# The Basics of Tlingit Verbal Structure 

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Tsu héide shugaxtutáan, yá yaa koosgé daakeit, haa jéex' a nák has kawdik'éet'.

```
tsu héide shugax_tutáan
tsu hé-dé \emptyset-shu-ga-w-ga-tu-\emptyset-tan-:
again MPRX-ALL 3.0-end-GCNJ-IRR-GMOD-1PL.S-CL[-D,\emptyset,-I]-handle-VAR
again here toward we will open it
yá yaa kַoosgé daakeit
yá yaa=ku-\emptyset-s-ge-\emptyset daa-ká-át
PROX MENT=AREAL-3.S-CL[+D,S,-I]-know-NMZ around-HSFC-thing
this knowledge container
haa jéex' a nák
haa jée-x' a nák
1PL.PSS possession-LOC 3N ELAT
our possessionin it away from
has kawdik'éet'
has=ka-ÿu-Ø-di-k'it'-h
PL=HSFC-PFV-3.S-CL[+D,\emptyset,+I]-leave-vAR
they left
```

We will open it again, this container of knowledge, that they left in our possession.

- Kichnáalx George Davis (Dauenhauer \& Dauenhauer 1990:314)


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## 1 Introduction

In this book I hope to set out the basic properties of Tlingit ${ }^{1}$ verbs in a manner that is accessible to linguists who do not specialize in Tlingit or the Athabaskan languages. The Tlingit verb is highly polymorphemic, meaning that verbs are made up of a large number of distinct morphemes. But it is not only fully conjugated verbs that are polymorphemic, the actual lexical entries contain large numbers of morphemes as well. In addition, the sequence of morphemes in a lexical entry is not contiguous, meaning that inflectional morphemes intervene between the morphemes that are lexically specified. In some cases a verb may undergo multiple cycles of derivation and inflection, with features of both interleaved together in the final form. This intricate structure makes working with Tlingit data very difficult for the uninitiated.

This book is not meant to be a complete reference grammar, but rather a guide that provides enough description of the verbal morphology and lexical structure to make the rest of the language more open to investigation by nonspecialists. Much of the language remains to be analyzed beyond what is given here, e.g. tonal phonology, demonstratives, the directional system, conjunction and coordination, focus and topicalization, and the overall syntax and compositional semantics of the language. This book is also not a textbook as it lacks explanations of general linguistic phenomena and it does not attempt any sort of pedagogical approach to the subject. People interested in Tlingit but lacking training in linguistics would do better to look to Dauenhauer \& Dauenhauer 2000 and Story \& Naish 1973 rather than struggle with this book, but advanced Tlingit language learners may find this book more approachable than Leer 1991.

Many verbal morphemes in Tlingit do not have independent meanings as such, but are instead only meaningful in combination with other mor-

[^0]phemes. Some verbal morphemes do have independent meanings but these are so abstract that it is difficult to understand them without having a thorough knowledge of other verbal phenomena. Because of this interdependence between different parts of the verb, it is almost impossible to describe the verbal morphology of Tlingit in any sort of linear, step-by-step manner. I have not attempted to do so in this book; I have instead focused on particular issues in each chapter and have left it to the reader to conceptually situate them among the issues addressed in other chapters. Thus phenomena described early on in this book may only make sense once one understands other phenomena that are dealt with later. The logic of Tlingit verbs can often be labyrinthine or even byzantine, but they are nonetheless cogent and indeed beautiful given enough patience.

Most of what I present here is not original, but rather constitutes a coherent reinterpretation of research by Jeff Leer (Leer 1978, 1989, 1991, 2000, 2001, 2008; Leer, Hitch, \& Ritter 2001; Williams, Williams, \& Leer 1978), Constance Naish and Gillian Story (Naish 1966; Story 1966, 1972; Story \& Naish 1973), Richard and Nora Marks Dauenhauer (Dauenhauer \& Dauenhauer 1987, 1990, 2000, 2002; Dauenhauer 1974), Keri Edwards (Edwards 2009), Seth Cable (Cable 2006, 2010), Michael Krauss (Krauss 1968, 1969, 1977, 1980; Krauss \& Leer 1981), Franz Boas (Boas 1917), Louis Shotridge ${ }^{2}$ (Shotridge 1915), John Swanton (Swanton 1909, 1911), and Ivan Veniaminov ${ }^{3}$ (Veniaminov 1846). By synthesizing these people's work into a single book I intend to save others the countless hours of comparison and interpretation that I have spent, and to provide a single unified reference for the Tlingit verb. I no doubt have introduced errors; I would have no blame placed upon any of my esteemed colleagues and academic ancestors for my lapses.

[^1]
### 1.1. FAMILY RELATIONSHIPS

Tlingit is a very distant cousin of the Athabaskan languages and a somewhat closer cousin of the Eyak ${ }^{4}$ language. Together they form the Na-Dene ${ }^{5}$ language family, also known by the more unwieldy name Athabaskan-EyakTlingit. The various family relationships are diagrammed in tree form in figure 1.1, but note that I have handwaved about the many complex problems in the subdivision of Athabaskan in favour of the traditional but inaccurate three-way geographic division.

Recent work by Vajda (2010) has indicated that the Na -Dene languages are likely to be related to the Yeniseian languages of central Siberia, and the two families are provisionally grouped together under the name of DeneYeniseian though no PDY has been reconstructed yet. I will not further address this hypothesis, and will not draw any comparisons between Tlingit and Yenseian languages. In contrast, I will occasionally highlight parallels between Athabaskan-Eyak languages and Tlingit, particularly where similar or shared verbal phenomena are better studied in the Athabaskan family.

There are remarkably few clear cognates between Tlingit and the other languages of the Na-Dene family, partly because of the very complex sound changes, but also due to vocabulary replacement. An example of such vocabulary replacement is the Proto-Athabaskan (PA) *łə $\eta^{y}$ 'dog' with widespread
 Tlingit (PT) *kaydł. Eyak has $3 i-k a^{h} \ddagger$ 'to bark' which points toward a Proto-Na-Dene (PND) form like * $k^{y}$ ay-(d) $\ddagger$ 'bark-INSTR’ (i.e. 'barker') replacing Tlingit's original term for 'dog' (Leer 2008: 15).

Cognates are not entirely unknown however. Leer $(2008,2010)$ has documeted quite a few basic cognates, but they are obscured by the great phonological distances within the family. Below are three examples of some basic vocabulary that are definitely shared across the family.

- Tlingit ka-t-ke $\ddagger$ 'be soaked, waterlogged' versus PA *q-čr $\partial \nmid$ 'be wet' > Koy Ratłtsał 'it is wet' (Jetté \& Jones 2000: 630), CAR sałtsal 'it is wet', Hup nitčw il 'it is wet', Tut $4 s ̌ r \partial \Varangle ~ ' i t ~ i s ~ w e t ' ~(L e e r ~ 2010: ~ 189), ~ A н t ~ n a t t s e l i ~$ 'that which is wet' (Kari 1990: 379)

4. Pronounced /'ijæk/ in English.
5. Pronounced /nadə'ne/ or /na'dene/, derived from Tl. naa 'clan, people' and PA *dəne 'man' (Sapir 1915: 558).
6. Abbreviations for Athabaskan languages are listed in appendix 24.


Figure 1.1: Tlingit's family tree.

- PT *-xa's ${ }^{\prime} i^{h}$ ‘skin (of fish)' (Northern-xáas'i) versus Eyak-sits' ‘skin (of fish)' and PPA *-sits'-d 'skin, hide' > PA *-za ${ }^{2} t s^{\prime} \sim-z \partial^{`} s(d)$ 'skin, hide; skin bag' (Leer 2008: 8) > CAR -zaz ‘skin', CHP -ðáð ‘skin, hide’ \& đé $\theta$ 'skin bag' (Krauss 1977: 18), AHT -zes ‘skin' (Kari 1990: 581), DEN -yas 'skin' (Kari 2007: 180-181), Koy -lał 'skin’ (Jetté \& Jones 2000: 392)
- PT $* \sqrt{x i s ̌ ' ~ ' b e ~ t a n g l e d ' ~(m o d e r n ~} \sqrt{x i s}$ ) versus Eyak xa'č'- $\$$ 'knot' and PA ${ }^{*} x^{y} a^{\text {h }}{ }^{2} \sim x^{y} a^{?} c^{\circ}$ ' 'knot' (Leer 2010: 185) > NAV šà:s, ChP šás, HAR šà ${ }^{7}$, HÄN šàr, Minto TAN $\check{s}^{r} \partial \check{L}^{r}$, UKu yots'~šošr (Krauss 1977: 17), Koy yots ~ sos(Jetté \& Jones 2000: 715), Ант sa:s (Kari 1990: 543)

Another important cognate is PND ${ }^{*}-k^{y} e(:) \eta^{\prime} \sim{ }^{*}-k^{y} i(:) \eta^{\prime}$ 'head’ from PT *-ša(n) 'head’ (Northern \& Southern -shá, Tongass -sha), Eyak -tsị’-do-'neck-QUAL-', and PA *-tsi' $(n)$ 'head'. Eyak has a nasalized vowel $i^{7}$ in this form and both Tlingit and Carrier also show intrusive nasals occasionally: PT *-šan-tu 'head-inside' (Northern \& Southern -shan-tú, Tongass -shan-tu) and PT *-ša ${ }^{\text {n }}$ ÿani.g ${ }^{w}$ 'head is.sick' (Northern -sháan ÿanéekw, Southern
-sháàn yanéekw, Tongass ?-sha'n ÿaneekw), CAR -țָinzzaz ‘scalp’ from PA * $-t s i^{\prime}(n)-z \partial^{2} t s^{\prime}$ 'head-skin' and -tsinyai' 'brains' (also cf. Inland DEN -tsinyun, Kari 2007: 87) from $\mathrm{PA}^{*}-t s i^{7}(n)-\gamma a: \eta^{\prime y}$ 'head-brain' (Leer 2010: 179). Compare other Athabaskan languages without this nasal, e.g. Aнt -tsizes 'scalp' and -tsiza:n' 'brain' (Kari 1990: 459, 489), DEN -tsiyas 'scalp' and -tsizun 'brain' (Kari 2007: 87), Koy -tłitt 'scalp' < -tłi:lał (Jetté \& Jones 2000: 392), NAV -tsi:ziz 'scalp' and -tsi:ya:? 'brain' (Young \& Morgan 1987: 832, 999).

One particularly compelling cognate where even the morphological structure is shared is PT * $\neq-k^{\prime} i^{h} \breve{c}^{\prime}$ '-wu 'scoter' (lit. 'neck-nape-white') from Northern and Southern Tlingit lak'eech'wú (i.e. łak'izč'wú' < *qak'i h'č'wu') and Tongass Tlingit lak'i'ch'wu (łak'i'č'wu < *łak'i'hč'wu) versus PA *ts'a'tł’ə-we:~ *ts'al-we: 'arctic loon' (lit. 'nape-white') from e.g. Tan $t \theta$ 'adlaba, Koy $t$ '’adlaba ~ ts’ədlama: (Jetté \& Jones 2000: 603, 668), Talkeetna Den ts’alba (Kari 2007: 27), and Ант ts'elbæ: (Kari 1990: 548). Including Eyak łə-k'uš 'grebe’ ('necknape') and $s a-\ell-k ’ u s ̌-\not /$ ‘duck sp.' (both lacking a 'white’ element) as supporting evidence, Leer reconstructs PND * $k^{\prime y} i^{(?)} t t^{\prime}=w i$ ' 'nape=white' (Leer 2008: 17).

A favourite example that native speakers often mention is Tlingit gáx 'rabbit' and e.g. Koy guұ (Jetté \& Jones 2000: 223), Upper Den gað (Kari 2007: 7), Aнт gaұ (Kari 1990: 574), Nav gah (Young \& Morgan 1987: 369), but like many other "obvious" cognates this may originally be a borrowing from some Athabaskan language. In this particular case the relationship is unclear because it is difficult to separate the uvular retentions in Tlingit and Alaskan Athabaskan from borrowings between them.

In contrast with the paucity of obvious cognates, there are many striking resemblances in verbal morphology. Indeed, it is probably this area of similarity that first inspired comparisons between Tlingit and the Athabaskan languages (see e.g. discussions in Krauss 1965b, 1980, 1986; Sapir 1915). Not only does Tlingit share many morphological resemblances, which by themselves could be mere coincidence or due to extended contact, but Tlingit even exhibits morphological irregularities cognate with those in Athabaskan languages. The following examples of irregular indefinite subject marking from Tlingit, Koyukon, and Gwich'in demonstrate a shared irregularity within the already remarkably similar verbal morphology. Here, though the roots are not cognate, the areal prefix is used for the indefinite human subject for Koyukon and Gwich'in and in Tlingit the indefinite human object kuallomorph is used in place of the indefinite human subject $d u$-. The areal prefix in Tlingit is also $\underline{k} u$-, which is identical here with the indefinite human
object. ${ }^{7}$
(1) a. Tlingit irregular indefinite human subject as object
yéi kuyaawakaa
yéi=ku-ÿa-ÿu-ÿa-ka-h
thus=IndH. 0 -vSFC-PFV-CL[-D, $\emptyset,+\mathrm{I}]$-say-VAR
'people have so said'
b. Koyukon irregular indefinite human subject as areal
hudәуi:ni:?
ht-dә-уi-Ø-ni:?
areal-QuAl-rpFV-CL[-D,Ø]-say
'people said'
(Jetté \& Jones 2000:437)
c. Gwich'in irregular indefinite human subject as areal
t’ágwánịáa:
t’ə-gwə-Ø-nịą:
thus-areal-CL[-D,Ø]-say
'people say so'
(Leer 1990: 77)
Linguists experienced with Athabaskan languages and Eyak are cautioned that although the structure of the Tlingit verb is comfortably similar to its Na -Dene cousins, there are many significant and subtle differences. The Tlingit verb should not be blindly analyzed according to the Athabaskan model despite the many similarities because the underlying assumptions from Athabaskan languages often are incorrect or irrelevant for Tlingit.

### 1.2. TERMINOLOGY AND APPARATUS

It is a tragedy of Tlingit linguistics that there are severe inconsistencies in terminology between different linguists working on the language, and even for particular linguists over time. This is of course inevitable for the study of any language, but Tlingit seems to suffer unduly in this regard. In this book

[^2]I try to mention equivalent terms that have been used by other linguists, but I have leaned heavily toward adopting terminology that is used in the wider realm of linguistic analysis. My hope is that by doing so this will reduce some of the needless difficulty in understanding Tlingit from a linguistic perspective. Readers familiar with other works on Tlingit grammar may consequently find my presentation here confusing, but I would rather attempt to open the field to more outsiders than to slavishly follow existing practices without consideration of the difficulty for those unfamiliar with this highly specialized linguistic tradition. I do tend to retain terminology used generally among Athabaskanists because of the genealogical relationship, but I have also abandoned some of the opaque and less common Athabaskanist terms as well.

Tlingit has in common with the Athabaskan languages an intricate system of phonological reduction of prefixes in the verb. Because of this, I use a four-line gloss rather than the more typical three-line gloss used for describing most languages. An example of this four-line gloss appeared in the previous section as example (1). The heading line of an example may contain a comment or short description of the form given in italics. For forms using Boas's, Swanton's, or other archaic transcription systems I will instead give the original transcription exactly as published (including italics) in the heading line, without alignment to the rest of the gloss. The first line of the actual glossed example is the conventional orthographic form. Some orthographic words are not phonological words, such as yéi= in (1a), so I indicate this by including the orthographic space in the form but ignoring it for columnar alignment. The second line is the morphological segmentation, which as can be seen in (1) can be fairly divergent from the surface form as spoken. The third line is the morpheme-by-morpheme gloss, with abbreviations used for most morphemes and with my featural notation $C L[ \pm D, S, \pm I]$ for the three components of the classifier. The fourth line is an English translation. A citation is given if the form is not from my own notes. Most translations of previously published data are my own; I aim for formal equivalence rather than more idiomatic English so that the structure of the original Tlingit is more clear.

The linguistic 'stigmata' of *foo and 'foo have their conventional meanings. The asterisk indicates ungrammaticality when used with a modern example, and it indicates a reconstructed form when used with unattested languages like Pre-Tlingit and Proto-Athabaskan. The superscript question mark indicates the questionability of a form, meaning that either speakers are uncertain about the grammaticality of the form or that I have deduced
the form from a poor transcription and have not verified it with a native speaker. The two combined indicate the questionable ungrammaticality of a form or the questionable reconstruction of a form. I also employ a few other symbols, namely a superscript dagger ${ }^{\dagger} f o o$ to indicate a dead form $f o o$ which is attested but no longer in use, a superscript percent sign $\%$ foo to indicate a form foo which I have deduced from grammatical patterns but have not checked with a native speaker (eventually there should be none of these in the book), and a superscript octothorpe ${ }^{\#} f o o$ to indicate that a form foo is semantically infelicitous or uninterpretable but nonetheless grammatical.

When I cite an example from a published text I often include a line number after the page number, separated from the page number by a period, e.g. "Swanton 1909: 349.2". In many cases I have not done so, but I intend to eventually go through all the examples and add line numbers where possible. In addition, I also hope to add notes to each form indicating the speaker if known. Once the body of this book is complete I will provide a lexicon appendix which will give a concordance of all words in the examples used herein.

### 1.3. FOR THE IMPATIENT

The consonant inventory is given in the orthography used here in table 2.2 on page 21 . The suprasegmental correspondences between the dialects are given in table 2.1 on page 21, and the vowel inventory for Northern Tlingit is given in table 2.3 and for Tongass Tlingit in table 2.5 on page 22 . Because dialect differences and orthographic practices can make some written data confusing to the uninitiated, researchers are urged to read chapter 2 before anything else.

The morphology of the Tlingit verb is an enormous topic, and even this summary description of the verb is unavoidably large. The reader in a hurry can focus on the chapters on the template (ch. 4), root (ch. 5), theme (ch. 6), valency (ch. 8), classifier (ch. 9), stem variation (ch. 10), mode (ch. 12), epimode (ch. 15), and clause type (ch. 16). The rest of the verb can be mostly comprehended through exposure and experience, or in the case of obscure phenomena like epiaspect (ch. 18) the average researcher is unlikely to encounter examples where it is a serious concern for analysis.

The concept of a verb theme will be familiar to Athabaskanists, but chapter 6 is nonetheless worth skimming since Tlingit's themes have a fairly dif-
1.3. For the impatient
ferent structure. The Tlingit classifier is so distinct from the Athabaskan model that its description is also required reading even for the most experienced Athabaskanists, but they should find it relatively easy to comprehend after some study.

## 2 Dialects and basic phonology

Tlingit has, in my view, a three-way division between its basic dialects: Tongass, Southern, and Northern. The primary distinction between the three dialects is based on their tone systems. Northern Tlingit, the most documented and best described, has a simple system of low /V̀(:)/ and high /V́(:)/ tones, with high tone being phonologically marked in that it is less common and is the non-default in certain phonological phenomena.

Southern Tlingit has a three-tone system with high /V́(:)/, low /V̀(:)/, and falling /V́V̀/ tones, with the falling tone only occurring on long vowels. Leer (2001) has argued that the Southern low tone is marked and the high tone is the default tone, in contrast with Northern Tlingit where the reverse is true. There are still many gaps in the documentation of Southern Tlingit and so Leer's plausible claim remains to be thoroughly verified. Given the questionable reality of phonological markedness in current linguistic theory, his claims about tonal markedness in both Northern and Southern Tlingit may actually reflect some other less well understood phonological properties. Also, Leer's term 'marked' should not be mistakenly equated with the tonogenesis phenomena in Athabaskan languages (Krauss 2005); though there are historical resemblances, Tlingit tonal markedness is an independent development.

Tongass Tlingit is extinct today, having been documented by Leer from two speakers (Williams, Williams, \& Leer 1978). There may have been one or two other speakers of Tongass Tlingit still alive in the 1970s, but today there are none. Tongass was conservative in that it was toneless, instead having a four-way division in vowel phonation types: short /V/, long /V:/, glottalized $/ \mathrm{V}^{ } /$and fading $/ \mathrm{V}^{\mathrm{h}} /$; phonetically these are [V], [V:], [V?], and [VV̀] $\sim$ [Vh] respectively. Leer invented the term stigma to label these phonation types (Leer 1991: 8, 12-18), derived from Greek $\sigma \tau i ́ \gamma \mu \alpha$ stígma meaning 'mark made by a pointed instrument', cf. the verb $\sigma \tau i \zeta \varepsilon ı v ~ s t i ́ z e i n ~ ' p r i c k, ~ p u n c-~$
ture'. A more common term for this sort of phenomenon is REGISTER as found in Asian languages such as Burmese and Shanghainese, but I use the most explicit term vowel phonation type. For the glottalized vowel phonation type Leer variously employs the symbols ', ', or ' after a vowel, and for the fading vowel phonation type he uses either 'or '. Compare the latter symbols to Boas's use of ' to indicate aspirated obstruents ${ }^{1}$ (Boas 1917). This was probably derived from the Ancient Greek $\delta \alpha \sigma$ v̀ $\pi v \varepsilon \tilde{u} \mu \alpha$ dasỳ pneûma or 'rough breathing' diacritic ' that indicates the presence of /h/before a vowel - e.g. $\dot{\alpha} / \mathrm{ha} /$ - and which is traditionally known as 'aspiration.' ${ }^{2}$ I use $h$ instead of Leer's `or ' for the Tongass fading vowel because it is easier to differentiate from ' or ' indicating a glottalized vowel. Since the glottal fricative $/ \mathrm{h} /$ cannot occur in the coda of a syllable in any Tlingit dialect, the use of $h$ is unambiguous after a vowel. Leer dislikes this practice because it tempts analyses parallel to Eyak: the $/ \mathrm{V}^{\mathrm{h}}$ / vowel phonation of Eyak is simply transcribed as Vh by Krauss (1968, 1969, 1977, 2006, 2009a,b,c), but this is actually more closely cognate with Tongass's glottalized vowels than with its fading vowels. Nevertheless I find $V h$ much easier to distinguish than $V^{\prime}$, and since there are no speakers nor learners of Tongass Tlingit there is no community to consult on literacy issues nor much potential for new documentation.

The division of Tlingit into three dialects is complicated by internal divisions within two of them. The Southern dialect can be divided into Sanya ${ }^{3}$ around Ketchikan and Behm Canal, and Henya ${ }^{4}$ on the northwestern coast of Price of Wales Island, with Alaskan Haida intervening between the two. The difference between these two subdialects is purely phonological, based on their distinct distributions of tone on verb prefixes and their different realizations of verb prefix sequences, but there are also a few lexical differences. Northern Tlingit is similarly subdivided into Transitional Tlingit, Cen-

1. Following Leer and several Athabaskanists, I use the term obstruent to refer to stops and affricates that together form a natural class apart from fricatives and sonorants.
2. The diacritic is also called $\delta \alpha \sigma \varepsilon \tau ̃ \alpha$ daseîa in Ancient Greek and $\delta \alpha \sigma \varepsilon$ cí / ða'sia/ in Modern Greek, hence Unicode's term 'dasia'; also note Latin spiritus asper. Boas seems to have generalized it to mark aspiration on both consonants and vowels. The current phonetic term 'aspiration' for consonants also apparently derives from description of the vocalic phenomenon in Ancient Greek.
3. Tlingit Saanyaa from saa-niÿaa 'south-direction'.
4. Tlingit Heinyaa from héi-niÿaa 'MPRX-direction', but often pronounced as Hinyaa and thus reanalyzed as from héèn-niÿaa 'water-direction'.


Figure 2.1: Tlingit dialect overview.
tral Tlingit, Gulf Coast Tlingit, and Inland ${ }^{5}$ Tlingit. The reasons for division of these subdialects are phonological and hence largely irrelevant here, but a few significant phenomena that appear frequently in published data will be described below.

Figure 2.1 gives my idea of Tlingit dialect relationships in tree form. The following outline gives more detail, including historical and current settlements. I use the one-letter symbols listed in parentheses for annotating forms in dialect variation, e.g. geey $y_{\mathrm{TSR}} \sim$ gei $_{\mathrm{NGI}}$. A letter like "S" may indicate Southern versus other Tlingit, or Sanya versus Henya Tlingit; the different uses should be clear in context. The exact dialect used in some settlements is unknown since they are abandoned and native speakers were not recorded. In such cases the settlement is noted in the most likely dialects, preceded with a superscript question mark ? indicating uncertainty.

- Tongass Tlingit (T): Duke Island Yi'x, Metlakatla Tahkw Ahni (now Coast Tsim. Maxłakxaała), Port Stewart Gahnax, Tongass Katukxuka
- Southern Tlingit (S)
- Sanya Tlingit (S): Cape Fox Gaash, Kah Shakes Cove Gunéiḱan Héènak'u, Naha Bay Naa.á, Unuk River Joonáx, Chickamin River Xeel, Yes Bay Yees Geeyí
- Henya Tlingit (H): Craig Shaanséet, Klawock Laawaak, Tuxekan T'akjik.aan, ?Kuyu Kooyú

[^3] poll I conducted in 2009 showed that people seemed to prefer 'Inland Tlingit'.

- Northern Tlingit (N)
- Transitional Tlingit (R): Wrangell Kaachx́xana.áak'w, Petersburg Gantiyaakw Séedi ~ Séet Ká, Kake Kéex $\underline{x}^{\prime}$, 'Kuyu Kooyú, 'Sumdum S'aawdáan, some in Angoon Aangóon
- Greater Northern Tlingit (N)
- Central Tlingit (N): Sitka Sheet'ká, Angoon Aangóon, Killisnoo Kanasnoow, Tenakee T'anageiy, 'Sumdum S'aawdáan, Taku T’aakú, Juneau Dzánti K'ihéeni ~Jóonu, Douglas X'áat'k' T'iká, Auke Bay Áak'w, Hoonah Xunaa, Haines Deishú, Klukwan Tlákw.aan, Skagway Shgagwéi
- Gulf Coast Tlingit (G): Lituya Bay Ltu.áa, Dry Bay Gunaxooo, Yakutat Yaakwdáat, Icy Bay Ÿaas'é, Kaliakh Galyáx
- Inland Tlingit (I): ?Sumdum S'aawdáan, Atlin Áatlein, Teslin Deisleen, Tagish Taagish, Carcross Naadaashahéeni ~ Naatasehéeni

The inventory of suprasegmental correspondences between the dialects is given in table 2.1 on page 21, see also the description of Leer's 'citation transcription' on page 19. The consonant inventory of all the dialects is shown in table 2.2 on page 21; note that this is an orthographic representation, but the descriptors all follow the North American style of the IPA. The vowel system of Northern Tlingit is documented in table 2.3 on page 22, with the symbols for Southern Tlingit falling tone vowels in table 2.4. The Tongass Tlingit vowel inventory is listed in 2.5 on page 22 using the orthographic representation for Tongass Tlingit that I employ throughout this book.

One phenomenon within Northern Tlingit that has an obvious effect on vowels is uvular lowering. This is important for investigating syntax and semantics because the variation is explicitly reflected in the orthographies, and it should not be taken to be a morphological difference. In Transitional Tlingit and the Southern and Tongass dialects, the high front vowels ee and $i$ are distinct from the mid front vowels $e i$ and $e$ when occurring with a uvular stop in the onset or coda. In the rest of Northern Tlingit outside the Transitional Tlingit subdialect - i.e. in Greater Northern Tlingit - there is a tendency to shift the high front to mid front when adjacent to a uvular stop, thus Transitional Tlingit geey 'bay' but Greater Northern Tlingit geiy and Transitional éek 'beach' but Greater Northern éík ~éek. Phonetic diphthongization can usually be heard in this circumstance for both high and mid
front vowels, producing something like [Réíqq] for /Ré:q/ and [qę̀èj] for /qè̀j/ with a speaker from Hoonah or Haines, where in Transitional these would be [Riíq] for /Rí:q/ and [qì̀j]] for /qì̀j/ with a speaker from Wrangell or Kake. ${ }^{6}$ Among several other shared properties, this similarity of Transitional Tlingit to Southern Tlingit sets it apart from the rest of Northern Tlingit and thus warrants the occasional polyphyletic treatment of Transitional Tlingit as forming a subgroup with Sanya and Henya.

It should be noted that the same lowering of $e e>e i$ also occurs in a few other words without an obvious motivation from a uvular consonant. Thus the verb $\underline{x} w a a t$ 'ee 'I found $i t^{\prime 7}$ as occurring in Transitional Tlingit has a lowered $e i$ in Greater Northern Tlingit: $\underline{x} w a{ }^{\text {wat'ei, }}$, and the verb awsinee 'he did $\mathrm{it}^{\prime 8}$ in Transitional Tlingit also has $e i$ in the Greater Northern Tlingit form awsinei. This apparently unpredictable difference has yet to be investigated in any sort of detail. It occurs often in data collected by Story \& Naish (1973) because they worked in Angoon which has a sizeable number of Transitional speakers presumably by intermarriage from Kake and Wrangell, or perhaps instead representing a remaining substrate unaffected by intermarriage with Greater Northern speakers from places like Sitka and Hoonah. Story \& Naish noted this phenomenon in some instances but missed it in others, so that some of their distinctions between verb roots are spurious. Edwards (2009) also notes a few instances of this phenomenon from Angoon speakers, usually recognizing when the vowels are lexically identical.

Tonal dialects of Tlingit (Northern and Southern) have a phenomenon of tone alternation on certain CV suffixes. The possessive suffix -yí occurs with high tone after a syllable with low tone, e.g. ax saayí 'my name', but with low tone afer a syllable with high tone, e.g. ax téiyi 'my stone'. Such suffixes are analyzed as having underlying high tone which is lowered due to an Obligatory Contour Principle effect. The lack of tone in Tongass Tlingit precludes such tone alternation, but it is significant that most of the elements that have
6. The town of Kake is K Kéex' (said to be from kée-x $\underline{\underline{x}}^{\prime} e$ 'dawn-mouth', a compound also found as $\underline{k} e e \underline{x}^{\prime}$ 'é 'beginning of dawn') in Transitional Tlingit which is the local subdialect, but the English name is taken from Greater Northern Kéiv́x which exhibits uvular lowering.
7. Atelic perfective of $O-S-c L[-D, \emptyset]-t$ ' $1 \sim t^{\prime} e$ ( $n a ;-:$ Act, $-t x^{\prime} \mathrm{Pl}$ Act) 'S find 0 ':

Ø-ÿu-xa-ÿa-t'i-h
3.0-PFV-1SG.S-CL[-D, $\emptyset,+I]$-find-VAR
8. Atelic perfective of $O-S-c L[-D, s]-n i \sim n e$ ( $n a ;-:$ Act) 'S do 0 ': a-ÿu- $\emptyset$-si-ni-h
3.0-PFV-3.S-CL[-D, $\mathrm{s},+\mathrm{I}]$-do-VAR
tone alternation in the other dialects can be found with fading vowels in Tongass Tlingit.

Northern Tlingit has some vowels which vary idiolectally between long and short. Most of these vowels are found in word-final suffixes, such as the allative suffix -dé which can be realized as either -déi or -dé when it has high tone: aandéi ~aandé 'toward town'. There are also a few variable length vowels in closed syllables, such as in the verb auxiliary =nooch 'habitually' which can also be found as =nuch. In Southern Tlingit these same vowels seem to be almost always short, and in Tongass Tlingit they are always long. This variation is not indicated in any consistent manner orthographically, though the trend over the last two decades has been to write them as short, and previously they were mostly written as long. In phonemic IPA transcriptions I represent them with a 'half-long' mark, thus /té'/ and /nù't $5 /$.

Another significant phenomenon that can be confusing is rounding spread. As with uvular lowering, this is reflected explicitly in the orthographies. In Southern and Transitional Tlingit sequences of high front vowels before labialized consonants are preserved, but in most Northern Tlingit there is a very strong tendency to spread labialization to the vowel. Thus Transitional néekw /níikw/ 'pain, sickness' can be found as nóok/nú:kw/ in some other Northern Tlingit, particularly in the Gulf Coast and Inland subdialects, as well as for Hoonah and Chilkat/Chilkoot speakers. This phenomenon has been lexicalized for most speakers in the communities where it occurs. There are also some words in the language that normally are unrounded but which surprisingly spread rounding. I call this phenomenon occult rounding and discuss it in section 5.1.1 in the context of verb roots.

Morphological compounding neutralizes tone in Northern Tlingit. Thus a compound lú-tú-x'úx' 'nose-inside-membrane' surfaces as lutux'úx' 'nasal membrane' with high tone preserved only on the final syllable (the head of the compound), and low tone occurring on all preceding syllables. This is neutralization rather than an Obligatory Contour Principle effect because existing low tones are not modified: aan 'town' + daa 'around' $\rightarrow$ aandaa. This phenomenon is called tone stealing or stolen tone by the Dauenhauers (e.g. Dauenhauer \& Dauenhauer 1987: 44). ${ }^{9}$ Morphological compounding

[^4]can also reduce long vowels to short vowels in non-head elements, but this does not seem to be consistent across all compounds and still requires some documentation and description.

Readers with no knowledge of Tlingit orthographies should be aware of a few peculiarities. The period. represents a glottal stop / $\mathrm{R} /$ before vowels, so for example kinaak.ádi 'coat' is /khìnà:k?átì/. Word-initial glottal stops are unwritten. The period is also used as a separator between consonant symbols that would otherwise form a digraph, e.g. s.h which is the sequence /sh/ and not the single sound / $\int /:$ yei nas.héin /jè:nàshé:n/ 'it is floating down ${ }^{10}$ versus yaa anashéin /jà:Rànà één/ 'it is barking along at it' ${ }^{11}$ (both from Dauenhauer \& Dauenhauer 1987: 47). Uvular sounds are represented by a subpositioned underscore diacritic, so that $\underline{x}$ is the voiceless uvular fricative $/ \chi / .^{12}$ Because there is essentially no voiced lateral phoneme, the symbol $l$ always stands for a voiceless lateral fricative / $\$ /$.

Ejectives are represented by an apostrophe, so that $\underline{x}^{\prime}$ is the ejective uvular fricative $/ \chi^{\prime} /$, a sound apparently unique to Tlingit (Maddieson, Smith, \& Bessell 2001). Since clusters of consonant and glottal stop are possible, the apostrophe does not represent a glottal stop. That said, the apostrophe does very rarely serve to indicate a word-final glottal stop, e.g. ha' [ha?] 'wow!', a sound which is paraphonemic. Otherwise a postvocalic apostrophe indicates a glottalized vowel in Tongass Tlingit as noted earlier.
'Voiced' obstruent symbols always represent unaspirated obstruents, so that $d z$ is the unaspirated alveolar affricate /ts/. Aspirated sounds are represented as 'voiceless', so that $t s$ is the aspirated alveolar affricate $/ \mathrm{ts}^{\mathrm{h}} /$. Note that syllable final obstruents are written as though they are aspirated whereas in fact they are unaspirated, thus gaatl 'pilot bread' is actually /qà:tł/ and not */qà:t ${ }^{\mathrm{h}} /$.

Long vowels are represented in an 'Englishy' manner, so that oo is /u:/, $e e$ is /i:/, and $e i$ is /e:/, with aa being /a:/ "as in Saab" (Dauenhauer \& Dau-

[^5]enhauer 1987:42). There is a vowel /o/ written as $o$ which is paraphonemic, occurring in a few exclamations; it lacks a long counterpart in all dialects but may feature either high or low tone in Northern and Southern.

Leer (Nyman \& Leer 1993) developed a different orthography which represents uvulars as $C h$ where $C$ is a velar symbol, and which has a different representation of vowel qualities, tone, and length. Naish and Story also had an earlier orthography which they replaced by the time they published their verb dictionary (Story \& Naish 1973), but which was used in their translation of the Gospel of John (Anonymous 1969), and which featured a different vowel system that turned out to be too confusing for native speakers. Naish and Story do not indicate high tone on $C V ́ C$ syllables when the syllable follows a high tone syllable, so for example their k'anáaxan 'fence' is now written ḱanáax́án (both [q’à'ná: $\chi$ án]). ${ }^{13}$ Naish and Story’s low tone marking on long vowels indicates stress or prominence rather than tone, a feature which is now ignored so that their woogòot 'he went' is now written woogoot (both [wù:'kù:t]). Such long vowels with low tone are another context where Naish and Story did not indicate following high tone, e.g. shkalnèegee 'story' for what is now shkalneegí (both [Jkª̀̀'nì:kí']). Their concept behind this was that since any syllables following a stressed vowel are expected to be high tone, this high tone need not be written. This is not universally the case however, so their practice can be misleading. In addition they always wrote variable length vowels as long whereas now these are generally written short, and some of their long vowels in the conjunct domain of verbs are spurious such as x́at woositèen 'he saw me' and kadoohéix nòojeen 'they always used to plant' which are in fact / $\chi$ atwusit ${ }^{\text {h }} \mathrm{i} \mathrm{n} /$ and $/ \mathrm{k}^{\mathrm{h}}$ atuhé: $\chi$ nu't $\left\{^{1} \mathrm{i} n /\right.$.

There are a few idiolectal or dialectally restricted consonants in the Tlingit consonant inventory. Inland Tlingit except Atlin has $m$ which may be either a conservative retention of now extinct * $m$ (Leer's current hypothesis) or which may be an innovative split of $w$ due to influence from neighbouring Athabaskan languages. Inland Tlingit's $m$ appears as a morphophonemic variant of $w$ in some verb forms such as 3-on-3 perfectives (see 19.3.1), in a few native lexemes like séem 'rain', -yumtú 'inside the chest', and máa 'how' for séew, -yuwtú, and wáa elsewhere, in some assorted Athabaskan loanwords like mesdzí 'great horned owl ${ }^{14}$ and jimasasée 'yellow
13. The word k'anáaxán is from Chinook Jargon q’əláxən or q'álaұən 'fence', where it was originally borrowed from an undetermined Coastal Salishan language.
14. Referring to Bubo virginianus lagophonus (Oberholser 1904). Elsewhere the species is
warbler,' ${ }^{15}$ and in some other borrowings like sdéem káa 'locomotive' from English 'steam car' and sitgamsáan 'noon' from Chinook Jargon sítkam san 'half day; noon'. In addition, the Coastal Tlingit word gawdáan 'horse', which was borrowed from Chinook Jargon kiwtán 'horse', appears in Inland Tlingit as gamdáan with a novel $m$ for $w$. Outside of Inland Tlingit, $m$ appears in a few words that were apparently from Coastal Tlingit such as Tsimshianic /ts'am/ from Tlingit s'aaw 'Dungeness crab'16 and English 'Sumdum' /'s $\wedge \mathrm{md} \wedge \mathrm{m} /$ from Tlingit S'aawdáan which probably contains the same s'aaw; these incidate that Coastal Tlingit may have recently also had $m$, though its loss is complete in all modern Coastal dialects.

Another rare consonant in Inland Tlingit is the unaspirated bilabial stop $b$ (IPA /p/) which appears only in the English loanwords báta 'butter' and áabíns 'apple' that are elsewhere gwáta and áagwíns~áagúns. The use of bilabials is increasing everywhere in the context of English code switching, so there is potential for it to become a more regular member of the sound system in the future.

The Inland dialect also has a voiced [1] in a few borrowings from neighbouring Athabaskan languages like daleiyí 'lake trout' ${ }^{17}$ and chilaaskaalé 'swallow', ${ }^{18}$ these are always converted to $n$ in Coastal Tlingit. Amy Marvin of Hoonah, Bert Dennis of Chilkoot, Jennie Manton of Angoon, and Sally Hopkins of Sitka were all recorded as having a [l] in place of $n$, a situation which has also been reported anecdotally for some other very old speakers who were not recorded. I write this as $\underline{n}$ to indicate that it is phonologically equivalent to $n$ but is phonetically distinct. Leer always reconstructs Proto-Na-Dene * $n$ and not ${ }^{*} l$ so that the appearance of [1] is due to denasalization; cf. Eyak l < PAE *n.
B. v. saturatus (Ridgway 1877) and it is called tsísk' $w_{\mathrm{SR}}$ or $d z i ́ s k^{\prime} w_{\mathrm{N}}$.
15. The referent is not specific, but instead seems to be 'little yellow bird', with another name ketllóox'u ts'ats'ée 'dog-urine (colour) little-bird'. This applies to several birds in the Dendroica and Vermivora genera, e.g. the yellow warbler D. petechia aestiva (Gmelin 1789) and the orange-crowned warbler V. celata (Say 1823). Also included may be Empidonax flaviventris (Baird 1843), the yellow-bellied flycatcher. Domestic canaries (Serinus canaria domestica L. 1758) are instead lumped together with pine siskins (Carduelis pinus Wilson 1810) under the unrelated name s'áas'.
16. The species is Metacarcinus magister (Dana 1852).
17. The species is Salvelinus namaycush (Walbaum 1792).
18. Family Hirundinidae, but nonspecific or species unknown. Common swallows in the region are the tree swallow Tachycineta bicolor (Viellot 1808) and the barn swallow Hirundo rustica (L. 1758), with a few other species occurring uncommonly or rarely.

There are two labialized glottal sounds.$w$ (IPA $/ R^{w} /$ ) and $h w$ (IPA $/ h^{w} /$ ) which, as noted by Story (1966: 9), only occur in some idiolects where elsewhere they are the non-labialized counterparts. They are discussed in section 10.1 in the context of root vowel apophony. Leer internally reconstructs them for Pre-Tlingit, so it may be the case that they were more widely distributed but have been lost through changes in rounding patterns.

The extinct consonant $\ddot{y}$ also needs some discussion. This sound is called GAMMA (e.g. Dauenhauer \& Dauenhauer 2002: 87) though it was audiorecorded as a voiced velar approximant [ $\Psi 4]$ rather than a voiced velar fricative ${ }^{*}[\mathrm{\gamma}]$ from various speakers, so the name is a slight misnomer. The gamma was probably extant in nearly all Tlingit before the 19th century. During the 19th and early 20th centuries it underwent a split-merger with $y$ and $w$ depending on labialization in context. Veniaminov recorded it as Cyrillic r [g] in Sitka (Veniaminov 1846), the Krause brothers recorded it as $g$ [g] in the Chilkat area (Krause 1885, 1956, 1993), Swanton recorded it as $y$ [u] extensively in Wrangell but only occasionally in Sitka (Swanton 1909, 1911), Boas did not record it from Louis Shotridge who was from the Chilkat area but acknowledged its presence elsewhere (Boas 1917). In the latter half of the 20th century it was almost extinct, though Leer recorded it as y [u] in Tongass Tlingit (Williams, Williams, \& Leer 1978), and De Laguna (1972: 11) recorded it as $y[u]^{19}$ from the speakers in Yakutat who also worked with Harrington (1939, 1940). There are several audio recordings of Tlingit speakers who preserved the gamma sound that are available in various archives, but no phonetic analysis has been done on them. As far as I am aware, no Tlingit speakers alive today have this sound as a distinct phoneme, but some will occasionally produce it as a phonetically delabialized variant of $w$ in rapid speech, and it can sometimes occur as a phonetic velarization of $y$ as well. The symbol $\ddot{y}$ is retained in morphological and phonological analyses because it helps to explain otherwise mysterious alternations between $y$ and $w$, and lacking it in analysis can be very troublesome as shown by De Wolf (1977).

Leer developed a combined 'citation' transcription which he uses for forms "not attributed to a specific speaker" (Leer 1991: 14). He has used

[^6]it in most of his academic publications since the 1980s (Leer 1989, 1990, 1991, 2000, 2001, 2008). This transcription represents an idealized Tlingit not actually found in any living or attested speech, and is instead something like a rough Pre-Tlingit reconstruction from which forms in the various dialects can be derived. The suprasegmental features of vowels are the most complicated, and the correspondences across the dialects versus Leer's citation forms are given in table 2.1. The citation forms of verbs given by Leer are based on the more conservative Northern Tlingit pattern of prefix contractions (sec. 14) but reflect the more conservative suprasegmental properties of Tongass vowels. Note that despite his statement that citation forms are not from a specific person, he nevertheless often uses his citation transcription for speech from recognized individuals as well. Linguists not thoroughly familiar with the vagaries of dialect variation are recommended to check Leer's citation forms with a native speaker or a more experienced linguist before assuming a realization of the forms in a particular dialect.

Finally, the two early publications on Tlingit grammar in English need to be noted. Boas (1917) demonstrated very high skill in his transcription of Tlingit, faithfully recording all of the consonants and nearly always transcribing tones accurately. This was no doubt due to his experience with other Northwest Coast languages, but Boas was also aided extensively by native speaker Stoowukáa Louis Shotridge who learned to transcribe his own speech from Boas (Shotridge 1915). ${ }^{20}$ In contrast with Boas's work, Swanton (1908, 1909, 1911) had a poorer ear, frequently confusing uvular and velar sounds, fricatives and affricates, and various vowels, as well as completely lacking tone though often catching stress. Boas often offers much improved retranscriptions of small portions of Swanton's work and Leer, Edwards, and the Dauenhauers have each retranscribed a few of Swanton's texts in various manuscripts. Users of Boas's data can be fairly confident except for some occasional errors in tone and his sometimes unusual word divisions, but linguists resorting to Swanton's data should consult native speakers or Tlingit specialists before serious analyzing of his materials. Because my interpretations of both Swanton's and Boas's transcriptions are sometimes fairly radical, I include the original forms in my examples cited from them. I do not do so for other sources when they are sufficiently accurate, instead silently homogenizing the orthography.
20. Stoowukáa even commissioned the manufacture of a special typewriter so that he could include properly transcribed Tlingit in typed letters to Boas and other anthropologists.

2．Dialects and basic phonology

| Tongass | Southern |  | Northern | Leer 91 | Translation |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sanya | Henya |  |  |  |
| V ta | V́ tá | V́ tá | V́ tá | tá | sleep |
| V ta $\underline{\mathrm{k}} \mathrm{a}^{\prime}$ | V́ tá káa | V̀ ta káa | V̀ ta káa | ta qá＇ | sleeping man |
| $\mathrm{V}^{\mathrm{h}}$ shah | V̀：shaa | V̀：shaa | V̀：shaa | ša＇ | mountain |
| $V^{\mathrm{h}} \mathrm{R}$ ahn | V̀：R aan | V̀：R aan | V̀：aan | $a^{\prime} n$ | land，town |
| $\mathrm{V}^{2} \underline{k} a^{\prime}$ | V́V̀ káà | V́V̀ káà | V́：káa | $q a^{\prime}$ | man |
| V ：$a \mathrm{a}$ | V́：áa | V́：áa | V́：áa | á | lake |
| V：R ÿihwaan | V́V̀R yiwáàn | V́V̀R yiwáàn | V́：R yiwáan | ÿi＇wá＇n | you（pl．） |
| V：haa | V̀：haa | V̀：haa | V̀：haa | ha． | us，our |
| V：R x＇aan | V̀：R x＇aan | V̀：R x＇aan | V̀：R x＇aan | $x^{\prime} a \cdot n$ | anger |

Table 2．1：Suprasegmental correspondences between dialects． $\mathrm{R}=$ sonorant．

|  |  | $\begin{aligned} & \frac{1}{\partial} \\ & \frac{\partial}{0} \end{aligned}$ | $\begin{aligned} & \stackrel{\rightharpoonup}{亏} \\ & \text { H. } \\ & 0 \end{aligned}$ | す | 馬 | $\frac{\vdots}{0}$ | $\begin{aligned} & \stackrel{0}{0} \\ & 1 \\ & \stackrel{\rightharpoonup}{0} \end{aligned}$ | 交 |  | $\square$ 0 0 0 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| unasp．stop | （b） | d |  |  |  | g | gw | g | gw |  |  |
| asp．stop |  | t |  |  |  | k | kw | $\underline{\text { k }}$ | kw |  |  |
| ejv．stop |  | $\mathrm{t}^{\prime}$ |  |  |  | $\mathrm{k}^{\prime}$ | k＇w | $\mathrm{k}^{\prime}$ | $\underline{k}^{\prime}$ w | ． | （．w） |
| nasal | （m） | n |  | （n） |  |  |  |  |  |  |  |
| pln．fric． |  | s | sh | 1 |  | X | xw | $\underline{x}$ | $\underline{\text { xw }}$ | h | （hw） |
| ejv．fric． |  | s＇ |  | l＇ |  | $\mathrm{x}^{\prime}$ | x＇w | $\underline{\text { x }}$ | $\underline{\text { x＇w }}$ |  |  |
| unasp．aff． |  | dz | j | dl |  |  |  |  |  |  |  |
| asp．aff． |  | ts | ch | tl |  |  |  |  |  |  |  |
| ejv．aff． |  | ts＇ | ch＇ | tl＇ |  |  |  |  |  |  |  |
| approx． |  |  |  | （1） | y | ÿ | w |  |  |  |  |

Table 2．2：Tlingit consonant inventory in Coastal orthography．

|  | low tone $\grave{V}$ |  |  |  |  |  | high tone V́ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | short V |  |  | long $\mathrm{V}_{\text {: }}$ |  |  | short V́ |  |  | long V́: |  |  |
|  | fnt | ctr. | bck. | fnt. | ctr. | bck. | fnt. | ctr. | bck. | fnt. | ctr. | bck. |
| high | i |  | u | ee |  | оо | í |  | ú |  |  | óo |
| mid | e |  |  | ei |  |  | é |  |  | éi |  |  |
| low |  | a |  |  | aa |  |  | á |  |  | áa |  |

Table 2.3: Northern Tlingit vowel inventory in Coastal orthography.

|  | falling V́V̀ ( $\hat{V}_{:}$) |  |  |
| :--- | :---: | :---: | :---: |
|  | front | centre | back |
| high | éè |  | óò |
| mid | él̀ |  |  |
| low |  | áà |  |

Table 2.4: Southern Tlingit falling tone vowels.

|  | short V |  |  | long V: |  |  | glottalized $V^{\text {? }}$ |  |  | fading $V^{h}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | fnt. | ctr. | $b c k$. | fnt. | ctr. | bck. | fnt. | ctr. | bck. | fnt. | ctr. | bck. |
| high | i |  | u | ee |  | оо | i' |  | $\mathrm{u}^{\prime}$ | ih |  | uh |
| mid | e |  |  | ei |  |  | e' |  |  | eh |  |  |
| low |  | a |  |  | aa |  |  | $\mathrm{a}^{\prime}$ |  |  | ah |  |

Table 2.5: Tongass Tlingit vowel inventory in orthographic representation.

## 3 Nouns and other non-verbs

This book is about verbs, but nouns and their kin must unavoidably be discussed to some extent. Nouns in Tlingit are fairly simple, with much fewer phonological and morphological complications than are associated with verbs. The phonological effects of morphological compounding were discussed in chapter 2 so that they need not be addressed here. The properties of nominal morphology that have a bearing on verbal morphology are possession, relational nouns, case suffixes and postpositions, nominal allomorphy, and the non-case nominal suffixes which consist of the plural suffixes and enclitics and the diminutive suffixes and enclitics. Other nominal issues such as determiner phrase structure, noun adjunction and syntactic compounding, nonverbal predication and equation, topicalization, noun semantics, and so forth will be left for a more complete grammar. Story (1966) has a fairly extensive analysis of nominal morphology and Naish (1966) of nominal syntax which I recommend for the reader interested in learning more about Tlingit nouns. Chapter 19 addresses pronouns as well as the pronominal elements in verbs.

### 3.1. PoSSESSION

Nouns are divided into two basic classes, those which are possessable and those which are not possessable. Unpossessable nouns consist solely of names as far as I am aware, and they cannot enter into any sort of possessive construction. Compare the grammaticality of colloquial English my Alice which could be uttered by an individual married to a woman named Alice, versus the ungrammaticality of Tlingit *ax Áanis which speakers have found strange even when accepting the English counterpart.

Possessable nouns are further divided into two classes based on possession marking, the ALIENABLE and INALIENABLE classes. Alienable nouns can


Figure 3.1: Noun possession types.
occur free, but when possessed they appear with the possessive suffix -yí. Inalienable nouns must be possessed and are not marked with the suffix -ÿí. The different possession types of nouns are summarized in figure 3.1.

The possessive suffix -ÿí comes after any plural or diminutive suffixes but before the oblique case suffixes and any enclitics. It appears on the possessum, indicating possession of the marked noun, and thus represents the 'possessed' status of the noun in a possessive construction. Contrast this with the English -'s which appears on the possessor rather than the possessum.
(2) a. James's house

James-'s house
James-pss house
'James's house'
b. Dzéiwsh hídi

Dzéiwsh hít-ÿí
James house-pss
'James's house'
The possessive suffix -yí has a variety of surface forms depending on the labialization and tone of the preceding syllable. The allomorphs are given in table 3.1. The basic principle is that if the syllable is open then an epenthetic glide $w$ or $y$ occurs, and if the syllable is rounded - i.e. containing a round vowel in the nucleus or a labialized consonant in the coda - then the suffix is rounded as well. The use of $\ddot{y}$ could be avoided in $\ddot{y}$-less dialects since

|  | consonant final |  |  | vowel final |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | +round | -round |  | tround | -round |
| low | -ú | -í |  | -wú | -yí |
| high | -u | -i |  | -wu | -yi |

Table 3.1: Allomorphs of the possessive suffix -ÿí. The labels describe the environment, i.e. the syllable preceding the suffix.
the rounding phenomenon is entirely predictable, but Tongass Tlingit unexpectedly has $\ddot{y}$ rather than $y$. The contrast in that dialect is thus not between a palatal and a labial-velar, but between two velar approximants that are [+round] and [-round], so like with other attested instances of $\ddot{y}$ it is maintained in the abstract morphological representation despite not appearing in the segment inventory. ${ }^{1}$ Like most other open syllable suffixes, the length of the vowel is variable in Northern Tlingit, usually short in Southern Tlingit, and usually long in Tongass Tlingit.

Inalienable nouns must always occur with a possessor and are not normally marked with the possessive suffix. They become alienated nouns with the addition of a possessive suffix, meaning that the noun is no longer an inalienable part of the possessor. The resulting form may have a bizarre or humorous meaning, but it is nevertheless grammatical. I have found that the alienability distinction can be fairly easily elicited from native speakers with a live animal such as a dog, a part of an animal like a bear paw, and a human doll with a removable limb or head. When cited without a possessor, inalienable nouns are given with a preceding en-dash, e.g. -shá 'head', in contrast to a suffix which has a preceding hyphen like -ÿí 'PSS'. In typescripts Leer typically uses two hyphens --shá instead (e.g. Leer 2008), which may or may not be converted in publication to an en-dash. If the alienability or inalienability of a noun is significant then I annotate it with :ALB or :INAL in the gloss following the Leipzig glossing rules (Comrie, Haspelmath, \& Bickel 2008) for indicating inherent properties; normally I leave this property unindicated.

The following examples demonstrate a few alienable and inalienable

[^7]nouns and the different sorts of possession marking associated with them.
(3) a. alienable noun
shákw
strawberry
'a strawberry'
b. possessed alienable noun
ax shágu
ax shákw-ÿí
1SG.PSS strawberry-PSS
'my strawberry'
c. inalienable noun
xóots shá
brown.bear head:INAL
'a brown bear's head' (attached to the brown bear)
d. inalienable noun without possessor
*shá
head:INAL
'a head'
e. inalienable noun with generic possessor
at shá
INDN.PSS head:INAL
'a head', 'something's head'
f. alienated inalienable noun
xóots sháayi
xóots shá-ÿí
brown.bear head:InAL-PSs
'a brown bear head' (not attached to a brown bear)
Story (1966) reports a different system with 'human-possessed' (no suffix) versus 'nonhuman-possessed' (with suffix). She says "semantically, these correspond to human and non-human categories, the possessive suffix occurring with the non-human" (Story 1966: 204). Thus xóots sháayi would refer to the head of a brown bear regardless of whether it is attached, and *xóots shá would be ungrammatical because the possessor is not human. Story's hypothesis has some currency in the language learning community, but I have never been able to verify her claim. I suspect this misunderstanding arises from the physical demonstration of disembodied animal parts
contrasted with the attached body parts of humans, where native speakers would give the former as marked with a possessive suffix and the latter as unmarked. All speakers with whom I have worked have had the basic alienability distinction that I have described previously, with the ability to alienate inalienable nouns by the addition of a possessor. None have shown a human/non-human distinction like that reported by Story. Boas (1917: 89) previously stated that the possessive suffix is not used "in cases in which inseparable possession is expressed", including "parts of the body, provided these are considered as parts of the living body". This is exactly the alienability distinction I have described, thus confirming that it predates Story's work and is not an innovation. The human/non-human distinction reported by Story may instead be an innovation itself, but it must have been restricted to only a few people since it is not widespread today.

Not all body parts are inalienable. The basic semantic concept seems to be that if a body part is readily removed or if it is useful when removed from a body then it is alienable, with all other body parts being referred to by inalienable nouns. Examples of alienable body parts that are easily removed include shé ${ }_{\mathrm{NS}} \sim$ shí 'blood', lóox' 'urine', geitl' 'mucus', xaaw 'fur, hair', sheit 'horn', and t'aaw 'feather'. Examples of less easily removed but useful body parts are s'aak 'bone', dleey 'flesh, meat, muscle', dook 'skin', and naas 'intestine'. There are a few alienable body parts which do not fit into either category, such as dáal 'rumen', and téet' 'vein'. There are also some which might be expected to be alienable by these criteria but are not, for example -x_aakw 'nail, claw'. Thus, like most alienability systems cross-linguistically, the status of a particular noun is not entirely predictable and hence must be memorized.

Some so-called inalienable nouns are actually alienable given that they obviously have a possessive suffix attached. They only rarely occur without possessors however, so they are treated by lexicographers as another kind of inalienable noun. Some speakers do not have access to these words in their alienable form, in which case the noun can be thought of as being a truly inalienable noun with a fossilized possessive suffix. Other speakers may be aware of the possibility of using the alienable form, with the difference between speakers probably due to different levels of conscious awareness and linguistic introspection. Like with most aspects of Tlingit grammar, skilled orators are more accustomed to considering these sorts of issues and are more likely to be aware of them. Examples of such pseudo-inalienable nouns include a few body parts like -ÿoowú ‘stomach', -keigú 'lung', -kalóox'sháni
'bladder', -k'áax́'i ‘kidney (of fish)', -jikóoli N $_{\mathrm{N}} \sim$-chkóoli ${ }_{\mathrm{RS}}$ 'back of hand', and the words for different kinds of tails: -koowú 'bird/fish tail', -l'eedí 'animal tail', -kuhaawú 'beaver tail', and -geení 'tail flipper.'. ${ }^{2}$ Each of these have what appears to be the suffix -ÿí which has been emboldened.

The alienability distinction is important for nouns incorporated into the verb. Noun incorporation is not a free phenomenon but rather restricted to some class of nouns that has not been entirely enumerated yet but is probably both phonologically and semantically constrained. Alienable and inalienable incorporates occur in different slots and have different morphological and semantic properties, among other distinctions. Chapter 20 documents the phenomenon of noun incorporation in detail.

Although most inalienable nouns are body parts, there are a variety of other inalienable nouns as well. These are termed relational nouns because they describe spatiotemporal or abstract relationships between the possessor and some other element external to the noun phrase. Relational nouns can be spatial such as -daa 'around, surrounding of', -xoo 'among', or -gei 'enclosed within, between folds of'. The following examples demonstrate some uses of relational nouns.

| (4) a. shaa | geix' | has yatee |
| :---: | :---: | :---: |
| haa | gei-x' | has=Ø-Ø-ÿa-ti-h |
| untain | lds.of:INAL-LOC | PL=3.0-ZCNJ-CL[-D, $\emptyset,+\mathrm{I}]$-be- |
| 'they are | between the | mountains' |

b. wáa sá a daax’ ituwatee ?
wáa sá a daa-x' i-tu-Ø-ÿa-ti-h
how Q 3N.PSS around:INAL-LOC 2SG.O-inside-ZCNJ-CL[-D, $\emptyset,+\mathrm{I}]$-be-var
'how do you feel about it?'
(Story \& Naish 1973: 226)
Relational nouns can be compounded like other nouns, so for example - $\underline{x}$ 'éi 'mouth' + - x- $o o$ 'among' together form - $\underline{x}^{\prime}$ 'axoo 'distributed among (to eat)', or xuk 'dryness' + - ÿá 'vertical surface' + -tú 'inside hollow object' forming xukyatú 'drying place'. The latter also demonstrates how compounding of an alienable noun with an inalienable noun can provide the possessor for the inalienable one. Some relational nouns are not spatiotemporal but instead refer to purely abstract concepts that have some relation to the possessor. Thus -lukaax denotes 'compelled by, set into immediate action
2. Possibly the obscure word -l'íli 'penis' also falls into this 'tail' category. The usual word for penis is -laaw, which is simply inalienable.
by', and -kayaa refers to 'something sort of like, something not measuring up to'. Relational nouns may take case suffixes and postpositions like other nouns, for which see section 3.2.

The two relational nouns -ká and -ÿá are so frequently used in Tlingit that I have specific gloss abbreviations for them. The relational noun -ká refers to the horizontal surface of the possessor, and it is very frequent in postpositional phrases as a sort of semantic and morphological host for the postposition. ${ }^{3}$ The relational noun -ÿá refers to the vertical surface of the possessor, and in the case of humans and animals it usually refers to the possessor's face. They are abbreviated HSFC for 'horizontal surface' and VSFC 'vertical surface' respectively. Both of these nouns have unique behaviour in the context of noun incorporation in the verb, and they also have a wider distribution than most other incorporated nouns. They are sometimes very vague in meaning, probably due to semantic bleaching from extensive use in a wide variety of contexts. This is most notable in the verb where they have become an important component of the noun classification system while retaining little of their original independent meanings, as well as being purely lexicalized and meaningless in many verbs.

### 3.2. CASE SUFFIXES AND POSTPOSITIONS

Tlingit has a fairly large inventory of case suffixes and postpositions. The difference between the two is phonological but not entirely well defined. There is an orthographic convention of writing CV case suffixes as separate words if the base word is somewhat long, but this is purely for visual convenience and they are nonetheless still suffixes. Postpositions are in contrast always written as separate words, and phonologically they are indeed more wordlike, at least being categorizable as enclitics. The entire inventory is given in table 3.2.

The case suffixes and postpositions have several different properties that do not hold for all members of the set, though each property is common to at least four of them. The different properties are hard to summarize in a table so instead I have included a lattice that diagrams the various properties in figure 3.2 on page 32. Dashed lines indicate that the particular case
3. The meaningless base =ee (see ch. 19) may have once been a relational noun like -ká, but completely bleached of meaning and thus grammaticalized.
3.2. Case suffixes and postpositions

| Form | Abv. | Name | Meaning |
| :--- | :--- | :--- | :--- |
| $-c h$ | ERG | ergative | subject of transitive verb |
| $-x^{\prime}$ | LOC | locative | at, on, in, by |
| $-t$ | PNCT | punctual | at a point, to a point, around a point |
| $-\underline{x}$ | PERT | pertingent | contacting, form of, concerning |
| - dé | ALL | allative | to, toward, until, manner of |
| $-d a ́ x$ | ABL | ablative | from, out of |
| -náx | PERL | perlative | along, by, via, during, across |
| -gáa | ADES | adessive | around, about, by, after, for |
| $-n$ | INST | instrumental | with, using, as soon as |
| teen | COM | comitative | along, with, accompanying |
| -ú | LOCP | locative predicate | verbless locative phrase |
| yáx | SIM | similative | like, as, similar to |
| yís | BEN | benefactive | for, benefiting |
| góot | ABES | abessive | without, lacking |
| nák | ELAT | elative | away from, leaving behind |
| ýáanáx | more | superlative | more than |
| kín | less | sublative | less than |

Table 3.2: Case suffixes and postpositions.
suffix or postposition displays the attached property to some extent but not unambiguously.

The entire set of case suffixes and postpositions does not comprise a single phonologically distinct class, with there instead being a distinction between the true suffixes and the postpositions. The difference between them is phonological, with postpositions behaving more like enclitics or distinct words and with suffixes being unpronounceable when not attached to a word. Some of the suffixes also have postposition-like properties in that they are occasionally found somewhat separate from a word and they do not exhibit tone alternation (q.v. ch. 2).

Some postpositions seem to have been derived from relational nouns (see sec. 3.1), in that they behave similarly to inalienable nouns. The differences from relational nouns are that they cannot be alienated and they do not themselves take case suffixes or other postpositions. It is likely that they were originally relational nouns but their meanings have drifted so far
to the abstract that they have become grammaticalized.
Cases are divided into three functional subsets: grammatical case, positional case, and relational case. Grammatical case is determined by syntax, so that the ergative suffix -ch appears on noun phrases that are the subject of a transitive verb, and the punctual suffix - $t$ appears on noun phrases denoting the goal of the perfective form of a $\emptyset$-conjugation class (see ch. 11) motion verb. Positional cases describe the spatiotemporal disposition of the entity that they mark, so the locative suffix $-x^{\prime}$ expresses location at the marked entity, the pertingent suffix -x expresses location in contact with the marked entity or a temporal extent coincident with the marked entity, the ablative suffix -dáx expresses motion away from the marked entity or a temporal extent after the time of the marked entity, and so forth. Relational CASES describe (non-positional) relationships between entities, so that the instrumental - $n$ expresses employment of or existence with the marked entity, and the pertingent suffix - $\underline{x}$ expresses being a component of the marked entity or being a member of the set of all entities described by the marked noun phrase.

One property not indicated in figure 3.2 is the distinction between CORE CASES and oblique cases. Tlingit has only one core case, namely the ergative suffix -ch which marks the subject noun phrase of a transitive verb. There is no absolutive case; the object noun phrase of a transitive verb is unmarked, as are the subject or object of an intransitive verb. The absolutive could be analyzed as - $\emptyset$ for symmetricality, but I have not done so. All the other case suffixes and postpositions form obliques, i.e. postpositional phrases that are not core arguments of a verb. Thus I occasionally refer to them as oblique cases.

The locative predicate suffix -ú is not given in figure 3.2 because of its unique syntactic property in forming phrases in which no verb occurs. It is a true suffix exhibiting tone alternation, and it is strictly a positional case with no relational properties. Other than the fact that it excludes a verb from cooccurring, it can be considered equivalent to the locative suffix $-x$..

I will address each case suffix and postposition in its own subsection in turn, describing each one's basic properties. Since this book is about verbs I will not explore their syntactic or semantic properties in any great detail, but I will point out some properties specifically correlated with verbs.


Figure 3.2: Property lattice for case suffixes and postpositions.

### 3.2.1. ERGATIVE SUFFIX

Although I promised to spend only a very little space in discussing the case suffixes and postpositions, the ergative suffix demands somewhat more attention than the others. This is because it is intimately associated with several different verbal phenomena and because it has some unusual impacts on the structure of the verb.

Swanton (1911: 168) called the ergative suffix -ch (his -tc) an "intensive suffix", used "when special attention is to be paid to anything". Boas (1917: 99) recognized it as well, and considered it to be a passive marker following other analyses of ergativity at the time. The ergative suffix was called the 'subjectival syntactic marker' by Story (1966: 30) and was finally labeled as 'ergative’ by Leer (1991: 33). It is most often used in a cross-linguistically typical way for ergatives, marking the subject argument of a transitive verb.
(5) a. ax éeshch útlxi as.ée
ax éesh-ch útlxi a-Ø-Ø-sa-.i-:
1SG.PSS father-ERG soup $3.0-\mathrm{ZCNJ}-3 . S-C L[-\mathrm{D}, \mathrm{s},-\mathrm{I}]$-cook-VAR
'my father is cooking soup'
b. haa s'aatéech ch'a du yéet akaawakaa
haa s'aatí-ch ch'a du yéet a-ka-ÿu- $\emptyset-y ̈ a-k a-h$
1PL.PSS master-ERG just 3 H.PSS son $3.0-\mathrm{HSFC}-\mathrm{PFV}-3 . S-\mathrm{CL}[-\mathrm{D}, \emptyset,+\mathrm{I}]$-say-VAR
'our master sent his own son'
theme: $0-k a-S-c L[-D, \emptyset]-k a(n a ? ;$-? Act) 'S send 0 (on message, mission)’
(Story \& Naish 1973: 183)
The ergative might be more properly termed a clitic rather than a suffix, given that it scopes over an entire phrase rather than a single word. The following example shows how the ergative appears on the last element in a conjunction though it is semantically indicating that both elements of the conjunction are agents.
(6) ergative over conjunction
séew ka gagaan kagánich áwé
[séew ka gagaan kagán-ÿíl-ch á-wé
[rain and sun light-PSS]-ERG FOC-MDST
kei kanas.éin
kei=ø-ka-na- $\emptyset$-sa-.a-n
up=3.0-HSFC-NCNJ-3.S-CL[-D,s,-I]-grow-VAR
'rain and sunlight are making them (plants) grow'
theme: $O-S-C L[-D, S]-a(\underline{g} a ;-$-? ?) 'S cause 0 to grow' (Story \& Naish 1973: 103)

I have not tested if it is possible to mark both elements of a conjunction with the ergative - e.g. ? 'séewch ka gagaan kagánich - but I have never seen this and hence I suspect that it is ungrammatical.

Plural enclitics occur before the ergative. It is ungrammatical to have the ergative on the inside of the plural enclitic, and it is also ungrammatical to have the ergative marked on both the noun and the plural enclitic. ${ }^{4}$ The examples below demonstrate these facts.
(7) a. du éesh hásch útlxi as.ée
du éesh=hás-ch útlxi a-Ø-Ø-sa-i-:
3H.PSS father=PL-ERG soup $3.0-\mathrm{ZCNJ}-3 . \mathrm{S}-\mathrm{CL}[-\mathrm{D}, \mathrm{S},-\mathrm{I}]-\mathrm{cook}-\mathrm{vAR}$
'his father and them are cooking soup'
b.* du éeshch hás útlxi as.ée
c.* du éeshch hásch útlxi as.ée

The construction kaa éesh hás 'someone’s father + plural' is generally interpreted as 'someone's father and other associated people', but in Tlingit oratory the term ax éesh hás 'my fathers' is used to address all males older than oneself of the opposite moiety so this is an alternate possible interpretation of the phrase.

A transitive verb with a middle voice object (reflexive, reciprocal) will not feature ergative marking on the subject noun phrase. Thus the first of the following examples with a third person subject and reflexive object is grammatical since it lacks -ch, but the second example that has -ch marked on the subject noun phrase is ungrammatical.
(8) a. XX'alchán sh dzixán

X X'alchán sh- $\emptyset-\emptyset$-dzi-xan-
NAME RFLX.O-ZCNJ-3.S-CL[+D,s,+I]-love-vAR
'X'alchán loves himself'
b.* X'alchánch sh dzix́án

The ergative also does not appear on the subject noun phrase if the object is indefinite. In the following sentence, the object t'á is not a specific king salmon but rather is an indefinite king salmon of arbitrary number and uniqueness. Note that despite being indefinite the ordinary third person object $a$ - is used, not the indefinite nonhuman object at-. The distinction between a semantically indefinite and a syntactically indefinite object has yet
4. There is in fact no case concord at all in Tlingit, on clitics or otherwise.
to be thoroughly explored, but this seems to be one diagnostic for semantic indefiniteness.
(9)


As a side note, Leer listed the following indefinite and definite noun phrases in an undated class handout (ms. ca. 2003). He also pointed out that proper names, "such as names of persons, pets, or clan property such as houses or hats, are always definite".

- indefinite noun phrase
- hít 'a house'
- dleit hít 'a white house'
- definite noun phrase
- yá hít 'this house'
- wé dleit hít 'that white house'
- wé Dleit Hít 'the White House'
- ax hídi 'my house’
- yá ax hídi 'this house of mine'
- Idakát hít 'every house’
- Idakát wé hítx' 'all the houses'

There has been to date no investigation of definiteness in Tlingit, so this is an open - and potentially very fruitful - area of research.

Returning to the ergative suffix, it never appears with an intransitive verb, neither subject intransitive nor object intransitive. Note that even though the sole argument of the subject intransitive is an agent, it is nonetheless not marked with the ergative. This is fairly typical cross-linguistically for ergative marking.

[^8](10) a. subject intransitive

X'alchán woogoot
X'alchán ÿu-Ø-ÿa-gut-h
NAME PFV-3.S-CL[-D, $\emptyset,+\mathrm{I}]$-go.SG-VAR
'XX'alchán went'
b.*X'alchánch woogoot
c. object intransitive

X’alchán yanéekw
X’alchán Ø-Ø-ÿa-nikw-:
NAME 3.0-ZCNJ-CL[-D, $\emptyset,+$ II $]$-sick-vAR
'X'alchán is sick'
d. * X'alchánch yanéekw

To sum up the basic properties of the ergative suffix, it is used to mark the subject noun phrase of a transitive verb if and only if the object of the verb is definite and it is not coreferential with the subject (middle voice). It of course is not used if there is no independent noun phrase which can be marked with the ergative, so that most instances of first and second person subjects lack an ergative-marked noun phrase as well as with third person subjects where the independent noun phrase referencing the subject is omitted.

The ergative has some peculiar effects on the verb depending on its position in the sentence. In a 3-on-3 conjugation where both the subject and the object are third person, the third person object will normally appear with the $a$ - allomorph rather than the $\emptyset$ - allomorph (sec 19.3.1). If however the subject noun phrase appears immediately before the verb then the $\emptyset$ - allomorph is used instead.
(11) a. SOV, object between subject and verb
ax éeshch útlxi as.ée
ax éesh-ch útlxi a- $\emptyset$ - $\emptyset$-sa-.i-:-
1SG.PSS father-ERG soup $3.0-\mathrm{ZCNJ}-3 . \mathrm{S}-\mathrm{CL}[-\mathrm{D}, \mathrm{S},-\mathrm{I}]$-cook-var
'my father is cooking soup'
b. OSV, subject immediately preceding verb
útlxi ax éeshch sa.ée
útlxi ax éesh-ch $\emptyset$ - $\emptyset-\emptyset$-sa-.i-:
soup 1SG.PSS father-ERG $\mathbf{3 . 0 - \mathrm { ZCNJ } - 3 . S - C L [ - D , S , - I ] - c o o k - V A R ~}$ 'my father is cooking soup'

Curiously, this does not seem to hold when the subject noun phrase is a third person human pronoun, either hú 'third person human' or hás 'third person (human) plural'. The use of the independent pronouns is emphatic as shown in the English translation; sentences without pronouns are possible (and more common) due to the verb-internal person marking.
(12) a. hóoch as.ée
hú-ch a-Ø-Ø-sa-i-:
3H-ERG 3.0-ZCNJ-3.S-CL[-D, s,-I]-cook-vaR
'him, he's cooking it'
b. hásch as.ée
hás-ch a- $\emptyset-\emptyset$-sa-.i-:
3PL-ERG 3.0-ZCNJ-3.S-CL[-D,S,-I]-cook-vAR
'them, they're cooking it'
It may be that the pronouns in these examples are actually focused or topicalized, and indeed people usually prefer to use them with an intervening focus particle like áwé. If they are indeed focused or topicalized then they could be external to the verb phrase and hence not be able to trigger the $a$ - $\sim \emptyset$ - alternation. This phenomenon remains to be explored.

The ergative can occur in a transitive sentence without an actual noun phrase for the object. The following examples demonstrate this phenomenon.
(13) a. dùsítc wusttîn

$$
\begin{array}{ll}
\text { du séech } & \text { wusiteen } \\
\text { du sée-ch } & \emptyset \text {-ÿu- } \emptyset \text {-si-tin-h } \\
\text { 3H.PSS daughter-ERG } & \text { 3.0-PFV-3.S-CL[-D,s,+I]-see-var } \\
\text { 'his daughter saw him' }
\end{array}
$$

(Boas 1917: 100)
b. Lḕ Łīngî'ttc wusko ${ }^{\prime}$
tléil lingítch wuskú
tléil lingít-ch Ø-u-ÿu-Ø-sa-ku-'
neg person-ERG 3.0-IRR-PFV-3.S-CL[-D,s,-I]-know-vaR
'no person knew it'
(Swanton 1909: 258.10)
In these types of sentences, if the ergative directly precedes the verb then it shows the $a-\sim \emptyset$ - alternation described above. Note also that the second example demonstrates how the ergative is used even in a negative sentence, in which case it indicates that the referent of the noun is the agent of the non-situation.

### 3.2.1.1. NONSUBJECT ERGATIVE USES

As well as its relatively unremarkable function of marking transitive subject noun phrases, the ergative suffix can also be used to indicate an instrument. This usage has distinctly different semantics, as can be seen with the following example.
(14) shálch yú útlxi awsixaa
shál-ch yú útlxi $a-\ddot{y} u-\emptyset$-si-xa-h
spoon-ERG DIST soup 3.0-PFV-3.S-CL[-D,s,+I]-eat-vAR
'he ate that soup with a spoon'
This instrumental use of the ergative suffix -ch is somewhat problematic when given the usual analysis of an ergative marker. The first example might be thought of as having an object yú útlxixi 'that soup' and a subject shál 'spoon' with the ergative suffix -ch. This would require that the subject of the verb, indicated with the $\emptyset$ - prefix in the verb, be the spoon. Since spoons do not normally eat, this reading of the sentence is nonsensical, and hence is rejected by native speakers when lacking a suitable context for spoons eating things. A drawback of this example is that every element of the sentence is normally expected to be a third person, and hence the distinction between subject and non-subject is more difficult.
(15) 'àx̣’únòyítc x̣ułıdjóq'
ax óonaayích xwaliják
ax óonaa-ÿí-ch Ø-ÿu-xِa-li-jak-ÿ
1SG.PSS gun-PSS-ERG 3.0-PFV-1SG.S-cL[-D,l,+I]-kill-vaR
'I killed it with my gun'
(Boas 1917: 99)
The example above provides a first person subject, marked within the verb as $\underline{x} a$-. This means that the subject noun phrase should be first person, and hence any noun phrase marked with the ergative would be expected to be a first person if the ergative is supposed to mark subjects. Instead, the noun phrase marked with the ergative is ax óonaayí 'my gun'. We could hypothesize that, although the noun óonaa would normally be a third person because it is inanimate and hence not a discourse participant, it could instead inherit its first person status through the semantic and syntactic relationship with its possessor $a \underline{x}$ 'my'. But this hypothesis would predict that the sentence du óonaayích x xwaliják 'I killed it with his gun’ should be ungrammatical since the possessor is third person and hence disjoint with the first person subject marked in the verb. Since this sentence is in fact
grammatical, we should just discard the idea that the ergative is marking the grammatical subject in this context. Instead, the ergative suffix -ch appears to have two mutually exclusive uses, one being the indication of the grammatical subject (AGENT-MARKING ERGATIVE) and the other being the indication of an instrument (Instrumental ergative).

Both the agent-marking ergative and the instrumental ergative can occur in a single sentence. The following pair of examples demonstrate an instance of this. The theme involved here is $P-c h ~ O-S-C L[-D, S]-\underline{k} e_{N} \sim \underline{k} i_{R S T}(\emptyset ;-$ ? Act) 'S pay 0 with P ', where the oblique noun phrase referring to the instrument used to pay is marked with -ch. Since this is a transitive verb it is possible to also have a noun phrase for the subject and hence for that noun phrase to be marked with the ergative suffix -ch.
(16) a. keijín dáanaach wutusikéi du xooní
keijín dáanaa-ch Ø-ÿu-tu-si-ke-ÿ du xoon-ÿí
five dollar-ERG 3.0-PFV-1PL.S-CL[-D,s, +I]-pay-VAR 3H.PSS friend-PSS
uháanch
uháan-ch
1PL-ERG
'we paid her friend five dollars'
(Naish 1966: 30)

| b. keijín | dáanaach | awsikéi |  | xooní |
| :---: | :---: | :---: | :---: | :---: |
| keijín | dáanaa-ch | a-ÿu-ø-si-ke-ÿ | du | xoon-ÿí |
| five | dollar-ERG | 3.0-PFV-3.S-CL[-D,s, +I]-pay-VAR | 3H.PSS | friend-Pss |
| ax | tláach |  |  |  |
| ax | tláa-ch |  |  |  |
|  | mother-E |  |  |  |

'my mother paid her friend five dollars'
(Naish 1966: 30)
The first of the sentences above shows that the agent-marking ergative appears on the first person plural pronoun, in agreement with the first person plural subject marked within the verb. This contrasts with the instrumental ergative appearing on a non-first person noun, one which is not a core argument of the verb but is instead an oblique. The instrumental ergative thus is a postposition, forming a postpositional phrase.

The second sentence above illustrates that the instrumental ergative has an additional property distinguishing it from the agent-marking ergative. If the noun phrase with the agent-marking ergative appeared before the verb then it would trigger $a$ - $\sim \emptyset$ - alternation and hence the verb form would be
wusikéi. Since the verb is instead awsikéi, the conclusion must be that the instrumental ergative does not trigger $a-\sim \emptyset$ - alternation in the verb.

The ergative suffix -ch can also be thematically specified. The following example demonstrates one verb theme which includes -ch on a noun phrase that is neither a subject nor an instrument.

```
(17) laakֵ'áskch du yéet jeex'
    laak'ásk-ch du ÿéet jee-x'
    black.seaweed-ERG 3H.PSS son possession-LOC
        awsiwóo
        a-ÿu-\emptyset-si-wu-\ddot{y}
    3.0-PFV-3.S-CL[-D, s, +I]-send-vAR
```

'he sent the black seaweed with his son' ${ }^{6}$
(Story \& Naish 1973: 183)
theme: P-ch $a-S-c L[-D, S]-w u(0 ;-\underline{\chi} A c t)$ 'S send P’
This theme has a thematic object pronominal $a$ - which is not referential, and hence it does not vary with subject inflection unlike the normal third person object $a$ - (see section 19.3.1). ${ }^{7}$ For this theme, the noun phrase referencing the entity being sent must be marked with the ergative suffix -ch even though the noun phrase's role is not an agent but instead a patient. (The destination or goal is optional, and marked with e.g. allative-dé.)

The ergative can also fail to occur in sentences with transitive verbs where it would otherwise be expected to be found. Boas (1917: 99) provides the following pair of sentences where he intended to illustrate that the -ch suffix marked the actor in a "passive" sentence.
(18) a. xùts we q'á ' $\alpha w s t t$ ìn
xóots wé káa awsiteen
xóots wé káa a-ÿu- $\emptyset$-si-tin-h
br.bear MDST man 3.0-PFV-3.S-CL[-D,s,+I]-see-VAR
'the brown bear saw the man'
b. gùtctc wùsit'ìn we k'èL
goochch wusiteen wé keitl
gooch-ch $\emptyset$-ÿu- $\emptyset$-si-tin-h wé keitl
wolf-erg 3.0-PFV-3.S-CL[-D,s,+I]-see-vAR MDST dog
'the wolf saw the dog'

[^9]Boas thought the second sentence was passive because of the presence of the ergative marker, similar to how English uses 'by' to mark a passive agent. Thus he gave the translation 'the dog was seen by the wolf'. We now know that Tlingit does not have passives, and that in fact the second sentence is an ordinary transitive (see ch. 8). What is curious instead is that the first sentence which Boas thought to be an ordinary transitive is actually rather unusual because it lacks ergative marking. This cannot be dismissed on the basis of an animacy difference between the two arguments, since the agent in that sentence is a brown bear which would be expected to be somewhat less animate than the human being, hence we would expect it to be more likely to be marked with the ergative so that its agency is explicit. Boas (1917: 100) himself admitted that his passive analysis was flawed, saying "there are quite a number of cases in which the sentences cannot very well be explained as passives". Our problem is rather the reverse, explaining why there are so many sentences that appear to be transitive but fail to show ergative marking. This may be due to definiteness as discussed earlier, but more research on definiteness is needed before we can make any firm hypotheses about the lack of ergative marking.

### 3.2.1.2. PARTICLES AND SUBORDINATE CLAUSES

The ergative -ch is a component of the explanatory particle ách along with the third person nonhuman pronoun á. This particle is usually found at the beginning of sentences or independent clauses, indicating that the previous statement is an explanation for the subsequent statement. It is typically translated into English as 'that's why' but the academic English terms 'thus', 'therefore', and 'ergo' are also accurate translations; often a translator will precede the antecedent statement with 'because' instead. The explanatory particle ách is usually followed immediately by a focus particle such as áwé or áyú, but this is not always necessary.

```
(19) ách haa dudlisáakw, Kak’weidí
ách haa- \(\emptyset\)-du-dli-sa \({ }^{\text {w }}\)-k Kak'weidí
EXPLN 1 PL.O-ZCNJ-INDH.S-CL[+D,l,+I]-call-REP NAME
```

'that's why they call us Kak'weidí' (Dauenhauer \& Dauenhauer 1987: 66)
In (19) the example sentence is preceded in context by another statement that gives the reason for why the house group is called Kak'weidí. The example begins with ách, indicating that the preceding statement is the ex-
planation and that this sentence is the consequent of the explanation. The following example demonstrates the same usage.
(20) ách áyú uháan tsú haa toowú a yáx
ách á-yú uháan tsú haa tú-ÿí a yáx
EXPLN FOC-DIST 1PL also 1PL.PSS inside-PSS 3N SIM
wootee
Ø-ÿu-ÿa-ti-h
3.0-PFV-CL[-D, Ø, +I]-be-vaR
'this is why we also felt so' (Dauenhauer \& Dauenhauer 1990: 160)
The explanatory particle can be thought of as having the third person nonhuman pronoun á serving as an anaphor for the preceding statement. This anaphor is marked with the ergative so that the antecedent statement that precedes the explanatory particle is then a sort of agent that causes the consequential statement following the explanatory particle. Schematically this is something like [СР ... antecedent ...] $]_{i}$ [СР $\dot{a}_{i}$-ch ... consequent ...], with $a$ indexing the entire antecedent sentence, and probably appearing in the same structural position as a topicalized phrase within the consequent sentence.

The same form ách also occurs as an obligatory oblique (ch. 8), i.e. an oblique noun phrase lexically specified as obligatorily appearing before a particular verb. The specific verb with which it appears is $P-\{t, \underline{\chi}, d e ́\}$ ách $a-S-C L[-D, s]-w u(\emptyset ;-$ ? Act) 'S send to P'; note the lexically specified object pronominal $a$ - which is nonreferential. The following example is taken from a class handout by Leer (ms. ca. 2003).
(21) dáanaa ax jeet ách awsiwóo dáanaa ax jee-t á-ch a-ÿu-Ø-si-wu-ÿ
money 1SG.PSS possession-PNCT 3 N -ERG $3.0-\mathrm{PFV}-3 . \mathrm{S}-\mathrm{CL}[-\mathrm{D}, \mathrm{S},+\mathrm{I}]$-send-VAR 'he sent me money'

In this example the word dáanaa 'money' looks to all the world like the object, and ách would be the subject with the ergative marker attached. But the subject and ách are not coreferential, as the following example shows.

```
(22) tsaa dleeyí áwé i x'éide ách
tsaa dleey-ÿí á-wé i x_'é-dé á-ch
seal meat-PSS FOC-MDST 2SG.PSS mouth-ALL 3N-ERG
    aa akwk_asawóo
    aa-a-ga-w-ga-xa-sa-wu-:
    PART-3.0-GCNJ-IRR-GMOD-1SG.S-CL[-D,S,-I]-send-VAR
'I will send you some seal meat'
```

(Story \& Naish 1973: 183)
Here the ách cannot be the subject because it is a third person whereas the verb is marked for first person singular. Also note the partitive object aaappearing in the verb along with the lexically specified and nonreferential $a$ third person object. Leer (ms. ca. 2003) claims that this verb does not take an object, and that the noun phrase (dáanaa or tsaa dleeyí) is a sort of topic and not an object. The ách is, at "an abstract grammatical level" according to Leer, a dummy pronoun which is coreferential with the topic. He translates dáanaa ax jeet ách awsiwóo literally as 'it's money, he made a sent-offering to me by means of it'. This implies that the -ch is not an ergative but rather an instrumental.

Given the previous discussion, the following example from Naish \& Story is probably a mistake. Rather than the verb root $\sqrt{ }$. 'own', this should probably have $\sqrt{ } w u$ 'send' instead as in the examples above.
(23) kóox ka gáatl ách has wududzi.oo
kóox ka gáatl á-ch has-Ø-wu-du-dzi-.u-h
rice and p.bread 3 N -ERG PL-3.0-PFV-INDH.S-CL[+D,s,+I]-own-VAR
'they gave them rice and pilot bread to take away'
(Story \& Naish 1973: 100)
If this example was not indeed a mishearing of $\sqrt{w u}$ or a speech error then this would constitute an additional verb in the lexicon which includes a thematic ách, at least for some people in Angoon. The likelihood of this being the case is rather small, but I have not checked it with any native speakers.

Although it mostly occurs on nouns, the ergative can also be suffixed to a subordinate verb. When done, this indicates that the subordinate clause is the explanation for some situation expressed in the main clause. Naish and Story call this construction a 'causal subordinate clause' (Naish 1966: 12). As Naish describes it, the subordinated verb marked with -ch represents the statement of 'cause' while the main clause is the statement of 'effect'.

```
(24) a. aagáa kiyeesheeyéech áwé,
á-gáa ku-ÿu-ÿi- \(\emptyset\)-shi-h-ée-ch á-wé
3N-ADES AREAL-PFV-2PL.S-CL[-D, Ø,-I]-search-vAR-SUB-ERG FOC-MDST yeeyt'ei
Ø-ÿu-ÿi-ÿa-t’e-h
3.0-PFV-2PL.S-CL[-D, Ø, +I]-find-VAR
```

'because you searched for it, you found it' (Story \& Naish 1973: 183)
b. ax káa yaa kandatáx'eech xáa
ax ká-' yaa=ka-na- Ø-da-tax'-n-ée-ch x́a
1SG.PSS HSFC-LOC along=HSFC-NCNJ-3.S-CL[+D, Ø,--I]-bite-vAR-SUB-ERG SOFT
áwé wóoshdáx daak yaxwaat'éey á-wé wóosh-dáx daak=ø-ÿa-ÿu-xַa-ÿa-t'iy-h FOC-MDST RECIP-ABL ADMAR=3.0-vSFC-PFV-1SG.S-CL[-D, $\emptyset,+\mathrm{I}]$-elbow-vAR
'because it was closing in on me, I elbowed it apart' (Naish 1966:12)
This phenomenon of marking a subordinate with -ch to indicate the antecedent situation shares the same conceptual framework as the explanatory particle ách discussed above. With ách the subordinate clause is shifted out to a distinct sentence and the consequent sentence begins with ách to indicate the relationship. With just -ch the subordinate clause is contained within the same sentence as the matrix clause, and the -ch marks the subordinate as the antecedent situation with the matrix clause describing the consequent situation. Structurally we can think of this use of -ch as indicating [[... antecedent ... V-ch sub $]$... consequent ... matrix $]$.

### 3.2.2. LOCATIVE SUFFIX

Story (1966: 29) called the locative suffix $-x^{\prime}$ 'adessive’, and Leer (1991:33) provided the term 'locative' which is more in keeping with its basic meaning. The locative suffix indicates that the marked noun phrase is a location for some other entity, and is usually translated into English as 'at', 'on', 'in', or 'by'.

| (25) a. | ax $\quad$ hídix' | áwé |
| :--- | :--- | :--- |
| ax | hít-ÿí- $\mathbf{x}^{\prime}$ | á-wé |
|  | 1SG.PSS house-PSS-Loc | FOC-MDST |
|  | 'at my house' |  |

b. yú káayagijeit káx'
yú káayag̣ijeit ká-x'
DIST chair HSFC-LOC
'on that chair'
c. du shantóox'
du shá-tú-x'
3H.PSS head-inside-Loc
'in his head'
d. aan $\mathbf{x}^{\prime}$ yatee
aan- $\mathbf{x}^{\prime} \quad \emptyset-\emptyset-\mathrm{ya}-\mathrm{ti}^{\mathrm{h}}-\mathrm{h}$
town-LOC 3.0-ZCNJ-CL[-D, Ø, +I]-be-vAR
'it's in town'
The locative suffix $-x^{\prime}$ has the same phonological form as the plural suffix $-x^{\prime}$, both being ejective velar fricatives, but the two are distributionally and semantically distinct. They occur for example in different positions in the sequence of suffixes that can attach to nouns.
(26) a. ax hítx'i
ax hít-x'-ÿí
1SG.PSS house-PL-PSS
'my houses'
b. ax hídix'
ax hít-ÿí- $\mathbf{x}^{\prime}$
1SG.PSS house-PSS-LOC
'at my house'
c. ax hítx'ix'
ax hít-x'-ÿíí- $x^{\prime}$
1SG.PSS house-PL-PSS-LOC
'at my houses'
There is an allomorph -' of the locative suffix that occurs after the final CV syllable of a preverb (ch. 21) or an obligatory oblique phrase (ch. 8). The allomorph is represented morphologically as -' due to its form in Tongass Tlingit as CV' with a glottalized vowel. The effect in Northern Tlingit is to change the CV to CV́: with a long vowel and high tone, regardless of the original tone. In Southern Tlingit the result is CV́V with a long vowel and falling tone. These are the usual correspondences between Tongass glottalization and the tone systems of the two dialects (see ch. 2).
(27) a. kaawayík yaagú áa yei ishkákַch
kaawayík yaagú á-'=yei=Ø-Ø-sh-kak-ch
air boat $3 \mathrm{~N}-\mathrm{LOC}=$ down=ZCNJ-3.S-CL[+D,sh,-I]-land-REP
'the airplane lands there' (Story \& Naish 1973: 121)
b. héen ax tuwáa sigóo
héen ax tú-ÿá-' $\quad$ - $\emptyset$-si-gu-:
water 1SG.PSS mind-vSFC-LOC $3.0-\mathrm{ZCNJ}-\mathrm{CL}[-\mathrm{D}, \mathrm{s}, \mathrm{I}]$ ]-enjoy-vAR
'I want water'
Although it has a restricted syntactic distribution, in the appropriate context this allomorph is freely varying with the basic locative allomorph $-x^{\prime}$ for many speakers. It is not clear if this is the case for all speakers, and may perhaps be limited by exposure to only a few examples or by limited grammatical introspection. The following example demonstrates the free variation, with the same sentence as the previous example but with the $-x^{\prime}$ allomorph of the locative suffix instead.
(28) héen ax tuwáx' sigóo
héen ax tú-ÿá-x' $\emptyset$ - $\emptyset$-si-gu-:
water 1SG.PSS mind-VSFC-LOC $3.0-\mathrm{ZCNJ}-\mathrm{CL}[-\mathrm{D}, \mathrm{s},+\mathrm{I}]$-enjoy-VAR
'I want water'
Both are acceptable to every speaker I have worked with, though the former form with -' is by far more common than the latter with $-x^{\prime}$.
[[FIXME: -i allomorph? - $\emptyset$ allomorph? -: allomorph? Leer 1991: 34]]
[[Fixme: Naish 1966: 115]
(29) a. du XÁni wugùd
du xáni woogoot
du xán-i ÿu-Ø-ÿa-gut-h
3H.PSS beside-LOC PFV-3.S-CL[-D, $\emptyset,+\mathrm{I}]$-go.SG-VAR
'he went by him (to visit)'
(Naish 1966: 128)
b. híni wugùd
héeni woogoot
héen-i=ÿu- $\emptyset-y ̈ a-g u t-h$
water-LOC=PFV-3.S-CL[-D, Ø, +I]-go.SG-VAR
'he went into the water'
(Naish 1966: 127)
The $-\emptyset$ and $-:$ allomorphs occur with the postpositional pronouns and the meaningless base $=e e$ (see ch. 19). Boas (1917:94) noted the use of both in his discussion of $=e e$ as expressing an indirect object.
(30) a. xáa awlitóow
xá-: $\quad$ a-ÿu- $\emptyset$-li-tuw-h
1SG-LOC 3.0-PFV-3.S-CL[-D,l,+I]-teach-vAR
'he taught it to me'
(Boas 1917: 94)
b. haa ée woo.éex'
haa=ee- $\emptyset \quad$ ÿu-Ø-ÿa-.ix'-h
1PL=BASE-LOC PFV-3.S-CL[-D,, ,+I]-call-vAR
'he called to us'
(Boas 1917: 94)
[[Fixme: Use with subordinate clauses.]]
 yées káax xat satéeyeex' áyú yaakwyíx' yées káa-x x્રat-Ø-sa-ti ${ }^{\text {h}}$-h-ée- $x^{\prime} \quad$ á-yú yaakw yík-x' young man-PERT 1SG.O-ZCNJ-CL[-D, S,-I]-be-vAR-SUB-LOC FOC-DIST boat in-LOC
yéi jixané
yéi=Ø-ji-Ø-xa-Ø-ne-'
thus=3.0-hand-zCNJ-1SG.S-CL[-D, Ø,-I]-do-vAR
'when I was a young man I worked on a boat'
(Naish 1966: 139)

### 3.2.2.1. OBSOLETE LOCATIVE

Boas (1917: 102) noted an obscure suffix - $k$ that he glossed as 'on', and which seems to be a cousin of the locative suffix. It occurs in a handful of different words such as tatóok 'cave', héen sháak 'head of a river', héen táak 'in the water', ixdáak 'entrance', -ÿa.áak ‘space or opportunity', -gunaÿáak 'apart', -ÿík 'inside', and -kináak 'above,', as well as possibly the following words for landforms: tl'átk 'earth', sháchk 'swamp', táx $\boldsymbol{k}$ 'eroded bank', $\underline{x}$ 'aak 'canyon'. Boas (1917: 102) gave the following examples that he had culled from Swanton's materials. I gloss the $-k$ as oloc 'obsolete locative' here for convenience, whereas I normally do not segment it nor gloss it as a distinct morpheme.
(32) a. Yū'ēq-hē'nî cākq!
yú Eik Héeni sháakx'
yú Eik Héen-ÿí shá-k-x'
dIST Copper River-pss head-oloc-Loc
'at the head of the Copper River'
8. Compare the word kinaak.át 'coat'.
b. Dēsgwa'tc dēx dîs hasduī'k kā'wakîs!
deisgwách déix dís hasdu éek
deisgwách déix dís has-du=ée-k
soon two month PL-3H=BASE-OLOC
kaawakís'
Ø-ka-ÿu-ÿa-kis'-̈̈
3.0-HSFC-PFV-CL[-D, $\emptyset,+1]$-pass-vAR
'soon two months had passed for them'
(Swanton 1909: 361.4)
c. djîłdaka't has ts!u yū'yak ${ }^{\mathrm{u}}$ yîkx has wuā't
ch'a ldakát hás tsu yú yaakw ÿíkx
ch'a ldakát hás tsu yú yaakw ÿí-k-x
just all 3PL also DIST canoe inside-oloc-PERT
has woo.aat
has=ÿu- $\emptyset-y ̈ a-. a t-h$
PL=PFV-3.S-CL[-D, Ø, +I]-go.PL-VAR
'so all of them went into the canoe again' (Swanton 1909:370.12)
d. AdA'x has kanduụiya' Gît!î́kcîk hasdułīłłk!-has ānî'q!
aadáx has kandudliÿáa Git'íkshik hasdu
á-dáx has=Ø-ka-na-du-dli-ÿa-ÿ Git'íksh-k has-du
3N-ABL PL=3.0-HSFC-NCNJ-INDH.S-CL[+D,l,+I]-lower-vAR NAME-OLOC PL-3H.PSS
leelk'w hás aaníx'
léelk'w=hás aan-ÿí-x'
grandparent=PL town-PSS-LOC
'then they were lowering to Git'iksh, to their grandfathers' town'
(Swanton 1909: 380.18)
Boas was perceptive in noticing this suffix because it is very obscure. He said that it "forms a firm unit with the stem, and is treated as a noun", implying that it is not actually a distinct grammatical unit. Unlike any of the other case suffixes, Boas also noted that "it may take other [case] suffixes" (Boas 1917: 102). Thus relational nouns that end with - $k$ may or may not lose it when some other suffix is attached, though this does not seem to be predictable.
(33) a. déix té x́áak
two rock between
'space between two rocks'
b. déix té x́áax $^{\prime}$ yatee
déix té $\underline{\text { X'áak-x }}^{\prime} \quad \emptyset-\emptyset-y ̈ a-t{ }^{\text {h }}$-h
two rock between-LOC 3.0-ZCNJ-CL[-D, Ø, +I]-be-vaR
'it is in between two rocks'
c. táay yík
garden inside
'inside a garden'
d. táay yít uwagút
táay ÿík-t u-Ø-ÿa-gut-ÿ
garden inside-PNCT PFV.TEL-3.S-CL[-D,, ,+I]-go.SG-VAR
'he went into the garden'
e. a t'éik

3N.PSS behind
'its area behind'
f. híd t'éwu wé xú3
hít t'éiwu wé xóots
hít t'éik-u wé xóots
house behind-LOCP MDST brown.bear
'that brown bear is behind a house'
(Naish 1966: 11)
My brief discussions of this suffix with native speakers have shown that they did not perceive $-k$ as having any substantial meaning, nor indeed did they perceive it as an element distinct from the words in which it is found. It is thus a fossilized suffix, one which presumably used to have a locative meaning but which now is functionally dead. Boas footnotes a reference to Swanton (1911: 194) where he discusses various postpositions and relational nouns, with Boas pointing specifically to the relational noun -ká 'horizontal surface' which Swanton glossed as 'on'. This may have been the actual source of the suffix, or it may represent some suffix to be reconstructed in Proto-Na-Dene, but I have no further analysis of it to offer at present.

### 3.2.3. PUNCTUAL SUFFIX

Story (1966:29) termed the punctual suffix 'illative', whereas Leer (1991: 33) applied the term 'punctual', which I retain. Boas (1917: 94) described it as indicating the "position resulting from a movement towards an object", in contrast with the allative suffix -dé describing only "movement towards an object". Its use revolves around the basic concept of a spatiotemporal
point, but different verb themes (ch. 6) and modes (ch. 12) give it different specialized interpretations.

Leer (1991: 33) states that the punctual suffix has three related meanings depending on the verb it occurs with. With positional imperfective forms of verbs it indicates that the marked noun is positioned at a point in space, similar to the meaning of the locative but with a more constrained sense of position. With telic ( $\emptyset$-conjugation class) motion verbs the punctual suffix indicates that the motion denoted by the verb is defined as terminating at the point denoted by the marked noun phrase, and this use represents the core of telicity expression in Tlingit. With atelic ( $n a-$, $g a-$, or $g a$-conjugation class) motion verbs the punctual suffix indicates that the motion expressed by the verb revolves around the point denoted by the marked noun phrase. In sum, the meanings of the punctual suffix $-t$ are:

- with positional imperfective verbs: at a point
- with telic $\emptyset$-conjugation class motion verbs: terminating at a point
- with atelic $n a-$, $g a-$, or $g a$-conjugation class motion verbs: revolving around a point

The following examples demonstrate the positional meaning, where the marked noun phrase indicates the point-like position of the verb's object, which is some unspecified third person element.
(34) a. stative imperfective with locative $-\mathrm{x}^{\prime}$
áx' yatee
á-x' Ø-Ø-ÿa-ti ${ }^{\text {h }}-h$
3N-LOC 3.0-ZCNJ-CL[-D, Ø,-I]-be-vaR
'it exists there' (no agency implied)
b. positional imperfective with punctual - t
át áa
á-t Ø-Ø-Ø-.a-:
3N-PNCT $3.0-\mathrm{ZCNJ}$-CL[-D, Ø,-I]-situate-vaR
'it's situated there' (probably as a result of being placed)
c. *?áx’ áa
á-x' Ø-Ø-Ø-.a-:
3N-LOC $3.0-\mathrm{ZCNJ}$-CL[-D, $0,-\mathrm{II}]$-situate-vaR

Note that the positional imperfective implies that some sort of agent may have placed the third person object there. This is not a presupposition since it can be cancelled [〔Fixme: example]], and because the verb is an object intransitive and hence lacks a subject the agency is not explicit. There is a transitive form of the positional imperfective which has $s$ in the $S$ component of the classifier [FIxmE: example]], and this does express agency explicitly. In contrast, the ordinary existential verb does not imply any sort of agent. This is conceptually separate from the punctuality of the location, but due to verbal semantics the two issues overlap considerably.

The telic interpretation of the punctual arises with motion verbs that are of the $\emptyset$-conjugation class, usually just termed 'telic motion verbs'. These are actually derivations from verb themes that lack an inherent conjugation class, as described in section 11.1. The telic perfective is probably the most common form occurring in ordinary speech, where the perfective form of the motion verb indicates that the motion ends at the location. Telic motion verbs contrast with atelic motion verbs that belong to one of the other three conjugation classes. In their perfective forms, the atelic motion verbs occur with the allative -dé instead.
(35) a. telic perfective with punctual -t

Sheet'kát xwaagút
Sheet'ká-t ÿu-x_a-ÿa-gut-ÿ
Sitka-PNCT PFV-1SG.S-CL[-D, Ø, +I]-go.SG-VAR
'I arrived at Sitka', 'I got to Sitka'
b. atelic perfective with allative -dé

Sheet'kaadé xwaagoot
Sheet'ká-dé ÿu-x̃a-ÿa-gut-h
Sitka-ALL PFV-1SG.S-CL[-D, Ø, +I]-go.SG-VAR
'I went towards Sitka', 'I went to Sitka'
The telic perfective example above expresses the fact that the speaker actually arrived at the destination, the town of Sitka. In contrast the atelic perfective example expresses the fact that the speaker did not actually arrive at Sitka, but was merely headed there. The distinction between the two is actually indicated by the verb stem rather than the postpositional phrase, since the punctual can also be used with the atelic verb.
(36) atelic perfective with punctual -t

Sheet'kát xwaagoot
Sheet'ká-t ÿu-ẋa-ÿa-gut-h
Sitka-PNCT PFV-1SG.S-CL[-D, $\emptyset,+\mathrm{I}]$-go.SG-VAR
'I went around Sitka'
Here the punctual suffix indicates that the speaker went around a point located in the town of Sitka. This is sometimes termed the perambulative use of the punctual suffix. The speaker may have actually gone around the entire town without having entered it, or may have just wandered around some point within Sitka, perhaps around Totem Square between the Pioneer and Ernie's.

### 3.2.4. PERTINGENT SUFFIX

Story (1966: 29) labeled the pertingent suffix $-\underline{x}$ as 'prolative'. This is a peculiar name since the pertingent does not really have an association with movement. Rather, as Leer (1991:33) describes it, the pertingent has to do with prolonged contact at a location, repeated arrival at a location, or having the form of something. Boas (1917: 96) thought of it as possibly the counterpart of the locative $-x^{\prime}$ (sec. 3.2.2) in parallel with the relationship between the punctual -t (sec. 3.2.3) and allative -dé (sec. 3.2.5), but stated that this "does not appear clearly".

The indication of repeated arrival at a location is usually found with repetitive and habitual forms of verbs.
(37) a. hīnx ye îcxî̀x̣tc
héenx yei ishxíxch
héen-x yei=Ø-Ø-sh-xix-ch
water-PERT down=ZCNJ-3.S-CL[+D,sh,-I]-run-HAB
'he always runs into the water'
(Swanton 1909: 274)
b. hà-X gùd
haax goot
haa- $\mathbf{x}=\emptyset-\emptyset-\emptyset-$ gut-h
here-PERT=ZCNJ-3.S-CL[-D, Ø,-I]-go.SG-VAR
'he comes here (repeatedly)'
(Naish 1966: 97)
c. $\Lambda$ k $\Lambda^{\prime}-\mathrm{X} \operatorname{s} \Lambda x^{\prime} \mathrm{a}^{\mathrm{G}}{ }^{\mathrm{w}}$
a káx sax'aakw
a ká-x sa-Ø- $\emptyset$-x'akw-h
3N HSFC-PERT voice-3.S-CL[-D, Ø,-I]-end-vaR
'he forgets'
(Naish 1966: 96)
Prolonged contact with a location is found with both stative and motion verbs.
(38) a. nèłx yéx̣òt wùt ì
neilx yéi xat wootee
neil-x yéi=xat-ÿu-ÿa-ti ${ }^{\text {h }}-\mathrm{h}$
home-PERT thus=1SG.0-PFV-CL[-D, Ø, +I]-be-vAR
'I was at home'
(Boas 1917: 96)
b. yá héen xookáx yaa neegúdi
yá héen xoo-ká-x yaa=na-i-Ø-gut-n-ée
PROX water among-HSFC-PERT along=NCNJ-2SG.S-CL[-D, Ø,--I]-go.SG-VAR-SUB

> x́áa !
xáa
SOFT
'yet you are walking on the water!'
(Naish 1966: 61)
Motion restricted to a fixed location is found only with motion verbs.
(39) a. áx wudikín wé gaanká
á-x ÿu- $\overline{\mathbf{x}}$-di-kin-ÿ wé gaan-ká
3N-PERT PFV-3.S-CL[ $+\mathrm{D}, \emptyset,+\mathrm{I}]$-fly.SG-VAR MDST smokehole-HSFC
'he (Raven) was flying (stuck) there in the smokehole'
The 'form of' meaning of the pertingent $-\underline{x}$ suffix is demonstrated in the following examples.
(40) a. wé Xáw yáy-X awnĵ̀
wé xáaw yáayx aawajee
wé x́áaw yáaÿ-x a-ÿu-Ø-ÿa-ji-h
MDST driftlog whale-PERT 3.0-PFV-3.S-CL[-D, Ø, +I]-believe-vAR
'he thought the log was a whale'
(Naish 1966: 123)
In the verb theme $P-\underline{x} O-C L[-D, S]-t i^{h}(n a ;-h$ Stv) ' $O$ be a member of $P$ ' the pertingent marks the set of which the object is described as a member.
(41) a. łingít $\underset{\underline{x}}{\sin }$ 'i

Lingítx sitee
Lingít-x $\quad \emptyset-\emptyset-$-si-ti ${ }^{\text {h}}-\mathrm{h}$
Tlingit-PERT $3.0-\mathrm{ZCNJ}-\mathrm{CL}[-\mathrm{D}, \mathrm{s},+\mathrm{I}]$-be-var
'he is a Tlingit'
(Boas 1917: 97)
b. A lēn cāx wusitī ${ }^{\prime}$
aatlein shaax wusitee
aatlein shaa-x $\quad \emptyset-y ̈ u-s i-t i^{h}-h$
big mountain-PERT 3.0-PFV-CL[-D,s,+I]-be-vAR
'it became a big mountain' (Swanton 1909: 97)
c. Xél du y
tléil du yádix xat unax́satee
tléil du yád-ÿí-x xat-u-na-ga-sa-ti ${ }^{\mathrm{h}}-\mathrm{h}$
NEG 3H.PSS child-PSS-PERT 1SG.O-IRR-NCNJ-GMOD-CL[-d,S,-I]-be-vAR
'so that I would not be his child' (Naish 1966:123)
d. č' $\wedge$ Pàn $\Lambda y \Lambda ́$ dešıtàn- $\mathbf{X}$ h $\Lambda s$ sttì
ch'a.aan áyá Deisheetaanx has sitee
ch'a.aan á-yá Deisheetaan-x has $=\emptyset-\emptyset-$-si-ti ${ }^{\mathrm{h}}-\mathrm{h}$
RESUM FOC-PROX Deisheetaan-PERT PL=3.0-ZCNJ-CL[-D,s,+I]-be-vAR
'however, they are of the Deisheetaan (clan)' (Story 1972: 38)
The $-\underline{x}$ pertingent suffix should not be confused with the allomorph $-\underline{x}$ of the ablative suffix -dáx which occurs in the ablative preverb aax=. Because $a a \underline{x}=$ is a preverb it will never occur in any position except immediately before the verb. Also, the combination of the third person nonhuman pronoun $a ́$ and the pertingent suffix $-\underline{x}$ always results in the form $a \underline{x}$ and never *aax.
(42) a. $\Lambda$ tú-x' là-X awnšád wé du šíd
a tóox' aax aawashát wé du
a tú-x' á-dáx=a-ÿu- $\emptyset-y ̈ a-s h a t-y ̈ \quad$ wé du
3N.PSS inside-LOC $3 \mathrm{~N}-\mathrm{ABL}=3.0-\mathrm{PFV}-3 . \mathrm{S}$-cL[-D, $\emptyset,+\mathrm{I}]$-grab-VAR MDST 3 H.PSS
shát
shát
wife
'in that (moment) he grabbed his wife from there' (Naish 1966: 127)
b. tíx' aax awlixaash
tíx' á-dáx $=a-y ̈ u-\emptyset-l i-x a s h-h$
rope 3 N -ABL=3.0-PFV-3.s-CL[-D,l,+I]-cut-vAR
'he cut the rope off from there'
theme: $O-S-c L[-D, I]$-xash (na;-n Act) 'S cut 0 ' (Story \& Naish 1973:61)

### 3.2.5. AlLATIVE SUFFIX

Story (1966: 29) provided the name 'allative' for the -dé suffix, which Leer maintained. Boas (1917:94) contrasted it with the punctual suffix -t (sec. 3.2.3), saying that the allative describes "movement towards an object" versus the punctual describing the "position resulting from movement towards an object". It is often translated into English as 'to', though in fact 'toward' is more accurate because it does not imply completion of movement to the marked noun. Contrast this with the punctual suffix which does imply completion of movement in its denotation of telic motion.

This suffix is one of the case suffixes which contain a vowel and hence which participate in an Obligatory Contour Principle phenomenon I call TONE ALTERNATION. I analyze the allative suffix, along with the other vowelcontaining case suffixes, as having high tone underlyingly in the tonal dialects (Northern and Southern). This high tone always appears when the preceding syllable of the noun has low tone, but when the preceding syllable of the noun has high tone then the suffix occurs with low tone.
(43) a. aandé
aan-dé
town-ALL
'toward the town'
b. hítde
hít-dé
house-all
'toward the house'
This suffix has variable length in Northern Tlingit. Earlier orthographic practice was to always write it as long, hence -déi, but current practice is to write it as short, thus -dé. Pronunciation of length varies idiolectally and even contextually for the same speaker, like with other variable length vowels in Northern Tlingit.

The allative suffix is almost certainly related to the alienable noun $d e i$ 'path, trail, road'. Tone is the most obvious distinction between the two, since dei is always low but the allative suffix -dé has alternating tone. The alienable noun can occur alone, whereas the allative is a suffix and hence must occur with a preceding word as its host, but the suffix is sometimes written as a separate word. The noun dei may occur with a possessive suffix, thus ax deiyí 'my road', whereas the suffix will always occur after any possessive suffix on some other noun, thus ax káayidé 'toward my car'. The two can cooccur: yú deidé 'toward that path', ax deiyíde 'toward my road'.

### 3.2.6. ABLATIVE SUFFIX

Story (1966:29) was the first to label the -dáx suffix as 'ablative', and Leer retained this term. It is usually translated in English as 'from' or 'out of', and Leer (1991: 34) notes its use with temporal noun phrases as meaning 'since'. Swanton (1911: 194) represented it as $d A X$ or $d A^{\prime} x$ and simply translated it as 'from', classing it as a "locative adverb". Boas (1917: 98) correctly recognized that its final consonant is uvular and also analyzed it as having high tone as -dớx. He also noted the avocalic allomorph -t즈 (his -tx̣) which is an optional form that can be used after any noun ending in an open syllable, but which usually occurs only with fairly short nouns.
(44) a. xāt ā'ni dax
xaat aanídáx
xaat aan-ÿí-dáx
salmon town-PSS-ABL
'from the salmon town'
(Swanton 1909: 253)
b. 'axyàdóx
ax yaadáx
ax yá-dáx
1SG.PSS face-ABL
'ahead of me', lit. 'from my face'
(Boas 1917: 98)
c. Łdaka't yētx ducāq!awe'
ldakát yéitx dusháax’ áwé
ldakát yé-dáx $\emptyset-\emptyset$-du- $\emptyset$-sha-:--x' á-wé
all place-ABL $3.0-\mathrm{ZCNJ}$-INDH.S-CL[-D, $\emptyset,-\mathrm{I}]$-marry-var-PL FOC-MDST
'people married her from everywhere'
theme: $O-S-C L[-D, \emptyset]-$ sha ( $\emptyset ;-:$ Act) 'S marry 0 '
(Swanton 1909: 259)

Unlike the allative -dé, the ablative -dáx $\underline{\text { does not exhibit tone alternation. }}$ Thus the tone on this suffix is always high. Note that Naish \& Story wrote it as low after a high tone syllable or a stressed low tone syllable, in keeping with their unusual orthographic practice documented in chapter 2.
(45) a. aandáx
aan-dáx
town-ABL
'from the town'
b. hítdáx
hít-dáx
house-Abl
'from the house'
Similar to the explanatory particle ách described in section 3.2.1, there is a sort of intersentential conjunction átx or aadáx that is constructed from the third person nonhuman pronoun á and the ablative suffix -dáx. Where the explanatory ách is a reference to the preceding statement as an antecedent, the construction átx or aadáx instead only indicates that the preceding statement was temporally ordered before the following one and does not imply any sort of causation. Boas (1917:98) translated it as "and then" in two examples taken from Swanton (1909) which are analyzed below.
(46) a. Atxā'we dutā'yenax yūt k ${ }^{u}$ dā îitc
átx áwé du taÿeenáx yóot
á-dáx á-wé du taÿee-náx yóo-t
3N-ABL FOC-MDST 3 H.PSS beneath-PERL DIST-PNCT
kda.éech
Ø-ka-Ø-da-ii-ch
3.O-HSFC-ZCNJ-CL[+D, Ø,-I]-slide-REP
'after that it would always slide down there from under him'
theme: O-ka-cl[+D,Ø]-.i~.e (ga; -ch Act) 'O slide down' (Swanton 1909: 289)
b. AdA' ${ }^{\prime}$ awe lē ỵaodu' dzîqōx łatsī'n duỵîga' aadáx áwé tle ÿawdudzikoox latseen á-dáx á-wé tle Ø-ÿa-ÿu-du-dzi-kux-h latseen 3N-ABL FOC-MDST just $3.0-\mathrm{HSFC}-\mathrm{PFV}-30 \mathrm{Bv} . \mathrm{s}-\mathrm{CL}[+\mathrm{d}, \mathrm{s},+\mathrm{I}]$-go.boat-VAR strength du ÿéegaa
du=ée-gáa
3H=BASE-ADES
'after that they just brought strength for him by boat'
(Swanton 1909: 290)
The form át $\underline{\underline{x}}$ is also sometimes written as ádx, in parallel with the writing of $-t \underline{x}$ as $-d \underline{x}$.

As well as the -tx or - $d \underline{x}$ form, there is a further contracted form $a a \underline{x}$ which is found with verbs. It is mostly a preverb, i.e. $a a \underline{x}=$, occurring when an obligatory oblique has only the third person nonhuman á as the sole noun in the postpostion phrase. It can be distinguished from the combination of á with
 aax.

### 3.2.7. Perlative suffix

Story (1966: 29) called the perlative suffix -náx 'translative'. Leer (1991:34) labeled it 'perlative', a name which I have retained. Terms used for similar cases in other languages include 'prolative' (e.g. Finnish) and 'vialis' (e.g. Yup'ik); the term 'perlative' is used for Aymara and Tocharian among others. The typical English translations for the perlative case in Tlingit are 'through', 'along', 'across', or 'by way of'; the Latin borrowing 'via' is also occasionally seen. Some linguists have distinguished prolative and perlative cases, with the former describing only 'via' or 'by way of' and the latter describing only 'across' or 'along'; there are to my knowledge no languages which have both as distinct so I see the differences as largely immaterial and certainly irrelevant for Tlingit.
(47) a. dùhídınó́x
du hídináx
du hít-ẏí-náx
3H.PSS house-PSS-PERL
'through his house'
(Boas 1917: 99)
b. Tāt yinA' ${ }^{\prime} \mathbf{x}$ awe ${ }^{\prime} \bar{a}^{\prime}$ waya
taat ÿeenáx áwé aawayaa
taat ÿee-náx á-wé a-ÿu-Ø-ÿa-ya-h
night inside-PERL FOC-MDST 3.0-PFV-3.S-CL[-d, $\emptyset,+\mathrm{I}]$-pack-vAR
'he carried it through the night'
(Swanton 1909: 258.9)
Leer (1991:34) also notes that the perlative -náx has a specialized temporal meaning 'including the time of'.

Phonologically the perlative suffix behaves almost identically to the ablative suffix -dáx, except that it does not have a contracted form *-nx. It does not exhibit tone alternation.
(48) a. aannáx
aan-náx
town-PERL
'through the town'
b. hítnáx
hít-náx
house-PERL
'along the house'

### 3.2.8. AdESSIVE SUFFIX

Story (1966: 29) termed the adessive suffix -gáa 'objective', and Leer (1991: 33) called it 'vicinitative'. Boas (1917:102) described only its purposive meanings, giving 'on account of' and 'for a purpose'. Leer (1991:33) was more thorough in examining it, translating its meanings in English as 'in the area of', 'after', 'for' (purpose), or 'about the time of'.
(49) a. Du-īgā' qodicī' yū'cawat
du éegaa koowdishée yú shaawát
du=ée-gáa ku-ÿu- $\emptyset$-di-shi-ÿ yú shaawát
3H=BASE-ADES AREAL-PFV-3.S-CL[+D, $\emptyset,+1]$-search-var DIST girl
'they searched for that girl'
(Swanton 1909: 260.1)
b. gūx gā awahū'n
gooxgáa aawahoon
goox-gáa a-ÿu-ø-ÿa-hun-h
slave-ADES 3.0-PFV-3.S-CL[-D, Ø, +I]-sell-vAR
'he sold it for slaves'
(Swanton 1909: 266.1)
c. du x'v́x'u-Ga neł uwngút
du x'úx'ugáa neil uwagút
du x'úx'-ÿí-gáa neil-(t)=u-ø-ÿa-gut-ÿ
3H.PSS book-PSS-ADES home-PERT=PFV.TEL-3.S-CL[-D, $\emptyset,+\mathrm{II}]$-go.SG-VAR
'he went indoors for his book' (Naish 1966: 121)
d. ahgaa kukaxtushee wei
a-gaa ku-ka-ga-w-ga-tu- $\emptyset$-shi-: we
3N-ADES AREAL-HSFC-GCNJ-IRR-GMOD-1SG.PL-CL[-D, $0,-\mathrm{I}]$-find-VAR MDST
naakw
naakw
medicine
'we will look for those medicines' (Williams, Williams, \& Leer 1978: 60)
[[Fixme: gígaa 'little better', x'éigaa 'truely', tl'agáa 'fairly, quite' (Naish 1966:137).]]

### 3.2.9. INSTRUMENTAL AND COMITATIVE SUFFIXES

Swanton (1911: 194) recognized a suffix -n that he glossed as 'with'. Boas (1917: 101-102) described two suffixes, $-n$ which he glossed as 'in company of, with' and -teen (his -t'in) which he said "according to Mr. Shotridge designates instrumentality" but which he could not confirm in Swanton's materials. Story (1966: 29) presented a postposition teen which she called 'concomitant' and classed it as an 'adjunctival syntactic marker'. They did not seem to recognize - $n$ as a suffix in the language. Leer (1991:34) lumped them together under the name of 'comitative', giving them as "-tin ~-(حi')n '(along) with, by means of; (temporal) 'as soon as'".

There seems to still be some uncertainty among speakers as to whether $-n$ and -teen are distinct morphemes with different meanings or whether they are simply allomorphs of the same basic morpheme. They both generally translate into English as 'with', with some speakers using -teen only with inanimate nouns and hence having an instrumental meaning, versus a use of $-n$ with animate nouns and hence having a more comitative meaning. Other speakers do not have this distinction, and the choice between - $n$ and -teen seems to be more phonologically determined or else perhaps arbitrary.

The following examples and translations from Boas (1917: 102) are fairly illustrative of this issue.
(50) a. duùx̣̂în
du oox een
du oox=ee-n
3H.PSS tooth=bASE-COM
'together with his teeth'
(Boas 1917: 102)
b. duùxttìn
du oox teen
du oox=teen
3H.PSS tooth=INSTR
'by means of his teeth'
(Boas 1917: 102)
Boas then goes on to give a few counterexamples from Swanton (1909) where the =teen form seems to have a comitative reading instead of an instrumental one.
(51) a. tcū'net tîn wugū't
chooneit teen woogoot
chooneit=teen ÿu- $\emptyset$-ÿa-gut-h
arrow=COM PFV-3.S-CL[-D, $\emptyset,+1]$-go.SG-VAR
'he went with arrows'
(Swanton 1909: 274.3)
b. ada'qde wugū't dusī' tîn
dákde woogoot du sée teen

inland-ALL=PFV-3.S-CL[-D, Ø, +1]-go.SG-VAR 3H.PSS daughter=com
'he went inland with his daughter'
(Swanton 1909: 380.14)
It is at present difficult to say whether there is a real distinction between $-n \sim=e e n$ and =teen. This may turn out to be a dialect-specific distinction, or it may be a feature changing across the entire population of language speakers. I gloss both as either instrumental or comitative depending on the particular context.
(52) a. đéł adu ?ìn sí wưàd
tléil aadóo een sá woo.aat
tléil aadóo=ee-n sá u-ÿu-Ø-.at-h
NEG who=BASE-COM Q IRR-PFV-3.S-CL[-D, Ø,-I]-go.PL-VAR
'they didn't go with anyone'
(Naish 1966: 122)
Boas (1917: 102) points out that the =een form can be used with subordinate clauses as well. In this use it comes immediately after the subordinated verb.

| Person | Dial. | With -n | With =een |
| :---: | :---: | :---: | :---: |
| 1SG | NS | xaan | ax een |
|  | T | xahn | ax ihn |
| 1PL | NS | toon | haa een |
|  | T | tuhn | hah ihn |
| 2SG | NS |  | i een |
|  | T |  | i ihn |
| 2PL | NS |  | yee een |
|  | T |  | ÿih ihn |
| 3H | NS | oon $\sim$ doon | du een |
|  | T | uhn | du ihn |
| 3N | NS | aan | a een |
|  | T | ahn | ? |
| INDH | NS | koon | kaa een |
|  | T | kuhn | kah ihn |
| INDN | NS |  | at een |
|  | T |  | at ihn |
| RFLX | NS |  | chush een |
|  | T |  | chush ihn |
| RECIP | NS |  | woosh~wooch een |
|  | T |  | wuhsh ihn |

Table 3.3: Forms of pronouns with the instrumental/comitative - $n$ and $=e e n$

xwasateení een tle
Ø-ÿu-xa-sa-tin-h-ée=een tle
3.0-PFV-1SG.S-CL[-D,S,-I]-see-vAR-SUB=INSTR just
ayakwkwadaháan
a-ÿa-ga-w-ga-xa-da-han-:
3.0-VSFC-GCNJ-IRR-GMOD-1SG.S-CL[+D, Ø,-I]-stand-VAR
'with seeing it, I will run away'
(Boas 1917: 102)
The ee component of the =een form is likely to be a form of the meaningless base =ee used with pronouns (see ch. 19). There are both -n forms and $=e e n$ forms for the personal pronouns, thus $\underset{\text { xaan is }}{ } \underline{x} a-n$ 1SG-Com 'with me', aan is $a-n 3 \mathrm{~N}-\mathrm{COM}$ 'with it', etc., as illustrated in table 3.3.

### 3.2.10. LOCATIVE PREDICATE SUFFIX

The locative predicate suffix -ú is unlike the other case suffixes and postpositions. It has mostly the same meaning as the locative suffix, but it expresses the location of a marked noun without the need for a verb phrase. Thus the locative predicate converts a noun phrase into a sentential predicate. It is easier to understand from examples than it is to understand by explanation.

| a. yáadu | ax | hídi |
| :--- | :--- | :--- |
| yá-t-ú | ax | hít-yí |
| Prox-PNCT-LOCP | 1SG.PSS | house-PSS |
| 'my house is here' |  |  |

b. aaá, du éesh néilu
aaá du éesh néil-ú
yes 3 H.PSS father home-LocP
'yes, his father is at home'
c. ax xánu
ax xán-ú
1SG.Pss beside-Locp
'it's beside me'
(Story 1966: 206)
The locative predicate suffix serves a similar verb-avoidance role as do the focus particles. The latter can frequently be found serving as a sort of copula in verbless sentences.
(55) a. ax hídi áyá
ax hít-ÿí á-yá
1SG.PSS house-PSS FOC-PROX
'this is my house'
b. ch'áak' áyú
ch'áak' á-yú
eagle FOC-DIST
'that's an eagle ${ }^{9}$
The semantic difference between the locative predicate suffix and the copular use of the focus particles is that the locative predicate denotes existence at a specified location, whereas the focus particles denote existence within the demonstrative distance system (see sec. 3.5).
9. The word 'eagle' in local English refers almost exclusively to the bald eagle, Haliaeetus leucocephalus (L. 1766). The Tlingit word ch'áak' is specific to this species.

The form áwu, also sometimes heard as áawu, is formed with the third person nonhuman pronoun á. This should not be mistaken for the focus particle á, unlike the focus particle constructions presented above. The third person nonhuman pronoun in this construction refers to some location which is derived from context. Although it is not a demonstrative, the English translation is usually 'here' or 'there'.
(56) a. gwál wé automatic button gíwé áwu? gwál wé automatic button gí-wé á-ú dUB MDST automatic button YN-MDST 3 N -LOCP 'maybe there was an automatic button there?'
(Dauenhauer \& Dauenhauer 1987: 116)
b. áwu i shát!
á-ú i shát
3N-LOCP 2SG.PSS wife
'there's your wife!'
(Dauenhauer \& Dauenhauer 1987: 130)
When combined with the demonstratives, the locative predicate suffix always occurs with a preceding punctual suffix $-t$. I have no hypothesis for why this is the case, but Leer may have worked out an explanation.
(57)
a. yáadu

ÿá-t-ú
PROX-PNCT-LOCP
'it's here'
b. héidu
hé-t-ú
MPRX-PNCT-LOCP
'it's over here'
c. wéidu
wé-t-ú
MDST-PNCT-LOCP
'it's there'
d. yóodu
yú-t-ú
DST-PNCT-LOCP
'it's over there'
The negation of a phrase with a locative predicate suffix results in the deletion of the suffix, or in other words locative predicate suffixes do not occur in negative sentences.
(58) a. positive with locative predicate -ú
aatlein dáanaa du jeewú
aatlein dáanaa du jee-ú
much money 3 H.PSS possession-LocP
'he has lots of money'
(Naish 1966:48)
b. negative without locative predicate -ú
tléil dáanaa du jee
NEG money 3H.PSS possession
'he doesn't have any money'
(Naish 1966: 48)

### 3.2.11. Similative postposition

The similative yáx is a postposition, meaning that it is not phonologically suffixed to the noun unlike the case suffixes discussed previously. Rather, $y a ́ x$ is a separate word which must occur after the noun phrase. It could be treated as an enclitic, but there is no particular justification for doing so.

The similative postposition yáx means 'like’ or 'similar to'. Swanton (1911: 193) documented it as yêx (IPA/jəx/) or yax (IPA/j $\wedge x /$ ) and glossed it as 'like'. ${ }^{10}$ Boas (1917:104) gave the form yóx (IPA /jí $\chi /$ ) and described it as meaning 'likeness, sameness', and considered it to be a relational noun like -ÿá 'face, vertical surface' or -yee 'underneath, inside covered area'. Naish (1966:68) transcribed the similative postposition as $y$ и́ $X$ (IPA /jí $\chi /$ ) and called it the 'similitudinal adjunctival syntactic marker'. She claimed that it is a full word rather than an enclitic, but did not give any particular resons for her conclusion. I tend to agree with her because yáx does not feature tone alternation or cause tone neutralization, and that it only very rarely is reduced in casual speech, usually to something like áx. There is some sort of intonational focus that is often placed upon it, but I have not researched sentential phonology enough to make any non-anecdotal statements.

Like the other postpositions, the similative postposition may have originally been a relational noun, perhaps a combination of -ÿá 'face' with the pertingent suffix $-\underline{x}$ (sec. 3.2.4). Tongass Tlingit has $y a \underline{x}$ and not $* \ddot{y} a \underline{x}$ which confirms that it has a $y$ rather than $\ddot{y}$, so that the resemblance to $-\ddot{y} a ́+-\underline{x}$ may instead be purely accidental. Some Northern Tlingit speakers have however

[^10]remarked upon the resemblance to me, so that it is at least a tempting relationship for Northern Tlingit speakers lacking a difference between $y$ and $\ddot{y}$. The similative postposition is definitely not a relational noun in modern Tlingit since it cannot be alienated and cannot be part of a complex possessive construction. 【Fixme: Examples】

The following examples demonstrate the use of the similative postposition yáx. Its meaning is fairly easy to grasp for an English speaker, and language learners gain felicity with it quite quickly.
(59) a. Léł òxyóx ${ }^{\text {'ilłtsìn }}$ tlél ax yáx ilatseen
tlél ax yáx i-u-Ø-la-tsin-h
NEG 1SG SIM 2SG.0-IRR-ZCNJ-CL[-D,l,-I]-strong-vAR
'you are not as strong as me'
(Boas 1917: 104)
b. xao yax ac tuwā'yatî
xِaaw yáx ash tuwáa ÿatee
xaaw yáx ash tú-ÿá-' $\quad$ - $\emptyset-$ ÿa-ti ${ }^{\text {h }}$-h
$\log$ SIM 3 PRX.PSS mind-vSFC-LOC $3.0-Z C N J-C L[-D, \emptyset,-$ I]-be-vAR
'it seemed like a log to her' (Swanton 1909: 252.11)
c. ÿaa kah jihde ÿah dujgeÿi ${ }_{T}$ yax

ÿaa kah jih-deh ÿah=Ø-du-ji-ge-ÿi yax
PROX INDH possession-ALL along=ZCNJ-INDH.S-CL[+D,Sh,+I]-refuse-REL SIM
ÿatih ${ }_{T}$
Ø-Ø-ÿa-ti ${ }^{\text {h }}$-h
3.0-ZCNJ-CL[-D, Ø, +I]-be-vaR
'these people seem to refuse to give to others (are kind of stingy)'
(Williams, Williams, \& Leer 1978: 86)
The similative should not be confused with the completive or abmarine preverbs $y a x=$ which it resembles except for tone. The example below shows both the similative yáx and the abmarine $y a \underline{x}=$ 'ashore, onto ground' for contrast.

$\begin{array}{lll}\text { yax kanli.átk } & \text { áwé } & \text { séew yáx } \\ \text { yax= }=\text { ka-na- } \emptyset \text {-li-.at-k } & \text { á-wé } & \text { séew yáx } \\ \text { ABMAR=HSFC-NCN-3.S-CL[-D,l,+I]-go.PL } & \text { FOC-MDST } & \text { rain SIM }\end{array}$
'they (paint drops) were going down like rain'
(Naish 1966: 122)

Because its basic meanings are relatively obvious I will not spend any further space discussing it. This should not be taken to imply that it is uninteresting, but merely that there are more complicated matters that deserve more attention in this book.

### 3.2.12. BENEFACTIVE POSTPOSITION

The benefactive postposition is ÿís. It has a syntactic distribution largely the same as the similative postposition (sec. 3.2.11). Swanton (1911: 194) transcribed it as yes and glossed it as 'for'. Unlike Swanton's mistake with the similative $y$ áx, his use of $y$ for the benefactive was correct since it is also documented in Tongass Tlingit as ÿis. Boas (1917:105) gave the benefactive as $y t s$ and also glossed it as 'for'.' ${ }^{11}$ Naish (1966:68) seems to have been the first to apply the conventional label 'benefactive', and gave it as yís in her transcription.
(61) a. a yís gaaw sh jeet
a ÿís gaaw sh jee-t
3N ben time rflX.PSS possession-PNCT yeedatí
Ø-ø-ÿi-da-ti-h
3.0-ZCNJ-2PL.S-CL[+D, $\emptyset,-\mathrm{I}]$-handle-vaR
'give yourselves time for it' $^{\prime}$
(Naish 1966: 122)
b. a ÿis gaach ayuh du.ahgin
a ÿis gaach a-yuh $\emptyset$ - $\emptyset$-du- $\emptyset-$-ak-h-in
3n ben mat FOC-DIST 3.0-ZCNJ-INDH.S-CL[-D, Ø,--I]-weave-vAR-DEC ch'a'kw
ch'a'kw
long.ago
'long ago they used to weave mats for it'
(Williams, Williams, \& Leer 1978: 98.35)

[^11]c. dudjiyî's
du jee ÿís
du jee ÿís
3H.PSS possession BEN
'for her (to have)'
(Swanton 1909: 252.6)
d. yú átgaa ax jee yís
yú át-gáa ax jee ÿís
dist indn-ades 1sG.PSS possession ben
kayeeshxítk'
Ø-ka- $\emptyset-\ddot{y} i-s h-x i t-\ddot{y}-\mathrm{k}^{\prime}$
3.0-HSFC-ZCNJ-1PL.S-CL[+D,Sh,-I]-scratch-VAR-DIM
'write a little letter for me (to obtain) that thing' (Naish 1966:122)
In Northern Tlingit the combination of - $\underline{\underline{x}}$ 'é 'mouth' and benefactive ÿís is unusual. Instead of behaving as an independent word, the benefactive instead acts like a clitic, neutralizing the high tone of the noun - $\underline{x}^{\prime}$ é.

The benefactive has a contracted suffix form of something like -is or $-s$ which can be found with a few relational nouns, mostly - $\underline{x}^{\prime} e ́$ 'mouth' and -jee 'possession'. Its use seems to be more common in southerly speakers, from perhaps Angoon southward, so that although a speaker from Atlin or Hoonah would understand the form they would not often use it. It is found in Northern as well as in Southern and Tongass Tlingit, but it appears to be most frequent in Transitional Tlingit and further south.
(62) a. duyề'tk! ${ }^{0}$ q!ēs
du ÿátk'w x'éis
du ÿát-k' xِ'é-y̌ís
3H.PSS child-DIM mouth-bEN
'for her little child (to eat)'
(Swanton 1909: 265.5)
b. wudjị̂̂ī' x hasduq!oe's hī'nga
wujixeex hasdu x́éis héengaa
ÿu- $\emptyset-j i-x i x-h \quad$ has-du x'é-ÿís héen-gáa
PFV-3.S-CL[+D,Sh,+I]-run-VAR PL-3H.PSS mouth-ben water-ABES
'he ran for water for them'
(Swanton 1909: 256.6)
c. k'ıdén h $\Delta \operatorname{sen}^{\text {du }}$ X'és $\Lambda \mathrm{d}$ kuqıs $\wedge$ ?í
k'idéin hasdu x'éis
k'éiㅊ-déin has-du x_'é-ÿís
good-ADV PL-3H.PSS mouth-BEN
at kukasa.ée
at-ga-w-ga-xa-sa-.i-:
INDN.O-GCNJ-IRR-GMOD-1SG.S-CL[-D,S,-I]-cook-VAR
'I'll cook well for them'
(Naish 1966: 124)
d. haa x'ehs ye' ahwsnih
haa $\quad$ x'e-ÿis ye'=a-ÿu-Ø-si-ni-h
1PL.PSS mouth-BEN thus=3.0-PFV-3.S-CL[-D, $\mathrm{s}, \mathrm{II}$ ]-do-VAR
'he made it for us (to consume)' (Williams, Williams, \& Leer 1978: 50.31)
e. i jís áyá yá tape
i jee-ÿís á-yá yá tape
2SG.PSS possession-ben FOC-PRox PRox tape
'this tape is for you (to have)'
f. yoo naakwx has ahwlyex haa
yoo naakw-x has=a-ÿu- $\emptyset-l i-y e x-\ddot{y} \quad$ haa
DIST medicine-PERT PL=3.0-PFV-3.s-CL[-D,l,+I]-make-VAR 1PL.PSS
jis
jee-ÿis
possession-ben
'they made it into medicine for us'
(Williams, Williams, \& Leer 1978: 52.58)

### 3.2.13. ABESSIVE POSTPOSITION

(63) a. duin wvadí ' $\alpha$ tk'átsḱk gút' neł 'uwagv́t'

| du éen | woo.aadi | atk'átsk'u góot |
| :--- | :--- | :--- |
| du=ée-n | ÿu- $\emptyset-$ ÿa-.at-h-i | atk'átsk'u góot |
| 3H.PSS=BASE-COM | PFV-3.S-CL[-D, $\emptyset,+\mathrm{II}]$-go.PL-VAR-REL | child |

neil uwagút
neil-(t)=u-Ø-ÿa-gut-ÿ
home-(PNCT)=PFV.TEL-3.S-CL[-D, Ø,+I]-go.SG-VAR
'he came home without the boys who went with him'
(Boas 1917: 168.6)
b. Atxawe' yū'kîk!îa dogō't awaā't
átx áwé yú kik'i.aa du góot
á-dáx á-wé yú kéek'-aa du góot
3N-ABL FOC-MDST DIST younger.brother-one 3H abes
áa woo.aat
a-'=ÿu-Ø-ÿa-.at-h
3N-LOC=PFV-3.S-CL[-D, $\emptyset,+\mathrm{II}]$-go.PL-VAR
'after that the younger brothers went there without him'
(Swanton 1909: 356.12)
(64) a. Xéł RỉX Gúd $\Lambda \mathrm{d} u \mathrm{X} \Lambda ́$
tléil eex góot at uxá
tléil eex góot at-u-Ø-Ø-Ø-xa-'
NEG oil ABES INDN.o-IRR-ZCNJ-3.S-CL[-D, Ø,--I]-eat-vaR
'he doesn't eat without oil'
(Naish 1966: 122)

### 3.2.14. ELATIVE POSTPOSITION

Story (1966:29) called the elative postposition 'recessive' and classed it along with her other 'adjunctival syntactic markers', as did Naish (1966: 68).

Compared to the other case suffixes and postpositions, the elative nák is actually rather rare. The most well-known use of the elative postposition nák is in the famous statement by Kichnáaĺx George Davis ${ }^{12}$ which was made into a song by Goos'shú Harold Jacobs. ${ }^{13}$
(65) haa jéex' a nák has kawdik'éet'
haa jée-x' a nák has=ka-ÿu- $\emptyset$-di-k'it'-h
1PL.PSS possession-LOC 3N ELAT PL=HSFC-PFV-3.S-CL[+D, $\emptyset,+1]$-leave-VAR
'they left it behind in our possession'
(Dauenhauer \& Dauenhauer 1990: 314)
The elative postposition is also found as part of a few relational nouns.
12. Deisheetaan clan, Shdeen Hít (Steel House), Kaagwaantaan yádi, Xootsnoowú Kwáan.
13. Yanyeidí clan, Hít Tlein (Big House), Dakl’aweidí yádi, Sheet’ká Kwáan.
(66) a. a waknak awlsin ${ }_{T}$
a waak-nak a-ÿu- $\emptyset$-li-sin-ÿ
3N eye-ELAT 3.0-PFV-3.S-CL[-D,l,+I]-hide-VAR
'he hid it from her'
(Leer 1975: 970)
b. du jinák

3H.PSS jín-nák
3H.PSS hand-ELAT
'away from him'
(Leer 1975: 970)
The elative postposition nák is similar in form to the verb root $\sqrt{n a k}$ ' pl . stand', used for plural animate entities standing. When used in a positional imperfective, the verb can appear as nák and hence can be confused for the elative postposition. They can be told apart by the syntax, since the verb will occur in a verb phrase with associated morphosyntax.
(67)

'standing for the cry'
(Dauenhauer \& Dauenhauer 1990: 270)
b. yáat nák
yá-t Ø-Ø-Ø-nak-n
PROX-PNCT ZCNJ-3.S-CL[-D, Ø,-I]-stand.PL-vaR
'they are standing here'
(Dauenhauer \& Dauenhauer 1990: 275)
The elative postposition is not accidentally similar to another verb root $\sqrt{n a \underline{k}}$ 'let go, leave, abandon'. The following are some examples of verbs based on this root.
(68) a. jix́wdinák
ji-ÿu-xa-di-nak-ÿ
hand-PFV-1SG.S-CL[+D, $\emptyset,+\mathrm{I}]$-leave-var
'I quit'
(Story \& Naish 1973: 165)
b. wé wáach xِasanák!

MDST clock 3.0-mouth-ZCNJ-3.S-CL[-D, S,-I]-leave-var
'silence that clock!'
theme: $O-\underline{x} ’ a-S-c l[-D, s]-n a \underline{k}(\emptyset ;-k w$ ? Act) ‘S silence 0 ’
(Story \& Naish 1973: 191)

### 3.2.15. Superlative postposition

(69) a. tlax a yáanáx de galtíshch wé shaawát tlax a ÿáanáx de Ø-ga-la-tish-ch wé shaawát very 3 N sup already 3.0 -GCNJ-CL[-D,l,-I]-lonely-hab MDST girl
'that girl is already lonely' (Dauenhauer \& Dauenhauer 1987: 100)
b. aLē'n tatū'kâyu hît yā'nax kuge ${ }^{\prime}$
aatlein tatóok áyú hít ÿáanáx koogéi
aatlein tatóok á-yú hít ÿáanáx Ø-ka-w-ÿa-ge-:
big cave FOC-DIST house SUP 3.0-HSFC-IRR-CL[-D, Ø,+I]-big-vAR
'that big cave, it was bigger than a house' (Swanton 1909: 270.3)
Boas (1917) misequated the superlative postposition ÿáanáx with the perlative case suffix -náx. The superlative is indeed probably derived from - ÿá-náx ‘face-PERL'.

### 3.2.16. SUBLATIVE POSTPOSITION

The older forms of this postposition indicate that it was probably a relational noun.
(70) a. Icā'n Gucdutī'n Waktâ'nî qînq! gogana'
eeshaan Gushduteen Waktwáani kínx’
eeshaan Gushduteen Waktwáani kín-x’
poor NAME Victoria sUB-LOC
guganáa
Ø-ga-w-ga-Ø-na-:
3.0-GCNJ-IRR-GMOD-CL[-D, $\emptyset,+\mathrm{I}]$-die-VAR
'poor Gushduteen will die without (having seen) Victoria'
(Swanton 1909: 406)

ax kín ikwligei
ax $\quad$ kín i-ka-w-li-ge-h
1SG.PSS SUB 2SG.O-HSFC-IRR-CL[-D,l,+I]-big-VAR
'you are smaller than I am'
(Boas 1917: 110)

### 3.3. Plurality

Nouns in Tlingit are, unlike English, not singular by default, but are instead unspecified for number. No serious study of this has been done for Tlingit, but the related Athabaskan languages such as Dëne Sųłiné have been investigated for similar properties (Wilhelm 2008). I generally translate nouns that are unmarked for number as singular, usually using the English determiner 'a' or 'an', but this should not be taken to mean that an unmarked noun is necessarily singular. Rather, the singular translation is simply the most convenient interpretation for an equivalent English sentence.

Unlike some Athabaskan languages [[Fixme: which?]], Tlingit does have a few explicit plural marking strategies. This fact was noted early on in the documentary record. The typical plural suffix on nouns in Tlingit is $x^{\prime}$. Swanton (1911) transcribed this suffix as $-q$ ! or -q!î and argued that it was "not a true plural" but rather a collective in "the sense of a LOT OF or A HEAP OF" the marked noun (Swanton 1911: 169; emph. orig.). He noted that "its employment is not essential" and that "it is occasionally used where no idea of plurality, according to the English understanding of that term, exists" (Swanton 1911: 169). Boas (1917: 81) correctly transcribed this suffix as $-x^{\prime}$ (his -x́) and labeled it as a plural, but said it would be better thought of as a distributive.

Naish (1966) had little to say about plurality. Story (1966: 203) described the $-x^{\prime}$ suffix as a "collective plural" but did not address its meaning other than giving translations of $-x$ ' marked nouns with English plurals. Story also noted that when suffixed on "open stem final tonic syllables with short vowels" - i.e. nouns with $C V$ syllables word-finally - the resulting forms with the plural suffix have long vowels; thus té 'rock' but téix' 'rocks'.
[[Fixme: Leer (1991:38) on the relationship between nonplural and plural noun modifiers: nothing versus $-x^{\prime}$, nothing versus =hás or $-x^{\prime}=\ddot{y} a ́ n,-k^{\prime}$ versus -x'=sáani, _ tlein versus _ tlénx', kuwáat' versus kudaÿát'x', "etc.".】]
[[Fixme: Xref to plural $-x^{\prime}$ and $-t^{\prime}$ suffixes on verbs, secs. 10.6.5 and 10.6.6. Story (1966: 203) notes the relationship between the verb and noun suffixes.]

The following two examples taken from Swanton (1911) demonstrate the basic appearance of the plural suffix.
(71) a. q!āt!
x'áat'
island
'an island'
(Swanton 1911: 169)
b. q!ā't!q! $\hat{l}$
x'áat'x'
$x^{\prime}$ 'áat'- $x^{\prime}$
island-PL
'islands'
(Swanton 1911: 169)
Swanton's transcription of a final $\hat{\imath}$ is his explicit perception of a fairly common epenthetic vowel that occurs sometimes after the plural when it follows another ejective consonant. Thus occasionally one may see e.g. x'áat'x'i written when there is no possessor to explain an underlying possessive suffix -ÿí. In such cases, this is merely the written representation of the epenthetic [ə] or [ I ] that apparently reduces the complex coda in /x'á:t'x'/ to a disyllabic [ $\mathrm{x}^{\prime} \mathrm{á}_{\mathbf{t}} \mathbf{t}$ '. $\mathrm{x}^{\prime} \mathrm{I}$ ].

Nouns that end with a short open syllable may occur with a long vowel when the plural suffix is attached. This is probably a form of variable vowel length.
(72) a. té
stone
'a stone'
b. téix'
té-x'
stone-PL
'stones'
The plural suffix might be thought of as amenable to analysis as an enclitic given its appearance after a postnominal adjective.
(73) a. łingítLèn
lingít tlein
person big
'big person’
(Boas 1917: 81)
b. łingítLè̀nx́
lingít tlenx'
lingít tlein-x'
person big-pl
'big people’
(Boas 1917: 81)

This is not however the case, given that it cannot appear with all postnominal adjectives.
(74) a. kéidladi yéis'
gull dark
'immature gull'
b.? kéidladix' yéis'
kéidladi-x' ÿéis'
gull-PL dark
'immature gulls'
c.* kéidladi yéis'x'
kéidladi ÿéis'-x'
gull dark-PL
Instead, the postnominal adjective tlein has a pluralized counterpart tlenx'. The singular or unmarked form tlein can also be found with a short vowel tlen but the pluralized tlenx' is never found with a long vowel *tleinx'. This difference is unpredictable and hence lexicalized, lending support to the idea that the plurality marking with these two postnominal adjectives is lexical rather than morphological. I know of no other postnominal adjectives, nor indeed any prenominal adjectives, that are distinguished for plurality other than this pair.

The plural suffix regularly exhibits rounding spread. Rounding spread is also found when the plural suffix occurs with roots that feature occult rounding, as discussed in section 5.1.1.
(75) a. gùx ${ }^{u}$
goox
slave
'a slave'
(Boas 1917:81)
b. gù ${\underset{x}{ }{ }^{u} \hat{X}^{u}}$
gooxx'w
goox-x'
slave-PL
'slaves'
(Boas 1917: 81)
c. 'á
áa
áa ${ }^{w}$
lake
'a lake’
d. 'á $x^{u}$
áax'w
áa ${ }^{\mathrm{w}}$ - x '
lake-PL
'lakes'
(Boas 1917: 81)
The rounding of the plural suffix after a round vowel or consonant is sometimes not written. This is a purely orthographic characteristic, the plural suffix is always rounded when rounding spread is expected. Thus one may see either gooxx'w or gooxx' written but both are always pronounced [ $\left.\mathrm{k}^{\mathrm{w}} \mathrm{u}: \chi^{\mathrm{w}} \mathrm{x}^{\prime \mathrm{w}}\right]$ with labialization all the way across the syllable.

The diminutive suffix $-k$ ' is similar to the plural, but indicates smallness or emotional attachment by the speaker to the marked noun. It cannot be combined with the plural suffix. Instead there is a specialized enclitic =sáani which is combined with the plural-marked noun to indicate a plural diminutive.
(76) a. káa yádi
káa ÿát-ÿí
man child-Pss
'a man's child'
b. káa yátx'i
káa ÿát-x’-ÿ́
man child-PL-PSS
'a man's children'
c. káa yátk'i
káa ÿát-k’-ÿ́
man child-DIM-PSS
'a man's little child'
d.* káa yátk'x'i
káa ÿát-k'-x'-ÿ́
man child-DIM-PL-PSS
'a man's little children'
e. káa yátx'i sáani
káa ÿát-x'-ÿí=sáani
man child-PL-PSS=DIM.PL
'a man's little children'
Note that I have analyzed the =sáani diminutive plural as including both diminuition and plurality. It cannot appear unless the noun is also marked
for plurality - i.e. *káa yádi sáani is ungrammatical. It is also reasonable to consider =sáani as solely denoting diminuition. I gloss it as DIM.PL to emphasize that it cannot otherwise occur without plural marking, however. This enclitic only sometimes neutralizes the tone of a preceding noun, whereas in general the noun is otherwise unmodified. I have found no predictable way to determine which nouns have neutralized tone with =sáani, but there may be dialectal or idiolectal differences that are undocumented and hence varying across the larger Northern Tlingit speech community.
(77) a. 'áx̣̂usánì
áax'w sáani
áa $^{\mathbf{w}}$ - $\mathrm{x}^{\prime}=$ sáani
lake-PL=DIM.PL
'little lakes'
(Boas 1917: 87)
b. tèx́sánì
teix' sáani
té- $x^{\prime}=$ sáani
stone-PL=DIM.PL
'little stones'
(Boas 1917: 87)
There are two other plural enclitics which are only used with humans or human-like groups. The more common plural enclitic is =hás, which has the same basic form as the independent third person plural pronoun as well as being similar to the pluralizer of the third person possessive has-du and the plural verb prefix has $=\sim s-$. [[Fixme: Xrefs.]] [[Fixme: History.]]
(78) a. $d u k \bar{a}^{\prime} k$
du káak
3H.PSS maternal.uncle
'his/her maternal uncle’
(Swanton 1911: 169)
b. dukā'k has
du kaak hás
du káak=hás
3H.PSS maternal.uncle=PL
'his/her maternal uncles'
(Swanton 1911: 169)
c. ax hunxu hás
ax húnxw=hás
1PL.PSS older.brother=PL
'my older brothers'

The above example illustrates the usual property of Tlingit nominal enclitics, whereby the clitic causes neutralization of the tone in the preceding noun. This is similar to the tone neutralization of nominal compounds, and may in fact be the same phenomenon. Some speakers will accept forms without tone neutralization, thus accepting du káak hás, but others insist on the neutralization. This may in fact be an effect of slow speech, with the speaker reducing the phonological connection between the two parts of speech when saying them slowly and carefully in a sort of citation form. Thus a Tlingit speaker may write e.g. du káak hás when transcribing another person's spoken du kaak hás because they say each word individually to themselves.

Although it is most commonly found with kinship terms, =hás also occurs with proper nouns and sometimes with numerals. In this use it has more of a collective than a plural meaning, though Tlingit does not really differentiate between the two concepts.
(79) a. Cā'dadūx̣-has wułîtsī'n

Shaadadoox hás wulitseen
Shaadadoox=hás Ø-ÿu-li-tsin-h
NAME=PL $\quad 3.0-\mathrm{PFV}$-CL[-D,l,+I]-strong-VAR
'the Shaadadoox were strong', 'Shaadadoox and them were strong'
(Swanton 1909: 350.5)
b. Tc!ule' dūcūnax has wē'tsa
ch'u tleidooshóonáx hás wé tsaa
ch'u tleidooshú-náx=hás wé tsaa
just six-Hum=PL MDST seal
'just six seals'
(Swanton 1909: 360.10)
Note that both Swanton and Boas (1917:57) were confused about the latter example, trying to analyze dūcūnax as a separate word when in fact it is part of the word tleidooshú 'six' plus the human numeral suffix -náx. They were misled by the frequent sequence of particles ch'u 'even' and tle 'just' which together mean something like 'just then' or 'when'. They thus tried to analyze the tlei- of tleidooshú 'six' - which comes from tléix' 'one' - as being the particle tle 'just'.

Occasionally a speaker may string together a sentence containing a few different forms of hás. This is unremarkable to Tlingit speakers though of course it is interesting - and even distracting - to linguists.
(80) hásch áwé yá hít has awliyéx wé
hás-ch á-wé yá hit has=a-ÿu-Ø-li-yex-ÿ wé
3PL-ERG FOC-MDST PROX house PL=3.0-PFV-3.S-CL[-D,l,+I]-make-VAR MDST
hasdu kaak hás
has-du káak=hás
pL-3H.PSS maternal.uncle=PL
'it was them, they made this house, their maternal uncles'
In Transitional and Southern Tlingit the =hás plural is sometimes reduced to just [s] in casual speech, as with the same reduction applied to other has morphemes. The above sentence might be pronounced by a Transitional Tlingit speaker from Wrangell as [híst ${ }^{\text {á'wé jí hít sàwlì̀jé } \chi \text { wé stù }}$ $\mathrm{k}^{\text {hà: }} \mathrm{k}$ hís]. Here the final =hás must be marked intonationally because of its information structure. ${ }^{14}$ But in an unmarked environment it may also be reduced to just [s], e.g. [?ว̀̀ đì:łk'w ú s jìsì'thì:n ké'wé jú ?à:nx'] for the following sentence.
(81) ax leelk'whás yisiteen géwé yú aanx'?
ax léelk'w=hás $\emptyset$-ÿu-i-si-tin-h gé-wé yú aan-x'
1SG.PSS grandparent=PL 3.0-PFV-2SG.S-CL[-D,s,+I]-see-vAR YN-MDST DIST town-LOC
'did you see my grandparents in that town?'
A few nouns that denote kinship relationships take an alternative plural enclitic =ÿán. This enclitic seems to be lexically restricted and cannot be used with most nouns, nor even with most kinship nouns.
(82) a. dukā'ni
du káani
3H.PSS brother.in.law
'his brother-in-law'
(Swanton 1911: 169)
b. dukā'niyên
du kaani ÿán
du káani=ÿán
3H.PSS brother.in.law=PL
'his brothers-in-law'
(Swanton 1911: 169)
14. I am handwaving here about intonation. I believe that an intonation system exists, and that pitch excursions and pitch neutralizations occur on top of the lexical tone system, and that these are used to mark various facets of information structure. But I must admit that no actual study of Tlingit intonation has been done.

Some instances of =ÿán also occur with the regular plural suffix $-x^{\prime}$. Note that an epenthetic vowel $i$ will occur between the $-x^{\prime}$ and =ÿán. Again this is not an instance of possessive marking, but is rather a purely phonological phenomenon. I have no explanation for why both plurals are used, and have not tested whether either is optional. I suspect it is a lexically specified phenomenon.
(83) a. duca't

> du shát

3H.PSS wife
'his wife'
(Swanton 1911: 169)
b. duca'tq!îyên
du shátx'i ÿán
du shát-x'=ÿán
3H.PSS wife-PL=PL
'his wives'
(Swanton 1911: 169)
c. du dachx̌án

3H.PSs grandchild
'his grandchild'
d. du d^čXínx' yón
du dachxánx'(i) yán
du dachx́an-x'=ÿán
3H.PSS grandchild-PL=PL
'his grandchildren'
(Story 1972: 47)

### 3.4. NOMINAL ALLOMORPHY

A few open monosyllabic morphemes have a peculiar tone and length alternation which is not entirely predictable. The most common morphemes exhibiting this phenomenon are the third person nonhuman pronoun á and the inalienable nouns -ÿá 'face, vertical surface' and -ká 'horizontal surface', though there are a few others. When suffixed these morphemes become long and low and the suffix takes a corresponding high tone if it normally undergoes tone alternation: aadé 'toward it', ax yaadé 'toward my face', a kaadé 'toward its horizontal surface'. For convenience these few morphemes are given in table 3.4 , with $-C V^{*}$ standing for any CV or CVC suffix and $-C$ standing for any case suffix composed of a single consonant. The allomorph $-n$ of
3.4. Nominal allomorphy

|  | Dial. | Unsuf. | $-C V^{*}$ | -C | -n | $-^{\prime}(L O C)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| z | N | á | $a a-C V{ }^{*}$ | á-C | aan | áa |
|  | S | á | aa-CV́* | á-C | aan | áà |
|  | T | $a$ | ah-CV* | $a-\mathrm{C}$ | ahn | $a^{\prime}$ |
| $\begin{aligned} & u \\ & \text { U } \\ & \text { N } \end{aligned}$ | N | -ká | -kaa-CV́* | -ká-C | - | -káa |
|  | S | -ká | -kaa-CV́* | -ká-C | - | -káà |
|  | T | -ka | -kah-CV* | -ka-C | - | -ka' |
| $\begin{aligned} & U \\ & \stackrel{4}{0} \\ & \hline \end{aligned}$ | N | -ÿá | - $\ddot{\text { a }}$-CV́ ${ }^{*}$ | -ÿá-C | - | -ÿáa |
|  | S | -yá | -yaa-CV́* | -yá-C | - | -yáà |
|  | T | - $\ddot{a}$ | -ÿah-CV* | -ÿá-C | - | - $\ddot{\square} a^{\prime}$ |
| - | N | xát | xaa-CV́* | хַáa-C | xaan | xַáa |
|  | S | xát | xaa-CV́* | x xáa-C $^{\text {a }}$ | xaan | xáà |
|  | T | $\underline{\text { xat }}$ | xah-CV* | ? | $\underline{\text { x }}$ ahn | ? $\chi^{\prime} a^{\prime}$ |
| $\begin{gathered} \text { M } \\ \stackrel{y}{\infty} \end{gathered}$ | N | =ee | $=e e-$ CV́ $^{*}$ | =ée-C | =éen | =ée |
|  | S | $=e e$ | $=e e-\mathrm{CV}^{*}$ | =ée-C | =éèn | =éè |
|  | T | =ee | ? | ? | =ihn | $?=i^{\prime}$ |
| $\begin{aligned} & \tilde{i} \\ & 0 \\ & 0 \end{aligned}$ | N | -jee | -jee-CV́* | -jée-C | - | -jée |
|  | S | -jee | -jee-CV́* | -jée-C | - | -jéè |
|  | T | -jih | -jih-CV* | -jih-C | - | ? |
| $\begin{aligned} & \frac{0}{0} \\ & \ddot{n} \end{aligned}$ | N | -tú | -too-CV́* | -tóo-C | -tóon | -tóo |
|  | S | -tú | -too-CV́* | -tóo-C | -tóòn | -tóò |
|  | T | -tu | -too-CV* | -too-C | ? | -tu' |

Table 3.4: Unpredictable nominal allomorphy. Note that suffixed 1SG is often $a \underline{x}=e e . .$. using BASE instead of $\underline{x} a \ldots$..., but the choice between them is idiolectal.
the instrumental-comitative suffix is treated separately from the other single consonant suffixes since it causes falling tone in Southern Tlingit.
(84) a. du jiht wudwatee yaa sah
du jih-t $\quad$-ÿu-du-ÿa-ti-ÿ yaa sah
3H.PSS poss'n-PNCT 3.0-PFV-INDH.S-CL[-D, $\emptyset,+\mathrm{I}]$-handle-var PROX name
'she was given this name'
(Williams, Williams, \& Leer 1978: 30)

There are a few lexical differences among certain relational nouns which are reflected in their phonology. This is still somewhat obscure and I have not explored it systematically.
(85) a. a tú

3N.PSS inside
'inside of it (concave entity)'
b. du lutú
du lú-tú
3H.PSS nose-inside
'inside his nose'
c. du toowú

3H.PSS mind
'his mind', 'his soul, 'his heart'
d.? du tú

3H.PSS inside
'inside of him'
e. a shú

3N.PSS end
'its end'
f. a shoowú

3N.PSS part
'part of it', 'half of it', 'a piece of it'
g. a shuwadaa
a shú-ÿá-daa
3N.PSS end-vSFC-around
'around the end of $i t$ '
The usual place where learners and linguists first notice nominal allomorphy is in words like the first person singular pronoun xát and -jee 'possession'. It should be noted however that the relational nouns like -ká, - ÿá, and -tú exhibit allomorphy even when they occur in compounds, though only when they are the last element in a compound and hence word-final. The following examples demonstrate a few instances of this allomorphy.
(86) a. Sheet'kát has uwakúx

Sheet'ká ${ }^{16}$-t has=u-Ø-ÿa-kux-ÿ
Sitka-PNCT PL=PFV.TEL-3.S-CL[-D, Ø,+I]-go.boat-vAR
'they went (by boat) to Sitka'
b. $\Lambda q^{w}$ án šitkà-d $\Lambda \mathbf{X} h \Lambda s X \Lambda t$ uwnšát
a kwáan Sheet'kaadáx has xat uwashát
a kwáan Sheet'ká-dáx has=xat-u-Ø-ÿa-shat-ÿ
3N.PSS people Sitka-ABL PL=1SG.O-PFV.TEL-3.S-CL[-D, Ø, +I]-grab-VAR
'its people captured me from Sitka' (Story 1972:47)

### 3.5. DEMONSTRATIVES

Tlingit has four demonstratives, which are proximal yá, mesioproximal hé, mesiodistal wé, and distal yú. The most commonly used are yá and wé, corresponding roughly to English's 'this' and 'that'. The distal yú is used for remote referents that are not easily accessible by either speaker or listener. The mesioproximal hé is somewhat vaguely defined as more distant than yá but not as distant as wé, and can be roughly translated into English as 'over here' versus 'right here' for yá. It indicates a position somewhat closer to the listener than to the speaker, and it is also used for things on the speaker's left side when contrasted with yá for the right side.

The convention for writing the demonstratives is to represent them as always short, thus yá. An earlier convention which can be seen in for example Story \& Naish 1973 was to write them as long, thus yáa. This difference reflects free variation among speakers of Northern Tlingit, and there is similar spoken variation in the other dialects. As far as I have been able to determine, there is no obvious reason for a speaker to choose one particular variant available in their dialect, and so I have concluded that the choice seems to be idiolectal and generally unpredictable.

In addition to dialectal and idiolectal variation, speakers will sometimes modify the duration and the pitch of a demonstrative for expressive purposes. This is particularly common in narratives, where the narrator may say things like yú shaa 'that mountain' as [ju:: ソ $\int \mathrm{a}: \perp$ ] when describing a
16. The name Sheet'ká 'Sitka' is derived from Shee 'Baranof Island' and a reduced form of the relational noun -t'iká 'outskirts, out beyond' which contains the noun -ká 'horizontal surface'. The meaning of $-t^{\prime} i$ is not clear, but it might be somehow related to the noun -t'eey 'elbow'.

| Abbv. | Dial. | Free | Suffix |
| :---: | :---: | :---: | :---: |
| PROX | T | yaa | -ya~-yaa~-yah |
|  | S | yá ~ yáa ~ yáà | -yá $\sim-y a \sim-y a ́ a ̀ ~$ |
|  | N | yá ~ yáa | -yá~ -yáa |
| MPRX | T | hei | -he ~-hei ~-heh |
|  | S | hé ~ héi ~ héi | -hé~ -he ~-hél |
|  | N | hé ~ héi | -hé ~ -héi |
| MDST | T | wei | -we $\sim$-wei $\sim-w e h$ |
|  | S | wé ~ wéi ~ wél | -wé ~-we ~-wél |
|  | N | wé ~ wéi | -wé ~ -wéi |
| DIST | T | yuh | -уи ~-yoo ~-yuh |
|  | S | yú ~ yóo ~ yóò | -yú ~-yu~-yóò |
|  | N | yú ~ yóo | -yú~-yóo |

Table 3.5: Demonstratives.
mountain that is very far away. The demonstratives are also frequently affected by intonational phenomena; for example a demonstrative will often have a lower pitch than an immediately following noun with a high tone, so that wé káa 'that man' will sound like [wełt $q^{\mathrm{h}} \mathrm{a}: 7$ ] which can be misinterpreted as */we qhá:/ by the intonationally naïve.

The demonstratives also occur as part of the focus particles. These are formed by combining the focus particle á with the suffix forms of the demonstratives, which can be somewhat different from the free forms depending on the dialect. As with the regular demonstratives, these may be phonetically modified for expressive and intonational reasons. The combination of demonstrative and and focus particle serves as a sort of verb avoidance technique, acting functionally as a copula. An illustration is given in section 3.2.10 in comparison with the locative predicate suffix which also serves as a verb avoidance strategy.

The demonstratives normally head a demonstrative phrase (DP), with a noun phrase occurring within this phrase. As such, possessive pronouns may occur between the demonstrative and the noun, as in the following examples.
(87) a. yá ax hídi
yá ax hít-ÿí
pROX 1SG.PSS house-PSS
'this, my house'
b. wé du x'úx'u
wé du x'úx'-ÿí
MDST 3 H.PSS book-PSS
'that, his book'
The demonstratives may not act as pronouns

### 3.6. ADJECTIVES

Tlingit has a small and restricted class of adjectives. They are divided into two groups based on syntactic distribution, the prenominal and postnominal adjectives. As the names imply, prenominal adjectives are found before nouns and postnominal adjectives are found after nouns. The prenominal adjectives occur after demonstratives, relative clauses, and numerals, thus immediately preceding the head of a noun phrase. The postnominal adjectives occur after all other elements of a noun phrase. The following example demonstrates a fairly large determiner phrase with nearly all of the possible elements occurring within, including both a prenominal and a postnominal adjective.
(88) yú hat uwa.adi yú haa-t=u-Ø-ÿa-.at-i déix-náx yées káaw-x' dist here-PNCT=PFV.TEL-3.S-CL[-D, $\emptyset,+\mathrm{I}]$-go.SG-REL two-HUM young man-PL
tlenx'
tlenx'
big.pl
'those two big young men who came here'
All of the prenominal and postnominal adjectives that I have encountered are listed in table 3.6. There may be one or two other rare adjectives not listed, and there are certainly several nouns that are occasionally used like adjectives and hence could be listed. Adjectives are mostly derived from either verbs or nouns by various unpredictable processes, but there are a few

|  | Form | Meaning | Compare |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { I } \\ & \text { I } \\ & \text { I } \\ & \text { I. } \end{aligned}$ | aak'é _ | good, well | $\sqrt{\text { k'éi }}$ 'good' |
|  | aatlein _ | much, lots | _ tlein 'big' |
|  | ch'áagu _ | old, ancient | ch'áakw 'long ago' |
|  | káa_ | male, he- | káa 'man' |
|  | kúnáx _ | very, actual, real | $\underline{\text { kú-náx 'AREAL-PERL'? }}$ |
|  | kustín - | giant, monstrous | $\underline{k} u-C L[+D, s]-\sqrt{t i n}$ ? |
|  | Lingít _ sheech _ | Tlingit, traditional female, she- | Lingít 'Tlingit' |
|  | shóogu _ | first, initial | -shú 'end, tip' |
|  | tatgéizıi _ | of yesterday | tatgé 'yesterday' |
|  | té ${ }_{-}$ | stone, rock | té 'stone, rock' |
|  | tlagu(wu) - | ancient, forever | tlaagóo 'legend' |
|  | tl'eitákw_ ÿées _ | pure <br> new, young |  |
|  | _ k'wát' | round, egg-shaped | k'wát' 'egg' |
|  | - kr'áatl' | thin and flat | k'áach' 'ribbon kelp' |
|  | _ létl'k | soft, pliable | $\sqrt{\text { lel 'lax, flabby'? }}$ |
|  | - sákw | future, to be, for |  |
|  | _ shaan | old, elderly | $\sqrt{\text { shan 'old' }}$ |
|  | _ shis'k | raw | $\sqrt{\text { shís' } \underline{k}^{\times} \text {'raw' }}$ |
|  | _ t'éex' | hard | $\sqrt{\text { t'ix' 'hard; frozen' }}$ |
|  | - tlein | large, big | $\sqrt{\text { tla }}$ 'stout' |
|  | _ tlenx' | large, big (pl.) | - tlein 'big' |
|  | - xook | dry, dried | $\sqrt{x u k}$ 'dry' |
|  | - uwaa | similar, fake | $\sqrt{y} a$ 'resemble' |
|  | - yádi | small, little, childlike | -ÿát 'child' |
|  | - ÿéeÿi | past, former, ex- | ÿee 'time'? |
|  | - yéis' | dark, dusky, immature | ÿéis' 'black stone' |

Table 3.6: Prenominal and postnominal adjectives. _ is the host noun.
adjectives which have no obvious source elsewhere in the lexicon. Membership in the adjective class is not entirely certain for a few words, these may be included or excluded depending on the criteria for adjectivehood.

In addition to the adjectives there are a number of colour terms which are sometimes encountered in an adjectival context. Tlingit does not have basic colour terms in the conventional sense, meaning words devoted to the description of colour with no other meanings. Instead, Tlingit has an array of fairly conventionalized colour-specific uses of otherwise ordinary nouns. They are most simply used in the construction X yáx yatee 'be like X', such as in the following examples.
(89) a. dleit yáx yatee
dleit yáx $\emptyset-\emptyset-y ̈ a-t i^{\text {h }}-\mathrm{h}$
snow SIM 3.0-ZCNJ-CL[-D, Ø, +I]-be-VAR
'it is white'
b. t'ooch' yáx yatee
t'ooch' yáx $\emptyset-\emptyset-y ̈ a-t i^{\text {h }}-\mathrm{h}$
charcoal SIM 3.0-ZCNJ-CL[-D, Ø, +I]-be-vaR
'it is black'
c. x'aan yáx yatee
xِ'aan yáx $\emptyset-\emptyset-y ̈ a-t i^{\text {h }}-\mathrm{h}$
fire SIM $3.0-\mathrm{ZCNJ}-\mathrm{CL}[-\mathrm{D}, \emptyset,+\mathrm{I}]$-be-vAR
'it is red'
d. x'éishx’’w yáx yatee
x'éishx́w yáx $\emptyset-\emptyset-y{ }^{\prime} a-t i^{h}-h$
jay ${ }^{18} \quad$ SIM $\quad 3.0-Z C N J-C L[-D, \emptyset,+I]-b e-V A R ~$
'it is blue'
This 'be like' construction is actually ambiguous, not specific for colour indication. It is entirely acceptable for a Tlingit speaker to use dleit yáx yatee to describe something cold and powdery but not white, or x્'aan yáx yatee to describe the blue flames of alcohol. There is much less focus on colour in traditional Tlingit culture than in Euro-American culture, so that descriptions of colour are relatively rare among native speakers despite heavy emphasis on teaching 'traditional' colour terminology by the education establishment.

[^12]Although the 'be like' construction is the more common method for describing the colour of an object, the conventional colour nouns are found in what appear to be noun compounds.
(90) a. dleit káa
snow man
'white man'
b. t'ooch' gáaxw
charcoal duck
'black scoter ${ }^{19}$
These can be compared against the following examples where the nouns have their basic meanings and not their colour meanings.
(91) a. dleit xwéinaa
snow scoop
'snow scoop', *'white scoop'
b. t'ooch' té
charcoal rock
'coal', *'black rock'
The use of the colour meaning versus the non-colour meaning of these nouns in compounds is unpredictable. For example, even with an established term like dleit káa one can still cancel the colour interpretation by explaining that a man made of snow is meant instead, and this particular term is susceptible to punning on the two interpretations. Because of such phenomena, the difference between colour and non-colour interpretations of these types of compounds is not fixed, but rather conventionalized in the lexicon. Consequently, I do not consider the colour terms to be true adjectives.

There are in fact a number of other nouns that have adjectival uses as well. The adjectives in table 3.6 provide a few examples of the most conventionalized adjectival nouns, particularly káa 'male', Lingít 'traditional', té 'stone', k'wát' 'round', and ÿádi ‘small'. Instances of nominal káa and té have already been given. In their adjectival use they precede the modified noun, thus káa xóots 'male brown bear' and té hít 'stone house'. The use of Lingít

[^13]is somewhat more complicated, since it has multiple nominal meanings as well. The basic meaning of lingít - note the lowercase spelling - is largely the same as English 'person', referencing a human being regardless of sex or age. The specialized use Lingít - note the uppercase spelling - is for reference to members of the Tlingit ethnic group. When employed as an adjective it appears prenominally, meaning something like 'traditional' or 'pre-contact' but usually translated as 'Tlingit', as in Lingít k'únts' 'Tlingit potato,', ${ }^{20}$ Lingít shákw 'Tlingit strawberry' or 'wild strawberry', ${ }^{21}$ and Lingít x'áax' 'Tlingit apple' or 'crabapple.'. ${ }^{22}$

[^14]
## 4 The verb template

The Tlingit verb, like its Athabaskan cousins, is traditionally described using a position class template. In such models, each position or slot in the template contains a related class of affixes that are linearly ordered with respect to the other slots. The linear ordering is documented on the basis of cooccurrence restrictions among various affixes. It is essentially stipulative in that there is no underlying explanation for why certain affixes occur in certain places, instead affixes 'just are where they are'.

Li $(1930,1946)$ and Hoijer (1945) were the first to seriously utilize charts of position classes for studying Athabaskan languages, though Goddard (1911) and Sapir (1914) did employ them to a certain extent (Kari 1989). Templates are now 'traditional' in Athabaskan language description (Jung 1999: 15). The early work on Tlingit did not use position class templates. Boas (1917) did seem to be leaning in the direction of templatic analysis based on his example chart of Tlingit verb composition (Boas 1917: 24), but he did not use a verb template in any systematic manner. Swanton (1911: 190-191) also seems to have had a similarly incipient templatic analysis based on his tabular presentation of verbal forms, though he also did not use position classes systematically.

Naish and Story (Naish 1966; Story 1966, 1972; Story \& Naish 1973) were the first to define a template after the conventional Athabaskan pattern, though unlike contemporary Athabaskan descriptions they considered the Tlingit object pronominals and other preceding elements to be outside the verb. Leer (1991) united all the parts of the verb in a single position class template which featured an extensive multidimensional expansion of Naish and Story's model. Cable (2006) developed a simpler unidimensional model from Leer's work, though he avoided addressing the suffixes. I have built on Cable's description, extending it to encompass the suffixes as well as the bound phrases, and have added a slot for the areal prefix.

The verb template is in my analysis not a theoretical construct, but instead merely a descriptive tool that aids in understanding the positions and interrelationships of different morphological elements within the verb. There are several different theoretical models currently that aim to dispense with template morphology per se, such as a scope-based ordering mirroring syntax (Rice 2000), a purely lexical phonology-based model (Hargus 1985), a multistage abstract lexical morphological model (Kari 1989, 1992), ${ }^{1}$ a bipartite phonological model (McDonough 2000) inspired by [[Fixme: Morice (1932)]], a syntactic model based on the Lexical Clause Hypothesis (Tuttle 1996), a purely syntactic model based on the Pronominal Argument Hypothesis (Hale 2001; Hale \& Platero 1996; Uyechi 1996; Willie \& Jelinek 2000), and an Optimality Theoretic account (Tuttle \& Hargus 2004). Leer (1991: 43-45) offered a dual morphology-syntax interface model for Tlingit based on Sadock's autolexical syntax (Sadock 1991) but he did not actually employ this model to any extent, instead using his highly articulated template for the rest of his dissertation. Cable (2006) addressed the prefix morphophonology of the Tlingit verb but assumed position classes out of convenience rather than attempt an explanation for how the prefixes came to be ordered. Other than Leer's brief flirtation there has not been any attempt at a formal theoretical explanation for the morphology of the Tlingit verb. I will not even consider such an undertaking here.

Regardless of its descriptive utility, the template should never be thought of as a psychological reality. To my knowledge no linguist has ever claimed that a Tlingit speaker actually manipulates verbs in their language with a mental position class system, and Jung (1999:15) similarly disclaims such ideas for Athabaskan. Currently the mental representations underlying Tlingit verb morphology are entirely unknown. Based purely on my own impressions, it seems that Tlingit speakers divide the verb into a few basic syllabic units, and that most of the morphology inside of the syllabic units is not consciously available for introspection without extensive training and practice. This points towards a mental representation consisting of large paradigms of mono-, sesqui-, or disyllabic units, implying a large storage requirement. The most salient part of the verb is unquestionably the root, but linguistically naïve speakers often find it difficult to consciously distinguish it from

[^15]the classifier and suffixes. For my work on Tlingit the template is a purely descriptive convenience.

In my template there are eighteen slots centred on the verb root which is numbered as slot 0 . Prefix slots are given positive numbers and suffix slots are given negative numbers. ${ }^{2}$ I make no distinction in the template between affixes and clitics because in some cases the same basic morpheme may have one allomorph that is phonologically a clitic and another allomorph that is phonologically an affix, as for example the proclitic has= and the prefix $s$ both of which indicate pluralization of a nonlocal ${ }^{3}$ argument. I have mostly avoided the use of subslots to reduce descriptive complexity, though the proclitic "preverbs" slot +17 has cooccurrences of morphemes with ordering constraints and hence requires subslots A-F, and the suffixal "duration" slot -3 may have internal ordering with subslots a and в. The structural description of my template, along with Leer's template for comparison, is given in table 4.1 on page 93.

In a template model of morphology the usual convention for defining a slot is that no morphemes within it can cooccur. But although I adopt template terminology and analysis from Kari (1989), I do not follow his rigorous methodology when it seems to produce something overly complicated and difficult for me to comprehend. For example, as far as I am aware it is impossible for epimode ( -5 ) and clause type ( -6 ) suffixes to cooccur. But rather than unifying them in a single slot as Leer did according to Kari's procedures, I have taken the position that their very distinct semantic and syntactic functions warrant separating them more than their morphological cooccurrence restrictions justify unifying them. For this reason it should not be assumed that morphemes in distinct slots can cooccur, nor that morphemes in the same slot cannot cooccur. These assumptions are largely true, but because I consider the template to be a useful device for description to be discarded when conceptually inconvenient, such implications are not to be taken too seriously.

With those considerations in place, we can look more closely at the or-
2. This positive and negative numbering was introduced by Leer (1991) for Tlingit, following the right-to-left numbering introduced in Golla's description of Hupa (Golla 1970) and hence extended to other Athabaskan languages (Kari 1989).
3. Leer uses the term 'local argument' for what most linguists call locative obliques, i.e. postpositional phrases that denote locations. I follow the widespread convention of local arguments being those referencing discourse participants, so that 1 st and 2 nd person are local arguments and other persons (3rd, indefinite, etc.) are nonlocal arguments.


Table 4.1: Verb template structure.
ganization of morphemes in the verb. Any given slot may hold one or more morphemes, usually more than one. But in a fully conjugated verb there is usually only one morpheme per slot, and most slots are empty. The preverbs are exceptional since it is possible to have at least one preverb from each subslot, though perhaps not from all the preverb subslots at once. It is also occasionally possible to have more than one incorporated noun, though possibly this may only apply to the inalienable incorporated nouns in slot +11 . There are a few incorporated nouns that, when they occur as independent nouns, are analyzed as being polymorphemic, for example -tukx'é 'anus' that is a compound of $-t u \underline{k} \underline{k}$ 'butt' and - $\underline{x}^{\prime} e$ ' mouth', but when this occurs as the incorporated noun tukx́x $e-\sim t u \underline{k}{ }^{\prime} e$ - it is analyzed as monomorphemic. Compare the independent noun - $\underline{x}^{\prime} e$ ' $m$ mouth' with the incorporated form $\underline{x}^{\prime} a$-, and note that the incorporated 'anus' is not *tukx'a-nor *tukx'ée-.

Table 4.2 on page 95 gives the complete inventory of known morphemes in the Tlingit verb, with a few exceptions. The most important exceptions are a handful of procliticized postpositional phrases such as adax $=\sim a \alpha \underline{x}=$ 'from it' and kanax = 'along its horizontal surface', where the independent forms are aadáx and -kaanáx.
(92) yadax yagax́tudaxóon

ÿá-dáx=ø-ÿa-ga-w-ga-tu-da-xun-:
vSFC-ABL=RFLX.O-vSFC-GCNJ-IRR-GMOD-1PL.S-CL[+D, $\emptyset,-\mathrm{I}]$-show.face-vAR
'we will lift our faces from it'
(Gooch Éesh Johnny Jackson in Dauenhauer \& Dauenhauer 1990: 164.44)
Another set of morphemes not given in table 4.2 is the incorporated focus particles and phonologically small postpositional phrases that can sometimes be found occuring between some of the preverbs (Leer 1991: 140-141). The exact circumstances for when such procliticized or incorporated forms are selected over independent forms have yet to be investigated, though Leer supposes that both phonological properties and argument structure condition the choice for the incorporated phrases (Leer 1991: 141).

The various Tlingit orthographies currently in use attempt to make a distinction between clitics and most affixes, in that clitics are written as separate words. But some prefixes are also written as separately, for example the objects $\underline{x} a t-$ ' 1 st pers. sg. obj.', haa- '1st pers. pl. obj.', and sh- 'reflexive obj.', among others. In addition most of the alienable incorporated nouns are conventionally written as separate words, as are some of the inalienable in-


Table 4.2: Verb morphemes.
corporates. These very inconsistencies are telling, since the phonology does not always make clear whether a given morpheme has become fully affixed or not, and the precise phonological delineations between the two groups have not been thoroughly worked out. In general the orthography should not be relied upon to judge clitic versus affix status, but it can be a useful guide.

### 4.1. Domains

The Tlingit verb can be divided into a few domains on the basis of morphophonological behaviour and to a lesser extent the semantic properties of particular affixes. This is a common approach in Athabaskan languages, probably best exemplified in the analysis of Ahtna by Kari (1989, 1992). Cable (2006) presents an extensive investigation of Tlingit verb prefix phonology and sets up a number of domains for his Optimality Theoretic approach to the metrical phonology of the verb prefixes. I do not wholeheartedly accept his analysis for largely theoretical reasons that are irrelevant here, but I will borrow from his descriptions of the domains in as much as they are descriptively useful.

This section only presents the definitions of the domains. The morphophonological processes and rules that are sensitive to these domains and hence give rise to them will instead be described for specific affixes and phenomena elsewhere. If I presented the reasons for defining each domain then this section would grow wildly and would become a phonological description of the verb devoid of any meaning. This would run directly counter to my goal of trying to provide a meaningful description of the labyrinth of verb morphology, so I will avoid walking off of that cliff. Readers who want more details should explore chapter 10 which accounts for the variation in verb stem shape and chapter 14 which offers a description of the morphophonological behaviours of the prefixes. For more structured attempts to explain verbal morphophonology phenomena, readers are referred to Cable 2006, chapter 5 (pp. 160-202) of Leer 1991, chapter 7 (pp. 110-141) of Story 1966, and sections 10-36 (pp. 20-86) of Boas 1917, all of whom have grappled with the morphophonology of Tlingit verbs in various interesting ways.

Figure 4.1 illustrates the definitions of the domains in the verb. The bound phrases in slot +18 and the auxiliaries in slot -7 are only part of the verb in a lexical or syntactic sense, but they can be analyzed to some extent


Figure 4.1: Domains of the verb.
as clitics and hence they have some phonological interactions with the rest of the system. In the interest of descriptive simplicity I exclude both and focus only on the core domains of the verb. The simplest distinction is between the PREFIX DOMAIN of all prefixes before the root and the SUFFIX DOMAIN of all suffixes after the root. These two domains are not often used descriptively since one can more clearly refer to 'all prefixes' or 'all suffixes'; they are given here for symmetric completeness.

The disjunct domain encompasses everything from the left edge of the verb inward to about slot +15 with the plural prefix; it may seem small compared to the others, but slot +17 contains seven subslots that have been omit-
ted in figure 4.1 for brevity. The conjunct domain extends from most of the objects in slot +14 to the classifier in slot +1 , and this domain consistutes the main body of the verb where the majority of the inflectional and derivational components occur. These two domains are named following the practice for Athabaskan languages (Kari 1975), and are similar to their Athabaskan relatives, but it is not yet clear if this similarity is inherited from Proto-Na-Dene, due to language contact, or due to parallel evolution.

The division between the disjunct and conjunct domains in Tlingit is not entirely clear because there is some inconsistency in the phonological behaviour of morphemes in the +14 objects slot and the +15 plural number slot. Some object prefixes like x_at- 'first singular', ax- 'first singular possessive', ash- 'third proximate', and at- 'indefinite nonhuman' are somewhat more proclitic-like than the other object prefixes because of their coda consonants. In addition, the plural number proclitic has= has an allomorph $s$ that is free or nearly obligatory in some dialects and which often seems to be much more like a prefix than a clitic. In contrast the +13 areal $\underline{k u}$ - is certainly a prefix given contractions like $\underline{k o o w d z i t e e ~ ' h e ~ w a s ~ b o r n ' ~ f r o m ~} \underline{k} u-+13$ $\ddot{y} u^{-+4}{ }^{d z i-+1} \sqrt{t i_{o}}{ }_{-h_{-1}}$.

The conjunct domain is further divided into two subdomains. The outer CONJUNCT DOMAIN comprises the objects ( +14 ), the areal prefix ( +13 ), and the alienable $(+12)$ and inalienable $(+11)$ incorporated nouns, though excluding the vertical $(+10)$ and horizontal surface $(+9)$ prefixes which were originally incorporates but which have wider semantics and distinct morphophonology. The inNER CONJUNCT DOMAIN, defined by Cable (2006: 17), contains the rest of the conjunct prefixes which participate in the prefix contraction process described in chapter 14.

The CONTRACTION DOMAIN groups together the other conjunct prefixes that are the main elements in the prefix contraction process, i.e. slots +1 through +7 , and excluding $+8,+9$, and +10 . This is defined because the outermost prefixes of the inner conjunct domain, namely the +10 vertical surface, the +9 horizontal surface, and the +8 self-benefactive, have distinct vocalic interactions with the other inner conjunct prefixes but which do not themselves participate entirely in the prefix contraction process (Leer 1991: 183). The PRE-CONTRACTION DOMAIN encompasses all the conjunct domain prefixes that may occur as CV prefixes in the contraction process, including those in $+8,+9$, and +10 . This domain is defined largely for symmetry with the contraction domain.

The extended stem domain extends from the root in slot 0 to the clause
type suffixes in slot -6. This domain does not seem to be defined in Athabaskan languages due to their limited inventories of suffixes (e.g. only three slots in Ahtna, Kari 1989: 438). Tlingit however rejoices in a fairly wide variety of suffixes, and taken together with the root they have some distinct phonological properties. Within this domain the stem domain defines the union of roots and suffixes that together produce the surface forms of verb roots as documented in chapter 10 on stem variation.

It would be extremely beneficial for an interested researcher to attempt a psycholinguistic study of how Tlingit speakers themselves perceive phonological domains. A good starting point for such a study is the work by Rice (2002). In this study they had fluent, minimally literate native speakers of Dëne Sųłiné (CHP) engage in morphological segmentation tasks and off-line lexical decision tasks. They found that people tended to not break verbs in the conjunct domain, showed more variation in the disjunct domain, and treated the stem as particularly privileged. Such a study for Tlingit would, among other things, help determine whether the orthographic word-breaking is representative of mental phonology or whether it is a bias introduced by the perceptions of English-speaking linguists.

### 4.2. SLOTS

In this section I will briefly describe each of the morpheme slots in the verb as labeled in table 4.1 on page 93, table 4.2 on page 95 , and in figure 4.1 on page 97. The slots are presented from left to right, i.e. from the highest numbered slot to the lowest numbered one, or from the beginning of the verb to the end of the verb. Rather than provide extensive details on each morpheme, I will instead provide references to the other sections and chapters in this book where the morphemes are discussed in the context of their morphological functions and behaviours.

### 4.2.1. SLOT + 18: Bound PHRASES

The BOUND PHRASES consist of a variety of postpositional phrases that are lexically specified; Leer sometimes refers to these as 'bound adjunct phrases' (Leer 1991: 142) but it is not clear whether they are syntactically either adjuncts or complements.

All the bound phrases are obliques and are hence composed of postpositional phrases. Some bound phrases only specify a particular case suffix or postposition, but some include a relational noun as well, and others consist of what is probably a relational noun with a fossilized postposition. Bound phrases are listed lexically with $P$ standing for the postpositional argument which is an unspecified noun phrase, and with other elements such as case suffixes or postpositions following the $P .^{4}$ Thus a verb which has a required locative argument would be listed with $P-x^{\prime}$ preceding the verb morpheme string, where $P$ is an arbitrary noun indexing the location and $-x^{\prime}$ is the locative suffix (sec. 3.2.2).

Since Tlingit lacks ditransitive verbs and hence indirect objects, some of Tlingit's bound phrases are functionally analogous to the indirect objects of Indo-European languages. Though perhaps similar, Leer's term 'indefinite object NPs' (Leer 1991:25) refers to syntactic objects that are not postpositionally marked and which are semantically indefinite; this has nothing to do with the traditional concept of an indefinite object. Leer also confusingly refers to these as 'bound argument phrases' in contrast with the 'bound adjunct phrases' (Leer 1991: 142). His use of the term 'bound' in reference to the objects is misleading since they are not actually morphologically or syntactically bound; rather they simply tend to occur near the verb but can be dislocated or topicalized away. The bound phrases are in contrast not objects, and they are really bound in that they must occur immediately before the verb and cannot be displaced by topicalization or other kinds of phrase reordering. ${ }^{5}$

A few bound phrases vary depending on how the verb is conjugated, for example $P$ - $\{t, \underline{x}, \mathrm{dé}\}$. In this case the bound phrase is used with derived motion verbs in the telic or Ø-conjugation class as described in section 11.1.1. The punctual suffix - $t$ (sec. 3.2.3) is used in modes where the motion is achieved, such as in the perfective or potential (secs. $12.2 \& 12.5$ ). The pertingent suffix $-\underline{x}$ (sec. 3.2.4) is used in modes where the motion is repeated, particularly the

[^16]repetitive imperfective (sec. 12.1.3). The allative suffix-dé (sec. 3.2.5) is used in other modes where the motion is not achieved, such as in the future (sec. 12.4).

Some bound phrases are lexically unique, meaning that they occur with only one verb root and are not otherwise found free. The best example is the phrase $P-k^{\prime}$ which is used in the verb theme $P-k^{\prime} a-S-C L[-D, \emptyset]-h i n ~(\emptyset ;-h$ Act) ' S believe P ' and in a few other themes based on the same root $\sqrt{ }$ hin 'believe'. The following examples demonstrate this verb and show how it is ungrammatical without the bound phrase. Note that the third person object prefix $a$ - is lexically specified and nonreferential. I have glossed $-k^{\prime}$ as obl standing for 'oblique', and I do not intend to imply any particular meaning for this suffix.
(93) a. ák' aawahín
á-k' a-ÿu- $\emptyset-y ̈ a-h i n-y ̈$
3 N -OBL $3.0-\mathrm{PFV}-3 . \mathrm{S}$-CL[-D, $\emptyset,+\mathrm{I}]$-believe-VAR
'he believed it'
theme: P-k'a-S-cL[-D,Ø]-hin ( $\emptyset$; -h Act) ‘S believe P’ (Story \& Naish 1973: 28)
b. átk' aawahín
át-k' a-ÿu-Ø-ÿa-hin-ÿ
INDN-OBL 3.0-PFV-3.S-CL[-D, Ø, +I]-believe-VAR
'he believed', 'he believed something'
c.*aawahín
a-ÿu- $\emptyset-\mathrm{ya} a-h i n-\ddot{y}$
3.0-PFV-3.S-CL[-D, $\emptyset,+\mathrm{I}]$-believe-vaR
'he believed'
I have not compiled any sort of extensive list of bound phrases, and I am not aware of such a resource having been made. There are certainly many interesting phenomena to be explored in this area. The most thoroughly documented subset of bound phrases are those specified by motion derivations, for which the reader is referred to section 11.1.

### 4.2.2. Slot +17: Preverbs

The preverbs are a large and motley collection of proclitic elements that mostly have adverbial functions, though some are actually locative obliques that have been incorporated into the verb. They are discussed at length in chapter 21. Leer (1991: 132) called the preverbs 'proclitic adjunct phrases',
but as with the bound phrases discussed in section 4.2.1 it is unclear whether these are syntactically adjuncts or complements. They do seem to be more like proclitics than the bound phrases. The preverbs are mostly adverbial, expressing manner and direction, but unlike true adverbs most of the preverbs can or must occur with postposition suffixes.

Leer (1991: 132-134) divided the preverbs into seven subgroups based on relative orderings, from the rightmost subgroup a to the leftmost subgroup F. He unfortunately did not provide any data demonstrating the relative orderings, so until someone with enough patience collects enough examples we must take his word for their structure.

### 4.2.3. SLOT + 16: RECIPROCAL AND OUTER DISTRIBUTIVE

The reciprocal woosh= and outer distributive dax= are two pronominal-like elements which occur near the left edge of the verb. They are not mutually exclusive, and when cooccurring the reciprocal appears to the left of outer the distributive, hence woosh=dax= RECIP=DISTB. [FIxmE: example]. The reciprocal triggers middle voice marking with the D component of the classifier, as discussed in section 9.1. Because of their pronominal-like properties they are documented in chapter 19 along with the other pronouns and pronominals.

The outer distributive dax= in slot +16 is "in semi-free variation with" (Leer 1991: 104) daga- ~dax- found in slot +3 immediately preceding the subject prefixes (sec. 4.2.16). The outer distributive in slot +16 precedes the object prefixes, so that with a 3-on-3 transitive verb the outer distributive comes before the 3-on-3 object $a$-.
(94) tléil dax akawusyéet
tléil dax=a-ka-ÿu- $\emptyset$-sa-yi't-h
NEG DISTB-3.0-HSFC-PFV-3.S-CL[-D,s,-I]-stretch-VAR
'he didn't stretch each one of them'
(Story 1966: 97)

### 4.2.4. SLOT + 15: PLURAL

The plural prefix has $=\sim s$ - is a morpheme that indicates plurality of nonlocal human person, i.e. third person subject or object, indefinite human subject, or indefinite human object. It is not in itself a pronominal, but instead modifies the plurality of the other pronominals. Since it is closely associated with the pronominals it is documented in chapter 19.

### 4.2.5. SLot +14: ObJECTS

The object slot contains one of the two major sets of pronominal elements in the verb, the other being the object slot. The object prefixes indicate both discourse local and discourse nonlocal pronominal referents, as well as indefinite referents and reflexivity. Like the other pronominals, the objects are discussed in chapter 19.

### 4.2.6. Slot + 13: AREAL

The areal prefix $\underline{k} u$ - is a typologically unusual morpheme which is cognate with the areal prefixes in the Athabaskan language family (see e.g. Cook 1996; Thompson 1993; Tuttle \& Hargus 2004).

Its status as a pronominal element is not clear, but because it has some interactions with other pronominal morphemes in the verb it is discussed in chapter 19.

### 4.2.7. SLOT + 12: ALIENABLE INCORPORATES

The alienable incorporate slot comprises a moderate number of morphemes derived from alienable nouns. They are not freely incorporable but instead are restricted to occurring in particular verb themes, usually only one or two per incorporate. Leer (1991:42) claims that the inalienable incorporates (sec. 4.2.8) always have possessors in the form of object prefixes in the verb, and that alienable incorporates necessarily lack such possessors. Because of this he positions them in the same slot as the object prefixes (Leer 1991: 123), a practice I see as somewhat confusing and hence have abandoned. The alienable incorporates are discussed in chapter 20.

### 4.2.8. SLOT + 11: INALIENABLE INCORPORATES

The inalienable incorporates are a fairly large number of mostly monosyllabic morphemes that are derived from inalienable nouns. According to Leer (1991: 42) they always occur with a possessor which is an object in slot +14 , though if this is the reflective object sh- the allomorph $\emptyset$ - appears instead as described in section 19.7. The inalienable incorporates are detailed in chapter 20 alongside the alienable incorporates of slot +12 .

### 4.2.9. SLOT +10: Vertical SURFACE

The vertical surface prefix $\ddot{y} a$ - is derived from the inalienable noun - $\ddot{y}$ ' face, vertical surface'. Unlike the other inalienable incorporates, the vertical surface prefix often does not occur with a preceding object prefix as a possessor. In addition, the vertical surface prefix has a few different meanings that do not seem to be derived from the meaning of the noun, and in some verbs it seems to have no meaning at all. Like the other inalienable incorporates it is described in chapter 20, but its use in the noun classification system is described in chapter 24.

### 4.2.10. Slot +9: Horizontal SURFACE

The horizontal surface prefix $k a$ - is derived from the inalienable noun -ká 'horizontal surface, flat of, top'. It is similar to the vertical surface prefix $\ddot{y} a-$ in that a number of verbs employ this prefix with meanings different from the basic concept of horizontal surface. In particular it represents the noun classification meaning of 'solid round object' in many themes. It is discussed in chapter 20 in the context of the inalienable incorporates and in chapter 24 in the context of the noun classification system.

### 4.2.11. SLot + 8: SELF-BENEFACTIVE

The self-benefactive prefix $g a$ - is used to indicate that the action described by a verb is performed for the subject's own benefit. It is the only prefix that occurs in slot +8 . It is not actually a pronominal prefix because it does not index a person alone, but instead defines the beneficiary of an action as being identical with the subject. Like the reflexive and reciprocal prefixes, the self-benefactive $g a$ - triggers middle voice marking with [ +D ] in the classifier. Although it is not a true pronominal prefix it is discussed further in chapter 19 alongside the pronominals and pronouns. The self-benefactive $g a$ - is also discussed in section 9.1 in the context of middle voice marking and the D component of the classifier $\mathrm{CL}[ \pm \mathrm{D}]$.

### 4.2.12. SLOT +7: OUTER CONJUGATION

The outer conjugation slot contains only the ga-conjugation prefix. We know it does not occur in the same slot as the other conjugation prefixes because
it appears to the left of the irrealis prefix in slot +6 whereas the other conjugation prefixes appear to the right of slot +6 .
(95) a. potential form of ga-conjugation verb
at googaashee
at-ga-u-ga- $\emptyset-y ̈ a-s h i-h ~$
INDN.O-GCNJ-IRR-GMOD-3.S-CL[-D, $\emptyset,+\mathrm{II}]$-sing-vAR
'he can sing (something)'
b. potential form of ga-conjugation verb
ugaagaanook
u-ga-ga-Ø-ÿa-nuk-h
IRR-GCNJ-GMOD-3.S-CL[-D, $\emptyset,+\mathrm{I}]$-sit-vAR
'he can sit down'
The ga-conjugation prefix is one of the four conjugation prefixes that define the conjugation classes described in chapter 11. The other three conjugation prefixes are outlined in section 4.2.14. The ga-conjugation prefix does not seem to have any particular meaning, despite attempts to shoehorn it into various semantic categories. It appears in modes which select a conjugation class prefix, which are listed below.

- -h extensional stative (sec. 12.1.5) CNJ-[+I]-...-h
- $-\ddot{y}$ extensional stative (sec. 12.1.5) $C N J-[+I]-. .-\ddot{y}$
- $-k$ multipositional stative (sec. 12.1.5) CNJ-[+I]-...-k(w-t)
- realizational (sec. 12.3) CNJ-[+I]-...-:
- habitual (sec. 12.6) CNJ-[-I]-...-ch
- potential (sec. 12.5) u-CNJ-ga-[+I]-...-\{h, $\ddot{y}\}$
- imperative (sec. 12.7) CNJ-[-I]-...-h
- hortative (sec. 12.8) CNJ-[-I]-... $\{h, \ddot{y}\}-(e e)$
- admonitive (sec. 12.8) CNJ-[-I]-...-:
- consecutive (sec. 12.9) CNJ-[-I]-...-:
- conditional (sec. 12.9) CNJ-[-I]-...-n-ee
- contingent (sec. 12.9) CNJ-ga-[-I]-...-n-ín

The $g a$-conjugation prefix occurs independently of the verb's conjugation class in all future forms (sec. 12.4), as part of the future prefix string $g a-w-g a$-. It also occurs in some comparative derivations from dimensional verbs in the string $g a-w-\ldots-2$, where other comparatives have $k a-w-\ldots-:$ instead. In verbs describing motion the ga-conjugation prefix indicates that the motion is generally directed downwards (sec. 11.1.2) which is why Naish
and Story labeled it the 'ascendant' (Story \& Naish 1973: 350). This is an excessively narrow term however because in non-motion verbs this meaning of $g a$ - only loosely applies, if at all.

Although the $g a$-conjugation class has the same phonological shape as the self-benefactive prefix $g a$ - in slot +8 (sec. 4.2.11), the two can be fairly easily distinguished. The self-benefactive prefix always occurs with [+D] in the classifier indicating middle voice (sec. 9.1). In contrast, the gaconjugation prefix can occur in verbs with either [ +D ] or [ -D ] in the classifier. Also, the ga-conjugation prefix will not occur in modes where a conjugation class prefix is not required, whereas the self-benefactive $g a$ - prefix can occur in any mode.

### 4.2.13. SLOT +6: IRREALIS

There are three irrealis prefixes that occur in slot $+6: u-, w$-, and $o o-$. The $u$ - prefix is a true irrealis prefix, occurring predictably with negatives, dubitatives, prohibitives, and optatives, among other contexts. The $w$ - prefix is only occurs in two contexts, namely in futures and in comparatives. Because of its association with the future I consider it to be an irrealis prefix as well, though Leer (p.c. 2011) objects to this because he has a different conceptualization of the irrealis category. The oo- prefix only occurs in a few relatively obscure contexts, but does seem to me to have some irrealis properties like its phonologically and positionally similar cousins. The irrealis prefixes and associated phenomena are discussed in chapter 13.

### 4.2.14. SLOT +5: INNER CONJUGATION

The inner conjugation prefixes are $\emptyset-, n a-$, and $g a-$. They group together functionally and semantically with the $g a$-conjugation prefix $g a$ - in slot +7 (sec. 4.2.12) but they are divided from it by the intervening irrealis prefixes (sec. 4.2.13). The reason for why the inner and outer conjugation prefixes are divided by the irrealis is still unclear. Leer attributes it to his 'prinicple of templatic attraction' whereby prefixes with similar phonological forms are attracted to the same positions in the template, and Tuttle \& Hargus (2004) sketched a formalization of this in Optimality Theory for Athabaskan languages, but no such work has been done for Tlingit. ${ }^{6}$ It may be that scope plays a role in the position of verbal morphemes as described at length by
6. See Leer 2009 for a related phenomenon he calls 'collybisty'.

Rice (2000), but no research has been done to explore her proposal in the context of Tlingit.

The following examples demonstrate the position of the $g a$-conjugation prefix and the three inner conjugation prefixes in the context of potential forms (sec. 12.5). Potentials include the prefix string $u$-CNJ-ga-with the irrealis, a conjugation prefix, and the $g a$ - mode prefix. The $g a$-conjugation prefix actually occurs before the irrealis, whereas the others occur after it but before the $g a$ - mode prefix.
(96) a. potential form of ga-conjugation verb at googaashee
at-ga-u-ga- $\emptyset-$ ÿa-shi-h
INDN.O-GCNJ-IRR-GMOD-3.S-CL[-D, $0,+\mathrm{I}]$-sing-vaR
'he can sing (something)'
b. potential form of ga-conjugation verb
ugaagaanook
u-ga-ga-Ø-ÿa-nuk-h
IRR-GCNJ-GMOD-3.S-CL[-D, Ø, +I]-sit-vAR
'he can sit down'
c. potential form of na-conjugation verb
ungaanee
Ø-u-na-ga-ÿa-ni-h
3.0-IRR-NCNJ-GMOD-CL[-D, Ø, +I]-happen-VAR
'it could happen'
d. potential form of Ø-conjugation verb
gwadixweitl
Ø-u-Ø-ga-di-xwetl-h
3.0-IRR-ZCNJ-GMOD-CL[+D, Ø, +I]-tired-vAR
'he could get tired'
Like the outer conjugation prefix, the inner conjugation prefixes do not have particularly obvious meanings. Naish and Story tried to assign the gaprefix the name 'ascendant' and $g a$ - the name 'descendant', with $n a$ - being 'progressive' (Story \& Naish 1973: 350). This terminology is misleading because although $g a$ - is sometimes associated with upward motion, $g a$ - with downward motion, and $n a$ - with the progressive mode, all of the conjugation prefixes also have other collective properties which have nothing to do with these descriptions. Leer labeled them 'aspectual prefixes’ 【Fixme: cite】 but
again they have properties that are independent of aspect. Consequently I have assigned them the more neutral term conjugation prefix to avoid emphasizing any particular properties. This term has also been used for other languages with similar lexically specified prefix classes, such as for Athabaskan languages (e.g. Hargus 1991; Jung 1999; Kari 1989; Rice \& Hargus 1989), Sumerian (e.g. Woods 2008), and Nyulnyulan languages (e.g. McGregor \& Wagner 2006).

All three of the $n a-, \underline{g} a$-, and $\emptyset$ - prefixes appear in the same set of modes that select conjugation class prefixes as for the $g a$-conjugation prefix. This list is repeated here for convenience.

- -h extensional stative (sec. 12.1.5) $C N J-[+I]-. .-h$
-     - $\ddot{y}$ extensional stative (sec. 12.1.5) $C N J-[+I]-. . .-\ddot{y}$
- $-k$ multipositional stative (sec. 12.1.5) CNJ-[ $+I]-\ldots . . k(w-t)$
- realizational (sec. 12.3) CNJ-[+I]-...:-
- habitual (sec. 12.6) CNJ-[-I]-...-ch
- potential (sec. 12.5) u-CNJ-ga-[+I]-...-\{h, $\ddot{y}\}$
- imperative (sec. 12.7) CNJ-[-I]-...-h
- hortative (sec. 12.8) CNJ-[-I]-...-\{h, $\mathbf{y}\}-(e e)$
- admonitive (sec. 12.8) CNJ-[-I]-...-:
- consecutive (sec. 12.9) CNJ-[-I]-...:-
- conditional (sec. 12.9) CNJ-[-I]-...-n-ee
- contingent (sec. 12.9) CNJ-ga-[-I]-...-n-ín

The $\emptyset$-conjugation prefix does not have a phonetic realization, it is merely a morphological abstraction included to make analysis of the verb more consistent. Leer assumed that it only occurred in modes that selected a conjugation class prefix, but I have extended its presence to all the other modes where some other conjugation prefix or perfective prefix does not occur. In motion verb derivations the $\emptyset$-conjugation prefix is strongly associated with telicity (sec. 11.1.1). For this reason Leer has argued that all verbs that select the $\emptyset$-conjugation class prefix are inherently telic, describing a situation that has a defined endpoint (ch. 11). I continue to use Leer's term 'telic' applied to the conjugation class as well as to the motion verb derivations despite misgivings about his hypothesis, though this is largely out of habit.

The na-conjugation prefix is a phonologically real element within the verb. It is the characteristic prefix of the progressive mode, where it occurs with the stem variation suffix -n (sec. 10.1). In motion verb derivations (sec. 11.1.2) it designates one of the three subclasses of atelic motion, namely the
subclass described by Leer as being either "lateral" or "undirected" [TFIXME: cite].

The ga-conjugation prefix is another phonologically real element occurring within the verb. It is distinct because it does not occur in any modes other than those which select conjugation class prefix. It forms a semantic opposition with the ga-conjugation prefix: in motion derivations the gaprefix is associated with downward motion in contrast with the ga-prefix's association with upward motion.
(97) a. gidahaan!
ga-i-da-han-h
GCNJ-2SG.S-CL[+D, Ø, -I]-stand.SG-VAR
'stand up!'
(Dauenhauer \& Dauenhauer 2002: 13)
b. ganú!
ga-Ø-Ø-nu(k)-h
GCNJ-2SG.S-CL[-D, Ø,--I]-sit.SG-vAR
'sit down!'
(Dauenhauer \& Dauenhauer 2002: 13)
The ga-conjugation prefix has the same phonological form as the $g a$ mode prefix discussed in the next section (4.2.15), but the two are distributionally and semantically distinct. The two prefixes cooccur in a few modes, namely the potential (sec. 12.5), hortative (sec. 12.8), and contingent (sec. 12.9).

### 4.2.15. SLOT + 4: PERFECTIVE AND $G A$-MODE

The perfective and $g a$ - mode prefixes are grouped together in a single slot because neither occurs with the other and both seem to be in nearly the same linear position. The perfective does not cooccur with any of the inner or outer conjugation prefixes, and the irrealis prefix is occluded by the perfective due to their similar phonological shapes. The ga-mode prefix certainly occurs to the right of the inner conjugation prefixes as demonstrated by the potential mode (sec. 12.5, also sec. 4.2.14), so the perfective presumably also should be ordered to the right of them as well.

The perfective is actually two distinct prefixes, the ordinary perfective $\ddot{y} u$ - and the telic perfective $u$-. The latter only occurs with telic ( $\emptyset$-conjugation class) verbs that have either third person subjects or no subjects. The ordinary perfective is found with all other perfective forms of verbs. The perfec-
tive prefixes are discussed in the context of the perfective mode in section 12.2.

The ga- mode prefix is an apparently meaningless prefix that occurs in a handful of modes. As illustrated in section 4.2 .14 this prefix is distinct from the $g a$-conjugation prefix which has a phonologically identical shape. The only purpose of the $g a$ - mode prefix seems to be to distinguish the modes in which it occurs from other modes in which it does not. The modes in which the $g a$ - mode prefix occurs are listed below.

- future (sec. 12.4) ga-w-ga-[-I]-..-\{i, h\}
- potential (sec. 12.5) u-CNJ-ga-[ $\pm I]-\ldots-\{h, \ddot{y}\}$
- hortative (sec. 12.8) CNJ-ga-[-I]-...-\{h, $\ddot{y}\}-(e e)$
- contingent (sec. 12.9) CNJ-ga-[-I]-...-n-ín

Curiously, all of the modes containing the ga-mode prefix seem to have an association with unreal situations, but only two of them - future and potential - actually feature irrealis morphology (sec. 4.2.13). There are several other modes which are associated with unreal situations but which lack $g a-$, so it is not the case that it is itself a marker of unreality.

### 4.2.16. SLOT + 3: INNER DISTRIBUTIVE

The inner distributive prefix is daga- $\sim$ dax-, which is "in semi-free variation with the more common allomorph" (Leer 1991: 104) dax= in slot +16 (sec. 4.2.3). Both distributive prefixes indicate that the object argument (or subject argument of a subject intransitive) denotes a set of multiple elements and that the situation described by the verb is distributed among these elements. Distributives are usually translated into English with 'each'.
(98) áx’ yéi wudaxduwa.oo
á-x’ yéi=Ø-ÿu-dax-du-ÿa-.u-h
3.N-LOC thus=3.0-PFV-DISTB-3.OBV.S-CL[-D, Ø, +I]-handle-VAR
'they put each one there'
(Story 1966: 97)

### 4.2.17. SLOT + 2: SuBJECTS

The subject slot contains one of the two major sets of pronominal elements within the verb, the other being the object slot. The subject slot encompasses the discrouse local pronominal referents (first and second persons)
as well as the discourse nonlocal referents (third persons). This is an important difference from Athabaskan languages where only the first and second person subjects are marked near the verb root, with the third person subjects instead being marked out near the objects. Plurality of subjects is only indicated directly for first and second person, with third person plurals using either the plural prefix has $=\sim s$ - (sec. 4.2.4) or a plural verb root (sec. 5.3.1). Third person subjects are either the third person obviate $d u$ - or the indefinite human $d u-$, where this distinction must be determined by the discourse context. The subjects are discussed in detail along with the other pronouns and pronominal elements in chapter 19.

### 4.2.18. SLOT +1: CLASSIFIER

The classifier slot contains the tripartite portmanteau morphemes called classifiers, of which there are sixteen. For a verb to be a verb it must have a classifier, meaning that the presence of a classifier within a verb is obligatory. Verbs that appear to lack a classifier have the 'null' or 'zero' classifier Ø-. Classifiers are essentially markers of voice and transitivity, though they also participate in the noun classification system as the name implies. The classifier is cognate with the classifiers found in the Athabaskan languages and in Eyak, but the composition and function of the Tlingit classifier is more complex.

There are three components in a classifier, named the D component, S component, and I component. The D and I components are binary, glossed as $[ \pm \mathrm{D}]$ and $[ \pm \mathrm{I}]$. The $S$ component is quaternary, with a classifier having one of the values $\{\emptyset, s, l, s h\}$. Table 9.1 on page 153 displays the whole classifier system in Tlingit. The D component is involved in voice, essentially with $[+\mathrm{D}]$ marking middle voice and $[-\mathrm{D}]$ indicating non-middle voice. The I component indicates stativity with [ +I ] and non-stativity with [ -I ]. The S component has a few different functions involving transitivity, causativity, negation, and noun classification. Because the classifier is involved in a number of complicated phenomena it is discussed at length in chapter 9.

### 4.2.19. Slot 0: Root

The root is the morphological centre of the verb and hence its slot is numbered as the pivot for the slot designations. Roots encapsulate the basic lexical semantics of the verb and hence provide the fundamental components of
a verb's meaning. The vast majority of verbs are monosyllabic with either CV or CVC patterns, though there are some exceptions such as CVCC roots and a very few disyllabic roots. The roots with complex phonological structure all appear to be fossilized forms derived from roots with previously productive suffixes, or they are obviously derived from nouns. Roots are detailed in chapter 5.

### 4.2.20. SLOT - 1: STEM VARIATION

The stem variation suffixes are mostly not true suffixes, though $-n$ and $-\ddot{y}$ do have real forms that occur in some modes with certain types of verb roots. The stem variation suffixes are instead mostly abstract elements that are used to describe the changes of vowels in verb roots depending on the mode. They are discussed at length in chapter 10.

### 4.2.21. SLOT -2: DERIVATION

The derivational suffixes are morphemes that create new verb roots from old ones. Most of the derivational suffixes contain a vowel and hence are monosyllabic, though a few are single consonants. Two derivational suffixes have a form that is identical with a duration suffix, namely $-k$ and $-\underline{x}$, but they can be distinguished from the duration suffixes semantically. Several of the duration suffixes are only found with one or two verb roots and hence their meanings cannot be determined independently of the root, but since the verb roots they occur with block stem variation the status of the suffixes as derivational is assumed. All the duration suffixes are discussed in the general context of verb derivation in chapter 23.

### 4.2.22. SLOT - 3: DURATION

The duration suffixes comprise a set of suffixes that behave like the stem variation suffixes. But unlike the stem variation suffixes they have distinct meanings, all associated with different temporal patterns of situations such as repetition, pluractionality, and serial sequence. All of the duration suffixes are single consonants such as $-c h$ and $-l$ '. They all produce the same type of stem variation, and hence are represented schematically by the abstract suffix $-X=\left\{-k,-c h,-\underline{x},-t,-x^{\prime},-t^{\prime},-s^{\prime},-l\right\}$. They can be divided into two sets based on whether they produce repetitive imperfectives (the -3 A set $\{-k,-c h,-\underline{x}\}$ or
whether they produce other secondary imperfective types (the $-3 B$ set $\{-t$, $\left.\left.-x^{\prime},-t^{\prime},-s^{\prime},-l^{\prime}\right\}\right)$. The derivation suffixes are described in the context of stem variation in section 10.6.

### 4.2.23. SLOT - 4: Mode

The mode suffixes in slot -4 are suffixes that are associated with specific modes. The -ch suffix occurs with the habitual mode (sec. 12.6), the -(n)ee suffix is found with the conditional mode (sec. 12.9), and the -ín suffix occurs with the contingent mode (sec. 12.9).

### 4.2.24. SLOT -5: EPIMODE

Slot -5 contains the suffixes that express epimodes as discussed in chapter 15. Epimodes extend modes by adding one of two properties. The decessive epimode with -een $\sim i h n_{\text {T }}$ indicates that the situation described by the verb was once true but is now no longer true. The prohibitive-optative epimode with -eek $\sim-i h \underline{k}_{\mathrm{T}} \sim-\underline{k}$ expresses a type of deontic modality, either prohibition (prohibitive) with a negative construction or desire (optative) with a positive construction.

### 4.2.25. Slot -6: Clause type

The clause type suffixes in slot -6 number two: subordinate $-e e \sim-i h_{T}$ and relative -i. The subordinate suffix creates a subordinate clause out of the marked verb and the relative suffix creates a relative clause out of the marked verb. The relative clause has been called 'attributive' by Naish, Story, and Leer, but it is more accurate to describe it as a relative clause marker than as a form which creates attributive verbs. The clause type suffixes are discussed in chapter 16.

### 4.2.26. Slot -7: Bound auxiliaries

The auxiliaries are a set of verb enclitics that allow the expression of an additional mode along with the verb. They originally developed from independent verbs, but have been bleached of their verbal syntactic status and are now bound morphemes. The auxiliaries are discussed in chapter 17.

## 5 The verb root

Verb roots are, as noted earlier, the morphological centre of verbs. Simply put, verb roots have prefixes preceding them and suffixes following them. Verb roots are combined with the stem variation suffixes to form stems as described in chapter 10.

Most verb roots are only found in verbs and hence are not found outside of verbal constructions. Some however have an independent life as nouns. Two arbitrary examples are dzaas 'thong, lace' which occurs in a verb 'lace up' e.g. ax́akawlidzás 'he laced it up', and séek 'belt' that can be found in the verb meaning 'put on a belt' such as kukalséek 'I'll put on a belt'. Story (1966: 52) provides a short list of examples of such roots, a few of which are duplicated and analyzed here.
(99) a. nís'
urchin
'a sea urchin'
b. aawanís'
a-ÿu- $\emptyset$-ÿa-nís' ${ }^{\times}$
3.0-PFV-3.S-CL[-D, Ø, +I]-urchin
'he ate sea urchins from the beach'
c. k'wát'
egg
'an egg'
d. awdlik'wát'
a-ÿu-Ø-dli-k'wát'x
3.0-PFV-3.S-CL[+D,l,+I]-egg
'it laid eggs'
e. éil'
salt
'salt', 'sea water'
f. awli.él'
a-ÿu-Ø-li-.el'-y
3.0-PFV-3.S-CL[-D,l,+I]-salt-vaR
'he salted it'
The meanings of the roots in verbs are clearly related to their nominal meanings, but this relationship is neither simple nor predictable. It is perfectly plausible from a semantic standpoint for the verb awdlik'wát' to mean something like 'it ate eggs' rather than 'it laid eggs'. Compare for example the English term 'egging' which can refer to either gathering eggs - 'we went egging at Egg Island' - or throwing eggs - 'we egged his car'. Because of this, it cannot be said that the relationship between the meaning of a root in a noun and the same root in a verb is predictable, but rather the fine structure of the meaning must be memorized.

In addition to the few verb roots that also appear as nouns, there are a variety of nominal derivations from verb roots. There are a number of derivational suffixes that produce nouns from verbs, outlined by Story (1966: 200203). Thus the instrument nominalizing suffix -aa produces nouns that refer to instruments used for the action described by the verb root, such as tsaagaa 'spear' and wootsaagaa 'cane' from $\sqrt{ }$ tsak 'poke with stick'. The agent nominalizing suffix -í produces nouns that refer to agents which perform the action described by the verb root, e.g. kashxeedí 'writer' from $\sqrt{ }$ xit 'scratch; write' and at.úndi 'shooter' from $\sqrt{ }$. un 'shoot'.

There are also a number of patterns for verb construction from nominal roots, such as the $O-C L[-D, I]-N O U N^{x}-i ́$ structure which is used to specify the possession of or property of having something described by the noun noun (Story 1966: 54). The following examples demonstrate a few instances of this construction; note that the resulting verbs have invariable roots.

| (100) a. | $\underset{\text { ax }}{\text { ax }}$ tleik |
| ---: | :--- | ---: |
|  | 1SG.PSS finger |
|  | 'my finger' |

b. litl'eigí
tsáax'
$\emptyset-\emptyset$-li-tl'eik ${ }^{x}$-í tsáax'
3.0-ZCNJ-CL[-D,l,+I]-finger-PPTY mitten 'gloves' (lit. 'fingered mittens')
c. ax jín

1SG.PSS hand
'my hand'
d. tléil uljíni
tléil Ø-u-Ø-la-jín ${ }^{\times}$-í
NEG 3.0-IRR-ZCNJ-CL[-D,l,-I]-hand-PPTY
'he is handless', 'he doesn't have hands'
e. dóosh l'eet
cat tail
'a cat's tail'
f. lil'eedí

Ø-Ø-li-l’eetx-í
3.0-ZCNJ-CL[-d,l,+I]-tail-PPTY
'it (saucepan) has a handle'
The first is derived from the noun -tl'éik 'finger', the second from -jín 'hand, arm', and the third from -l'eet 'animal tail'. The verb theme $O-C L[-D, l]-$ $\operatorname{saa}^{x}-i ́(\emptyset ;$ Inv Stv) 'O have a (major) name; 0 be famous' is one example of these sorts of verbs that is derived from an alienable noun saa 'name', whereas most seem to be derived from body parts and hence inalienable nouns.

A verb root cannot morphologically occur alone if it is to be a verb, though on the surface this is not always obvious. Consider the following example of a positional imperfective verb.
(101) át áa
á-t Ø-Ø-Ø-.a-:
3N-PNCT $3.0-\mathrm{ZCNJ}$-CL[-D, $0,-\mathrm{II}]$-sit-VAR
'it is seated/situated there'
Here the verb root $\sqrt{ } . a$ 'be seated, situated' appears to be bare in that there are no phonologically obvious elements other than the root. This is not the case however, given that there are actually three $\emptyset$ - prefixes and a vowel-modifying suffix $-:$ which have all gone through morphophonological adjustments to produce the surface form.
(102) góot

Ø-Ø-Ø-gut-:
ZCNJ-3.S-CL[-D, Ø,--I]-VAR
'having gone, ...'
This example has the verb root $\sqrt{g u t}$ 'sg. go by foot' in the consecutive form of the verb theme $S$-cl[-D, Ø]-gut ( $\emptyset$; Mot, -h Rep) 'S (sg.) go by foot'. The consecutive is formed with the conjugation class prefix of the verb theme,
which in this case is $\emptyset$-. The subject is third person, hence $\emptyset$-. The classifier is the $\emptyset$ series, with the $[-\mathrm{D}]$ and $[-\mathrm{I}]$ features, thus arising as $\emptyset$-. Finally, the verb stem variation suffix used in the consecutive form is -: which produces a long vowel and high tone. So although this example appears to be a bare root, again there is substantial invisible or non-segmental morphology involved in this form.

It is of course possible to analyze Tlingit verbs so that no invisible elements like these are needed, but such an approach would fail to capture a large number of useful generalizations. With the invisible elements in place, it is the case that no verb root ever occurs alone, though roots that have a nominal use may occur independently as nouns.

### 5.1. Root PHONOLOGY

Verb roots have restricted phonological shapes; almost all are either CV or CVC in form. The morphophonology of the verb is sensitive to the differences between these two shapes, so it is necessary to keep track of them as OPEN roots and ClOSED ROots respectively. As will be shown later, the open and closed roots have subtypes depending on their stem variation behaviour, but the basic division is between open and closed syllables.

There are a relatively small number of verb roots that have more complex shapes than CV or CVC, but none with more than two syllables. Nearly all roots that appear to be disyllabic are actually composed of a CV or CVC root with a derivational (slot -2) suffix, for example $\sqrt{ }$. únxaa 'shoot and miss' which is derived from $\sqrt{ }$. un 'shoot' and -xaa 'miss target'. A few of these suffixes are essentially stipulated rather than being understood as having independent meanings, for example $\sqrt{\underline{x}}$ aanás' 'travel by raft' with $\sqrt{\underline{x} a}$ 'paddle, transport by boat' where the -nás' suffix is otherwise undocumented but the connection between the two roots is nonetheless clear. Some disyllabic forms are originally nominalizations of roots which are then derived into new verbs. Thus $\sqrt{ }$ néegwál' 'paint' seems to be derived from an unattested root $\sqrt{n i k w}$ with the addition of the nominalizing suffix -ál' as found in e.g. táax'ál' 'needle' from $\sqrt{\text { tax }}$ ' bite, pierce', t'aagál' 'fastening peg' from
 There is one verb root that is verified as being truly disyllabic rather than decomposable into a root+suffix form, namely $\sqrt{ }$.eeshaan 'poor, pitiful'. Once again this root seems to have been derived from the another root, specifically

Roots of the shape CVCC are usually taken to be composed of a CVC root plus a derivational suffix. For example, the derivational suffix $-\underline{k}$ seems to denote the lack of something based on its appearance in roots like $\sqrt{x^{\prime} w a ́ s ' k}$ 'numb' and $\sqrt{ }$ yáshk 'scarce'. It also occurs in the deverbal construction $k a$ $C L[+D, I]-\sqrt{X}-\underline{k}$ 'lacking X ' as in the following examples.
(103) a. c'ıs dag nıhén k $\wedge \nmid t i ́ l G$
ch'as daak nahéin kaltéelk
ch'as daak=na- $\emptyset-\emptyset$-hu-n ka-l-téel-k
just ADMAR=NCNJ-3.S-CL[-D, $\emptyset,-\mathrm{I}]$-wade-var HSFC-CL[+D,l,--I]-shoe-DPRV
'he's just wading out shoeless'
(Naish 1966: 124)
b. kallítaak
ka-l-lítaa-k
HSFC-CL[+D,l,-I]-knife-DPRV
'without a knife' (Raven and Deer, Yakwxِwaan Tláa Katherine Mills)
c. kıłdánaG
kaldáanaak
ka-l-dáanaa-k
HSFC-CL[+D,l,-I]-money-DPRV
'penniless'
(Naish 1966: 137)
The derivational suffix $-\underline{k}$ is probably related to the derivational suffix -áklw which denotes deprivation as in $\sqrt{ }$.éiyáḱkw 'have paralyzed limb', $\sqrt{t l}$ 'éilákw 'remove milt', and $\sqrt{ }$ séewch'ákww 'rain-flavoured, tasteless'. Other two-consonant codas of roots are probably the result of a previously productive inflectional suffix having been reanalyzed as derivational, such as $\sqrt{c h}$ 'ách'xِ 'spotted' probably having the repetitive suffix -x and $\sqrt{t}$ lék $\underline{k} w k$ 'eat greedily' the repetitive suffix - $k$. There are of course exceptions such as the root $\sqrt{n u ́ k t s}$ 'sweet, tasty' where the final affricate has no counterpart in other verb roots.

### 5.1.1. OCCULT ROUNDING

There are a number of CV roots which have the vowel $a$ that do not behave predictably with regard to rounding of suffixes. For example, the verb woonaa 'he died' implies that the verb root is $\sqrt{n a}$, but when suffixed with e.g. the relative suffix $-i$ (section 16.1) the resulting form is not the predicted *woonaayi but instead woonaawu '(one) that died'. It is not as if the verb
root ends with a $w$ rather than with the vowel $a$ since it still behaves as an open root without a final consonant. Rather the verb root acts as if the vowel is $u$, with labialization predictably spreading from it. Thus the root's vowel seems to have a normally invisible [+round] feature even though the vowel $a$ is normally [-round]. I call this phenomenon occult rounding and use a final superscript ${ }^{w}$ to indicate that the root selects rounded forms rather than unrounded forms as might be expected, thus $\sqrt{n} a^{w}$ 'die'.
(104) a. imperative
naná!
Ø-na-Ø-na ${ }^{\text {w }}$-h
2SG.O-NCNJ-CL[-D, Ø,-I]-die-vaR
'die!'
b. relativized perfective
woonaawu káa
$\emptyset$-ÿu-ÿa-na ${ }^{\text {w}}$-h-i káa
3.0-PFV-CL[-D, Ø, +I]-die-VAR-REL man
'a man who died'
Another such example is the root $\sqrt{s} a^{w}$ 'breathe' which undergoes the expected apophony $a \rightarrow e$ éi when suffixed with the repetitive suffix $-k$ (section 10.6.1) but unexpectedly occurs with the final consonant rounded: daséikw 'he breathes' (repetitive imperfective, section 12.1.3). [[Fixme: Also $\sqrt{x} a^{w}$ 'paddle' $+-x^{\prime} \rightarrow$ xáax' $w$ and $\sqrt{s h a^{w}}$ 'marry' $+-x^{\prime} \rightarrow$ sháax'w, and $\sqrt{y a^{w}}$ 'carry in pack' (Leer 1991: 165).]

Occult rounding is not actually restricted to verb roots. Boas (1917:18) pointed out a few examples of nouns that feature unexpected labialization after the vowel $a$.
(105) a. Xunaa káawu

Xunaa káa ${ }^{\text {w }}$-ÿ́
Hoonah man-Pss
'a man of Hoonah'
b. áak'w
áa ${ }^{w}-\mathrm{k}^{\prime}$
lake-DIM
'little lake’
There are more than just the ones Boas encountered, however.
(106) a. Deisheetaan sháawu

Deisheetaan sháa ${ }^{w}$-ÿí
Deisheetaan woman-PSs
'a Deisheetaan (clan) woman'
(Story 1972: 37)
b. Káa Náawu Tlein
káa náa ${ }^{w}$-ÿí tlein
man dead-pss big
'Big Man's Corpse'
(Héenák'w Táax' Forrest DeWitt)
In addition, as noted by Boas (1917: 18), a few nouns have an epenthetic $a$ before the diminutive suffix $-k^{\prime}$ which seems to feature occult rounding.
(107) a. héenák'w
héen-k'
water-DIM
'a little water'
b. eexák'w
eex-k'
oil-DIM
'a little oil', 'a little grease'
And most unusual of all is the following example from Boas (1917:18). His gloss was incorrect, the usual word for 'navel' is -kool, and the word -taanú refers to the umbilical cord instead. The final element seems to be a possessive suffix, similar to other ostensibly inalienable nouns that have a fossilized possessive form (see section 3.1).
(108) du taanú
du taan-ÿí
3H.PSS umbilical.cord-PSS
'his umbilical cord'
This irregular form has been levelled for some Inland Tlingit speakers who instead have -taaní. Leer (ms., n.d.) recorded a form -taanwú from an unknown source, so that what appears to be a labialized form of the possessive suffix may have originally been some other non-possessive syllable containing $w$ or $u$ which has since been reduced.

### 5.1.2. ROOT VARIABILITY

Most roots are variable, meaning that they have different forms depending on conjugationally selected and lexically specified stem variation. This phenomenon is addressed in chapter 10. Roots that have been derived from some other form, either from a noun or from another verb, are invariable. Although there are some roots that are always invariable for no adequately explained reason, most invariable verb roots are derived, and hence their very invariability can be taken as an indicator of their derived status. Thus all CVCC roots are invariable, whether obviously including a fossilized derivational suffix or not.

The tradition begun by Leer has been to indicate variability with some sort of symbol at the end of the root. For Leer $(1976,1978,1991)$ this has always been an asterisk *, and for Edwards (2009) this is a tilde ~. Since the majority of roots are variable, I find it more useful to indicate those that are not variable and assume that all others are variable. Thus I place a superscript saltire cross ${ }^{\times}$at the end of invariable roots and leave the variable roots unmarked. It may however be a better idea to maintain consistency with the established tradition, and I have yet to make up my own mind on this issue.

### 5.1.3. ROOT BORROWING

Verb roots are only occasionally borrowed from other languages, but there are several instances of English borrowings: $\sqrt{\text { bélled }^{x}} \sim \sqrt{b e ́ l t}{ }^{x}$ 'be spelled', $\sqrt{\text { dádi }^{x}}$ 'study', $\sqrt{ }$ foned ${ }^{x} \sim \sqrt{ }$ font ${ }^{x}$ 'telephone', and $\sqrt{ }$.oh 'amount to nothing' (from English oh for zero). The first two have their initial English /s/ reanalyzed as the $S$ component of the classifier, and the other two have novel $\emptyset$ series classifiers. Note that only the root $\sqrt{ }$ dádi $^{x}$ [táti ${ }^{\top}$ ] is disyllabic, given the pronunciations of $\sqrt{\text { belled }}{ }^{x}$ as [pélt], $\sqrt{\text { phoned }}{ }^{x}$ as [font], and $\sqrt{ }$. oh $^{x}$ as [?o:]. As with other derived roots, all verb roots borrowed from English are invariable.
(109) a. xat kawdi.oh
xat-ka-ÿu-di-.oh ${ }^{\times}$
1SG.0-HSFC-PFV-CL[+D, Ø,+I]-amount.to.nothing
'I amounted to nothing'
(Ǩeixwnéi Nora Dauenhauer)

b. Robych xat woofoned<br>Roby-ch xat-ÿu- $\varnothing$-ÿa-foned ${ }^{\times}$ Roby-ERG 1SG.0-PFV-3.S-CL[-D, Ø,+I]-telephone 'Roby telephoned me'<br>(Daasdiyaa Ethel Makinen)

### 5.2. Root meanings

Generally a given verb root occurs in multiple verbs, so that a verb root does not denote a single verb but rather a semantic class that is realized in a number of verbs with the same root. There are however a number of HAPAX ${ }^{1}$ verb roots that only occur in a single verb. Some of these hapax roots can be related to other roots by derivation, so that for example the root $\sqrt{ }$.en which occurs in the verb 'move one's head' can be related to the root $\sqrt{ }$. a meaning 'move the end of something' by suffixation and apophony. Other hapax roots can be related to nouns, such as the root $\sqrt{ }$ dzas 'lace up' and the noun dzaas 'thong, lace'. But there are still some hapax roots that resist connection to anything else, for example $\sqrt{ }$.ekw 'whistle'.

The opposite phenomenon, where a verb root appears in a large number of verbs, is quite common. Verb roots that are found in a many different verbs are what I term promiscuous roots. Perhaps the most promiscuous root is $\sqrt{h a}$ that has the general meaning of 'move invisibly', but which appears in around 50 different verbs with meanings ranging from 'be many' and 'be hungry' to 'remember' and 'wrestle'. Because of this promiscuity, some roots can be nearly impossible to assign a single coherent meaning. In such cases the gloss of a verb root is merely a convenient approximation appropriate to the particular verb rather than a firm statement of its semantic range.

There are quite a few verb roots that are homophonous but semantically distinct. There is a convention of labeling each homophonous root with a homonym number, thus $\sqrt{ } . a_{1}$ 'situate', $\sqrt{ } . a_{2}$ 'move end', and $\sqrt{ } . a_{3}$ 'delay', but there is no consistency among linguists in the assignment of homonym numbers. Thus Naish and Story assigned 'sit' number 1 (Story \& Naish 1973: 267) but Leer assigned it number 4 , and tentatively merged Naish and Story's $\sqrt{ } \cdot a_{2}$ 'examine; swim' with their $\sqrt{ } . a_{3}$ 'move end', assigning that root as number 1
 term in philology, corpus linguistics, and lexicography. Pron. /'hæpæks/ in English.
(Leer 1978: 4). I generally follow Naish and Story's numbering where possible since it is the most well documented, but in general homonym numbers should only be understood to indicate distinctness between homonyms and do not represent consistent indices. The criteria for distinguishing homophonous but semantically distinct roots is by no means well established, which is a major factor in the proliferation of inconsistent numbering. Another contributing factor is that Tlingit linguists have historically tended to work alone rather than collaborating extensively. Compounding the problem is that Leer's catalogue covers all possible roots regardless of whether they occur in verbs or not, so that his numbering for $\sqrt{ } \cdot a$ roots also includes $a ́$ 'it', áa 'lake', the $a a$ in $\underline{k u} . a a$ 'but', and so forth. Eventually when a database of all Tlingit roots and verbs is complete the Tlingit linguistic community will hopefully settle on a single homonym numbering system.

### 5.3. ROOT SUPPLETION

Root suppletion is the replacement of one verb root by another in a paradigm of verb conjugations. Root suppletion is a purely lexical phenomenon in that suppletive pairs are specified in the lexicon and cannot be otherwise predicted. Although this phenomenon might better be termed 'root alternation' since it involves an alternation between two lexical entries dependent on some other grammatical feature, I have maintained the term 'suppletion' since there are already a number of other situations in Tlingit described as 'alternations'.

Root suppletion is found for plurals and for noun classification, each of which is dealt with separately below. The most significant semantic domains where plural root suppletion occurs are in motion verbs and handling verbs. Most of the basic motion verbs have suppletion for plural subjects. The noun classification system uses root suppletion of handling verb roots for various classes of nouns.

### 5.3.1. ROOT SUPPLETION FOR NUMBER

A number of verb themes show suppletion of the root depending on number. This phenomenon is essentially independent of number marking in pronominals, the has $=\sim s$ - plural prefix, or the plural object suffixes. The most frequent root suppletion for number in speech is the suppletion of the
root $\sqrt{ }$ gut 'sg. go by foot' with $\sqrt{ }$.at 'pl. go by foot'. The following two examples demonstrate this phenomenon with telic perfectives and third person subjects.
(110) a. neilt uwagút
neil-t=u-Ø-ÿa-gut-̈̈
home-PNCT=PFV.TEL-3.S-CL[-D, Ø, +I]-go.SG-VAR
'he got home'
theme: $P-\{t, \underline{x}, d e ́\} S-c L[-D, \emptyset]-g u t(\emptyset ;$ Mot, $-h$ Rep) 'S (sg.) arrive at P by foot'
b. neilt has uwa.át
neil-t=has=u-ø-ÿa-.at-ÿ
home-PNCT=PL=PFV.TEL-3.S-CL[-D, $\emptyset,+\mathrm{I}]$-go.PL-VAR
'they got home'
theme: P-\{t, , ,dé\} S-cl[-D,Ø]-.at (Ø; Mot, -h Rep) 'S (pl.) arrive at P by foot'
Note the inclusion of the plural has= in addition to the plural meaning that is supplied by the verb root. This duplicate specification of plurality also occurs with pronominals that are inherently plural, as the following pair of telic perfectives shows.
(111) a. shgóont xwaagút
shgóon-t ÿu-xa-ÿa-gut-ÿ
school-PNCT PFV-1SG.S-CL[-D, Ø, +I]-go.sG-VAR
'I got to school'
b. shgóont wutuwa.át
shgóon-t ÿu-tu-ÿa-.at-ÿ
school-PNCT PFV-1PL.S-CL[-D, Ø, +I]-go.PL-VAR
'we got to school'
It is ungrammatical to use a plural pronominal or other plural marking with a singular root and vice versa.
(112) a.* shgóont x_waa.át
shgóon-t ÿu-xa-ÿa-.at-ÿ
school-PNCT PFV-1sG.s-CL[-D, Ø, +I]-go.PL-VAR
b.*shgóont wutuwagút
shgóon-t ÿu-tu-ÿa-gut-ÿ
school-PNCT PFV-1PL.s-CL[-D, Ø, +I]-go.sG-VAR
This phenomenon is purely lexical. If we switch to a root that describes some other kind of locomotion, in this case $\sqrt{\underline{k} u \underline{x}}$ 'travel by boat or other vehicle', we see that suppletion does not occur.
(113) a. Jóonodé yaa nxakúx

Jóono-dé ÿaa=na-xa- $\emptyset-\underline{k} u x-n$
Juneau-ALL along=NCNJ-1SG.S-CL[-D, Ø,--I]-go.boat-VAR
'I'm getting to Juneau by boat'
theme: $P-\{t, \underline{x}$, dé $\} S-c L[-D, \emptyset]-k u \underline{x}(\emptyset ;-h$ Rep) 'S arrive at P by boat, vehicle'
(Story \& Naish 1973: 233)
b. haat wutuwakúx
haa-t=ÿu-tu-ÿa-kux-ÿ
here-PNCT=PFV-1PL.S-CL[-D, $\emptyset,+1]$-go.boat-VAR
'we came by boat'
theme: $P-\{t, \underline{x}$, dé $\} S-c L[-D, \emptyset]-k \underline{x} \underline{x}(\emptyset ;-h$ Rep) 'S arrive at P by boat, vehicle'
(Story \& Naish 1973: 52)
There is in fact a root $\sqrt{ } g u$ that describes what might be construed as plural locomotion of boats, but it actually refers to the group of boats themselves rather than the people travelling in them. The verb denotes the motion of a group of things travelling along the surface of water, as for example a school of killerwhales or a herd of seals. It is metaphorically extended to a fleet of boats, and is thus not a purely plural counterpart of $\sqrt{k} u \underline{x}$. The referent is a unit rather than a plurality, as can be seen in the following examples.
(114) a. kéet yaawagoo
kéet $\quad$ - -ÿa-Ø-ÿa-gu-h
killerwhale 3.s-vSFC-ZCNJ-CL[-D, $\emptyset,+\mathrm{I}]$-school-var 'a school of killerwhales is swimming'
(Story \& Naish 1973: 221)
b. yaakw haadé yakwgagóo

ÿaakw haa-dé=ø-ÿa-ga-w-ga-ø-gu-ÿ
boat here-ALL=3.S-VSFC-GCNJ-IRR-GMOD-CL[-D, Ø,-I]-school-vAR
'the boats will be coming here'
(Story \& Naish 1973: 233)
Note also in the above examples that the subject noun phrase is not marked for plurality (no plural $-x^{\prime}$ suffix) and the third person subject pronominal does not have an accompanying has= plural proclitic. This indicates that plurality of killerwhales or boats in these examples is not a grammatical feature. It is likely that the nouns here refer to the type of school and the verb provides the semantic concept of a group. Nouns in Tlingit are generally unspecified for number rather than default singular, and though there are a few nouns that are inherently plural these particular nouns are not.

### 5.3.2. ROOT SUPPLETION FOR NOUN CLASS

Another type of root suppletion is part of the noun classification system. This will be dealt with as a full system in chapter 24 , here I will only demonstrate the part interacting with lexical selection of roots. Noun classification is triggered by the shape or composition of the referent of nouns, so that the verb reflects the object noun's physical properties in the real world. Similar systems have been extensively documented in Athabaskan languages (Axelrod 2000; Carter 1976; Krauss 1968; Poser 2005; Rushforth 1991; Thompson 1993). The noun classification system in Tlingit is fairly complicated and not entirely documented, but there are several of the more obvious categories that are well understood.

The following examples, selected from a longer list given by Dauenhauer \& Dauenhauer (2002: 60-62), demonstrate a few of the noun classification categories for verbs of handling. These themes represent only a small sampling of the whole system, chosen to demonstrate just the portion of the system that depends on root suppletion. All the forms here are telic imperatives with the $\emptyset$-conjugation class prefix (see chapters 11 and 12).
(115) a. generic object
haat tí wé $x^{\prime} u^{\prime}$ !
haa-t=Ø-Ø- $\emptyset-\emptyset-\mathbf{t i}-\mathrm{h}$ wé $\mathrm{x}^{\prime} \mathrm{u}^{\prime}$
here-PNCT=3.0-ZCNJ-2SG.S-CL[-D, Ø,-I]-handle-vAR MDST book
'bring that book here!'
b. empty container
haat tán wé gúx'aa!
haa-t=Ø-Ø-Ø-Ø-tan-h wé gúx'aa
here-PNCT=3.0-ZCNJ-2SG.S-CL[-D, $0,-\mathrm{I}]$-handle-var mDST cup
'bring that (empty) cup here!'
c. filled container
haat sa.ín wé gúx'aa!
haa-t= $\emptyset-\emptyset-\emptyset-$-sa-.in-h wé gúx'aa
here-PNCT=3.0-ZCNJ-2SG.S-CL[-D, S,-I]-handle-vAR MDST cup
'bring that (filled) cup here!'
d. animate holdable object
haat sanú wé dóosh!
haa-t= $\emptyset-\emptyset-\emptyset$-sa-nu-h wé dóosh
here-PNCT=3.0-ZCNJ-2SG.S-CL[-D,S,+I]-handle-vAR MDST cat 'bring that cat here!'

> e. fabric object
> haat áx $\quad$ wé jigwéinaa!
> haa-t= $\emptyset-\emptyset-\emptyset-\emptyset-$-áx-h $\quad$ wé ji-gwéinaa
> here-PNCT=3.0-ZCNJ-3.S-CL[-D, $\emptyset,-\mathrm{I}]$-handle-vAR MDST hand-wiper
> 'bring that hand towel here!'

For simplicity's sake I have glossed the roots all as 'handle' though each has its own distinct meaning. The occurrence of $s$ versus $\emptyset$ in the $S$ component of the classifier is not important here, though other portions of the noun classification system do depend on alternations of the $S$ component (see section 9.2 and chapter 24). Note how in particular the classificatory difference between the empty container and filled container examples is represented only in the verb, with the object noun phrase in both examples being just gúx'aa 'cup'. As with the root suppletion for plurality described earlier, this classificatory root suppletion is a lexical phenomenon and cannot be predicted from syntax alone. Indeed, the fact that the same noun phrase can occur with different verb themes and give perceptively different meanings means that it is not even a lexical phenomenon in some sense, but instead a semantic phenomenon dependent on largely unpredictable encyclopedic knowledge and experiential reasoning.
[[Fixme: Other flavours of suppletion?]

### 5.4. Root tuples

There are some interesting sets of roots which have very similar meanings and which differ in only one or two consonant values, for example $\sqrt{ }$ sak 'exhausted' and $\sqrt{ }$ shak 'breathless'. The usual term for pairs of related words in historical linguistics is 'doublet' and for three related words the term is 'triplet'. Because I will be discussing groups of various sizes I will borrow the generic term tuple from mathematics which is used to describe an arbitrary number of elements in an ordered collection. This term covers numbers beyond triplets, including quadruplets, quintuplets, and other larger collections.

Leer (1990) has made the only extensive inquiry into consonant tuples in Tlingit. He recognized them in the classifier $S$ component which can alternate between the three anterior fricatives $s, l$, and $s h$. He also pointed out alternations between both root-initial and root-final consonants in verb roots denoting dimension, in various other verb roots, and in some names.

I will survey a few of the consonant tuples occurring outside of the classifer to illustrate the phenomenon. Classifier alternations are discussed independently in chapter 9.

Dimension verbs in Tlingit are verbs that describe a physical or temporal dimension such as length, distance, or thickness. They have unique comparative forms discussed in section [[Fixme: ??]]. Although Leer (1990) used the comparative forms in his discussion, I have switched to plain forms for clarity. There are a number of tuples of dimension verb roots which differ only by one consonant, for example $\sqrt{d a l^{x}}$ 'heavy' and $\sqrt{d a s}$ 'light' where the final consonant differs only in place of articulation.

| a. yá t'áa | ax | jée | yadál |
| :--- | :--- | :--- | :--- | :--- |
| ya t'áa | ax | jee-' | $\emptyset-\emptyset-y{ }^{\prime} a-d a ́ l^{\times}$ |

PRox board 1SG.PSS possession-LOC 3.0-ZCNJ-CL[-D, $\emptyset,+\mathrm{I}]$-heavy
'this board I have is heavy'
(Story \& Naish 1973: 107)
b. shayéinaa kaawadaas
shayéinaa Ø-ka-ÿu-ÿa-das-h
anchor $\quad 3.0-\mathrm{HSFC}-\mathrm{PFV}-\mathrm{CL}[-\mathrm{D}, \emptyset,+\mathrm{I}]$-light-VAR
'this anchor is light'
(Story \& Naish 1973: 108)
Another pair of dimension verb roots with single consonant differences are $\sqrt{l e}$ 'far' and $\sqrt{ }$ se 'near'. These have the same relationship between $l$ and $s$ but instead the alternation is in the initial consonant rather than the final one.
$\begin{array}{lll}\text { (117) a. naaléi } & \text { ágé } & \text { hasdu aaní ? } \\ \emptyset \text { Ø-na- } \emptyset-l e-? & \text { á-gé } & \text { has-du aan-ÿí } \\ & 3.0-N C N J-C L[-D, \emptyset,-\mathrm{I}] \text {-far-VAR } & \text { FOC-YN }\end{array}$
'is their town far away?'
(Story \& Naish 1973: 87)
b. koonaséi
áwé, aadé áwé
Ø-ka-u-na- $\emptyset$-se-? á-wé á-dé á-wé
3.0-HSFC-IRR-NCNJ-CL[-D, $\emptyset,-\mathrm{I}]$-near-var FOC-MDST 3 N -ALL FOC-MDST
daak at x́wali.ún
daak=at-ÿu-xa-li-.un-ÿ
ADMAR=INDN.O-PFV-1SG.S-CL[-D,l,+I]-shoot-VAR
'it was nearer, so I shot out there'
(Story \& Naish 1973: 139)
There are also examples of tuples patterned on affricates and stops as well. The following three are a triplet of dimension verb roots which differ in their final consonant but have obviously related meanings.
(118) a. laak'ásk kaliyáat'
laak'ásk $\quad$-ka- $\emptyset$-li-yat'-h
black.seaweed 3.0-HSFC-ZCNJ-CL[-D,l,+I]-long-vAR
'the black seaweed is long'
(Story \& Naish 1973: 127)
b. ax tási yéi kwliyáatl'
ax tás-ÿí yéi=Ø-ka-ÿu-li-yatl'-h
1SG.PSS thread-PSS thus=3.0-HSFC-PFV-CL[-D,l,+I]-short-vAR
'my thread is short'
(Story \& Naish 1973: 188)
c. tíx' kawliyáach'
tíx' Ø-ka-ÿu-li-yach'-h
rope 3.0-HSFC-PFV-CL[-D,l,+I]-too.short-vAR
'the rope is too short'
(Story \& Naish 1973: 189)
We might expect there to be a corresponding root $\sqrt{ }$ yats' to fill out the pattern, but there is in fact no such root. There are two homophonous roots $\sqrt{y a s_{1}}$ and $\sqrt{y a s_{2}^{\prime}}$ that mean 'smooth' and 'move leg, step' respectively, but these do not seem to be related.
(119) a. s'ísaa akawliyáas'
s'ísaa a-ka-ÿu-Ø-li-yas' ${ }_{1}$-h
sail 3.0-HSFC-PFV-3.S-CL[-D,l,+I]-smooth-VAR
'he smoothed out the sail'
(Story \& Naish 1973: 199)
b. keitl haatl'ít yan kaxwdliyás'
keitl haatl'-ÿí-t ÿan=ka-ÿu-xa-dli-yas' ${ }_{2}-\ddot{y}$
dog shit-PSS-PNCT TERM=HSFC-PFV-1SG.S-CL[+D,l,+I]-step-vAR
'I stepped onto dog shit'
There are many other consonant tuples which are less functionally distributed, and which seem to be essentially random in their semantic and lexical distributions. I will present a motley collection of them here for perusal.

The following pair of roots vary in their final fricative between $s$ and $s h$. Other than this variation they are extremely close both semantically as well as phonologically.
(120) a. tuwdi.ús
tu-ÿu- $\emptyset$-di-.us-ÿ
mind-PFV-3.S-CL[+D, $\emptyset,-\mathrm{I}]$-sulk-var
'he is sulking, refusing to speak'
(Story \& Naish 1973: 217)
b. sh k'awdli.úsh
sh-ḱa-ÿu-Ø-dli-.ush-̈̈
RFLX-mouth-PFV-3.S-CL[+D,l,+i]-pout-vaR
'he is pouting, pursing his mouth and not speaking'
(Story \& Naish 1973: 217)
There is no morphological justification for these two roots to come from a single underlying form, no suffix which could explain the alternation between $s$ and $s h$. Instead this is simply a lexical pair that must be memorized. There are a few other examples of the same variation between $s$ and $s h$, such as the following pair. Here the varying consonants are initial rather than final.
(121) a. kaawasák

Ø-ka-ÿu-ÿa-sak-ÿ
3.0-HSFC-PFV-CL[-D, Ø, +I]-exhaust-vAR
'he is exhausted'
(Story \& Naish 1973: 83)
b. yaa kanashák
yaa= $\emptyset$-ka-na- $\emptyset$-shak-n
along=3.0-HSFC-NCNJ-CL[-D, Ø,--I]-breathless-vaR
'he's getting breathless, winded'
(Story \& Naish 1973: 36)
Another similar doublet is between $t s^{\prime}$ and $t l^{\prime}$, with the latter being somehow more emphatic. Although these examples are intransitive, there are also transitive verbs based upon the same roots.
(122) a. k'ateil shaawats'ít'
k'ateil Ø-sha-ÿu-ÿa-ts'it'-ÿ
pitcher 3.0-head-PFV-CL[-D, Ø,+I]-fill-vaR
'the pitcher is full'
(Story \& Naish 1973: 89)
b. séew héeni shaawatl'ít' haa káasdi
séew héen-ÿí Ø-sha-ÿu-ÿa-tl'it'-ÿ haa káast-ÿí
rain water-PSS 3.0-head-PFV-CL[-D, Ø,+I]-overfill-vAR 1PL.PSS barrel-PSS
'our barrel is overflowing with rainwater' (Story \& Naish 1973: 89)

Verb roots are not the only part area of the lexicon where these tuplets appear. There are also tuplets among the nouns, such as the following example where the final consonants vary between $c h$ and $t l$.
(123) a. gooch
'hill, mound, knoll'
b. gootl
'mound, bump, lump'
This is not an instance of modern diminutive marking because, as described in section 3.3 there are productive diminutive suffixes and enclitics. In addition there is a diminutive adjective ÿádi as documented in section 3.6. This could be construed as an example of a now obsolete diminutive marker, but there are no other similar doublets as far as I am aware.

There is a triplet of $t l^{\prime}: s^{\prime}: c h^{\prime}$ which occurs in a set of both nouns and verb roots.
(124) a. daawdihátl'

Ø-daa-ÿu- $\emptyset$-di-hatl'-ÿ
RFLX.0-around-PFV-3.S-CL[+D, $\emptyset,+\mathrm{II}]$-shit-VAR
'it shat itself', 'it covered itself in shit'
b. uwahás'
$u-\emptyset-\ddot{y} a-h a s^{\prime}-\ddot{y}$
PFV.TEL-3.S-CL[-D, Ø, +I]-vomit-vaR
'he vomited'
(Story \& Naish 1973: 240)
c. kei kagux̆laháach'
kei= $\emptyset$-ka-ga-w-ga-la-hach'-:
up=3.0-HSFC-GCNJ-IRR-GMOD-CL[-D,l,-I]-shame-VAR
'it'll be shameful'
(Story \& Naish 1973: 187)
d. háatl'
'shit, crap; filth'
e. háas'
'vomit'

## 6 Verb themes: Lexical entries of verbs

The verb theme is the lexical entry of a verb, meaning that the theme comprises all of the elements of a given verb that must exist in the lexicon because they cannot be grammatically predicted. The eleemnts in a verb theme are those which a language learner must memorize to be able to fully conjugate the verb.

The term 'theme' is an Athabaskanist one, as is the adjective thematic which means "lexically specified as part of the verb theme". This term has nothing to do with the syntactic notion of thematic roles nor the term 'theme' used as an equivalent to 'patient'. I maintain the Athabaskanist use of the term 'theme' because it is so widespread throughout Tlingit description, and use the term SEMANTIC ROLE or just role in place of 'thematic role' to avoid confusion, though for syntax in the Government and Binding tradition I still use ' $\theta$-role'.

### 6.1. Structure of Verb themes

A minimal verb theme in Tlingit consists of a verb root, two features of the classifier, and either an argument slot or an incorporated noun. In addition there are a few other lexical features which are not always realized in every conjugated verb but which nonetheless cannot be predicted where they do occur. These features are the conjugation class, the theme category, the imperfective stem variant, and the imperfective repetitive form. The following outline describes a transitive verb theme meaning ' S (ubject) see $O$ (bject)'.

- root: $\sqrt{\operatorname{tin}}(0)$
- classifier: (+1)
- D component: [-D]
- S component: [s]
- core arguments: S (+2), O (+14)
- obligatory oblique arguments: none
- conjugation class: ga-(+5)
- imperfective stem variation: $-h(-1)$
- theme category: Active
- repetitive form: regular, $g a$-conjugation class $\rightarrow y e i=(+17 \mathrm{D})+-c h(-3)$

Since this is a large amount of information that must be given, themes are usually represented in a more compact manner. The basic components of a theme can be represented with a string of morphemes and morpheme placeholders. The above verb theme is represented here with the string $O$ -$S-C L[-D, S]$-tin 'S see O'. If represented templatically this might appear as:

```
(125) O- S- CL[ -D, s ]- tin
    +14 +2 +1[ ] 0
    obj subj cl[ D S ] see
    'S see 0'
```

Although this level of detail is not normally given, it will later be useful for illustrating the details of verb conjugation. Note that the slots specified in the theme are highly discontinuous, so that the object is shown immediately to the left of the conjugation class prefix, but there are actually nine intervening slots between them. A more honest representation would show all the empty slots in the theme:

$$
\left.\begin{array}{rll}
(126) & \cdots & 0- \\
& \cdots & +14+13+12+11+10+9+8+7+6+5+4+3+2
\end{array}\right)
$$

Obviously this is not a very efficient representation, however. The string representation thus saves space, but it can be misleading to those who are not intimately familiar with the template.

### 6.2. EPHEMERA

As can be seen from the detailed outline of the theme that was given in the previous section, there is more to a verb theme than just a string of morphemes. The elements of a verb theme can be divided into two basic types, those which are morphologically obvious and those which are not. Morphologically obvious elements show up in every single verb conjugation in one form or another. These obvious elements are the root, classifier, subject and/or object, incorporated nouns, mandatory oblique arguments, and any
derivational elements such as directional preverbs or derivational suffixes. All of these elements are given as part of the morpheme string.

The non-obvious elements of a verb theme are the conjugation class (ch. 11), imperfective stem variation (ch. 10, ch. 12), theme category (ch. 12), and repetitive imperfectives (ch. 12), as well as any restrictions against the use of certain modes. For the sake of a convenient label I call these non-obvious elements of a theme the EPHEMERA since they are ephemeral or fleeting elements that only matter and can only be detected under certain circumstances. Unfortunately most ephemera were not documented by Naish and Story in their verb dictionary (Story \& Naish 1973), so that our most thorough and readily accessible documentation of verb themes lacks these elements. Edwards has documented the conjugation class, imperfective type, and at least one repetitive imperfective for all of the verbs in her dictionary (Edwards 2009), but because her representation of stem variation is specific to the Northern Tlingit dialect (Edwards 2009:31-33) her documentation does not completely record the imperfective stem variation for verb themes. Leer has documented essentially everything in manuscript form but only a smattering of his findings are available in any sort of publicly accessible format, such as scattered throughout his dissertation (Leer 1991). Instances of verbs in various conjugations can determine some of the ephemera for a theme, so for example an imperative or potential form provides the conjugation class of a theme; for more details on this see chapter 12.

The theme we have been looking at is expressed in full as: $O-S-C L[-D, S]-$ tin ( $g a ;-h$ Act) 'S see 0'. The morpheme string was discussed earlier. The portion in parentheses comprises three ephemeral elements: the conjugation class, the imperfective stem variation suffix, and the imperfective type. Following the parentheses a conventional English translation is given, where ' S ' is the subject and ' 0 ' is the object. Leer generally uses a similar representation except that he gives the imperfective stem variation suffix as a prefix on the imperfective type, thus "'-Active" for our example theme. ${ }^{1}$ Edwards also uses a similar representation, but leaves out the stem variation suffix in favour of tone and length marking on the root and giving a set of sample conjugations (Edwards 2009).

1. He also used "Processive" for this theme category (Leer 1991) where he earlier (Leer 1978) and now again uses "Active", cf. Edwards's ACt type (Edwards 2009).

### 6.3. ADDITIONAL THEMATIC ELEMENTS

Themes can contain more than what has been given in this simple example. Additional elements are often lexically specified, but fortunately these are all morphologically obvious. Incorporated nouns, direction preverbs, the selfbenefactive prefix, derivational suffixes, and bound phrases are all given as part of the prefix string.
[[Fixme: Give examples of each.]]

### 6.4. THEME CATEGORIES

Leer (1991: 235) categorizes verb themes into what he calls THEME TYPES or THEME CATEGORIES, which are similar to but not the same as Kari's description of verb theme categories for Ahtna (Kari 1979). ${ }^{2}$ These theme categories are, as the name implies, lexically specified as part of the verb theme. Leer (1991:234) says that there are three kinds of information necessary to fully specify a theme category:

1. motion - whether a theme is a motion verb or not
2. conjugation class - the conjugation class prefix of a non-motion theme, or of a derivation of a motion theme
3. imperfective type - the kind of primary imperfective applicable to the theme, if one exists

The motion themes are dealt with more fully in section 11.1. The basic feature of motion themes is that they are not specified for conjugation class or imperfective type, but must instead have these derived along with various directional preverbs and other additional elements. The derived motion themes fall into specific theme categories as a result of the motion derivation process, rather than having lexically specified theme categories. The imperfectives that arise from motion derivation are all secondary imperfectives (repetitive imperfectives) and as such motion verbs are like eventives in that they lack primary imperfectives.

Conjugation class is described in detail in chapter 11. There are four classes based on which one of the four conjugation class prefixes $\{\emptyset-, n a-$,

[^17]$g a-, g a-\}$ are selected in certain modes like imperatives and potentials. Each verb theme belongs to one of these classes, with additional lexical features such as telicity and selection of specific repetitive imperfectives arising from conjugation class membership.

This leaves the imperfective type and hence the concept of a primary imperfective. Every verb theme has at least one imperfective form with a few exceptions. The 'default' imperfective form is termed by Leer the PRIMARY IMPERFECTIVE (Leer 1991: 238). This form is essentially unpredictable and hence must be lexically specified. A given theme may have more than one imperfective form, with semantic distinctions between them, and these other imperfectives are termed by Leer secondary imperfectives (Leer 1991: 238). The secondary imperfectives of a theme are either the progressive imperfective or what Leer (1991:238) refers to as DURATIVE IMPERFECTIVES which are a category lumping together repetitive imperfectives and various additional active imperfectives (Leer 1991: 240). Secondary imperfectives are not necessarily lexically specified because they can be predicted from the conjugation class (see chapter 11), or they are associated with particular verb derivations, or they form an epiaspect (see chapter 18).

Non-motion themes are divided into four separate subtypes by Leer according to their kinds of primary imperfective forms, outlined below:

- stative theme - has a stative imperfective
- ACTIVE THEME - has an active imperfective
- positional theme - has a positional imperfective
- eventive theme - lacks a primary imperfective

Stative themes have stative imperfectives which are characterized by having $[+\mathrm{I}]$ in the classifier for realis forms. This is in contrast with the other imperfectives which have [-I] in the classifier for realis forms. ${ }^{3}$ Stative themes generally denote states. Some stative themes however denote situations that might be thought of as more like actions rather than states, for example smelling or feeling (Leer 1991: 244) with the verbs $O-S-C L[-D, s]-n i x^{\prime}$ ( $\emptyset$; -: Stv) 'S smell 0'4 and jée O-S-cL[+D, Ø]-nikw~nuk ( $0 ;-h$ Stv) ‘S feel, palpate
3. The $y o o=[+I]-\ldots-k$ repetitive imperfective and $y o o=[+I]-\ldots-k$ active imperfective are exceptions to this rule, having [ +I ] in the classifier rather than the expected [ -I ]. These are the only exceptions.
4. Edwards (2009: 194) erroneously lists this as an active verb, but her example of the imperfective asinéex' 'he is smelling it' shows that with [+I] it must be stative or otherwise a peculiarly unique irregularity among active themes.

0'. Thus the category of stative, as with many of Leer's distinctions, is one defined on the basis of morphological distribution rather than semantics. Note that Naish and Story used the term 'stative' to refer to themes that take an object argument but not a subject (Story \& Naish 1973), what Leer (1991) called 'objective' themes and what are here called object intransitives (see chapter 8). Although many stative themes are indeed object intransitives because they often denote involuntary (non-agentive) situations, there is no implication that statives must be object intransitives or vice versa.

There are four kinds of basic stative themes which are distinguished by their stem variation in their imperfective forms: $-\ddot{y}$ stative, $-:$ stative, and $-h$ stative, with the $-n$ stative only occurring with the root $\sqrt{h a}$ 'be many'. The details of stem variation are explained in chapter 10 and the structure of stative imperfectives are explored in section 12.1.5. The - $\ddot{y}$ stative themes are considered to be the default type of stative by Leer (1991: 244), with -: stative themes generally denoting possession and comparison with some denoting perception or cognition, and $-h$ stative themes generally denoting perception and cognition. The $-n$ stative themes are all formed with the root $\sqrt{h a}$ 'be many' as noted previously, and as the category is defined they all occur with $[+\mathrm{I}]$ in the classifier and - $n$ stem variation in their imperfective forms: $O$-sha$\ddot{y} a-C L[+D, \emptyset]-h a(n a ;-n S t v)$ ' 0 be many', 0 -sha- $\quad$ ä-S-cL[-D,l]-ha (na?; -n Stv) 'S have many 0', at-ji-ÿa-S-CL[-D,l]-ha (na?; -n Stv) 'S have many possessions' (all from Leer 1976: 1).

There are a few additional kinds of stative imperfectives which are secondary rather than primary imperfectives. These are the extensional statives and the multipositional statives. Being secondary imperfectives, these additional stative imperfectives do not constitute part of a theme category.

Active themes, also sometimes known as processive themes by Leer (e.g. 1991), are characterized by having [-I] in the classifier in their primary imperfective forms, along with other non-statives. As with stative themes, active themes have a number of different subtypes depending on stem variation in their imperfective forms, but unlike statives these subtypes are much more numerous: -: active, -' active, $-h$ active, $-\underline{x}$ active, $-k$ active, $C L[+I]-\ldots-k$ active, $y o o=C L[+I]-\ldots-k$ active, $-c h$ active, $-t$ active (repeating), $-s^{\prime}$ active (serial), $-l^{\prime}$ active (serial), $-x^{\prime}$ active (plural), and $-t^{\prime}$ active (plural).

Positional themes denote body posture or physical configuration of something. They always require an oblique argument in a postpositional phrase which is the location of the denoted entity. This oblique is usually marked with the punctual suffix $-t$, which with positional themes means 'at a
point’. [TFixme: Leer skipped this section in his dissertation.] There are only two positional imperfective subtypes, namely -: positional, and -n positional. An example of a $-:$ positional imperfective is the theme $P-t O-S-C L[-D, S]-\cdot a^{h} ?$; $-:$ Pos) 'S seat 0 at P'. [FIXME: Example of $-n$.]

Eventive themes denote "events that culminate in an instantaneous change of state" (Leer 1991: 286-287), and which have only marginally acceptable inceptive and completive derived forms (Leer 1991: 286) unlike the other theme categories. Eventive themes are unique in that they lack primary imperfectives (Leer 1991: 235), hence there are no large lists of imperfectives with different stem variations unlike for stative, active, or positional themes. Eventive themes may or may not have secondary imperfectives, and when lacking imperfectives entirely an eventive theme will only be found in other modes like the perfective and future. Leer (1991: 287, 289) gives a few typical eventive themes such as the theme $0-S-C L[-D, \emptyset]-j a \underline{k}$ ( $\emptyset$; Evt, -x Rep) 'S kill 0' which has a repetitive imperfective xajákx ‘I kill it, I keep trying to kill it' and a progressive imperfective yaa nxajág 'I'm killing it' but no primary imperfective. Another example is the theme $O-S-C L[-D, \emptyset]-t^{\prime} i^{h}$ (ga; Evt, -ch Rep, -x' Rep) 'S find 0 ' which has a repetitive imperfective kei xat'eech 'I find it repeatedly, I keep finding it', a plural repetitive imperfective xat'éetx' 'I find them repeatedly, I keep finding them', and a progressive imperfective kei nxat'een 'I'm finding it; I'm in the process of finding it', but again this theme lacks a primary imperfective.

Leer terms eventive themes that are semantically resultative as involUNTARY EVENTIVE THEMES (Leer 1991:235) which can be members of the $\emptyset$-, $n a$-, or $g a$-conjugation classes but apparently not of the $g a$-conjugation class (Leer 1991: 290). Eventive themes which are object intransitive are predictably involuntary eventives (Leer 1991: 292). The usual translations of some eventive themes can be confusing, such as for example the theme $O-S-c L[-D, s]-k u^{h}\left(\emptyset\right.$; Inv Evt) 'S know $0^{\prime}$ ' which is usually translated as 'know' but according to Leer (1991:292) actually means 'become familiar with' or 'come to know' and hence denotes a change of state rather than merely the existence of a state. The involuntary eventive theme $O-S-C L[-D, s]-\operatorname{tin}$ ( $g a ;$ Inv Evt) 'S see O' is less misleading in its English translation, given the English verb 'see' can denote the state of seeing or the event of seeing, and the event can be interpreted as being involuntary.

## 7 Conjugating verbs

In this section I will demonstrate my mental model of how Tlingit verbs are conjugated. This is not a well-founded theoretical model nor a model of how native speakers produce verbs, but rather a heuristic process by which I have learned to conjugate verbs to produce spoken forms.

The following example demonstrates one conjugation of the verb theme $O-S-c L[-D, \emptyset]-t a \underline{k}(\emptyset ;$ Mot, -x Rep) 'S poke 0 ' in the telic ( $\emptyset$-class) perfective $\ddot{y} u-C L[+I]-\ldots-\ddot{y}$ with a first person singular subject $\underline{x} a-$ and a second person singular object $i$.

|  | +14 | +4 | +2 |  | +1 |  | 0 | -1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| theme | $\begin{aligned} & \text { O- } \\ & \text { OBJ } \end{aligned}$ |  | $\begin{gathered} \hline \text { S- } \\ \text { SUBJ } \end{gathered}$ | CL[-D] | CL[Ø] |  | $\sqrt{\text { tak }}$ poke |  |
| person | $\begin{gathered} \mathrm{i}- \\ 2 \mathrm{SG} .0 \end{gathered}$ |  | $\begin{aligned} & \underline{\text { xa- }} \\ & \text { 1SG.S } \end{aligned}$ |  |  |  |  |  |
| mode |  | ÿu- PFV |  |  |  | $\mathrm{CL}[+\mathrm{I}]$ |  | $\begin{gathered} -\ddot{y} \\ \text { VAR } \end{gathered}$ |
| string |  | ÿu- | xa- | CL[-D] | CL[Ø] | $\mathrm{CL}[+\mathrm{I}]$ | tak | - y |
| prefixes |  | ixwa- |  |  | ÿa- |  | ták |  |
|  |  |  |  | xwaa- |  |  |  |  |
| result | ixwaaták <br> 'I poked you' |  |  |  |  |  |  |  |

The first line in the example is the verb theme, which comes from the lexicon. The second line is the assignment of person, which is constrained by the subject and object slots in the theme. The third line is the mode, which is constrained by the verb theme's ephemera that are not shown here - the $\emptyset$-conjugation class means that the perfective is telic and hence has $-\ddot{y}$ stem variation. The fourth line is the morpheme string which is constructed from
the morphemes derived from the three prior lines. The fifth line is the first step of morphophonology, where the various prefixes are contracted together. The final line is the second step of morphophonology, with the prefix chunks further contracted into a single unit.

Motion verbs are initially derived before they can be conjugated (see 11.1), a fact which was not represented above. The next example features a verb theme $S-C L[-D, \emptyset]-k u \underline{x}$ (Mot) 'S go by boat, vehicle' which is first derived into a productive theme with the derivational string $\ddot{y} a n-\{t, \underline{x}, d e ́\}=(\emptyset ;$ -h Rep Mot) 'go to shore, come to rest'. The mode applied here is the future, which consists of the ga-conjugation prefix (here used for mode specification rather than conjugation class), the $w$ - irrealis allomorph specific to the future and comparatives, the $g a$ - mode prefix, $[-I]$ in the classifier, and the $-:$ stem variation suffix.


Not shown in this particular example is that the motion derivation step also adds to the verb theme's ephemera, as defined in chapter 6. This particular motion derivation places the theme in the $\emptyset$-conjugation class and defines a - $h$ repetitive imperfective.
[[FIXME: Examples of conjugation prefixes in use.]
[[FIXME: Examples of lexically specified imperfective stem variation in use.】
[[Fixme: Examples of morpheme replacement, where a morpheme is replaced by another one due to inflectional or derivational requirements.]

## 8 Valency

The basic valency distinction in Tlingit is whether a theme takes a subject prefix, an object prefix, both, or neither. Object prefixes are positioned near the left edge of the verb in slot +14 , similarly to the Athabaskan languages and Eyak which also have their object prefixes quite far from the root. Unlike the Athabaskan languages however, Tlingit subject prefixes are not split between inner and outer prefixes. Instead Tlingit has all the subject prefixes near the verb root in slot +2 just to the left of the classifier. A particular subject or object prefix is called a Pronominal, in contrast with a PRONOUN which is a nominal element occurring outside the verb. Thus the prefix $\underline{x} a$ - which occurs in slot +2 of the verb is the first person singular subject pronominal. Whether the pronominals are truly arguments of the verb or not - the Pronominal Argument Hypothesis - is a theoretical issue which I will not address here.

Themes that take a subject are given with a notional $S$ - prefix in place of some subject pronominal, and themes that take an object are given with a notional $O$-prefix in place of some object pronominal. If a theme has an $S$ - or an $O$ - then no instance of that verb can occur without the appropriate slot filled by some pronominal. If a theme lacks an $S$ - or an $O$ - then no instance of that verb can occur with a pronominal in that slot. Thus themes do not have optional subjects and/or objects, either a theme has a mandatory requirement for a subject or object or it cannot ever occur with one.

Only considering the requirement of subjects or objects is actually too simplistic a model of verb valency for Tlingit. A theme may include a subject or object pronominal which is nonreferential and does not change across conjugations. These lexically specified uses of subject and object pronominals are termed thematic pronominals. Thematic object pronominals are limited to third person $a$-, third person proximate ash-, indefinite nonhuman at-, reflexive $s h$-, and perhaps indefinite human $\underline{k} u$-; no allomorphs of these
prefixes are ever thematic. The only thematic subject is indefinite human $d u$-. Note that all of these pronominals are non-local arguments, i.e. none are first or second person and thus they do not index discourse participants.

I use the terms 'subject intransitive' and 'object intransitive' as transparent equivalents for the more opaque 'unergative intransitive' and 'unaccusative intransitive' terms that are conventionally used for describing active/agentive transitivity systems [[FIXME: cite]]. Naish and Story called the subject intransitives simply 'intransitive' (Story \& Naish 1973: 366-366), but called object intransitives 'stative' (Story \& Naish 1973:366) which is a misnomer since these themes do not necessarily have stative semantics. Despite recognizing the cross-linguistic phenomenon of active/agentive systems and noting established terminology, Leer used the terms 'intransitive' and 'objective' for the two intransitive types (Leer 1991: 49), as well as sometimes calling the subject intransitive 'subjective' [[FIXME: cite]; these terms again can imply semantic distinctions that are not appropriate in my opinion. In addition, like Naish \& Story's practice, Leer's application of the epithet 'intransitive' to the subject intransitives fails to capture the fact that intransitives are in general verbs which take a single argument regardless of the syntactic or semantic role of that argument. The category of 'impersonal' as used by Naish and Story has a more broad meaning since they did not distinguish between verbs that have no pronominals like xee-CL[-D, Ø]-.at ( $\emptyset$; -:? Act) ‘sun set, dusk' (Story \& Naish 1973: 268) and those which have thematic pronominals like $\boldsymbol{a}-C L[+D, \emptyset]-g a n(g a ;-h$ ? Act) 'sun shine' (Story \& Naish 1973:318).

The following list gives examples of all of the basic valency categories in Tlingit with consideration of thematic pronominals.

- transitive:
$\boldsymbol{O}-\boldsymbol{S}-c L[-D, s]-t i n(g a ;-h \mathrm{Act})$ 'S see $\mathrm{O}^{\prime}$
- subject (unergative) intransitive:
$S-c L[-D, s]-g a \underline{x}(g a ;-:$ Act) 'S cry’
- object (unaccusative) intransitive:

O-cl[-D, Ø]-k'e ( $g a ;$-: Stv) 'O be good’

- impersonal:
kee-CL[-D, Ø]-.a (Ø; -n Act) 'sun rise, dawn'
- subject (unergative) intransitive with thematic object:
$\boldsymbol{a}-\bar{y} a-u-S-c L[+D, \emptyset]-g u t(\emptyset ;-\underline{x}$ Rep) 'S go back'
- object (unaccusative) intransitive with thematic subject:

O-ka-du-cL[-D, Ø]-saÿ (Ø?; -ÿ? Stv) 'O be hot, sweaty'

- impersonal with thematic subject:
du-CL[-D, Ø]-nikw (na?; -h Act) 'wind blow'
- impersonal with thematic object:
$\boldsymbol{a}-C L[+D, \emptyset]-g a n(g a ;-h$ ? Act) ‘sun shine’
Certain themes have incorporated nouns, which will be discussed in more detail in chapter 20. Incorporation can have an effect on the valency of a verb theme. Some themes which have argument positions may instead have an incorporated alienable noun in place of the argument. Such themes then have their valency for that argument saturated and no longer have free variation of that argument pronominal. The following examples demonstrate a basic subject intransitive theme along with derived themes where an incorporated alienable noun has reduced the valency of the theme. ${ }^{1}$
(129) a. subject intransitive + obligatory $P$
s'eik du éet uwaháa
s'eik du ee-t u-ø-ÿa-ha-ÿ
smoke $_{\boldsymbol{i}}$ 3.PSS BASE-PNCT PFV.TEL-3. $\boldsymbol{S}_{\boldsymbol{i}}$-CL[-D,, ,+I]-move.invis-VAR
'he wants to smoke'
theme: $P-\{t, \underset{\sim}{\boldsymbol{\chi}}, d e ́\} S-c L[-D, \emptyset]-h a\left(\emptyset ;-h\right.$ Rep) 'S go invis. to P ; P have urge for $\mathrm{S}^{\prime}$
(Story \& Naish 1973: 242)
b. subject intransitive + obligatory $P$
atshook xáat uwaháa
atshook xaa-t u-ø-ÿa-ha-ÿ
laughter $_{i} \quad$ 1SG-PNCT PFV.TEL-3. $\boldsymbol{S}_{i}$-CL[-D, $\left.\emptyset,+\mathrm{II}\right]$-move.invis-VAR
'I feel like laughing'
(Story \& Naish 1973: 242)
c. impersonal + obligatory $P$
du éet yaan uwaháa
du ee-t ÿaan-u-ÿa-ha-ÿ
3.PSS BASE-PNCT hunger-PFV.TEL-CL[-D, Ø,+I]-move.invis-VAR
'he is hungry'
theme: $P$-\{t,, , dé $\}$ ÿan-cl[-D, Ø]-ha (Ø; -h Rep) 'P be hungry’
(Story \& Naish 1973: 112)

1. The themes here illustrate the incorporated $\ddot{y} a a n-$ 'hunger' and lux'- 'urine'. Other possible alienable incorporates here are shakux- 'thirst', luk- 'hot drink', ÿata- 'sleep', l'il''defecation', has'- ‘vomit' (Leer 1976: 4/2).
d. impersonal + obligatory $P$
du éet lux' uwaháa
du ee-t lux'-u-ÿa-ha-ÿ
3.PSS BASE-PNCT urine-PFV.TEL-CL[-D, Ø, +I]-move.invis-vAR
'he needs to urinate'
theme: $P-\{t, \underline{x}, d e ́\} ~ l u x ’-c L[-D, \emptyset]-h a(0 ;-h$ Rep) 'P need to urinate’
The basic verb in these examples is $P-t S-C L[-D, \emptyset]-h a(\emptyset ;-h$ ? Mot) 'S move invisibly to P ', with various derivations via incorporated alienable nouns. The first example sentence shows a subject intransitive verb theme that takes an obligatory postpositional phrase (described below) indicating the experiencer and marked by the punctual case suffix $-t$. The subject is the agent, expressed both in the verb with the third person subject prefix as well as externally with the noun phrase s'eik 'smoke', both of which are coindexed. The second example demonstrates a similar form, but this time with a postpositional phrase formed around a first person pronoun rather than the third person pronoun that requires a meaningless base for postposition attachment. The third example is a derived form with the alienable noun $\ddot{y} a=n-$ 'hunger'. Note how the verb has become impersonal, no longer containing subject marking, and with no external noun phrase. The fourth example is similar, with the alienable noun lux'- 'urine' incorporated.

In the themes with incorporates above it is ungrammatical to include an external noun phrase as an argument of the verb. Compare the first two with the subject intransitive theme where an external noun phrase is coindexed with the subject pronominal in the verb. ${ }^{2}$

Another issue involving valency is whether a theme requires an obligaTORY OBLIQUE or not. Tlingit does not have indirect objects like those found in Indo-European languages because Tlingit lacks ditransitive verbs that take two grammatical objects. Tlingit does however have a large number of verb themes which have obligatory oblique arguments in the form of postpositional phrases, where a sentence containing such a verb is ungrammatical if it lacks the postpostional phrase. The postpositions occurring in such obligatory obliques are the punctual $-t$, pertingent $-\underline{x}$, locative $-x^{\prime}$, and ergative -ch (see section 3.2). [FIXmE: Verify; Leer's $-t$ may actually be $-t \sim-\underline{x}$
2. I do not know if it is possible for this theme to take a local argument rather than a third person argument. If so, e.g. if du éet xِwaaháa 'I came to him invisibly' is grammatical, then this would unquestionably have a subject slot. As it stands this could actually have an object slot instead, perhaps du éet x́at uwaháa. It may actually be impossible for this theme to have a local argument of either kind which is itself interesting.
$\sim$-dé. He also says that those with $-t$ and $-\underline{x}$ are always bound, which obviously needs to be proven.] The obligatory obliques also seem to have an additional restriction in that they always occur immediately before the verb and sentences are judged to be awkward if the phrase is moved elsewhere, e.g. after the verb. ${ }^{3}$ Unlike Indo-European indirect objects, the obligatory obliques do not only occur with transitive verbs, but rather they also occur with intransitives of both types and even with impersonals. Since they are lexically specified they can be included as part of the valency of verbs just as subjects and objects are so considered. The requirement for obligatory obliques is common throughout the Na-Dene family, with the symbol $P$ (for 'postposition phrase') representing one in a verb theme.
[[Fixme: Go over table 8.1 and check to see which of the question marks are attested.】

The following examples demonstrate two themes which have obligatory obliques. The first is an object intransitive theme where there is no subject argument, but there is an obligatory oblique. The second is a transitive theme (causativized from the prior theme) with all three arguments. Both of these examples are ungrammatical without the postpositional phrase that is the obligatory oblique.
(130) a. object intransitive with obligatory oblique

| tléil ax | kát | sawoox'aakw |
| :--- | :--- | :--- |
| tléil axַ | ká-t | $\emptyset$-sa-u-ÿu- -x'akw-h |

NEG 1SG.PSS HSFC-PNCT 3.0-voice-IRR-PFV-CL[-D, Ø,-I]-forget-vAR
'he didn't forget me'
theme: $P$ ká-\{t, x, $\}$ O-sa-cl[-D, Ø]-x’akw ( $\emptyset$; -h Rep Stv) ‘0 forget $\mathrm{P}^{\prime}$
(Story \& Naish 1973: 96)
b.* tléil sawoox'aakw
tléil Ø-sa-u-ÿu- $\emptyset$-x'akw-h
NEG 3.0-voice-IRR-PFV-CL[-D, Ø,-I]-forget-vAR
'he didn't forget'
3. This is only a description of my perceptions. I have not thoroughly explored this part of the grammar and lexicon, so the properties of these obligatory obliques are still open questions needing further research.

| Valence category | S | 0 | P |
| :--- | :---: | :---: | :---: |
| transitive | + | + | $\pm$ |
| subject intransitive | + | - | $\pm$ |
| object intransitive | - | - | $\pm$ |
| impersonal | $\times$ | + | $\pm$ |
| object intransitive + thematic S | + |  |  |
| subject intransitive + thematic 0 | + | $\times$ | $\pm$ |
| impersonal + thematic S | $\times$ | - | $\pm$ |
| impersonal + thematic 0 | - | $\times$ | $\pm$ |
| impersonal + thematic S \& O | $\times$ | $\times$ | $\pm$ |
| transitive + obligatory P | + | + | + |
| subject intransitive + obligatory P | + | - | + |
| object intransitive + obligatory P | - | + | + |
| impersonal + obligatory P | - | - | + |
| $?$ | $\times$ | + | + |
| $?$ | + | $\times$ | + |
| $?$ | $\times$ | - | + |
| $?$ | - | $\times$ | + |
| $?$ | $\times$ | $\times$ | + |

Table 8.1: Valency of Tlingit verbs. +: required present, -: required absent, $\pm$ : optional, $\times$ : thematic (lexically specified and nonreferential)
c. transitive with obligatory oblique
a kát has sawtulix'ákw
a ká-t has=ø-sa-ÿu-tu-li-x'akw-ÿ
3N.PSS HSFC-PNCT PL=3.0-voice-PFV-1PL.S-CL[-d,l,+I]-forget-vAR
'we made them forget it'
theme: $P$ ká-\{t, $\underline{x}\} \quad O-s a-S-c L[-D, l]-x ’ a \underline{k} w(\emptyset ;$-? Stv) ‘S make 0 forget P ’
(Story \& Naish 1973: 96)
d.* has sawtulix'ákw
has=Ø-sa-ÿu-tu-li-x'akw-ÿ
PL=3.0-voice-PFV-1PL.S-CL[-D,l,+I]-forget-vAR
'we made them forget'
Another very frequent theme that has an obligatory oblique is the theme P tú-ÿá-x’ $0-C L[-D, s]-g u(g a ;-:$ Stv) 'P like, want 0 '. This is a complex postpo-
sitional phrase, where $P$ acts as the possessor of the inalienable noun compound -tú-ÿá 'mind-face' which then has the locative suffix -x' attached to it. This compound is usually found with the locative allomorph -' so that the compound is then realized as -tuwáa in Northern Tlingit and -tuwa' in Tongass Tlingit, but occasionally -tuwáx' may be encountered even among the youngest speakers. ${ }^{4}$
(131) a. ax xuhnx'i, ax tuwa' sigoo ax $\quad$ xuhn-x'-ÿi ax tu-ÿa-' $\quad$ - $\emptyset$-si-gu-: 1PL.PSS friend-PL-PSS 1PL.PSS mind-vSFC-LOC 3.0-ZCNJ-CL[-D,s,+I]-enjoy-VAR 'my friends, I want ...'
(Williams, Williams, \& Leer 1978: 32)
b. tsu dáanaa du tuwáa aa sigóo tsu dáanaa du tú-ÿá-' aa-ø-si-gu-: again money 3H.PSS mind-vSFC-LOC PART.O-ZCNJ-CL[-D,S,+I]-enjoy-vAR 'he wants some more money'
theme: P tú-ÿ́á-x’ O-cL[-D,s]-gu (ga; -: Stv) 'P like, want 0’
(Story \& Naish 1973: 241)

```
c. ax tuwáa sigóo
ax tú-ÿá-' Ø-Ø-si-gu-:
1SG.PSS mind-vSFC-LOC \(3.0-Z C N J-C L[-D, s,+1]\)-enjoy-vAR
neildé xwagoodée
neil-dé=ÿu-xa-Ø-gut-h-ée
home-ALL=PFV-1SG.S-CL[-D, Ø,-I]-go.SG-var-SUB
'I want to go home'
```

(Story \& Naish 1973: 241)
Note that with this theme the patient argument is a noun phrase receiving no case marking, or else it is an otherwise unmarked subordinate verb. The locative postpositional phrase is not the verb's direct object, it is instead an obligatory oblique that indexes the experiencer role. In the first example the noun phrase is probably the object of the main verb, though I have not tested this and am unaware if others have done so. Verb phrase arguments can be marked for grammatical case (i.e. ergative -ch) if they are subordinate, but this does not occur with this theme, so it must be assumed that the

[^18]verb phrase in the second example is also the main verb's object argument, perhaps with the support of an invisible PRO or the like.

There are two themes which may or may not have both a thematic subject and thematic object pronominal. The uncertainty is because of a morphological inconsistency in Tlingit, whether the areal prefix $k u$ - is identical with the allomorph $\underline{k} u$ - of the indefinite human object which is otherwise $\underline{k} a a$-. This issue is addressed in subsection 19.6 in more detail. If the areal is in fact an object pronominal then the following two examples demonstrate the only two themes that are documented to have both thematic subject and object pronominals.
(132) a. kukawduwagít
ku-ka-ÿu-du-ÿa-git-ÿ
AREAL-HSFC-PFV-INDH.S-CL[-D, $\emptyset,+\mathrm{I}]$-dark-VAR
'it is squalling' theme: $\underline{k u} \boldsymbol{u}-\mathrm{ka}-\mathrm{du}-\mathrm{CL}[-\mathrm{D}, \emptyset]-g \mathrm{git}(? ;$-? ?) 'rain in squalls'
(Story \& Naish 1973: 166)

```
b. kukawduwayél'
ku-ka-ÿu-du-ÿa-yel'-ÿ
AREAL-HSFC-PFV-INDH.S-CL[-D, Ø, +I]-peace-VAR
'it is calm weather' theme: \(\boldsymbol{k} \boldsymbol{u}-\mathrm{ka}-\boldsymbol{d u}\)-cl[-D,Ø]-yel' (?; -? ?) 'be calm weather'
```

(Story \& Naish 1973: 41)

### 8.1. Modifying valency

There are only a few methods to modify the valency of verbs, namely true antipassivization, pseudo-antipassivization, and pseudo-passivization. Antipassivization is the process of reducing valency by removing an object, as widely described in the literature on languages with ergative/absolutive grammatical case systems. Contrast this with passivization where a subject is removed, as is found in English and other European languages. True antipassivization in Tlingit is a reduction of valency where the object position is completely deleted, whereas pseudo-antipassivization and pseudopassivization are valency reduction processses that feature a nonreferential pronoun in the place of the removed argument.

The basic form of antipassivization in Tlingit is the TRUE ANTIPASSIVE where a transitive theme loses its object slot (Leer 1991:98). Concomitant
with this loss is the change of the D component of the classifier from [-D] to [+D]; for more details on the $D$ component see section 9.1.
(133) a. transitive
x'úx' tlein akagux́shaxéet
x'úx' tlein a-ka-ga-w-ga- $\emptyset$-sha-xit-:
book $_{i}$ big $\quad 3 . \mathbf{o}_{i}$-HSFC-GCNJ-IRR-GMOD-3. $\mathbf{S}_{j}$-CL[-D,Sh,-I]-furrow-VAR
'he ${ }_{j}$ is going to write a big book $_{i}{ }^{\prime}$
theme: $\boldsymbol{O}$-ka-S-cl[-D,sh]-xit (Ø; -h Act) 'S draw, paint, write O'
(Story \& Naish 1973: 251)
b. true antipassive with [ +D ]

Lingít xx'éináx kashxeet áwé
Lingít x́éénáx ka- $\emptyset$-sh-xit-h á-wé
Tlingit mouth-PERL HSFC-3.s-CL[+D,sh,-I]-furrow-VAR FOC-MDST
ashigóok
a- $\emptyset-\emptyset$-shi-góok ${ }^{\times}$
3.0-ZCNJ-3.S-cL[-D,sh,+I]-know.how
'he knows how to write in Tlingit'
theme: ka-S-cl[+D,sh]-xit (Ø; -h Act) 'S draw, paint, write’
(Edwards 2009: 283)
In the first example above the verb theme takes both an object and a subject, and thus is transitive. The second example shows nearly the same verb, but without an object pronominal and with [+D] in the classifier. The theme in the second example is the antipassive of the theme in the first example. The custom in Tlingit description has been to treat antipassivization as a derivational phenomenon, so that when an initially transitive theme is antipassivized the result is a new object intransitive theme. It has not however been demonstrated that this is in fact derivational, or whether true antipassivization is instead an inflectional - and hence perhaps syntactic - phenomenon.

Another flavour of antipassivization is the pseudo-antipassive. PseudoANTIPASSIVES are not true antipassives where an object argument is deleted, but instead have a filler argument in the object position. The filler is $a t$-, the indefinite nonhuman object 'something'.
(134) a. transitive
útlxi awsi.ée
útlxi $\quad a-y ̈ u-\emptyset-s i-i-i-y ̈$
soup $_{i} 3.0_{i}$-PFV-3.S-cL[-D,s,+I]-cook-vaR
'he cooked soup'
theme: $O-S-c L[-D, S]-. i\left(0 ;\right.$-: Act) 'S cook $0^{\prime}$
b. pseudo-antipassive with at-
at wusi.ée
at-ÿu- $\emptyset$-si-.i-
INDH. 0 -PFV-3.S-CL[-D,S,+I]-cook-VAR
'he cooked', 'he cooked something' theme: at-S-cl[-D,s]-.i ( 0 ; -: Act) 'S cook'
c. ungrammatical referential object
*útlxi at wusi.ée
útlxi at-ÿu- $\emptyset$-si-.i- $-\ddot{y}$
soup $_{i}$ INDH. $\mathbf{o}_{i}$-PFV-3.S-CL[-D, $\left.\mathrm{s},+\mathrm{I}\right]$-cook-var
'he cooked soup'
The indefinite nonhuman object at-fills the object slot in the theme. It is however nonreferential, meaning that no object noun phrase can be coreferential with it. This is thus a form of antipassivization since the object valency of the theme is reduced, but since there is still a thematic element in the object position I refer to it with the 'pseudo-' prefix.

Unlike antipassives, Tlingit does not have true passives where the valency of a verb is reduced through removal of the subject position. There is a phenomenon I call the PSEUDO-PASSIVE where the subject position is filled by a nonreferential $d u$ - which is the indefinite human subject pronominal. It is obviously a parallel to the pseudo-antipassive shown above. Pseudopassivization may not be a completely productive process, but there are a number of pairs of themes that exhibit this phenomenon. A frequent instance of such pseudo-passives is the pair 'S hear 0 ' and ' $O$ be heard' as in the following examples.
(135) a. transitive

$$
\text { gaaw tléil } \underline{\underline{x} w a . a a x}
$$

gaaw tléil Ø-ÿu-x્રa- $\emptyset-. a x-h$
$\operatorname{drum}_{i}$ NEG $3.0_{i}$-PFV-1SG.S-CL[-D, Ø,-I]-hear-vaR
'I didn't hear the drum'
theme: O-S-cL[-D,Ø]-.ax (?; -ch Rep) 'S hear O’ (Story \& Naish 1973: 107)
b. pseudo-passive with du-
nadáakw duwa.áxch
nadáakw Ø-Ø-du-ÿa-.ax-ch
table $_{i} \quad 3.0_{i}$-ZCNJ-INDH.s-CL[-D, $\left.\emptyset,+\mathrm{I}\right]$-hear-REP
'the table is making noise (squeaking)', lit. 'the table is being heard'
theme: O-du-cl[-D, Ø]-.ax (?; -ch Rep) '0 be heard’
(Story \& Naish 1973: 107)
c. ungrammatical referential subject
*kaach nadáakw duwa.áxch
kaa-ch nadáakw Ø-Ø-du-ÿa-.ax-ch
INDH $_{j}$-ERG table $e_{i} \quad 3.0_{i}$-ZCNJ-INDH. $\boldsymbol{S}_{j}$-CL $[-\mathrm{D}, \emptyset,+\mathrm{I}]$-hear-REP
'someone hears the table'
As with true antipassives and pseudo-antipassives, the pseudo-passives are conventionally treated as a lexical phenomenon where a pseudoantipassive theme is derived from a transitive theme. Again, this assumption has yet to be demonstrated, and it may be possible that it is instead an inflectional phenomenon.

Middle voice can result in modification of valency but this is not a necessary requirement of middle voice marking. The phenomenon of middle voice is discussed at length in section 9.1 along with the $D$ component of the classifier which is the characteristic indicator of middle voice.

## 9 The classifier

The classifier is the most important element of a verb besides the verb root. The presence of classifier morphemes is the hallmark of all Na-Dene languages, and it is in Tlingit that the classifier has its most elaborate structure and function.

Tlingit classifiers are tripartite portmanteau morphemes. They are at most a CV syllable, but the simplest classifier is $\emptyset$ - which has no surface phonological form. There are no classifiers with just $V$, hence they can be CV, C, or $\emptyset$. The complete inventory of classifiers is given in table 9.1. The three features of classifiers are the D component, S component, and I component. All three features are obligatory in every conjugated verb, though only the D component and S component are lexically specified. Both D and I components are binary, but the $S$ component is quaternary with the four values $\emptyset, s, l$, and $s h$. Note that the three nonzero forms of the $S$ component are Tlingit's three plain anterior fricatives, a fact that is important for both phonology and for historical reconstruction. The classifiers essentially mark voice and valency, but the details are complicated and will be explored at length below.

The cognate classifiers in Athabaskan languages lack the I component except for a few vestigial alternations (Krauss 1969: 59), and the S component consists only of alternation between a Proto-Athabaskan ${ }^{*} \nmid$ and ${ }^{*} \emptyset-$ perhaps more mnemonically termed a 'Ł component'. The Athabaskan D component is consistent with Tlingit, but is somewhat more subtle in its phonology due to various historical effects. To some extent Eyak retains the I component as a separate prefix yi- preceding the classifier (Krauss 1969: 58; Leer 2008: 25), thus being more conservative than Tlingit in this regard. Eyak however has the simpler $\nless \emptyset$ alternating $S$ component rather than Tlingit's four-way system (Krauss 1965a: 175). It is likely that Tlingit innovated the expanded $S$ component inventory rather than it being a retention


Table 9.1: Classifier morphemes.
of the Proto-Na-Dene system, though Leer (2008:27) proposes that Proto-Na-Dene had both causative *s and "mutual interrelationship" * $\ddagger$ as distinct elements, with Tlingit's additional sh and the collapse in distinct meaning between $s$ and $l$ being later innovations.

Edward Sapir first labeled the classifier in Athabaskan languages as a "third modal' element" whose "primary significance is to define voice, i.e., such notions as transitive, intransitive, and passive" (Sapir 1915: 540 fn . 6, emph. orig.). He did not however recognize its presence in Tlingit, presumably due to having had little experience with the language: "As far as is known, Athabaskan 'third modal' elements find no counterpart in Tlingit" (Sapir 1915: 541 fn. 4). This is contradicted by Sapir's student John R. Swanton, who had already documented Tlingit's "third modal prefixes" in his grammatical sketch (Swanton 1911: 181-184).

Franz Boas also recognized the presence of these prefixes in Tlingit and seems to have been the first to publicly apply the label of 'classifier', saying that the "original function seems to have been to indicate the form of the subject or object of the verb" (Boas 1917: 23) and "it is fairly clear that the primary function of these elements is a classificatory one" (Boas 1917: 28). Boas was misled by his carefully collected paradigms however, since the noun classification function of the $S$ component is in fact relatively obscure when compared to the effects on transitivity and voice. Regarding the name 'classifier', Leer (1990: 93 fn. 12) notes:

A better term would be something like "valentizers", since their principal function is to indicate the valence of the verb [...] However, since the name classifier is one of the few grammatical labels sanctioned by common use among Athabaskanists, it is probably not worth the trouble to try to change it.
9.1. The D component and middle voice

Unfortunately for the description of Tlingit, Naish and Story did indeed attempt to change it, calling it an "extensor" (e.g. Story 1966: 63, 95; Story \& Naish 1973: 350, 368-378). This term never caught on, with Krauss (1969) and Leer (1978, 1991) retaining "classifier" and all other Tlingit linguists having followed suit. Since then for Athabaskan languages Kibrik (1993, 1996) has offered "transitivity indicator" abbreviated Ti, Rice (2000, 2009) has tried "voice/valence prefix" abbreviated v/v, and Gessner \& Hansson (2004) have tried simply 'valence prefix' abbreviated val, but none of these has become popular and "classifier" seems to be firmly stuck.

The fact that only one of Tlingit's sixteen classifiers - CL[-D,,$--I]$ - is unrealized on the surface is a strong argument for a zero morpheme. It is however rather peculiar that the [+I] version of $\emptyset$-, namely $\ddot{y} a-$, has $\ddot{y}$ as its consonant. In $\ddot{y}$-less Tlingit we can consider this to be a realization of the vowel $i$ since the consonant is realized as $y$ in non-rounded environments and is regularly rounded to $w$; this very explanation was offered by Edwards (2009: 30), apparently following Krauss (1969). Unfortunately this model does not work for Tongass Tlingit nor for any conservative examples of Southern or Northern Tlingit where the $\ddot{y}$ phoneme still had an independent existence. Leer is, to my knowledge, still working out a complete historical explanation for this problem, but it is probably from an earlier * $\ddot{i}$ - prefix cognate with Eyak yi- as will be described in the section on the I component.

Since each component has in many ways its own separate morphological life, I will describe each in in turn in its own section. Interactions between them are rather minor morphologically, though of course the whole complex is phonologically difficult to slice apart.

### 9.1. The D component and middle voice

Edwards (2009: 30-31) gives the D component as a prefix preceding the classifier, though she mixes this with a description of it as a binary feature. I do not adopt the practice of representing it as a prefix, but instead hold to Leer's representation where the D component is only a binary feature of the classifier prefix. This is because the D component is phonologically invisible on the surface when it occurs in the [-I] classifiers that have a nonzero $S$ component. These three forms - $s$-, $l$-, and sh- - could potentially be analyzed as affricates like $d+s \rightarrow d z \rightarrow s$ but they still contrast with affricates in the Tongass and Southern dialects and the Transitional subdialect of Northern

Tlingit. This contrast is because of devoicing of the $i$ vowel in [ +I ] classifiers with non- $\emptyset$ S components, a phenomenon which is addressed in detail in section 9.4.2 below. Edwards did not need to deal with this because of her exclusive focus on the non-Transitional subdialects of Northern Tlingit. In her defence however, it is much easier to list themes with $d$ - or nothing rather than $C L[+D]$ - versus $C L[-D]$ - in a dictionary. Nevertheless, suffice to say that the D component cannot be consistently analyzed as a separate prefix, but instead must be analytically treated as a feature of the whole portmanteau morpheme that is the classifier, regardless of how one represents it lexicographically.

Absence of the D component, or rather the occurrence of [-D] in the classifier, is the norm for most verbs. Presence of the D component, or [+D], indicates middle voice. Middle voice covers a number of different verb inflections and derivations. The simplest instances of middle voice are inflection with reflexives and reciprocals.
(136) a. non-reflexive atelic perfective ixwsiteen
i-ÿu-xa-si-tin-h
2SG.0-PFV-1SG.S-CL[-D,s,+I]-see-vAR
'I saw you'
theme: $O-S-c L[-D, S]-$ tin ( $g a ;-h$ Act) 'S see 0 '
b. reflexive
sh xwadziteen
sh-ÿu-xa-dzi-tin-h
RFLX.0-PFV-1SG.S-CL[+D,s,+I]-see-VAR
'I saw myself'
c. non-reciprocal
awsiteen
a-ÿu- $\emptyset$-si-tin-h
3.0-PFV-3.S-CL[-D,s,+1]-see-vAR
'he saw him'
d. reciprocal
woosh wudziteen
woosh= $\emptyset-$ ÿu- $\emptyset$-dzi-tin-h
RECIP $=3.0-\mathrm{PFV}-3 . \mathrm{S}$-CL[+D, $\mathrm{s},+\mathrm{I}]$-see-VAR
'they saw each other'

In the above examples note how the classifier changes from [-D] in the non-reflexive and non-reciprocal forms to $[+D]$ in the reflexive and reciprocal forms. This is characteristic of INFLECTIONAL MIDDLE VOICE, where the middle marking of $[+\mathrm{D}]$ is caused by changes in argument structure and transitivity.

A particularly unusual instance of inflectional middle voice is the indefinite human subject $d u$-. Whenever a theme with a classifier $S$ component of $s, l$, or $s h$ is conjugated with an indefinite human subject $d u$-, then the classifier must have [+D]. In this situation the indefinite human subject $d u$ - thus requires middle voice marking.
(137) a. awsi.ée
a-ÿu-Ø-si-.i-ÿ
3.0-PFV-3.S-CL[-D, s, +I]-cook-VAR
'he cooked it'
theme: $O-S-C L[-D, s]-i(0$; -: Act) 'S cook 0 '
b. wududzi.ée

Ø-ÿu-du-dzi-i- i-
3.0-PFV-INDH.S-CL[+D, s,+I]-cook-VAR
'people cooked it'
c.* wudusi.ée
$\emptyset-\ddot{u} u-d u-s i-i-\ddot{y}$
3.0-PFV-INDH.S-CL[-D,s,+I]-cook-vAR

As if to confuse the issue, the opposite is true where the theme has a $\emptyset$ classifier with [ +D ]. If such a theme is conjugated with the indefinite human subject $d u$ - then the classifier must be changed to [-D], meaning that the verb is 'demiddled'. This is inflectional rather than derivational; the verb theme is still the same in all other respects.
(138) a. awdináa
a-ÿu- $\emptyset-d i-n a-\ddot{y}$
3.0-PFV-3.0-CL[+D, Ø, +I]-drink-VAR
'he drank it'
theme: $O-S-C L[+\boldsymbol{D}, \emptyset]-n a(\emptyset ;-h$ Act) 'S drink 0 '
b. wuduwanáa
$\emptyset$-ÿu-du-ÿa-na-ÿ
3.0-PFV-INDH.S-CL[-D, $\emptyset,+1]$-drink-VAR
'people drank it'

## c.* wududináa

Ø-ÿu-du-di-na-ÿ
3.0-PFV-INDH.S-CL[+D, Ø, +I]-drink-VAR

The same effect also happens with [-I] classifiers, where the expected $d a$ - is instead replaced by $\emptyset$-.
(139) a. tléil wudaná
tléil Ø-u-ÿu- $\emptyset$-da-na-'
NEG 3.0-IRR-PFV-3.S-CL[+D, $0,-\mathrm{I}]$-drink-VAR
'he didn't drink it'
b. tléil wuduná
tléil Ø-u-ÿu-du-Ø-na-'
NEG 3.0-IRR-PFV-INDH.S-CL[-D, $\emptyset,-\mathrm{I}]$-drink-VAR
'people didn't drink it'
c.*tléil wududaná
tléil Ø-u-ÿu-du-da-na-'
NEG 3.0-IRR-PFV-INDH.S-CL[+D, $\emptyset,-\mathrm{I}]$-drink-VAR
This does not apply to themes with classifiers of the $s, l$, or sh series.
[[Fixme: Examples.]
Antipassives were discussed in section 8.1 above. The D component has a central role in true antipassivization. In this phenomenon the valency of a theme is reduced by deletion of the object (contrast passivization where a subject is deleted), and in addition the D component switches from [-D] to $[+D]$. This use of the D component is also a form of inflectional middle voice, where again it indicates lowered valency of the theme. The example below of two active imperfectives shows how the first theme is antipassivized to form the second theme containing [ +D ].
(140) a. transitive theme
atéew
a-Ø-Ø-Ø-tiw-:
3.0-ZCNJ-3.S-CL[-D, $\emptyset,-\mathrm{I}]$-read-var
'he is reading it'
theme: $O-S-c L[-D, \emptyset]-$ tiw $_{T S R} \sim t u w_{N}\left(\emptyset ;-:\right.$ Act) 'S read, count $0^{\prime}$
b.* téew

Ø- $\emptyset-\emptyset$-tiw-:
ZCNJ-3.S-CL[-D, $0,-\mathrm{I}]$-read-vAR
'he is reading'
c. antipassivized subject intransitive theme
datéew
Ø-Ø-da-tiw-:
ZCNJ-3.S-CL[+D, $0,-\mathrm{I}]$-read-vAR
'he is reading' theme: $S-c L[+D, \emptyset]-$ tiw $_{T S R} \sim t u w_{N}(\emptyset ;-:$ Act) 'S read, count’

## d.* adatéew

a-Ø-Ø-da-tiw-:
3.0-ZCNJ-3.S-CL[+D, $\emptyset,-\mathrm{I}]$-read-var
'he is reading it'
Arguably this process of reducing the valency of a theme could be considered to be derivational rather than inflectional. This is a typical problem with valency-modifying processes. [[Fixme: Point to some general literature on the problem and leave it unresolved.]]

Inflectional middle voice is not only associated with elements inside the verb. The Indirect middle voice is a type of inflectional middle voice which occurs with obliques that have lowered semantic valency. No syntactic arguments are changed but these arguments are coreferential rather than referencing distinct entities. In the first example below the two arguments are distinct: singular first person and plural third person. In the second example the two arguments are now coreferential, since any element in the set of references for one argument is also an element in the set of references for the other argument.
(141) a. non-middle
ax kaadé has awli.aat
ax ká-dé has=a-ÿu-Ø-li-.at-h
1SG.PSS HSFC-ALL PL=3.0-PFV-3.S-CL[-D,l,+I]-handle.PL-VAR
'they put them (e.g. blankets) on me'
theme: P-dé $0-S-c l[-D, l]-a t(n a ; y o o=[+I]-\ldots-k$ Rep) ‘S handle 0 (pl.) to P’
b. indirect middle
wooch kaadé has awdli.aat
wooch ká-dé has=a-ÿu-Ø-dli-.at-h
RECIP.PSS HSFC-ALL PL=3.0-PFV-3.S-CL[+D,l,+1]-handle.PL-VAR
'they put them on each other'
Thus, although one might make the conclusion that middle voice is a reduction of syntactic valency, this is incorrect. Middle voice does not imply
a reduction of syntactic valency, unlike in many languages where valency and voice are largely inseparable. In Tlingit, a fully transitive theme may be marked for middle voice and yet undergo no reduction in the number of syntactic arguments. The previous examples demonstrate this phenomenon, where the transitive theme $P-d e ́ O-S-c L[-D, l]-a t$ ( $n a ; y o o=C L[+I]-. .-k$ Rep) 'S handle 0 (pl.) toward $\mathrm{P}^{\prime}$ retains all three arguments $\mathrm{S}, \mathrm{O}$, and P even when P is reciprocal and thus [+D] occurs in the classifier.

There are a very few exceptions to inflectional middle voice marking (Story 1966: 89). These can be considered to be thematic irregularities since they are apparently unpredictable and hence must be lexically specified. The example below shows a theme that does not have [ +D ] despite a reciprocal oblique.
(142) wóoshdáx daak yaxwaat'éey
wóosh-dáx daak= $\emptyset-\ddot{y} a-y ̈ u-\underline{x} a-y ̈ a-t ' i y-\ddot{y}$ ?
RECIP-ABL open=3.0-VSFC-PFV-1SG.S-CL[-D, $\emptyset,+\mathrm{I}]$-elbow-vAR
'I elbowed it apart'
(Story 1966: 89)
[[Fixme: This needs to be checked to ensure that it's not just a speech error. But how many people have this obscure verb in their lexica?』

### 9.1.1. DERIVATIONAL MIDDLE VOICE

Many instances of middle voice, and hence [+D], are DERIVATIONAL MIDDLE voice. Whereas inflection involves the selection of arguments and of tense-mood-aspect categories that are added to themes to produce conjugated verbs, derivation instead modifies themes to produce new themes and is mostly independent of inflection. Derivational middle voice is the modification of a theme to produce a new theme that includes [+D] in the classifier. There are several different derivations that involve middle voice marking.

- self-benefactive: $g a-(+8)$ and [+D]
- revertive motion with intransitives
- $\underline{k} u \underline{x}=$ revertive: $\underline{k} u \underline{x}=(+17$ E1), Ø-conjugation class, and [+D]
- when $\underline{k u x}=$ is used with transitive verbs the [+D] does not occur (i.e. [-D])
 and [+D]
- can be more complex motion derivations: kei=a-ÿa-oo$C L[+D, \emptyset]-$ at 'pl. escape on foot'
- this only occurs with subject intransitive verbs
- cooccurring motion: $k a$ - 'HSFC' ( +9 ), [+D], and [s]
- dissimulative: sh- 'RFLX. ${ }^{\prime}$ ( +14 ), $\underline{k}^{\prime} a$ - 'mouth' (+11), [+D], and [l]
- recreational: ash- ‘30Bv.o’ (+14), ka- 'HSFC' (+9), $u$ - 'IRR’ (+7), [+D], [1]?, and -aa 'PLAY' (-2)
- deprivative: [+D] and -ákw 'DEPRV' (-2)
- plural objects: [+D] and $-x^{\prime} \sim-t^{\prime}$ 'PL.o' ( -3 )
- plural comparison: $k a$ - 'HSFC' ( +9 ) or ga- 'GCNJ' ( +7 ), $u$ - 'IRR' ( +6 ), and [+D]
(143) a. transitive
aawaják
a-ÿu-Ø-ÿa-jak-ÿ
3.0-PFV-3.S-CL[-D, Ø, +I]-kill-VAR
'he killed it'
b. transitive with self-benefactive
agawdiják
a-ga-ÿu- $\emptyset-d i-j a k-y ̈$
3.0-SBEN-PFV-3.S-CL[+D, Ø, +I]-kill-vAR
'he killed it for himself'
(144) a. seigánx' gaxtusa.ée
seigán-x’ $\quad$-ga-w-ga-tu-sa-i-:-
tomorrow-LOC 3.0-GCNJ-IRR-GMOD-1PL.S-CL[-D, s,-I]-cook-vAR
'we will cook it tomorrow'
b. seGín-x' $\mathbf{g} \mathbf{g}_{\mathrm{g}} \mathrm{XXtus'í}$
seigánx' gagaxtus.ée
seigán-x’ Ø-ga-ga-w-ga-tu-s-i-:
tomorrow-LOC 3.0-SBEN-GCNJ-IRR-GMOD-1PL.S-CL[+D, S,-I]-cook-vAR
'we will cook it tomorrow for ourselves' (Naish 1966: 123)
(145) a. telic perfective
neil xwaagút
neil-t=u-xa-ÿa-gut-ÿ
home-PNCT=PFV.TEL-1SG.S-CL[-D, Ø, +I]-go.SG-VAR
'I got home'
theme: neil-\{t,, ,dé $\}=S-c L[-D, \emptyset]-$ gut ( $\emptyset ;-$ h Rep Mot) 'S arrive home, come inside'
b. telic perfective with revertive kux $=[+\mathrm{D}]$ - (Ø; -ch Rep)
kux xwadigút
kux=u-xa-di-gut-ÿ
REV=PFV.TEL-1SG.S-CL[+D, $\emptyset,+1]$-go.SG-vAR
'I got back'
theme: $\underline{k} u \underline{x} \sim \underline{k} u \mathcal{X}_{x} d e=S-c l[+D, \emptyset]-g u t(\emptyset ;-c h$ Rep Mot) 'S go back, return’
c. repetitive imperfective
neilx xagoot
neil-x= $=$-xa- - -gut-h
home-PERT=ZCNJ-1SG.S-CL[-D, Ø,-I]-go.SG-VAR
'I go home repeatedly’, 'I keep going home’ theme: neil-\{t,, ,dé $\}=S-c L[-D, \emptyset]-g u t(\emptyset ;-h$ Rep Mot) 'S arrive home, come inside'
d. repetitive imperfective with $\underline{\text { kux }}=[+\mathrm{D}]-$
kúx́de x_adigútch
kúx-dé=Ø-x-xa-di-gut-ch
REV-ALL=ZCNJ-1SG.S-CL[+D, $\emptyset,-\mathrm{I}]$-go.SG-REP
'I go back repeatedly', 'I keep going back' theme: $\underline{k} u \underline{x} \sim \underline{k} u \underline{x} d e=S-c L[+D, \emptyset]-g u t(\emptyset ;$-ch Rep Mot) 'S go back, return’
(146) a. telic perfective
haat uwagút
haa-t=u- $\emptyset-\ddot{y} a-g u t-y ̈$
here-PNCT=PFV.TEL-3.S-CL[-D, Ø, +I]-go.SG-VAR
'he came here'
theme: haa-\{t, $\underline{,}, d e ́\}=S-c L[-D, \emptyset]-g u t(\emptyset ;-h$ Rep Mot) 'S come here’
b. telic perfective with revertive $\mathrm{a}-\mathrm{y} \mathrm{a}-\mathrm{oo}-[+\mathrm{D}]-$
ayawdigút
a-ÿa-u-Ø-di-gut-ÿ
3.0-vSFC-PFV.TEL-3.S-CL[+D, $\emptyset,+\mathrm{I}]$-go.SG-VAR
'he returned'
theme: $a-\bar{y} a-o o-S-c l[+D, \emptyset]-g u t(\emptyset ;-\underline{x}$ Rep Mot) 'S go back, return’
c. repetitive imperfective
haax goot
haa- $x=\emptyset-\emptyset-\emptyset$-gut-h
here-PERT=ZCNJ-3.S-CL[-D, $\emptyset,+\mathrm{II}]$-go.SG-VAR
'he comes here repeatedly', 'he keeps coming here'
theme: haa-\{t, $\underline{,}, d e ́\}=S-c L[-D, \emptyset]-$ gut (Ø; -h Rep Mot) 'S come here’
d. repetitive imperfective with revertive $\mathrm{a}-\mathrm{ya}-\mathrm{oo}-[+\mathrm{D}]-$
ayawdagútch
a-ÿa-oo-Ø-da-gut-ch
3.0-vSFC-IRR-3.S-CL[+D, $\emptyset,+1]$-go.sG-REP
'he returns repeatedly', 'he keeps returning'
theme: $a-y ̈ a-o o-S-c l[+D, \emptyset]-g u t(\emptyset ;$ - $-\underline{\chi}$ Rep Mot) 'S go back, return’
(147) a. atelic perfective
wujixeex
ÿu-Ø-ji-xix-h
PFV-3.s-CL[+D,sh,+I]-run-VAR
'he ran'
theme: $S-c L[+D, s h]-x i x$ (na; yoo=[+I]-...-k Rep Mot) 'S run'
b. atelic perfective with dissimulative sh-k'a-cL[+D,l]-
sh k'awdlixeex
sh-k'a-ÿu-Ø-dli-xix-h
RFLX.O-mouth-PFV-3.S-CL[+D,l,+I]-run-VAR
'he pretended to run'
theme: $\boldsymbol{s h}-\underline{\boldsymbol{k}} \mathbf{\prime} \mathbf{a}-S-c L[+\mathbf{D}, \boldsymbol{I}]-x i x(n a ; y o o=[+I]-\ldots-\mathrm{k}$ Rep Mot) 'S pretend to run’
(148) a. atelic perfective
wudit'aach
ÿu- $\emptyset$-di-t'ach-h
PFV-3.S-CL[+D, Ø,+I]-swim.surface-VAR
'he swam'
theme: $S$-cl[+D, Ø]-t'ach~t'ash ${ }_{S T}$ ( $n a ;-h$ Act) 'S swim (on surface)'
b. active imperfective with recreational ash-ka-u-CL[+D]-...-aa
ash kudat'ájaa
ash-ka-u- $\emptyset$-da-t'ách ${ }^{\times}$-aa
3PRX.O-HSFC-IRR-3.S-CL[+D, $\emptyset,-\mathrm{I}]$-swim.surface-PLAY
'he is swimming for fun'

(Kַeixwnéi Nora Dauenhauer)


### 9.1.2. Thematic middle voice

The D component can be thematic [+D], lexically specified as part of the verb theme. This is not a representation of middle voice in the syntactic sense, since it does not necessarily affect the valency of the theme. Instead, thematic [+D] is a representation of semantic middle voice, indicating
that the theme denotes a situation that involves self-affectedness. This selfaffectedness is not merely a reflexive ' X does X to self' but rather a more general 'be involved in X and be affected by X ' where X is some situation denoted by the verb theme. Thus agent and affected are coreferential, and hence the semantic valency is reduced. The various themes demonstrated below should help elucidate this concept.

Perhaps the most common examples of thematic [+D] are among object intransitives, where the object argument is a patient that experiences some event or state and is somehow affected by it.
(149) a. [+D] object intransitive (telic perfective)
wuditláx a tukdaa

Ø-ÿu-di-tlax-ÿ a túk-daa
3.0-PFV-CL[+D, Ø0,+I]-mold-var 3N.PSS butt-around
'the bottom around it is moldy'
theme: $O-c L[+\boldsymbol{D}, \emptyset]-t l a \underline{x}(\emptyset ;-k w$ Rep Event) ' $O$ be moldy’
(Edwards 2009: 258)
b. [+D] object intransitive with obligatory oblique (atelic perfective)
té x'áakde wdzigeet
té x’áak-dé Ø-ÿu-dzi-git-h
rock between-ALL 3.0-PFV-CL[+D, $\mathrm{s}, \mathrm{+I}]$-fall-vaR
'he fell in the crevice of the rock'
theme: P-dé $O-c L[+D, S]-g i t\left(n a ; y o o=[+I]-\ldots-k\right.$ Rep Mot) ' 0 fall into $\mathrm{P}^{\prime}$
(Edwards 2009: 87)
Object intransitives are not the only examples of thematic [+D], however. Subject intransitives exhibiting thematic [ +D ] are in fact fairly common. The subject argument is of course an agent rather than a patient, and the situation caused by the agent affects the agent.
(150) a. [+D] subject intransitive (atelic habitual)
ts’ootaat áwé a tóo
ts'ootaat á-wé a tú-'
morning FOC-MDST 3N.PSS inside-LOC
yagalxéech
ÿa-ga- $\emptyset-1-x$ xi-ch
vSFC-GCNJ-3.S-CL[+D,l,-I]-overnight-HAB
'it remains alight through to the morning' theme: $\ddot{y} a-S-c L[+\boldsymbol{D}, l]-\underline{x} i(g a ;-$ - Act) 'S remain alight overnight'
(Story \& Naish 1973: 144)
9.1.2. Thematic middle voice
b. $[+D]$ subject intransitive (telic habitual)
keex’é shukát áwé
kee-xِ'é shuká-t á-wé
dawn-mouth ahead-PNCT FOC-MDST
shoodanookch ax léelk'w
sha-u- $\emptyset$-da-nuk-h-ch ax léelk'w
head-IRR-3.S-cL[+D, $\emptyset,-\mathrm{I}]$-mv.vert-vaR-HAB 1SG.PSS grandparent
'my grandfather gets up before dawn'
theme: sha-S-cl[+D,Ø]-nuk (Ø; - $\underline{\underline{x}}$ Rep Event) 'S get up, rise’
(Edwards 2009: 199)
c. [+D] subject intransitive with obligatory oblique (atelic perfective) gandaadagóogu wéit wudikeen gandaadagóogu wé-t ÿu- $\emptyset$-di-kin-h woodpecker ${ }^{2} \quad$ MDST-PNCT PFV-3.S-CL[+D, $\left.\emptyset,+\mathrm{I}\right]$-fly-vaR
'a woodpecker was flying around there'
theme: P-t S-cl[+D, Ø]-kin (na; yoo-[+I]-...-k Rep Mot) 'S fly around P'
(Edwards 2009: 168)
The semantic and morphological boundaries between self-affected and self-unaffected are fuzzy, at least in terms of thematic [+D] marking. Certainly any theme of controlled locomotion could be said to involve selfaffectedness of the agent by the locomotion. Most verbs of locomotion like P-\{t,, , dé $\}$ S-CL[-D, Ø]-gut (Ø; -h Rep Mot) 'S (sg.) arrive at P’ do not feature a thematic [+D] however, so the diagnostic of self-affectedness fails in such instances. As such, thematic [+D] may be indicative of something more specific than self-affectedness, but this remains to be researched.

Some impersonal verbs also have thematic [+D]. These seem to all be weather verbs, but since most impersonal verbs are weather verbs this is not particularly surprising. Both flavours of impersonals occur, those with thematic pronominals and those without (but with the areal $\underline{k} u$-).
(151) a. [+D] impersonal (telic perfective)
koowdigwás'
ku-ÿu-di-gwas'-ÿ
AREAL-PFV-CL[+D, $\emptyset,+\mathrm{I}]$-fog-VAR
'it was foggy'
theme: $\underline{k} u-C L[+\mathbf{D}, \emptyset]-g w a s^{\prime}(\emptyset ;-\underline{x}$ Rep Event) 'be foggy' (Edwards 2009: 99)
2. From gan-daa $\emptyset$-da-gu'k-i 'firewood-around 3.s-cl[+D, Ø,-I]-peck-NMz', cf. O-S-cL[-D, Ø]gu'k (?; -h Act) 'S peck O' (Story \& Naish 1973: 147). The -i suffix is optional.
b．［＋D］impersonal（thematic a－；atelic perfective）
wé kagíttóox yaa ntoo．ádi
wé kagít tú－x ÿaa＝na－tu－Ø－．at－n－ée
MDST dark inside－PERT along＝NCNJ－1PL．S－CL［－D，Ø，－I］－go．PL－VAR－SUB
awdlidées
a－ÿu－dli－di＇s－h
3．0－PFV－CL［＋D，l，＋I］－moon－VAR
＇the moon shone while we went along in the darkness＇
theme：$a-c L[+D, l]$－di＇s（ga；－ch Rep Event）＇moon shine＇（Edwards 2009：70）
c．［ +D ］impersonal（thematic a－；progressive imperfective）
yei andagán
yei＝a－na－da－gan－n
down＝3．0－NCNJ－CL［＋D，Ø，－I］－burn－VAR
＇it＇s getting sunny＇
theme：$a-c L[+\boldsymbol{D}, \emptyset]$－gan（ga；－ch Rep Event）＇sun shine’（Edwards 2009：82）

## 9．1．2．1．TRANSITIVES WITH THEMATIC MIDDLE VOICE

Leer（1991：96）explicitly says that thematic［＋D］only occurs in＇intransi－ tives＇，which in his terms means only object intransitives．The above exam－ ples of subject intransitives and impersonals invalidate this claim．Leer gives only one exception to his claim，namely the transitive theme $0-S-C L[+D, \emptyset]-n a$ （ $\emptyset$ ；－h Act）＇S drink 0 ＇which occurs with thematic［＋D］．This theme is ex－ tremely important for historical reconstruction because the same thematic $[+D]$ occurs in cognate themes found in Eyak and in the Athabaskan lan－ guages．Thus Eyak has a theme $0-S-C L[+\mathbf{D}, \emptyset]-l a$＇S drink 0 ＇where Proto－ Athabaskan－Eyak ${ }^{*} n$ became Eyak $l$［Fixme：cite】．Proto－Athabaskan has a reconstructed theme＊O－S－CL［＋D，Ø］－na：＇S drink O＇［FIXME：cite】，based on examples such as Plains Apache hišdląā＇（de Reuse 2006：257），Carrier asdnai 【FIXME：cite】，Kaska esda：n（Patrick Moore，p．c．），Slave ehdo（Patrick Moore，p．c．），and Tanana asdənun 【Fixme：cite】 which all mean＇I am drink－ ing it＇．Compare Tlingit x $\underset{\text { adinaa＇I am drinking it＇in addition，where the first }}{ }$ person singular subject is $\underset{\chi}{ } a$－versus $s$－or $\check{s}$－in most Athabaskan and $h$－in Slave，Proto－Na－Dene＊\＄－＇1st person singular．＇${ }^{3}$

3．This particular sound is reconstructed separately from the fricative system．For details on the reconstruction of the first person singular fricative＊\＄see Krauss 1977 and Leer 2008.

Despite the importance of this theme for historical reconstruction, Leer's claim that the theme ' S drink 0 ' is the "lone transitive theme" featuring a thematic [+D] (Leer 1991: 96) is incorrect. There are in fact several transitive themes documented by Edwards (2009) which feature thematic [+D]. The following example demonstrates a theme $O-S-C L[+\boldsymbol{D}, s]-\underline{g} a a^{x} \underline{x}^{x}(g a ;$ Act) 'S ask, cry for $0^{\prime}$ which is clearly transitive but also clearly contains [+D].
(152) perfective
atxá daakahídix' gishoo taayí ka k'wát'
atxá daa-ká-hít-ÿí-x' gishoo taay-ÿí k̄a k'wát'
food around-HSFC-house-PSS-LOC pig fat-PSS and egg
awdzigáax
a-ÿu-Ø-dzi-gáax ${ }^{\times}$
3.0-PFV-3.S-CL[+D, s, +I]-cry
'she ordered eggs and bacon at the restaurant'

The possibility that this theme has a thematic $a$ - which is nonreferential can be ruled out since the $a$ - disappears as expected when occurring with other arguments besides the 3-on-3 pattern.
(153) perfective
dáanaa du éex xwadzigáax
dáanaa du=ée-x $\quad \emptyset$-ÿu-xِa-dzi-gáax ${ }^{x}$
money 3H.PSS=BASE-PERT 3.0-PFV-1SG.S-CL[+D, $\mathrm{S}, \mathrm{II}]$-cry
'I asked for money from him'
There are other transitive themes that feature [+D] as well. Edwards (2009:194) offers an alternative perfective form awdziníx' 'he smelled it' with [ +D ] for the theme $O-S-C L[-D, s]-n i x$ ' ( $\emptyset$; -h Act) 'S smell 0 ' that usually has [-D]: awsiníx' 'he smelled it'. This flavour of the theme is confirmed by a pair of Tongass Tlingit example from Leer (1975: 1073).
(154) a. perfective
awdznix' ${ }_{\text {T }}$
a-ÿu- $\emptyset-d z i-n i x^{\prime}-\ddot{y}$
3.0-PFV-3.S-CL[+D, $\mathrm{s},+\mathrm{II}]$-smell-VAR
'he smelled it'
b. future
akgwasneex' ${ }_{T}$
a-ga-w-ga-Ø-s-nix'-:
3.O-GCNJ-IRR-GMOD-3.S-CL[+D, s,-I]-smell-vAR
'he will smell it'
A thematic $a$-cannot be excluded in this case because we lack examples of the theme in other than 3-on-3 conjugations.

Edwards also gives the two themes jee O-S-CL[+D, Ø]-nuk ( $\emptyset$; -h Stv) ‘S feel, touch 0 with hands' and $\underline{x}$ 'éi $0-S-C L[+D, \emptyset]-n u k(\emptyset ;-h$ Stv) 'S taste, sample 0', both of which are based on the root $\sqrt{n u k_{\mathrm{N}}} \sim \sqrt{n i k w_{\text {RST }}}$ 'feel' and which feature thematic [+D]. She does not give examples of these themes, but Story \& Naish (1973: 282) do list them as well, giving the following examples.
(155) a. perfective
tsaa dleeyí ágé xِ'éi yidinúk?
tsaa dleey-ÿí á-gé x'éi Ø-ÿu-i-di-nuk-ÿ
seal meat-PSS FOC-YN mouth 3.0-PFV-2SG.S-CL[+D, $\emptyset,+\mathrm{I}]$-feel-vAR
'have you tasted seal meat?' (Story \& Naish 1973: 224)
b. hortative
xáach jee kadanoogú!
xáa-ch jee $\emptyset$ - $\emptyset$-ga-xa-da-nuk-h-í
1SG-ERG hand 3.0-ZCNJ-GMOD-1SG.S-CL[+D, $\emptyset,-\mathrm{I}]$-feel-var-Hort
'let me feel it!'
(Story \& Naish 1973: 232)
[[Fixme: Reflexive Ø-? Incorporated $\underline{x}^{\prime}$ éi and jee? These must be ruled out for them to be truly transitive with thematic [+D].]]

A very good example of a transitive verb theme with thematic [ +D ] is $O-$ $S-C L[+D, S]-e^{h}(g a ;-? A c t)$ 'S ask for more O'. This was documented by Story \& Naish (1973: 22, 265) as being transitive, and was also noted by Leer (1978: 6) though he did not indicate its transitivity there. Leer (1976: 123/46) documented this same theme with the meaning 'S wish for 0 '. The following examples demonstrate this theme in use.
(156) a. atelic perfective
íxt' awdzi.ei
íx́t' a-ÿu-Ø-dzi-.e-h
shaman 3.0-PFV-3.s-cL[+D,s,+I]-ask.for-vaR
'the shaman asked for more of it'
(Story \& Naish 1973: 22)
b. imperative
xút'aa x'wán gees.ei
xut'aa x'wán Ø-ga-i-s-.e-h
adze be.sure $3.0-\mathrm{GCNJ}-2 \mathrm{SG} . \mathrm{S}-\mathrm{CL}[+\mathrm{D}, \mathrm{s},-\mathrm{I}]$-ask.for-vaR
'be sure to ask for more adzes'
(Story \& Naish 1973: 22)
c. atelic perfective
laxéitl xwadzi.ei
luck Ø-ÿu-xַa-dzi-.e-h
luck 3.0-PFV-1SG.S-CL[+D,s, +I]-ask.for-VAR
'I wished for (more?) luck'
(Leer 1976: 123/46)
The first of these examples has a third person subject noun phrase $\underline{\underline{x} x t} t^{\prime}$ 'shaman' but no third person object phrase. ${ }^{4}$ The verb shows three-on-three marking in the verb, with $a$ - and $\emptyset$ - where $a$ - only occurs either thematically or when there is a $\emptyset$ - third person subject marked. Since this theme does not otherwise occur with a thematic $a$-, that third person object prefix must be indexing an object, and hence the verb must be transitive. The second example has a separate noun phrase, $\underline{x} u t^{t}$ 'aa 'adze', with a second person singular subject marked. The second person singular subject is only marked in imperatives when the classifier has [+D], otherwise the $\emptyset$ - allomorph is used instead. This indicates that the $s$ - in the classifier position is not the reduced $s a-\llbracket$ Fixme: xref $\rrbracket$ but is instead the true CL[+D,s,-I] classifier. The third example has an unquestionable first person singular subject x́a-along with an object noun phrase. None of these examples has any sort of morphology that would suggest some other reason for middle voice marking. The example translations do however suggest some sort of self-affectedness, if only rather vaguely.

Despite their meanings, these three examples confirm that this theme is unquestionably transitive with thematic [ +D ]. Consequently, the claim by Leer (1991: 96) that the theme 'S drink 0 ' is the only transitive theme with thematic [+D] can be discounted.

[^19]
### 9.2. THE $S$ COMPONENT AND TRANSITIVITY

The $S$ component is the heart of the classifier. There are four possible values of the $S$ component, namely $\emptyset, s, l$, and $s h$. A classifier must have one of these four values. The $\emptyset$ value is the most common, followed by $s$ and then by $l$. The sh value is somewhat rare. Leer (1991: 99) calls the S component the 'series' component, in reference to the consonantal series (place of articulation) for each of the fricatives. Although I usually use ' $S$ ' in favour of 'series' because it parallels ' $D$ ' and 'I', I still sometimes find it useful to refer to e.g. the 'l series' of classifiers which is the set $\{l a-, l i-, l-, d l i-\}$. The following examples from Story (1966: 64) show a verb conjugated in four forms across the $s$ series.
(157) a. wutust?í
wutusi.ée
$\emptyset-\ddot{y} u-t u-s i-$ i- $-\ddot{y}$
3.0-PFV-1PL.s-cl[-D,s, +I]-cook-vaR
'we cooked it'
theme: $O-S-C L[-D, S]-. i(\emptyset ;-h A c t)$ 'S cook $0^{\prime}$
b. wutusilìyin
wutusa.eeyéen
Ø-ÿu-tu-sa-i-h-éen
3.0-PFV-1PL.S-CL[-D,s,-I]-cook-VAR-DEC
'we had cooked it'
c. gawtuzt?í
gawtudzi.ée
Ø-ga-ÿu-tu-dzi-.i-ÿ
3.0-SBEN-PFV-1PL.S-CL[+D,s, +I]-cook-VAR
'we cooked it for ourselves'
d. gawtus?ìyin
gawtoos.eeyéen
Ø-ga-ÿu-tu-sa-i-h-éen
3.0-SBEN-PFV-1PL.S-CL[+D,s,-I]-cook-VAR-DEC
'we had cooked it for ourselves'
The values of the $S$ component are mostly lexically specified, but there are some fairly regular alternations between values. These alternations are essential in trying to understand the syntactic and semantic functions of the $S$ component. In many Athabaskan languages there is a fairly regular alternation between Ø in intransitive verbs and $\nmid$ in transitive verbs (Kibrik 1993, 1996). Tlingit shows this as well in some themes, as in the following pair.
(158) a. object intransitive
wook'éi
Ø-ÿu-ÿa-k'é-ÿ
3.0-PFV-CL[-D, Ø,+I]-good-vAR
'it's good'
theme: $0-c l[-D, 0]-k \prime e ́ ~(g a ;-\ddot{y}$ ? Stv) ‘ 0 be good’
b. transitive
awlik'éi
a-ÿu-Ø-li-k'é-ÿ
3.0-PFV-3.S-CL[-D,l,+I]-good-vaR
'he improved it'
theme: $O-S-c l[-D, I]-k$ 'é ( $g a ;--$ ? Act) 'S improve 0'
Another example of transitive $\emptyset \sim l$ alternation in the $S$ component of the classifier is shown in the following examples. The former has the theme P ká-'daak=O-sa-CL[-D, Ø]-ha (Ø; -? Act) 'O remember P’, which is an object intransitive theme that takes the remembered entity as a complex postpositional phrase. The other theme $P$ ká-' daak=O-sa-S-CL[-D,l]-ha (Ø; -? Act) 'S cause 0 to remember $P$ ' exhibits increased transitivity with the addition of a subject argument $S$ that represents the causer, with the 0 and $P$ arguments remaining the same. The switch from $\emptyset$ to $l$ in the $S$ component of the classifier is correlated with the addition of a subject to the theme.
(159) a. a káa daak has seiwaháa
a ká-' daak=has=Ø-sa-ÿu-ÿa-ha-ÿ
3N.PSS HSFC-LOC ADMAR=PL=3.0-voice-PFV-CL[-D, $\emptyset,+\mathrm{I}]$-move.invis-vAR
'they remembered it'
(Story \& Naish 1973: 170)
b. a káa daak xat sawliháa
a ká-' daak=xat-sa-ÿu-Ø-li-ha-ÿ
3N.PSS HSFC-LOC ADMAR=1SG.0-voice-PFV-3.S-CL[-D,l,+I]-move.invis-vAR
'he reminded me'
(Story \& Naish 1973: 170)
Similar patterns of transitivity-related alternation can be found between $\emptyset$ and $s$ as well, usually formed from the causative derivational strings $S$ $C L[s]$ - or $O-C L[s]$-applied to either object or subject intransitives respectively (Leer 1991: 52-53).
(160) a. subject intransitive
xwaanúk
ÿu-xa-ÿa-nuk-ÿ
PFV-1SG.S-CL[-D, $\emptyset,+\mathrm{I}]$-sit.SG-VAR
'I sat down'
theme: $S$-cl[-D, Ø]-nuk (ga; -? Act) 'S (sg.) sit down’
b. causative
xat wusinúk
xat-ÿu-Ø-si-nuk-ÿ
1SG.O-PFV-3.S-CL[-D,s,+I]-sit.SG-VAR
'he made me sit down'
theme: O-S-cL[-D,s]-nuk (ga; -? Act) 'S seat 0 (sg.)'
Unfortunately there are many counterexamples where the alternation is due to some other phenomenon, often the object noun classification system. Such counterexamples are easily found among transitive themes.
(161) a. transitive
aawaxaash
a-ÿu- $\emptyset-\ddot{\text { ÿa-xash-h }}$
3.0-PFV-3.S-CL[-D, Ø, +I]-cut-vaR
'he cut it'
theme: $O-S-c l[-D, \llbracket]$-xash (na; -: Act) 'S cut 0 '
b. transitive
awlixaash
a-ÿu-Ø-li-xash-h
3.0-PFV-3.S-CL[-D,l,+I]-cut-vaR
'he cut it (rope)'
theme: $O-S-c L[-D, I]$-xash ( $n a ;$-: Act) 'S cut 0 (rope-like)’
There are three possible analyses of $S$ component alternation. One is that the $S$ component can regularly alternate between $\emptyset$ and either $s$ or $l$ to switch from intransitive to transitive themes, and that this phenomenon is blocked by the use of the $S$ component in object noun classification. The converse is that object noun classification is the default and is blocked by S component alternation for transitivity. Given that this is historically less supported than the former analysis, it is less plausible. The third analysis is that both are lexical phenomena that are only partly predictable and hence must be largely learned as incomplete generalizations from patterns in the lexicon. In practice this third analysis seems to be what most linguists working on Tlingit
have adopted, but there has not been any serious argumentation for taking any of these three positions.

The argument for unpredictability of $S$ component use in various themes is strengthened by the distribution of non- $\emptyset$ values of $S$ components in intransitive themes. The following four examples documented by Story \& Naish (1973:362) demonstrate object intransitive themes that each have one of the four $S$ component values.
(162) a. uwat'áa

Ø-u-ÿa-t’a-̈̈
3.0-PFV.TEL-CL[-D, Ø, +I]-hot-vAR
'it's hot'
b. wusináa

Ø-ÿu-si-na-ÿ
3.0-PFV-CL[-D, s, +I]-damp-vaR
'it's damp'
c. wulixoon

Ø-ÿu-li-xun-h
3.0-PFV-CL[-D,l,+I]-thin-VAR
'he's thin'
d. wushinék

Ø-ÿu-shi-nek-ÿ
3.0-PFV-CL[-D,sh,+I]-slush-vAR
'it's slushy'
The above examples show that a particular $S$ component value does not necessitate a particular valency, since all are object intransitives.

### 9.2.1. NEGATIVE S COMPONENT ALTERNATION

The $S$ component alternates between $\{\emptyset, s, l\}$ on the one hand and $s h$ on the other in a small class of verbs. This phenomenon, which I call sh-alternation, is often triggered by negation of the clause. This alternation is lexically specified, and does not apply to all verb themes. The following theme $O-C L[-D, \emptyset]-$ k'éi (ga; Stv) 'O be good’ is one theme which undergoes sh-alternation.
(163) a. positive form
yak'éi
Ø-Ø-ÿa-k'éi
3.O-ZCNJ-CL[-D, Ø, +I]-good
'it's good'
theme: $\boldsymbol{O}-c L[-D, \emptyset]-k$ 'éi (ga; Stv) ' 0 be good’
b. negative form
tléil ooshk'é
tléil Ø-u-Ø-sha-k'éi
NEG 3.0-IRR-ZCNJ-CL[-D,sh,-I]-good
'it's not good', 'it's bad'
The negative form of this verb always occurs with sh, even though other irrealis forms of the verb do not occur with sh. The following example shows this, with a dubitative which is also irrealis-marked like a negative, but which does not change to the sh classifier.
(164) dubitative form
gwál yéi ook'é
gwál yéi $=\emptyset-u-\emptyset-k$ 'éi
dub thus=3.0-IRR-CL[-D, $\varnothing,-\mathrm{I}]$-good
'it might be good'
Note that this root $\sqrt{k^{\prime}} e^{i}$ is essentially an invariable root except that it irregularly exhibits shortening of the vowel to $k$ 'é in irrealis forms. This irregularity is independent of the sh-alternation since it happens with all irrealis forms, as seen in the previous example, rather than being restricted to only negative forms.

This sh-alternation sometimes seems to be associated with specific roots rather than specific themes. Another theme based on the same root is $\underline{k} u$ $C L[-D, \emptyset]-k$ 'é (ga?; Stv) 'weather be good' where the areal prefix $k$ k- denotes weather. The positive form has the classifier $\ddot{y} a$ - but the negative form again has the classifier sha- rather than expected $\emptyset$-.
(165) a. positive form
koowak'éi
ku-ÿu-ÿa-k'éi
AREAL-PFV-CL[-D, $\emptyset,+\mathrm{I}]$-good
'the weather is good'
b. negative form
tléil kooshk'é
tléil ku-u-ÿu-sha-k'éi
NEG AREAL-IRR-PFV-CL[-D,sh,-I]-good
'the weather is bad'
A counterexample of $s h$-alternation not being associated with a root is the promiscuous root $\sqrt{ }$ tan which has meanings ranging from 'handle', 'long object lie', and 'think'. The theme yoo=x'a-S-CL[-D, Ø]-tan (o?; -ch Stv) 'S talk, be speaking' based on this root shows $s h$-alternation in the negative form, but this does not occur with other themes.
$\begin{array}{lll}\text { a. i } & \text { ÿat'e' } & \text { yuh x'adwatank } \\ \text { i } & \text { ÿa-t'e-' } & \text { yuh=x'a- } \emptyset-d u-y \text {-ya-tan-k }\end{array}$ 2SG.PSS VSFC-behind-LOC ALT=mouth-ZCNJ-INDH.S-CL[-D, Ø, +II-handle-REP 'people are talking behind your back'
(Leer 1976: 1336)
b. tléil yoo x’eishtánk tléil yoo=x'a-u-Ø-Ø-sha-tan-k
NEG ALT=mouth-IRR-3.S-CL[-D,sh,-I]-handle-REP
'he can't speak'
A particular problem with this pair is that they may not be as much of a pair as they seem. The negation here is not a simple semantic negation, the negative form does not mean 'is not speaking, does not speak' but rather means 'is not capable of speaking'. This points to the possibility that the sh classifier component is not simply a negative marker, but is rather more semantically complex.

It might be supposed that sh-alternation only happens with fairly common vocabulary such as 'be good' and 'talk' as described above, but shalternation is also reported in relatively obscure vocabulary. The following verb theme is $O-C L[-D, s]-t u(g a ;-:-S t v)$ ' 0 be clever, ingenious' based on the root $\sqrt{t u}$ 'clever'.
(167) a. positive form
sitóo
Ø-Ø-si-tu-:
3.0-ZCNJ-CL[-D,s,+I]-clever-vaR
'he's clever, ingenious'
(Leer 1976: 408/167)
b. negative form
tléil ushtú
tléil Ø-u- $\emptyset$-sha-tu-'
NEG 3.0-IRR-ZCNJ-CL[-D,sh,-I]-clever-vAR
'he isn't clever'
(Leer 1976: 408/167)
Curiously, another theme $O-\underline{x}^{\prime} a-C L[-D, s]-t u(g a ;-:$ Stv) ‘O be glib, clever in speech' based on the same root does not exhibit negative sh-alternation in the negative form.
(168) a. positive form
lawyers x’asitóo
lawyers $\emptyset$-x'a- $\varnothing$-si-tu-:
lawyers 3.0-mouth-zCNJ-CL[-D,s,+I]-clever-vaR
'lawyers are glib'
(Story \& Naish 1973: 101)
b. negative form
tleil xِeistu ${ }_{T} \quad \mathrm{~N}$ : tléil xِ'eistú
tleil Ø-xِ'a-u- $\emptyset$-sa-tu-'
NEG 3.0-mouth-IRR-ZCNJ-CL[-D,s,-I]-clever-VAR
'he isn't glib'
(Leer 1975: 1559)
Since the negative form of this verb theme is only attested from the Tongass dialect there may be a difference between the Northern and Tongass dialects in sh-alternation that has not yet been documented. It may also be possible that since $s h$-alternation is not frequent nor productive, it is easily lost in intergenerational transmission.

Negative triggered $s h$-alternation is not the only type of $s h$-alternation. The verb $S$-CL[-D, Ø]-ta ( $n a ;$-h Act) 'S sleep' has an optional alternation in at least the imperative form. The form with sh is used to indicate the speaker's displeasure with the referent of the second person pronominal.
(169) a. normal imperative
natá!
na-Ø-Ø-ta-h
nCNJ-2SG.S-cl[-D, Ø,-I]-sleep-vaR
'sleep!'
b. angry imperative
nashtá!
na-Ø-sha-ta-h
NCNJ-2SG.S-CL[-D,sh,-I]-sleep-VAR
'sleep, dammit!'

Rather than grammatical negativity, this use of negative sh-alternation seems to be associated with affective negativity, i.e. the negative attitude of the speaker. [Fixme: Conventional implicature, cf. Potts.] This phenomenon has yet to be explored thoroughly. It seems to be marginal and is probably not productive for any speakers, though there are one or two other verbs which also exhibit this alternation.

It should be understood that the use of $s h$ in the $S$ component of the classifier is by no means restricted to $s h$-alternation. There are many themes which use $s h$ in an unqualified manner, for example the theme $S-C L[+D, S h]-$ $k^{\prime} e^{\prime} n(g a ;-$ ? Act) 'S jump' or the theme $0-c L[-D, s h]-n e ’ \underline{k}(\emptyset ;$-? Stv) 'O be slushy'.

### 9.3. THE I COMPONENT AND STATIVITY

The [ +I ] value of the I component is generally realized as the presence of a vowel $i$ in the classifier. Thus $\mathrm{CL}[-\mathrm{D}, \mathrm{s},+\mathrm{I}]$ is $s i-$ and $\mathrm{CL}[+\mathrm{d}, \mathrm{l},+\mathrm{I}]$ is dli-. The classifier with the features $C L[-D, \emptyset,+I]$ is a bit unusual because it is realized as $\ddot{y} a$ - ( $y a$ - varying with $w a$ - in $\ddot{y}$-less dialects). The [-I] value is polyphonic, being either a vowel $a$ as in $s a-\mathrm{CL}[-\mathrm{D}, \mathrm{s},-\mathrm{I}]$ or nothing as in $l-\mathrm{CL}[+\mathrm{D}, \mathrm{l},-\mathrm{I}]$.

The I component is never lexically specified. Instead it indexes the 'stateness' of a conjugated verb. In perfectives the I component is [ +I ] when realis, representing the fact that perfectives describe a state of the world. In irrealis perfectives the I component is [-I] because the verb describes a state of the world that does not exist, a non-state. This can be seen clearly in the various imperfectives, where stative imperfectives (plain stative imperfectives, extensional stative imperfectives, and multipositional stative imperfectives) always have $[+\mathrm{I}]$ in their realis forms but non-stative imperfectives (active imperfectives, repetitive imperfectives, and progressive imperfectives) always have $[-\mathrm{I}]$ in their realis forms. This is because stative imperfectives describe a state whereas non-stative imperfectives describe an event or process instead.

The following examples show a stative verb in three different conjugations. [FIxme: Verb theme] The first is the future, which has [-I] for all verbs. The second is the perfective which has [+I] when it is realis, in this case an ordinary non-negative form. The third is an imperfective, which since this verb is stative is necessarily a stative imperfective. As with all stative imperfectives, this has $[+\mathrm{I}]$ in the classifier.
(170) a. future with [-I]
yá táakw kei kugux́sa.áat'
yá táakw kei=ku-ga-w-ga- 0 -sa-.at'-:
PROX winter up=AREAL-GCN-IRR-GMOD-3.S-CL[-D,s,-I]-cold-vAR
'it's going to be cold this winter'
(Story \& Naish 1973: 51)
b. perfective with $[+I]$
kuwsi.áat'
ku-ÿu-Ø-si-.at'-h
AREAL-PFV-3.S-CL[-D,s,+I]-cold-vAR
'it was cold (weather)'
c. stative imperfective with $[+I]$
kusi.áat'
ku-Ø-Ø-si-.at'-:
AREAL-ZCNJ-3.S-CL[-D,s,+I]-cold-vaR
'it's cold (weather)'
Compare the previous forms with the following examples that show a non-stative verb.

### 9.4. MORPHOPHONOLOGICAL PECULIARITIES

The classifiers are subject to some morphophonological changes that result in unusual forms in some situations. A few of these will be documented in this section, though some are better documented in the chapter on prefix morphophonology (ch. 14).

### 9.4.1. CLASSIFIER $A$ VOWEL LOSS

Classifiers of the $s, l$, or sh series will occur as single consonants when they have $[+\mathrm{D}]$ and $[-\mathrm{I}]$, so that the classifier prefix $s$ - surfaces from the features CL[+D,S, -I$], l$ - from CL[+D, $\mathrm{l},-\mathrm{I}]$, and $s h-$ from CL[ $+\mathrm{D}, \mathrm{Sh},-\mathrm{I}]$. But these consonantal forms also result from a morphophonological reduction which occurs with a few preceding prefixes (Leer 1991: 175). When preceded by the perfective $\ddot{y} u$ - or $u$-, the na-conjugation prefix, the irrealis $u$-, the distributive daga, a word initial $g a$ - conjugation prefix or mode prefix, or the third person object prefix $a$-, each without any other non-null prefixes intervening, then the three classifiers $s a-$, $l a$-, and $s h a$ - are all reduced to consonants. Thus both $\mathrm{CL}[+\mathrm{D}, \mathrm{C},-\mathrm{I}]$ and $\mathrm{CL}[-\mathrm{D}, \mathrm{C},-\mathrm{I}]$ patterns can result in $s-, l-$, and $s h$ - forms.
(171) a. yá tléikw tléil ulnúkts
yá tléikw tléil Ø-u-la-núkts ${ }^{\times}$
PROX berry NEG 3.0-IRR-CL[-D,l,-I]-sweet
'this berry is not sweet'
theme: $O-C L[-D, I]-n u ́ k t s^{\times}$(?; Stv) 'O be sweet' (Story \& Naish 1973: 219)
b. yaa nas.íx'

ÿaa=Ø-na- $\emptyset-s a-. i x^{\prime}-n$
along=3.0-NCNJ-3.S-CL[-D, s,-I]-call-vAR
'he's going along sounding (a horn)'
theme: $O-S-c L[-D, s]-. i x^{\prime}(\emptyset ;$ - ? Act) 'S sound 0 (horn, whistle, etc.)’
(Story \& Naish 1973: 202)
c. júx’aa tóot astán du jín
júx́aa tú-t a-Ø-Ø-sa-tan-n du jín
sling inside-PNCT $3.0-\mathrm{ZCNJ}-3 . \mathrm{S}-\mathrm{CL}[-\mathrm{D}, \mathrm{S},-\mathrm{I}]$-handle-var 3 H.PSS arm
'he has his arm lying in a sling'
theme: $P-t ~ O-S-c l[-D, S]-\tan \left(-n\right.$ Pos) 'S have 0 (long) lie at $\mathrm{P}^{\prime}$
(Edwards 2009: 229)
This phenomenon occurs before other prefix contractions described in chapter 14, so that the classifier shape that occurs in the prefix string is $C$ rather than Ca - when prefix contraction is applied.
(172) a. with classifier li-
awlitín
a-ÿu- $\emptyset-l i-t i n-n$
3.0-PFV-3.S-CL[-D,l,+I]-see-vAR
'he watched him'
theme: $O-S-c l[-D, l]-$ tin ( 0 ; $-n$ Act) 'S watch 0 '
b. with classifier la-
tléil awulteen
tléil a-u-ÿu- $\emptyset$-la-tin-h
NEG 3.0-PFV-3.S-CL[-D,l,-I]-see-vaR
'he didn't watch him'
c.* tléil awlateen
tléíl a-u-ÿu-ø-la-tin-h

### 9.4.2. CLASSIFIER I VOWEL LOSS

In Southern Tlingit and to some extent in Tongass Tlingit the $i$ vowel of classifiers is frequently deleted. This is noted in passing by Leer (1991: 180) as rule number ( $13^{\prime} \mathrm{c}$ ) of his prefix morphophonology rules. He states that the $i$ vowel of a classifier is deleted when the classifier occurs as the first syllable of the verb word or when it is preceded by a vowel. He also describes this phenomenon in the introduction to the Tongass Texts collection of texts from Frank Williams Geetwein (Gaanax.ádi) and Emma Williams Kalnaakw (Teikweidí) who were the last two speakers of Tongass Tlingit (Williams, Williams, \& Leer 1978: 16-17). The following examples, constructed from various sources, demonstrate the phenomenon of $i$ vowel loss.
(173) a. Northern Tlingit
héen ax tuwáa sigóo
héen ax tú-ÿá-' $\quad$ - $\emptyset$-si-gu-:
water 1SG.PSS mind-vSFC-LOC 3.O-ZCNJ-CL[-D,S,+I]-enjoy-vAR
'I want water'
b. Southern Tlingit
héèn ax twáà sgóo
héen ax tú-ÿá-' $\emptyset$ - $\emptyset$-si-gu-:
water 1SG.PSS mind-vSFC-LOC 3.0-ZCNJ-CL[-D,s,+I]-enjoy-vAR
'I want water'
c. Tongass Tlingit

| hi'n ax | tuwa' | sigoo |
| :---: | :---: | :---: |
| hi'n ax | tu-ÿa-' | Ø-Ø-si-gu-: |
| water 1sG.Pss | mind-vSFC-Loc | 3.O-ZCNJ-CL[-D, s, +I]-enjoy-var |
| want wat |  |  |

The examples above show the same conjugation of the same verb theme in Northern, Southern, and Tongass Tlingit. The classifier is phonologically verb-initial since the preceding morphemes are all $\emptyset$-. Also note the falling tone on the word héèn which is a regular phenomenon in syllables with a long vowel and high tone that end in sonorants. The reduction of the word tuwáa to twáa is typical [[FIXME: mandatory?] for syllables ending in a short $u$ before another syllable with onset $w$.

This vowel loss is not entirely complete phonetically. In rapid speech they can be hard to detect, but in somewhat slower speech the deleted vowels are still slightly audible or they are devoiced so that a noticeable short
pause between consonant articulations can be heard. Thus although phonemically the form sgóo is /skú:/, it can be heard as [sịkú:] with a breathy vowel, [sikú:] with a voiceless vowel, and [s:kú:] with a lengthened [s], among other pronunciations. This phenomenon obviously needs more investigation, but the precipitously declining population of Southern Tlingit speakers may limit any future work to archived materials.

### 9.4.3. S COMPONENT $S$ SUBSTITUTION

Leer (1991: 99) says that the $s$ value of the $S$ component is the default value in derivations which replace the original $S$ component of a theme. There is a morphophonological restriction on this however, in that the $s$ value cannot occur with a root that begins with an affricate. As such the $s$ value in such derivations will alternate with the $l$ value in themes containing an affricateinitial root.
[[FIXME: Examples.]

### 9.4.4. CLASSIFIER DELETION WITH $D U$ -

[[FIXME: See section 9.1.]]

### 9.4.5. UNUSUAL CONTRACTIONS

There are a few instances where the classifier is contracted with the onset of the root. These are rare and lexicalized, and hence they can be surprising.

The verb theme $S-C L[+D, s h]$-xix (Mot) 'S run' exhibits the unusual contraction of $s h-$ 'CL[ $[\mathrm{D}, \mathrm{sh},-\mathrm{I}]$-' with the onset $x$ of the verb root, producing the sequence sh (Leer 1991: 103). This occurs with any of the motion derivations based on this motion theme where the classifier is not modified. The first example below demonstrates the atelic perfective form of this theme which does not feature the contraction, whereas the second example demonstrates the irrealis atelic perfective with the contraction occurring.
(174) a. atelic perfective
wujixeex
ÿu-Ø-ji-xix-h
PFV-3.s-CL[+D,sh,+I]-run-VAR
'he ran'
theme: $S-c L[+D, s h]-x i x(n a ; y o o=[+I]-\ldots-k$ Rep Mot) 'S run'
b. irrealis atelic perfective
tléil wusheex
tléil u-ÿu-Ø-sh-xix-h
neg IRR-PFV-3.S-CL[+D,Sh,-I]-run-vaR
'he didn't run'
This contraction seems to be universal among Tlingit speakers, and hence it is firmly embedded in the language despite not being regular, nor frequent, nor productive. This very unusual phenomenon in Tlingit is reminiscent of the frequent reduction of classifiers and verb root onsets in Athabaskan languages.

The verb theme $O-C L[-D, l]-t s i n(g a ;-h \mathrm{Stv}$ ) ' O be strong' is litseen in its imperfective form, but in its irrealis form it is ulcheen. This can be seen in the following examples. The reduction of the classifier la- to $l$ - after the irrealis prefix $u$-is a regular phenomenon, see section 9.4.1 for details.
(175) a. imperfective
litseen
Ø- $\emptyset$-li-tsin-h
3.0-ZCNJ-CL[-D,l,+I]-strong-vAR
'it's strong'
theme: O-cL[-D,l]-tsin (ga;-h Stv) ' O be strong'
b. irrealis imperfective
tléil ulcheen
tléil Ø-u- $\emptyset$-la-tsin-h
NEG 3.0-IRR-ZCNJ-CL[-D,l,-I]-strong-vAR
'it's not strong', 'it's weak'
This irregular form seems to be related to the reduction of the classifier, but it is not entirely clear. In any case, this form must be memorized since it is not found for any other verbs with similar phonology. A few speakers do not have this, instead using the predictable form ultseen. This is not a general phenomenon, since other verbs with an initial alveolar affricate do not change to a postalveolar affricate, for example lidzée 'it's difficult' but tléil uldzee 'it's not difficult' and not *tléil uljee.

It is interesting that the two contractions discussed above both are found with irrealis morphology. The reason for this is not clear, but obviously needs further study.

## 10 Stem variation

Stem variation consists of predictable changes of the vowel in a verb root depending on the particular conjugation of the verb. It is one of the most opaque phenomena in the Tlingit verb, yet it is very stable across speakers and dialects and is crucial to distinguishing several different conjugations. Stem variation was first thoroughly described by Leer (1991: 152-157, 160174) though it had been noticed earlier by Boas (1917:25-27) and Story (1966:48-56). Under Leer's analysis, stem variation is accounted for by a set of largely abstract suffixes on the verb root which cause changes in vowel length, tone, and sometimes apophony. ${ }^{1}$ These suffixes are $-n,-\ddot{y},--^{\prime}$, $-h,-^{\prime}$, and $-X$. The last is not a suffix per se, instead standing for the set of duration suffixes in slot -3 : $-k,-\underline{x},-c h,-h,-t,-x^{\prime},-t^{\prime},-s^{\prime}$, and $-l^{\prime}$, all of which have similar morphological and phonological behaviours.

The root together with a stem variation suffix forms the STEM of a verb. It is almost impossible for verb roots to occur without stem variation suffixes, the only exceptions being invariable roots. Hence the root and stem are often conflated when discussing conjugated verbs, but it is nonetheless analytically more sound to consistently distinguish between roots and stems.

Although Leer does represent the stem variation suffixes as what he calls 'stigmatic suffixes' (Leer 1991: 167), he does not typically refer to the stem variation suffixes per se but instead to the stems that they form in combination with roots. Thus where I speak of the stem variation suffix -h in some context, Leer instead refers to the 'fading stem'. This can be confusing when a particular stem does not actually have the feature that Leer has labelled the stem with, e.g. the fading stem of the root $\sqrt{ }$ sha't 'handle quickly' being sha't with a glottalized vowel in Tongass Tlingit rather than the *shaht with a fad-

[^20]ing vowel that is implied by the name 'fading stem'. This is exactly why I refer to the suffixes explicitly rather than the stems that they form, since it is conceptually easier to grasp that a suffix can produce different forms depending on its combination with other elements. Additionally, because Leer's 'stigmata' (vowel phonation types, see chapter 2) do not exist in Northern and Southern Tlingit I have adopted the more dialect-neutral term 'stem variation suffix' rather than his 'stigmatic suffix'.

The realization of stem variation depends not only on the stem variation suffixes, but also on the shapes of the roots. Closed roots and open roots can have quite different realizations with the same stem variation suffix. Although closed roots all have mostly the same realizations of stem variation, there are some minor but predictable differences that require splitting them up into three subtypes: CVC, CVC', and CV'C. ${ }^{2}$ Open roots also show similar minor differences that produce two subtypes: CV and CV ${ }^{\mathrm{h}}{ }^{3}$ The details regarding these subtypes will be covered later.

The complete system of stem variation is given in table 10.1. In this table I use a transcription system that combines the vocalic features of the Tongass and Northern dialects together, similar to the combined transcription used by Leer in his dissertation (Leer 1991). Northern high tone is marked and can be ignored for Tongass. Glottalization and fading in Tongass can be treated as identical to length in Northern. Thus a form CVhC is exactly that in Tongass and is CV:C (low tone) in Northern. However, CV́'C and CV́:C are both $C V V^{\prime} C$ in Northern but are distinct $C V^{\prime} C$ and $C V: C$ in Tongass. The $\breve{V}$ or $\check{V}$ stands for apophony of the vowel which is discussed in the subsections on the relevant stem variation suffixes.

The stem variation suffixes for the most part do not have inherent meanings, but instead serve as additional markers of the modes. Their distribution across the various modes is given in table 10.2. The - $\ddot{y}$ suffix is associated with some of the stative imperfectives as well as the perfectives, and hence may have something to do with stativeness, an issue explored further in section 10.2.

The $-n$ suffix is mostly non-stative although there is one group of stative themes that have imperfectives with -n, namely the handful of themes similar to $O$-sha-ÿa-CL[+D,Ø]-ha (na; -n Stv) 'O be many'. As will be detailed in chapter 12 , the stativeness is from [ +I ] in the classifier of the imperfective.
2. I like to pronounce these as [sivi'si], [sivi's'i], and [si'vi?si].
3. These I usually pronounce as [si'vi] and either [si'vih] or [si'vihə].

| Stem Var. Suffix | Closed roots |  |  | Open roots |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | CVC | CVC' | CV'C | CV | CV ${ }^{\text {h }}$ |
| -n | CV́C | CV́C' | CV́C | CV́:-n | CV́:-n* |
| ```-\ddot{y} habitual -ch otherwise``` | CV́C | CV́C' | CV́C | $\begin{aligned} & \text { CV́:ÿ-ch } \\ & \text { CV́: } \end{aligned}$ | $\begin{aligned} & \text { CV́:ÿ-ch } \\ & \text { CV́: } \end{aligned}$ |
| $-:$ | CV́:C | CV́:C' | CV'S | CV́: | CV́: |
| -h imperative otherwise | CVhC | CV''C' | CV́'C | $\begin{aligned} & \text { CV́ } \\ & \text { CVh } \end{aligned}$ | $\begin{aligned} & \text { CV́ } \\ & \text { CVh } \end{aligned}$ |
| $-X \in\{-k,-\underline{x},-c h,-h$ <br> two suffixes one suffix | $\begin{aligned} & -t,-x^{\prime},- \\ & \text { CV́C-X } \end{aligned}$ | $\begin{aligned} & \left.,-s^{\prime},-l^{\prime}\right\}_{s} \\ & C V C^{\prime}-X \end{aligned}$ | t-3 CV́C-X | $\begin{aligned} & \text { CV́-X-X } \\ & \text { CV́: }:-X \end{aligned}$ | $\begin{aligned} & \text { CV́-X-X } \\ & \text { CV̈h-X } \end{aligned}$ |
| -' (open roots only) no other suffix auxiliary or pro decessive -een other suffixes | hib.-opt <br> th $i \sim e e$ |  |  | CV́ <br> CV́:-... <br> CV́'-een <br> CVh-... | CV́ <br> CV́:-... <br> CV́'-een <br> CVh-... |
| closed plain relative clause otherwise | CVC <br> CV́C | CVC' <br> CV́C' | $\begin{aligned} & \text { CVC } \\ & \text { CV́C } \end{aligned}$ |  |  |
| * Exception: CV ${ }^{\text {h }}$ stems $\sqrt{n i}{ }^{h}$ 'become' and $\sqrt{ } \boldsymbol{y} a^{h}{ }^{h}$ 'resemble' have neen $\sim$ nihn $n_{\mathrm{T}}$ and $\ddot{y} e i n \sim \ddot{y} e h n_{\mathrm{T}}$ instead of *néen~neen $n_{\mathrm{T}}$ and *̈̈́éin $\sim \ddot{y}$ ein $_{\mathrm{T}}$. |  |  |  |  |  |

Table 10.1: Stem variation system (Leer 1991: 168). Stem variation realizations that define the distinct root types are emphasized in bold. Invariable stems are excluded.

| Suffix | Modes |
| :---: | :---: |
| - $\ddot{y}$ | $-\ddot{y}$ stative imperfective, $-\ddot{y}$ extensional stative imperfective, realis telic perfective, some active atelic potentials, telic habitual, some telic imperatives, some hortatives |
| -n | $-n$ active imperfective, $-n$ positional imperfective, progressive, $-n$ stative imperfective, conditional, contingent |
| -: | realis $-:$ active imperfective, realis $-:$ positional imperfective, realis -: stative imperfective, realizational, realis future, admonitive, consecutive |
| -h | irrealis -: active imperfective, irrealis -: positional imperfective, $-h$ active imperfective, $-h$ positional imperfective, irrealis - $h$ stative imperfective, realis - $h$ stative imperfective of $\sqrt{t} i^{h}$ 'be', -h extensional stative imperfective, irrealis telic perfective of closed roots, atelic perfective, irrealis future, most potentials, some telic habituals, most telic imperatives, some hortatives |
| -' | -' active imperfective (open roots only), irrealis $-\ddot{y}$ stative imperfective of open roots, irrealis $-\ddot{y}$ extensional stative imperfective of open roots, irrealis telic perfective of open roots |
| -X | $-k$ repetitive imperfective, $[+I]-\ldots-k$ repetitive imperfective, $y o o=[+I]-. . .-k$ repetitive imperfective, $-\underline{x}$ repetitive imperfective, $-c h$ repetitive imperfective, $-t$ active (repeated) imperfective, $-x^{\prime}$ active (plural) imperfective, $-t^{\prime}$ active (plural) imperfective, $-s^{\prime}$ active (serial) imperfective, $-l^{\prime}$ active (serial) imperfective |

Table 10.2: Distribution of stem variation suffixes across modes.

All the other imperfectives with $-n$ have $[-I]$ and are hence non-stative.
The $-:$ suffix is strongly associated with realis except in the admonitive which includes the irrealis prefix $u$-. The -h suffix is strongly associated with irrealis except for the realis stative imperfective of the root $\sqrt{t i}{ }^{h}$ 'be, exist'. Finally, the -' is also associated with irrealis except for its occurrence in both the realis and irrealis forms of the -' active imperfective. None of these occurrences seems to demonstrate an obvious independent meaning for any of the suffixes, though further research could clarify this situation.

As discussed above, the Northern Tlingit dialect does not feature all of the stem variation distinctions that are found in the Tongass Tlingit dialect. The Northern system is thus somewhat simpler, and I will sketch it for ease of reference here. Linguists should generally attend to the full system as found in Tongass Tlingit, but language learners are better served by focusing on only the Northern stem variation system. For convenience I have given table 10.1 in modified form as table 10.3 which shows the variations that occur in Northern Tlingit only.

There are still differences between roots in Northern Tlingit, but these differences are not as complex as those in the Tongass Tlingit dialect. Thus a CVC root $\sqrt{ }$ gut 'sg. go (by foot)' with the -h stem variation suffix will result in a stem goot, as in the atelic perfective woogoot 'he went'. An ejective-final CVC' root $\sqrt{n u t}$ 'swallow' with - $h$ will have the form nóot' as in the atelic perfective aawanóot' 'he swallowed it', with the final ejective obstruent 'pulling up' the tone, presumably by the spread of a laryngeal feature. Although there are no glottalized vowels in Northern Tlingit, CV'C roots still occur with high tone, thus behaving like the CVC' roots with final ejective obstruents. The CV'C root $\sqrt{n i}$ 'kw 'sick' with -h then has the form néekw as in woonéekw 'he was sick' rather than the *neekw that would be expected if it were a CVC root instead. Edwards (2009) only documents Northern Tlingit with language learners in mind as the primary audience, and as such represents these three closed root types as goot~ (CVC), nóot'~ (CVC'), and néekw~ (CV'C) in her dictionary.

The open roots also both still vary in Northern Tlingit, though again not as much as they do in Tongass Tlingit. A CV ${ }^{\mathrm{h}}$ root $\sqrt{t a^{h}}{ }^{h}$ 'sleep' has a repetitive imperfective with the $-\underline{x}$ repetitive suffix which is one of the $-X$ suffixes that cause apophony. This root $\sqrt{t} a^{h}$ with $-\underline{x}$ is realized as teix with a long apophonized vowel and low tone: teix 'he sleeps repeatedly'. In contrast a CV root $\sqrt{ }$ la 'flow out' with the repetitive suffix - $\underline{x}$ gives a repetitive imperfective with a long apophonized vowel and high tone: laléiex 'it melts'. Edwards

| Stem Var. Suffix | Closed roots |  |  | Open roots |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | CVC | CVC' | CV'C | CV | CV ${ }^{\text {h }}$ |
| -n | CV́C | CV́C' | CV́C | CV̂́-n | CV́s:-n* |
| ```-\ddot{y} habitual -ch otherwise``` | CV́C | CV́C' | CV́C | $\begin{aligned} & \text { CV́:ÿ-ch } \\ & \text { CV́: } \end{aligned}$ | $\begin{aligned} & \text { CV́:ÿ-ch } \\ & \text { CV́: } \end{aligned}$ |
| -: | CV́:C | CV́:C' | CV́:C | CV́: | CV́: |
| -h imperative otherwise | CV:C | CV́:C' | CV́:C | $\begin{aligned} & \text { CV́ } \\ & \text { CV: } \end{aligned}$ | $\begin{aligned} & \text { CV́ } \\ & \text { CV: } \end{aligned}$ |
| $-X \in\{-k,-\underline{x},-c h,$ <br> two suffixes one suffix | $\begin{aligned} & -t,-x^{\prime},- \\ & \text { CV́C-X } \end{aligned}$ | $\begin{aligned} & \left.{ }^{\prime},-s^{\prime},-l^{\prime}\right\}_{\Phi} \\ & C V C^{\prime}-X \end{aligned}$ | t-3 <br> CV́C-X | $\begin{aligned} & \text { CV́-X-X } \\ & \text { CV̂́-X } \end{aligned}$ | $\begin{aligned} & \text { CV́-X-X } \\ & \text { CV̈:-X } \end{aligned}$ |
| -' (open roots on no other suffix auxiliary or pr decessive -een other suffixes | hib.-opt <br> ith $i \sim e e$ |  |  | CV́ <br> CV́:-... <br> CV́:-een <br> CV:-... | CV́ <br> CV́:-... <br> CV́:-een <br> CV:-... |
| closed plain relative clause otherwise | CVC <br> CV́C | CVC' <br> CV́C' | $\begin{aligned} & \text { CVC } \\ & \text { CV́C } \end{aligned}$ |  |  |
| * Exception: $\mathrm{CV}^{\mathrm{h}}$ stems $\sqrt{n i^{h}}$ 'become' and $\sqrt{ } \ddot{y} a^{h}$ 'resemble' have neen and $\ddot{y}$ ein instead of *néen and *ÿéin. |  |  |  |  |  |

Table 10.3: Stem variation system in Northern Tlingit. Stem variation realizations that define the distinct root types are emphasized in bold. Invariable stems are excluded.
(2009) represents the open roots as taa~ (CV ${ }^{\mathrm{h}}$ ) and láa~ (CV). Leer usually gives these as $\mathrm{CV}^{* \prime}$ and $\mathrm{CV}^{* \prime}$ respectively.

### 10.1. NASAL $-N$

There are two stem variation suffixes that have true surface forms, these are $-n$ and $-\ddot{y}$. The $-n$ suffix is the more frequently visible one, hence I will discuss it first. It does not seem to have an easily identified meaning, so I gloss it simply as VAR indicating that it is a stem variation suffix. The -n suffix occurs in progressives, conditionals, contingents, $-n$ active imperfectives, $-n$ positional imperfectives, and with one root where the imperfective forms of the themes are apparently stative. ${ }^{4}$ Probably the most obvious mode where this suffix occurs is the progressive. However, like the conjugation prefix na-, the stem variation suffix - $n$ should not be taken to be inherently progressive in meaning.

The effect of $-n$ on closed roots is to always produce a short vowel with high tone, i.e. $C V C-n \rightarrow C V ́ C$, or just $C V C$ in Tongass Tlingit.
(176) a. yaa anatán

ÿaa=a-na- $\emptyset-\emptyset-\tan -\mathbf{n}$
along $=3.0-\mathrm{NCNJ}-3 . \mathrm{s}-\mathrm{CL}[-\mathrm{D}, ⿹ 勹,-\mathrm{I}]$-handle-var
'he is going along carrying it'
theme: $0-S-c L[-D, \emptyset]-\tan (n a ; M o t)$ ' S handle 0 (wooden?)’
With open roots however, the $-n$ suffix always produces a long vowel with high tone $C V^{\prime}$, or just a long vowel $C V$ : in Tongass Tlingit.
(177) a. yaa anatéen

ÿaa=a-na-Ø-Ø-ti ${ }^{\text {h }}-\mathbf{n}$
along $=3.0-\mathrm{NCNJ}-3 . \mathrm{S}-\mathrm{CL}[-\mathrm{D}, \emptyset,-\mathrm{I}]$-handle-var
'he is going along carrying it'
theme: $0-S-c L[-D, \emptyset]-t i^{h}$ (na; Mot) 'S handle 0 (generic)’
The $-n$ suffix causes apophony in open roots where the vowel is either $a$ or $u$, so that a sequence $C a-n$ becomes Céin and a sequence $C u-n$ becomes Cwéin if the consonant has a corresponding labialized form or otherwise it becomes Céin. All posterior ${ }^{5}$ consonants have a labialized form so that for example $\sqrt{x a}$ 'pour' will have $x a-n \rightarrow x w e ́ i n$. The gamma $\ddot{y}$ usually becomes
4. For details on these and other modes mentioned here, see chapter 12.
5. Recall that 'posterior' means velar and further back.
$w$ in this context, but because there are no roots of the form $* \sqrt{y} u \ldots$ we do not know if a root like $\sqrt{ } \ddot{y} u$ would have $\ddot{y} u-n \rightarrow$ wéin or not. The two glottal consonants. (i.e. $/ \mathrm{R} /$ ) and $h$ are posterior consonants which may or may not have labialized counterparts.$w$ and $h$. The use of these labialized forms is apparently now idiolectal, so for some speakers the root $\sqrt{ }$. $u^{h}$ 'handle clothing, dress' has a stem .u-n appearing as .wéin and for others it occurs only .éin. Having . $w$ and $h w$ as distinct phonemes is probably conservative but is now apparently marginal, and in most places a sound like [ $2^{\mathrm{w}}$ ] only occurs as a predictable phonetic labialization before a round vowel, e.g. óonaa 'gun' being pronounced [?ẃs.na:] but being phonemically just /Rú:na:/. The following examples illustrate a few instances of the $-n$ triggered apophony in roots with $a$ and $u$.
(178) a. telic (Ø conjugation) perfective
aawaxáa
a-ÿu- $\emptyset-\ddot{a} a-\underline{-x} a-\ddot{y}$
3.0-PFV-3.S-CL[-D, Ø, +I]-eat-vaR
'he ate it'
theme: $O-S-c L[-D, \emptyset]-\underline{x} a(0 ;-h$ Act, $-\underline{\underline{x}}$ Rep) 'S eat 0 ' (Leer 1976: 785/453)
b. progressive imperfective
yaa anaxِéin
ÿaa=a-na- $\emptyset-\emptyset-x$-xa-n
along=3.0-NCNJ-3.S-CL[-D, $\emptyset,+\mathrm{II}]$-eat-var
'he is going along eating it'
(Leer 1976: 785/453)
c. atelic (non-Ø conjugation) perfective
ax nák wusihoo
ax nák ÿu- 0 -si-hu-h
1SG.PSS away PFV-3.S-CL[-D,s,+I]-swim-vaR
'it swam away from me' theme: $S$-cl[-D,s]-hu (na?; -? ?) 'S swim on surface, wade’ (Leer 1976:64)
d. progressive imperfective
kéet yaa nas.hwéin
kéet ÿaa=na- $\varnothing$-sa-hu-n
killerwhale ALONG=NCNJ-3.S-CL[-D,S,-I]-swim.sfc-vaR
'a killerwhale is swimming along'
(Leer 1976: 64)
In the last form, the sa-classifier has its vowel deleted following the naprefix as according to the usual rule documented in section 9.4.1. The . does
not represent a glottal stop, but is instead used as a separator so that s.h means /sh/ rather than / $\delta /$ as described in chapter 2.

For open roots the $-n$ always arises as a surface segmental phoneme. In contrast, it only seems to appear in the conditional forms of a few closed roots such as $\sqrt{ }$ gut 'sg. go by foot'. Otherwise the $-n$ suffix is never seen with closed roots.
(179) a. haat uwagút
haa-t=u-Ø-ÿa-gut-ÿ
here-PnCT=PFV.TEL-3.S-cL[-D, Ø, +I]-go.SG-vAR
'he came here'
theme: P-\{t,x,dé $S-C L[-D, \emptyset]-g u t\left(\emptyset ;\right.$-h Rep) 'S (sg.) arrive at $\mathrm{P}^{\prime}$
b. haat gútnee
haa-t=Ø-Ø-Ø-gut-n-ih
here-PNCT=ZCNJ-3.0-CL[-D, Ø,-I]-go.SG-vAR-COND
'if he comes here'
Leer (1991) deals with this problem by offering two allomorphs of the conditional, the -nih and -ih forms with the -n stem variation suffix never surfacing for closed roots and the -nih allomorph being lexically specified. This seems to me to be needlessly complicated. Instead I consider the occasional appearance of $-n$ with closed roots to the lexicon as a purely lexical irregular phenomenon, with no unusual allomorphs necessary.

### 10.2. VELAR APPROXIMANT - $\because$

The $-\ddot{y}$ stem variation suffix is the other stem variation suffix which has a true surface form, but it is generally more obscure. This suffix is actually quite common underlyingly despite its rare surface appearance, occurring in the realis forms of $-\ddot{y}$ stative imperfectives and $-\ddot{y}$ extensional stative imperfectives as well as in realis telic perfectives, some potentials with open roots, most telic habituals, some hortatives, and most telic imperatives. It was probably originally a sort of stative marker given its role in these modes and likely cognates in Eyak [Fixme: Leer p.c., but ヨcite?]. The only place where it still obviously appears in most Tlingit today is in telic habituals of themes that have open roots. In these forms the sequence $C V-\ddot{y}-c h$ is realized as $C V: \neq y ̈ c h$ in Northern Tlingit, with $\ddot{y}$ being either $w$ or $y$ depending on rounding.
(180) a. perfective
dleey xwaaxáa
dleey Ø-ÿu-xa-ÿa-xa-̈̈
meat 3.0-PFV-1SG.S-CL[-D, Ø, +I]-eat-var
'I ate meat'
theme: $O-S-c l[-D, \emptyset]-\underline{x} a(\eta ;-h$ Act) 'S eat 0 '
b. telic habitual
dleey xwaxáaych

meat 3.0 -IRR-ZCNJ-1SG.S-CL[-D, $\varnothing,-\mathrm{I}]$-eat-var-HAB
'I always eat meat'
There are a few roots where the $-\ddot{y}$ stem variation suffix seems to have been reanalyzed as part of the root's coda. A good example of this is the root $\sqrt{ }$. $u$ 'own, possess' which has the counterpart $\sqrt{ }$.uw $\sim \sqrt{ }$. 'buy' where the $w$ may be originally from the stem variation suffix $-\ddot{y}$. The latter root behaves like a closed root when it occurs with the final $w$, taking the typical $C V C-\ddot{y}$ $\rightarrow C V ́ C$ form, whereas the open root instead has the form $C V-\ddot{y} \rightarrow C V V^{\prime}$ that is predictable for other similar open roots. These two roots are illustrated below.
(181) a. -ÿ stative intransitive

Dzantik'i Héeni áwé aya.óo
dzánti-k'i héen-ÿí á-wé a-Ø-Ø-ÿa-.u-̈̈
flounder-base river-PSS FOC-MDST $3.0-\mathrm{ZCNJ}-3 . S-\mathrm{CL}[-\mathrm{d}, \emptyset,+\mathrm{I}]$-own-vaR
'he owns Gold Creek'
theme: $O-S-c l[-D, \emptyset]-u$ ( $n a ;-y \ddot{S t v)}$ 'S own, possess $0^{\prime} \quad$ (Leer 1976: 142)
b. telic perfective also with $-\ddot{y}$
yax ayawsi.úw
ÿax=a-ÿa-ÿu-Ø-si-.uw-̈̈
CPLV=3.0-VSFC-PFV-3.S-CL[-D, s, +I]-buy-vaR
'he bought them all'
theme: $\ddot{y} a \underline{x}=O-\ddot{y} a-S-c L[-D, s]-u w(0 ;-\ddot{y}$ ? Stv) 'S buy 0 completely'
(Leer 1976: 151/57)
The example with $\sqrt{ } . u$ demonstrates that it is a typical open root, taking the predictable form .óo in combination with the -ÿ suffix. The example with $\sqrt{ }$.uw shows that it is a closed root, taking the predictable form .úw in combination with the $-\ddot{y}$ suffix. Thus although these two roots were probably identical originally, the latter is now acting like a typical closed root rather
than an open one, and the $-\ddot{y}$ has been reanalyzed as $w$ in the coda of the root rather than an independent suffix, with a new $-\ddot{y}$ added through the stem variation system.

### 10.3. Long -: And CV'C Roots

The other three stem variation suffixes -,$--h$, and -' are essentially notional in that they are never realized as segments in most Tlingit dialects. The $-:$ suffix (Leer's - -) is realized mostly as a long vowel in Tongass Tlingit and always as a long vowel with high tone in Northern Tlingit. It occurs in the realis forms of the $-:$ active, $-:$ positional, and $-:$ stative imperfectives, in the realizational, the realis future, the admonitive, and the consecutive. Its meaning is obscure, occuring in both realis and irrealis (the admonitive mode is irrealis with $u$-) conjugations, as well as in active, stative, and positional imperfectives.

Although in Northern Tlingit the $-:$ stem variation suffix always results in long vowels with high tone, in Tongass Tlingit there is one exception which is crucial to the division between the three types of closed roots. Both CVC and CVC' roots in Tongass Tlingit have the form $C V C^{(1)}-: \rightarrow C V: C^{(1)}$, in parallel with the Northern Tlingit form $C V C^{(1)}-{ }_{-2} \rightarrow C V^{\prime}: C^{(1)}$. But CV'C roots in Tongass Tlingit have the form $C V^{\prime} C-: \rightarrow C V^{\prime} C$ instead, whereas Northern Tlingit has $C V^{\prime} C-: \rightarrow C V ́: C$.

The following examples illustrate this difference by giving realis future conjugations of the same verb themes in the two dialects (from Leer 1991: 163-164). The first pair below show a CVC root $\sqrt{ }$.at 'handle pl.', where the Tongass form has the long vowel $a a$ in the stem and the Northern form has the long high-tone vowel áa in the stem.
(182) a. Tongass
keh kwkala.aat
keh=Ø-ga-w-ga-xa-la-.at-:
up $=3.0-\mathrm{GCNJ}-\mathrm{IRR}-\mathrm{GMOD}-1 \mathrm{SG} . S-\mathrm{CL}[-\mathrm{D}, \mathrm{l},-\mathrm{I}]$-handle.PL-VAR
'I will pick them up' theme: keh=O-S-cL[-D,l]-.at ( $\emptyset$; -ch Act) 'S pick up 0 (pl.)'

## b. Northern

kei kwkala.áat
kei=Ø-ga-w-ga-xa-la-.at-:
up $=3.0-\mathrm{GCNJ}-\mathrm{IRR}$-GMOD-1SG.S-CL[-D,l,-I]-handle.PL-VAR
'I will pick them up'
theme: kei=O-S-cl[-D,l]-at ( 0 ; -ch Act) 'S pick up 0 (pl.)’
The next pair show a CV'C root $\sqrt{ }$ sha't 'handle quickly'. The Tongass Tlingit form has the glottalized vowel $a^{\prime}$ in the stem, which is different from the previous example. In contrast the Northern Tlingit form has the long hightone vowel áa in the stem, just as in the previous example.
(183) a. Tongass
keh kwkasha't
keh= $\emptyset$-ga-w-ga-xa- $\emptyset$-sha't-:
up $=3.0-\mathrm{GCNJ}$-IRR-GMOD-1SG.S-CL[-D, Ø,--I]-handle.quickly-vAR
'I will snatch it up'
theme: keh=O-S-cL[-D,Ø]-sha't (Ø; -ch Act) 'S pick up 0 quickly'
b. kei kwkasháat
kei=Ø-ga-w-ga-xa- $\emptyset$-sha't-:
up $=3.0-\mathrm{GCNJ}-\mathrm{IRR}$-GMOD-1SG.S-CL[-D, $\emptyset,-\mathrm{I}]$-handle.quickly-vAR
'I will snatch it up'
theme: kei=O-S-cL[-D, Ø]-sha’t ( $\varnothing$; -ch Act) 'S pick up 0 quickly’
Both of these roots, $\sqrt{ }$.at and $\sqrt{ }$ sha't, have short vowels in the perfective: Tongass keh $\underline{x} w l i . a t$ and Northern kei $\underline{x} w l i . a ́ t$ 'I picked them up', and Tongass keh x́wahshat and Northern kei x́waashát 'I snatched it up'. This makes it clear that the glottalization shown in the root $\sqrt{s h a}$ ' is not present in every stem, but is instead a feature of the root that appears when the root occurs with the - $h$ stem variation suffix.

For Northern Tlingit the distinction between CVC' roots and CV'C roots is irrelevant at least with -h as shown above, but for Tongass this distinction is significant for stem variation. There is as far as I am aware no other justification for treating CV'C roots separately, so this occurrence of ' with -: stem variation is the precise method for distinguishing CV'C roots from the other types. Obviously Edwards (2009) does not consider this root type at all in her treatment of stem variation since there is no distinction in Northern Tlingit. I am unaware if the Southern Tlingit dialects maintain this distinction.

### 10.4. FADING -H AND CVC ROOTS

The fading suffix - $h$ is another mostly notional stem variation suffix. It is associated with two non-stative imperfective types and one extensional stative imperfective as well as with atelic perfectives, potentials, most imperatives, and many different irrealis forms. It has a few different realizations in all the dialects. The one realization that gives it its name is distinct in both Tongass and Northern Tlingit. This is the effect on CVC roots in contrast with CVC' and CV'C roots.

For Northern Tlingit the CVC' roots have the form $C V C^{\prime}-h \rightarrow C V_{:} C$, and $C V^{\prime} C$ roots similarly have the form $C V^{\prime} C-h \rightarrow C$ V́ $C$. In contrast, unmarked CVC roots have a different form $C V C-h \rightarrow C V: C$ where the result has a long vowel but low tone rather than high tone.

Tongass Tlingit is the reason why this stem variation is designated with a fading vowel symbol, which is Leer's -' or -' and which is -h in my representation. CVC' roots and CV'C roots with -h have an identical surface form of stem vowels in a manner similar to Northern Tlingit, thus $C V^{\prime} C-h \rightarrow C V^{\prime} C$ and $C V C^{\prime}-h \rightarrow C V^{\prime} C^{\prime}$, where the resulting stem for both has a glottalized vowel. In contrast, CVC roots have a fading vowel rather than a glottalized vowel, so CVC-h $\rightarrow$ CVhC.

Thus both Tongass and Northern Tlingit demonstrate the necessity for a division of closed roots with CVC on the one hand and CVC' and CV'C on the other. As noted earlier, Northern Tlingit does not make a distinction between CVC' roots and CV'C roots so these two classes can be lumped together in opposition to CVC roots. In contrast, Tongass maintains a distinction between all three classes.

Open roots with the $-h$ stem variation suffix are realized in two ways. Nearly all modes have open roots with $-h$ arising as $C V$ in Northern Tlingit or $C V$ in Tongass Tlingit. In imperatives, where $-h$ occurs in some telic imperatives and all atelic imperatives, open roots with $-h$ are instead found with the stem shapes $C V h$ with a fading vowel in Tongass Tlingit and CV: with a long vowel and low tone in Northern Tlingit.

### 10.5. GLOTTALIZED - ' AND OPEN ROOTS

The glottalized stem variation suffix -' is restricted to open roots. It surfaces in Tongass Tlingit when a root occurs with a following decessive suffix -ihn ${ }_{\mathrm{T}}$,
so that the shape is $C V^{\prime}$ 'yilnn.
(184) a. has gax sati
has=gax- $\emptyset-\emptyset-$-sa-ti-'
PL=cry-ZCNJ-3.s-CL[-D, S,-I]-handle-var
'they are crying'
(Leer 1991: 174)
b. has gax sati'ÿihn
has=gax- $\emptyset-\emptyset-$-sa-ti- - -ihn
PL=cry-zCNJ-3.S-CL[-D,S,-I]-handle-vaR-DEC
'they had been crying'
(Leer 1991: 174)
In other dialects the -' stem varation suffix is purely notional since glottalized vowels are not phonemic. The following examples of Northern Tlingit demonstrate this difference.
(185) a. has gax satí
has=gax- $\varnothing$ - $\varnothing$-sa-ti-'
PL=cry-ZCNJ-3.s-CL[-D, S,-I]-handle-var
'they are crying'
b. has gax satéeyeen
has=gax- $\emptyset-\emptyset-$ sa-ti-'-éen
PL=cry-ZCNJ-3.S-CL[-D,S,-I]-handle-vaR-DEC
'they had been crying'
c. xaxá

Ø-Ø-хха-Ø-хха-'
3.0-ZCNJ-1SG.S-CL[-D, Ø,-I]-eat-var
'I eat it'
d. xaxáayeen

Ø-Ø-хха-Ø-хха-'-éen
3.0-ZCNJ-1SG.S-CL[-D, Ø,-I]-eat-var-DEC
'I had been eating it'

### 10.6. DURATION SUFFIXES - $X$

The duration suffixes are a set of suffixes in slot -3 which all share the same stem variation pattern. The suffixes are the three repetitive suffixes $-k,-\underline{x}$, and -ch which are used for various repetitive imperfectives depending on a theme's conjugation class, and the suffixes $-h,-t,-x^{\prime},-t^{\prime},-s^{\prime}$, and $-l^{\prime}$ which are
all derivational suffixes that provide either secondary imperfectives or new themes. They are represented by the abstract stem variation suffix - $X$ where $X$ stands for an obstruent.

All the duration suffixes have the same stem variation, with closed roots arising as CVC in Tongass Tlingit and CV́C in Northern and Southern Tlingit. Open roots behave differently depending on whether they occur with one suffix (most of the duration suffixes) or with two suffixes. With one suffix the vowel of an open root will undergo apophony similar to that found with the $-n$ stem variation suffix, but with CV roots occurring as long with high tone $C \dot{V}$ : in Northern and Southern Tlingit and simply long $C \ddot{V}$ : in Tongass Tlingit, and with $C V^{\mathrm{h}}$ roots occurring as long with low tone $C V_{V}$ in Northern and Southern or a fading vowel CV̈h in Tongass Tlingit. With two suffixes ${ }^{6}$ the open roots do not undergo apophony, instead occurring with short vowels in all dialects and with high tone in Northern and Southern Tlingit. The effect is that two duration suffixes makes the root surface as though it were a closed root rather than an open one.

Since each of the duration suffixes has a distinct meaning and a distinct distribution across themes, I will discuss each separately below.

### 10.6.1. REPETITIVE - $K$ SUFFIX

The $-k$ suffix denotes a "series of actions involving repeated contact with a back-and-forth motion" (Leer 1991: 245). In combination with [+I] in the classifier, it denotes a "series of back and forth actions", with the pair together occurring "only with a few themes" (Leer 1991: 245). This suffix also occurs with the $y o o=[+I]-\ldots-k$ repetitive and active imperfectives which are discussed in section 12.1.

The $-k$ suffix has a rounded form predictably after roots which have the round vowel $u$ or a labialized consonant $C^{w}$. Note that this occurs regardless of whether the root is open or closed, meaning that for closed roots the labialization spreads across the coda even if the coda consonant cannot be labialized itself.
6. Only two pairs of duration suffixes occur together, $-k w-t$ and $\underline{x} w-x^{\prime}$. For these see sections 10.6 .1 and 10.6 .2 respectively.
(186) a. yoo=[+1]-...-k repetitive imperfective

```
yoo yagútkw
yoo=\emptyset-\emptyset-ÿa-gut-k
ALT=ZCNJ-3.S-CL[-D,\emptyset,+I]-go.SG-REP
'he goes repeatedly'
        theme: S-CL[-D,Ø]-gut (na; yoo=[+I]-...-k Rep Mot) 'S (sg.) go'
```

(Story 1966: 57)
Rounding applies before the vowel undergoes apophony, as the following form demonstrates. This root $\sqrt{g} u$ irregularly becomes géikw instead of the expected *gwéikw (Leer 1991: 153), but this has no effect on the rounding of the suffix. In other modes which have apophony the more usual form occurs.
(187) a. atelic perfective
s'ísaa teen aax xwaligoo
s'ísaa teen á-dáx $\emptyset$-ÿu-xַa-li-gu-h
cloth-INSTR 3 N -ABL 3.0-PFV-1SG.S-CL[-d,l,+I]-wipe-vAR
'I wiped it off with a cloth'
theme: O-S-cL[-D,l]-gu (ga; -k Act) ‘S wipe 0’ (Story \& Naish 1973: 248)
b. -k active imperfective
algéikw
a- $\varnothing$ - $\emptyset-l a-g u-k ~$
3.0-ZCNJ-3.S-CL[-d,l,-I]-wipe-REP
'he's wiping it'
c. progressive imperfective
t'áa ká yaa analgwéin
t'áa ká ÿaa=a-na-Ø-la-gu-n
floor HSFC along=3.0-NCNJ-3.S-CL[-D,l,-I]-wipe-vAR
'he's going along wiping the floor' (Story \& Naish 1973: 248)
There are also a few verb roots where the $-k$ suffix occurs in its rounded form even though there does not appear to be a phonological justification. These are treated as lexicalized.
(188) a. yoo yadidlákkw
yoo=ÿa- $\emptyset-\emptyset-d i-d l a k-k$
ALT=VSFC-ZCNJ-3.S-CL[+D, Ø,--I]-gain-REP
'he keeps making money'
theme: $\ddot{y} a-S-c l[+D, \emptyset]-d l a \underline{k}(n a ;-$ ? Act; -kw Rep) 'S make money'
(Story 1966: 104)

In combination with the $-t$ suffix (see section 10.6.4) the $-k$ suffix also occurs in its rounded form. This combination only occurs in motion themes with open roots which are derived to produce $-k$ multipositional statives [ [Fixme: section ??] as documented by Leer (1991: 153, 328), thus sequences of -kw-t. For closed roots only the ordinary - $k$ suffix occurs, with predictable rounding as appropriate.
(189) a. multipositional stative with closed root
áx nali.átk
á-x $\quad$ - $\quad$-na-li-.at-k
3N-PERT 3.0-NCNJ-CL[-D, Ø,+I]-go.PL-REP-REP
'they lie here and there along it'
theme: $O-c L[-D, l]-a t\left(n a ;-k\right.$ MPos Mot) ' 0 (inanim.) lie multiply along $\mathrm{P}^{\prime}$
(Leer 1991: 329)
b. multipositional stative with open root
áx naadákwt
á-x $\quad \emptyset$-na-ÿa-da-k-t
3N-PERT 3.0-NCNJ-CL[-D, $\emptyset,+1]$-flow-REP-REP
'they (water bodies) lie here and there along it'
theme: $P-\underline{x} O-c L[-D, \emptyset]-d a\left(n a ;-k\right.$ MPos Mot) ' O (water) lie multiply along $\mathrm{P}^{\prime}$
(Leer 1991: 328)

### 10.6.2. REPETITIVE -XX SUFFIX

The - $\underline{x}$ suffix denotes an "action leading to transformation from one state to another" (Leer 1991: 245). It is the usual suffix for repetitive imperfectives of causatives as described in section 8.1.
[[Fixme: boiling, steaming, soaking, freezing, thawing, removing contents, shaping, growing】

Story (1966: 57, 104) calls this suffix the 'habitual' suffix.
(190) active imperfective with -x
cháas' dush.útlx
cháas' Ø-ø-du-sha-.utl-x
humpy 3.0-ZCNJ-INDH.S-CL[-D,sh,-I]-boil-REP
'people boil humpies' ${ }^{7}$
theme: $O-S-c L[-D, S h]-u t l(? ;$-x Act) 'S boil 0 (fish)' (Story \& Naish 1973: 33)
7. 'Humpy salmon', also known as 'pink salmon' locally, are Oncorhynchus gorbuscha (Walbaum 1792).
(191) active imperfective with -x
kaxwéix kadulnálx
kaxwéix $\quad$-ka-Ø-du-la-nal-x
highbush.cranberry 3.0-HSFC-INDH.S-CL[-D,l,-I]-steam-vaR
'people steam highbush cranberries' ${ }^{8}$
theme: $0-k a-S-c l[-D, l]-$ nal (?; - $\underline{\chi} A c t$ ) 'S steam 0 (esp. berries)'
(Story \& Naish 1973: 211)

### 10.6.3. Repetitive -CH SUFFIX

The -ch suffix is a repetitive suffix which is limited to a few themes. It occurs in the repetitive imperfectives of a small number of $\emptyset$-conjugation class motion derivations with various directional preverbs, for which see 11.1.1. It also occurs in the repetitive imperfectives of the $g a$ - and $g a$-conjugation class motion derivations as discussed in section 11.1.2.

Story (1966: 57, 103) treats this suffix as identical to the habitual -ch suffix, which in her terms is the 'frequentative'. Leer (1991: ??) however distinguishes the -ch suffix of repetitive imperfectives from the -ch suffix of habituals. He puts the habitual suffix together with the the conditional -nee and contingent -ín suffixes, and puts the repetitive -ch suffix together with the other duration suffixes that cause stem variation. Since the $-\ddot{y}$ suffix actually surfaces with open roots in habituals, the habitual -ch suffix is not directly associated with stem variation, in contrast with the repetitive -ch suffix. An additional distinction between the two is that the repetitive -ch suffix causes apophony like the other $-X$ duration suffixes whereas the habitual -ch suffix does not cause apophony.

### 10.6.4. REPETITIVE -T SUFFIX

The $-t$ suffix denotes a "series of discrete actions involving repeated contact which is instantaneous and usually violent" (Leer 1991: 245). [[Fixme: hitting, shooting, poking, cutting to pieces]]
8. The highbush cranberry is Viburnum trilobum (Marshall), also treated as V. opulus subsp. trilobum ((Marshall) Clausen).

### 10.6.5. Plural - $X^{\prime}$ SUfFIX

The $-x^{\prime}$ suffix is obviously related to the nominal plural suffix of the same shape. On verbs this suffix denotes an "action involving the movement or transformation of multiple discrete entities" (Leer 1991: 245).

### 10.6.6. PLURAL -T' SUFFIX

The $-t$ ' suffix is another plural-like suffix found on some imperfectives. As (Leer 1991: 245) describes it, the $-t$ ' suffix "denotes [an] action leading to [the] destruction of discrete multiple entities". [[Fixme: burn, die]]

### 10.6.7. SERIAL -S' SUFFIX

The -s' suffix denotes a "series of actions involving repeated contact with [a] cumulative result" (Leer 1991: 245).
[[Fixme: sew, rub, feel, shake, knock, encourage, advise]]
(192) a. telic perfective
wudiwóo
ÿu- $\emptyset$-di-wu-ÿ
PFV-3.S-CL[+D, $\emptyset,+\mathrm{I}]$-lunch-vaR
'he took lunch along'
theme: $S-c L[+D, \emptyset]-w u\left(\emptyset ;-s^{\prime} A c t\right)$ 'S take along lunch’
b. imperfective with -s '
dawéis'
Ø-Ø-da-wu-s'
ZCNJ-3.S-CL[+D, Ø,--I]-lunch-SER
'he takes lunch along'
c. noun
wóow daakéit
wóow daa-ká-.át
lunch around-hSFC-thing
'lunch container'
(193) a. future
l'oowú kélaa kookalanéis'
l'oow-ÿí kélaa Ø-ka-ga-w-ga-xa-la-nes'-:
wood-PSS platter 3.0-HSFC-GCNJ-IRR-GMOD-1SG.S-CL[-D,I,-I]-oil-vaR
'I'm going to oil the wooden platter'
theme: O-ka-S-cl[-D, Ø]-nes’ (0; -? Act) 'S oil 0’ (Story \& Naish 1973: 141)
b. future
at doogú kookalanáa
at dook-ÿú Ø-ka-ga-w-ga-xa-la-na-:
INDH.PSS skin-PSS 3.O-HSFC-GCNJ-GMOD-1SG.S-CL[-D,l,-I]-oil-VAR
'I'm going to oil the (thing's) skin'
theme: O-ka-S-cl[-D, Ø]-na ( $\varnothing$; -s' Act) 'S oil 0’ (Story \& Naish 1973: 141)
c. imperfective with -s '
akalanehs' ${ }_{\text {T }}$
a-ka-Ø-la-na-s'
3.0-HSFC-3.S-CL[-D,l,-I]-oil-SER
'he's oiling it'
(Leer 1975: 900)
d. independent noun
nehs' ${ }_{T}$
neis' $_{N}$
'oil, liniment'
(Leer 1975: 902)
e. noun compound
yaneis'í
ÿa-neis'-ÿ́
face-oil-PSS
'deer tallow', used on face as ointment

### 10.6.8. SERIAL -L' SUFFIX

The $-l$ ' suffix is reported as occurring with only one theme: $O-k a-S-C L[-D, l]-$ xakw ( $0 ;-l$ ' Act) 'S grind 0 '. The $-l$ ' suffix is probably a variant of $-s$ ' but this has yet to be explored. It only occurs in the imperfective form of this theme.
(194) a. active imperfective with -l'
dleey aklaxákwl'
dleey a-ka-Ø-Ø-la-xakw-l'
meat 3.0-HSFC-ZCNJ-3.S-CL[-D, Ø,--I]-grind-SER
'he is grinding meat'
theme: $0-k a-S-c l[-D, l]$-xakw ( $\emptyset ;-1$ l' Act) 'S grind 0’
(Story \& Naish 1973: 102)
b. perfective
akawlixákw
a-ka-ÿu-ø-li-xakw-ÿ
3.0-HSFC-PFV-3.s-CL[-D,l,+1]-grind-vAR
'he ground it'
(Leer 1976: 616/310)
This particular root has been nominalized twice, producing two unique nouns. One is kaxágwaa 'pestle, grinder' which is formed with the instrumentalizing suffix -aa, compare t'áax'aa 'biter, mosquito' from $\sqrt{t}$ 'ax' 'bite'. The other is the more opaque xákwl'ee 'soapberry'9 ${ }^{9}$ which is apparently derived from the imperfective form of an unattested theme * $O-S-C L[-D, I]-x a k w$ ( $\emptyset$; $-l^{\prime}$ Act) 'S grind 0 ’ since it includes the $-l$ ' suffix and lacks $k a$-.

The somewhat obscure word yadzánl' 'bumpy, ugly (pock-marked?) face' may also include the -l' suffix. This is not however a verb, as can be seen in the following example where it is possessed like an ordinary alienable noun.
(195) imperative
du yadzánl’i latín
du ÿá-dzánl'-ÿí Ø-Ø-Ø-la-tin-ÿ
3H.PSS face-??-PSS 3.0-ZCNJ-2SG.S-CL[-d,l,-I]-see-vAR
'look at his ugly face'
theme: O-S-cL[-D,l]-tin (0;-n Act) 'S look at, see O'
It is unclear what dzánl' alone means, but if -l' were indeed a separate suffix then we could posit the underlying root $\sqrt{d z a n}$. What semantic contribution -l' would have in this case is unknown. This may be related to dzánti 'flounder,' ${ }^{10}$ but if so then the relationship is not obvious.

[^21]
### 10.7. CLOSED ROOTS WITH NO SUFFIX

[[FIXME: Not invariable roots. I only know these when they occur in relative clauses, but Leer (1991) implies in various places that variable closed roots can occur without stem variation or other suffixes. I don't think that this applies to - $\emptyset$ relatives because these normally seem to have some sort of stem variation, e.g. aadé góot káa 'the man who goes there'. Need to learn more about this.]

### 10.8. INVARIABLE ROOTS

Invariable roots do not exhibit stem variation by definition. This causes an analytical problem for stem variation because it is then impossible to say what stem variation suffixes occur with a particular root in any modes that have more than one possible stem variation suffix.

With invariable roots it is impossible to say which particular imperfective type is used for a given theme. Although the general theme category can be determined from semantics, the specific stem variation cannot.

In the example above, the verb ashigóok is clearly an imperfective since it has no distinct mode prefixes. It also has [+I] in the classifier, meaning that it cannot be any of the active, repetitive, positional, or progressive imperfectives. ${ }^{11}$ It must then be a stative imperfective, but whether it is a $-:$ stative or a $-\ddot{y}$ stative cannot be determined since in this mode these two suffixes never surface hence they can only be distinguished by changes in the root vowel. Because of this peculiar analytical problem, invariable roots are assigned their own type of imperfectives, namely the stative with invariable

[^22]root type. 【[FIXME: Check with Jeff to ensure that there aren't any non-stative imperfectives with invariable roots. He probably said this in his dissertation somewhere.[] Thus the previous example is more normally segmented as $a$ $\emptyset$ - $\emptyset$-shi-góok ${ }^{x}$ with no stem variation suffix. It would be analytically reasonable to add a zero stem variation suffix - $\emptyset$ to express this particular type of stem non-variation, but adding more zero morphology to Tlingit's already abundant inventory of null morphemes is not particularly advisable.

Although invariable roots do not show stem variation in their imperfective forms, this does not mean that they never occur with stem variation suffixes. Those stem variation suffixes which have surface forms can still be found with invariable roots, it is just that the root does not form the stem expected to occur with the suffix.
(197) conditional mode with invariable root
sh kanxalneeknee
sh-ka-na-x_a-l-neek ${ }^{\text {x }}$-n-ee
RFLX.O-HSFC-NCNJ-1SG.S-CL[+D,l,-I]-tell-var-COND
'if I tell a story'
theme: sh-ka-S-cl[ $[+D, l]-$ neek ${ }^{\times}$(na; Act) 'S tell a story'
(Leer 1991: 211)
In the example above, the verb root $\sqrt{n e e k^{x}}$ is invariable, hence it does not exhibit stem variation. Yet the conditional mode (subsection 12.9) requires the $-n$ stem variation suffix which surfaces in this form. Though the root is invariable and hence the stem maintains its low tone and long vowel, the stem variation suffix nonetheless appears. Thus it is not the case that stem variation suffixes never occur with invariable roots, but rather the non-surfacing stem variation suffixes are not seen occurring with invariable roots. It is thus analytically possible that a particular theme based on an invariable root may have a stem variation suffix in its imperfective form, but which particular suffix occurs can never be determined.

## 11 Conjugation class

The conjugation class of a theme is defined by its use of one of the four CONJUGATION PREFIXES $\emptyset-, n a-, g a-$, and $g a$ - in certain modes such as the potential and conditional. Every theme belongs to one of the four conjugation classes, except for motion themes which have no inherent conjugation class but instead are derived into any of the four depending on telicity and direction or manner of movement. This unique property of motion themes is treated in subsection 11.1.

Leer (1991: 203) calls the conjugation prefixes 'aspect prefixes' and describes them as markers of 'lexical aspect' (Leer 1991: 72), which is essentially the division between $\emptyset$-marked 'telicity' on the one hand and $n a-, \underline{g} a$-, or ga-marked 'atelicity' on the other. Telicity should be taken loosely here, it was coined by Leer based on the semantics of motion verbs when derived into the $\emptyset$-conjugation class versus the other classes. He argues that telicity is inherent in all $\emptyset$-conjugation class verbs, regardless of whether they are motion verbs or not, and that all non-Ø-conjugation verbs are atelic. This is rather difficult to support given the variety of verbs in each of the categories, so that one must stretch the conventional definition of telicity quite far to meet Leer's assertions. But since Leer considers the cross-linguistic status of telicity to be irrelevant to the analysis of Tlingit, in his usage the term 'telic' can be taken as basically equivalent to ' $\varnothing$-conjugation'. I waffle between using the more explicit term and continuing his usage, but it should always be kept in mind that 'telic' and 'atelic' are essentially alternative labels for conjugation classes and not necessarily indicative of the fixed point of a situation.

Aside from telicity, in Leer's analysis the term 'lexical aspect' also includes a verb's theme category, such as active or stative, which is in fact largely independent of the conjugation class. Again this has relatively little to do with the conventional concept of aspect; rather it is closer to the tradi-
11. Conjugation class

| Cls. | Pfx. | Preverb | Pfv. | Rep. Impfv. | Telicity |
| :--- | :--- | :--- | :--- | :--- | :--- | Movement

Table 11.1: Conjugation classes and their associated features. $\ddot{y} a=$ occurs in the progressive but not in the future.
tional Athabaskanist use of the term 'aspect' to refer to what is often called 'aktionsart' elsewhere. Because conjugation class and theme category constitute independent phenomena both morphologically and semantically, I refer to them as separate categories and have discarded Leer's conceptualization of lexical aspect.

The selection of a conjugation prefix is not the only feature dependent on the conjugation class of a theme. Certain modes select preverbs depending on the conjugation class, so for example a future form of a ga-class occurs with the $k e i=$ 'up' preverb, one of the $g a$-class occurs with the yei= preverb, and themes of the $\emptyset$-class or na-class do not occur with a mode-specific preverb in the future. The $\ddot{y} a a=$ preverb occurs with the $\emptyset$ - and na-classes in the progressive, with yei= and kei= appearing again with the ga- and gaclasses. The distinction between $\emptyset$-class and the other three classes is a basic feature of telicity. Telicity is also realized in some modes by different stem variation suffixes (chapter 10), so that a realis perfective of a $\emptyset$-class theme will have the $-\ddot{y}$ stem variation suffix but one of a $n a-$, ga-, or $g a$-class theme will have the - $h$ suffix instead. Repetitive imperfectives of non-motion themes are also dependent on conjugation class, with $\emptyset$-class themes having a -ch repetitive imperfective, na-class themes having a yoo $=[+I]-\ldots-k$ repetitive imperfective, $g a$-class themes having a yei=...-ch repetitive imperfective, and ga-class themes having a kei=...-ch repetitive imperfective; these may be overridden by various derivational processes however. Table 11.1 illustrates the four classes and their various realizations (adapted from Leer 1991: 72, 246).

This division of verb themes into classes on the basis of prefix selection brings to mind the phenomenon in Athabaskan languages where perfective forms feature one of the four lexically specified prefixes $s-, n-, \gamma^{-}$, or $\emptyset-$. The
selection in Tlingit however happens in other modes instead of perfectives, although as has already been noted the stem variation of the perfective is sensitive to telicity and hence conjugation class. ${ }^{1}$ The following examples demonstrate four themes that belong to different conjugation classes in the imperative mode which requires the class's conjugation prefix (Leer 1991: 73). Note that imperatives (and admonitives) irregularly have the second person singular subject as $\emptyset$-since it is the pragmatic default in such listenerfocused commands.
(198) a. imperative of Ø-class
layéx!
Ø-ø-Ø-la-yex-ÿ
3.0-zCNJ-2SG.s-CL[-D,l,-I]-make-vAR
'make it!'
theme: $O-S-c L[-D, I]-$ yex ( $\emptyset$; -: Act) 'S make 0’
b. imperative of na-class
na.óos' !
Ø-na- $\varnothing-\emptyset$-.us'-h
3.0-NCNJ-2SG.S-CL[-D, Ø,-I]-wash-VAR
'wash it!'
theme: $O-S-c L[-D, \emptyset]-u s^{\prime}$ (na; -kw Act) 'S wash 0'
c. imperative of ga-class ${ }^{2}$
ganú!
Ø-ga-Ø-Ø-nuk-h
3.0-GCNJ-2SG.S-CL[-D, Ø,-I]-sit.SG-VAR
'sit down!'
theme: $O-S-c l[-D, \emptyset]-n u k(g a ;-? ~ A c t) ~ ' S ~(s g) ~ s i t ~ d o w n ’$.
d. imperative of ga-class
gashí!
Ø-ga- $\emptyset-\emptyset$-shi-h
3.0-GCNJ-2SG.S-CL[-D, $\emptyset,-\mathrm{I}]$-sing-vaR
'sing it!'
theme: $0-S-c l[-D, \emptyset]-s h i^{h}(g a ;-$ - Act) 'S sing 0'

[^23]Note the distribution of the stem variation suffixes in the examples above. The $\emptyset$-class theme has $-\ddot{y}$ in the imperative whereas the other three have - $h$ instead. This division is, according to Leer (1991), because the $\emptyset$ class is associated with telicity whereas the other three classes are associated with atelicity, and imperatives select stem variation based on this telicity distinction. I doubt that telicity is truly a semantic feature of all forms of $\emptyset$-class verbs, but rather suspect it is only a property of perfectives and habituals. My reasoning is that the $\emptyset$-class is represented in a number of other modes like the other conjugation prefixes, and some of these modes are difficult to apply the notion of telicity to. An example is the admonitive mode, where it is hard for me to conceive of there being a real distinction between telicity for the $\emptyset$-class and atelicity for the other classes.
(199) a. líl ulayéix
líl Ø-u- $\emptyset-\emptyset-l a-y e x-:$
PHIB 3.0-IRR-ZCNJ-2SG.S-CL[-D,l,-I]-make-vaR
'don't make it'
b. líl una.óos'
líl Ø-u-na- $\emptyset-\emptyset-. u s^{\prime}-:$
PHIB 3.0-IRR-NCNJ-2SG.S-CL[-D, Ø,-I]-wash-VAR
'don't wash it'
c. líl uganóok
líl u-ga- $\emptyset-\emptyset-n u k-:$
PHIB IRR-GCNJ-2SG.S-CL[-D, Ø,-I]-sit-vAR
'don't sit down'
d. líl gooshée
líl Ø-ga-u- $\emptyset-\emptyset$-shi-:
PHIB 3.0-GCNJ-IRR-2SG.S-CL[-D, Ø,--I]-sing-VAR
'don't sing it'
If telicity were a true distinction in non-perfectives then we would expect that líl ulayéix should mean 'don’t completely make it; don't finish making it', and hence the implication of completion should be uncancellable. I have not tested this but it seems unlikely to me.

The meanings of the conjugation prefixes are fairly obscure in the context of most themes. They have distinct meanings in motion verbs, where themes are not intrinsically members of any of the conjugation classes but are instead derivationally assigned to them as described in subsection 11.1 below. As noted earlier, telicity is a distributional category rather than a
purely semantic one, and it is much less clear in non-motion verbs than in motion verbs. Nonetheless, Leer (1991: 79) argues that the following distribution of themes demonstrates the inherent telicity of non-motion verbs which are $\emptyset$-conjugation class. ${ }^{3}$

- inherently telic, Ø-class
- active: process, activity
- O-S-cL[-D,l]-yex ( 0 ; -h Act) 'S make O’
- O-S-CL[-D, S]-i ( $\emptyset$; -h Act) 'S cook O’
- O-S-cL[-D, Ø]-x $\quad(\emptyset ;$-' Act, - $\underline{x}$ Act) 'S eat 0 ’
- $a-S-c L[-D, \emptyset]-l u x ’$ (Ø; -h Act) 'S urinate’
- eventive: punctual event
- O-S-CL[-D,s]-ku (Ø; Evt) 'S (come to) know O'
- O-S-cL[-D, Ø]-jak (Ø; Evt) 'S kill O'
- O-S-cL[-D,Ø]-.ax ( $\emptyset$; Evt, -ch Rep) 'S (be able to) hear 0’
- O-cl[+D, Ø]-xwetl (Ø; Evt, - -x Rep) 'O be tired'
- stative: property, situation
- $P-\underline{x} O-C L[+D, \emptyset]-x w a s^{\prime}\left(\emptyset ;-\ddot{y}\right.$ Stv) ‘O (pl.) hang at $\mathrm{P}^{\prime}$
- inherently atelic, non- $\varnothing$-class
- na-class
- active
- O-ka-S-cL[-D,Ø]-nik (na; -: Act) 'S tell 0’
- O-S-cL[-D, Ø]-.us’ (na; -k Act) 'S wash 0’
- O-S-cL[-D, Ø]-jun (na; -: Act) 'S dream 0’
- eventive
- O-CL[-D,Ø]-ni $i_{T S R I} \sim n e ~(n a ; E v t) ~ ' h a p p e n ~ t o ~ 0 ’ ~$
- P O-S-cL[-D,s]-ni $i_{T S R I} \sim n e(n a ; E v t)$ ' S do P to $\mathrm{O}^{\prime}$
- O-CL[-D, Ø]-na (na; Evt) 'O die’
- stative
- O-CL[-D,Ø]-ge (na;-: Stv) 'O be big’
- O-CL[-D, Ø]-le (na;-y Ext Stv) 'O be far'
- yéi $=u-S-c L[-D, \emptyset]-j i(n a ;-:$ Stv) 'S think'
- ga-class
- active
- O-S-CL[-D, Ø]-ix’ (ga; -: Act) 'S invite 0’
- O-sha-ka-S-cL[-D,Ø]-ya (ga; -h Act) 'S comb O's hair'

3. Leer did not give the actual themes, but merely the translations. I have listed the actual themes here.

- eventive
- O-S-cL[-D, $]$-tin (ga; Evt) 'S see O’
- S-CL[-D,Ø]-nuk (ga; Evt) 'S sit down'
- stative
- $\underline{\underline{L}} u-C L[-D, \emptyset]-k^{\prime} i^{x}(g a ; S t v)$ 'weather be good’
- O-(ga)-cl[-D,Ø]-dlan (ga; -h Stv) 'O be deep’
- O-CL[-D,Ø]-ti ${ }^{h}(g a ;-h$ Stv) 'O be, exist'
- ga-class
- active
- O-S-cL[-D,Ø]-shi ${ }^{h}$ (ga;-h Act) 'S sing 0'
- eventive
- S-cl[+D, Ø]-han (ga; Evt) 'S stand up’
- O-S-CL[-D, Ø]-t'i $i_{T S R} \sim t^{\prime} e(g a ;$ Evt) 'S find 0'
- stative
- O-cl[-D, Ø]-k'éix (ga; Stv) 'O be good’
- O-CL[-D, Ø]-t'a (ga; -h Stv) 'O be hot'
- O-S-CL[-D, Ø]-tin (ga;-: Stv) 'S be able to see O’
- O-S-cL[-D,S]-xan (ga;-ÿStv) 'S love 0’

Although only the translations of the themes are given above, note that the valency of a theme is irrelevant to either its conjugation class or to its theme category.

The conjugation class prefixes do not appear in all modes, so it can be somewhat difficult to identify. The following list of modes are those in which the conjugation class prefix is always found. The $\emptyset$-conjugation class prefix is apparent in these modes by the lack of one of the other prefixes, and so only exists in contrast.

- imperfectives
- -h extensional stative imperfective
- -ÿ extensional stative imperfective
- -k multipositional stative imperfective
- realizational
- potential
- habituals
- imperatives
- hortative
- admonitive
- consecutive
- conditional
- contingent

The habituals feature distinct stem variation between the Ø-conjugation class and the other three classes, as well as exhibiting the various conjugation class prefixes. Although the perfective does not show distinct conjugation class prefixes, it does show distinct stem variation between $\emptyset$ and non- $\emptyset$ classes, with the former having $-\ddot{y}$ stem variation and the latter having $-h$ stem variation. The potentials and imperatives also shows this behaviour to some extent, but because it is not consistent across all themes it cannot be relied on as an indicator of conjugation class unlike the behaviour with the perfectives.

The conjugation class has explicit morphology in a few other modes despite not featuring the conjugation class prefixes themselves. In these cases, which were already touched upon earlier, a directional preverb is used to indicate the class instead of a conjugation class prefix. The associations between classes and directional preverbs were given earlier in table 11.1. The following is a list of modes in which the directional preverbs are used instead of conjugation class prefixes.

- imperfectives
- -X active imperfective
- -X repetitive imperfective
- progressive
- future

If a theme belongs to the $g a$-conjugation class then in any of these modes the verb will always have the preverb yei= $\sim y e h=_{\mathrm{T}}$ 'down'. If a theme belongs to the ga-conjugation class then in any of these modes the verb will have the preverb $k e i=\sim k e h=_{T}$ 'up'. The association of these conjugation classes with the two vertical directions is also apparent in the semantics of the motion derivation strings that fall under these conjugation classes, for which see section 11.1. Themes in either the na-conjugation class or the $\emptyset$-conjugation class do not take a directional preverb in the modes listed above. An exception is the progressive mode, where $n a$ - and $\emptyset$-class themes do occur with the preverb $\ddot{y} a a=\sim \ddot{y} a h=_{\mathrm{T}}$ 'along' if and only if this preverb is not blocked in the theme by any of the other +17D preverbs: $k e i=\sim k e h=_{\mathrm{T}}$ 'up', yei= $\sim y e h=_{\mathrm{T}}$ 'down', $\ddot{y} e i \underline{k}=_{\mathrm{N}} \sim y e e \underline{k}=_{\mathrm{s}} \sim i h \underline{k}=_{\mathrm{T}}$ 'down to shore, beachward', daak$=\sim \operatorname{dah} \underline{k}=_{\mathrm{T}}$ 'inland from shore, back from open, off of fire', and daak= $\sim d a h k={ }_{\mathrm{T}}$ 'seaward, into open, falling from sky, onto fire’ (Leer 1991: 204).
11.1. Conjugation class and motion verbs

It can be seen that this group of preverb-selecting modes, along with those modes directly selecting a conjugation class prefix, actually covers most of the mode inventory in Tlingit and hence most conjugational possibilities for verbs. Only the perfective modes and the rest of the imperfectives occur without some indication of the conjugation class. These two groups of modes are unfortunately the most common in speech and in oral literature, hence most naturally occurring instances of a theme do not indicate the conjugation class.

Two modes use a conjugation class prefix across all of the classes, in effect overloading the usual class-marking use of the conjugation class prefixes. The two modes are the progressive imperfective and the future. The progressive imperfective has the prefix $n a$ - in all of its forms regardless of the conjugation class of the theme. The future has the prefix $g a$-in all of its forms regardless of the theme's conjugation class. These two modes feature the directional preverbs distinguishing conjugation classes as described earlier.

The $g a$ - mode prefix is easily confused with the $g a$-conjugation class prefix: they are homophonous, have similar morphophonology, and occur very close to each other in the template. The two ga- prefixes are primarily distinguished by their distribution among the different modes. In addition, like the other conjugation class prefixes, the ga-conjugation class prefix never cooccurs with any other conjugation class prefix. Contrast this with the $g a$ - mode prefix which occurs for example in the future along with the $g a$ conjugation class prefix. The $g a$ - mode prefix and $g a$-conjugation class prefix can occur together, as for example in the potential form of a theme in the gaconjugation class, where they can be found surfacing as e.g. kaaka- with the first person singular subject or gaagi- ~gaagee- with the second person singular subject.

### 11.1. CONJUGATION CLASS AND MOTION VERBS

Motion verbs are members of the conjugation classes like all other verbs, but the relationship is rather different. Leer (1991: 72, 234) defines motion themes on the basis of their conjugation class and telicity - a purely distributional distinction - but motion themes are also members of a semantic class circumscribing events where some kind of movement takes place, as the name implies. The class is not exclusive to locomotion, although verbs
like $S$-CL[-D, Ø]-gut (Mot) 'S (sg.) go by foot' are indeed ideal examples. Instead the class is broader, including verbs of handling and verbs involving metaphoric motion as well. But the semantic class of motion does not always overlap with what we might expect from a naïve Anglocentric perspective. The theme $O-C L[-D, \emptyset]-s h u^{h}$ (Mot) ' $O$ be extended' is a motion theme (Leer 1991:319) though it can also describe what might be abstractly thought of as a state, and $O-S-C L[-D, \emptyset]-k a\left(\emptyset ;-s^{\prime} A c t\right)$ 'S sew $0^{\prime}$ (Leer 1991:268) and $O$ $k a-S-C L[-D, \emptyset]-h a(\emptyset ;-\underline{x} A c t)$ 'S dig 0 ' (Leer 1991: 269) are not motion verbs despite describing activities that obviously involve some sort of motion. It is thus best to think of the class in terms of its distributional properties as Leer has done rather than to try to slice up the semantic space of motion themes in terms of the movement properties of events.

Leer (1991: 293) provides a list of motion themes which he categorizes on the basis of the controlledness of the denoted motion and the valency of the theme. I replicate this list below. This is not exhaustive, but is instead merely a sampling of the more frequent themes.

- intransitive controlled motion
- S-CL[-D,Ø]-gut (Mot) 'S (sg.) go by foot'
- $S$-CL[-D, Ø]-at (Mot) 'S (pl.) go by foot’
- $S-C L[-D, \emptyset]-k u \underline{x}$ (Mot) 'S go by boat, vehicle'
- O-ÿa-cl[-D,Ø]-gu (Mot) 'O (fleet of boats) go’
- S-cl[+D, Ø]-kin (Mot) 'S (sg.) fly'
- O-ka-CL[+D,l]-ÿich (Mot) '0 (pl.) fly’
- intransitive uncontrolled motion
- O-CL[-D,Ø]-xix (Mot) ‘O (sg.) fall, move through space’
- O-CL[+D,sh]-xin (Mot) 'O (sg., wooden) fall, move through space'
- O-CL[+D, s]-git (Mot) ' O (sg., animate) fall, move through space’
- O-ka-CL[-D, Ø]-s'u's (Mot) 'S (pl.) fall, move through space’
- O-CL[+D, Ø]-ga't (Mot) ‘S (pl.) fall scattered’
- transitive controlled motion
- O-S-CL[-D, Ø]-ti ${ }^{h}$ (Mot) 'S handle 0 (sg.)’
- O-S-CL[-D,Ø]-tan (Mot) 'S handle (wooden)'
- O-S-cL[-D,s]-nuk (Mot) 'S handle 0 (sg., anim.)’
- O-S-cL[-D,s]-ta ${ }^{h}$ (Mot) 'S handle 0 (sg., dead/unconscious anim.)’
- O-S-CL[-D,l]-at (Mot) 'S handle 0 (pl., inan., dead/uncon. anim.)’
- O-S-CL[-D,S]-ki (Mot) 'S handle 0 (pl., anim.)’
- O-ka-S-cL[-D,Ø]-jel (Mot) 'S handle 0 (pl., disorganized bunch)’
- transitive uncontrolled motion
- O-S-CL[-D, Ø]-gix' (Mot) 'S throw 0'
- O-S-cL[-D, Ø]-xich (Mot) 'S throw 0 (wooden or anim.)'
- O-S-CL[-D, Ø]-gich (Mot) 'S throw 0 (pl.)’

None of these themes can be used as is, but must instead be derived with a particular motion derivation string. Each string assigns the theme to a particular conjugation class, and nearly all strings provide an imperfective type as well. The $\emptyset$-conjugation class derivations are the most numerous, and all are telic in that they denote motion that has a defined endpoint. ${ }^{4}$ This telicity is the specific reason why the $\emptyset$-conjugation class is considered to be telic in contrast to the atelicity of the other three classes. The $n a-, g a-$, and $g a$-conjugation classes are atelic in that they denote motion that may have a target but the termination of motion at the target is not presupposed.

### 11.1.1. TELIC $\emptyset$-CONJUGATION CLASS MOTION DERIVATION

Motion themes derived into the $\emptyset$-conjugation class are telic, meaning that they denote motion that has a defined endpoint. The majority of motion derivation strings produce themes in the $\emptyset$-class. All $\emptyset$-class derivations involve some sort of change to the morphology of the theme, at least adding a postpositional bound phrase.

The following examples demonstrate the motion verb theme $S-C L[-D, \emptyset]-$ gut (Mot) 'S (sg.) go by foot' as it occurs with the motion derivation string $P$ $\{t, \underline{x}$, dé $\}(\emptyset ;-h$ Rep) 'terminate at $P$ '. The derived theme is $P-\{t, \underline{x}, d e ́\} S-C L[-D, \emptyset]-$ gut ( $\emptyset$; -h Rep) 'S arrive at P', meaning that the theme requires a locative PP with a suffix -t, - $\underline{\chi}$, or -dé depending on the mode, the theme is a member of the $\emptyset$-conjugation class, and the theme's imperfective type is the $-h$ repetitive imperfective.
(200) a. with P-t in the telic perfective
aant $\quad$ xwaagút
aan-t u-xַa-ÿa-gut-ÿ
village-PNCT PFV.TEL-1SG.S-CL[-D, $\emptyset,+\mathrm{I}]$-go.SG-VAR
'I arrived at the village'
theme: $P-\{t, \underline{x}, d e ́\} S-c L[-D, \emptyset]-g u t(\emptyset ;-h$ Rep) 'S arrive at $P$ ’

[^24]b. with P-x in the -h repetitive imperfective
aanx xagoot
aan-x $\quad \emptyset$-xa- $\emptyset$-gut-h
village-PERT ZCNJ-1SG.S-CL[-D, Ø,-I]-go.SG-VAR
'I arrive at the village repeatedly'; 'I keep arriving at the village'
c. with P -dé in the future
aandé kwkagóot
aan-dé ga-w-ga-xa-ø-gut-:
village-ALL GCNJ-IRR-GMOD-1SG.S-CL[-D, $\emptyset,-\mathrm{I}]$-go.SG-VAR
'I will arrive at the village'; 'I will go toward the village'
d. with P-t in the potential
aant kwaagoot
aan-t u-Ø-ga-xa-ÿa-gut-h
village-PERT IRR-ZCNJ-GMOD-1SG.S-CL[-D, $\emptyset,+\mathrm{I}]$-go.SG-vAR
'I might arrive at the village'
The first example shows the theme in the perfective, which is specifically the telic perfective since this theme is a member of the $\emptyset$-conjugation class. The locative PP takes the punctual $-t$ suffix which indicates that the motion terminates (and thus is telic) at the location referenced by the noun aan. The telic perfective has its usual $-\ddot{y}$ stem variation suffix producing a $C V{ }_{C}$ stem with the closed root (see subsection 10.2), and the telic perfective has the +4 telic perfective prefix $u$-. ${ }^{5}$ The imperfective type is the $-h$ repetitive imperfective which is specified by the derivational string.

Although there are a large variety of derivational strings for motion which result in $\emptyset$-conjugation themes, not all strings provide the same primary imperfectives. The derivational string $P-\{t, \underline{x}, d e ́\}(\emptyset ;-h$ Rep) described above is one of several that produce motion themes in the $\emptyset$-class which have a - $h$ repetitive imperfective. Another set of derivations in the $\emptyset$-class instead give themes which have -ch repetitive imperfective forms as their primary imperfectives. These two groups are documented in table 11.2 on page 216. Other groups of $\emptyset$-class motion derivation strings produce $-\underline{x}$ repetitive imperfectives, $y o o=C L[+I]-\ldots-k$ repetitive imperfectives, and -ch repetitive imperfectives. These are documented in table 11.3 on page 217.
5. The telic perfective prefix $u$-is only distinguished from the ordinary perfective prefix $\ddot{y} u-$ when it occurs with the third person, otherwise the two surface with exactly the same phonological results. See section 12.2 for more on perfectives.
11.1.1. Telic Ø-conjugation class motion derivation

| Cls. Derivation | Meaning |
| :---: | :---: |
| with - $h$ repetitive imperfective |  |
| $\emptyset \mathrm{N}-\{t, \underline{\underline{x}}$, dé $\}$ | arriving at N , coming to N |
| $\emptyset \quad \ddot{y} a n=\sim \ddot{y} a n \underline{x}=\sim$ ÿánde $=$ | moving ashore, to rest, completing |
| $\emptyset \quad \mathrm{N}-x^{\prime} \ddot{y} a n=\sim \ldots$ | coming to rest at N |
| $\emptyset \quad \mathrm{N}-n a \underline{x}$ ÿan=~... | moving across N , to other side of N |
| $\emptyset \quad \ddot{a} a n=\sim \ldots+k^{\prime}{ }^{\text {¢ }}$ | setting up, erecting |
| $\emptyset \quad \ddot{a n}=\sim . . .+$ sha- | setting up, leaning against |
| $\emptyset$ kux= ~ kuxx $=\sim$ kúxde $=$ | moving aground, into shallow water |
| $\emptyset$ neil $(t)=\sim$ neilx $=\sim$ neildé $=$ | moving inside, coming home |
| $\emptyset \quad \mathrm{N}-x^{\prime} \mathrm{neil}(\mathrm{t})=\sim \ldots$ | moving inside house at N |
| $\emptyset$ haat= $\sim$ haax $=\sim$ haa( $n$ )dé $=$ | coming here |
| $\emptyset$ yóo- $\{t, \underline{\chi}$, de $\}=$ | going away, going off somewhere |
| with -ch repetitive imperfective |  |
| $\emptyset$ kei= | moving up |
| $\emptyset \quad u \underline{x}=k e i=$ | moving out of control, blindly, amiss |
| $\emptyset \quad \mathrm{N}-\underline{x}^{\prime} e^{-}-\chi^{\prime} \mathrm{kei}=$ | catching up with N |
| $\emptyset$ yei= | disembark, exit boat or other vehicle |
| $\emptyset \quad y e e \underline{k}_{\mathrm{S}} \sim \ddot{y} e i \underline{k}_{\mathrm{N}} \sim i h \underline{k}_{\mathrm{T}}=$ | moving down to shore |
| $\emptyset \quad$ héeni=yeek=... | moving down into water |
| $\emptyset$ daak= | moving up from shore, back from open |
| $\emptyset$ dáagi=daak= | moving further up from shore |
| $\emptyset \quad \underline{k w a ́ a k x}=$ daak $=$ | doing by mistake, wrongly |
| $\emptyset \quad \underline{k} u \underline{x}=\sim \underline{k u} u \underline{x} d e=[+\mathrm{D}]-$ | reverting, returning |
| $\emptyset \quad \mathrm{N}-x^{\prime} \underline{\underline{k}} \mathbf{\underline { x }} \mathbf{x}=[+\mathrm{D}]$ - | reverting, returning to N |

Table 11.2: Some Ø-conjugation class (telic) derivation strings for motion themes.
11.1.1. Telic $\emptyset$-conjugation class motion derivation


Table 11.3: More telic $\emptyset$-conjugation class (telic) derivation strings for motion themes.

Note that the locative $-x^{\prime}$ suffix has an allomorph -' after vowels which in Tongass Tlingit results in a glottalized vowel and in Northern and Southern Tlingit results in a long vowel with high tone. This allomorph is the default (and possibly the only allowed form) in proclitics and most of the bound phrases. Thus for example the motion derivation string $a^{\prime}-{ }^{\prime}=\ddot{\prime} a \underline{x}=(\emptyset$; $-\underline{x}$ Rep) 'turning over' will normally surface as e.g. áa yax x́waatán 'I turned it over' (perfective) in Northern Tlingit rather than áx'yax xwaatán. The details of this allomorphy and morphophonology are beyond the scope of this document, but it is useful nonetheless to be aware of the phenomenon.

It would take a very large amount of space to demonstrate all of the various $\emptyset$-conjugation class motion derivation strings. Instead the following examples, taken from Leer (1991: 297-306) show an assortment of themes demonstrating each type of repetitive imperfective. Most of these examples are based on the motion theme $O-S-C L[-D, \emptyset]-\tan$ (Mot) 'S handle 0 (wooden)', though the last example uses $S-C L[-D, \emptyset]-g u t$ (Mot) 'S (sg.) go by foot' instead. The last example has the motion derivation string $a-y ̈ a-o o-[+D]-(-h$ Rep ) 'reverting, turning back' including a thematic pronominal $a$ - 'third person object' and thus cannot be applied to transitive or object intransitive themes (see chapter 8).
(201) a. with neil $=$ and -h repetitive imperfective
neilx xataan
neil-x=Ø-Ø-xa-Ø-tan-h
home-PERT=3.0-ZCNJ-1SG.S-CL[-D, Ø,--I]-handle-vaR
'I bring it inside repeatedly'; 'I keep bringing it inside’ (p. 300) theme: $P-\{t, \underline{\chi}, d e ́\} ~ O-S-c L[-D, \emptyset]-\tan \left(\emptyset ;-h\right.$ Rep) 'S bring 0 to $P^{\prime}$
b. with $\mathrm{kei}=$ and -ch repetitive imperfective
kei xatánch
kei=Ø-Ø-xa- $\emptyset$-tan-ch
up $=3.0-\mathrm{ZCNJ}-1 \mathrm{SG} . \mathrm{S}-\mathrm{CL}[-\mathrm{D}, \emptyset,-\mathrm{I}]$-handle-REP
'I bring it up repeatedly', 'I keep bringing it up' (p. 298)
theme: kei=O-S-cl[-D, Ø]-tan (Ø; -ch Rep) 'S handle 0 upwards’
c. with á-'=ÿax= and -x repetitive imperfective
áa yax xatánx
á-'= $=\ddot{a x}=\emptyset-\emptyset-x$-xa- $\emptyset-\tan -\underline{x}$
$3 \mathrm{~N}-\mathrm{LOC}=$ ROT $=3.0-\mathrm{ZCNJ}-1$ SG.S-CL[-D, $\emptyset,-\mathrm{I}]$-handle-REP
'I turn it over repeatedly’, 'I keep turning it over’ (p. 302) theme: $a^{\prime}-x^{\prime}=\ddot{y} a \underline{x}=O-S-c L[-D, \emptyset]-\tan (\emptyset ;-\underline{x} R e p)$ 'S turn 0 over'
d. with ÿan $=y o o=$ and yoo $=\mathrm{CL}[+\mathrm{I}]-\ldots-\mathrm{k}$ repetitive imperfective
yan yoo xaatánk
ÿan=yoo=Ø-Ø-хха-ÿa-tan-k
ABMAR $=$ ALT $=3.0-\mathrm{ZCNJ}-1 \mathrm{SG} . \mathrm{S}-\mathrm{CL}[-\mathrm{D}, ⿹ 勹,+\mathrm{I}]$-handle-REP
'I am lifting it up and down repeatedly', 'I keep lifting it up and down' (p. 303)
theme: $\ddot{y} a n=y o o=O-S-c L[-D, \emptyset]-\tan (\emptyset ; y o o=[+I]-\ldots-k$ Rep) 'S lift 0 up and down'
e. with hé-dé ÿa-oo- ~ ÿaa= and - ch repetitive imperfective
héide yaa xatánch
hé-dé ÿaa= $\emptyset-\emptyset$-хха- $\emptyset$-tan-ch
MPRX-ALL along=3.0-ZCNJ-1SG.S-CL[-D, $\emptyset,-\mathrm{I}]$-handle-REP
'I am moving it aside repeatedly', 'I keep moving it aside' (p. 305) theme: hé-dé ( $\ddot{a} a)=O-y ̈ a-o o-S-c l[-D, \emptyset]-\tan (\emptyset ;-c h$ Rep) 'S move 0 aside’
f. with $\mathrm{a}-\mathrm{y} \mathrm{a}-\mathrm{oo}-[+\mathrm{D}]-$ and -x repetitive imperfective awux́dagútx $\sim$ ayaxdagútx
a-ÿa-oo-Ø-x-xa-da-gut-x
3.0-VSFC-IRR-ZCNJ-1SG.S-CL[+D, Ø,-I]-go.SG-REP
'I am turning back repeatedly', 'I keep turning back' (p. 306) theme: $a-\ddot{y} a-o o-S-c l[+D, \emptyset]-g u t(0 ;-\underline{x}$ Rep) 'S turn back'

### 11.1.2. ATELIC $\{N A, G A, G A\}$-CONJUGATION CLASS MOTION DERIVATION

The atelic motion derivation strings assign one of the $n a-$, $g a-$, or $g a-$ conjugation classes to the derived motion verb theme. They are much less numerous than the telic $\emptyset$-conjugation class motion derivation strings. The $n a$-conjugation class strings either assign the $y o o=C L[+I]-\ldots-k$ repetitive imperfective or they give themes with no imperfective. The latter are the only motion derivation strings that produce themes without an imperfective type, though there are non-motion themes that lack imperfective types as well. The $g a$ - and $g a$-conjugation class motion derivation strings give themes with a -ch repetitive imperfective. All the atelic motion derivation strings are given in table 11.4 on page 220 (Leer 1991: 306-315).

Reviewing the meanings of the various atelic motion derivation themes reveals patterns in their meanings according to the particular conjugation class. The ga-conjugation class is associated with upward motion and initiation of movement. This is supported by the use of the preverb kei= 'up'
11.1.2. Atelic $\{n a, g a, g a\}$-conjugation class motion derivation

| Cls. Derivation | Meaning |
| :---: | :---: |
| with $y o o=[+I]-\ldots-k$ repetitive imperfective |  |
| na - | moving along, lateral, horizontal |
| na $\mathrm{N}-\underline{\underline{x}}$ | moving along N |
| na N -dé | moving toward N |
| na N -dáx | moving away from N |
| na N -náx | moving by way of, through N |
| na $y u \underline{x}=$ | moving out of house |
| na $\mathrm{N}-x^{\prime} y u \underline{\chi}=$ | moving out of house at N |
| without imperfective |  |
| na N - $t$ | moving around N |
| na N áa | moving around |
| with -ch repetitive imperfective |  |
| ga - | falling (intransitive uncontrolled themes), downward |
| ga $\quad$ ¢̈aa= | moving down |
| ga yaax= | embarking, getting into boat, vehicle |
| ga $\ddot{\text { ganax }}=$ | moving down into ground |
| ga $\mathrm{N}-\underline{\chi}$ | moving down along N |
| ga héen-x= | moving into water |
| ga káx sha- | falling over, prone |
| ga N -náx | moving down by way of, through N |
| with -ch repetitive imperfective |  |
| ga - | starting off, picking up, upward |
| ga N -dáx | starting off or picking up from N |

Table 11.4: na-, ga-\& ga-conjugation class derivation strings for motion themes.
11.2. Conjugation class and repetitive imperfectives

| Class | Preverb | Classifier | Suffix | Example |
| :--- | :--- | :---: | :--- | :--- |
| $\emptyset$ | none | $[-\mathrm{I}]$ | $-\underline{x}$ | as.éex 'he cooks it' |
| na | yoo $=$ | $[+\mathrm{I}]$ | $-k$ | yoo ayal'únk 'he hunts it' |
| ga | yei $=$ | $[-\mathrm{I}]$ | - ch | yei adagánch 'it gets sunny' |
| ga | kei= | $[-\mathrm{I}]$ | $-c h$ | kei latseench 'he gets strong' |

Table 11.5: Conjugation class and repetitive imperfectives. Adapted from Edwards 2009: 26.
to mark the conjugation class where the conjugation prefix is otherwise blocked. The $g a$-conjugation class is associated with downward motion, which is supported by the use of the preverb yei= 'down' for marking the conjugation class where the conjugation prefix is blocked. The na-conjugation class has two senses, one associated with lateral motion and the other with undirected motion.

### 11.2. CONJUGATION CLASS AND REPETITIVE IMPERFECTIVES

The formation of repetitive imperfectives is also dependent on conjugation class. This is demonstrated in table 11.5 where the four different classes have different kinds of repetitive imperfectives.

The first verb theme illustrated in table 11.5 is the theme $O-S-C L[-D, S]-. i$ ( $\emptyset$;-: Act) 'S cook O'. This theme is a member of the $\emptyset$-conjugation class, and non-motion themes in this class regularly take the - $\underline{x}$ repetitive imperfective. The following example illustrates a few forms of this theme.
(202) a. telic perfective
awsi.ée
a-u-Ø-si-.i- $\ddot{y}$
3.0-PFV.TEL-3.S-CL[-D,S,+I]-cook-VAR
'he cooked it'
b. -: active imperfective (primary)
as.ée
a-Ø-Ø-sa-i-:
3.0-ZCNJ-3.S-CL[-D, s,-I]-cook-vAR
'he is cooking it'
c. -x repetitive imperfective (secondary)
as.éex
a- $\emptyset-\emptyset$-sa-.i-x
3.O-ZCNJ-3.S-CL[-D, S,-I]-cook-REP
'he keeps cooking it', 'he is cooking it repeatedly'
The second verb theme in table 11.5 is the theme $O-S-C L[-D, \emptyset]-l^{\prime} u^{\prime} n$ ( $n a$; $-:$ Act) ' S hunt 0 '. This theme is a member of the na-conjugation class, and hence is an atelic (non- $\emptyset$-class) theme. Non-motion themes in the $n a$ conjugation class regularly take the yoo=CL[+I]-...-k repetitive imperfective, the only type of repetitive imperfective which has [+1] in the classifier.
(203) a. atelic perfective
aawal'óon
a-ÿu-Ø-ÿa-l'u'n-h
3.0-PFV-3.S-CL[-D, Ø, +I]-hunt-VAR
'he hunted it'
b. -: active imperfective (primary)
al'óon
a-Ø-Ø-ø-1'u'n-:
3.0-ZCNJ-3.S-CL[-D, Ø,-II]-hunt-VAR
'he is hunting it'
c. yoo= $\mathrm{CL}[+\mathrm{I}]-\ldots-\mathrm{k}$ repetitive imperfective (secondary)
yoo ayal'únk
yоо=a-Ø-Ø-ÿa-l'u'n-k
ALT $=3.0-\mathrm{ZCNJ}-3 . \mathrm{S}-\mathrm{CL}[-\mathrm{D}, \emptyset,+\mathrm{I}]$-hunt-REP
'he keeps hunting it', 'he hunts it repeatedly'

## 12 Mode: Aspect, tense, mood, etc.

Tense, mood, aspect, polarity, and modality are lumped together by Leer (1991) as 'schetic categories' after the Greek term $\sigma \chi$ ह́ $\sigma \iota \varsigma ~ s k^{h}$ ésis 'relation, state, condition. ${ }^{1}$ Leer argues that Tlingit does not distinguish the various categories in any sort of clean morphological manner, and hence he develops a different categorization system consisting of MODE that covers perfectivity and habituality, LEXICAL ASPECT that covers dynamicity and boundedness, and EPIASPECT that covers progression and repetition (Leer 1991: 67). In this section I will only consider mode. Despite Leer's curious definition, mode covers far more than merely perfectivity and habituality, as will be shown in great detail below.

Leer divides the modes into three basic types: declarative modes, deontic modes, and circumstantial modes. The first two terms have their typical linguistic meanings, with DECLARATIVE MODES denoting "that the proposition expressed by a speaker's utterance is offered as an unqualified statement of fact" (Loos et al. 2004), and DEONTIC MODES denoting "the speaker's degree of requirement of, desire for, or commitment to the realization of the proposition expressed by the utterance" (Loos et al. 2004). The CIRCUMSTANTIAL MODES denote the circumstances of the event or property that is denoted by the verb. This may seem to be a circular definition, but it will be explained more thoroughly in section 12.9.

The following list outlines the various modes. There are various imperfectives distinguished by stem variation suffixes which will be detailed in section 12.1 below; they are not shown in this list for brevity's sake.

[^25]- declarative modes
- imperfectives
- non-stative imperfectives
- active imperfectives
- positional imperfectives
- repetitive imperfectives
- progressive imperfective
- stative imperfectives
- plain stative imperfectives
- extensional stative imperfectives
- multipositional stative imperfective
- perfectives
- telic perfective
- atelic perfective
- realizational
- future
- potential
- habituals
- telic habitual
- atelic habitual
- deontic modes
- imperatives
- telic habitual
- atelic habitual
- hortative
- admonitive
- circumstantial modes
- consecutive
- conditional
- contingent

The formation of the various modes is done with a number of different morphemes in the verb. The stem variation suffixes, the I component of the classifier, and the various aspectual and conjugational prefixes from +7 to +4 are the basic morphological elements that specify different modes. In addition certain imperfectives use duration suffixes in the -3 slot for mode specification. Several different modes use certain preverbs in cases where the conjugational prefixes are used for aspect marking rather than conjugation marking. Finally, the habituals, hortative, conditional, and contingent
12. Mode: Aspect, tense, mood, etc.

| Mode | Preverb $+17$ | $\begin{gathered} \text { Asp./Conj. } \\ +7-+4 \end{gathered}$ | $\begin{gathered} \text { I-Cpnt. } \\ +1 \end{gathered}$ | $\begin{gathered} \text { Var } \\ -1 \end{gathered}$ | $\begin{gathered} \text { Suff. } \\ -3 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DECLARATIVE MODES imperfectives |  |  |  |  |  |
|  |  |  |  |  |  |
| $-:$ active \& -: positional |  |  |  |  |  |
| realis |  | $\emptyset$ - | -I | -: |  |
| irrealis |  | u-ø- | -I | -h |  |
| $-h$ active \& $-h$ repetitive |  |  |  |  |  |
| realis |  | Ø- | -I | -h |  |
| irrealis |  | u-Ø- | -I | -h |  |
| -' active \& -' positional (open roots only) |  |  |  |  |  |
| realis |  | $\emptyset$ - | -I | -' |  |
| irrealis |  | u-Ø- | -I | -' |  |
| $-n$ active \& -n positional |  |  |  |  |  |
| realis |  | Ø- | -I | -n |  |
| irrealis |  | u-Ø- | -I | -n |  |
| $-X$ active ( $\left.-s^{\prime},-l^{\prime},-t,-x^{\prime},-t^{\prime}\right) \&-X$ repetitive ( $-\underline{\chi},-c h,-k$ ) |  |  |  |  |  |
| realis | (PVB=) | $\emptyset$ - | -I |  | -X |
| irrealis | (PVB=) | $u-\emptyset$ - | -I |  | -X |
| [+I]-...-k active \& repetitive |  |  |  |  |  |
| realis |  | Ø- | +I |  | -k |
| irrealis |  | $u-\emptyset$ - | -I |  | -k |
| $y o o=[+\mathrm{I}]-\ldots-k$ active \& repetitive |  |  |  |  |  |
| realis | $y o o=$ | $\emptyset$ - | +I |  | -k |
| irrealis | $y o o=$ | и-ø- | -I |  | -k |
| progressive |  |  |  |  |  |
| realis | PVB $=$ | na- | -I | -n |  |
| irrealis | PVB= | u-na- | -I | -n |  |

Table 12.1: Non-stative imperfective (declarative) modes.
modes all have specific suffixes of their own used in addition to other morphemes. Tables 12.1, 12.2, 12.3, and 12.4 on pages 225 through 228 illustrate all of the various modes. To save space there is much that is left unexplained in the tables, hopefully the reader will be able to make sense of them after having read through the sections on each mode.

| Mode Preverb <br> +17  | Asp./Conj. $+7-+4$ | $\begin{gathered} \text { I-Cpnt. } \\ +1 \end{gathered}$ | $\begin{gathered} \text { Var } \\ -1 \end{gathered}$ | $\begin{gathered} \text { Suff. } \\ -3 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Declarative modes (cont'd) |  |  |  |  |
| imperfectives (cont'd) |  |  |  |  |
| $\because$ stative |  |  |  |  |
| realis | $\emptyset$ - | +I | -: |  |
| irrealis | u-ø- | -I | -h |  |
| -ÿ stative |  |  |  |  |
| realis | $\emptyset$ - | +I | - $\ddot{\text { l }}$ |  |
| irrealis |  |  |  |  |
| closed root CVC | u-ø- | -I | $-\ddot{y}$ |  |
| open root CV | $u-\emptyset$ - | -I | - |  |
| -n stative |  |  |  |  |
| realis | $\emptyset$ - | +I | -n |  |
| irrealis | u-ø- | -I | -h |  |
| $\sqrt{t i}{ }^{h}$ 'be' stative |  |  |  |  |
| realis | $\emptyset-$ | +I | -h |  |
| irrealis (cf. - $\quad$ g stative) | $u-\emptyset$ - | -I | -' |  |
| stative with invariable root |  |  |  |  |
| realis | $\emptyset$ - | +I |  |  |
| irrealis | и-ø- | -I |  |  |
| -h extensional stative |  |  |  |  |
| realis | CNJ- | +I | -h |  |
| irrealis | $u$-CNJ- | -I | -h |  |
| $-y ̈$ extensional stative |  |  |  |  |
| realis | CNJ- | +I | $-\ddot{y}$ |  |
| irrealis | u-CNJ- | -I | -' |  |
| $-k$ multipositional stative realis |  |  |  |  |
| closed root CVC | CNJ- | +I |  | -k |
| open root CV | CNJ- | +I |  | -kw-t |
| irrealis |  |  |  |  |
| closed root CVC | u-CNJ- | -I |  | -k |
| open root CV | u-CNJ- | -I |  | -kw-t |

Table 12.2: Stative imperfective (declarative) modes.
12. Mode: Aspect, tense, mood, etc.

| Mode Preverb <br> +17 | $\begin{gathered} \text { Asp./Conj. } \\ +7-+4 \end{gathered}$ | $\begin{gathered} \text { I-Cpnt. } \\ +1 \end{gathered}$ | $\begin{gathered} \text { Var } \\ -1 \end{gathered}$ | $\begin{gathered} \hline \text { Suff. } \\ -3 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Declarative modes (cont'd) perfectives |  |  |  |  |
| Ø-conjugation perfective realis irrealis | $\ddot{y} u-\sim u-$ | +I | $-\ddot{y}$ |  |
| open root CV | $\ddot{y} u-\sim u-$ | -I | -' |  |
| closed root CVC | $\ddot{y} u-\sim u-$ | -I | -h |  |
| $n a-, g a-, g a$-conjugation perfective realis irrealis | ÿu- <br> ÿu- | + -I | -h |  |
| realizational - always realis realis | CNJ- | +I | -: |  |
| habituals |  |  |  |  |
| Ø-conjugation habitual closed root CVC | $u-\emptyset$ - | -I | $-h \sim-\ddot{y}$ | -ch |
| open root CV | и-Ø- | -I | $-\ddot{y}$ | -ch |
| na-, ga-, ga-conjugation habitual | CNJ- | -I |  | -ch |
| future |  |  |  |  |
| realis PVB= | ga-w-ga- | -I | $-:$ |  |
| irrealis $\mathrm{PVB}=$ | ga-w-ga- | -I | -h |  |
| potential |  |  |  |  |
| non-decessive | u-CNJ-ga- | +I | -h |  |
| decessive <br> open root CV | u-CNJ-ga- | -I | -h |  |
| non-decessive | u-CNJ-ga- | +I | -h |  |
| decessive | $u-\mathrm{CNJ}-\mathrm{g} a-$ | -I | -h |  |
| some active $\emptyset$-conjugation themes with open root CV |  |  |  |  |
| non-decessive | $u-\emptyset-g a-$ | +I | $-\ddot{y}$ |  |
| decessive | u-Ø-ga- | -I | $-\ddot{y}$ |  |

Table 12.3: Non-imperfective declarative modes.
12.1. Declarative modes: imperfectives

| Mode Preverb <br> +17  | $\begin{gathered} \text { Asp./Conj. } \\ +7-+4 \end{gathered}$ | $\begin{gathered} \text { I-Cpnt. } \\ +1 \end{gathered}$ | $\begin{aligned} & \text { Var } \\ & -1 \end{aligned}$ | $\begin{gathered} \hline \text { Suff. } \\ -3 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| DEONTIC MODES imperatives - always realis Ø-conjugation imperative |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| open root CV | $\emptyset$ - | -I | $-h \sim-\ddot{y}$ |  |
| closed CVC with DIR= DIR= | Ø- | -I | -h |  |
| closed CVC otherwise | Ø- | -I | $-\ddot{y}$ |  |
| $n a-, g a-, \underline{g a-c o n j u g a t i o n ~ i m p e r a t i v e ~}$ | CNJ- | -I | -h |  |
| hortative - always realis | CNJ-ga- | -I | $-h \sim-\ddot{y}$ | (-ée) |
| admonitive - always irrealis | u-CNJ- | -I | $-:$ |  |
| Circumstantial modes |  |  |  |  |
| consecutive | CNJ- | -I | $-:$ |  |
| conditional | CNJ- | -I | -n | -ée |
| contingent | CNJ-ga- | -I | -n | -ín |

Table 12.4: Deontic and circumstantial (non-declarative) modes.

### 12.1. DECLARATIVE MODES: IMPERFECTIVES

There are twenty-seven ${ }^{2}$ different kinds of imperfectives in Tlingit. The category of imperfective subsumes a number of different aspectual distinctions which are generally thought of as distinct aspects by most linguists, including generic situations, habitual situations, progressive situations, collective reference to multiple situations, continuous situations, serial situations, distribution of a situation among multiple participants, and iterating or repeating situations. Leer (1991) has explored the semantics of the various imperfectives in extensive detail, though confusingly he has done so using his own semantic framework so that it requires careful translation for a more general audience.

Morphologically there are two basic kinds of imperfectives, the stative imperfectives and the non-stative imperfectives. The distinction between

[^26]the two kinds is based on the presence of [+I] in the classifier of stative themes in their realis forms and [-I] in the classifier of the realis forms of non-stative themes. The exception to this rule is that the imperfectives with $C L[+I]-\ldots-k$ and $y o o=C L[+I]-\ldots-k$ have $C L[+I]$ despite being non-stative.

Statives have typical stative semantics in their imperfectives, but can denote either states or transitions in other modes. This can be seen from the examples below (taken from Leer 1991: 364) where the English translations of the non-imperfective modes illustrate the ambiguity.
(204) a. stative imperfective with -ÿ
yak'éi
Ø-Ø-ÿa-k'éi-ÿ
3.0-ZCNJ-CL[-D, Ø, +I]-good-VAR
'it is good'
theme: $O-c L[-D, \varnothing]-k^{\prime} e^{(x)}(g a ;-y \ddot{S t v})$ ' 0 be, become good'
b. atelic (-h) perfective
wook'éi
$\emptyset$-ÿu-ÿa-k'éi-h
3.0-PFV-CL[-D, Ø,+I]-good-vAR
'it was good', 'it became good (and still is)'
c. future
gugak'éi
Ø-ga-w-ga- $\emptyset$-k'éi-h
3.0-GCNJ-IRR-GMOD-CL[-D, Ø,--I]-good-vAR
'it will be good', 'it will become good'
d. habitual
gak'éich
Ø-ga- $\emptyset-k ' e ́ i-c h$
3.0-GCNJ-CL[-D, Ø, -I]-good-HAB
'it is always good', 'it always becomes good'
The non-stative imperfectives do not feature this sort of ambiguity since they denote actions rather than states. There is however an ambiguity in the non-stative imperfectives between the concurrent or progressive reading and the generic or habitual reading, similar to that which can be found in the imperfectives of other languages like English. The following examples show this with their permissible English translations (Leer 1991:363).
（205）a．active imperfective with－＇
dleey tooxá
dleey Ø－Ø－tu－Ø－xa－＇
meat $3.0-\mathrm{ZCNJ}-1 \mathrm{PL} . \mathrm{S}-\mathrm{CL}[-\mathrm{D}, ⿹ 勹,-\mathrm{I}]$－eat－var
＇we are eating meat＇，＇we eat meat＇
theme：$O-S-c L[-D, \emptyset]-\underline{x} a(\emptyset ;$－＇Act）＇S eat 0 ＇
b．telic（ $-\ddot{\mathrm{y}}$ ）perfective
dleey wutuwaxáa
dleey Ø－ÿu－tu－ÿa－xa－ÿ
meat 3．0－PFV－1PL．S－CL［－D，Ø，＋I］－eat－VAR
＇we ate meat＇
Leer says that temporally all imperfectives must have their event time in the present．The two temporal phrases yá yeedát＇this moment＇and yá yagiyee＇this day＇can occur with imperfectives but not the two phrases tatgé ＇yesterday＇or seigán＇tomorrow＇（Leer 1991：362），as the following examples demonstrate．All of these illustrate the same verb theme in the same $-:$ active imperfective form．
（206）a．yá yeedát du een kadunéek
yá yeedát du＝ee－n $\quad$－ka－$\emptyset$－du－$\emptyset$－nik－：
PROX moment 3H．PSS＝BASE－INSTR 3．0－HSFC－INDH．S－CL［－D，Ø，－－I］－tell－vAR
＇people are telling it to him right now＇
theme：P－n O－ka－S－cL［－D，Ø］－nik（na；－：Act）＇S tell about 0 to P’
b．yá yagiyee du een kadunéek
yá yagiyee du＝ee－n $\quad$－ka－$\emptyset$－du－$\emptyset$－nik－：
PROX day $\quad 3$ H．PSS＝BASE－INSTR 3.0 －HSFC－INDH．S－CL［－D，$\emptyset,-\mathrm{I}]$－tell－vAR
＇people are telling it to him today＇
c．＊tatgé du een kadunéek
tatgé du＝ee－n $\quad$－ka－$\emptyset$－du－$\emptyset$－nik－：
yesterday 3 H．PSS＝BASE－INSTR $3.0-\mathrm{HSFC}-\mathrm{INDH.S-CL}[-\mathrm{D}, ⿹ 勹$ ，－I］－tell－vAR
＇people are telling it to him yesterday＇
$\begin{array}{rll}\text { d．} \text {＊} \text { seigán } & \text { du een } & \text { kadunéek } \\ \text { seigán } & \text { du＝ee－n } & \emptyset \text {－ka－} \emptyset \text {－du－} \emptyset \text {－nik－：}\end{array}$
tomorrow 3H．PSS＝BASE－INSTR 3．0－HSFC－INDH．S－CL［－D，Ø，－I］－tell－VAR
＇people are telling it to him tomorrow＇
Leer＇s assertion that imperfectives are always in the present must be modulated by the fact that they often occur in non－present contexts．Nar－ ratives are almost always situated in the past but show imperfectives very
frequently. To reconcile this discrepancy, the temporal locality of a narrative frame has to be distinguished from the temporal perspective of any given event described in the narrative. Schematically this can be represented as the following:
(207) a. $\checkmark$ [Past ... [Present Imperfective ] ...]
b. *[Past ... Imperfective ...]

Thus, although an imperfective can describe an event that happened in the past, it is expressed as an event situated in the present within the wider temporal context of the past narrative frame. The imperfective then expresses a present perspective on the situation, but the narrative frame fixes this in a past temporal locality. Imperfectives therefore do not have intrinsic present tense, but instead represent a situation aspect and inherit their tense from the speaker's viewpoint.

Both stative and non-stative imperfectives are subdivided by their stem variation suffix and by their theme category. The theme category is not morphologically distinguished but is critical to the semantics of the imperfective, so that an active category theme and a positional category theme (both nonstatives) are identical morphologically but are distinguished by their meanings, with the imperfective of the active category theme denoting an activity and the imperfective of the positional category theme denoting a position or location. Paradigmatically the two are also distinct in that a verb with a positional imperfective has a defective paradigm - it occurs in no other modes except the positional imperfective. Certain stative imperfectives do have distinguishing morphology, so that a plain stative imperfective and an extensional stative imperfective may both have the $-\ddot{y}$ stem variation suffix but the extensional stative features a conjugation prefix not found in the plain stative. Table 12.1 on page 225 gives the complete inventory of non-stative imperfectives with their characteristic morphologies, and table 12.2 on page 226 gives the inventory of stative imperfectives.

Leer (1991) divides the imperfectives into two categories, PRIMARY IMperfectives and secondary imperfectives. The distinction is defined essentially on whether a particular type of imperfective can be specified as the imperfective form for a given theme. Those imperfective types which can be the sole thematically specified imperfective for a theme are primary imperfectives, and those which are never the sole thematically specified imperfective are secondary imperfectives. This distinction was also noted in section 6.4. The primary imperfectives are all of the positional imperfectives and
the active and stative imperfectives that occur with the $\emptyset$-conjugation prefix. The secondary imperfectives are the progressive imperfective, the extensional stative imperfectives, the multipositional stative imperfective, and the repetitive imperfectives; all of these except the repetitive imperfectives occur with a conjugation prefix that may not be Ø- (na-for the progressive, the conjugation class for the others). Leer (1991:357) notes that primary imperfectives "can refer to an ongoing situation, but can also be used for generic sentences" in contrast with secondary imperfectives which "necessarily involve progressivity, habituality, iterativity, conativity, or multiple reference".

Each subsection below considers a particular type of imperfective. Since active imperfectives seem to be the most numerous these are dealt with first. The other non-stative imperfectives are presented following the active imperfectives, and then finally the stative imperfectives are described.

### 12.1.1. AcTIVE IMPERFECTIVES

Active imperfectives are imperfective forms that occur with themes involving some sort of action, as opposed to a state. Leer called these ProCESSIVE IMPERFECTIVES in his dissertation (Leer 1991) but previously called them 'active' (Leer 1976; Williams, Williams, \& Leer 1978) and now does so again (Leer 2000). Like all non-stative imperfectives they have $[-I]$ in the classifier, except the $C L[+I]-\ldots-k$ and $y o o=C L[+I]-\ldots-k$ active imperfectives which have $\mathrm{CL}[+\mathrm{I}]$ for unexplained reasons.

The various subtypes of active imperfectives are distiguished by their stem variation in the realis forms. Themes with a particular subtype of active imperfective do have some common meanings, but this commonality is rather unreliable so that the phonological differences between the various stem variations is more prominent than any semantics. The following outline lists the different subtypes of active imperfectives with their semantic properties as given by Leer (1991: 244-245):

- -: Active - action leading to product or oral activity: making, cutting (creating product), roasting, inflating, chewing, spitting, licking, telling, whistling, weeping, selling
- -'Active - rare, mostly denoting oral activity: eating, drinking, saying, weeping, working
- -h Active - action viewed as process, especially physical manipulation: binding, rolling up, mashing, wringing, rubbing, peeling, shaving, scratching, pushing with stick, hunting, gathering, fighting, playing, dancing, telling a story, laughing, asking
- -x Active - action leading to transformation from one state to another: boiling, steaming, soaking, freezing, thawing, removing contents, shaping, growing
- -k Active - actions involving repeated contact with a back-and-forth motion: stroking, sweeping, wiping
- $C L[+I]-\ldots-k$ Active - rare, series of back-and-forth actions: breathing, blinking
- yoo=CL[+I]-...-k Active -
- -ch Active - rare: plural falling, shouting
- DIR=...-ch Active -
- -t Active - series of discrete actions involving repeated contact which is instantaneous and usually violent: hitting, shooting, poking, cutting to pieces
- -s'Active - series of actions involving repeated contact with cumulative result: sewing, rubbing, feeling, shaking, knocking, encouraging, advising
- -l' Active - unique theme: grinding
-     - $x^{\prime}$ Active - action involving movement or transformation of discrete multiple entities
-     - $t^{\prime}$ Active - action leading to destruction of discrete multiple entities: burning, dying

The following example demonstrates a theme which has a -: active imperfective as its primary imperfective form. Note that the theme, $O-S-C L[-D, \emptyset]-$ nik (na; -: Act) 'S tell O', denotes a kind of oral activity. This is characteristic of themes which have a $-:$ active imperfective. The zero conjugation marker $\emptyset$ - is common with nearly all imperfectives, and since this is an active theme it has [-I] in the classifier. The $-:$ stem variation suffix produces a basic stem shape with a long vowel and high tone for closed roots as this example shows, and also long and high for open roots.

```
(208) active imperfective with -:
kaxanéek
\emptyset-ka-\emptyset-x_а-\emptyset-nik-:
3.0-HSFC-ZCNJ-1SG.S-CL[-D,\emptyset,-I]-tell-vaR
'I'm telling it'
    theme: O-S-cl[-D,0]-nik (na;-: Act) 'S tell O'
```

(Leer 1991:247)

The next sentence is an example of an active imperfective with -' stem variation. This type of stem variation only occurs with open roots, as detailed in section 10.5, and produces a basic stem shape with a short vowel and high tone. This particular example is from Roby Littlefield Koolyéík ${ }^{3}$ who asked Richard Marvin [IFixme: name? clan?] «Tsaa eexí gé ixá?»» "Do you eat seal oil?". Richard Marvin replied with this sentence, which is humorous because it is a sequence of three $\underline{x} a$ syllables.
(209) active imperfective with -'
xaxá

Ø-Ø-хха- $\emptyset-\underline{x} а-’ \quad$ xá
3.0-zCNJ-1SG.S-CL[-D, Ø, -I]-eat-var indeed
'I eat it indeed’ (Richard Marvin)
theme: $O-S-c L[-D, \emptyset]-x a(0 ;-h A c t)$ 'S eat 0 '
The example above also demonstrates the other features common to active imperfectives, namely the zero conjugation prefix $\emptyset$ - as well as [-I] in the classifier. Also note again that the theme involves a kind of oral activity, which is typical for -' active imperfectives.

The sentence given below demonstrates a - $h$ active imperfective with the theme $O$-ka-S-cL[-D, Ø]-chixw ( $\emptyset$; -h Act) 'S knead O'. The root $\sqrt{c h i x w}$ 'knead, massage, press with hands' is found as $\sqrt{ }$ chux in much of Northern Tlingit due to regressive rounding, for which see chapter 2. Unusually for Leer, who normally focuses on Tongass and Southern root forms, this Northern-style regressively rounded $\sqrt{c h u x}$ is the form he lists in his verb collection (Leer 1978: 596/295) and verb stem list (Leer 1976: 50). The example below of this theme's -h active imperfective has the usual $\emptyset$ - conjugation prefix and [-I] in the classifier found in most active imperfectives, as well as the - $h$ stem variation specific to this subtype.

[^27](210) active imperfective with -h
kaxacheexw
Ø-ka-Ø-xa-Ø-chixw-h
3.0-HSFC-ZCNJ-1SG.S-CL[-D, $\emptyset,-\mathbf{I}]$-knead-vaR
'I'm kneading it'
(Leer 1991: 247)
theme: O-ka-S-cl[-D, Ø]-chixw~chux (0; -h Act, -s’ Act) 'S knead 0’
The $-h$ stem variation suffix gives rise to a variety of shapes depending on the particular root, for more details see section 10.4. The stem here has a long and low vowel, but some closed roots - the CV'C and CVC' types - will have a long vowel with high tone instead, and open roots will surface with a long vowel and low tone in the imperfective. This particular subtype of active imperfective, that with $-h$, is the most general subtype of active imperfective. It can be thought of as the default active imperfective type; language learners can guess that an active theme has the -h active imperfective as its primary imperfective and often be correct.

As noted above, some closed roots will have stems with a long high vowel when combined with $-h$. The following example is a root of the CV'C type, where a glottalized stem occurs for an otherwise fading stem in Tongass Tlingit, and in Northern Tlingit a long vowel with high tone occurs where it would otherwise be low tone.
(211) active imperfective with -h
sh k'ada.ées ${ }_{N}$
sh k'ada.i's ${ }_{T}$
sh-k'a-Ø-Ø-da-.i's-h
RFLX.O-mouth-zCNJ-3.S-CL[+D, $\emptyset,-\mathrm{I}]$-hiss-vaR
'he is whistling under his breath (making an "ees ees" noise)' theme: sh-k'a-S-cl[+D, Ø]-.i's ( $\emptyset$; -h Act) 'S whistle under breath'
(Leer 1976: 137/53)
The meaning of this verb theme is to make a quiet, repetitive sound like [?s:2s:Rs:] or one like [?ư?ư?u]. This is often done by Tlingit people - even English monolinguals - when idling during some activity, or when pausing momentarily to consider the course of an action. It may also be done as a means of quietly soothing a fussing infant. The root is probably onomatopoetic: in Tongass Tlingit this example would have the form sh k'ada.i's, i.e. / $\int q$ 'ata?i²s/, with a glottalized vowel in the stem, closely mimicking the actual sound. The shift from glottalized vowels to tone in Southern and Northern Tlingit has obscured this onomatopoesis, and consequently the high tone in such verbs appears to be arbitrary.

The $-\underline{x}$ active imperfective is demonstrated below with the theme $O-k a-$ $C L[-D, \emptyset]-. a(n a ;-\underline{x} A c t)$ ' $O$ (plant, tree) grow'. This theme has the promiscuous root $\sqrt{ }$. $a$ 'end move, extend' which denotes the movement or extension of the end of an object, as also found in themes like kee-cl[-D, Ø]-. a (na; -h Stv, -ch Rep) 'dawn', $O-\ddot{y} a-c L[-D, \emptyset]-a(n a ;-\underline{x} A c t)$ 'O (fish) migrate', P-náx $O-\underline{x} ’ a-k a-$ $C L[+D, s]-a(0 ;-\ddot{S t v})$ ' 0 (pointy) be sticking out of P ', and so forth. This particular theme has a $-\underline{x}$ active imperfective, which is characteristic of themes that denote activities that are transformation from one state to another and which happen in a relatively repetitive or continuous manner.
(212) active imperfective with -x

| daa sá i | táayi | geix' |
| :--- | :--- | :--- | :--- |
| daa sá i | táay-ÿí | gei-x |

what Q 2SG.PSS garden-PSS between.folds-Loc

## ka.éix ?

Ø-ka-Ø-Ø-.a-x
3.0-HSFC-ZCNJ-CL[-D, $0,-\mathrm{I}]$-move.end-REP
'what is growing in your garden?'
theme: $O-k a-c L[-D, \emptyset]-a$ (na; - $\underline{\underline{x}}$ Act) ' $O$ (plant, tree) grow’
(Story \& Naish 1973: 103)
The next example also demonstrates the same $-\underline{x}$ active imperfective but this time with the closed root $\sqrt{ } . i t^{\prime}$ 'soak'. Coincidentally this root also has two forms $\sqrt{ } i t^{\prime}$ and $\sqrt{ }$. $u t^{\prime}$ according to Story \& Naish (1973: 201), but this is not confirmed by Leer (1976: 135/52, 1978: 7) who only lists $\sqrt{ }$. $i t^{\prime}$ and gives $\sqrt{ } . u t$ ' as only 'adhere by suction' (Leer 1976: 154/58, 1978: 9).
(213) active imperfective with -x
shaaw kadul.ít'x
shaaw Ø-ka- $\varnothing$-du-la-.it'- $\mathbf{x}$
gumboot 3.0-HSFC-ZCNJ-INDH.S-CL[-D,l,-I]-soak-REP
'they soak gumboots'
theme: O-ka-S-CL[-D,I]-.it'~.ut' (?; - -x Act) 'S soak O' (Story \& Naish 1973: 201)
This example also demonstrates the 'habitualish' use of active imperfectives when they occur with an indefinite human subject or with a third person subject. This particular use is an expression of what might otherwise be considered to be a habitual activity, and could thus be expected to be given in the habitual mode (section 12.6). The distinction between true habituals and this 'habitualish' use of the imperfective seems to be based on the referentiality of the person involved, so that an indefinite 'somebody, people'
or a generic third person 'a person' merits the active imperfective versus a definite whucg merits a true habitual. This distinction could also be due to whether the speaker is emphasizing the activity in which case they select the active imperfective, or whether they are emphasizing the disposition of the actor in which case they select the habitual. This is still an open area of research, though Leer (1991:356-365, 393-423) discussess this issue in some detail in his study of the semantics of imperfectives and habituals.

The $-k$ active imperfective occurs with verb themes that denote an activity involving repeated back-and-forth motion in contact with a surface. The next example shows the theme $0-S-c L[-D, l]-g u(g a \sim n a ;-k$ Act) 'S wipe 0 ' which has a - $k$ active imperfective form as its primary imperfective. It should be noted that the root $\sqrt{g} u$ behaves somewhat irregularly here, undergoing the usual apophony triggered by the $-k$ suffix but with the rounding of the onset consonant being lost unlike with apophony of other roots containing a round $u$ vowel (Leer 1991: 153); thus géikw and not *gwéikw. This is a lexically specified irregularity of this particular root. Also this theme is apparently in the process of shifting from the more conservative $g a$-conjugation class to the more widespread na-conjugation class (Leer 1991: 272), hence the representation of the conjugation class as $g a \sim n a$. This inconsistency between conjugation classes has no effect on the form of the active imperfective, however.
(214) active imperfective with -k
xalagéikw
Ø-ø-xa-la-gu-k
3.0-ZCNJ-1SG.S-CL[-D,l,-I]-wipe-REP
'I'm wiping it'
theme: $O-S-c L[-D, l]-g u(g a \sim n a ;-k A c t)$ 'S wipe 0 '
(Leer 1991: 271)
The denotation of this theme helps to explain why it takes a $-k$ active imperfective that looks suspiciously similar to repetitive imperfectives. The action of wiping something denoted by this theme is a nearly instantaneous activity, with a single wipe only taking a moment. This momentaneousness is then difficult to reconcile with the imperfective aspect which generally extends over a period of time before and after the event time point on the timeline of the situation. Consequently the active imperfective form denotes not the instantaneous action of wiping, but instead a sequence of repeated wiping acts over a period of time.

There are a small number of themes which have [ +I ] despite being active. All of these are ones which have a $-k$ suffix in their active imperfective forms, hence the label ' $c L[+I]-\ldots$-k active imperfective'.
(215) active imperfective with $\mathrm{CL}[+\mathrm{I}]-\ldots-\mathrm{k}$
ch'a yeisú diséikw
ch'a yeisú $\emptyset$ - $\emptyset$-di-sa ${ }^{\text {w }}$-k
just still $\mathbf{z C N J}-3 . S-\mathrm{CL}[+\mathrm{D}, \emptyset,+\mathbf{I}]$-breathe-REP
'he's still breathing'
theme: $S-C L[+D, \emptyset]-s a^{w}$ (na; [ +1$]-\ldots-$-k Act) 'S breathe’ (Story \& Naish 1973:35)
Like the $-k$ active imperfectives, themes with $C L[+I]-\ldots-k$ active imperfectives denote actions that have an essential repetitive nature. Thus breathing and blinking fall into this category. Leer (1991: [[Fixme: where?]]) also reports the existence of $y o o=C L[+I]-\ldots-k$ active imperfectives as well, paralleling the $y o o=C L[+I]-\ldots-k$ repetitive imperfectives described in section 12.1.3. I have not encountered any examples of these, and hence cannot verify their existence.

Active imperfectives with -ch also represent a type of action which is essentially repetitive. These themes involve plural individual actions that are taken together as a single action. Leer (1991: 245) only mentions 'falling' and 'shouting'. Though he does not say this explicitly, his 'falling' refers specifically to weather phenomena, for example hail in the following sentence.
(216) active imperfective with -ch
kadás' kadagátch
kadás' $\emptyset$-ka- $\bar{\emptyset}$-da-gat-ch
hail 3.0-HSFC-ZCNJ-CL[+D, Ø,-I]-fall.PL-REP
'hail is falling'
theme: $O$-ka-CL[+D, Ø]-gat (ga; -ch Act) ‘O (pl.; small round objects) fall’
(Story \& Naish 1973: 85)
(217) active imperfective with -t
gúnx̌aa altákt
gúnxaa a-Ø-Ø-la-tak-t
abalone 3.0-zCNJ-3.s-cL[-D,l,-I]-poke-SER
'he's poking abalone'

[[Fixme: The $d a$ - classifier is deleted with preceding $d u-$, see section 9.1.] ]
(218) active imperfective with -s'
tl'iknaa.át een dukéis'
tl'eek-naa.át ee-n $\quad$ - $\varnothing$-du-da-ka-s'
finger-clothing BASE-INSTR $3.0-\mathrm{ZCNJ}$-INDH.S-CL[+D, $\emptyset,-\mathbf{I}]$-sew-SER
'people sew with a thimble'
theme: $O-S-c L[+D, \emptyset]-\underline{k} a(\emptyset ;-s$ ' Act) 'S sew 0’ (Edwards 2009: 164)
(219) active imperfective with -l'
dleey aklaxákwl'
dleey a-ka-Ø-Ø-la-xakw-l'
meat 3.0-HSFC-ZCNJ-3.S-CL[-D,l,-I]-grind-SER
'he's grinding meat'
theme: O-ka-S-cl[-D,l]-xakw (Ø; -l’ Act) ‘S grind, smush 0’
(Story \& Naish 1973: 102)
(220) active imperfective with $-\mathrm{x}^{\prime}$
neildé ashatlékwx'
neil-dé=a-sha- $\emptyset-\emptyset-\emptyset-$ tlekw- $\mathbf{x}^{\prime}$
home-ALL=3.0-head-zCNJ-3.S-CL[-D, Ø, -I]-grab.up-PL
'he grabbed and took them inside’
theme: $O$-sha-S-CL[-D, Ø]-tlekw ( $n a ;-x^{\prime}$ Act) 'S grab and take $0^{\prime}$
(Story \& Naish 1973: 102)
[[Fixme: Leer definitely wrote has náat' but why isn’t this *has néit' instead? Usually a $a$ vowel undergoes apophony with a - $X$ suffix, i.e. $C \hat{E}:-X$, but that's not happening here.]
(221) active imperfective with - $\mathrm{t}^{\prime}$
has náat'
has= Ø- $\emptyset-\emptyset$-na-t'
PL=3.O-ZCNJ-CL[-D, $\emptyset,-\mathbf{I}]$-die-PL
'they are dying off'
(Leer 1978: 243/85)
The root $\sqrt{ }$ gan 'burn' shows up in a few themes that have a $-t$ ' active imperfective. Since this root is closed, the stem is gánt' with a short vowel and high tone. Story \& Naish (1973:318) treated the root $\sqrt{\text { gan as distinct from }}$ $\sqrt{ }$ gánt', and judging by their definitions of the themes as "burn (usually out of doors), burn over an area" and "burn (esp. trash)" they were not aware of the pluralization implied by the $-t$ ' suffix. In addition they did not understand that the $S$ component difference of $\emptyset$ versus $s$ in the various themes based on $\sqrt{ }$ gan does not actually distinguish intransitives and transitives. Instead, as

Leer (1976: 645/365) documented, there are pairs of $O-S-C L[-D, s]-$ gan (na; Evt) 'S burn 0 ' and $O-C L[-D, s]-g a n(n a$; Evt) 'O burn', as demonstrated by awsigaan 'he burned it' and wusigaan 'it burned', as well as $0-k a-S-c L[-D, s]-$ gan (na; Evt) 'S burn surface of 0 ’ and $0-k a-c L[-D, s]-g a n(n a ;$ Evt) 'surface of 0 burn' as in akawsigaan 'he burned it' and kawsigaan 'it burned'.

Being eventive the above themes lack primary imperfectives, thus there is no form such as *asgáan 'he's burning it'. Instead $-t$ ' is used to form a secondary imperfective which presupposes the additional meaning of a plurality of objects. In this case the - $t^{\prime}$ may not only be plural but also pluractional, since it might denote a single action of burning multiple objects or a plurality of actions of burning individual objects. Nearly all the forms with $-t^{\prime}$ that have been attested are transitive, so that it may be possible that the plurality and/or pluractionality has an additional presupposition of the existence of an agent, an issue which needs to be checked with native speakers.

The first pair of examples below contrasts the future of $O-C L[-D, S]-g a n$ ( $n a ;$ Evt) 'O burn' and the secondary active imperfective of $O-S-C L[-D, S]-g a n$ ( $n a$; Evt) 'S burn 0 ' with the $-t$ ' suffix. I present these in contrast because I lack examples of non-imperfective forms of the transitive themes.
(222) a. future
$\begin{array}{lll}\text { i k'wádli kaadé } & \text { guxsagáan } \\ \text { i } & \text { k'wátl-ÿí ká-dé } & \emptyset \text {-ga-w-ga-sa-gan-: }\end{array}$
2SG.PSS pot-PSS HSFC-ALL $3.0-\mathrm{GCNJ}-\mathrm{IRR}-\mathrm{GCNJ}-\mathrm{CL}[-\mathrm{D}, \mathrm{S},-\mathrm{I}]$-burn-VAR
'your pot (and its contents) will burn'
(Story \& Naish 1973: 38)
b. active imperfective with -t'
naa.át aksagánt'
naa.át a-ka- $\emptyset-\emptyset$-sa-gan-t'
clothing 3.0-HSFC-ZCNJ-3.S-CL[-D, S,-I]-burn-PL
'he is burning clothing'
(Story \& Naish 1973: 38)
The next pair of examples contrast the (atelic, non- $\emptyset$-class) perfective of the theme $O-k a-C L[-D, s]-g a n(n a ; E v t)$ 'surface of $O$ burn' with the secondary active imperfective of the theme $O-k a-S-c L[-D, s]$-gan (na; Evt) 'S burn surface of $\mathrm{O}^{\prime}$.
(223) a. perfective
gagaan latseeních haa yá
gagaan Ø-Ø-la-tsin-h-ée-ch haa yá
sun ${ }^{5} \quad 3.0-\mathrm{ZCNJ}$-CL[-D,l,-I]-strong-var-SUB-ERG 1PL.PSS face
kawsigaan
Ø-ka-ÿu-si-gan-h
3.0-HSFC-PFV-CL[-D,s,+I]-burn-VAR
'because the sun was strong our faces burned'
(Story \& Naish 1973: 38)
b. x'éedadi kínde xasagánt'
x'éedadi kín-dé $\emptyset$ - $\emptyset$-xa-sa-gan-t'
stump $^{7}$ up-ALL $3.0-\mathrm{ZCNJ}-1 \mathrm{SG} . \mathrm{S}-\mathrm{CL}[-\mathrm{D}, \mathrm{S},-\mathrm{I}]$-burn-PL
'I'm burning up tree stumps'
(Story \& Naish 1973: 38)
The following additional examples of $-t^{\prime}$ are offered by Leer (1976: $645 / 365$ ) without any comment. I lack any information on their original theme which apparently includes an incorporated ká-x 'horizontal.surfacepertingent'. That this has been incorporated into the verb is clear from the lack of high tone on $k a$ as well as the lack of a possessor preceding it.
(224) a. active imperfective with -t'
kax asgánt'
ka-x=a-Ø-Ø-sa-gan-t'
HSFC-PERT=3.0-ZCNJ-3.S-CL[-D,S,-I]-burn-PL
'he is frying them'
b. deverbal noun with $-\mathrm{t}^{\prime}$
kax gánt'i
ka-x=gan- $\mathbf{t}^{\prime}-\mathrm{i}$
HSFC-PERT=burn-PL-NMZ
'fried, roasted food'
5. The reader may have noted that the word gagaan 'sun' derives from the same root $\sqrt{ }$ gan 'burn' with the apparent addition of the ga-conjugation prefix, which here would have the meaning 'downward'.
7. This is from $\sqrt{x^{\prime} i t}$ 'uproot' and -(.) adi 'thing which is' (roughly), and so specifically refers to tree stumps which have been knocked over or otherwise uprooted, excluding tree stumps which are still rooted and standing upright.

### 12.1.2. PoSITIONAL IMPERFECTIVES

Positional themes are unusual in that they can only occur in the imperfective mode, unlike any other types of themes. 【Fixme: xref to theme types】 Positional imperfectives are identical in form to active imperfectives, they are only distinguished by their semantics and by the fact that positional themes do not occur with all of the stem variations found among active themes. Indeed, the only stem variations that do occur with positional imperfectives are $-z^{\prime},-\prime$, and $-n$.

The following example demonstrates a typical positional imperfective, one with $-:$ stem variation. As with other non-stative imperfectives the positional imperfective is characterized by [-I] in the classifier and the $\emptyset$ conjugation class prefix.
(225) positional imperfective with -:
t’ook kát as.áa du yádi
t’ook ká-t a-Ø-Ø-sa-.a-̀ du yát-ÿí cradleboard HSFC-PNCT $3.0-\mathrm{zCNJ}-3 . S-\mathrm{CL}[-\mathrm{D}, \mathrm{s},-\mathrm{I}]$-seat-var $3 \mathrm{H} . \mathrm{PSS}$ child-PSS 'he has his child seated on the cradleboard' theme: P-t O-S-cl[-D,S]-a (na; -: Pos) 'S have 0 seated at $\mathrm{P}^{\prime}$
(Edwards 2009:328)
Leer (1991:324) considers positional themes to be derived, with an obligatory $P$ - $t$ postpositional phrase where $P$ is the location of the verb's object. He says that positional imperfectives usually have a semantic relationship with some other theme that supplies the non-imperfective modes. Edwards (2009: 168) gives the theme $S-C L[-D, \emptyset]-k i(n a ? ;-n$ Pos) 'S (pl.) be seated'. Contra Leer, she states that this verb theme has an optional postpositional phrase $P-t$, thus allowing both of the following examples.
(226) a. has kéen
has=Ø-Ø-Ø-ki-n
PL=ZCNJ-3.S-CL[-D, Ø,-I]-sit.PL-VAR
'they are seated'
theme: $S-C L[-D, \emptyset]-k i(n a ? ;-n$ Pos) 'S (pl.) be seated’ (Edwards 2009: 168)
b. át has kéen
á-t has= $\emptyset-\emptyset-\emptyset-k i-n$
3N-PNCT PL=ZCNJ-3.S-CL[-D, $\emptyset,-\mathrm{II}]$-sit.PL-VAR
'they are seated there'
theme: $P-t S-C L[-D, \emptyset]-k i\left(n a ?\right.$; $n$ Pos) 'S (pl.) be seated at $\mathrm{P}^{\prime}$
(Edwards 2009: 168)

The related theme $S-C L[-D, \emptyset]-k i(\underline{g} a ;$ Evt) 'S (pl.) sit down' (Edwards 2009: 168) is the non-positional counterpart to the previous theme. This theme, being eventive, lacks a primary imperfective form, but it does have forms of the other modes such as perfective, repetitive imperfective, and so forth.

The following is a positional imperfective according to Leer (1991: 247).
(227) positional imperfective with -'
xatá
Ø-xa- $\varnothing$-ta ${ }^{\text {h }}$ -
zCNJ-1SG.S-CL[-D, Ø,-I]-sleep-vaR
'I'm sleeping'
theme: $S-c L[-D, \emptyset]-t a^{h}$ (na; -' Pos) 'S sleep'
(Leer 1991: 247)
This may in fact not be a positional imperfective for two reasons. One is that Leer also gives a perfective form of this theme which is peculiar if it is positional, but reasonable if it is an active verb. The second reason is that this is the only positional imperfective recorded that has -' stem variation, a fact which Leer (1991:244) notes. Edwards (2009:227) instead lists this verb as an active theme, with a perfective, an active imperfective (probably -' but this is not clear from Edwards's notation), and a - $\underline{x}$ repetitive imperfective. She also gives the following example of a subordinated hortative form of this theme. ${ }^{8}$
(228) haaw yan awli.át a káa
haaw yan=a-ÿu- $\emptyset-l i-. a t-y ̈ \quad a \quad k a ́-'$
branch ABMAR=3.0-PFV-3.S-CL[-D,l,+I]-handle.PL-VAR 3N.PSS HSFC-LOC
ngataayít
na-ga- $\varnothing-\emptyset-t a-h-e ́ e-t$
nCNJ-GMOD-3.S-CL[-d, Ø,-I]-sleep-var-SUB-PNCT
'he put down branches in order to sleep on them' (Edwards 2009: 227)

### 12.1.3. REPETITIVE IMPERFECTIVES

[[FIXME: Note iterative imperfectives, MUltiple-iterative imperfectives, and conative imperfectives (Leer 1991: 239). The former two "freely form epiaspectual paradigms".] ]
8. Edwards's translation 'he put branches down so he could sleep on them' leads one to surmise that this verb is a potential because of the 'could', but the verb is actually a 'purposive' (Story 1966: 106) that is constructed from a subordinated hortative with the punctual case suffix added. My translation is more accurate but less natural.
12.1.4. Progressive imperfective

| Class | Preverb | Example |
| :--- | :--- | :--- |
| $\emptyset$ | ÿaa= | aadé yaa has na.át 'they are walking along there' |
| na | ÿaa= | aagáa yaa kunashéen 'he is going along searching for it' |
| ga | yei= | yeï andagán 'it is getting sunny' |
| ga | kei= | kei ndahán 'he is standing up' |

Table 12.5: Conjugation class and progressive imperfective directional preverbs. Adapted from Edwards 2009: 25.
[[Fixme: Also occasional.]

### 12.1.4. Progressive imperfective

Progressive imperfectives are only secondary imperfectives, never primary imperfectives for any theme. Progressive imperfectives are characterized by the appearance of the na-conjugation prefix. They also have [-I] in the classifier for both realis and irrealis forms, and have the $-n$ stem variation suffix. Although the na-conjugation prefix is always present, progressives are nonetheless sensitive to conjugation class, with each class having a specific directional preverb. The distribution of preverbs selected by the progressive imperfective and conjugation class is given in table 12.5 .

The $\emptyset$ - and $n a$-conjugation classes both select the $\ddot{y} a a=$ 'along' preverb, an unusual division which ignores the telicity split between $\emptyset$ and the other three classes. This particular $\ddot{y} a a=$ is not the same as the homophonous preverb referring to mental activity that shows up in themes such as $\ddot{y} a a=\underline{k} u$ -$S-C L[+D, S]-g e(g a ;-\ddot{y} S t v)$ 'S be intelligent, wise'. Leer (1991: 135-136) takes some pains to show that the two preverbs must be ordered separately, so that $\ddot{y} a a=$ 'along' occurs in slot +17A whereas $\ddot{y} a a=$ 'MENT' occurs in +17B; in addition he notes that $\ddot{y} a=$ 'along' is in complementary distribution with the other directional preverbs (Leer 1991: 136).
(229) a. aadé yaa has na.át
á-dé ÿaa=has=na- $\varnothing$ - $\emptyset-. a t-n$
3 N -ALL along=PL=NCNJ-3.S-CL[-D, $\emptyset,-\mathrm{I}]$-go.PL-vaR
'they are walking along toward there'
theme: $P-\{t, \underline{\chi}$, dé $\} ~ O-c L[-D, \emptyset]-$-at ( 0 ; -h Rep Mot) ' O (pl.) go by foot to $\mathrm{P}^{\prime}$
b. aagáa yaa kunashéen
á-gáa 弟aa=ku-na-Ø-Ø-shi-n
3N-ADES along=AREAL-NCNJ-3.S-CL[-D, $\emptyset,-\mathbf{I}]$-search-VAR
'he is going along searching for it'
theme: P-gáa S-cL[-D, Ø]-shi (na; -h Rep Mot) 'S search for P'
c. yei andagán
yei=a-na-da-gan-n
down=3.0-NCNJ-CL[+D, $\emptyset,-\mathrm{I}]$-burn-VAR
'it is getting sunny'
theme: $a-C L[+D, \emptyset]-g a n(\underline{g} a ;-h$ ?) 'sun shine’
d. kei ndahán
kei=na-Ø-da-han-n
up=NCNJ-3.S-CL[+D, Ø, -I]-stand-vAR
'he is standing up'
theme: $S-C L[+D, \emptyset]-h a n(g a ;-h$ Rep Mot) 'S stand up’

### 12.1.5. STATIVE IMPERFECTIVES

(230) - ̈̈ stative imperfectives
a. tsaa eexí xalits'éx
tsaa eex-ÿí Ø-Ø-x_-li-ts'ex-ÿ
seal oil-PSS 3.0-ZCNJ-1SG.S-CL[-D,l,+I]-indulge-VAR
'I indulge in seal oil' (Story \& Naish 1973: 114)
b. a yáanáx tá alits'éx
a ÿáanáx tá a-Ø-Ø-li-ts'ex-ÿ
3 N more sleep $3.0-\mathrm{ZCNJ}-3 . \mathrm{S}-\mathrm{CL}[-\mathrm{D}, \mathrm{l},+\mathrm{I}]$-indulge-VAR
'he's indulging in sleep too much'
(Story \& Naish 1973: 114)

### 12.2. DECLARATIVE MODES: PERFECTIVE

The meaning of the Tlingit perfective is cross-linguistically typical, in that it denotes a situation which began at some point in the past and either in the case of a state it continues to persist to the time of utterance or in the case of a non-state it is implied to have ceased at utterance time.

The basic perfective prefix is $\ddot{y} u$-. This is usually found as $w u$ - and has been given that way by Cable (2006). The use of $\ddot{y}$ rather than $w$ is because
of the form of perfectives with second person subjects. When occurring with the second person singular subject $i$ - the combination of the two as $\ddot{y} u-i$ - occurs as $\ddot{y} i(\ddot{y} e e$ when with the classifier $\ddot{y} a-$ ). Thus the following example with both Northern Tlingit and Tongass Tlingit forms.
(231) yisiteen $_{N}$

ÿisitihn
$\emptyset$-ÿu-i-si-tin-h
3.0-PFV-2SG.S-CL[-D, S, +I]-see-VAR
'you (sg.) saw it'
The plural has a similar appearance, where the sequence of the perfective $\ddot{y} u$ - and the second person plural subject $\ddot{y} i$ - arising as $\ddot{y} e e \ddot{y}$. The Northern and Tongass forms make this evident.
(232) yeeysiteen ${ }_{N}$

ÿihÿsitihn ${ }_{T}$
Ø-ÿu-ÿi-si-tin-h
3.0-PFV-2PL.S-CL[-D, s, +I]-see-VAR
'you (pl.) saw it'
If we were to describe the perfective prefix on the sole basis of (nonconservative) Northern Tlingit then we would be forced to deal with the difficult alternation between $w$ and $y$, where $w$ would usually win due to regular spread of rounding but not in this particular case. Tongass and conservative Northern Tlingit preserved the $\ddot{y}$ as a distinct phoneme, and it seems that here we can analyze the vowel $u$ of the perfective prefix $\ddot{y} u$ - as being lost, but the $\ddot{y}$ as remaining. For similar reasons the second person plural has $\ddot{y}$, since we would expect a glide $y$ to arise from a vowel $i$, but instead we find $\ddot{y}$.

Although the preceding discussion treated the perfective as a single mode, there are actually two kinds of perfectives depending on whether the theme is telic or atelic, as defined by the $\emptyset$-conjugation class on the one hand and the $n a-$, $g a$-, and $g a$-conjugation classes on the other (see chapter 11). Atelic perfectives always occur with the perfective prefix $\ddot{y} u-$, as well as with the $-h$ stem variation suffix. Telic perfectives have the $-\ddot{y}$ stem variation suffix instead. Telic perfectives have a distinct perfective prefix $u$ - which is indistinguishable from the atelic perfective prefix except where the subject or object is zero (third person) and the classifier is CL[-D, Ø].
(233) a. telic perfective
shgóont uwagút
shgóon-t u-Ø-ÿa-gut-ÿ
school-PNCT PFV.TEL-3.S-CL[-D, Ø,+I]-go.SG-vaR
'he got to school'
theme: $P-\{t, \underline{\chi}, d e ́\} S-c l[-D, \emptyset]-g u t\left(\emptyset ;-h\right.$ Rep Mot) 'S arrive at $\mathrm{P}^{\prime}$
b. atelic perfective
shgóonde woogoot
shgóon-dé ÿu-Ø-ÿa-gut-h
school-ALL PFV-3.s-cl[-D, $\emptyset,+\mathrm{I}]$-go.SG-vaR
'he went toward school'
theme: P-dé S-cl[-D,Ø]-gut (na; yoo=[+I]-...-k Rep Mot) 'S go toward P’
The above pair illustrate two motion derivations as described in section 11.1. The first theme is derived into the $\emptyset$-conjugation class which is telic. The second theme is derived into the na-conjugation class, one of the three $\{n a, g a, g a\}$ atelic classes. Each type has a different postposition associated with it, the telic one being $-t$ in the perfective and the atelic one always being -dé.

The $u$ - telic perfective prefix is indistinguishable from the atelic perfective prefix except in the special cases where the subject prefix is $\emptyset$ - or absent, and the object prefix is $\emptyset$ - (not $a$-) or absent. Compare the previous examples with the following two which have a first person subject instead.
(234) a. telic perfective
shgóont xwaagút
shgóon-t u-xַa-ÿa-gut-ÿ
school-PnCT PFV.TEL-1SG.S-CL[-D, $\emptyset,+\mathrm{I}]$-go.SG-var
'I got to school'
b. atelic perfective
shgóonde xwaagoot
shgóon-dé ÿu-xa-ÿa-gut-h
school-ALL PFV-1SG.S-CL[-D, Ø, +I]-go.SG-VAR
'I went toward school'
Non-motion themes also feature the same distinction, being telic or atelic depending on their lexically specified conjugation class.
(235) a. atelic perfective
woogaax
ÿu- $\emptyset$-ÿa-gax-h
PFV-3.s-cl[-D, $\emptyset,+\mathrm{I}]$-cry-vaR
'he cried'
theme: $S$-cl[-D, Ø]-gax (ga; -ch Act) 'S cry’
b. telic perfective
at uwaxáa
at-u- $\emptyset-\ddot{y} a-\underline{x} a-\ddot{\mathbf{y}}$
INDN.0-PFV.TEL-3.S-CL[-D, Ø, +I]-eat-vaR
'he ate'
theme: at-S-cl[-D, Ø]-xa ( $0 ;-h$ Act) 'S eat'
Some themes have invariable roots and hence it can be difficult to tell whether the theme has a telic or atelic perfective.
(236) woosháash

Ø-ÿu-ÿa-sháash
3.0-PFV-CL[-D, Ø, +I]-wear.out
'it wore out'
theme: O-cl[-D, Ø]-sháash ${ }^{\times}$(ga; Evt, -ch Rep) 'O wear out by friction’
In such cases the conjugation class still applies, it is merely that the distinction between the $\emptyset$-class on the one hand and the $n a-, g a$-, and $g a$-class on the other is not visible in the perfective since this distinction is only signalled by stem variation. The example above is atelic since it is a member of the $g a$-conjugation class, thus if this were not an invariable root it would be expected to have the form *shaash.

There are a very few themes which lack perfectives. One example is $O$ $t u-C L[-D, l]-$.an ( $g a ;-h S t v$ ) ' 0 be kind, gentle’ which only occurs in the imperfective as tuli.aan 'he is kind' and does not have a perfective form. Another example is $O-k a-C L[+D, l]-c h ' a ́ c h ' \underline{x}{ }^{\times}$(?; Stv) ' 0 (natural obj.) be spotted' which has the form kadlich'ách' $\underline{x}$ 'it (rock, wood) is spotted' and also cannot occur in the perfective.

### 12.3. DECLARATIVE MODES: REALIZATIONAL

The realizational mode is an archaicism that is all but dead in modern Tlingit. It can be found in songs and in some set phrases, and it very occasionally
occurs in the speech of highly skilled orators. Semantically it is similar to the perfective, but expresses the speaker's relief or surprise about the perfectivity of the situation. Leer (1991:379) says that it "seems to convey an impression of vividness or immediacy".

The realizational is formed from the verb theme's conjugation class prefix, $[+\mathrm{I}]$ in the classifier, and the $-:$ stem variation suffix. Since this mode is so rare, the examples here are all taken from those collected by (Leer 1991).
(237) wáa sáyá dé at naanée ?
wáa sá-ÿá dé at-na-ÿa-ni-:
how Q-PROX now indN.O-NCNJ-CL[-D, $\emptyset,+\mathbf{I}]$-happen-var
'what (on earth) has happened now?'
(Leer 1991:379)
The example above illustrates the eventive theme $O-C L[-D, \emptyset]-n i_{T S R I} \sim n e$ ( $n a$; Evt) 'happen to 0'. This theme is a member of the na-conjugation class, hence the realizational appears with $n a$-. The classifier $\ddot{y} a$ - is contracted with the preceding $n a$ - to produce $n a a$, and with the open root the stem variation suffix -: gives $C V V^{:}$in Southern and Northern Tlingit.
(238) yéi naatée aankáawu
yéi= Ø-na-ÿa-ti ${ }^{\text {h}}-\mathbf{z}$ aankáawu
thus=3.0-NCNJ-CL[-D, Ø, +I]-be-var aristocrat
xat gasháa
xat- $\varnothing$-ga- $\varnothing-\emptyset-$ sha- $\quad$ y
1SG.O-ZCNJ-GMOD-3.S-CL[-D, Ø,-I]-marry-vAR
'let it be that an aristocrat should marry me'
(Leer 1991:379)
(239) shunliháash ax adaawóotli

Ø-shu-na-li-hash-: ax adaawóotl-ÿí
3.0-end-NCNJ-CL[-D,l,+I]-float-VAR 1SG.PSS trouble-PSS
'my trouble has floated away'
(Leer 1991: 380)
(240) ax leelak'whás hídi anák
ax léel(a)k'w=hás hít-ÿí a-nák
1SG.PSS grandparent=PL house-PSS 3 N -ELAT
yéi naxjigéet
yéi=Ø-na-xa-ji-git-:
thus=3.0-NCNJ-1SG.S-CL[+D,Sh,+I]-fall-vAR
'I have put my grandparents' house behind me' theme: $O-S-c L[+D, s h]-g i t(n a ;-$ ? Act) 'S leave behind 0 '
(Leer 1991:380)
(241) daak galis'ées
daak= $\emptyset$-ga-li-s'is-: du tú-ÿí i yéil-ÿí
ADMAR=3.0-GCNJ-CL[-D,l,+I]-blow-VAR 3H.PSS inside-PSS 2SG.PSS raven-PSS
'your raven's soul has blown out to sea'
(Leer 1991: 381)
Leer (1991:380) says that the following example is "the only instance where I have heard the Realizational used spontaneously in conversation". In keeping with his usual practice, Leer does not segment the example. He does not say who uttered it, and since he gives it in his idealized transcription it is impossible to determine the original dialect.
(242) yanaxtuwadláak

Ø-ÿa-na-ga-tu-ÿa-dlak-\{ı,h\}?
3.O-VSFC-NCNJ-GMOD-1PL.S-CL[-D, $\emptyset,+1]$-win-VAR
'we've made it!'
(Leer 1991: 380)
Leer's claim that this is an example of the realizational is somewhat problematic. The sequence naxtu is the usual surface form of the prefixes na$g a-t u$-. Since $t u$-here is indisputably the first person plural subject, as confirmed by the English translation, the $\underline{x}$ cannot be the first person singular subject. Thus $g a$ - has to be the $g a$-mode prefix. This has never been reported as being part of the realizational mode, but is instead expected in the hortative which is composed of $C N J-g a-[-I]-\ldots-h \sim \ddot{y}-(i h)$. The presence of $w a$ in naxtuwa indicates that the classifier is $\ddot{y} a$-, hence having $[+1]$ in contrast with the hortative's $[-\mathrm{I}]$. The only mode where the $g a$-mode prefix occurs with a conjugation class prefix and [ +I ] is the potential, but this would also have the irrealis $u$ - that should surface as something like either *yoonax́tuwadlák or *yoonax́tuwadlaak depending on stem variation ( $-\ddot{y}$ or $-h$ respectively).

### 12.4. DECLARATIVE MODES: FUTURE

The future is one of the least complicated modes in Tlingit from a learner's perspective, but it has some unusual morphological and semantic properties. Futures always contain the string of prefixes $g a-w$ - $g a$ - where $g a$ - is the $g a$-conjugation prefix, $w$ - is an allomorph of the irrealis prefix, and $g a$ - is the ga-mode prefix. The latter prefix does not seem to have any independent meaning, it is simply a morphological adjunct that helps to distinguish certain modes from others. The $w$-prefix is similar to the more usual $u$-irrealis prefix, and can be analyzed as contributing the irrealis part of the semantics of the future, though Leer (1991) avoids addressing its meaning.

In addition to the prefix string $g a-w-g a-$, the future also always occurs with $[-\mathrm{I}]$ in the classifier. Conceptually this can be thought of as the future not being a state, which accords not only with its point-like temporal semantics but also with the fact that the future is not realized.

The positive future is reliably distinguished from the negative future, with the positive form having -: stem variation and the negative form having $-h$ stem variation. The following example demonstrates this distinction.
(243) a. positive future
neildé kkwagóot
neil-dé=ga-w-ga-xa- $\emptyset$-gut-:
home-ALL=GCNJ-IRR-GMOD-1SG.S-CL[-D, Ø,-I]-go.SG-var
'I will go home'
b. negative future
tléil neildé kkwagoot
tléil neil-dé=ga-w-ga-xa- $\varnothing$-gut-h
NEG home-ALL=GCNJ-IRR-GMOD-1SG.S-CL[-D, Ø,-I]-go.SG-vAR
'I won't go home'

### 12.5. DECLARATIVE MODES: POTENTIAL

(244) ch’u tle yé a xánt ayeel'óoni
ch'u tle yé a xán-t a-ÿu-i-Ø-l'u'n-h-ée
even just thus 3N.PSS near-PNCT 3.0-PFV-2SG.S-CL[-D, $\emptyset,-\mathrm{II}]$-hunt-var-SUB
tsá giya.óon
tsá $\bar{\emptyset}$-u- $\emptyset$-ga-i-ÿa-.u'n-h
only.then 3.O-IRR-ZCNJ-GMOD-2SG.S-CL[-D, Ø, +I]-shoot-VAR
'when you have gotten near it, then you can shoot it' (Leer 1991:386)
(245) ch'a yáax' ganú ixduwajaak
ch'a yáax' ganú
ch'a yá-x' ga- g- $\emptyset-\sqrt{n u}(\mathrm{k})$-ÿ
just PROX-LOC GCNJ-2SG.S-CL[-D, $\varnothing,-\mathrm{I}]$ - $\sqrt{\text { sit.SG-VAR }}$
just here-at you.SG.sit.IMP
ixduwajaak
i-u-ø-ga-du-ÿa- $\sqrt{j}$ jk-h
2SG.O-IRR-ZCNJ-GMOD-IND.H.S-CL[-D, $\emptyset,+I]-\sqrt{ }$ kill-vaR
someone.kill.Pot.you.SG
'sit right here (or else) someone might kill you'
theme: $S$-cl[-D, 0$]-n u k(g a ;-$ ? Act) 'S (sg.) sit down'
theme: $O-S-C L[-D, \emptyset]-\sqrt{j} a \underline{k}(\emptyset ;-\ddot{y}$ ? Act) 'S kill 0'
(unkn. song cited in Leer 1991:386)
(246) Ỵā'q!gwa axhu'nxo-has qâkxasîtī'n ÿáax' gwá ax hunxِu hás kwaakasiteen
ÿáax' gwá ax hunxِu hás
ÿá-x’ gwá ax húnxw=hás
PROX-LOC SURP 1SG.PSS elder.bro=PL
here-at oh my elder.brothers
kwaakasiteen
Ø-u-ga-ga-xa-si- $\sqrt{\text { tin-h }}$
3.0-IRR-GCNJ-GMOD-1SG.S-CL[-D,s,+I]-V $\sqrt{\text { see }}$-VAR
I.see.pot.it
'oh I might see my elder brothers here'
(Swanton 1909: 405.61)
theme: $O-S-c c[-D, s]-\sqrt{t i n}(\underline{g} a ;-h$ Act) 'S see 0 '
(247) Dā'go qātc sa xat gax sînē'x ?
daagu káach sá xat gwaaxsineix ?
daagu káach sá xat gwaax́sineix
daagu káa-ch sá xat-u-ga-ga-Ø-si- $\sqrt{n}$ nex-h
which man-ERG Q 1SG.O-IRR-GCNJ-GMOD-3.0-CL[-D,s,+I]-V $\operatorname{lave-vAR~}$
which man $Q$ he.save.рот.me
'which man might save me?' (Swanton 1909:408.75)
theme: $O-S-c L[-D, S]-\sqrt{n i \underline{i}} \sim \sqrt{n e x}$ (ga; -h Act) 'S save 0'
(248) a. dubitative + (positive) + potential
gwál kwaakasiteen
gwál Ø-u-ga-ga-xa-si- $\sqrt{\text { tin}}-\mathrm{h}$
dUB 3.0-IRR-GCNJ-GMOD-1SG.S-CL[-D,s,+I]-V see-vaR
'I might see it' (lit. 'maybe can')
(Leer 1991: 388)
b. dubitative + negative + potential
gwál tléil kwaakasiteen
gwál tléil Ø-u-ga-ga-xa-si- $\sqrt{\text { tin-h }}$
dUB NEG 3.0-IRR-GCNJ-GMOD-1SG.S-CL[-D,s,+I]-Vsee-var
'I might not see it' (lit. 'maybe can't') (Leer 1991:388)
(249) ch'a goot'agáan sá tsá yéi nkwasinee
ch'a goot’agáan sá tsá
ch'a goot'agáan sá tsá
just when.FUT Q only.then
just when some only.then
yéi nkwasinee
yéi= $\emptyset-u-n a-g a-x a-s i-\sqrt{n i-h}$
thus=3.0-IRR-NCNJ-GMOD-1SG.S-CL[-D,s,+I]-Vdo-VAR
I.do.poт.it
'someday I may do it' (Seidaayaa Elizabeth Nyman in Leer 1991:386) theme: $O-S-c L[-D, s]-\sqrt{n i \sim} \sqrt{n e}(n a ;-h \mathrm{Act})$ ' S do 0 '
(250) a. Lét 'òd ${ }^{2}$ hàt' qwògù dìyó tléil aadé haat kwaagoodi yé
tléil aadé haat kwaagoodi
tléil á-dé haa-t=u-Ø-ga-xa-ÿa-gut-h-i
NEG 3.N-ALL here-PNCT=IRR-ZCNJ-GMOD-1SG.S-CL[-D, $\emptyset,+\mathrm{II}]$-go.SG-VAR-REL
not [Rel it-ward here-to=I.go.Pot.REL yé yé
way
] way
'there's no way for me to get ${ }^{9}$ here', 'I cannot get here'
(Boas 1917: 92)
9. The translation as 'get' rather than Boas's 'come' is because this captures the telicity encoded by the $\emptyset$-conjugation class of the verb and - $t$ punctual case suffix on the preverb. Boas didn't get conjugation classes.
b. Léł 'òd ${ }^{\prime}$ hàt' gayìy'àdìyó
tléil aadé haat gayeey.aadi yé
tléil aadé haat gayeey.aadi
tléil á-dé haa-t=u-Ø-ga-ÿi-ÿa-.at-h-i
NEG 3.N-ALL here-PNCT=IRR-ZCNJ-GMOD-1SG.S-CL[-D, Ø, +I]-go.PL-VAR-REL
not [Rel it-ward here-to=you.pl.go.Pot.rel
yé
yé
way
] way
'there’s no way for you (pl.) to get here', 'you (pl.) cannot get here'
(Boas 1917: 92)
(251) inabilitive: negative + potential relative
tléil aadé nkwaagoodi yé
tléil aadé nkwaagoodi yé
tléil á-dé u-na-ga-xِa-ÿa-gut-h-i yé
NEG 3.N-ALL IRR-NCNJ-GMOD-1SG.S-CL[-D, Ø,+I]-go.SG-VAR-REL way
not [Rel it-ward I.go.pot.reL ] way
'I can't go' ('no way can I go')
(Story 1966: 184)
(252) relative clauses with referential heads (not light noun yé 'way, manner')
a. gwatuwaxaayi át
gwatuwaxaayi át
Ø-u- $\emptyset$-ga-tu-ÿa-xa-h-i át
3.0-IRR-ZCNJ-GMOD-1PL.S-CL[-D, Ø, +I]-eat-VAR-REL IND.N
we.eat.Pot.it.REL thing
'something we can eat'
(Story 1966: 184)
b. ugaajaagi át
ugaajaagi át
Ø-u-Ø-ga-Ø-ÿa-jak-h-i át
3.0-IRR-ZCNJ-GMOD-3.S-CL[-D, Ø, +I]-kill-VAR-REL IND.N
he.kill.pot.it.REL thing
'something he can kill'
(253) decessive potentials
a. nagwagoodéen

Ø-u-na-ga- $\emptyset-g u t-h-e ́ e n ~$
3.0-IRR-NCNJ-GMOD-CL[-D, Ø,-I]-go.SG-VAR-DEC
'he would have gone'
(Story 1966: 184)
b. yéi ngwateeyéen
yéi=Ø̄-u-na-ga-Ø-ti-h-éen
thus=3.0-IRR-NCNJ-GMOD-CL[-D, $\emptyset,-\mathrm{I}]$-be-var-DEC
'it would have been so'
(Story 1966: 184)
c. yéi jingwaneiyéen yéi=ji-u-na-ga-Ø-Ø-ne-h-éen thus=hand-IRR-NCNJ-GMOD-3.S-CL[-D, $0,-\mathrm{I}]$-do-vAR-DEC
'he would have worked'
(Story 1966: 184)

### 12.6. DECLARATIVE MODES: HABITUAL

(254) a dahkak'ats'i aweh
a dah-ka-k'ats'-ÿi a-weh
3N.PSS around-HSFC-thorn-PSS FOC-MDST
ahx duxas'ch s'e
a-dax= $\emptyset$-u- $\emptyset$-du- $\emptyset$-xas'-ÿ-ch s'e
$3 \mathrm{~N}-\mathrm{ABL}=3.0-\mathrm{IRR}$-ZCNJ-INDH.S-CL[-D, $\emptyset,-\mathrm{I}]$-scrape-vAR-HAB init.
'initially the thorns are scraped off of it'
(Williams, Williams, \& Leer 1978: 48)

### 12.7. DEONTIC MODES: IMPERATIVE

### 12.8. DEONTIC MODES: HORTATIVE AND ADMONITIVE

### 12.9. CIRCUMSTANTIAL MODES: CONSECUTIVE, CONDITIONAL, CONTINGENT

The circumstantial modes comprise the consecutive, conditional, and contingent. The consecutive mode indicates that the described event or property occurs subsequent to some other circumstance. It is conventionally
12.9. Circumstantial modes: consecutive, conditional, contingent
translated as 'when', i.e. 'when V occurs' for the marked V. The consecutive mode is formed with the theme's conjugation prefix, [II] in the classifier, and the $-i$ stem variation suffix. As a string this can be represented $C N J-C L[-I]-\ldots-:$.
(255) consecutive

| ách áyá | atx | gadaháan | ldakát du |
| :--- | :--- | :--- | :--- |
| ách á-yá | á-dáx | ga- $\emptyset$-da-han-: | ldakát du |

'so she stands up from it and it's all over her' theme: $S-C L[+D, \emptyset]-h a n(g a ;-c h$ Rep Mot) 'S (sg.) stand up' theme: yéi=O-CL[-D, Ø]-ti ${ }^{h}$ (na; -h Stv) 'O be thus, so'
(Dauenhauer \& Dauenhauer 1987: 196)
This particular example is from Frank Dick Sr. Naakil.aan's rendition of the popular 'Girl who Married the Brown Bear' story. The context here is that the girl has just stepped in a pile of brown bear feces, slipped, and then fallen down. She then proceeds to curse brown bears for their defecatory practices, calling them tukx’agékákwx'w or 'big basket anuses' (túk $\underline{-x} \underline{x}^{\prime} e ́-g e ́-\underline{k} a ́ k w-$ $x^{\prime}$ 'butt-mouth-large-basket-PL'). The consecutive is the first of the two verbs in the sentence that describes the girl standing up, and this is framed by the stative imperfective verb where the feces 'is all around on her thus'.

The conditional mode indicates that the described event or property is a condition for some other circumstance. It is conventionally translated as 'if', i.e. 'if $V$ is/were the case' for the marked V. The conditional mode is formed with the theme's conjugation prefix, $[-\mathrm{I}]$ in the classifier, the $-n$ stem variation suffix, and the conditional suffix -ee $\sim-i h_{T}$. In a string this can be given as CNJ-[-I]-...-n-ee.
(256) a. conditional
hat gútnee
haa-t=Ø-Ø-Ø-gut-n-ee
here-PnCT=ZCNJ-3.S-cl[-D, Ø,-I]-go.SG-var-cond
'if he gets here'
theme: P-\{t,,$\underline{,}$, é $\} S-c L[-D, \emptyset]-$ gut ( $\emptyset ;-h$ Rep Mot) 'S (sg.) arrive at $\mathrm{P}^{\prime}$
(Story 1966: 106)
12.9. Circumstantial modes: consecutive, conditional, contingent
b. conditional
sh kanxalneeknee
sh-ka-na-xa-l-neek ${ }^{\text {x }}$-n-ee
RFLX.O-HSFC-NCNJ-1SG.S-CL[+D,l,-I]-tell-vaR-COND
'if I tell a story'
theme: sh-ka-S-cl[+D,l]-neek ${ }^{\times}$(na; Act) 'S tell a story’ (Leer 1991:211)
The contingent mode indicates that the described event or property is associated with the occurrence of some other circumstance. It is conventionally translated as 'whenever', i.e. 'whenever V is the case' for the marked V . The contingent mode is formed with the theme's conjugation prefix, the $g a$ - mode prefix, $[-\mathrm{I}]$ in the classifier, the $-n$ stem variation suffix, and the contingent suffix -ín $\sim-i n_{\mathrm{T}}$. The string representation is CNJ-ga-CL[-I]-...-nín.
(257) a. contingent
haat gagúdin
haa-t=Ø-ga- $\emptyset$ - $\emptyset$-gut-n-ín
here-PNCT=zCNJ-GMOD-3.S-CL[-D, Ø,-I]-go.SG-var-CTING
'whenever he gets here'

(Story 1966: 106)

## 13 Polarity: Realis and irrealis

Realis is not marked in Tlingit, but irrealis is distinctly indicated by an irrealis prefix in slot +6 within the verb. This slot is located between the outer conjugation prefixes in slot +7 and the inner conjugation prefixes in slot +5 . According to Leer (1991) there are three prefixes in this slot, namely $u$-, $w$ (his $\check{u}$-), and oo- (his $u \cdot-$ ). He only recognizes the $u$ - prefix as being a genuine irrealis marker, but I consider them all to index some flavour of irrealis semantics.

Leer (2000:110) states that the semantic category of irrealis in Tlingit is composed of three morphological phenomena:
i. The irrealis prefix $u$ - or oo-, often resulting in phonological rounding or occasionally lengthening in the conjunct prefixes of the verb.
ii. The feature $[-I]$ in the verb classifier, resulting in the phonological lack of either $i$ or $\ddot{y}$ in the classifier prefix.
iii. A variety of length, tone, and vowel quality patterns resulting from verb stem variation.

It is important to understand that Leer $(1991,2000)$ theorizes irrealis as a syntactic phenomenon that is represented by a sort of agreement in the verb. Because of this he requires that irrealis marking in the verb be associated with some sort of independent syntactic element such as the negative particle tléil or the dubtative particle gwál. His reasoning is based on historical phenomena, since the particles which seem to trigger irrealis marking all contain a $l$ element (the embedded clause negative $l$ is solely this element) and as such the syntactic template is something like $l \ldots u \sim O o-C L[-I]-. .$. VAR. I see this as excessively restrictive given that a number of modes which feature an irrealis-like prefix seem to have irrealis semantics, for example the future and potential. Leer (2000) implies that the future is not irrealis because there is a choice between a positive future and a negative or dubita-
tive one, whereas I argue that the irrealis is a verb-internal morphosemantic phenomenon that may or may not reflect an independent syntactic feature. My view of irrealis marking is strictly semantic, so that an irrealis form indicates that the described situation is disjoint with the timeline, occurring at some point that either branched from this timeline before the utterance time or at a point that has yet to occur. Syntactic features may require this sort of interpretation or it may be inherent in the lexical or inflectional structure of the verb. My conceptualization is based on the cross-linguistic patterns of irrealis marking, whereas Leer's view is that cross-linguistic phenomena are irrelevant for the analysis of Tlingit and only comparison to historically related languages is valid. I will not discuss Leer's arguments further, instead urging the reader to consult Leer 1991 and Leer 2000.

Because of my stance on the irrealis category in Tlingit, I include a larger number of grammatical contexts where it occurs. Negation is in some respects the locus classicus of irrealis, and indeed negated verbs are always irrealis-marked in Tlingit. Dubitatives, prohibitives, and optatives also feature irrealis marking. There are also a number of modes which have inherent irrealis marking, such as the futures, potentials, and admonitives. Finally there are two lexical contexts where irrealis marking occurs, namely the derivational processes of comparatives and revertives and the thematically specified irrealis in themes like 'be afraid' and 'be lazy'. The following outline indicates all of the basic morphosyntactic structures where irrealis morphology can be found.

- irrealis prefix $u$ - and $w$ -
- perfectives
- negatives with tléil ~tlél ~hél ~l
- dubitatives with a preceding gwál or gé-DEM (just gé?)

。 prohibitives (prohibitive-optative epimode) with líl and -k

- optatives (prohibitive-optative epimode) with gu.aal and $-\underline{k}$
- imperfectives (all types?)
- negatives with tléil ~ tlél $\sim$ hél $\sim l$
dubitatives with a preceding gwál or gé-DEM (just gé?)
prohibitives (prohibitive-optative epimode) with líl and $-\underline{k}$
optatives (prohibitive-optative epimode) with gu.aal and $-\underline{k}$
- futures (using $w$-)
positives
negatives with tléil $\sim$ tlél $\sim$ hél $\sim l$

> - dubitatives with a preceding gwál or gé-DEM (just gé?)
> - potentials
> - positives
> - negatives with tléil $\sim$ tlél $\sim$ hél $\sim l$
> - admonitives
> - derivational processes including irrealis prefixes
> - comparatives of dimension verbs (using $w$-)
> - revertive motion with $a-\ddot{y} a-\boldsymbol{u}-C L[+D]$ -
> - thematically specified irrealis prefixes
> - inherently negative themes with tléil
> - tléil O-ga-u-CL[-D,Ø]-ha (ga; -? Stv) 'O be obvious’
> - other themes, e.g.
> - P-x’ a-ka-u-S-CL[+D,l]-x́éetl’x (ga; -? Stv) 'S be afraid’

> P's speech'
> - O-ka-u-CL[-D,l]-xéeetl’x-shán (ga; -? Stv) '0 be dangerous’
> - a-u-S-cL[+D,s]-ka (ga; -? Stv) 'S be lazy’
> - O-ka-u-S-CL[-D,Ø]-dlénㅊ-xaa (na; -? Act) 'S tempt 0’

In the following sections I will discuss the various verbal phenomena associated with irrealis marking. I will first consider negation as it occurs across the various modes. Subsequently I will address dubitatives, prohibitives, and optatives, each of which is also independent of mode as is negation. I will then go through the various modes that have inherent irrealis marking, specifically the futures, potentials, and admonitives. Then I will go through the derivational instances of irrealis and will survey a few of the themes which include irrealis marking as part of their lexical entries. Finally I will illustrate some areas where irrealis marking might be expected but does not occur, such as the conditionals, contingents, imperatives, hortatives, and hypotheticals.

### 13.1. NEGATION

The most common form of negation is the combination of an irrealis-marked verb with the negative particle tléil. The following examples of a few negative imperfective forms demonstrate the use of the negative tléil with an irrealismarked verb.
(258) negative sentences
a. tléil ash ux́sakú
tléil ash-u-Ø-xa-sa-ku-'
neg 3PRX.O-IRR-ZCNJ-1SG.S-CL[-D,s,-I]-know-var
'I don't know him' theme: $O-S-C L[-D, S]-k u$ ( $\emptyset ;-$-? ?) 'S know 0’
b. tléil gwadlaan yá éix' yík
tléil Ø-u-ga- $\emptyset$-dlan-h yá éixِ yík
neg 3.0-IRr-GCNJ-CL[-D, $\emptyset,-\mathbf{I}]$-deep-var Prox slough inside
'it's not deep in this slough'
theme: O-CL[-D, Ø]-dlan (ga; -? Stv) 'O be deep’ (Edwards 2009: 74)
c. tléil uldál yá atk'átsk'u
tléil $\emptyset$-u- $\emptyset$-la-dál ${ }^{\times}$yá atk'átsk'u
neg 3.0-IRR-ZCNJ-CL[-D,l,-I]-heavy ${ }^{\times}$PRox boy
'this boy isn't heavy'
theme: O-CL[-D,Ø]-dál’ (ga; Inv Stv) 'O be heavy’ (Story \& Naish 1973: 108)
Compare the three examples above with the following non-negative counterparts. In all of the positive forms the verb has [+I] in the classifier and lacks the irrealis prefix $u$-. In contrast, the negative forms have the negative particle tléil, the irrealis prefix $u$-, and [-I] in the classifier. Note that classifier forms $C a$ - with [-I] lose the $a$ vowel when preceded immediately by the irrealis prefix (sec 9.4.1).
(259) positive sentences
a. ash x́asikóo
ash-Ø-xa-si-ku-ÿ
ash-ZCNJ-1SG.S-CL[-D, s,+I]-know-VAR
'I know him'
b. gaadláan yá éixِ yík

Ø-ga-ÿa-dlan-: yá éix́ yík
3.0-GCNJ-CL[-D, Ø, +I]-deep-var PRox slough inside
'it's deep in this slough'
c. yadál yá atk'átsk'u

Ø-Ø-ÿa-dál ${ }^{\times}$yá atk'átsk'u
3.0-ZCNJ-CL[-D, Ø, +I]-heavy ${ }^{\times}$PROX boy
'this boy is heavy'

The cooccurrence of the irrealis $u$-and the negative particle tléilis obligatory in negatives. The following ungrammatical examples demonstrate that they must occur together. No translations are given because these sentences are nonsensical, consultants correct them to the form tléil ash ux́sakú with both the negative particle and irrealis in place. ${ }^{1}$

## (260) ungrammatical negatives

```
a.* tléil ash x_asakú
    tléil ash-Ø-xa-sa-ku-'
    NEG 3.PRX-ZCNJ-1SG.S-CL[-D,S,-I]-know-VAR
    b.* ash ux_sakú
    ash-u-Ø-х_а-sa-ku-'
    3.PRX-IRR-ZCNJ-1SG.S-CL[-D,S,-I]-know-VAR
```

The negative particle has several forms. The most common form is tléil, with a reduced form tlél. There is also a form hél which might be thought of as even further reduced, though it might instead be derived from hé MPRX $+l$ NEG. This last form $l$ is in fact the most basic negative particle, with the others apparently derived from it. Consider the following examples.
(261) negation within relative clauses


The second sentence is ungrammatical with tléil whereas the first sentence with $l$ is grammatical. Both are examples of relative clauses, with the

1. There is an alternative form tléil ash x́wasakú which has the exact same meaning but with a slightly different morphophonological realization of the prefixes in the verb. The use of $\underline{x} w a$ - for irrealis plus first person singular subject collapses the distinction between imperfective $u-\emptyset-\underline{x} a$ - with the irrealis and $\ddot{y} u-\underline{x} a-$ with the perfective as in ash $\underline{x} w a s i k o ́ o ~ ' I ~ k n o w / k n e w ~ h i m ', ~ t h o u g h ~ t h e ~ n e g a t i v e ~ p a r t i c l e ~ t l e ́ i l, ~ c l a s s i f i e r ~[-I], ~ a n d ~ s t e m ~$ variation still distinguish them. The choice between the two is idiolectal or at most communilectal. Some speakers use both freely, and many (all?) speakers will accept both regardless of dialect. I have standardized on $u \underline{x} a$ - here since it is more contrastive.
syntactic structure Dem $[\mathrm{Neg} \mathrm{V}]_{\mathrm{Rc}} \mathrm{N}$ where the relative clause occurs between the demonstrative and the noun. The relative clause can be internally negated with the negative particle $l$ but not with any other negative particles, so that the use of tléil is ungrammatical. The same is also true with subordinate clauses. Hence the use of $l$ is unrestricted but the use of tléil, tlél, and hél are restricted, and therefore $l$ is the most basic form of the negative particle.

The word tléik' 'no' is the negative interjection, which is not coincidentally similar to the negative particle tléil. Leer (2000: 135, fn. 11) hypothesizes that tléik' is a doublet with tléix' 'one' which he derives from a Proto-Na-Dene form * $d \partial=\nmid V-q$ ' 'one; together, all'. He supports this with the claim that "Tlingit tlé $\cdot x$ ' 'one' can occasionally be translated as '(all) together (i.e. as a group)'". The negative particle tléil is then derived from concatenation of tléik' and $l$, and this he speculates "may once have been structurally analogous to French 'pas (= $\ddagger$ ) du tout ( $t \nmid e ́ \cdot k$ ')'". Leer (2000: 111) also notes that there is an archaic form tléik'=l that occurs in songs and describes hél as innovative in Northern Tlingit. He also compares tléil to Eyak dik'. A few Tlingit
 to be 'slangy' or 'casual' but in fact seems to be archaic. This is because the vowel ei [e:] is probably derived from an earlier *ay [aj] or *aÿ [aup], so that the earlier form of the word was probably something like *tlayk', closely reflecting the raised [æ] or diphthongal [aj].

Leer's description of $l$ as a "preverbal proclitic $\downarrow=$ in dependent clauses" (Leer 2000:111) is incorrect. As noted earlier, $l$ is certainly unique in dependent clauses, but it is not a proclitic at all. Instead, the negative particle occurs at the beginning of a dependent clause, and noun and/or postposition phrases can occur between the negative particle and the verb as in the following example.
(262) negation within complex relative clause
a. wé l xóotsch wooshayi shaawát wé l xóots-ch $\emptyset$-u-ÿu- $\emptyset-\emptyset$-sha-i shaawát MDST NEG br.bear-ERG 3.0-IRR-PFV-3.S-CL[-D, $\emptyset,-\mathrm{I}]$-marry-REL girl
'that girl who the brown bear didn't marry' (Yaaxl.aat Irene Paul)
b. wé l xóotsch wooshayi shaawát

Dem [ $\begin{array}{lll}\text { Neg N } & \text { V }\end{array}$
Since $l$ appears to be an independent word rather than a proclitic, an interesting consequence for the phonology of Tlingit is that at least some
words can be vowelless. This property is not uncommon further south on the Northwest Coast but it is rather rare in the north. Similar elements which occur in vowelless syllables are the plural $s$ - prefix and the reflexive object prefix $s h-$, but these are prefixes rather than independent words.

The perfective prefix $\ddot{y} u$ - and the telic perfective prefix $u$ - block or obscure the irrealis prefix. This means that negative forms are not overtly distinguished by the presence of the irrealis prefix when the verb is in a perfective conjugation. Leer (2000:111) actually claims that the irrealis prefix does not exist in perfectives, ${ }^{2}$ but I find it somewhat more consistent to simply say that it is still morphologically present but phonologically obscured. The following example of a positive perfective contrasted with a negative perfective demonstrates this phenomenon.
(263) a. positive perfective
woosh x'éit yawtudzi.áa
woosh x'é-t ÿa-ÿu-tu-dzi-.a-ÿ
RECIP.PSS mouth-PNCT VSFC-PFV-1PL.S-CL[+D, $\mathrm{s},+\mathrm{I}]$-kiss-VAR
'we kissed each other'
theme: P $\underline{x}^{\prime} e ́-\{t, \underline{x}, d e ́\} ~ \ddot{y} a-S-C L[-D, s]-a(\emptyset ;-?$ Mot?) 'S kiss P on P’s mouth'
(Dauenhauer \& Dauenhauer 2002: 18)
b. negative perfective
tléil woosh x'éit yawtoos.á
tléil woosh xِ'é-t ÿa-u-ÿu-tu-s-.a-'
NEG RECIP.PSS mouth-PNCT vSFC-IRR-PFV-1PL.S-CL[+D,s,-I]-kiss-vaR
'we didn't kiss each other' (Dauenhauer \& Dauenhauer 2002: 18)
Notice that despite the lack of distinction between positive perfective $\ddot{y} u-$ and negative perfective $u-\ddot{y} u$-, the verb still has irrealis features which distinguish it from the realis form. The positive perfective of the $\emptyset$-conjugation class includes the stem variation suffix $-\ddot{y}$ (sec. 10.2) and has $[+\mathrm{I}]$ in the classifier. The negative perfective instead has the $-h$ stem variation suffix (sec. 10.4 ) and has [-I] in the classifier. Although neither of these is specifically an irrealis marker, they are strongly correlated with irrealis marking and hence serve to indicate the irrealisness of the form despite the obscurity of the $u$ prefix.

[^28]Verbless negative sentences are also possible, but since there is no verb to host it the irrealis prefix $u$ - cannot occur. The following pair demonstrates positive and negative verbless constructions for possession. The -ú suffix is the locative predicate that expresses location in positive verbless constructions (sec. 3.2.10).
(264) a. positive verbless construction
aatlein dáanaa du jeewú
aatlein dáanaa du jee-ú
much money 3H.PSS possession-LoCP
'he has lots of money'
(Naish 1966: 48)
b. negative verbless construction
tléil dáanaa du jee
neg money 3H.PSS possession
'he doesn't have any money'
(Naish 1966: 48)
The irrealis prefix $u$-is notably preserved along with the negative particle in deverbal nouns. The following examples demonstrate a theme $O-C L[-D, I]-$ jín ${ }^{\times}-i ́(\emptyset ;$ Inv Stv) ' 0 have arms, hands' in both positive and negative imperfectives along with a derived noun. The theme is derived from the inalienable noun -jín 'hand, arm'.
(265) a. positive imperfective
tléix' xat lijíni
tléix' xat- $\emptyset$-li-jín ${ }^{\times}$-í
one 1SG.o-ZCNJ-CL[-D,l,+I]-hand-PPTY
'I am one-armed’ (ND)
theme: $O-c L[-D, l]-$ jín$^{x}-i ́(\emptyset ;$ Inv Stv) ‘O have arms, hands’
b. negative imperfective
tléil xat uljíni
tléil xat-u-Ø-la-jín츠́
NEG 1SG.O-IRR-ZCNJ-CL[-D,l,-I]-hand-PPTY
'I am armless', 'I have no arms' (ND)
c. possessed nominalized negative imperfective
ax l.uljíniyí
ax l=u-la-jín ${ }^{\times}$-í-ÿí
1SG.PSS NEG=IRR-CL[-D,l,-I]-hand-PPTY-PSS
'my vest', lit. 'my armless (thing)' (ND)

The positive form of the verb means to have some number of arms or hands, whereas the negative form of the verb means to lack arms or hands. The negative form predictably occurs with irrealis marking. The third form is a noun rather than a verb, as can be confirmed by syntactic properties. Possessive pronouns and the possessed suffixes can only occur with nouns, though the exception is the occasional use of possessive pronouns as the object prefixes in verbs containing incorporated inalienable nouns (see section 19.1.1). The position of the negative particle is diagnostic here; it has been fully incorporated into the noun whereas the possessive-shaped object prefix would occur between the negative and the rest of the verb. All together, this means that in the last sentence the verb has been nominalized but still preserves the irrealis prefix. Note that, like dependent clauses, only the negative particle $l$ is permissible and the others tléil $\sim$ tlél and hél cannot occur, i.e. *axِ tlel.uljíniyí is ungrammatical.

### 13.2. DUBITATIVES

Dubitatives are syntactic constructions, so that the dubitative indicator is an independent word and not some element occurring within the verb. There are two words which express dubativity, the dubitative particle gwál and the yes/no-question particle with a suffixed demonstrative gé-DEM. The examples below demonstrate positive and negative imperfectives along with the two dubitative forms.
(266) a. positive imperfective
yéi yatee
yéí= Ø-Ø-ÿa-ti-h
thus=3.0-zCNJ-CL[-D, Ø, +I]-be-vAR
'it is so'
theme: yéi=O-cl[-D, Ø]-ti1 ( $n a ;-h \mathrm{Stv}$ ) ' 0 be thus, so' (Leer 2000: 111)
b. negative imperfective
tléil yéi utí
tléil yéi= $\emptyset-\mathbf{u}-\emptyset-\emptyset-\mathrm{ti}-{ }^{\prime}$
NEG thus=3.0-IRR-ZCNJ-CL[-D, $\emptyset,-\mathrm{II}]$-be-var
'it is not so'
(Leer 2000: 111)
c. irrealis dubitative imperfective with gwál
gwál yéi utí
gwál yéi= Ø-u- $\emptyset-\emptyset-\mathrm{ti}-{ }^{-}$
dub thus=3.0-IRR-ZCNJ-CL[-D, Ø,--I]-be-vAR
'maybe it is so'
(Leer 2000: 112)
d. irrealis dubitative imperfective with gé-DEM
yéi géwé utí
yéi=gé-wé=Ø-u- $\emptyset-\emptyset-\mathrm{ti}{ }^{\prime}$
thus=YN-MDST=3.0-IRR-ZCNJ-CL[-D, Ø,--I]-be-vAR
'I guess it is so'
(Leer 2000: 112)
As can be seen from the above examples, the dubitatives with both gwál and gé-DEM have irrealis marking with the irrealis prefix $u-,[-I]$ in the classifier, and the -' stem variation found with irrealis forms of open roots in $-\ddot{y}$ stative imperfectives. This seems to show that dubitatives fall into the irrealis category in Tlingit. There are however many examples of the dubitative particles gwál and gé-DEM being used with realis rather than irrealis forms, as in the following examples.
(267) a. realis dubitative imperfective with gwál
gwál yéi yatee
gwál yéi=Ø- $\emptyset-\mathrm{ÿa}-\mathrm{ti}-\mathrm{h}$
duB thus=3.0-ZCNJ-CL[-D, $\emptyset,+\mathrm{II}]$-be-vaR
'maybe it is so'
b. realis dubitative imperfective with gé-DEM
yéi géwé yatee
yéi=gé-wé=Ø-Ø-ÿa-ti-h
thus=YN-MDST=3.0-ZCNJ-CL[-D, $\emptyset,+\mathrm{I}]$-be-vaR
'I guess it is so'
Leer (1991: 479 fn . 75) states that "some speakers can also use Realis forms with" gwál and gé-DEM, but this is at odds with his description of the dubitative constructions elsewhere (Leer 1991: 87). He later says that "realis verb forms can be used instead of irrealis forms" with both gwál and gé-DEM but insists that the use of irrealis with dubitatives is more conservative (Leer 2000: 112-113). Regardless of its historical status, the use or disuse of irrealis marking with dubitatives is probably today a choice between more and less likely depending on the speaker's beliefs regarding the proposition, with less likely assertions being irrealis-marked. For Tlingit speakers
with whom I have worked, the realis form is either more acceptable or both are equally acceptable, which is the reverse of what Leer has implied. Some initial questioning has led me to believe that the difference is probably between 'maybe yes' for realis and 'maybe no' for irrealis, or between weaker and stronger modals like English's 'perhaps' and 'possibly', but I have not pursued this issue any further. Leer (1991: 480) raises the same hypothesis but does not say whether he attempted to elicit any semantic distinctions from native speakers. This issue thus remains to be investigated.

Although previous examples have only given the gé-DEM dubitative as an 'incorporate' within the preverbal zone of the verb, this is only the case when there are no noun phrases preceding the verb. If a noun phrase does occur before the verb then the particle occurs immediately after it and not within the preverbs. In contrast, the dubitative particle gwál occurs sentenceinitially.
(268) a. dubitative perfective
tsaa gíwé awujaak
tsaa gí-wé a-u-ÿu- $\emptyset-\emptyset-j a k-h$
seal $\mathbf{Y N}$-MDST $3.0-\mathrm{IRR}$-PFV-3.S-CL[-D, $\emptyset,-\mathrm{I}]$-kill-vAR
'I guess he killed a seal'
(Leer 1991: 480)
b. dubitative perfective
gwál tsaa awujaak
gwál tsaa a-u-ÿu-Ø-Ø-jak-h
dub seal 3.0 -IRR-PFV-3.S-CL[-D, $\emptyset,-\mathrm{I}]$-kill-VAR
'maybe he killed a seal'
(Leer 1991:480)
An interesting dichotomy remarked upon in passing by Leer (2000: 112) is that gé-DEM only triggers irrealis morphology if it precedes or is incorporated into the verb. If it follows the verb then a realis form is used instead.
(269) a. dubitative perfective with following gé-DEM
awsikóo géwé
a-wu- $\emptyset-s i-k u-\ddot{y}$ gé-wé
3.0-PFV-3.S-CL[-D, s, +I]-know-vAR YN-MDST
'I guess he knows her'
theme: $O-S-c L[-D, S]-k u(0 ;-:$ Act) 'S know 0 ’
(Leer 2000: 112)
b. dubitative perfective with preceding gé-DEM
wé shaawát géwé awuskú
wé shaawát gé-wé a-u-wu- $\emptyset-$ sa $^{4}-\mathrm{ku}-\mathrm{h}$
MDST girl YN-MDST 3.0-IRR-PFV-3.S-CL[-D,S,-I]-know-VAR
'I guess he knows that girl'
(Leer 2000: 112)
This may indicate that, for speakers who require irrealis for verbs after gé-DEM, it must occur in a higher position in the sentence for it to scope over the verb. Given that in main clauses Tlingit normally has free phrase order with few obvious effects on morphology from scrambling, this dichotomy is highly significant for understanding of phrase structure and deserves much more investigation. Unfortunately the number of speakers who maintain the irrealis requirement for this construction may be vanishingly few today.

There are several other particles which express epistemic modalities, but these do not trigger irrealis marking in any context. Their meanings are not clear and no thorough research has been done on their semantics, but it is useful to point them out here. I borrow my examples from Leer (1991: 479).
(270) a. deductive or inferential
tsaa ásé aawaják
tsaa á-sé a-ÿu- $\emptyset-y ̈ a-j a k-y ̈$
seal FOC-DED 3.0-PFV-3.S-CL[-D, Ø, +I]-kill-vAR
'he must have killed a seal'
b. tentative
tsaa kwshé aawaják
tsaa kwshé a-ÿu- $\emptyset-\ddot{a} a-j a k-y ̈$
seal FOC-DED 3.0-PFV-3.S-CL[-D, Ø, +I]-kill-vAR
'he killed a seal (I guess)'
c. speculative
tsaa shákdé aawaják
tsaa shákdé a-ÿu-Ø-ÿa-jak-ÿ
seal 3.0-PFV-3.S-cL[-D, Ø, +I]-kill-vaR
'he probably killed a seal'
4. The $s a-$, $l a$-, and $s h a$ - classifiers, $\mathrm{CL}[-\mathrm{D},\{\mathrm{s}, \mathrm{l}, \mathrm{sh}\},-\mathrm{I}]$, lose their vowels when no surface forms intervene between them and a preceding $w u-\mathrm{PFV}, n a-\mathrm{NCNJ}, u$-IRR or PFV.TEL, dagaDISTB, or $a-3.0$, or also $\underline{g} a-\underline{G C N J}$ if it is word-initial (Leer 1991: 175).

Leer (1991:479-480) did not provide coherent names for the various epistemic constructions as I have done, but he did arrange them in an implicit continuum between positive and negative statements. The following outline represents his sequence of epistemic modalities.

- positive (realis)
- interrogative with á-gé FOC-YN (realis)
- deductive or inferential with á-sé FOC-DED (realis)
- tentative with kwshé (realis)
- speculative with shákdé (realis)
- dubitative with gé-DEM (irrealis)
- dubitative with gwál (irrealis)
- negative with tléil (irrealis)

As noted above, the two dubitative forms also occur as realis without any irrealis marking. For speakers that permit both the realis and irrealis marking along this scale overlaps, and for speakers that only have realis dubitatives the negative is the sole irrealis construction in this continuum.

### 13.3. Prohibitives and Optatives

### 13.4. MODE-INHERENT IRREALIS

### 13.4.1. FUTURES

### 13.4.2. Potentials

### 13.4.3. ADMONITIVES

### 13.5. DERIVATIONAL IRREALIS

### 13.6. LACK OF IRREALIS

[[Fixme: Conditionals]]
[[Fixme: Contingents]
[[Fixme: Imperatives]
[[Fixme: Hortatives]
[[Fixme: Hypotheticals]

## 14 Prefix morphophonology

The morphophonology of Tlingit verb prefixes is labyrinthine but regular. I will describe it for Northern Tlingit since I do not yet fully understand the system that is found in Southern and Tongass Tlingit, which is shared to some extent by speakers of Transitional Tlingit. The Northern system and the Tongass-Southern system seem to be distinct, so separate treatment is warranted.

The basic issue in verb prefix morphophonology in Northern Tlingit is metricality, with a strong pressure to contract prefix strings to one or two syllables through a kind of syncope (Cable 2006). I call this phenomenon prefix contraction. The complex interactions between consonants and vowels in the prefix contraction process give rise to a bewildering variety of patterns with numerous exceptions. Rather than attempt to formally explain this process in a rule-based framework as Leer (1991) did, or in a constraintbased framework as Cable (2006) did, I will instead simply describe the basic contraction patterns in a loosely structured and informal manner.

My basic assumption here is that there are underlying prefixes such as +4 perfective $\ddot{y} u$ - and +9 horizontal surface $k a$ - that are taken together to form particular sequences of prefixes for a given verb. These prefixes are then modified (via syncope, etc.) to produce the realized forms that are actually spoken. This is the same analytic assumption that has been made since at least Swanton (1911) and Boas (1917), but it is not necessarily the right one. Native speakers almost certainly do not process long strings of prefixes in their heads when they wish to produce a verb, but instead do something like starting with a handful of features and then picking out a surface form that matches the set of features. Decoding the spoken forms can often hinge on fairly subtle phonetic differences such as the aspiration of a consonant as in 1SG.S.FUT kkwa versus 3.S.FUT kgwa, or rounding as in 3.HORT naga versus 3.POT nagwa. It is probably for this reason that the Tlingit's verbs have

| outer conjunct CV prefixes |  |  |  |  |  | inner conjunct prefixes |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +14 | +13 | +11 | +10 | +9 | +8 | +7 | +6 | +5 | +4 | +2 | +1 |
| $\begin{gathered} \text { i- } \\ \text { ÿi- } \\ \text { a- } \\ \text { ku- } \end{gathered}$ |  | $\begin{gathered} \text { ji- } \\ \text { x'a- } \\ \underline{x}^{\prime}{ }^{\prime}{ }^{\prime}- \\ \text { tu- } \\ \text { shu- } \\ \text { lu- } \\ \text { se- } \\ \text { sa- } \\ \text { xa- } \\ \text { gu- } \\ \text { ta- } \\ \text { ki- } \\ \underline{\text { xil- }} \end{gathered}$ |  |  |  |  | $\begin{aligned} & \text { u- } \\ & \text { w- } \\ & \text { oo- } \end{aligned}$ | Ø- <br> na- <br> ga- | ÿu- <br> u- <br> ga- | xa- <br> tu- <br> i- <br> ÿi- <br> Ø- <br> du- <br> du- | Ø- <br> ÿa- <br> da- <br> di- <br> sa- <br> si- <br> s- <br> dzi- <br> la- <br> li- <br> I- <br> dli- <br> sha- <br> shi- <br> sh- <br> ji- |

Table 14.1: Verb prefixes participating in prefix contraction.
multiple exponence with the same categories indicated by different features in different parts of the verb, such as the difference beween [-I] for the hortative and [ +I ] for the potential, and $-\ddot{y}$ for the hortative versus $-h$ for the potential.

### 14.1. CLASSIFIER SHAPE

The prefix contraction process is sensitive to the shapes of the classifiers. For convenient reference all the classifiers are organized by shape in table 14.2 , except that $\emptyset$ - and $\ddot{y} a-(C L[-D, \emptyset,-I]$ and $\operatorname{cL}[-D, \emptyset,+I]$ ) are excluded since each forms its own unique phonological group. The basic phonological distinctions among all the others are between $C$ - shaped, $C i$ - shaped, and $C a-$ shaped classifiers. Note that the phonological properties are all that matter in the context of prefix contraction, so that although $d a-$ is [ +D ] it patterns with the other $C a$ - prefixes which are [-D], and thus the morphosemantic
14.2. Contractable prefixes and their modes

| Ci- |  | Ca- |  | C- |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Form | Features | Form | Features | Form | Features |
| di- | +D $\emptyset$ +I | da- | +D Ø -I |  |  |
| si- | -D s +I | sa- | -D s -I | $s$ - | -D s -I |
| dzi- | +D s +I |  |  | $s$ - | +D S -I |
| li- | -D l +I | la- | -D l -I | 1- | -D l -I |
| dli- | +D l +I |  |  | 1- | +D l -I |
| shi- | -D sh +I | sha- | -D sh -I | sh- | -D sh -I |
| ji- | +D sh +I |  |  | sh- | +D sh -I |

Table 14.2: Classifiers by phonological shape, excluding $\emptyset$ - and $\ddot{y} a$-.
properties of the classifiers are essentially irrelevant. In addition, note that the $C$ - prefixes can arise from classifier $a$ vowel loss of what would otherwise be the $C a$ - prefixes $s a$-, $l a$-, and $s h a$-, as described in section 9.4.1. The same independence of phonological and semantic properties is also true for other prefixes involved in the prefix contraction process, so the ga-conjugation prefix and the $g a$-mode prefix behave the same phonologically regardless of their semantic differences.

### 14.2. CONTRACTABLE PREFIXES AND THEIR MODES

Table 14.3 on page 274 is a matrix of the various contractable prefix sequences versus the modes that they can occur in. This table is meant to simplify the problem of decoding modes from arbitrary verbs. The process to follow is first to determine the underlying prefixes from the possible forms given in tables 14.4 (p. 277) through 14.13 (p. 288). With the underlying prefix sequence known, table 14.3 here can then lead to possible modes for the sequence. The form in question can then be checked against the modes in tables 12.1 (p.225) through 12.4 (p. 228) given in chapter 12 . With a particular mode in mind, stem variation can be checked against table 10.1 (p. 184) or 10.3 (p. 187) in chapter 10, and then the final determination of a given verb's mode should be nearly certain.

The $u$-listed here in table 14.3 is not a single prefix. It instead represents either the irrealis $u$ - as found in e.g. negatives tléil utí' 'it isn't' and potentials

14．2．Contractable prefixes and their modes

| Prefix | $$ | N | $\begin{aligned} & \text { Ĩ } \\ & \text { U } \\ & \text { D } \\ & \text { E } \end{aligned}$ |  | $\begin{aligned} & \text { Nu } \\ & \text { H } \\ & \text { O2 } \\ & \text { D2 } \end{aligned}$ |  | $\begin{aligned} & \bar{T} \\ & \text { 式 } \\ & \text { or } \end{aligned}$ | 믗 | $\begin{aligned} & \text { I } \\ & \text { I } \\ & \text { む } \\ & \text { ह } \end{aligned}$ | $\begin{aligned} & \text { N } \\ & \text { 気 } \\ & 0 \\ & 0 \end{aligned}$ |  | シ 0 0 0 0 0 | $\begin{aligned} & \bar{Z} \\ & \text { D } \\ & \text { I } \\ & 0 \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ÿu－ | ＋ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| u－ÿu－ | ＋ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| u－ | ＋ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ga－w－ga－ |  | ＋ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\emptyset$－ |  |  | ＋ |  |  | ＋ |  |  | ＋ |  |  | ＋ | ＋ |  |
| u－ø－ |  |  | ＋ |  |  |  | ＋ |  |  |  | ＋ | ＋ | ＋ |  |
| $\emptyset$－ga－ |  |  |  |  |  |  |  |  |  | ＋ |  |  |  | ＋ |
| u－Ø－ga－ |  |  |  |  |  |  |  | ＋ |  |  |  |  |  | ＋ |
| na－ |  |  |  | ＋ | ＋ | ＋ | ＋ |  | ＋ |  |  | ＋ | ＋ |  |
| u－na－ |  |  |  | ＋ | ＋ |  |  |  |  |  | ＋ | ＋ | ＋ |  |
| na－ga－ |  |  |  |  |  |  |  |  |  | ＋ |  |  |  | ＋ |
| u－na－ga－ |  |  |  |  |  |  |  | ＋ |  |  |  |  |  | ＋ |
| ga－ |  |  |  | ＋ |  | ＋ | ＋ |  | ＋ |  |  | ＋ | ＋ |  |
| u－ga－ |  |  |  | ＋ |  |  |  |  |  |  | ＋ | ＋ | ＋ |  |
| ga－ga－ |  |  |  |  |  |  |  |  |  | ＋ |  |  |  | ＋ |
| u－ga－ga－ |  |  |  |  |  |  |  | ＋ |  |  |  |  |  | ＋ |
| ga－ |  |  |  | ＋ |  | ＋ | ＋ |  | ＋ |  |  | ＋ | ＋ |  |
| ga－u－ |  |  |  | ＋ |  |  |  |  |  |  | ＋ | ＋ | ＋ |  |
| ga－ga－ |  |  |  |  |  |  |  |  |  | ＋ |  |  |  | ＋ |
| ga－u－ga－ |  |  |  |  |  |  |  | ＋ |  |  |  |  |  | ＋ |

Table 14．3：Contractable prefix sequences and their associated modes．
yéi ungatee 'it could be', or the telic perfective $u$ - as in e.g. át uwagút 'he got there'. More will be said about the telic perfective $u$ - later in the context of perfective prefix contraction. The two $u$ - prefixes are distinguished in table 14.3 here for perfectives, so $u-\ddot{y} u$ - is an irrealis perfective (the $u$-disappears) and $u$ - alone when checked in the perfective column is then the telic perfective.

Unlike Leer's documentation (Leer 1991), I list the Ø-conjugation prefix separately from the absence of a prefix; $\emptyset$ - cannot cooccur with any of $n a$-, $g a-$, or $g a$ - since it is a conjugation prefix, but it can occur with the $g a$ - mode prefix and the resulting contraction is the same as $g a-$ alone. The two $g a-$ prefixes are positionally distinct, since the ga-conjugation prefix always occurs before the $g a$ - mode prefix. Thus they cannot be confused for each other except when the conjugation prefix is $\emptyset$ - and hence invisible.

Since the future prefix sequence $g a-w-g a$ - contains the irrealis $w$-, the irrealis $u$ - cannot cooccur with it and hence there can be no *ga-u-w-ga-sequence given in table 14.3. The future has both a distinct meaning and distinct contractions from the similar sequence $g a-u-g a$ - that arises in some verbs in the potential mode. With some practice and familiarity the difference between the two is usually immediately obvious.

Finally, although the $g a$-conjugation prefix and the self-benefactive $g a$ have the same form, the latter does not participate in prefix contraction the same way; instead the self-benefactive ga-behaves the same as a $C V$ - prefix like horizontal surface $k a$ - or vertical surface $\ddot{y} a$ - among others. For this reason, self-benefactive $g a$ - is not included in table 14.3.

### 14.3. THE PREFIX CONTRACTIONS

The tables 14.4 through 14.13 show the results of prefix contraction across the various combinations of prefixes. The appropriate classifier shapes are given along the top of each table and the prefix strings with which they are combined are given along the left side of each table. In each subsection below I describe the table for a particular contraction type, along with some explication of various contractions possible within the given type. The following list describes each table with its number and page number.

- table 14.4 (p. 277) - contraction of +4 perfective $\ddot{y} u$ - or $u$ -
- table 14.5 (p. 279) - contraction of future $g a-w-g a-. . C L[-I]-$
- table 14.6 (p. 281) - contraction of +5 Ø-conjugation
- table 14.7 (p. 282) - contraction of +5 na-conjugation
- table 14.8 (p. 283) - contraction of +5 ga-conjugation
- table 14.9 (p. 284) - contraction of +7 ga-conjugation
- table 14.10 (p. 285) - contraction of +5 Ø-conjugation and $+4 \underline{g} a$-mode
- table 14.11 (p. 286) - contraction of +5 na-conjugation and $+4 g a$-mode
- table 14.12 (p. 287) - contraction of $+5 g a$-conjugation and $+4 \underline{g} a$-mode
- table 14.13 (p. 288) - contraction of $+7 g a$-conjugation and $+4 \underline{g} a$-mode

Tables 14.4 and 14.5 are focused on the perfective and future modes, respectively. Each of the tables other than 14.4 and 14.5 is centred around a particular conjugation prefix (see ch. 11) with or without the addition of the $g a$-mode prefix (sec. 4.2.15). A particular table gives the various sequences of prefixes on the left side and classifier shapes across the top, with the forms that result from combination of the prefix sequence and classifier of a specific shape in each cell in the main body of the table.

The tables centred around conjugation prefixes are broken up into chunks depending on the prefixes in each sequence. The first chunk is the simplest, only involving the subject prefixes and the specific conjugation prefix. The second chunk covers the combination of +6 irrealis $u$ - with the conjugation prefix and subject. The second half of each table is essentially the same with the addition of the outer conjunct $C V$ - prefixes shown in table 14.1 on page 14.1. At the bottom are the forms that arise when the +6 irrealis $o o$ - or $w$ - occur in the prefix sequence.

The $C V$ - prefixes that have $a$ as their vowel $V$ have special behaviour when occurring with the +6 irrealis $u$-. In the resulting forms this behaviour is noted with the symbol $U$. Compare for example the sequence $u$-na-xa-Ciwhich is realized as unxaCi versus the sequence $\boldsymbol{k a} \boldsymbol{a}-u$-na-x $a$-Ci- which is realized as koonax_Ci, but if ji- is used then ji-u-na-x_-Ci- becomes jeenax_Ci and not *joonax_Ci.

### 14.3.1. PERFECTIVE PREFIX CONTRACTION

In table 14.4 , the first row has the prefix string $\ddot{y} u-\underline{x} a-$ which is the perfective prefix and the first person singular subject prefix. These are then combined with a Ci-shaped classifier to produce a form $\underset{w}{ } w a C i$. Taking the classifier difor example, the prefixes are $\ddot{y} u$ - $\underline{x} a-d i$ - and the resulting form is $\underline{x} w a d i$, as in the verb kúxde $\underline{x} w a d i g o o t ~ ' I ~ w e n t ~ b a c k ' ~ f o r m e d ~ f r o m ~ k u ́ x-d e ́=y ̈ u-x ַ a-d i-g u t-h ~$ 'REV-ALL=PFV-1SG.S-CL[+D, $\emptyset,+\mathbf{I}]$-go.SG-VAR'.
14.3.1. Perfective prefix contraction

| Subj. | Prefixes | Classifier shape |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Ci- | Ca- | C- | Ø- | ÿa- |
| 1SG | ÿu-xa- | xwaCi | xwaCa | xwaC | xwa | xwaa |
| 1PL | ÿu-tu- | wutuCi | wutuCa | wutooC | wutoo | wutuwa |
| 2SG | ÿu-i- | ÿiCi | ÿiCa | ÿiC | ÿi | ÿee |
| 2SG | u-i- | ÿiCi | ÿiCa | ÿiC | ÿi | iÿa |
| 2PL | ÿu-ÿi- | ÿeeÿCi | ÿeeCa | ÿeeÿC | ÿeeÿ | ÿeeÿ |
| IND.H | ÿu-du- | wuduCi | - | wuduC | wudu | wuduwa |
| 3 | ÿu-ø- | wuCi | - | wuC | wu | woo |
| none | ÿu- | wuCi | - | wuC | wu | woo |
| 3 | u-ø- | wuCi | - | wuC | wu | uwa |
| none | u- | wuCi | - | wuC | wu | uwa |
| 1SG | CV-ÿu-xa- | CVxwCi | CVxwaCa | CVxwaC | CVxwa | CVxwaa |
| 1PL | CV-ÿu-tu- | CVwtuCi | CVwtuCa | CVwtooC | CVwtoo | CVwtuwa |
| 2SG | CV-ÿu-i- | CVÿCi | CVÿCa | CVÿiC | CVÿi | Ceeÿa |
| 2PL | CV-ÿu-ÿi- | CVÿeeÿCi | CVÿeeÿCa | CVÿeeÿC | CVÿeeÿ | CVÿeeÿ |
| IND.H | CV-ÿu-du- | CVwduCi | - | CVwduC | CVwdu | CVwduwa |
| 3 | CV-ÿu- $\emptyset-~$ | CVwCi | - | CVwuC | CVwu | CV:wa |
| none | CV-ÿu- | CVwCi | - | CVwuC | CVwu | CV:wa |

Table 14.4: Northern Tlingit prefix contractions with +4 perfective $\ddot{y} u$ - or $u$-.

The second set of lines in table 14.4 are the forms resulting from contraction with prefix strings that include CV prefixes in the outer conjunct domain. The specific CV prefixes were given in table 14.1 previously. A string $C V-y ̈ u-\underline{x} a-$ combined with a $C i$ - classifier gives a form of $C V \underline{x} w C i$, so that the string $\underline{k} u-\bar{y} u-\underline{x} a-d z i$ - becomes $k \underline{x} u \underline{w} d z i$, as in the verb $\underline{\underline{k} u \underline{x} w d z i t e e ~ ' I ~ w a s ~ b o r n ' ~}$ formed from $\underline{k} \mathbf{u}$ - $\boldsymbol{y} \mathbf{u}$-xa-dzi-ti-h 'AREAL-PFV-1SG.S-CL[+D,s,+I]-be-VAR'.

The distinct forms resulting from the $\emptyset$ - and $\ddot{y} a$ - classifiers become apparent in comparison with the two examples given above. The combination of $\ddot{y} u-\underline{x} a-\emptyset-$ results in $\underline{x} w a$ and the combination of $\ddot{y} u-\underline{-x} a-\ddot{y} a-$ results in $\underline{x} w a a$, both of which are different from the forms found with the other classifier shapes. For example, consider the verb tléil xwagoot 'I didn't go' with tléil $\ddot{\boldsymbol{y}} u-\underline{x} a-\emptyset$-gut-h 'NEG PFV-1SG.S-CL[-D, $\emptyset,-\mathrm{I}]$-go.SG-VAR' and the verb $\underline{x} w a a g o o t ~ ' I ~$ went' with $\ddot{\boldsymbol{y} u} \mathbf{u}-\underline{\boldsymbol{x}} \boldsymbol{a}-\ddot{\boldsymbol{y}} \boldsymbol{a}-\mathrm{g} u t-h$ 'PFV-1SG.S-CL[-D, $(,+\mathrm{I}]$-go.sG-VAR'.

The irrealis prefixes $u$ - and oo- are not morphophonologically distinguished in forms of the perfective mode, so that Leer (1991) claimed that the prefixes simply did not exist in perfectives. I take a different approach, supposing that the irrealis prefixes do exist in perfectives just as in most other modes, but they are simply obscured by the perfective prefix morphophonology. Thus the sequence $\boldsymbol{u - y ̈ u - x a - \emptyset - ~ ' I R R - P F V - 1 S G . S - C L - ' ~ c o n t r a c t s ~}$ to $\underline{x} w a$ which is exactly the same as the sequence $\ddot{y} u-\underline{x} a-\emptyset-$ 'PFV-1SG.S-Cl-' without the irrealis prefix. Because of this lack of surface differences between presence and absence of irrealis prefixes, they are not indicated in table 14.4.

There are actually two distinct perfective prefixes in Tlingit, namely ÿuand $u$-. The latter is the telic perfective prefix whereas the more common $\ddot{y} u-$ can be thought of as unspecified for telicity (membership in the $\emptyset$-conjugation class, see ch. 11 and sec. 12.2). This distinction is almost completely invisible in the language except in a few special cases. When a telic perfective occurs with the second person singular $i$ - and the classifier $\ddot{y} a-$ and with no preceding CV prefixes in the conjunct domain then the form ï̈a occurs (row four, last column in table 14.4), whereas an atelic perfective has ÿee instead (row three, last column in table 14.4). When a telic perfective occurs with either the third person $\emptyset$ - or with no subject prefix and with the classifier $\ddot{y} a$ - and no CV prefixes in the conjunct domain then the form uwa occurs (rows nine and ten, last column in table 14.4), whereas an atelic perfective has woo instead (rows seven and eight, last column in table 14.4). The only other situation where the telic perfective prefix $u$ - may be analyzed as occuring distinctly from the ordinary perfective $\ddot{y} u$ - is in telic habituals, as described in section 12.6.

### 14.3.2. FUTURE PREFIX CONTRACTION

Some combinations of prefixes have more than one resulting form, either due to dialect differences or idiolectal habits. The different forms of the future are an excellent case in point. Table 14.5 shows the various forms of the future prefix string $g a-w-g a-$ 'GCNJ-IRR-GMOD-' when combined with the subject prefixes and classifiers. Since the future mode can only occur with [-I] classifiers there are only three possible classifier shapes $C a-, C$-, and $\emptyset$-.

The different forms of the future result from different amounts of phonological contraction of the string of prefixes. The sequence $g a-w-g a-\underline{x} a-$ with the first person singular subject is reduced to kuka in all Tlingit dialects, and

| Subj. | Prefixes | Classifier shape |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Ca- | C- | $\emptyset$ - |
| 1SG | ga-w-ga-xַa- | kukaCa | kukaC | kuka |
|  |  | kwkaCa | kwkaC | kwka |
|  |  | kkwaCa | kkwaC | kkwa |
| 1PL | ga-w-ga-tu- | gaxtuCa | gaxtooC | gaxtoo |
| 2SG | ga-w-ga-i- | gagiCa | gageeC | gagee |
|  |  | kgiCa | kgeeC | kgee |
| 2PL | ga-w-ga-ÿi- | gaxÿiCa | gaxÿiC | gaxyi |
| IND.H | ga-w-ga-du- | gaxduCa | gaxduC | gaxdu |
| 3 | ga-w-ga-ø- | gux̧Ca |  |  |
|  |  |  | kgwaC | kgwa |
| none | ga-w-ga- | guẋCa | gugaC | guga |
|  |  |  | kgwaC | kgwa |
| 1SG | CV-ga-w-ga-xa- | CVkwkaCa | CVkwkaC | CVkwka |
| 1PL | CV-ga-w-ga-tu- | CVgaxtuCa | CVgaxtooC | CVgaxtoo |
| 2SG | CV-ga-w-ga-i- | CVkgiCa | CVkgeeC | CVkgee |
| 2PL | CV-ga-w-ga-ÿi- | CVgaxäiCa | CVgaxÿic | CVgaxÿi |
| IND.H | CV-ga-w-ga-du- | CVgaxduCa | CVgaxduC | CVgaxdu |
| 3 | CV-ga-w-ga-ø- | CVguxCa | CVkwgaC | CVkwga |
| none | CV-ga-w-ga- | CVguxa | CVkwgaC | CVkwga |
| 1SG | ka-ga-w-ga-xַa- | kakwkaCa kookaCa | kakwkaC <br> kookaC | kakwka kooka |

Table 14.5: Northern prefix contractions with future $g a-w-g a-\ldots \mathrm{CL}[-\mathrm{I}]-$. The CV prefix $k a$ - with 1SG.S $\underset{\alpha}{ } a$ - has an additional optional contraction.
this is the only form permitted in Tongass Tlingit. The other dialects permit two further reductions $k w \underline{k} a$ and $k \underline{k} w a$ where the initial $k w$ or $k$ is usually found in the coda of some preceding syllable (either a preverb or a separate word). Southern Tlingit permits an even further reduction to just kwa as well, which is also occasionally heard in Northern Tlingit in casual fast speech. Where a given dialect permits multiple contracted forms the fullest forms are generally considered to be the most formal and the shortest forms the most informal. Some younger speakers may be unaware of the fact that there are multiple forms permitted in a dialect, probably the result of generalizing the most common form in local speech when they were children.

The future has an unusual contraction when it occurs with a preceding $k a$ - 'horizontal surface' prefix and the first person singular subject $\underline{x} a$-. The usual form resulting from contraction with a preceding CV prefix is kakwka, as in kakwkalatín 'I'm going to observe it' (Story \& Naish 1973: 141). An alternative contraction reduces the form further, merging the $k a$ - and $g a$ - prefixes and spreading the rounding of $w$ - across the whole vowel. The result of this is kooka, as in kookalanáa 'I'm going to oil it' (Story \& Naish 1973: 141). I have not actually heard this particular contraction myself, so I am not entirely sure that it is still in use. I suspect that it may actually be kookka [ $\left.\mathrm{k}^{\mathrm{hw}} \mathrm{u}: \mathrm{k}^{\mathrm{w}} \cdot \mathrm{q}^{\mathrm{h}} \mathrm{a}\right]$ or $k u k \underline{k} a\left[\mathrm{k}^{\mathrm{hw}} \mathrm{uk} \mathrm{k}^{\mathrm{w}} . \mathrm{q}^{\mathrm{h}} \mathrm{a}\right]$ with the second $k$ of $k a k w \underline{k} a$ preserved, but lacking data I am merely speculating about this.

| Subj. | Prefixes | Classifier shape |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Ci- | Ca- | C- | $\emptyset-$ | ÿa- |
| 1SG | Ø-xַа- | xaCi | xaCa | xaC | xa | xaa |
| 1PL | $\emptyset$-tu- | tuCi | tuCa | tooC | too | tuwa |
| 2SG | $\emptyset$-i- | iCi | iCa | eeC | ee | iÿa |
| 2PL | $\emptyset$-ӱi- | ÿiCi | ÿeeÿCa | ÿiC | ÿi | ÿeeÿ |
| IND.H | $\emptyset$-du- | duCi | - | duC | du | duwa |
| 3/none | Ø-(Ø-) | Ci | Ca | iC | $\emptyset$ | ÿa |
| 1SG | u-(0-ха- | $\left\{\begin{array}{l}\text { xwaCi } \\ \text { uxxCi }\end{array}\right.$ | xwaCa <br> uxCa | xwaC | $\begin{aligned} & \text { xwa } \\ & \text { uxa } \end{aligned}$ | xwaa uxaa |
| 3/none | u-Ø-(Ø-) | $u \mathrm{Ci}$ | - | uC | u | uwa |
| IND.H | u-ø-du- | $\left\{\begin{array}{l}\text { - }\end{array}\right.$ | - | $\begin{aligned} & \text { uduC } \\ & \text { duC } \end{aligned}$ | udu <br> du | - |
| 1SG | CV-Ø-xа- | CVxCi | CVxxCa | CVxaC | CVxa | CVxxaa |
| 1PL | CV-Ø-tu- | CVtuCi | CVtuCa | CVtooC | CVtoo | CVtuwa |
| 2SG | CV-Ø-i- | CeeCi | CeeCa | CeeC | Cee | Ceeÿa |
| 2PL | CV-Ø-ÿi- | CVÿeeÿCi | CVÿCa | CVÿiC | CVÿ | CVÿeeÿ |
| IND.H | CV-ø-du- | CVduCi | - | CVduC | CVdu | CVduwa |
| 3/none | CV-ø-( $\emptyset-)$ | CVCi | CVCa | CVC | CV | CVÿa |
| 3/none | ka-ø-(Ø-) | kaCi | kaCa | kaC | ka | kaa |
| 1SG | CV-u- $\emptyset$-xa- | CU:xCi | CU:ẋCa | CU:xaC | CUxxa | CU:ẋaa |
| 3/none | CV-u-Ø-(Ø-) | CU:Ci | CU:Ca | CU:C | CU: | CU:ÿa |
| IND.H | CV-u- $\emptyset$-du- | $\left\{\begin{array}{l}\text { - } \\ -\end{array}\right.$ | - | CU:duC <br> CVduC | CU:du CVdu | - |
| 1SG | CV-oo-Ø-xa- | CuẋCi | Cuxda | CuxaC | Cuxa | Cuxaa |
| 3/none | CV-oo- $\varnothing$-( $\varnothing$-) | CooCi | CooCa | CooC | Coo | Cuwa |
| 3/none | CV-w-Ø-(Ø-) | CuCi | CuCa | CuC | Cu | Coo |

Table 14.6: Northern prefix contractions with +5 Ø-conjugation. U: represents oo if V is $a$, or lengthened V otherwise.

| Subj. | Prefixes | Classifier shape |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Ci- | Ca- | C- | $\emptyset-$ | ÿa- |
| 1SG | na-xa- | naxِCi | naxِCa | naxaC | naxa | naxaa |
| 1PL | na-tu- | natuCi | natuCa | natooC | natoo | natuwa |
| 2SG | na-i- | niCi | niCa | neeC | nee | niÿa |
| 2PL | na-ÿi- | naÿCi | naÿCa | naÿiC | naÿ | naÿeeÿ |
| IND.H | na-du- | naduCi | - | naduC | nadu | naduwa |
| 3/none | na-(Ø-) | naCi | - | naC | na | naa |
|  |  |  |  |  | unxa | unxaa |
| 1SG | u-na-xa- | \{naxwaCi | naxwaCa | naxwaC | naxwa | naxwaa |
| 3/none | u-na-(Ø-) | unaCi | - | unaC | una | unaa |
| 1SG | CV-na-xַa- | CVnaxCi | CVnaxCa | CVnxaC | CVnxa | CVnxaa |
| 1 PL | CV-na-tu- | CVntuCi | CVntuCa | CVntooC | CVntoo | CVntuwa |
| 2SG | CV-na-i- | CVniCi | CVniCa | CVneeC | CVnee | CVniÿa |
| 2PL | CV-na-yi- | CVnaÿCi | CVnaÿCa | CVnaÿC | CVnaÿ | CVnaÿeeÿ |
| IND.H | CV-na-du- | CVnduCi | - | CVnduC | CVndu | CVnduwa |
| 3/none |  | CVnCi | - | CVnaC | CVna | CVnaa |
| 1SG | CV-u-na-ẋa- | $\left\{\begin{array}{l} \text { CU:nax̃Ci } \end{array}\right.$ | CU:naxaCa | CUnnxaC | CUinxa | CU:nxaa |
|  |  | CVnaxwCi | CVnaxwCa | CVnxwaC | CVnxwa | CVnxwaa |
| 3/none | CV-u-na-(Ø-) | CU:nCi | CU:nCa | CU:naC | CU:na | CU:naa |
| 1SG | CV-oo-na-xa- | CunaxCi | Cunax̧Ca | CunxaC | Cunxa | Cunxaa |
| 3/none | CV-oo-na-( $\emptyset$-) | CunCi | - | CunaC | Cuna | Cunaa |
| 3/none | CV-w-na-(Ø-) | CunCi | - | CunaC | Cuna | Cunaa |

Table 14.7: Northern prefix contractions with +5 na-conjugation. U: represents $o o$ if $V$ is $a$, or lengthened $V$ otherwise.

| Subj. | Prefixes | Classifier shape |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Ci- | Ca- | C- | $\emptyset$ - | ÿa- |
| 1SG | ga-xa- | kaCi | kaCa | kaC | ka | kaa |
| 1PL | ga-tu- | gatuCi | gatuCa | gatooC | gatoo | gatuwa |
| 2SG | ga-i- | giCi | giCa | geeC | gee | giÿa |
| 1PL | ga-ÿi- | gaÿCi | gaÿCa | gaÿiC | gaÿ | gaÿeeÿ |
| IND.H | ga-du- | gaduCi | - | gaduC | gadu | gaduwa |
| 3/none | ga-(Ø-) | gaCi | - | gaC | ga | gaa |
| 1SG | u-ga-xַa- | kwaCi | kwaCa | kwaC | kwa | kwaa |
| 3/none | u-ga-(Ø-) | gwaCi | gwaCa | gwaC | gwa | gwaa |
| 1SG | CV-ga-xַa- | CVkaCi | CVkaCa | CVkaC | CVka | CVkaa |
| 1PL | CV-ga-tu- | CVxxtuCi | CVxxtuCa | CVxtooC | CVxxtoo | CVxxtuwa |
| 2SG | CV-ga-i- | CVgiCi | CVgiCa | CVgeeC | CVgee | CVgiÿa |
| 1PL | CV-ga-ÿi- | CVxxÿiCi | CVxxÿiCa | CVxẏiC | CVxyyi | CVxyÿeeÿ |
| IND.H | CV-ga-du- | CVxxduCi | - | CVxduC | CVxxdu | CVxxduwa |
| 3/none | CV-ga-( $\varnothing$-) | CVxxCi | CVxxCa | CVgaC | CVga | CVgaa |
| 1SG | CV-u-ga-xa- | CU:kaCi | CU:kaCa | CU:kaC | CU:ka | CU:kaa |
| 3/none | CV-u-ga-(Ø-) | CU:xCi | CU:xCa | CU:gaC | CU:ga | CU:gaa |
| 1SG | CV-oo-ga-ẋa- | CukaCi | CukaCa | CukaC | Cuka | Cukaa |
| 3/none | CV-oo-ga-(0-) | CuxCi | CuẋCa | CugaC | Cuga | Cugaa |

Table 14.8: Northern prefix contractions with +5 ga-conjugation. U: represents $o o$ if $V$ is $a$, or lengthened $V$ otherwise.

| Subj. | Prefixes | Classifier shape |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Ci- | Ca- | C- | $\emptyset$ - | ÿa- |
| 1SG | ga-xa- | gaxCi | gaẋCa | gaxaC | gaxa | gaxaa |
| 1PL | ga-tu- | gatuCi | gatuCa | gatooC | gatoo | gatuwa |
| 2SG | ga-i- | giCi | giCa | geeC | gee | giÿa |
| 2PL | ga-ÿi- | gaÿCi | gaÿCa | gaÿiC | gaÿ | gaÿeeÿ |
| IND.H | ga-du- | gaduCi | - | gaduC | gadu | gaduwa |
| 3/none | ga-(Ø-) | gaCi | - | gaC | ga | gaa |
| 1SG | ga-u-xַa- | gooxCi | gooxCa | gooxaC | gooxa | gooxaa |
| 3/none | ga-u-(Ø-) | ? gooCi | - | gooC | goo | ?goowa |
| 1SG | CV-ga-xa- | CVgax̧Ci | CVgaẋCa | CVkxaC | CVkxxa | CVkxaa |
| 1PL | CV-ga-tu- | CVktuCi | CVktuCa | CVktooC | CVktoo | CVktuwa |
| 2SG | CV-ga-i- | CVgiCi | CVgiCa | CVgeeC | CVgee | CVgiÿa |
| 2PL | CV-ga-ÿi- | CVgaÿCi | CVgaÿCa | CVgaÿiC | CVgaÿ | CVgaÿeeÿ |
| IND.H | CV-ga-du- | CVkduCi | - | CVkduC | CVkdu | CVkduwa |
| 3/none | CV-ga-( $\emptyset$-) | CVkCi | CVkCa | CVgaC | CVga | CVgaa |
| 1SG | CV-ga-u-x̌a- | CVgooxCi | CVgooxCa | CVkwxַaC | CVkwẋa | CVkwxַaa |
| 3/none | CV-ga-u-(Ø-) | ${ }^{\text {? }} \mathrm{CVgooCi}$ | - | CVgooC | CVgoo | ${ }^{\text {? }}$ CVgoowa |

Table 14.9: Northern prefix contractions with $+7 g a$-conjugation.

| Subj. | Prefixes | Classifier shape |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Ci- | Ca- | C- | $\emptyset$ - | ÿa- |
| 1SG | Ø-ga-ẋa- | kaCi | kaCa | kaC | ka | kaa |
| 1PL | Ø-ga-tu- | gatuCi | gatuCa | gatooC | gatoo | gatuwa |
| 2SG | $\emptyset$-ga-i- | giCi | giCa | geeC | gee | giÿa |
| 1PL | Ø-ga-ÿi- | gaÿCi | gaÿCa | gaÿiC | gaÿ | gaÿeeÿ |
| IND.H | Ø-ga-du- | gaduCi | - | gaduC | gadu | gaduwa |
| 3/none | $\emptyset$-ga-(Ø-) | gaCi | - | gaC | ga | gaa |
| 1SG | u-ø-ga-xa- | kwaCi | kwaCa | kwaC | kwa | kwaa |
| 3/none | u- $\emptyset$-ga-( $\emptyset$-) | gwaCi | gwaCa | gwaC | gwa | gwaa |
| 1SG | CV-ø-ga-xa- | CVkaCi | CVkaCa | CVkaC | CVka | CVkaa |
| 1PL | CV-ø-ga-tu- | CVxxtuCi | CVxxtuCa | CVxxtooC | CVxtoo | CVxxtuwa |
| 2SG | CV-Ø-ga-i- | CVgiCi | CVgiCa | CVgeeC | CVgee | CVgiÿa |
| 1PL | CV-ø-ga-ÿi- | CVxÿiCi | CVxÿiCa | CVxÿiC | CVxÿi | CVxıÿeeÿ |
| IND.H | CV-ø-ga-du- | CVxduCi | - | CVxxduC | CVxdu | CVxduwa |
| 3/none | CV-Ø-ga-(Ø-) | CVxxCi | CVx¢Ca | CVgaC | CVga | CVgaa |
| 1SG | CV-u-Ø-ga-xa- | CU:kaCi | CU:kaCa | CU:kaC | CU:ka | CU:k̇aa |
| 3/none | CV-u-ø-ga-(Ø-) | CU:xCi | CU:xCa | CU:gaC | CU:ga | CU:gaa |
| 1SG | CV-oo-Ø-ga-xa- | CukaCi | CukaCa | CukaC | Cuka | Cukaa |
| 3/none | CV-oo- $\emptyset$-ga-( (-) | CuxxCi | CuxxCa | CugaC | Cuga | Cugaa |

Table 14.10: Northern prefix contractions with $+5 \emptyset$-conjugation and $+4 \underline{g} a$ mode. U: represents oo if V is $a$, or lengthened V otherwise.

| Subj. Prefixes |  | Classifier shape |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Ci- | Ca- | C- | $\emptyset-$ | ÿa- |
| 1SG | na-ga-xa- | nakaCi | nakaCa | nakaC | naka | nakaa |
| 1 PL | na-ga-tu- | naxِtuCi | naxtuCa | naxtooC | naxtoo | naxtuwa |
| 2SG | na-ga-i- | nagiCi | nagiCa | nageeC | nagee | nagiÿa |
| 2 PL | na-ga-ÿi- | naxÿiCi | naxyı̈iCa | naẋÿiC | naxyıi | naxÿeeÿ |
| IND.H | na-ga-du- | naxduCi | - | naxduC | nadu | naxduwa |
| $3 / n$ | na-ga-(Ø-) | naxِCi | naxCa | nagaC | naga | nagaa |
|  |  |  | unkaCa | unkaC | unka | unkaa |
| 1SG | u-na-ga-xa- | nakwaCi | nakwaCa | nakwaC | nakwa | nakwaa |
| $3 / n$ | u-na-ga-( $\emptyset$-) | $\left\{\begin{array}{l} \text { unaxci } \\ \text { naxwCi } \end{array}\right.$ | unaxCa naxwCa | ungaC <br> nagwaC | unga <br> nagwa | ungaa <br> nagwaa |
| 1SG | CV-na-ga-xa- | CVnkaCi | CVnkaCa | CVnkaC | CVnka | CVnkaa |
| 1PL | CV-na-ga-tu- | CVnaxtuCi | CVnaxtuCa | CVnaxtooC | CVnaxtoo | CVnaxtuwa |
| 2SG | CV-na-ga-i- | CVngiCi | CVngiCa | CVngeeC | CVgnee | CVngiÿa |
| 2PL | CV-na-ga-ÿi- | CVnaxÿiCi | CVnaxÿiCa | CVnaxÿiC | CVnaxÿi | CVnaxÿeeÿ |
| InD. H | CV-na-ga-du- | CVnaxduCi | - | CVnaxduC | CVnaxdu | CVnaxduwa |
| $3 / n$ | CV-na-ga-(Ø-) | CVnaxaci | CVnaxCa | CVngaC | CVnga | CVngaa |
| 1SG | CV-u-na-ga-xa- | \{ CUnkaCi | CU:nkaCa | CUinkaC | CUinka | CUnnkaa |
|  |  | CVnkwaCi | CVnkwaCa | CVnkwaC | CVnkwa | CVnkwaa |
| $3 / n$ | CV-u-na-ga-( $\emptyset-)$ | $\left\{\begin{array}{l}\text { CU:naxali }\end{array}\right.$ | CU:naxCa | CU:ngaC | CUinga | CUnngaa |
|  |  | CVnaxwCi | CVnaxwCa | CVngwaC | CVngwa | CVngwaa |
| 1SG | CV-oo-na-ga-xa- | CunkaCi | CunkaCa | CunkaC | Cunka | Cunkaa |
| $3 / n$ | CV-oo-na-ga-( $\emptyset$-) | CunaxِCi | CunaxCa | CungaC | Cunga | Cungaa |
| $3 / n$ | CV-w-na-ga-(Ø-) | CunaxCi | CunaxCa | CungaC | Cunga | Cungaa |

Table 14.11: Northern prefix contractions with +5 na-conjugation and $g a-$ mode. U: represents oo if $V$ is $a$, or lengthened $V$ otherwise.

| Prefixes | Classifier shape |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ci- | Ca- | C- | $\emptyset-$ | ÿa- |
| ga-ga- | kaakaCi | kaakaCa | kaakaC | kaaka | kaaka |
| ga-ga-tu- | gaaxtuCi | gaaxtuCa | gaxaxtooC | gaaxtoo | gaxaxtuwa |
| ga-ga-i- | gaagiCi | gaagiCa | gaageeC | gaagee | gaagiÿa |
| ga-ga-ÿi- | gaxaxiCi | gaaxÿiCa | gaaxyiC | gaaxyi | gaaxÿeeÿ |
| ga-ga-du- | gaaxduCi | - | gaaxduC | gaaxdu | gaaxduwa |
| ga-ga-Ø- | gaaxCi | gaax ${ }^{\text {Ca }}$ | gaagaC | gaaga | gaagaa |
| ga-u-ga-xa- | kwaakaCi | kwaakaCa | kwaakaC |  | kwaakaa |
| ga-u-ga-Ø- | gwaax Ci | gwaax Ca | gwaagaC | gwaaga | gwaagaa |
| CV-ga-ga-xa- | CVkaakaCi | CVkaakaCa | CVkaakaC | CVkaaka | CVkaakaa |
| CV-ga-ga-tu- | CVgaaxtuCi | CVgaaxtuCa | CVgaaxtooC | CVgaaxtoo | CVgaaxtuwa |
| CV-ga-ga-i- | CVgaagiCi | CVgaagiCa | CVgaageeC | CVgaagee | CVgaagiÿa |
| CV-ga-ga-ÿi- | CVgaaxÿiCi | CVgaaxyı̈iCa | CVgaaxÿiC | CVgaaxẏi | CVgaaxÿeeÿ |
| CV-ga-ga-du- | CVgaaxduCi | - | CVgaaxduC | CVgaaxdu | CVgaaxduwa |
| CV-ga-ga-ø- | CVgaaxCi | CVgaaxCa | CVgaagaC | CVgaaga | CVgaagaa |
| CV-ga-u-ga-x̌a- | CU:kaakaCi | CU:kaakaCa | CU:kaakaC | CU:kaaka | CU:kaakaa |
| CV-ga-u-ga-Ø- | CU:gaaxCi | CU:gaaxCa | CU:gaagaaC | CU:gaaga | CU:gaagaa |
| CV-ga-oo-ga-xa- | CukaakaCi | CukaakaCa | CukaakaC | Cukaaka | Cukaakaa |
| CV-ga-oo-ga-ø- | CugaagaCi | CugaagaCa | CugaagaC | Cugaaga | Cugaagaa |

Table 14.12: Northern prefix contractions with $g a$-conjugation and $g a$-mode. U: represents oo if $V$ is $a$, or lengthened $V$ otherwise.

| Prefixes | Classifier shape |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ci- | Ca- | C- | $\emptyset$ - | ÿa- |
| ga-ga-xa- | gakaCi | gakaCa | gakaC | gaka | gakaa |
| ga-ga-tu- | gaxtuCi | gaxtuCa | gaxtooC | gaxtoo | gaxtuwa |
| ga-ga-i- | gagiCi | gagiCa | gageeC | gagee | gagiÿa |
| ga-ga-ÿi- | gaxÿiCi | gaxÿiCa | gaxÿiC | gaxÿi | gaxÿeeÿ |
| ga-ga-du- | gaxduCi | - | gaxduC | gaxdu | gaxduwa |
| ga-ga-Ø- | gaxCi | gaxCa | gagaC | gaga | gagaa |
| ga-u-ga-ẋa- | gookaCi | gookaCa | gookaC | gooka | gookaa |
| ga-u-ga-Ø- | goox̧ Ci | goox̧ Ca | - | googa | googaa |
| CV-ga-ga-x̌a- | CVkkaCi | CVkkaCa | CVkkaC | CVkka | CVkkaa |
| CV-ga-ga-tu- | CVgaxtuCi | CVgaxtuCa | CVgaxtooC | CVgaxtoo | CVgaxtuwa |
| CV-ga-ga-i- | CVkgiCi | CVkgiCa | CVkgeeC | CVkgee | CVkgiÿa |
| CV-ga-ga-ÿi- | CVgaxÿiCi | CVgaxÿiCa | CVgaxÿiC | CVgaxÿi | CVgaxÿeeÿ |
| CV-ga-ga-du- | CVgaxduCi | - | CVgaxduC | CVgaxdu | CVgaxduwa |
| CV-ga-ga-ø- | CVgaxַCi | CVgaxCa | CVkgaC | CVkga | CVkgaa |
| CV-ga-u-ga-x̌a- | CVkwkaCi | CVkwkaCa | CVkwkaC | CVkwka | CVkwkaa |
| CV-ga-u-ga-ø- | CVgoox-Ci | CVgooẋCa | CVkwgaC | CVkwga | CVkwgaa |

Table 14.13: Northern prefix contractions with ga-conjugation and ga-mode.

## 15 Epimode: More aspect and modality

The category of EPIMODE consists of two mutually exclusive suffixes that can be added to various modes to provide further distinctions of aspect and modality. This term, coined by Leer [[Fixme: cite]], refers to the fact that these elements are like other mode features but occur apart from them. The Greek prefix $\varepsilon$ ह́nt- epi- means 'in addition to' among other things, hence the term epimode means 'in addition to mode'.

The two types of epimode are the decessive and the prohibitive optative. The epimode suffixes are mutually exclusive, meaning that a verb can be marked for neither, one, or the other, but never both. Thus it is impossible for a verb to be marked both decessive and prohibitive-optative at the same time.

The epimode suffixes are are added to declarative modes, but there are differences in which of these modes they can occur with. The decessive can be added to imperfectives, perfectives, futures, potentials, and habituals, as well as to future habituals that are composed of futures with a habitual auxiliary (ch. 17). The prohibitive-optative is more restricted as it can be added only to imperfectives and perfectives. This distribution is shown in table 15.1 alongside the similar distribution of clause type suffixes (ch. 16); note that clause type and epimode are not mutually exclusive. I will discuss each epimode in its own section below.

### 15.1. Decessive

The DECESSIVE suffix -een $n_{\text {Ns }} \sim-i h n_{\mathrm{T}}$ indicates that the situation described by the verb was once the case in the past. The term is derived from Latin dēcēssus 'going down, decreasing' which is the antonym of accēssus 'coming up to, increasing'. Naish and Story were apparently the first to apply this name (Story 1966: 105). It is conventionally translated into English as 'used to', so

| Mode | Epimode |  | Clause type |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Decessive | Prohib.-Opt. | Subord. | Relative |
| Declarative modes |  |  |  |  |
| Imperfectives | $\pm$ | $\pm$ | $\pm$ | $\pm$ |
| Perfectives | $\pm$ | $\pm$ | $\pm$ | $\pm$ |
| Future | $\pm$ | - | $\pm$ | $\pm$ |
| Potential | $\pm$ | - | - | $\pm$ |
| Habitual* | $\pm$ | - | $\pm$ | $\pm$ |
| Realizational | - | - | - | - |
| Deontic modes |  |  |  |  |
| Imperative* | - | - | - | - |
| Hortative* | - | - | - | - |
| Admonitive | - | - | - | - |
| Circumstantial modes |  |  |  |  |
| Consecutive | - | - | - | - |
| Conditional | - | - | - | - |
| Contingent | - | - | - | - |
| Composite modes with auxiliaries |  |  |  |  |
| Imperfective habitual | - | - | $\pm$ | $\pm$ |
| Imperfective consecutive | - | - | - | - |
| Imperfective conditional | - | - | - | - |
| Imperfective contingent | - | - | - | - |
| Future habitual | $\pm$ | - | $\pm$ | $\pm$ |
| Future consecutive | - | - | - | - |
| Future conditional | - | - | - | - |
| Future contingent | - | - | - | - |

Table 15.1: Combinations of modes with epimode and clause type suffixes.
that $x$ xwaxáayeen is 'I used to eat it'. The decessive implies that the situation is no longer the case. I am uncertain if this is a presupposition because I have not tested whether it can be canceled, i.e. whether one can say something like ${ }^{\text {\%xwwaxáayeen } k a ~ c h ' a ~ y e i s u ́ ~ x ́ a x a ́ ~ ' I ~ u s e d ~ t o ~ e a t ~ i t ~ a n d ~ I ~ s t i l l ~ e a t ~ i t ' . ~}$

The decessive suffix can be applied to imperfectives, perfectives, the future, the potential, and the habituals. The only declarative mode which does not accept the decessive suffix is the realizational mode. I will demonstrate a pairs of non-decessive and decessive forms for each mode. The following example gives a perfective pair, and decessive marking seems to most commonly occur with perfectives. Note that the vowel of the decessive suffix predictably undergoes progressive rounding.
(271) a. telic perfective

> xwasikóo
$\emptyset$-ÿu-xa-si-ku ${ }^{h}$ - $-\ddot{ }$
3.0-PFV-1SG.S-CL[-D,s,+1]-know-VAR
'I know it'
theme: $O-S-C L[-D, S]-k u^{h}(\emptyset$; Event) 'S know, realize 0’ (Leer 1991: 212)
b. decessive telic perfective
xwasakóowoon
$\emptyset$-ÿu-xِa-sa-ku ${ }^{\mathrm{h}}$-ÿ-een
3.0-PFV-1SG.S-CL[-D,S,-I]-know-VAR-DEC
'I used to know it'
(Leer 1991: 212)
Decessives can also be formed with the future mode + habitual auxiliary which is described in chapter 17.

The decessive form requires [-I] regardless of the I component in the non-decessive form. This is because the decessive denotes a situation which is no longer the case, so that e.g. a stative with [+I] with the I component indexing the reality of the state must change to [-I] because the state described by the verb no longer exists.

Decessives can be applied to relative and subordinate forms of verbs as well, as the following two examples demonstrate. The first example below shows that the decessive form of a relativized verb does not feature the decessive suffix -een, but instead has the relative suffix -i and $[-I]$ in the classifier. Contrast this with non-decessive relatives which may or may not have the suffix $-i$ and always have [ +1 ] in the classifier.
(272) a. decessive relative telic perfective
wé xwasakóowu át
wé $\emptyset$-ÿu-xِa-sa-ku ${ }^{\mathrm{h}}-\ddot{\mathrm{y}}-\mathbf{i}$ át
MDST 3.0-PFV-1SG.S-CL[-D,S,-I]-know-vAR-REL 3N
'thing I used to know'
(Leer 1991:214)
b. decessive subordinate telic perfective
xwasakoowóo yéeyi
Ø-ÿu-xa-sa-ku ${ }^{\text {h }}$-h-ée= $\mathbf{y}$ éeÿi
3.0-PFV-1SG.S-CL[-D,S,-I]-know-VAR-SUB=DEC
'which/when I used to know it'
(Leer 1991: 214)
As can be seen with the second example above, decessive subordinates have the enclitic =ÿéeÿi 'former, previous' rather than the decessive suffix. This enclitic is also used with nouns, such as ax shát yéeyi 'my former wife'.
[[Fixme: Leer (1991:212) says that the verb form is always irrealis for decessives and for prohibitive-optatives: "if there is a special Nonassertive/Irrealis form of the mode, this is used in all cases where the verb is marked for status ... or epimode ..., as well as in Subordinative forms and verbal nouns. The Assertive Realis form is therefore used only where the verb is Realis, not Subordinative, and not marked for epimode." But this doesn't make sense, since his examples seem to show a verb not marked for irrealis but nonetheless subordinate. The problem is compounded by his using a verb that doesn't have an obvious marker of irrealis, instead only showing classifier and stem variation.]

### 15.2. Prohibitive-optative

The PROHIBITIVE-OPTATIVE suffix -ee $\underline{k} \sim-i h \underline{k}_{\mathrm{T}} \sim-\underline{k}$ indicates either that the event or property described by the verb is desired to be the case (optative) or that it is desired to not be the case (prohibitive) depending on whether the clause has positive or negative polarity. Naish and Story applied the name 'optative' (Story 1966: 105) while noting that it has a prohibitive meaning in negative contexts, and Leer (1991) established the hyphenated name.

The prohibitive-optative suffix is much more restricted than the decessive suffix, being only permitted with imperfectives and perfectives. It cannot occur with any other declarative modes, nor with any deontic or circumstantial modes nor with auxiliaries. The optative reading of the suffix is the default, occurring with positive forms of verbs, whereas the prohibitive
reading occurs with negative forms of verbs that also include the negative particles tléil or $l$ or their allomorphs preceding the verb.
(273) a. prohibitive imperfective
tléil áx igoodéek
tléil á-x u-Ø-i-Ø-gut-h-éek
NEG 3N-PERT IRR-ZCNJ-2SG.S-CL[-D, Ø,-I]-go.SG-OPT
'don't go there'
theme: P-\{t,x, dé $S-C L[-D, \emptyset]-g u t(\emptyset ;$-h Rep) 'S arrive at P’ (Story 1966: 105)
b. optative imperfective
gwál haax ugoodéek
gwál haa-x=u-Ø-Ø-Ø-gut-h-éek
DUB here-PERT=IRR-ZCNJ-3.S-CL[-D, Ø,-I]-go.SG-VAR-OPT
'hopefully he'd come here'

## 16 Clause type: Relativization and subordination

The epimode is one dimension that expands off of the basic modes, and clause type is the other. There are two mutually exclusive clause type suffixes, the SUBORDINATE clause suffix -ée $e_{S N} \sim-i h_{T}$ and the RELATIVE clause suffix $-i \sim-\emptyset$. The relative suffix forms relative clauses and the subordinate suffix forms other types of embedded clauses.

The following pair of examples demonstrates an ordinary main clause verb in contrast with a relative clause using the relative suffix -i. The latter example has the object shaawát as the external head of the relative clause, with uwashayi being the relativized verb and xóotsch as the subject noun phrase within the relative clause.
(274) a. non-relativized verb
xóotsch shaawát uwasháa
xóots-ch shaawát Ø-u-Ø-ÿa-sha-ÿ
brown.bear-ERG girl 3.0-PFV.TEL-3.S-CL[-D, Ø, +I]-marry-VAR
'the brown bear married the girl'
theme: $0-S-c L[-D, \emptyset]$-sha (Ø; -: Act) 'S marry 0'
b. relativized verb
wé xóotsch uwashayi
wé xóots-ch Ø-u-Ø-ÿa-sha-i
MDST [rc brown.bear-ERG 3.0-PFV.TEL-3.S-CL[-D, Ø, +I]-marry-REL RC] shaawát shaawát girl
'that girl who the brown bear married'
Compare the previous examples with the following examples demonstrating subordination.
(275) a. non-subordinated verb
xóots aawaják
xóots a-ÿu-Ø-ÿa-jak-ÿ
brown.bear 3.0-PFV-3.S-CL[-D, Ø, +I]-kill-vaR
'he killed a brown bear'
b. subordinated verb
xwasiteen xóots
$\emptyset$-ÿu-xِa-si-tin-h xóots
3.0-PFV-1SG.S-CL[-D,s,+I]-see-VAR [sub br.bear
awujaagí
a-ÿu-Ø-Ø-jak-h-ée
3.0-PFV-3.S-CL[-D, Ø,--I]-kill-VAR-SUB Sub]
'I saw (that) he killed a brown bear'
In the second example the verb awujaagí has been marked for subordination and the entire phrase is now embedded below the verb $\underline{x}$ wasiteen.

The traditional term for the relative suffix is attributive based on its formation of verbs that modify nouns in a manner similar to adjectives, hence 'attributive verbs'. These verbs are actually small relative clauses, since most such attributive verbs can optionally have preceding non-verbal elements (argument noun phrases, locative postpositional phrases, adverbs, etc.). Thus this suffix always forms relative clauses, and as such I have renamed it to be more explicit about its function. Leer (1991) often refers to the 'proclitic form' of verbs, which is the form of a verb once it is relativized with either -i or $\emptyset$. He sees this verb form as being procliticized to the head noun, though this is in fact incorrect unless the entire relative clause phrase is to be analyzed as a giant proclitic. His perspective was limited only to the verbs themselves in a phonological sense, not considering the larger phrase structure in which they are embedded.

Both the relative suffix and the subordinate suffix are restricted in the inventory of modes which they can be applied to. Their distribution is given in table 15.1 on page 290 along with the distribution of epimode suffixes. Neither of the relative or subordinate can be applied to any of the deontic modes (imperative, hortative, admonitive) nor to any of the circumstantial modes (consecutive, conditional, contingent). In the declarative modes the imperfectives, perfectives, future, and habitual can have either suffix, but only the relative can be applied to the potential mode and neither can be applied to the realizational mode. With auxiliaries (Leer's 'composite modes',
see chapter 17) both the relative and the subordinate are permitted with the imperfective habitual and the future habitual, but none of the others.

The surface form of the subordinate suffix is somewhat variable. In Tongass Tlingit it is always -ih, but in Northern Tlingit (and probably also Southern) the form can be either -ée if the verb stem has low tone or -ee if the verb stem has high tone. In contrast the relative suffix -i is always low tone (no tone applies to the - $\emptyset$ allomorph). Both suffixes are somewhat variable in their length in Northern Tlingit, and seem to usually be short in Southern Tlingit. I write the subordinate suffix -ée as long in morpheme segmentations merely to distinguish it from the relative suffix -i which I always write short. The current orthographic convention is to write both suffixes as short, though like with other variable length vowels the earlier practice was to write them as long.

Because of their extremely similar forms, the relative suffix and the subordinate suffix can be difficult to distinguish in some contexts. There are distinct morphological correlates however, so that the whole verb always distinguishes the two. Regardless of the non-subordinate verb form, the subordinate always occurs with [-I] classifiers. In contrast the relative can occur with either [ -I ] or $[+\mathrm{I}]$ classifiers. Subordinate-marked verbs can take case suffixes to express various types of embedded clauses, whereas relativemarked verbs never occur with case suffixes. As noted above, the relative suffix is never high tone, whereas the subordinate suffix has tone opposite of the verb stem. The subordinate suffix always appears with any mode where it is permitted, whereas the relative suffix only appears with stative imperfectives, perfectives, and the potential.

### 16.1. Relatives

As noted earlier, relative clauses are formed with relativized verbs. Relativized verbs are verbs marked with the relative clause suffix and often with different stem variation from their main verb counterparts. There are two allomorphs of the relative suffix in my analysis, the $-i$ allomorph and the $-\emptyset$ allomorph. The -i allomorph occurs along with $[+1]$ in the classifier, whereas the $-\emptyset$ allomorph is found when a verb has [-I] in the classifier.

### 16.1.1. LIGHT NOUNS

There are two nouns that occur as heads of relative clauses where they do not have an independent reference but rather refer to something which occurs within the relative clause itself. They are called light nouns, and are $a a$ 'some, one, thing' and yé 'place, manner, way'. The light noun $a a$ is probably related to and perhaps identical with the partitive pronoun $a a$, for which see section 19.5 . The light noun yé is probably related to the manner preverb yéi= 'thus, so' and the manner particle yéi 'thus, so, that way'.

The light head noun yé 'place, manner, way' is sometimes contracted with the relativization suffix -i to produce a verb ending -éi. This is not a true suffix yet, but there is a chance of it becoming a headless relative suffix in the future.
(276) $\Lambda X$ gé-de wudıhané yñ $X$ wutì
ax géide wudihaanéi yáx
ax géi-dé ÿu- $\emptyset$-di-han-h-i yé yáx
1SG.PSS against-ALL PFV-3.S-CL[+D, $\emptyset,+\mathrm{II}$-stand.PL-VAR-REL way SIM
wootee
Ø-ÿu-ÿa-ti ${ }^{\text {h }}$-h
3.0-PFV-CL[-D, Ø, +I]-be-VAR
'it was as though everything was against me'
(Naish 1966: 126)

### 16.2. SUBORDINATES

(277) a. tlákw dakéis' sh tóo iltóowu tlákw dakéés' sh tú-' Ø-Ø-1-tu-:-ée EMPH sewing RFLX.PSS inside-LOC 3.0-ZCNJ-CL[+D,l,-I]-learn-var-SUB
dakéis' kei kwgak'éi
dakéis' kei=Ø-ga-w-ga- $\emptyset-$ k'éi $^{x}$
sewing UP=3.0-GCNJ-IRR-GMOD-CL[-D, Ø,--I]-good
'she's really studying sewing so she'll get good at sewing'
(Story \& Naish 1973: 114)

```
    b. tlákw dakéis' sh tu-' iltóowu dakéis'
    really sewing self inside-to she.learns sewing
    [Adv N [ [Pron N-P ] ]PPV ] Sub N
        kei=kwgak'éi
        up=will.be.better
        V
(278)
    a. tsaa doogú gaxoogóot 
        xwaat'eesh
        \emptyset-ÿu-x्-a-ÿa-t'ish-h
        3.0-PFV-1SG.S-CL[-D,\emptyset,+I]-stretch.skin-VAR
    'to dry the seal skin I stretched it' (Story & Naish 1973: 215)
b. tsaa doogú gaxoogóo -t áwé xwaat'eesh
        seal skin it.should.dry to I.stretched.it
    [[ N N N V [ | [ Sub P ] [PP Foc V
```


### 16.3. RELATIVIZATION

Relative clauses are marked by distinct morphology on the relativized verb, a phenomenon documented in some detail by Leer (1991: 158, 169-171, 173174 , etc.), though I have encountered some problems with his description. A verb marked for relativization has either the relativizing suffix -i or in my analysis the notional relativizing suffix - $\emptyset$. According to Leer, the suffix -i only occurs with a few specific modes, ${ }^{1}$ namely the perfectives, the potentials, and the eight kinds of stative imperfectives. All these modes also exhibit the $\mathrm{CL}[+\mathrm{I}]$ feature in the classifier ${ }^{2}$ morpheme for their realis forms, so that the relative suffix $-i$ only occurs with the classifier feature CL[+I] (Leer 1991:

1. A mODE is a language-specific category subsuming tense, mood, aspect, modality, and polarity. Any given mode is marked with several morphemes and morphological features which are discontinuously interleaved with lexical, derivational, and other inflectional morphology.
2. The classifier, apparently named by Boas (1917: 22, 27-35), has three features $\mathrm{CL}[ \pm \mathrm{D}, \mathrm{S}$, $\pm I]$ with $S=\{\emptyset, s, l, s h\}$. It primarily indicates voice and valency, but unlike with the Athabaskan languages the Tlingit classifier does have some noun classification functions as well.
159). Relativized forms of verbs in other modes do not have a suffix, which I analyze as - $\emptyset$ 'REL' for symmetry with -i 'REL'.

The following placenames in (279) contrast a relativized perfective with $\mathrm{CL}[+\mathrm{I}]$ and $-i$ and a relativized progressive imperfective with $\mathrm{CL}[-\mathrm{I}]$ and $-\emptyset$.
(279) a. perfective with -i relative suffix

Kawlit'ix'i Gawdáan
Ø-ka-ÿu-li-t'ix'-i gawdáan
3.0-HSFC-PFV-CL[-D,l,+1]-hard-REL horse
'horse that's in rigor mortis', 'Deadhorse' (a gulch in White Pass)
(Keixwnéi Nora Dauenhauer)
b. progressive imperfective with - $\emptyset$ relative suffix

Yaa Nax́'ákw T'á
ÿaa=na- $\varnothing-\emptyset$-x'akw-n- $\varnothing \quad$ t'á
along $=$ NCNJ-3.S-CL[-D, $\emptyset,-\mathrm{I}]$-migrate-var-REL king.salmon
'king salmon that is going upstream' (a river in the Taku
watershed) (Yaxgóos' Jackie Williams)
The morphological markers of the perfective in (279a) are the $\ddot{y} u$ - perfective prefix which usually appears as $w$ or $w u$, and $[+I]$ in the classifier which usually appears as $i$. There is no stem variation suffix in this relativized form, but in a non-relative it would be -h for this verb producing kawlit'éex'. The progressive imperfective in (279b) is formed with the preverb ÿaa= 'along', the $n a$-conjugation prefix, $[-I]$ in the classifier, and the $-n$ stem variation suffix. The perfective form exhibits the relative suffix $-i$, whereas the progressive imperfective has - $\emptyset$. Because the -i suffix makes relative clauses relatively easy to spot, I have been biased towards collecting examples exhibiting this suffix.

The forms in example (280) below illustrate what I call Small relatives, which are relative clauses that consist only of a verb and a head noun. Previous linguists (Leer 1991; Naish 1966; Story 1966) used the term 'attributive' for the relativized forms of verbs because they had only considered these small relatives, where the verb acts as a simple attributive modifier of the head. Since Tlingit has a closed class of adjectives these small relatives serve as the primary method of nominal modification. They are quite frequent in ordinary talk, in contrast with complex relatives that are less common. Small relatives are very productive constructions, with new vocabulary often being formed from them.

| (280) a. | kawdudlituli | át |
| :---: | :---: | :---: |
|  | Ø-ka-ÿu-du-dli-tul-i | át |
|  | 3.0-HSFC-PFV-IND.H.S-CL[+D, l,+1]-roll-REL | Ind.n |
|  | 'sushi roll', lit. 'thing that has been | rolled up' |

(Daasdiyaa Ethel Makinen)
b. kaashís'gi

Ø-ka- $\emptyset$-ÿa-shís' $\underline{k}^{\times}-\mathbf{i}$
3.0-HSFC-ZCNJ-CL[-D, Ø, +I]-raw-REL fish
'sushi', lit. 'raw fish'
(Daasdiyaa Ethel Makinen)
c. si.áax'u át
Ø- $\emptyset$-si-.áax' $w^{x}$ - $\mathbf{i}$ át
3.0-ZCNJ-CL[-D,s,+I]-spicy-REL IND.N
'pepper', lit. 'spicy stuff'
(Keixwnéi Nora Dauenhauer)
d. kadu.uxxu

Ø-ka- $\emptyset$-du- $\emptyset$-.ux-x-i át
3.0-HSFC-ZCNJ-IND.H.S-CL[-D, $\emptyset,-\mathrm{I}]$-blow-REP-REL IND.N
'balloon', lit. 'thing people inflate' (Keixwnéi Nora Dauenhauer)
e. a káa dul.us'ku át
a ká-' Ø- $\emptyset$-du-la-.us'-kw-i át
3.N.PSS HSFC-LOC 3.O-ZCNJ-IND.H.S-CL[-D,l,-I]-wash-REP-REL IND.N
'washboard', lit. 'thing people wash it out on top of'
(Edwards 2009: 142)
The last form in (280e) above is not actually a small relative since it contains a DP a káa 'on top of it' within the relative clause. This points toward my finding that the so-called 'attributive' form of verbs is also used for more complex relative clause structures. Example (281) below is a more explicit relative clause containing both an ergative-marked subject and a locative oblique. These sorts of complex relatives are less frequent in discourse, so perhaps earlier researchers simply did not encounter enough examples of them for the phenomenon of relative clause construction to become apparent.
(281) relativized perfective verb with complex structure
a. morphology
wé xóotsch Kéex’’x' uwashayi
wé xóots-ch Kéexِ'-x’ Ø-u- $\emptyset-y ̈ a-s h a-i$
mDST brown.bear-ERG Kake-LOC 3.0-PFV.TEL-3.S-CL[-D, $\emptyset,+\mathrm{I}]$-marry-REL shaawát
shaawát
girl
'that girl who a brown bear married in Kake' (Yaaxl.aat Irene Paul)
b. syntax
wé xóots-ch Kéex'-x' uwasha-i
that br.bear $_{i}$-ERG Kake-in he $_{i}$.married.her ${ }_{j}$-REL
D $\left[\begin{array}{cc}\left.\mathrm{CP}^{2} \mathrm{DP}_{i} \quad-j\left[\mathrm{~N}-\mathrm{P}_{\mathrm{PP}}\right] \mathrm{V}_{[+\mathrm{S},+0]} \mathrm{CP}\right]\end{array}\right.$
shaawát
$\operatorname{girl}_{j}$
$\mathrm{N}_{j}$
Although most irrealis-marked verbs reliably have the [-I] feature in the classifier, a relativized irrealis-marked verb has [+I] instead. The pair below in (282) demonstrate this with a negative (hence irrealis-marked) perfective along with the relativized counterpart. The verb here is 'eat', which was listed as ya-xaa by Story \& Naish (1973: 77, 339). ${ }^{3}$
(282) a. negative perfective
tléil x'áax' xwaxá
tléil x'áax' $\emptyset$-u-ÿu-xַa- $\emptyset-\underline{x} a-{ }^{\prime}$
NEG apple 3.0-IRR-PFV-1SG.S-CL[-d, $\emptyset,-\mathbf{I}]$-eat-vAR
'I didn't eat an apple'
b. relativized negative perfective
wé 1 xwaaxayi x'áax'
wé l $\quad$-u-ÿu-x-xa-ÿa-xa-i x'áax'
MDST NEG $3.0-\mathrm{IRR}$-PFV-1SG.S-CL[-D, $\emptyset,+\mathbf{I}]$-eat-REL apple
'that apple that I didn't eat'

[^29]The reader may have noticed that in example (280) I included two relativized verbs that show the -i relative suffix but have $[-I]$ in the classifier. I have repeated the offending forms below in example (283). Both of these forms coincidentally have a rounded $-u$ rather than unrounded $-i$, but this is phonologically predicted by progressive rounding spread from the root vowel.


| b. a káa | dul.us'ku |  |
| :--- | :--- | :--- |
| a | ká-' | $\emptyset-\emptyset-d u-l a-. u s '-k w-i ~ a ́ t ~$ |
| 3.N.PSS | HSFC-LOC | 3.0-ZCNJ-IND.H.S-CL[-D,l,-I]-wash-REP-REL IND.N |
| 'washboard', lit. | 'thing people wash it out on top of' |  |

(Edwards 2009: 142)
The mismatch between [-I] and $-i$ is difficult for me to explain. Both are repetitive imperfectives of transitive verbs. Example (283a) is from the verb $O-k a-S-c L[-D, \emptyset]-u^{\prime} \times\left(\emptyset ;-s^{\prime}\right.$ Act, -x Rep) 'S inflate 0’ and example (283b) is from the verb $O-S-c L[-D, l]-. u s^{\prime}(\emptyset ;-k w$ Rep) 'S wash out O'. All non-stative imperfective types - i.e. the active, repetitive, positional, and progressive imperfectives - always occur with [-I] in the classifier. The sole exceptions are the $[+I]-\ldots-k$ repetitive and the $y o o=[+I]-\ldots-k$ repetitive imperfectives that only occur with a limited set of verbs, and neither of the two verbs in question has one of these imperfective types. Thus these two examples occur with $[-I]$ as expected for non-stative imperfectives. But I am at a loss as to why they should occur with the relative suffix -i when Leer says that relativized verbs with $[-I]$ always lack the $-i$ relative suffix. It may be possible that the vowel occurring here is epenthetic to avoid a difficult cluster of [ $\left.\mathrm{x}^{\mathrm{w}} \chi^{\mathrm{w}} .2\right]$ or [ $\left.s^{\prime} k^{w} .2\right]$, but I am unsure. Such epenthesis does occur elsewhere in the language, e.g. lingítx'i sáani ‘little people; dear people’ with [t.x’i.s] from lingít$x^{\prime}=s a ́ a n i ~ ' p e r s o n-P L=D I M . P L '$.

### 16.3.1. STEM VARIATION OF RELATIVIZED VERBS

Leer's concept of relativized verb forms is that they are proclitics attached to nouns (Leer 1991: 170), a claim which I dispute. His argument is based on small relative forms like kawdudlituli át 'thing that has been rolled up' as
previously given in example (280a), which he would analyze with the verb forming a proclitic attached to the noun as kawdudlituli=át. This is untenable given my examples of relative clauses that contain PPs and DPs with the same sort of 'proclitic' forms, and with numerals, adjectives, and possessors appearing between the verb and the head noun. The proclitic analysis would require a large syntactic phrase to be admissible as a clitic, and such clitics would be attachable to any of possessors, numerals, adjectives, or nouns, with preference for the leftmost in an NP. Leer's proclitic analysis of relativization also requires a torturous mismatch between phonology and syntax that is, in my view, entirely unnecessary.

Leer's idea of relativized verbs being proclitics on nouns arose from looking at the interaction between the relativized verb forms and the regular system of verb stem variation. Verb stem variation is a morphophonological phenomenon where the vowel of a verb root underoges predictable suprasegmental changes and apophony to form different stems in the verb paradigm. Tlingit stem variation can be compared to similar systems of stem variation in verb paradigms across the Athabaskan family and in Eyak, but the Tlingit system is perhaps more transparent. Stem variation is too large and complicated a topic to treat in its entirety here, but I must address the interaction between it and relativization.

Stem variation in my analysis involves a set of suffixes which are affixed to verb roots to produce verb stems. ${ }^{4}$ Each mode specifies particular stem variation suffixes for main verb forms, so for example the progressive imperfective occurs with the - $n$ suffix, and the habitual of a $\emptyset$-conjugation class verb occurs with -ÿ before the habitual suffix -ch. Irrealis forms may have different stem variation from the realis forms, but many modes have the same suffix for both. The stem variation suffixes may or may not appear as actual segments in the verb, but always produce particular vowel changes that depend on whether the root is open (no coda) or closed (coda). Thus a closed root combined with $-n$ will have a short vowel and high tone, e.g. $\sqrt{g}$ gut 'sg. go' $+-n \rightarrow$ gút, and an open root combined with $-n$ will have a long vowel and high tone and apophony of $a$ or $u$ to $e$, e.g. $\sqrt{x} a$ 'eat' $+-n \rightarrow$ xéein. The notional suffixes $-:$ (Leer's --), $-h$ (Leer's -'), and -' never have surface forms in

[^30]Northern Tlingit, instead only modifying the root vowel.
The restricted class of invariable roots does not undergo stem variation, so that such roots always have a single fixed form throughout their paradigms. I invert the tradition by indicating the invariable roots with a final saltire cross ${ }^{x}$, e.g. $\sqrt{n u ́ k t s}{ }^{x}$ 'sweet'; Leer instead marks the much larger class of variable roots with a final asterisk ${ }^{*}$, e.g. $\sqrt{\mathrm{X}} a^{*}$, and Edwards (2009) similarly uses a final tilde $\sim$, e.g. $\sqrt{\underline{x}} a \sim$.

Relativized forms of verbs have different realizations of stem variation from verbs appearing in main clauses. Leer (1991: 170-171) lays out a set of informal rules for the realization of relativized stems. I summarize them here with some examples for each.

- relativized invariable roots are the same as main clause forms

$$
\begin{aligned}
& \sqrt{\text {.áa }} x^{\prime} w^{\times \times} \text {'spicy' }+-\emptyset \rightarrow \text {.áax' } w \\
& \sqrt{\text {.ááax' } w^{\times}} \text {'spicy' }^{2}-i \rightarrow \text {.áááu } \\
& \sqrt{ } \text { shís' } \underline{k}^{\times} \times \text {raw' }+-\emptyset \rightarrow \text { shís' } \underline{k} \\
& \sqrt{\text { shís }} \underline{k}^{\times} / \text {'raw' }^{+-i} \rightarrow \text { shís'gi } i
\end{aligned}
$$

- roots with obstruent suffixes are the same as main clause forms

$$
\begin{aligned}
& \sqrt{x} \boldsymbol{a} \text { 'eat' }+-\ddot{y}+- \text { ch 'habitual' }+-\emptyset \rightarrow \text { xááaych } \\
& \sqrt{\underline{x}} \boldsymbol{a} \text { 'eat' }+-\ddot{y}+-c h ~ ' h a b i t u a l '+-i \rightarrow \text { x́áayji } \\
& \text { (cf. } \sqrt{\underline{x}} \boldsymbol{a}+-\ddot{y} \rightarrow \underline{\text { xáa }} \boldsymbol{a} \text { ) } \\
& \sqrt{\text { gut }} \text { 'sg. go' }+-\ddot{y}+- \text { ch 'habitual' }+-\emptyset \rightarrow \text { gútch } \\
& \sqrt{g u t} \text { 'sg. go' }+-\ddot{y}+-c h \text { 'habitual' }+-i \rightarrow g u ́ t j i \\
& \text { (cf. } \sqrt{g u t+-\ddot{y}} \rightarrow g u ́ t \text { ) }
\end{aligned}
$$

- closed and open roots with $-i$ have a short vowel and low tone

$$
\begin{aligned}
& \sqrt{x} \boldsymbol{x} \text { ‘eat' }+-\ddot{y}+-i \rightarrow \underline{\text { x }} \boldsymbol{a y i} \text { i, *xáayi } \\
& \text { (cf. } \sqrt{x} \boldsymbol{a}+-\ddot{y} \rightarrow \underline{\text { xáa }} \text { ) } \\
& \sqrt{\text { gut 'sg. go' }+-\ddot{y}+-i \rightarrow g u d i \text {, *gúdi }} \\
& \text { (cf. } \sqrt{g u t+\ddot{y} \rightarrow \text { gút) }}
\end{aligned}
$$

- open roots with $-:$ stem variation and the $-\emptyset$ relative have $-h$ instead

$$
\begin{aligned}
& \sqrt{x} \boldsymbol{a} \text { 'eat' }+-\dot{+}+-\emptyset \rightarrow \underline{x} a a \text {, * } \underline{\text { xáa }} \\
& \text { (cf. } \sqrt{\underline{x}} \boldsymbol{a}+-: \rightarrow \underline{x} \boldsymbol{a} \boldsymbol{a} ; \sqrt{\underline{x} \boldsymbol{a}} \boldsymbol{a}+-h \rightarrow \underline{\chi} \boldsymbol{a} \boldsymbol{a} \text { ) }
\end{aligned}
$$

- other roots with the - $\emptyset$ relative are the same as main clause forms

$$
\begin{gathered}
\sqrt{x} a+-n+-\emptyset \rightarrow \underline{x} \text { éin } \\
(\text { cf. } \sqrt{\underline{x} a+-n \rightarrow \underline{x} e ́ i n}) \\
\sqrt{g u t+-n+-\emptyset \rightarrow g u ́ t} \\
(c f . \sqrt{g u t+-n \rightarrow g u ́ t})
\end{gathered}
$$

One problem I have encountered with Leer's description of relativized
forms is that it is not always consistent with the forms produced and checked by speakers I have worked with. For example, the sequence $\sqrt{n u t}$ 'swallow' $+-h+-i$ should be nut'i according to the rules above. Instead a few of my consultants were adamant that the correct form should be nóot'i identical with the nonrelativized form, although one then later also used nut'i as predicted by Leer. I suspect that Leer's description of stem variation for relativized forms represents an idealized system that is not consistent across all speakers. Another possibility I have considered is that speakers may have the stem variation of main clause forms mentally overshadowing the relativized forms, so that in the artificial contexts of elicitation or teaching they emphasize the nonrelativized stem variation. This might imply that the relativized stem variation does not arise from morphophonological rules, but rather it could be due to phrasal phonology such as intonation. In either case, more work needs to be done in this corner of the verb morphophonology. I will not further address any stem variation inconsistencies in this paper.

There are, as Leer (1991: 170 fn .7 ) notes, a few verb roots which have some unusual stem variation behaviours. One particularly odd root is $\sqrt{k^{\prime}} e^{\prime} i^{x}$ 'good' which is normally an invariable root, but which has an irregular form k'é rather than k'éi when occurring in an irrealis-marked verb. When relativized this particular root appears as $\sqrt{k^{\prime}} \dot{e}^{x}+-i \rightarrow k^{\prime}$ éiyi in Northern Tlingit as expected for invariable roots, but in Southern Tlingit it instead has the form $\sqrt{k^{\prime}} e^{\prime} i^{x}+-i \rightarrow k^{\prime}$ eyi as though it were an ordinary variable open root. As with other stem variation inconsistencies, I will not address this phenomenon any further.

### 16.3.2. DECESSIVE MARKING AND RELATIVIZATION

Relativized verbs exhibit somewhat different morphology when they are decessive-marked, so I will summarize the differences here. The decessive -een is a verb suffix indicating that the situation described by the verb was once the case in the past but no longer is the case. ${ }^{5}$ This was named by Naish and Story (Story 1966: 105) from Latin dēcēssus 'going down, decreas-
5. I believe that the semantic function of decessives is a cancellable implication so that one can say something like ${ }^{\%}$ xwax́áayeen $k$ ka ch'a yeisú x́axá 'I used to eat it and I still eat it'. I have not actually verified this, however. Leer (1991: 471) notes that Kaajákwti Walter Soboleff could interpret the decessive as referring to a long past situation just recalled by the speaker, where the result of the situation would still hold. I am unaware if any other speakers allow this interpretation.
ing'. Leer (1991:87) collects the decessive together with the mutually exclusive prohibitive-optative suffix $-\underline{k} \sim-e e \underline{k}$ in a category he calls EPIMODE, from Greek $\varepsilon$ ह́nt-epi- 'in addition to. ${ }^{6}$ Decessive marking can be added only to certain declarative modes, namely the imperfectives, perfective, future, potential, and habitual (Leer 1991: 214, 221-224). It is not permitted with any of the deontic or circumstantial modes like the imperative or the conditional (Leer 1991: 89). All decessive forms have [-I] in the classifier regardless of the mode's original $[ \pm \mathrm{I}]$ feature, perhaps because $[+I]$ reflects stativity and decessives describe situations that no longer exist. In example (284) below I demonstrate the same verb in the perfective, the relativized form of the perfective, the decessive perfective, and the relativized form of the decessive perfective.
(284) a. perfective
xwasikóo
Ø-ÿu-xa-si-ku-ÿ
3.0-PFV-1SG.S-CL[-D,s,+I]-know-VAR
'I know it'
b. relativized perfective
wé xwasikuwu shí
wé $\emptyset$-ÿu-xِa-si-ku-i shí
mDST 3.0-PFV-1SG.S-CL[-D,S,+I]-know-REL song
'that song I know'
c. decessive perfective
xwasakóowoon
Ø-ÿu-x̄a-sa-ku-ÿ-een
3.0-PFV-1SG.S-CL[-D,S,-I]-know-VAR-DEC
'I used to know it'
In the relativized perfective the relative suffix -i appears as expected, with predictable rounding due to the round vowel of the verb root and the insertion of a glide to avoid hiatus. In the decessive perfective the decessive suffix -een also appears as expected, along with [-I] in the classifier.

[^31](284) d. relativized decessive perfective
wé xwasakóowu shí
wé $\emptyset$-ÿu-xַa-sa-ku-ÿ-i shí
MDST 3.0-PFV-1SG.S-CL[-D,S,-I]-know-VAR-REL song
wé $\emptyset$-ÿu-xַa-sa-ku-ÿ-een- $\emptyset \quad$ shí
MDST 3.0-PFV-1SG.S-CL[-D,S,-I]-know-VAR-DEC-REL song
'that song that I used to know'
The relativized form of the decessive perfective is problematic; I have offered two segmentations of it. The first segmentation interprets the form as having a relative suffix $-i$ and with the decessive suffix absent. This is what Leer (1991: 158, 214) states occurs with decessive relatives, but later he contradicts himself by saying that instead the relativized form has -een "reduced to $-i$ " (Leer 1991: 460), implying that the decessive suffix is modified rather than absent. The second segmentation reflects his latter claim. Leer generally seems to follow the former analysis with the relative suffix $-i$ in his other writings, and I have followed him in this, but I want to note here that I have no arguments favouring or countering either hypothesis.

Regardless of which segmentation is assumed for relative decessives, the most important surface characteristic is that the relativized decessive form looks similar to other forms of relativized verbs marked with -i except for the unique fact that it has $[-I]$ in the classifier rather than the usual $[+I]$. This mismatch between $-i$ and $[-I]$ is essentially diagnostic for decessive relatives, but compare the previously discussed problems in (283). I have avoided decessive relatives because of the confusion regarding their morphology, but I have described them here for completeness since they can be found in published texts.

## 17 Auxiliaries: Mode combination

At the end of the verb are the auxiliaries, a set of verblike words that can host some verbal suffixes. There are five auxiliaries; in the Northern dialect they are nooch 'habitual', noojeen 'habitual decessive', nóokw 'repetitive', núkwni 'conditional', and ganúgun 'contingent'. They contain instances the -4 mode suffixes (sec. 4.2.23, also secs. 12.6 and 12.9) and -5 epimode suffixes (see ch.15) attached to them, and with the $g a$ - mode prefix of the contingent in the ganúgún auxiliary as well. The inventory of auxiliaries is given in table 17.1. Because there is so much variation within and between dialects, the documented variants are presented in total with subscripts indicating which dialects they occur in. This is more compact than presenting the variants for each dialect individually.

The basic concept behind the development of the auxiliaries seems to be that they arose as a way to simplify the coda of a verb. Since several of the mode suffixes consist solely of consonants, a verb root with a complex coda - such as most invariable roots - becomes increasingly difficult to pronounce with more consonants stuck on the end. As Leer (1991:211) says, "the combination of order -4 outer mode suffixes with invariable roots or invariant stems may be phonologically awkward and/or hard to parse, and can be avoided by the auxiliaries rather than the outer mode suffixes".

For example the habitual suffix -ch can occur at the end of a verb like lax'wás'kch 'it's always numb', giving a stem syllable with sequence of three consonants in a row that have very different places and manners of articulation: / $x^{\prime \text { 'ás'qt }} \mathbf{\int} /$. To 'rescue' this the habitual auxiliary makes it possible to move the -ch away from the stem. This is demonstrated in the following example. The invariable stative imperfective is lix'wás'k and since this theme is $g a$-conjugation it has an atelic habitual with $C L[-I]-\ldots-c h$. The habitual auxiliary nooch is available to shift the -ch off of the stem. The result is the form lax'wás'k nooch, which is a stative imperfective + habitual.
17. Auxiliaries: Mode combination

| Form | Gloss | Definition | Auxiliary Affixes |
| :---: | :---: | :---: | :---: |
| neech $_{\text {SRI }}$ nooch $_{\text {RN }}$ nukch $_{\mathrm{G}}$ nuhch $_{\text {т }}$ | HAB.AUX | habitual | -ch |
| neejéen $_{\text {SRI }}$ <br> noojéen $_{\text {RN }}$ <br> nuhjeen $_{T}$ | DEC.HAB.AUX | decessive habitual | -ch-een |
| néekw $w_{\text {SRI }}$ <br> nóok $\mathrm{N}_{\mathrm{N}}$ <br> neekw ${ }_{\text {T }}$ | CSEC.AUX | consecutive | $-:$ |
| níkwnee $_{\text {SRI }}$ <br> núknee ${ }_{\text {RN }}$ <br> nuknih ${ }_{T}$ | COND.AUX | conditional | -n-ee |
| ganíkw $_{\text {SR }}$ ganígún ${ }_{1}$ ganúgún ${ }_{\mathrm{N}}$ ${ }^{\text {? }}{ }^{\text {ganikw }}$ | CTNG.AUX | contingent | $\underline{g} a-\ldots-n-1{ }^{\text {n }}$ |

Table 17.1: Verb auxiliaries (-7).
(285) a. invariable stative imperfective
lix'wás'k
Ø-Ø-li-x'wás' $\underline{k}^{\times}$
3.0-ZCNJ-CL[-d,l,+I]-numb
'it's numb' theme: $0-c L[-D, l]-x^{\prime} w a ́ s{ }^{\prime} k^{x}(g a ;$ Inv Stv) ‘O be numb’
b. atelic (non- $\emptyset$ class) habitual
lax'wás'kch
Ø-Ø-la-x'wás'kx-ch
3.0-ZCNJ-CL[-D,l,-I]-numb-HAB
'it's always numb'

$$
\begin{aligned}
& \text { c. stative imperfective + habitual } \\
& \text { lax'wás'k } \\
& \text { nooch } \\
& \text { Ø-Ø-li-x'wás' } \underline{\mathrm{k}}^{\times}
\end{aligned} \begin{aligned}
& \text { nooch } \\
& \text { 3.0-ZCNJ-CL[-D,l,+I]-numb } \\
& \text { 'it's always numb'Aux }
\end{aligned}
$$

Note the classifier difference between the stative imperfective lix'wás'k 'it's numb' and the stative imperfective + habitual lax'wás'k nooch 'it's always numb'. This is not due to the habitual marking even though the habituals are always $[-\mathrm{I}]$. Instead, it is a property of the auxiliary that manifests on the verb. As noted by Naish (1966: 190), all verbs with auxiliaries have [-I] no matter what the basic modes specify for the $[ \pm I]$ classifier feature. The meaning of this is as yet unclear, since it seems to bear no relationship to the usual meanings of [-I] as marking non-stative or irrealis situations. It may be that $[-I]$ here is simply the last verb-internal remains of the original mode that has been shifted to the auxiliary since all of the modes on which the auxiliaries are based specify [-I].

The auxiliaries do not simply indicate the same thing as the equivalent mode suffixes, however. Since the auxiliaries are independent of the verb per se, this frees up the verb to accomodate affixes associated with other modes. As a result, the auxiliaries allow the combination of an auxiliaryhosted mode together with a verb-hosted mode. The auxiliaries express either habitual, consecutive, conditional, and contingent, and they can be combined with imperfective or future verb forms. The habitual, conditional, and contingent auxiliaries can also be combined with consecutive verb forms, but only when the verb theme is an eventive (sec. 6.4) and hence lacks a [ [Fixme: "Continuous"?? Does he mean durative or repetitive??] imperfective (Leer 1991: 157).
 pearing in the verb theme $0-S-C L[-D, \emptyset]-n i k w(\emptyset ;-h \mathrm{Act}$ ) 'S feel 0 ' and in the theme $P-t S-c L[-D, \emptyset]-n i k w(\emptyset ;$ Mot, $-k$ Rep) 'S feel like having/doing P’ (Leer 1991: 156). The latter is somewhat more likely given that it lacks an object slot and hence no $a$ - would occur, but there is no evidence of the $P$ - $t$ obligatory bound phrase. Leer supposes that the auxiliary was once fully inflected but only the extant forms survived with all other conjugations becoming obsolete.

Leer (1991: 155) places the auxiliaries in his slot -4 , which is equivalent to slot -4 here that contains the habitual -ch, conditional -nee, and contin-
gent -ín suffixes. His reasoning is that since the auxiliaries are in complementary distribution with the mode suffixes they must be grouped together (Leer 1991: 155-156). He does note that the habitual ${ }^{1}$-ch cooccurs with the epimode suffixes in slot -5 , namely the decessive -een and prohibitiveoptative -eek $\sim \underline{k}$ suffixes. I feel that this placement inside of other suffixes is confusing so I have simply placed them at the far rightmost edge of the verb, with the caveat that I consider the template to be nothing more than a descriptive convenience (ch. 4).

The habitual auxiliary neech $h_{\text {SRI }} \sim$ nooch $_{\mathrm{N}} \sim$ nuhch $_{\mathrm{T}} \sim$ nukch $_{\mathrm{G}}$ is, according to Leer (1991: 156), "a contraction of expected *?uni'g ${ }^{w} \sim$ ? $u^{\prime}$ níg ${ }^{w} \overline{3} "$ ", i.e. uneekwch or uníkwch 'he always feels'. The form nukch $_{\mathrm{G}}$ retains the verb root's coda, where all the other forms have lost the coda.
[[Fixme: Epiaspect versus auxiliary. Leer's examples feature epiaspects with progressive + habitual.]]
(286) a. sh kanxalneekch
sh-ka-na-xa-la-neek ${ }^{\times}$-ch
RFLX.O-HSFC-NCNJ-1SG.S-CL[-D,l,-I]-tell-HAB
'I always tell the story'
(Leer 1991: 211)
b. sh kaxalneek nooch
sh-ka-Ø-xa-la-neek ${ }^{x}$ nooch
RFLX.O-HSFC-ZCNJ-1SG.S-CL[-D,l,-I]-tell HAB.AUX
'I always tell the story'
(Leer 1991: 211)
(287) a.*yoo nxagútguch
yoo=na-xa- $\emptyset$-gut-k-ch
ALT=NCNJ-1SG.S-CL[-D, Ø,--I]-go.SG-REP-HAB
'I always go back and forth'
(Leer 1991: 211)
b. yoo xagútkw nooch
yoo= $=$-xa- $\emptyset$-gut-k nooch
ALT=ZCNJ-1SG.S-CL[-D, Ø,-I]-go.SG-REP HAB.AUX
'I always go back and forth'
(Leer 1991: 211)

[^32]
## 18 Epiaspect: Mode recursion

Tlingit verbs can be conjugated beyond the modes that are described in chapter 12. There are three types of what Leer (1991:215) calls EPIASPECTS which are essentially recursive extensions of the mode system. These three types are founded upon three particular modes: repetitive imperfectives, progressive imperfectives, and realizationals. The basic morphological phenomenon can be characterized by the appearance of two different kinds of mode marking on a verb.
(288) a. repetitive imperfective + perfective
yú dakká áyá áx’ yéi haa wooteex
yú daak-ká á-yá á-x’ yéi=haa-ÿu- $\emptyset-$ ti $^{\mathrm{h}}-\mathbf{h}-\underline{x}$
dIST inland-HSFC FOC-PROX $3 \mathrm{~N}-\mathrm{LOC}$ thus=1PL.O-PFV-CL[-D, Ø,-I]-be-vAR-REP
'we had been living there in the Inland'
(RZ in Dauenhauer \& Dauenhauer 1987: 74)
b. progressive imperfective + future
kashde yaa ikwkalajéek' áwé
kashde ÿaa=i-ga-w-ga-xa-la-jik'-: á-wé
COGIT along=2SG.O-GCNJ-IRR-GMOD-1SG.S-CL[-D,l,-I]-pack-var FOC-MDST
'I thought I was going to be packing you along' (EN in Leer 1991:498)
In example (288a) the repetitive imperfective (sec. 12.1.3) is indicated by the repetitive suffix $-\underline{x}$ and by the $[-I]$ feature of the classifier. The perfective (sec. 12.2) is indicated by the perfective prefix $\ddot{y} u$ - and by the stem variation suffix -h. In example (288b) the progressive (sec. 12.1.4) is indicated by the $\ddot{y} a a=$ 'along' preverb, and the future is indicated by the $g a-w$ - $g a$ - prefix string, the $[-I]$ classifier feature, and the $-i$ stem variation.
(289) repetitive imperfective + progressive?
a káa daaktinidatánch yá aadé
a ká-' daak=tu-na-i-da-tan-ch yá á-dé
3N HSFC-LOC ADMAR=inside-NCNJ-2SG.S-CL[+D, $0,-\mathrm{I}]$-handle-REP PROX $3 \mathrm{~N}-\mathrm{ALL}$
idaayaxaka yé
i-daa-ÿa- $\emptyset-x a-\emptyset-k a-\emptyset \quad$ yé
2SG.O-around-vSFC-ZCNJ-1SG.S-CL[-D, $\emptyset,-\mathrm{I}]$-say-ReL way
'you keep remembering what I tell you' (EN in Leer 1991:498)

## 19 Pronouns and pronominals

Tlingit has a somewhat large system of pronoun-like elements. They are divided into two categories, the pronominals which are prefixes in the verb and the pronouns proper which occur outside the verb. The pronominals are further divided into subject and object, and the pronouns are divided into possessive, independent, and postpositional. Subject and object pronominals are fairly self-explanatory. Possessive pronouns are those which occur as the head of a possessive construction. Postpositional pronouns are those which occur with a postposition such as the ergative -ch or ablative -dáx. The independent pronouns are those which occur as an independent noun phrase, i.e. being neither the head of a possessive construction nor the complement of a postposition. My analysis of the system is given in table 19.1.

The discourse local pronominals, i.e. the first and second person pronominals, are the only ones which inherently distinguish plurality, with both singular and plural forms. The singular forms only refer to a single person, the plural forms refer to more than one person. The other pronominals have unmarked plurality, so that e.g. the third person subject can refer to a single third person or to multiple third persons. Explicit plurality arises with particular verb roots that are inherently plural (see sec. 5.3), with plural verb suffixes (see section 10.6.5), and with the nonlocal pluralizer has= $\sim s$ - discussed in section 19.9 .

The nonlocal pronominals are divided into third person and non-third. The third person pronominals are divided into ordinary third person and discourse-specified third person, all of which are discussed in section 19.3. Animacy and humanity of the third person pronominals is not distinguished in the verb, however there are distinct extra-verbal pronouns for human versus nonhuman. The indefinite pronouns are distinct for humanity and animacy in the verb, and are discussed in section 19.4. The partitive is discussed in section 19.5 .

19．1．First person

|  | Pronominals |  | Pronouns |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Object | Subject | Possessive | Independent | Postpositional |
| 1SG | $\underline{\text { xat }}$～ $\mathrm{ax}^{\text {－}}$ | $\underline{\chi} a-$ | ax | xát | $a \underline{x}=e e-\sim \underline{\chi} a-$ |
| 亏 | haa－ | tu－ | haa | uháan | haa＝ee－$\sim h a a(n)-$ |
| $\bigcirc{ }^{-1 \mathrm{SG}}$ | $i$－ | $i$－ | i | wa．é | $i=e e-$ |
| 2 PL | $\ddot{y} i^{-}$ | $\ddot{y} i-$ | $y i$ | ÿiháan | $\ddot{y} i=e e-$ |
| $\left.\begin{array}{c} 3 \mathrm{H} \\ 3 \mathrm{~N} \end{array}\right\} 3$ | $\emptyset-\sim a-$ | Ø－ | ${ }_{\text {du }}$ | $\begin{aligned} & \text { hú } \\ & \text { á } \end{aligned}$ | $\begin{aligned} & d u=e e-\sim u- \\ & a=e e-\sim a- \end{aligned}$ |
| 亏్ర్ర 3PRX | ash－ | － | ash | ash | ash＝ee－ |
| －308V | － | $d u-$ | $a$ | á | $a=e e-\sim a-$ |
| $\overbrace{\text { INDH }}$ | $\underline{k} a \mathrm{a}-\sim \mathrm{k} u$－ | du－ | $\underline{\text { k }}$ a $a$ | ķáa | $\underline{k} a, \sim \underline{k} u=e e-$ |
| Indn | at－ | － | at | át | $a t=e e-$ |
| PART | aa－ | － | aa | aa | $a \mathrm{a}=e e$－ |
| areal | ku－ | － | － | － | ${ }^{\text {？}}$ ku－ |
| む RFLX | $s h-\sim \emptyset-$ | － | chush～sh | chúsh | chush |
| $\overbrace{\text { RECIP }}$ | woosh＝ | － | woosh | wóosh | woosh |
| （3）PL | has＝＋．．． | has＝＋ | has－du | hás | has－du＝ee－ |

Table 19．1：Pronouns and verb pronominals．

Postpositional pronouns are a special series of pronouns that serve as complements of postpositions．The most general pattern is a possessive pro－ noun encliticized with a meaningless base $=e e$ to which the postpositions are attached．An alternative form，which is probably older，is available for the first persons，the third person human and nonhuman，and the third person obviate．These alternative forms have their postpositions attached directly without the use of the meaningless base．

## 19．1．FIRST PERSON

All first person singular pronouns and pronominals are characterized by the uvular fricative $\underline{x}$ ．The first person singular＇sound＇is reconstructed sepa－ rately from the rest of the sound system in Proto－Na－Dene，usually indicated as＊\＄．Krauss（1977）is responsible for the reconstruction of this，showing that it is cognate to Athabaskan ${ }^{*}$ š and ${ }^{*} X^{y}$ in various forms，and to Eyak $X^{(w)}$
and $s$. Leer (2008: 5) reconstructs Proto-Athabaskan-Eyak first person singular ${ }^{*} \$$ as actually being $X^{*}{ }^{(w)}$. He says that Tlingit's $\underline{x}$ is still an open question, but that probably the Proto-Na-Dene form was velar. The lack of velar fricatives in most of the Tlingit conjunct verb prefix zone (ch. 4) may have something to do with this proposed shift from velar to uvular.

The first person plural forms are diverse. The subject pronominal is $t u$-, but the object pronominal is haa- like the possessive pronoun and the postpositional pronoun. It is probably not a coincidence that the first person plural haa- is similar in form to the directional preverb haa= 'here', and there may be a connection to the -haan found in the plural independent pronouns uháan '1PL' and yiháan '2PL'.

### 19.1.1. FIRST PERSON SUBJECT

The first person singular subject is $\underset{\alpha}{ } a$-, glossed as 1 SG.S. Being a subject prefix it participates in the complex system of prefix morphophonology whereby it is contracted with the other neighbouring prefixes. Its simplest form is in imperfectives that use the $\emptyset$-conjugation prefix, with the first person singular subject appearing in its ideal form $\underline{x} a$-.
(290) útlxi xasa.éex
útlxi $\emptyset$ - $\emptyset-x$-xa-sa-i-x
soup 3.0-ZCNJ- $\mathbf{1 S G} . S-\mathrm{CL}[-\mathrm{D}, \mathrm{S},-\mathrm{I}]$-cook-REP
'I cook soup (frequently)'
This is not always the case however, since when it occurs with a non- $\varnothing$ prefix then the vowel disappears.
(291) ix́six́án
i- $\emptyset$-xa-si-xan-
2SG.O-ZCNJ-1SG.S-CL[-D,S,+I]-love-vAR
'I love you'
It has a very frequently occuring contracted form $\underline{x} w$ - or $\underline{x} w a$ - that arises when it is combined with the perfective prefix $\ddot{y} u-\sim u$ - or with the irrealis prefix $u$-.
(292) a. tléil xwasateen
tléil $\emptyset$-u-xa-sa-tin-h
NEG 3.0-IRR-1SG.S-CL[-D,S,-I]-see-VAR
'I don't see it'
b. i xánt xwaagút
i x xán-t ÿu-xa-ÿa-gut-ÿ
2SG.PSS near-PNCT PFV-1SG.S-CL[-D, $\emptyset,+1]$-go.SG-vAR
'I came by you'
Most obscure is probably when it appears as $\underline{k}$-, which is formed from contraction with either the $\underline{g} a$-conjugation prefix or the $\underline{g a}$-mode prefix. In this case, the fricative $\underline{\chi}$ seems to become the aspiration when combined with the unaspirated $g$, and the vowel is either lost or moved around.
(293) tsu yéi ikwkasatéen
tsu yéi=i-ga-w-ga-xa-sa-tin-:
again thus=2SG.O-GCNJ-IRR-GMOD-1SG.S-CL[-D,S,-I]-see-VAR
'I will see you again'
There is some variability in the contraction of irrealis and the surrounding prefixes so that the $w$ may occur on the $\underline{k}$, producing $k w$ as in yéi ikkwasatéen and other similar forms. The aspiration of the $\underline{k}$ is always diagnostic, since this feature is never obscured when the first person singular subject occurs.

The first person plural subject pronominal is uniquely tu-. It may be somehow related to the inalienable noun -tu 'inside (of closed container); mind, spirit', but this is purely speculative. That particular noun also appears as the incorporated inalienable noun prefix $t u$ - which should not be confused with the first person plural subject. The following examples show the difference.
(294)
a. a daa yoo tukataan
a daa yoo=tu- $\varnothing$-ga-xa- $\varnothing$-tan-h
3N.PSS around ALT=mind-ZCN-GMOD-1SG.S-CL[-D, $\varnothing$,-I]-handle.SG-VAR
'let me think about it'
(Story \& Naish 1973: 226)
b. a daa yoo tuxtula.aat
a daa yoo=tu- $\emptyset$-ga-tu-la-.at-h
3N.PSS around ALT=mind-ZCNJ-GMOD-1PL.S-CL[-D,l,-I]-handle.PL-VAR
'let us think about it'

The examples illustrate that the verb with the first person singular subject has only one $t u$ - which precedes the conjugation and mode prefixes. In contrast, the verb with the first person plural subject has two tu- prefixes, one being the same inalienable noun that occurs before the conjugation and mode prefixes, and one being the first person plural subject that occurs after the conjugation and mode suffixes but immediately before the classifier. When confronted with an unrecognized $t u$ - the linguist can check the valency of the verb first, and if it is transitive or subject intransitive then if the $t u$ - is the subject it should be amenable to altering the number or plurality. An unchanging $t u$-must then be the inalienable noun prefix rather than the first person plural subject.

### 19.1.2. FIRST PERSON OBJECT

The first person singular object prefix is normally xat-. It is orthographically represented as a separate word, but it is actually a prefix of the verb. It can be distinguished from the independent first person pronoun xát by the high tone that is found in Northern and Southern Tlingit, as explained further in section 19.1.3.
(295) a. Ø-conjugation imperative
xat idashí!
xat-Ø-i-da-shi-h
1SG.o-ZCNJ-2SG.S-CL[+D, Ø,--I]-reach.hand-vaR
'help me!'
theme: $0-S-c L[+D, \emptyset]-s h i(\emptyset ;-$-: Act) 'S help 0’
b. ga-conjugation perfective
xat wusiteen
xat-ÿu- $\emptyset$-si-tin-h
1SG.0-PFV-3.S-CL[-D,s,+I]-see-VAR
'he saw me'
theme: $O-S-c L[-D, S]-$ tin ( $g a ;-h$ Act) 'S see 0 '
c. xát ákwé ?
xát á-gé-wé
1SG FOC-YN-MDST
'is that me?'
The first person object occasionally takes the form of the first person singular possessive pronoun $a \underline{x}$ when the verb contains an inalienable incorporated noun Leer (1991:42-43). In such cases the object $a \underline{x}$ - seems to act as
the possessor of the incorporated noun, with the pair together indicating the object of the verb. The following examples demonstrate the variation between an unincorporated noun, an incorporated noun with $a \underline{x}-$, and an incorporated noun with $\underline{x} a t-$. Note that the use of $a \underline{x}$ shá 'my head' for usual $a \underline{x}$ shax̃aawú (shá-xַaaw-ÿí head-fur-PSS) 'my head-hair' is idiomatic.
(296) a. unincorporated inalienable noun
ax shá awlixaash
ax shá a-ÿu-ø-li-xash-h
1SG.PSS head 3.0-PFV-3.S-cL[-D,l,+I]-cut-vaR
'he cut my hair'
b. incorporated inalienable noun with ax-
ax shawlixaash
ax-sha-ÿu-Ø-li-xash-h
1SG. 0 -head-PFV-3.S-cl[-d,l, +I]-cut-vAR
'he cut my hair'
c. incorporated inalienable noun with xat-
xat shawlixaash
xat-sha-ÿu- $\emptyset$-li-xash-h
1SG.o-head-PFV-3.S-cL[-d,l,+I]-cut-vaR
'he cut my hair'
This is the only object pronominal which has a distinct form when acting as a possessor rather than an ordinary object. The choice of using $a \underline{x}$ - versus xat- is apparently idiolectal. According to Leer (1991: 123), some speakers never use $a \underline{x}$ - and only use $\underline{x} a t$-, other speakers have $a \underline{x}$ - and xat- in free variation. He is unclear if there is a regular distinction between the choice of $a \underline{x}$ - among different speakers. He is also unclear if $a \underline{x}$ - is permitted without an incorporated noun. Given that I have encountered no examples of such constructions, I suspect that $a \underline{x}$ - is only allowed with incorporates, but this remains to be verified.

The first person plural object pronominal haa- has the same form as the first person plural possessive pronoun haa. This is quite distinct from the first person plural subject prefix $t u$ - as discussed in section 19.1.1. It is strikingly similar to the 'here' preverb $h a a=$, which is almost certainly not a coincidence.
(297) a. haa isiteen gé ?
haa- $\emptyset$-i-si-tin-h gé
1PL.0-ZCNJ-2SG.S-CL[-D,s,+I]-see-VAR YN
'do you see us?'
b. haat xwaagút
haa-t=ÿu-xa-ÿa-gut-ÿ
here-PNCT=PFV-1SG.S-cL[-D, $\emptyset,+1]$-go.SG-vAR
'I came here'
The two are not identical however, given that they can cooccur in the same verb. The next example demonstrates this fact.
(298) haat haa kawdliyích
haa-t=haa-ka-ÿu-dli-ÿich-ÿ
here-PNCT=1PL. 0 -HSFC-PFV-CL[+D,l,+I]-fly.PL-VAR
'we flew here'

### 19.1.3. FIRST PERSON INDEPENDENT PRONOUNS

The first person singular independent pronoun is simply $\underline{x} a ́ t$, or $\underline{\underline{x}} t_{\mathrm{T}}$ in Tongass Tlingit. It is distinct from the first person singular object pronominal prefix xat- in that the object pronominal always has low tone in Northern Tlingit and the independent pronoun always has high tone. The two can be confused in written materials since the object pronominal is written as a separate word.

The first person plural independent pronoun is highly variable. In Tongass Tlingit it was uhwaan ${ }_{T}$ (IPA /Ru ${ }^{\text {h }}$ wa:n/) with an initial fading vowel. In Southern Tlingit it is usually uháàn ${ }_{s}$ with a short initial vowel and falling tone on the second vowel, but it is sometimes heard as uwáàn ${ }_{s}$ with the same vowels but with a voiced labial-velar approximant instead of a glottal fricative. In Northern Tlingit several forms are common: uháan, uwáan, ooháan, oowáan, oohwáan (IPA /Ru'h ${ }^{\text {wáan/n/), etc. The variation between forms is }}$ largely idiolectal, frequently with multiple forms used by the same speaker. The form oohwáan is one of the few words that exhibits a phonemic labialized glottal fricative $h w / h^{w}$ / for those who have this sound in their inventory. The variation between $w, h$, and $h w$ is almost certainly due to different interpretations of an earlier fading vowel and labial-velar approximant as found in the Tongass form. Thus a form like earlier */?u' ${ }^{\text {h }}$ wa:n/ was interpreted as a sequence of [hw] and hence segmentalized as $/ h^{w} /$, or as just $/ h /$ or /w/.

The independent pronouns can be thought of as being "emphatic", meaning that they emphasize the person indicated by the pronoun. This is especially true for the first and second person independent pronouns because verbs will always be marked for either subject or object being first or second person. The emphasis indicated by an independent pronoun is often ignored in English translations, but it is sometimes represented by an additional introductory object pronoun in English such as in the following examples.
[[Fixme: Examples]

### 19.1.4. Possessive PRONOUNS

The first person singular possessive pronoun is $a \underline{x}$, with the same uvular fricative $\underline{x}$ as found in the first person singular subject prefix $\underline{x} a-$, object prefix xat-, and independent pronoun xát.
(299) a. Dzéiwsh hídi áwé

Dzéiwsh hít-ÿí á-wé
James house-PSS FOC-MDST
'that's James's house'
b. ax hídi áwé
ax hít-ÿí á-wé
1SG.PSS house-PSS FOC-MDST
'that's my house'
The first person plural possessive pronoun is haa, with the same form as the first person plural object prefix haa-.
(300) haa hídi áwé
haa hít-ÿí á-wé
1PL.PSS house-PSS FOC-MDST
'that's our house'

### 19.2. SECOND PERSON

All second person pronouns and pronominals are characterized by the high front vowel $i$ except for the independent second person singular wa.é. The plural second person forms mostly include a velar approximant ÿi or palatal approximant yi, whereas the singular forms have nothing or an initial glottal stop instead.

### 19.2.1. INDEPENDENT PRONOUNS

The second person singular independent pronoun is wa.é, or we.é in Inland Tlingit with lowering of $a$ to $e$, and with Inland Tlingit speakers having $m$ the form is ma.é or me.é. The second person singular independent pronoun is unusual in form when compared to all other second person singular pronouns and pronominals in Tlingit. Leer thinks it likely that Pre-Tlingit had *wa.í or *ma.í instead, where the .é portion is from a former *.i which would then be more clearly related to the other second person singulars.
(301) a. wa.é ágwé?
wa.é á-gé-wé
2SG FOC-YN-MDST
'is that you?'
b. ch'a wa.é, i aayíx has layéx !
ch'a wa.é i aa-ÿí-x has=Ø-Ø-Ø-la-yex-ÿ
just 2SG 2SG.PSS PART-PSS-PERT PL=3.0-ZCNJ-2SG.O-CL[-D,l,-I]-make-vAR
'just you, make them your own!' (Story \& Naish 1973: 17)
There is an exclamation ha.é! (Inland he.é!) which is used to express surprise or dismay. This exclamation is in my experience often directed at an interlocutor who would thus be second person. It seems possible, though by no means certain, that the .é in ha.é could be derived from the same source as the second person singular independent pronoun wa.é.

The second person plural independent pronoun is, like the first person plural, very variable. In Tongass Tlingit there were three forms
 (IPA /uiчua:n/). Southern Tlingit has either yiwháàn S $_{\text {(IPA /jiwháàn/) or }}$ yiwáàn $n_{\text {s }}$ (IPA /jiwáàn/) according to Leer, though variation is probably as extensive as in Northern Tlingit except for the obligatory falling tone on the second vowel. Northern Tlingit has yihwáan (IPA /yihwá:n/), yeewáan, yiwháan (IPA /jiwhá:n/), yeeháan, ihwáan (IPA /?ihª́:n/), and so forth.

### 19.3. Third person

Third person is the 'default' marking for the subject and the object of verbs. This is because of a simple crosslinguistic fact: the majority of a person's speech is about people and things other than the speaker (first person) or
the listener (second person). Because of this frequency, many languages actually do not mark third person. Tlingit exhibits this behavior, not marking third person subjects or objects in the verb. We analyze this with a zero prefix $\emptyset$-, indicating that the morphological place is not actually empty but instead has an invisible morpheme.
(302) a. $\underline{x} w a a g o o t$

ÿu-xa-ÿa-gut-h
PFV-1SG.S-CL[-D, $\emptyset,+1]$-go.SG-vAR
'I went'
b. woogoot

ÿu-0-ÿa-gut-h
PFV-3.s-cL[-D, Ø, +I]-go.SG-VAR
'he went'
c. xat woonaa
xat-ÿu-ÿa-na-h
1SG.s-PFV-CL[-D, Ø, +I]-die-vaR
'I died'
d. woonaa

Ø-ÿu-ÿa-na-h
3.0-PFV-CL[-D, $\emptyset,+\mathrm{I}]$-die-VAR
'he died'
Third person pronouns - those third person pronominal elements occurring outside of the verb - are not invisible, but instead indicated by real morphemes like $d u$ 'his, her' and hú 'he, she'. Outside of the verb there is also another distinction, between human and nonhuman. The nonhuman third person pronouns are $a$ 'its' and á 'it'. These are ungrammatical, or at least semantically bizarre, when used to refer to humans.
(303) a. á áwé, yisiteen gé?
á á-wé $\emptyset$-ÿu-i-si-tin-h gé
3N FOC-MDST 3.0-PFV-2SG.S-CL[-D,S,+I]-see-VAR YN
'that, did you see it?'
b. hú áwé, yisiteen gé?
hú á-wé Ø-ÿu-i-si-tin-h gé
3H FOC-MDST 3.0-PFV-2SG.S-CL[-D, $\mathrm{s}, \mathrm{II}]$-see-VAR YN
'him, did you see him?'
19.3.1. Three-on-three third person

There is somewhat more leniency in using the third person human pronouns to refer to nonhumans. In legendary and mythic narratives it is typical for nonhuman entities like Raven and Brown Bear to be referred to using human pronouns. People will also often refer to

Curiously, although within the verb the prefix $d u$ - refers to an indefinite human subject (sec. 19.4), outside of the verb it is instead the third person possessive.
(304) a. indefinite human subject
yaay wuduwaják
ÿaaÿ Ø-ÿu-du-ÿa-jak-ÿ
whale 3.0-PFV-INDH.S-CL[-D, $\emptyset,+\mathrm{I}]$-kill-var
'somebody killed a whale'
b. du éesh wuduwaják
du $_{i}$ éesh $\emptyset-\ddot{u} u-\mathbf{d u}_{j}$ - ̈̈a-jak-ÿ
3 H.PSS ${ }_{i}$ father $3.0-\mathrm{PFV}$-INDH. $\boldsymbol{S}_{j}$-CL $[-\mathrm{D}, \emptyset,+\mathrm{I}]$-kill-vAR

c. du éesh xwaaják
du éesh Ø-ÿu-xa-ÿa-jak-ÿ
3H.PSS father 3.0-PFV-1SG.S-CL[-D, Ø, +I]-kill-vAR
'I killed his father'

### 19.3.1. THREE-ON-THREE THIRD PERSON

Three-on-three third person marking in the verb is an allomorph $a$ - of the third person object prefix which appears only when the third person subject $\emptyset$ - cooccurs. Because it only happens with both third person object and subject, it can only occur with transitive verbs that have both subject and object slots. The following examples demonstrate how it appears in the verb when both subject and object are third person, but not otherwise.
(305) a. xat wusikóo
xat-ÿu-Ø-si-ku-ÿ
1SG.S-PFV-3.S-CL[-D,s,+I]-know-VAR
'he knows me'
b. xwasikóo

Ø-ÿu-xa-si-ku-ÿ
3.0-PFV-1SG.S-CL[-D, s, +I]-know-VAR
'I know him'
c. awsikóo
a-ÿu-Ø-si-ku-ÿ
3.0-PFV-3.s-CL[-D,s,+I]-know-VAR
'he knows it'
Three-on-three marking occurs with any mode, and with any combination of mode and other features like reality or decessivity.
(306) a. progressive with 3-on-3
yaa analnák
ÿaa=a-na-Ø-la-nak-n
along $=3.0-\mathrm{NCNJ}-3 . \mathrm{S}$-CL[-D,l,-I]-raise-vaR
'they are raising it (flag)'
(Story \& Naish 1973: 166)
b. negative perfective with 3-on-3
tléil awuskú
tléil a-u-ÿu- $\emptyset$-sa-ku-'
NEG 3.0-IRR-PFV-3.S-CL[-D, s,-I]-know-VAR
'he doesn't know it'
c. perfective decessive with 3-on-3
awuskóowoon
a-ÿu-Ø-sa-ku-'-een
3.0-PFV-3.s-CL[-D,S,-I]-know-VAR-DEC
'he used to know it'

### 19.3.2. THEMATIC THIRD PERSON

Thematic third person is the occurrence of the $a$ - third person object in verb themes where three-on-three marking is unexpected. The third person object $a$ - is, in these cases, not referential. Thus it does not formally reference anything, and is instead a lexically specified part of the verb theme.

### 19.4. INDEFINITE PERSON

### 19.4.1. THEMATIC INDEFINITE PERSON

### 19.5. Partitive

The partitive pronoun is a word that refers to one of or some of a referent. It is usually translated into English as either 'one' or as 'some' depending on
whether the referent is thought of as a collection of individual entities (count noun) or as an undifferentiated mass (mass noun).
[[Fixme: Examples of 'one' and 'some' uses.]
In the verb, the partitive is a prefix that indicates that the situation affects only part of the referent. Like the pronoun, it is generally translated by the English 'some', though it can also mean 'one'.
(307) a. wé k'únts' áwé xwaaxáa
wé k'únts' á-wé Ø-ÿu-xַa-ÿa-xa-ÿ
mDST potato FOC-MDST 3.0-PFV-1SG.S-CL[-D, $\emptyset,+\mathrm{I}]$-eat-vAR
'I ate potatoes'
(Leer 1991: 124)
b. wé k'únts' áwé aa xwaaxáa
wé k'únts' á-wé aa-ÿu-x्xa-ÿa-xַa-ÿ
mDST potato FOC-MDST PART-PFV-1SG.S-CL[-D,, ,+I]-eat-VAR
'I ate some potatoes'
(Leer 1991: 124)
The partitive prefix is often thought to be an object pronominal, but this is not actually clear. Instead most instances of the partitive prefix could be cooccurring with a $\emptyset$ - third person object prefix. The following example shows that either analysis is plausible.
(308) a. héen aa la.úk!
héen aa- $\emptyset-\emptyset-l a-. u k-\ddot{y}$
water PaRT.0-ZCNJ-2SG.S-CL[-D,l,-I]-boil-vaR
'boil some water!'
(Story \& Naish 1973: 33)
b. héen aa la.úk!
héen aa-Ø-Ø-Ø-la-.uk-ÿ
water PART-3.0-ZCNJ-2SG.S-CL[-D,l,-I]-boil-VAR
'boil some water!'
(Story \& Naish 1973: 33)
If indeed the partitive cooccurs with the third person object then we would expect the $a$-allomorph of the third person object to appear with it when there is a third person subject. I do not know whether this is grammatical or not.
(309) a. héen awli.úk
héen $a-y ̈ u-\emptyset-l i-. u k-y ̈$
water 3.0-PFV-3.S-CL[-D,l,+I]-boil-VAR
'he boiled water'
b. ${ }^{\%}$ héen aa awli.úk
héen aa-a-ÿu-ø-li-.uk-ÿ
water PART-3.0-PFV-3.S-CL[-D,l,+I]-boil-vAR
'he boiled some water'
Interestingly, the partitive prefix does occasionally cooccur with the indefinite nonhuman object as in the following example.
(310) aa at eenéen
aa-at- $\emptyset-\emptyset-\emptyset-$-in-h-éen
PART-INDN.O-ZCNJ-3.S-CL[-D, Ø,--I]-kill.PL-VAR-DEC
'some ( $a a-$-) used to kill things ( $a t-$ )'
(Leer 1991: 124)
In this example the partitive is actually qualifying the subject rather than the object. This fact provides independent support for the argument that the partitive is not actually an object prefix, nor indeed any kind of pronominal, but is instead a qualificational prefix that provides additional information about the referent, similar to the classificatory prefixes ( $k a-, \ddot{y} a-$, etc., ch. 24) and the Athabaskan-Eyak qualifier prefixes.

Leer (1991: 124) claims that the partitive pronominal can be coreferential with a first or second person plural independent pronoun. He gives the following two examples justifying this claim.
(311) a. kwáakt tsé aa néi x’wán yeehwáan kwáak̄t tsé aa- $\emptyset-\emptyset-\emptyset$-ne-? x'wán yeehwáan amiss ADMON PART-ZCNJ-3.S-CL[-D, Ø,--I]-happen-VAR IMP 2PL 'don't let something happen to any of you'
b. tléil aadé gunéi aa uxַjixeexi yé
tleil á-dé gunéi=aa-u- $\emptyset$-ga- $\emptyset-\mathrm{ji}-\mathrm{xix}-\mathrm{h}-\mathrm{i} \quad$ yé
NEG 3N-ALL INCEP=PART-IRR-ZCNJ-GMOD-3.S-CL[+D,sh,+I]-run-VAR-REL manner uháan
uháan
1PL
'there was no way we could start running'
While it is certainly true that the partitive pronominal is semantically coreferential with the independent pronouns here, it is not necessarily the case that they are syntactically coreferential. The second example is unquestionably a relative clause with the relativized form of the verb including the relative suffix -i, and with the light noun yé 'manner' as its external head. In this situation the uháan must then be outside of the relative clause, coming
19.6. The areal prefix
after the head as it does. Instead, the verb has a third person subject due to the narrative perspective of being disjunct with the speaker, who then clarifies the relationship between the third person and self in the matrix clause.

### 19.6. The areal prefix

The areal prefix is $k u-$, appearing in slot +13 (sec. 4.2). It occurs in verbs that denote kinds of weather, natural phenomena, space, and time. In addition it appears in a few verbs that denote mental activities along with the mental preverb $\ddot{y} a a=$ 'mind'. It is unclear whether the areal prefix is a pronominal element in the verb, or whether it is instead something akin to an incorporated noun (ch. 20). The issue of its pronominal status is complicated by the fact that the indefinite human object pronominal, which is usually kaa-, has an allomorph $\underline{k} u$ - that can be found in some situations.

The areal prefix is not a novel invention in Tlingit, but instead is an element found across the Na-Dene family. It is found in every Athabaskan language, with the following cognates taken from some recent publications: Ант qu-~qo-~hw- (Kari 1989), Koy hz-, SAR gu-, Hol $x$-, Dog go- ~ ho(Thompson 1993), Nav ho-, Chp ho- (Cook 1996), DEG $\chi$-, CAR ho- ~ wh-, DEN $q u-$, Tan $x w-$, Gwi $g w-$, Hup $x w i-\sim x o-$, Sla go-, Sek $w-$, Chr go- (Tuttle \& Hargus 2004). It does not occur in Eyak though the third person plural object is qa- 【FIXmE: cite Krauss】 and sometimes appears in situations where one might expect the areal in Tlingit or in an Athabaskan language. Thompson (1993) suggested * $q^{w}$ д- as a reconstruction for PA, but the removal of the labialized uvular series changed this to *qu-. Thus the Den form qu- and the Ант form qu-both appear to be unaltered retentions. Given the Tlingit form $\underline{k} u$ - (IPA /q ${ }^{\mathrm{h}} \mathrm{u}-/$ ) the PND reconstruction is almost certain to be *qu-, so that Tlingit retains the same unaltered form as do Aht and Den.

The following examples demonstrate a pair of verb themes with and without the areal prefix. The pair are based on the invariable verb root $\sqrt{k^{\prime} e^{x}}$ 'good', which though invariable has an irregular short vowel é rather than the usual vowel *éi in the stem used with irrealis forms. The areal prefix appears in the same area of the verb as the object prefixes, so it is found on the left edge here.
(312) a. yak'éi

Ø-Ø-ÿa-k'éi ${ }^{\times}$
3.0-ZCNJ-CL[-D, Ø, +I]-good
'it's good'
b. kuwak'éi
ku-Ø-ÿa-k'éi ${ }^{\times}$
AREAL-ZCNJ-CL[-D, $\emptyset,+I]$-good
'it's good weather'
c. tléil ushk'é
tléil $\emptyset$-u- $\emptyset$-sha-k'éi ${ }^{x}$
NEG 3.0-IRR-ZCNJ-CL[-D,sh,-I]-good
'it's not good', 'it's bad'
d. tléil kooshk'é
tléil ku-u-Ø-sha-k'éix
NEG AREAL-IRR-ZCNJ-CL[-D,Sh,-I]-good
'it's not good weather', 'it's bad weather'
The presence of the areal prefix above changes the verb's meaning from being about a generic state of goodness to being about the goodness of the weather. This is a characteristic property of the areal in a sizeable fraction of verb themes containing the areal. The following is a list of themes from Story \& Naish 1973 which contain the areal and which are associated with weather.

- $k u-C L[-D, S]-$ at (?; -? Stv) 'be cold weather', $\sqrt{ }$.at 'cold'
- $k u-C L[-D, s]-n a(? ;-? S t v)$ 'be mild and damp weather', $\sqrt{n a}$ 'damp; oil'
- k $k u-C L[-D, \emptyset]-t$ 'a (?; -? Stv) 'be hot weather', $\sqrt{t}$ 'a 'hot'
- ku-ka-cl[-D,l]-tl'ak' (?; -? Stv) 'be wet weather', $\sqrt{t l \prime}{ }^{\prime} k^{\prime}$ 'wet, glossy'
- k $\quad u-C L[-D, \emptyset]-x u k$ (?; -? Stv) 'be dry weather', $\sqrt{x u k}$ 'dry'
- ku-ka-cL[-D,Ø]-xak (?; -? Stv) 'be dry \& crisp weather', $\sqrt{\text { xak }}$ 'dessicated (e.g. shell, bone)'
 'dark'

The areal does not only encode weather, however. The following examples demonstrate a few themes where it describes a spatial extent, hence the term 'areal'.

- P-x' $\underline{k} u-S-c L[-D, \emptyset]-. u(? ;-? A c t)$ 'S dwell at P', $\sqrt{ } . u$ 'own, possess'
- ku-CL[-D, Ø]-ha (?; -? Act) 'come (time, season); have a turn', $\sqrt{h a}$ 'move invisibly'
- $\underline{k} u-S-C L[+D, s]-n i x \prime$ (?; -? Act) 'S sniff, smell around', $\sqrt{n i x}$ ' $s m e l l ’$
- $k u-k a-c L[+D, \emptyset]-c h e x$ ' (?; -? Stv) 'be shadowed', $\sqrt{c h e x}$ ' 'shadow'
- P-gaa ku-S-cL[-D,Ø]-shi (?; -? Act) 'S search for P’, $\sqrt{\text { shi }}$ 'search'
- P ká-x k ku-S-CL[-D, Ø]-shi (?; -? Act) ‘S come across P', $\sqrt{\text { shi }}$ 'search'
- ku-S-cL[+D,l]-l'utl ( $\emptyset$; -: Act) 'S scavenge', $\sqrt{l}$ 'utl 'scavenge' (hapax)
- $\underline{k} u-k a-C L[+D, s h]-g i^{\prime} t \sim g e ' t\left(? ;-\right.$-? Stv) ‘be dark, shadowed', $\sqrt{g} i^{\prime} t \sim \sqrt{g} e^{\prime} t$ 'dark'
- $k u-S-C L[-D, \emptyset]-t i n ~(g a ;-:$ Stv) 'S have sight, be able to see', $\sqrt{\text { tin }}$ 'see'
- tl. ku-S-cl[-D, sh]-tin (ga; -: Stv) 'S lack sight, be blind', $\sqrt{ }$ tin 'see'
- ku-S-CL[-D, Ø]-tin (Mot) 'S take a trip, travel', $\sqrt{ }$ tin 'see'
[[Fixme: List of verbs from N\&S:
- ku-di-.oo 'remain, be left over'
- ku-li-haa 'wrestle’
- ku-ka-si-haa 'polish'
- ku-ya-ya-waal 'bore holes through'
- ku-ya-nook~neekw 'behave like, do’
- ku-ka-li-nook' 'persuade, cause to change mind'
- ku-shi-teen 'be blind, lack sight'
- ku-ya-ya-dlaak 'win’
- ku-ya-tlaakw 'whisper'
- ku-li-kaas' 'scum'
]]
[[Fixme: Verbs with $\ddot{y} a a=$ 'mental'.
- yaa=ku-dzi-gei 'be intelligent'
- yaa=kַu-shu-si-gei 'understand'
- yaa=ku-si-gaat 'be confused'
- yaa=ku-li-gaat 'pass out'
- yaa=ku-dli-gaat 'wander'
]]
The areal should not be confused with the suffix -kú which is found on a variety of placenames: T’aakú 'Taku River mouth', Taalkú 'Thomas Bay', S'it'kú 'Sitkoh Bay', etc. This -kú probably describes a type of long bay with a narrow entrance and perhaps a river at the head, but it has fallen out of use and is now opaque except for its occurrence in placenames. It may have
once been related to the areal, but this relationship is now difficult to reconstruct. ${ }^{1}$


### 19.7. REFLEXIVE

The reflexive has a typical cross-linguistic function, indicating that the agent and patient are identical; compare the English reflexive pronoun suffix '-self'. The Tlingit reflexive is characterized by the sh postalveolar fricative. In the verb this is the usual form of the reflexive object prefix sh-. The reflexive possessive pronoun can also be found as just sh, but it has a larger form chush which is common to the independent and postpositional pronouns chúsh and chush.

### 19.7.1. INALIENABLE INCORPORATE POSSESSOR

The reflexive object sh- occurs as $\emptyset$ - when used with an incorporated noun. My discussion here is entirely based on Leer (1991: 97-98).
(313) a. non-reflexive
aawa.óos'
a-ÿu-Ø-ÿa-.us'-ÿ
3.0-PFV-3.0-CL[-D, $\emptyset,+$ I]-wash-VAR
'he washed it'
theme: O-S-cl[-D,Ø]-.us' (na; -kw Rep) 'S wash 0'
b. reflexive
sh wudi.óos'
sh-ÿu- $\emptyset$-di-.us'-ÿ
RFLX.0-PFV-3.0-CL[+D, $0,+\mathrm{I}]$-wash-VAR
'he washed himself'
c. non-reflexive with obligatory oblique
du yá aawa.óos'
du ÿá a-ÿu-Ø-ÿa-.us'-̈̈
3H.PSS ${ }_{i}$ face $3.0-\mathrm{PFV}-3.0_{j}$-CL[-D, $\left.\emptyset,+\mathrm{I}\right]$-wash-VAR
'he ${ }_{j}$ washed his s face'; $_{i}$ either $i=j$ or $i \neq j$

1. Compare the -náx of bays such as S'iknáx, Gaanáx, Taanáx, etc., which may possibly have been derived from the perlative -náx but is now opaque and only occurs as a placename component.
d. non-reflexive with incorporated object
ayaawa.óos'
a-ÿa-ÿu-Ø-ÿa-.us'-ÿ
$3.0_{i}$-face-PFV-3.S $\mathrm{S}_{j}$-CL[-D, $\left.\emptyset,+\mathrm{I}\right]$-wash-VAR
'he ${ }_{j}$ washed his $_{i}$ face'; only $i \neq j$
e. reflexive with incorporated object
yawdi.óos'
Ø-ÿa-ÿu- $\emptyset-d i-. u s '-\bar{y}$
RFLX. $\mathbf{o}_{i}$-face-PFV-3.S $\mathrm{S}_{i}$-CL[+D, $(\mathrm{\emptyset},+\mathrm{I}]$-wash-var
'he ${ }_{i}$ washed his ${ }_{i}$ face'
Examples (a) and (b) show the verb without a 'face' element, and example (c) has 'face' as a direct object. Example (d) shows the verb with 'face' incorporated into the verb, where the third person object cannot be coreferential with the third person subject. Example (e) demonstrates how the reflexive object occurs with its zero allomorph, with the subject and object being coreferential. In this case the reflexive object could also be sh-, so sh yawdi.óos', with exactly the same meaning. It is unclear if this choice between the two allomorphs is free or not. If the reflexive object is thematic, i.e. lexically specified, then the use of the $\emptyset$ - allomorph is ungrammatical.

### 19.8. RECIPROCAL

[[Fixme: Previously discussed in section 9.1.]]
[[Fixme: The woosh= proclitic. Also the oblique woosh, possessive woosh, etc.]

### 19.9. NUMBER AND DISTRIBUTIVITY

[[FIXME: Plural has $=\sim s-$. Plural object $-x^{\prime}$ and other pluralizing suffixes.]

### 19.9.1. PLURAL PREFIX

The has= plural in the verb is a proclitic, and its allomorph the $s$ - plural is a prefix. The distinction is subtle, largely made due to the presence of a glottal stop before a subsequent vocalic prefix like $a$ - '3.0'. A form like $s$ awsiteen can be pronounced as either /s?awsit ${ }^{\text {h }} \mathrm{i} \mathrm{n} /$ or as /sawsit ${ }^{\mathrm{h}} \mathrm{i} \mathrm{n} /$, in contrast a
form like has awsiteen is almost always pronounced as /has?awsit ${ }^{\mathrm{h}} \mathrm{i}$ :n/ and only very occasionally encountered as /hasawsit ${ }^{\mathrm{h}} \mathrm{i}$ :n/ in rapid, casual speech. Although it is not a proclitic, $s$ - is usually written as a separate word orthographically. The $s$-allomorph is more common in the Transitional and Southern dialects, and is less common in the rest of Northern Tlingit. There is no semantic difference between the two allomorphs. Although it is morphologically proper to distinguish between the two as proclitic and prefix, for convenience I refer to them both as the 'plural prefix'.

Tongass Tlingit has a form as= apparently found in no other dialect, but since there is so little data on Tongass Tlingit it is difficult to say whether this is a true allomorph or just an incidental form. Otherwise the has= form and the $s$ - form are found. The following are a few examples of Tongass Tlingit usage of the plural prefix.
(314) a. as dustaaÿch
as=Ø-Ø-du-sa-ta- $\ddot{y}-\mathrm{ch}$
PL=3.0-ZCNJ-30Bv.S-CL[-D,S,-I]-boil-vAR-HAB
'they would always boil it' (Williams, Williams, \& Leer 1978: 24)
b. k'adein has akuhs.hatch
k'e-dein has=a-ka-u- $\emptyset$-sa-hat-ch
good-ADV PL=3.0-HSFC-PFV.TEL-3.0-CL[-D, S,-I]-cover-HAB
'they would always cover it well' (Williams, Williams, \& Leer 1978: 24)
The has= $\sim s$ - plural indicates the plurality of a third person argument. The following example is a basic demonstration of the use of has $=\sim s$. The verb is a $\emptyset$-conjugation perfective with a third person subject. The third person subject is pluralized with the has= proclitic. Note that the verb agrees in plurality with the noun k'isáani 'young men, boys' which is inherently plural, being the plural counterpart to the noun yadák'w 'young man, boy.'.
(315) yú k'isáani tleikaa has uwaxée
yú k'isáani tleikaa has=u-Ø-ÿa-xi-ÿ
DIST young.men twenty PL=PFV.TEL-3.S-CL[-D, $\emptyset,+1]$-overnight-vaR
'those young men camped twenty nights'
(Swanton 1909:354)
2. The word k'isáani is also the plural counterpart to the noun yadak'wátsk'u. Both refer to young men or boys, and both contain the noun yát 'child' and have an unpredictably rounded form of the diminutive suffix $-k$ '. The second form also contains the noun $k$ 'átsk'u which seems to be some sort of diminutive, e.g. atk'átsk'u 'child', shaatk'átsk'u 'girl' (containing shaawát 'girl', itself from sháa ‘woman' + yát 'child'), and sándi k'átsk’u 'Saturday’ (containing sándi ‘Sunday; week’).

The plural prefix is used even when plurality is specified elsewhere in the verb. In this next example the verb root .at 'pl. go (by foot)' is inherently plural, being used as the counterpart to the inherently singular verb root gut 'sg. go (by foot)'; see section 5•3.1 for more on this kind of verb root suppletion.
(316) yoo s ya.átk
yoo=s-Ø-Ø-ÿa-.at-k
ALT=PL-ZCNJ-3S-CL[-D, $\emptyset,+\mathrm{I}]$-go.PL-REP
'they go to and fro'
(Story 1966: 104)
The preceding examples have pluralization of the subject. But the plural prefix is not specific for subject or object, and can be used to indicate plurality of either. The following examples from Leer (1991:131) demonstrate that has= can pluralize either the subject or the object with the same verb theme.
(317) a. pluralizing object with has=
has xwasiteen
has=Ø-ÿu-x_-si-tin-h
PL=3.0-PFV-1SG.S-CL[-D,S,+I]-see-VAR
'I saw them'
b. pluralizing subject with has=
has xat wusiteen
has=xat-ÿu- 0 -si-tin-h
PL=1SG.S-PFV-3.S-CL[-D,S,+I]-see-VAR
'they saw me'
c. ambiguous plurality with has=
has awsiteen
has=a-ÿu- $\emptyset$-si-tin-h
PL=3.0-PFV-3.s-CL[-D, S, +I]-see-VAR
'they saw him', 'he saw them', 'they saw them'
The last example above demonstrates that has= can be ambiguous when both the subject and object are third person (3-on-3). If one of the arguments has an animate referent then that is presupposed to be the plural referent, since number is unspecified for most inanimate nouns, and indeed for most nouns generally.

If a theme is intransitive then the plural prefix can only pluralize the sole argument of the theme. Thus a subject intransitive with plural prefix has
a plural subject, and an object intransitive with a plural prefix has a plural object.
[[Fixme: Examples.]
The plural prefix also occurs with the third person possessive and the third person postpositional pronouns (Leer 1991: 132). In this case it is usually written as part of the pronoun, but may occasionally be seen as a separate orthographic word.
(318) a. du éex’ at wulitéew
du=ee-x' at-ÿu- $\emptyset-l i-t i ’ w-h$
3H=BASE-LOC INDN.O-PFV-3.S-CL[-D,l,+I]-teach-VAR
'he taught him (something)'
b. hasdu éex' at wulitéew
has-du=ee-x' at-ÿu- $\emptyset-l i-t i ' w-h$
PL-3H=BASE-LOC INDN.O-PFV-3.S-CL[-D,l,+I]-teach-VAR
'he taught them (something)'
c. du éesh woonaa
du éesh $\emptyset$-ÿu-ÿa-na-h
3H.PSS father 3.0-PFV-CL[-D, Ø, +I]-die-VAR
'his father died'
d. hasdu éesh woonaa
has-du éesh Ø-ÿu-ÿa-na-h
PL-3H.PSS father 3.0-PFV-CL[-D, Ø, +I]-die-VAR
'their father died'

### 19.9.2. DISTRIBUTIVE PREFIXES

[[Fixme: Distributive daga- and daga-~dax-.]
[[Fixme: Story 1966: 97-98]
[[Fixme: Leer 1991: 104-107, 129-131]
(319) kudagalt'íx'ch yá xáat

Ø-ka-u-ø-daga-ø-la-t'ix'-ch yá xáat
3.0-HSFC-IRR-ZCNJ-DISTB-3.S-CL[-D,l,-I]-freeze-HAB PROX fish 'they freeze each of these fish'

```
(320) a daat at kawdax_diyáa
    a daa-t at-ka-ÿu-dax-\emptyset-di-ya-ÿ
    3.N.PSS around-PERT IND.N.0-HSFC-PFV-DISTB-3.S-CL[+D, Ø, +I]-move-VAR
    'each thing was moving about it' (Story 1966: 97)
```

(321) haa jeex' yéi dax nateech
haa jee-x' yéi=dax= $=\emptyset$-na- $\emptyset$-ti-ch
1PL.PSS poss'n-LOC thus=dISTB=3.0-NCNJ-CL[-D, Ø,--I]-be-REP??
'each of them is in our possession'
(Story 1966: 97)
It can occasionally be impossible to tell whether a distributive is the inner distributive in slot +3 or the outer distributive in slot +16 . This occurs when there are no conjunct prefixes with non- $\emptyset$ forms occurring between the distributive and the subject or classifier. The following example demonstrates how both analyses of the distributive, as the outer distributive in +16 or the inner distributive in +3 , can be correct for the exact same form.
(322) núkt dax duwa.áxch
núkt dax=Ø-Ø-du-ÿa-.ax-ch
grouse distb=3.0-ZCNJ-IND.H.S-CL[-D, Ø, +I]-hear-REP
núkt Ø-Ø-dax-du-ÿa-.ax-ch
grouse $3.0-\mathrm{ZCNJ}$-DISTB-IND.H.S-CL[-D, $\emptyset,+\mathrm{I}]$-hear-REP
'each grouse is heard'
(Story 1966: 98)
In such situations the choice for the linguist between one or the other analysis is essentially arbitrary. Since there is no ambiguity of meaning, speakers do not care about - and are in fact unaware of - the ambiguity of form in these situations. Indeed, it is likely that this ambiguity of form but not of meaning is what gave rise to the distributive occurring in two distinct positions within the verb. Children could arbitrarily choose the inner distributive based on mostly ambiguous data and then later encounter forms where the distributive is clearly much further leftward. To rescue this situation they would then analyze the distributive as having two unique positions. This is not logically simpler than reanalyzing all instances as being in the outer position, but since children would only have their existing assumptions rather than any explicit data available, splitting the prefix into two positions would require less modification of their mental grammar.
(323) tléil adagwakéis'
tléil a-u- $\bar{\emptyset}$-daga- $\emptyset-\emptyset$-kes'-h
NEG 3.0-IRR-ZCNJ-DISTB-3.S-CL[-D, Ø,-I]-Sew-VAR
'she isn't sewing each one'
(Story 1966: 98)
(324) a. ldakát naa áyá hít adagaa.óo
ldakát naa á-yá hít a-ø-daga-Ø-ÿa-.u-:
all clan Foc-Prox house 3.0-ZCNJ-DISTR-3.S-CL[-d, $\emptyset,+\mathrm{I}]$-own-VAR
'all the clans have their own houses'
(Story 1972: 34)
b. woosh guwanáade hítx'
woosh gunaÿáa-dé hít-x'
RECIP different-ALL house-LOC
has adagaa.óo
has=a-ø-daga-ø-ÿa-.u-:
PL=3.0-ZCNJ-DISTR-3.S-CL[-D, Ø, +I]-own-VAR
'each opposite has their own house'
(Story 1972: 34)
(325) a. ch’a.aan ku.aa shiyadihéini aa
ch'a.aan ku.aa Ø-sha-ÿa-di-ha-n-i aa
RESUM but 3.0-head-vSFC-CL[+D, $\emptyset,+1]$-many-var-REL one
a tóox' yéi dagaatée yá Lingít
a tú-x’ yéi=Ø-daga-ÿa-ti ${ }^{\mathrm{h}}$-:?? yá Lingít
3N.PSS inside-LOC thus=3.O-DISTR-CL[-D, Ø, +I]-be-VAR PROX Tlingit
kusteeyí
ku- $\varnothing$ - $\emptyset-s a-t{ }^{\text {h }}-\emptyset-$ ÿí
AREAL-ZCNJ-3.S-CL[-D,s,-I]-be-NMZ-PSS
'however there are quite a few that live in the old way'
(Story 1972:37)
(326) gíl’x' áa yéi dagaatee gíl'-x' á-' yéi=daga-Ø-Ø-ÿa-ti ${ }^{\text {h }}-h$
cliff-PL $3 \mathrm{~N}-$ LOC thus=DISTR-3.0-CL[-D, $0,+\mathrm{I}]$-be-VAR
'there are cliffs at each one'
(Story \& Naish 1973: 211)

### 19.9.3. PLURAL OBJECT SUFFIX

[[FIxme: Ref section 10.6 .5 and section 10.6.6.]

## 20 Incorporated nouns

[[Fixme: Inalienable nouns and object possessors.]
(327) a. aadé yéi daadune yé
á-dé yéi=Ø-daa- $\emptyset-d u-\emptyset-n e-\emptyset \quad$ yé
3N-ALL thus=3.0-around-ZCNJ-INDH.S-CL[-D, Ø,--I]-do-REL manner 'the way it is done', 'the way people do it' theme: O-daa-S-cL[-D, Ø]-ni $i_{R S T} \sim n e_{N}$ (na; -: Act) 'S do O’ (Edwards 2009: 196)
[[Fixme: Alienable nouns and decreased transitivity, as discussed in chapter 8.]
(328) a. ax aat yáx xat taawa.ás
ax aat yáx xat-taa-ÿu-ÿa-.as-ÿ
1SG.PSS pat.aunt SIM 1SG.O-??-PFV-CL[-D, Ø,+I]-long-PFV
'I'm lonesome for my paternal aunt' (Story \& Naish 1973: 127)
b. woosh yáx yee taaguxdda.áas
woosh yáx yee-taa-ga-w-ga-Ø-da-.as-:
RECIP SIM 2PL.O-??-GCNJ-IRR-GMOD-CL[+D, $\emptyset,-$-I]-long-VAR
'you will be lonesome for each other' (Story \& Naish 1973: 127)
(329) a. du éet saxwdlit'án dé
du=ée-t sa-ÿu-xa-dli-t'an-ÿ dé
3H=BASE-PNCT voice-PFV-1SG.S-cL[ $[+\mathrm{d}, \mathrm{l}, \mathrm{+I}]$-expect-var already
'I'm longing for him already' (Story \& Naish 1973: 127)
(330) a. tléil xáax yaan uhaa
tléil x xá-x ÿaan-u- $\emptyset-\emptyset$-ha-h
NEG 1SG-PERT hunger-IRR-ZCNJ-CL[-D, $\emptyset,-$-I]-move.invis-vAR
'I don't get hungry'
(Story \& Naish 1973: 112)
b. tléil dáa sá du éex yaan us.haa
tléil dáa sá du=ée-x ÿaan-u-Ø-sa-ha-h
NEG what Q $3 \mathrm{H}=\mathrm{BASE}-\mathrm{PERT}$ hunger-IRR-ZCNJ-CL[-D,s,-I]-move.invis-VAR 'nothing makes him hungry'
(Story \& Naish 1973: 113)
(331) a. kei gax gaxyisatée
kei=gax-ga-w-ga-ÿi-sa-ti ${ }^{\text {h}}$-:
up=cry-GCNJ-IRR-GMOD-2PL.S-CL[-D, S,-I]-be-VAR
'you (pl.) will cry'
(Story \& Naish 1973: 60)
b. gooch gaxsatí
gooch gax- Ø-sa-ti $^{\mathrm{h}}{ }^{\prime}$
wolf cry-zCNJ-CL[-D,S,-I]-be-vAR
'wolves are howling'
(Story \& Naish 1973: 112)
(332) a. du eedé yaa yatanahéin
du=ee-dé ÿaa=ÿata-na-Ø-ha-n
3H=BASE-ALL along=sleep-NCNJ-CL[-D, $0,-\mathrm{I}]$-move.invis-vAR
'he's getting sleepy'
(Story \& Naish 1973: 195)
b. gáax'w xáat yatawsiháa
gáax’w x́á-t Ø-ÿata-ÿu-si-ha-ÿ
herring.roe 1SG-PNCT 3.0-sleep-PFV-CL[-D, S, +I]-move.invis-vAR
'herring eggs make me sleepy'
(Story \& Naish 1973: 195)

| Prefix | Source noun |
| :---: | :---: |
| yaan $\sim \ddot{y} a h n_{\text {T }}{ }^{-}$ | yaan 'hunger' |
| shakux- | shakoox $\sim$ shakuhx ${ }_{\text {T }}$ 'thirst' |
| ÿata- | -ÿá 'face, vertical surface'? + tá 'sleep' |
| $\underline{\text { x'asakw- }}$ | $\underline{\chi}$ 'aséikw 'breath, life' |
| gax- | gax ${ }^{\text {c }}$ 'crying, weeping' |
| $x e i_{\mathrm{N}} \sim x e e_{\mathrm{SR}} \sim x i h_{\mathrm{T}}{ }^{-}$ | xee 'dusk, shadow' (cf. shaa xeiyí 'mtn. shadow') |
|  |  |
| yei $\mathrm{N}_{\mathrm{N}} \sim{ }^{?}$ yee $_{\text {SR }} \sim \ddot{y} i h_{\mathrm{T}}-$ | ÿee 'time' (cf. yeedát 'moment') |
| l'il'- | l'éel' 'feces' |
| kanik- | kaneek~kanihk ${ }_{\text {T }}$ 'report, news' |
| kayik- | kayéik 'noise' |
| yaka- | yaká 'curse, reproach, rebuke' |
| $s a a \sim s a h_{\text {T }}{ }^{-}$ | saa 'name' |
| $a a n \sim a h n_{\mathrm{T}^{-}}{ }^{-}$ | aan 'land, town, settlement' |
| $n a a \sim n a h_{\text {T }}{ }^{-}$ | naa 'clan, nation, people' |
| sha.axw- | sha.aaxw 'bundle' |
| yakw- | $y a a k w \sim y a h k w_{\text {T }}$ 'canoe, boat' |
| hin- | héen $_{\mathrm{N}} \sim$ héè $_{\mathrm{S}} \sim$ heen $_{\mathrm{T}}$ 'fresh water, river, stream' |
| lux'- | lóox' 'urine' |
| has'- | háas' 'vomit' |
| luk- | $\sqrt{l u k}$ 'sip' |

Table 20.1: Alienable incorporated nouns (+12).

| Prefix | Source noun |
| :---: | :---: |
| ji- | -jín 'hand, arm', -jee 'possession' |
| $\underline{\chi^{\prime}} a \sim \underline{k}^{\prime} a-$ | -xַ'éi 'mouth' |
| tu- | -tú 'inside; mind, emotions' |
| sha- | -shá 'head' |
| shu- | -shú 'end' |
| lu- | -lú 'nose, point' |
| $s e \sim s a-$ | -séi 'voice’ |
| $\underline{\chi}$ - | - ẋaaw 'fur' |
| $g u-$ | -gú 'base, butt' |
| ta- | -tá 'bottom; head of bay' |
| $d a a \sim d a h_{T^{-}}$ | -daa $\sim d a h_{\mathrm{T}}$ 'around, surrounding, periphery' |
| taa- | ?? 'lonesome' |
| X $\mathrm{OOO}^{-}$ | -ххоо 'among, amidst, within' |
| xan- | -xán 'vicinity, near' |
| $\underline{\chi} \times 1 a-$ | - $\underline{\chi}^{\prime}$ aa 'space between, interstice' |
| $t^{\prime} e^{\prime} i_{\mathrm{N}} \sim{ }^{\text {t }}$ 'é $e_{\text {SR }} \sim^{?} t^{\prime} i^{\prime}{ }^{-}{ }^{-}$ | -t'éi 'behind, screened by, obscured by' |
| $t^{\prime} a a-$ | -t'áa~t'áak 'landward side' |
| yik- | -yík 'inside (concave)' |
| yee- | -yee 'underneath, beneath' |
| $\underline{k i}$ | $\sqrt{\text { ki }}$ 'sit'? |
| gin- | -geen 'tail flipper' |
| $\underline{x} i-$ | -xeee 'shoulder' |
| s'aan- | ${ }^{\text {? }}$ 'saan 'limb'? |
| lidíx $\underline{\chi}^{\prime}$ - | -lidíx' 'neck, throat' |
| wak- $(+k a-)$ | -waak 'eye' |
| s'ak- + + $k a-)$ | s'aak 'bone' (alienable; kraa s'aagí 'one's bone') |
| $\underline{\chi}$ 'us- $(+k a-)$ | - $\underline{\chi}^{\prime}$ Oos 'foot, leg' |
| s'ee- $(+k a-)$ | -s'ee 'eyebrow' |
| duk-(+ka-) | dook 'skin' (alienable; ḱaa doogú 'one's skin') |
| $l a-(+k a-)$ | -laká 'inside of mouth' (cf. -leitóox' 'in the throat') |
| tl'ik- (+sha-) | -tl'ee $\underline{S c}_{\text {SR }}$ 'finger' + -shá 'head' = -tl'ikshá 'fingertip' |
| keey- | -keey 'knee' |
| tóox' - + + ka-) | -tóox'-ká 'kneeling' |
| $\underline{x}^{\prime}{ }^{\text {atu- }}$ |  |
| tukx'e~tuk'e- | -tukxx'é 'anus' (<-túk 'butt' + - - ${ }^{\prime}$ 'éi 'mouth') |
| daa.it- | -daa.éet 'joint' |
| tax'- | -téix'x 'heart' |

Table 20.2: Inalienable incorporated nouns (+11).

## 21 Preverbs

The preverbs are a fairly large collection of proclitic-like elements which express adverbial concepts. Leer (1991: 132) referred to the preverbs as 'proclitic adjunct phrases' but there is no clear evidence for whether they are syntactically adjunct or complement phrases. They do seem to be phrases, given that most preverbs either can or must have a postposition suffix, most if not all preverbs permit focus particles to follow them, and a few preverbs show evidence of being moveable to positions outside of the verb complex. For these reasons Leer considered the preverbs to be a subset of the bound phrases (Leer 1991: 140), but I draw a distinction between the two due to their large morphological differences. The description of preverbs as proclitics is due to their formation of an intonational and phonological unit with the verb, particularly in that they often serve as coda hosts for the resyllabification of complex onsets arising from verb morphophonology.

The inventory of preverbs is given in table 21.1. The groups A-F are from Leer's subdivisions established on the basis of relative ordering among various preverbs (Leer 1991:132-134). The group F preverbs are outermost (i.e. leftmost) and the group a preverbs are innermost (i.e. rightmost). Although Leer said he tried "to indicate clearly the grounds for positing these suborders" (Leer 1991: 132), his description of them actually only gives a few examples of relative orderings and fails to firmly establish the reasons for the subdivisions. The groups clearly need to be combed through and tested to either confirm or revise Leer's ordering, but this will require not only extensive corpus and elicitation work on the part of linguists but also extraordinary patience on the part of native speaker consultants participating in such an effort. I suspect that native speakers do not actually have a complete ordering of all of the preverbs mentally, but instead have a partial ordering respecting certain combinations that are either conventional or lexicalized. In addition, some speakers probably have more detailed par-


Table 21.1: Preverbs (+17).
tial orderings than others, depending on relative oratorical skill and breadth of vocabulary.

The conjugation class column in table 21.1 refers to the conjugation classes that are lexically specified along with the preverbs for derivations of motion verbs. For more on this topic see section 11.1. Most of the preverbs occur in $\emptyset$-conjugation class motion derivations, and indeed the $\emptyset$ conjugation class is the largest in terms of motion derivation possibilities. But all of the other three conjugation classes - na-, $g a-$, and $g a-$ - are represented among the preverbs. Neither the locative preverb áa=, the manner preverb yéi= 'thus', nor the mental preverb $\ddot{y} a a=$ 'mind' is associated with a derivation for motion verbs, hence none of these occur with a particular conjugation class.

### 21.1. GROUP F PREVERBS

The group F preverbs are the outermost, leftmost preverbs in the verb complex. They are thus the outermost, leftmost elements that can be found in any verb. All of the group $F$ preverbs seem to involve a locative suffix -' (sometimes $-x^{\prime}$ ) or the rare locative suffix $-i$ that may be related to the locative predicate suffix -u (sec. 3.2.10).

Only two of the group F preverbs are relatively common, namely the inceptive gunaÿéi $=\sim$ gunéi $=\sim$ gunaÿe' $=$ (sec. 21.1.1) and the locative áa=~ $a^{\prime}=$ (21.1.2). The abumbrative gági= 'out of shadow, out of darkness' preverb is found in the title of the collection of Seidaayaa Elizabeth Nyman's narratives transcribed by Jeff Leer: gágiwduł.àt (Nyman \& Leer 1993), written gági wdul.aat in the Coastal orthography, and meaning 'they brought multiple things out of shadow'.

### 21.1.1. INCEPTIVE

The inceptive gunaÿéi $=\sim$ gunéi $=\sim$ gunä̈e ${ }^{\prime}=_{T}$ expresses the initiation or inception of an event or motion. The fullest form in Northern Tlingit is gunaÿéi $=$, obviously similar to the Tongass form gunaÿe'= with the typical parallel between a Tongass glottalized vowel $e^{\prime}$ and a Northern long high tone vowel éi. The reduced form gunéi= is found in some Northern Tlingit, particularly the more northern subdialects as found in e.g. Yakutat and Chilkat
territory. It is also found in reduced form as gunéì= in Sanya Southern Tlingit spoken by Kashéix́sh Henry Denny, as shown in the following example.
(333) gunél̀ kawdudlník yá haa shagóòn yá
gunéì=Ø-ka-ÿu-du-dli-nik-ÿ yá haa shagóòn yá
INCEP=3.0-HSFC-PFV-30BV.S-CL[+D,l,+I]-tell-vAR PROX 1PL.PSS history PROX
Saanyaa Kwáàn
Saanÿaa Kwáàn
Sanya kwáan
'they would begin telling this our history, this Sanya Kwáan' (Kashéiexsh Henry Denny in DC-009-A 00:01:32)
I do not have any examples at hand but I expect the full form in Southern Tlingit to be gunayéi=, thus following the usual correspondence between glottalized vowels in Tongass Tlingit and falling tone in Southern Tlingit.

Like (nearly?) all other preverbs, the inceptive gunaÿéi= can have a focus particle intervening between it and the rest of the verb.
(334) gunayéix' áyá akwgax́ach
gunayéi-x'=á-yá=a-ga-w-ga-ø-ø-xach-:
INCEP-LOC=FOC-PROX=3.0-GCNJ-IRR-GMOD-3.S-CL[-D, Ø,-I]-Tow-VAR
'he's going to start towing it'
(Naish 1966: 133)
This example also illustrates that it can have a following locative suffix $-x^{\prime}$. This locative suffix is probably not an addition as shown here, but is instead integral to the inceptive preverb but slowly being eroded away. The Tongass form gunaÿe'= points toward this analysis, given that -' is an allomorph of the locative $-x^{\prime}$ that is often found in more grammaticalized forms; compare the locative preverb $a ́ a=$, in Tongass $a^{\prime}=$, as discussed in section 21.1.2. Consequently Naish's transcription as gunayéix' might be a mishearing of gunayéx'.

The inceptive appears to be derived from guna 'other, different' and ÿéi 'manner; place'. Kelly \& Willard (1905: 746) give djŭ-gंō-nŭ-yā' glossed as 'elsewhere', which is ch'a gunayéi, essentially identical in form to the inceptive preverb. Leer (1975) gives the following forms under his gunaya• heading:

- a gunayáa ‘different from it'
- aguwanáa 'different from it'
- agunayáade 'differently’
- woosh gunyáade aa 'different ones’
- ch'a guna aa 'another one'
- ch'a gunayéi ‘elsewhere’
- gunayakwáan 'strangers’
- guneitkanaayích has du yáa wdli.át 'opposite clan member'
- gunayéi 'start to, begin to, at the beginning'

It seems clear that there is a relationship between the inceptive gunaÿéi= and the various nouns and adverbs based on guna 'other', but the exact reasoning for how one gets from 'other place' to 'start, begin' is still opaque.

### 21.1.2. LOCATIVE

The locative preverb $a ́ a=_{\mathrm{NR}} \sim a ́ a ̀==_{\mathrm{s}} \sim a^{\prime}=_{\mathrm{T}}$ is essentially a procliticized form of the third person nonhuman pronoun á and the locative case suffix - $x^{\prime}$ in its glottalic allomorph -'. The independent postpositional phrase $a^{\prime}-x^{\prime}$ or $a^{-\prime} \mathbf{-}^{\prime}$ can mean 'at it', 'on it', 'in it' or 'there'. The locative preverb is restricted to meaning only 'there', and so cannot reference an entity, only a location.

```
(335) ax éesh áa yatee
    ax éesh áa=\emptyset-\emptyset-ÿa-ti-h
    1SG.PSS father LOC=3.0-ZCNJ-CL[-D,\emptyset,+I]-be-vaR
    'my father is there', *'my father is on it'
```


### 21.2. GROUP E PREVERBS

The group E preverbs are subdivided into two groups on the basis of which postpositions they can occur with. The group E1 preverbs occur with punctual $-t$ (sec. 3.2.3), pertingent -x (sec. 3.2.4), and allative -dé (sec. 3.2.5). The group E2 preverbs invariably occur with specific postpositions, mostly pertingent -x $x$ but also punctual $-t$, ablative -dáx (sec. 3.2.6), and perlative -náx (sec. 3.2.7).

### 21.2.1. GROUP E1 PREVERBS

The group E1 preverbs all express directions, and all are part of $\emptyset$ conjugation class motion derivations. All the E1 preverbs are analyzed as occuring with one of three case suffixes, the punctual $-t$, pertingent $-\underline{x}$, or allative -dé, depending on the verb's mode. In fact, although all the group E1
21.2.1. Group E1 preverbs

|  | Gloss | Source |  | Unmarked | Punctual -t | Pertingent -X | Allative -dé |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Form | Trans. |  |  |  |  |
| 5$\frac{\pi}{0}$$\vdots$2 | ABMAR | ÿán | 'shore' | ÿan- | ÿan- | ÿax- | ÿánde- |
|  | home | neil | 'home' | neil- | neil(t)- | neilx- | neildé- |
|  | here | haa? | 'us'? | - | haat- | haax- | haadé- |
|  | hence | yóo | 'distal' | yóo- | yóot- | yóox- | yóode- |
|  | REV | $\underline{k} u$ | 'areal' | kux- | kux- | kux- | kúxde- |
|  | aground | kux? | 'dry'? | ${ }^{\text {? }} \mathrm{kux}_{1}{ }^{-}$ | kux ${ }_{\text {- }}$ | kuxx ${ }_{1}{ }^{-}$ | kúxde ${ }_{\text {- }}$ |
| $\begin{aligned} & \text { I } \\ & \text { む } \\ & \text { D } \\ & \text { in } \end{aligned}$ | ABMAR |  |  | ÿan- | ÿan- | ÿax- | yánde- |
|  | home |  |  | neil- | neilt- | neilx- | neildé- |
|  | here |  |  | ${ }^{\text {? }}$ haa- | haat- | haax- | haadé- |
|  | hence |  |  | ? ${ }^{\text {yóo- }}$ | yóot- | yóox- | yóode- |
|  | REV |  |  | ? ${ }^{\text {kux }}$ - | $\underline{\text { kux- }}$ | ${ }^{\text {? }}$ Kuxx- | kúx de- |
| $\begin{aligned} & \tilde{0} \\ & \text { O} \\ & \tilde{0} \end{aligned}$ | ABMAR |  |  | ÿan- | ÿan- | ÿax- | yandeh- |
|  | home |  |  | ? n ? ${ }^{\text {a }}$ | nehlt- | nehlx- | nehldei- |
|  | here |  |  | ? hah - | haht- | hahx- | hahdei- |
|  | hence |  |  | ? yoo- | yoot- | yoox- | yoodeh- |
|  | REV |  |  | ${ }^{\text {? }}$ kux- | kux- | ${ }^{\text {? }}$ Kuxx- - | kuxdeh- |

Table 21.2: Group E1 preverb (+17) variants. kux only in Inland Tlingit.
preverbs are found with $-\underline{x}$ and -dé, only three of them are found with $-t$, and the other three are analyzed as having 'lost' their $-t$ suffixes.
21.2.2. Group E2 preverbs

The inventory of group E1 preverbs is given in table 21.2.

### 21.2.2. GROUP E2 PREVERBS

### 21.2.2.1. Mistaken

The 'mistaken' preverb is $\underline{k} w a ́ a \underline{k} \underline{x}={ }_{\text {NRS }} \sim \underline{k} w a a \underline{k} \underline{x}={ }_{T}$.
(336) kwáakt $\begin{array}{lll}\text { kwáak-t } & \text { tsé } & \text { aanéi } \\ \text { tsé } & \text { a'wán } \\ \text { a- } \varnothing-\emptyset-\sqrt{n e-: ~} & \text { x'wán }\end{array}$ wrong-PNCT ADMON $3.0-\mathrm{ZCNJ}-3 . S-\mathrm{CL}[-\mathrm{D}, \emptyset,-\mathrm{I}]$-happen-VAR beware yeewháan yeewháan 2PL
'don't let anything bad happen to you'
(Gooch Éesh Johnny Jackson in Dauenhauer \& Dauenhauer 1990: 164.47)

### 21.3. GROUP D PREVERBS

### 21.4. Group C preverbs

### 21.5. Group B Preverb

Group B consists solely of the lone preverb $\ddot{y} a a=\sim \ddot{y} a=\sim \ddot{y} a h=$. It only occurs in verbs denoting mental activity, hence it is described as the 'mental' preverb abbreviated MENT. This preverb is purely thematic in that it only occurs as a lexically specified element of certain verb themes, and it is not available for use in other verbs. In all the themes I have seen containing $\ddot{y} a a=$, the areal prefix $\underline{k u} u$ - (sec. 19.6) can also be found.
(337) progressive imperfective
ax daa kei yaa kushunasgéin
ax daa kei=ÿaa=ku-shu-na-sa-ge-n
1SG.PSS around up=ment=AREAL-end-NCNJ-CL[-D,S,-I]-smart-VAR
'I am coming to understand'
theme: $N-$ daa $\ddot{\boldsymbol{y}} \boldsymbol{a} \boldsymbol{a}=\underline{\underline{k}} u-$ shu-cl $[-D, s]-g e(g a ;-\ddot{y} S t v)$ ' N understand (situation)’
(Leer 1991: 136)

Leer ordered the mental preverb $\ddot{y} a a=$ after most of the other preverbs because it usually occurs immediately before the rest of the verb. But the preverbs in group a come after, such as the $\ddot{y} a=$ 'along' preverb found especially in progressive imperfectives.
(338) progressive imperfective
yaa yaa kunxalgát
ÿaa=ÿaa=ku-na-xa-l-gat-n
ment=along=AREAL-NCNJ-1SG.S-CL[+D,l,-I]-daze-vAR
'I am wandering along lost in a daze' theme: $\boldsymbol{y} \boldsymbol{a} \boldsymbol{a}=\underline{k} u-S-c l[+D, l]-g a t(n a ;$ Mot, $y o o=[+I]-\ldots-$-k Rep) 'S wander in a daze’
(Leer 1991: 136)

### 21.6. Group A preverbs

## 22 Adverbs

There are a few different kinds of adverbs in Tlingit. Some are phonologically identical with adjectives, and hence can just be considered to be adjectives that are also allowed to modify verbs. Others are used only to modify verbs and never with nouns, thus behaving like true adverbs in a crosslinguistic sense. I will only consider the true adverbs in this chapter, with the adjectives having already been discussed in chapter 3 . Nearly all of the preverbs have adverbial meanings and functions, but because they are elements within the verb rather than external phrases I consider them separately in chapter 21.

Manner adverbs are constructed with the suffix -déin. This is attached to a conjugated verb, usually a third person perfective or imperfective. I gloss this suffix as simply ADV because it is more succinct than 'manner', though this is not the only adverb-forming suffix in Tlingit.

Numeric adverbs are made using the suffix -dahéen 'time, instance, repetition' attached to the combining form of a numeral.

ch'a tleidahéen áyá kei uwa.íx'
ch'a tléix'-dahéen á-yá kei=u-Ø-ÿa-.ix'-ÿ
just one-time FOC-PROX up=PFV.TEL-3.S-CL[-D, $\emptyset,+1]$-shout-VAR
'he shouted once'
(Naish 1966: 131)
[[Fixme: More: dachóon 'straight to', dasháan 'headed to', dakóon 'tail towards' dak'óol'in 'back'; keek'át 'a little', kútx 'too much', gígaa 'better'; x'éigaa 'truly', tl’agáa 'fairly', kúnáx 'very' ...(Naish 1966: 135-137)】
[[FIXME: Lacking: $k a-C L[+D, l]-$ ROOT- $k]$
[[Fixme: Whatever -in is in dziyáagín 'soon, later' and seigánín 'tomorrow'.]

## 23 Derivation

There are several different kinds of derivation which involve verbs. The simplest kind of derivation is a verb based on a noun, as discussed in chapter 5 , such as the verb $O-C L[-D, l]-\sqrt{j i ́ n}{ }^{x}-i ́ ? I n v S t v O$ have hand(s) or arm(s) based on the inalienable noun -jín 'hand, arm'.

- noun $\rightarrow$ verb
- verb $\rightarrow$ verb + suffix
- verb $\rightarrow$ verb + S component


### 23.1. Suffixal derivation

| Suffix | Name | Gloss | Meaning |
| :---: | :---: | :---: | :---: |
| -án | restorative | REST | restore previous state |
| -xaa | amissive | MISS | miss the target of action |
| -ákıw | deprivative | DEPRV | remove, deprive, lacking |
| -aa | play | PLAY | playing, pretending |
| -jaa | radiative? | RAD | give off something? |
| -shán | intensive? | INTNS | intensifies meaning? |
| -k | excessive? | EXCES | too much? |
| -í | property | PPTY | have, have the property of |
| -k | ? | UNK | unknown |
| -(á)ch' | ? | UNK | unknown |
| -ál' | ? | UNK | unknown |
| -gákw | ? | UNK | unknown |
| -nás | ? | UNK | unknown |
| -nás' | ? | UNK | unknown |
| -át' | ? | UNK | unknown |
| -x | ? | UNK | unknown |

Table 23.1: Derivational suffixes ( -2 ).

| Sfx. | Stem | Pg. | Root | Stem meaning |
| :---: | :---: | :---: | :---: | :---: |
| -án | haanán | 274 | haan | (sg.) restore confidence by reelection |
|  | naagán | 284 | naak | (pl.) restore confidence by reelection |
|  | taanán | 292 | taan | reconsider; reset bone/joint |
|  | xeexán | 325 | xeex | be restored to normality; become normal |
|  | хַeenán | 338 | xeen | get back into joint by itself |
| -x<aa | .únẋa | 270 | .oon | miss target when shooting |
|  | t'áchxaa | 296 | t'aach | miss target when slapping |
|  | dzéixaa | 296 | dzoo | miss target when throwing round object |
|  | shátxaa | 309 | shaat | miss target when grabbing something |
|  | gwálxaa | 319 | gwaal | miss target when punching with fist |
|  | k'íshxַaa | 337 | k'eesh | miss target when hitting with stick |
|  | xıíchxıa | 341 | xeech | miss target when hitting with stick |

Table 23.2: Some verbs with -2 derivational suffixes in Naish \& Story 1973.

|  | Stem | Pg. | Root | Stem meaning |
| :---: | :---: | :---: | :---: | :---: |
| -áḱw | .éiyákow | 265 | .eik? | have a useless/injured limb |
|  | nóox'ákw | 283 | nóox ${ }_{n}$ | remove shell, esp. from gumboots |
|  | ch'éeyákw | 306 |  | be slow |
|  | tl'éilákw | 311 | $t l^{\prime} \mathrm{eil}_{n}$ | remove milt from fish |
|  | geiyákw | 332 | $\underline{g e i}{ }_{n}$ | scoop out, esp. from clamshell |
|  | xַaayákw | 340 | xaaw | shed hair, esp. of animal in spring |
|  | xoonákw | S66:56 | xoon? | drowning? |
|  | séewch'ákw | S66:56 | seew $_{n}$ | tasteless, rain-flavoured |
| -aa | héixwaa | 271 | heexw | make magic, perform positive rites |
|  | wéinaa | 278 | $\mathrm{woO}_{2}$ | powder face; have face powdered |
|  | t'áax'aa | 296 | t'aax' | play with marbles |
|  | t'ájaa | 296 | t'aach | play at swimming |
|  | ts'ígwaa | 299 | ts'eek | be a delicate issue, require diplomacy |
|  | ts'í(s)x(w)aa | 300 |  | sneeze (onomatopoetic?) |
|  | ch'éit'aa | 306 | ch'eet'? | play with ball, esp. basketball |
|  | dlénẋaa | 310 | dlaan? | tempt, try out, test |
|  | kíts'aa | 321 | keets' | play on seesaw |
|  | k'éinaa | 322 | k'ein | play at jumping or twirling around |
|  | góol'aa | S66:55 | gool' | wink |
| -jaa | sáyjaa | 301 | saay | give off lots of heat; be sweaty |
|  | gíẋja | 334 | geex ${ }^{\prime}$ | creak, squeak; play bowed instrument |
|  | x'éel'jaa | S66:55 | xeel'? | groan |
| -shán | .áax̧ch'án | 270 | .aax | be fascinating to listen to |
|  | tées'shán | 289 | tees' ${ }^{\prime}$ | be fascinating to watch; be fascinated |
|  | xéetl'shán | 338 | $\underline{\text { xeetl }}^{\prime}$ | be dangerous |
|  | ẋwáal'shán | 342 | $\underline{\chi}^{\prime}$ waas $_{1}$ ? | be soft like down; (neg.) lack softness |
|  | $x^{\prime}$ 'wás'k | 330 | $x^{\prime} u s^{\prime}{ }_{n}$ ? | be numb, circulation cut off |
|  | yát'kx' | S66:59 | yaat' | be long (pl.) |
|  | $t \sin \underline{k} x^{\prime}$ | S66:59 | tseen | be expensive (pl.) |
|  | yáshk | S66:59 | yaach'? | be scarce |

Table 23.3: More verbs with -2 derivational suffixes in Naish \& Story 1973. $x_{n}$ noun.

| Sfx. | Stem | Pg. | Root |
| :--- | :--- | :--- | :--- | Stem meaning

Table 23.4: Even more verbs with -2 derivational suffixes in Naish \& Story 1973.

## 24 Noun classification

[[Fixme: Athabaskan: Axelrod 2000; Carter 1976; Krauss 1968; Poser 2005;
Rushforth 1991; Thompson 1993]]
[[Fixme: Boas and Naish \& Story’s descriptions.]]
[[Fixme: The Dauenhauers' list of categories.]
[[FIXME: Jeff's list of categories from Leer, Hitch, \& Ritter 2001.]]
[[Fixme: Separating manner from noun classification.]]
[[Fixme: The problem beyond just handling verbs - positionals, motion, etc.]

## Abbreviations

## LANGUAGE ABBREVIATIONS

Aht Atna, Ahtna<br>Car Dakelh Bughuni, Carrier<br>ChP Dëne Sųłiné, Chipewyan<br>Chr Chiricahua Apache<br>Den Dena'ina, Tanaina<br>Deg Deg Xinag, Deg Hit’an, *Ingalik<br>Dog Tłịchọ Yatiì, Dogrib<br>Gwi Gwich'in, Kutchin<br>Hä̃ Hän Hwëch'in<br>HAR Hare (Slave dialect)<br>Hol Holikachuk, Innoko<br>Hup Hupa<br>Koy Denaakk'e, Koyukon<br>Nav Diné Bizaad, Navajo<br>Sar Tsuut'ina, Sarcee<br>Sek Tsek'ehne, Sekani<br>Sla Denedha Zhahtié, Slave (Eng. /'sleí.vi/)<br>Tan (Lower) Tanana<br>Tut Tututni<br>UKu Upper Kuskokwim, Kolchan

## Miscellaneous abbreviations

ANLA Alaska Native Language Archive, UAF, Fairbanks, Alaska
ANLC Alaska Native Language Center, UAF, Fairbanks, Alaska
C consonant; complementizer

| CP | complementizer phrase, full clause (main or embedded) |
| :--- | :--- |
| DC | Dauenhauer Collection: collected recordings from Nora Marks Dau- <br> enhauer and Richard Dauenhauer, archived at SHI, UAS, \& ANLA |
| D | demonstrative, determiner |
| DP | determiner phrase <br> F |
| fricative |  |
| N | noun |
| NP | noun phrase |
| O | object |
| P | postposition; variable argument of postposition in verb theme |
| PP | postpositional phrase |
| Q | Q-particle sá marking the end of a wh-question <br> QP |
| Q-phrase, phrase headed by Q particle sá (Cable 2010) |  |
| R | sonorant (cf. English /a/) |
| S | subject |
| SHI | Sealaska Heritage Institute, Juneau, Alaska |
| UAF | University of Alaska Fairbanks, Fairbanks, Alaska |
| UAS | University of Alaska Southeast, Juneau, Alaska |
| UBC | University of British Columbia, Vancouver, British Columbia |
| V | vowel; verb |
| VP | verb phrase |
| X | duration suffix in stem variation (sec. 10.6) |
| YN | YN-particle gé marking the end of a yes/no-question |

## Bibliography

Anonymous. 1969. Dikée Ankáwoo doo Yéet dàt John-ch kawshixidee Yoox́’utúnk: The gospel of John in the Tlingit language. Santa Ana, CA: Wycliffe Bible Translators.
Axelrod, Melissa. 2000. The semantics of classification in Koyukon Athabaskan. In The Athabaskan languages: Perspectives on a Native American language family, Theodore B. Fernald \& Paul R. Platero (eds.), pp. 9-27. (Oxford studies in anthropological linguistics 24). Oxford: Oxford University Press. ISBN 0-19-511947-9.
Boas, Franz (ed.). 1911. Handbook of American Indian languages. Washington, DC: U.S. Government Printing Office.

- 1917. Grammatical notes on the language of the Tlingit Indians. (University Museum Anthropological Publications 8.1). Philadelphia: University of Pennsylvania.
Cable, Seth. 2006. Syncope in the verbal prefixes of Tlingit: Meter and surface phonotactics. (Lincom Studies in Native American Lingusitics 53). Berlin: Lincom Europa. ISBn 3-89586-377-7.
- 2010. The grammar of Q: Q-particles, wh-Movement and pied-piping. (Oxford studies in comparative syntax 24). Oxford: Oxford University Press. ISBN 978-0-19-539226-5.
Carter, Robin M. 1976. Chipewyan classificatory verbs. International Journal of American Linguistics 42(1): 24-30.
Comrie, Bernard, Martin Haspelmath, \& Balthasar Bickel. 2008. The Leipzig glossing rules: Conventions for interlinear morpheme-by-morpheme glosses. Revised version, February 2008. URL http://www.eva.mpg.de/lingua/ resources/glossing-rules.php.
Cook, Eung-Do. 1996. Third-person plural subject prefix in Northern Athabaskan. International Journal of American Linguistics 62(1): 86-110.

Cook, Eung-Do \& Keren Rice (eds.). 1989. Athapaskan linguistics: Current perspectives on a language family. (Trends in Linguistics: State-of-the-Art Reports 15). Berlin: Mouton de Gruyter. ISBN 0-89925-282-6.
Dauenhauer, Nora Marks \& Richard Dauenhauer. 1987. Haa shuká, our ancestors: Tlingit oral narratives. (Masterpieces of Tlingit oral literature 1). Seattle: University of Washington Press. ISBN 0-295-96495-2.

- 1990. Haa tuwunáagu yís: For healing our spirit. (Masterpieces of Tlingit oral literature 2). Seattle: University of Washington Press. ISBN 0-295-96850-X.
- 2000. Beginning Tlingit. Juneau, AK: Sealaska Heritage Foundation. ISBN 0-9679311-1-8.
- 2002. Lingít xַ'éináx sá! Say it in Tlingit: A Tlingit phrasebook. Juneau, AK: Sealaska Heritage Institute. ISBN 0-9679311-1-8.
Dauenhauer, Richard. 1974. Text and context of Tlingit oral tradition. Madison, WI: University of Wisconsin at Madison, PhD dissertation.
De Laguna, Frederica. 1972. Under Mount Saint Elias: The History and Culture of the Yakutat Tlingit. (Smithsonian Contributions to Anthropology 7). Washington, DC: Smithsonian Institution Press.
De Wolf, Gaelan. 1977. Tlingit phonology in a generative framework: An examination of phonological processes and abstract representation. Vancouver: University of British Columbia, master's thesis.
De Reuse, Willem J. 2006. A practical grammar of the San Carlos Apache language. (Lincom Studies in Native American Lingusitics 51). Berlin: Linсом Europa. ISBN 3-89586-861-2.
Edwards, Keri. 2009. Dictionary of Tlingit. Juneau, AK: Sealaska Heritage Institute. ISBN 978-1-44-040127-5.
Fernald, Theodore B. \& Paul R. Platero (eds.). 2000. The Athabaskan languages: Perspectives on a Native American language family. (Oxford studies in anthropological linguistics 24). Oxford: Oxford University Press. ISBN 0-19-511947-9.
Gessner, Suzanne \& Gunnar Ólafur Hansson. 2004. Anti-homophony effects in Dakelh (Carrier) valence morphology. In: Proceedings of the 30th annual meeting of the Berkeley Linguistics Society. Ed. by M. Ettlinger, N. Fleischer, \& M. Park-Doob. Berkeley: Berkeley Linguistics Society, pp. 93104.

Goddard, Pliny Earle. 1911. Athapascan (Hupa). In Handbook of American Indian languages, Franz Boas (ed.), pp. 85-159. Washington, DC: U.S. Government Printing Office.

Golla, Victor. 1970. Hupa grammar. Berkeley: University of California, Berkeley, PhD dissertation.
Hale, Ken. 2001. Navajo verb stem position and the bipartite structure of the Navajo conjunct sector. Linguistic Inquiry 32(4): 678-693.
Hale, Ken \& Paul R. Platero. 1996. Navajo reflections of a general theory of lexical argument structure. In Athabaskan language studies: Essays in honor of Robert W. Young, Eloise Jelinek et al. (eds.), pp. 1-13. Albuquerque: University of New Mexico Press. ISBN 0-8263-1705-7.
Hargus, Sharon L. 1985. The lexical phonology of Sekani. Los Angeles: University of California Los Angeles, PhD dissertation.
Hargus, Sharon. 1991. The disjunct boundary in Babine-Witsu Wit'ten. International Journal of American Linguistics 57(4): 487-513. JSTOR 3519736.
Harrington, John P. 1939. Notes and vocabulary from George Johnson, Jack EIlis, and others, Sitka and Juneau. Unpublished manuscript, Smithsonian Office of Anthropology Archives no. 4103.

- 1940. Notes and vocabulary from George Johnson, Alaska. Unpublished manuscript, Smithsonian Office of Anthropology Archives no. 4100.
Hoijer, Harry. 1945. The Apachean verb, part I: Verb structure and pronominal prefixes. International Journal of American Linguistics 11(4): 193203.

Jelinek, Eloise et al. (eds.). 1996. Athabaskan language studies: Essays in honor of Robert W. Young. Albuquerque: University of New Mexico Press. ISBN 0-8263-1705-7.
Jetté, Jules \& Eliza Jones. 2000. Koyukon Athabaskan dictionary. Ed. by James Kari. Fairbanks, AK: Alaska Native Language Center. ISBN 1-55500-063-0.
Jung, Dagmar. 1999. The dynamics of polysynthetic morphology: Person and number marking in Athabaskan. Albuquerque: University of New Mexico, PhD dissertation.
Kari, James. 1975. The disjunct boundary in the Navajo and Tanaina verb prefix complexes. International Journal of American Linguistics 41(4): 330345.

- 1979. Athabaskan verb theme categories: Ahtna. (Alaska Native Language Center Research Papers 2). Fairbanks, AK: Alaska Native Language Center.
- 1989. Affix positions and zones in the Athapaskan verb complex: Ahtna and Navajo. International Journal of American Linguistics 55(4): 424-454.
- 1990. Ahtna Athabaskan dictionary. Fairbanks, AK: Alaska Native Language Center. ISBN 1-55500-033-9.

Kari, James. 1992. Some concepts in Ahtna Athabaskan word formation. In Morphology now, Mark Aronoff (ed.), pp. 107-131. Albany, NY: State University of New York Press.

- 2007. Dena'ina topical dictionary. Fairbanks, AK: Alaska Native Language Center. ISBN 978-1-55500-091-2.
Kari, James \& Ben A. Potter (eds.). 2010. The Dene-Yeniseian connection. (Anthropological papers of the University of Alaska, new series 5.1-2). Fairbanks, AK: University of Alaska Press.
Kelly, William A. \& Frances H. Willard. 1905. Grammar and vocabulary of the Hlingĭt language of Southeastern Alaska. In Report of the Commissioner of Education, ch. 10, pp. 715-766. (Annual reports of the Department of the Interior for the fiscal year ended June 30, 1904 vol. 1). Washington, D.C.: U.S. Government Printing Office.

Kibrik, Andrej A. 1993. Transitivity increase in Athabaskan languages. In Causatives and transitivity, Bernard Comrie \& Maria Polinsky (eds.), ch. 2, pp. 47-68. (Studies in language companion series vol. 23). Philadelphia: John Benjamins. ISBN 1-55619-375-0.

- 1996. Transitivity decrease in Navajo and Athabaskan: actor-affecting propositional derivations. In Athabaskan language studies: Essays in honor of Robert W. Young, Eloise Jelinek et al. (eds.), pp. 259-304. Albuquerque: University of New Mexico Press. ISBN 0-8263-1705-7.
Krause, Aurel. 1885. Die Tlinkit-Indianer: Ergebnisse einer Reise nach der Nordwestküste von Amerika und der Beringstraße ausgeführt im Austrage der Bremer Geographischen Gesellschaft in den Jahren 1880-1881 durch die Doctoren Arthur und Aurel Krause, geschildert von Dr. Aurel Krause. Jena: Hermann Costenoble.
- 1956. The Tlingit Indians: Results of a trip to the Northwest Coast of America and the Bering Straits. (American Ethnological Society Monographs 26). Translation by Erna Gunther of Die Tlinkit-Indianer, Jena, 1885. Seattle: University of Washington Press. ISBN 0-295-95075-7.
- 1993. To the Chukchi Peninsula and to the Tlingit Indians, 1881/1882: Journals and letters by Aurel and Arthur Krause. Trans. from the German by Margot Krause McCaffrey. (The Rasmuson Library Historical Translation Series 8). Fairbanks, AK: University of Alaska Press. ISBN 0-912006-66-8.
Krauss, Michael E. 1965a. Eyak: A preliminary report. Canadian Journal of Linguistics 10: 167-187.

Krauss, Michael E. 1965b. Proto-Athapaskan-Eyak and the problem of NaDene II: Morphology. International Journal of American Linguistics 31(1): 18-28. JSTOR 1264070.

- 1968. Noun-classification systems in Athapaskan, Eyak, Tlingit, and Haida verbs. International Journal of American Linguistics 34(3): 194203. JSTOR 1263565.
- 1969. On the classifiers in the Athapascan, Eyak, and the Tlingit verb. International Journal of American Linguistics 35(4): 53-83.
- 1977. Proto-Athabaskan-Eyak fricatives and the first person singular. Unpublished manuscript, Alaska Native Language Archive ca961K1977a. Fairbanks, AK.
- 1980. On the history and use of Comparative Athabaskan linguistics. Unpublished manuscript, Alaska Native Language Archives.
- 1986. Edward Sapir and Athabaskan linguistics. In New perspectives in language, culture, and personality: Proceedings of the Edward Sapir Centenary Conference, William Cowan, Michael K. Foster, \& Konrad Koerner (eds.), pp. 147-191. (Studies in the history of the language sciences vol. 41). Amsterdam: John Benjamins. ISBN 90-272-4522-3.
- 2005. Athabaskan tone. In Athabaskan prosody, Sharon Hargus \& Keren Rice (eds.), pp. 51-136. (Current issues in linguistic theory vol. 269). Amsterdam: John Benjamins. ISBN 90-272-4783-8.
- 2006. A history of Eyak language documentation and study: Fredericæ de Laguna in Memoriam. Arctic Anthropology 43(2): 172-218.
- 2009a. Eyak adjectives. Unpublished manuscript, Alaska Native Language Archive EY961K2009.
- 2009b. Eyak instrumentals. Unpublished manuscript, Alaska Native Language Archive Ey961к2009.
- 2009c. Eyak interrogatives. Unpublished manuscript, Alaska Native Language Archive EY961K2009.
Krauss, Michael E. \& Jeff Leer. 1981. Athapaskan, Eyak, and Tlingit sonorants. (Alaska Native Language Center Research Papers 5). Fairbanks, AK: University of Alaska.
Leer, Jeff. 1975. Tlingit stem collection. Unpublished manuscript, Alaska Native Language Archive TL9621975n.
- 1976. Tlingit verb catalog. Unpublished manuscript, Alaska Native Language Archives.
- June 1978. Tlingit stem list. Unpublished manuscript, Alaska Native Language Archives TL962L1975m.

Leer, Jeff. 1989. Directional systems in Athapaskan and Na-Dene. In Athapaskan linguistics: Current perspectives on a language family, Eung-Do Cook \& Keren Rice (eds.), ch. 15, pp. 575-622. (Trends in Linguistics: State-of-the-Art Reports vol. 15). Berlin: Mouton de Gruyter. ISbn o-89925-282-6.

- 1990. Tlingit: A portmanteau language family? In Linguistic change and reconstruction methodology, Philip Baldi (ed.), pp. 73-98. (Trends in linguistics: studies and monographs vol. 45). Berlin: Mouton de Gruyter. ISBN 0-89925-546-9.
- 1991. The schetic categories of the Tlingit verb. Chicago: University of Chicago, PhD dissertation.
- 2000. The negative/irrealis category in Athabaskan-Eyak-Tlingit. In The Athabaskan languages: Perspectives on a Native American language family, Theodore B. Fernald \& Paul R. Platero (eds.), ch. 7, pp. 101-138. (Oxford studies in anthropological linguistics 24). Oxford: Oxford University Press. ISBN 0-19-511947-9.
- 2001. Shift of tonal markedness in Northern Tlingit and Southern Athabaskan. In Cross-linguistic studies of tonal phenomena: tonogenesis, Japanese accentology, and other topics, Shigeki Kaji (ed.), pp. 61-86. Tokyo: Institute for the Study of Languages, Culture of Asia, \& Africa, Tokyo University of Foreign Studies. ISBN 4872977947.
- 2008. Recent advances in AET comparison. Unpublished manuscript, Alaska Native Language Archive ca965L2008b.
- 2009. Collybisty: Making change in Athabascan. Paper presented at the 2009 Athabaskan Languages Conference.
- 2010. The palatal series in Athabascan-Eyak-Tlingit, with an overview of the basic sound correspondences. In The Dene-Yeniseian connection, James Kari \& Ben A. Potter (eds.), pp. 168-193. (Anthropological papers of the University of Alaska, new series vol. 5.1-2). Fairbanks, AK: University of Alaska Press.
Leer, Jeff, Doug Hitch, \& John Ritter. 2001. Interior Tlingitnoun dictionary: The dialects spoken by Tlingit elders of Carcross and Teslin, Yukon, and Atlin, British Columbia. Whitehorse, YT: Yukon Native Language Centre. ISBN 1-55242-227-5.
Li, Fang-Kuei. 1930. Mattole, an Athabaskan language. Chicago: University of Chicago Press.

Li, Fang-Kuei. 1946. Chipewyan. In Linguistic structures of Native America, Harry Hoijer (ed.), pp. 398-423. (Viking Fund publications in anthropology vol. 6). New York: Viking Fund.
Loos, Eugene E. et al. (eds.). 2004. Glossary of linguistic terms. Dallas: SIL International. URL http://www.sil.org/linguistics/GlossaryOfLinguisticTerms/ Index.htm.
Maddieson, Ian, Caroline L. Smith, \& Nicola Bessell. 2001. Aspects of the phonetics of Tlingit. Anthropological Linguistics 43(2): 135-176. JSTOR 30028779.

McDonough, Joyce. 2000. On a bipartite model of the Athabaskan verb. In The Athabaskan languages: Perspectives on a Native American language family, Theodore B. Fernald \& Paul R. Platero (eds.), ch. 7, pp. 139-166. (Oxford studies in anthropological linguistics 24). Oxford: Oxford University Press. ISBN 0-19-511947-9.
McGregor, William \& Tamsin Wagner. 2006. The semantics and pragmatics of irrealis mood in Nyulnyulan languages. Oceanic Linguistics 45(2): 339379. DOI 10.1353/ol.2007.0005.

Naish, Constance M. 1966. A syntactic study of Tlingit. London: School of Oriental \& African Languages, University of London, master's thesis.
Nyman, Elizabeth \& Jeff Leer. 1993. Gágiwduł.àt: Brought forth to reconfirm. The legacy of a Taku River Tlingit clan. Fairbanks, AK: Alaska Native Language Center. ISBN 1-55500-048-7.
Poser, William J. 2005. Noun classification in Carrier. Anthropological Linguistics 47(2): 143-168.
Rice, Keren D. \& Sharon Hargus. 1989. Conjugation and mode in Athapaskan languages: Evidence for two positions. In Athapaskan linguistics: Current perspectives on a language family, Eung-Do Cook \& Keren Rice (eds.), ch. 7, pp. 265-316. (Trends in Linguistics: State-of-the-Art Reports vol. 15). Berlin: Mouton de Gruyter. ISBN 0-89925-282-6.
Rice, Keren. 2000. Morpheme order and semantic scope. (Cambridge Studies in Linguistics). Cambridge, Eng.: Cambridge University Press. ISBN 0-521-58354-3.

- 2009. The Athabaskan language family. Unpublished lecture materials for LSA 2009 Institute.
Rice, Sally. 2002. Morphological representation in an endangered, polysynthetic language. Brain and Language 81: 473-486.

Rushforth, Scott. 1991. Uses of Bearlake and Mescalero (Athapaskan) classificatory verbs. International Journal of American Linguistics 57(2): 251266.

Sadock, Jerrold M. 1991. Autolexical syntax: A theory of parallel grammatical representations. (Studies in contemporary linguistics). Chicago: University of Chicago Press. ISBN 0-226-73344-0.
Sapir, Edward. 1914. Notes on Chasta Costa phonology and morphology. (University Museum anthropological publications 11.2). Philadelphia: University of Pennsylvania.

- 1915. The Na-Dene languages: A preliminary report. American Anthropologist 17(3): 534-558. JSTOR 660504.
Shotridge, Louis. 1915. Notebook of Tlingit language notes, songs, \& articles for Museum Journal, including work with Boas. University of Pennsylvania Museum Archives, Louis Shotridge Collection. Container 1, folder 14.
Story, Gillian L. 1966. A morphological study of Tlingit. London: School of Oriental \& African Languages, University of London, master's thesis.
- 1972. A sample grammar of Tlingit. (Second year collected notes 2). London: Summer Institute of Linguistics (GB).
Story, Gillian L. \& Constance M. Naish. 1973. Tlingit verb dictionary. Fairbanks, AK: Alaska Native Language Center. ISBN 0-933769-25-3.
Swanton, John R. 1908. Social condition, beliefs, and linguistic relationship of the Tlingit Indians. Washington, DC: U.S. Government Printing Office.
- 1909. Tlingit myths and texts. (Bulletins of the Smithsonian Institution Bureau of American Ethnology 39). Washington, DC: U.S. Government Printing Office.
- 1911. Tlingit. In Handbook of American Indian languages, Franz Boas (ed.), pp. 159-204. Washington, DC: U.S. Government Printing Office.
Thompson, Chad. 1993. The areal prefix hu- in Koyukon Athapaskan. International Journal of American Linguistics 59(3): 315-333.
Tuttle, Siri G. \& Sharon L. Hargus. 2004. Explaining variability in affix order: The Athabaskan areal and third person prefixes. In: Working papers in Athabaskan languages. Ed. by Gary Holton \& Siri G. Tuttle. Vol. 4. Alaska Native Language Center Working Papers. Fairbanks, AK: Alaska Native Language Center, pp. 70-98.
Tuttle, Siri. 1996. Direct objects in Salcha Athabaskan. In Athabaskan language studies: Essays in honor of Robert W. Young, Eloise Jelinek et al. (eds.), pp. 101-122. Albuquerque: University of New Mexico Press. ISBN 0-8263-1705-7.

Uyechi, Linda. 1996. The Navajo third person alternation and the pronoun incorporation analysis. In Athabaskan language studies: Essays in honor of Robert W. Young, Eloise Jelinek et al. (eds.), pp. 123-136. Albuquerque: University of New Mexico Press. ISBN 0-8263-1705-7.
Vajda, Edward T. 2010. A Siberian link with Na-Dene languages. In The DeneYeniseian connection, James Kari \& Ben A. Potter (eds.), pp. 33-99. (Anthropological papers of the University of Alaska, new series vol. 5.1-2). Fairbanks, AK: University of Alaska Press.
Veniaminov, Ivan. 1846. Замъчанія о колошенскомъ и кадьякскомъ языкахъ (Observations about the Tlingit \& Kodiak (Alutiiq) languages). Санктпетербургъ (St. Petersburg): Императорскій академій наукъ (Imperial Academy of Science).
Wilhelm, Andrea. 2008. Bare nouns and number in Dëne Sųłiné. Natural Language Semantics 16(1): 39-68. DOI 10.1007/s11050-007-9024-9.
Williams, Frank, Emma Williams, \& Jeff Leer. 1978. Tongass Texts. Fairbanks, AK: Alaska Native Language Center.
Willie, Mary Ann \& Eloise Jelinek. 2000. Navajo as a discourse configurational language. In The Athabaskan languages: Perspectives on a Native American language family, Theodore B. Fernald \& Paul R. Platero (eds.), ch. 11, pp. 252-287. (Oxford studies in anthropological linguistics 24). Oxford: Oxford University Press. ISBN 0-19-511947-9.
Woods, Christopher. 2008. The grammar of perspective: The Sumerian conjugation prefixes as a system of voice. (Cuneiform monographs 31). Leiden: Koninklijke Brill. ISBN 978-90-04-14804-8.
Young, Robert W. \& William Morgan. 1987. The Navajo language: A grammar and colloquial dictionary. Revised. Albuquerque: University of New Mexico Press. ISBN 0-8263-1014-1.
Zhang, Linhai et al. 2010. Inferred origin of several Native American potatoes from the Pacific Northwest and Southeast Alaska using SSR markers. Euphytica 174(1): 15-29. DOI 10.1007/s10681-009-0092-4.


[^0]:    1. Pronounced /'klıy, $\mathrm{kIt} /$ or /'klı, $\mathrm{g}_{\mathrm{l}} \mathrm{t} /$ in English, from Tlingit Lingít /4in.kít/ 'person'.
[^1]:    2. Stoowukáa Louis Shotridge was a member of the 【FIXmE: clan】 from the Jilkáat Ǩwáan. He worked with Franz Boas and with Edward Sapir. Boas taught Shotridge linguistics and anthropology, and Shotridge had a typewriter manufactured so he could type Tlingit in transcription. Most of his work has sadly been lost, including a large vocabulary collection, but some still exists at the University of Pennsylvania Museum.
    3. Ivan Evseevič Popov-Veniaminov, pronounced /i'van ,ven.jə'min.af/ in English, written Иванъ Евсъевичъ Поповъ-Вениаминовъ /i'van jev's'ejevit 'popov-vieníia'minov/ in Russian (old orth.). He is also known as 'John' or 'Ioann’ in English, became Metropolitan Innocent (Митрополитъ Іннокентій /mitropo'lit inno'k'entijij/) of Moscow, and was canonized as St. Innocent (Санктъ Іннокентій /sankt inno'k'ent ${ }^{\text {ijij }}$ /) of Alaska. His greatest linguistic achievements were his work on Aleut. Veniaminov's pioneering work on Tlingit has seen little attention since the 19th century.
[^2]:    7. As Leer (1990: 93 fn. 10) notes, Eyak has cognates for both the Tlingit verb theme and the Athabaskan one, but lacks an areal prefix distinct from third person plural object qa-. The areal is reconstructed as $\mathrm{PA}{ }^{*} q^{w}{ }^{2}-\equiv * q u-$, and as PND *qu- despite the lack of Eyak evidence; see section 19.6 for more on the Tlingit areal. In addition, the Athabaskan $\gamma^{-}$ perfective is from PND ${ }^{*}$ gə- since $\mathrm{PA}^{*} \gamma$ was uvular, so the $\gamma$-perfective is unrelated to Tlingit perfective $\ddot{y} u$ - since ${ }_{G} \ngtr \ddot{y}$. Tlingit's cognate to the Athabaskan $\gamma$-perfective is instead the $g a$-conjugation prefix described in section 4.2.14, and perfective $\ddot{y} u$ - is related to the Athabaskan $s$-perfective via PND ${ }^{*}{ }_{x} y_{i}$ - with voicing and labialization.
[^3]:    5. Leer calls this subdialect 'Interior Tlingit' (e.g. Leer, Hitch, \& Ritter 2001), but an informal
[^4]:    9. Note that the comparative samples given by the Dauenhauers, woogoodí and woogoodi yé are not actually examples of stolen tone. The former is a subordinate verb which is marked with the -ée ~-í suffix that alternates in tone depending on the verb stem. The latter is a relative clause with the suffix -i that does not alternate in tone, so that there is not any neutralization of tone due to the following yé 'place, manner' noun.
[^5]:    10. Progressive imperfective of $O-C L[-D, s]-h a(? ;-? ?)$ 'O float':
    yei=Ø-na-sa-ha-n down=3.0-NCNJ-CL[-D, s,-I]-float-vaR
    11. Progressive imperfective of $O-S-C L[-D, \emptyset]-s h a(g a ;-: A c t)$ 'S bark at 0 ':

    ÿaa=a-na- $\emptyset-\emptyset$-sha-n
    along=3.0-NCNJ-3.S-CL[-D, $\emptyset,-\mathrm{I}]$-bark-vaR
    12. The underscore diacritic, adopted by Naish \& Story in the typewriter era, should only be encoded with the Unicode U+0331 Combining Macron Below character, since e.g. $\underline{k} \mathrm{U}+1 \mathrm{E} 35$ Latin Small Letter K with Line Below officially decomposes into U+006B and $\mathrm{U}+0331$. Use of $\mathrm{U}+0332$ Combining Low Line is incorrect.

[^6]:    19. De Laguna actually says "velar y ( y ) was usually gamma $(\gamma)$ or velar gamma $(\gamma)$, as indeed I was often inclined to hear it" (De Laguna 1972: 11). Her ear was rather imprecise however, given the many transcription mistakes throughout her work, so I believe that she did actually hear [ $\underset{\square}{ }]$ rather than $[\gamma]$ or [ь] but lacked the skill to distinguish them. Her audio recordings that I have heard seem to bear this out.
[^7]:    1. Note that no feature geometric analysis has been done for Tlingit segmental phonology, so that the equivalence of [ $\pm$ round] on consonants and vowels is purely descriptive here rather than being a theoretical claim.
[^8]:    5. 'King salmon' is the local English name for Oncorhynchus tshawytscha (Walbaum 1792), known as 'chinook salmon' or 'spring salmon' further south.
[^9]:    6. 'Black seaweed' is the local English term for Porphyra abbottiae (V.Krishnamurthy 1978). It is related to species used for Japanese nori and Welsh laver (bara lawr).
    7. The example form aa akwkasawóo (Story \& Naish 1973: 183) confirms that $a$ - is thematic, since it should not otherwise appear with the first person singular subject (aa-a-ga-w-ga-x $\boldsymbol{\underline { - }} \boldsymbol{-}$ - - -.
[^10]:    10. Swanton actually gave both forms with $y$, i.e. $\ddot{y}$, rather than $y$. In his texts he has $y$ from speakers that have $\ddot{y}$ in their inventory, so he was probably mistaken.
[^11]:    11. Boas miscorrected Swanton, converting Swanton's $y$ to $y$ silently in his retranscriptions of Swanton's materials. Perhaps Louis Shotridge did not accept the form with gamma and thus Boas presumed it to be an error.
[^12]:    18. The local jay species is the Steller's jay, Cyanocitta stelleri (Gmelin 1788). The regional variant has a very black head and a brilliant dark blue body and wings. The Tlingit name is at least partly onomatopoetic given the jay's typical calls.
[^13]:    19. The black scoter is Melanitta americana (Swainson 1832). It is locally called 'black duck' in English, and is also known as gáaxw t'ooch' by some. Leer has sometimes confused the black scoter with the surf scoter (M. perspicillata L. 1758) which is called wakkals'óox ${ }^{\prime}$ gáaxw 'dirty-eye duck' or lak'eech'wú 'pale-nape'.
[^14]:    20. The 'Maria's potato' or 'Tlingit potato' is Solanum tuberosum (L. 1753), intermediate between Group Andigena and Group Tuberosum, and closely related to Mexican and Chilean cultivars. See Zhang et al. 2010 for details.
    21. The local strawberries are 'beach strawberry' Fragaria chiloensis ssp. pacifica (Staudt 1962), 'woodland strawberry' F vesca ssp. americana ([Porter] Staudt 1962), and 'Virginia strawberry' E. virginiana ssp. glauca ([S.Watson] Staudt 1962). The species are not distinguished linguistically although $F$. chiloensis ssp. pacifica is recognized as a distinct plant by some speakers because of its seashore distribution and dark glossy leaves.
    22. The crabapple is Malus fusca ([Raf.] C.K.Scheid. 1906).
[^15]:    1. Kari's work can be seen as as embracing template morphology rather than trying to replace it, but the results seem to be unlike more general approaches to templatic morphological theory.
[^16]:    4. The use of $P$ is inconsistent, $N$ is sometimes also seen and it is typical when the postposition is lexicalized or absent. It would probably be more appropriate to use only $N$ or only $P$ for the variable component of all bound phrases.
    5. Leer (1991: 142) argues that the bound phrases can actually be focused, but only 'provided no other phrase intervenes between the focused bound phrase and the verb complex'. What he is referring to is that bound phrases can have a focus particle such as áwé between them and the verb, but nothing else. This is different from the conventional notion of syntactic focus which involves displacement of a phrase to the left periphery.
[^17]:    2. Leer waffles between calling the Tlingit system 'theme types' and calling it 'theme categories' following Kari. I adopt Kari's term for consistency with the Athabaskan literature. Although the systems of theme categories are different between Tlingit and Athabaskan languages, the conceptual framework is certainly genealogically related.
[^18]:    4. The word toowáa is frequently encountered in texts, especially those by Naish and Story. This is an incorrect form and is only accidentally said, with tuwáa being by far the norm. Per Leer (p.c. 2010): "The compounding forms of these prefixes are short: tu-shu-, yu-, etc. Unfrotunately Naish and Story often wrote these incorrectly as long vowels, thinking the words would be more recognizable that way. Thus misspellings such as -toowáa have crept into popular writing."
[^19]:    4. The occurrence without ergative -ch on the subject noun phrase is interesting. I believe that this is allowed when there is no object noun phrase present, or when animacy makes the agent obvious.
[^20]:    1. Leer calls this apophony 'umlaut' by analogy with Germanic languages though the Tlingit phenomenon does not involve true $C \ddot{V} C i$ sequences. It may have historically but this has yet to be reconstructed.
[^21]:    9. Also known as 'Canada buffaloberry', 'foamberry', or 'soopolallie' elsewhere, this is Shepherdia canadensis (L.) Nutt. 1818.
    10. Two species Lepidopsetta bilineata Ayres 1855, and L. polyxystra Orr \& Matarese 2000.
[^22]:    11. The $y o o=C L[+I]-\ldots-k$ active and $y o o=C L[+I]-\ldots-k$ repetitive actually have $[+I]$, but the lack of either $y o o=$ or $-k$ in the imperfective obviously excludes these from consideration.
[^23]:    1. Telic or $\emptyset$-conjugation perfectives have $u$ - rather than $\ddot{y} u$ - with either both third person subject and object or with intransitives of third person, in combination with the cL[-D, $\emptyset,+1]$ classifier $\ddot{y} a$-. This is a different phenomenon, for which see section 12.2.
    2. The root $\sqrt{n u k}$ 'sg. sit' irregularly lacks the coda consonant in the imperative. The two other roots with this same property are $\sqrt{ }$ gut 'sg. go' and $\sqrt{ }$.at 'pl. go'.
[^24]:    4. Telicity is distinct from achievement. The endpoint is defined regardless of whether the motion is achieved, so that a $\emptyset$-class theme in the future does not presuppose that the motion will terminate, only that it is expected to terminate.
[^25]:    1. The Oxford English Dictionary (2nd edn.) describes the term schesis as obsolescent, giving the definition "the manner in which a thing is related to something else" as well as the definition "a temporary habit or state of the body" specific to medical physiology. Both have citations from the late 17 th and early 18th century. Leer apparently recoined the term directly from Greek.
[^26]:    2. At last count. Occasionally a new type of imperfective may turn up since some obscure themes have uniquely irregular imperfectives, or from previously undocumented dialectal or idiolectal variation.
[^27]:    3. Kook Hít, Kookhitttaan Kaagwaantaan; Sheet'ká Kwáan.
[^28]:    2. He says specifically that $u$ - "does not occur with subject pronominal prefixes containing high vowels" and "is also zeroed out in the perfective mode ...and in the future mode" (Leer 2000: 111). This actually seems to mean that the irrealis does not exist in the first case but is phonologically deleted in the second case. Leer actually does not make a clear distinction between morphology and phonology theoretically.
[^29]:    3. The verb theme (lexical entry) is $O-S-c L[-D, \emptyset]-\underline{x} a(0 ;-$ ' Act, $-\underline{x}$ Rep) 'S eat 0 ', i.e. a transitive with non-middle [-D] and $\emptyset$-series classifier, in the $\emptyset$-conjugation class, and having an active imperfective with -' stem variation and a repetitive imperfective with - $\underline{x}$.
[^30]:    4. Leer (1991:164) has a more convoluted description involving abstract stems which then undergo various modifications depending on other phonological rules, though he presents and abandons something like my suffixal analysis at one point. He also uses the unique concept of 'vowel stigma', and his pandialectal presentation and inconsistent terminology are difficult for the uninitiated.
[^31]:    6. Leer also includes an 'assertive epimode' in contrast to the decessive and prohibitiveoptatitve, but this is simply the unmarked form so I have ignored it.
[^32]:    1. Leer (1991: 156) here calls it 'occasional' though he elsewhere calls it 'habitual'; he had changed some of his terminology during the writing of his dissertation, and hence is terminologically inconsistent in various places.
