of qualifiers are as anatomical and thematic verb prefixes.) In Athabaskan these qualifier prefixes appear only in the verb, and in many Athabaskan languages only quite vestigially so. In Eyak, however, the use of these qualifiers is quite robust in verbs, marking the class of the subject of intransitive verbs and of the object of transitive verbs, as in Athabaskan. In Eyak, moreover, qualifiers occur more widely than as verb prefixes, also being prefixed to postpositions, either thematically, or marking the class of the postpositional object.



They also occur prefixed to adjectives, marking the class of the noun to which the adjectives refer.

Many nouns are unclassified, perhaps the majority, including all nouns referring to humans or higher animals. Classification of nouns is somewhat inconsistent in variability, the majority perhaps being 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 (spruce-pitch/gum; sinkers of net; bullets). However, di:ya’ remains classified as liquid whether it is “sea-water’ or ‘table salt’. Nouns can become declassified (miniature bear-spear belonging to tiny dwarf). Noun-classification and class of each noun has been specified and exemplified consistently, routinely, in the 1970 Eyak dictionary. Moreover, classification of nouns and noun-classes has been extensively discussed in Krauss 1968 [[reference]], so – for the moment at least – that discussion will not be repeated here. Syntactic use of class-marks will be shown here, though, or in the syntax chapter. Class-marks will of course also be included, as appropriate, in the chapter on qualifiers. In this chapter, however, this classification of nouns will not be shown or treated.

On the other hand, as shown in the statistical table 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 chapter.

### **Morphological categories of basic nouns**

The main morphological oppositions for basic nouns (or stem-nouns not derived from verbs) are the two following, which crosscut each other: plus/minus possessed and plus/minus qualified. Possessed nouns, bound, require possessive prefix or possessor noun, as opposed to free nouns. By possessed is meant inherently, inalienably possessed. These are therefore most generally kin terms, and anatomical terms, body parts. (For any other types of possession, e.g. ‘dog belonging to me’, ‘dog in my charge’, ‘meat I bought’, unlike Athabaskan and Tlingit, Eyak uses postpositional phrases.) In addition, however, there are over 20 nouns noted here which seem to be used both free and possessed, but only two of these nouns have different allomorphs (corresponding at all to the pattern in both Athabaskan and Tlingit), Xe: ~ -Xe’ ‘fat, grease’, and ts’Al ~ -ts’Alih ‘bone, shell’. Such nouns will be examined at length here. All kin terms are possessed, but some body parts or products which in Athabaskan are possessed are not so in Eyak, e.g. q’Ama: ‘kidney’, le:L ‘(strand of) hair’, or ts’a:’ ‘umbilical cord’, evidently 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).

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 plus/minus possessed opposition. These combine to produce 4 categories of basic nouns: possessed unqualified, possessed qualified, and unpossessed unqualified, unpossessed qualified. Basic nouns will be presented in that order, with

those that may be both possessed and unpossessed considered in detail between those two. *[[terminology: choice needed between possessed/unpossessed, bound/free, dependent/independent]]*

### Possessed nouns

For possessed nouns there is a further subcategorization, for those with -L- prefix in the same position as L-classifier (following the qualifier, which is usually but not always present). That -L- prefix 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. Many of these -L- prefixed nouns also have an -L suffixed to the stem, and ca. 30 such are listed in a section of the chapter on Instrumentals. These are semantically not so much instrumentals, however, but more anatomical, body parts, though many are much less strictly so, e.g. ‘pit (of fruit)’, ‘nest (of bird)’, ‘handle (of artifact)’.

First, we shall present possessed nouns without prefixal -L-, unqualified, then qualified, and after these, those with -L-.

#### Possessed nouns without qualifiers

Kin terms are predictably all possessed, i.e. definitively so, and most are basic stem nouns, not too numerous to list exhaustively here: -chu: ‘maternal grandmother’, -k’inh ‘paternal grandmother’, -’uh ‘paternal grandfather’, -’we:shG ‘maternal grandfather’, -a:n ‘mother’, -ta:’ ‘father’, -tinh ‘father’s brother’, -XAwAX ‘(man’s) older brother’, -’ehd ‘wife’, -qa’ husband’, -yahsh ‘(woman’s) child’, -Ginh ‘woman’s brother’s child’, -t’inh ‘man’s sister’s child’, -tsi:ny ‘(man’s) daughter’. 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 system, and more, see the authors’ “Athabaskan-Eyak Kin Term System”, ms. **[[date]]** and forthcoming. When referred to generically, without specifying 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 the following: -tah ‘skin’, -La’ch’ ‘stomach’, -La:n’ ‘thigh, hindquarter’, -tse’ ‘flesh, meat’, -tsin’ ‘neck, nape’, -ts’a:nX ‘eyebrow’, -sahd ‘liver’, -sits’ ‘skin (of fish)’, -djehX ‘ear’, -ch’ich’ ‘elbow’, -ch’AX ‘wing’, -ch’a:d’ ‘dorsal fin’, -she:k’ ‘chest’, -gAwa’ts’ ‘mesentery’, -guch’ ‘penis’, -ga’q’L’ ‘larynx’, -k’ahsh ‘foot’, -Gu(n)hd ‘knee’, -Ge’t’ ‘body, torso’, -Gu’ts’ ‘(fish) scales’, -GAla’ ‘shoulder, foreleg’, -Xu’ ‘hair, fur’, -Xa:dj ‘gills’, -lu:ch’ ‘inside or soft part of cheek’, -la:X’ ‘eye’, -ni:k’ ‘nose, beak’, -ni:sq’ ‘nostril’; 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 to a possessed anatomical noun generically, the indefinite possessor 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’.

There are a very few possessed nouns which are neither anatomical nor kin terms, possibly to be considered postpositions, e.g. o?-q’As ‘one of a pair of o’, ’o?-qa:’ ‘o?’s ‘kind, tribe; part of o, some of o; and o?-q’Ayanh ‘o?’s homeland’. Perhaps in a class of

its own, or like a kin term, beside -wA-lah(-yu:) 'spirit(s) of', is -ch'iyá 'boss, master of/at' including many instances where possessor is verbal noun or gerund, so e.g. la:xga:-dA-ch'iyá 'storekeeper', k'u-ch'iyá 'good hunter; chief', yAX 'isa:X-ch'iyá 'good walker', ki:nX-A-ch'iyá 'big crybaby'.

### Possessed nouns with qualifiers

Following are possessed nouns with qualifier prefixes. (For more of the same, see also next subsection, on the same also with prefix -L-.) Many 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 do indeed have a stem with is not otherwise identifiable.

First, with l- anatomical, 'head' (and clearly cognate with a PA \*-nE-), we have -:nda: 'face', -:n-dAlah 'antler, horn' (cf. only Athabaskan -de 'horn'), -:n-ch''it 'forehead', -lA-ch'u:ch' 'inside or soft part of cheek' (possibly mistaken, blend; -lA- instead of -n:- before coronal 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'. The following, with l- qualifier that looks more thematic than anatomical, are -l-gah 'corpse' (cf. l-dA-ga/ 'leave, get the hell out', very forceful, so very possibly a verbal noun in origin), -:n-tuh 'milt', -:n-dja'L 'king salmon milt, semen' (cf. -gu:ndja'L below), -lA-wa'L 'rim, edge' (cf. -wa'L 'covering (of cloth over aperture)')?. Unique, semantically more like a postposition is -lA-'e: 'different from, strange to'.

Next most common evidently is y- anatomical 'hand', as in -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 farts'?), -yA-q'a'ts' 'hand' (cf. O-q'Ats' 'bite O, trap O in jaws'). With a y- qualifier that seems thematic rather than anatomical but possibly anatomical in origin are -yA-ta: 'father-in-law' (cf. -ta: 'father'), -yA-dah 'mother-in-law' (cf. -da 'sg. S its, stays') and -yA-quh 'young of animal' (cf. -quh 'pl. S sit, stay').

Fairly common also is gw- anatomical 'hip area' and/or noun-classificatory 'filment-like' in -gu-tl'ah (mammal) tail' (cf. -tl'ah- 'headwater', PA \*-tl'a' 'rump', etc.), -gu-guch' 'penis (of dog, etc.)' (cf. -guch' 'penis', and below), -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'.

Highly specialized is X- anatomical 'human male genitalia' in-XA-Xu' 'male pubic hair' and -XA-guch' 'human (as opposed e.g. to dog's) penis'.

This leads to combinations of anatomical and/or thematic qualifiers in e.g. -XA-lA-Xu' 'female pubic hair' (cf. above, and postpositional -XA-lA-ya'd 'vulva'), -gu:-n-dza'L 'dorsal fin; (fish) kidney' (cf. -:n-dja'L above), -gu-nA-GAG 'hip' (with unique allomorph of -lA-).

Unique is -qi:-tAtl' 'heel' with anatomical -qi:- 'foot' alone (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 as 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 -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’), -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). In several of these the d- appears to relate to ‘mouth’, as with PAE \*d- qualifier ‘oral/vocal activity’ and PA \*-da’ ‘mouth’.

Combinations of d- and l- here are -dla:-tsa: ‘testicles’ (cf. tsa: ‘stone’), -dla:-si:nd or -dla:-si:nt’ ‘ribs’, -’uGL-dla:-shid ‘pericardium?’ (‘heart edge’), and -:n-dA-shid in ’u:ndAshidqa’X k’u:Linhhin ‘he’s wearing labrets’ (‘there is something through his l-lips’; cf. -dA-shid ‘lips’ above). The last appears highly irregular in the order of d- and l- as -:n-dA- instead of the regular dla:-, derivational ordering over phonological rule ordering.

Some combinations involve reduced forms of anatomical nouns which occur in reduced form in the qualifiers, e.g. lX- ‘berry like’ (cf. -la:X ‘eye’), k’ush-dA- ‘lower leg’ (cf. -k’ahsh ‘foot’, plus d- qualifier): -gu-lAXA-de:L ‘spine’ (cf. -gw- above), -lAXA-q’As ‘one eye of pair’, -k’ush-dA-q’u’ ‘calf of leg’ (instead of \*?k’ahsh-dA-q’u’ ‘leg-q’u’, not tested. cf. -q’u’ ‘S (herring) spawns’, q’Ama: ‘salmon roe; kidney’, PA \*q’un’, also PA \*-ch’wEch’w- ~ -ch’wE’shw ‘kidney; calf of leg’, Russian *ikra* ‘caviar, calf of leg’, etc.).

### **Possessed nouns of the form -L-stem(-L)**

A further category of possessed nouns is those with the -L- prefix, mentioned above. Many of these, over half, also end with an -L suffix, or sometimes end with that suffix, though some have no attestations with -L suffix, perhaps only because those were inadequately tested for the incidence of that suffix. Therefore, a large number of such nouns were listed in the subsection “forms with -L-stem-L” in the chapter on instrumentals, q.v. Listed there are 31 such items, 22 of which are attested only with -L suffix, 6 both with and without, and 3 always without. The degree to which some can be semantically classified as instruments is variable, and not clearly correlated with the presence or absence of -L suffix. Of the 31, 22 have qualifier prefixes. The only item that has neither qualifier prefix nor -L suffix is -L-tah ‘skin container’, which forms a very nice definitive minimal pair with -tah ‘skin, pelt’. Further useful contrasts with nouns without -L- prefix, also without -L suffix, though with qualifiers, are -dA-L-tah ‘shell’ (cf. -dA-tah ‘bark of tree’), -dla:-L-tah ‘scrotum’ (cf. also -dla:-tsa: ‘testicles’), t’Ak’L-’A-dA-L-tah ‘quiver’ (‘arrow container’) etc.; -dA-L-ts’Alih ‘shell’, ’i:nLxi:shg-’i:-n-L-ts’Alih ‘amphineura shell (basket pattern)’, -lAXA-L-ts’Alih ‘pit (of fruit)’ with d-, l-, and lX- qualifiers (cf. -ts’alih ‘bone’).

To be added to the -L-stem-L items listed in the instrumentals chapter are the following two: qa:-ni:ch’-A-dA-L-gahG(-L) ‘pink substance’ (cf. qa:-ni:k’ ‘our/human nose’, gahG ‘resin’), (k’Ayi:ny) gu’w-A-L-wahg(-L) ‘(of a different) tribe’ (no qualifier; gu’w- probably from postposition o-g(w)a’ ‘like o’). These nouns are all much more like anatomical terms than instrumentals, in fact. Adding these 2 to the statistics for the 31 nouns listed under instrumentals, the total is now 33. Of these, 22 are attested only with the -L suffix, 8 with and without, and 23 have qualifier prefixes.

That leaves one more subgroup of this subcategory, of which 3 were listed under instrumentals, those possessed nouns with -L- prefix attested only without -L suffix. Perhaps 17 such can be added here, only one of which, again, is without qualifier. Thus the total of possessed nouns cited with -L- prefix (with or without -L suffix) is 50, of which 40 have qualifiers. While the total of those attested always with suffix -L is 22, with and without 8, as noted, the total of those attested only without is 20.

Several of the following show d- qualifier, sometimes more: -dA-L-tl'a' 'handle (of knife, axe)' (cf. o-dA-tl'a', 'corner of o, e.g. mouth, edge of o, e.g. table'), cf. -ku:n-dA-Ltl'a' 'stock (e.g. of gun)' (the same with -ku:l- anatomical 'belly'); k'u-dA-L-ts'Aq' 'young grass' (if not a relativization of otherwise unattested Active imperfective verb); -dA-L-q'a' 'stem of bush' (cf. q'a' 'bush; twig of bush'; -dA-L-XAlah 'corner of box, butt-end of tree'; mAgAG-dA-L-qehX 'checkerboard', cf. -L-qehX 'bottom of cavity, vessel' (the only additional item here with no qualifier; cf. preverb qehX 'closed'); -dA-L-ku:n 'stump of tree', cf. -sA-L-ku:n 'roots' with the rare qualifier sA- (cf. -ku:l- 'belly'); with lX- 'anatomical' 'eye, berry-like', -lAXAL-gugsg 'seeds (in fruit)', (cf. gugsg 'louse'); that with d- thematic: -lAXA-dA-L-t'ahLk' 'eyelashes' (cf. next), -gu:n-L-t'ahLk' 'gill-covering' (cf. GA-LA-t'a'Lk' 'flutter wings'). In -Xu:nLtl'Ala' 'gums' we have Xu:l- anatomical 'teeth' (cf. PA \*-ghu'). In at least one item we have gw- 'hip area; filament-like': -gu-L-ts'ahLk' 'tailbone of seal'.

Finally, along with -L-Xa'L, -L-tl'a' for various kinds of handles, we have -L-te' (cf. PA \*-tEngy'), not attested without qualifier: tsa:-wiL-dla:-L-te' 'stone-axe handle' and tAGL-'A-lA-Lte' 'hammer-handle' with class-marks for possessor; ts'isa:-XAdA-L-te' 'mast' and t'a'q'-L-XAdA-L-te' 'fishing-rod' with Xd- 'rod' thematic, or -GA-L-te' for generic '(straight) handle'. That last, with GA- which might be considered a "generic" or abstract qualifier, may be an indication that there is an inclination to favor qualifiers for nouns with -L- prefix, as already suggested by the statistics..

To summarize, a large proportion of possessed nouns, up to 30%, have prefixal -L-. So many of those also have suffixal -L that they were first seen as at least associable with instrumentals. (Some more nouns with prefixal -L- will also be found under unpossessed nouns, but not in remotely the same proportion, perhaps none with -L suffix. These can instead be interpreted as relativizations generally of Active imperfective of verb themes in many cases otherwise unattested, with L-classifier.) These possessed nouns with prefixal -L- are generally in the semantic category of part of something, body part, plant part, artifact part. Also, many can be literally shown to be derived as a displaced or modified use of something else, e.g. of another possessed noun, in the case of 'skin' > '(flexible) container', 'bone' > 'shell, pit'; of an unpossessed noun, as in 'grass' > 'nest', 'louse' > 'seed'; of a stem found otherwise in verbs or conceivably so, as in 'flutter' > 'eyelashes'. The rest can be shown only to have Athabaskan cognates, 'eyelid', -te'; or evidently have stems which are otherwise unattested, e.g. -wahg and a few more.

Two items are attested with final -L and not with -L- prefix, but -dA- instead, which hypothetically could be claimed to be a classifier instead of a qualifier, viz. -dA-ga'q'L 'throat' (cf. -ga'q' 'larynx, Adam's apple') and -dA-XAGL 'gunwhale'. In these cases, however, it proved impossible to elicit any clear or consistent forms without the -L, and since it is also proven that there are stems with inherent final clusters of the form -q'L and -GL, these are best explained as such.

**t'ahL ~ -L-t'ahL**

A most interesting item to close this section with, and to lead into unpossessed nouns is Eyak t'ahL and -L-t'ahL 'leaf, (plume-)feather', cognate with Athabaskan \*-t'an'. Given that cognate, 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 > -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! *[[The statistics come only from my ledger. Half the instances are from Lena, 2 from Anna in elicitation and 16 more in text, the rest from Marie, 1938, Furuhjelm, and Rezanov. This is an instance which bears further checking not only in my later notes, but also in Li and Austerlitz, which do not figure in the statistics, and of course should, insofar as we're reduced to working with such.]]* 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 -L- nouns to 52, 41 of which have qualifiers.

For further consideration of the function of the prefixal -L-, see below also the detailed case of ts'Al ~ -ts'Alih 'bone'. Note at least occasional parallels in Athabaskan, e.g. Koyukon -tlee-L-tl'en-e' 'skull' ('head bone').

**Nouns attested both possessed and unpossessed**

In addition to the unique case of -L-t'ahL ~ t'ahL 'leaf, (plume-)feather', just discussed, 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, which 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 morphonology in Athabaskan and Tlingit is cognate, as Leer has shown *[[reference]]*, 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 basic 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 \*Xe ~ -ghe', \*ts'En ~ -ts'Ene' 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 which 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: ~-Xe:’, ya: ~ -(A)ya’ ‘thing’, q.v. in the 1970 dictionary. However, -(A)ya’ occurs only with preverbals as possessor, e.g. te’ya’ ‘salmon’ (< ta’-ya’ ‘water-thing’), dla:q’Aya’ ‘mountain goat’ (dla:-q’-A-ya’ ‘thing on 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 the 1970 dictionary 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: ~ -Xe’ ‘grease’ item.

### ts’Al ~ -ts’Alih

The case of ts’Al ~ -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 has *tsyllia* (not in Radloff) for *bertso* ‘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. (We have the latter in contrast, incidentally, in *utalets*” *aliua* ‘eggshell’, clearly to be read ’udALts’Alih ’uwa: ‘its shell of it’). The only apparent counterexample, unpossessed disyllabic, we have is Furuhielm 1862 *zali*. 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 parts, and ’i:nLxi:shg-’i:-n-L-ts’Alih ‘red abalone shell’, with l- class-mark for ’i:nLxi:shg, a displacement. Without displacement and without -L-, we have not only the -GAla’ts’Al(ih) ‘shouler blade’ from Lena but also k’uts’Alih ‘bone (of something)’, and from Galushia Nelson (probably from Anna) also in basket-pattern names, along with the abalone shell, ch’i:leh-ts’Alih ‘raven bone’, and qa:-ts’Alih yahd ‘Eagle House (“skeleton house”), < ‘our/human bones house’. Likewise, from Anna in text, we 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. ‘my finger bones’ and ‘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-).

Cf. also k'uleh-dA-L-ch'iyahd 'mushroom' ('rain-hat' along with k'ulehya' ch'iyahd 'id', with what must be an inherently unpossessed noun treated, incorrectly?, like a body part.

### **Xe: ~ -Xe'**

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'), tsa:-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 3 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'-, of unclear origin, but likely enough itself to be a reduction of -yAq'ya'-. The opacity of the result presumably allows very easily for a possessive interpretation of the combination.

Verbs derived from this noun, '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 '-'. Cf. ma: 'lake', derivative verb -ma:'.

There is one possible reverse case, however, in the term or name for the mythical being Property Woman, k'u-Xe:-gAXts', with what looks like what 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.

### **Other basic nouns attested both possessed and unpossessed**

At least 18 further such nouns have been noted as both possessed and unpossessed, in one way or another. None are attested so abundantly as the 3 or 4 above (including t'ahL ~ -L-t'ahL), and none have variant allomorphs relating to plus/minus possessed status. Of the 18, like 3 of the above, 11 are non-localized body parts, or body products, i.e. 5 are body parts but not inherently localized, and 6 (including 'blood') are body products; of the remaining 6, 4 have to do with plants, and 3 are kin terms. They will be taken in that order.

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 3 compounds, one ancient, tsa:-lA-q'AX 'crab (species)' in Rezanov, 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, shA DingAG-q'aX 'bacon' < 'pig fat'. On the other hand, it was easily elicited also as unpossessed,



q'AX 'fat (not rendered)', 3 times, and in Rezanov. (Further details: from Lena and Marie we have the phrase q'AX-de: (de: < ?) 'greedy person, hungry baby', found as k'uq'AXde: from Galushia 1933. From Anna in text we have the epithet lAqul-q'AX-lAw 'big fat cheeks' with possessor of 'cheeks' zeroed out. There is also the Active or Neuter perfective stative verb theme LA-q'AX 'S is 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 si-tsin'-gudA-k'u't' 'tendon in my neck' with 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:djqa'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 plus/minus 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 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).

Very possibly, along with at least ts'Al ~ -ts'alih 'bone' above, which most certainly belongs with these 3 or 4, we can consider these to be a subcategory, plus/minus possessed, of non-localized body parts.

Finally, belonging conceivably to this subcategory of "non-localized body parts," also might be wAsheh 'name', attested unpossessed a dozen times, including Rezanov. 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 plus/minus 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 'feces' we have unpossessed ch'e' attested 5 times, including Rezanov, 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'. 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' < 'inside head - AGi'- dung', cf. 'marrow' above, with exactly the same -iGi'- of unclear status, but note here that the lA-yAq' 'inside head of' has possessor zeroed out. (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 (in 'yellow'). Unpossessed \*(?)tse'q' 'urine' was rejected by Lena, but is evidently attested from Galushia Nelson 1938 as *tša:t*, with umlaut over *a*, and also, perhaps as a verbal noun(?) in Rezanov *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 which 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 \*wEt' 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' 'S vomits' 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 *ka gott'' Briukho'*, certainly to be read qa:wAt' 'our/human belly, i.e. stomach', confirmed in the anonymous ms. vocabulary of ca. 1812, found only in 1990, *kavvat'' briukho'*, 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 represent the different patterns of possessed (localized) body parts, and unpossessed body products, sometimes also possessed.

Much more problematical is the case of (-)ts'u:, because of inadequate documentation. We have unpossessed ts'u: in 20 instances, including 2 in Rezanov, 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 *kyts''-u 'sosok'', sosets''*, 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 product. For some reason, not noted, this was evidently never reelicited from a modern speaker. In the 1970 dictionary it is noted, "[exact] form uncertain, attested only in Rezanov." 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-t'su:'. 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 lX- anatomical 'eye', and possessed k'uAdu:ts' and unpossessed lA-du:ts' 'skin of seal's face from above eyes to nose', with l- anatomical 'head'. We even have the stem as in a verb in a song Marie remembers her father signing to her, ts'AIX 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 gw- 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 'gelatin, etc.' one may originally be tl' Ach', losing its final ejectivity under the influence of the 'tailbone' item. Another item perhaps like this is ts'Ala' 'potted smashed salmon roe put up for winter' and k'u'dA-ts'Ala' kettle' with d- qualifier, but the semantics are too unclear.

In conclusion here, 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 freely be used unpossessed, at least 'blood', 'feces', 'vomit', 'milk', 'dried nasal mucus', also probably 'urine'. They are less freely attested as possessed, though some can also be possessed, marginally and/or in compounds, '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 6 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' 'feces', 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.

Four more items marginally in this plus/minus 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'. 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 gw- '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 gw- and stem wa'ts', cf. wa'ts' 'whip'.

Finally, there are also 3 kin terms which marginally or incidentally fall into this category, as kin terms prove to be the nouns which 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 < \*?sA-qe:-kuts'-A-kih, with the adjective -k'uts' 'small' and diminutive -kih. The sA- is unexplained, perhaps the rare qualifier s-, 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 -G negative, in 'ehdG XAwa: 'female dog, bitch', 'ehdG 'uyahsh 'her female child, daughter'.

Need to add to this section: tanh 'wave', k'u-tanh 'wave made by something'; ts'Ala' 'smashed salmon roe put up for winter', k'u-dA-ts'Ala' 'kettle'??; xu'ch' 'roughened wood', k'u-xu'xh'??; k'uleh-dA-L-ch'iyahd 'mushroom' ('rain-hat', perhaps incorrectly, treated as a body part; cf. k'ulehya' ch'iyahd 'id.', 'hat for rain'). These bring the total of plus/minus possessed nouns up to 30, without any systematic attempt in the field to elicit such.

### Unpossessed nouns

The category of unpossessed nouns is far larger, of course than that of possessed nouns. This is true not only of nouns generally, including the huge category of nominalizations, but is true also of basic or stem nouns. While the total number of (never) possessed stem-nouns without qualifier prefix is well under 100, the total number of such nouns (never) unpossessed is about 200. This number does include, some such nouns with -g and -L suffixes, especially where these are merely "euphonic" after clusters, e.g. gugs-g 'louse' and laXts'-L 'star'. On the other hand, it does not include nouns derived from verbs, i.e. instrumentals, such as te-'L 'mat', nor does it include what are plainly verbal nouns. Furthermore, that total counts gahG 'resin, gum; sinkers; bullets' as only one noun, where the meaning differs according to class-marks that go with the different meanings, in the same way as ya:n 'medicine' is only one noun, whether it is IX- class, for 'pills' or gl- class for 'liquid medicine'. Such matters are dealt with in the 1970 dictionary and in the section of the chapter on qualifiers as class-marks.

Basic unpossessed stem nouns fall in a very wide range of semantic categories, presumably the full range, the main exception being kin terms, as noted above. We shall merely exemplify basic unpossessed stem nouns here, showing the variety of phonological shapes they may take. Some open stems, counting nasalized vowels along with non-nasalized, are CVh: duh 'hose kelp', sanh 'cottongrass', tanh 'shoe stuffing', tanh 'wave' gah 'day', xah 'summer' qih 'meadow', 'anh 'land'; CV': La' 'glacier', sa' 'cambium', q'a' 'bush'; CV:, the one shape not shared by verb stems: ta: 'trail', tl'i: 'bear spear', La:n 'baleen', tsa: 'stone', ts'a: 'umbilical cord', cha:n 'bait', shi: 'creek', Xa: 'northwind', ma: (< \*wa:n) 'lake', 'a:n 'river', Xe: 'grease' and ts'u 'breast' mentioned above; CV': ya:n 'medicine; also CVR (where R is sonorant: w, l, y, not n): tsi:ny 'mussel; branch', k'u:y 'wind', xi:l 'shaman', qAw 'clearing', ts'Al 'bone' mentioned above. 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.

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 ejectives. 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 that respect), so that morpheme-internally such a distinction cannot be made, and such stems are written CV:C'. Closed stems also have reduced vowel nuclei, but with restrictions occurrence and contrast according to rules shown in the phonology. – *[[going on in complexity, ending up with CVRVCC types.]]*

*[[skipping the rest of this section, not sure it should be presented this way, as this really belongs to some level of phonology, and should include the whole range of stem shapes for all nouns and verbs together, exc. where there are differences, already pointed out. May be best here merely to list a few random examples]]*

### **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 'S grows', for which see below, for the items with -L-. There are some qualifiers which seem relatively numerous in this group also, especially the irregular dla:X-, the apparently generic or abstract GA-, and rare s-.

For d- qualifier 'wood', there are at least 2 or 3 clear examples: dA-kinh 'stick, wood' (cf. PA \*dE-kEn 'id.' and \*kEn 'base'), no berb; and dA-duhdz 'porch', verb only O-L-duhdz 'make O (porch)', verb presumably derived from noun; for dA-cheh 'rotten wood', cf. lA-chehg 'crumble', where dA-chehg would have to be a verbal noun, to explain the absence of thematic lA- classifier. There are likewise 3 items with the "irregular" qualifier dlX-, 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:-: so "irregular" dla:X-t'e'Gsh-g 'unripe berries', dla:X-k'igsh-g 'berry species', dla:X-q'e:ts' 'nausea', and dla:XA-'i:nt' 'button'. None of these have any verb with those stems. A few more with other qualifiers, especially GA- 'generic?' have no verbal use of the stem: e.g. 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', and ti:-lA-kihs (insofar as distinct from -kihsh) 'wild rhubarb'. 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).

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 above, are lAXA-t'its' 'hail' and gudla:-t'its'

'icicles' (gdI- 'suspended'), for which cf. dA-t'its' 'freeze' and t'its' 'ice'; gu-si:ns 'grey hair' (not possessible), cf. dA-si:ns 'become mouldy' and si:ns 'mould'. Possibly either relativizations or verbal nouns, derived from verb themes with zero qualifiers, are items like lAXA-dAq' 'snowball', cf. O-IX-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, Gl- 'ground', -wAs 'change shape, crumble'; and probably GA-dA-shA-xa'ch' 'wick', cf. O-xa'ch' 'tie knot in O', xa'ch'(-L) 'knot'. For dIa:-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'; the expended -ch'e:' 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 'red snapper' to be a verbal noun is another question, especially in view of the fact that dIa:ch'e:' is also used or lexicalized in the color term for 'red', as of o-ga' 'like o', as in dIa: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, and that prefixal -L- (presumably not the classifier L-) occurs only with possessed nouns, extensively documented above. However, for some reason, the following items, occur as an exception to both, there being apparently no exceptions to either constraint alone: 'i:n-L-k'a't' 'sea urchin', 'i:n-L-xi:sh-g 'red abalone', 'i:n-L-xAwah 'read ribbon seaweed', and 'i:n-L-XAmah 'bracket fungus'. For all of these there are homophonic or phonologically relatable stems: k'a't' 'island' (loan from Tlingit), xi:sh-g 'gravel', l-xa 'grow', and -XAmah '(dog) barks', but only the 'grow' seems semantically relatable. If indeed 'seaweed' is related to '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 dIa:-L-Xe:ch'-g 'quartz' bay be so explained, especially if this is not a verbal noun, -Xe:ch'- not otherwise attested; cf. dIa:-ch'e:' 'red snapper' above, also with qualifier dl-, class-mark for tsa: 'stone', much more likely to be a verbal noun, at least in origin.

### **Noun phrases, better phrasal nouns?**

Noun phrases include 2 or 3 types: noun compounds, which include more than one noun stem, and noun phrases, composed of noun preceded by postpositional phrase. They constitute a large category of nouns, some hundreds, only a selection of which is included below. A third type is postpositional phrases which are nominalized with final -d. Those last will be exemplified here, but more systematically treated in the chapter on postpositions and preverbs.

### **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. Bound nouns of course compound freely, but with unbound nouns compounding is rather limited, to two or three main uses: 1. 'Y made of X', literally, and 2. a. legendary creatures, b. ceremonial artifacts or events (largely originating in Tlingit culture).

Note that in compounding with monosyllabic first element, a connective or epenthetic -A- is usually inserted, but its omission was not systematically tested. In any case, the connective -A- 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.

Listing first artifacts, Y made out of, consisting of X: k'u:ndAleh-tsa'L 'horn knife', k'u:ndAleh-shiL 'horn spoon' (GN), da:na:-shiL 'silver spoon' (GN), dAkinh-shiL 'wooden spoon' (GN), sah-A-si:nL 'socks, stockings' ('fluff boots'), Gits'AX-si:nL 'stockings' ('cloth boots'; Rezanov), 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), dza:nd-ch'iyahd 'skunk –cabbage (leaf) hat', k'uXa:shg-ch'iyahd 'beaver (skin) hat'; cf. below), 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'tah-yahd 'skin house'), kidz-k'uXehL 'coarse twine', dAkinh-dzanhd 'wood showshoes' (GN), Le'Lq'(-A)-tsi'lahL 'feather pillow', Ge:Xah-dla:XA'i:nd 'mother-of-pearl button', tsAtl-dA-ts'ik' personal name of Anna's father ('board-plate'), tsAtl-dA-ts'ik' personal name of Anna's father ('board plate'), k'uXehL-tAL 'firedrill' ('rope drill', perhaps incorrect, GN). Also here perhaps a few natural items, still Y considiting (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'), and perhaps mistakenly, qa:-la:X-A-giyah 'tears' ('our eye water', Rezanov; Lena: 'eye-water', not tears').

Examples of legendary creatures, mostly with dAXunh 'person, man' or qe'L 'woman' as second element, head, all to be found in texts from Anna and Lena, are e.g. lis-dA-dAXunh 'tree man', GAdAgilCh'e'-dAXunhyu: 'brass-people', sah-x-dAXunh 'cockle person', tsa:-dla:-dAXunh, tsa:-dAXunh 'stone man' (with and without class-mark for 'stone'), and several more listed under dAXunh; ch'iyat'lG-qe'L 'frog woman', 'itl'-A-lA-qe'L 'mountain woman', 'u'tl'-dA-qe'L, 'u'tl'-qe'L driftwood woman' (with and without class-mark for 'driftwood'), and several more listed under qe'L; further, however: GAdAgil-sAqe:ts'Akih 'sun child' and GAdAgil-dAkinh 'sun sticks', showing that his type of compound is special to oral literature, rather than confined to dAXunh and qe'L as head

The attested ceremonial artifact terms appear confined to clan-house names and totem-poles, and might well reflect Tlingit linguistic style as well as Tlingit culture: chi'i:leh-yahd 'Raven House', gu:djgAlAG-yahd 'Eagle House', na:XAG-yahd 'Seagull House' and several more listed under yahd, many from Galushia Nelson; likewise 'Ayawih-lAGAshk'L 'totem pole' ('mask /grotesque face pole', Lena), -lAGAshk'L totem pole' (GN, "prefix with [word for] eagle or raven"). Likewise Russian Orthodox k'u:nda'ch' gah-yahd 'church, prayer house', sAsinhLinu:-dla:sha'L 'cemetery' ('dead people's enclosure'); probably also mAgag-qAXah 'checkers month' and several other month-names. (ceremonial); possibly also e.g. ya:-djilah 'rainbow' ('sky-?'), k'uXa:shg-ch'iyahd 'mushroom' ('beaver hat', cf. above'). Another suspect item 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, e.g. *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-chi'iyatIG* 'female frog'. So even with possessed kinship nouns as head: e.g. *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, unlike other languages such as English, or Athabaskan and Tlingit, instead of compounding, Eyak specifies the relationship between two unbound nouns by subordinating the first to a postposition. E.g. for 'Raven House' instead of *ch'i:leh-yahd* we have from Lena *ch'ilehshiyahya' yahd* 'Raven's house', i.e. *ch'ileh-shiyah* 'Old Raven' (with pejorative/endearment adjectival suffix as used in myth), as *o* of *o-ya'* 'of o', a rather common and general postposition in such noun-phrases, used also e.g. in *ts'iyuhya' duxL* 'bear trap', i.e. 'blackbear's deadfall', likewise *yahshya' ch'iyahd* 'shellfish sp.' ('doll's hat'), *lisya' ci:ny, lisya' 'a:L* 'spruce boughs', *lisya' gahG* 'spruce pitch', *yahGAYu:ya' yahd* 'menstruants' house', *qe'LGAYu:ya' na:w* 'wine' ('women's whiskey'), or with other postpositions, e.g. *lis-dA-yAq' qALa'nik* 'wood worms' ('worms in trees'). *dAq'a:g-da:tl' 'AX* 'steamboat' ('boat with fire'), *Gu'L-q' ya:nahd tah* 'bedspread' ('that which lies flat on blanket'), and many other such noun phrases, a highly productive structure or process in Eyak. For this, see below, section after next. Compounding by contrast plays but a small part in the formation of Eyak noun-phrases.)

### Compounds, with possessed nouns as head

Bound nouns of course compound freely as head of noun phrases, i.e. kin terms, body parts, and a few more items, e.g. *-ch'iyah'* 'master of', *-wA-lah(-yu:)* 'spirit(s) of', *-lah-G(-A-yu:)* 'inhabitant(s) of'. Therefore *la:xga:-ch'iyah'-ta:'-ni:k* 'store-keeper's father's nose' is presumably grammatical. Perfectly predictable compounding, such as the preceding or *'anh qe'L-ta:'* 'that woman's father', *si-chu:-ta:'* 'my mother's mother's father', *siya:n-ni:k* 'my mother's nose', *XAwa:-djehX* 'dog's ear', or even *si-lA-Ga:nsh-dA-Xu'* 'my whiskers' ('hair of the lower part of my face, below my nose'), is not exemplified here.

The following are listed in the scanning for nouns as entries because they are lexicalized, metaphorical: *tsa:-dla:-Xe'* 'kerosene', *xa:s-A-Xe'* 'soap' ('taboo-grease', ceremonial or mythical?), *k'u'uGL-dla:-shid* 'pericardium', *giyah-Ltah* 'water-skin, bucket', *tanh-A-yahsh* and *tanh-dla:-yahsh* 'flotsam' ('wave child'), *sahxw-A-yahsh* 'small clam species' ('cockle's child'), *sahx-wAlahyu:* 'cockle-spirits' and no doubt many other such with *-wAlah* 'spirit of', *djiL-yAquhyu:* 'shelves' ('platform-young'), *disLi'ehdg-yAquhyu:* 'Ritz crackers' ('pilot-bread young'), other lexicalizations with *-yAquh*, *xut'L-yAquh* 'pistol' etc., *dji:dj-dAkuhd* 'fireweed' < '?s lips', *sAsinhLinhu:-wAXa:w* 'ghost, shadow' < 'dead people's image', *XAwa:-djehX* 'berry species' ('dog's ear'), *k'u:y-A-yahsh*, *k'u:y-A-yAquh* 'slight breeze' (wind's child), *-qa'-lA-'ehd* 'husband's sister-in-law' ('husband's l- wife'), *tlu:dj-qa'* 'king (at cards)' ('klootch's husband', < Chinook jargon), *du:s-qa'* 'king at cards' (some confusion, *du:s \*?'ace'* from Russian *tus* 'ace'), *Le't'-lA'ah* 'jack of diamonds' (Le't' box; diamonds', *-lA'ah*



'slave', ceremonial?), XAwa:-tl'Aqa'd 'berry species in moss' ('dog's anus'), lis-dA-tah 'bark' ('tree's skin'), lixah-'i:nda:' 'bear mask' ('grizzly's face').

Of course nouns which are found both possessed and unpossessed can also be compounded, as in the lexicalized GAdagiL'-ch'e' 'brass' ('sun feces', mythical?), tsa:-lA-q'AX 'crab species' ('rock fat')

### **Noun phrases, 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 o, for o', probably more numerous than all other postpositions combined, in this construction. Some examples: Xe:ya' tsa:'L 'grease box', xi:lyu:ya' tsi:ny 'shamans' song', ts'AlyAq'ya' Xe: 'marrow' ('inside of bone grease'), ma:ya:ya' sinhX 'algae' ('lake thing's resin'), sAsinhLinu:ya' la'mahd 'inedible berry species' ('dead people's berries'), sAsinhLinu:ya' XAwa: 'moth' ('dead people's dog'), sAsinhLinu:ya' ye:t' 'small smelly dark kind of wild celery' ('dead people's wild celery'), k'ulehya' ch'iyahd 'mushroom' ('rain's hat'), ch'iyatl'Gya' ch'iyahd 'mushroom' ('frog's hat'), yahshya' ch'iyahd 'shellfish species' (doll's hat'), XAwa:ya' gugsg 'flea' ('dog's louse'), xAtl'ya' XuhLg 'snow shovel', lixahya' duxL 'bear trap', yahGAyu:ya' yahd 'menstruants' house', ts'iyuxya' ya: 'mosquito bar' ('thing for mosquitoes'), qi:yALAxhanhya' dzAwAL 'spider's web'; ya:nu'Gi' sinhX 'algae' may be from \*?ya:nu'(yA?)q'ya' sinhX 'underwater inside resin', ch'e:yu'ya' la'mahd 'elderberry-bush berries' and 5 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: le:L-gu-Xa' ya:n' 'flower species' ('for hair medicine'), giyah-gulA-Xa' ya: 'boots' ('for water thing'); dzanhd-A-yAX-A- ta: 'Milky Way' ('under snowshoes trail'), Lanhd-A-yAX-A- yahd 'smokehouse' ('under smoke house', possibly < Lahnd 'uyAX yahd 'smoke under it house'), ; -lAqah-yAq'(-d)-A-djilahG, -lAqah-yaq'-AGi'- djilahG 'brain' ('inside of head *sarana*/pudding'), ts'AlyAq'iGi'- Xe: 'marrow' ('inside bone grease'), xut'L-yAq'd chi:shg 'gunpowder' ('inside gun gravel'); dAq'a:g-da:-tl'(')AX 'steamboat' ('with fire boat'), dAq'A:g-dA-wa'L(X)'AX 'steamboat' ('following fire boat'), qa:-sa'-d. giyah 'saliva' ('water in our mouth'). A special case are the directional winds, e.g. shi:-da' k'u:y 'into creeks wind', for this and other winds, see 1970 dictionary under k'u:y 'wind'. Note that several of these are phonological compounds, e.g. dzahndAyAXAta:, with what looks like epenthetic -A- joining the postposition and unpossessed noun, perhaps in origin a fully reduced -'e', q.v. in 1970 dictionary. Note also that these are all lexicalizations, i.e. lexemes to cite here precisely because they are lexicalized. They 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.

### Nominalization of postpositions

Aside from the major category of nominalization of verbs by relativization and deverbalization, there is a category of nominalization of postpositions. 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 them will be included in the chapter of postpositions. Exemplification of this category will be confined here to some lexicalizations: ts'AL-qa' GAd-i:'-X-d or ts'AL-qa' GAd-i:'-q'-d 'smokehole' ('?' + 'between o' + Gd- qualifier 'place' + -'e' 'unoccupied place of' + -X- 'movement within' or -q' 'on' + -d), -tsin'-da'-d 'tip' ('front part of head'; -tsin' 'neck' but cf. PA-\*tsi' 'head'), XAdla:-tsin'-da'-d 'point of land' with Xdl- qualifier, ts'iyux-xa'-dA-'e'-d 'mosquito bite' ('mosquito eating-range unoccupied place of'), -sa'-d 'mouth' (cf. o-sa' 'into o's mouth'), -ku:n-L-ch'A-yAq'-d 'abdomen' ('belly toward inside of'; cf. o-yAq'-d 'inside of, interior of o'), (-)Gu:dz(-L)-qa'-d 'joint' ('between Gu:dz(-L)'), sAndi-qa'-d 'week' ('between Sundays').

### Nominalizations – Relativizations of verbs

Nominalizations are nouns derived from verbs. Of these, deverbals, i.e. nouns derived from verbs by the derivation that deletes the classifier and conjugation or mode-aspect prefixes are covered in the chapters on gerund and verbal noun, acquisitionals, and instrumentals, which need to be reorganized. Here, on the other hand, are covered nouns derived from verbs by relativization. These constitute a very large proportion of nouns, as shown in the statistical table. These are formed retaining all prefixes, and by zero suffix for verbs or verb phrases with no human reference, -inh for singular human reference, and -inu: for plural human reference.

Clearly, by far the largest proportion of relativizations is in Active imperfective, for 2 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 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 zero classifiers, deverbals are homophonous with relativizations, so are indistinguishable from them. After Active imperfective relativizations are exemplified, we then turn to nouns that are relativizations of other mode-aspects. In the sample, up to 150 were Active imperfective, but that number is less than 40% of the total in the corpus. Of (lexicalized) relativizations in other conjugations and mode-aspects, a much larger proportion is cited, including 17 Active perfectives, 2 Inceptive imperfectives, 18 Inceptive perfectives, 24 Neuter imperfectives and 9 Neuter perfectives; also 2 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.

### Active imperfective relativizations

Starting with human relativizing suffixes, simplest intransitives: LA'inhinh 'married woman', dik' LA'ehGinu: 'unmarried women', k'uGA'a:nGinh 'blind person' (thematic negative); transitives: k'uts'AXinh 'smith' ('he pounds something', Rezanov), 'iLgiyiL(inh) 'witch' ('bewitches indeterminate O'), qa: Xinhinu: 'cannibals' ('they eat us'), qa: Lyi:n'inh 'doctor' ('he cures us'), qa: ta'X (yAX) 'i:nLyi:nhinh 'priest' ('he puts our heads (down) into water'); yAX k'uLAq'a'Xinh 'square dance caller' ('he directs us about'), yAX k'u'LAd'e'LXinh 'square dance caller' ('he bosses 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'), o-tl' tsin'dAlinhinh 'sweetheart of o' ('speaks with o'), 'AwLA'e: tsin'dAlinninu: 'Swedes, Greeks' ('they speak strangely'), passive peramublative: yAX dAkud'Xinh 'messenger; acolyte' ('he is sent about on errands'), k'utl' 'ida'Xinhinh 'storyteller' ('he tells stories to one').

Non-human, intransitive: lAXALAtux 'rice' ('granular 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' ('feet clamber'), 'i:nLch'iyak' 'rotten fishheads' ('i:nLch'iyak'wL Sewock) ('head is sharp-tasting'), lAXALAchanh 'onion' ('ball-like smells'), qi:yALAchanh 'daddy long-legs' ('toes smell'), gulAxuL 'whirl of water', 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 are in position', usitative from positional), gu:nch'a:x 'silty water' (from Active stative, or deverbalization?), gudAGAmAk' 'gnat' ('its butt is round', from Inceptive stative, or deverbalization?), la'mahd 'berries' ('it ripens', deverbalization?), lixah < lAxah 'grizzly bear' ('it grows', deverbalization?), dla:wehsg 'swamp' ('it collapses', deverbalization?), lAXAwehsg 'quicksand' ('granular 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).

Non-human, transitive: k'uxu'tl' 'killerwhale' ('it blows on something'), k'uLGAdjg 'propeller' ('it paddles something'), 'adLAXa'tl'(g) 'clock' ('it knocks itself'), 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', usitative from Inceptive perfective stative), qa' 'AdXALA'ah 'horseclim' ('it extends own penis out', usitative from Neuter imperfective).

A fair proportion are transitive passive: lAXAdAtAs(g) 'dice' ('ball-like are shaken'), ditl'a'g < dAtl'a'g 'book' ('it is nicked, spotted'), lAXAdatsu:x 'musket' ('granular are thrust (into it)'), lAXAdAts'uh 'orange' ('ball-like is sucked'), dAxu'tl'g 'balloon' ('it is inflated'), dAxits' 'drum' ('it is beaten'), dAGahdj(g) 'rattle', lAXAdAGahdjg 'small

bell' ('ball-like is made to rattle'), dAdAq'a:g 'incense' ('it is burned'), dla:dAq'a:g 'coal' ('stone is burned'), lAdAxa:g '(domestic?) plant' ('its is made to grow'), , yAX LAwAsX 'sweater' ('it is stretched about').

More examples follow, of more complex structure, starting with intransitives with preverb: ta' Lteh 'dead spawned-out fish' ('lies dead in water', ya:nahd tah 'cover' ('ies flat covering'), same in several more, e.g. Gu'Lq' ya:nahd tah 'beadsread' ('lies flat on blanket'), yAX dALAk'a't'yu: 'birds' ('fly about'), ta'd qALa'nik' 'small fish species' ('wriggles in water'), lAG tli:X 'halibut' ('flips/flounders ashore') dAG lah 'trout species' ('swim upstream'), li' lah 'trout species' ('swim downstream'), yAX dAla:X 'planet' ('moves about', qa:nch' 'a:ch' 'spring (season)' ('they (animals) come out', persistive), yAX XAda'ya:X(yu:) 'birds' ('they fly about'); with postpositional phrases: 'uq' k'uteh 'bed, sleeping-place' ('on lies on it'), 'uyAq' k'uteh 'sleeping-bag' ('on lies in it'), 'uya' k'uteh 'sleeping-bag' ('one like in it, open top'), qi'ch' k'uch'e' 'toilet' (place where one defecates), tsa:le:X quh 'octopus' (< tsa:-lA-yAX 'pl. stay under rock'), da:X dALAts'u'ts'g 'leech; suction cup' ('it sucks with mouth on a surface'), sLa'dah gu:nLACHanh 'perfume' ('it smells beautiful'), 'idah LAgAmih 'sugar' ('it tastes good'), 'uwa'LX yAX k'udAqe:g 'compass' ('one navigates according to it'), ya:q'd k'udAq'ah 'aurora borealis' ('something burns in sky'), iLqa'X qAdAsid 'chain' ('pl. extend between each other'), 'uya'ch' yAX k'udA'a'ch'X 'urine tub' ('into it one (pl.) goes about', qi'ch' yaX k'udA'a'ch'X 'toilet' ('place where one (pl.) goes about'). Many of these are usitatives derived from other theme classes: positional (Lteh, -teh, quh ), classificatory (tah), Neuter imperfective (-sid), motion (lah, -'a'ch', -qe-, some of which are already in Active imperfective by other derivations: viz. persistive, repetitive, perambulative.

Intransitives with overt noun subject: sAqe:ts' Akih 'uyAq'd dah 'womb', sAqe:ts' Akih 'uyAq'd quh 'womb', lAXALtux 'uq' qa:nch' lAXA'yah 'rice table in church' ('rice is ready on it'), dja:q' ya:q'dAX yAX dAla:X 'bullhead constellation' ('bullheads swim about in sky'), di:iya' 'uya'd gulALah 'salt shaker' (i.e. 'cellar'?, 'salt is in it, open at top') qihda:q' lAXALAYah 'cranberries' ('berries are on meadow'), lisdAyAq' qALa'nik' 'wood worms' ('wriggle inside tree'), dALAx:e:g GAnuh 'whistling duck species'. All but the least of these appear to be usitative derivations from other than Active verb themes: positional ('womb'), classificatory ('rice table', 'salt shaker', 'cranberries'), or motion: ('wood worms').

Transitives, some with indeterminate object: qa: 'i:ntl'in't' 'bee' ('it farts on our face'), qa:nch' k'uq'Ats'g 'hornet; horsefly' ('it suddenly bites one'), qe'xu:tl' 'porpoise' (< qa'-'i- 'it emrges blowing'), 'uX 'Adk'u:nLak'u:d 'towel' ('one wipes own face with it', persistive), 'udAyAq' k'u'xutl'g 'flute' (Rezanov, 'one blows into it with noise'), 'uyAq' Ach' k'u'xu'tl'g 'flute' 'one blows into it'), qi' 'Adk'udAxahL 'steambath, sweathouse' ('place where one steams self'), 'uyAq' yAX k'u'LA'a:nX 'field glasses' ('one looks about in it'), dAlu'ch' da: [ 'Ad]lAGAdA'e: 'mirror' ('we see our face through').

Evidently the most frequent are passives from transitives, especially common in instrumental sense, many of which are cited also in the chapter on instrumentals. ya:nahd dAtah 'grass mat' ('it is set down flat, as covering'), 'uyAq' k'ugulAdAts'u'ts' 'sucking tube, drinking straw' ('in it liquid is sucked'), qi' k'udAts'AX 'smithy' ('place where something is pounded'), yAX lAXAAAdAts'AX 'ball' ('ball-like is thrown about'), sa'

dA'ah 'tobacco' ('it is put into own mouth'), da:X XAdAdja'g 'matches' ('linear is jerked against surface'), 'uX 'iLch' k'udAgAXts' 'glue, paste' ('with it something is made to adhere to each other'), dAch' dAgAXts' 'bandage' ('it is made to stick to indeterminate object'), 'AdiX da:X dAgAXts' 'wallpaper' ('it is made to stick to surface indoors'), qi' k'ud k'u'lAdAga'g 'school' ('place where something is taught to one'), 'uX k'udAxu'tl' 'bellows' (Rezanov, 'with it something is blown on'), yAX dAxuLX 'barrel' ('it is rolled about'), 'uX qa:nch k'uxuLg 'corkscrew' ('with it something is revolved up out'), k'ugudAch' dAxuLg 'outboard motor' ('it is made to revolve at the butt-end of something'), 'uX k'udAxa:sh "lancet" (1938, 'something is butchered with it'), qi' k'udAxa:g 'garden' ('place where something is made to grow'), 'uX k'udAGAdjg 'oar, paddle' ('with it something is levered, paddled'), 'uq' Ach'ahd 'idadAXah 'Bible' ('from on it story is told'; cf. 'newspaper' below), yAX dAdAXahd 'accordion' ('it is pulled back and forth with noise'), dAlu' lahdz yAX dAXahd 'bureau of drawers' ('it is pulled forward back and forth through'), yAX lAXAdAXa'tl'X 'shinny ball' ('ball-like is batted about'), 'uX yAX k'ulAXAdAXa'tl'X 'shinny stick' ('with it something ball-like is batted about'), '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 something is baked'), 'uyAq' k'u:ndAwa' 'mortar; ice cream maker' ('in it something is ground'), 'uX yAX k'u'dAyahdX 'measuring stick' ('with it something is measured about'), Xi:ch' dAdA'iLgyu: 'junk, trash' ('things which are thrown away/yonder'), 'uyAq' k'uGAdA'eh 'field glasses' ('in it something is seen'), 'uya'X k'udAkus 'washing machine' ('in it, open at top, with motion, something is washed'), XAdAG dALayah 'fish-drying rack' ('stick-like are put up above'), 'uq' Ach' k'uqi:dALayah 'footstool' ('onto it one's feet are put'), ya:nu'ch' lAXAdAya: 'seeds' ('granular are put underground one after another'). Note that many, but not all, of these appear to be neologisms.

Passive with 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 teeth are cleaned with it'), di:ya' 'uya'ch' gu[n]dAya: 'salt shaker' ('i.e. cellar'? 'salt is put into it, open at top'), dide'L qi:dla:dAq'a:g 'electric wires' ('lamp is burned involving hollow rope-like'), giyah qi' tl'ehd dAxuLg 'faucet' ('place where water is turned open'). Note that these appear all to be neologisms.

Overt noun as object: tAwi:s XAdAts'AX 'snipe species' 'it throws (or pounds?) stone axe', ya: gulAGahG 'snipe species' ('chops liquid thing'), le:L guch'u' 'dragonfly; hummingbird' ('it steals hair'), giyah gulAts'u'ts'g 'pump' ('oit 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 overt noun as head, as subject, all or most being neologisms, if not *ad hoc* descriptions: qa:XA' Lts'iya'ts' giyah 'vodka' (Rezanov, 'water which utterly rots on us'), 'idah gu:nLAgAmih giyah 'syrup' (Rezanov, 'water which tastes good'); head as object of postposition: 'uq' Ach'ahd 'ida'dAXah ditl'a'g 'newspaper' ('paper from on which a story is told', cf. 'Bible', above), 'uwa'LX 'u'dAgah Lanhd 'smoke signals' (1938, 'smoke according to which something gets known'), verb usitative from Neuter imperfective; head as object of passive: t'a'd dAtah

'AdLAXa'tl' 'pocket watch' ('clock which is kept in own pocket'), XAdla:tah dAkinh 'latch stick' ('stick which lies crosswise'), verbs usitative from classificatory.

### Relativizations of other than Active imperfective

*Active perfectives* are of course very frequent in the corpus, but proportionately very few of these are relativized and lexicalized. Only 16 examples were noted in the survey, and of these, a large proportion, at least half, refer to foods, especially modern foods: sLicha:dL 'hump of humpback salmon' (a delicacy, 'hump of humpback salmon that has been cut off'), sALts'ahsL 'partly dried fish' (unclear why not passive), sLisihL 'fish that has been rotted'; modern foods: sLit'its'L 'rock candy' ('it has been frozen'), sLixu'tl'gL 'bread' ('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'), k'uch'ahd 'i:lihsa'yahL 'good luck amulet' ('from something 3 is mentally situated', perhaps somehow from \*'uch'ahd k'u:lihsa'yahL 'from it one is mentally situated/affected'). Possibly belonging in this category also is 'i:nsLiwa'L 'snuff' ('it has been ground'), though not the following: 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' ('has hairs on its head'), XAdisdiXahdL 'plain line basket pattern' (1938, 'linear has been dragged'), 'uya'X 'AdsdikusL 'bathtub' ('one has washed oneself in it, open at top'). Examples of common relativizations that are hardly lexicalized: 'i:nsALxahLinh 'old person', sAsinhLinu: 'dead people'.

*Inceptive imperfectives* are attested as what could be considered lexicalized relativizations, particularly in one specialized semantic area: '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 Inceptive imperfective ('future') qu'- ~ as in the acquisitional k'uqu'wAshe:ch'L ~ k'uqa'she:ch'L and gerund k'uqa'she:l 'hunting', more exactly 'be going to kill something', discretely avoiding presumption. Cf. the synonymous 'uX k'uxLsiyuhyu: ('those with which I kill many something') and 'utl' da: k'uLsiyu:k' ('that with which we kill many something', customary). Wider such use of the future in such nominalizations was not tested, but in view of its absence with -siyu:, it seems possible that such use is restricted to the one stem -she. 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.

*Inceptive perfectives* in lexicalized relativizations are not very common. A few are from motion verbs: tsAdl dAGAXe:L 'water bug species' ('it is packing a board'), 'u'tl' dAGAXe:L 'squid' ('it's packing driftwood'), dla:GAXuL 'wheel; grindstone' ('it is rolling along; stone is revolving', GALa'nik'L 'bugs' ('they are crawling along'; but cf. qAla'nik' 'waterbugs, woodworms', usitative Active imperfective). A larger proportion are Inceptive perfective stative themes, retaining the semantic character of those:

GALAduk'L 'hill, mound', GALAXi'ts'L 'some kind of hill', dAGALAshugL 'crooked knife', GALAguk'Linh 'hunchback', GAqe:L 'ellipse', IAGAdAq'a'L 'axe', dla:GALAGAmAk'L 'button' (Rezanov, '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', derived from noun as Inceptive perfective stative. Also perhaps GAdAgil 'sun', if not a verbal noun with GAdA- thematic qualifier, stem -giL without -L suffix, cf. next. dAGALde: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 roughened', Neuter perfective).

*Neuter imperfectives* are commonly lexicalized and relativized. Taking only a few examples with -t'eh 'be a certain way': k'ulAX 'i:t'inh 'chief' ('he is greater than one'), o-Xa' wAX'i:t'inh 'spouse' ('lives with o'), t'its'ga' 'i:t'eh 'glass' ('is like ice'), tsinhtl'ga' 'i:t'eh 'flour' ('is like ashes'), q'Ama: ga' 'i:t'eh 'millet' (Rezanov, 'it's like roe'), k'uLe'xtl'ga' lAXi:t'eh 'grapes' ('berries are like gallbladder'), or with -Le/ 'be C(omplement): dAGAleh k'u:Lihinu: 'smart people' ('their mind exists'), dAGAleh k'u:Leh cat's name ('smart'). Further didit'u:ch' ('solid? is black'), 'i:ndit'u:ch' black abalone' ('head is black'); 'uni:k' 'uwa: qi:sid 'razor clams' ('their noses protrude'); 'Adu'liLiginhinhkih 'well-mannered child' ('little knows-self'), o-d k'u'li:Lga'ginh 'o's teacher' ('teaches something to o', unusual in keeping Neuter imperfective with repetitive, presumed Active imperfective o-d k'u'lALAg'a'ginh probably as good or better, unless in fact further derived as a "poetic stativization", for which cf. below); di:yanh 'stickleback' ('is sharp'), Xa:ngudi:yanh 'porcupine' ('back is sharp'); and many examples with stem -'a/ 'extend': la'da'X 'i:'ah 'two-pronged fish spear' ('double extends'), yAX XAdi:'ah 'candle' ('linear extends downward'; cf. synonymous usitative yAX XAdAdA'ah 'linear is made to extend downward'), 'uX k'udi:'ah 'pot with handle' ('something extends attached to it'), 'iLX XAdidi'ah 'seam' ('linear extend in contact with each other'), ya'X di:'ah 'ramp' ('wooden extends upward'), 'iLda:X qi:gudla:di'ah 'something inside porcupine, edible' ('ropelike extends along each other'), li' guli:'ah 'brook' ('water extends downstream'), yAX 'igudli:L'ah 'waterfall' ('water extends downward'), qi:yi:'ah 'crab species' ('toes extend').

Examples with overt noun subject: ta: qi'dga' 'i:'ah 'end of road' ('place as far as to which trail extends'), and overt noun as head of relative clause: 'iLXa'X 'idid'ah xut'L 'double-barreled shotgun' ('rifle which extends along each other'), gu:nLits'anh giyah 'hard liquor' ('water which is strong liquid'). One unique instance as o in postpositional phrase o-ga' 'like o', with dA- 'ipse': di-'idiyah-ga' 'in one piece, whole' ('just as it is in size').

Additionally, there are lexicalized relativizations of two Neuter imperfective derivations: anatomical resemblance dAXunhga' 'i:nLida:' 'owl species' ('it has a face like a person'), and XAlahsdla:GAyu:ga' 'i:nLila:X 'duck species' ('it has eyes in its head like a White man'); and of "poetic stativization" in qe'yiLteh 'whale' ('it lies dead emerged'), 'itl'a:ndaht 'iguli:Ltah 'Eyak River' ('it keeps liquid pressed against the mountain'), ya'X gudli:'yah 'fountain' ('water is situated upward'). Here too might belong o-'s teacher, mentioned above.

For examples of Neuter imperfective themes which have not remained as such in lexicalized relativizations, on the other hand, cf. items listed under Active imperfectives above, switched to that by the usitative derivation, q.v. also in chapter on usitatives. It would appear that that derivation is more common in transitives than in intransitives. **[[check on this]]**

*Neuter perfectives* are probably represented here at least as well as Active perfectives, proportionately much better: ts'a:tl'ya' 'i:dahLinh 'infant' ('is staying in baby basket'), gutl'a'q'ya' 'i:dahLinh 'sternman' ('is sitting in stern'), 'uleh GAlI:'yahLinh 'she's pregnant' ('it is her time of year'), dAyAX dIa:dItahL 'rain-bucket' ('is set underneath'), da' 'i:t'its'L 'frozen roe' ('is frozen into container'), lAXAdiXu'L 'peach' ('ball-like is furry'), ni:Lts'isL 'porcupine hole' (unanalyzable, stem not otherwise known, ni:-anomalous, perhaps for 'i:n-), k'uxuch' di:Le'L 'roughened wood' (overt noun complement, 'wooden is roughened', cf. xuch' GAlE'L above), giyah 'uyAq' guli:'yahL 'blister' ('water is situated in it'), la'X yAX dAdAtl'ih 'necklace' (d-class is tied/worn hanging downward over head').

Finally, there are attested a few relativizations, half a dozen altogether, of Active mode-aspects other than imperfective and perfective, i.e. of modes (at least optative and desiderative, perhaps also imperative) in addition to aspects (imperfective and perfective, above). For conditional (aspect) there are no lexicalized relativizations attested; for more relativizations of conditional ('anyone who / anything which'), see chapter on conditional.

*Active optative* is evidently well attested in at least one specific semantic area: Xa:ndiyah(yu:) 'food' ('may be eaten, pl.),' Xa:nliyah'e:X 'looking for food' ('looking for what he may eat', Lena in text), k'uXa:nliyah 'food' ('what one may eat', Lena); cf. also Giyah 'food', unanalyzable, possibly a disyllabic stem, but also possibly with stem 'eat', minus X- thematic qualifier, cf. k'u-w-ah 'meal' verbal noun likewise, but here with possible G- thematic?, and -iy- as vestige of optative. One other possible example is qa:da:X 'iyinhinh 'priest' (only from Sopie, 6-22-87, "because he walks in front of us", so to be interpreted 'let him walk in front of? us'; but cf. qa: ta'X yAX 'i:nLyi:'inh 'priest', Lena, qa: ta'X'I:nLyi:nhinh 'priest', Marie, 'he puts our head (down) into water'). 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', 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'Lya:' 'Alaska daisies', a heart medicine. This is also transcribed qa' GAdi:Lya:', likewise an imperative, but the form with is -i'- further confirmed by both Lena and Marie. Lena explains "sounds like 'dig them up'", more literally 'handle them in plural acts up out!', 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' GALya:' 'shield fern roots' ('put them on the fire!'), with qu' 'on the fire' as preverb. However, this might alternatively be interpreted as from qu'q' 'ALya:' as a 'A'-type quasi-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 chapter on the customary, no lexicalized relativizations whatever had been noted, other than two personal names, as mentioned in the subsection "Miscellanea" of that chapter. 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' (Lena, 'by using it as a handle something in container is customarily handled upward'), and 'utl' da: k'uLsiyu:k' 'our weapons' ('that with which we customarily kill many something', Anna in text, mentioned above). 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, persistent, perambulative, are freely or proportionately represented as lexicalized relativizations.

### **Internal syntactic status of relativizations and 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 unclear picture. First, for relativizations in the semantic fields allowing inalienable possession, anatomical and kin terms, we have few relativizations. The most obvious such anatomical term is -Xu:nLAYah 'tooth, teeth', clearly from the classificatory verb theme -L-(y)a 'pl. are in position', retaining the classifier, so not a verbal noun, here probably to be seen as passive usitative of the transitive, 'pl. are kept in position', with the anatomical qualifier -Xu:-n- 'toothlike, involving teeth', obviously cognate with Athabaskan \*-Xu' 'tooth'. The verb theme clearly implies plural 'teeth' originally, but the term is confirmed also for singular 'tooth' as well, in itself implying lexicalization. For 'my (own) tooth/teeth' we have of course siXu:nLAYah, and unattested k'uXu:nLAYah siya' '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. More interesting is that for third person human possessed we have 10 instances, all 'uXu:nLAYah, never reflexive or with relativizer \*?'uXu:nLAYinhin, 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 me'), sidALyAX lah 'my older sibling' ('he lives before me'), certainly not \*linhin, plural probably 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 'wV's toward o'). The plural, however, is now -ch'an'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 a not inherently possessed nouns leaves more unanswered questions, however. In one text from Anna we have 'my', 'your' and 'his' with 'weapons, hunting-gear', nominalized even with -yu: 'plural', still as subject, in 'uX k'uqu'xLshehyu:, 'uX k'uqi'yiLshehyu:, and 'uX k'uqu'wALshehyu: 'those with which I'll kill something' etc., respectively. This must certainly be a lexicalization, however transparent. Note, however, that in the 3<sup>rd</sup> person, the form lacks the relativizer, is not \*?'uX k'uqu'wALshinhinh(yu:), conceivably treated as though it does not refer to a human 3<sup>rd</sup> person, though the subject remains, 'those with which he'll kill something', not passivized.

We have a clear usitative Active imperfective relativization of a Motion theme from Marie in sich'a:X 'inhinh 'my helper' ('he comes to my aid'; cf. sich'a:X Ga:Linh 'he's helping me'). Likewise from Marie 1980 xuLyi:n'inh 'he's my doctor' ('he cures me'; cf. xuGALya:n'Lnh 'he's curing me'), along with qa: Lyi:n'inh '(medical) doctor' (usitative, 'he cures us/humans'); also lAX k'u:t'e: 'AnahshAkih 'uXe'xleh 'I like this weather', where lAX k'u:t'e: 'this weather' ('something is this way') is both a lexicalized relativization serving as the object of 'like' and 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, we have sid k'u'li:Lga'ginh 'my teacher' ('he – perpetually -- causes me repeatedly to know something', with unusual Neuter imperfective stative along with repetitive), along with k'ud k'u'li:lga'ginh 'teacher' ('he – perpetually – causes someone to know something', xu: qi' xdah 'place I stay, my place'. 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 '(he') 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: siya' 'my weapons' ('those something is killed with belonging to me', passive); \*?'xu: siya' qi' k'udah 'my place' ('my place where someone stays'), \*?'k'ucha:X 'inhinh siXA' 'my helper' ('he who helps someone in relation to me'; or \*?'qa:ch'a:X... 'helps us/humans'), \*?'qa: Lyi:n'inh siXA' 'my doctor' ('he who helps us/humans in relation to me'), \*?'k'ud k'u'li:Lga'ginh siXA' 'my teacher.

In an attempt to answer this question, apparently never directly addressed in the field, the only relativization we have further such data on 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 relevant information we have for this lexeme.

Most interesting is Rezanov's *atkol' gete etleittu 'biednoi'* ('poor'). The first *e* of 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 *i kratkoe* making semivowel /y/ rather than /y i/. This allows the possibility that the *i* is *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

yiLininh-duh ‘he’s very rich/powerful indeed’. Note in the Rezanov original that the usual relativizing -inhinh 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 *i* rather than *n*. Rezanov never came at all close to transcribing -inhinh well, -en” at best. Whatever the original was, we apparently have from Lena the phrase in 3<sup>rd</sup> person, related ’i:t’eh for some reason without relativizer, present presumably without relativizing force on the main verb. Another interpretation, with *i kratkoe* and not *n*, is 2<sup>nd</sup> person singular in the main verb, thus ’a’d k’ulAX ’i:t’eh yiLeh-duh ‘you’re a very rich one 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 \*?!k’ulAX ’i:t’eh xiLininh.

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’.

**[[Incomplete: 1. Fill in section on simplest unpossessed stem nouns. 2. Settle on terminologies, e.g. +/- poss. 3. Internal syntax of NPs, e.g. ’uX tsa: dla:dAGahG (focus?). 4. Intransitives more often usitativized in Ni? 5. Coordinate relativizations w other chapters better. 6. Redo intro. in connection with that coordination]]**

### **Miscellaneous 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).

### **Loans**

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 have obvious cognation with.

Therefore, by “purity” we 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, rather, in terms of lexemes, just over 200, out of ca. 7,000. These 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 83 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 5 more items that have come into Eyak from Tlingit, of Tlingit, Athabaskan, and English origin. Thus up to 110 of the 200 loanwords in Eyak have come from or through Tlingit

From Chugach Yupik there are about 20 items, and up to 19 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 5 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 which 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 which 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.

*Tlingit* loans are easily defined, especially as known to Lena or Marie. Lena's father knew some Tlingit, but not Lena, nor of course Marie. Bilingualism in Tlingit was apparently just beginning to reach Eyak Village, when that expansion was decisively aborted by the American canneries starting 1889. Tlingit loans attested only in the Anonymous 1810 vocabulary are not included here, as that 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 Yakutat Eyak. It is of course hypothetically possible that some monosyllables or stems could be loans from Eyak to Tlingit, especially in items shared only between Yakutat Tlingit and Eyak, but even there, given the dominance of Tlingit over Eyak, the reverse might *a priori* be more probable. However, in the much more usual case of items shared between Eyak and all Tlingit, or even 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 seems not unlikely that other languages, now unknown, were in between.

It is quite probable that significantly more legitimate loans from Tlingit could 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 which 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)' (< kwAs), as opposed to tse'q 'urine', cf. PA \*tsu'G 'yellow', also kus' Akih '(child's) vulva', and the verb O-kus 'wash O'. The other is Xah 'war' (< Xa/), with the verb -Xah 'plural boats move', which can be used neutrally in 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' (< tUL), O-L-tAL 'drill O', and tAGL 'hammer' (< tAGL), O-L-tAGL 'hammer O'. One item alone appears to be only a verb both in Tlingit and in Eyak -dje:dj 'S is amazed, surprised' (< -djedj).

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 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 superior or of higher prestige.

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' (< Xe/shx'w). A large proportion of Tlingit loans are in fact in the category of fauna and flora. 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 here in the lists that follow. Further fauna: de:qi:dGa:G ‘jaeger’ (< Yakutat deqidGa/G), ts’its’ ‘harlequin duck’ (< s’Us’), ts’Axe:L ‘crow’ (< ts’Axwe`L), ch’Aqi:nq’ ‘mallard’ (Yakutat ch’AX’i/nX’), ga:x ‘black duck species’ (< ga/xw), GAXtl’ ‘swan’ (GUGL’); sa:g ‘eulachon’ (< sa/g), tu:’ahs ‘fish species’ (< Yakutat tU’a/s, of Athabaskan origin?), ti:tl’ ‘dog salmon’ (< ti/L’), ch’ihdG ‘skate’ (< ch`i`dGa/), wa:w ‘herring’ (< Yakutat wa/w); ye:n ‘sea cucumber’ (< ye/n); Gu:djih ‘wolf’ (< Gu`dj), -ih unexplained, also diffused to Haida), quwAqa:n ‘deer’ (< qUwAka`n), XAskqa:k’ ‘cross fox’ (< XAska/x’), XALt’u:ch’ (< XALt`u`ch’) black fox’; Le:shXa:shi:shXa: ~ ‘dragonfly’ (Yakutat LXa`shi`shXa/w). Flora: La:X ‘red cedar’ (< La`X), ga:ndAG ‘lupine’ (< kAntAGw), yeLtAXi: ‘onion’ (< ye`LtAXI), shug ‘strawberry’ (< shUg), q’e:shkuXa:gu: ‘berry species’ (< q’e`shkUha/gU ‘bog cranberry’), kuts’i:ts’ ‘plant species with purple flower’ (< ?, Anna only). Natural substances: ts’AGL ‘graphite’ (< ts’AGL), in ts’AGLga’ ‘i:t’eh ‘dark grey color’; and ts’Aga:d (< s’Agwa/d GLOSS) in ts’Aga:dga’ ‘i:t’eh ‘brown color’. Among uncertain cases vaguely remembered are Lu:n “some kind of plant” (< Lu`n ‘bark’), and LuhL “some kind of bark” (< Lu/L ‘fireweed’). At least two items are in Yakutat Tlingit only and in Eyak, ka:shk’ ‘humpback salmon’ (< Yakutat kwa/shk’), and sahx(w) ‘cockle’ (< Yakutat sa`xw), where the direction of the loan is uncertain.

Another large category is tools and artifacts. Beside ‘hammer’ and ‘drill’ above, tools are, tAwi:s ‘stone axe’ (< Yakutat tAYi`s, where Y is velar sonorant), XAt’a: ‘adze’ (< XAt`a’), k’uda: ‘file’ (< x`Ada’), kuts’i:d ‘screw’ (< kAs`i/d), certainly covering an extreme range of chronology. Other artifacts: ts’ik’ (< s`Ix’ ‘plate’), shiL ‘spoon’ (< shAL), q’Adl ‘cooking-pot’ (< q`wAdl), q’Atlge:L ‘bottle’ (< q`wAdlgwe/L), ts’isa: ‘canvas, tarpaulin’ (< s`Isa` ‘cloth’), LANAs ‘nose-ring; padlock’ (< LUnA/s), shAwe:na: ‘anchor’ (< shAYe/na, where Y is velar sonorant), q’e:k’Atl’ ‘straight pin’, (< X`e/x`wA/L’), kust’a:t’ ‘quilt’ (< kAst`a/t’), kushxi:d ‘cloth’ (< kAshxi/d), kAna:d, kAna:’Ad ‘coat’ (< kIna`’A/d), tsa’k’ ‘gloves, mittens’ (< tsa/x’), ku:shti:L ‘moccasins’ (< Yakutat ki`shti/L, ke`shti/L), dAq’Ata:L ‘trousers’ (< tUq`Ata/L), kAwu:d ‘beads’ (< kAwu/d), niLa: ‘handkerchief’ (< Yakutat? nILa/), ’a:nke:we: ‘flag’ (< ’a`n k(w)e/Yi, where Y is velar sonorant, ‘land mark’), Ge’q’dja: ‘musical instrument’ (< GIX`dja’), guch’uh ‘gambling-die’ (only in Swanton, Am. Ethn. XX 1908.445, k!Itc!u/ “buttocks-shaped”, but no such Tlingit meaning; -Vh seems irregular; loan from Eyak?), kut’i:k’ ‘chewing-tobacco’ (< kAt`i/x’), shuki:’Ad ‘dance wand’ (only Galushia Nelson, < shAki`’A/d ‘dance hat’), silke:d ‘goatskin shield’ (only Galushia Nelson, < sA/n ke`d ‘wiaslet’?), ’AyAwih ‘goblin; scary face mask’ (< ’AyA/Yi, where Y is velar sonorant, v. Swanton 1909.80-01). More abstract are -sa:w ‘namesake’ (< -sa`Y), tle:qa: ‘20’ (< tle`qa/; see numerals chapter), nAts`gL qAXah ‘a certain month’ (barely remembered by Lena; cf. Tlingit nAs`g ‘3’); note t’u:ch’qa: ‘black man’ (cf. ‘black fox’ and ‘20’ above, also the stem -t’u:ch’ in more widely diffused terms below. Two basic items, ’AdAwi’L ‘war, excitement, panic, frenzy’ (< ’AdAwu/dl), and Xu:l or hu:l ‘sale, on sale’ (< hun), are both also used adverbially. The four Eyak clan names are Tlingit, dji:shqe:d(i:), qu:sk’e:d, Ga:nAXte:, and de:qe:d (< djishqwe`di, qusk’e`di, GanAXtedi, te`qwe`di); these may be considered somewhat marginally naturalized in late Cordova Eyak.

Possessed nouns and certainly not marginal, beside ‘namesake’ above, are the two kin terms, for parents’ cross siblings, -’and ‘father’s sister’ (< ’a`d) and -ga:G ‘mother’s

brother' (< ga/G), 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' (< YAXa`w). Another 2 possessed anatomical nouns are -xi'ts' 'shin' (< x i/s'), and -'lahs 'intestines' (< na`s), though especially in the case of the latter, cognation is to be considered, as the -'l- is otherwise hard to explain.

Very basic, unless in fact cognate, are k'a't' 'island' (< x'a/t'), and ts'a' 'mud, clay' (< s'A/). This small category of possible cognates may include also du:xLidah 'crane', Rezanov du:Lxideh, Tlingit du/L, PA \*de:L, PAE \*dewL, leaving -xideh unidentified.

Finally, 'uk'ahyAkih 'nobleman' is probably a reinterpretation of Tlingit 'a`n-k'w-yA/di, formally appearing to be Eyak 'uk'ah 'from it', -yA- thematic as in -yA-quh, and -kin diminutive, perfectly canonic, but with no such analyzable meaning.

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 as necessary, e.g. s'Us' 'harlequin duck' > ts'its', GUGL' 'swan' > GAXtl'. Labialization is lost as such e.g. in Xe/shx'w 'Steller's jay' > q'e:'shk', q'wAdl-gwe/L 'cooking pot' > q'Atl-ge:L, but the labialization is kept with velars and reduced vowels, e.g. shUg > shug. The Tlingit back unrounded velar sonorant, written as underlined y or gamma, appears regularly as modern Eyak w, as in 'herring', 'head of hair', or 'shadow' above. This may be due to a change in Eyak itself, however, where in 1805 Rezanov wrote g, not labialized, which is now always w. Prevocalic Tlingit n is retained as such, not shifted to l, yet another reason why Tlingit na`s 'intestines', Eyak -'lahs, is easier to explain as cognate than as a loan. Before a consonant e.g. gAndA/Gw > ga:ndAG, Tlingit n can become Eyak nasalization.

Looking carefully at the Tlingit tones and any possibility of correlating those with the choice between Eyak V:, V', and Vh, we find the following. There seems to be no clear difference in correlation between Eyak V: and Tlingit V/ and V`, i.e. Tlingit high tone and low are both Eyak V: more often than not. The exceptions to this, however, do show some correlations.

Of the 8 exceptions with Eyak V', not surprisingly, 5 are followed by a glottalized obstruent in Tlingit: tsa/x' > tsa'k' 'glove', -xi'ts' < xi/s' 'shin', k'a't' < xa/t' 'island', Ge'q'dja: < GI/X'dja` 'musical instrument', and q'e:'shk' < Xe/shx'w 'bluejay', in all of which the Tlingit vowel also happens to have high tone. (There are of course also instances of Eyak V: under those same circumstances, e.g. ti:tl' < ti/L' 'dog salmon', kut'i:k' < kAt'i/x' 'chewing- tobacco'.) The others with Eyak V' are ts'a' < s'A/ with Tlingit reduced vowel final, impossible in Eyak, plus high tone and preceding glottalized fricative, possibly explaining the result; 'AdAwi'L < 'AdAwu/dl 'excitement' also with fricative for affricate, and da'ke:d (also variant da:ke:d) < da'ke`d 'container'.

Perhaps more interesting is that of the 9 exceptions with Eyak Vh, 6 come from a low-toned full vowel in Tlingit: sahx(w) < sa`xw 'cockles', ch'ihdG < ch'i`dGa/ 'skate', -'ahd < 'a`d 'paternal uncle', -'lahs < na`s 'intestines', nahGAts'e: < na`Gas'e/ 'fox',

ta:snah- < ta/sna` - place-name. The 3 others, coming from Tlingit V/, are of more dubious status: LuhL ‘bark?’ < Lu/L ‘fireweed’, tu:’ahs ‘fish species’ < Yakutat? tU’ a/s; Xah (also variant Xa:) < Xa/ ‘war’ has open stem.

Some of these items could be cognates instead of loans (see also below), and/or there is some kind of correlation between Tlingit high tone and Eyak V’, especially with following C’, on the one hand, and between Tlingit low tone and Eyak Vh, on the other. These results, for whatever reason, coincide with the historical-comparative evidence provided by non-tonal Tongass Tlingit, at the extreme southern opposite end of the territory. The Tongass fading stigma, like Eyak Vh, corresponds to low tone in the rest of Tlingit. Both Tongass clipped V’ and sustained V: correspond to high tone in Northern Tlingit, which has thus merged the two. If, for instance, the 5 instances of Eyak CV’C’ correspond with Tongass CV’C’ and/or those of Eyak CV:C’ correspond with Tongass CV:C’, such results would have significance well beyond the study of loans in Eyak.

**[[JEFF, DO THEY??!!]]**

*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. Even though, as mentioned, some Eyaks knew some Chinook Jargon, it 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’ (< na/w) from Jargon *lam* (from English *rum* or French *rhum*). Another is Eyak da:na: ‘money; dollar; silver dollar’ (Tlingit da/na`) from Jargon *dala* (from English *dollar*). Incidentally, at least 3 more Tlingit loans can be counted, as hybrids, with these 2 Jargon items compounded with purely Tlingit elements in the following: na:wshida: ‘funnel’ (< na/w shIda`, na:wda’ke:d ‘whiskey bottle’ (< na/w da`ke`d); cf. dAwa:guhda’ke:d ‘tobacco pouch’ below), da:na:shu:wu: ‘half dollar’ (< da/na` su`wu/), and wAGda:na: ‘eyeglasses’ (< wA`G da/na` ‘eye - silver dollar’).

This path for 4 more items is demonstrable this way, sAnAg, sAng ‘silk’ (< sAng), gu:n ‘gold’ (< gu/n), shdi:n ‘steel’ (< shdi/n), cha:nAwa:n ‘Chinaman’ (< cha/nwa`n), and yi:nAwa:(yu:) ‘shore patrol’ (< wA/nAwa` ‘man-o’-war’). Even where there are no such criterial segments, there is no reason to doubt the same path for the following. All have been checked and confirmed for presence in Yakutat Tlingit as well, of course: du:sh ‘cat’ (< du/sh), **[[check CJ dictionary for origin]]** dAwa:guh ‘snuff tobacco’ (< dAwa`gu), Rezanov *tokudaket*” dAwa:guhda’ke:d ‘tobacco container’, gud ‘dime, ten cents’ (< gUd < gwId) from English *bit* (as in *two bits*), hence also another hybrid gudshu:wu: ‘nickel, five cents’ (‘half dime’), ka:ta: ‘quarter, twenty-five cents’ (< kwa/ta`), and probably also, only in Rezanov *khass*” ‘cow’, probably Eyak xa:s (< xa`s), ultimately English *horse* **[[is this so?]]**, and *khass*”-ka ‘bull’, Eyak xa:sqa’ ‘cow’s husband’. 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.

*Chugach Yupik Eskimo*, “Aleut” in local English, is the second largest source of loans into Eyak, up to 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. At the same time, however, Chugach is also the source of up to 19 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, not surprisingly: *'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* GLOSS), *'ALbah* ‘eider’ (< *elpa*), *'Awa:yAG* ‘cormorant’ (< *agayuq*). Uncertain is *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. Note, much more surprisingly, other fauna: *Gi:nga:dAG*, where *-ng-* is a velar nasal, ‘red rotten salmon, way upstream’ (< *qingtaataq* ‘pregnant’), *na:XAg* ‘goose’ (< *nauruq*), and above all, *gu:djgAlAG* or *Gu:djgAlAG* ‘eagle’ (< *kuckalaq*, *quckalaq*). The rest are miscellaneous: *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*).

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’ (Yupik generally *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.

*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 5 more definitely come through Tlingit, leaving up to 9 which may have come directly, though some of those may also have come through Chugach. In the first subcategory are those with final *-G* which Chugach has suffixed its *-q* singular suffix: *sha:XAlAG* ‘sugar’ (< *saarraaq* < *sa/khar*; cf. Yakutat Tlingit *saXana*, clearly not the source of the Eyak), *sha:lehG* ‘shawl’ (< *saaliq* < *shal*), *shAdingAG*, here *-ng-* not velar nasal but [nk], ‘pig’ (< *sitinqaq* < *zadi/nka* ‘a back (of meat)’), *shdu:lihG* ‘table’ (< *stuuluq* < *stol*), *shgu:lihdAG* ‘frying pan’ (< *skuulutaq* < *skvoroda*), *gu:xyAG* ‘coffee’ < *kuuggiaq* < *ko/fe*), *gu:nehG* ‘horse’ (< *kuunniq* < *kon*), *lu:sga:G* ‘spoon’ (< *luuskaa* < *lo/zhka*), *'Ala:bAG* ‘black person’ (< *alapaq* < *ara/b* < Arab), *'Alu:sisdAG* ‘Christmas’ (<

alusistaq < *Ro/zhdestvo*), ba:sgAG ‘Easter’ (< paaskaq < *Pa/skha*), bAlu:sgAG ‘snuff’ (< peluskaa < *poniu/shka*), dji:ni:wAG ‘teakettle’ (< ciiniiguaq < cainiik ‘small kettle’ with Chugach suffix -uaq, see next), dj:ni:g ‘teakettle’ (< cainiik < *cha/inik*).

There are at most 5 Russian loans in Eyak that appear to have come through Tlingit, because they are among the relatively few Russian loans attested in Tlingit, and the Eyak agrees with the Tlingit and not with the Chugach: gi:wa: ‘beer’ (< gi/wa` < *pi/vo*, cf. Chugach pivaq), cha:shga: ‘cup’ (< *cha/shka*, cf. Chugach caskaq, repeated below), shgu:na: ‘schooner’ (< shgu/na` < *shku/na*). One more appears to have come through Tlingit because of n instead of l from Russian r, in cha:ngu: , where -ng- is [nk], ‘drinking glass’, not documented in Tlingit, < *cha/rku*, accusative case of *cha/rka* ‘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 following 7 items 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 13 of the preceding: da:mah ‘king (at checkers)’ (< *da/ma*, cf. Chugach taamaq), gAlu:dj ‘key’ (< *kliuich*, cf. Chugach kelucaq), gAldu:xa: ‘potato’ (< *karto/fel*’, cf. Chugach kaltuuggaaq), ma:sdla: ‘butter’ (< *ma/slo*, cf. Chugach maslaq), la:xga: ‘store’ (< *la/vka*, cf. Chugach laugkaa), yu:xga: ‘skirt’ (< *iu/bka*, cf. Chugach yuupkaa), baashih ‘God!’ (< *Bo/zhe*, cf. Chugach puusaa). The absence of final -G (Chugach -q) is perhaps not proof that such loans did not come somehow through Chugach: note especially the final syllable of ‘potato’, where Eyak x and Chugach gg are both expected for *f*, but not -a: or -aaq for *-el*’. There are 2 items which could have come directly from Russian to Eyak or perhaps through Chugach: mAshuhg ‘gunnysack’ (< *mesho/k*, Chugach misuuk), ‘Ami:n ‘prayer’ (< *Ami/n* ‘Amen’, probably also present in Chugach). Note also in ‘key’ and ‘potato’ that Russian *k* is not aspirated in the Eyak, so at least not precluding the Chugach route. There are 3 other items that most probably came directly to Eyak, the first 2 of which show aspirated initials: che:y ‘tea’ (< *chai*, not through Chugach because of initial ch-, not dj-, and not through Yakutat Tlingit cheyu < Russian partitive *cha/iu*), certainly the most widespread Russian loanword in Alaska; kAle:st’ ‘cross, crucifix’ (< *krest*, cf. Tlingit kAne/sd, Chugach kelistaq, Eyak final -st’ in conformity with a certain type of stem-final cluster); and sla:wa:dih ‘some kind of Christmas church song’, vaguely remembered, (< *sla/va* ... ‘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 2 more Russian loans which are hardly documented outside of Eyak. One, sa:dgAG ‘cassock, priest’s robe’, certainly of Russian origin, is problematic because the original Russian is hard to identify, *za-tka-* 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 *sazhe/n* ‘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 *-zhe/n*; this item is otherwise attested only in Tlingit, sha`shi/n ‘id.’, with the same assimilation, but the Eyak must have come directly from the Russian, given the second vowel in Tlingit.

While Eyak has a relatively small number of Russian loans compared Aleut, Alutiiq, Tanaina, 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.

*Ahtna Athabaskan* is a very distant third, behind Tlingit and Chugach, as a source of loans into Eyak. Barely 6 to 12 loans into Eyak seem clearly to be of Ahtna origin, or even to have come through Ahtna, dovetailing with 6 to 14 more the source or routing of which cannot be traced at the present state of our knowledge. From Ahtna are dAni:gih ‘moose’ (< deniigi), dAldu:deh ‘ground squirrel’ (< delduudi ‘tree squirrel’), k’uLdiya:n ‘spruce grouse’ (< ’eL dyaani < ‘that which eats spruce boughs’; probably influenced by k’uLdAtlG ‘ptarmigan’), and possibly t’AXgsg ‘cottonwood tree’ (Ahtna t’aghes, PA \*t’AXs, so possibly from some other Athabaskan), and cha:sh ‘hedysarum’ (with edible root, widespread in Athabaskan, e.g. Minto troth (PA \*chwas, implying PAE \*kwas, which would be Eyak \*ka:s), Ahtna tsaas, also Tlingit tsaats, where the Eyak must clearly be from Ahtna. A sixth loan from Ahtna might be k’udjAXAya:sh ‘sable, marten’, perhaps with folk-etymological -djAXA- ‘ear’, attested not in Tlingit, but in Ahtna [tseghaasi], of unclear status in Kari 1990.207; cf. Tanaina k’EchEghushE, and Ingalik gEtsEghEyE, an irregular diffusion. This appears to be of some Athabaskan origin, borrowed into Eyak, reshaped, perhaps from some older form of Ahtna. ‘Cottonwood’ may be old, also ‘marten’, perhaps also ‘hedysarum’, but ‘moose’ is recent, and ‘ground squirrel’ is also recent, starting to displace tsALk’, another diffusion, for which see below. Only 2 place-names are attested in Eyak from Ahtna: ’a:dna:’ ‘upper Copper River’ (< ’atna’ ‘Copper River’ < ’ad- River’, meaning of ’ad- 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’” (-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 since 1908. 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.

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, 4 to 6 from Ahtna, perhaps on such grounds alone, Tlingit should be considered that much more likely to be the immediate source. Likewise nahGAts’e: ‘fox’, e.g. Ahtna naggets’i, Tlingit na`GAs’e/, which looks like it came into Eyak from Tlingit, but which appears to be of Athabaskan origin. Another is tsALk’ ‘ground squirrel’, Tlingit tsALg, 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 gUnXa ‘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 as ta:sna:dAlahGayu: (= Yakutat Tlingit ta/sna`qwa`n ‘people of tasna, far interior’), v. also Swanton 1908.167, *Daavydov??*; 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 deLt`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`u`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`sh(w) ‘charcoal’, < PAE \*t`ewch`. The Tlingit and Ahtna would be from reduced \*t`Ewch`, 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. -t`sAlih ‘bone’ above), or like an Athabaskan relativized verb: XAya:nih ‘caribou, moose’ (Rezanov ‘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 the ‘caribou, moose’, cf. Ahtna ghenaaay ‘caribou’ (even Chugach rranayiq), Upper Inlet Tanaina ghenuy, Koyukon ghenoye, intereted as ‘that which moves’; but widely in Canada, either methathesized or original PA \*ghEyani ‘large grazing mammal’, cf. Navajo `ayani ‘buffalo’ (‘that which eats’). *[[Need to check UT, Tutchone, etc]]*

There is a miscellany of 4 more nouns with complex distribution to consider here, 3 of which are biota. Most complex is sa:q`sg ‘dulse, sea-lettuce’, Tlingit La`q`A/sg, also in Haida and beyond, but note also Tanaina jagaLq`a (Upper Inlet jagaLggey), “< Esk[imo]”; 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 Eyak shows assimilation of lateral to sibilant, the probable direction being from Tlingit northward.

The vowel in Eyak shi:q` ‘robin’ cannot be explained; cf. Ahtna shuuq`, Athabaskan widely \*sh(w)uq`, and Tlingit shu`X`; routing unclear, unless the statistics favor Tlingit. If this is instead a PAET item, the Eyak could imply \*shiwq`; cf. tl`iW ‘bind’.

In the case of djiL ‘bed shelf, platform, cache’, Ahtna dzeL ‘bed, shelf’, Athabaskan widely \*djwEL ‘platform cache’, Tlingit chiL ‘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 include an item attestead 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 chiLqad *[[tone??]]*.

For Eyak dzi:dzi: ‘sandpiper’ there is both Ahtna dziidzi ‘waterfowl’, Tanaina jija ‘id.’, and Tlingit hUkAdzi/dzi ‘semipalmated sandpiper’, closer semantically than the Ahtna; at least partly of imitative origin, directionality unclear.

Finally, there are 2 exclamations 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, api, Ahtna 'aba, 'ebi 'ouch', 'ebe 'hot!, Minto 'eba 'painful, ill', also used un 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.

Remaining here are *English* loans, about 21, 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 which are phonologically adapted to Eyak, and in one case, semantically changed.

We begin with 4 nouns for nationalities, 3 of which appear to be of 19<sup>th</sup> century local English, possibly through Chinook Jargon and/or Tlingit: dja:bAni: 'Japanese sg.' and dja:bAni:yu: 'Japanese pl.' (< "Japanee"); lu:shAnyu: 'Russians' (< "Rooshians": cf. Tlingit 'Anu/shi, not the source of the Eyak). Lastly, kAna:qa:yu:, vaguely remembered as "Greeks, Mexicans, Spanish" (< "Kanaka", i.e. Hawaiian, Polynesian), also kAna:qa:shiyahu: 'bad Kanakas'; with -qa: under Tlingit influence, cf. tle:qa: '20', t'u:ch' qa: 'black man'; and/or through Tlingit so interpreted; and, probably 20<sup>th</sup> century and not through Tlingit, xAlAki:nahyu: 'Filipinos'.

Also 20<sup>th</sup> century, and not through Tlingit, are 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'iyatlGya 'Amble:l 'mushroom' (< 'frog's umbrella'), qe'LGayu:ya' kAnggu:dz, -ng- velar nasal, 'women's tools', perhaps vaguely remembered (evidently < 'women's canned goods'); with non-prevcalic 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?); but LinGih yahd 'one yard (3)', semantically and/or phonologically influenced by O-'yahd 'measure O'. Finally, perhaps partly through Chinook Jargon and/or Tlingit, sAndi:qa'd 'week' ('between Sundays', Eyak postposition nominalized with -d). A number of these also have Eyak-based synonyms, including 'cannery', 'oranges', 'mushroom', 'jar'.

### **Unanalyzable nouns, to be revised**

Practically the only kind of Eyak lexemes that are not clearly analyzable or clearly segmentable is nouns. – *No! There remain about 40 unanalyzables, and only 20 are nouns, the rest being adverbs, exclamations, particles, etc.* -- Having dealt with the loans that are identifiable as such, only some disyllabic or polysyllabic nouns remain in question. As Eyak morphemes are generally monosyllabic, the one kind of morpheme that can be even disyllabic is some stems with medial sonorants w m l n y. Though there may be some problems in defining what is canonic for such disyllables, for which see chapter on phonology, possible unanalyzables in that category will be here left aside, pending further comparative study. – *Now done, file on VR(V) stems.* -- Also left aside here are a few stems with possible suffixes that cannot be assigned a meaning, e.g.

tl'etl'G 'salmonberry sprout', ch'iyatl'G 'frog', qAts'LG 'male salmon', or e.g. ch'e:t'-A-shiyah 'currants' < 'bad ch'e:t'' where stem ch'e:t' cannot be assigned a meaning. Likewise not considered here are nouns such as -lA-qah 'head' with the anatomical qualifier prefix -lA- 'head,' where the stem -qah cannot be assigned a meaning. *These should be classified as not unanalyzables, but analyzables or potential analyzables with one unidentified morpheme, real unanalyzables as those with two or more unidentified morphemes.* On the other hand, included here will be nouns like qAXah 'moon', which could include a prefix qA- 'plural' and a stem -Xah, possibly 'fleet moves', but the semantics cannot fit, and many more complex forms. Such forms are all segregated in the 1970 dictionary, along with loans, at the end of each file for initial phoneme. They will be brought together here, all at least listed, and some general patterns noted. – *Hardly possible to note patterns. Done for VR(V) stems, but not for these 20. Not much more can be done than list them, with reference to potential analyses already in dictionary. The other such 20 unanalyzables, not nouns, are likewise to be listed or dealt with at end of appropriate sections of grammar, e.g exclamations.* -- Possible alternate analyses of all these need not be shown here, as that is done for each such entry in the dictionary itself. But new insights for some will be included, especially as arising from patterns detected hereo. . No. – Note that at least 13 of the 20 are biota, though most of those 13 are *not* necessarily or particularly coastal biota. Several are quite basic vocabulary.

*These unanalyzables can be defined as containing **more than one** unidentified morpheme.*

The most important of these, certainly, is dAXunh 'person; Eyak', most probably a loan from Chugach or rather, given the -n-, earlier Yupik, modern Yupik taru, a shamanic word for 'person', cf. CSY taghnughhaq 'boy' < taghnnu-q 'small taghnu', CAY tan'gurraq, Aleut tayaGuX 'person'. The Eyak could conceivably come from taru without n, -unh spontaneously, but more likely \*tarnu or \*tanru [ta~]- before fricative, where the n is lost in later Yupik, and moved in Eyak, where nasalized reduced vowels are not possible.

The rest of the unanalyzable nouns are listed here, 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.

di:-tinh 'puffin'

qA-Xah 'moon'

tl'e:-kus 'horsetail, equisetum'

Lu:n-diyahs ~ -ya:s 'mouse, rat', cf. PA \*dlun'I certainly for Lu:n-

LA-kush-'i: '-ah 'shrew' , 'i: 'ah 'extends', but maybe folk etymology, cf. TL Lugshiyān

ts'i:n-tsih 'fir'

ke:L-ta:g ~ g- 'seal'

gu:-su-xk'-da:-X 'fan out cambium'

Ga:djih 'lynx' (cf. Gu:djih, xa:nih, XAya:nih)

Ge:L-gAlid 'owl'

Ge:-tsahg 'starfish', -tsahg '(cut into) fringes'?

ts'i:ntl'-Ga:leh 'heron'

Ga:gAleh 'fish species'  
q'Adi-lich' 'tomcod, gray cod'  
niga:dA-sheh ~ 'kingfisher'  
lAXA-sha:-'ne: 'squinter' (nickname)  
ya'XA-kih 'large canoe'  
'Ana:shah 'flower'  
'AnahshA-kih 'pleasure'  
'e'lAwah 'weasel'

## 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 can be suffixed or attached to nouns, e.g. *-dzu: XAWa:dzu:* 'good dog', *-lAw ~ -nAW* in *tsa:dli:nAw* 'big stone', there being no *\*tsa:dla:da:s* 'heavy stone', or, possibly, *\*?ts:dla:GAmAk'* 'round stone'. The following deals primarily or first with those forms which are what here are called adjectives for Eyak, derivable from or relatable to Neuter imperfective stative verb theme types, with final sections on the anomalous *-kih* diminutive, and on adjectives derived from stative themes types other than Neuter imperfective.

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 chapter on Neuter imperfective verbs, 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 the table here below. In the table of dimensionals there are two verbs for which there are verbs but no corresponding adjectives, *-tsa* 'deep' and *-wa'q* 'shallow'.

There are 13 stems attested in the Eyak corpus which pattern clearly as adjectives. Of the 13, 11 are more or less dimensional and paired off as of positive as opposed to negative valence, e.g. 'long' (positive) vs. 'short' (negative), with one set 'thick' vs. 'thin' having two negatives, 'thin' and 'very thin'. In the dictionary the two basic patterns of their use are called dependent and independent. 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 adjectives of positive and negative valence. Therefore, the valence is evident only in dimensional adjectives in independent use.

All 13 adjectives are associable at some level with some verb theme which has a stem at least etymologically related to the adjectival stem. In the case of 'good' and '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 will be commented on below the following table. The table itself will list the pairings, with simple or simplified gloss in the first column, independent adjectival form in the second, related verb stem in the third column, with gloss, if different.

	<b>Independent adjective</b>	<b>Verb stem</b>
'long'	k'u-'a:w	-'a/ 'sg. extends'
'short'	ya:-dik'	-dik'
'thick'	k'u-chahsh	-cha'sh
'broad, wide'	k'u-wAX	-wAX
'narrow, thin'	ya:-tsidz-g	-tsidz-g
'very narrow, thin'	ya:-djidj-g	-djidj-g
'big'	k'u-'lAw	-'li/ 'be too big'
'little'	ya:-kuts'-g	-kuts'-g
'very little, tiny'	ya:-gut'-g	-gut'-g
'many, much'	k'u-t'u'	-t'u'
'few, not much'	ya:-luhd-g	-lu'd-g
'good'	k'u-dzu:	-dzu' 'improve; annoy'
'bad'	k'u-shiyah ~ -shah ~ -sha:-	-sha/ 'stingy'

The phonological relationships between the adjectival and verbal stems are quite interesting. Of the 13, 7 are of the form CVC, where C is obstruent and V a reduced vowel, or the stem is invariable -t'u'. In these 7 cases there is no difference between adjectival and verbal stem. In all 6 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 chapter on Neuter imperfective.

In the remaining 4 adjectives, non-obstruent closed, the verb stem is CV' (-dzu') or CV/, i.e. the variable open type which is basically -CV'- in all but the Neuter imperfective. In 2 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, -'a:w ~ -'a/, -'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 Athabaslan 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 K-series, on the other hand, stem-internal -w- or -m- is especially common, presumably from \*Kw-.)

### Dependent use

We shall begin exemplification 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 or “connective” -(‘)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. The vowel is called “connective”, since it is only partly conditioned phonologically, partly conditioned also morphologically. Monosyllabic nouns, usually with connective -(‘)A-: ta:hA’a:w ‘onng road/trail’ (no -‘-, showing zero = h, V: = V:h, no -‘- 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’), 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’. 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’lAw being twice rejected by Lena; xi:la’lAW ‘great shaman’, treated likewise. Human nouns, usually with -(‘)i- before adjective (though cf. e.g. xi:l ‘shaman’, so here probably generic human), as follows: 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 -yu: ‘pl.’ following the adjective, not preceding).

The general pejorative -shiyah ‘bad’, itself not always pejorative, is especially frequent and versatile, attached to nominalized (relativized) verbs, often in epithets and names: ’i:nLilinhinshiyah ‘funnyface!’, ’i:nsAxahLinhshiyah ‘poorly brought-up person, bad-mannered’, Lsihshiyah ‘lousy rotten thing’, also qe’Lshiyah woman’s name’ (no -(‘)i-), even alone shiyah as dog’s name; attached to exclamations: ’a:nya:siyah (of anger). Attached to many kin terms -shiyah is idiomatic, with no pejorative force whatever in grandparental terms: e.g. sichu:(shiyah) ‘my mother’s mother’, also parents’ siblings, sitinh(shiyah) ‘my father’s brother’. Here the vocatives are chu:shah, tinhshah, etc., the only kind of form in which the allomorph -shah appears.

Also pejorative epithets are djehXlAw ‘big-ears!’, Ge’t’lAw ‘big-body!’, in which there is neither a connective vowel nor possessive prefix. For these, see both the following, and further below, subsection on epithets and names.

In many cases, qualifiers appear between the noun and adjective, in which then no connective appears. Most such cases are with classified nouns, where class-marks accordingly appear: dide’LdAdzu: ‘pretty lamp’, ya:n’lAXAdzu: ‘good pills’, ya:n’gulAdzu: ‘good (liquid) medicine’, gahXAdAdzu: ‘fine day’, yahddA’a:w ‘long house; cannery’, tsa’Lda’lAw ‘big knife’, Le:sk’XAdAkuts’g ‘small log’, Le:sk’XAda’lAw ‘big log’, ’itl’lAkuts’g ‘small mountain’, kAwAsgL’i:’nAw ‘big paddle’ (l-class), ’a:ngu:’nAw ‘big river’, k’uLt’ahLti:’nAw, big leaf’, we:gshgda’lAw

'big ulu-knife', dAq'a:gda'lAw 'big fire', epithet sa'GAda'lAw 'big-mouth!', anatomical classifier qAdlku:'naW 'large-bellied pot', lisku:nda'lAw 'big-based tree', alone as epithet ku:'nAw 'big-belly!'.

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. 'iLdu:gudAdzu:kihyu:shduhnu: 'I wonder who such pretty-butted (girls) are' including anatomical qualifier. For further discussion and examples see chapter on interrogatives.

### Independent use

All the adjectives in independent use are shown above in the table, with k'u- indefinite prefix 'something' for 'good', 'bad', and positive-valence dimensional adjectives. ya: 'thing' 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, whereof e.g. si- 'my, me' can always also appear. Probably not so here, e.g. k'ushiyah 'bad, evil', but presumably not \*sishiyah 'my evil, my bad thing, bad thing I did' or the like, though such was tested only late, with Sophie; there is no clear instance of exactly such in the corpus, at least with such meaning. From Sophie 6/22/87, however, we do have xu: shishiyah 'no-good', and 'i:[ 'i?]shiyah 'no-good you', 'i: 'ishiyahXA' XAwa: 'your dog (you being unworthy to have a dog)', 6/23/87, '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 her judgement, \*?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.

Many instances of independent adjective are internally or morphologically as shown in the table, without qualifiers or class-marks when associated with unclassified nouns, but many do have such marks, between the k'u- or ya:- and adjectival stem when associated with classified nouns. Independent adjectives without and with such markers 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 dAXunhishiyah. Thus also '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 without head noun, in addition to the 13 in the table, here with qualifiers, are ya:qi:lAtsidzg 'thin (rope)', k'u'lAXAchahsh 'coarse (grain)', dAqi:kih k'u'lAXa'lAW 'big (berries) are all gone', k'u'lAXAdAt'u' 'lots (of snowballs)'. Examples of adjectives can of course be found as negated noun phrases, e.g. dik' 'Aw k'u'lAWG 'not that big thing'

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 this last category, complement, that adjectives are the most frequent, by far. 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.

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'. With verb, still more frequently: 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 yiLininh '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, direct object and object of postposition, in the pattern of nouns. As subject of verb: k'ushiyah 'ula'X dAsa'yahLinh 'he got angry' ('evil, something bad came down over him'); 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'; as object of postposition: k'udzu:wahd 'for good (luck)', k'udzu:la' 'good luck', k'ushiyahla' 'bad luck', k'udzu:Lch'a:d 'right side', k'ushiyahya'X 'in anger, in a fit', k'ut'u'da'X 'many times', k'ut'u'da:d 'many places'.

With 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.

### Multiple adjectives

There are several instances of more than one adjective combined: k'u'lAWAXshiyah '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', comparative verb, plus 2 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 ca'Lda'lAWdAt'u' 'many big knives', where noun-class-marking qualifier dA- appears before both adjectives.

### 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 of course most such adverbializations involve these two non-dimensionals, dimensionals are not excluded: k'u'lAWdah 'greatly, in a big way'.

### 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-, the 'i- of which occupies the direct object position of the corresponding verb, like indeterminate O 'i-; it occurs as such, '-', in some but not all of the adjectival attestations, in which it is either absent or occurs as -A-. The -Gi- presumably occupies the qualifier position, though it is not attested, possibly cannot co-occur, with other qualifiers. In negative verbs it becomes -GA-, so it is difficult to understand whether the -i- quality of -Gi- comes from the 'i-, or from the Gi:- of the Neuter imperfective usual for the verb, or if it is inherent. The meaning must refer to 'cavity, space'. Adjectival use, especially in the full form of 'iGi-, appears derived from or is analogical to the verbal use. Except for one attestation with -t'u' 'many', the rest are all with -'lAw 'big' and -'a:w 'long': with zero for 'i- (where k'u'i- would be k'u'-), qi' k'uGi'lAw 'place where it is spacious', qi' k'uGi'lAw dlaa:'anhd 'big den', 'ilAXAde:'Gi'lAw 'your big eyes (sockets)', pejorative; with -A- for -'i-, dla:'anhdAGi'lAw 'big den', lAyAq'AGi'lAwV 'loud (big voice, inside of head)' Rezanov 1805 only, *leexakkeliaga* (where w represents a velar sonorant between two [A]-like vowels), xu: siya' 'uq'AGit'u', 'i: 'iya' ya:luhdg "I've got bunches, you've got just a few" ('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). Adjectival use with full '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; correct adjective might be dik' ... Gi'a:wG or dik' ... GA'a:wG, and correct Neuter imperfective verb might be dik' ... 'iGa'ahG < 'iG a'ahG, verb -'a/ 'sg. extends'. (6-27-10. Cf. chapter on nouns, with historical interpretation of -(i/A)Gi'- connected with postposition o-yAq' 'inside o' and o-'e' 'in vacant place of o'.)

### 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 and postpositional phrases. There would doubtless have been more attestations and a greater variety thereof if the possibilities had been actively investigated. With postpositional phrases: 'AwlAX k'uchahsh 'something thicker than that', cf. 'AwlAX 'i:Lcha'sh 'it's thicker than that'; see above lAyAq'AGi'lAw 'loud voice' evidently lexicalized epithet; idiom 'uq'AGit'u' 'many amounts', see above. With preverbs: ya:n'ch' k'udAtsidzg 'ten-pound lard can < 'something d- class narrowing downwards', with irregular k'u- instead of ya:-, 'i:ndzi'X ya:lAXAtsidzg '(type of) spear < fine-grained through front'; where adjective is dependent and with preverb, though written here with spaces, the whole adjective phrase follows or is appended to the noun: shdu:lihG ya' GAdla:'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. following; 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)'; pejorative epithets with

anatomical qualifiers: la'q' qi:dAchahsh 'thick-feet', la'q' yAchahs 'thick-hands'. With both postpositional phrase and preverb: 'uyAq' li' 'iGi'a:w 'deep cavity', cf. negativized form of this, above.

### **Anatomical and thematic qualifiers**

In addition to noun-class-marking qualifiers, it will be noted that there are anatomical and thematic qualifiers as well. Anatomical, as shown above: -gudA-dzu: 'nice butted', -lA-wAX 'wide-headed/faced', -ku:'nAw 'big-bellied'; further k'uqi:dAt'u' 'many tracks (feet)', k'uqi:da'lAw sanhAsi:nL 'big(-footed) socks'; with thematic qualifier: qi' k'uGa:ndzu: 'where the ground is good'. For several more examples with anatomical and thematic qualifiers, see following sections on epithets and names, and on lexicalizations below.

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', k'ugu:nt'u'inu: 'many people'. See dictionary for further data and possible etymology. The latter form with human plural relativizer 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 o of postpositions: dik' gudla:'a:wG 'not far (over water)', dik' GAdla:'a:wG 'not far (over land)', dik' GAdla:'a:wG '(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'; dependent with preverb: gu:nehG ya' GAdla:'a:w 'high/tall horse', GAdla:dik' 'a short distance or time away'.

### **Epithets and names**

Adjectives are common in epithets and names, which are or at least can be grammatically marked in lacking possessive prefix or o 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: 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', all pejorative epithets; djAXAdla:'a:w 'long-ears' epithet for rabbit or alert dog, ch'a:ndA'a:w 'long-arms', k'ushdA'a:w 'long-legs' epithet for snipe, deer, also a woman's name; with anatomical nouns: xi'ts'dA'a:w 'long-shins', also 'snipe', ch'Alih'a:w 'long-sleeved garment', and pejoratively, tsin'gudli:'nAw 'big-neck', sa'GAda'lAw 'big-mouth', la:XlAXa'lAw 'big-eyes', sha:wa'nAw 'big-head', djehXlAw 'big-ears', Ge't'lAw 'big-body' mentioned above; also epithets: yaLtsAq'sgL'a:w 'long-fingers' (of octopus), lAGa:nsh'a:wV Rezanov 1805 only,

*liukash*”-*aua*, ‘pig’ < long-(part of face below nose)’. Probably an epithet is *qe’Ldzu:kih* ‘pretty girl’, 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* dog’s name, and *qe’Lsiyah* woman’s name, *qe’Lsha:kih* woman’s name, both probably epithets, without connecting vowel, cf. *qe’Lishiyah* ‘bad woman’.

### 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: e.g. *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’ < ? (cf. ‘Ad-LA-ch’e:t’ ‘act silly’); with thematic qualifier *lAXAchahsh* ‘gunnysack < coarse-grained’, with anatomical nouns *lAGa:nsh’a:wV* ‘pig’ (cf. above, Rezanov 1805 Yakutat only; modern Cordova *shAdi:ngaG* < Chugach < Russian), *guka’dAtsidzg* ‘duck species’ < narrow-tail’, *ya:n’ch’ k’udAtsidzg* ‘ten-pound lard can < something narrowing downwards’, ‘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 -cidz-g; *lAyaq’AGi’lAw* ‘loud voice < inside of head big’.

### Diminutive -kih

The general diminutive in Eyak is -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 all 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 formerly blind husband, cooking for herself meat he shot and which she told him he’d missed; red-handed and acutely embarrassed, she addressed him *siqa’kih* ‘my dear hubbie’.

This morpheme is well covered in the 1970 dictionary entry, from which only a few examples will be taken here. It is appended to nouns with basically the same connective vowel -(‘)A- to monosyllables, and -(‘)i- to nouns for humans, as are adjectives: *dAXunh’ ikih* ‘small person; miniature person, mannekin, homunculus’, ‘AX’*Akih* ‘small boat; model boat’, *du:shAkih* ‘kitty, small cat’, *XAwa:kih* ‘cute little dog, puppy’. With class-marks for classified nouns: *tsa’LdAkih* ‘small knife’, -*ts’u:lAkih* ‘small breasts’, *k’uLt’ahLti:lAkih* ‘small leaf’, with anatomical mark: *k’uXu:nLAyahXu:lAkih* ‘small tooth’. It is very frequent in lexicalizations: ‘AX’*Akih* ‘canoe’ (cf. ‘AX’*Akih* ‘small boat’), so ‘AX’*Akihkih* ‘small canoe’, *k’udAGAlehkih* ‘spider species < a little mind’, in grandchild kin terms, e.g. *sichu:kih* ‘my grandchild (woman’s daughter’s child)’, cf.

sichu:(shiyah) ‘my grandmother (mother’s mother)’. About two dozen such lexicalizations are listed in the dictionary -kih entry. 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 preceding, 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 exclamations, sometimes with morphemes otherwise unattested: dAqi:kih ‘all gone, none left’, gusi:kih ‘a little (bit)’, ’AnahshAkih ‘fun, pleasure, desired’; or with well-attested forms: ya:kihdah ‘(in) payment’ (ya:-kih- ‘a little something’, -dah adverbializer), di’dahkih ‘fairly well, decently, OK’ (dA- ‘ipse’, ’i-dah ‘well’), q’a:lkigha ‘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.

### **Adjectival use of verbs other than Neuter imperfectives (5-25-10, this needs to be qualified or revised, according to later addendum to chapter on gerunds)**

Stems of a few verb themes of stative classes other than Neuter imperfective are attested in dependent adjective use. For example, the stem -GAmAk’ of the Inceptive perfective stative GALAGAmAk’L ‘it is round’, in gAdAGAmAk’ ‘gnat’, a lexicalized epithet ‘round-butt’; presumably also the same, minus the anatomical qualifier, must be attested in the dog’s name GAmAk’. Well attested in this way is the Active perfective stative theme d-L-ehd(-g) ‘dry’: e.g. dAsAL’ehdgL k’utse’ ‘dry/dried meat’, but sa:q’sgdA’ehdg ‘dried dulse (pressed into hard block for winter eating)’, k’u:ydA’ehdg ‘dry wind’, shugdla:’ehdg ‘strawberries dried (and pressed into hard block for winter eating)’ (IX- class mark for berry-like absent, given change in shape, d-thematic from stative theme retained, added l- not explained), lAXdla:’ehdg ‘raisins’ (epithet, retaining IX- class-mark, with d- and l- exactly as in preceding).

This adjectival use of stative themes other than Neuter imperfective is probably limited, often epithetical, and noted here only in the process of scanning for nouns resulting from lexicalization. The corpus has not been carefully examined for the productivity of this derivation, so there may well be more instances of it to be found. In any case, its productivity was never actively investigated.

This derivation is clearly distinct from the Active imperfective Usitative, both syntactically and morphologically. Syntactically, it does not precede the noun as attributive, as in dAsAL’ehdgL k’utse’ ‘meat which is dry’. Morphologically, it deletes not only the perfective affixation but also the thematic classifiers, while at the same time it retains the thematic qualifiers and suffixes, GALAGAmAk’L > GAmAk’, dAsAL’ehdgL > dA’ehdg.

6-27-10. These are reinterpreted in the chapter on gerunds as verbal nouns, not adjectives at all. lAXAdla:dA’ehdg ‘raisins’ (‘a drying of berrylike’), etc.



## 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 final subsection, on older sources). 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.

### Morphology of abstract counting

The numerals from one to ten are as follows, 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 following subsection.)

- 1 LinhG-ih
- 2 la'd-ih
- 3 t'uhLga'
- 4 qAlahqa'ga'
- 5 ch'a:n'-ih
- 6 tsi'i:n
- 7 la'dits'i:n
- 8 q'adits'i:n
- 9 guts'de:
- 10 dAGa:q'

The Eyak numeral system cannot be very ancient, as of all these, only '1' and '2' have Athabaskan cognates, from PAE \*LEnq' and \*na'-.

'3' and '4', appear to be postpositional phrases with postposition o-ga' 'like o'. The o in '3' is t'uhL- of unknown meaning, not otherwise occurring. The o in '4' is qAlah-qa', itself very possibly another postpositional phrase o-qa' 'among/between o'; qAlah is of unknown meaning unless that is itself another postpositional phrase o-lah 'around o' with qa- < PAE \*qWA- 'place, event' as o. That, however, would make '4' an anomalous triple postpositional phrase 'like between around place/event'.

'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'En 'bone'. '7' is obviously composed of that preceded by la'di- probably to be interpreted as ordinal '2<sup>nd</sup> ts'i:n'; it can not be either '2 x 6' nor '2 + 6'. 8 is the same preceded by q'Adi- (probably < q'AdA-), which is perhaps a reduction of q'ah-dA- 'finally', q.v. in dictionary. In Tlingit '6-7-8' pattern similarly: 1-dooshu, 2-dooshu, 3-dooshu, though only '7' is exactly like the Eyak, the Eyak lacking the '1-' in '6', and in '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 o of o-q' 'on o'. Cf. the alternation of that with o-X in dAGa:X for the -teen's and below ; dAGa:- is either locational dAG- 'above' with augment -a:-, 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 \*-Gan'- 'arm', Eyak -GAla' 'shoulder'. Cf. in this semantic connection Tlingit kei-jin '5', jin-kaat '10', where jin is 'had', but kei- and -kaat are of unclear meaning, and there is some connection with the Tlingit numerals at least in that the Tlingit pattern for 6-8, i.e. 1-3-dooshu, is similar to the Eyak 6-8, and that Eyak '20' is a direct loan from Tlingit.

In sum, clearly '1-10' is a hodgepodge, divisible into 6 subgroups, '1-2, 3-4, 5, 6-7-8, 9, 10': '1-2' are cognate with Athabaskan; '3-4' are both postpositional phrases, 'o-like, equal to o' with o of unclear identity; '5' is 'forearm' < \*'hand'? (cf. '10'); '6-8' are '6' ts'i:n (< \*'bone'?, cf. Tlingit 1-3 -dooshu), '7' '2<sup>nd</sup> ts'i:n', '8' 'ts'i:n finally'; '9' is 2 unidentifiable segments; '10' is perhaps 'on top', or 'on arm' (cf. '5' 'forearm').

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, '19' 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 o 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 tle:qa: ('1-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 o 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:'nda'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' '2<sup>nd</sup> 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 tAwaAn from English, plus 2 failed attempts to elicit '1000' by Russians, along with 4 failed attempts by Russians to elicit '100'.

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 the final subsection here on "Older sources."

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 dA-X-k'-ih -d, (')wA-X-k'-ih, (')lA-X-k'-ih. For these, see further under Interrogatives for dAXk'i-d, and Demonstratives for (')wAXk'ih and (')lAXk'ih.

### Morphology of non-abstract counting

As noted, the numerals '1, 2, 5' LinhG-ih, la'd-ih, ch'a:n'-ih, 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': LihnGda'X 'once', la'dAX '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'll 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); ?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. This morpheme is probably best classed as phonologically enclitic, as that, taking the form (')a:na: with l- class-marker, can be attached to the numeral without ', so that it will be written attached to the numeral, without space. 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 -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'dda: yahd '2 houses', LihnGlAXa: la'mahd '1 berry', dAXk'lAXa: shuglAXa'lAwchi:d 'iXa' 'how ever many big strawberries do you have?!', ch'a:n'XAda: gah '5 days'; t'uhLga'guka: le:L '3 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* '2 hats', presumably *dAXk(')a:na:* *ch'iyahdd* or *dAXk(')a:na:d* *ch'iyahd* 'how many hats?', *LinhGti:na:* *tsa'k'* '1 mitten', *LinhGqi:na:* *k'uXehL* '1 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:* '1 stone', or, probably the more correct *-dli:na:*, *la'd dli:na:* *dla:XA'i:nd* '2 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'* '1 pair of mittens', *la'dnu:lAya'* *tsa'k'* '2 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* '1 way' is special in usually meaning 'motionless, still', *LinhGdah* 'iLt'ux 'hold it still!'. With postpositions, in addition to *o-da'X* 'o times' above, there are examples with *o-da:-* and various postposition-finals: *LinhGda:d* '(at rest in, nominalization of) 1 place', *LinhGda:ch'* 'to 1 place', *t'uhLga'da:d* '3 places', *t'uhLga'da:X* 'Aw sALtsAXLinh 'he cut it in 3 pieces'; *XAWa:yu:* *la'da:X GA'a'ch'L* 'dogs are going along 2 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: *t'uhLga'da:X da'mahdg* 'u'lixilGah 'I know 3 ways it can be cooked', *t'uhLga'da'X* 'Aw yAX sALtsAXLinh 'he cut it apart into 3', and, as above, *t'uhLga'da'X q'unh wAX sAliL* 'he did it 3 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'*.

### Syntax, ordinals

From the above, e.g. occurring as *o* 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 *o* of postpositions in sentences, as shown above, but also as *S*, *O*, or *C* thereof, even without overt nouns: e.g. as *S* in *la'dnu:* 'u:d sALtehL '2 persons are lying there (comatose or dead)', or as *O* in *ch'id la'dih sich' 'aLa'* 'give me just (exactly/at least) 2!', *LinhGlAXa:* *sich' lAXA'a'* 'give me one (berry)!', 'al la'dih 'uwa: 'ich' qu'xLah 'I'll give you these 2 of them'. Numerals are *C* 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 of course 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 have two extra hats', and as attribute also to possessed nouns, here in phrase as *S* in a non-verbal sentence: *la'dih 'uXu:nLAYah 'uwa:* *k'a:dih* '2 (of) his teeth 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 arrived there (by boat)', with 'Aw *t'uhLga' ya:* 'the 3 thing' used adverbially. This construction clearly differs from '3 (days)' *t'uhLga'XAda:* (*gah*) in lacking the *XAda:* (particle or postposition and *Xd*-class-marker for 'day'), likewise 'Al *q'Adits'i:n 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’i:n for ‘7’ itself; this obviously cannot mean either ‘2 [x] 6’ nor ‘2 [+] 6’, but only ‘2<sup>nd</sup> 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.

### 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: 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 ‘3 days passed’, t’uhLga’ ’uch’ahd yAsALqahL ‘3 days ago, 3 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; this of course serves also in measuring the passage of time. 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 *o* of *o-ga* ‘like *o*’, so taking comparative dimensional verb, e.g. *la’dih k’uk’ahshga’ ’i:L’a* ‘it’s 2 feet long’ (‘it extends like/equal to 2 feet’). 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:n* ‘cord of wood’, from Russian *sazhen*, unit of linear measure, ca. 7 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.

### 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.

### Older sources

There is of course significant history of the documentation of Eyak numerals, of some interest here. The first list of Eyak numerals is Rezanov Yakutat 1805, showing '1-12, 20, 30, 40, 50'; left blank are '60, 70', etc., '100, 200' etc., '1000'. Next is Anonymous 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" Yakutat 1812, 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 1-1-, 20, 30, but 40 left blank. Next at the Copper River is Wrangel, ca. 1835, with '1-10, 20, 30, 100'. Last there in the Russian period is Furuhjelm, 1862, with '1-12, 20, 30, 100, 1000'. After the Russian period, and a gap of 71 years, the first source is de Laguna 1933, with Galushia Nelson of Alaganik-Cordova, '1-10' only. Next was Harrington 1940, working with George Johnson of Bering River village, '1-10', decimals '20-90, 100', also counting people, '1-10'. Next was Li 1952, 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 10 sources before Krauss, 6 Russian and 4 post-Russian, 11 lists altogether, including Li with lists from 2 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:XX'a:d N for '11-12', and tle:qa:g for '20'.

However, for '30, 40, 50', of the 10 historical sources, 7 agree on the decimal system, but 3 show vigesimal or potential vigesimal. Those 3 are Anonymous at Yakutat ca. 1810 and "Baranov" at Yakutat 1812, which is highly influenced by Anonymous 1810, both definitely vigesimal, and potentially vigesimal is Khromchenko 1823 at Copper River.

For '20' Anonymous at Yakutat 1810 has *tliekakv*", and '30' is *tlekak" kvatakaan*", i.e. tle:qa:gk'wa:[d] dAGa:q' ('20 + 10', where -k-, two short vertical lines, is easily misread for -n- in copying). For '40' 1810 has *latit" tlekek" kvatakaak*", i.e. la'dih tle:qa:gk'wa:d dAGa:q' (2<sup>nd</sup> 20) + 10', thus meaning '50' rather than '40'. For '50', switched with '40', 1810 has *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 4 decimals very shortly after 1810, "Baranov" Yakutat 1812 has '20' *tliekakv*" tle:qa:gw, '30' *tlkan" kvatakaak*", i.e. tle:qa:gk'wa:[d] dAGa:q' as in 1810. Then for '40' 1812 has *lati tliekak" kva*, i.e. the same as was erroneously said in 1810 for '50' now corrected to '40'. This in fact perhaps, like 1810, may be more exactly to be read as a very carefully pronounced la'dih tle:qa:gw, but 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 *lati-tliekvaak* "va-takaak" la'dih tle:qwa:ɡk'wa:[d] dAGa:q' (2<sup>nd</sup> 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 at Copper River 1823 also has *Tlekanu* (for *Tlekaku*) tle:qa:gw for '20', and for '30' has *Tlekax* "Katekok", i.e. tle:qa:xk'a:d dAGa:q' as in Yakutat 1810-1812. 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 Wrangel, ca. 1835, *tutlokekakx* "t'uhLgw[a'da'Xd]AGa: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 of 1805, we can see the system was still clearly decimal there, even with the Tlingit loan for '20', *tliakak* "tle:qa:g, then '30' *toal'kdaaxtakak* "t'uhLg[wa'da'X dAGa:q' ('3 x 10') '40' *kliakak[--]jaxtakak*", with 2 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 '1-man + 10', '40' was '2-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 4 Russian sources: 1810 *tkakva tsyi*, which can only be read dAGa:Xk'wa:d ts'i:n '16', and 1812 has the same, still more poorly transcribed, *takva-tsyi*. Wrangell ca. 1835 has *takakx* "tlekak" dAGa:q' tle:qa:g '10<sup>th</sup> 20', hardly correct, except perhaps for '200'. Furuhjelm 1862 is still farther off, with *vetzte takhakh*, to be read [g]wAts'de: dAGa:q' '9<sup>th</sup> 10', cf. *kvatze* '9'; he also has *khatatzi* q'Adats'i:n '8' for '20', and *khatatzi takakh* '8<sup>th</sup> 10' for '30', which are the 2 numerals immediately preceding '100', so that something like '90' for '100' here is hardly surprising. From the post-Russian sources, both Harrington and Li 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 4 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 of course 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 tAwaAn from English, we have only “Baranov” Yakutat 1812 *tlinak*”a *tykaak*” or *tlikak*”a *tykaak*” tle:qa: k’a:[d] dAGa:q’ ’20 + 10’ (cf. same source *tlkak*”*kvatakaan*” ‘30’ tle:qa: gk’wa:d dAGa:q’), and Furuhejm Cordova 1862 *Khanakvaka* qAnahqwa’ga’ for qanahqa’gwa’, modern qAlahqa’g(w)a’ ‘4’. These results are hardly surprising in view of those 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 *tsun*”, implying ts’u:n instead of ts’i:n. All subsequent sources have the Russian vowel *y*, or *i* or *e*, interpretable as /i/. Yakutat 1810 and 1812 sometimes have *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 ‘5 persons’, ‘6 persons’, where Krauss, 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 1810, 1812, so in all 3 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 Yakutat 1810, 1812, and Copper River 1823 but not in Rezanov 1805, or in Wrangell ca. 1835. Third, the -ga’ or -gwa’ in ‘3’ and ‘4’ is usually labialized (-*kva*, -*koa*, -*kua*), as may be expected, given that o-ga’ is 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, *kalakvaka* in both 1810 and 1812, implying -qwa’-ga’, instead of the expected -qa’-gwa’. In fact we have that not only in Yakutat 1810, 1812, but also in Furuhejm’s 1862 Cordova ‘1000’ *khanakvaka* (see above), though not in his ‘4’, *khaliakhakva*, or in Khromchenko 1823 *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.



## INTERROGATIVES

Interrogatives are of the two basic types, *wh-* and *yes/no*. The *yes/no* type is indicated by the interrogative enclitic *-sh* attached to the first word of the sentence: e.g. *dAsAche'Lsh* 'are you hungry?', *dAsAche'Lshunh* 'is he hungry?', *dik'sh dAsche'L* 'aren't you hungry?', *dik'shuhnu: dAsche'L* 'aren't they hungry?' For this, see further chapter 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 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.

### WH- INTERROGATIVES

The basic Eyak *wh-* interrogative words or stems are *de:* 'what?', *du:* 'who?', *da:* 'where?', *dAX* 'how?', and *k'e:* 'how?'. From comparison with Athabaskan *\*dE-WE* (or *\*wE-dE*) 'who?' and *\*dE-yE* (or *\*yE-dE*) 'what?' it is clear that Eyak has *dA-* as its *wh-* element, 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, as will be shown below in the subsection on syntax..

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 the chapter on Negatives. The other such use, often with proclitic *dA-* '*ipse*', 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, 'anyone who', 'that which', etc..

The interrogatives are extensively covered in the 1970 dictionary 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 potential is revealed. The information in the 1970 dictionary is treated here in summary only, as here we shall concentrate on the post-1965 material, which is cited by speaker and date.

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 which is heavily contaminated by 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, where there is either duplication of -d's, i.e. both postposition-final and interrogative enclitic, da:dd, or possibly, allowing for overlap of categories, interrogative and locational, simplification, or haplology, 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 chapter 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 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 which 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.

### Prefixation, proclitics

Three prefixes or proclitics are attested with interrogatives. Two, k'u- negative prefix, and proclitic dA- 'ipse', can combine, so are found of course in the order dA-k'u-, thence often dik'u-. These are covered with the interrogatives in the dictionary and in the chapter on Negatives.

The third is affective or exclamatory 'iL-, intensifier often or usually with overtones of vexation or disgust: 'iLke:duh 'how the hell...?', from Sophie 1987 'iLk'e:dAw 'a:nda' sahL, 'iLk'e:chi:dAw 'a:nda' sahL 'how did you get here?!' (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 had not been tested together. -- The other attestation of affective 'iL- is with the stem -chi- in the exclamation 'iLchi'sh(dAg), of surprise and usually vexation, clearly to be segmented 'iL-chi'-sh-dAg, where -dAg is 'also', and -sh- is the interrogative enclitic. The stem -chi- is in origin very probably and interestingly the same as the -chi:- in 'who ever?, who on earth?', to be further exemplified below. 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.

### Suffixation (or compounding)

Aside from the interrogative enclitic -d, at least one morpheme, the intensifier -chi:- already mentioned just above, 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 'how ever 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, cancelling each other out, leaving the "vote" in favor of postposition preceding -chi:-. (Late note: the correctness of this speculation is dramatically confirmed from Lena, 6/13/71, from whom we have dAXk' lAXa: shuglAXa'lAwchi:d 'iXa 'how ever many big strawberries do you have?!', which shows that the -chi:- 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. Also from Anna, 6/72, du:tl'chi:dAw tsin'dAleh 'whom ever is he speaking to?', dAXk' da: da:na:ci:dAw 'how ever much money is that?')

Therefore, next to last (i.e. last before enclitic (-chi):-d in these interrogatives) are the postpositions. These are fairly well attested: du:ya'-d- 'whose?', du:ch'-d, du:ch'a'-d- 'to(ward) whom?', du:ch'ahd-d 'from whom?', 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:leh-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 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?', Anna 6/72 de:ga'dAw diLits'anh 'how much does it cost?', de:ga'chi:dAw diLits'anh 'how ever 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 of course limited, but we have dAXk'da'Xd 'how many times?; a number of times' with specialized o-da'X 'o times', and in 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 below 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 interrogative 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. Then from Anna 6/71, we have de:lAWdA’Aw ‘what’s that big thing?’ (which may be a mistranscription for de:’lAW-; cf. k’e:’WAX- below). Following that up in the last session with Lena 7/13/71, we have 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?’, and then de:wahshiyah(chi:)dA’Aw, ‘for (the purpose of) what (ever on earth) bad thing is it?’, where the postposition o-wah(d) not only precedes the -chi:-, but much more surprisingly, precedes also the adjective -shiyah ‘bad’, perhaps incorrectly. Then, following those up with Sophie 1987 we have 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 sg. human relative, followed and confirmed by k’e:dzu:dkinhnu: ’a:nda’ shA’a’ch’L ‘how did they (cute girls) get here?’. This then was further elaborated with anatomical qualifier -gudA- ‘buttocks’ k’e:gAdAdzu:dkinhnu: ’a:nda’ shA’a’ch’L ‘how did those cute-butted (girls) get here?’, then finally ’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!’ and ’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’, now also with exclamatory prefix ’iL-, the diminutive immediately following the adjectival stem, -yu: ‘plural’, and -sh-d- enclitic combination ‘I wonder’. This 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 following order of elements: proclitic or prefix (’iL-, dA-; k’u-) + interrogative (de:, du:, da:, k’e:; in highly limited way dAX) + qualifier + adjective + -yu: ‘pl.’ + postposition + -chi:- intensifier + -sh interrogative enclitic + -d interrogative enclitic + human relativizer enclitic -unh,-uhnu:); diminutive -kih appears in at least two positions, following 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 interrogative in negatives and relatives. Negatives with k’u- prefix: k’ude: XAdahG ‘there’s nothing to eat’ (Lena, more precisely ‘nothjing is being eaten’?), k’udu:yu:tl’ ’Adawi’L q’e’ ’idAlAlehGinu: ‘they got nobody to war with anymore’ (Anna, more precisely ‘they’re warring with no one more’?), but then Sophie 1987 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’, with the verbs in the positive. With a negative verb, presumable k’udu:tl’ ’uwa: ’u:da’ qu’xahG, the meaning would be ‘I’m not going there with anyone of them’, k’udu:XA’ wAX ’a’xt’u:G, meaning would be ‘I’m not living with anyone’. This important potential distinction was not further checked.

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 chapter on negatives.

Interrogatives, with and without dA- 'ipse' are frequent in relative use: e.g. 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 as o 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, 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?'

### Syntax

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 is suffixed to the last word of the phrase. In the de: k'utse'd 'what meat?' construction above, the de: is attributively adjectival, as in several other such attestations: de: Lila:'dA'anh 'what man/boy is he?' (Anna 6/71), de: 'Ana:shahdA'Aw 'what (species of) flower is that?' (Lena 6/13/71), de: ya:dA'Aw 'what thing is that?'; and with de: as o of postposition, de:lah da:dd 'about what place (is he speaking)?'. This same use is found in the relative: dAde:d Ga:ndich'idjgyu: 'any (kind of) small birds', in this instance with enclitic not final, though presumable dAde: Ga:ndich'idjgyu:d would be at least as acceptable; cf. next below.

Examples where interrogative is possessor of non that is not inherently possessed (not anatomical or kinship term) are du:ya' 'AxdA'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 end appears to be optional, but probably preferable, considering following examples.

In the construction with postposition o-a: 'of o' following de:/du:, 'which/who of o' the enclitic is phrase-final: 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.?'.

We have several attestations of de: itself or as o of postposition in phrases with ya: 'thing', the enclitic -d being phrase-final in each: de: ya:dA'Aw 'what (thing) is that?', dik' dAdu: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?'); note also da:ch'ahd ya:dA'Aw 'where's that thing from?'

The interrogative dAX-k'-d 'how many?' is relatively limited or specialized, but is most frequent of course in noun phrases, where the enclitic is regularly phrase-final:

dAXk'ih XAwa:d 'iXa' 'how many dogs do you have?'; with classified nouns and noun-class particle: dAXk' lAXa: la'mahdd 'iXa' 'how many berries do you have?', dAXk' lAXa: shuglAXa'lAwchi:d 'iXa' 'how ever many gig strawberries do you have?!' (Lena 6/13/71), dAXk' da: shdu:lihGd da'li:LXah 'how many tables do you have?', dAXk' 'a:na:d tAGL da'li:LXah 'how many hammers do you have?' (where enclitic is on noun-class particle instead of phrase-final). Relative use is quite common: dAXk'nu:duhnu: 'how many (people) are they?', also 'quite a few people', but dAxk'nu: 'i'ehdGAYu:d 'your quite a few wives', dAXk'nu: Lila:'GAYu:d 'quite a number of men', dAXk' 'a:na:d 'some months' (elliptical, l-class noun), as o of o-Xa' with specialized meaning as o of postposition: dik' 'u:la'xLga:G dAXk'iXa'd q'e:'anh qu'xdah 'I don't know what time (at what hour o'clock) I'll come back home', and with specialized postposition o-da'X 'o times': dAXk'da'Xd 'how many times?; quite a few times', as shown above.

Most interestingly, we have 3 instances 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': 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' wA X 'i:t'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 not 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 o of subordinating postposition. Further examples of this were not tested. To indulge in speculation, presumable du: sAsinhLledhduhnu: ki:nX 'because someone died they're weeping' might well be acceptable (along of course with e.g. presumable du:d sAsinhLlehdq'uhnu: ki:nX or conceivable ?du: sAsinhGLlehdq'unhnu: ki:nX 'id.').

The possibility of interrogative with enclitic -d after verb-phrase was tested only late and desultorily – possibly also earlier, but without record. With Sophie 1987 we have \*du: sA'ehLdunh 'whom did he marry?', adjudged "goofy", but 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 \*duchi: wAX qa'lehdAw 'id.' definitely rejected. From this much it appears that du: V-d as an interrogative is not 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.

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.

More important, but inadequately tested, was the distinction 'who killed a bear?' and 'whom did a bear kill?'. Simple du:d lixah sAshehL would most likely be read 'who killed a bear?', and \*?lixah du:d sAshehL would almost certainly be rejected rather than accepted for 'whom did a bear kill?'. The latter meaning could certainly be specified e.g.

by du:dunh(,) lixah 'anh sAshehL, but it remains uncertain whether a second reading of basic minimal du:d lixah sashehL could be 'whom did a bear kill?'. Cf. the ambiguity, tested and confirmed, of '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 SOV structure, ambiguity results.

Finally, from last session with Anna, 6/72, we have du:dA'anh lixah sAshehL "who killed the bear", apparently an attempt at disambiguation, more exactly 'who is that (human) that killed a/the grizzly bear', but it was not ascertained whether that could also be parsed "who is that (human) that a/the grizzly bear killed", full disambiguation of which might have the 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.

### Copular -A-; -sh-d- 'I wonder'

Copular -A- with -d enclitic is common: de:dA'Aw 'what is it/that?', de:dA'Al 'what is this?', du:dA'anh 'who is he/that?', du:dA'i: 'who are you sg.?', du:dA'u:d 'who's there?', du:yu:dA'ahnu: 'who are they?', de:shiyahdA'Aw 'what's that nasty (thing)?', du:siyahdA'anh 'who's that nasty (person)', de: 'Ana:shahdA'Aw 'what (species) is that flower?', du: Lila:'dA'anh 'what man is that?'. This use can apparently be extended e.g. to du:dA'ah 'a:nd sAtehL 'who is he (who) is lying here?', actually preferred to du:dunh 'a:nd sAtehL 'who is lying here?' by Marie 8/3/96, presumably by momentary lapse.

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 chapter on enclitics -d, -sh, -q'-.

### de:ga'da:Xd 'when?'; 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 o of 'o-ga' 'like o'. Identification of -da:X is a bit problematical: presumably da:3, o-da:-X, uses 2d.-f. and 3., as vague meaning of postposition or subordinator, extended to concept of time e.g. in ne:tl'-da:X 'at first', qi'-ya:-da:X 'sometime(s)'. It is strange, however, that a we have a postpositional phrase the o of which is itself a postpositional phrase, de:ga'. For the semantics, cf. however also de:ga' 'Awxa' wAX 'i:t'eh da:XdunhAw ... 'he had been living with it for quite some time and/when he ...' above. Dictionary examples for de:ga'da:Xd are only with 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 of course also attested, in the relative use, usually or probably by chance always with dA-'ipse', 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 \*'AwAX > (')wAX took place. This is a third way of saying 'why?'. Cf. 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?'; here 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:'wAXshduhnu: wAX 'i:t'eh 'I wonder why they're 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.

#### **tlā: 'where?'**

Finally, there is one other interrogative, marginal to the system, tlā: qi' and tlā: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: e.g. tlā:Xuhnu:, tlā:X 'ahnu 'where are they?', tlā:XA'i: 'where are you?' (so both without and with copular -A-), tlā:X sini:k'lAw 'where's my big nose?' (answer to insulting epithet), tlā:X dAXunh 'where is a person?' (no people present). In tlā:Xchi:d sita:' 'where on earth is my father?', and Anna (late Raven text, 6/71) tlā:Xchi:d 'ila:X 'where are your (missing) eyes?', tlā:X is treated as fully regular interrogative, both with -chi:- and, probably because of that, also -d enclitic.



## NEGATION

The morpheme which is most basic to negation or definitive of negation is the negative suffix -G. (Cf. 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, 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 Inceptive imperfective (future) paradigm, of specialized limited occurrence, perhaps obsolescent. That paradigm is treated next below, 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'udAX* 'cannot', *k'ude*: 'nothing', *k'udu*: 'no one', *k'ude: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'. 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.

### THEMATIC NEGATIVE

This is a well-defined Active derivation 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 eight of these clearly attested. They are all of perceptual abilities or of stative qualities, to show lack of that ability or quality. These are listed below 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'

*'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'*-

*dALAde:G* 'does not understand it (speech)' < *diLideh* 'understands it (speech)', unconfirmed, attested only in Rezanov *tufletek*" 'deaf' *dAxwLAde:G* 'I do not understand it (speech)'

LAch'a:nG 'is weak' < Lits'anh 'is strong', with unique pejorative shift ts' > ch', cf. Tlingit; cf. also LAts'a:nG 'moulting 'duck', nominalization, without that shift. Sometimes also 'a'LAch'a:nG, 'is weak' retaining analogous Neuter negative prefix; see 'dull' next. (Exactly the same is confirmed by Anna 6/19/72) dALAch'a:NG or da'LAch'a:nG 'weak (e.g. of table); inexpensive'.)

XAda'ya:nG 'is dull', cf. di:nyanh < di:yanh 'sharp', with Xd- instead of d- qualifier, remaining Neuter with Neuter negative prefixation, instead of shift to Active

Of the 8 items attested, the first three are Active imperfective to begin with. This being an Active derivation, only the last one of the last five fully fails to show shift from Neuter imperfective to Active. :nGGinh 'he didn't give in, break down' ('did not become weak mentally').

There are a few other verbs which look like they may be of this origin, 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'.

### CAUTIONARY PROHIBITIVE

This is a minor specialized conjugation 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 2sg subject prefix here is overt -i- - with classifiers zero and -L- whereas it is always zero in imperatives. Of the ca. 19 attestations, 10 are 2sg, 1 is 2pl and 8 are 3<sup>rd</sup> person. It is probably only because no attempt to elicit first person forms that such are absent in the corpus.

No morphemes are unique to this conjugation, but only the combination of GA- conjugation prefix as e.g. in the Inceptive imperative or Inceptive perfective, and -G negative suffixed to the stem. Open variable stems take the form as in Active imperfective, in all 7 examples with lengthening (perhaps therefore not optional) of stem-vowel to V:, including the one example of CV/ (-ma:-G).

In addition to the unique affixal frame GA- -G, all examples include the adverbial particle q'ah 'now!, already!', usually (in 16 of the 19) reduced to proclitic q'A-. This is exactly the same as in the prohibitive gerund, q.v., attested mostly in Rezanov, 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!'

The meaning of the Cautionary Prohibitive, as distinguished from the far more common ordinary prohibitive (for which see below, simply ya'Xu: with positive Inceptive imperfective), and of course as distinguished from ordinary imperative (always positive), seems to be advice or command specifically to avoid undesirable consequence, rather than mere prohibition.

The attested examples will be listed below 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.

'Aw q'ah Gi:sehdG 'don't trip on it!'

'Aw q'AXAGa:Ginh 'let him not eat it!'  
 ya' lAXAts'iyats'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 animals!' ('don't walk 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'AdAGALaqaGG 'don't fall off!'  
 'anh sAqe:ts'Akih q'Aqid dAGALaqaGG 'let that child not fall off!'  
 yAX q'AdAGi:'ya:G 'don't capsize!'  
 yAX q'AdAGAlAXya:G 'pl don't capsize'  
 'Ad q'AGAdAk'in't' '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'inh 'let him not shoot that gun!'

The last 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 xutl' q'AGALxut'inh! 'don't! / let it not happen! – 'let him not shoot that gun!'.

The position of q'ah ~ q'A- may be after the first constituent of the construction. That is probably why it follows instead of preceding the preverbs qid in 'don't fall off' and yAX 'in 'don't capsize!', since nothing else in these cases precedes the preverb for the particle to follow. Even the reflexive '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, r.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 19 examples, all GA-. It so happens that these are probably [check] all from Lena. On [date], Marie was asked to confirm hypothetical 'Aya:, ya:n' q'AGALaqaGG '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.

Krauss seems 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- -G morphology, but that has not yet been spotted in scansion of the corpus for the grammar.

Note below also the section on the Inceptive perfective paradigm with negative -G, the negative Inceptive perfective ‘not yet’, of a structure in some ways parallel to this Cautionary Prohibitive with Inceptive prefix.

### 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’udea:dah* ‘no way’. (The following section will take up *di:yAX* and Inceptive perfective ‘not yet’ negatives.)

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 indefinite pronominal prefix *k’u-* at all. 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 *\*dE-k’w(E)*, where the modern Eyak *di-* might then be simply the rather freely used Eyak proclitic *dA-* ‘*ipse*, the very’, still attested as such also e.g. in *dAk’ude:dah*, *dik’ude:dah* ‘no way (at all)’. This *dik’* is of course frequently attested in Rezanov 1805, over a dozen times, where it is usually transcribed *tyk-*, occasionally *tek-*, at least once *tak-*, perhaps never *tik-*. In Li’s field notes it is consistently transcribed *diq’*, but this is certainly incorrect.

### *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 [dI: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 sAtI’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’ ’AdxLeA’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 person’, which might be distinguished from *dik’ dAXhun[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, of course, *’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 ‘yes’ answer the Eyak

is dik', yik'a'dinh 'no, he is sick', and for the English 'no' answer, the Eyak is 'a:n, dik' 'a'k'a'dGinh 'yes, he is not sick'.

In a number of instances, dik' negates a previously stated construction without repeating it: e.g. tli: gAli:tl'eh da:X q'a:l 'Awa: dik' before the water was cold but now it isn't' ('already it (water) is cold and now though no/not' -- this as response to an effort to differentiate 'was cold (and no longer is)' past tense from present, for essentially tenseless Eyak Neuter imperfective stative 'be cold'). Further examples, often followed by correction: 'uqa'Xyi:nhinu: 'Awa: dik', ya:kuts'g yiLeh 'some of them though no (aren't big), they're little', 'anh LinhGih 'Awa: 'AdAX dik', dIAGA'a: wAX 'i:tinhhinh '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 < 'not for (all) that': dik' 'Awa:[,(?)] dA'wAX q'uhnu: 'iLt'a'd 'Aw sALahL 'nevertheless, *still* they hung them up'.

### 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.

Negated nouns or noun phrases: dik' lixahG 'not a brownbear', dik' 'uqa'G not her husband', dik' dAXunhyu:G 'they [are]n't humans', dik' dAXunhyu:G lAXi: 'you pl [are]n't humans', dik' 'kula:Gaya' sAqe:GAyu:G 'they [are]n't others' children', dik' GAyAqa:qa:'G 'they [are]n't our own tribe/kind'.

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'.

Adjectives: dik' 'Aw tail 'Awa: k'u'a:wG 'its tail [is]n't long', dik' k'udzu:G 'not good', ta:dz 'Awa: dik' 'a'd k'ut'u'G 'formerly though they [were]n't very plentiful', dik' GAdla:'a:wG, qi'ch' da: GA'a'ch'L 'not far (overland), the place we're going to'.

Pospositional phrases, locationals: dik' GAdla:'a:wch'G 'not to far', dik' 'a:ndG 'not here', 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's/that's a dog', we normally have XAwa: q'A'Aw instead of dik' XAwa:G q'A'Aw 'that's/it's 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 e.g. dik' qe'L q'A'anh, Lila: q'a'anh '(s)he's not a women, (s)he's a man', and dik' XAWa: q'A'Aw, du:sh q'A'Aw 'it's not a dog, it's a cat', where also on two occasions the negated XAWa: q'A'Aw is reduced to q'Aw, and the -G remains deleted. Likewise in 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'.

**Addendum 10/18/09:** There are several more non-verbal elicitations with dik' in the past-1965 data, to be added here. Lena 6/13/71: dik' k'eshuh wAXG 'I don't think so' ('not perhaps thus'). Sophie 1987, p. 19: dik' siya:n 'i:G, dik' siya:nG 'i:, dik' 'i: siya:n, dik' 'i:G siya:n, all 'you're not my mother' (presumably with mild differences in focus, but all acceptable), p. 53: dik' dAde:d 'u:dG, dik' dAde:dG 'u:d, \*dik' dAde:dG 'u:dG 'there's nothing there', but second "kind of goofy", and third rejected, confirming complete unacceptability of double negatives; dik' xu: 'a:ndGdAwa: 'before I'm there, while I wasn't there', dik' xu: 'a:ndG da:x while I'm not here', instances of subordination of negative non-verbal clauses; dik' XAWa: q'AW, du:sh q'A'Aw '[it's] not a dog, it's a cat', unclear whether omission of copular -A- in q'Aw (instead of q'A'Aw) is less good form. From Marie 8/3/96 we have several more non-verbal elicitations: dik' XAWa: q'AW (i.e. \*?dik' XAWa:G q'Aw) 'not a dog', dik' xu:G 'not I', dik' 'Aw XAWa:G 'not the dog', dik' 'Aw q'A'Aw 'that's not it', (not \*dik' 'AwG q'A'Aw, not \*dik' 'Aw q'A'AwG), dik' 'Aw q'Aw 'not that one', dik' qe'LGAYu: 'Awa:G 'not [the] women[, just the men]'.

### **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., 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.

#### *Negative verbal morphology: prefixation*

As noted for Eyak inflectional morphology already in 1965, 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 \*ngyE- perfective (insofar as that was still present with \*s(E)-) and neuter prefix, also PA E \*ngyE-, with the negative. Thus, the positive Active (s-) perfective positive paradigm with zero and L- classifier was as follows: 1s si-, 2sg and 3 sA-, 2pl lAXsA-; but the negative was 'Axs-, '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 \*'Es- in Athabaskan negative *non*-perfectives e.g. PPA \*'Es'a'tl'E '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 \*ngyE-) in absolute initial imperfective, otherwise -i:- (< CA-yi-), with zero and L- classifiers, but that is deleted as such with dA- and LA- classifiers, which become instead themselves di- and Li-, metathesis. In Negative neuters the \*ngyE- reflexes disappear altogether, di- and Li- revert to dA- and LA-, and the person prefixation becomes 1sg 'A'x-, 2sg 'A'yi-, 3 'a', 2pl 'a'lAX-, in absolute initial position; otherwise the 'A'- becomes Ca'-. That of course implies that the fundamental Neuter negative prefix is -a', the same as that of the Neuter imperative and optative. More likely even, that -a'- is from -A' -, where 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, thus isolating the segment -'- as the basic negative Neuter prefix. 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.

No other paradigms have any prefix or prefix changes special to the negative. However, it has been observed that with the Customary Active derivation (never perfective), most instances of which have zero which seems to alternate very freely with 'A-, with zero perhaps the more frequent in the positive, in the negative the reverse seems to be the case. For this, see chapter on Customary. This increase in frequency of 'A- over zero may be due to an analogical influence of the 'A- prefix present in the s-perfective negative, probably also in Neuter negatives. This influence is further suggested in occasional irregularities in other negatives, in at least 2 instances of negative Repetitive Active imperfectives. In positive Repetitive Active imperfectives, or in negative Active imperfective without repetitive, the prefixation is probably never 'A-, but always zero: dik' xwut' (explicitly not dik' \*'Axwut'G, Lena) 'I'm not vomiting'.

However, we do have, on a different occasion from Lena, alongside regular Repetitive dik' yAX xwusgG 'I'm not turning them inside out (one after another)', also dik' 'AxwusgG 'id.' "OK too", a form obviously suggested by Krauss rather than spontaneous. In the case of another such analogical form from Lena, dik' 'ich' 'Axle'ggG 'I'm not bothering you' entered along with regular dik' 'ich' xle'ggG 'id.', it is less clear that the analogical form is due to elicitation rather than spontaneous. In any case, it does seem clear that any such irregularities are due to analogy with the 'A- of negative s-perfectives and perhaps Neuters. [[– **Addendum.** Several more instances, probably all spontaneous, of such irregularity appeared with dik' and other negative words: dik' 'aALAxu'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. 1sg xa:gG). In other

words, such analogical forms are less than extremely rare, understandably. This may especially be so with Repetitives, and also, perhaps less easily explained, with negative words other than dik'.]]

Interesting also in this connection is the behavior in negative Neuters with the 2sg subject prefix yi-, < PAE \*ngyE-, homophonous with the perfective and Neuter \*ngyE-. This becomes zero, homophonous with third person, in all Active (s-)perfectives, positive and negative, in all Neuters, and always with dA- (~di-) and LA- (~Li-) classifiers. However, this yi- remains or is restored after the -a'- in negative Neuters, both imperfective and perfective: thus dik' 'a'yishahG 'you're not stingy', dik' silAX 'A'yiXanhG 'you're not fleeter(-footed) than I', dik'sh ts'a' la'yiLe:G 'isn't your face dirty?', dik'sh(uh) 'u:la'yiLgahG 'don't you know?' (several instances), dik'sh la'yiLgehGLG 'aren't you lonely?'.

*Negative verbal morphology: suffixation of -G*

As for suffixation of -G, a fair amount of early attention was given 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 3 or 4 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 the Dictionary 1970.

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 is 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, of course, -G is not the only suffix to the stem. Negative -G is in fact the last of a potential of at least 3 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, more like enclitic, of the 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'.

Here follow examples of -G with other suffixes to verb stem: 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’); dik’ yAX da:XGinh ‘he’s not walking about (though he may possibly be walking)’; liability: dik’ lAXa’LATugXG ‘berries that don’t swell’, dik’ ’a’LXa’Xch’XGinh ‘he’s not ticklish’; perfective: dik’ ’u:da’ ’AxsahLG ‘I didn’t go there’; customary: 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’, rather abundant in the corpus, often in the sense ‘never’; 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). Note also, above, negation of thematic negatives.

Further combinations of the preceding derivational and mode-aspectual suffixes are attested in the corpus, e.g. 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’; negative Customary with thematic Repetitive: di’k’ dAxLAXe:Xgk’G ‘I don’t snore’, with thematic -X: dik’ ’AxLXa’Xch’Xk’G ‘I never tickle it’.

#### *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: ’anh dAXunh ’Aw XAwa: dik’ ’AsshehLG ‘the man didn’t kill the dog’ “sounds funny”, likewise ’Aw XAwa: ’Aw du:sh dik’ ’AsqahLG ‘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, clearly expressed March 4, 1996: “XAwa: dik’ dAXunh ’AsqahLG ‘dog didn’t bite man’ – most natural, dik’ XAwa: dAXunh ’AsqahLG ‘dog didn’t bite man’ – OK but marked, XAwa dAXunh dik’ ’AsqahLG – 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. February 7, 1996: Lila:’ dik’ lixah ’AsshehLG ‘man didn’t kill grizzly’ – normal, dik’ Lila:’ lixah ’AsshehLG – focus on ‘man’, Lila:’ dik’ sLi’mahdL XAsahLG ‘man didn’t eat bread’ – normal, dik’ Lila:’ sLimahdL XAsahLG – focus on ‘bread’; i.e. in the first dik’ S O V-G focus is said to be on S (as in the March example), but in the second, focus is said to be on O. On August 3, we have, not paired, “dik’ qe’L wAX dAsliLG ‘not he, a woman said that’”, strong confirmation of markedness with focus on S, where the natural or unmarked order would be qe’L dik’ wAX dAsliLG ‘a woman didn’t say that’. Finally, September 19, 1998. the pair ’anh dAXunh dik’ ’Aw XAwa: ’Asta’tl’LG ‘the guy didn’t kick the dog’, but in dik’ ’anh dAXunh ’Aw XAwa: ’Asta’tl’LG the focus appears to be 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 S 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 focus particle set q'-, which is of course the usual means for showing focus. In the absence of overt S, 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 'AsshehLGinh must mean only 'he didn't kill a grizzly', lixah dik' 'AsshehLGinh only 'a grizzly didn't kill him'.

**Addendum10/19/09.** Some further light on this basic syntax is available in post-1965 elicitation investigating focus or emphasis in negative verbal sentences from Marie 1/31/98 and 2/7/96. She confirms dik' preceding subject should best be glossed 'it's not that...', dik' 'anh Lila:' tsu'dG' 'it's not that the man is sleeping', also that '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*'.

### **k'udu:, k'ude:, k'udAX, k'ude:dah**

The first two of these negative words obviously consist of the interrogatives de:(-d) 'what?', du:(-d), with negative prefix k'u-. 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 neabs 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 \*dE-wE- 'who?' and \*dE-yE- 'what?', as some Athabaskan languages reflect instead \*wE-dE- and \*yE-dE-.

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 will be treated in a following subsection.)

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 incidence of dA-'ipse'. Organization here will parallel that for dik' above.

*Asyntactic k'udu:, k'ude:, k'udAX, k'ude:dah*

These three basic forms do occur in non-verbal constructions, alone or asyntactically, 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 asyntactic example we may have is Rezanov *ked"-et"* 'no' (with non-palatalizing *e*), 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 asyntactic instance in text of k'udAX 'hey can't do it, in vain, impossible'. Not surprisingly, on the other hand relatively abundant asyntactically is k'ude:dah 'no way': aside from several occurrences alone in text, we have e.g. 'ahnu: sA'ehdzLinu: q'uhnu:, 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'.

*Syntactic k'udu:, k'ude:, k'udAX, k'ude:dah*

Sentences with overt S for these negatives are very scarce, but enough to confirm the same basic word order as for dik', **[[breaks off here]]**

These negatives are of course 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 pl)'. 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 subsection below on the question of double negatives. A false start is k'udu:-, dAdu:d sAsinhL 'anhu ya:X XAdla:Lqa:k' 'nobod-, 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.

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 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:XG 'I can't swim (about)', k'udAX XAGi:ya:G da:X 'if you can't eat it'.

We have 2 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 2 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'AdAX '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.

Some of the many instances of k'ude:dah 'no way' with verb: k'ude:dah lehG 'it can't do anything' (because its back is broken), da:X q'unhu: 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', customary k'ude:dah ta' 'a:k'G 'there's never any way he can get into the water', interrogative customary k'ude:dahshuhnu: 'uqa' dAXunh 'Adu'la:IXdAXa:k'G 'is there no way you can turn yourselves human among them?' In one case we have an emendation, k'ude:dah q'e:yaX dAqe:XG, Xa:ndiyahlu'qa: q'e:yaX dAqe:XGinh 'he can't boat about anymore, boat about for food anymore', without repetition of k'ude:dah.

*Use of proclitic dA- 'ipse'*

Along with possible use of dA- 'ipse' barely attested, in possible dik'udAX above, and only with k'udAX, we have at least one clear instance of this as proclitic in dik'ude:dah, transcribed di-: customary dik'ude:dah qe'yiLtehyAq' q'e' qa' 'Ada:k'G 'there's no way at all he can ever get 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 no 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 in this connection, of course, Ahabaskan 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 final paragraph on next subsection below for further use of dA- in negatives.

*Corresponding or alternative dik' (dA-)du:-d, dik' dA-de:-d, dik' dA-ke:-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 subsection further below on double negatives.

Corresponding or alternative to the less frequent k'udu: 'no one', we have 6 attestations (5 without dA- and 1 with) in the ledger corpus of dik' (da-)du:-d 'not anyone', usually in the sense of 'no one'. Without dA-: 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'), dik' du:d 'AdlAXa:n' 'AsdAliLG 'not anyone avenged himself', dik' du:dunh 'u:la'Lga:G 'not anybody knows'; one with dA-: dik' dAdu:lahyu:dAw 'a'Le:G 'it's no anybody's fault' ('it's about no one pl'); we also have asyntactic 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 5 attestations (none without dA-) in the ledger corpus of dik' dAde:-d 'not anything' probably all in the sense of 'nothing': e.g. dik' dAde:d da:la'xLXa:G 'I have nothing', dik' dAde:dunh 'udAGAlehtl' 'idAlehG 'nothing worried her' ('nothing concerned her mind'), dik'

dAde:lAXd 'ixsL'ahnLG, dik' dAde:kihlAX 'ixsL'anhLG 'I didn't see anything, 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 4 times in the corpus, never \*?dik' k'e:-d, e.g.: dik' dAk'e:dunh 'anhtl' dAsliLG 'she didn't say anything to him', dik' dAk'e:duh q'e' dAle:G 'nothing more happens to them', dik' dAk'e:duh yAX 'Adi:llihLa'ya:XG 'he can in no way think anything (amiss about it)', also idiomatic dik' 'a'd dAk'e:dunh 'Adla'LAT'inhin 'there's no sign of anger on his face' ('not very much in any way is he making himself be facially', stem -t'uh-).

The pattern of use of dA- in these negative constructions is not clear: 5 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

#### *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 2 instances of this construction reversed, dAke:d outside the negation, preceding dik', therefore in its positive meaning 'anything at all': dAk'e:dunh dik' 'anhtl' dAle:G 'there's nothing he won't say to her' ('any way at all he doesn't act verbally with her'), dAk'e:yu:dunh dik' 'anhtl' dAle:G 'id.' ('any ways pl at all he doesn't act verbally with her'), in addition to dAde:dunh dik' XahG 'there's nothing he won't eat'. In other words it appears that Eyak quite definitely avoids double negatives, even where English allows double negatives that negate each other.

Once more back to the etymology of dik' itself, and other Eyak negative words: these involve possible proclitic dA- 'ipse' and a possible -k'(w), Eyak k'u- 'negative' as in k'u-du:, k'u-de:, k'u-dAX, with du:, de: and dAX. These interrogatives themselves all clearly include the initial segment PAE \*dE-, i.e. dA-, and even purely Eyak k'e:-d (cf. k'e -'sh 'maybe) is probably further segmentable. All of this somehow involves dA- and k'(w)-, not to mention of course the alternative or corresponding sequences dik' dA-\*dE- etc.. It is interesting or even ironic that the question of the etymology of dik' and its relation to the inadequately documented sequence dik'u-(\*dE-) itself involves an apparent avoidance of a double negative -k'-k'-, e.g. dik' dAk'e:d rather than \*?dik' k'e:d or \*!k'uk'e:.

#### **NEGATIVE INCEPTIVE PERFECTIVE, 'NOT YET'**

Another common type of negative, attested at least 60 times, means 'S has not yet V'd, S has not yet begun to V', equivalent to or also glossed as 'before S V's', but not 'before S V'd'. All of these forms have in common that they occur exclusively in the

Inceptive perfective, i.e. with the usual combination of GA- conjugational prefix and -L stem-suffix definitive for the Inceptive perfective paradigm. The meaning of this common type of negative is that the verbal action has not yet taken place, has not yet even begun to take place -- whether it ever eventually takes place or not. This adds support for naming that GA- -L paradigm the Inceptive perfective, the negation here then referring 'not (even) beginning'. At the same time, it will be remembered, a fundamental meaning of the GA- -L Inceptive perfective paradigm in the positive, is that the act or event is in progress, has begun, but is not finished. As such it can also be called the Progressive, as is done with the Progressive derivation, q.v. This aspectual quality of the GA- -L paradigm is so fundamental that its exact cognate with the same meaning is still ubiquitous in Athabaskan as well.

There appear to be two very distinct subtypes of this negative. One is quite different from the full negative type above, in not being introduced with any negative word at all, but with a postposition suffixed to the verb, thus making a subordinate clause of the negative clause or sentence. We have this type in a total of 20 or so instances. The only two postpositions attested for this are o-dAwa: 'right in front of, waiting for o' (about 17 times), and o-dALyAX 'preceding o, in front of o, before o in time' (3 times)

A second type appears to be the reverse, introduced by the negative word di:yAX, with no subordinating postposition suffixed to the verb. We have this type in a total of about 40 [[?]] instances. The first type, subordinated by those postpositions, is consistently 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 20 or so instances of the first type and about 40[[?]] of the second, there are at least 6 instances with both di:yAX and subordinating postposition o-dAwa: combined, all glossed 'before S V's'.

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-). 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:, of course, 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 of course in all full negatives. Thus, deliberately elicited type one negative Inceptive perfectives with -G-, i.e. phonetically aspirated [q], 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 Krauss's 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 -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.

The etymology of di:yAX is unclear. It could be a canonic single morpheme, perhaps, but more likely it is to be segmented. For -yAX cf. of course o-dALyAX 'before, in front of o', which has to be segmented -dA-L-yAX. The sequence -dA-L- is common elsewhere, not only of course in verbs where -L- is the classifier, but it occurs also in nouns, somewhat opaquely. For -yAX cf. especially o-yAX 'under, beneath o', and GA-L-yAX 'bottommost of a series'. For initial di:- one obvious partial candidate is of course again dA- (~ di-) '*ipse*', leaving though the vowel length and basic morphological structure unexplained. A better explanation therefore, conceivably, is dA-'e'-yAX 'under the (vacant) place of indeterminate o', the shape of '-e' being well documented as exceptionally unstable. Cf. e.g. 'AdiX '(to) home, in(doors)', clearly < 'Ad-'e'-X '(movement) in the vacated space of oneself', where -diX is itself phonologically non-canonic for a stem, only explicable as exceptional reduction of some full front vowel. The meaning of dA-'e'-yAX might here be something like 'meanwhile, pending', though we do not have any Eyak form attested with such a gloss, and apparently no effort was made to elicit such. (Closest to that, very probably, is dA'Aw dAwa:, rather frequent in text, usually glossed 'and then' or the like, perhaps sometimes imprecisely. This is the same o-dAwa: as so often subordinates these clauses. The o thereof of is'Aw 'it;that' with dA-'*ipse*'.) Also not attested is di:yAX standing alone or asyntactically, 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, 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 of 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.

**Type one: -G/q'- plus postposition**

Since this subtype has no initial marker and ends only with -G/q'- plus postposition suffixed to an Inceptive perfective, the 20 or so incidences thereof are rather uniform, except that 3 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.

Instances with o-dAwa: and -G-: 'uk'ah IAGi:ta:LGdAwa: 'before you forget' (Lena, but only in connection with di:yAX IAGi:ta:LGdAwa: 'id.', which see further below, also cf. 'uk'ah IAGi:ta:Lq'dAwa: below, on earlier occasion), 'Ashi:n'iinh '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).

Instances of o-dAwa: and -q'-: 'uk'ah IAGi: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 perhaps half a dozen more like this.

Instances 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, -G/q'- inaudible).

**Mixed type: both di:yAX ... -G- plus postposition o-dAwa:**

There are 6 clear instances of this, all with o-dAwa:, none with o-dALyAX: di:yAX 'uk'ah IAGi:ta:LGdAwa: 'before you forget' (Lena; cf. above, on the later occasion, along with 'uk'ah IAGi:ta:LGdAwa: 'id.' and 'uk'ah IAGi: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), and di:yAX 'ahnu: dAXunhyu: 'a:nda' q'e' GAdA'a'ch'LGINu: 'before those people come back' likewise, with overt subject noun phrase.

Note that in all these instances, 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.

**Type two: di:yAX ...-G**

This clear type is the negative frame, beginning with di:yAX and ending unproblematically with negative suffix -G and no 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 V’d’.) As noted above, and also because broader syntax was not carefully considered, though the glossing for this type should consistently be ‘S has not yet V’d’, for perhaps 25% of the instances it is instead ‘before S V’s’.

The 2 instances with o-da:X: ya’Xu: qa’ qi’yiyah di:yAX GAxsi:LGda:X ‘don’t leave before I die!’ (Lena, cf. above), di:yAX “ya’Xu”: dAGAle:LGda:X ‘before she says “don’t!”’. Surely some of the instances in the type below 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, mixed type never ends with suffix-q’, only -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 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-.

## INTERRUPTION AND CONCLUSION

At this point in the writing of this chapter, having forgotten whether 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”, and “Negative Inceptive perfective, ‘not yet’.” The two shorter sections “Thematic Negative” and “Cautionary Prohibitive” 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 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 are 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 therefore 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.

Final point: 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.

#### Addenda 10/17/09, 40/28/10

**di:yAX with s-perfective.** 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: di:yAX gi:wa: GAXdAla:LG and di:yAX gi:wa: 'AxsdAlahLG "I never drink beer yet", di:yAX te'ya' XAGAxa:LG da:X ['before I ate fish'] "can't pin down difference [between that and di:yAX te'ya' XAxshahLG 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: di:yAX Xa:n' k'uXAsahhLG 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'uXAxshahLG 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, never spontaneous.

**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 yiLinhinh ['he's close by'], where k'uda:d 'near something' is clearly the postpositional phrase o-da:d with indefinite o k'u-; but also dik' dAda:d 'a'Le:G 'it's nowhere', 'it's not anywhere', "it's hard to think of how to say 'nowhere'", where in the latter dA-da:d is indeed the interrogative with dA- 'ipse', 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 o 'near something', without and with dA- (~ di-) 'ipse', or as da:-d 'where?' with neative k'u- without and with dA- 'ipse'. 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.

### OTHER NEGATIVE-LIKE CONSTRUCTIONS

Here we shall continue only with brief mention of 3 further constructions that could be considered negative in some sense.

#### 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 asyntactically, plus the (positive) Inceptive imperfective (= 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-. Its meaning is to be glossed 'let it not happen, it must not happen (that S will V)!'. Cf. the Cautionary Prohibitive above, also always Inceptive imperfective, but negative with suffix -G., 'take care/precaution that S will not V!'

#### 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 'ida:, q.v. under k'a:, which introduces a clause with optative verb. Here also, there is no negative morphology.

#### o-Xda:d 'without'

Third is 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: 'udAGAlehXda:d 'a'Linhinu: 'promiscuous women' ('they who are without sense'), 'uni:k'Xda:d 'a'Lininh 'he has no nose', giyahgAlAXda:d 'uq' k'a'Leh 'Mummy Island' ('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 prefix.