

Sketch of Central Alaskan Yupik, an Eskimoan Language

OSAHITO MIYAOKA

1. Morphology and Syntax
 - 1.1. Morphology
 - 1.2. Syntax
- Phonology**
2. Phonological Essentials
 - 2.1. Representations
 - 2.2. Suffix Types
3. Phonological Rules
4. Phonetic Details
5. Orthography
- Grammar**
6. Verbs
 - 6.1. Person (Subject and Object)
 - 6.2. Mood
 - 6.2.1. Indicative Mood
 - 6.2.2. Participial Mood
 - 6.2.3. Interrogative Mood
 - 6.2.4. Optative Mood
 - 6.2.5. Connective Mood
 - 6.2.5.1. Causal
 - 6.2.5.2. Contingent
 - 6.2.5.3. Precessive
 - 6.2.5.4. Concessive
 - 6.2.5.5. Conditional
 - 6.2.5.6. Indirective
 - 6.2.5.7. Contemporative (1)
 - 6.2.5.8. Contemporative (2)
 - 6.2.5.9. Stative and Collective
 - 6.2.6. Subordinative Mood
 - 6.3. Basic Sentence Types
 - 6.3.1. Verb Bases and Core Nominals
 - 6.3.2. Half-Transitive and Adversative/Benefactive Verbs
 - 6.3.3. Simple Sentences and Case Marking
 - 6.3.4. Complex-Verb Sentences
 - 6.3.5. Complex versus Compound Sentences
7. Nominals
 - 7.1. Number
 - 7.2. Case
 - 7.2.1. Absolutive
 - 7.2.2. Relative
 - 7.2.3. Ablative-Modalis
 - 7.2.4. Allative
 - 7.2.5. Locative
 - 7.2.6. Perlative
 - 7.2.7. Equalis
 - 7.3. Person (Possessor)
 - 7.4. Subclasses of Nominals
 - 7.4.1. Numerals
 - 7.4.2. Personal Pronouns
 - 7.4.3. Demonstratives
 - 7.4.3.1. Pronominal Demonstratives
 - 7.4.3.2. Adverbial Demonstratives
 - 7.4.4. Participles
 - 7.4.5. Deverbal Nominals
 - 7.4.5.1. Relativization
 - 7.4.5.2. Patient Nominals
 - 7.4.5.3. Agent Nominals
 - 7.4.5.4. Gerundive Nominals
 - 7.4.6. Interrogatives
 - 7.5. Nominal Phrases
 - 7.5.1. Appositive
 - 7.5.2. Coordinate
 - 7.5.3. Adnominal Relative
8. Postbases
 - 8.1. Nominal-elaborating Postbases
 - 8.2. Nominalizing Postbases
 - 8.3. Verb-elaborating Postbases
 - 8.3.1. Syntactic
 - 8.3.2. Adverbial
 - 8.4. Verbalizing Postbases
 - 8.5. Miscellaneous Postbases
9. Noninflecting Words
 - 9.1. Particles
 - 9.2. Enclitics
10. Selected Vocabulary

Central Alaskan Yupik is one of the five Yupik (Western Eskimo) languages, which together with the Inuit-Inupiaq (Eastern Eskimo) language constitute the Eskimo branch of the Eskimo-Aleut linguistic family. The other four Yupik languages are Alutiiq Alaskan Yupik, Central Siberian Yupik, Naukanski, and Sirenikski. See volume

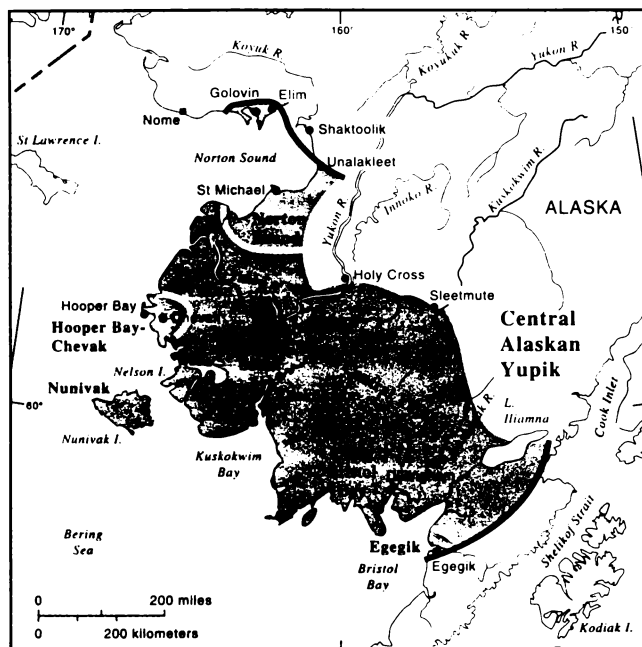
5:49-63 for the classification, distribution, and prehistory of the family and Bergsland (1986) for Eskimo and Aleut historical linguistics. Central Alaskan Yupik, which is distributed south of Golovin and Elim (Norton Sound), on the Yukon (up to Holy Cross) and the Kuskokwim (up to Sleetmute), on Nunivak Island, down the coast to

Bristol Bay and the north coast of the Alaskan Peninsula, has five measurably diverged dialects with phonological and lexical variation: Norton Sound, Hooper Bay and Chevak, Nunivak, General Central Yupik (Yukon, Nelson Island, Kuskokwim, Bristol Bay, Nushagak River, and Lake Iliamna), and Egegik. There is evidence for at least one extinct dialect. Recorded from the Aglurmiut, it is apparently closest to the Nunivak dialect. Its location is uncertain.

This sketch is a description of General Central Yupik (fig. 1) with slightly heavier emphasis on the Yukon subdialect.

Central Alaskan Yupik exhibited the greatest vigor among the 20 Alaska Native languages in the 1990s, being spoken by a little more than 50 percent of the approximately 22,000 people in the traditional area and by perhaps a few thousand in urban areas in 1990. Most of them spoke Yupik and English with differing competency. The few Yupik monolinguals were mainly children before school age and the oldest people, including more women than men. Bilingual education started in 1970 for the first time in Alaska in the Central Yupik area (McGary 1979:77-98; Miyaoka 1980). See Krauss (1973, 1979, 1980, 1985) for details of the language situation and of linguistic work; Jacobsen (1995) provides a practical grammar of Central Alaskan Yupik.

Information on the Yukon subdialect was provided by, among others, Paschal L. Afcan (originally from Akulurak) (fig. 2), and information on the Kuskokwim subdialect by Elsie Mather (from Kwigillingok) (figs. 3-4) and Marie Meade (from Nupapitchuk).



326 Fig. 1. Distribution of Central Alaskan Yupik language and dialects.



Fig. 2. Paschal Afcan (b. 1938). He is standing in front of a display of Yupik language textbooks developed at the Eskimo Language Workshop, University of Alaska, Fairbanks. One of several native speakers who made an early contribution to material development for Yupik bilingual education, he was Miyaoka's first consultant, working with him from 1967 to 1969. Photograph by Osahito Miyaoka, Fairbanks, 1973.

1. MORPHOLOGY AND SYNTAX

1.1. MORPHOLOGY

Yupik is an almost exclusively suffixing language. As many suffixes may occur in a single (morphological) word, it is in structure a polysynthetic language in which a word may be the functional equivalent of a sentence embodying a number of more or less concrete ideas that in most languages would be rendered by independent words. A Yupik word is not merely a "static" construct but may approach a "dynamic" sentence in microcosm, which each speaker builds up to a certain extent on each occasion.

Yupik words are classified according to whether they inflect (i.e., take endings to indicate certain grammatical functions) or not: inflecting and noninflecting words. The noninflecting words, comprising particles and enclitics (which are most of the monosyllabic noninflecting words), are adverbial, modal, conjunctive, or



Fig. 3. Elsie Mather (b. 1936), an authority on Yupik language and culture. She started working with Miyaoka in 1977. Photographed at the Institute of Eskimology, University of Copenhagen, 1986.

interjectional in function. Inflecting words, which are verbs and nominals, consist of a single base followed by two kinds of suffixes, postbases and an ending, in that order. The base carries the "basic meaning" of the word (except for a very few bases with the most neutral meanings like |pi-| 'thing; to do'). The postbase generally elaborates the meaning or changes the grammatical function of the base, composing together with it a secondarily derived or expanded base. The ending expresses the grammatical relationship of number, person, case, and mood. Postbases are derivational suffixes, and endings, which form a closed class, are inflectional. Though postbases are much more limited in number than bases, the derivational processes represented by them constitute a highly developed and productive system in Yupik. The endings on inflecting words are combinations of two or three morphemes, which may be either phonologically fused together or more or less transparently segmentable. However, endings as well as expanded bases are given as a unit without indicating internal morpheme boundaries (+ or -; see 2.2.), unless this information is necessary for correct phonological derivation. Endings behave in some ways differently from postbases, and the bracket (|) is used to signal the start of an ending; an ending of the shape |+Ø| will not be indicated in phonological representations. Other conventions are given in table 1.

The base, whether expanded or not, of an inflecting word is either nominal or verbal in function, though a small number of bases are both. The subscript _N or _V may be used to indicate the functional class of a base. A postbase may also be defined in terms of the function of the base (or postbase) to which it is attached and the function of the resulting expanded base. Except for a few postbases relevant to particles, they fall into four functional classes: nominal-elaborating postbases (indicated

by subscript _{NN}), which are added to nominal bases to form nominal expanded bases; nominalizing postbases (_{VN}), which nominalize verb bases; verb-elaborating postbases (_{VV}), which are added to verb bases to form verbal expanded bases; and verbalizing postbases (_{NV}), which verbalize nominal bases. The first two classes are nominal postbases, and the other two verbal. Some verb-elaborating postbases are adverbial and others syntactical.

The function of the adjective of other languages is taken care of by verbs (predicative), nominal-elaborating postbases, and certain nominals (attributive), while that of adverbs is taken care of by verb-elaborating postbases and noninflecting words.

Bases (and postbases), except some demonstrative bases, end in a vowel, apical stop (|t| or |c|), or velar (|ɣ|, |ʝ|, |x|, |χ|, or |q|). The final |q| occurs after a full vowel (i.e., any vowel except |ə|) in nominal bases (or postbases) and a few mood markers. No nominal base (or postbase) ends in |c|. The shortest bases are monosyllabic, having the shapes CV, (C)VC, or (C)VCC. When cited in isolation, morphemes that do not occur word-finally end with a hyphen, and suffixes begin with a plus or minus sign (2.2.). Examples of bases are: |yuy-|_N 'person', |aŋut-|_N 'man (male)', |pi-|_{NV} 'thing; to do', |mikə-|_V 'to be small', |inaɣc-|_V 'to lie down'. Examples of postbases (with the number under which they

Table 1. Abbreviations

abm.	ablative-modalis
abs.	absolute
all.	allative
connec.	connective
equal.	equalis
ind.	indicative
inter.	interrogative
intrans.	intransitive
loc.	locative
opt.	optative
part.	participle or participial
perl.	perlative
pl.	plural
refl.	reflexive
rel.	relative
sg.	singular
subord.	subordinative
tran.	transitive
1	first person
2	second person
3	third person
3R	reflexive third person (e.g., 2 pl.: intransitive verb with a second-person plural subject, 1sg.—3sg.: transitive verb with a first-person singular subject and third-person singular object; 2 dual—pl.: plural noun with a second-person dual possessor)



Qanrucit Taringnaurutait

Aperyarat ayuqenrilata taikaniumalriit ilait ukut iliitnek
canimegteggun igangqertut, kingunrata una nallunailkutaqluku.

- C = Canineq
Q = Qaluyaat
KS = Kusquqvak
KP = Kuigpak
N = Nunivaaq
NC = Naparyaarmiut-Cev'aq
-

- ac'eciaraq - Elrimi wall'u merr'ami qaqiarrluku aturiqeng-
yaraq tuqullrem atranek (atkugluku, qasper-
luku, pilugirluku ilaitni-llu aliumaterluku);
aturiqengyaraq kassuusngualriigneq mikel-
nguugnek Nakaciruami; aturiqengyaraq nasqunek
Kuigpagmi Kevgim nalliini
- akngirqun - Elrim kenkataa tuqulleq elriutetukii/
ac'etetukii
- alailutet - napalriit tuqullret nallunailkutait/
umyuaqutait
- allungak /
qantam allungii - qantam muragam terr'a (c.f. PERNEQ)



- aluuyaq - qantaq murak takluni

Smithsonian, Anthr. Lib.

328 Fig. 4. Elsie Mather's 1985 book titled *Cauyarnariuq* ('It is Time for Drumming'). left, P. 153; right, translation of the same page.



Explanation for the Words

Some of the words which are explained because they are different [depending on the dialects] have one of the [capital] letters beside them, making it clear where the words come from.

C	= Canineq:	Lower Coast
Q	= Qaluyaat:	Nelson Island
KS	= Kusquqvak:	Kuskokwim River
KP	= Kuigpak:	Yukon River
N	= Nunivaaq:	Nunivak Island
NC	= Naparyarmiut-Cev' aq:	Hooper Bay and Chevak

-
-
- ac' eciyaraq - custom of completely dressing the namesake of a dead person at the Memorial Feast [Elriq or Merr' aq] (putting on him/her a parka, a cloth parka cover, a skin boot, and sometimes mitten as well); custom of dressing the two 'married' children at the Would-be Bladder Beast [Nakaciruaq]; custom of dressing the 'head person' at the time of the Messenger Feast [Kevgiq] in the Yukon.
- akngirqun - a dead person who is very dear to one who does the Memorial Feast (or does the dressing) for him/her.
- alailutet - the [grave] posts that are to tell (or remember) the dead persons
- allungak /
qantam allungii - the bottom part of a wooden bowl (cf. perneq bent part)



- aluuyaq - a long [oval] wooden bowl

are given in section 8) are: 6 |+k*aq-|_{NN} 'future', 30 |-nγ-|_{VN} 'more', 57 |+laγ-|_{VV} 'usually', 78 |+tait-|_{NV} 'there to be no'.

What determines whether an expanded base is nominal or verbal is the function of the rightmost postbase, the one immediately preceding the ending. A verb base (with no postbase) or any expanded base in which the rightmost postbase is verbal (class _{VV} or _{NV}) combines with inflectional categories such as mood and person. The word thus formed is a verb. Thus in |qayaq_N+paγ_{NN}-li_{NV}-q a γ_{VV}+s q ə_{VV}+z a a q ə_{VV}-t γ u_{VV}[+γ * a q a] *qayaxpali:qaasqəssaqaət̚xua:qa* 'I asked him to make a big kayak (but he has not yet made it)' the noun base |qayaq-|_N is expanded by six postbases (1, 87, 50, 35, 64, and 53) of different functional classes. The completely expanded base is verbal and followed by the verbal ending |+γ*aqa| 'ind. 1sg.—3sg.' (from two morphemes |+γ*aq-| and |-ka|). A nominal base (with no postbase) or an expanded base in which the rightmost postbase is nominal (class _{NN} or _{VN}) combines with inflectional categories such as case, number, and person, thus constituting a nominal: |qayaq_N+paγ_{NN}-li_{NV}+zaγa_{VN}|-ka| *qayaxpali:yaya:qa* 'the way I make a big kayak', which is nominal with three postbases (1, 87, and 26) and the noun ending |-ka| 'abs. 1sg.—sg.'.

A word as a morphological unit may be uttered by itself or together with one or more enclitics or nonenclitic words. Such a sequence bounded by pauses is a phonological phrase or prosodic domain. The left boundary of an enclitic and a nonenclitic word inside a phonological phrase may be marked respectively by the double hyphen (++) and the number sign (#), and the pause or the boundary of a phonological phrase by space or the doubled number sign (##). Each of these is a major boundary: ##nunaka=lu=γuq## *nuna:ka=lu=xuq* 'also my land, they say', ##nunaka#tamana## *nuna:ka(t)#tama:na* 'that (extended) land of mine'.

Morphological processes such as compounding, prefixation, reduplication, infixation, and internal modification are not used, with a few exceptions. The only productive process is suffixation, by means of which Yupik attains one of the highest degrees of synthesis among known languages. Suffixation is accompanied by a variety of phonological (i.e., morphophonemic) adjustments outlined in section 3.

1.2. SYNTAX

As many grammatical relations are taken care of by the inflectional systems of mood, case, person and number reference, the word order in a sentence is far from rigid. Apart from exclamatory and interjectional expressions as well as nominals in some contexts, the presence of a verb to express the main predication is obligatory in full sentences.

An intransitive (i.e., intransitively inflected) verb has one core nominal argument, or simply core nominal, involved in it, and a transitive (i.e., transitively

inflected) verb has two. A core nominal is indexed on the verb ending but may not necessarily be overtly expressed by a nominal. If expressed, the core nominal is cross-referenced with the verb ending and is assigned a syntactic case according to the ergative pattern for a third-person referent and the neutral pattern for a non-third person referent. The core nominal for an intransitive verb to which the absolutive case is assigned is the subject of the verb. The core nominals for a transitive verb to which the relative and the absolutive cases are assigned are respectively the subject and the object. The subject is the nominal characterized by, among other things, the reflexive third person that refers back to it. A typical sentence obligatorily consists of a verb and one or two core nominals. A noncore nominal, not indexed on a verb ending, occurs in an adverbial case and is an (adverbial or adnominal) adjunct if not interjectional. A complex sentence consists of a main clause (with a verb in an independent mood) and a dependent clause (with a verb in a dependent mood). A compound sentence consists of two or more main clauses. A syntactic verb-elaborating postbase adds or removes one of the nominals of the verb. As the maximum number of core nominals indexed on a verb ending is two, nominal reduction has to occur if the nominals involved in the expanded verb exceed that number. A complex verb is one in which another verb is embedded.

Perhaps no language exceeds Yupik in the degree of functionality of its internal syntax. Unlike most polysynthetic languages the morphological structure of a Yupik word cannot simply be defined in terms of more or less fixed suffix positions (or slots) each filled with an appropriate suffix, particularly since: one and the same postbase can occur more than once in a word; nominalizations and verbalizations can occur serially and repeatedly; and a complex verb can be further expanded by one or more elaborating postbases and a nominalizing postbase of its own, and by one or more additional complex-verb-forming postbases (6.3.4.).

PHONOLOGY

2. PHONOLOGICAL ESSENTIALS

2.1. REPRESENTATIONS

The symbols used in phonological representations, enclosed between vertical bars (| |), are given in tables 2 and 3.

By application of the phonological Rules P1 through P24 in 3., phonemic representations are derived from the phonological ones. These are written in italics and are used in citing actual Yupik forms. The "phonemic" level, as distinct from the phonological and the phonetic, is characterized by surface contrast: see P22. The phonemic symbols for vowels are the same as used in phonological representations (table 2), while

Table 2. Phonological and Phonemic Vowels

	<i>front</i>	<i>central</i>	<i>back</i>	
high	<i>i</i>	<i>ə</i>	<i>u</i>	voiced
low		<i>a</i>		

accent: acute (´), grave (`) on the vowel
lengthening: raised dot (˙) after the vowel

Table 3. Phonological Consonants

	<i>labial</i>	<i>apical</i>		<i>velar</i>		
		<i>dental</i>	<i>alveo-palatal</i>	<i>front</i>	<i>back</i>	
stop	<i>p</i>	<i>t</i>	<i>c</i>	<i>k</i>	<i>q</i>	voiceless
fricative	<i>f</i>	<i>t̪</i>	<i>s</i>	<i>x</i>	<i>x̠</i>	
		<i>v</i>	<i>l</i>	<i>z</i>	<i>ɣ</i>	<i>ɣ̠</i>
approximant	<i>w</i>		<i>y</i>			voiced
nasal	<i>m</i>	<i>n</i>		<i>ŋ</i>		

the consonantal phonemic symbols are summarized in table 4. Rules P12 and P13 account for the additional symbols, labial-velar fricatives, and voiceless nasals (see table 5, no. 16 also).

A full vowel may be lengthened, and any consonant can be geminated (Rule P22). A geminated consonant has a syllable boundary in the middle of the maintained articulation. In phonemic representations a lengthened vowel and a geminated consonant are indicated respectively by a postponed raised dot (˙) and by doubling the consonant. On the phonemic level no more than two consonants or two vowels may occur in sequence, and consonant clusters are confined to word-medial position (except on loanwords) and cannot consist of two apical stops.

2.2. SUFFIX TYPES

Suffixation of postbases and endings results in a number of complex adjustments in the phonological segments that are brought into contact in the process. Since these adjustments are not completely predictable from the phonological shape of the elements involved, different suffix types must be distinguished according to the pattern of phonological adjustments they induce. The most important distinction is that between deleting suffixes and retaining suffixes. Deleting suffixes written with a preceding minus sign (as in |-put| ‘abs.

1pl.—pl.’) delete the final velar fricative of a preceding base or postbase, while retaining suffixes written with a preceding plus sign (as in |+put| ‘abs. 1pl.—sg.’) do not. Thus |acay[-put| ‘our aunts’ becomes |aca-put| (phonemically *aca˙put*), with deletion of the |ɣ| of the base, while the deletion does not occur in |acay[+put| ‘our aunt’ (*acaxput*, in which |ɣ| has become *x* by another rule). This deletion (Rule P8) should apply to the phonological representation derived by Rules P1–P7, though these happen not to be relevant in this case. One class of suffixes has the subscript 1 (one) after the boundary, as in 98 |+₁paa|, 74 |+₁ŋ*at-|, and 20 |+₁uciq-|, which show special treatments of preceding apical stops, namely deletion and fricativization, as exemplified in Rule P2i. The subscript is given in phonological representations only in those contexts where relevant, that is, if the preceding base or postbase has final apical stop. Some suffix-initial velars, written with an asterisk as in 6 |+₁k*aq-|, 74 |+₁ŋ*at-|, 38 |+₁ɣ*i-|, and 65 |+₁ɣ̠*i-| behave in several respects differently from nonasterisked velars: see Rules P3ii-iii, P5i, P6, P9, and P10 for details.

3. PHONOLOGICAL RULES

Phonological representations consisting of the symbols so far introduced are converted to phonemic ones by the set of phonological Rules P1 through P24, which are postlexical. A rule applies rightward from the left (P5i, P9, P22). If more than one rule is relevant to a representation, the rules apply in numerical order. The rules given here handle only the adjustments of a more or less generalizable character and are not free from exceptions. Adjustments unique to specific bases or suffixes are mentioned as each case comes up, either in the body of the sketch or in table 5, and these lexical adjustments should be applied before the postlexical rules in 3, unless otherwise indicated. Stages in the phonological derivation are linked by the conventional arrow (>), to be read ‘becomes’.

Rule P1 Accentuation on (C)VC bases. A monosyllabic base of the shape (C)VC is accentuated and is marked by a grave accent (cf. P22), for example, |yuy-piɣ| > |yùɣ-piɣ| *yuppik* ‘Eskimo’, |iŋ+u[+mi| > |iŋ+u[+mi| *iŋnumi* ‘in the one over there’, |mic-tɣu[+ɣ*uq| > |mic-tɣu[+ɣ*uq| *mittətɣuq* ‘he landed’.

Table 4. Phonemic Consonants

	<i>labial</i>	<i>apical</i>		<i>velar</i>		<i>labial-velar</i>		
		<i>dental</i>	<i>alveo-palatal</i>	<i>front</i>	<i>back</i>	<i>front</i>	<i>back</i>	
stop	<i>p</i>	<i>t</i>	<i>c</i>	<i>k</i>	<i>q</i>			voiceless
fricative	<i>f</i>	<i>t̪</i>	<i>s</i>	<i>x</i>	<i>x̠</i>	<i>x*</i>	<i>x̠*</i>	
		<i>v</i>	<i>l</i>	<i>z</i>	<i>ɣ</i>	<i>ɣ̠</i>	<i>ɣ*</i>	voiced
approximant	<i>w</i>		<i>y</i>					
nasal	<i>M</i>	<i>N</i>		<i>Ŋ</i>				voiceless
	<i>m</i>	<i>n</i>		<i>ŋ</i>				voiced

gemination: doubling of the consonant

Table 5. Special Conditions on Phonological Rules

1. Final apical deletion (P2i) applies also before some suffixes that do not begin with nonvelar stop: 10 |-,luγ-|, 28 |+,-nŷ-|, 30 |-,lŷ-|, and the negative subordinative marker |-,na-| (6.2.6.). Only the postvocalic apical is fricativized before the connective marker |+,-η*inaŷ-| (6.2.5.8.) and the postbases 25 |+,-viγ-|, 66 |+,-mi-|, 73 |+,-η*ait-|, and 74 |+,-η*at-|. An apical, if preceded by a fricative, is deleted before 19 |+,-ut-|, 20 |+,-uciq-|, 31 |+,-uc-| instead of being fricativized.
2. Initial |p| of a retaining suffix is fricativized to *v* intervocalically. Fricativization of |p| occurs also after an apical consonant if the |p| is followed by |ə|, and after |cic| in the case of 98 |+,-paal-|, which in turn fricativizes the final |c| into *z* instead of deleting it by P2i.
3. Insertion of *ə* (P6) between two morpheme-final consonants also occurs before some suffixes beginning with a vowel: |+,-u-| (for nonabsolute singular pronominal demonstrative bases, e.g., |akm+u|+|mi| *akmumi* 'in the one across there', 7.4.3.1. (cf. P22ii-c) but |akm+a|+|ni| *akMuni* 'across there', 7.4.3.2.) and |+,-a-| (as in |nutγ+a|+|γ*uq| *nutγauq* 'he is shooting').
4. P7i is blocked in the '2dual—3sg.' interrogative and optative endings. P7ii is blocked (a) after a noun-base-final *ə* before the postbases 60 |+,-zuumiit-|, 61 |+,-zuuma-|, 62 |+,-zuyγ-| (e.g., |nəqə+zuyγ|+|tuq| *nəqyuxtuq* 'he wants fish') or (b) when *ə* separates two identical consonants (e.g., |kuvə+viγ| *kuvəvvik* 'place for spilling'). P7ii applies also before the deleting postbase 36 |-,zu-| and 59 |-,zuit-|, the deleting suffixes in tables 10, 12, 13, which begin with a nasal plus vowel, and (optionally) |-,ki-| (6.2.4.).
5. P8 tends to be blocked before a prevocalic velar stop, if the final velar is voiceless (e.g., |uivənqəx|+|ku+ni| *uivənqəxkuni* 'if it is round') or is a back velar preceded by |ŷa| or |γα| in certain morphemes. These morphemes have the following phonological peculiarities. P19 is also blocked. After P22 the |ŷa| or |γα| is deleted before a major boundary or (though optionally with some morphemes) before a consonant. The deletion of |γα| is accompanied by assimilation of a following back velar to a front one: |tuykaŷaŷ|-ka| *tuxkaŷaŷa* or *tuxkaŷa* 'my ivory', |qulŷunŷitaŷaŷ| *qulŷunŷitaŷa* 'nine', |piyuŷ|+|γ*aq-ka| *piyuŷaŷa* or *piyuŷa* 'I want to get it'. See the postbase 15 |-,ŷuŷluŷ-| for a similar syllable contraction.
6. P9 is blocked for |η*| (cf. note to table 7) and the initial velar of the postbases 14 |+,-ŷ*uyəŷ-| and 65 |+,-ŷ*i-|.
7. Accentuation of P10 is blocked before the second-person optative marker |+,-γ*i-| and the postbase 44 |+,-γ*uyəŷ-|.
8. Devoicing (P13) and consonant cluster breaking by *ə* insertion (P17i) are blocked in loanwords and onomatopoeic words. Devoicing may occur also after accentuation (P22) in the Kuskokwim subdialect (as seen in *nəxkina*, 6.2.4.).
9. Another type of |t| affrication occurs after P22 among younger speakers in particular: |t| becomes *c* before *ə* followed by geminated *s* or *c*: |kəxut-*cuaŷaŷ*| *kəxucəccuax* 'small tooth'.
10. A base-final apical and the initial || of the following mood markers are reduced to *l* after P1: optative |+,-li-| and |+,-la-| (including 1sg. |+,-lii| and 1dual |+,-luγ|) and subordinative |+,-lu-|.
11. Base-final |t| becomes *c* before the |i| of the postbase 38 |+,-γ*i-| and 42 |+,-ima-| and before those postbases beginning with |li| (see table 5, no. 15) if the || and its preceding vowel are deleted.
12. *ŷ* is inserted before (i) the postbase 1 |+,-pay-| after noun-base-final vowel, (ii) the postbase 10 |+,-luγ-| after noun-base-final |ə|, and (iii) the postbases 25 |+,-viγ-|, 60 |+,-zuumiit-|, 61 |+,-zuuma-|, 62 |+,-zuyγ-|, and 74 |+,-η*at-| after noun-base-final |t|, with P7ii being blocked in the final *ə*.
13. Postbase-initial |u| (19 |+,-ut-|, 20 |+,-uciq-|, 31 |+,-uc-|, 42 |+,-uma-|) is deleted after a base-final full vowel.
14. The |s| of the postbases beginning with |s| plus apical stop (24 |+,-st-|, 34 |+,-sci(u)ŷ-|, 55 |+,-sciiŷat-|) is deleted after a base-final velar.
15. Deleting suffixes beginning with |li| (87 |-,li-|, 88 and 89 |-,liqə-|, 90 |-,liŷ-|) may optionally drop the || together with a preceding vowel. See table 5, no. 11 also.
16. The *u* of certain nouns with the sequence *qu* or *ku* (e.g. |atəkuy-| 'parka' and body- or plant-part words that end in *quq*) optionally becomes a voiceless vowel with velar friction, if it is immediately followed by a vowel: |atəkuy|+|ŷa| > *atkuə* [atkəʷa] 'his parka', |uyaquq|+|ŷa| > *uyəʷquə* [uyəʷqəʷa] (or even > *uyəqəʷa*) 'his neck'.
17. Stative verbs that end in |cic| show fluctuation between final |c| and |t| as shown in the variation *ipəxcəcan* ~ *ipəxcələn* (causal connec. 3sg.) 'because it is sharp', *kawixəcəskən* ~ *kawixəcələn* (conditional connec. 3sg.) 'if it is red', and *manixəcəsnətuq* ~ *manixəcələnətuq* (with 74 |+,-η*at-|) 'it seems to be smooth'.

See Rule P10 also.

Rule P2 Apical adjustment. (i) Before a suffix with the subscript 1 an apical is generally deleted if the suffix begins with nonvelar stop (|p, t, c|), but otherwise the final |t| and |c| are fricativized to *l* and *z* respectively: |niic|+|tuq| > |nii|+|tuq| *niituq* 'he hears', |taic|+|k*i| > |taiz|+|k*i| *taiski* '(you sg.) bring them along!', |pinŷit|+|γu| > |pinŷil|+|γu| *pinŷilyu* '(you sg.) don't do it!', |taic|+|γu| > |taiz|+|γu| *taizyu* '(you sg.) bring it along!'. See table 5, no. 1. (ii) Morpheme-final |c| becomes *t*: |ikiŷc|+|laŷ|+|tuq| > |ikiŷt|+|laŷ|+|tuq| > *ikiŷtəlaŷtuq* 'it (usually) opens'. (iii) A |ə| is inserted

after a base or postbase that ends in |t| (but see table 5, no. 10): |ikiŷt|+|laŷ|+|tuq| > |ikiŷtə|+|laŷ|+|tuq| (just above), |kəxut|+|pəci| > |kəxutə|+|vəci| (table 5, no. 2) *kəxutəfci* 'of your(pl.) teeth', |cavə+ut| > |cavə+utə| *cavur* 'oar'.

Rule P3 Velar adjustments. (i) Morpheme-final |q| is fricativized to *ŷ* except that it is deleted before a retaining suffix that consists of a single consonant or begins with a consonant cluster, or before an ending in table 6 that begins with CV or before 16 |+,-miu-| or 91 |+,-mət-|: |aŷyaq+pay| > |aŷyaŷ+pay| *aŷyaŷpak* 'big boat', |aŷyaq|+|nka| > *aŷyanka* 'my boats'. (ii) Initial

nonasterisked velar nasal of a retaining suffix is deleted after a velar: |at̥[+ŋa] > |at̥[+a] at̥xa 'his name'. (iii) Suffix-initial nonasterisked velar stop or fricative (except the dual |ɣ|) is assimilated to final velar as to whether it is front or back: |əlay-qataɣ[+tut] > |əlay-kataɣ [+tut] əla'kataxtut 'they are about to dig', |amaɣ[+ɣu] > |amaɣ[+ɣu] ama'xu '(you sg.) backpack it!' (table 7 note).

Rule P4 Suffix-initial adjustment. A [ə] is added to the beginning of a retaining suffix (but after the plus sign) that consists of a single consonant or begins with a consonant cluster (except the noun endings |+tɣun| and |+ttun| in table 6) if a consonant precedes: |acaɣ[+ɣ+mta] > |acaɣ[+əɣ+əmta] acciiɣəmta 'of our aunts (dual)'.

Rule P5 Central vowel adjustments. (i) Both of two single central vowels ([a] or [ə]) that flank a nonasterisked

front velar nonstop next to a boundary become i: |tumə[+ŋa] > |tumi[+ŋi] tummii 'his footprint', |acaɣ[+əɣ+əmta] > |aciy[+iɣ+əmta] P4. (ii) A nominal-base-final [ə] becomes a before [ŋi]: |tumə[+ŋi] > |tuma[+ŋi] tummai 'his footprints'.

Rule P6 Final cluster breaking. A [ə] is inserted between two contiguous base-final or postbase-final consonants if followed by a consonant (except an asterisked velar fricative) or a major boundary or if preceded by a third consonant: In the last case the [ə] insertion may alternatively occur before the two final consonants: |nutɣ+zuy[+tut] > |nutəɣ+zuy[+tut] nutəɣyuxut 'they want to shoot'. |nutɣ-ly| > |nutəɣ-ləɣ| nutlək 'one with a gun', |at̥ɣ-lu| > |atəɣ-lu| atəq-tu 'also the name'; |aɣvinly|+n| > |aɣvinləɣ[+ən] aɣvinləɣən or |aɣvinəly[+ən] aɣvinəlyən 'six' (cf. P4), |azvɣ+ŋu[+ɣ*ut] > |azvəɣ+u[+ɣ*ut] azvəɣyut or |azəvɣ+u[+ɣ*ut] azəvɣyut 'they are walruses' (cf. P3ii). See table 5, no. 3.

Rule P7 [ə] deletion. (i) A [ə] followed by CV within a suffix is deleted if the deletion does not violate the consonant cluster limitation (2.1.): |kəxutə[+vəci] > |kəxutə[+vci] (P2iii). (ii) Morpheme-final [ə] is deleted before a retaining suffix that begins with V or CV (where C is voiced): |kəxut[+pət] > |kəxutə[+vət] > |kəxut[+vət] kəxutfət 'of your(sg.) teeth' (cf. table 5, no. 2 and P2iii). |nəɣə[+ɣ*ut] > |nəɣ[+ɣ*ut] nəɣyut 'they eat'. See table 5, no. 4.

Rule P8 Final velar deletion. A final velar is deleted

Table 6. Endings for Unpossessed Nouns

Case	Singular	Plural	Dual
Absolutive (+θ)	+θ	+t	+ɣ
Relative (+m)	+m	+t	+ɣ
Locative (+ni)	+mi	+ni	+ɣni
Allative (+nun)	+mun	+nun	+ɣnun
Ablative-modalis (+nəɣ)	+məɣ	+nəɣ	+ɣnəɣ
Perlative (+kun)	+kun	+tɣun	+ɣkun
Equalis (+tun)	+tun	+ttun	+ɣtun

NOTES: See P3i for deletion of morpheme-final |q| before an ending. The forms in this table are phonological representations.

Table 7. Optative Endings

				Intransitive		Transitive								
						Object								
						Third			First			Second		
				sg.	pl.	dual	sg.	pl.	dual	sg.	pl.	dual		
Subjunct	Third	sg.		+θ	+ɣu	+ki	+kəɣ	+ŋa	+kut	+kuy	+tən	+ci	+təɣ	
		pl.	+li-	+t	+tɣu	+tki	+tkəɣ	+tŋa	+tkut	+tkuy	+tɣən	+tci	+ttəɣ	
		dual		+ɣ	+ɣnəɣu	+ɣnəki	+ɣnəkəɣ	+ɣtəɣŋa	+ɣt+kut	+ɣt+kuy	+ɣt+ɣən	+ɣtci	+ɣttəɣ	
	First	sg.		(+lii)	+ku	+ki	+kəɣ							
		pl.	+la-	(+lta)	+ut	-put	+ɣput							
		dual		(+luɣ)	+uɣ	-puɣ	+ɣpuɣ							
Second	sg.		+a											
		+ɣ*i-	+tən	+ɣu	+k <i>i</i>	+k <i>*əɣ</i>	+ŋ*a	+k*ut	+k*uy					
	pl.	~	+u											
	dual	+na-	+θ	+ci	+təɣ	+təɣu	+təki	+təkəɣ	+təɣŋa	+təɣkut	+təɣkuy			

NOTES: For the intransitive first person the endings with the mood and person markers fused are given in parentheses.

The |+ɣ*i-| for second-person subject endings only occurs after bases that end in a double vowel or [ə], and even there it is not obligatory except before person markers of '2sg.' and '2sg.—3sg.'

Of the variants for '2sg.', |+tən| occurs after final |c|, |+u| after |t|, |+a| after other consonant bases, |+θ| after vowel bases.

The initial |ɣ| of '2sg.—3sg.' ending and a base-final velar fricative are reduced to a voiceless fricative after P3iii.

See table 5, no. 4 for the '2dual—3sg.' ending.

See table 5, no. 10 for the || of the mood markers |+li-| and |+la-|.

The '1pl.—3sg.' and '1dual—3sg.' are |+ɣput| and |+ɣpuɣ| respectively for some speakers.

P9 applies to the |ŋ*| of '2sg.—1sg.' in spite of table 5, no. 6, if the mood marker |+ɣ*i-| or the aspectual marker |-ki-| occurs before the person marker.

The forms in this table are phonological representations.

before a deleting suffix: |əlay-kataɣ[+tut] > |əla-kataɣ[+tut] (P3iii), |yùɣ-pix| > |yù-pix| (P1). See table 5, no. 5.

Rule P9 Intervocalic velar deletion. A single voiced velar next to a morpheme boundary is deleted if between two single vowels the first of which is a full vowel. This applies from the leftmost boundary in a word toward the right: |tuma[+ɲi] > |tuma[+i] (P5ii), |aciɣ[+iɣ+əmta] > |aci[+iɣ+əmta] (P5i), |kiu[+ɣ*aq+ɲa] > |kiu[+ɣa+a] *kiuɣaa* ‘he answers her’ (cf. P3i, ii), |mikəlɲuɣ+ɲu[+ɣ*uq-ɲa] > |mikəlɲu+u[+ɣ*u-a] *mikəlɲuuɣaa* ‘I am a child’ (cf. P3i, ii, P8). See table 5, no. 6.

Rule P10 Asterisked velar fricative deletion. An asterisked velar fricative is deleted after a consonant, with the same accentuation as P1 if the base takes the shape of (C)VC: |amaɣ[+ɣ*aq+ɲa] > |amaɣ[+a+a] *amaɣaa* ‘he backpacks it’ (cf. P3ii, iii, P9) |nəɣ[+ɣ*ut] > |nəɣ[+ut] (P7) |maniɣ+ɣ*i[+ɣ*ut] > |maniɣ+i[+ut] *maniɣiut* ‘they become smooth’ (cf. P9). See table 5, no. 7.

Rule P11 |ci| plus apical adjustment. An |i| becomes |ə| between |c| and a non-word-final apical, with the apical being devoiced (see P13iii) if the |ci| is base-initial or in a base-final or postbase-final |cic|, in the interrogative marker |+ci| (table 8), or in the second-person plural marker |+paci| in connective mood and adverbial case endings (tables 9-10): |cila| > |cəla| *cəla* ‘world’, |ayay+cic[+ɣu] > |ayay+cəs[+ɣu] *ayaxcəsxu* ‘(you—sg.) let it go!’ (P2i), |ayay[+cinuɣ] > |ayay[+cəNuk] *ayaxcəNuk* ‘we(dual) leave (inter.)’ (cf. P13i, P19).

Rule P12 Labial-velar fricativization. The approximant |w| becomes a labial-velar fricative ɣ* unless between vowels: |aw+na| > |aɣ*+na| *aɣ*na* ‘the one over there’, |aw+u[+m] > |əw+u[+m] > |əɣ*+u[+m] *aɣ*ɣ*um*

‘of the one over there’ (cf. P1) (cp. |awa[+ni] *awa:ni* ‘over there’), |wa[+ni] > |ɣ*a[+ni] *x*ani* (see P13 for symbol *x**). This applies also after gemination by P22: |tawaam| > taɣ*ɣ*aam ‘but’. See 15 |-ɣuɣluɣ-| for the labial-velar ɣ* due to syllable contraction.

Rule P13 Devoicing. The voiceless nasals are represented by capital letters (*M*, *N*, and *Ń*), and the voiceless labial-velar fricative by *x**. (i) Fricatives are devoiced when next to a major boundary or a voiceless consonant: |ɣ*a[+ni] > |x*a[+ni] (P12), |atəɣ-lu| > |atəx-lu| (P6), |aɲyaɣ+paɣ| > |aɲyaɣ+paɣ| (P3i), |kəxut[+vət] > |kəxut[+fət] (P7ii). (ii) Nasals are devoiced after stop and optionally after voiceless fricative, unless across a major boundary: |pi+st+ɲu[+ɣ*ut] > |pist+Ńu[+ut] *pistəŃuut* ‘they are servants’ (lit. ‘doers’) (cf. P2iii, P7ii, P9), |azəmc+ni[+ɣ*aq+ɲa] > |azəmt+Ni[+a] *azəmtNi* ‘he says she cracked it in half’ (cf. P2ii,iii, P3i,ii, P7ii, P9 and note to table 11). (iii) Fricative devoicing occurs also across an intervening |ə| particularly when |tə| is followed by the participial |-lɣiaq-i (6.2.2., 7.4.4.; see P11): |mic[+lɣia] > |mitə|-lɣia: *mittətɣia* ‘(it) landing’ (cf. P1, P2ii,iii). See table 5, no. 8.

Rule P14 |t| affrication. (i) A |t| and |s| across a suffix boundary become *c*: |naɬunɣit+zuy[+tut] > |naɬunɣicux[+tut] *naɬunɣicuxut* ‘they want to know’ (cf. P2iii, P7ii, P13i). (ii) A |t| becomes *c* before |ə| followed by preconsonantal |s|: |tuquc+sqə[+ɣ*ut] > |tuqutə+sq[+ut] > |tuqucə+sq[+ut] > *tuqucəsqu* ‘they ask themselves to be killed’ (cf. P2ii,iii, P7ii, P10). See P17iii and table 5, no. 9.

Rule P15 |t| deletion. Postconsonantal |t| is deleted before a nasal (except a nonasterisked velar): |azəmt+Ni[+a] > |azəmt+Ni[+a] (P13ii), |ciniɣc+mi[+ɣ*ut] > |cəNixt+Mi[+ut] > |cəNix+Mi[+ut] *cəNixMiut* ‘they

Table 8. Interrogative Endings

				<i>Transitive</i>										
				<i>Object</i>										
				<i>Third</i>			<i>First</i>			<i>Second</i>				
				<i>sg.</i>	<i>pl.</i>	<i>dual</i>	<i>sg.</i>	<i>pl.</i>	<i>dual</i>	<i>sg.</i>	<i>pl.</i>	<i>dual</i>		
S u b j e c t	Third	sg.	+ta-	+θ	+ɣu	+ki	+kəɣ	+ɲa	+kut	+kuy	+tən	+ci	+təɣ	
		pl.	~	+t	+tɣu	+tki	+tkəɣ	+tɲa	+tkut	+tkuy	+tɣən	+tci	+ttəɣ	
		dual	+ɣ*a-	+ɣ	+ɣnəɣu	+ɣnəki	+ɣnəkəɣ	+ɣɲa	+ɣkut	+ɣt+kuy	+ɣt+ɣən	+ɣtci	+ɣttəɣ	
	First	sg.		+ɲa								+kən		
		pl.		+ta										
		dual	+ci-	+nuɣ										
Second	sg.		+t	+ɣu	+ki	+kəɣ	+ɲa	+kut	+kuy					
	pl.		+ci	+ci+ɣu	+ciki	+cikəɣ	+ci+ɲa	+cikut	+cikuy					
	dual		+təɣ	+təɣu	+təki	+təkəɣ	+təɣɲa	+təɣkut	+təɣkuy					

NOTES: The initial |c| of the first- and second-person marker is fricativized to *z* after a vowel if the subject is singular and, though with some fluctuation, after bases that end in a stop plus |ə| if the subject is nonsingular.

See table 5, no. 4 for the ‘2dual—3sg.’ ending.

See P11 for the mood marker |+ci-|.

The first-person subject intransitive forms may be used for the first-person subject and the third-person object (with no distinction in number) transitive.

334 The forms in this table are phonological representations.

also visit' (cf. P2ii,iii, P7ii, P9, P11), |ənə[-məytɲi] > |ən[-məxNi] *ənəmməxNi* 'in their own house' (cf. table 5, no. 4, P13i,ii, P17ii).

Rule P16 |ə| assimilation. A |ə| assimilates to preceding full vowel: |mikəlɲuɣ[+t] > |mikəlɲuɣ[+ət] > |mikəlɲu[+ət] *mikəlɲuut* 'children' (cf. P4, P9).

Rule P17 |ə| insertion. A |ə| is inserted to break consonant clusters: (i) at a morpheme boundary in three-consonant clusters in order to meet the cluster limitation (2.1.) (see table 5, no. 8), |pist+ɲu[+ut] > |pistə+ɲu[+ut] (P13ii) |nəyə[+ɲ*a-mt+ɣu] *nəyənamtəxu* 'as we ate it' (cf. P7ii, P13i); (ii) between the two consonants of a word-initial sequence |əCC| (except in a verb base having the shape |əCə-|) with the second consonant next to a boundary, |ətɣ[+ɲa] > |ətəx[+a] *ətəxxa* 'his anus' (cf. P3ii, P13i); (iii) between |t| and an apical stop, with |t| being affricated, |qayaq[+ɲattun] > |qaya[+acətun] *qayyaacətun* 'like their kayak' (cf. P3i,ii, P9), see P14.

Rule P18 |a| raising. An |a| becomes ə in the sequence |qa| plus back velar fricative if the syllable is next to a boundary: |amaɣ-qəy[+ɣu] > |ama-qəy[+ɣu] *amaqəxu* '(you—sg.) please backpack it!' (cf. P8, note to table 7).

Rule P19 Word-final velar adjustment. Before a major boundary a velar fricative becomes a stop: |cali+viɣ| > |cali+vik| *cali'wik* 'place to work' (cf. P13i), |atəx+tu| > |atəq+tu| (P13i). See table 5, no. 5.

Rule P20 Word-final |ə| adjustment. Before a major boundary a |ə| becomes a except that postvocalic |tə| becomes n: |ənə| > |ənə| *əna* 'house', |cali+st| > |cali+sta| *calista* (cf. P2iii) 'worker', |cavə+utə| > |cav+un| (P2iii, P7ii).

Rule P21 |v| and |z| adjustment. (i) A single |v| becomes w between full vowels unless it is base-final: |cali+vik| > |cali+wik| (P19) (cp. |cav+un| P20). (ii) Prevocalic single |z| next to a boundary becomes y unless

it is ending-initial: |nutəy+zuy[+tut] > |nutəy+yux[+tut] (P6, P13i) (cp. |pi[+cit] > |pi[+zit] *pizit* '(you—sg.) do (inter.)', cf. note to table 8), |pəkəc+ut| > |pəkəy+ut| *pəkəyut* 'Monday, thing to move with' (cf. P2i, P20) (cp. |kic+ut| *kizzun* 'sinker', cf. P1, P2i, P20).

Rule P22 Accentuation. Accentuation, which operates on a phonological phrase, is realized in quantity change (vowel lengthening and consonant gemination), pitch, stress, and tempo. Accentuation and its various phonetic realizations, which act to signal the different major boundaries, are governed by a foot-structuring principle that eliminates some types of foot in favor of others (Miyaoaka 1971). Although accentuation is generally predictable, as is quantity to the same extent, some phonologically unpredictable but lexically conditioned changes (gemination, syllable contraction, etc.) produce surface contrasts between a single and a lengthened vowel and between a single and a geminated consonant. Hence quantity is indicated in phonemic representations.

Two kinds of accent are distinguished: rhythmical accent marked by acute accent (´) and regressive accent marked by grave (`): see P1 and P10 as well. A full vowel in a rhythmically accentuated open syllable is lengthened, while a rhythmically accentuated open syllable with ə or a regressively accentuated open syllable (with any vowel) becomes a closed syllable with its immediately following syllable-initial consonant becoming geminated. See 4. for stress and pitch. Syllable boundaries, indicated in this section by periods without following space, occur before an intervocalic single consonant, between two vowels, and between two consonants (geminate as well as clusters). The following rules, (i) through (iv), apply iteratively from the initial syllable of a phonological phrase to the end:

Table 9. Connective Mood Person Markers

		Intransitive	Transitive											
			Object											
			Third pl.			First pl.			Second pl.			Reflexive		
	sg.	pl.	dual	sg.	pl.	dual	sg.	pl.	dual	sg.	pl.	dual		
Subject	Third	sg. +ɲan	+ɲaku	+ɲaki	+ɲakəy	+ɲana	+ɲakut	+ɲakuy	+ɲatən	+ɲaci	+ɲatəy	+ɲani	+ɲatəŋ	+ɲatəy
	pl.	+ɲata	+ɲatyu	+ɲatki	+ɲatkəy	+ɲatna	+ɲatkut	+ɲatkuy	+ɲatyən	+ɲatci	+ɲattəy	+ɲatni	+ɲattəŋ	+ɲattəy
	dual	+ɲaynəy	+ɲayku	+ɲayki	+ɲaykəy	+ɲayna	+ɲaykut	+ɲaykuy	+ɲaytən	+ɲayci	+ɲaytəy	+ɲayni	+ɲaytəŋ	+ɲaytəy
	First	sg. +ma	-mku	-mki	-mkəy				-mkən	-mci	-mtəy	-mni	-mtəŋ	-mtəy
pl.	-mta	-mt+ɣu	-mt+ki	-mt+kəy				-mt+ɣən	-mtci	-mttəy	-mt+ni	-mttəŋ	-mttəy	
dual	+məynuy	+məynəy	+məynaki	+məynəkəy				+məynəyən	+məy-ci	+məytəy	+məyni	+məytəŋ	+məytəy	
Second	pl.	+pət	+pəy	+pəki	+pəkəy	+pəna	+pəkut	+pəkuy				+pəni	+pətəŋ	+pəkəy
	dual	+pəci	+pəci+ɣu	+pəciki	+pəcikəy	+pəci+na	+pəcikut	+pəcikuy				+pəcini	+pəcitəŋ	+pəcitəy
Reflexive	pl.	+pətəy	+pətəy	+pətəyki	+pətəykəy	+pətəy-na	+pətəykut	+pətəykuy				+pətəy-ni	+pətəy-təŋ	+pətəy-kəy
	dual	+pətəy	+pətəy	+pətəyki	+pətəykəy	+pətəy-na	+pətəykut	+pətəykuy				+pətəy-ni	+pətəy-təŋ	+pətəy-kəy
third	pl.	+mi	+mi+ɣu	+miki	+mikəy	+mi+na	+mikut	+mikuy	+mitən	+mici	+mitəy			
	dual	+məŋ	+məyɲ+ɣu	+məyɲ+ki	+məyɲ+kəy	+məyɲ+na	+məyɲ+kut	+məyɲ+kuy	+məyɲ+ɣən	+məyɲ-ci	+məyɲtəy			
		+məy	+məynəy	+məynaki	+məynəkəy	+məynəna	+məynəkut	+məynəkuy	+məynəyən	+məynəci	+məynətəy			

NOTES: Initial |m| of reflexive third-person subject marker is replaced with n after the mood marker |+ku|. Table 5, no. 2 applies to all second-person subject forms. P15 is blocked in '1pl.—3Rsg.' and '3Rpl.—1sg.' endings.

See P11 for the second-person plural marker |+pəci-|.

The forms in this table are phonological representations.

Table 10. Adverbial Case Endings for Possessed Nouns

Possessor		Singular	Plural	Dual
Third	singular	+ɲani	+ɲini	+ɣkəni
		+ɲakun	+ɲikun	+ɣkənkun
		+ɲatun	+ɲitun	+ɣkətun
	plural	+ɲatni	+ɲitni	+ɣkətni
		+ɲatyun	+ɲityun	+ɣkətɣun
		+ɲattun	+ɲittun	+ɣkəttun
dual	+ɲayni	-kəɲni	+ɣkəɲni	
	+ɲaykun	-kənkun	+ɣkənkun	
	+ɲaytun	-kətun	+ɣkətun	
First	singular	-mni		+ɣ+mni
		-mkun		+ɣ+mkun
		-mtun		+ɣ+mtun
	plural	-mt+ni		+ɣ+mt+ni
		-mt+ɣun		+ɣ+mt+ɣun
		-mttun		+ɣ+mttun
dual	-məɲni		+ɣməɲni	
	-məɲnəɲun		+ɣməɲnəɲun	
	-məɲ(t)tun		+ɣməɲtun	
Second	singular	+pəni		+ɣpəni
		+pəɲun		+ɣpəɲun
		+pətun		+ɣpətun
	plural	+pəcini		+ɣpəcini
		+pəcityun		+ɣpəcityun
		+pəcitun		+ɣpəcitun
dual	+pətəɲni		+ɣpətəɲni	
	+pətəɲnəɲun		+ɣpətəɲnəɲun	
	+pətəɲtun		+ɣpətəɲtun	
Reflexive third	singular	-mini		+ɣmini
		-mikun		+ɣmikun
		-mitun		+ɣmitun
	plural	-məɲt+ni		+ɣməɲt+ni
		-məɲt+ɣun		+ɣməɲt+ɣun
		-məɲ(t)tun		+ɣməɲ(t)tun
dual	-məɲni		+ɣməɲni	
	-məɲnəɲun		+ɣməɲnəɲun	
	-məɲtun		+ɣməɲtun	

NOTES: Each column gives the locative (marked by |ni|), perlative (|kun|), and equalis (|tun|) forms. The allative and ablative-modalis forms are obtained by replacing the final |i| of the locative form with |un| and |əɲ| respectively.

See table 5, no. 4 for deleting suffixes that begin with a nasal plus vowel. See P11 for the 2d-person pl. marker |+pəci|.

Table 5, no. 2, applies to all retaining suffixes beginning with |pV|.

P15 is blocked in the locative, allative, and ablative-modalis 'lpl.—sg./pl.' and 'lpl.—dual' endings.

The forms in this table are phonological representations.

(i) Rhythmical accent. Starting from a word-initial syllable that is accentuated if it is a closed syllable or unaccented if it is an open syllable, accents fall rhythmically

on every two syllables: |aɲyaq-li-qataɲ|+|tut| > |aɲ.ya.li.qa.taɲ.tut| (cf. P3, P8, P13) > *áɲ.ya.lí.qa.táɲ.tut* 'they are about to make a boat', |qayaq-li-qataɲ|+|tut| > |qa.ya.li.qa.taɲ.tut| (cf. P3, P8, P13) > *qa.yá.li.qá.taɲ.tút* > *qa.yá.li.qá.taɲ.tut* (cf. iii) 'they are about to make a kayak', |qayaq+pay|+|mi=mi| > |qa.yax.pay.mi=mi| (cf. P3, P13) > *qa.yáx.pay.mí=mi* 'how about in the big kayak?', |tuntuvay+taɲqəx+zuɲnaɲqə|+|ɣ*uq=lu=ɣuq| > |tun.tu.wax.taɲ.qəx.suɲ.nax.quq=lu=xuq| (cf. P3, P7, P10, P13, P19, P21) > *tún.tu.wáx.taɲ.qəx.suɲ.náx.quq=lú=xuq* 'also they say there seems to be a moose', |ə.tə.xa| (P17) *ə.táx.xa*.

(ii) Regressive accent. (ii-a) If the rhythmical accent is due to fall on the first vowel of a vowel cluster or a double vowel, the accent regresses onto the preceding syllable. This rule is blocked before a major boundary inside a phonological phrase: |cali+ɣ*aq|+|m| > |ca.li.am| (cf. P3, P9) > *ca.lí.am* > *càl.li.am* (cf. i,iii) 'of the work' (cp. |cali=am| > *ca.lí=am* 'get to work (hurry up)!'): |pis.tə.ŋú.ut| (P17) > *pís.tə.Ŋú.ut* > *pís.təŊ.Ŋu.ut* (cf. i,iii). (ii-b) If the rhythmical accent is due to fall on an open syllable immediately preceded by a closed syllable, the accent regresses onto the closed one. This rule is blocked before a major boundary: |qayaq+pay|+|mini| > |qa.yax.pay.mi.ni| > *qa.yáx.pay.mí.ni*. > *qa.yáx.pàɲ.mi.ni* (i,iii) 'in his own big kayak' (cf. *qa.yáx.pay.mí=mi* above), |aɲyaq+pay-li+zuɲna+zuɲnaɲqə|+|ɣ*ua| > |aɲ.yax.pa.li.yuɲ.ɲa.yuɲ.nax.qu.a| (cf. P3, P7, P8, P10, P13, P21) > *áɲ.yáx.pa.lí.yùɲ.ɲa.yúɲ.nàx.qu.a* (cf. i,ii-a,iii) 'I seem able to make a big boat'. (ii-c) If the rhythmical accent is due to fall on an open syllable with |ə| that is preceded by another open syllable CV, the |ə| is syncopated, unless the consonants flanking the |ə| are identical ones (including quasi-identical |c| and |t|, or |q| and |x|) or unless the immediately preceding syllable consists of a word-initial |ə|: |kəmy[-ni]| > |kə.mə.ni| (cf. P6, P8) > *kəm.ni* (cf. i) 'his own flesh' (cp. |kəmy[-mi]| > |kə.mə.mi| (cf. P6, P8) > *kə.məm.mi* (cf. i) 'of his own flesh' and |əmy[-ni]| > |ə.mə.ni| (cf. P6, P8) > *ə.mən.ni* (cf. i) 'his own water'), |aɲyaq+pay-ɲə-ci-qə|+|ɣ*uq| > |aɲ.yax.pa.ɲə.ci.quq| (cf. P3, P7, P8, P10, P13, P19) > *áɲ.yáx.pa.ɲə.ci.quq* > *áɲ.yáx.pàɲ.ci.quq* (cf. i, ii-b, iii) 'he will get a big boat' (cf. |aɲyaq-piy-ɲə-ci-qə|+|ɣ*uq| > |aɲ.ya.pi.ɲə.ci.quq| (cf. P3, P7, P8, P10, P19) > *áɲ.ya.pí.ɲə.cí.quq* (cf. i) 'he will get a genuine boat'.

(iii) Deaccentuation. If rhythmical accent is due to fall on a word-final syllable, it is deaccentuated before #(#): *nu.təɲ.yux.tut* (P6) > *nu.təɲ.yux.tút* (cf. i) > *nu.təɲ.yux.tut*. A result of deaccentuation is an accentless disyllabic word whose first syllable is open and an accentless disyllabic hypermeter at the end of polysyllabic words: *nu.tək* 'gun' (cf. i).

(iv) Preboundary regressive accent. (iv-a) A syllable preceding a nonenclitic boundary receives regressive

Table 11. Indicative Endings

		Intransitive		Transitive									
				Object									
				Third			First			Second			
S u b j e c t	sg. pl. dual	+θ +t +γ	+γ*aq-	sg.	pl.	dualsg.	sg.	pl.	dual	sg.	pl.	dual	
				Third	+ηa	+ηi	+γ	+ηaηa	+ηakut	+ηakuy	+ηatən	+ηaci	+ηatəy
				First	+ηat	+ηit	+γkət	+ηatηa	+ηitkut	+ηitkuy	+ηatyən	+ηitci	+ηit(təy)
Second	+ηay	-kəy	+γkəy	+ηay(ηə)ηa	+ηay(t+)kut	+ηay(t+)kuy	+ηaytən	+ηayci	+ηaytəy				
b j e c t	sg. pl. dual	+tuq- ~ +γ*uq-	-ηa -kut -kuy	-ka	+nka	+γka				-mkən	-mci	-mtəy	
				+put	-put	+γput				-mt+γən	-mtci	-mttəy	
				+puγ	-puγ	+γpuγ				-məytən	-məy-ci	-məytəy	
t	sg. pl. dual	-tən -ci -təy	+γ*aq-	+n	-tən	+γkən	+pəηa	+pəkut	+pəkuy				
				+ci	-ci	+γci	+pəci+ηa	+pəcikut	+pəcikuy				
				+təy	-təy	+γtəy	+pətəy(ηə)ηa	+pətəykut	+pətəykuy				

NOTES: In the sequence |CV₁[γəV₁] (< |CV₁[+γaq+ηV₁] cf. P3i, ii), which results from suffixing third-person subject transitive endings with initial |η| to bases that end in a single full vowel the |əγ| is deleted. However, the |γV₁] is deleted instead in '3pl.—1pl.', '3pl.—2pl.', and '3pl.—2dual' endings.

The second-person subject and the first-person object forms have the initial |-və| instead of |+pə| for some Kuskokwim speakers.

A |t| becomes c before an apical stop.

The forms in this table are phonological representations.

accent: |anyaq|-ka#qaa| > |aη.ya.qa#qaa| (cf. P3, P8) > *án.ya.qà(q)#qaa* (cf. i,iii) 'my boat?' (cp. |anyaq|-ka=lu| > |aη.ya.qa=lu| [cf. P3, P8, P13] > *án.ya.qá=lu* [cf. i] 'my boat also'); |nuna|-ka-lu#tanəm| (cf. P13) > *nu.ná.ká=lù(t)#ta.nəm* (cf. i,iii) 'my land too! (annoyed)' (cp. |nuna|-ka=lu-γuq| > *nu.ná.ká=lú=xuq* 'my land too, they say'). (iv-b) A syllable preceding an enclitic boundary, if the postboundary segment is vocalic, receives regressive accent, replacing the rhythmical accent (if any) on the preboundary syllable: |nutγ=am| > |nu.tək=am| (cf. P6, P13, P19) > *nu.tək=(k)am* (cf. i) 'again the gun'; |ca.lis.ta=am| > *ca.lís.tà=am* (cf. i) 'again the worker' (in this case the regressive accent lengthens the preboundary vowel because there is no consonant to be geminated next to the boundary).

Rule P23 Vowel cluster adjustments. (i) The second vowel of a double vowel is shortened: |isxət-kə[+γ*aa=lu| > *ísxətkaá=lu* (cf. P2, P7, P10, P13, P22i,ii-c,ii-b) 'it is his bag', cp. |isxət|-ka=lu| > *ísxətka=lu* (cf. P2, P13, P22i,ii-c) 'my bag'; see 4. for the difference between *kaá* and *ká*. (ii) Word-initial *ia* and *ua* become *ya* and *wa* respectively: |ua[+ni| > *wa=ni* (cf. P22i) 'down there'. (iii) Though with considerable fluctuation, accent in clusters *ai* and *au* (and also *ui* and *iu* for some speakers) tends to shift from the second vowel to the first, and the second vowel is shortened: |tau[+na| *táuna* (cf. P22i) 'that one'.

Rule P24 Boundary-related blockings (optional). Besides the obligatory blocking of P22ii-a, ii-b before a major boundary, some rules connected with a major boundary may optionally be blocked inside a phonological phrase, with the boundary behaving somewhat like |+|: |kuiγ=mi| > *kuik=mi* (cf. P13, P19) or *kuiγmi* (with P13, P19 blocked) 'how about the river?'; |nutγ=am| > *nutək=(k)am* (P22) or *nutəγγam* (with P13, P19

blocked): |əlpəc=kiq| > *əlpət=kiq* (cf. P2ii) or *əlpəskiq* (as if from |əlpəc+kiq|, cf. P2i, P13) 'I wonder, you...'; |kuiγ#un'a| > *kuik#unna* (cf. P13, P19) or *kuiγunna* (with P13, P19 blocked) 'the river down there'.

4. PHONETIC DETAILS

Phonetic details of each phonemic symbol (tables 2, 4) are further specified.

a is fronted, i.e., [æ] (with less pharyngeal tension than in English *cat*), after *i*; low back, i.e., [ɑ] (as in French *cas*), next to back velar or in lengthened form; otherwise low central (lower than English *cut*): *azəmNia* [azímNiæ] (P13), *əla'kataxtut* [əlá'katáxtut] (P3). *i* and *u* are high front and high back respectively (as in English *lick* and *look*), but lowered, that is, [e] (as in English *bed*) and [o] (as in German *Gott*) respectively, next to back velar: *amik* [amik] 'door', *amiq* [ameq] 'skin'; *ukuk* [ukuk] 'these(dual)', *uquq* [oqoq] 'oil'. *i* is markedly low, i.e., [ɛ], between back velar and *a*: *mittətχia* [míttətχɛæ] (P13). See table 5, no. 16 for the velarized voiceless variant of *u*. *ə* is central and somewhat close to [i] (as in rapid colloquial American English *But...*, *but...*, *but...!* or *Just a minute!*), but lowered, that is, [ə] (like the unstressed vowel in English *about*) next to back velar, and is devoiced ([i̥] or [ə̥]) if not next to a voiced sound. Initial *ə* may be preceded by glottal stop, especially when followed by geminated stop, and is usually not pronounced or barely heard when followed by single consonant: *unəq* [unəq] 'armpit', *cəla* [cɛ̥la] (P11), *əqquq* [ʔə̥qoqoq] 'it shrinks', *əna* [(i)na] (P20). The variant of a vowel next to back velar may be accompanied by slight pharyngeal tension.

A short and a lengthened vowel contrast: *uyixtuq* 'it beaches' (|uyiγ[+tuq|) versus *uyi'xtuq* 'it beaches suddenly' (|uyi'γəγ[+tuq|, cf. table 5, no. 5). A vowel cluster or a double vowel is phonetically a single syllable.

An accented vowel tends to carry greater prominence with duration, pitch, and stress combined than an unaccented one: *akkia'ni* [âk.kiæ'.ni] 'across it'; *isxatkaa=tu* [ís.ɣat.kaá.tu] versus *isxatka=tu* [ís.ɣat.ká.tu] (P23); *attauciq* [ât.táu.čeq] 'one'. Vowels across - or # belong to two syllables: *cali=am* [ča.lí.am] versus *calliam* [čâl.liæm] (P22). The hiatus may be emphasized by glottal stop especially if a double vowel or a vowel cluster comes next to the boundary: *qayyaa#aatama* [qây.yáú'aá.ta.ma] 'my father's kayak'.

Stops are lenis with unaspirated quality. Thus *p* of *pin* 'your(sg.) thing' is more like the *p* of English *spin* than that of *pin*. *k* and *q* (and their corresponding fricatives for that matter) are functionally distinct (as in many Northwest American Indian languages): *anyak* [ányak] 'two boats' versus *anyaq* [ányaq] 'boat'. *c* is an affricate [č] (like English *ch*) or before *ə* [c] (like the *ts* of English *iseise*: *ciun* [čiun] 'ear', *cətuk* [c̥tʉk] 'fingernail'.

The fricatives *v* and *f* are like English (as *vast* and *fast*): *cavun* [čavun] (P2), *aftaa* [áftaa] 'he divides it'. *l* is a lateral with the tongue blade more evenly elevated than English *l* (which is pronounced with a "sagging" tongue), and its corresponding voiceless *l* has some friction like Welsh *ll* but is not aspirated: *calliuq* [čâl.liuq] 'he is working' versus *caltiuq* [čâlliuq] 'he may be doing something'. *z* and *s* are like English (as *zip* and *sip*): *pizit* [pizit] (P21), *ciisiq* [čiiiseq] 'worm'. They are contextually labialized: *tənsuun* [tíns'uun] 'airplane'. *ɣ* is a voiced fricative similar to the Spanish intervocalic *g* (as in *lago*), while *ɣ̣* resembles the fricative nontrilled variant of French "r grasseyé"; correspondingly, *x* is like the German "ach-laut," and *ɣ̣* resembles the *r* in French *quatre*: *əɣnəq* [íɣnəq] 'juice' versus *əɣ̣nəq* [əɣ̣nəq] 'day', *əxNəq* [íxNəq] 'throwing away' versus *əx̣Nəq* [əx̣Nəq] 'dawning'. *ɣ̣* and its corresponding *x̣* are front labial-velar fricatives (*ɣ̣* and *x̣* pronounced with lip rounding): *aɣ̣'na* [áɣ̣'na] (P12), *x̣'ani* [x̣'ani] (P12). The back labial-velar fricatives *ɣ̣* and *x̣* are marginal sounds (see 15 [-ɣ̣ỵluɣ̣-] and table 5, no. 16). *w* and *y*, which are approximants at the positions of *u* and *i*, are glides: *awa'ni* [awá'ni] (P12), *qayaq* [qayaq] 'kayak'.

The nasals *m*, *n*, and *ŋ* are voiced as in English *sum*, *sun*, and *sung*, and *M*, *N*, and *Ŋ* are their voiceless counterparts: *azəmnia* [azímniæ] 'he says it cracked in half' versus *azəmnia* [azímniæ] (P13), *anyanka* [ányanka] (P3) with no nasal neutralization (like Russian *bánk* 'bank' with dental *n*, but unlike English *bank*.)

Single and geminated consonants contrast, with geminates straddling the syllable boundary: *taquq* [ta.qoq] 'braid' versus *taququq* [táq.qoq] 'he finishes'. (In the Hooper Bay and Chevak dialect geminated consonants and like-consonant clusters contrast: *annuq* 'he goes out' versus *an⁽ⁿ⁾nanɣixtuq* 'he no longer

goes out', which has the *n* released in the first syllable: P22ii-c.)

The allocation of prominence in a phonological phrase varies greatly as it is a function of expressive, discourse, and other factors; but at least in a neutral utterance (such as in citation), the last accented syllable in the phrase tends to carry the greatest prominence. The pitch is lowest at the end of the first accented syllable of a word, then rising steadily toward the end of the word. It falls most markedly at the end of the last accented syllable of a whole phonological phrase. The end of a phonological phrase is also signaled by the slowing tempo: *qayáxpâymini* (P22), *qayáxpâymi'=mi* (P22), *imú'mi(q)#qázzyiŋqətútútàtni* *qázzyimi#uítaúyatútúuŋa* 'in those old days when they had men's houses, I used to stay in one of them'. The degree of pitch fall is assumedly correlated with the syntactic constituency of the words involved (Woodbury 1989).

5. ORTHOGRAPHY

The practical orthography developed by the Eskimo Language Workshop at the University of Alaska has been employed in Central Alaskan Yupik villages since 1970, when bilingual education was inaugurated. In this sketch the Yupik orthography is given in the selected vocabulary section.

The Yupik orthography is fundamentally based on the phonological level on which accentuation Rule P22 is to apply. The following letters and digraphs are employed in the orthography: ⟨a, c, e, g, gg, i, k, l, ll, m, n, ng, p, q, r, rr, s, ss, t, u, v, vv, w, y⟩. The use of some symbols differs from the phonemic transcription. Orthographic ⟨e⟩ and ⟨ng⟩ correspond to phonemic *ə* and *ŋ* respectively: (orthographic) ⟨tengmiaq⟩ (phonemic) *təŋmiaq* 'goose'. Orthographic ⟨w⟩ represents only prevocalic *x̣*, while the phonemic *ɣ̣* and preconsonantal *x̣* are both represented by ligatured ⟨uḡ⟩ and the phonemic *v* and *w* both by ⟨v⟩: ⟨wani⟩ *x̣'ani* (P12), ⟨auḡna⟩ *aɣ̣'na* (P12), ⟨calivik⟩ *cali'wik*, ⟨cavun⟩ *cavun* (P2). Double fricatives in the orthography (⟨vv, ll, ss, gg, and rr⟩) are voiceless (phonemic *f, t, s, x, and ɣ* respectively): ⟨amarru⟩ *ama'xu* (P3). Single fricatives in the orthography (⟨v, l, s, g, and r⟩) are voiceless at the beginning or end of a word, next to a stop, or after a double fricative, but otherwise voiced (phonemic *v, l, z, ɣ* and *ɣ̣*): ⟨kuicuar⟩ *kuicuaɣ̣* 'rivulet', ⟨nutegyugut⟩ *nutəɣyuxtut* (P6), ⟨qemaggvik⟩ *qəmaxfik* 'bag', ⟨arvinlegen⟩ *aɣ̣vinləɣən* (P6), ⟨ner' llinia⟩ *nəɣlinnia* '(I see) he has eaten it'. A nasal in the orthography is voiceless after a stop (and optionally after a double fricative): ⟨ukna⟩ *ukNa* 'the one coming', ⟨errneq⟩ *əxNəq* (4.). The orthography does not represent vowel lengthening and consonant gemination of the type formulated in P22, but it indicates gemination of the other types by an apostrophe after the consonant: ⟨ner'ut⟩ *nəɣ'ut* (P7). An apos-

trophe is also used in the orthography to indicate word-final truncation (e.g., ⟨qaill'⟩ *qait(un)* 'how?') or deviation from the general accentuation pattern (P22) due to syllable contraction (see table 5, no. 5) (e.g., ⟨anger-tu'rtuq⟩ *aḡəxtúxtuq* 'he keeps saying yes' versus ⟨angerturtuq⟩ *aḡəxtuxtuq* 'he is chewing gum', ⟨quln-gunrita'ar⟩ *qúlḡnḡyita'x* 'nine'), to distinguish [nɣ] from [ŋ] (e.g., ⟨un'gani⟩ *unḡani* 'downriver' versus ⟨ungani⟩ *unḡani* 'his own beard'), and to show that a fricative or a nasal is not devoiced in spite of its environment (e.g., ⟨nut'lek⟩ *nutlək* (P6), ⟨'lagiq⟩ *layiq* [table 5, no. 8] 'goose', ⟨up'nerkaq⟩ *upnəxkaq* 'spring'). In the orthography a hyphen is used to mark enclitics instead of = (e.g., ⟨una-llu⟩ *una=lu* 'this one also') and to distinguish a native element from a non-native one in a word ⟨town-ami⟩ 'in town'). A bar (–) on a nasal shows that the nasal is voiceless even if it does not follow a voiceless consonant ⟨asemñia⟩ *asəmNia* [P9]). Punctuation is the same as in English. See Miyaoka and Mather (1979) for orthographic details.

GRAMMAR

6. VERBS

The categories for which verbs are inflected are person and number of core nominal arguments and mood. Derivation of syntactically different kinds of verbs is correlated with the case marking of the core nominals involved.

Tense-aspect specification is made by some postbases such as 53 |–t̥y–|_v and 46 |+ciqə–|_v: |kiu–t̥y|+*γuq| *kiut̥xuq* 'he answered' and |kiu+ciqə|+*γuq| *kiuciquq* 'he will answer' versus |kiu|+*γuq| *kiuγuq* 'he answers'. Isolated Yupik verbs with no tense-aspect specifications are here glossed by the English present tense, though they are actually either perfective ('he has (just) answered') or progressive ('he is answering'). Negation is indicated in verbs by the postbase 70 |–n̥yit–|_v, |+pəkə–|_v (6.2.6.), or other postbases with negative connotation (47, 55, 59, 60, 73, 78, 92): |kiu–n̥yit|+*γuq| *kiun̥yituq* 'he does not answer', |kiu+pəkə|–na–ni| *kiufkəna'ni* '(he) not answering'.

Members of Yupik speech communities are highly sensitive to indirectness in expression and to interpersonal attitude as to who is spoken to or about. Indirect expression is not so much something like a special polite form to be used in certain situations as a very normal and common way of speaking in almost any situation irrespective of whom, when, or where a person is speaking. Making a definite statement concerning personal feelings or future events would not be well received. Attitudinal distinctions are made minimally among positive (elevating, respectful, or desirable), negative (deprecating, derogatory, or condescending), neutral, and endearing. This sensitivity is particularly reflected in the careful choice by the speaker of a verb mood (6.2.2., 6.2.3.), an enclitic (|=kin|, |=kiq|, |=γuq|),

and the postbase (e.g., 5, 7, 15, 50, 64, 67) to be used in a verb or a nominal, combined with the frequent use of certain set words. An expression heedless of these distinctions (nuances, subtleties, etc.) would sound very blunt or inappropriate.

6.1. PERSON (SUBJECT AND OBJECT)

The person category distinguishes first, second, third, and reflexive third person. The reflexive third person refers back to the subject of the main clause, and, accordingly, only dependent moods (6.2.5. and 6.2.6.) are inflected for this category: see 7.3. and 7.4.2. also. See 6.3.1. and 7.4.2. for the type of reflexivity where two core nominals (agent and patient) are coreferent.

Verbs are either intransitive—monominal with the subject person indexed—or transitive—binominal with both the subject and the object indexed—although the subordinative indexes only one nominal even if two core nominals are involved. The subject and object markers in a verb ending make cross-reference to corresponding overtly expressed nominals and agree with them in number. However, when the subject or object of a transitive verb is overtly expressed by a nominal, a singular verb form is often used instead of the plural or dual form appropriate to the subject or object, or a plural form instead of the dual: *yuit taḡəxḡakut* (connec. 3sg.—1pl.) *anətxuukut* 'because the people saw us, we went out' (cf. *taḡəxḡakut* 3pl.—1pl.), *kipu'takək* (indic. 3dual—3pl.) *anyak* 'they(dual) buy the boats (dual)' (cf. *kipu'taxkək* 3dual—3dual).

It is to be noted (i) that most person markers on verbs (tables 7-9, 11) occur as the absolutive or relative possessive-pronominal endings on nouns (tables 12-13) as well, (ii) that the indicative transitive endings with the object in the third person (table 11) are almost perfectly identical with the possessed absolutive endings for the third person (table 12), and (iii) that the connective mood markers (table 9) are based on the relative endings (table 13) (hence the occasional use of the term relative mood for the connective).

One set of markers (verbal person markers) occurs only on verbs, except for the second person, and marks only intransitive subjects or transitive objects but not transitive subjects. These are 1sg. |+ḡa|, 1pl. |+kut|~|+ta|, 1dual |+kuy|~|+nuγ|; 2sg. |+t(əḡ)|~|+kəḡ|(|+γəḡ|), 2pl. |+ci|, 2dual |+təγ|; 3sg. |+ku|(|+γu|), 3pl. |+ki|, 3dual |+kəγ|.

The marking of the persons follows the ergative pattern in the subordinative mood and the accusative pattern in the connective mood. The other moods in the first- and second-person singular and the indicative and participial moods in the first person dual and plural follow the ergative pattern but otherwise follow the accusative or the neutral pattern.

6.2. MOOD

There are six moods of two subtypes, the independent moods (indicative, participial, interrogative, and

Table 12. Absolute Endings for Possessed Nouns

	<i>Possessor</i>	<i>Singular</i>	<i>Plural</i>	<i>Dual</i>
Third	singular	+ηα	+ηι	+γ
	plural	+ηατ	+ηιτ	+γκατ
	dual	+ηαγ	-καγ	+γκαγ
First	singular	-κα	+νκα	+γκα
	plural	+put	-put	+γput
	dual	+puγ	-puγ	+γpuγ
Second	singular	+n	-tən	+γκən
	plural	+ci	-ci	+γci
	dual	+təγ	-təγ	+γtəγ
Reflexive third	singular		-ni	+γni
	plural	+təη	-təη	+γtəη
	dual	+təγ	-təγ	+γtəγ

NOTES: See table 5, no. 4, for deleting suffixes that begin with a nasal plus vowel; table 5, no. 2, applies to all retaining suffixes beginning with |pV|.

The forms in this table are phonological representations.

Table 13. Relative Endings for Possessed Nouns

	<i>Possessor</i>	<i>Singular</i>	<i>Plural</i>	<i>Dual</i>
Third	singular	+ηαν	+ηιν	+γκən
	plural	+ηατ	+ηιτ	+γκατ
	dual	+ηαγνəγ	-kənka	+γκənka
First	singular	-ma		+γma
	plural	-mta		+γ+mta
	dual	-məγnuγ		+γməγnuγ
Second	singular	+pət		+γpət
	plural	+pəci		+γpəci
	dual	+pətəγ		+γpətəγ
Reflexive third	singular	-mi		+γmi
	plural	-məη		+γməη
	dual	-məγ		+γməγ

NOTES: See table 5, no. 4 for deleting suffixes that begin with a nasal plus vowel; table 5, no. 2, applies to all retaining suffixes beginning with |pV|.

The forms in this table are phonological representations.

optative) and the dependent moods (connective and subordinative). The independent moods are used only as main-clause predicates, while the dependent moods typically occur in clauses subordinate to independent verbs but are also used independently in a number of constructions. Some enclitics and verb-elaborating postbases select a certain mood.

6.2.1. INDICATIVE MOOD

The indicative mood makes a straight statement of an event or state. In the indicative the intransitive endings, indexing the subject person, have the mood marker

|+₁tuq-| (after a consonant) ~|+₁γ*uq-| (after a vowel), and the transitive endings, indexing both subject and object, have |+₁γ*aq-| (table 11): *ila'kaqa anun* 'the man is my relative' (|ila-kə[+₁γ*aq-kə| 'I have him as (83 |-kə-|) a relative (|ila-|)'), *tanyuxxaanka ayaxuut* 'my boys went away' (|ayay-lyu[+₁γ*uq+t| 'they went away'), *cəNixciqaana ata'ku* 'he will visit me this evening'.

6.2.2. PARTICIPIAL MOOD

A participle expresses a potential predication, which becomes an actual predication with a more or less expressive force particularly with the addition of one of certain noninflecting words: a response in dialogues very often uses |=wa| (~|#wa|, 9.2.). If nonpredicative, a participle is nominal (7.4.4.). The participial marker |-lyiaq-| (cf. P13iii)~|+₁nyŷ-| (after |t|) for the intransitive forms and |-kə-| for the transitive, is followed by the same person markers as in the indicative (table 11) except that |p| becomes *v* after the transitive |-kə-| (table 5, no. 2): 3sg. |-lyia|~|+₁nyŷ|, 3pl. |-lyiit|~|+₁nyuut|, 1sg. |-lyiana|~|+₁nyua|, 2pl. |-lyiaci|~|+₁nyuci|; 3sg.—3sg. |-kii|, 1pl.—3sg. |-kvut|. Examples are: *atsanək=x'a nəγəlyia* (3sg.) 'he is eating berries' (more indirect than the indicative *atsanək nəγyuuq*), *atsat=x'a nəγkai* (3sg.—3pl.) 'he is eating the berries', *tuaxpiaq nunnailhutən* 'it seems you (sg.) have no place (to stay)' (|nuna+ηit[+₁nyŷ-tən| 2sg.), *aktəη pitaqlua nəγηaitkəfcia* 'poor guys, you (pl.) won't catch and eat me' (*pitaqlua* subord. 1sg., |nəγə+η*ait[-kə+vci+ηa| 2pl.—1sg.). A participial verb can take the place of an interrogative verb (6.2.3.): *qaku ima aya'katalyia'kut* 'when are we leaving (again, as I forgot)?'

6.2.3. INTERROGATIVE MOOD

An interrogative verb is used in information-asking questions, which require the use of an interrogative (7.4.6.) typically at the beginning of a sentence. This mood is not used in yes-or-no questions with|#qaa| (9.1.). The interrogative mood has different markers depending upon the subject, |+₁ta-| (after a consonant) ~|+₁γ*a-| (after a vowel) for third person and |+₁ci-| for first and second person (table 8). Examples are: *qanvaq nullian taηəlxuzziu* 'when did you (sg.) see your (sg.) wife?' (|taηx-lyu[+₁ci+γu| 2sg.—3sg.), *qaku nəγciqsəta* 'when will we eat?', *kittuuzit* 'who are you (sg.)?' (|kitu+ny[+₁ci+t| 2sg.), *ciin aptatNa nakən tək'i'təxutəmnək* 'why are they asking me where I came from?' (|apəc[+₁ta+təηa| 3pl.—1sg.), *qafcinək iməymiatəxtəxuat* 'how many minks did they catch?' (80 |+c-|). Addition of an enclitic as in *kina'=kiq* or *kina'=xuq taiya* 'who is coming?' makes the question indirect. An interrogative verb expanded by the post-base 1 |+pay-| (table 5, no. 2), or 43 |+pakaγ-| (table 5, no. 2), if used without an interrogative word, has an exclamatory force: *nacan asixpaxta* 'how nice your (sg.) hat is!'

6.2.4. OPTATIVE MOOD

The optative mood expresses the speaker's wish or request that an event or a state occur. As in the interrogative mood, the optative mood has different markers depending upon the subject, |+li-| for third person, |+la-| for first person, and |+γ*ī-| for second person (table 5, nos. 7 and 10; table 7). The first- and third-person optatives may merely express the speaker's wish or may ask for permission or consent from the person spoken to: *taili* 'may he come (now)!', *iñnia'tən ciuṁək nəylit* 'may your (sg.) children eat first?'; *malixtamtək* 'may I go with you (dual)?', *tuavət aju'laiγalta* 'let us stop down there!'. The second person expresses command, instruction, or prohibition to the person spoken to: *kuicua'yaam akkia'nun ama'qaxcikut* '(you pl.) please carry us over to the other side of the small river!' (more indirect and polite than *ama'xciikut* without 50 |-qaγ-|), *x*ani aqumyanγilu* '(you sg.) don't be sitting here!' (|+γα-|_{vv} 'continuously'). See 9.2. for the enclitics |tuq| and |kin| that select this mood. An optative form with the aspectual postbase |-ki-|_{vv} (table 5, no. 4), which immediately precedes the ending, expresses a wish for accomplishment of an event or a state in the future, possibly with the connotation of a long and expectant wait: *taikili* 'may he come (in the future)!', *aqsilutən nəykina* '(you sg.) eat hearty!' (*aqsilutən* subord. 2sg. 'being full', |+na+θ| special 2sg. optative ending after the postbase |-ki-|; *nəykina* in the Kuskokwim dialect). The postbases |+zaqu-|_{vv} and |+piiqə-|_{vv} (table 5, no. 2), followed by |+na-| (cf. 6.2.6.) plus a second-person-subject optative ending (but 2sg. |+naγ|, 2sg.—3sg. |+nakul|), express prohibition of a future and a continuative action respectively: *nəyyaqu nacciu* '(you pl.) don't eat it (in the future)!', *nəyviiqNak* '(you sg.) don't be eating, stop eating!'. The postbase |-ki-| may also occur as a statement in the past context (with narrative force): *nəykilliu x*anixpak nanluki* 'he now ate all of them' (*nanluki* subord. 3pl. 'using them up').

6.2.5. CONNECTIVE MOOD

A connective verb typically occurs in syntactic dependence upon another verb, and expresses cause, time, concession, condition, or the like, depending upon the connective-mood marker that stands before the person marker (table 9). The connective markers are (1) causal |+η*a-| 'because, when', (2) contingent |+γ*aqa-| 'whenever', (3) precessive |+pailγ-| (table 5, no. 2) 'before', (4) concessive |-ηγāγ-| 'although', (5) conditional |-ku-| (table 5, no. 5) 'if', and (6) indirective |+zua-|. The final vowel of (1), (2), (5), and (6) is deleted together with the initial [η] of third-person subject markers.

6.2.5.1.

A causal connective verb marked by |+η*a-| ~ |+ηa-| (with much fluctuation in the apical adjustment of P2i)

expresses an event or a state causing that of the main-clause verb. Examples are: *cikiγnamki* (1sg.—3pl.) *quyyaut* 'because I gave presents to them, they (others) are glad', *cikiγnamtəḅ* (1sg.—3Rpl.) *quyyaut* 'because I gave presents to them, they (themselves) are glad', *upnəxkauxcən* (3sg.) *cəta nəḅlaiγutuq* 'since it is spring now, it is not cold any more'. A base-final or postbase-final ηə is often dropped before the marker: *aḅḅḅata-aḅḅata* 'because they are big' (|aḅ[+ηa+ḅata| 3pl.).

6.2.5.2.

A contingent connective verb marked by |+γ*aqa-| (< |+γ*aγ-qa-|) expresses a generic condition (with indefinite temporal reference) on the main-clause verb, which requires the postbase 57 |+laγ-|_{vv}, 76 |-tu-|_{vv}, or 59 |-zuit-|_{vv}. Examples are: *quya'laxtua taḅxaqamkən* 'I am happy whenever I see you (sg.)', *cikuq aaḅnaγḅia'qan kuiymun atxaxcəccuitəḅuakut* 'whenever the ice becomes dangerous, he never lets us go down toward the river'.

6.2.5.3.

A precessive connective verb marked by |+pailγ-| (table 5, no. 2) indicates the temporal precedence of what is expressed by the main-clause verb: *taizyu ikixpailəxpəyu* 'bring it to me before you (sg.) open it!', *aḅvət maqitxuut nəḅvailəḅməḅ* 'the men took a bath before they ate'.

6.2.5.4.

A concessive connective verb marked by |-ηγāγ-| (fricativizing only [t], but not [c], and changing [ηγāγC] into ηḅḅC, with regressive accent on preceding syllable if it is unaccented) expresses concession: *aptəḅḅamtəxu kiuyuitaakut* 'although we asked him, he never answered us', *cali'yuumiiləḅḅḅma calinḅnaqqua* 'even if I don't want to work, I'm trying to work'.

6.2.5.5.

A conditional connective verb is marked by |-ku-|, and the reflexive third-person markers have *n* instead of *m*. It has three functions. It may indicate a prior condition for what is expressed by the main-clause verb: *amik cikuskani* (3sg.—3Rsg.) *ikixcəsciiγacciiquq* 'if the door freezes (lit. if it [impersonal] freezes the door, cf. 6.3.1.), it will not open'. It may also indicate a counterfactual condition if used with a main verb containing the postbase |+zaγ-|_{vv}: *natutxunγilkumku tammaanətəḅḅən cəNixtəḅxuya'ḅamkən* 'if I had known that you(sg.) were there (lit. your(sg.) being there, cf. 91 |+nət-|_{vv} and 7.4.5.4.), I would have visited you(sg.)'. Finally, it may also be used as an indirect way of expressing one's wish or request, if used independently in connection with |tawaam| 'only, but' or |=wa| (~|#wa|, 9.2.): *maqi-kuvət tay*γ*aam* 'perhaps you(sg.) had better take a bath', *ankuma=x*a* 'perhaps I should go'.

6.2.5.6.

An indirective connective verb marked by |+zua-|, which only occurs independently but with the enclitic |=lu| or |=li|, is an indirect way of expressing one's wish or request (cf. 6.2.5.5.): *anyuama=tu* 'perhaps I should go', *nəqmək=ti taicuavŋa* 'perhaps you should bring me a fish' (|tai+c[+zua+vŋa] 2sg.—1sg.).

6.2.5.7.

The connective markers |-tŷ-| (6.2.5.7.) and |+ŋ*inanŷ-| (6.2.5.8.), which are contemporative, have the peculiarity (i) that the intransitive forms take the locative case endings for possessed nouns (table 10) as person markers and (ii) that the transitive forms take the person markers in table 9, with |ni| inserted after |mi| for the reflexive third-person singular subject markers.

A contemporative (1) connective verb form marked by |-tŷ-| 'when (in the past)' (cf. 23 |-tŷ-|_{vN}) expresses an event or a state at the same time as that of the main-clause verb. Examples are: *aataka nəŷətŷani* (3sg.) *ayatŷuunə* 'when my father ate, I left', *aatama nəŷətŷaku* (3sg.—3sg.) *ayalŷuunə* 'when my father ate it, I left', *aataka quyyauq nəŷtəŷminniu* (3Rsg.—3sg.) 'my father is happy when he is eating it'.

6.2.5.8.

A contemporative (2) connective verb form marked by |+ŋ*inanŷ-| 'while' (table 5, no. 1; cf. 71 |+ŋ*inaŷ-|_{vV} and 29 |-nŷ-|_{vN}) expresses a continuative action or state during which the event of the main-clause verb occurs: *qannaataaŋa nəŷŋina=nəŷminniu* 'he is talking to me while he is eating it'.

6.2.5.9.

There is a special use (sometimes called an independent relative, cf. 6.1.) of the intransitive person markers:

A stative or collective verb base may occur with the intransitive endings without any intervening mood marker. The first or second person expresses the bodily posture or degree of collectivity ('all, together, alone') of the absolutive nominal (intransitive subject or transitive object) of the sentence, the third person that of the object, and the reflexive third person that of the subject. Examples are: *nəŷətŷuunə nanəŷma* 'I ate, (I) standing (|nanŷ-|)', *innaan taŷənŷaiŷaqa* 'I took his picture while he is lying (|inaŷ-|)', *quyyuŷmi taŷvayŷaŋa* '(he) smiling (|quyyuŷ-|), he looked at me'; *kiima calliunə* 'I am working, (I being) alone (|kii-|)', *nəqa tammaan nəŷŷaa* 'he eats the whole fish (|tama(tku)ŷ-| '(to be) whole, all, both') (cp. *nəqəm illii nəŷŷaa* 'he eats part of the fish'; see 7.1.), *nəqa iituumaan nəŷŷaa* 'he eats the fish including the eye' (|+tuuma-|_{vN} '(to do) together with'). Some of the collective bases can be nominal as well.

6.2.6. SUBORDINATIVE MOOD

A subordinative verb expresses an event concomitant with or accompanying what is expressed by the verb on which it depends. Used independently, the subordinative has the force of the indicative or of the optative (as a command). A closely connected sequence of events (with the same subject) is very often related by subordinative verbs (especially in the narrative style). In a subordinative verb the mood marker |+lu-| (table 5, no. 10)~|-na-| (negative; table 5, no. 1) is followed by a verbal person marker (6.1.) except for the reflexive third person: 1sg. |+lua| (< |+lu+ŋa|), 3Rsg. |+luni|.

The peculiarity of a subordinative verb is (i) that, even if it is transitive, it indexes only one nominal, namely, the nominal that is to occur in the absolutive case if overtly expressed, and (ii) that its subject nominal is coreferential with the main-clause subject. Thus the reflexive third-person subordinative is intransitive and its ending indexes the subject, while the third person is transitive and its ending indexes the object. The first- and the second-person subordinative can be either intransitive or transitive. Examples are: *təki-tua piyyua-lua* (1sg.) 'I arrived, (I) walking', *pisuŷyuxtua malixutən* (2sg.) 'I want to go hunting, (I) following you (sg.)', *taŷxaa qia-luni* (3Rsg.) 'he saw her, (he) crying', *taŷxaa qiafkaŷluku* (3sg.) 'he saw her crying,' lit. 'he saw her, (he) having her cry'. In the last sentence the causative postbase 33 |+vkaŷ-| (~|+cic-|) is added to the mononimal base |qia-| 'to cry' (with neutralization of the causative connotation), making its unexpressed subject nominal coreferential with the main-clause subject and allowing the (noncoreferential) third person for which it is indexed to function as the notional subject by making it the ostensible object of the causative. Because the verb here is mononimal, the causative postbase could be deleted (*qia-luku*) without causing ambiguity. However, the deletion is not acceptable in the following example, where more than one nominal is involved in the verb base |nəŷə-| 'to eat': *taŷxaqa nəŷəfkaŷluku* 'I saw him eating,' lit. 'I saw him, (I) having him eat'. Additional examples: *taitŷ-uukut əlitNalu-ta* 'we came to learn' (|+na-|_{vV} intention in subordinative forms), *tuqu-ciqNilu-ku qanəxtuq* 'he says (he saying) she will die' (|tuqu-ciqə+ni[+luku] 3sg.), *tuqu-ciqNilu-ni* (3Rsg.) *qanəxtuq* 'he says (he saying) he (himself) will die'. Independent uses: *aqumlutən* '(you sg.) sit down!', *tua-i-tu aatama taŷəxtuku tuntuq* 'and then my father saw the caribou' (note the relative 1sg.—sg. *aatama* in construction with the subordinative 3sg. *taŷəxtuku*). A reflexive third-person subordinative may be used as an adnominal adjunct: *imna uqu-ŷilun-i anun taŷəxtua-qa* 'I saw that fat man'.

The negative subordinative marker |-na-| only occurs after (i) the specific postbase |+pəkə-| (table 5, no. 2), which negates the preceding base instead of 70 |-nŷit-|

(6) (e.g., |ayay+pəkə[-na-| 'not leaving') or (ii) a base or postbase that ends in |cic| or |t| (with a preceding |i| being replaced by *u*) (e.g., |kii'ycic[-,na-| > |kii'ycəNa-| 'being hot' (cf. P11), |canimət[-,na-| > |caniməna-| 'being near', |nutγ+ñit[-,na-| > |nutγuna-| 'lacking a gun'). The negative |-,na-| is followed by the same verbal person markers as |+lu-|: 3Rsg. |-,nani|, 1sg. |-,nii| (< |-,na+ñal|), but 2sg. |-,nay| (instead of |-,natən|). Examples are: *nutxunnii* (1sg.) *ayatxua'ma* (connec. 1sg.) *pitaxkak taukuk pisutxun'itaxka* 'because I went without a gun, I did not hunt those kinds of game (dual)', *iqtufkəna'ci* '(you pl.) don't tell a lie!', *cukkaunaku* 'don't do it fast!'.

6.3. BASIC SENTENCE TYPES

6.3.1. VERB BASES AND CORE NOMINALS

Monominal bases, in which only one nominal, S(ubject), is involved, occur with intransitive endings only: |tuqu-|: *tuquuq* 'he dies', |mikə-|: *mikkuq* 'he is small', |atsa'ytū-|: *atsaxtu'utūq* 'he eats berries' (note that the base is monominal since a nominal base (|atsa'γ-| 'berry') verbalized by a verbalizing postbase (77 |+tu'γ-| 'to eat') is syntactically not a nominal). However, monominal bases of motion may occur with transitive endings having the location as the object: |at'γa'γ-|: *atxaxtuq* 'he goes down', *in'γiq atxax'γaa* 'he goes down the mountain'.

Binominal bases, in which two nominals, P(atient) and A(gent), are involved, occur either with intransitive or transitive endings. P is the recipient of a verbal event, while A, which presupposes P (but not vice versa), initiates the event toward P as the more active participant with higher control. The binominal bases fall into three groups, distinguished by the syntactic-semantic relationship between their intransitive and transitive forms. The agentive binominal bases, which generally describe events focusing on the process of the A's action, are semantically transitive even with intransitive inflection, in which case P is shunted (6.3.3.ii). The intransitive verbs are antipassive: |kiu-|: *kiu'γaa* 'he answers her', *kiu'γuq* 'he answers (someone)', |nə'γə-|: *nə'γaa* 'he eats it', *nə'γuq* 'he eats (something)'. However, in tense-aspect specified contexts, the agentive binominal bases with intransitive inflection may be passive with the agent being deleted: *aku'taq akka nə'γuq* 'the ice-cream has already been eaten', *ukut kali'kat ta'γi'ηaci'qut ata'ta* 'this book will be understood later on'. see also 42 |+uma-|~|+ima-|_{vv}. The non-agentive binominal bases, which generally describe events focusing on the result of the A's action, are semantically transitive with transitive inflection: |at'γ-|: *atxaa* 'he tears it', |ii'γ-|: *ii'γaa* 'he hides it', |ə'γu'γ-|: *ə'γu'γaa* 'he washes it'. With intransitive inflection they are medio-passive, in which case A is deleted or the opposition between P and A is nullified (6.3.3.iii), or

reflexive: *atəxtuq* 'it is torn (passive); it tears (medial)', *iixtuq* 'it is hidden; it hides', *ə'γu'xtuq* 'he washes himself'. Some of the nonagentive binominal bases are impersonal: A for them is something impersonal (such as a natural phenomenon or process), which is usually not overtly expressed: |ciku-|: *cikkuu* '(the cold) freezes it, i.e., it freezes'.

There are a few trinominal bases, in which three nominals, P₁, P₂, and A, are involved: |ciki'γ-|: *ciki'γaa* 'he gives her (something)' (cp. |tunə-|: *tunnaa* 'he gives it [to someone]')

The syntactic verb-elaborating postbases (8.3.1.) change the number of nominals involved in verb bases by adding or removing one nominal: |tuqu-| 'to die': |tuquc-| 'to kill' with 32 |+c-| (which binominalizes a monominal base by adding A and changing S into P), |tuqucəsci'γ-| 'to get killed' with 34 |+sci(u)γ-|; |nə'γə-| 'to eat': |nə'γəsqə-| 'to ask—to eat' with 35 |+sqə-| (6.3.4.); |at'γ-| 'to tear': |at'γi-| 'to tear; to tear on (to the disadvantage of)' with 38 |+γ'i-| (6.3.2.).

6.3.2. HALF-TRANSITIVE AND

ADVERSATIVE-BENEFACTIVE VERBS

Nonagentive binominal bases, if expanded by 38 |+γ'i-| (table 5, no. 11) or (much less productive) 31 |+uc-| or |-kəñə-| (deleting final |tə| after P8), are semantically transitive with intransitive inflection, that is, antipassive. They are the so-called half-transitive verbs (Kleinschmidt 1851: 55-56). *atxiuq* 'he tears (something)', *ii'γiuq* 'he hides (something)', *ika'yuutuq* 'he is helping (someone)' (|ikayu'γ+uc-|); *ak'Nixkəñuq* 'he hurts (someone)' (|ak'ñi'γc-kəñə-|). Half-transitive verbs turn out to be a specialized subtype of experiencer verbs. Experiencer verbs with |+γ'i-| are generally adversative in connotation, implying an event or a process taking place in such a way that it affects E(xperiencer), participant distinct from P, usually disappointing, victimizing, or causing a loss to E. Experiencer verbs with |+uc-| are benefactive. If a primary base is monominal, the experiencer verb base with |+γ'i-| is binominal, involving S and E. It can thus inflect transitively: |kicci-| (< |kic+γ'i-|): *kiccia* 'it sinks on him', or intransitively, in which case S is shunted (6.3.3.ii): *kicciuq* '(something) sinks on him'. If a primary base is binominal, the experiencer verb base is trinominal, involving P, E, and A, the first of which is shunted so that it may occur with a transitive ending: |tə'γi-| (from |tə'γi'γ-|) *tə'γlə'γγia* 'he steals (something) from her', |ii'γi-| (from |ii'γ-|) *ii'γia* 'he hides (something) on, from her', |cikui-| (from |ciku-|) *cikku'γaa* '(the cold) freezes (something) on him, (something) freezes on him'. It can also inflect intransitively. If the primary base is agentive, E is shunted (in addition to P being shunted): *tə'γlə'γγiuq* 'he steals (something) (on, from someone)'. If impersonal, A is deleted (in addition to P being shunted) '(something) freezes on him' (6.3.3.iii).

If nonagentive, the adversative relation between A and E (which remain after P shunting) is nullified or, rarely, A is deleted (cf. 6.3.1., 6.3.3.iii): *atxiuq* 'he tears (something); (someone) tears (something) on him'. The first reading is that of a half-transitive verb, which is nothing but an intransitively inflected experiencer verb from a nonagentive base. Further examples: (half-transitive) *kuvvitxuug qattami'nək* 'he spilled (|kuvvə-|, |+γ*i-|) his own pail (*qattami'nək* abm. 3Rsg.—sg.) (accidentally)' (cp. *kuvvaa qattani* 'he spilled his own pail (*qattani* abs. 3Rsg.—sg.) (deliberately)'), *aqfatuq qattamək* 'he is fetching (|aqfa-|, |+uc-|) a pail'; (adversative-benefactive) *kuvvitxua qa qattamək* 'I spilled a pail on him, his pail', *aqfatta qattamək aḥun* 'he is fetching a pail for the man'.

6.3.3. SIMPLE SENTENCES AND CASE MARKING

A syntactic case—absolute or relative—is primarily assigned to the nominals involved in verb bases in the hierarchical order of S/P > E > A. Case assignments as formulated in this section, 6.3.4. and 7.2.5.(2) will show that one nominal with the same semantic role, such as A, can occur in no less than five different cases—absolute, relative, ablative-modalis, allative, and locative. (i) The absolute case is assigned to the first nominal along the nominal hierarchy, and the relative case to the second if any: *nayiq kittuq* 'the seal (*nayiq* abs., S) sinks', *aḥu'təm nayiq nəḡḡaa* 'the man (*aḥu'təm* rel., A) eats the seal (P)', *aḥu'təm nayiq kiccia* 'the seal (S) sinks on the man (E)', *aḡnam kuvyaq atxaa* 'the woman (*aḡnam* rel., A) tears the net (*kuvyaq* abs., P)'. If there are more nominals involved in a verb base than can be referred to in an ending (one for intransitive endings and two for transitive), they have to be reduced to that number. The reduction to one core nominal, intransitivization, is morphologically accompanied by removal of one nominal from indexing on the verb. (ii) Except for the cases in (iii), nominal reduction is made by shunting the nominal in the absolute case into the ablative-modalis and by promoting the next higher nominal to the absolute. A shunted nominal is not a core nominal but an adverbial adjunct: *aḥun nayiḡmək nəḡḡuq* 'the man (*aḥun* abs.) eats a seal (*nayiḡmək* abm.)', *aḥun nayiḡmək kicciiuq* 'a seal sinks on the man'; *aḡnam aḥun kuvyamək atxia* 'the woman tears a net (*kuvyamək* abm.) on the man (E)'. (iii) Reduction to one core nominal is made (iii-a) in the case of a nonagentive base or its derivative base by deleting A or by nullifying the opposition between the two core nominals involved (A and P or A and E): *kuvyaq atəxtuq* 'the net is torn' (deletion), 'the net tears' (nullification); *aḥun kuvyamək atxiuq* 'the net is torn on the man' (deletion), 'the man tears a net' (nullification—half-transitive, which is much more common); and (iii-b) in the case of an impersonal nonagentive base or its derivative base by deleting A;

nayiq cikkuuq 'the seal is frozen' (cp. *nayiq cikkuu* 'the seal is frozen' lit. '[the cold] freezes the seal').

6.3.4. COMPLEX-VERB SENTENCES

The syntactic verb-elaborating postbases 33 |+cic-| ~|+vkaγ-|, 35 |+sqə-|, 37 |+zukə-|, and 39 |+ni-| expand a verb base by adding A into a complex verb, where the primary verb base belongs to the (morphologically as well) embedded structure and the postbase to the matrix. The derived complex verb is nonagentive. The case is assigned from within the embedded structure by the rules in 6.3.3. Nominal reduction may either be made by (ii) above or by (iv) shunting A of the embedded verb into the allative case and by promoting the next higher nominal: *aḡnam aḥunMun nayiq nəḡasqaa* 'the woman tells (|+sqə-|) the man (*aḥunMun* all.) to eat the seal' versus *aḡnam aḥun nayiḡmək nəḡasqaa* 'the woman tells the man to eat a seal' (cp. *aḥu'təm nayiq nəḡḡaa* 'the man eats the seal' versus *aḥun nayiḡmək nəḡḡuq* 'the man eats a seal', 6.3.3.), *aḡnaq aḥunMək nəḡasqiiuq* 'the woman asks (half-transitive |+γ*i-|) a man to eat (something); the woman asks (someone) to eat a man'.

Albeit to a limited extent, a complex verb can be nominalized or further expanded by one or more of its own elaborating postbases: *avayγukətəqa* 'the one I thought had left' (|+zukə-|, 23 |-lγ-|), *pisuḡniqatxuug* 'he briefly (50 |-qaγ-|) mentioned (|+ni-|) that he went hunting'. Two or more complex-verb-forming postbases can occur in a word to bring forth a multilayer structure: *əḡu'ḡinisqiu aḥunMun* 'ask (|+sqə-|, |+γ*i-| above) the man to say (|+ni-|) that she is washing dishes!'

6.3.5. COMPLEX VERSUS COMPOUND SENTENCES

A verb with one or more of its own core nominals (and adjuncts) can be embedded into a sentence to form a complex sentence. The main clause has an independent mood verb, while the dependent clause has a dependent mood verb: *aḡnat iqfatxuut uitəḥ kuvyiita* 'the women were berry-picking (*iqfatxuut* indic. 3pl.) because their own husbands (*uitəḥ* abs. 3Rpl.—pl.) were net-fishing (|kuvya[+ḡ*ata] connec. 3pl.)'. A compound sentence, on the other hand, consists of two clauses each having an independent mood verb, with a conjunctive word typically occurring between them. Various combinations of moods take place, but the second clause tends to have a participial or (independently used) subordinative verb: *aḡnat iqfatxuut uinīt-x" a* (abs. 3pl.—pl.) *kuvyalḡiit* (part. 3pl.) or *aḡnat iqfatxuut uinīt=tu kuvyalu'təḥ* (subord. 3Rpl.) 'the women were berry-picking, and their husbands were net-fishing' (note the syntactic independence as shown by *uinīt* with the third-person suffix instead of *uitəḥ* with the reflexive third-person suffix in the complex sentence above, which refers back to the main clause subject), *aḡnat qama'ni taḥətəxuanka iqfaḡlutəḥ* (subord. 3Rpl.) 'I saw the women up there, and they were berry-picking', cp.

aḡnat qama'ni taḡətxuanka iqfaɣcəlu'ki 'I saw the women up there berry-picking' (*iqfaɣcəlu'ki* subord. 3pl. '[having] them berry-pick', cf. 6.2.6.).

7. NOMINALS

Nominals are inflected for case, number, and person. They fall into subclasses: nouns, which have full inflection, and numerals, pronouns, demonstratives, participles, deverbal nominals, and interrogatives, which have less inflection and highly limited expansion by postbases. (The morphological and syntactic peculiarities of those other than nouns will be dealt with in 7.4.). Some deverbal nominals (7.4.5.) function as nominal clauses and relative clauses. A nominal stands as the subject or object of a verb or as an adverbial or adnominal adjunct depending upon the case in which it occurs, but it is interjectional otherwise. Two or more (typically contiguous) nominals may constitute a nominal phase (appositive, coordinate, or adnominal relative, 7.5.), which functions syntactically as a single nominal. The language has neither gender (noun class) nor noun classification.

Every noun is obligatorily inflected for one of three numbers (7.1.) and one of seven cases (7.2.), and optionally inflected for the person of a possessor (7.3.). The number and case suffixes for unpossessed nouns are in table 6. The suffix complexes used on possessed nouns to index the number and case of the noun and the person of the possessor are in tables 10, 12-13.

7.1. NUMBER

The three numbers are singular, dual, and plural: *yuk* 'one person', *yuuk* 'two persons', *yuut* 'persons (more than two)'; *aḡyaqa* 'my boat' (see 7.3. for the possessor 'my'), *aḡyanka* 'my boats (more than two)'; *aanaxka* 'my mother and father (lit. my two mothers)', *maḡ'luqətxiik* 'a grandmother and her grandchild (dual part. with |mauḡluḡ-| 'grandmother' and 83 |-kə-|) all in absolutive case. A composite object may be expressed by a plural or dual noun, while the singular form, if used at all, refers to one part of that object: *akxət* (pl.) 'a ladder or ladders' versus *akəq* (sg.) 'rung', *qəḡaxka* (1sg.—dual) 'my nose', *taḡyuxxaam ikamḡyak atu'ḡyak* 'the boy is using the dog sled (*ikamḡyak* dual)'. The generic singular is used (*yuum umyuyḡaa* 'the human mind') as is singular ('part of') for plural ('some of') in a certain category of nominals: *yuum illii* (abs. 3sg.—sg., |ila-|), *x'atən aḡu'quq* 'some people are like this', *pisuḡyaḡam illii naftua'qa* 'I don't know some of the hunting methods'.

7.2. CASE

The seven cases are absolutive (called objective by some authors), relative (or subjective), ablative-modal, allative (or terminalis), locative, perlative (or vialis), and equalis (similaris or conformativa). The absolutive and relative cases are mostly syntactic, and

the others generally adverbial, though there are syntactically specified uses of some of these. See 6.3.3. and 6.3.4. for the syntactic case markings of nominals. All the adverbial cases except the equalis are locational, but their frame of reference may be either spatial or temporal.

7.2.1.

The absolutive case indicates the topic of predication. The subject of an intransitive verb and the object of a transitive verb, so long as they refer to the third person, occur in the absolutive form, agreeing with the verb in number (see 7.2.5.[2]): *aḡnak taiyuk* 'the two women (*aḡnak* abs. dual) (they) are coming (*taiyuk* ind. 3dual)', *aḡnat asi'kanka* 'I like (them) (*asi'kanka* ind. 1sg.—3pl.) the women (*aḡnat* abs. pl.)', *aḡnaq əḡammətuq* 'the woman (*aḡnaq* abs. sg.) (she) is in the house (*əḡammətuq* ind. 3sg., 91 |+mət-|) (information on the location of the [already known] woman, who is the topic) (cp. *aḡnaḡtaḡqəxtuq əḡəmmi* 'there is a woman [*aḡnaḡtaḡqəxtuq* ind. 3sg., 79 |+taḡq-|] in the house [*əḡəmmi* loc. sg.]—information on the existence itself of a woman, who is not the topic).

The absolutive singular form of a noun for a period of time may be used as an adverbial adjunct referring to the most recent instance of the time denoted, while the locative form (7.2.5.(1)) expresses more general time: *unuk təki'tətxuut* 'they came last night (*unuk* abs. sg.)' (cp. *unuḡmi təki'tətxuuq* 'he came at night (not in the daytime) (*unuḡmi* loc. sg.)', *kiak* 'last summer' (cp. *kiaymi* 'in summer').

A vocative form, characterized by a doubling of the last vowel of the absolutive form unless it is in a vowel cluster (*ii* in the case of |ə|), is used in addressing persons at some distance or in an exaggerated way: *aanaa x'antua* 'mother, I'm here!', *qəḡaxpalliik* 'you (sg.), (one with: 13 |-ly-|) big nose!', *tupaxci'am ukkuut* 'you (pl.) (here), wake up!' (see 7.4.3.1.). But in addressing persons near the speaker truncated forms are commonly used: *qimux* 'dog!' (cf. *qimuxta* 'dog'), *aḡat* 'Angalgaq!' (person's name), *us* for *uzzuuq* (7.4.3.1.). See also 7.2.5.(2).

7.2.2.

The relative case marks a nominal that is in construction with another nominal (as "genitive") or with a transitive verb (as "ergative").

A relative nominal in construction with a nominal refers to a possessor as the adjunct, and the other nominal (referring to a possessed entity) as the head must be inflected with a third-person possessive-pronominal suffix ('his', 'their'—7.3.) agreeing in number with the relative nominal. The two nominals linked in this construction, which constitute an adnominal relative phrase (7.5.3.), tend to occur contiguously in a sentence, the adjunct usually preceding the head. The case of the head nominal is determined by the syntactic role

|+paa| (table 5, no. 2) occurs in connection with the enclitic |=li|: *cəta'mi-li asixpaa* 'my, the weather is fine!'

7.2.6.

The perlative case indicates: (1) Location or time through or along which an event takes place: *kuixpim cəNNiikun ayaxciqu'kuk* 'we (dual) will go along the bank (*cəNNiikun* perl. 3sg.—sg.) of the Yukon' (*kuixpim* rel. sg., lit. 'big river'), *nəytəyməŋ kiŋnu'a:kun yu'ya'liya'glutəŋ* 'after (*kiŋnu'a:kun* perl. 3sg.—sg., lit. 'its back part') their meal (*nəytəyməŋ* rel. 3Rpl.—sg.)', they go for (|=liya'g-|_v) dancing'. (2) A part of the whole that is affected or damaged: *i'yuvyūn#qaa qimuxtəm kəxət'xua'tən* 'did the dog bite you (sg.) on your (sg.) leg (*i'yuvyūn* perl. 2sg.—sg.)?' (3) Instrument or means: *ənyaməxtəxun unnua'qu tək'i:ciiqut* 'they will arrive in their (own) boats tomorrow'.

7.2.7.

The equalis case indicates: (1) an entity that is similar or in some way equivalent to another: *mikəl'huq ata'mitun ayu'quq* 'the child looks like his (own) father (*ata'mitun* equal. 3Rsg.—sg.)', *nalliat kassat yuppixtun qantua* 'which one (7.4.6.) of the White men (*kassat* rel. pl.) speaks (like an) Eskimo?', *ukuk pilu'yuuk tun-yuyaxka qultun* 'I wish to sell this pair of boots for 10 dollars'. (2) Point of comparison with a verb base expanded by the postbase 45 |+ta-|_v: *una miktəuq tautun* 'this is as small as that (*tautun* equal. sg.)'. (3) Manner and time with 20 |+uciq-|_v: *niiyucimtun* 'as soon as I heard', *pita'cimtun* 'as hard as I can' (with 45 |+ta-|).

The equalis and the locative of comparison (7.2.5.(3)) may follow another adverbial case ending: *qilaymitun* 'as in heaven', *ənən maanimi kiixtun'yuq* 'your (sg.) house is warmer than here (*maani* loc. 7.4.3.2.)'.

7.3. PERSON (POSSESSOR)

A noun may be inflected with a possessive-pronominal suffix indexing the person of a possessor: *ənyaput* 'our boats (abs. 1pl.—pl.)', *panixtək* 'your (dual) daughter (abs. 2dual—sg.)'. The person category of possessor is the same as that for verbs. The reflexive third person refers back to the subject of a sentence: *pani'ni asi'kaa* 'he likes his (own) daughter (*pani'ni* abs. 3Rsg.—sg.). Unlike the situation with verbs, the person inflection for nouns is obligatory only in certain cases. A third-person suffix is obligatory as a cross-reference on the head nominal of an adnominal relative phrase: *ənu'təm pannia* 'the man's (*ənu'təm* rel. sg.) daughter (*pannia* abs. 3sg.—sg.)'; *əŋamta atxit* 'our uncle's (*əŋamta* rel. 1pl.—pl.) names (*atxit* abs. 3pl.—pl.)'. But the third-person suffix is also used without an adjunct nominal as the equivalent of 'his, its, their, etc.': *pannia asi'kaa* 'he likes his (another's) daughter', *natu'yayu'tanka atxit* 'I have forgotten their names'.

A few subclasses of nouns, taken as inalienable, are obligatorily inflected for person: (1) body part terms

(*camna ityaqa puvvuq* 'my foot down there is swollen'), (2) nouns of location or part-to-whole (*canimətəNi uitəuq* 'he is beside us'), and (3) kinship terms (*aatan tək'i-tuq* 'your (sg.) father has arrived'). See 7.4.1. for numerals with person inflection.

7.4. SUBCLASSES OF NOMINALS

Subclasses other than nouns have their own morphological or syntactic peculiarities.

7.4.1. NUMERALS

There are separate numeral bases for the units 1 through 6, 10, 15, and 20 as listed in table 15. The lacunae are filled by expanding these bases (i.e., 7 and 8 by adding |+nly-| to bases of 2 and 3, but 9, 14, and 19 by adding |+ŋun'iyatə'ya'g-| to bases of 10, 15, and 20 respectively) or by combining two or more numerals (i.e., 11 through 13 by 10 plus 1 through 3, 16 through 18 by 15 plus 1 through 3; 40, 60, 80, and 100 by 2, 3, 4, and 5 plus |lipiaq-| (from |lipiy-| 'limb') in the appropriate number: 30, 50, 70, and 90 by 20, 40, 60, and 80 plus 10; numbers within the decades by 20 plus 1. etc.) For 1,000 the Russian loanword |tiitsisaaq-| is used.

The absolute ending is |+θ| for the bases 1, 15, 20, and those with |+ŋun'iyatə'ya'g-|, |+γ| for 2, and |+n| for the rest: *attauciq* 'one', *qul'ŋun'iyatə'x* 'nine', *mal'yuq* 'two persons', *piŋa'yun təŋsuutət mittut* 'three airplanes have landed' (*piŋa'yun* in apposition with *təŋsuutət*). For the other cases the bases take the unpossessed noun endings (table 6) of the appropriate number: *attaucimi* 'in one', *kipu'tət'xua mal'yuxtun* 'he bought it for two dollars (*mal'yuxtun* equal. dual)', *qul'ŋun'iyatə'ŋnək kaukan* 'at nine o'clock' (lit. 'when it strikes nine').

Numeral bases expanded by |-yqu-|_{nn} with the ablative-modal ending of the appropriate number function as numbers of repetition: *nunniinun ayat'xuuna mal'yuxquy'nək* 'I visited his village twice (*mal'yuxquy'nək* abm. dual)'. Except for |ciuqliq-| 'the first' (from |ciu-| 'front') and |tuŋliq-| 'the second' (from |tuŋə-| 'direction'), numeral bases with a third-person possessive-pronominal suffix function as ordinal number: *cəta'miit* '(their) fourth (3pl.—sg.)', *i'ŋnia'məy'nuk ciuqliat* 'the first of our (dual) children'.

7.4.2. PERSONAL PRONOUNS

Personal pronouns refer only to humans. Only the (non-reflexive) third-person pronouns distinguish absolute and relative forms. The other pronouns have a single syntactic case, used in both functions. The first-person

Table 15. Numeral Bases

1	atauciq	4	citama	10	qulə
2	mal'yu	5	talima	15	akimiaq
3	piŋayu	6	a'yvinly	20	yuina'y

NOTE: The forms in this table are phonological representations.

pronouns are possibly derived from the demonstrative base |u-| (cf. *x^aani* ‘here’) and show resemblance in formation to demonstrative pronouns. Adverbial case endings are suffixed to |waŋ-| (singular) or |waŋku-| (nonsingular) (*x^aaŋtun* ‘like me’, *x^aaŋkuɣnun* ‘to us (dual)’). The variant |wiina| is more emphatic than |wii|. The adverbial cases for the other persons are made by inflecting the base |əl(ə)-| like a possessed noun: *əlminun* ‘to himself’, *əlpətəɣnun* ‘to you (dual)’, *əltaitxun* ‘through them’.

Since personal pronominal reference is made to the subject, object, and possessor by endings, the use of personal pronouns is highly restricted. They are employed for the sake of focus, contrast, narrative or expressive effect, and enumeration, as well as where reference to a person cannot otherwise be made: *əltaita pikkaat* ‘it belongs to them’, lit. ‘they (*əltaita* rel. pl.) have (83 |-kə-|_{NV}) it’, *x^aiina aataka kipwcestəŋNjuuq* ‘my father is a storekeeper’, *x^aiina aataka aanaka=tu təkɪtətɣuukut* ‘I, my father, and my mother arrived’, *əlliini uitauna* ‘I am staying with him (*əlliini* loc. 3sg.)’, *taŋəxtuq əlminək* ‘he sees himself (in the mirror)’, *x^aaŋnuuq* ‘it’s me’, *caŋa’təŋyittua əlpət=(t)am* ‘I am fine, and you (sg.)?’, *aŋyani əlpənun aqfaqqaasqaa* ‘he wishes you (*əlpənun* all. 2sg., 7.2.4.(2)) to go to get his (own) boat’.

The bases |ila-| ‘part, relative’ and |aipaŋ-| ‘other (of two), partner’, which are generally inflected for person, function like pronouns: *ila’ci* ‘one of you’, *aŋnat illiita iŋnia’qaa* ‘he is the child of one of the women’ (*aŋnat* ‘women (rel. pl.)’, *illiita* ‘one of them (rel. 3pl.—sg.)’, 83 |-kə-|_{NV}); *aŋyayma aipaak* ‘one of my boats (dual)’. See 7.1. and 7.4.6. also.

7.4.3. DEMONSTRATIVES

Demonstrative bases may be semantically classified into three groups as in table 16. The important factors in locating an entity or referring to a location by means of a demonstrative are its expanse or motion and the areal segments of the speaker’s surroundings in relation to some topographical feature like the river or the sea, toward which much of the life of the Yupik people is oriented. The areal segmentation is correlated with verbs (see ‘to go’ in 10.). The “extended” (E) demonstratives indicate a broad location (or temporal duration) or an entity, not narrowly localized, that is horizontally lengthy or moving. The “nonextended” demonstratives indicate a more specific location (or time) or an entity that is stationary (or moving within a confined area) and can be precisely located. The basic difference between the “near” nonextended (N) and the “far” nonextended (F) is a matter of distance and distinctness. An N demonstrative refers to an entity or a location that is relatively near, distinct, and visible, while an F demonstrative refers to an entity or a location, indistinct and typically invisible, that is more

distant than a corresponding N one. All the demonstratives are deictic, except that |im-| refers to shared knowledge and that |tau-| and |tamat-| can be either deictic or anaphoric. The opposite of |uk-|, motion away from the speaker (or time just passed), can be expressed by |aw-|.

Demonstrative bases occur as pronominal or adverbial demonstratives. Expanded by verbalizing postbases, they occur in verbs as well. Nominal and verbal endings are suffixed to certain expanded bases.

7.4.3.1.

Pronominal demonstratives occur with an unpossessed noun ending (table 6). The bases have to be expanded by |+na-| to take an absolutive singular ending, by |+u-| (–|∅| after |tau-|; table 5, no. 3) to take a nonabsolutive singular ending or a verbal ending for singular subject, and by |+ku-| to take a nonsingular ending or a verbal ending for nonsingular subject: |u-|: abs. sg. *una* (< |u+na|+∅|), loc. sg. *uumi*, perl. pl. *ukutxun*; |am-|: abs. sg. *amna*, equal. sg. *ammutun*, all. dual *amkuɣnun*. Most pronominal demonstratives have vocative forms. The singular is formed by adding |+zuuq| directly to the base, the nonsingular by doubling the last vowel of the absolutive form (7.2.1.): |u-|: sg. *uzzuuq*, pl. *ukkuut*. The bases |kan-|, |mat-|, and |tamat-| have irregular forms, listed here in the order absolutive singular form, vocative singular form (if used), nonabsolutive singular base, and nonsingular base: *kanna*, *kaccuuq*, |kātu-|, |kanku-|; *manna*, *maccuuq*, |mātu-|, |maku-|; *tama’na*, |tamatu-|, |tamaku-|. When a base ending in |k| is expanded by the nonsingular marker |+ku-|, the sequence |k+ku| becomes *ky+ku*: |ik-|: abs/rel. pl. *ikəxkut*. A limited number of postbases occur with an expanded pronominal demonstrative base: 4 |-cuaŋyā-|: *una’cua’x* abs. sg. ‘this small one’, *uucuaŋmi* loc. sg., *uku’cua’yaat* abs/rel. pl.; 94 |+ŋu-|: *uunuuq* ‘it is this one’, *ukkuuyut* ‘they are these ones’.

Table 16. Demonstrative Bases

Extended (E)	Nonextended		
	Far (F)	Near (N)	
mat-		u-	‘here (near to first person)’
tamat-		tau-	‘there (near to second person)’
		im-	‘aforementioned or known’
		uk-	‘approaching (space and time)’
aw-	am-	iŋ-	‘over there’
aŋ-	akm-	ik-	‘across there, on the opposite’
paw-	pam-	piŋ-	‘back, up there, away from river’
paŋ-	pakm-	pik-	‘up, above there’
un-	cam-	kan-	‘down, below there, toward river’
uŋ-	cakm-	uŋ-	‘out there, down river, toward exit’
qaw-	qam-	kiuŋ-	‘inside, up river, inland’
qaŋ-	qakm-	kəx-	‘outside (immediate vicinity)’

NOTE: The forms in this table are phonological representations.

A pronominal demonstrative stands by itself or in appositive phrases with another nominal (7.5.1.): *una cauya* ‘what is this (N)?’, *manna ənəvvut nəŋtixtuq* ‘this (E) house of ours is cold’, *uumi cassami* ‘at this hour’, *mattumi iya:lumi* ‘in this month’, *unnumək nayiymək pisu:qataxtua* ‘I am about to hunt that (E) seal (in horizontal motion) down yonder’, *kanna anyaq kittəqa:taxtuq* ‘that (N) boat down there is about to sink’, *camna kuixpiim paina qailixtuq* ‘it is rough down there (F) at the mouth of the Yukon’. The vocative form is used for address: *tuppii=am uzziuuq* ‘you (sg.) (here), wake up!’ Examples of |aw-| versus |uk-|: *aγːziuuq nəqsuqa:taxtutan#qaa* ‘hey, you (sg.) (moving away), are you going fishing?’, *atam ukNa anyaq ayyiixtətxia ucippaka:pixtuni* ‘look, here comes that boat with a big load!’ |im-| refers to an entity only in consciousness, which has no connection with physical location (often implying that the speaker cannot recollect the name of the entity): *imna tuqu:təq akxːauwaq tuunyaluuq* ‘that person who died yesterday was a shaman’. It may occur in apposition with a deictic demonstrative: *imna paɣna* ‘that one back there (shared knowledge)’. In the Norton Sound dialect the prefix |ta-| (prevocalic)~|ta:z-|(preconsonantal) occurs with any demonstrative base instead of an appositive phrase with |im-|. The expanded base |ima-| occurs only as a particle without further suffixation or in the particle |tayima| ‘somewhere, there (out of sight)’.

7.4.3.2.

Adverbial demonstratives have expanded bases with |+a-| (blocking the accentuation of P1): |ika-| from |ik-|. Specific changes involved in the formation of expanded bases are: |(C)ayaa-| from |(C)ay-|, |kia-| from |kiuγ-|, |(ta)maa-| from |(ta)mat-|, |wa-| from |u-|, |tua-| from |tau-|. Adverbial demonstratives occur only in the adverbial cases, but the case markers that are suffixed to the expanded base are somewhat different from those in table 6: loc. |+ni|, all. |+vət|~|+tmun|, abm. |+kən|, perl. |+xun| (*uuxun* instead of **xːaxun* from |wa-|), equal. |+tən| (occurring only with |wa-| and |tua-|). The allative |+vət| is more particular or definite than |+tmun|, but the bases |wa-|, |tua-|, and F demonstratives only take |+vət|: *pi:ni* ‘back there’ (cf. *piŋnumi* ‘in the one back there’), *maatMun* ‘toward here, this area’, *maavət ata:nəq itətxuuq* ‘the stranger came in here’, *paɣyaani inɣim qaiŋani yuymək taŋətəxuuq* ‘he saw a man above there on top of the mountain’. The expanded adverbial demonstrative base followed by |=i| is interjectional, though in the case of F demonstratives the expanded base occurs without |=i| in this function and |waniwa| is used instead of *|wa=i|: *taŋ maa=i ayyiixtətxia təŋsuun* ‘look, here comes the plane!’, *tua=i ayayniilta* ‘there (now), let us begin!’ The bases |wa-|, |maa-|, and |tua-| in particular occur in various particles (9.1.). The expanded bases followed by |+t-|

function as nouns of location and are inflected for person (which indicates the point of reference; 7.3.): |ikat-|: *ika:tii* ‘area across it’, *ika:təmkun* ‘(through) across me’; |awat-|: *awa:təmtəNi caɣa:yiit amləxtut* ‘there are a lot of bears around us’. Some demonstratives do not make these nouns in |+t-| and are replaced in this function by nondemonstrative bases: |qulə-| ‘upper part, 10’ (for *|pikat-|), |kəlu-| ‘farther up behind’ (for *|piat-|), |kət-| ‘area toward river’ (for *|kanat-|). The expanded base may occur with a few postbases: *pika:nətuq* ‘it is up there (91 |+nət-|_{sv})’. See also 86 |+viγc-|~|+tmuγc-|_{nv}.

7.4.4. PARTICIPLES

The participial mood marker (6.2.2.) functions as a nominalizing postbase to form a nominal participle. The intransitive nominal participle (|-lɣiaq-|) is not inflected for person: *nəɣəlɣia* ‘one who is eating’, *taqu:malɣiit* ‘complete (lit. finished) things’, *taqu:manɣilŋuut* ‘incomplete things’, *taŋəxkək aipaqa:txiik* ‘(you sg.) look at the married couple (dual)’, *nayixculɣia:ɣuŋa:tuq* ‘maybe he is (one who is) going out seal hunting’, *atsat nəɣkai* ‘the berries (the ones) he is eating’ (*nəɣkai* abs. 3sg.—pl.). The intransitive marker followed by |-ni| may mean ‘when(ever)’: *nautuulɣiani it(əɣ)laxtuq* ‘when (someone is) sick, he always comes in’.

7.4.5. DEVERBAL NOMINALS

Deverbal nominals, formed with the nominalizing postbases (8.2.), show different types of nominalization.

7.4.5.1.

A clause with one or more of its own core nominals is changed by 23 |-lɣ-| into a nominal phrase of past connotation that functions as a relative clause with the absolutive nominal as head: *aŋun atsanək nəɣtəq* ‘the man who ate berries’ (*aŋun* ‘man’ and *nəɣtəq* ‘one who ate (abs. sg.)’ constituting an appositive phrase, 7.5.1.) from *aŋun atsanək nəɣɣuq* ‘the man is eating berries’; *aŋu:təm atsat nəɣətɣi* ‘the berries which the man ate’ (a combination of the appositive *atsat nəɣətɣi* ‘berries, ones he ate (abs. 3sg.—pl.)’ and the adnominal relative (7.5.3.) *aŋu:təm nəɣətɣi* ‘ones the man ate’) from *aŋu:təm atsat nəɣɣai* ‘the man is eating the berries’.

7.4.5.2.

A patient nominal is formed with 27 |+γ*aq-| (perfective) or |-kəŋaq-|. An inflection for person indicates the agent: *iqqaiɣaq* ‘washed clothing’, *iqqaiɣanka* (abs. 1sg.—pl.) ‘ones I washed’; *anyaq atu:qəŋaa* ‘the boat he is using’.

7.4.5.3.

An agent nominal is formed with 24 |+st-|, which requires a nonagentive verb base to be expanded by 38 |+γ*i-| (see 6.3.2.). An inflection for person indicates the patient: *kəxəsta* ‘biter, one who bites’, *kəxəstii* ‘his biter, one who bites him’, *əli:caɣista* ‘teacher’ (|əlicaɣ-| ‘to teach’).

7.4.5.4.

A gerundive nominal is formed with postbases such as 29 |-nŷ-|, 22 |-tŷ-|, and 20 |+_iuciq-|. Gerundives with |-nŷ-| have no person inflection: *əmənnəq unnua:kumi assiitkaqa* 'I don't like drinking in the morning'; *əməttəq unnua:kumi assiitkaqa* 'I don't like to drink in the morning'; *ayu:qucia* 'its (way of) resembling, condition', *qaitun ayu:qucciitaqa* 'I don't know how it is' (92 |+ŋit-|_{nv} 'to lack').

7.4.6. INTERROGATIVES

An interrogative is required in information-asking questions with an interrogative verb or (occasionally) a participial or optative verb: see 6.2.3. for interrogative sentences. Interrogatives are a morphologically miscellaneous albeit functionally distinct class of words. Some of them do not inflect: |qaitun| 'how'. Others are inflecting words, though they do not all inflect in the same way. |ca-| 'what' takes the unpossessed noun endings: abs/rel. pl. *cat*, all. sg. *camun*, loc. sg. *cami* (also 'when [specifically], sometime'). The general interrogative for reason *ciin* 'why' comes from |ca-| 'to do what, something' (<|ca|+ŋan| connec. 3sg., cf. 6.2.5.1.), from which base a person-specific interrogative is formed as well: *caavət* 'why you (sg.)', *caaməŋ* 'why they'. |qafci-| 'how many' inflects like a numeral base: abs. *qafcin*, abm. *qafcinək*. |naliŷ-| 'which', the interrogative equivalent of |ila-| (7.4.2.), inflects the same way: *nalliat* abs. 3pl.—sg. (*kassat* rel. pl.) 'which one (of the White men)', *naliŷpuk* 'which one of us (dual)'. |kit-| 'who' inflects like a pronominal demonstrative, but the absolute and relative singular are *kina* and *kia* respectively, and the expanded base for adverbial-case singular is |kitu-| and that for the nonsingular is |kinku-|: loc. sg. *kitu:mi*, all. pl. *kinkunun*; inter. 2sg. *kittuuzit* 'who are you (sg.)?', *kia pikkaanək* 'for whom (lit. for whose future belonging, cf. 6 |+k*aq-|)?' (as in response to *naaŋua:mək cana:qataxtua* 'I am going to carve a toy'). |na-| 'where' inflects like an adverbial demonstrative: loc. *nani*, abm. *nakən*, perl. *naxxun*, all. *natMun* (not **navət*), *nattii* 'where in relation to it'. |qaŋvaq-| 'when (in the past)' and |qaku-| 'when (in the future)' inflect, but to a very limited extent.

Some interrogatives function like indefinite pronouns or adverbs when used with a noninterrogative verb: *kina taiyuq* 'somebody is coming', *kitu:mək taŋətxunŷitu:kut* 'we did not see anybody', *nəŋŋatuq tayi:ma nani caŋxītqumi* 'he may be eating now somewhere in the opening'.

7.5. NOMINAL PHRASES

Two or more nominals, which are typically contiguous, constitute a nominal phrase: appositive, coordinate, or adnominal relative.

7.5.1.

In appositive phrases the two or more nominals stand in apposition, agreeing in number and case: *piŋa:yun təŋsuutət* 'three airplanes', *aŋu:təm aŋyaa nuta:ŷaq aŋŋuq* 'the man's new boat is big' (*nuta:ŷaq* 'new one' in apposition with the adnominal relative phrase *aŋu:təm aŋyaa* 'man's boat'), *iŋnia:ma aŷŷim* 'of my naughty child' (note the unpossessed *aŷŷim* 'naughty one').

7.5.2.

In coordinate phrases the two or more nominals in the same case are connected by a conjunctive particle or enclitic (such as |wattu| 'or', |cali| 'and also', |-lu| 'and'): *aŋnaq aŋu:tək=tu* 'the woman and two men', *attauciq malŷuk xⁿattu piŋa:yun* 'one, two or three'.

7.5.3.

In adnominal relative phrases a relative nominal as the adjunct is in syntactic subordination to the head nominal (7.2.2.). An adnominal relative phrase can be an adjunct to another noun, constituting a higher adnominal phrase: *aŋu:təm panniian atxa* 'the name of the man's daughter' (*pannian* rel. 3sg.—sg.) (cf. *aŋu:təm pannia*, 7.3.).

8. POSTBASES

It is postbases that make Yupik a somewhat unique polysynthetic language (see 1.2.). Not only are they outstandingly productive in derivation, but they also have important syntactic functions and are relevant to speech styles as well. Many postbases are lexical in that they are very concrete in content, but there are no lexical or nominal suffixes like those in the Wakashan, Chimakuan, and Salishan languages that seemingly function as core nominals inside a verb. Some postbases may occur more than once in a word. The number of postbases that occur in a word is potentially unlimited, though in natural speech it rarely exceeds half a dozen. By contrast with the wide freedom of the order of words within a sentence, the relative position of postbases within a word is semantically or functionally determined. In general a postbase immediately follows the base or expanded base to which it is directly related. Thus the order of postbases may affect the meaning: *ayaxciqNia* 'he said she would go' versus *ayaynici:qaa* 'he will say she went' (both being indic. 3sg.—3sg.; 46 |+_iciqə-|_{vv} and 39 |+ni-|_{vv}).

No postbase is known to be a reduced form of a once independent base. A few postbases show combination or fusion of a case marker with some derivational element: 16 |+miu-|_{nn}, 86 |+viŷc-|_{nv}, 91 |+mət-|_{nv}. The postbase |-klaayc-|_{vv, nn} 'o'clock' (from English) is an isolated example reminiscent of a Chinook Jargon word borrowed as a suffix in Quileute (Boas 1947: 225). In some cases an obsolete postbase may be detected in a number of bases of a particular semantic category,

though their primary bases may not be deducible. Note, for example, the relative abundance of |-quq-| in body-part terms.

The following list, far from exhaustive, gives only the more productive postbases grouped by the functional classes (8.1.–8.4.). Productivity varies even among these. Some are combinable with any semantically appropriate base of a base class, while others are affiliated with bases or endings of a certain category. Those postbases that belong to two or more of the classes are listed only once. A few postbases outside the four classes are miscellaneous in function (8.5.).

8.1. NOMINAL-ELABORATING POSTBASES (_{NN})

See also 21, 23, 25, 71, and 72.

1 |+pay-|~|+vay-|(optionally after |t|)_{NN, VN}, |-pay-|~|-vay-|_{VN, NV} (often disturbs accentuation) '(one with) big, all, during (the time); intensely' (*ciutəxpak* or *ciulvak* 'big ear', *unuxpak* 'all night, during the night'; *pámyuxpak* 'big tail', *pamyúxpak* 'you, big tail! (expressive)'; *kəxpəγγaa* 'it bit him hard'; *nə́ǵəppaxtuq* 'he eats a lot').

2 |-piγ-| 'genuine' (*atpia* 'his real name', *yuppik* 'Eskimo').

3 |+taγ-| 'pertaining to' (*yuppixtaat* 'Eskimo things').

4 |-cuəγ-|_{NN} (table 5, no. 5), |-cuəγ-|_{VN} 'small, little' (*ənəccuax* 'small house'; *taicua'qaa* '(you sg.) please come for a moment').

5 |-cuŋaq-|_{NN}, |-cuŋaq-|_{VN} 'cute, dear' (*nukkacu'ŋaq* 'cute Nuk'aq'; *aya'cuŋaxtuq* 'he (dear) leaves').

6 |+k*aq-| 'future' (*anyaxkaq* 'material for a boat', *uitavixkaq* 'place where one will stay'), cf. 23 |-tγ-| and 27 |+γ*aq-|.

7 |-kayγ-|_{NN, VN} 'respectful, big, great(ly)' (*una'kayak* 'this [respectful] one'; *aya'kayaxtuq* 'he [respectful] leaves').

8 |-qva-| 'advanced in direction or time' (*unukfani* 'late at night', *ukaqfani* 'very near', *quləqfani* 'far way up').

9 |-qliγ-| 'one located in' (*quləqliq* 'one on top', *quləqlika'caax* 'the highest one' with |-kacaəγ-| 'very, most').

10 |-tuy-| (table 5, nos. 1 and 12) 'bad, old, kind of' (*cəta'tuk* 'bad weather').

11 |-tyut-|_{NN, VN} 'partner in' (*atətxutka* 'my namesake'; *ayətxutkaqa* 'he is my traveling companion' with 83 |-kə-|).

12 |-xəγ-| 'little bit of' (*cuya'xaq* 'a little tobacco').

13 |-lγ-| 'one having' (*pupsulək* 'crab, one with pincer', *aŋnaq i'ŋniəxpələk* 'woman who has a big child', *qaya'lək anyamək=lu* 'one having a kayak and a boat', cf. 7.2.3.(3)).

14 |+γ*uyəγ-| (table 5, no. 6) 'multitude of' (*anyəyu'yaat* 'many boats').

15 |-yuylyū-|_{NN, VN} (contracts |yuy| to 'y' after an unaccented vowel but deletes the first |y| after an accented

vowel) 'poor, sorry' (*ənyəγ'luq* 'boat (poor)', *qaya'uyluq* 'kayak (poor)', *aca'yuyluq* 'aunt (poor)' with no P9 deletion of |γ|; *aya'yuyluxtuq* 'he (poor) leaves').

16 |+miu-| (deletes final |q|, P3i) 'inhabitant of' (*cəNaγmiu* 'coast dweller', *cammiuŋuzit* 'where are you (sg.) from?').

17 |+nku-| 'associate' (*upsankuuγut* 'they are Upsaq's family').

18 |+ŋut-| 'supply of' (*mu'γautəka* 'my wood supply').

8.2. NOMINALIZING POSTBASES (_{VN})

27 selects binominal bases, and 30 monominal ones. 21 and 24 require a nonagentive base to be expanded by 38 |+γ*i-| (6.3.2.). See also 1, 11, 7.4.4. and 7.4.5. Some deverbal nominals are lexicalized nouns.

19 |+ut-| (table 5, nos. 1 and 13) 'means, time, cause' (*cavun* 'oar', *nautuun* 'illness', *kizzuttiini* 'when he was drowned').

20 |+uciq-| (table 5, nos. 1 and 13) gerundive nominal (7.4.5.4.) (*yuucia* 'his (way of) living', *taktaccia* 'its length' with 45 |+ta-|).

21 |+cuut-|~|+suut-|(after vowel)_{VN, NN} 'instrument, means' (*cali'suun* 'tool', *kəppissuun* 'wedge'; *i'γəluxcuun* 'calendar').

22 |-tγ-| gerundive nominal (7.4.5.4.) (*tama'təq* 'being lost', *tamatqa* 'my being lost', *ali'ŋuq aya'təxkami'nək* 'he is afraid to go' with 6 |+k*aq-|).

23 |-tγ-|_{VN, NN} relative clause (past) (7.4.5.1.); 'former' (*tama'təq* 'one that was lost', *tamatqa* 'one I lost', *tama'γiitəq* 'one who lost something'; *uitxa* 'her ex-husband').

24 |+st-| (table 5, no. 14) agent nominal (7.4.5.3.) (*nəqsuxta* 'fisherman' with 81 |+suγ-|, *kəxəstətxa* 'one who bit him' with 23 |-tγ-|).

25 |+viγ-|_{VN, NN} (postconsonantal |t| deletion of P15; table 5, nos. 1 and 12) 'place' (*mizvik* 'airport', *qəmaxfik* 'bag', *quya'wikkaa* 'he is thankful to him' with 83 |-kə-|; *qimuxtəγvik* 'kennel').

26 |+zəγaq-| 'way, device, method' (*yu'γəγəγaq* 'how to dance', *qanəγəγəγaq* 'language, word, saying', *itəγəγəγaq* 'entrance').

27 |+γ*aq-| patient nominal (perfective) (7.4.5.2.) (*nəγγaq* 'one that has been eaten', *tuqu'tauγuq* 'he was killed' with 94 |+ŋu-|, *iqqai(γə)χkaq* (table 5, no. 5) 'clothing to be washed' with 6 |+k*aq-|).

28 |+nγ-| (table 5, no. 1) noun of result (*qupNəq* 'crack', *kumlanəq* 'frozen fish', *ayaγnəq* 'beginning').

29 |-nγ-| gerundive nominal with no person inflection (7.4.5.4.) (*nəγnəq* 'eating', *qupnəq* 'splitting', *aya'nəq* 'going').

30 |-nγ-|~|-tγ-|(after apical; table 5, no. 1) 'more, most' (*anyam aŋəŋə* 'one bigger than the boat', *aŋəŋət* 'the biggest'; *assiitxa* 'one worse than it'). With 94 |+ŋu-| following (7.2.5.(3)) (*aŋəŋuūq* 'it is bigger'; *ayəγyuumiitxuūq* 'he is more reluctant to go').

8.3. VERB-ELABORATING POSTBASES (_v)

Some postbases in this class have a syntactic function (8.3.1.), while others are adverbial (8.3.2.).

8.3.1.

Syntactic verb-elaborating postbases affect the nominals involved in verb bases, typically by expanding or reducing verb bases by one nominal (6.3.1. through 6.3.4.). 33, 35, 37, and 39 form complex-verb bases (6.3.4.). 34 selects binominal bases. Bases expanded by 34 or 36 are monominal.

31 |+uc-| (table 5, nos. 1 and 13) (adds P or E, changing S of monominal bases into A, and shunting P with binominal bases, cf. 6.3.2.) (*anu'taa* 'he takes her out (with him); he goes out for her', *assiutaana* 'he is being nice toward me', *kipu'yuttaa* 'he buys (something) for her', *kipu'yutuk* 'they (dual) buy (something) for each other, for themselves', *aqfataa* 'he fetches (something) for her', *aqfatuq* 'he fetches [something]').

32 |+c-| (adds A, with S of monominal bases becoming P, cf. 6.3.1.) (*qamtaa* 'he turns it [stove] down', *qamtuq* 'it is turned down [by someone]', cp. *qammuq* 'it dies down').

33 |+cic-|(cf. P11)~|+vkaγ-|(after vowel) 'to cause, let, allow' (*tuqu'cattaa* 'he lets [someone] kill it', *nəγəfkaγγai* 'he lets them eat, feeds them'). See 6.2.6. for noncausative use.

34 |+sci(u)γ-| (deletes A; table 5, no. 14) 'to be —ed (to the subject's damage or disadvantage)' (*caγa'ayamun malixcascitxuug* 'he was followed by the bear', cf. 6.3.4.(iv)).

35 |+sqə-| (with P5i blocked before this postbase) 'to tell, ask, want' (*tuqu'cəsqa* 'he asks [someone] to kill it; he asks her to kill [something]').

36 |-zu-| (deletes P; table 5, no. 4) 'to be skillful, tend' (*nutyuug* 'he is good at shooting', *kəxsuuq* 'it tends to bite').

37 |+zukə-| 'to think' (*anyauyuka'qa* 'I think it is a boat').

38 |+γ*-i-| (half-transitivizes but adds E for experiencer verbs, 6.3.2.) (*navγiuq* 'he breaks [something]; [something] breaks on him', *navγiana* 'he breaks [something] on me', cp. *navγaa* 'he breaks it', *navəxtuq* 'it is broken').

39 |+ni-| 'to say' (*asiγnia'qa* 'I say it is good').

40 |+naγi-| 'to be time to' (*nəγnaγγiuq* 'it is time [for him] to eat' [the subject can also be P], *nəγnaγγia* 'it is time for him to eat' [the subject and object can also be A and P]).

41 |+naγqə-| (|γ| being deleted before |qC|) 'should' (*nəγnaγqaa* 'I must eat it', *nəγnaγquq* 'he should eat, it can be eaten', *nəγnaqluni* '(he) should eat').

8.3.2.

Adverbial verb-elaborating postbases include ones expressing tense-aspect, modality, and evidentiality as

well as manner, degree, intensity, and so forth. 45 and 65 select monominal bases. A base expanded by 45 is monominal. See also 1, 4, 5, 7, 15, 76, and 96.

42 |+uma-| (table 5, no. 13)~|+ima-|(after apical; table 5, no. 11) 'to be in a state of —ing' (*nəγu'mauq* 'he is eating (a long time); it has been eaten', *ikiχcimmauq* 'it is open').

43 |+pakaγ-| (table 5, no. 2) 'so much, so long' (*ciin nəγvakaxta* 'why is he eating so much?', *cali'wakaxta* 'what is he doing all the time?', *nəηlixpakalγia* 'one making so much noise').

44 |+tuγaγ-| (after velar; table 5, no. 5)~|+quγaγ-| (after apical, which is deleted; table 5, no. 5) ~ |+γ*uγaγ-| (after vowel; table 5, nos. 5 and 7) 'to keep —ing' (*azzauxtūxtuq* 'he keeps (boat-)poling', *nəγu'γatxuug* 'he kept eating').

45 |+ta-| 'to that degree' (often in construction with an equalis noun as object of comparison (7.2.7.) and reduplicatable in a word) (*asixtaccia* 'its goodness, how it is good' with 20 |+uciq-|, *əηtattauq* 'it is that big').

46 |+ciqə-| (P2i deletion being accompanied by doubling of |i|) 'will (future)' (*qaku təkiciiq* 'when will he come?'—more blunt than 67 |+niaγ-|, *nəγciqə'qa* 'I will eat it').

47 |-ksait-| 'not yet' (*təkī'təksaituq* 'he has not arrived yet', *taηəqsaitaqa* 'I have not seen him since').

48 |-qapiγc-| (table 5, no. 5) 'very, at all, just' (*asi'qapixtuq* or emphatic *asiqqapixtuq* 'it is very good', *taiqapixtua* 'I just came').

49 |-qataγ-| (table 5, no. 5) 'about to' (*anqataxtuq* 'he is about to go out').

50 |-qaγ-| (table 5, no. 5) 'briefly, merely' (giving indirectness to an optative verb) (*patu'qəγγaa* 'he merely covers it', *umkaxu* '[you sg.] please shut it!').

51 |-ti-| 'perhaps' (*nəγyulttiutan* 'would you [sg.] like to eat?').

52 |-lini-| 'evidently, now I see' (*cani'mətaqapixtəli'niuq* 'I see it is very near').

53 |-tγu-| 'did (past)' (*ayatxuug* 'he left'), cf. 23 and 94.

54 |-siyaγ-| 'too' (*miksiyyaaxtuq* 'it is too small').

55 |+sciiyat-|_{v, NV} (table 5, no. 14) 'cannot' (*calisciiyatuq* 'he cannot work'; *atkuxciiyatuq* 'he cannot put on a parka').

56 |-xaaγ-| 'first' (often in subordinative or optative forms) (*qawa'xaaγluta* 'we first sleeping, after we sleep', *əməxxaaγlii* 'let me drink first').

57 |+laγ-|(Yukon)~|-laγ-|(Kuskokwim) 'habitually' (*uilukun nəγlaya'qa* 'I [usually] eat it with a spoon'), cf. 6.2.5.2.

58 |-lηu-| 'to be tired of —ing' (*nutəlηuuq* 'he is tired of shooting [but still doing it]').

59 |-zuit-| 'never' (*kəxsuituq* 'it never bites').

60 |+zuumiit-|_{v, NV} (table 5, nos. 4 and 12) 'to have no desire (to)' (*məluyyuumiitua* 'I don't wish to smoke').

61 |+zuuma-|(Yukon)-|+zuyna-|(Kuskokwim)_{vv, sv} (table 5, nos. 4 and 12) 'can' (*kīpaḡcuumauq* 'he can walk around', *atuḡyuyḡaa* 'he can use it').

62 |+zuy-|_{vv, sv} (table 5, nos. 4 and 12) 'to want (to)' (*malixcuyamkən* 'I want to go with you (sg.)'; *qimuxtəḡyuxtuq* 'he wants a dog').

63 |+zuynaḡqə-| 'probably' (*ayalxuyuyḡnaḡquq* 'I guess he left').

64 |+zaaqə-| 'supposedly, fruitlessly, to no avail' (often implying politeness) (*tailxuyyaaquq* 'he was supposedly coming [but has not shown up yet]; he came [but not fulfilling his purpose]'; *akuḡtaxtuḡyuyyaaqua* 'I would like to eat ice-cream').

65 |+ḡi-| (changing [t] to [l] after single vowel; table 5, no. 6)-|+li-|(after [ə]) 'to become, make (more)' (*cukaḡḡia* 'he causes it to be fast', *ukaḡsiḡḡiuq* 'it is becoming near', *anliuq* 'it is becoming big', *nəqNiḡḡia* 'he, it is making it tasty').

66 |+mi-| (table 5, no. 1) 'also' (*natinḡilmiuq* 'he also knows').

67 |+niaḡ-| future (*nəḡniaḡtukut* 'we will eat [soon]', *qakuḡkiḡ təkīNiaḡta?* 'when will he come?', cf. 46).

68 |+nauḡ-| 'now, habitually' (*nəḡnauḡtukut* 'we will eat (now)', *ayayḡnauḡtuq yaaqfanum* 'he would go farther away').

69 |-nqiyə-| 'again' (*atunḡixtuq* 'he is singing again').

70 |-nḡit-| 'not' (*qawanḡituq* 'he is not sleeping', *natinḡitaqa* 'I know it'), cf. 29 and 92.

71 |+ḡinaḡ-|_{vv, sv} 'only, just, for no particularly purpose; only, totality of' (*məluḡḡinaḡtuq* 'he is just smoking'; *painḡinaḡmun* 'only to the mouth'); cf. *yuināq* '20'.

72 |+ḡuaḡ-|_{vv, sv} 'to pretend to; imitation of' (*qawaḡyuaḡtuq* 'he pretends to be asleep'; *kəxutNuaq* 'false tooth').

73 |+ḡait-| (table 5, no. 1) 'will not' (*kīpuzḡaitaa* 'he will not buy it').

74 |+ḡat-|_{vv, sv} (table 5, nos. 1 and 12) 'maybe; to look like' (*ayaxciḡNatuq* 'maybe he will go'; *kuiḡḡatuq* 'it is like a river').

75 |-ḡnaqə-| 'to try to' (*qanəḡnaquq* 'he is trying to speak').

8.4. VERBALIZING POSTBASES (_{vv})

Bases expanded by 83, 90, 92, 93, 95, and 96 are binominal; the others are typically monominal. See 55, 60, 61, 62, and 74 as well.

76 |+tu-|_{vv} |-tu-|_{vv} 'to have much; regularly, to the fullest extent' (*akiḡtuuq* 'it is expensive', *kiiḡtuuq* 'it is (generally) warm'; *qantuūq* 'he can speak').

77 |+tuḡ-| 'to eat, use' (*atsaxtuḡtuq* 'he eats berries', *qayaxtuḡtuq* 'he uses a kayak').

78 |+tait-| 'there to be no — in it (at the time)' (*əna yuxtaituq* 'there is nobody in the house'), cf. 92.

79 |+tanḡḡ-| 'there to be — in it (at the time)' (*kuiḡmi* (loc.) or *kuiḡ* (abs.) *nəqtanḡḡtuq* 'there are fish in the river (now)'; cf. 7.2.3.(3)), cf. 97.

80 |+c-| 'to catch, go to' (*nəqtuq* 'he is catching fish', *kīpuzvixtuq* 'he is going to the store').

81 |+cuḡ-| (after velar)-|+suḡ-| (after vowel) 'to hunt, seek for' (*nəqsuxtuq* 'he is fishing', with the base [nəqə-| 'fish']).

82 |+k*it-| 'to have a little' (*imaxkituq* 'it has not much content, is a low tide').

83 |-kə-| 'to have — as' (*qayaḡqaa* 'it is my kayak', lit. 'I have it as a kayak', cf. 94; *kuyyam kizzutkaa* 'it is a net sinker', *aipaquḡkuk* 'we [dual] are partners').

84 |-kəyc-| 'to have a good —' (*təpkəxtuq* 'it smells good').

85 |-qsiḡ-| (with adverbial demonstrative bases or location nouns) 'to be far in that direction' (*ukaḡsixtuq* 'it is near by' with [uk+a-]; *aciḡsixtuq* 'it is far down').

86 |+viḡc-| |-|+tmuḡc-| 'to go to' (*maavixtuq* 'he is coming here'), cf. allative adverbial demonstratives (7.4.3.2.).

87 |-li-| (table 5, no. 15) 'to make (for)' (*anḡ(all)iuq* 'he is making a boat').

88 |-liqə-| (table 5, no. 15) 'to be afflicted in' (*kəxuciquq* or *kəxutəliḡquq* 'he has a toothache', *taaniquq* 'he is drunk').

89 |-liqə-| (table 5, no. 15) 'to catch a lot of' (*nəqliquq* or *nəqiḡquq* 'he gets a lot of fish').

90 |-liḡ-| (table 5, no. 15) 'to supply with, have plenty of' (*patuḡliḡḡaa* 'he puts a cover on it', *təḡmi(a)ixtuq* 'it (area) has many geese').

91 |+mət-| |-|+nət-| 'to be at' (*qayaḡmətuq* 'it is in the kayak', *qayyaanətuq* 'it is in his kayak', *nanta* 'where is it?'; cf. *qayaḡmi* loc. sg., *qayyaani* loc. 3sg.—sg., *nani* loc.).

92 |+ḡit-| 'to have no' (*əna yuituq* 'the house is unoccupied', *uiḡituq* 'she has no husband', *nannluciiḡtaqa* 'I don't know where it is' with 91 |+nət-| and 20 |+uciḡ-|).

93 |+ḡiḡ-| 'to have — removed' (*pattuiḡḡaa* 'he removes its cover', *ammiiḡtuq* 'it has been skinned').

94 |+ḡu-| 'to be (copula)' (*qayyauḡuq* 'it is a kayak', cf. 83).

95 |+ḡuḡc-| 'to become, make' (*kiaḡyuxtuq* 'it became summer', *yuuḡtuq* 'he is born', *picciuxḡtuku* 'making it come true').

96 |-ḡ*ə-|_{vv, sv} 'to acquire; to begin to' (*uiḡuq* 'she gets married'; *nəḡḡaa* 'he is beginning to eat it').

97 |-ḡqḡ-| 'to have' (*ilanḡḡḡtuḡa amḡḡnək* 'I have a lot of relatives'; cf. 7.2.3.(3)).

8.5. MISCELLANEOUS POSTBASES

98 |+paa| (table 5, no. 2) exclamatory particle from verb base (*assiipaa* 'how bad!', *aḡvaa* 'how big!'; cf. 7.2.5.(4)).

99 |-ku| 'in the future' (*unnuaḡqu* 'tomorrow', cp. *unnuaq* 'this morning', *xḡaniḡku* 'soon', cp. *xḡani* 'now').

100 |*-ȳ*| ‘to say’ (verbalizing any word class) (*ata:kiiȳaana* ‘he says to me “let me see (|ataki|)”’ [with *i* repeated]).

9. NONINFLECTING WORDS

As opposed to nominals and verbs, which constitute the inflecting word classes, particles and enclitics are non-inflecting. Enclitics are monosyllabic, but there are also a few monosyllabic particles. They are clearly distinguished from each other in phonological phrases, especially by accentuation (P22).

9.1. PARTICLES

Many particles are not analyzable; however, some appear to be petrified remnants of originally inflected words, and others allow of some analysis. Some nominals, deprived of almost all inflection, are close to particles. Although quite restricted in derivation and devoid of inflection, particles are highly important in the actual functioning of the language and are accompanied by multifarious delicate nuances. They are wide-ranging in function but may be classified very broadly as: interjectionals, adverbials (including modals), conjunctives, and sentence words, although the distinctions are often elusive. Some of the more common particles are listed:

Interjectionals: |*âcaca*(ki)| ‘how little, how few!’, |*ala*=i| ‘oh, my! (surprise or fright)’, |*am*(pi)| ‘hurry up!’, |*atam*| ‘look, listen! (calling attention)’, |*ikiki*(ka)| ‘how big, fast, much!’, |*taŋ*| ‘look!’ Examples in context: *qamna kuiȳam kaŋŋia ikkiki nâqliqa-pixtâtȳuuq* ‘my, there were a lot of fish up there at the end of the river!’, *atam manna yuk aȳȳiȳtâtȳia* ‘see, the man is coming this way!’, *qayaqa(t)#taŋ* ‘look, my kayak!’

Adverbials: |*atata*| ‘later on’, |*caknȳ*| ‘very much’, |*cali*| ‘more, yet, again’, |*kæzianȳ*| ‘always’, |*æymian*| ‘immediately’, |*ikik*(a)| ‘possibly, I suppose so’, |*ilumun*| ‘indeed, really’, |*ima*| ‘I forgot, you remember’, |*nau*=wa| ‘where’, |*tayima*| ‘somewhere, there (out of sight)’, |*tuay*(piaq)| ‘it seems (like)’: *ikik tayi ma pittiuq* ‘possibly he must be doing it now (not here)’, *yuaȳun tama na ataam atu qæxu* ‘(you sg.) please sing again that song (you are singing now)’.

Connectives: |*maatæn*| ‘when’, |*tawaam*| ‘but, instead, only’, |*tuatu*| ‘and then’, |*wâtu*| ‘or’: *tayȳaam tæxænȳat kiimæn unæxtauciqsuynaxqut* ‘however, only the old folks will probably be left behind’, *tuatu=xuq tauna nunnailȳuq qazyim qukkaanun aqu mæti nilu ni* ‘and then, that man without a place to stay sat down in the middle of the men’s house’.

Sentence words: |*aan*| ‘yes; you are welcome’, |*iȳi*| ‘yes’, |*naamiki*(ka)| ‘I don’t know’, |*qaa*| ‘is that so?’; (in phonological phrases) marker of yes-or-no question in which the interrogative mood is not used, |*qaan*| ‘no’, |*qâŋa*| ‘no (strong denial or prohibition)’, |*quyana*| ‘thank you’: *uitalaxtuci(q)#qaa maani* ‘do you (pl.) live here?’, *iȳi, uitalaxtukut maani* ‘yes, we live here’.

9.2. ENCLITICS

Enclitics cannot occur independently. They are appended to (morphologically complete) words of any class but generally to the first word of a sentence (except |*=lu*|). One enclitic may be followed by another. Some enclitics can be particles (characterized by #) as well: |*=wa*|~|*#wa*|. The enclitic boundary occurs in some particles and interjectional demonstratives (*tai=tai* ‘come!’, *cama=i* ‘hello’, *pika=i* ‘up there!’). Enclitics have a very limited membership:

|*=am*| ‘again as usual, characteristically’ implies surprise, amusement, praise, or frustration: *aanaka=i am manaȳyati niuq* ‘I see my mother went ice-fishing again’.

|*=ȳam*| ‘(but) I thought that’ implies contradiction to what someone said: *aanaka=xam manaȳyatȳuuq* ‘(but) I thought my mother went ice-fishing’.

|*=ȳuq*| ‘he says that; tell (him) that’ indicates communication through an intermediary: *aanaka=tu=xuȳ=(ȳ)am manaȳyatȳuuq* ‘tell him that / he told me that my mother also went ice-fishing as usual’, cf. P24; (son) *aataka qanȳutqaaqiu ayayyuxtua=xuq* ‘please tell my father I want to go’, (mother) *qætunȳaan=xuq ayayyuyaaquq* ‘your (sg.) son says he wants to go’, (father) *ayayli=xuq piyu kuni* ‘tell him he can go if he wants’, (mother) *pi(x)=xuq piyu kuvæt* ‘he says you can go if you want’. See 6.2.3. as to the use for indirectness.

|*=kin*|~|*#kin*(a)| ‘I hope’, similar to |*=tuq*| below: *pikNa=tu=kin* or *pikNa=tu(k)#kin(a)* ‘I hope that one up there’, *næȳli(k)#kin* ‘I hope he eats’ or (indirectly) ‘I hope I eat’.

|*=kiq*| ‘I wonder’, selecting the interrogative mood, implies wonder, curiosity, or surprise: *aanaka=kiq qaku manaȳyaȳniaxta* ‘I wonder when my mother will go ice-fishing’, *qaitun=kiq antattaa* ‘I wonder how big it is’.

|*=lam*| ‘I wish it otherwise’: *aanaka=tam manaȳyanȳilȳuq* (part. 3sg.) ‘why didn’t my mother go ice-fishing?’

|*=li*| ‘...! (exclamation)’, used in connection with a verb base expanded by 98 |*+paa*| (table 5, no. 2) (and a locative nominal, 7.2.5.(4)): *næȳixpaa=ti (mattumi ænæmtæNi)* ‘my, it (this house of ours) is cold!’

|*=lu*| ‘and, also’, appended to the last in a series, indicates coordination: *aanaka=tu manaȳyaȳciq-kuk* ‘my mother and I will go ice-fishing’, *aŋwæt mikæŋuut qimuxtæt=tu taiȳat* ‘men, children, and dogs are coming’.

|*=mi*| ‘as for, then how about’ indicates the topic of an interrogation: *aanaka=mi qaku manaȳyaȳciqa* ‘then how about my mother, when will she go ice-fishing?’; a) *caŋa ta uin* ‘how is your (sg.) husband?’, b) *caŋa tæŋȳituq uika* ‘my husband is fine’, a) *ila tæŋ=mi* ‘how about your relatives?’

|=tuq| 'I wish', selecting an optative verb, implies hope or wish: *aanaka=tuq manayya'lyi* 'I wish my mother would go ice-fishing', *malixtamci=tuq* 'I wish I could go with you (sg.)'.

|=wa|~|#wa|, often used in connection with a participial, interrogative, or optative verb, is presentational, implying response, agreement, or contrast: *aanaka(x"#x"a manayyaxciqal'ya* 'well, my mother will go ice-fishing' (can be a response to *kina=kiq manayya'niaxta* 'I wonder who will go ice-fishing?'); *ciin ukNa taiya* 'why is he coming this way?', *ciin=x"a taiya* 'yes, I too wonder (I don't know either) why he is coming this way'; *maatən itəxtua aanaxka aqumyalu'tək, ikNa=x"a atqaqa* 'when I entered, my mother and father (cf. 7.1.) were sitting, while my elder sister was across there'.

10. SELECTED VOCABULARY

The number of primary bases is small (perhaps not exceeding 2,000 in the last analysis) and postbases are even more limited in number (perhaps not more than 400), but the flexible and extensive use of postbases for derivation permits the building up of a huge lexicon as well as of words with complex internal syntax.

The following list gives basic nominals, verbs, and particles that mainly have an unexpanded base from the point of view of the present-day language, although many of these were evidently secondary derivatives at one time. Also included are postbases with more concrete meanings. A full Yupik dictionary is Jacobson (1984); Fortescue, Jacobson, and Kaplan (1994) is a comparative Eskimo dictionary with Aleut cognates.

It will be clear that for nonnative concepts the language has been more apt to create new descriptive words out of the native lexical stock or to extend the meaning of native words than to borrow words. However, there is a considerable influx of Russian loanwords ('bread', 'Christmas', 'clock', 'kettle', 'store', 'table', 'tent') and a few from English ('bullet'). For detailed information on loanwords see Hammerich (1954) and Jacobson (1984: 678-689).

After the English gloss in each entry, the Yupik form is given in phonemic representation, sometimes followed by the phonological representation (|...|), and in the Yupik orthography (in parentheses). The forms given are 'abs. 3sg.—sg.' for typically possessed nouns (*illua* 'inside of it'), 'abs. sg.' for other nominals (*kuik* 'river'), 'ind. 3sg.' for monominal verb bases (*mikkuq* 'it is small'), and 'ind. 3sg.—3sg.' for binominal verb bases (*asi'kaa* 'he likes it'), unless otherwise noted. Bases not (easily) predictable from the phonemic form are added in vertical bars. The nonagentive and impersonal bases are respectively marked by (NA) and (I) after the phonemic form, and the transitive forms not so marked are agentive.

across there *ikNa*, etc. 'the one across there' (table 16) (ikna)
 again |=am|; 69 |-nqiyc-|
 airplane *təṣsuun* (lit. 'flying instrument') (tengssuun)
 all *tamaq* 'all, whole' |tamaq-| (tamaq)
 tamaγmən 'they all' (6.2.5.9.) (tamarmeng)
 already *akka* 'already, long time ago' (ak'a)
 also *cali* 'also, still' (cali); |=lu|; 66 |+₁mi-|
 although See 6.2.5.4.
 always *kəzzia'nək* (kesianek)
 amulet *iinjuq* 'amulet, pill, medicine' (iinruq)
 and |=lu|
 angry, to be *qənəxtuq* |qənγ-| (qenertuq)
 animal *uṇuṣiq* |uṇuṣiq-| (ungungssiq)
 answer, to *kiuγaa* |kiu-| (kiugaa)
 any *piccia'tun* (piciatun)
 arm *taliq* |taliq| (talliq)
 unəq 'armpit' (uneq)
 around *awətii* 'area around it' |awat-| (avatii)
 arrow *pitəxcaun* (pitegcaun)
 ash *aγaq* |aγaq-| (araq)
 ask, to *aptaa* 'he questions him' |apəc-| (aptaa)
 ask, to 35 |+sqə-| 'to ask, want, tell'
 aunt *acak* (paternal) (acak)
 annaana (maternal) |anaana-| (anaana)
 back *tunuq* (anatomical or locational) |tunuq-| (tunuq)
 kiṇṇua 'its back' |kiṇu-| (kingua)
 back there *piṇna*, etc. 'the one back there' (pingna) (table 16)
 bad, to be *assiituq* |asiit-| (assiituq)
 bag *isxan* 'carrying bag' (issran)
 qəmaxfik (qemaggvik)
 bark *qəltə* 'bark, fish scale, scab' |qəlt-| (qelta)
 bark, to *qiluγaa* 'it barks at him' |qiluγ-| (qilugaa)
 bath *maqi* 'steambath' (maqi)
 maqquq 'he takes a bath' (maquq)
 be, to 79 |+taṅqχ-| 'there to be'; 78 |+tait-| 'there to be no'; 91 |+mət-| 'be at'; 94 |+ṇu-| (copula)
 bear *taqu'kaq* 'brown or grizzly bear' |taqukaq-| (taqukaq)
 caγa'yak 'bear, monster' (carayak)
 tanyə'lyi 'black bear' (tan'gerli)

bear, to *iḡniuaq* ‘she gives birth’ (irniuaq)
yuuḡtuq ‘he was born’ |yuuḡc-| (yuurtuq)
 beard *uḡak* (ungak)
 because See 6.2.5.1.
 become, to 65 |+ḡ*i-|_{v,v}; 95 |+ḡuḡc-|_{v,v}
 bed *iḡlḡaq* (ingleq)
 before See 6.2.5.3.
 begin to *ayaḡniḡḡaa* ‘he begins it’ (ayagniraa);
 96 |-ḡ*ḡ-|
 behind *kḡllua* ‘area behind it’ |kḡlu-| (kelua)
 belly *aḡsaquq* |aḡsaquq-| (table 5, no. 16) (aḡsaquq)
 below *accia* ‘area below it’ |aci-| (acia)
 berry *atsaq* |atsaq-| (atsaq).
cuḡaaq ‘blueberry’, |cuḡaaq-| (curaq);
iqfaḡḡai ‘she picks them (berries)’ |iqvaḡ-|
 (iqvarai)
 beside *cannia* ‘area beside it’ |cani-| (cania)
 big, to be *aḡḡuq* (aḡḡuq)
aḡliuq ‘he grows’ (aḡliuq)
 big 1 |+paḡ-|; *ikkiki* ‘so big, much!’ (ik’iki)
 bind, to *nḡmḡaa* ‘he binds, wraps it’ (NA) (nemraa)
nḡmḡaq ‘binding material’ |nḡmḡ-| (nemeq)
 bird *yaqu’lḡk* (lit. ‘one with wings’) (yaqulek)
tḡḡmiaq ‘bird, goose, duck’ |tḡḡmiaq-| (tengmiaq)
 bite, to *ke.xxaa* (NA) |kḡxḡ-| (keggaa)
 black, to be *tḡḡḡuuq* (tḡḡḡuuq)
 blood *auk* (auk)
 boat *aḡḡaaq* |aḡḡaaq-| (aḡḡaaq)
qayaq ‘kayak’ |qayaq-| (qayaq)
 body *tḡma* ‘body, torso’ |tḡmḡ-| (tema)
 bone *ḡnḡaq* ‘bone, seed’ (eneq), pl. *ḡḡḡḡḡ* |(n)ḡḡḡ-|
 (enret) (cf. water |ḡmḡ-|)
 boot *pilu’ḡuk, kaḡḡuk* ‘knee-high boot’ (piluguk,
 kaḡḡuk)
 bow *uḡlḡvḡaq* ‘bow for arrows’ (urluveq)
 bread *qaḡquq* |qaḡquq-|, *kḡli’paq* |kḡlipaq-| (qaq’uq,
 kelipaq)
 break, to *navḡaa* (NA) |navḡ-| (navḡaa)
azḡmtaa ‘he breaks it in two’ (NA) |azḡmc-|
 (asemtaa)
 breast *ḡvzaik* (evsaik)
 breathe, to *anḡḡaaḡtuq* |anḡḡaaḡ-| (aneryaartuq)
 bright, to be *tanḡixcḡtuq* |tanḡixcic-| (tanḡigcetuq)
 (table 5, no. 17)
 bring, to *taitaa* |taic-| (taitaa)

iḡḡutaa ‘he brings it in’ |itḡuc-| (it’rutaa)
 brother *aḡḡaaq* ‘elder brother’ |aḡḡaaq-| (aḡḡaaq),
uyu’ḡaaq ‘younger sibling’ |uyu’ḡaaq-| (uyuraq)
 bullet *puuliq* |puuliq-| (puuliq); see ‘content’
 burn, to *ḡkkuq* ‘it burns, is on fire’ (ek’uq);
ḡka ‘fire’ |ḡkḡ-| (eka)
 but *taḡḡḡaam* ‘however, only’ (taḡḡaam)
 buttock *nutuq* |nutuḡ-| (nulluq)
 buy, to *kipu’taa* |kipuc-| (kiputaa)
 cache *mamḡḡaaq* |mamḡḡaaq-| (mamteraq)
 can 61 |+zuuma-|; 55 |+sciiḡat-| ‘cannot’
 car *akalḡia* (lit. ‘rolling one’) (akalria)
 caribou *tuntuq* ‘caribou, reindeer’ |tuntuq-| (tuntuq)
 catch 80 |+c-|; 89 |-liḡḡ-| ‘to catch a lot’
 cat’s cradle *aixaq* |aixaq-| (airraq)
 chair *aquḡlitaq* |aquḡlitaq-| (aquḡllitaq)
 check, to *paḡtaa* ‘he checks it’ |paḡc-| (paḡtaa)
 chest *qatḡak* (qat’gak)
 chief See ‘parent’.
 child *iḡḡniaq* ‘offspring’ |iḡḡniaq-| (irniaq)
mikḡḡḡuq (lit. ‘small one’) |mikḡḡḡuḡ-|
 (mikḡḡḡuq)
 chin *tamluq* |tamluq-| (tamluq)
 Christmas *alu’sistuuaq* |alusistuuaq-| (Alussistuuaq)
 church *aya’yuvik* (lit. ‘place for worshipping’)
 (aḡayuvik)
 clam *uiluq* ‘clam, spoon’ |uiluq-| (uiluq)
 clean, to *caḡi’ḡaa* (NA) |caḡiḡ-| (carriraa)
 clock *cassaḡ* |cḡsaḡ-| (cass’aq); |-kḡlaḡc-|_{v,v} _{ss}
 ‘o’clock’
 close, to *palu’taa* (NA) |paluc-| (palutaa)
 clothing *atu’ḡaaq* |atu’ḡaaq-| (aturaaq); see ‘to use’
 cloud *amiḡluq* |amiḡluq-| (amirluq)
 cold, to be *kumḡlataa* ‘the cold is affecting it’, (I)
 |kumḡlac-| (kumḡlataa)
kumḡlatuq ‘it is frozen’ (kumḡlatuq)
nḡḡḡiḡtuq ‘it (weather) is cold’ |nḡḡḡiḡ-|
 (nengḡḡirtuq)
nḡḡḡiuḡaa ‘the cold is affecting him’ (I)
 (nengḡḡiuraa);
nḡḡḡiuḡtuq ‘he is cold’ (nengḡḡiurtuq)
 come, to *taiḡuq* |tai-| (taiguq)
aḡḡiḡḡtuq ‘he comes (from distance)’ |aḡḡiḡḡ-|
 (aḡiḡirtuq)
tḡki’taa ‘he arrives at it’ |tḡkic-| (tekitaq)

content *imaq* ‘content, pus, bullet’ |*imaq-*| (*imaq*)
 cook, to *əγγaa* ‘she cooks, boils it’ |*əγα-*| (*egaa*)
 cough *quzəq* ‘cough, cold’ (*quseq*)
 quzəxtuq ‘he coughs, has a cold’ |*quzγ-*|
 (*qusertuq*)
 count, to *naaqaa* ‘he counts, reads it’ (NA) |*naaqə-*|
 (*naaqaa*)
 cousin *ilux* ‘man’s male cross-cousin or friend’
 |*iluyāγ-*| (*ilur*) (table 5, no. 5),
 ilu’naq ‘woman’s female cross-cousin or friend’
 |*ilunəq-*| (*ilunəq*); see also ‘part’
 cover, to *patua* ‘he covers, closes it’ (NA) (*patua*)
 patu ‘cover, lid’ (*patu*)
 cry, to *qia’γaa* ‘he cries over him’ (*qiagaa*)
 qia’yuq ‘he cries’ (*qiaguq*)
 cut, to *kili’γaa* ‘he cuts, wounds him’ (NA) |*kiliγ-*|
 (*kiliraa*);
 kəppaa ‘he cuts it off’ (NA) |*kəpə-*| (*keppaa*)
 dance, to *yuyəxtuq* |*yuyəγ-*| (*yurartuq*)
 daughter *panik* (*panik*)
 day *əγnəq* (*erreq*); *əγNəq* ‘dawning’ (*erreq*)
 deep, to be *əttuuq* (*etuuq*)
 die, to *tuquuuq* (*tuquuuq*)
 dig, to *əla’γaa* |*əlay-*| (*elagaa*)
 dirty, to be *iqqauq* (*iqqauq*);
 iqqai’γaa ‘he washes it’ (NA) |*iqaiγ-*| (*iqairaa*)
 divide, to *aftaa* ‘he divides it’ (NA) |*avc-*| (*avtaa*)
 do, to *pia* ‘he does to him, does it’ (with meaning
 depending upon context or a succeeding postbase)
 (*pia*); see ‘what’ and ‘thing’
 dog *qimuxta* (lit. ‘one who pulls’) |*qimuγt-*|
 (*qimugta*)
 dollar See ‘whole’ and ‘half’
 door *am(mi)ik* (*ami(i)k*)
 down *kəttii* ‘area down toward the river or sea’
 |*kətə-*| (*ketii*)
 down there *kanna*, etc. ‘the one down there’
 (*kan’a*) (table 16)
 drink, to See ‘water’
 dry, to *kin’γaa* ‘he dries it’ (NA) |*kinγ-*| (*kinraa*)
 dull, to be *ipxia’tuq* ‘it is not sharp’ |*ipxiat-*|
 (*ipgiatuq*)
 dust *iqaq* ‘dirt, dust, grime’ |*iqaq-*| (*iqaq*)
 ear *ciun* (*ciun*)
 eat, to *nəγ’γaa* |*nəγə-*|; 77 |*+tuγ-*| (*neraa*)

edge See ‘shore’, ‘face’, and ‘limit’
 egg *pəksuq* |*pəksuq-*| (*pəksuq*) ~*kaya’nuq* |*kayanuq-*|
 (*kayanguq*) ‘bird’s egg’
 imlauk ‘roe’ (*imlauk*)
 electricity See ‘thunder’
 end *iqqua* ‘its tip, other end’ |*iquγ-*| (*iqua*)
 enjoy, to *aṅlanniuq* ‘he is having fun’ (*aṅlaniuq*)
 Eskimo *yuppik* (lit. ‘genuine person’) (Yup’ik)
 eye *ii* (*ii*)
 face *kəxi’naq* ‘face, knife edge’ |*kəxinaq-*| (*kegginaq*)
 fall *uksuaq* ‘(last) autumn’ |*uksuaq-*| (*uksuaq*)
 fall, to *ixtuq* |*iγc-*| (*igtuq*)
 far, to be *yaaqsixtuq* |*yaaqsiγ-*| (*yaaqsigtuq*)
 fast, to be *cukkauq* (*cukauq*)
 fat *tunuq* ‘back fat’ |*tunuq-*| (*tunuq*); see ‘oil’
 father *aata* |*a(a)ta-*| (*aata*); see ‘mother’
 fear, to *ali’nuq* ‘he is afraid’ (*alinguq*)
 feather *mətquq* ‘feather, fur, hair’ |*mətquq-*|
 (*melquq*) (table 5, no. 16)
 feces *anaq* |*anaq-*| (*anaq*)
 anaxtuq ‘he defecates’ |*anaγ-*| (*anartuq*)
 anaγvik ‘toilet’ (*anarvik*)
 few, to be *ikxətuq* |*ikxət-*| (*ikgetuq*); see ‘little’
 fight, to *catu’γaa* |*catuγ-*| (*callugaa*)
 find, to *nala’qaa* (NA) |*nalaqə-*| (*nalaqaa*)
 finger *yua’γaaq* |*yua’γaaq-*| (*yuaaraq*)
 cətuk ‘fingernail’ (*cetuk*)
 finish, to *taqqa* |*taqə-*| (*taqaa*)
 nanṅaa (NA) |*nanṅə-*| (*nangaa*)
 fire *kənəq* ‘fire, match’ (*keneq*); see ‘to burn’
 first *ciumək* (*ciumək*)
 ciuqtiq ‘first one’ |*ciuqliq-*| (*ciuqliq*)
 fish *nəqa* ‘fish, food’ |*nəqə-*| (*neqa*)
 kumlanəq ‘frozen fish’ (*kumlaneq*)
 nəqəxtuk ‘dried fish’ (*neqerrluk*)
 fish, to See ‘hook’ and ‘net’
 float, to *puxtauq* (*pugtauq*)
 flow, to *caγvuq* (*carvuq*)
 flower See ‘to grow’
 fly *ciivak* ‘house fly’ (*ciivak*)
 fly, to *təṅṅuq* ‘it flies, takes off’ (*teng’uq*)
 follow, to *malixtaa* ‘he goes with him’ (*maligtaa*)
 food *nəqkaq* ‘food (prepared), meal’ |*nəqkaq-*|
 (*neqkaq*); see ‘fish’

foot *iryaq* |itəyaq-| (it'gaq)
 footprint *tuma* 'footprint, track' |tumə-| (tuma)
 forget, to *natu'yayu'taa* 'he forgets it' |natuyayuc-|
 (nalluyagutaa)
 fox *kavviaq* '(red) fox' |kaviaγ-| (kaviaq)
 freeze, to see 'cold' and 'ice'
 friend see 'cousin' and 'part'
 front *ciuŋa* 'its front area, boat's bow' (ciunga)
 future 6 |+k*aq-|_{NN}; see 'will'
 get *aqfaa* 'he gets it' |aqfa-| (aqvaa); 96 |-ŋ*ə-|
 girl *nazzauγluq* |nazauγluγ-| (nasaurluq)
 give, to *tunnaa* 'he gives, exchanges, sells it' (NA)
 |tunə-| (tunaa)
 ciki'γaa 'he gives him (something)' |cikiγ-| (cikiraa)
 go, to *qəγaxtuq* 'he goes across' |qəγax-| (qerartuq)
 ayaxtuq 'he goes away' |ayax-| (ayagtuq)
 atxaxtuq 'he goes down' |atxax-| (atrartuq)
 itəxtuq 'he goes in' |itγ-| (itertuq)
 annuq 'he goes out' (an'uq)
 aγyuq 'he goes over' (ag'uq)
 anəłγaxtuq 'he goes toward exit, downriver'
 |anəłγax-| (anelrartuq)
 mayuxtuq 'he goes up, climbs' |mayuγ-|
 (mayurtuq)
 tagyuq 'he goes up from river' (tag'uq)
 itxaxtuq 'he goes upriver' |itxax-| (itrartuq)
 god *aya'yun* (agayun)
 good, to be *asixtuq* |asiγ-| (assirtuq)
 goodbye *piuγaa* (to one person) (piuraa)
 goose *nəqtəq, laγiq* |laγiq-| (neqləq, 'lagiq); see
 'bird'
 grandchild *tutxax* |tutxaxγ-| (table 5, no. 5) (tutgar)
 grandfather *appa* |əpa-| (ap'a)
 grandmother *mauγluq* |mauγluγ-| (maurluq)
 grass *canək* (canek)
 grave *quŋuq* 'grave, coffin' |quŋuq-| (qunguq)
 green, to be *cunaxcətuq* 'it is green' |cunaxcic-|
 (cungagcetuq) (table 5, no. 17)
 grow, to *nauyuq* 'it (plant) grows' (nauquq)
 naucəttaaq 'blossom, flower, plant' |naucətaaq-|
 (naucetaaq)
 gun *nutək* (nutək); *nutxaa* 'he shoots it' |nutγ-|
 (nutgaa)
 guts *qiluq* |qiluq-| (qiluq)
 habitually 68 |+nauγ-|; 57 |+laγ-|~|-laγ-| 'usually'

hair *nuyaq* 'hair on head' |nuyaq-| (nuyaq); see
 'feather'
 half *avək* 'half, 50 cents' (avek)
 avyaa 'he halves it' (NA) |avy-| (avgaa)
 hand *aixaq* 'hand, seal flipper' |aixaq-| (aiggaq)
 hang, to *ayaχtaa* (NA) |ayaγc-| (agartaa)
 hard, to be *təxxuq* 'it is hard, not soft' (tegg'uq)
 hare *maqa'γuaq* |maqa'γuaq-| (maqaruq)
 harness *anuk* 'harness on dogs' (anuk)
 harpoon *nanəχpak* '(sealing) harpoon' (nanerpak)
 hat *nacaq* 'hat, hood (parka)' |nacaq-| (nacaq)
 have, to 97 |-ŋqχ-|; 92 |+ŋit-| 'not to have'
 he *əllii*, etc. (table 14) (ellii)
 head *nasquq* |nasquq| (nasquq) ~*qami'quq* |qamiquq|
 (table 5, no. 16) (qamiquq)
 hear, to *niitaa* 'he hears it' |niic-| (niitaa)
 heart *ixcaquq* |ixcaquq| (table 5, no. 16) (ircaquq)
 heavy, to be *uqa'maituq* 'it is heavy' |uqamait-|
 (uqamaituq)
 hello *x'aqqa* (waqaa), *cama'i* (cama-i)
 help, to *ika'yuyγaa* 'he helps him' (NA) |ikayuγ-|
 (ikayuraa)
 here *una*, etc. 'the one here' (table 16) (una)
 herring *iqa'tuaxpak* (iqalluarpak)
 hide, to *iiγaa* 'he hides it' (NA) |iiγ-| (iiraa)
 hit, to *kauγaa* 'he strikes it' |kauγ-| (kaugaa)
 hole *uki'nəq* (ukineq); *uki'taa* 'he makes a hole in
 it' (NA) |ukic-| (ukitaa)
 hook *manaq* 'fishhook' |manaq-| (manaq)
 manaχtuq 'she jigs with a hook and line' |manaγ-|
 (manartuq)
 hope |-kin|~|#kin(a)|; |-tuq| 'I hope'
 hot, to be *kiiχcətuq* 'it (weather) is hot' |kiiγcic-|
 (table 5, no. 17) (kiircetuq)
 uuqNaxquq 'it (thing) is hot' (uuqnarquq)
 house *əna* |ənə-| (ena)
 qazγiq 'men's house, community house' |qazγiq-|
 (qasγiq)
 how *qaitun* (7.4.6.) (qaillun)
 how many *qafcin* (7.4.6.) (qavcin)
 hungry, to be *kaixtuq* |kaiγ-| (kaigtuq)
 hunt, to 81 |+cuγ-|
 pisuxta 'hunter' |pisuγt-| (pissurta)
 hurt, to *akNixtaa* 'he hurts him' (NA) |akniγc-|
 (akngirtaa)

husband	<i>ui</i> (ui)	life	<i>uṅu'wa</i> (unguva)
I	<i>x'ii</i> wii , etc. (table 14) (wii)		<i>uṅu'wauq</i> 'he is alive' (unguvauq)
ice	<i>ciku</i> (ciku)	like, to	<i>asi'kaa</i> (NA) asikə- (assikaa)
	<i>cikkua</i> '(the cold) freezes it' (I) (cikua)	limit	<i>əṅəllii</i> 'its limit, border, edge' əṅələ- ((e)ngelii)
	<i>cikkuuq</i> 'it freezes' (cikuuq)	liquor	<i>taaṅaq</i> taaṅaq- (taaṅaq)
ice cream	<i>aku'taq</i> 'Eskimo ice cream' akutaq- (akutaq)		<i>taaṅiquq</i> 'he is drunk' (taaṅiquq)
if	see 6.2.5.5.	little	4 -cuaṅaṅ- ; 12 -ṅaṅ-
immediately	<i>əgmian</i> (egmian)		<i>accaca</i> 'so little, few!' (ac'aca)
Indian	<i>inṅiliq</i> inṅiliq- (inṅiliq)	liver	<i>təṅuk</i> (tenguk)
in-law	<i>nəṅṅauk</i> 'sibling's husband' (nengauk)	load	<i>uci</i> 'load on sled or boat' (uci)
	<i>uku'ṅaq</i> 'sibling's wife' ukuxaq- (ukurraq)		<i>amaq</i> 'backpack' amaq- (amaq)
	<i>caki'ṅaq</i> 'spouse's sibling' cakiṅaq- (cakirraq)		<i>ama'ṅaa</i> 'he backpacks it' amaṅ- (amaraa)
	<i>cakiq</i> 'spouse's parent' cakiq- (cakiq)	long, to be	<i>takkuq</i> (tak'uq)
insect	<i>ciisiq</i> 'insect, worm, snake' ciisiq- (ciissiq)	lose, to	<i>tama'ṅaa</i> (NA) tamaṅ- (tamaraa)
inside	<i>illua</i> 'inside of it' ilu- (ilua)	louse	<i>nəṅəsta</i> (lit. 'eater') nəṅəst- (neresta)
inside there	<i>kiuṅna</i> , etc. 'the one inside there' (table 16) (kiugna)	love, to	<i>kənkaa</i> (NA) kənka- (kenkaa)
island	<i>qikəṅtaq</i> qikəṅtaq- (qikertaq)	make, to	87 -li- ; see 'to work'
ivory	<i>tuxkaṅ</i> 'walrus tusk' tuxkaṅaṅ- (tugkar) (table 5, no. 5)	man	<i>aṅun</i> 'man (male)' (aṅun)
juice	<i>əṅnəq</i> (egneq)	many	14 +ṅ*uyaq-
kettle	<i>cainik</i> (cainik)		<i>akkaki'ka</i> 'so many!' (ak'akika)
kill, to	<i>tuqu'taa</i> (NA) tuquc- (tuqutaa)	many, to be	<i>amtəxtut</i> (3pl.) 'they are many' (amllertut)
knee	<i>ciisquq</i> ciisquq- (table 5, no. 16) (ciisquq)		<i>amtəṅət</i> 'many (things)' amtṅ- (amlleret)
knife	<i>ulluaq</i> 'woman's knife' uluaq- (uluaq); see 'metal'	mark	<i>alṅaq</i> alṅaq- (alṅaq) ~ <i>iyaq</i> iyaq- (igaq) 'mark, symbol, letter'; see 'to write'
know, to	<i>natunṅittaa</i> 'he knows (lit. is not ignorant of) it' natunṅit- (nallunritaa)	marry, to	<i>kassuutaa</i> (NA) kasuuc- (kassuutaa); <i>kassuutuk</i> 'they (dual) marry' (kassuutuk)
labret	<i>tuutaq</i> tuutaq- (tuutaq)	match	<i>spiickaaraq</i> spiickaaraq- (table 5, no. 8) (spiickaaraq); see 'fire'
ladder	<i>akṅət</i> (akret), plural of <i>akəq</i> 'rung' (akeq)	maybe	74 +ṅ*at- 'to seem to'
lake	<i>nanvaq</i> nanvaq- (nanvaq)	meet, to	<i>paiṅtaa</i> 'he goes to meet him' paiṅc- (pairtaa)
lamp	<i>naniq</i> 'lamp, light' naniq- (naniq)	mend, to	<i>kituxtaa</i> 'he fixes it' (NA) kituyc- (kitugtaa)
land	<i>nuna</i> 'land, place, country, soil, settlement' nuna- (nuna)	messenger	<i>kəṅvaq</i> 'messenger, servant' kəṅvaq- (keṅvaq)
land, to	<i>mittuq</i> 'it lands (from air)' mic- (mit'uq)	metal	<i>cawik</i> 'metal, knife' (cavik)
language	<i>qanəṅyaṅaq</i> 'language, word (lit. way of speaking)' qanəṅyaṅaq- (qaneryaraq)	middle	See 'waist'
laugh, to	<i>əṅəllaṅtuq</i> əṅəlaṅ- (engelartuq, ngel'artuq)	mind	<i>umyu(ṅ)aq</i> 'mind, idea' umyu(ṅ)aq- (umyu(g)aq)
leaf	<i>cuyaq</i> 'leaf, tobacco leaf' cuyaq- (cuyaq)	mink	<i>imaṅmiutaaq</i> imaṅmiutaaq- (imarmiutaaq)
learn, to	<i>əli'taa</i> əlic- (elitaa)	mitten	<i>alliiman</i> (aliiman)
left	<i>caṅu'mik</i> 'left hand' (carumik)	money	See 'opposite' and 'whole'
leg	<i>iṅuq</i> iṅuq- (iruq)	moon	<i>iṅa'luq</i> 'moon, month' iṅaluq- (iraluq)
letter	See 'paper' and 'to write'		
lie down, to	<i>inaxtuq</i> inaṅ+c- ; see 6.2.5.9. (inartuq)		

- moose *tuntuwak* |tuntuvaɣ-| (tuntuvak)
- more *cali* ‘more, yet, again’ (cali); 30 |-nŷ-|; |-nŷu-| (7.2.5.(3)).
- morning *unnuaq* ‘(this) morning’ (unuaq)
- mosquito *makuŷyaq* |makuŷyaq-| (makuryaq)
- mother *aana* |a(a)na| (aana); *aanaka* or *ana’ka* ‘my mother’ (aanaka, anaka); see ‘father’
- mountain *iŋŷiq* |iŋŷiq-| (ingriq)
- mouth *qanəq* (anatomical) (qaneq),
paiŋa ‘its (nonanatomical) mouth, opening’ (paiŋa)
- move, to *pəktuq* ‘he, it moves’ |pəkəc-| (pektuq)
- name *atəq* |atŷ-| (ateq);
atətxun ‘namesake’ (atellgun)
- narrow, to be *iqkituq* |iqəkkit-| (iqkituq)
- near, to be *cani’mətuq* |canimət-| (canimetuq)
- neck *uya’quq* |uyaquq-| (table 5, no. 16) (uyaquq)
- needle *miŋqun* (mingqun)
- nephew *qanŋiax* ‘man’s brother’s child’ |qanŋiaŷ-| (table 5, no. 5) (gangiar)
uzɣuq ‘man’s sister’s child’ |uzɣuq-| (usguq)
anyəŷaq ‘woman’s brother’s child’ |anyəŷaq-| (an’garaq)
nuxxaq ‘woman’s sister’s child’ |nuxxaq-| (nurr’aq)
- net *kuvyaq* ‘fishnet’ |kuvyaq-| (kuvyaq)
kuvyauq ‘he fishes by drift-netting’ (kuvyauq)
- new *nuta’yaq* ‘new, fresh thing’ |nuta’yaq-| (nutaraq)
- niece see ‘nephew’
- night *unuk* ‘(last) night’ (unuk)
- no *qaan, qanŋa* (qaang, qang’a)
- noise *nəpa* ‘noise, sound’ |nəpə-| (nepa)
nəplixtuq ‘he/it is noisy’ |nəpliŷ-| (neplirtuq)
nəppaituq ‘he/it is quiet’ |nəpait-| (nepaituq)
- north *nəɣəq* ‘north, northwind’ (negeq)
- nose *qəŋaq* |qəŋaq-| (qengaq)
- not 70 |-nŷit-|_{v̄v}; |+pəkə-| (6.2.6.); 92 |+ŋit-|_{v̄v} ‘not to have’
- now *x’attua* ‘now, a short while ago’ (watua)
- number See 7.4.1. and table 15.
- oar *cavun* (lit. ‘thing to row by’) (cavun)
- oil *uquq* ‘(seal) oil, fat’ |uquq-| (uquq)
uqu’ŷiuq ‘he is fat’ (uquriuq)
- old *akkataq* ‘old, stale thing’ |əkataq-| (ak’allaq)
- one *attauciq* (7.4.1. and table 15) (atauciq)
- only *kiima* ‘I only’, etc. |kii-| (6.2.5.9.) (kiima); 71 |+ŋ*inaŷ-|; see ‘but’
- open, to *ikiŋtaa* (NA) |ikiŋc-| (ikirtaa)
- opening *caŋitquq* ‘open area’ |caŋitquq-| (carrilquq); see ‘mouth’
- opposite *akkia* ‘its opposite, equivalent, money’ |aki-| (akia)
- or *x’attu* (wall’u)
- other *aipaq* ‘the other (of two), partner’ |aipaq-| (aipaq)
ata ‘another, different one’ |ata-| (alla)
- out there *uɣna*, etc. ‘the one out there’ (table 16) (ugna)
- outside *əlatii* ‘its (immediate) outside, exterior’ |əlat-| (elatii)
- outside there *kəxNa*, etc. ‘the one (immediate) outside there’ (table 16) (keggna)
- over there *iŋna*, etc. ‘the one over there’ (table 16) (ingna)
- pants *qəxu’tiik* (dual) (qerrulliik)
- paper *kali’kaq* ‘paper, letter’ (kalikaq)
kali’kat ‘book(s)’ (7.1.) (kalikat)
- parent *aŋa’yuqaaq* ‘parent, chief’ |aŋayuqaŷ-| (angayuqaq)
- parka *atkuk* (table 5, no. 16) (atkuk)
qaspəq ‘parka (covering)’ (qaspeq)
- part *ila* ‘part, one of, some of, relative, cousin, friend’ |ila-| (7.4.2.) (ila)
- partner 11 |-tŷut-|; see ‘other’, ‘name’
- past 23 |-tŷ-|_{v̄v, n̄n}; 53 |-tŷu-|_{v̄v}
- path *tumya’yaq* ‘path, road’ |tumya’yaq-| (tumyaraq)
- person *yuk* ‘person, owner, spirit’ (yuk)
- picture *taŷəŋyaq* ‘picture, image, shadow’ |taŷəŋyaq-| (tarenraq)
- place *əna* ‘house, place’ |ənə-| (ena); 25 |+viɣ-|
- plate *qantaq* ‘plate, bowl’ |qantaq-| (qantaq)
- play, to *aqquiɣuq* |aqui-| (aquiɣuq)
- pot *əyan* (egan)
- ptarmigan *aqəzɣiq* |aqəzɣiq-|, *qanqiiq* |qanqiiq-| (aqesɣiq qangqiiq)
- pull, to *nuqtaa* |nuqəc-| (nuqtaa)
- pus See ‘content’
- push, to *ciŋnaa* |ciŋə-| (cingaa)
- put away, to *qəmaxtaa* (NA) |qəmaxc-| (qemagtaa)
- put down, to *əllia* (NA) |əli-| (ellia)
- put on, to *attaa* ‘he dons it’ |ac-| (ataa)

quiet, to be see 'noise'
radio *niicuyinissuun* (lit. 'instrument for listening')
(niicugniissuun)
rain *cəta'tuk* 'bad weather' |ciɬaɬuɣ-| (cellalluk)
cəta'tixtuq 'it is raining' |ciɬaɬiɣ-| (cellallirtuq)
raise, to *maktaa* (NA) |makəc-| (maktaa)
raven *tulu'kaɣuk* (tulugaruk)
reach, to see 'to come'
read, to see 'to count'
real 2 |-piɣ-| 'real, genuine'
red, to be *kawiɣcətuq* |kaviɣcic-| (table 5, no. 17)
(kavircetuq)
relative see 'part'
resemble, to *ayu'qaa* |ayuqə-| (ayuqaa)
return, to *utəxtuq* 'he comes back' |utəɣc-| (utertuq)
right *əlluaq* 'correct one' |əlluaq-| (elluaq)
right *tatixpik* 'right hand' (tallirpik)
river *kuik* (kuik)
root *acitquq* |acitquq-| (table 5, no. 16) (acilquq)
rope *qitxutaq* |qitɣutaq-| (qillrutaq)
rotten, to be *aɣu'mauq* (arumauq)
salmon *taɣyaqfak* 'king salmon' (taryaqvak)
sayək 'silver salmon' (sayak)
salt *taɣyuq* |taɣyuq-| (taryuq)
sand *qay'yaq* |qawyaq-| (qaŋgyaq)
say 39 |+ni-|; |=ɣuq|
school *əli'caɣvik* (lit. 'place to learn') (elicarvik)
scratch *cətuɣmiɣɣaa* |cətuɣmiɣ-| (cetugmigaa); see
'finger'
sea *imaxpik* (imarpik)
seal *maklak* 'bearded seal' (maklak)
nayiq 'hair seal' |nayiɣ-| (nayiq)
isu'ɣiq 'spotted seal' |isuɣiq-| (issuriq)
search, to *yua'ɣaa* 'he looks for it' |yuaɣ-| (yuraa)
see, to *taŋxaa* |taŋx-| (tangrraa)
seed see 'bone'
sell, to see 'to give'
settlement see 'land'
sew, to *miŋqaa* |miŋqə-| (miŋqaa)
shaman *aŋaɬkuq* |aŋaɬkuq-| (angalkuq)
sharp, to be *ipəx(cə)tuq* |ipɣ(cic)-| (table 5, no. 17)
(ipeg(ce)tuq)
she see 'he'
shoot, to see 'gun'

shore *cəNa* 'shore, edge' |cina-| (ceña)
short, to be *nani'tuq* |nanit-| (nanituq)
shoulder *tuzək* |tuzɣ-| (tusek)
shrink, to *əqquq* |əqə-| (eq'uq)
sick, to be *nanətuq, nauuuɣuq* 'he is ill'
(nangtequq, nauuuɣuq)
sinew *yua'luq* |yualuq-| (yualuq)
sing, to see 'to use'
sink, to *kittuq* |kic-| (kit'uq)
sister *atqaq* 'elder sister' |alqaq-| (alqaq)
uyu'ɣaaq 'younger sibling' |uyu'ɣaɣ-| (uyuraq)
sit down, to *aqu'muq* (aqumuq)
aquɣauq 'he is sitting' (aquɣauq)
skillful, to be 36 |-zu-|
skin *amiq* |amiq-| (amiq)
sky *qilak* 'sky, heaven, ceiling' (qilak)
sled *ikamɣak* (dual) (ikamrak)
sleep *qawaɣtuq* |qawaɣ-| (qavartuq)
sleeve *aliq* |aliɣ-| (aliq)
small 4 |-cuəɣaɣ-|
small, to be *mikkuq* (mik'uq)
smell *təpa* |təpə-| (təpa) 'smell, fermented salmon
head'
smell, to *naɣ'ɣaa* |naɣə-| (naraa)
smoke *puyuq* |puyuq-| (puyuq)
smoke, to see 'to suck'
smooth, to be *manix(cə)tuq* |maniɣ(cic)-| (table 5,
no. 17) (manig(ce)tuq)
snow *aqixtaq* 'snow (soft and melting)' |aqiɣtaq-|
(aqigtaq)
qanikcaq 'snow on the ground' |qanikcaq-|
(qanikcaq)
qanuk 'snowflake' (qanuk)
qanixtuq 'it is snowing' |qaniɣ-| (qanirtuq)
snowshoe *taŋluq* |taŋluq-| (tangluq)
some(-thing, etc.) See 7.4.6.
son *qətun'ɣaaq* |qətun'ɣaɣ-| (qetunraq)
song *yua'ɣun* (yuarun)
sorry, to be *ilu'təquq* 'he is sorry, sad' (ilutequq)
south *uŋa'laq* |uŋalaq-| (ungalaq) 'south, southwind'
speak, to *qanəxtuq* 'he speaks' |qanɣ-| (qanertuq)
qannaayuuq 'he talks' |qanaa-| (qanaaguq)
spear *panaq* |panaq-| (panaq)
spill, to *kuvvaa* (NA) |kuvə-| (kuvaa)

spirit *anəŋnəq* ‘spirit, breath’ (anerneq)
tuunŋaq ‘familiar spirit’ |tuunŋaq-| (tuunraq); see
‘person’ and ‘world’
spit, to *qəciŋaa* ‘he spits at it’ |qəciŋ-| (qeciraa)
split, to *quppa* (NA) |qupə-| (qupaa)
spring (time) *upnəxkaq* |upənəŋkaq-| (up’nerkaq)
squeeze, to *qəttaa* |qəc-| ‘he hugs, squeezes it’
(qetaa)
stab, to *kappaa* (NA) |kapə-| (kapaa)
stand, to *nanəxtuq* |nanŋ+c-| (nangertuq); see 6.2.5.9.
star *ayyaq* |ayyaq-| (agyaq)
stay, to *uitauq* (uitauq)
steal, to *təyləŋyaa* |təylŋ-| (telegaa)
stick *awaŋyaa* ‘branch, stick’ |avayaq-| (avayaq)
stone *ciimaq* |ciimaq-| (ciimaq)
stop, to *aŋu’laixtaa* ‘he stops it’ (NA) (arulairtaa)
store *kipuzvik* (lit. ‘place to buy’) (kipusvik)
laafkaa |laavkaa-| (‘laavkaa)
story *qanəmcicq* |qanəmcicq-| (qanemcicq)
quliŋyaa ‘legend’ |quliŋyaa-| (quliraq)
straight, to be *nalqix(cə)tuq* |nalqiy(cic)-| (table 5,
no. 17) (nalqig(ce)tuq)
stranger *ala’nəq* ‘stranger, visitor’ (allaneq)
strike, to *kauyaa* |kauy-| (kaugaa)
strong, to be *kayyuuq* (kayuuq)
suck, to *məluŋyaa* ‘he sucks, smokes it’ |məluŋ-|
(melugaa)
summer *kiak* ‘(last) summer’ (kiak)
sun *akəxta* |akəŋt-| (akerta)
surface *qaiŋa* ‘its surface, top’ (qaiŋa)
swallow, to *iyyaa* |iyə-| (igaa)
swell, to *puvvuq* ‘it is swollen’ (puv’uq)
swim, to *kuimuq* (kuimuq)
table *stuuluq* |stuuluq-| (table 5, no. 8) (stuuluq)
tail *pamyuq* |pamyuq-| (pamyuq)
take, to *təyyua* ‘he takes (in hands)’ (NA) (tegua)
take off, to *yuuyaa* ‘he removes it’ (NA) |yuu-|
(yuugaa)
teach, to *əli’caŋyaa* (NA) |əlicaŋ-| (əlicaraa)
~*əlitNauyaa* |əlitnauy-| (elitnauraa)
tear, to *atxaa* (NA) |atŋ-| (allgaa)
tent *pəla’təkaq* |pəlatəkaq-| (pelatekaq)
thankful, to be *quyyauq* ‘he is thankful, glad’ (quyauq)
quya’na ‘thank you’ (quyana)
that see ‘there’

thaw, to *uŋyuxtuq* ‘it thaws, melts’ |uŋyuy-| (urugtuq)
there *tauna*, etc. ‘the one there’ (table 16) (tauna)
thick, to be *cannuuq* |cənu-| (canuuq)
thin, to be *canxətuq* |canxət-| (canggetuq)
thing *pi* ‘thing, property’ (pi); see ‘to do’
think *umyuaxtəquq* (umyuartequq); 37 |+zukə-|
this see ‘here’
throat *iyyayaa* |iyyayaa-| (igyaraq)
throw, to *əxtaa* |əx-| (egtaa)
thunder *katuk* ‘thunder, electricity’ (kalluk)
kalixtuq ‘it is thundering’ |kaliŋ-| (kallirtuq)
tide *ula* ‘high tide, flood’ |ulə-| (ula)
ulluq ‘it floods, rises’ (ul’uq)
tie, to *qiləxtaa* (NA) |qiləŋc-| (qillertaa)
tired, to be *məŋnuxtuq* ‘he is exhausted’ |məŋnuŋ-|
(mernurtuq)
taqsuquq ‘he is tired (physically)’ (taqsuquq)
tired, of, to be 58 |-lŋu-| ‘to be bored’
tobacco see ‘leaf’
today *əŋnəxpak* ‘today, all day’ (ernerpak)
əŋnəqu ‘today (in the future)’ (ernequ)
together |+tuuma-|_{sv} (6.2.5.9.) ‘(to act) with’
tomorrow *unnua’qu* (unuaqu)
tongue *uluq* |uluq-| (uluq)
tooth *kəxun* (keggun)
top *kanŋa* ‘its top, peak’ |kanŋ-| (kangra)
toward *tunŋii* ‘area toward it, its direction’ |tunŋə-|
(tunŋii)
trap *taluyaa* ‘fishtrap’ |taluyaa-| (taluyaa)
tree *uqfiat* ‘tree, willow’ (uqviaq)
uqfiat (uqviat), ‘forest’
napa ‘tree, spruce’ |napa-| (napa)
try to, to 75 |-ŋnaqə-|
tundra *nuna’pik* (lit. ‘real land’) (nunapik)
turn over, to *mumixtaa* ‘he turns it over, translates
it’ (NA) (mumigtaa)
twist, to *qipaa* (NA) |qipə-| (qipaa)
uncle *attaata* (paternal) |ataata-| (ataata)
aŋak (maternal) (angak)
up *qullii* ‘its upper part’ |qulə-| (qulii)
up there *pikNa*, etc. ‘the one up or above there’
(table 16) (pikna)
urine *təququq* |təquq-| (teq’uq)
quxxuq ‘he urinates’ (qurr’uq)

use, to *atuḡaa* ‘he uses, sings, wears it’ |atuḡ-| (aturaa); 77 |+tuḡ-|

very *cakNəq* ‘very much’ (cakneq); 48 |-qapiḡc-|

visit, to *cəNixtaa* |ciniḡc-| (ceñirtaa)

voice *əḡiḡna(q)* |əḡina(q)-| (erina(q))

waist *qukaq* ‘waist, middle’ |qukaq-| (qukaq)

wait, to *utaḡaa* |utaqa-| (utaqaa)

wake up, to *tupaxtuq* |tupaḡ-| (tupagtuq)

walk, to *piyyuaḡuq* |piyua-| (piyuaguq)

walrus *azvəq* (asveq)

warm, to be *puḡlaniḡtuq* |puḡlaniḡ-| (puḡlaniḡtuq)

wash, to *əḡmiḡyaa* ‘he washes him (face)’ (NA) |əḡmiḡ-| (ermigaa)

əḡuḡyaa ‘he washes it (dish, etc.)’ (NA) |əḡuḡ-| (eruraa); see ‘to be dirty’

water *əməq* (meq)

əməḡyaa ‘he drinks it’ |əməḡ-| (meraa)

wave *qaiq* |qaiḡ-| (qaiq)

wear, to see ‘to use’

weather see ‘world’ and ‘rain’

weave, to *tupiḡyaa* |tupiḡ-| (tupigaa)

wet, to *məciḡyaa* ‘he gets it wet, soaks it’ (NA) |məciḡ-| (meciraa)

whale *aḡvəq* ‘black whale or bowhead’ (arveq)

cəttuaq ‘white whale or beluga’ |cittuaq-| (cetuaq)

when *qanvaq* ‘when (in the past)’ (qangvaq)

qaku ‘when (in the future)’ (qaku); see 6.2.5.7., 7.4.4., and 7.4.6.

whenever see 6.2.5.2. and 7.4.4.

where *nani* ‘where, somewhere’ (7.4.6.) (nani)

which *nalliat* ‘which one of them?’ (7.4.6.) (naliat)

while See 6.2.5.8.

white, to be *qatəḡtuq* |qatḡ-| (qatertuq)

White man *kassaq* |kàsaq-| (kass’aq)

who *kina* ‘who, someone’ (7.4.6.) (kina)

whole *tama(lku)q* ‘(to be) all, whole, dollar’ |tama(lku)q-| (tama(lku)q)

why *ciin* (7.4.6.) (ciin)

wide, to be *iqtuuq* (iqtuuq)

wife *nulliaq* |nuli(ḡ)aq-| (nuliaq)

nuliḡxa or *nulliaḡya* ‘his wife’ (nulirra, nuliara)

will 46 |+ciqə-|_{vḡ}; 67 |+niaḡ-|_{vḡ}; 73 |+ḡ*ait-|_{vḡ} ‘will not’

wind *anuḡa* |anuḡə-| (anuqa);

anuḡliḡtuq ‘it is windy, blows’ |anuḡliḡ-| (anuḡlirtuq)

window *əḡaḡləq* (egaleq)

wing *yaquq* |yaquq-| (yaquq)

winter *uksuq* ‘(last) winter, year’ |uksuq-| (uksuq)

wipe, to *pəxiḡyaa* (NA) |pəxiḡ-| (perriraa)

wish to, to 62 |+zuḡ-|; 60 |+zuumiit-| ‘not to wish’

with 13 |-lḡ-| ‘one having’

wolf *kəḡlunəq* (kegluneq)

wolverine *qafcik* (qavcik)

woman *aḡnaq* |aḡnaq-| (arnaq)

wonder |=kiq| ‘I wonder’

wood *muḡak* ‘(fire)wood, log’ (murak)

work, to *callia* ‘he makes (something) for him’ (calia)

world (c)əta ‘world, outdoors, weather, spirit’ |cila-| ~|əta-| ((c)ella)

wound *əkiq* ‘wound, cut’ |əkiq-| (ekiq)

write, to *alḡaḡyaa-iyaaḡyaa* ‘he writes to him’ |alḡaḡ-| ~|iyaaḡ-| (alḡaraa, igaraa); see ‘mark’

wrong *iqtu* ‘wrong one’ (iqtu)

iqtua ‘he tells him a lie’

cəḡaḡtuq ‘something is wrong with him/it’ (cangatuq)

year *atḡakuq* ‘year, age’ |atḡakuq-| (allrakuq); see ‘winter’

yes *ii-i, aən* ‘yes; you are welcome’ (ii-i, aən)

aḡyaa ‘he says yes to him’ |aḡy-| (anḡraa)

yesterday *akx^wauyaq* |akwauyaq-| (akwauḡaq)

you *ətpət* ‘you (sg.)’, etc. (table 14) (elpet)

Copyright © 1996 by Smithsonian Institution
All rights reserved.

For sale by the Superintendent of Documents,
U.S. Government Printing Office, Washington, D.C. 20402.

Library of Congress Cataloging in Publication Data

Handbook of North American Indians.

Bibliography.
Includes index.
CONTENTS:

v. 17. Languages.

I. Indians of North America.

I. Sturtevant, William C.

E77.H25 970'.004'97 77-17162