

# Tlingitology Seminar Notes: Background and Morphology

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## Summary

This document consists of lecture notes for the first half of the “Tlingitology” seminar at the University of British Columbia from 1 May through 11 May 2012, taught by James A. Crippen.<sup>1</sup> The lectures covered the social and documentary background of the Tlingit language, essentials of the segmental and tonal phonology, most of the noun morphology, and the basic lexical and morphological infrastructure of the verbal system. Some simple syntactic phenomena were also presented. These notes have been expanded from the lectures, including more examples, extensive citations from previous publications, and discussion of a few more topics that were neglected for various reasons. These notes cover enough of the language for a linguist to start analyzing most Tlingit sentences.

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1. *Dzéiwsh* (Gaanyaa), *Kaakáak’w Hít Deisheetaan* (Kak’weidi), *S’iknaxádi yádi*, *Shtax’héen K’wáan*.

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## 1. BACKGROUND

- Name: English *Tlingit* /'kɫɪŋkɪt/ ~ /'kɫɪŋɡɪt/; Tlingit *Lingít* /ʕɪn.kít/ 'Tlingit', from *lingít* 'person, human'
- Historical Relationship: Na-Dene (Athabaskan–Eyak–Tlingit) family (see sec. 6.2 on p. 72)
  - tree: [Na-Dene Tlingit [Ath.–Eyak Eyak [Dene [Northern Ahtna ...] [Pacific Coast Hupa ...] [Southern Navajo ...]]]]
  - Tlingit is phonologically closer to Eyak, but shows evidence of long contact with Dene (Athabaskan) lgs.
- Place: spoken in most of Southeast Alaska; also Atlin BC, Carcross, Tagish, and Teslin YT
  - most Tlingit speakers today are in Juneau AK, Sitka AK, and Whitehorse YT
- Situation: circa 200 fluent speakers (excluding semi-speakers, learners, etc.), all are also fluent in English
  - still used in daily conversation by many; frequent ceremonial use by L1 and L2 speakers
  - literacy in Tlingit is rare though English literacy is nearly universal
  - attitude is positive but support is limited, see Dauenhauer & Dauenhauer 1998a; Dauenhauer 2005
  - maybe 15–20 advanced learners with conversational fluency, including 5–10 very advanced learners who can understand most of the verb conjugations and can transcribe and translate into English
- Language contact: pre-European contact with Eyak, Ahtna, Southern Tutchone, Tagish, Tahltan, Kaska, Nisga'a, Coast Tsimshian, Haida; post-European contact with Russian, Chinook Jargon, English
  - borrowings from Tlingit into other languages are fairly widespread
  - borrowings from Dene (Athabaskan) into Tlingit are somewhat common, but many are not from any currently identifiable language (i.e. not modern neighbours)
  - pre-European borrowings from other languages are very sparse in the Tlingit lexicon
  - small Russian vocabulary, larger Chinook Jargon vocabulary, increasing English vocabulary
- Culture: Northern Northwest Coast, similar to Haida, Nisga'a, & Coast Tsimshian
  - population is quite large: circa 25,000 people today in both countries
  - Coastal Tlingit have a typical rainforest subsistence, Inland Tlingit have a boreal forest subsistence like and probably adapted from Dene (Athabaskan) neighbours
  - firmly matrilineal, patriline is acknowledged and used ritually
    - English last names are patrilineal, hence represent paternal families and not matriline
    - names and status are typically inherited but not predestined
    - bloodline is less emphasized than among Haida and Tsimshianic cultures
  - two moieties: Raven (*Laayineidí*) and Wolf/Eagle (no single native name)
  - each moiety encompasses maybe 30 clans each, clan is primary identity (not moiety)
    - English 'clan names' are the primary crest of the clan: 'Beaver clan' vs. *Deisheetaan* 'people of the house at the end of the trail' (*dei-shú-hít-taan* 'trail-end-house-group')
  - *kwáan* is a geopolitical unit composed of clans that reside in a particular area, e.g. *Shtax'héen Kwáan* 'Stikine people' resident in Wrangell and its vicinity
    - Raven clans: *Kiks.ádi*, *Teyhittaaan*, *Kaach.ádi*, *Taalkweidí*, *Kaasx'agweidí*
    - Wolf/Eagle clans: *Naanyaa.aayí*, *S'iknax.ádi*, *Kayaashkiditaan*, *Xook'eidí*
  - basic Tlingit identification is: name(s), clan, father's clan (*yádi* 'child of'), *kwáan*
    - *Dzéiwsh* (*Gaanyaa*) James A. Crippen, *Deisheetaan* clan, *S'iknax.ádi yádi*, *Shtax'héen Kwáan*
    - *Keixwnéi* Nora Marks Dauenhauer, *Lukaax.ádi* clan, *Chookaneidí yádi*, *Xunaa Sháawu*<sup>2</sup>
    - at least a person's primary Tlingit name & clan should be mentioned in publication and archival
- Current linguists: Jeff Leer, Keri (née Edwards) Eggleston, Alice Taff, Seth Cable, James A. Crippen

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2. People from *Xunaa* Hoonah usually describe themselves as *Xunaa Káawu* 'Man of Hoonah' or *Xunaa Sháawu* 'Woman of Hoonah' rather than members of a *Xunaa Kwáan*. Their *kwáan* homeland is Glacier Bay which is now a National Park that they are largely excluded from. They moved to Hoonah just before European contact due to glacial expansion covering all of Glacier Bay.

## 2. LANGUAGE MATERIALS

- Linguistic description and analysis
  - Veniaminov 1846 — first attempt at Tlingit grammar description, an applaudable effort
  - Kelly & Willard 1905 — weird but good transcription, poor analysis, interesting examples
  - Swanton 1911 — poor analysis, messy and inaccurate but consistent transcription, useful mostly for interesting example data; some of his consultants retained *j* /*ɥ*/ which he wrote as *y*
  - Boas 1917 — good transcription, first to document tone correctly, retranscribes some of Swanton 1911, useful insights, incomplete understanding of verb but excellent work on noun; primary consultant was *Stoowukáa* Louis Shotridge from Chilkat (*Jilkáat*) *kʷáan* so some dialect-specific phonological oddities
  - Story 1966 — basic morphology, first person to ‘get’ the verb, uses tagmemics; beware of confusing tone representation on suffixes, excludes object prefixes and other leftward elements from verb word and incorrectly considers all object prefixes to be actual object NPs
  - Naish 1966 — basic syntax, useful insights, uses tagmemics; caveats as for Story 1966, wrong about relative (‘attributive’) clause position in DP, beware various misleading misnomers (e.g. ‘demonstrative’ for determiners *yá*, *hé*, *wé*, *yú*)
    - Naish and Story established much of the descriptive terminology for Tlingit, and weight of tradition can be difficult to overcome despite terminological mislabelling
  - De Wolf 1977 — segment, tone, and word phonology in an *SPE*-style framework; apparently only from textual data, didn’t understand *j* despite Swanton’s and Boas’s comments
  - Leer 1991 — *essential reference*; PhD diss on verb morphosemantics, sketches phonology and syntax, very detailed morphophonology, comprehensive analysis of verb forms; poorly edited & difficult reading, uses autolexical syntax combined with Leer’s idiosyncratic analysis, often uses constructed examples not matching any particular dialect, transcription is ‘combined’ from all dialects to become essentially an internal reconstruction of Pre-Tlingit; beware of abrupt unexplained changes in terminology and analysis due to poor editing
  - Leer misc. — 1989 directionals, 1990 pronouns & verb pronominal prefixes, 1990 consonant alternations, 2000 irrealis, 2001 tone; many unpublished manuscripts in the Alaska Native Language Archive (ANLA) at the University of Alaska Fairbanks (UAF), see <http://www.uaf.edu/anla/collections/tlingit/list/>; beware varying terminology & transcription depending on year and phase of the moon
  - Maddieson, Smith, & Bessell 2001 — instrumental phonetics of Tlingit, verifies ejective fricatives; only represents typical Northern Tlingit speakers from Juneau, Hoonah, Sitka; based mostly on nouns and other non-verbs, does not address any phrasal phenomena, some calibration problems
  - Cable 2006 — verb prefix phonology in OT (originally a PhD qualifying paper), prefix contraction results from syncope; lacks a real feature theory, assumes nonexistence of default vowels; major step forward but needs revisiting
  - Cable 2010c — wh-phrasal syntax (originally his PhD dissertation), documents mandatory wh-fronting, treats Q particle *sá* as a phrasal head of QP accounting for pied-piping effects; intentionally sketchy on other syntactic details
  - Cable, Crippen — numerous unpublished manuscripts and handouts from talks (like this one)
- Lexicography
  - Boas 1917 — includes lexicon compiled from concordance of Boas’s & Swanton’s notes
  - Naish & Story 1963; Naish, Story, et al. 1976 — original noun dictionary; earlier edition in old orthography, both editions have several bad typos such as *s’ak̄s* for *sáks* ‘bow (weapon)’; some slightly extended versions also in circulation

- Story & Naish 1973 — verb dictionary; *essential reference*
  - largest published collection of verb themes
  - excellent source of example sentences
  - lacks documentation of verb ephemera (conj. class, theme category, impfv. type, etc.)
  - some mistakes in vowel length in the verb prefixes, cf. Story 1966 & Naish 1966
  - weird tone marking system: high tone suffix vowels are usually unmarked, low  $\check{V}V$  indicates stressed long low vowel, cf. Story 1966 & Naish 1966
- Leer, Hitch, & Ritter 2001 — noun dictionary of Inland Tlingit dialect, largest noun coverage
  - uses Yukon Native Language Centre (YNLC) orthography
  - includes vocabulary unknown on the coast, conversely lacks some coastal vocabulary
- Edwards 2009 — new dictionary of verbs & nouns; *essential reference*
  - first published dictionary to document verb ephemera usefully
  - less coverage of verb themes than Story & Naish 1973
  - online: [http://www.sealaskaheritage.org/programs/Language%20Resources/Tlingit\\_dictionary\\_web.pdf](http://www.sealaskaheritage.org/programs/Language%20Resources/Tlingit_dictionary_web.pdf)
  - Keri Eggleston (née Edwards) also has an ongoing ‘500 Conjugated Verbs’-type project from the same work: <http://www.goldbeltheritage.org/verbs/verbs/tlingit/1>
- Archived documentary materials at ANLA by Leer: <http://www.uaf.edu/anla/collections/tlingit/list/>
  - field notes 1965–200x
  - stem list manuscript, 1978, circa 90 pages
  - verb theme catalogue manuscript, 1975, circa 900 pages
  - root and stem catalogue manuscript, 1973, circa 5000 pages
  - Tongass Tlingit documentation (1973–1976)
- audio materials — Tlingit rejoices in a comparatively huge amount of audio available for research
  - Dauenhauer & Dauenhauer collection: over 1000 hours, nearly all has been digitized
    - mostly narrative and oratory, some singing, occasional conversation
    - copies available at University of Alaska Southeast (UAS, Juneau), Sealaska Heritage Institute (SHI, Juneau), and eventually also ANLA (Fairbanks) and Yukon College (Whitehorse)
    - James A. Crippen has perhaps  $\frac{1}{4}$  or  $\frac{1}{5}$  copied in his possession
  - maybe 20 hours of digital video of conversations recently recorded by Alice Taff at UAS
  - perhaps 100 hours recorded by Leer at ANLA, some digitized
  - at least 10 hours of video also recorded by Leer at ANLA, not digitized
  - perhaps 30 hours from Sitka Native Education Program (SNEP), digitized
  - perhaps 20 hours in Forrest DeWitt collection (James A. Crippen, curator), some digitized
  - unknown amount from Sheldon Jackson College collection, some digitized
  - unknown but fairly large amount in various personal collections
  - *less than one percent of recorded Tlingit has been transcribed, even less has been translated*
- Easily available texts
  - early sources: Swanton 1909, Boas 1917, Velten 1939, Velten 1944
  - modern sources: Gospel of John (Anonymous 1969); Story 1972; Watson 1973; Dauenhauer 1974; Williams, Williams, & Leer 1978 (sole published Tongass dialect source); Dauenhauer & Dauenhauer 1981; Dauenhauer & Dauenhauer 1987, 1990; Dauenhauer 1981; Nyman & Leer 1993; Story 1995; Dauenhauer & Dauenhauer 1998b; Dauenhauer, Dauenhauer, & Black 2008; Crippen & DeWitt m.s.; Crippen & Kadashan m.s.; Dauenhauer & Dauenhauer m.s. forthcoming (Raven stories)
  - the most important are Williams, Williams, & Leer 1978; Dauenhauer & Dauenhauer 1987, 1990; Nyman & Leer 1993; Dauenhauer, Dauenhauer, & Black 2008

### 3. SEGMENTAL AND TONAL PHONOLOGY

In this section I first present the consonants, then the vowels, then dialects and variation, then syllables, and finally tonology. There remains much to be done but the basic phenomena are fairly well documented.

#### • Consonants

- maximum of 48 consonants, minimum of 42
- usually no labial consonants (assuming that /w/ is velar), though dialectal /m/ and borrowed /p, f/
- three way laryngeal distinction: unaspirated /C/, aspirated /C<sup>h</sup>/, ejective /C'/
  - aspiration has a remarkably long VOT, almost as long as Navajo
  - ejectives are 'strong' or 'fortis', with the ejective pressure quite high, and with glottal opening just after the release; Tlingit ejectives are loud and noisy
- unaspirated consonants are orthographically 'voiced' but aren't: *dl* /tʰ/ ≠ *\*dl* or *\*dlʒ* or whatever
- only sonorants /n, w, j/ are voiced, also dialectal /u, l, m/
- since /l/ is lacking in most dialects, orthographic *l* = /ʎ/, and *l̲* = /l/<sup>3</sup>
- large inventory of ejective fricatives /s', ʃ', x', x'<sup>w</sup>, χ', χ'<sup>w</sup>/ (orthographically *s', l', x', x'w, x̲', x̲'w*)
  - these are real ejectives, see Maddieson, Smith, & Bessell 2001
- ejective consonants are almost always distinguished from /Cʔ/ sequences, exceptions are purely lexical (also often dialectal)
- the voiced velar approximant 'gamma' *j̣* /u/ is recently extinct
  - really an approximant, not a fricative /ɣ/ despite the name
  - documented and recorded among speakers up until the 1970s
  - split-merged with *w* /w/ in rounded environments, and with *y* /j/ elsewhere: *j̣* > *w*/[lab] ; *y*
  - so *j̣* now appears as either *y* or *w*, but *y* and *w* themselves still do not vary, thus *j̣* is retained in the morphophonology to represent the unpredictable but systematic *y* ~ *w* variation:
    - > e.g. *yá* 'face' vs. *tú* 'mind' + *yá* 'face' → *tuwá* 'face of mind', so *yá* 'face' instead of *yá*
  - Swanton wrote *y*, Boas & De Laguna followed him; Leer used to use *y*, *y̲*, or *ỵ* before switching to *j̣*; 19th century documents often have *r*, *g*, or Cyrillic *z* /g/ reflecting *j̣* (note Ru. dial. *z* /ɣ/)
- only posterior consonants (velar, uvular, glottal) can be rounded /C<sup>w</sup>/
  - since *w* is the rounded counterpart of *j̣*, *w* is then velar and not labial
  - /ʔ<sup>w</sup>/ and /h<sup>w</sup>/ seem to be idiolectal today, people who lack them only have /ʔ/ and /h/ glottals
    - > *ana.wéini* /ʔànáʔé:nì/ 'if he buys it' vs. *ana.éini* /ʔànáʔé:nì/ 'if he buys it'; verb root *√.u* 'buy'
- rounding is obligatory next to rounded vowels: /uk/ = /uk<sup>w</sup>/ = [uk<sup>w</sup>] ≠ [uk]; /ku/ = /k<sup>w</sup>u/ = [k<sup>w</sup>u] ≠ [ku]
  - non-rounded consonants are used orthographically: *kóok* 'box' [k<sup>h</sup>wú:q<sup>w</sup>]
- uvular consonants are represented with an underscore diacritic in the Coastal orthography
  - thus *k̲* /q<sup>h</sup>/, *k̲'w* /q<sup>w</sup>/, *x̲'* /χ'/, *g̲* /q/, *g̲w* /q<sup>w</sup>/, etc.
  - underscore diacritic is represented in Unicode with U+0331 COMBINING MACRON BELOW
  - YNLC orthography uses velar *C + h*: *kh* /q<sup>h</sup>/, *kh'w* /q<sup>w</sup>/, *xh'* /χ'/, *gh* /q/, *ghw* /q<sup>w</sup>/, etc.
  - Email orthography (used in email, on Facebook, etc.) also uses *C + h* for uvulars
- glottal stops are represented orthographically as . (period)
  - *wutudzi.aan* /wùt<sup>h</sup>ùtsiʔà:n/ 'we settled; we made a town'
  - glottal stops are not written word-initially: *aan* /ʔà:n/ 'land, town'
  - period . is used rather than apostrophe ' because /Cʔ/ clusters can occur, so ' would be confused with ejectives: *Luljini* /ʎʔùtʃini/ 'vest' (lit. 'armless') ≠ *l'uljini* /ʎ'ùtʃini/ (not a word)

3. The YNLC orthography has *t* = /ʎ/ and *l* = /l/. This is because Inland Tlingit has loans with /l/ from Dene languages.

- period also used to separate erroneous clusters orthographically: *yei nas.héin* /jè:nàshé:n/ ‘it is floating down’ versus *yaa anashéin* /jà:ʔànàsé:n/ ‘it is barking along at it’
  - *m* is restricted to Carcross, Tagish, and some Teslin speakers in the Yukon
    - at first I thought it was a borrowing from Dene, e.g. *jimasasée* ‘yellow warbler’<sup>4</sup>
    - but it appears in basic vocabulary: *máa* ‘how’ for Coastal *wáa* ‘how’
    - also in some morphology, e.g. *amsikóo* ‘he knows it’ vs. Coastal *awsikóo*
    - among Chilkat speakers, the same perfective morpheme realization is often [w̃]: [ʔãw̃.sɪ'kʰú:]
    - so probably *m* > *w* < *w* merger somewhat recently arising except in the Yukon
  - a few very old speakers from different Northern Tlingit towns were recorded with [l] instead of /n/ (this is the voiced lateral approximant like in English /lift/, not the voiced fricative [ɮ])
    - represented as *n* in the Coastal orthography when needed, phonologically still sort of like [n]
    - people who had [l] were from towns where other people had /n/
    - the same sound change happened in Eyak: Proto-Athabaskan-Eyak \**n* > Eyak *l*
  - occasional partial or complete denasalization of *n* → [nd], [d]
- Vowels
  - small vowel inventory: /a, e, i, u/; very rare parophonemic /o/ in a few interjections e.g. *hó hó!* /hó hó/ ‘indeed!’ and in some borrowings e.g. *Jóono* /tʃú:nò/ ‘Juneau’
  - contrastive length /V/ vs. /V:/ in all dialects
    - suprasegmentals other than length are dialect-dependent, see dialect discussion below
    - Northern Tlingit has low and high tone contrasting on both vowel lengths with all qualities
  - long vowels are probably bimoraic, phonetically maybe 1.5× ~ 2× short vowel length
  - short vowels were earlier (through Naish & Story) thought to be lax
    - so [a:]—[ʌ], [e:]—[ɛ], [i:]—[ɪ], [u:]—[ʊ]
    - but really short vowels vary in quality all over the place, so /a/ = [a], [ʌ], [ə], [ɑ], etc.
      - › someone needs to investigate all the phonetic variation in context
    - Maddieson, Smith, & Bessell (2001) show that length is the primary distinction, not quality
  - Coastal orthography represents long vowels with Englishy digraphs: *ee* /i:/, *ei* /è:/, *oo* /ù:/, *aa* /à:/
    - short vowels are monographs *i* /ì/, *e* /è/, *u* /ù/, *a* /à/
    - low tone is unindicated, high tone has an acute accent *í* /í/, only on first graph of a digraph *ée* /í:/
  - Email orthography follows Coastal orthography for vowels
  - YNLC orthography combines length and tone as a single diacritic: *à* /à:/, *â* /â:/, vs. *a* /à/, *á* /á/
    - this system is not used at all outside of the Yukon, and is losing ground there too
  - rounding spread
    - high front vowels can be rounded next to labialized consonants
    - roughly /ik<sup>w</sup>/ → [uk<sup>w</sup>]; /k<sup>w</sup>i/ → [k<sup>w</sup>u]
    - happens more often further north, so some words are rephonologized:
      - › *gwít* /k<sup>w</sup>ít/ ‘dime’ → *gút* /k<sup>(w)</sup>út/ in Angoon, Sitka, Juneau, etc.
      - › *néekw* /ní:k<sup>w</sup>/ ‘sickness’ → *nóok* /nú:k<sup>(w)</sup>/ in Haines, Yakutat
  - uvular lowering
    - high front vowels next to uvulars undergo some phonetic adjustment
    - roughly /i:q/ → [i̠q]; /qi:/ → [q̠i̠]
    - this has been phonologized as /i/ → /e/ around uvulars in much of Northern Tlingit
    - thus *eek* /ʔi:q/ ‘copper’ → *eik* /ʔè:q/ and *geey* /q̠i:j/ ‘bay’ → *geiy* /qè:j/ in e.g. Hoonah, Haines, Yakutat

4. *Dendroica petechia aestiva* Gmelin 1789.



- variable length
  - at least in Northern Tlingit, some vowels can be freely either short or long
  - I represent variable length vowels with a ‘half-long’ mark: /V˘/
  - some speakers always have variable length as long, some always short, most have both
  - most variable length vowels are word-final, so this is probably final vowel shortening
  - but some variable length vowels are not word-final: *yiwáan* ~ *yeewáan* /ji˘wá:n/ ‘you (pl.)’
  - it is probably not coincidental that many variable length vowels in Northern are fading vowels in Tongass (e.g. *yihwaan* /uɪ<sup>h</sup>wa:n/), but the exact reasons for this are still unclear
  - not all word-final vowels have variable length, some are only long and some are only short
    - › variable length: *aan-dé* /ʔa:nté˘/ ‘toward town’, [ʔa:nté] ~ [ʔa:nté:]
    - › only long: *aan-gáa* /ʔa:nqá:/ ‘near town’, [ʔa:nqá:], \*[ʔa:nqá]
    - › only short: *aan-ká* /ʔa:nk<sup>h</sup>á/ ‘surface of town’, [ʔa:nk<sup>h</sup>á], \*[ʔa:nk<sup>h</sup>á:]
  - the orthographies used to represent variable vowels as long, but now they are usually written short
    - › non-final variable vowels are written as pronounced by the writer or transcribed speaker, so e.g. both *nóoch* and *núch* are frequent forms of the habitual postverbal auxiliary (§5.10)
    - › final variable vowels are now usually written short but long ones are common; long often reflects actual pronunciation, but sometimes just arbitrary variation or habit by the writer
- Dialects
  - dialect variation is almost all phonological and morphophonological, plus assorted lexical stuff
  - speaker comprehension of other dialects is very good even with no prior exposure
  - three basic dialects: Tongass, Southern, Northern
  - Tongass Tlingit (†)
    - recorded by Leer from the last two speakers (a married couple) in the 1970s
    - no acoustic analysis of recordings has ever been done, fun phonetic work awaits
    - retained *yj*, clearly recorded as /uɟ/
    - toneless, had four-way vowel system instead: short /V/, long /V:/, glottalized /Vʔ/, fading<sup>5</sup> /V<sup>h</sup>/
      - › long, glottalized, and fading are all roughly the same temporal length, clearly longer than the short vowel, and probably bimoraic
      - › fading /V<sup>h</sup>/ was usually realized as something like [Vʋ], [Vh̥], or [Vh]; it is mostly cognate with Northern & Southern /V̇:/
      - › glottalized /Vʔ/ almost always realized as [Vʔ] or [Vʔ̚]; mostly cognate with Southern /V̇ʔ/ and often with Northern /V̇:/
      - › long /V:/ mostly cognate Southern /V̇:/ and often with Northern /V̇:/
      - › short /V/ cognate with both Northern and Southern /V̇/ and /V̇/ depending on environment
      - › fading and glottalized vowels can ‘leak’ onto following sonorants, so something like /CVʔR/ → [CV:ʔ̚] and /CV<sup>h</sup>R/ → [CV:ʔ̚]; needs some acoustic analysis
      - › there seem to be some interesting metrical phenomena, needs work
  - Southern Tlingit (almost extinct!)
    - description in introduction of Williams, Williams, & Leer 1978; some more in Leer 2001;
    - very little published data available; some of audio recordings but almost none are transcribed
    - pressing need to do phonology on this dialect while there are still a couple of speakers alive

5. Leer usually transcribes Vʔ for the glottalized vowel symbol and V<sup>h</sup> for the fading one. I find these hard to distinguish, so I use V<sup>h</sup> for the fading one instead. Leer used the Englishy long vowels of the Coastal orthography along with ‘ or ` for orthographic representation of Tongass Tlingit, but I use ‘ and *h* orthographically because these are again easier to distinguish. Since /h/ cannot occur in the coda, fading *Vh* is unambiguous with consonantal *h*, and since ‘ is a property of ejectives, it is also unambiguous.

- I really don't understand the phonological phenomena yet despite listening to a lot of it
- no *j* at all except in phonetic accidents or occasional imitation of Tongass Tlingit
- less rounding spread than in Northern, and rounding spread is generally not lexicalized
- three tones: high / $\acute{V}(:)$ /, low / $\grave{V}(:)$ /, and falling / $\acute{V}\grave{V}$ /
  - > falling tone is restricted to long vowels
  - > falling tone is an exact cognate of Tongass / $V^?$ / but also occurs for expected / $\acute{V}(:)$ / before sonorants: T. *yeehwaan* / $\text{u}\text{q}^{\text{h}}\text{w}\text{a}:\text{n}/$  and N. *yeewáan* / $\text{j}\text{i}^{\text{r}}\text{w}\acute{\text{a}}:\text{n}/$  but S. *yeewáàn* / $\text{j}\text{i}:\text{r}\text{w}\grave{\text{a}}\text{n}/$  'you pl.'
- Leer (2001) thinks that the high tone is default, versus Northern default low
- stressed long low vowels are typically 'more' low: *aandaa* [ $\text{?}\grave{\text{a}}:\text{n}'\text{t}\grave{\text{a}}:$ ] 'around town'; long low vowels also usually exhibit some pitch drop that can be mistaken for falling tone by the unwary: [ $\text{?}\text{a}:\text{n}'\text{t}\text{a}:\text{!}$ ]
- two subdialects: Sanya (*Saanyaa* / $\text{s}\grave{\text{a}}:\text{n}.\text{j}\grave{\text{a}}:$ / 'southerly' *Kwáàn* / $\text{q}^{\text{h}}\text{w}\acute{\text{a}}\text{n}/$ ) and Henya (*Heinyaa* / $\text{h}\grave{\text{e}}:\text{n}.\text{j}\grave{\text{a}}:$ / 'hitherly' *Kwáàn*)
  - > *saa* / $\text{s}\text{a}:$ / 'southern' + *nijaa* / $\text{n}\grave{\text{i}}.\text{u}\grave{\text{a}}:$ / 'direction'
  - > *héi* / $\text{h}\acute{\text{e}}:$ / 'mesioproximal' + *nijaa* 'direction'; this has been reanalyzed as *héèn* / $\text{h}\grave{\text{i}}\text{n}/$  'water' + *nijaa* 'direction' via reduction of *ei* to *e* and thence confusion with *i*: *Heinyaa* > *Henyaa* / $\text{h}\grave{\text{e}}\text{n}.\text{j}\grave{\text{a}}:$ / > *Hinyaa* / $\text{h}\text{i}\text{n}.\text{j}\grave{\text{a}}:$ / > *Heenyaa* / $\text{h}\grave{\text{i}}:\text{n}.\text{j}\grave{\text{a}}:$ /
- different verb prefix contraction patterns in each subdialect, both more similar to Tongass
  - > N. *wutuwaajak* [ $\text{w}\grave{\text{u}}.\text{t}^{\text{h}}\grave{\text{u}}.\text{w}\grave{\text{a}}.\text{t}\acute{\text{f}}\acute{\text{a}}\text{q}$ ] 'we killed it'
  - > S. *wútwájak* [ $\text{w}\acute{\text{u}}\text{t}.\text{w}\acute{\text{a}}.\text{t}\acute{\text{f}}\acute{\text{a}}\text{q}$ ] 'we killed it'
  - > H. *wútwàjak* [ $\text{w}\acute{\text{u}}\text{t}.\text{w}\grave{\text{a}}.\text{t}\acute{\text{f}}\acute{\text{a}}\text{q}$ ] 'we killed it'
  - > T. *wutwajak* [ $\text{w}\text{u}\text{t}.\text{w}\text{a}.\text{t}\text{f}\text{a}\text{q}$ ] 'we killed it'
- Northern Tlingit
  - only two tones / $\acute{V}(:)$ / and / $\grave{V}(:)$ /; just recently lost *j* / $\text{u}\text{q}/$
  - three subdialects: Transitional, Inland, Greater Northern
  - Transitional (Wrangell, Kake) has some Southern-like features, largely undocumented
  - Inland (Atlin, Teslin, Carcross, Tagish) has partial(?) merger of /a/ and /e/ (not long vowels), use of /l/ in Dene loans, use of /m/ except in Atlin; fairly well documented by Leer
  - Greater Northern: Tlingit everywhere else, spoken by the vast majority today
    - > further north  $\Rightarrow$  more rounding spread and uvular lowering
    - > Chilkat (Haines, Klukwan, Skagway) has some Inland-like features such as [ $\text{w}^{\text{r}}$ ] for Inland /m/
    - > Angoon has some Transitional-like speakers
    - > Gulf Coast (Yakutat, Dry Bay) has some minor Eyak contact effects, retained *j* until very recently, and has a few other peculiarities different from e.g. Juneau or Sitka
- to distinguish examples, I use a subscript N for Northern, T for Tongass, and S for Southern, or S for Sanya versus H for Henya; I occasionally also use R for Transitional, I for Inland, C for Chilkat, and G for Gulf Coast (Yakutat, Dry Bay), and when these are used N indicates all other Northern besides (see also section 6.1 on page 70)
  - *geehy*<sub>T</sub> ~ *geey*<sub>SRI</sub> ~ *geiy*<sub>N</sub> 'bay': *geehy* in Tongass, *geey* in Southern, Transitional Northern, and Inland Northern, and *geiy* in all other Northern Tlingit
- Syllables
  - basic syllable is CV or CVC; V and VC are either resyllabified or a prothetic / $\text{?}$ / is used word-initially
  - the most complex coda is probably ...VCCC: *s'aakx'x* / $\text{s}'\text{a}:\text{q}\text{x}'\text{x}/$  'of bones'
    - these are usually rescued with an epenthetic vowel /i/ (/u/ if rounded), for example *ts'ítskwx'* / $\text{t}\text{s}'\text{i}\text{t}\text{s}\text{k}^{\text{w}}\text{x}'$ / 'little birds'  $\rightarrow$  *ts'ítsgux'* [ $\text{t}\text{s}'\text{i}\text{t}\text{s}.\text{k}^{\text{w}}\text{ù}\text{x}'^{\text{w}}$ ]
    - ...VCC codas are not uncommon: *tákl* / $\text{t}^{\text{h}}\acute{\text{a}}\text{q}\text{l}/$  'hammer', *nás'k* / $\text{n}\acute{\text{a}}\text{s}'\text{k}/$  'three'

- the most complex onset is probably CCV...: *chxánk'* /tʰhχánk'/ 'grandkid', *skóok* /skʰú:q/ 'cough', *kwagóot* /kʰqʰwàkú:t/ 'I will go', *kwshé* /kʰwʃé/ 'maybe'
- coda consonants cannot be aspirated
  - they are orthographically written aspirated due to the Anglocentric bias of linguists!
  - all consonants must be released in careful speech
  - but linguists heard the coda release burst with subsequent silence as aspiration
  - Maddieson, Smith, & Bessell (2001) showed that this burst was the same as unaspirated stops in onsets, and the onset aspiration burst was considerably longer
- glottal consonants /h, ʔ, hʷ, ʔʷ/ (*h, ., hw, .w*) cannot occur in the coda — historically this is probably due to the glottalized and fading vowel phonation types blocking glottal consonants in the coda
- anterior nonejective fricatives /s, ʃ, ʎ/ (*s, sh, l*) can be syllables for some people
  - *Lushk'é* /ʎʔùj.k'é/ 'badness, sin' → [ʎʔùj.k'é] or [ʎ.ʔùj.k'é]
  - *de s sh il.át* /tè:sʃʔʎ.ʔát/ 'they're already lying down' → [tè:sʃʔʎ.ʔát] or [tè:s.ʃʔʎ.ʔát] or [tè:sʃʔʎ.ʔát]
  - *s aawaják* /sʔà:wà:tʃáq/ 'they killed it' → [sʔà:wà.tʃáq] or [s.ʔà:wà.tʃáq]
- there is stress in all dialects, but it is poorly documented and so needs serious phonological research
  - Leer (1991, 2001) attributes the development of tone as partly due to stress, particularly Tongass /V:/ → Northern /V́:/ & Southern /V́:/ ~ /V́V̂R/
- metrical phonology is wide open, though Cable (2006) provides a place to start within the verb
- there's much more to be said about syllable structure, especially with an autosegmental featural analysis
- Tonology (Northern Tlingit dialect)
  - I don't understand Southern Tlingit tonology so I won't address it here
  - Northern Tlingit has high /V́/ and low /V̂/ tones
  - the low tone is unwritten, so *V́* and *V*
  - noun compounding exhibits the simplest tonological phenomenon
    - high tones are neutralized to low except for the last root (head noun) in a compound:
      - › *lú* /ʎú/ 'nose' + *tú* /tʰú/ 'inside' + *x'úx'* /x'úx'/ 'membrane' → *lutux'úx'* [ʎú.tʰù.x'úx'] 'nasal membrane'
    - low tone never goes high, so this is neutralization not OCP:
      - › *aan* /ʔà:n/ 'town' + *daa* /tà:/ 'around' → *aandaa* [ʔà:n.tà:] 'around town; exurbs'
    - tone neutralization doesn't care about length:
      - › *dáak* /tá:q/ 'inland (dir.)' + *ká* /kʰá/ 'horizontal surface' → *daakká* [tà:q.kʰá] 'inland (area)'
    - compounding may also reduce long vowels, but it's sort of unpredictable
      - › *Dakká* [tàq.kʰá] 'Inland (Tlingit)'
      - › there are probably rules, but nobody's documented them yet
  - ĆV(:) suffixes on nouns exhibit tone alternation
    - *aan* /ʔà:n/ 'town' + *-dé* /-té:/ 'toward' → *aandé* [ʔà:n.té:] 'toward town'
    - *hít* 'house' /hít/ + *-dé* /-té:/ 'toward' → *hítde* [hít.tè:] 'toward the house'
    - *aan* /ʔà:n/ + *-gáa* /-qá:/ 'for, around' → *aangáa* [ʔà:n.qá:] 'around town'
    - *hít* /hít/ + *-gáa* /-qá:/ 'for, around' → *hítgaa* [hít.qà:] 'around the house'
  - but ĆVC suffixes do not exhibit tone alternation
    - *aan* /ʔà:n/ + *-dax* /-táχ/ 'from' → *aandax* [ʔà:n.táχ] 'away from town'
    - *hít* /hít/ + *-dax* /-táχ/ 'from' → *hítdux* [hít.táχ] 'away from the house'
    - › Naish & Story perversely wrote this as *hítdux* because the high tone is predictable in CVC suffixes after a high tone root; their practice has been abandoned because it is too confusing, but beware Story & Naish 1973, etc.

- the possessive suffix *-j̄í* exhibits rounding spread as well as tone alternation
  - we know that it is *-j̄í* and not *-yí* because speakers retaining *j̄* used that and not *y* when the suffix was not in a rounding environment (recall that *y* never undergoes rounding, but *j̄* usually does)
    - › Leer’s reason for using *-j̄í* rather than just *-í* is that *y* vs. *w* insertion is predictable in Northern Tlingit, but *j̄* glide insertion for hiatus avoidance in Tongass and other dialects retaining *j̄* is unpredictable
    - › in fact, Tongass always inserts *j̄* for hiatus avoidance in unrounded contexts, and never inserts *y* anywhere, so if *j̄* is a default glide for insertion then it need not be lexically specified
    - › we could thus say *-í* instead, but tradition prevails so far
  - *aḵ* ‘my’ + *saa* ‘name’ + *-j̄í* PSS → *aḵ saayí*<sup>6</sup>
  - *aḵ* ‘my’ + *áa* ‘lake’ + *-j̄í* PSS → *aḵ áayi*
  - *aḵ* ‘my’ + *aan* ‘town’ + *-j̄í* PSS → *aḵ aaní*
  - *aḵ* ‘my’ + *xáak* ‘bivalve shell’ + *-j̄í* PSS → *aḵ xáagi*
    - › as previously noted the ‘voicing’ here is purely orthographic because coda stops are unaspirated but written aspirated; thus the *k* is resyllabified into the onset and hence must be written ‘voiced’, i.e. /xà:k/ *xaak* + /-uɨ́/ *-j̄í* → [xà:kí] *xaagi* ≠ [xà:kʰí] *xaaki*
    - › we can probably blame Boas for this originally, but Naish & Story perpetuated it
  - *aḵ* ‘my’ + *gishoo* ‘pig’ + *-j̄í* PSS → *aḵ gishoowú*
  - *aḵ* ‘my’ + *wanadóo* ‘sheep’ + *-j̄í* PSS → *aḵ wanadóowu*
  - *aḵ* ‘my’ + *yaakw* ‘boat’ + *-j̄í* PSS → *aḵ yaagú*
  - *aḵ* ‘my’ + *náakw* ‘medicine’ + *-j̄í* PSS → *aḵ náagu*
- tone has a significant distribution in verbs
  - all ‘conjunct’ prefixes (those closer to the root) have low tone, except for a few incorporated nouns (which are fairly far from the root anyway)
    - › *wutuwaǰák* [wù.tʰù.wà.tʃáq] ← *θ-j̄u-tu-ja-ják* ‘we killed it’
    - › \**wútúwáǰák*, \**wútuwáǰák*, etc.; no other tone patterns are possible
  - ‘disjunct’ prefixes (those which are very far leftward) may or may not have high tone
    - › *gunéi wutuwa.át* [qù.né:wù.tʰù.wà.ʔát] ~ *gunéi wtuwa.át* [qù.né:w|tʰù.wà.ʔát] (*gunéi* = *gunajéi* = ‘start, begin’ inceptive preverb) ‘we began going’
- some words (lexically specified?) ending in CV (mostly) syllables undergo some peculiar alternations
  - *á* third person nonhuman ‘it’ 3.N
    - › *á* ‘it’ + *-CV...* (any CV or CVC noun suffix) → *aaCṼ...* (*aahCV...<sub>T</sub>*)
      - *á* + *-dé* ‘toward’ (allative) → *aadé* ‘toward it’; \**ádé*, \**adé*, \**áde*
      - *á* + *-dáx* ‘from’ (ablative) → *aadáx* ‘from it’; \**ádáx*, \**adáx*, \*\**ádax*
      - versus *á* + *=j̄áx* (similative) → *á yáx*, *ayáx*
    - › *á* ‘it’ + *-C* (any C noun suffix) → *áC* (*aC<sub>T</sub>*)
      - *á* + *-x* ‘at’ → *áx* ‘at it’; \**aax*, \**ax*
      - *á* + *-x̄* ‘of’ → *áx̄* ‘of it’; \**aax̄*, \**ax̄*
    - › *á* ‘it’ + *-* ‘at’ (locative allomorph of *-x*) → Northern *áa* ‘at it’, Southern *áà*, Tongass *aa*
    - › *á* ‘it’ + *-n* ‘with’ (instrumental) → *aan* (*aahn<sub>T</sub>*)
  - *-ká* ‘horizontal surface, *-j̄á* ‘vertical surface’ behave the same as *á* ‘it’ 3.N, except that occurrence with *-n* is impossible (= *ee-n* is used instead)
  - the *á* focus particle as found in *áwé*, *áyá*, *ásé*, etc. does not behave the same

6. This would be *aḵ saahj̄í* in Tongass Tlingit, or *aḵ saaj̄í* for Northern speakers with *j̄*.

- *xát* first person singular independent pronoun is similar except for its bare form
  - > *xát* + *-dé* 'toward' (allative) → *xaadé*; \**xátdé*, \**xatdé*, \**xáade*
  - > *xát* + *-x* 'at' (locative) → *xáax*'; \**xátx*', \**xaax*'
  - > *xat* + *-n* 'with' (instrumental) → *xaan* (*xaahn*<sub>T</sub>); \**xáan* (\**xátn* since sonorants can't follow nonsonorants in codas)
  - > *xát* + *-'* 'at' (locative allomorph) → *xáa*<sub>N</sub>, *xáà*<sub>S</sub>, *xaa'*<sub>T</sub>; \**xaa* (\**xát*' since *-'* can't occur with codas)
  - > the alternative to suffing on *xát* is *ax=ee* which involves *=ee* next
- *=ee* meaningless base for postpositional attachment
  - > most pronouns use this base for postpositions, the exceptions are third person nonhuman *á* 'it' given above, first person singular *xát* given above, indefinite human *káa* (which behaves predictably), and the rare third person human *u* (the majority use *du=ee* nowadays)
  - > *=ee* + *-C* → *=eeC* or sometimes *=eeC*, needs more work
  - > *=ee* + *-n* → *=éen*<sub>N</sub>, *=éèn*<sub>S</sub>, *=eehn*<sub>T</sub>
  - > *=ee* + *-'* → *=ée*<sub>N</sub>, *=éè*<sub>S</sub>, *=ee'*<sub>T</sub>
- *-jee* 'possession' relational noun
  - > *-jee* + *-C* → *-jeeC*
  - > *-jee* + *-'* → *-jée*<sub>N</sub>, *-jée*<sub>S</sub> (Tongass unknown)
  - > *-jee* cannot occur with *-n*
- *-tú* 'inside' relational noun
  - > *-tú* + *-C* → *-túC*
  - > *-tú* + *-n* → *-tóon*<sub>N</sub>, *-tóòn*<sub>S</sub> (Tongass unknown)
  - > *-tú* + *-'* → *-túo*<sub>N</sub>, *-túò*<sub>S</sub>, *-túo'*<sub>T</sub>
- there are probably a few others that behave similarly, but I haven't hunted for them

#### 4. NOUNS

- nouns are mostly monosyllabic but can be compounded as already shown
    - there are some undecomposable polysyllabic nouns, e.g. *néegwál* 'paint', *ts'axweil* 'crow'
    - but most polysyllabic nouns are either compounds or are derived from verbs
  - noun template
    - Noun + Plural/Diminutive + Possessive + Case
      - plural and diminutive are mutually exclusive
- (1) a. *aḡ hítx'idé*  
*aḡ hítx'-yí-dé*  
 ISG.PSS house-PL-PSS-ALL  
 'toward my houses'
- b. *aḡ hítk'idé*  
*aḡ hítk'-yí-dé*  
 ISG.PSS house-DIM-PSS-ALL  
 'toward my dear house'
- c. \**aḡ hítx'-k'-yí-dé*
- d. \**aḡ hítk'-x'-yí-dé*
- diminutive plurals instead use a special construction *N-x'=sáani*

- (2) a<sub>x̄</sub>      hítx'i sáani  
 a<sub>x̄</sub>      hítx'-j'í=sáani  
 1SG.PSS house-PL-PSS=DIM  
 'my dear houses'
- the =sáani is analyzed as a clitic because it may cause tone neutralization similar to noun compounds: a<sub>x̄</sub> hítx'i sáani
    - > the plural suffix precedes the nominalization suffix on verbs: yéi jínéiyi 'worker' + -x' PL → yéi jínéix'i 'workers'; a<sub>x̄</sub> yéi jínéix'iyí 'my workers'
  - at least the diminutive and plural suffixes cause lengthening of final short vowels
    - > té 'stone' + -k' DIM → téik' 'little stone'; shí 'song' + -x' PL → shéex'
- possession and alienability
    - two basic kinds of nouns: alienable and inalienable
    - alienable nouns can exist without a possessor, and if possessed they have the possessive suffix -j'í
      - hítx 'house'; a<sub>x̄</sub> hídi ← a<sub>x̄</sub> 'my' + hítx 'house' + -j'í PSS
    - inalienable nouns cannot exist without a possessor, and do not have the possessive suffix
      - a<sub>x̄</sub> jín 'my hand' ← a<sub>x̄</sub> 'my' + -jín 'hand'
      - \*jín 'hand'; kaa jín 'someone's hand; a human's hand'
    - inalienable nouns are indicated with an initial en-dash or two hyphens: -jín, --jín
    - inalienable nouns are mostly body parts, but a large number are 'relational nouns' that denote spatiotemporal relationships with their possessor
      - a<sub>x̄</sub> xán 'my vicinity', du yee 'beneath him', hasdu xoo 'among them', a ya.áak 'space or opportunity for it', a wanyáa 'apart from it', a daakashú 'to its detriment; portending ill for it', ...
      - relational nouns are often compounded: du wakshuwadaa 'avoidance of his vision' ← -waak 'eye' + -shú 'tip, end' + -j'á 'face, vertical surface' + -daa 'around'
    - inalienable nouns can be alienated by addition of the possessive suffix; in such cases, body parts are severed from their host body
      - xóots jín 'brown bear's paw'
      - xóots jíní 'a brown bear paw' ← xóots 'brown bear' + -jín 'paw' + -j'í PSS
      - this structure is, as can be seen by the translations, roughly the opposite of English possessives
  - postpositions ~ case suffixes
    - the ergative is a grammatical case suffix, the rest are all positional/locative
    - syntactically, all case suffixes and postpositions are heads of PPs (except the ergative)
    - some are true suffixes, others seem to be clitics or independent words, at least one is both?
    - only one is possible for a given noun, there is no stacking regardless of phonological differences
    - inventory:
      - -ch ergative ERG: subject of transitive verb
- (3) a<sub>x̄</sub>      tláach      a<sub>x̄</sub>      éesh      asixán  
 a<sub>x̄</sub>      tláa-ch      a<sub>x̄</sub>      éesh      a-θ-θ-si-√xan-ÿ  
 1SG.PSS mother-ERG    1SG.PSS father 3.O-ZCNJ-3.S-CL[-D,S,+I]-√love-VAR  
 my      mother-SUBJ    my      father    she.love.IMPFV.him  
 'my mother loves my father', \*'my father loves my mother'
- -x' locative LOC: at, on, in, by

- (4) Sheet'káx' has yatee  
 Sheet'ká-x' has= $\emptyset$ - $\emptyset$ - $\ddot{y}a$ - $\sqrt{ti}$ -h  
 Sitka-LOC PL=3.O-ZCNJ-CL[-D, $\emptyset$ ,+I]- $\sqrt{be}$ -VAR  
 Sitka-in he.PL.be.IMPFV  
 'they are in Sitka'
- › the locative has an allomorph '- ' which is available (though not mandatory) on words ending in CV syllables; Tongass realizes this as glottalization, Southern as falling tone (hence also a long vowel), and Northern as a long vowel with high tone:  $a\ kaa'_T \sim a\ káá'_S \sim a\ káa'_N$  'on its horizontal surface' with  $-ka_T \sim -ká'_S \sim -ka'_N$  'horizontal surface'
  - › thus (4) could also be *Sheet'káa has yatee* in Northern Tlingit
- *-t* punctual PNCT: at a point, to a point, around a point
- (5) haa aanít uwagút  
 haa aan- $\ddot{y}i$ -t u- $\emptyset$ - $\ddot{y}a$ - $\sqrt{gut}$ - $\ddot{y}$   
 1PL.PSS town-PSS-PNCT PFV.TEL-3,S-CL[-D, $\emptyset$ ,+I]- $\sqrt{go}$ .SG-VAR  
 our town-to he.go.PFV.TEL  
 'he got to our town'
- *-x* pertinent PERT: contacting, form of, concerning, member of
- (6) Kaagwaantaan $\bar{x}$  has sítée  
 Kaagwaantaan- $\bar{x}$  has= $\emptyset$ - $\emptyset$ -si- $\sqrt{ti}$ -h  
 Kaagwaantaan.clan-PERT PL=3.O-ZCNJ-CL[-D,s,+I]- $\sqrt{be}$ -VAR  
 Kaagwaantaan.clan-of he.PL.be.member.IMPFV  
 'they are of the Kaagwaantaan clan'
- *-dé* allative ALL: toward, to, until, in the manner of
- (7) yú héende woogoot  
 yú héen-dé  $\ddot{y}u$ - $\emptyset$ - $\ddot{y}a$ - $\sqrt{gut}$ -h  
 D.DIST river-ALL PFV-3,S-CL[-D, $\emptyset$ ,+I]- $\sqrt{go}$ .SG-VAR  
 that river-toward he.go.PFV  
 'he went toward that river'
- *-dáx* ablative ABL: from, out of, due to, after, following
- (8) haa aanídá $\bar{x}$  woogoot  
 haa aan- $\ddot{y}i$ -dá $\bar{x}$   $\ddot{y}u$ - $\emptyset$ - $\ddot{y}a$ - $\sqrt{gut}$ -h  
 1PL.PSS town-PSS-ABL PFV-3,S-CL[-D, $\emptyset$ ,+I]- $\sqrt{go}$ .SG-VAR  
 our town-from he.go.PFV  
 'he went from our town'
- *-náx* perlativ PERL: along, by, via, during, across
- (9) yá héenná $\bar{x}$  woókoo $\bar{x}$   
 yá héen-ná $\bar{x}$   $\ddot{y}u$ - $\emptyset$ - $\ddot{y}a$ - $\sqrt{kux}$ -h  
 D.PROX river-PERL PFV-3,S-CL[-D, $\emptyset$ ,+I]- $\sqrt{go}$ .boat-VAR  
 this river-across/along he.go.by.boat/vehicle.PFV  
 'he boated across/along this river'

- *-gáa* adessive ADES: around, about, near, for the purpose of

(10) káaxweigáa hoon daakahídidé woogoot  
 káaxwei-gáa hoon=daa-ká-hít-ýí-dé yü- $\emptyset$ -ÿa- $\sqrt{\text{gut}}$ -h  
 coffee-ADES sale=around-HSFC-house-PSS-ALL PFV-3.S-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{go}}$ .SG-VAR  
 coffee-for store-toward he.go.PFV  
 ‘he went to the store for coffee’

- *-n ~ =een* instrumental INSTR: with, using, as soon as

(11) kaashaxáshaa een wé tás aawaxaash  
 kaashaxáshaa=een wé tás a-ÿu- $\emptyset$ -ÿa- $\sqrt{\text{xash}}$ -h  
 scissors=INST D.MDST thread 3.O-PFV-3.S-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{cut}}$ -VAR  
 scissors=with that thread he.cut.PFV.it  
 ‘he cut that thread with scissors’

- > since Boas it has been recognized that there is not an entirely clear distinction between the instrumental (here) and the comitative (following)
- > I have found some people who have no distinction between the two, others who have fairly strong judgements, and some who waffle about their judgements
- > the instrumental vs. comitative distinction still needs some real semantics work

- *=teen* comitative COM: along with, accompanying

- > as mentioned above, it’s not entirely clear that this is distinct from *-n ~ =een*

(12) du keidlí teen woogoot  
 du keitl-ÿí=teen yü- $\emptyset$ -ÿa- $\sqrt{\text{gut}}$ -h  
 3.H.PSS dog-PSS=COM PFV-3.S-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{go}}$ .SG-VAR  
 his dog=with he.go.PFV  
 ‘he went with his dog’

- *-ú* locative predicate LOCP: verbless locative

- > this has largely the same semantics as the locative *-x’* but it precludes the use of a verb; it is thus a verb avoidance tool, similar to the focus particles (*áyá*, *áwé*, etc.) being used as copulas

(13) a. a $\bar{x}$  xánu b. aatlein dáanaa du jeewú  
 a $\bar{x}$  xán-ú aatlein dáanaa du jee-ú  
 1SG.PSS beside-LOCP much money 3.H.PSS possession-LOCP  
 ‘(it is) beside me’ ‘(he has) lots of money in his possession’  
 c. \*a $\bar{x}$  xánu yatee d. \*a $\bar{x}$  xánx’ yatee  
 a $\bar{x}$  xán-ú  $\emptyset$ - $\emptyset$ -ÿa- $\sqrt{\text{ti}^h}$ -h a $\bar{x}$  xán-x’  $\emptyset$ - $\emptyset$ -ÿa- $\sqrt{\text{ti}^h}$ -h  
 1SG.PSS beside-LOCP 3.O-ZCNJ-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{be}}$ -VAR 1SG.PSS beside-LOC 3.O-ZCNJ-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{be}}$ -VAR  
 my beside-LOCP it.be.IMPFV my beside-LOC it.be.IMPFV  
 ‘it is beside me’ ‘it is beside me’

- *=jáx* similative SIM: like, as, similar to

(14) xaaw yáx ash tuwáa yatee  
 xaaw=ÿáx ash tú-ÿá’  $\emptyset$ - $\emptyset$ -ÿa- $\sqrt{\text{ti}}$ -h  
 log=SIM 3.PR.X.PSS inside-VSFC-LOC 3.O-ZCNJ-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{be}}$ -VAR  
 log=like her mind-face-at it.be.IMPFV  
 ‘it seemed like a log to her’



- =*yís* benefactive BEN: for, benefiting

(15) a $\bar{x}$     aat yís             $\bar{x}$ waa.oo  
 a $\bar{x}$     aat=*yís*             $\emptyset$ - $\bar{y}$ u- $\bar{x}$ a- $\bar{y}$ a- $\sqrt{\text{u}}$ -h  
 1SG.PSS paternal.aunt=BEN 3.O-PFV-1SG.S-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{buy}}$ -VAR  
 my    paternal.aunt=for I.buy.PFV.it  
 'I bought it for my paternal aunt'

- > Southern and Transitional Northern Tlingit regularly contract -*x'é* 'mouth' and -*jee* 'possession' with =*yís* to form -*x'éís* 'for him to eat' and -*jís* 'for him to have'

(16) du    yátk'i             $\bar{x}'é$ ís  
 du     $\bar{y}$ át-k'- $\bar{y}$ í         $\bar{x}'é$ =*yís*  
 3.H.PSS child-DIM-PSS mouth=BEN  
 'for his little child to eat'

- =*góot* abessive ABES: without, lacking

(17) tléil eex *góot*    oo $\bar{x}$ á  
 tléil eex=*góot*    a-u- $\emptyset$ - $\emptyset$ - $\emptyset$ - $\sqrt{\bar{x}}$ a-'  
 NEG oil=ABES    3.O-IRR-ZCNJ-3.S-CL[-D, $\emptyset$ ,-I]- $\sqrt{\text{eat}}$ -VAR  
 not oil=without he.eat.IRR.IMPFV.it  
 'he doesn't eat it without oil'

- =*nák* elative ELAT: away from, leaving behind

(18) haa    jeex'            a *nák*    has kawdik'éet'  
 haa    jee-x'            a=*nák*    has=ka- $\bar{y}$ u- $\emptyset$ -di- $\sqrt{k}$ 'it'-h  
 1PL.PSS possession-LOC 3.N=ELAT PL=HSFC-PFV-3.S-CL[+D, $\emptyset$ ,+I]- $\sqrt{\text{die.off}}$ -VAR  
 our    possession-in it=from he.PL.die.off.PFV  
 'they died off leaving it behind in our possession'

- =*yáanáx* superlative SUP: more than

(19) hít yáanáx            kawligéi  
 hít=*yáanáx*             $\emptyset$ -ka-w- $\emptyset$ - $\bar{y}$ a- $\sqrt{\text{ge}}$ - $\bar{y}$   
 house=SUP            3.O-HSFC-IRR-ZCNJ-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{big}}$ -VAR  
 house=more.than it.big.COMPV.IMPFV  
 'it is bigger than a house'

- =*kín* sublative SUBL: less than

(20) a $\bar{x}$  *kín*            ikwligéi  
 a $\bar{x}$  *kín*            i-ka-w-li- $\sqrt{\text{ge}}$ - $\bar{y}$   
 1SG=SUB            2SG.O-HSFC-IRR-CL[-D,l,+I]- $\sqrt{\text{big}}$ -VAR  
 me=less.than you.big.COMPV.IMPFV  
 'you are smaller (less big) than me'

- the ones that act like clitics or independent words probably were derived from relational nouns in the not too distant past

- also, allative -*dé* is probably derived from *dei* 'path, trail, road'

## 5. VERBS

Verbs are described using a verb template with slots for each morpheme position class, numbered positively from the root leftward (prefixes) and negatively from the root rightward (suffixes). The template makes no distinction between affix and clitic.

- roughly, the verb template looks like:
  - Preverbs<sub>S+17</sub> — Object<sub>+14</sub> — TAM<sub>+7 - +4</sub> — Subject<sub>+2</sub> — Classifier<sub>+1</sub> —  $\sqrt{\text{Root}}$ <sub>0</sub> — Stem Variation<sub>-1</sub>
- preverbs are largely adverbial-like proclitics that are phonologically tied to the verb
  - some preverbs take selected postpositions, hence are derived from PPs
- unlike Dene languages, the subjects are all right next to the classifier and root
  - third person subject is  $\emptyset$ , the rest are surface prefixes
  - the areal *ku-* can be considered a subject though it is near the objects, but its function as a subject is irregular; in e.g. *kuwak'éi* ‘it is nice weather’ the *ku-* is either an object of an unaccusative intransitive or it is a kind of incorporate, in either case it is not coindexable with any DPs in the sentence
- the most salient tense-aspect-mood (TAM) marking is between the subject and object
  - TAM is also marked in other slots, e.g. duration suffixes in -3, mode suffixes in -4, epimode in -5, auxiliaries (enclitics) in -7
- stem variation is the morphology accounting for changes in the verb root (length, tone, and apophony)
- there are various other things like the number prefixes (+16 – +15), incorporated nouns (+13 – +9), self-benefactive (+8), distributive (+3), derivational suffixes (-2), clause type (-6), and so forth
- I segment and gloss verbs according to the usual linear convention as done for most languages

- (21) a.    at *xwasiteen*    b.    sh *gugas.áat'*  
           at- $\check{y}u$ -*x*a-si- $\sqrt{\text{tin}}$ -h    sh-ga-w-ga- $\emptyset$ -s- $\sqrt{\text{at}}$ :-  
           IND.N.O-PFV-1SG.S-CL[-D,S,+I]- $\sqrt{\text{see}}$ -VAR    RFLX.O-GCNJ-IRR-GMOD-3.S-CL[+D,S,-I]- $\sqrt{\text{cold}}$ -VAR  
           I.see.PFV.something    he.CAUSV.cold.FUT.self  
           ‘I saw something’    ‘he will chill himself’

- but I actually think of verbs in a multilayer analysis where separate portions of the verb are morphologically arranged and then linearized and phonologically processed
  - the three main layers are the verb theme (lexical entry), person inflection, and mode (TMA) inflection

	<i>theme</i>		O		S		[-D]		[s]		$\sqrt{\text{tin}}$
	<i>person</i>		at-		<i>x</i> a-						
			IND.N.O		1SG.S						
	<i>mode</i>		$\check{y}u$ -				[+I]				-h
			PFV								VAR
(22) a.	at-	$\check{y}u$ -	<i>x</i> a-	[-D]	[s]	[+I]	$\sqrt{\text{tin}}$	-h			
	at	<i>x</i> w	a	si			teen				
	at <i>x</i> w	a			si			teen			
		at <i>x</i> wasiteen									
		‘I saw something’									

<i>theme</i>	O			S	[-D]	[s]		√.at'	
<i>person</i>	sh-			∅-	[+D]				
	RFLX.O			3.S					
<i>mode</i>		ga-	w-	ga-			[-I]		-:
		G <sub>CNJ</sub>	IRR	G <sub>MOD</sub>					VAR
b.	sh-	ga-	w-	ga-	∅-	[+D]	[s]	[-I]	√.at' -:
	sh			guga			s		.áat'
				sh guga			s		.áat'
				sh gugas					.áat'
				sh gugas.áat'					
				'he will chill himself'					

- this representation is more clear regarding the relationships between the affixes in the verb, but it takes up much more space and hence is not suitable for large numbers of examples

### 5.1. VERB THEME

A verb theme is the lexical entry of a verb; 'thematic' means 'lexically specified as part of the verb'. Technically the term 'verb' covers all instances of that grammatical category, whereas the term '(verb) theme' refers solely to the lexical entry. In practice this distinction is rather loose, but the adjective 'thematic' is never used for non-lexical elements.

#### • Verb theme examples

- *O-S-CL*[-D,∅]-√*x*a (∅; -' Act) 'S eat O'
- *kei=ji-S-CL*[-D,l]-√*tsak* (∅; Evt) 'S raise hand'
- *O-CL*[-D,∅]-√*ti<sup>h</sup>* (*na*; -*h* Stv) 'O be'
- *ku-CL*[-D,∅]-√*t'a* (∅; -*h* Stv) 'weather be hot'
- the *O* is the object, *S* is the subject
- things like *kei=* 'up', *ji=* 'hand', and *ku=* 'areal' are thematic, i.e. lexically specified morphemes
- the *CL*[±D,C] stands for the two lexically specified classifier components
- the root is helpfully annotated with a √ symbol, when not annotated it is normally the last element in the theme (though some suffixes are thematic)
- the 'verb ephemera' are listed in parentheses after the morpheme string, those here comprise:
  - the conjugation class (∅, *na*)
  - the imperfective stem variation (-', -*h*)
  - and the theme category (Act, Evt, Stv)
  - the latter two taken together indicate the imperfective type
- the schematic translation is given in single quotes

#### • Verb ephemera

- some elements of verb themes appear in most forms of the verb theme across the inflectional paradigm, but other elements only appear in a few less common parts of the paradigm
- the elements that appear in almost every form are the root, classifier components, argument structure (subject and object requirements), and thematic (lexically specified) prefixes

- verb themes may also include bound phrases like *N-dáx* ‘from N’ which are obligatory in every form and hence are also obvious
- the less obvious elements are the ‘verb ephemera’, which are the conjugation class, imperfective type, theme category, and unpredictable repetitive imperfective types
- as shown above, themes are given as morpheme strings representing the obvious elements followed by parentheses enclosing the verb ephemera, and finally a schematic translation
- specific ephemeral elements will be discussed individually below
- Verb root
  - basically either CV or CVC; more details under stem variation below
  - a few unanalyzable disyllabic roots, e.g.  $\sqrt{néegwál}$  ‘paint’,  $\sqrt{eeshaan}$  ‘pitiful, pitiable’
  - most disyllabic roots are from monosyllabic roots plus a derivational suffix like *-xaa* ‘miss target’, *-án* ‘restore’, or *-ákw* ‘deprive’:  $\sqrt{únxaa}$  ‘miss target when shooting’,  $\sqrt{haanán}$  ‘restore confidence by reelection’,  $\sqrt{nóox’ákw}$  ‘remove shell’
  - some roots are derived from nouns, e.g.  $\sqrt{jín}$  ‘have arm, hand’ from *-jín* ‘arm, hand’
  - roots carry the majority of the lexical semantics, but some can be provided by other morphological components of the verb theme, e.g. the classifier S component, incorporated nouns, preverbs, verb ephemera
  - most roots have a fairly well defined general meaning, but some occur in such a wide variety of verb themes that they are almost meaningless independently
  - most roots only occur in a couple of verb themes, but some occur in a large number of themes, 40 or more; roots that are found in a large number of themes are called ‘promiscuous roots’
  - homophonous roots are distinguished mostly by their semantics, but also by the patterns of argument structure across the themes they occur in; some homophonous roots use different classifiers as well
    - the distinctions between some homophonous roots derive from subtle frozen metaphors
    - some roots have been divided into homophonous pairs merely because the semantics in different themes are so distant, but such distinctions may be spurious
    - drawing the lines between themes of homophonous roots can boil down to aesthetics
- Classifier S & D components
  - D component is usually CL[–D], but some verb themes have CL[+D] unpredictably
  - S component can be any of { $\emptyset$ , *s*, *l*, *sh*} unpredictably
  - more about these under the classifier below
  - as a shorthand in informal materials, I often merely give the classifier as just its S component because CL[–D] is typical, so e.g. *O- $\emptyset$ - $\sqrt{ti}^h$*  (*na; -h* Stv) ‘O be’
    - Leer (1991) gives the classifier as an unadorned morpheme, e.g. “*O-S-t-yex*” for my *O-S-[l]- $\sqrt{yex}$* ; he includes the D component as a feature, e.g. “*O-S- $\emptyset$ +D-na*” for my *O-S-[+D, $\emptyset$ ]- $\sqrt{na}^h$*
    - Edwards (2009) also gives the classifier as an unadorned morpheme, but treats the D component as a prefix (which is neater but analytically misleading as discussed below), e.g. “*O-S-d-s-gáax*” for my *O-S-[+D,s]- $\sqrt{gáax}$*  and “*O-S-d-l-k’wát*” for my *O-S-[+D,l]- $\sqrt{k’wát}$* ”
- Argument structure (valency): [ $\pm$ S,  $\pm$ O]
  - transitive: [ $\pm$ S,  $\pm$ O]
  - subject intransitive (unergative): [ $\pm$ S, –O]
  - object intransitive (unaccusative): [–S,  $\pm$ O]
  - impersonal: [–S, –O]
    - impersonal verbs usually – but not always! – have a thematic pronominal prefix for either subject or object or both

- thematic pronominals: some verbs include lexically specified (thematic) subject or object prefixes, these will be covered more under person inflection and valency below
  - Conjugation class:  $\{\emptyset, na, ga, ga\}$ 
    - except for motion verbs, every verb theme belongs to a specific conjugation class
    - the verb theme's conjugation class prefix is used in a number of different modes, e.g. imperative, habitual, potential, extensional stative imperfective, conditional, contingent
      - Cable (p.c. 2012) notes:
        - ... one way I generally represent it to myself is that an overt conjugation prefix appears in *every* mode except for (i) perfective, (ii) imperfective (at least, non-extensional ones), and (iii) future (where the proclitic is used). Moreover, the only mode where conjugation class is guaranteed to have *no* effect on the form is the imperfective (at least, again, for the non-progressive, extensionals or multiple-positionals...)
    - specific conjugation class prefixes are used in certain modes regardless of the conjugation class of the verb theme, e.g. progressive imperfective always has *na-* and future always has *ga-*; these block the conjugation class, so that other conjugation class representatives appear (mostly directional preverbs)
    - the conjugation class is essentially meaningless, but does take on some meaning in motion verbs which will be discussed later
    - Leer calls them 'aspect', though this has little to do with the conventional sense of linguistic aspect
  - Imperfective type and stem variation
    - except for eventive and motion themes, all verbs have an unpredictable 'primary imperfective'
    - main difference among primary imperfectives is in stem variation
    - active:  $-i, -h, -', -n, -s', -l', -t, -x', -t', -k, CL[+I]-\dots-k, yoo=CL[+I]-\dots-k$
    - stative:  $-i, -\ddot{y}, -n, -h, -h$  extensional,  $-\ddot{y}$  extensional,  $-k$  multipositional, invariable
    - positional:  $-i, -', -n$
  - Theme category:<sup>7</sup> {active, stative, positional, eventive, motion}
    - a theme category is "a broad group of verb themes that has an identifiable semantic relationship and a common structure in the most basic derived verb forms" (Kari 1990: 44–45)
    - stative verb themes always have  $CL[+I]$  in their imperfective forms, whereas other theme categories nearly all have  $CL[-I]$  in their imperfectives instead
      - some specialized stative subcategories are extensional statives which denote a state extended over some roughly linear space, and multipositional statives which denote a state of being positioned in multiple locations (e.g. rocks on a beach, puddles along a path)
      - following Athabaskanist tradition, statives are also divided into dimensional statives which have comparative forms using  $ka-w[-I]-\dots-i$  or  $ga-w[-I]-\dots-i$ , and descriptive statives which do not have comparative forms
        - › the theme  $O[-D, \emptyset]-\sqrt{yat}$  (*na; -\ddot{y}* Stv) 'O be long' is a dimensional stative
- (23) a.  $yayát'$   
 $\emptyset-\emptyset-\ddot{y}a-\sqrt{yat}'-\ddot{y}$   
 3.O-ZCNJ-CL[-D,  $\emptyset$ , +I]- $\sqrt{long}$ -VAR  
 it.be.long.IMPFV  
 'it's long'
- b.  $yéi koowáat'$   
 $yéi=\emptyset-ka-w-\emptyset-\emptyset-\sqrt{yat}'-i$   
 thus=3.O-HSFC-IRR-ZCNJ-CL[-D,  $\emptyset$ , -I]- $\sqrt{long}$ -VAR  
 thus=it.be.long.COMP.V.IMPFV  
 'it's yay long'

7. The active–neuter distinction in Dene (Athabaskan) languages does not obviously apply to Tlingit, which instead distinguishes statives ( $[+I]$  classifier in realis imperfectives) versus all others ( $[-I]$  in realis imperfectives). Leer did refer to stative themes as 'neuter' in the 1970s, but that term is defunct today for Tlingit.

› contrast the theme  $O\text{-}CL[-D, \emptyset]\text{-}\sqrt{k'ei^x}$  (*ga*; Stv) ‘O be good’ which is a descriptive stative

- |         |   |    |   |
|---------|---|----|---|
| (24) a. | yak'ei<br>$\emptyset\text{-}\emptyset\text{-}\ddot{y}a\text{-}\sqrt{k'ei^x}$<br>3.O-ZCNJ-CL[-D, $\emptyset$ , +I]- $\sqrt{good}$<br>it.be.good.IMPFV<br>‘it’s good’ | b. | *yéi kook'ei<br>yéi= $\emptyset$ -ka-w- $\emptyset\text{-}\emptyset\text{-}\sqrt{k'ei^x}$<br>thus=3.O-HSFC-IRR-ZCNJ-CL[-D, $\emptyset$ , -I]- $\sqrt{good}$<br>thus=it.be.good.COMP.V.IMPFV<br>‘it’s so good’ (‘so’ ≠ emphasis) |
|---------|---|----|---|

- active verb themes denote processes which may or may not culminate; Leer (1991) refers to these as ‘processive’ but previously used ‘active’ and has since returned to this, Edwards (2009) uses ‘active’
- positional verb themes denote position in a location; they can only occur in the imperfective mode, never in any other mode
- eventive verb themes mostly denote instantaneous culminative events; they can’t occur in the imperfective, and can basically be called achievements
- motion verbs denote kinds of motion; they are a complex issue which will be covered separately below
- Repetitive imperfective types
  - regardless of whether a verb theme has a primary imperfective, it can always(?) have at least one repetitive<sup>8</sup> imperfective
  - usually the conjugation class predicts the repetitive imperfective:
    - $\emptyset$ -conjugation class →  $\text{-}\ddot{x}$  repetitive imperfective
      - ›  $O\text{-}S\text{-}[s]\text{-}\sqrt{i}$  ( $\emptyset$ ; -h Act) ‘S cook O’ — *as.éex* ‘he cooks it repeatedly’
    - *na*-conjugation class → *yoo*=CL[+I]-...-*k* repetitive imperfective
      - ›  $O\text{-}S\text{-}[\emptyset]\text{-}\sqrt{l'u'n}$  (*na*; -: Act) ‘S hunt O’ — *yóo ayal'únk* ‘he hunts it repeatedly’
    - *ga*-conjugation class → *yéi*= + -*ch* repetitive imperfective
      - ›  $a\text{-}[+D, \emptyset]\text{-}\sqrt{gan}$  (*ga*; Evt) ‘sun shine’ — *yéi andagán* ‘the sun shines repeatedly’
    - *ga*-conjugation class → *kei*= + -*ch* repetitive imperfective
      - ›  $O\text{-}[l]\text{-}\sqrt{tsin}$  (*ga*; -h Stv) ‘O be strong’ — *kei latsínch* ‘he gets strong repeatedly’
  - but some verb themes have unpredictable repetitive imperfectives instead
    - verb theme:  $S\text{-}[\emptyset]\text{-}\sqrt{ta^h}$  (*na*; -' Act) ‘S sleep’
    - since this theme is *na*-conjugation class we expect a *yoo*=CL[+I]-...-*k* repetitive imperfective
    - but \**yoo yatéik* ‘he sleeps repeatedly’ is ungrammatical
    - instead this theme uses the  $\text{-}\ddot{x}$  repetitive imperfective as though it were  $\emptyset$ -conjugation
    - so *téix* ‘he sleeps repeatedly’
    - the verb theme is then listed more explicitly as:  $S\text{-}[-D, \emptyset]\text{-}\sqrt{ta^h}$  (*na*; -' Act,  $\text{-}\ddot{x}$  Rep) ‘S sleep’
    - the reasons for these irregular repetitive imperfectives remain to be explained
- Bound phrases
  - some verb themes include adjunct phrases that are lexically specified and must be immediately preceding the verb
  - these are given immediately before the verb morpheme string in citations:
    - $N\text{-}\ddot{x}\text{-}O\text{-}[-D, s]\text{-}\sqrt{ti^h}$  (*na*; -h Stv) ‘O be N, be member of N, become N’
    - *N eetéenáx*  $O\text{-}[-D, \emptyset]\text{-}\sqrt{ti^h}$  (*na*; -h Stv) ‘O need, lack, require N’
    - *N toowú*  $S\text{-}[-D, l]\text{-}\sqrt{t'a}$  ( $\emptyset$ ;  $\text{-}\ddot{x}$  Act) ‘S comfort N’
    - *N tú-ýá-~x'*  $S\text{-}[-D, s]\text{-}\sqrt{gu}$  (*ga*;  $\text{-}\ddot{y}$  Stv) ‘N want S; S be pleasing to N’

8. Leer (1991) in some places refers to repetitive imperfectives as ‘iterative’, loosely following Athabaskanist terminology. Elsewhere he has used ‘repetitive’, as has Edwards (2009).

- the bound phrase usually includes a variable NP element signified by  $N^9$
- the  $N$  can be the possessor of another noun (e.g.  $N$  possesses *-toowú* giving ‘ $N$ ’s feelings’), or it can be the direct argument of a postposition (e.g.  $N$  + pertaining  $-x$ )
- occasionally adverbs are listed as well, but these have no variable argument, e.g. *tleiyéi* in the theme *tleiyéi yéi=O-[∅]-√ti<sup>h</sup> (na; -h Stv)* ‘O be still, quiet; O stop’
- along with adverbs, there are a few themes that require nouns without any variable possessor, e.g. *ká-x* ‘HSFC-PERT’ in the theme *káx O-S-[+D,∅]-√ti<sup>h</sup><sub>2</sub> (ga; Evt)* ‘S put on O (shirt, dress)’
  - Leer attributes this to an invisible reflexive possessor (normally *chush ~ sh*) coindexed with the subject, compare the disappearance of reflexive object *sh-* with incorporated nouns as noted in section 5.2 below

## 5.2. PERSON INFLECTION AND VALENCY

- verb themes come with their valency (argument structure) lexically specified: [ $\pm S, \pm O$ ]
- subjects are all – unlike in Dene (Athabaskan) lgs. – marked immediately to the left of the classifier
- objects are all marked in slot +14 quite far from the classifier and root
- subjects are 1st singular *xá-* and plural *tu-*, 2nd singular *i-* and plural *ji-*, third  $\emptyset$ -, indefinite human *du-*, and third obviate *du-*
  - formally both *du-* prefixes are identical, the functional distinction is whether it has a definite referent or not
  - 2nd singular *i-* becomes  $\emptyset$ - in imperatives if the classifier is [ $-D$ ]
- objects are 1st singular *xat-* ~ *ax-* and plural *haa-*, 2nd singular *i-* and plural *ji-*, third  $\emptyset$ - ~ *a-*, third proximate *ash-*, indefinite human *kaa-* ~ *ku-*, indefinite nonhuman *at-*, reflexive *sh-* ~  $\emptyset$ -, and partitive *aa-*
  - first singular object *ax-* occurs optionally (idiolectally?) with incorporated nouns, thus appearing to be a possessor
  - third object *a-* occurs when there is a third subject  $\emptyset$ -, so *a-* is distinct 3-on-3 marking
    - third object *a-* goes back to  $\emptyset$ - if an ergative-marked NP immediately precedes the verb; more on this later in the context of syntax
  - indefinite human *ku-* happens instead of *kaa-* with some verbs, and might be a locus of idiolectal (or dialectal?) variation
  - reflexive *sh-* becomes  $\emptyset$ - when occurring with incorporated nouns; since inflectional use of the reflexive always causes [ $+D$ ] in the classifier, the  $\emptyset$ - seems to really exist morphologically
- thematic pronominals are nonreferential and lexically specified; they are restricted to:
  - subjects: *du-* ‘indefinite human subject’
  - objects: *a-* ‘third person object’, *ash-* ‘third person proximal object’, *at-* ‘indefinite nonhuman object’, *sh-* ‘reflexive object’
- thematic pronominals never agree with any NPs in the sentence
- the presence of a thematic pronominal blocks any other prefix in that slot, hence thematic pronominals restrict the valency of a verb
- areal *ku-* is morphologically identical with the *ku-* allomorph of the indefinite human object (*kaa-* ~ *ku-*); some have separated these, but for others the areal *ku-* is distinct and does not block the object slot

9. Edwards and Leer both list bound phrases with  $P$  for NPs that are arguments of postposition phrases and  $N$  for NPs that are possessors of other NPs. I see no reason to explicitly distinguish these, so I simply use  $N$  for both. Using  $P$  is also confusing to people expecting it to mean ‘postposition’.

- so the areal *ku-* may or may not be a thematic pronominal

(25) a.	Áankichx’ Áankich-x’ Anchorage-LOC ‘I was born in Anchorage’	<b>ku</b> xwdzitee <b>ku</b> -ÿu-xa-dzi-√ti <sup>h</sup> -h AREAL-PFV-1SG.S-CL[+D,S,+I]-√be-VAR	b. */√	Áankichx’ Áankich-x’ Anchorage-LOC ‘I was born in Anchorage’	<b>xat ku</b> owdzitee <b>xat-ku</b> -ÿu-dzi-√ti <sup>h</sup> -h 3.O-AREAL-PFV-CL[+D,S,+I]-√be-VAR
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- for people with areal *ku-* in the object slot only (a) is grammatical
- for people with the areal separate from the objects, (b) is grammatical and (a) is not used though it is accepted from others

- the representation of the theme is then either one of:

- *N-x’ ku-S-CL[+D,S]-√ti<sup>h</sup> (ga; -h Stv)* ‘S be born at N’
- *N-x’ O-ku-CL[+D,S]-√ti<sup>h</sup> (ga; -h Stv)* ‘S be born at N’

- some other person and number inflection is also available outside of the subject and object

- reciprocal *woosh=* (+16) ‘each other’
  - this triggers middle voice marking with classifier CL[+D] (more detail in section 5.4)

(26) a.	wutusiteen Ø-ÿu-tu-si-√tin-h 3.O-PFV-1PL.S-CL[-D,S,+I]-√see-VAR we.see.PFV.it ‘we saw it’	b.	<b>woosh</b> wutudziteen <b>woosh</b> =Ø-ÿu-tu-dzi-√tin-h RECIP=3.O-PFV-1PL.S-CL[+D,S,+I]-√see-VAR we.see.PFV.RECIP.it ‘we saw each other’
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- there is an outstanding question of whether the third person object still exists in reciprocals

- distributive *dax=* (+16) ‘each, individually among’

(27) a.	xwasiteen Ø-ÿu-xa-si-√tin-h 3.O-PFV-1SG.S-CL[-D,S,+I]-√see-VAR I.see.PFV.it ‘I saw it’	b.	<b>dax</b> xwasiteen <b>dax</b> =Ø-ÿu-xa-si-√tin-h DISTB=3.O-PFV-1SG.S-CL[-D,S,+I]-√see-VAR I.see.PFV.DISTB.it ‘I saw each one’
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- plural *has=* ~ *s-* (+15)
  - this is ambiguous between pluralization of subject and pluralization of object in the case that both are third person

(28) a.	awsiteen a-ÿu-Ø-si-√tin-h 3.O-PFV-3.S-CL[-D,S,+I]-√see-VAR 3.see.PFV.3 ‘he saw it’	b.	<b>has</b> awsiteen <b>has</b> =a-ÿu-Ø-si-√tin-h PL=3.O-PFV-3.S-CL[-D,S,+I]-√see-VAR 3.see.PFV.PL.3 ‘he saw them’, ‘they saw him’, ‘they saw them’ (?)
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- but with persons that include plurality the plural prefix does not apply, so only the third person argument can be pluralized

(29) a.	<b>has</b> wutusiteen <b>has</b> =Ø-ÿu-tu-si-√tin-h PL=3.O-PFV-1PL.S-CL[-D,S,+I]-√see-VAR we.see.PFV.PL.3 ‘we saw them’	b.	<b>has</b> haa wsiteen <b>has</b> =haa-ÿu-Ø-si-√tin-h PL=1PL.O-PFV-3.S-CL[-D,S,+I]-√see-VAR 3.see.PFV.PL.us ‘they saw us’
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- reflexive *sh-* (+14) ‘self’
  - this triggers middle voice marking with classifier CL[+D]

(30) a.	<i>xwasiteen</i>	b.	<i>sh xwadziteen</i>
	$\emptyset$ - <i>yü-xa-si-√tin-h</i>		<i>sh-yü-xa-dzi-√tin-h</i>
	3.O-PFV-1SG.S-CL[-D,S,+I]-√see-VAR		RFLX.O-PFV-1PL.S-CL[+D,S,+I]-√see-VAR
	I.see.PFV.it		I.see.PFV.RFLX
	‘I saw it’		‘I saw myself’

- the reflexive *sh-* is usually analyzed as an object prefix, but there may be reasons to consider it as not being an object prefix itself, instead modifying a third person object like with the reciprocal, distributive, etc.
- self-benefactive *ga-* (+8) ‘for own benefit’
  - this triggers middle voice marking with classifier CL[+D]

(31) a.	<i>wutusi.ée</i>	b.	<i>gawtudzi.ée</i>
	$\emptyset$ - <i>yü-tu-si-√i-ÿ</i>		$\emptyset$ - <i>ga-yü-tu-dzi-√i-ÿ</i>
	3.O-PFV-1PL.S-CL[-D,S,+I]-√cook-VAR		3.O-SBEN-PFV-1PL.S-CL[+D,S,+I]-√cook-VAR
	we.cook.PFV.it		we.cook.PFV.SBEN.it
	‘we cooked it’		‘we cooked it for ourselves’

- distributive *daga-* ~ *dax-* (+3) ‘each, individually among’
  - essentially the same as the *dax=* found in +16; these are *positional* allomorphs as well as this +3 prefix having two *phonological* allomorphs
  - here’s an example from Story (1966: 97)

(32) <i>kudagalt’ix’ch</i>	<i>yá xáat</i>
$\emptyset$ - <i>ka-u-∅-daga-∅-la-√t’ix’-ÿ-ch</i>	<i>yá xáat</i>
3.O-HSFC-IRR-ZCNJ-DISTB-3.S-CL[-D,l,-I]-√freeze-VAR-HAB	PROX fish
3.freeze.HAB.DISTB.3	this fish
‘he freezes each of these fish’	

- Leer (1991: 104–107) discusses both distributive prefixes and finds that the +3 instance is older, but is being supplanted by the +16 instance
  - › he says that the fewer prefixes, the more likely +3 is to be used, and conversely for the +16 form
  - differences in scope between the two forms have yet to be explored
- plural root suppletion (o), e.g. *√gut* ‘sg. go’ → *√.at* ‘pl. go’
  - verb root suppletion for plurality occurs mostly with movement and handling verbs

(33) a.	<i>aadé xwaagoot</i>	b.	<i>aadé wutuwa.aat</i>
	<i>á-dé yü-xa-ÿa-√√gut-h</i>		<i>á-dé yü-tu-ÿa-√.at-h</i>
	3N-ALL PFV-1SG.S-CL[-D,∅,+I]-√go.SG-VAR		3N-ALL PFV-1PL.S-CL[-D,∅,+I]-√go.PL-VAR
	it-toward I.go.SG.PFV		it-toward we.go.PL.PFV
	‘I went toward there’		‘we went toward there’

- plural object *-x’* & *-t’* (-3)
  - the *-x’* applies to active imperfective themes and pluralizes the object
  - the *-t’* applies to active imperfective themes which denote an event leading to the destruction of the object, and pluralizes the object
  - more on these in section 5.6 on imperfective types

- Leer has two unpublished mss analyzing pronominals in an idiosyncratic way: Leer 1990a, Leer 1993

### 5.3. STEM VARIATION

Stem variation is the regular, largely predictable change in root vowels depending on mode inflection. There are some interesting patterns in the stem variation system, but meanings should not generally be read into the stem variation suffixes. Some suffixes do have an identifiable meaning because of their use in forming different kinds of imperfectives, and presumably all of the various suffixes involved used to have some sort of meaning in an earlier stage of the language.

- stem variation is quite similar to that in Dene (Athabaskan) languages and Eyak; Benjamin L. Whorf describes it succinctly in a paper for a class on Dene languages by Edward Sapir:
  - each stem [has] a series of forms (like IE “principal parts”) largely due to old closely fused suffixes that have resulted in vowel and tone change, so that this stem-variation may be considered schematically as another position coming fusionally or “inflectionally” after the stem (Whorf 1932: 6–7)
  - the distributional patterns across a paradigm in Tlingit are completely different from Dene languages, but the underlying mechanisms are quite similar
  - I think that compared to most Dene languages the stem variation system of Tlingit is somewhat more transparent and less complicated
- I represent stem variation by mostly abstract suffixes that combine with the root, placing the stem variation suffixes in slot –1 immediately after the root just as Whorf proposed
- most stem variation suffixes don’t have any obvious meaning, and are instead just analytical tools
- the *-n*, *-j̄*, and *-X* suffixes actually have surface segments associated with them and don’t just affect the vowel
- the *-X* is a generic suffix that stands for any of {*-k*, *-x*, *-ch*, *-t*, *-x'*, *-t'*, *-s'*, *-l'*} which produce the same stem shapes
  - these aren’t actually stem variation suffixes per se because they have identifiable meanings (repetitive, serial, plural object, etc.), but they behave like the stem variation suffixes in affecting root vowels so they are lumped together with them for stem analysis
- examples of a CV root:
  - root  $\sqrt{cha}$  ‘filter’ + stem var. *-h* → stem *chaa*
  - root  $\sqrt{cha}$  ‘filter’ + stem var. *-j̄* → stem *cháa*
  - root  $\sqrt{cha}$  ‘filter’ + stem var. *-:* → stem *cháa*
  - root  $\sqrt{cha}$  ‘filter’ + stem var. *-'* → stem *chá* (note that *-'* only occurs with CV roots, more later)
  - root  $\sqrt{cha}$  ‘filter’ + stem var. *-n* → stem *chéin*
  - root  $\sqrt{cha}$  ‘filter’ + stem var. *-x* → stem *chéix*
- the results of stem variation are different for CVC roots:
  - root  $\sqrt{nak}$  ‘pl. stand’ + stem var. *-h* → stem *naak̄*
  - root  $\sqrt{nak}$  ‘pl. stand’ + stem var. *-j̄* → stem *nák̄*
  - root  $\sqrt{nak}$  ‘pl. stand’ + stem var. *-:* → stem *náak̄*
  - root  $\sqrt{nak}$  ‘pl. stand’ + stem var. *-n* → stem *nák̄*
  - root  $\sqrt{nak}$  ‘pl. stand’ + stem var. *-x* → stem *nák̄x*
- but there’s more – both CV and CVC roots have different subtypes depending on how they behave with certain stem variation suffixes
  - CVC (‘plain’) roots behave as shown above
  - CVC (‘ejective’) roots with final ejectives have a different form with *-h*:
    - $\sqrt{k'it}$  ‘die out’ + *-h* → *k'éet'*, \**k'eeet'*
    - the final ejective ‘pulls up’ tone, presumably due to something like spread of a [c.g.] feature
  - CV'C (‘glottalized’) roots lack final ejectives but still behave like CV'C roots with *-h*:

- $\sqrt{l'u'n}$  ‘hunt’ +  $-h$  →  $l'óon$ ,  $*l'oon$ ;  $\sqrt{tsu'w}$  ‘move pl. stick ends’ +  $-h$  →  $tsóow$ ,  $*tsoow$
- many of these end in a sonorant so they perhaps developed from regressive [c.g.] spread and consequent loss of glottalized sonorants; some may show forward [c.g.] spread from onset ejectives
- in Tongass Tlingit, both  $-h$  and  $-:$  give glottalized forms  $CV'C$ , but just  $CVC$  with  $-n$ ,  $-j̃$ , and  $-X$ , so Tongass distinguishes  $CVC'$  and  $CV'C$  roots on the basis of  $-:$  as well
- CV (‘plain’) roots<sup>10</sup> behave as shown above
- CV<sup>h</sup> (‘fading’) roots have a different form with  $-X$ :
  - $\sqrt{ta^h}$  ‘sleep’ +  $-x$  →  $t'eix$ ,  $*t'éix$
  - in Tongass Tlingit these are realized with a fading vowel:  $t'eihx$
- the  $-j̃$  ‘gamma’ stem variation suffix is usually invisible, but shows up when combined with the  $-ch$  habitual suffix and a CV or CV<sup>h</sup> root
  - $\sqrt{cha}$  ‘filter’ +  $-ch_{HAB}$  →  $cháaych$ ,  $*cháach$  (again  $j̃ > y$  in gammaless Tlingit)
  - $\sqrt{ta^h}$  ‘sleep’ +  $-ch_{HAB}$  →  $táaych$ ,  $*táach$  (here  $j̃ > y$  in gammaless Tlingit)
  - $\sqrt{ku}$  ‘know’ +  $-ch_{HAB}$  →  $kóowch$ ,  $*kóoch$  (here  $j̃ \rightarrow w$  always)
- some verb roots are invariable — I indicate invariable roots with a superscript saltire cross <sup>\*</sup> at the end:  $\sqrt{dzée}^*$  ‘difficult’,  $\sqrt{néegwál}^*$  ‘paint’
  - Leer instead indicates *variable* roots with a superscript asterisk <sup>\*</sup> and leaves invariable roots unmarked; Edwards follows Leer in marking variable roots but uses a final tilde  $\sim$  rather than an asterisk
  - since most roots are variable and invariable roots are the exception, I find it more useful – and more concise – to indicate only the *invariable* roots
  - invariable roots have their tone, length and vowel quality exactly the same in every mode, so that stem variation does not occur, and stem variation suffixes are never segmented

- (34) a. yasátk  
 $\emptyset$ - $\emptyset$ - $\dot{y}a$ - $\sqrt{sátk}^*$   
 3.O-ZCNJ-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{quick}}$   
 ‘it is quick’
- b. woosátk  
 $\emptyset$ - $\dot{y}u$ - $\dot{y}a$ - $\sqrt{sátk}^*$   
 3.O-PFV-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{quick}}$   
 ‘it was quick’

- there is one exceptional invariable root which *does* undergo stem variation, namely  $\sqrt{k'éi}^*$  ‘good’; this root is almost always invariable except that it takes  $-'$  stem variation in all irrealis forms (see the classifier S component in section 5.4 below for discussion of the  $\emptyset \rightarrow sh$  alternation)

- (35) a. yak'éi  
 $\emptyset$ - $\emptyset$ - $\dot{y}a$ - $\sqrt{k'éi}^*$   
 3.O-ZCNJ-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{good}}$   
 ‘it is good’
- b. tléil ushk'é  
 tléil  $\emptyset$ -u- $\emptyset$ -sha- $\sqrt{k'éi}^*$ -'  
 NEG 3.O-IRR-ZCNJ-CL[-D,sh,-I]- $\sqrt{\text{good-VAR}}$   
 ‘it’s not good; it’s bad’
- c. wook'éi  
 $\emptyset$ - $\dot{y}u$ - $\dot{y}a$ - $\sqrt{k'éi}^*$   
 3.O-PFV-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{good}}$   
 ‘it was good’
- d. tléil wushk'é  
 tléil  $\emptyset$ -u- $\dot{y}u$ -sha- $\sqrt{k'éi}^*$ -'  
 NEG 3.O-IRR-PFV-CL[-D,sh,-I]- $\sqrt{\text{good-VAR}}$   
 ‘it was not good; it was bad’

#### 5.4. THE CLASSIFIER

- the classifier is a tripartite portmanteau morpheme: CL[ $\pm D$ , S,  $\pm I$ ] where  $S \in \{\emptyset, s, l, sh\}$

10. Leer represents these as glottalized CV' but they never actually occur glottalized in any contrast with CV<sup>h</sup> roots.

- the first part, the feature [ $\pm D$ ], is the D component, the second feature [S] is the S component (from consonant ‘series’), and the third feature [ $\pm I$ ] is the I component
- the classifier features are realized almost like surface segments, but there are enough inconsistencies to where they must be analyzed as abstract features rather than as purely phonological elements

		-D		+D	
		-I	+I	-I	+I
S (series)	$\emptyset$	$\emptyset$ -	<i>y</i> a-	da-	di-
	s	sa-	si-	s-	dzi-
	l	la-	li-	l-	dli-
	sh	sha-	shi-	sh-	ji-

- [ $+I$ ] looks like it could be just *i*- with reanalysis as *y*- in the CL[-D, $\emptyset$ , $+I$ ] classifier, but since this actually occurs as *y*a- in dialects with *y* and since *y* is velar rather than postalveolar *i*, the [ $+I$ ] feature is not just *i*-
- Edwards 2009 treats [ $+D$ ] as just *d*- but the abstract analysis as a feature is again more consistent
  - combination of [ $+D$ ] and [ $-I$ ] with any of the non- $\emptyset$  S components (i.e. [s], [l], [sh]) results in a fricative rather than an affricate: *s*- not \**dz*-, *l*- not \**dl*-, *sh*- not \**j*-
  - in Tongass and Southern Tlingit since the *i* vowel can be deleted in *dCi*- classifiers, the two *s*- and *dz*- are contrastive: the *s*- is CL[ $+D$ , s,  $-I$ ] and the *dz*- is CL[ $+D$ , s,  $+I$ ] which would be *dzi*- in Northern
  - in Edwards’s defence, *d*- is far easier to use for lexicographic representation
- D component: the feature [ $+D$ ] indicates middle voice, and [ $-D$ ] is the elsewhere case
  - the prototypical middle voice is inflectional, found with reflexives and reciprocals:

- (36) a.  $\underline{x}$ wasiteen  
 $\emptyset$ - $\dot{y}$ u- $\underline{x}$ a-si- $\sqrt{\text{tin}}$ -h  
 3.O-PFV-1SG.S-CL[-D,s,+I]- $\sqrt{\text{see}}$ -VAR  
 I.see.PFV.it  
 ‘I saw it’
- b. **sh**  $\underline{x}$ wadziteen  
**sh**- $\dot{y}$ u- $\underline{x}$ a-**dzi**- $\sqrt{\text{tin}}$ -h  
 RFLX.O-PFV-1SG.S-CL[+D,s,+I]- $\sqrt{\text{see}}$ -VAR  
 I.see.PFV.RFLX  
 ‘I saw myself’
- c. wutusiteen  
 $\emptyset$ - $\dot{y}$ u-tu-si- $\sqrt{\text{tin}}$ -h  
 3.O-PFV-1PL.S-CL[-D,s,+I]- $\sqrt{\text{see}}$ -VAR  
 we.see.PFV.it  
 ‘we saw it’
- d. **woosh** wutudziteen  
**woosh**= $\dot{y}$ u-tu-**dzi**- $\sqrt{\text{tin}}$ -h  
 RECIP=PFV-1PL.S-CL[+D,s,+I]- $\sqrt{\text{see}}$ -VAR  
 we.see.PFV.RECIP  
 ‘we saw each other’

<i>theme</i>	O	S	[-D]	[s]	$\sqrt{\text{tin}}$
<i>subject</i>		$\underline{x}$ a- 1SG.S			
<i>object</i>	<b>sh</b> - RFLX.O		[+D] MID		
(37) <i>mode</i>		$\dot{y}$ u- PFV		[+I]	-h VAR
	sh $\underline{x}$ wa		dzi		teen
	sh $\underline{x}$ wadziteen ‘I saw myself’				

– inflectional middle voice can also occur from other elements, like self-benefactive  $ga_{-+8}$

- (38) a. at wusi.ée  
at- $\dot{y}u$ - $\emptyset$ -si- $\sqrt{i}$ - $\dot{y}$   
IND.N.O-PFV-3.S-CL[-D,S,+I]- $\sqrt{\text{cook}}$ -VAR  
'he cooked something'
- b. at gawdzi.ée  
at-**ga**- $\dot{y}u$ - $\emptyset$ -**dzi**- $\sqrt{i}$ - $\dot{y}$   
IND.N.O-SBEN-PFV-3.S-CL[+D,S,+I]- $\sqrt{\text{cook}}$ -VAR  
'he cooked something for himself'

– another instance of inflectional middle voice is as part of antipassivization

- (39) a. aawatéew  
a- $\dot{y}u$ - $\emptyset$ - $\dot{y}a$ - $\sqrt{t}$ éew<sup>x</sup>  
3.O-PFV-3.S-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{read}}$   
'he read it'
- b. wuditéew  
 $\dot{y}u$ - $\emptyset$ -**di**- $\sqrt{t}$ éew<sup>x</sup>  
PFV-3.S-CL[+D, $\emptyset$ ,+I]- $\sqrt{\text{read}}$   
'he read'

– middle voice can be triggered by elements outside the verb, called indirect (inflectional) middle voice

- (40) a. a $\underline{x}$  kaadé has awli.aat  
a $\underline{x}$  ká-dé has=a- $\dot{y}u$ - $\emptyset$ -li- $\sqrt{at}$ -h  
1SG.PSS HSFC-ALL PL=3.O-PFV-3.S-CL[-D,l,+I]- $\sqrt{\text{handle}}$ .PL-VAR  
'they put blankets on me'
- b. wooch kaadé has aw**dli**.aat  
wooch ká-dé has=a- $\dot{y}u$ - $\emptyset$ -**dli**- $\sqrt{at}$ -h  
RFLX.PSS HSFC-ALL PL=3.O-PFV-3.S-CL[+D,l,+I]- $\sqrt{\text{handle}}$ .PL-VAR  
'they put blankets on each other'

– other contexts for inflectional middle voice with various derivational forms

- reversion motion with intransitives
    - >  $kux_{+17e1}$  ( $\emptyset$ -conjugation class; but [-D] with transitives)
    - >  $a\text{-}\dot{y}a\text{-}oo\text{-}$  ( $\emptyset$ -conjugation class;  $a_{+14}$  3.O,  $\dot{y}a_{+10}$  VSFC,  $oo_{+6}$  IRR; impossible with transitives)
  - cooccurring motion  $ka_{+9}$  HSFC with [+D] and [s]
  - dissimulative with  $sh_{+14}$  RFLX.O,  $k'a_{+11}$  'mouth', [+D] and [l]
  - recreational/simulational with  $ash_{+14}$  3.OBV.O,  $ka_{+9}$  HSFC,  $u_{+6}$  IRR, [+D], [l], and  $-aa_{-2}$  PLAY
  - deprivative with [+D] and  $-ákw_{-2}$  DEPRV
  - plural objects with [+D] and  $-x'_{-3}$  or  $-t'_{-3}$  PL.O
  - plural comparison with [+D] and  $ka_{+9}$  HSFC or  $ga_{+7}$  GCNJ, and  $u_{+6}$  IRR
- nearly all lexical entries of verbs (verb themes) are specified [-D], but some are [+D], these are 'thematic middle voice'

- the canonical example of thematic [+D] is the theme  $O\text{-}S\text{-}[+D,\emptyset]\text{-}\sqrt{na}$  ( $\emptyset$ ;  $-\dot{y}$  Act) 'S drink O'

- (41) a.  $\underline{x}$ wadináa  
 $\emptyset$ - $\dot{y}u$ - $\underline{x}a$ -**di**- $\sqrt{na}$ - $\dot{y}$   
3.O-PFV-1SG.S-CL[+D, $\emptyset$ ,+I]- $\sqrt{\text{drink}}$ -VAR  
'I drank it'
- b. tléil has oodaná  
tléil has=a-u- $\dot{y}u$ - $\emptyset$ -**da**- $\sqrt{na}$ -'  
NEG PL=3.O-IRR-PFV-3.S-CL[+D, $\emptyset$ ,+I]- $\sqrt{\text{drink}}$ -VAR  
'they didn't drink it'

- forms of this verb theme without [+D] are ungrammatical (except with  $du\text{-}$  as described below)

- (42) a. \* $\underline{x}$ waanáa  
 $\emptyset$ - $\dot{y}u$ - $\underline{x}a$ - $\dot{y}a$ - $\sqrt{na}$ - $\dot{y}$   
3.O-PFV-1SG.S-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{drink}}$ -VAR  
'I drank it'
- b. \*tléil has awuná  
tléil has=a-u- $\dot{y}u$ - $\emptyset$ - $\emptyset$ - $\sqrt{na}$ -'  
NEG PL=3.O-IRR-PFV-3.S-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{drink}}$ -VAR  
'they didn't drink it'

- the D component is also used derivationally to create antipassives of transitives
  - transitive verb theme *O-ka-S-[-D,sh]-√xit* ( $\emptyset$ ; -h Act) ‘S draw, paint, write O’
  - antipassive theme *ka-S-[-D,sh]-√xit* ( $\emptyset$ ; -h Act) ‘S draw, paint, write’

(43) a. x’úx’ tlein akaguxshaxéet

x’úx’ tlein a-ka-ga-w-ga- $\emptyset$ -sha-√xit-:

book big 3.O-HSFC-GCNJ-IRR-GMOD-3.S-CL[-D,sh,-I]-√scratch-VAR

book big he.write.FUT.it

‘he is going to write a big book’

(Story & Naish 1973: 251)

b. Lingít x’éináx kawjixít

Lingít x’é-náx ka-ÿu- $\emptyset$ -ji-√xit-ÿ

Tlingit mouth-PERL HSFC-PFV-3.S-CL[+D,sh,+I]-√scratch-VAR

Tlingit language-in he.write.PFV

‘he wrote in Tlingit’

- [+D] and [-D] exhibit alternation with the *du-* subject (indefinite human or 3rd obviate)
  - a verb theme with CL[+D, $\emptyset$ ] must instead have [-D] when it occurs with a *du-* subject prefix

(44) a. wutudináa

$\emptyset$ -ÿu-tu-di-√na-ÿ

3.O-PFV-IPL.S-CL[+D, $\emptyset$ ,+I]-√drink-VAR

‘we drank it’

b. wuduwanáa

$\emptyset$ -ÿu-du-ÿa-√na-ÿ

3.O-PFV-IND.H.S-CL[-D, $\emptyset$ ,+I]-√drink-VAR

‘somebody drank it’

- in contrast, a theme with CL[-D,S<sup>+</sup>] where S<sup>+</sup> ∈ {s, l, sh} must instead have [+D] when it occurs with a *du-* subject prefix

(45) a. wutusi.ée

$\emptyset$ -ÿu-tu-si-√i-ÿ

3.O-PFV-IPL.S-CL[+D,s,-I]-√cook-VAR

‘we cooked it’

b. wududzi.ée

$\emptyset$ -ÿu-du-dzi-√i-ÿ

3.O-PFV-IND.H.S-CL[+D,s,+I]-√cook-VAR

‘somebody cooked it’

- S component: valency, transitivity, or just lexically specified

- like Dene languages, alternation between  $\emptyset$  and *l* can be transitivizing

(46) a. wook’éi

$\emptyset$ -ÿu-ÿa-√k’éi\*

3.O-PFV-CL[-D, $\emptyset$ ,+I]-√good

‘it was good’

b. awlik’éi

a-ÿu- $\emptyset$ -li-√k’éi\*

3.O-PFV-3.S-CL[-D,l,+I]-√good

‘he improved it, made it good’

- the same can also happen with  $\emptyset$  and *s*

(47) a. xwaanúk

ÿu-xa-ÿa-√nuk-ÿ

PFV-1SG.S-CL[-D, $\emptyset$ ,+I]-√sit.SG-VAR

‘I sat’

b. xat wusinúk

xat-ÿu- $\emptyset$ -si-√nuk-ÿ

1SG.O-PFV-3.S-CL[-D,s,+I]-√sit.SG-VAR

‘he sat me’, ‘he made me sit’

- but there are many verbs where such alternation has some other function, such as in the noun classification system

- (48) a. *aawaxaash*  
 a- $\check{y}$ u- $\emptyset$ - $\check{y}$ a- $\sqrt{x}$ ash-h  
 3.O-PFV-3.S-CL[-D, $\emptyset$ ,+I]- $\sqrt{cut}$ -VAR  
 ‘he cut it (generic thing)’
- b. *awlixaash*  
 a- $\check{y}$ u- $\emptyset$ -li- $\sqrt{x}$ ash-h  
 3.O-PFV-3.S-CL[-D,li,+I]- $\sqrt{cut}$ -VAR  
 ‘he cut it (rope-like thing)’
- across the verbal lexicon, there is no solid relationship between valency and the S component; the following verbs are all object intransitives (unaccusatives) with different S component values
- (49) a. *uwat’áa*  
 $\emptyset$ -u- $\check{y}$ a- $\sqrt{t}$ ’a- $\check{y}$   
 3.O-PFV-CL[-D, $\emptyset$ ,+I]- $\sqrt{hot}$ -VAR  
 ‘it’s hot’
- b. *wusináa*  
 $\emptyset$ - $\check{y}$ u-si- $\sqrt{na}$ - $\check{y}$   
 3.O-PFV-CL[-D,s,+I]- $\sqrt{damp}$ -VAR  
 ‘it’s damp’
- c. *wulixoon*  
 $\emptyset$ - $\check{y}$ u-li- $\sqrt{xun}$ -h  
 3.O-PFV-CL[-D,li,+I]- $\sqrt{thin}$ -VAR  
 ‘he is thin’
- d. *wushiné $\check{k}$*   
 $\emptyset$ - $\check{y}$ u-shi- $\sqrt{nek}$ - $\check{y}$   
 3.O-PFV-CL[-D,sh,+I]- $\sqrt{slush}$ -VAR  
 ‘it’s slushy’
- the S component value *sh* has a special ‘negative’ function called *sh*-alternation
- some verbs are lexically specified to use *sh* in their negative forms
- (50) a. *yak’éi*  
 $\emptyset$ - $\emptyset$ - $\check{y}$ a- $\sqrt{k}$ ’éi $\check{x}$   
 3.O-ZCNJ-CL[-D, $\emptyset$ ,+I]- $\sqrt{good}$   
 ‘it is good’
- b. *tléil ushk’é*  
 tléil  $\emptyset$ -u- $\emptyset$ -sha- $\sqrt{k}$ ’éi $\check{x}$ -’  
 NEG 3.O-IRR-PFV-CL[-D,sh,-I]- $\sqrt{good}$ -VAR  
 ‘it’s not good, it’s bad’
- this is specifically related to negation since it does not occur in other irrealis-marking environments like the *gwál* dubitative
- (51) *gwál yéi ook’é*  
*gwál yéi*= $\emptyset$ -u- $\emptyset$ - $\emptyset$ - $\sqrt{k}$ ’éi $\check{x}$ -’  
 DUB thus=3.O-IRR-ZCNJ-CL[-D, $\emptyset$ ,+I]- $\sqrt{good}$ -VAR  
 ‘it might be good’
- the *sh*-alternation seems to be associated with specific roots since it happens for most themes based on a particular root
- (52) a. *kuyak’éi*  
 ku- $\emptyset$ - $\check{y}$ a- $\sqrt{k}$ ’éi $\check{x}$   
 AREAL-ZCNJ-CL[-D, $\emptyset$ ,+I]- $\sqrt{good}$   
 ‘weather is good’
- b. *tléil kooshk’é*  
 tléil ku-u- $\emptyset$ -sha- $\sqrt{k}$ ’éi $\check{x}$ -’  
 NEG AREAL-IRR-PFV-CL[-D,sh,-I]- $\sqrt{good}$ -VAR  
 ‘weather is not good, weather is bad’
- but there are exceptions like the following pair of themes based on  $\sqrt{tu}$  ‘clever’
- (53) a. *sitóo*  
 $\emptyset$ - $\emptyset$ -si- $\sqrt{tu}$ -:  
 3.O-ZCNJ-CL[-D,s,+I]- $\sqrt{clever}$ -VAR  
 ‘he is clever, ingenious’
- b. *tléil ushtú*  
 tléil  $\emptyset$ -u- $\emptyset$ -sha- $\sqrt{tu}$ -’  
 NEG 3.O-IRR-ZCNJ-CL[-D,sh,-I]- $\sqrt{clever}$ -VAR  
 ‘he isn’t clever, ingenious’
- c. *lawyers x’asitóo*  
 lawyers  $\emptyset$ -x’a- $\emptyset$ -si- $\sqrt{tu}$ -:  
 lawyers 3.O-mouth-ZCNJ-CL[-D,s,+I]- $\sqrt{clever}$ -VAR  
 ‘lawyers are glib’ (Story & Naish 1973: 101)
- d. *tléil x’eistú*  
 tléil  $\emptyset$ -x’a-u- $\emptyset$ -sa- $\sqrt{tu}$ -’  
 NEG 3.O-mouth-IRR-ZCNJ-CL[-D,s,-I]- $\sqrt{clever}$ -VAR  
 ‘he isn’t glib’

- finally there are some themes where *sh*-alternation can be used in non-irrealis forms; the alternation here indicates displeasure on the part of the speaker and is thus psychological negativity rather than semantic negativity

- (54) a. natá!  
na- $\emptyset$ - $\emptyset$ - $\sqrt{\text{ta}}$ -h  
NCNJ-2SG.S-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{sleep}}$ -VAR  
'sleep!'
- b. nashtá!  
na- $\emptyset$ -**sha**- $\sqrt{\text{ta}}$ -h  
NCNJ-2SG.S-CL[-D,**sh**,+I]- $\sqrt{\text{sleep}}$ -VAR  
'sleep, dammit!'

- I component: [+I] in realis perfectives, stative imperfectives, non-decessive potentials, realizational
  - the I component is never lexically specified, it always arises from mode inflection
  - the exact function of [+I] is unclear, but it seems to have something to do with realis and stativity

## 5.5. MODE INFLECTION

- mode is a language-specific category encompassing tense, aspect, and mood
- mode marking is spread across the verb in multiple morphemes and features
- a simple example, the perfective mode:
  - the perfective prefix is *yü-* or sometimes *u-*, which undergoes some complicated morphophonological changes depending on the surrounding prefixes:

- (55) a. wutuwa.át  
yü-tu- $\dot{y}$ a- $\sqrt{\text{at}}$ - $\dot{y}$   
PFV-1PL.S-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{go}}$ .PL-VAR  
'we went'
- b. at xwaaxáa  
at-yü-xa- $\dot{y}$ a- $\sqrt{\text{xa}}$ - $\dot{y}$   
IND.N.O-PFV-1SG.S-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{eat}}$ -VAR  
'I ate (something)'
- c. xat uwasáa  
xat-u- $\emptyset$ - $\dot{y}$ a- $\sqrt{\text{sa}}$ - $\dot{y}$   
1SG.O-PFV.TEL-3.O-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{name}}$ -VAR  
'he named me'
- d. yeeyliyex  
 $\emptyset$ -yü-yi-li- $\sqrt{\text{yex}}$ - $\dot{y}$   
3.O-PFV-2PL.S-CL[-D,l,+I]- $\sqrt{\text{make}}$ -VAR  
'you (pl.) made it'
- e. yisi.ée  
 $\emptyset$ -yü-i-si- $\sqrt{\text{i}}$ - $\dot{y}$   
3.O-PFV-2SG.S-CL[-D,s,+I]- $\sqrt{\text{cook}}$ -VAR  
'you (sg.) cooked it'
- f. awdináa  
a-yü- $\emptyset$ -di- $\sqrt{\text{na}}$ - $\dot{y}$   
3.O-PFV-3.S-CL[+D, $\emptyset$ ,+I]- $\sqrt{\text{drink}}$ -VAR  
'he drank it'

- note that all the examples also include [+I] in the classifier, and  $\dot{y}$  stem variation
- so the perfective mode can be said to comprise *yü-* (or sometimes *u-*), [+I], and  $\dot{y}$
- but the verbs given above are all members of the  $\emptyset$ -conjugation class
- the other three *na-*, *ga-*, and *ga-* conjugation classes have a different perfective form with *-h* instead of  $\dot{y}$

- (56) a. wutuwataa  
yü-tu- $\dot{y}$ a- $\sqrt{\text{ta}}$ <sup>h</sup>-h  
PFV-1PL.S-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{sleep}}$ -VAR  
'we slept'
- b. at xwaahoon  
at-yü-xa- $\dot{y}$ a- $\sqrt{\text{hun}}$ -h  
IND.N.O-PFV-1SG.S-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{sell}}$ -VAR  
'I sold something'
- c. xat wooxoox  
xat-yü- $\emptyset$ - $\dot{y}$ a- $\sqrt{\text{xux}}$ -h  
1SG.O-PFV-3.S-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{summon}}$ -VAR  
'he summoned me'
- d. yeeyligoo  
 $\emptyset$ -yü-yi-li- $\sqrt{\text{gu}}$ -h  
3.O-PFV-2PL.S-CL[-D,l,+I]- $\sqrt{\text{wipe}}$ -VAR  
'you (pl.) wiped it'



- e. *yisineix*  
 $\theta$ -*ÿu-i-si-√nex-h*  
 3.O-PFV-2SG.S-CL[-D,S,+I]-√save-VAR  
 ‘you (sg.) saved it’
- f. *káx awditee*  
*káx a-ÿu-θ-di-√ti<sup>h</sup>-h*  
 on 3.O-PFV-3.S-CL[+D,θ,+I]-√put-VAR  
 ‘he put it on’

- also note that where the  $\theta$ -conjugation class had *u-* in *xat uwayáa* ‘he resembles me’, here only *ÿu-* occurs in *xat wooxoox* ‘he summoned me’
- so the perfective is made of *ÿu-* ~ *u-* plus [+I] and *-ÿ* for  $\theta$ -conjugation class verbs, and it’s made of *ÿu-* plus [+I] and *-h* for other verbs

	<i>theme</i>	O	S	[-D]	[θ]	√ <i>x</i> a	
	<i>person</i>	at- IND.N.O	<i>x</i> a- 1SG.S				
	<i>mode</i>		<i>ÿu-</i> PFV		[+I]	<i>-ÿ</i> VAR	
(57) a.		at <i>x</i> wa		<i>ÿ</i> a		<i>x</i> áa	θ-conjugation
		at <i>x</i> waa					
		at <i>x</i> waaxáa ‘I ate (something)’					
	<i>theme</i>	O	S	[-D]	[θ]	√ <i>h</i> un	
	<i>person</i>	at- IND.N.O	<i>x</i> a- 1SG.S				
	<i>mode</i>		<i>ÿu-</i> PFV		[+I]	<i>-h</i> VAR	
b.		at <i>x</i> wa		<i>ÿ</i> a		hoon	na-conjugation
		at <i>x</i> waa					
		at <i>x</i> waahoon ‘I sold something’					

- modes are thus marked by multiple discontinuous morphemes and features, what Sapir called ‘interrupted synthesis’ for Dene (Athabaskan) languages:

This trait of split semantemes, of making the expression of an idea depend on a binary compound that is readily interrupted by the expression of auxiliary ideas or by some of the interrupted parts of auxiliary expressions likewise binomially composed—“interrupted synthesis”, to use Sapir’s term for it—is the outstanding peculiarity of Athabaskan. The interlocking of a number of interrupted semantemes into a firmly knit structure seems to be the leading principle of coherence in these languages.

(Whorf 1932: 17)

- most modes have irrealis (a.k.a. negative) forms as well as realis (a.k.a. positive) forms
  - to continue with the perfective, the irrealis form has [-I] in the classifier, and always has *-h* or *-’* stem variation
    - specifically,  $\theta$ -conjugation verbs with CV roots have *-’* stem variation when irrealis; all others have *-h* stem variation
    - Leer (1991: 208) actually says that  $\theta$ -conjugation verbs with both CV and CVC roots have *-’* stem variation in their irrealis forms – this requires that we define the phonological results of *-’* in a complicated way:

- > CV + -' → CV́
- > CVC + -' → CV:C ← CVC + -h

rather than complicate the system further, I simply say that CVC roots take *-h* like in the other three conjugation classes

- I analyze all irrealis forms as having the irrealis *u-* prefix
  - the back rounded vowel is obvious in imperfectives and many other modes
  - but because *u-* is so similar to the perfective, the irrealis is obscured in perfectives
  - Leer instead claims that the irrealis prefix simply doesn't occur in perfectives, but I see no reason for the perfective mode to be morphologically special; we already have other prefixes which disappear due to morphophonology

- (58) a. tléil wutoo.aat  
 tléil u-ÿu-tu-θ-√.at-h  
 NEG IRR-PFV-1PL.S-CL[-D,θ,-I]-√go.PL-VAR  
 'we didn't go'
- b. tléil at xwaxá  
 tléil at-u-ÿu-xa-θ-√xa-'  
 NEG IND.N.O-IRR-PFV-1SG.S-CL[-D,θ,-I]-√eat-VAR  
 'I didn't eat (something)'
- c. tléil xat oosá  
 tléil xat-u-u-θ-θ-√sa-'  
 NEG 1SG.O-IRR-PFV.TEL-3.O-CL[-D,θ,+I]-√name-VAR  
 'he didn't name me'
- d. tléil yeeylagoo  
 tléil θ-u-ÿu-ÿi-la-√gu-h  
 NEG 3.O-IRR-PFV-2PL.S-CL[-D,l,-I]-√wipe-VAR  
 'you (pl.) didn't wipe it'
- e. tléil yisaneix  
 tléil θ-u-ÿu-i-si-√nex-h  
 NEG 3.O-IRR-PFV-2SG.S-CL[-D,s,+I]-√save-VAR  
 'you (sg.) didn't save it'
- f. tléil káx awdatee  
 tléil káx a-u-ÿu-θ-da-√ti<sup>h</sup>-h  
 NEG on 3.O-IRR-PFV-3.S-CL[+D,θ,-I]-√put-VAR  
 'he didn't put it on'

- negation is the typical context for irrealis forms of modes, but they can also appear less commonly in dubitatives and in a few other irrealis contexts, hence the terms 'negative form' and 'positive form' are convenient but sometimes misleading

- (59) a. gwál wutoo.aat  
 gwál u-ÿu-tu-θ-√.at-h  
 DUB IRR-PFV-1PL.S-CL[-D,θ,-I]-√go.PL-VAR  
 'perhaps we went'
- b. gwál at xwahoon  
 gwál at-u-ÿu-xa-θ-√hun-h  
 DUB IND.N.O-IRR-PFV-1SG.S-CL[-D,θ,-I]-√sell-VAR  
 'perhaps I sold something'
- realis forms with *gwál* are also possible, and preferred by many of my consultants
  - I suspect a *gwál* [+IRR] versus *gwál* [-IRR] distinction used to hold but the *gwál* [+IRR] declined because of analogy with the other (weaker?) dubitative *kwshé* that is always realis
  - Leer (1991: 87) says that irrealis *must* occur with *gwál*, with 'presumptive' *gé-DEM* (*gé* is the yes-no question particle), and negative *tléil*, but the only particle I have found absolutely requiring irrealis is *tléil*; this may be due to either diachronic shift or perhaps dialectal differences
- some modes instead have an irrealis prefix built into them
    - the potential mode is made of the irrealis *u-*, the verb theme's conjugation prefix *CNJ-*, the *ga-* mode prefix,<sup>11</sup> [+I], and (mostly) *-h* stem variation
    - this is generally represented by a string *u-CNJ-ga-[+I]-...-h*, but note that the *ga-* conjugation prefix occurs *before* the irrealis prefix since it is in slot +7 versus the others in slot +5 and irrealis in between them in slot +6 — cf. the following examples

11. The *ga-* mode prefix seems to be largely meaningless, but may have something to do with modality or possibility given its distribution in the future, potential, hortative, and contingent modes.

- (60) a. *θ-conjugation*  
 kooxshikóotl'  
 θ-ka-u-θ-ga-shi-√kutl'-h  
 3.O-HSFC-IRR-ZCNJ-GMOD-CL[-D,sh,+I]-√mud-VAR  
 'it can be muddy'
- b. *na-conjugation*  
 yéi=ungaaatee  
 yéi=θ-u-na-ga-ÿa-√ti<sup>h</sup>-h  
 thus=3.O-IRR-NCNJ-GMOD-CL[-D,θ,+I]-√be-VAR  
 'it can be so'
- c. *ga-conjugation*  
 gwaagaadlaan  
 θ-u-ga-ga-ÿa-√dlan-h  
 3.O-IRR-GCNJ-GMOD-CL[-D,θ,+I]-√deep-VAR  
 'it can be deep'
- d. *ga-conjugation*  
 at googaashee  
 at-ga-u-ga-ÿa-√shi-h  
 IND.N.O-GCNJ-IRR-GMOD-CL[-D,θ,+I]-√sing-VAR  
 'he can sing'
- the [+I] of the potential does not change when it is negated; [+I] → [-I] instead occurs when the potential is extended with the decessive epimode consisting of [-I] and -éen DEC meaning 'used to be the case'
  - > compare these negated potentials

- (61) a. tléil yéi=ungaaatee  
 tléil yéi=θ-u-na-ga-ÿa-√ti<sup>h</sup>-h  
 NEG thus=3.O-IRR-NCNJ-GMOD-CL[-D,θ,+I]-√be-VAR  
 'it can't be so'
- b. tléil at googaashee  
 tléil at-ga-u-ga-θ-√shi-h  
 NEG IND.N.O-GCNJ-IRR-GMOD-CL[-D,θ,+I]-√sing-VAR  
 'he can't sing'
- > versus these decessive potentials with [-I]-...-éen

- (62) a. yéi=ungateeyéen  
 yéi=θ-u-na-ga-θ-√ti<sup>h</sup>-h-éen  
 thus=3.O-IRR-NCNJ-GMOD-CL[-D,θ,-I]-√be-VAR-DEC  
 'it could have been so'
- b. at googasheeyéen  
 at-ga-u-ga-θ-√shi-h-éen  
 IND.N.O-GCNJ-IRR-GMOD-CL[-D,θ,-I]-√sing-VAR-DEC  
 'he could have sung'

	O	S	[-D]	[θ]	√shi
<i>theme</i>					
<i>person</i>	at- IND.N.O	θ- 3.S			
<i>mode</i>	ga- GCNJ	u- IRR	ga- GMOD	[+I]	-h VAR
(63) <i>epimode</i>				[-I]	-éen DEC
	at googa			∅	sheeyéen
	at googa				
	at googasheeyéen 'he could have sung'				

- the future has a *w-* prefix which appears to be another kind of irrealis, occurring in the same slot as irrealis *u-*;<sup>12</sup> the morphemes involved are the *ga-* conjugation √ prefix, the irrealis *w-*, the *ga-* mode prefix, [-I] in the classifier, and -: stem variation

12. Leer does not consider this prefix to be a 'true' irrealis because it does not alternate in negative or dubitative forms. I feel this is irrelevant, and simply consider the future to be, like the potential, inherently irrealis due to its quantification over possible worlds.

- (64) a. yéi kgwatée  
 yéi=∅-ga-w-ga-∅-√ti<sup>h</sup>-:  
 thus=3.O-IRR-NCNJ-GMOD-CL[-D,∅,-I]-√be-VAR-DEC  
 ‘it will be so’
- b. at gugashée  
 at-ga-w-ga-∅-√shi-:  
 IND.N.O-GCNJ-IRR-GMOD-CL[-D,∅,-I]-√sing-VAR  
 ‘he will sing’
- the future has *-h* stem variation when negated, but the irrealis prefix *w-* does not change, nor indeed do any other future mode elements
- (65) a. tléil yéi kgwatee  
 tléil yéi=∅-ga-w-ga-∅-√ti<sup>h</sup>-h  
 NEG thus=3.O-IRR-NCNJ-GMOD-CL[-D,∅,-I]-√be-VAR-DEC  
 ‘it won’t be so’
- b. tléil at gugashee  
 tléil at-ga-w-ga-∅-√shi-h  
 NEG IND.N.O-GCNJ-IRR-GMOD-CL[-D,∅,-I]-√sing-VAR  
 ‘he won’t sing’

## 5.6. IMPERFECTIVE TYPES

- rather than being a single morphological structure, like the future or perfective, the imperfective mode is a large class of different types; some of these types are lexically specified, others are predictable
  - at last count there are 26 imperfective types, though there may be a few obscure ones still undocumented
- each verb theme takes a particular imperfective type, referred to as the theme’s ‘primary imperfective’
  - the primary imperfective of a verb theme is lexically specified; they cannot generally be predicted but there are some basic patterns related to theme categories (section 5.7) noted by Leer (1991: ch. 7)
    - eventive verb themes do not have primary imperfectives
    - motion verb themes also do not have primary imperfectives
    - a few non-eventive verb themes also lack primary imperfectives
    - a few active verb themes have more than one primary imperfective; Leer (1991: 241 fn. 1) notes that speakers claim there is no difference in meaning and speakers generally prefer one over the other, so this is probably due to dialectal or idiolectal variation
  - primary imperfectives are distinguished mostly by their stem variation, though theme categories also play a major role
  - for example, the theme *O-S[-D,∅]-√xa* (*∅*; -’ Act) ‘S eat O’ has the -’ active imperfective as its primary imperfective type; the -’ active imperfective is made up of the *∅*-conjugation prefix, [-I] in the classifier, and -’ stem variation

(66)	<i>theme</i>	O	S	[-D]	[∅]	√ <u>x</u> a
	<i>person</i>	a-	∅-			
	<i>mode</i>	∅-			[-I]	-’
		a	∅			<u>x</u> á
		a <u>x</u> á				
		‘he eats it’, ‘he’s eating it’				

- since all other modes have a prefix in the +7 – +4 range of slots but most imperfectives have nothing in this range, I analyze imperfectives as having the *∅*-conjugation prefix
  - we have already seen that the conjugation prefixes are sometimes used for expressing modes independent of conjugation class, e.g. the *ga*-conjugation prefix in all forms of the future mode
  - Leer instead analyzes the imperfectives as lacking any prefixes in +7 – +4; this difference in analysis is purely theoretical rather than an empirical issue

- Leer (1991: 244) has some lexicographic notes on which meanings take which primary imperfectives; his list is expanded here with actual verb themes and examples of third person or 3-on-3 imperfective forms
  - statives
    - ȷ* stative: default stative type used for most statives
      - *O*-[*l*]-√*ge<sup>h</sup>* (*na*; -*ȷ* Stv) ‘O be big’ – *ligéi*
      - *O*-[∅]-√*yat*’ (*na*; -*ȷ* Stv) ‘O be long’ – *yayát*’
      - *O*-[*l*]-√*ts’a*(*ȷ*) (*ga*; -*ȷ* Stv) ‘O be fragrant’ – *lits’áa*
      - *O*-*ka*-[+*D*,*l*]-√*x’at*’ (*ga*; -*ȷ* Stv) ‘O be unripe’ – *kadlix’át*’
      - *k<sub>u</sub>*-[∅]-√*t’a<sup>h</sup>* (∅; -*ȷ* Stv) ‘be hot weather’ – *k<sub>u</sub>wat’áa* ~ *k<sub>u</sub>yat’áa*
      - *N*-*tú*-*ȷá*-’*S*-[*-D*,*s*]-√*gu* (*ga*; -*ȷ* Stv) ‘N want S; S be pleasing to N’ – *du tuwáa sigóo*
      - *N*-*dé* *O*-[+*D*,∅]-√*xwas*’ (∅; -*ȷ* Stv) ‘O (pl.) hang at, be fastened to N’ – *aadé dixwás*’
    - : stative: possession; perception and cognition; all comparative forms
      - *O*-*S*-[∅]-√*u<sup>h</sup>* (*na*; -: Stv) ‘S own O’ – *aya.óo*
      - *yéi*=*O*-*S*-[∅]-√*u<sup>h</sup>* (*na*; -: Stv) ‘S be wearing O; S be using O’ – *yéi aya.óo*
      - *O*-*S*-[∅]-√*tin* (*ga*; -: Stv) ‘S (be able to) see, perceive O’ – *ayatéen*
      - *O*-*S*-[*sh*]-√*k’an* (*ga*; -: Stv) ‘S hate O’ – *ashik’áan*
      - it is impossible to distinguish -: from -*h* if the root is CVC’ or CV’C; as far as I can tell, Leer categorizes most such roots as the -*h* stative type which makes -: considerably smaller
    - h* stative: perception and cognition; existence
      - *x’éi* *O*-*S*-[+*D*,∅]-√*nikw<sub>TSR</sub>*~√*nuk<sub>N</sub>* (∅; -*h* Stv) ‘S taste O’ – *x’éi awdineekw* ~ *x’éi awdinook*
      - *jéé* *O*-*S*-[+*D*,∅]-√*nikw<sub>TSR</sub>*~√*nuk<sub>N</sub>* (∅; -*h* Stv) ‘S feel O’ – *jéé awdineekw* ~ *jéé awdinook*
      - *yéi*=*sh*-*tu*-*S*-[+*D*,∅]-√*nikw<sub>TSR</sub>*~√*nuk<sub>N</sub>* (∅; -*h* Stv) ‘S feel so (physically)’ – *yéi sh tudineekw* ~ *yéi sh tudinook*
      - *O*-*S*-[±*D*,*s*]-√*nix*’ (∅; -*h* Stv) ‘S smell O’ – *awsinéex*’ ~ *awdzinéex*’
      - *N*-*k’á*-*S*-[∅]-√*hin* (*ga*; -*h* Stv) ‘S believe (in) O’ – *ák’ ayaheen*
      - Leer says *O*-[∅]-√*ti<sup>h</sup>* (*na*; -*h* Stv) ‘O be’ and the like are irregular because their meanings imply -*ȷ* statives (not perceptual and not dimensional), but I group them with the other -*h* statives since they are morphologically unremarkable
    - n* stative: only themes with √*ha<sup>h</sup>* ‘many’; not listed by Leer
      - *O*-*sha*-*ȷá*-[+*D*,∅]-√*ha<sup>h</sup>* (*na*; -*n* Stv) ‘O be many’ – *shayadihéin*
      - *O*-*sha*-*ȷá*-*S*-[*l*]-√*ha<sup>h</sup>* (*na*; -*n* Stv) ‘S have many O’ – *ashayalihéin*
      - *at*-*ji*-*ȷá*-*S*-[*l*]-√*ha<sup>h</sup>* (*na*; -*n* Stv) ‘S have many possessions’ – *at jiyalihéin*
    - k* stative: only themes with √*kutl*’ ‘muddy’; not listed by Leer
      - *O*-*ka*-[*sh*]-√*kutl*’ (∅; -*k* Stv) ‘O be muddy’ – *kashikútł’kw*
      - *O*-*ka*-*S*-[*sh*]-√*kutl*’ (∅; -*k* Stv) ‘S make O muddy’ – *akshikútł’kw*
  - positionals
    - n* positional: default positional type; posture or physical configuration
      - *N*-*t* *O*-[∅]-√*tan* (∅; -*n* Pos) ‘O (wooden; container) be positioned at N’ – *át tán*
      - *N*-*t* *O*-[∅]-√*ti* (∅; -*n* Pos) ‘O (generic) be positioned at N’ – *át téen*
      - *N*-*t* *O*-[∅]-√*han* (*ga*; -*n* Pos) ‘O (sg.) stand at N’ – *át hán*
      - *N*-*t* *O*-[∅]-√*na<sub>k</sub>* (*ga*; -*n* Pos) ‘O (pl.) stand at N’ – *át has ná<sub>k</sub>*
      - *N*-*t* *O*-[∅]-√*da* (∅; -*n* Pos) ‘O (water) lie at N’ – *át déin*
      - *N*-*t* *O*-[∅]-√*ax* (∅; -*n* Pos) ‘O (fabric) lie at N’ – *át áx*

- *N-t O-[+D,l]-√tsis* ( $\emptyset$ ; -n Pos) ‘O (boat) float, be moored at N’ – *át iltsís*<sup>13</sup>
- *N-t S-[∅]-√xex’w* ( $\emptyset$ ; -n Pos) ‘S (pl.) lie sleeping at N’<sup>14</sup> – *át has xéx’w*
- *N-t O-S-[l]-√sha’t* (*ga*; -n Pos) ‘S hold (down) O at N’ – *át alshát*
- : positional: sit, be situated
  - *N-t O-[∅]-√.a* (*ga*; -: Pos) ‘S (sg.) be seated, situated at N’ – *át áa*
  - *N-t S-O-[s]-√.a* (*ga*; -: Pos) ‘S seat O (anim.) at N’ – *át as.áa*
  - *N-t O-[l]-√.a* (*ga*; -: Pos) ‘O (inanim., esp. bldg.) be seated, situated at N’ – *át la.áa*
  - *N-t O-[∅]-√kin* (*ga*; -: Pos) ‘S (pl.) be seated, situated at N’<sup>15</sup> – *át has kéen*
  - *N-t O-[s]-√tan* (*ga?*; -: Pos) ‘O (sg.) lie at N unable to move (dead, paralyzed)’ – *át satáan*
  - *N-t sh-S-[+D,s]-√tan* (*ga?*; -: Pos) ‘S (anim.) lie motionless at N (not sleeping)’ – *át sh istáan*
- ’ positional: unique, only occurs with  $\sqrt{ta^h}$  ‘sleep’
  - *N-t S-[∅]-√ta<sup>h</sup>* (*na*; -’ Pos) ‘S (sg.) lie sleeping at N’ – *át tá*
  - *N-t O-S-[s]-√ta<sup>h</sup>* (*na*; -’ Pos) ‘S have O (sg.) lie sleeping at N’ – *át astá*
- actives
  - : active: action leading to a product; oral action<sup>16</sup>
    - *O-S-[l]-√yex* ( $\emptyset$ ; -: Act) ‘S make O’ – *alyéix*
    - *O-S-[∅]-√xash* ( $\emptyset$ /*na*; -: Act, -k Act) ‘S cut, saw O’<sup>17</sup> – *axáash*
    - *O-S-[s]-√.i* ( $\emptyset$ ; -: Act) ‘S cook O’ – *as.ée*
    - *O-S-[l]-√gis~√gil* (*na*; -: Act) ‘S cook O on a stick’<sup>18</sup> – *algées ~ algéel*
    - *O-S-[∅]-√.in* ( $\emptyset$ ; -: Act) ‘S pick O (berries, into container)’<sup>19</sup> – *a.éen*
    - *O-S-[∅]-√tax’* ( $\emptyset$ ; -: Act) ‘S chew O’ – *atáax’*
    - *O-S-[l]-√tux* ( $\emptyset$ ; -: Act) ‘S spit out O’ – *altóox*
    - *O-S-[∅]-√tlet’* ( $\emptyset$ ; -: Act) ‘S lick O’ – *atléit’*
    - *O-ka-S-[∅]-√.ux* ( $\emptyset$ ; -: Act) ‘S blow up O’ – *aka.óox*
    - *O-ka-S-[∅]-√nik* (*na*; -: Act) ‘S tell, report about O’ – *akanéek*
    - *S-[∅]-√gax* (*ga*; -: Act) ‘S cry’ – *gáax*
    - *O-S-[∅]-√hun* (*na*; -: Act) ‘S sell O’ – *ahóon*
  - As with the -: and -h statives, there seems to be no way to morphologically distinguish the two kinds of actives with CVC’ or CV’C roots; Leer has such roots as variously -: or -h and I am uncertain what his diagnostic was for their separation beyond the semantic differences
  - ’ active: open roots only; a few themes mostly involving oral activities or production
    - *O-S-[∅]-√xa* ( $\emptyset$ ; -’ Act) ‘S eat O’ – *axá*

13. An example of the fairly rare epenthetic or ‘peg’ vowel *i*. The morphemes here are  $\emptyset$ - $\emptyset$ -*l*- $\sqrt{tsis}$ -*n* ‘3.O-ZCNJ-CL[+D,l,-I]-√float-VAR’ which would result in *ltsís*. This is malformed so the epenthetic ‘peg prefix’ *i*- is inserted to rescue it. This is less common than in Dene languages, but seems to be essentially cognate.

14. Leer (1991: 327) erroneously gives this as -’ positional. This is certainly a typo since elsewhere he has it as -n.

15. Edwards (2009: 168) erroneously lists this with -n stem variation rather than -h. Cf. Leer 1991: 326 and my discussion in section 5.7.

16. Leer includes ‘whistle’ in his list, implying themes with  $\sqrt{.éikw}$ , but that verb root is invariable and so cannot be -: active. The progressive *yaa kanxa.éikw* ‘I’m whistling it’ should have -n stem variation and hence be  $\sqrt{.éikw}$ , but  $\sqrt{.éikw}$  proves that it is invariable.

17. This is what Leer (1991: 278) calls a “dual-aspect theme”, by which he means that it can occur both as a  $\emptyset$ -conjugation and a *na*-conjugation verb. Additionally it has two primary imperfectives according to his analysis (Leer 1991: 279), a -: active and a -k active imperfective.

18. Leer (1973a) gives this with both  $\sqrt{gis}$  and  $\sqrt{gil}$  roots, apparently with *gil* attested at least in Tongass Tlingit. Story & Naish (1973: 56, 331) only have  $\sqrt{gis}$  for this verb, with  $\sqrt{gil}$  meaning ‘blunt’.

19. Normally the root  $\sqrt{.in}$  refers to handling a filled container, and is thus a motion verb (section 5.8). This particular theme is active however, and is based on the idea that berry picking involves handling filled containers (traditionally baskets, now coffee cans and 5 gallon plastic buckets).

- $O-S-[\emptyset]-\sqrt{shi}^h$  (*ga*; -' Act) 'S sing O' – *ashí*
- $O-S-[\text{+D},\emptyset]-\sqrt{na}$  ( $\emptyset$ ; -' Act) 'S drink O' – *adaná*
- $yéi=(x'a)-\ddot{y}a-S-[\emptyset]-\sqrt{ká}$  (*na*; -' Act) 'S say so'<sup>20</sup> – *yéi x'ayaká*
- $N-dé O-\ddot{y}a-S-[\text{s}]-\sqrt{ká}$  (*na*; -' Act) 'S charge N for O' – *du eedé ayaská*
- $yéi=O-daa-S-[\emptyset]-\sqrt{ni}_{TSR}\sim\sqrt{ne}_N$  (*na*; -' Act) 'S work (so) on O' – *yéi adaané*
- Cable (p.c. 2012) notes:
  - ... for CVC roots, a -' active imperfective would look just like a -: active imperfective (at least in the realis modes). Given that the primary meaning of the -' active imperfective is “oral activity or production”, one might wonder whether such (allegedly) -: active imperfectives as ‘chew’, ‘spit’, ‘lick’, ‘blow’, ‘tell’, ‘cry’ might be better classified as CVC -' active imperfectives. Of course, for this to work, I'm guessing we'd have to suppose that the CVC -' active imperfectives also take -*h* in the irrealis (just like -: active imperfectives). I don't see this as too implausible, though...
  - this would necessitate that  $CVC + -' \rightarrow C\acute{V}:C$  so that the stem would appear identical with  $CVC + -: \rightarrow C\acute{V}:C$
  - recall that earlier we considered  $CVC + -' \rightarrow CV:C$  for irrealis  $\emptyset$ -conjugation perfectives
  - having both is phonologically inconsistent, so we can only choose one, the other, or neither
  - saying that -' simply does not occur with CVC roots avoids the inconsistency entirely, so I adopt this position despite the failure to capture the semantic lexical class
  - also note that, given the identification of -' as glottalization, we'd expect  $CVC + -' \rightarrow CV'C$  in Tongass Tlingit but in fact this doesn't seem to occur
- h* active: action viewed as a process, especially one involving physical manipulation (rub  $\sqrt{gix'}$   $\sqrt{dich}$ , peel  $\sqrt{s'el'}$ , shave  $\sqrt{xas'}$ , scratch  $\sqrt{dlakw}$ , push with a stick  $\sqrt{tak}$ , hunt  $\sqrt{l'u'n}$ , gather  $\sqrt{ha}$ , fight  $\sqrt{gaw}$ , play  $\sqrt{yat}$ , dance  $\sqrt{l'ex}$ , laugh  $\sqrt{shuk}$ , ask  $\sqrt{wus'}$ )
  - $O-ka-S-[\emptyset]-\sqrt{nik}$  (*na*; -*h* Act) 'S tell O' – *akaneek*
  - $O-S-[\emptyset]-\sqrt{t'us'}$  ( $\emptyset$ ; -*h* Act) 'S toast O, cook O near open flame' – *alt'óos'*
  - $O-S-[\emptyset]-\sqrt{s'u'w}$  (*na*; -*n* Act) 'S chop O' – *as'óow*
  - $O-ka-S-[\emptyset]-\sqrt{chixw}\sim\sqrt{chux}$  ( $\emptyset$ ; -*h* Act, -*s'* Act) 'S knead O'<sup>21</sup> – *akacheexw*
  - $sh-k'a-S-[\text{+D},\emptyset]-\sqrt{i's}$  ( $\emptyset$ ; -*h* Act) 'S whistle under breath' – *sh k'ada.ées*
  - $O-S-[\emptyset]-\sqrt{s'it}$  ( $\emptyset$ ; -*h* Act) 'S tie, bind O' – *as'eet*
  - $O-ka-S-[\text{l}]-\sqrt{tul}$  ( $\emptyset$ ; -*h* Act) 'S roll up O' – *aklatool*
  - $O-ka-S-[\emptyset]-\sqrt{t'al'}$  ( $\emptyset$ ; -*h* Act) 'S press O flat, mash O' – *akat'áal'*
  - $O-ka-S-[\emptyset]-\sqrt{t'ix'}\sim\sqrt{t'ex'_N}$  ( $\emptyset$ ; -*h* Act) 'S wring, twist, wind O' – *akat'éex' ~ akat'éix'\_N*
  - $at-S-[\emptyset]-\sqrt{shuk}$  ( $\emptyset/na$ ; -*h* Act) 'S laugh, smile' – *at shook*
  - $O-ka-S-[\emptyset]-\sqrt{yex}$  ( $\emptyset/na$ ; -*h* Act) 'S whittle O' – *akayeix*
  - Leer (1991: 280) says that probably all themes with -*h* active imperfectives are either *na*-conjugation or both  $\emptyset$ -conjugation and *na*-conjugation (his “dual-aspect”)
- n* active: rare, occurs only with a few themes; not recognized by Leer
  - $O-S-[\emptyset]-\sqrt{sha't}$  (*ga*; -*n* Act) 'S grab O' – *ashát*
  - $N-ká-x a-S-[\emptyset]-\sqrt{del}$  ( $\emptyset$ ; -*n* Act) 'S guard, watch, protect N' – *a káx adél*
  - these themes do not have a surface -*n* because they are closed roots, but they display  $C\acute{V}C$  stem variation expected from -*n*; they could also be analyzed as -*y* but that is associated with stativeness in other contexts, so -*n* is supposed here instead

20. This theme has *x'a*- in the active and repetitive imperfectives but not otherwise, e.g. perfective *yéi yaawaḱaa*.

21. Some people have this as -*h* active and others have -*s'* active instead.

- Leer (1991: 206) does in fact imply that these exist, listing a type of “n-Positional/Processive Imperfective” where his “Processive” is our active
  - elsewhere he makes no mention of *-n* active imperfectives, so we still need to investigate them further
- x* active: action leading to transformation from one state to another (boil  $\sqrt{uk}$ , steam  $\sqrt{xu}$   $\sqrt{nal}$ , soak  $\sqrt{it}$ ~ $\sqrt{ut}$ , freeze  $\sqrt{ix}$ ); default for causatives with [s] or [l]
  - *O-ka-[\emptyset]-\sqrt{a}* (*na*; -*x* Act) ‘O (plant) grow, yield; O (water) flow’ – *ka.éix*
  - *O-ka-S-[s]-\sqrt{a}* (*na*; -*x* Act) ‘S grow O (plant); S make O (water) flow, S turn on O (hose, faucet)’ – *aksa.éix*
  - *O-ka-S-[l]-\sqrt{it}* ( $\emptyset$ ; -*x* Act) ‘S soak O’<sup>22</sup> – *akla.ít’x*
  - *yéi=O-ka-S-[s]-\sqrt{na}’k* ( $\emptyset$ ; -*x* Act) ‘S form, shape O’ – *yéi aksanáx*
  - *O-S-[l]-\sqrt{la}* ( $\emptyset$ ; -*x* Act) ‘S melt O’ – *alléix*
  - *O-S-[\emptyset]-\sqrt{ix}* ( $\emptyset$ ; -*x* Act, -s’ Act) ‘S freeze O’<sup>23</sup> – *alt’ix’x*
- k* active: series of actions with an alternating back-and-forth motion in repeated contact
  - *O-S-[l]-\sqrt{gu}* (*ga~na*; -*k* Act) ‘S wipe O’ – *algéikw*<sup>24</sup>
  - *O-S-[\emptyset]-\sqrt{us}* (*na*; -*k* Act) ‘S wash O’ – *a.ús’k*
  - *O-S-[\emptyset]-\sqrt{xit}* (*ga~na*; -*kw* Act) ‘S sweep O’ – *axít’kw*
  - *O-S-[l]-\sqrt{shi}^h* (*na*; -*kw* Act) ‘S stroke, pet, caress O’ – *ashíkw*
  - the reason for *-kw* rather than *-k* with some non-round roots is unclear; there doesn’t seem to be a synchronic phonological motivation so it may be due to e.g. a final \**w* or \**u*
  - active *ga*-conjugation themes may be reanalyzed to *na*-conjugation by some speakers (Leer 1991: 272), probably due to levelling, hence the *ga~na* listed here
- [+I]-...-*k* active: series of alternating actions, only occurs with a few themes
  - *S-[+D,\emptyset]-\sqrt{sa}^w* (*na*; [+I]-...-*k* Act) ‘S breathe’ – *diséikw*
  - *S-[\emptyset]-\sqrt{likw}\_{TSR}~\sqrt{luk}\_N* ( $\emptyset$ ; [+I]-...-*k* Act) ‘S blink’ – *yal’úkkw}\_N ~ yal’ikkw}\_{SR} ~ yal’ikkw}\_T*
- yoo*=[+I]-...-*k* active: [no description by Leer]
  - *yoo=x’a-S-[\emptyset]-\sqrt{tan}* ( $\emptyset$ ; *yoo*=[+I]-...-*k* Act) ‘S speak, talk’ – *yoo x’ayatánk ~ yoo x’aatánk*
  - *O-CL[+D,s]-\sqrt{ax}* ( $\emptyset$ ; *yoo*=[+I]-...-*k* Act) ‘O (sound) echo, resound’ – *yoo ya.áxk*
  - *O-ka-S-[\emptyset]-\sqrt{ha}* ( $\emptyset$ ; *yoo*=[+I]-...-*k* Act) ‘S stir, rub, spread O (oil, grease, butter)’ – *yoo akayahéik*
  - *N-x O-[l]-\sqrt{gix}~\sqrt{gex}\_N* (*ga*; *yoo*=[+I]-...-*k* Act) ‘O rub against N making creaking noise’ – *yoo ligíx’k ~ yoo ligéx’k}\_N*
- ch* active: obscure, occurs only with a few themes
  - *O-ka-[+D,\emptyset]-\sqrt{gat}* (*ga*; -*ch* Act) ‘O (pl. small round) fall’ – *kadagátch*
  - *S-[+D,\emptyset]-\sqrt{la}* ( $\emptyset$ ; -*ch* Act, *y* Pot/Imp/Hort) ‘S yell’ – *daléich*
- DIR*=...-*ch* active: [no description by Leer]
  - t* active: ‘ictive’ ICT,<sup>25</sup> series of discrete actions with repeated instantaneous contact (hit  $\sqrt{gwal}$ , shoot  $\sqrt{un}$ , poke  $\sqrt{tak}$ , cut into pieces  $\sqrt{t’ax}$ )
    - *O-S-[\emptyset]-\sqrt{tsex}* ( $\emptyset$ ; -*t* Act) ‘S kick O’ – *atséxt*
    - *O-S-[l]-\sqrt{tak}* ( $\emptyset$ ; -*t* Act) ‘S poke O’ – *altákt*

22. Some people have a *-r* active imperfective instead (Leer 1973a), thus *akla.éet’*. Presumably they have a *-x* repetitive as well, and those lacking the *-r* active have converted the *-x* repetitive to a *-x* active (i.e. primary imperfective).

23. This theme also has a *-s’* active imperfective according to a listing by Leer (1976) but I have not verified this.

24. This verb has an irregular apophonic form from the *-k* suffix, with *géikw* instead of expected \**gwéikw*. Other forms are predictable, e.g. habitual *axlagwéich ~ analgwéich* ‘he always wipes it’ and progressive *yéi analgwéin ~ yaa analgwéin* ‘he is wiping it’.

25. From Latin *ictus* ‘blow, stroke, thrust’ derived from *icēre* ‘to strike, hit’.



- $O-S-[\emptyset]-\sqrt{un}$  ( $\emptyset$ ;  $-t$  Act) ‘S shoot O (with gun)’ – *a.únt*
  - $O-S-[\emptyset]-\sqrt{t'ix'}\sim\sqrt{t'ex'_N}$  ( $\emptyset$ ;  $-t$  S pound, hammer, smash, break O) ‘-’ *at'ix't* ~ *at'éx't\_N*
  - s’ active: ‘serial’ SER, series of actions with repeated contact and cumulative result (rub, feel, knock, encourage, advise)
    - $O-S-[\text{+D},\emptyset]-\sqrt{ka}$  ( $\emptyset$ ;  $-s'$  Act) ‘S sew O’ – *ada kéis'*
    - $O-ka-S-[\emptyset]-\sqrt{yu'k}$  ( $\emptyset$ ;  $-s'$  Act) ‘S shake O’ – *akayúks'*
    - $O-ka-S-[\emptyset]-\sqrt{chixw}\sim\sqrt{chux'_N}$  ( $\emptyset$ ;  $-h$  Act,  $-s'$  Act) ‘S knead O’<sup>26</sup> – *akachíxws'* ~ *akachúxs'\_N*
  - l’ active: ‘serial’ SER, only occurs in one theme
    - $O-ka-S-[-D,l]-\sqrt{xakw}$  ( $\emptyset$ ;  $-l'$  Act) ‘S grind O’ – *aklaxákwl'*
    - possibly retained in *yadzánl'* ‘lumpy, pockmarked face’<sup>27</sup>
    - $\sqrt{néegwál}$  ‘paint’ might be related, but why not *\*néekwl'* instead?
  - x’ active: ‘plural object’ PL.O, movement or transformation of multiple discrete entities
    - $O-sha-S-[\emptyset]-\sqrt{tlekw}$  (*na*;  $-x'$  Act) ‘S grab and take O’ – *ashatlékwx'*
  - t’ active: ‘plural object destruction’ PL.O, action leading to destruction of multiple discrete entities
    - $O-S-[s]-\sqrt{gan}$  (*na*;  $-t'$  Act) ‘S burn O’ – *asgánt'*
    - $O-ka-S-[s]-\sqrt{gan}$  (*na*;  $-t'$  Act) ‘S burn surface of O’ – *aksagánt'*
  - beyond the primary imperfectives there are the secondary imperfectives
    - the progressive imperfective is available for nearly all verbs
      - progressives are constructed with the *na*-conjugation prefix,  $[-I]$ , and  $-n$  stem variation
      - the progressive also occurs with a specific preverb depending on conjugation class:  $\emptyset \rightarrow$  nothing or *yaa* ‘along’, *na*  $\rightarrow$  nothing or *yaa* ‘along’, *ga*  $\rightarrow$  *yeyi* ‘down’, *ga*  $\rightarrow$  *kei* ‘up’
- (67) a.  *$\emptyset$ -conjugation*  
*yaa* has *na.át*  
*yaa*=has=*na*- $\emptyset$ - $\emptyset$ - $\sqrt{at-n}$   
 along=PL=NCNJ-3.S-CL $[-D,\emptyset,-I]$ - $\sqrt{go}$ .PL-VAR  
 ‘they are going along’
- b. *na-conjugation*  
*yaa* *kunashéen*  
*yaa*=*ku*-*na*- $\emptyset$ - $\emptyset$ - $\sqrt{shi-n}$   
 along=AREAL-NCNJ-3.S-CL $[-D,\emptyset,-I]$ - $\sqrt{search}$ -VAR  
 ‘he is going along searching’
- c. *ga-conjugation*  
*yeyi* *andagán*  
*yeyi*=*a*-*na*-*da*- $\sqrt{gan-n}$   
 down=3.O-NCNJ-CL $[\text{+D},\emptyset,-I]$ - $\sqrt{burn}$ -VAR  
 ‘it is getting sunny’
- d. *ga-conjugation*  
*kei* *ndahán*  
*kei*=*na*- $\emptyset$ -*da*- $\sqrt{han-n}$   
 up=NCNJ-3.S-CL $[\text{+D},\emptyset,-I]$ - $\sqrt{stand}$ -VAR  
 ‘he is standing up’
- note that Tlingit progressives are not semantically identical with English, instead Tlingit progressives generally mean ‘move along while doing’, as in the following (Leer 1991: 500) with the theme  $O-S-[\emptyset]-\sqrt{s'u'w}$  (*na*;  $-n$  Act) ‘S chop O’
- (68) *wooch*      *géide*              *yaa* has *anas'úw*  
*wooch*      *géi-dé*              *yaa*=has=*a*-*na*- $\emptyset$ - $\emptyset$ - $\sqrt{s'u'w-n}$   
 RECIP.PSS    opposition-ALL    along=PL=3.O-NCNJ-3.S-CL $[-D,\emptyset,-I]$ - $\sqrt{chop}$ -VAR  
 each.other    against-toward    they.chop.PROG.it  
 ‘they are chopping it along toward each other’

26. Some people have this as  $-h$  active and others have  $-s'$  active instead.

27. This might be from a verb *yá*- $[\text{+D}]-\sqrt{sa'n}$  where the root is  $\sqrt{sa'n}$  ‘cure shamanistically’, perhaps via a related meaning like ‘diseased’ or ‘poxed’. An alternative root is  $\sqrt{dzaj}$  ‘bearded’, and there is also *dzánti* ‘flounder’.

- › the primary imperfective of an active verb supplies a reading closer to the English progressive, though it also has a generic temporal reading

(69) gán as'úw  
 gán a- $\emptyset$ - $\emptyset$ - $\emptyset$ - $\sqrt{s'u'w-n}$   
 firewood 3.O-ZCNJ-3.S-CL[-D, $\emptyset$ ,-I]- $\sqrt{chop}$ -VAR  
 'he's chopping firewood', 'he chops firewood'

- most verb themes also have repetitive imperfectives as described earlier
  - a verb theme that has a  $yoo=[+I]$ -...- $k$  active or  $-x$  active imperfective as its primary imperfective essentially has the same as its secondary imperfective, so that the primary and secondary imperfectives aren't distinguished for such verb themes; no other imperfective forms are allowed with such themes (Leer 1991: 242)
- verb themes are not limited to a single repetitive imperfective, so that some have not only the conjugation class-related one, but also others
- in addition to repetitive imperfectives, some themes have other types of secondary imperfectives
  - motion verbs may have an associated positional imperfective representing the result of the motion to a position; thus the basic motion theme  $O-[\emptyset]-\sqrt{da}$  (Mot,  $-h$  Ext Stv,  $-n$  Pos,  $-kwt$  MPos) 'O flow' has an  $-n$  positional imperfective with bound  $N-t$  which can be listed as a separate verb theme  $N-t$   $O-[\emptyset]-\sqrt{da}$  ( $\emptyset$ ;  $-n$  Pos) 'O (fluid) lie at N'

(70) a. *-h repetitive imperfective*  
 áx daa  
 á-x  $\emptyset$ - $\emptyset$ - $\emptyset$ - $\sqrt{da-h}$   
 3N-PERT 3.O-ZCNJ-CL[-D, $\emptyset$ ,-I]- $\sqrt{flow}$ -VAR  
 'it flows there'

b. *positional imperfective*  
 át déin  
 á-t  $\emptyset$ - $\emptyset$ - $\emptyset$ - $\sqrt{da-n}$   
 3N-PNCT 3.O-ZCNJ-CL[-D, $\emptyset$ ,-I]- $\sqrt{flow}$ -VAR  
 'it (fluid) is lying there'

- the preceding theme also shows how a theme can have a multipositional stative imperfective; all multipositional stative imperfectives require a locative  $N-x$  and have the  $-kw-t$  suffixes if open CV or  $-k$  if closed CVC, and the form acts as a sort of plural to the positional imperfective

(71) *multipositional stative imperfective*  
 áx naadákwt  
 á-x  $\emptyset$ -na- $\dot{y}a$ - $\sqrt{da-kwt}$   
 3N-PERT 3.O-NCNJ-CL[-D, $\emptyset$ ,+I]- $\sqrt{flow}$ -MPOS  
 'multiple ones (fluid) lie here and there along it'

- motion verbs that refer to a mass or group have extensional stative imperfectives as an additional secondary imperfective type, representing the motion as a static extent; the basic motion theme  $O-[\emptyset]-\sqrt{shu^h}$  (Mot,  $-\dot{y}$  Ext Stv) 'O extend' is the only one which occurs with all four conjugation classes in the  $-\dot{y}$  extensional stative imperfective (Leer 1991: 319)

(72) a. *kei=( $\emptyset$ ) 'moving up'*  
 kei yashóo  
 kei= $\emptyset$ - $\emptyset$ - $\dot{y}a$ - $\sqrt{shu^h-\dot{y}}$   
 up=3.O-ZCNJ-CL[-D, $\emptyset$ ,+I]- $\sqrt{extend}$ -VAR  
 'it extends up'

b. *N-dé (na) 'moving toward N'*  
 aadé naashóo  
 á-dé  $\emptyset$ -na- $\dot{y}a$ - $\sqrt{shu^h-\dot{y}}$   
 3N-ALL 3.O-NCNJ-CL[-D, $\emptyset$ ,+I]- $\sqrt{extend}$ -VAR  
 'it extends toward it'

- c. *N-x (ga) 'moving down along N'*  
 áx gaashóo  
 á-x Ø-ga-ÿa-√shu<sup>h</sup>-ÿ  
 3N-PERL 3.O-GCNJ-CL[-D,Ø,+I]-√extend-VAR  
 'it extends down along it'
- d. *N-dáx (ga) 'moving away from N'*  
 aadáx gaashóo  
 á-dáx Ø-ga-ÿa-√shu<sup>h</sup>-ÿ  
 3N-ABL 3.O-GCNJ-CL[-D,Ø,+I]-√extend-VAR  
 'it extends off away from it'

- most extensional stative imperfectives only occur with the *na*-conjugation 'moving along' and *N-x ga*-conjugation 'moving down along N' motion derivations; usually the perfective is used to express an extensional state instead
- even for *na* the extensional stative is sometimes replaced with the perfective, as in the *na*-derived motion theme *O-[Ø]-√da (na; Mot, -h Ext Stv, -kwt MPos) 'O flow'* where the perfective and extensional stative are used interchangeably (Leer 1991: 321 fn. 1)

- (73) a. *perfective*  
 woodaa  
 Ø-ÿu-ÿa-√da-h  
 3.O-PFV-CL[-D,Ø,+I]-√flow-VAR  
 'it flows'
- b. *-h extensional stative imperfective*  
 naadaa  
 Ø-na-ÿa-√da-h  
 3.O-NCNJ-CL[-D,Ø,+I]-√flow-VAR  
 'it flows', 'it is flowing'

## 5.7. THEME CATEGORIES

The theme categories are groupings of verb themes based on their semantics and secondarily on morphological differences, with the essential distinction in Tlingit being between active, stative, positional, eventive, and motion. Leer calls the theme category a 'lexical aspectual category' in his dissertation (Leer 1991: 234), but elsewhere uses either 'theme type' or 'theme category' depending on the year. Kari (1979) established the term 'theme category' in publications on Dene (Athabaskan) languages, so for familial consistency I have adopted it. The theme categories in Tlingit are closely tied to the imperfective types discussed previously in section 5.6, and most analyses consider the two topics together but I have divided them for precision. Motion verbs are addressed separately in section 5.8 below.

- five theme categories: active, stative, positional, eventive, motion
- active verbs
  - active<sup>28</sup> verbs generally describe actions or processes involving the verb's arguments: eat, speak, work, swallow, dig, fish, chop, study, cook, hunt, ask, grow, sleep, instruct
  - Leer says 'processive' in his dissertation (Leer 1991) but elsewhere says 'active'
  - Edwards (2009) labels this class 'act'
  - Leer divides active verbs into two groups depending on their conjugation class
    - Ø-conjugation class verbs he calls 'telic'
    - *na-*, *ga-*, and *ga*-conjugation class verbs he calls 'atelic'
    - his claim is that the Ø-conjugation class verbs mostly describe processes that culminate in a defined termination (Leer 1991: 236)
    - this does not clearly follow from his examples of 'telic' Ø-conjugation themes, however
      - > the theme *O-S-[+D,Ø]-√na<sup>h</sup> (Ø; -' Act) 'S drink O'* is not necessarily telic in all of its forms, given for example the imperfective mode *xadaná* 'I am drinking it'

28. The use of 'active' and 'stative' in Tlingit has nothing to do with valency or argument structure. Active verbs may or may not be transitive, and if intransitive may or may not be unergative. The same is true for statives.

- › the same is true for  $O-S-[l]-\sqrt{yex}$  ( $\emptyset$ ;  $-r$  Act,  $-x$  Rep) ‘S make O’ in e.g. the repetitive imperfective  $xalayéxx$  ‘I keep trying to make it; I make it repeatedly’ where the former reading is not obviously culminative
    - › the non- $\emptyset$ -conjugation themes that he calls ‘atelic’ are also not obviously non-culminative
    - › so  $O-S-[l]-\sqrt{shi}^h$  ( $ga$ ;  $-r$  Act) ‘S sing O’ is hard to construe as non-culminative in the perfective mode  $xwaashee$  ‘I sang it’
    - › and  $O-S-[l]-\sqrt{gu}$  ( $ga-na$ ;  $-k$  Act) ‘S wipe O’ seems to be clearly culminative in the consecutive mode  $kalaqóo$  ‘when/after I wiped it’
    - › instead Leer’s ‘telicity’ appears to be a weak generalization from the pattern he sees in the motion verbs, detailed in section 5.8, perhaps with some influence from the inceptive and terminative non-motion derivations (section 5.9) that both convert the theme to the  $\emptyset$ -conjugation class
    - › as will be shown in section 5.8, the  $\emptyset$ -conjugation class derivations of motion verbs are themselves not necessarily telic
    - › so it is probably best to discard Leer’s notion of telicity as a grammatical category, and to simply use the conjugation classes as labels to describe the grammatical groupings correlated with those classes
- there are a small handful of active  $\emptyset$ -conjugation themes that Leer (1991: 269) calls “ $\emptyset(-\ddot{y})$ -aspect”, where the potential, imperative, and hortative modes have  $-\ddot{y}$  stem variation instead of the expected  $-h$  stem variation; he also refers obliquely to this group while discussing mode morphology (Leer 1991: 204)
  - Leer often indicates these by giving the conjugation class as ‘ $\emptyset$ ’ instead of the usual  $\emptyset$ ; this practice apparently dates from before he labeled some Northern CV: stems as having  $-\ddot{y}$  stem variation, when he did not see it them distinct from the CV: stems with  $-r$  stem variation
  - Leer only uses the  $\emptyset(-\ddot{y})$  sign a few times in his dissertation, and nowhere else
  - I indicate these as  $\emptyset-\ddot{y}$  conjugation class, but also include the ephemeral note ‘ $-\ddot{y}$  Pot/Imp/Hort’ for clarity
  - they can be succinctly described as ‘ $\emptyset-\ddot{y}$  themes’
  - Leer (1991: 269 fn. 9) lists the following themes, though there may be a few more:
    - ›  $O-ka-S-[l]-\sqrt{ha}$  ( $\emptyset-\ddot{y}$ ;  $-x$  Act,  $-\ddot{y}$  Pot/Imp/Hort) ‘S dig O’
    - ›  $O-S-[l]-\sqrt{wu}$  ( $\emptyset-\ddot{y}$ ;  $-x$  Act,  $-\ddot{y}$  Pot/Imp/Hort) ‘S send for O’
    - ›  $S-[+D, \emptyset]-\sqrt{wu}$  ( $\emptyset-\ddot{y}$ ;  $-?$  Act,  $-\ddot{y}$  Pot/Imp/Hort) ‘S take traveling provisions, lunch’
    - ›  $O-S-[s]-\sqrt{na}^h$  ( $\emptyset-\ddot{y}$ ;  $-?$  Act,  $-\ddot{y}$  Pot/Imp/Hort) ‘S sun-dry O’
    - ›  $O-S-[l]-\sqrt{la}^h$  ( $\emptyset-\ddot{y}$ ;  $-r$  Act,  $-\ddot{y}$  Pot/Imp/Hort) ‘S suck O’
    - ›  $O-S-[l]-\sqrt{sha}$  ( $\emptyset-\ddot{y}$ ;  $-\ddot{y}$  Act,  $-\ddot{y}$  Pot/Imp/Hort) ‘S marry O’
    - ›  $O-shu-ka-S-[l]-\sqrt{ja}^h$  ( $\emptyset-\ddot{y}$ ;  $-?$  Act,  $-\ddot{y}$  Pot/Imp/Hort) ‘S advise O’
    - ›  $O-S-[l]-\sqrt{x}^a$  ( $\emptyset-\ddot{y}$ ;  $-?$  Act,  $-\ddot{y}$  Pot/Imp/Hort) ‘S twist O to soften it’
    - ›  $O-S-[+D, \emptyset]-\sqrt{x}^u$  ( $\emptyset-\ddot{y}$ ;  $-?$  Act,  $-\ddot{y}$  Pot/Imp/Hort) ‘S wear O (blanket)’
    - ›  $O-S-[s]-\sqrt{ku}^h$  ( $\emptyset-\ddot{y}$ ;  $-\ddot{y}$  Act,  $-\ddot{y}$  Pot/Imp/Hort) ‘S come to know O’
    - ›  $O-S-[l]-\sqrt{xa}$  ( $\emptyset-\ddot{y}$ ;  $-?$  Act,  $-\ddot{y}$  Pot/Imp/Hort) ‘S paddle O’
    - ›  $S-[+D, \emptyset]-\sqrt{la}$  ( $\emptyset-\ddot{y}$ ;  $-ch$  Act,  $\ddot{y}$  Pot/Imp/Hort) ‘S yell’
- Leer (1991: 204) also points out another stem variation problem with  $-h$  versus  $-\ddot{y}$  in active themes
  - in  $\emptyset$ -conjugation active themes that do not have “aspectual derivational strings” – i.e. derivations that modify conjugation class – there is apparently freedom between  $-h$  and  $-\ddot{y}$  stem variation for closed roots (CVC, CV’C, CVC’)

- Story (1966: 185) seems to have first described this variation,<sup>29</sup> she notes that they do not occur with directionals, fitting with Leer's more specific – and probably more accurate – statement that they do not occur with derivations that modify conjugation class
- to clarify, we would normally expect *-h* in this context, but for some unexplained reason *-j̄* may show up instead
- the following examples are taken from Story (1966: 185); the themes here are *O-S-[θ]-√.u'n (θ; -t Act)* 'S shoot O (with gun)' and *O-S-[θ]-√shuch (θ; -: Act)* 'S bathe O'

- (74) a. *hortative with -h*  
 gatoo.óoni  
 θ-θ-ga-tu-θ-√.u'n-h-ée  
 3.O-ZCNJ-GMOD-1PL.S-CL[-D,θ,-I]-√shoot-VAR-SUB  
 'let's shoot it'
- b. *hortative with -j̄*  
 gatooshúji  
 θ-θ-ga-tu-θ-√shuch-ÿ-ée  
 3.O-ZCNJ-GMOD-1PL.S-CL[-D,θ,-I]-√bathe-VAR-SUB  
 'let's bathe it'
- this does not seem to be free variation, i.e. a particular theme does not vary freely between *-h* or *-j̄*
  - instead, the use of *-h* versus *-j̄* for closed roots seems to be a lexically specified property
  - this problem has yet to be documented in any detail, so that it is still an open issue

• stative verbs

- stative verbs describe states and attributes of the verb's arguments
- Leer (1991: 75) notes that stative verbs can also have inchoative denotations in most modes
  - an imperfective mode of a stative verb denotes a pure state
  - other modes may denote either a state or a transition into a state, or both

- (75) a. *stative imperfective*  
 x̄at yanéekw  
 x̄at-θ-ÿa-√néekw\*  
 1SG.O-ZCNJ-CL[-D,θ,+I]-√sick  
 'I am sick'
- b. *stative imperative*  
 iganéekw !  
 i-ga-θ-√néekw\*  
 2SG.O-GCNJ-CL[-D,θ,-I]-√sick  
 'get sick!', 'be sick!'
- c. *stative imperfective*  
 x̄at ligéi  
 x̄at-θ-li-√ge-ÿ  
 1SG.O-ZCNJ-CL[-D,l,+I]-√big-VAR  
 'I am big'
- d. *stative perfective*  
 x̄at wuligéi  
 x̄at-ÿu-li-√ge-ÿ  
 1SG.O-PFV-CL[-D,l,+I]-√big-VAR  
 'I was big', 'I got big'

- most statives are non-θ-conjugation (Leer 1991: 252), though some θ-conjugation statives exist
  - *O-ka-[sh]-√kutl' (θ; -k Stv)* 'O be muddy'
  - *yéi=O-ka-[θ]-√xa't (θ; -j̄ Stv)* 'O is so shaped'
  - *ku-[θ]-√t'a<sup>h</sup> (θ; -j̄ Stv)* 'be hot weather'
  - Edwards (2009: 251) is incorrect about the latter being the only θ-conjugation class stative theme
- Leer (1991: 254) says that most statives are *ga*-conjugation, and that all *ga*-conjugation stative themes have invariable roots
  - the converse also holds, that statives with invariable roots are *ga*-conjugation
  - the root *√k'éi\** 'good' is an invariability exception, where in some themes it is at least partially variable
- Leer (1991: 251) divides statives into two groups: descriptive statives and cognitive statives

29. Leer (1991: 204) has an incorrect citation for Story's discussion, which is *not* in the nonexistent section 11.2.2.2.1 on the nonexistent page 248, but rather is as cited here.

- descriptive statives “denote existence, location, or possession of some attribute, such as ‘to be’ or ‘to be thus’” (Leer 1991: 251)
- most descriptive statives are object intransitives (unaccusatives), e.g.:
  - >  $O$ -[ $l$ ]- $\sqrt{x\acute{e}tl}$  (*ga*; -*h* Stv) ‘O be lucky’
  - >  $O$ -[ $\emptyset$ ]- $\sqrt{y\acute{a}t}$  (*na*; - $\dot{y}$  Stv) ‘O be long’
  - >  $O$ -[ $\emptyset$ ]- $\sqrt{t'ix}$  (*ga*; -*h* Stv) ‘O be difficult’
  - >  $O$ -[ $s$ ]- $\sqrt{\acute{a}ax'w^*}$  (*ga*; Stv) ‘O be sour’
- dimensional descriptive statives are a subtype of descriptive statives which “denote a quantifiable physical attribute” (Leer 1991: 256)
  - > the most important feature of dimensional statives is that they permit comparative forms with the comparative derivation  $y\acute{e}i=ka/ga-w-$  (-: Stv)

- (76) a. *dimensional stative imperfective*  
 yayát'  
 $\emptyset$ - $\emptyset$ - $\dot{y}a$ - $\sqrt{y\acute{a}t}$ - $\dot{y}$   
 3.O-ZCNJ-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{long}}$ -VAR  
 ‘it’s long’
- b. *comparative dimensional stative imperfective*  
 yéi koowáat'  
 $y\acute{e}i=\emptyset$ -ka-w- $\emptyset$ - $\dot{y}a$ - $\sqrt{y\acute{a}t}$ -:  
 thus=3.O-HSFC-IRR-ZCNJ-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{long}}$ -VAR  
 ‘it’s yay long’
- c. *dimensional stative habitual*  
 nayát'ch  
 $\emptyset$ -na- $\emptyset$ - $\sqrt{y\acute{a}t}$ -ch  
 3.O-NCNJ-CL[-D, $\emptyset$ ,-I]- $\sqrt{\text{long}}$ -HAB  
 ‘it always is/becomes long’
- d. *comparative dimensional stative habitual*  
 a yáanáx kunayát'ch  
 a<sub>j</sub> yáanáx  $\emptyset_i$ -ka-w-na- $\emptyset$ - $\sqrt{y\acute{a}t}$ -ch  
 3.N<sub>j</sub> more.than 3.O<sub>i</sub>-HSFC-IRR-NCNJ-CL[-D, $\emptyset$ ,-I]- $\sqrt{\text{long}}$ -HAB  
 ‘it<sub>i</sub> always is/becomes longer than it<sub>j</sub>’

- > the last pair of examples shows how the manner argument  $y\acute{e}i=$  ‘thus’ can be replaced by more specific manners to denote different kinds of comparison
- > Leer (1991: 256) says that most dimensional statives are *na*-conjugation and have - $\dot{y}$  stem variation in the imperfective mode
- > some however are *ga*-conjugation, generally those with invariable roots
- > a couple of dimensional statives have an extensional stative imperfective rather than an ordinary stative imperfective (Leer 1991: 322–324)
  - extensional statives have their conjugation prefix appearing in the imperfective
  - the theme  $O$ -[ $\emptyset$ ]- $\sqrt{li^h_{TSR}\sim le^h_N}$  (*na*; - $\dot{y}$  Ext Stv) ‘O be far’ is an important example of an extensional stative

- (77) a. *perfective*  
 woolei  
 $\emptyset$ - $\dot{y}u$ - $\dot{y}a$ - $\sqrt{le^h}$ -h  
 3.O-PFV-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{far}}$ -VAR  
 ‘it became far’, ‘it was far’
- b. *- $\dot{y}$  extensional stative imperfective*  
 naaléi  
 $\emptyset$ -na- $\dot{y}a$ - $\sqrt{le^h}$ - $\dot{y}$   
 3.O-NCNJ-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{far}}$ -VAR  
 ‘it is far’
- this theme is a kind of dimensional stative since like other dimensional statives it has a derived comparative theme  $y\acute{e}i=O$ -ka-w-[ $\emptyset$ ]- $\sqrt{li^h\sim le^h}$  (*na*; - $\dot{y}$  Ext Stv) ‘O be so far’

- (78) a. *comparative perfective*  
 yéi kaawalei  
 $y\acute{e}i=\emptyset$ -ka-w- $\dot{y}u$ - $\dot{y}a$ - $\sqrt{le^h}$ -h  
 thus=3.O-HSFC-IRR-PFV-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{far}}$ -VAR  
 ‘it became so far’, ‘it was so far’
- b. *comparative - $\dot{y}$  extensional stative imperfective*  
 yéi kunaaléi  
 $y\acute{e}i=\emptyset$ -ka-w-na- $\dot{y}a$ - $\sqrt{le^h}$ - $\dot{y}$   
 thus=3.O-HSFC-IRR-NCNJ-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{far}}$ -VAR  
 ‘it is so far’

- Edwards (2009: 182) notes that  
The perfective form *yéi kaawalei* ‘it was that far’ is commonly used in situations where one just fell short of making it to a destination. In other words, ‘I almost made it, it was just that far away’.
- there are two derived themes based on the theme  $O-[\emptyset]-\sqrt{li^h}_{TSR}\sim le^h_N$  (*na*; -*y* Ext Stv) ‘O be far’ which use what are normally motion derivations;<sup>30</sup> one is with  $N-x$  (*ga*; -*ch* Rep) ‘down along N’ and the other is  $N-x$  *ya-oo-* ( $\emptyset$ ; -*ch* Rep) ‘obliquely around N’

- (79) a. *-y* extensional stative imperfective  
 á $\bar{x}$  gaaléi  
 á $\bar{j}$ - $\bar{x}$   $\emptyset_i$ -*ga-ya-√le<sup>h</sup>-y*  
 3.N $\bar{j}$ -PERT 3.O $\bar{i}$ -GCNJ-CL[-D, $\emptyset$ ,+I]-√far-VAR  
 ‘it $\bar{i}$  is far down along it $\bar{j}$ ’ (e.g. trail or river)
- b. *-y* extensional stative imperfective  
 á $\bar{x}$  wuwaléi  
 á $\bar{j}$ - $\bar{x}$   $\emptyset_i$ -*ya-oo-ya-√le<sup>h</sup>-y*  
 3.N $\bar{j}$ -PERT 3.O $\bar{i}$ -VSFC-IRR-CL[-D, $\emptyset$ ,+I]-√far-VAR  
 ‘it $\bar{i}$  is far around it $\bar{j}$ ’ (e.g. distance along shoreline)

- the other important extensional stative theme is  $O-[\emptyset]-\sqrt{dlan}$  (*ga*; -*h* Ext Stv) ‘O be deep’

- (80) a. *potential*  
 gwaagaadlaan  
 $\emptyset$ -u-*ga-ga-ya-√dlan-h*  
 3.O-IRR-GCNJ-GMOD-CL[-D, $\emptyset$ ,+I]-√deep-VAR  
 ‘it may be(come) deep’
- b. *-h* extensional stative imperfective  
 gaadlaan  
 $\emptyset$ -*ga-ya-√dlan-h*  
 3.O-GCNJ-CL[-D, $\emptyset$ ,+I]-√deep-VAR  
 ‘it is deep’

- extensional statives are also available as derived themes for motion verbs that denote the motion of groups or masses, these are covered in section 5.8 below
- cognitive statives denote “cognition, perception, or attitude” (Leer 1991: 252)
- all cognitive stative themes are either transitive or intransitive with a thematic pronominal
  - ›  $O-S-[s]-\sqrt{xán}^*$  (*ga*; Stv) ‘S love O’
    - this theme is transitive with an invariable root  $\sqrt{xán}^*$  ‘love’
    - the root is related to the relational noun  $-xán$  ‘neighbouring, near’

- (81) a. *cognitive stative imperfective*  
 xasi $\bar{xán}$   
 $\emptyset$ - $\emptyset$ -*xa-si-√xán<sup>\*</sup>*  
 3.O-ZCNJ-1SG.S-CL[-D,s,+I]-√love  
 ‘I love her’
- b. *cognitive stative habitual*  
 ga $\bar{x}$ sa $\bar{xán}$ ch  
 $\emptyset$ -*ga-xa-sa-√xán-ch*  
 3.O-GCNJ-1SG.S-CL[-D,s,-I]-√love-HAB  
 ‘I always (come to) love her’

- ›  $N-k'$   $a-S-[\emptyset]-\sqrt{hin}$  ( $\emptyset$ ; -*h* Stv) ‘S believe N’
  - this theme has a thematic pronominal  $a-$  3.O which is nonreferential; it appears even when the subject is not  $\emptyset$ - 3.S and it can’t be coindexed with any DP in the sentence
  - the oblique  $N-k'$  includes the unique postposition  $-k'$  that only happens with themes based on this root  $\sqrt{hin}$  ‘believe’, but which is probably related to the locative  $-x'$  and is certainly distinct from the diminutive  $-k'$
  - Edwards (2009: 118) gives this theme with  $N$  *éek'* implying that her consultants preferred to use  $-k'$  with the postpositional attachment base =*ee* rather than direct attachment

30. Leer confusingly lists these extensional stative themes as “motion” themes because they can be used with a few motion derivations and most other extensional statives are derived from motion themes. These particular themes are however semantically unlike motion themes. I do not believe they can occur with other motion derivations but I am unsure of this.

- (82) a. *cognitive stative imperfective*  
 ák' aᵗaaheen  
 á<sub>i</sub>-k' a- $\emptyset$ -ᵗa-ᵗa- $\sqrt{hin}$ -h  
 3.N<sub>i</sub>-OBL 3.O-ZCNJ-1SG.S-CL[-D, $\emptyset$ ,+I]- $\sqrt{believe}$ -VAR  
 'I believe it<sub>i</sub>'
- b. *cognitive stative habitual*  
 ák' ooxahínch  
 á<sub>i</sub>-k' a-u-ᵗa- $\emptyset$ - $\sqrt{hin}$ -ch  
 3.N<sub>i</sub>-OBL 3.O-PFV.TEL-1SG.S-CL[-D, $\emptyset$ ,-I]- $\sqrt{believe}$ -HAB  
 'I always (come to) believe it<sub>i</sub>'
- c. *cognitive stative perfective*  
 aᵗ kinaayéigik' aᵗwaahín  
 aᵗ kinaayéik-ᵗi-k' a-ᵗu-ᵗa-ᵗa- $\sqrt{hin}$ -ᵗ  
 1SG.PSS guardian.spirit-PSS-OBL 3.O-PFV-1SG.S-CL[-D, $\emptyset$ ,+I]- $\sqrt{believe}$ -VAR  
 'I have come to believe in my guardian spirit'

· positional verbs

- positional verbs describe physical situations of the verb's arguments, usually locations or positions in space, and very occasionally in time by metaphorical extension
- positional verb themes only occur in the imperfective mode, and cannot exist in other modes
- most positional themes are paired with other non-positional themes that provide equivalent non-imperfective forms (Leer 1991: 324)
  - motion themes that are transitive and denote controlled motion have corresponding themes that are intransitive and denote being at or coming to rest (Leer 1991: 325)
  - for such intransitive themes, the imperfective mode is positional with the bound phrase *N-t* and the non-imperfective modes include the motion derivation *ᵗan*= ~ *ᵗaᵗ*= ~ *ᵗánde*= ( $\emptyset$ ) 'coming to rest'

- (83) a. *perfective*  
 áa yan uwatán  
 á<sub>j</sub>-' ᵗan= $\emptyset$ <sub>i</sub>-u-ᵗa- $\sqrt{tan}$ -ᵗ  
 3.N<sub>j</sub>-LOC TERM=3.O<sub>i</sub>-PFV.TEL-CL[-D, $\emptyset$ ,+I]- $\sqrt{move}$ -VAR  
 'it<sub>i</sub> came to rest there<sub>j</sub>'
- b. *-n positional imperfective*  
 át tán  
 á<sub>j</sub>-t  $\emptyset$ - $\emptyset$ - $\emptyset$ - $\sqrt{tan}$ -n  
 3.N<sub>j</sub>-t 3.O<sub>i</sub>-ZCNJ-CL[-D, $\emptyset$ ,-I]- $\sqrt{move}$ -VAR  
 'it<sub>i</sub> is at rest there<sub>j</sub>'
- c. *-h repetitive imperfective*  
 áa yaᵗ taan  
 á<sub>j</sub>-' ᵗaᵗ= $\emptyset$ <sub>i</sub>- $\emptyset$ - $\emptyset$ - $\sqrt{tan}$ -h  
 3.N<sub>j</sub>-LOC TERM=3.O<sub>i</sub>-ZCNJ-CL[-D, $\emptyset$ ,-I]- $\sqrt{move}$ -VAR  
 'it<sub>i</sub> keeps coming to rest there<sub>j</sub>'
- d. *future*  
 áa yánde kgwatáan  
 á<sub>j</sub>-' ᵗán-de= $\emptyset$ <sub>i</sub>-ga-w-ga- $\emptyset$ - $\sqrt{tan}$ -:  
 3.N<sub>j</sub>-LOC TERM-ALL=3.O<sub>i</sub>-GCNJ-IRR-GMOD-CL[-D, $\emptyset$ ,-I]- $\sqrt{move}$ -VAR  
 'it<sub>i</sub> will come to rest there<sub>j</sub>'

- we could represent themes like that above by including the positional imperfective as a special form listed in the ephemera
  - > *O*-[ $\emptyset$ ]- $\sqrt{tan}$  (Mot, -n Pos) 'O (container) assume/be in position'
- but many examples of motion & positional theme pairings do not have exactly the same root, as for example the pair of  $\sqrt{ki}$  'sit (pl.)' and  $\sqrt{kin}$  'be seated (pl.)'

- (84) a. *perfective*  
 áa has wookee  
 á-' has=ᵗu- $\emptyset$ -ᵗa- $\sqrt{ki}$ -h  
 3.N-LOC PL=PFV-3.S-CL[-D, $\emptyset$ ,+I]- $\sqrt{sit}$ .PL-VAR  
 'they sat down there'
- b. *positional imperfective*  
 át has kéen  
 á-t has= $\emptyset$ - $\emptyset$ - $\emptyset$ - $\sqrt{kin}$ -:  
 3.N-PNCT PL=ZCNJ-3.S-CL[-D, $\emptyset$ ,-I]- $\sqrt{sit}$ .PL-VAR  
 'they are sitting there'



c. *negative perfective*

tléil áa has wookée  
 tléil á' has=ÿu- $\emptyset$ - $\emptyset$ - $\sqrt{k}$ i-h  
 NEG 3.N-LOC PL=PFV-3.S-CL[-D, $\emptyset$ , -I]- $\sqrt{\text{sit}}$ .PL-VAR  
 'they didn't sit down there'

d. *negative positional imperfective*

tléil át has ukeen  
 tléil á-t has=u- $\emptyset$ - $\emptyset$ - $\emptyset$ - $\sqrt{k}$ in-h  
 NEG 3.N-PNCT PL=IRR-ZCNJ-3.S-CL[-D, $\emptyset$ , -I]- $\sqrt{\text{sit}}$ .PL-VAR  
 'they aren't sitting there'

- › the final *n* of the positional root might be analyzed as *-n* stem variation giving  $\sqrt{CV} + -n \rightarrow C\acute{V}:n$  and hence *kéen* here so that the root would still be  $\sqrt{k}$ i for both themes
- › but the irrealis form breaks that analysis: irrealis *-n* active and *-n* positional imperfectives also have *-n*, but the irrealis positional stem here is *kéen* and hence has *-h* stem variation
- › therefore we have the positional imperfective with *-:* stem variation, rather than the *-n* found with most other positional imperfectives
- so we list motion & positional pairs as two related themes rather than as a single theme with a special imperfective form
  - › *O*- $[\emptyset]$ - $\sqrt{tan}$  (Mot) 'O (container) move' + *N-x'* *ÿan*=~*ÿax*=~*ÿánde*= ( $\emptyset$ ) 'coming to rest at N' & *N-t O*- $[\emptyset]$ - $\sqrt{tan}$  ( $\emptyset$ ; *-:* Pos) 'O (container) be situated at N'
  - › *N-x'* *S*- $[\emptyset]$ - $\sqrt{k}$ i (Mot) 'S (pl.) sit' + *N-x'* (*ga*) 'downward at N' & *N-t S*- $[\emptyset]$ - $\sqrt{k}$ in (*ga*; *-:* Pos) 'S (pl.) be seated at N'
- some positional themes have roots that are phonologically unrelated, so the relationship is purely lexical-semantic
  - › the motion theme *S*- $[\emptyset]$ - $\sqrt{nuk}$  (Mot) 'S (sg.) sit' is semantically related to the positional theme *N-t S*- $[\emptyset]$ - $\sqrt{a}$  (*ga*; *-:* Pos) 'S (sg.) be seated, situated at N'

(85) a. *perfective*

áa woonook  
 á' ÿu- $\emptyset$ -ÿa- $\sqrt{nuk}$ -h  
 3.N-LOC PFV-3.S-CL[-D, $\emptyset$ , +I]- $\sqrt{\text{sit}}$ .SG-VAR  
 'he sat down there'

b. *positional imperfective*

át áa  
 á-t  $\emptyset$ - $\emptyset$ - $\emptyset$ - $\sqrt{a}$ -:  
 3.N-PNCT ZCNJ-3.S-CL[-D, $\emptyset$ , -I]- $\sqrt{\text{sit}}$ .SG-VAR  
 'he is sitting there'

- Cable (p.c. 2012) has some reservations about Leer's approach:
 

Your discussion of the purely positional themes [with]  $\sqrt{k}$ in and  $\sqrt{a}$  greatly clarifies why Leer (1991) treats positional imperfectives as the primary imperfectives of derived themes (something I always found extremely confusing/odd). However, I'm not entirely convinced by this argument. How many positionals are there, really, where we can definitely say that they *aren't* just secondary imperfectives of an independent theme? To my eye, it would be more elegant for something like *át tán* to be a secondary imperfective of the motion theme, and for  $\sqrt{k}$ in and  $\sqrt{a}$  to be listed as irregular exceptional forms.

  - › we can thus envision an operation where applying a positional imperfective semantics to an existing theme produces a specialized secondary imperfective
    - › this operation would then have exceptions where the root is suppletive
  - › I sympathize with this analysis, but have not considered the ramifications for the consequent rearrangement of the lexicon and the verbal system
  - › this remains an outstanding issue for lexical and morphosemantic investigation, closely tied with the semantics of the positional imperfective aspectual category
- all positional imperfectives occur with the bound PP *N-t* 'at N': \*(*át*) *áa*
  - the locative *-x'* ~ *-'* is ungrammatical with positional imperfectives (Leer 1991: 328)

- (86) a. *positional imperfective*  
 \*áx' áa  
 á-x' Ø-Ø-Ø-√.a-:  
 3.N-LOC 3.O-ZCNJ-CL[-D,Ø,-I]-√sit.SG-VAR  
 'he is sitting there'
- b. *positional imperfective*  
 át áa  
 á-t Ø-Ø-Ø-√.a-:  
 3.N-PNCT 3.O-ZCNJ-CL[-D,Ø,-I]-√sit.SG-VAR  
 'he is sitting there'
- c. *stative imperfective*  
 áx' yéi yatee  
 á-x' yéi=Ø-Ø-ÿa-√ti-h  
 3.N-LOC thus=3.O-ZCNJ-CL[-D,Ø,+I]-√be-VAR  
 'it is there'
- d. *stative imperfective*  
 \*át yéi yatee  
 á-t yéi=Ø-Ø-ÿa-√ti-h  
 3.N-PERT thus=3.O-ZCNJ-CL[-D,Ø,+I]-√be-VAR  
 'it is there'
- e. *active imperfective*  
 áx' yéi jíné  
 á-x' yéi=Ø-Ø-Ø-√ne-'  
 3.N-LOC thus=ZCNJ-3.S-CL[-D,Ø,-I]-√work-VAR  
 'he is working there'
- f. *active imperfective*  
 \*át yéi jíné  
 á-t yéi=Ø-Ø-Ø-√ne-'  
 3.N-PNCT thus=ZCNJ-3.S-CL[-D,Ø,-I]-√work-VAR  
 'he is working there'

- most positional themes are intransitive, but there are causative positional themes that have both subjects and objects, e.g. *N-t O-S-[s]-√.a* (*ga; -: Pos*) 'S have O seated, situated at N'

- (87) t'ook kát as.áa du yádi  
 t'ook kát as.áa du yádi  
 t'ook ká-t a-Ø-Ø-sa-√.a-:  
 cradleboard HSFC-PNCT 3.O-ZCNJ-3.S-CL[-D,s,-I]-√sit.SG-VAR 3H.PSS child-PSS  
 'he has his child sitting on a cradleboard'

(Edwards 2009: 328)

- positional themes (always?) have multipositional stative imperfectives that denote “that the group or mass is distributed among various locations” (Leer 1991: 328), essentially serving as a plural counterpart for the positional imperfective
- multipositional stative imperfectives are stative since they have [+I] in the classifier, and they also include the theme's conjugation prefix
  - they characteristically have either the *-k* suffix with a closed root or *-kwt* with an open root
    - > Leer treats *-kwt* as a sequence of two suffixes *-kw-t*
    - > the *-k* suffix is probably the repetitive, and the *-t* suffix may be the ictive pluractional suffix
    - > the reason why *-kw-t* has rounding whereas *-k* does not is unclear
    - > I usually segment this as a single suffix *-kwt* 'MPOS' since using *-kw-t* 'REP-ICT' is rather opaque
    - > I also gloss *-k* as 'MPOS' instead of 'REP'
  - multipositional stative imperfectives also always have a bound PP *N-x̄* with the pertinent case
  - the following pair exemplifies the positional theme *N-t O-[Ø]-√da* (*na; -n Pos*) 'O (water) lie at N' and the multipositional stative theme *N-x̄ O-[Ø]-√da* (*na; -kwt MPos Stv*) 'O (water) lie along N' (Leer 1991: 328)

- (88) a. *positional imperfective*  
 át déin  
 á-t Ø-Ø-Ø-√da-n  
 3.N-PNCT 3.O-ZCNJ-CL[-D,Ø,-I]-√flow-VAR  
 'it (body of water) lies there'
- b. *multipositional stative imperfective*  
 áx̄ naadákwt  
 á-x̄ Ø-na-ÿa-√da-kwt  
 3.N-PERT 3.O-NCNJ-CL[-D,Ø,+I]-√flow-MPOS  
 'bodies of water lie here and there along it'

- eventive verbs

- eventive verbs describe situations that culminate instantaneously, essentially achievements  
such themes refer to events that culminate in an instantaneous change of state (Leer 1991: 286–287)
- a prototypical example of an eventive theme is  $O-S-[\emptyset]-\sqrt{u'n}$  ( $\emptyset$ ; Evt,  $-t$  Rep) ‘S shoot O (with gun)’

- (89) a. *eventive perfective*  
 $\underline{x}$ waa.ún  
 $\emptyset$ -ÿu- $\underline{x}$ a-ÿa- $\sqrt{u'n}$ -ÿ  
 3.O-PFV-1SG.S-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{shoot}}$ -VAR  
 ‘I shot it’
- b. *eventive repetitive imperfective*  
 $\underline{x}$ a.únt  
 $\emptyset$ - $\emptyset$ - $\underline{x}$ a- $\emptyset$ - $\sqrt{u'n}$ -t  
 3.O-ZCNJ-1SG.S-CL[-D, $\emptyset$ ,-I]- $\sqrt{\text{shoot}}$ -ICT  
 ‘I’m shooting at it (repeatedly)’, ‘I’m taking shots at it’
- another typical eventive theme is  $O-S-[\emptyset]-\sqrt{t'ih}_{TSR}\sim t'e^h_N$  (*ga*; Evt) ‘S find O’
- (90) a. *eventive perfective*  
 $\underline{x}$ waat'ee  
 $\emptyset$ -ÿu- $\underline{x}$ a-ÿa- $\sqrt{t'ih}$ -h  
 3.O-PFV-1SG.S-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{find}}$ -VAR  
 ‘I found it’, ‘I’ve found it’
- b. *eventive progressive*  
 kei n $\underline{x}$ at'éen  
 kei= $\emptyset$ -na- $\underline{x}$ a- $\emptyset$ - $\sqrt{t'ih}$ -n  
 up=3.O-NCNJ-1SG.S-CL[-D, $\emptyset$ ,-I]- $\sqrt{\text{find}}$ -VAR  
 ‘I’m beginning to find it’, ‘I’m finding it more exactly’

- Leer (1991: 235) defines a subset of eventives called ‘involuntary eventives’  
If the Perfective [of an eventive theme] is semantically a resultative, the theme is called an INVOLUNTARY EVENTIVE theme; otherwise it is simply called an EVENTIVE theme (Leer 1991: 235)
- the theme  $O-S-[\emptyset]-\sqrt{jak}$  ( $\emptyset$ ; Evt) ‘S kill O’ is an ordinary eventive, whereas the theme  $O-[\text{+D},\emptyset]-\sqrt{xwe'tl}$  ( $\emptyset$ ; Evt) ‘O be(come) tired’ is an involuntary eventive

- (91) a. *eventive perfective*  
 $\underline{x}$ waaják  
 $\emptyset$ -ÿu- $\underline{x}$ a-ÿa- $\sqrt{jak}$ -ÿ  
 3.O-PFV-1SG.S-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{kill}}$ -VAR  
 ‘I killed it’
- b. *involuntary eventive perfective*  
 $\underline{x}$ at wudixwétl  
 $\underline{x}$ at-ÿu-di- $\sqrt{xwe'tl}$ -ÿ  
 1SG.O-PFV-CL[+D, $\emptyset$ ,+I]- $\sqrt{\text{tire}}$ -VAR  
 ‘he is tired’, ‘he got tired’
- Leer (1991: 290) notes that involuntary eventives are only  $\emptyset$ -, *na*-, or *ga*-conjugation, so there are no *ga*-conjugation involuntary eventive themes
  - Leer (1991: 74) also says that most intransitive involuntary eventive themes are object intransitives (unaccusatives), but that some exceptions exist  
Single-argument Involuntary Eventive themes always refer to an event that happens to the referent of the argument, an event that is beyond the control of this referent; such themes are therefore always [object intransitive]. Thus all [object intransitive] Eventive themes are Involuntary Eventive themes, and do not need to be specially designated as Involuntary... Only a few Involuntary Eventive themes are transitive... Leer (1991: 74)
  - › despite his assertion that indicating involuntary eventives is unnecessary for object intransitives, I do indicate them in verb theme representations for clarity
  - › an object intransitive involuntary eventive theme is  $O-[\text{+D},\emptyset]-\sqrt{shan}$  ( $\emptyset$ ; Invol Evt) ‘O (person) be(come) old’

- (92) a. *involuntary eventive perfective*  
 $\underline{x}$ at wudishán  
 $\underline{x}$ at-ÿu-di- $\sqrt{shan}$ -ÿ  
 1SG.O-PFV-CL[+D, $\emptyset$ ,+I]- $\sqrt{\text{old}}$ -VAR  
 ‘I am old’, ‘I got old’
- b. *involuntary eventive progressive*  
 yaa  $\underline{x}$ at nadashán  
 ÿaa= $\underline{x}$ at-na-da- $\sqrt{shan}$ -n  
 along=1SG.O-NCNJ-CL[+D, $\emptyset$ ,-I]- $\sqrt{\text{old}}$ -VAR  
 ‘I’m getting old’

- › an example of a transitive involuntary eventive is the theme  $O-S-[s]-\sqrt{ku}^h$  ( $\emptyset$ ; Invol Evt) ‘S be(come) familiar with, come to know O’ that is more usually translated as ‘S know O’

- (93) a. *involuntary eventive perfective*  
 xwasikóo  
 $\emptyset$ -yü-xa-si- $\sqrt{ku}^h$ -ỹ  
 3.O-PFV-1SG.S-CL[-D,S,+I]- $\sqrt{\text{know}}$ -VAR  
 ‘I have become familiar with it’, ‘I know it’, ‘I knew it’
- b. *involuntary eventive progressive*  
 yaa nxasakwéin  
 yaa= $\emptyset$ -na-xa-sa- $\sqrt{ku}^h$ -n  
 along=3.O-NCNJ-1SG.S-CL[-D,S,-I]- $\sqrt{\text{know}}$ -VAR  
 ‘I am coming to know it’, ‘I am becoming familiar with it’

- › another similar transitive involuntary eventive theme is  $O-S-[s]-\sqrt{tin}$  ( $ga$ ; Invol Evt) ‘S catch sight of, see O’ which again is more usually translated as simply ‘S see O’

- (94) a. *involuntary eventive perfective*  
 xwasiteen  
 $\emptyset$ -yü-xa-si- $\sqrt{tin}$ -h  
 3.O-PFV-1SG.S-CL[-D,S,+I]- $\sqrt{\text{see}}$ -VAR  
 ‘I caught sight of it’, ‘I see it’, ‘I saw it’
- b. *involuntary eventive progressive*  
 yei nxasatín  
 yei= $\emptyset$ -na-xa-sa- $\sqrt{tin}$ -n  
 down=3.O-NCNJ-1SG.S-CL[-D,S,-I]- $\sqrt{\text{see}}$ -VAR  
 ‘I am catching sight of it’, ‘I am beginning to see it’

- › notice that both of the two preceding verb themes are experiential predicates
  - possibly all involuntary eventives are experiential predicates, with some minor stretching of ‘experience’ for verb themes like  $O-[+D,\emptyset]-\sqrt{shan}$  ( $\emptyset$ ; Invol Evt) ‘O (person) be(come) old’
  - I am unaware if the converse is actually true, but I expect that most experiential predicates are involuntary eventives

## 5.8. MOTION VERBS

Motion verbs are those describing some kind of motion. This motion may be metaphorical, e.g. “transfer of property, transition from one state of mind to another, etc.” (Leer 1991: 293 fn. 12).

- motion verb themes are based around particular roots that denote motion, e.g.  $\sqrt{gut}$  ‘sg. go (by foot)’
- a motion theme does not belong to any particular conjugation class, instead motion themes must be derived into one of the four conjugation classes
  - the derivation usually includes a bound PP or NP, or else a preverb, though some are bare
  - take the basic motion theme  $S-[\emptyset]-\sqrt{gut}$  (Mot) ‘S (sg.) go (by foot)’
    - this theme cannot be used without a motion derivation because it lacks a conjugation class
  - one of the most frequent motion derivations is  $N-\{t,x,dé\}$  ( $\emptyset$ ), meaning that the derivation is into the  $\emptyset$ -conjugation class and includes a bound PP  $N-\{t,x,dé\}$ ; the meaning is ‘motion ending at  $N$ ’

- (95) a. *perfective*  
 át xwaagút  
 á-t yü-xa-ya- $\sqrt{gut}$ -ỹ  
 3N-PNCT PFV-1SG.S-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{go}}$ .SG-VAR  
 ‘I got there’
- b. *potential*  
 aadé kwaagoot  
 á-dé u- $\emptyset$ -ga-xa-ya- $\sqrt{gut}$ -h  
 3N-ALL IRR-ZCNJ-GMOD-1SG.S-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{go}}$ .SG-VAR  
 ‘I can get there’

- in the  $N-\{t,x,dé\}$  phrase the postposition is sensitive to the particular mode, e.g. punctual  $-t$  for the perfective, allative  $-dé$  for the future and potential, and  $-x$  for the imperfective and habitual
- for convenience  $á$  is translated as ‘there’, but  $á$  really means ‘it’, so  $N$  is not just a location

- another motion derivation is *N-t* (*na*), where the verb theme is in the *na*-conjugation class and has a bound PP *N-t*; the meaning is ‘motion circling around *N*’

(96) a. <i>perfective</i>	b. <i>potential</i>
át xwaagoot	át unkaagoot
á-t yü-xa-ya-√gut-h	á-t u-na-ga-xa-θ-√gut-h
3N-PNCT PFV-1SG.S-CL[-D,θ,+I]-√go.SG-VAR	3N-PNCT IRR-NCNJ-GMOD-1SG.S-CL[-D,θ,+I]-√go.SG-VAR
‘I went around there’	‘I can go around there’

- like any other non-θ-conjugation verb theme, the perfective form has *-h* stem variation
- the *-t* in the bound PP is invariable rather than depending on the mode

- another *na*-conjugation motion derivation is *N-dé* (*na*) which denotes ‘motion towards (but not necessarily ending at) *N*’

(97) a. <i>perfective</i>	b. <i>potential</i>
aadé xwaagoot	aadé unkaagoot
á-dé yü-xa-ya-√gut-h	á-dé u-na-ga-xa-ya-√gut-h
3N-ALL PFV-1SG.S-CL[-D,θ,+I]-√go.SG-VAR	3N-ALL IRR-NCNJ-GMOD-1SG.S-CL[-D,θ,+I]-√go.SG-VAR
‘I went toward there’	‘I can go toward there’

- motion derivations in the *ga*-conjugation class are associated with downward movement, while motion derivations in the *ga*-conjugation class are associated with upward movement
  - hence Story & Naish (1973: 353) named *ga-* ‘descendant’ and *ga-* ‘ascendant’, though this only works for motion verbs and not for conjugation classes generally
  - the following have *N-x* (*ga*) ‘motion down along *N*’ and *N-dáx* (*ga*) ‘motion starting up from *N*’

(98) a. <i>perfective</i>	b. <i>potential</i>
áx xwaagoot	áx kwaakaagoot
á-x yü-xa-ya-√gut-h	á-x u-ga-ga-xa-ya-√gut-h
3N-PERT PFV-1SG.S-CL[-D,θ,+I]-√go.SG-VAR	3N-PERT IRR-GCNJ-GMOD-1SG.S-CL[-D,θ,+I]-√go.SG-VAR
‘I went down along it’	‘I can go down along it’
c. <i>perfective</i>	d. <i>potential</i>
aadáx xwaagoot	aadáx gookaagoot
á-dáx yü-xa-ya-√gut-h	á-dáx ga-u-ga-xa-ya-√gut-h
3N-ABL PFV-1SG.S-CL[-D,θ,+I]-√go.SG-VAR	3N-ABL GCNJ-IRR-GMOD-1SG.S-CL[-D,θ,+I]-√go.SG-VAR
‘I went up from it’	‘I can go up from it’

- by far the largest class of motion derivations is the θ-conjugation class, with the *na*-conjugation and *ga*-conjugation classes covering somewhat less than ten, and the *ga*-conjugation class only including two motion derivations
- Leer (1991) insists that the θ-conjugation class denotes telic motion versus the atelic motion of the other conjugation classes, but the following derivations are hard to construe as involving telicity
  - *kei=* (θ) ‘movement upward’ (not *ga*-conjugation!)
  - *yey=* (θ) ‘movement downward’ (not *ga*-conjugation!)
  - *N-x*’ (θ) ‘movement approaching *N*’
  - *yán=yoo=* (θ) ‘movement up and down (from surface)’
  - *áa=yáx=* (θ) ‘turning over’
  - *N-daséi-x*’ (θ) ‘exchanging places with *N*’

- *a-ÿa-oo-[+D]- (∅)* ‘reverting, movement returning to source’
- each motion derivation provides a distinct repetitive imperfective form which is not necessarily the repetitive imperfective normally associated with the conjugation class
  - *N-{t,x,dé} (∅)* and its relatives all have a *-h* repetitive imperfective

- (99) a. *perfective*  
 haat uwagút  
 haa-t=u-∅-ÿa-√gut-ÿ  
 here-PNCT=PFV.TEL-3.S-CL[-D,∅,+I]-√go.SG-VAR  
 ‘he came here’
- b. *-h repetitive imperfective*  
 haax̄ goot  
 haa-x̄=∅-∅-∅-√gut-h  
 here-PERT=ZCNJ-3.S-CL[-D,∅,-I]-√go.SG-VAR  
 ‘he comes here repeatedly’

- in contrast, *ÿeik̄= (∅)* ‘movement down to shore’ has a *-ch* repetitive imperfective

- (100) a. *perfective*  
 ÿeik̄ uwagút  
 ÿeik̄=u-∅-ÿa-√gut-ÿ  
 ADLIT=PFV.TEL-3.S-CL[-D,∅,+I]-√go.SG-VAR  
 ‘he went down to shore’
- b. *-ch repetitive imperfective*  
 ÿeik̄ gútch  
 ÿeik̄=∅-∅-∅-√gut-ch  
 ADLIT=ZCNJ-3.S-CL[-D,∅,-I]-√go.SG-VAR  
 ‘he goes down to shore repeatedly’

- thus when listing motion derivations it is also necessary to note the repetitive imperfective type associated with them

- > *N-{t,x,dé} (∅; -h Rep)* ‘motion ending at *N*’
- > *daak̄= (∅; -ch Rep)* ‘motion up from shore’
- > *gunayéi= ~ gunéi= (∅; -x̄ Rep)* ‘motion beginning’
- > *ÿan=yoo= (∅; yoo=[+I]-...-k Rep)* ‘motion up and down’
- > *a-ÿa-oo-[+D]- (∅; -x̄ Rep)* ‘motion reverting’
- > *N-dé (na; yoo=[+I]-...-k Rep)* ‘motion toward *N*’
- > *N-t (na; —)* ‘motion around *N*’
- > *(ga; -ch Rep)* ‘falling (uncontrolled); motion downward (controlled)’
- > *N-dáx̄ (ga; -ch Rep)* ‘motion starting off from, picking up from *N*’

- note that *N-t (na; —)* ‘motion around *N*’ lacks a repetitive imperfective, as does its sibling form *N áa (na; —)* ‘motion around indefinite location’

- also note that *(ga; -ch Rep)* ‘falling (uncontrolled); motion downward (controlled)’ lacks any non-ephemeral elements, a property shared with the other two non-∅ conjugation class derivations (*na; yoo=[+I]-...-k Rep*) ‘motion along, laterally, horizontally, unconstrained’ and *(ga; -ch Rep)* ‘motion starting off, picking up, upward’

- some motion derivations include incorporated nouns, “where the motion crucially involves only part of an object” which is “specified by the incorporated noun” (Leer 1991: 312)
  - the typical incorporate in motion derivations is *sha-* ‘head, top part of upright object’ from the inalienable noun *-shá* ‘head’, as in *ÿan= ~ ÿax̄= ~ ÿánde= sha-* (∅; -h Rep) ‘set up by leaning against something’

- (101) a. *ÿan x̄waatán*  
 ÿan=∅-ÿu-x̄a-ÿa-√tan-ÿ  
 TERM=3.O-PFV-ISG.S-CL[-D,∅,+I]-√handle-VAR  
 ‘I set it down’
- b. *ÿan shax̄waatán*  
 ÿan=∅-sha-ÿu-x̄a-ÿa-√tan-ÿ  
 TERM=3.O-PFV-ISG.S-CL[-D,∅,+I]-√handle-VAR  
 ‘I set it up’ (e.g. a post against a wall)

- another incorporate is *k’i-* ‘base, bottom end of upright object’ from the inalienable noun *-k’i*<sup>31</sup> ‘base’ in the derivation *ÿan= ~ ÿax̄= ~ ÿánde= k’i-* (∅; -h Rep) ‘erect, set up on or into the ground’

31. Also cf. *-k’eyí* ‘base, stem, foot of plant or tree’.

- (102) a.  $\dot{y}\text{an } \dot{x}\text{waatán}$   
 $\dot{y}\text{an}=\emptyset\text{-}\dot{y}\text{u-}\dot{x}\text{a-}\dot{y}\text{a-}\sqrt{\text{tan-}\dot{y}}$   
 TERM=3,O-PFV-1SG.S-CL[-D,∅,+I]-√handle-VAR  
 ‘I set it down’
- b.  $\dot{y}\text{an } \text{k}'\dot{i}\dot{x}\text{waatán}$   
 $\dot{y}\text{an}=\emptyset\text{-sha-}\dot{y}\text{u-}\dot{x}\text{a-}\dot{y}\text{a-}\sqrt{\text{tan-}\dot{y}}$   
 TERM=3,O-PFV-1SG.S-CL[-D,∅,+I]-√handle-VAR  
 ‘I set it up’ (e.g. a post by sticking it into the ground)

- Leer (1991: 293–295) divides motion verb themes up into a handful of categories based on their semantic and syntactic properties; I repeat his categories and examples here
  - intransitive themes of controlled motion
    - $S\text{-}[\emptyset]\text{-}\sqrt{\text{gut}}$  (Mot) ‘S (sg.) go (by foot)’
    - $S\text{-}[\emptyset]\text{-}\sqrt{\text{at}}$  (Mot) ‘S (pl.) go (by foot)’
    - $S\text{-}[\emptyset]\text{-}\sqrt{\text{kux}}$  (Mot) ‘S go by boat, vehicle’
    - $O\text{-}\dot{y}\text{a-}[\emptyset]\text{-}\sqrt{\text{gu}}$  (Mot) ‘S go in a group or fleet (canoes, vehicles, whales)’
    - $S\text{-}[+D,\emptyset]\text{-}\sqrt{\text{kin}}$  (Mot) ‘S (sg.) fly’
    - $O\text{-ka-}[+D,l]\text{-}\sqrt{\text{yich}}$  (Mot) ‘S (pl.) fly’
  - intransitive themes of uncontrolled motion
    - $O\text{-}[\emptyset]\text{-}\sqrt{\text{xix}}$  (Mot) ‘O (generic) fall, move through space’
    - $O\text{-}[+D,sh]\text{-}\sqrt{\text{xin}}$  (Mot) ‘O (wooden) fall, move through space’
    - $O\text{-}[+D,s]\text{-}\sqrt{\text{git}}$  (Mot) ‘O (animate) fall, move through space’
    - $O\text{-ka-}[\emptyset]\text{-}\sqrt{\text{sóos}^*}$  (Mot) ‘O (pl.) fall, move through space’
    - $O\text{-}[+D,\emptyset]\text{-}\sqrt{\text{gat}}$  (Mot) ‘O (pl.) fall scattered’
  - transitive themes of controlled motion
    - $O\text{-S-}[\emptyset]\text{-}\sqrt{\text{ti}^h}$  (Mot) ‘S handle O (generic)’
    - $O\text{-S-}[\emptyset]\text{-}\sqrt{\text{tan}}$  (Mot) ‘S handle O (wooden; empty container)’<sup>32</sup>
    - $O\text{-S-}[s]\text{-}\sqrt{\text{nuk}}$  (Mot) ‘S handle O (sg. live conscious animate)’
    - $O\text{-S-}[s]\text{-}\sqrt{\text{ta}^h}$  (Mot) ‘S handle O (dead/unconscious animate)’
    - $O\text{-S-}[l]\text{-}\sqrt{\text{at}}$  (Mot) ‘S handle O (sg. inanimate or unconscious animate)’
    - $O\text{-S-}[s]\text{-}\sqrt{\text{ki}}$  (Mot) ‘S handle O (pl. live conscious animate)’
    - $O\text{-ka-S-}[\emptyset]\text{-}\sqrt{\text{jel}}$  (Mot) ‘S handle O (pl. inanimate) in a bunch’
  - transitive themes of uncontrolled motion
    - $O\text{-S-}[\emptyset]\text{-}\sqrt{\text{gix}}$  (Mot) ‘S throw, abruptly handle O (generic)’
    - $O\text{-S-}[\emptyset]\text{-}\sqrt{\text{xich}}$  (Mot) ‘S throw, abruptly handle O (wooden or animate)’
    - $O\text{-S-}[\emptyset]\text{-}\sqrt{\text{gich}}$  (Mot) ‘S throw, abruptly handle O (pl.)’
  - the classificatory verb system which classifies nouns using verbs is based on the transitive themes of controlled and uncontrolled motion along with the intransitive themes of uncontrolled motion
    - Leer (1991: 295) notes that ‘classificatory theme’ is often artificially restricted by Athabaskanists to only the transitive themes of controlled motion, usually called ‘handling verbs’
    - the handling verbs are certainly the greatest locus of classificatory diversity, but Tlingit also shows clear classificatory behaviour in the other two categories (transitive and intransitive uncontrolled)
    - I note that Leer’s descriptions of the classificatory properties are different from those of the Dauenhauers (Dauenhauer & Dauenhauer 2002: 60–62) and Edwards (2009: 572–575), both of whom offer different classes defined by the largely the same verb themes

32. Leer (1991) gives this theme as denoting the handling of wooden objects, whereas the Dauenhauers have it as denoting the handling of empty containers (Dauenhauer & Dauenhauer 2002: 61). In his verb catalogue Leer (1976) has “*aawataan* ‘he carried it (container, simple wooden obj)’” so that perhaps both readings apply to the same verb theme.

- Story & Naish (1973: 42–43) also list somewhat different classifications using the same themes
  - the most extensive document cataloguing the classificatory verbs is by Leer, Hitch, & Ritter (2001: CV-1–13), but this again seems to differ from the others in certain respects
  - Roby Littlefield (p.c. 2011) has collected small sets of physical objects corresponding to different classifications by various Tlingit speaking individuals, and again her inventory differs from Leer, Edwards, and the Dauenhauers, in some cases significantly
  - consequently we can say that the classificatory verb system is understood in a global functional sense, but the particular classifications have yet to be coherently documented and are probably subject to dialectal and even idiolectal variation
- motion verbs that describe the movement of a group or mass can regularly have derived *na-* or *ga-* conjugation extensional stative imperfectives with *-h* stem variation (Leer 1991: 321)
    - Leer gives examples of the motion theme  $O-[\emptyset]-\sqrt{da}$  (Mot) ‘O (fluid) flow’ with  $N-dé$  (*na*;  $yoo=[+I]-\dots-k$  Rep) ‘toward N’ and with  $N-x$  (*ga*; *-ch* Rep) ‘down along N’ forming extensional stative imperfectives

(103) a. <i>na-conj. -h extentional stative imperfective</i>	b. <i>ga-conj. -h extentional stative imperfective</i>
aadé naadaa	áx gaadaa
áj-dé $\emptyset_i$ -na- $\dot{y}a$ - $\sqrt{da}$ -h	áj-x $\emptyset_i$ -ga- $\dot{y}a$ - $\sqrt{da}$ -h
3.N <sub>J</sub> -ALL 3.O <sub>i</sub> -NCNJ-CL[-D, $\emptyset$ , +I]- $\sqrt{\text{flow}}$ -VAR	3.N <sub>J</sub> -PERT 3.O <sub>i</sub> -NCNJ-CL[-D, $\emptyset$ , +I]- $\sqrt{\text{flow}}$ -VAR
‘it <sub>i</sub> flows toward it <sub>j</sub> ’	‘it <sub>i</sub> flows down along it <sub>j</sub> ’

- the motion theme  $O-[\emptyset]-\sqrt{shu}^h$  (Mot) ‘O extend’ is, according to Leer (1991: 319), the only theme that can have all the possible extensional stative imperfectives based on the motion derivations
  - he has examples with the following derivations, all of which give *-y* extensional stative imperfectives:
    - *kei=* ( $\emptyset$ ; *-ch* Rep) ‘upward’
    - *yán=*  $\sim$  *yáx=*  $\sim$  *yánde=* ( $\emptyset$ ; *-h* Rep) ‘ashore, to rest’
    - $N-\{t, x, dé\}$  ( $\emptyset$ ; *-h* Rep) ‘arriving at, coming to N’
    - $N-x$  *yá-oo-* ( $\emptyset$ ; *-ch* Rep) ‘obliquely around N’
    - $N-dé$  (*na*;  $yoo=[+I]-\dots-k$  Rep) ‘along toward N’
    - $N-x$  (*ga*; *-ch* Rep) ‘down along N’
    - *yáa=* (*ga*; *-ch* Rep) ‘downward’
    - $N-dáx$  (*ga*; *-ch* Rep) ‘starting off, going away, picking up from N’
  - the following examples give one of each conjugation class; note that  $\emptyset$ -conjugation extensional statives have the same appearance as ordinary statives

(104) a. <i>kei yashóo</i>	b. <i>aadé naashóo</i>
kei= $\emptyset$ - $\emptyset$ - $\dot{y}a$ - $\sqrt{shu}$ - $\dot{y}$	áj-dé $\emptyset_i$ -na- $\dot{y}a$ - $\sqrt{shu}$ - $\dot{y}$
up=3.O-ZCNJ-CL[-D, $\emptyset$ , +I]- $\sqrt{\text{extend}}$ -VAR	3.N <sub>J</sub> -ALL 3.O <sub>i</sub> -NCNJ-CL[-D, $\emptyset$ , +I]- $\sqrt{\text{extend}}$ -VAR
‘it extends up’	‘it <sub>i</sub> extends toward it <sub>j</sub> ’
c. áx gaashóo	d. aax gaashóo
áj-x $\emptyset_i$ -ga- $\dot{y}a$ - $\sqrt{shu}$ - $\dot{y}$	áj-dáx= $\emptyset_i$ -ga- $\dot{y}a$ - $\sqrt{shu}$ - $\dot{y}$
3.N <sub>J</sub> -PERT 3.O <sub>i</sub> -GCNJ-CL[-D, $\emptyset$ , +I]- $\sqrt{\text{extend}}$ -VAR	3.N <sub>J</sub> -ABL=3.O <sub>i</sub> -GCNJ-CL[-D, $\emptyset$ , +I]- $\sqrt{\text{extend}}$ -VAR
‘it <sub>i</sub> extends down along it <sub>j</sub> ’	‘it <sub>i</sub> extends off away from it <sub>j</sub> ’

- Leer (1991: 319) also notes that there are at least two motion derivations which never occur as extensional stative imperfectives, namely the perambulative  $N-t$  (*na*) ‘around N’ and the alternating  $yoo=$  ( $\emptyset$ ;  $yoo=[+I]-\dots-k$  Rep) ‘back and forth, to and fro’



## 5.9. NON-MOTION DERIVATION

There are a small number of productive derivations that can be applied to verb themes to modify their lexical aspect (aktionsart). These are similar to those derivations found with motion verbs, but are not obligatory.

- no stative theme can occur with the non-motion derivations
- the non-motion derivations have largely the same structure as motion derivations
- the resulting derived verbs are not inflectionally restricted, so mode, epimode, etc. are all available
- Leer (1991: 218) divides the non-motion derivations into a few small groups; examples are mostly from Leer (1991: 231–233)

– the inceptive and terminative; both presuppose an endpoint and hence indicate telicity

• inceptive *gunayéi=* ( $\emptyset$ ; -x Rep) ‘beginning, initiating’

› this often appears reduced as *gunéi=* and is occasionally metathesized to *guwanéi=*

› the Tongass forms are *gunayé'=T* and *gune'=T*

› it possibly derives from *guna* ‘different, other’ and the *yéi=* ‘thus, so’ manner preverb,<sup>33</sup> which is related to the light noun *yé* ‘way, manner; place’; the appearance of *ỵ* here rather than *y* is unexplained, but the appearance of ‘ may be from the locative allomorph -’

(105) a. *inceptive future*

*gunayéi kkwaxáa*

*gunayéi=* $\emptyset$ -ga-w-ga-xa- $\emptyset$ - $\sqrt{\text{xa}}$ -:

INCEP=3.O-GCNJ-IRR-GMOD-1SG.S-CL[-D, $\emptyset$ ,-I]- $\sqrt{\text{eat}}$ -VAR

‘I’ll begin to eat it’

b. *inceptive potential*

*gunayéi kwaaxaa*

*gunayéi=* $\emptyset$ -u- $\emptyset$ -ga-xa-*ỵ*a- $\sqrt{\text{xa}}$ -h

INCEP=3.O-IRR-ZCNJ-GMOD-1SG.S-CL[-D, $\emptyset$ ,+I]- $\sqrt{\text{eat}}$ -VAR

‘I can begin to eat it’

• terminative *ỵan=* ~ *ỵax=* ~ *ỵánde=* ( $\emptyset$ ; -h Rep) ‘finishing, ending, terminating’

› the *ỵan=* preverb is derived from the noun *ỵán* ‘shore’, which appears to have originally meant ‘ground’ and is cognate with Proto-Athabaskan \**ɣən* ‘ground’, probably PND \**ɣən* > PT \**ỵán*

(106) a. *terminative future*

*yan kkwaxáa*

*ỵan=* $\emptyset$ -ga-w-ga-xa- $\emptyset$ - $\sqrt{\text{xa}}$ -:

TERM=3.O-GCNJ-IRR-GMOD-1SG.S-CL[-D, $\emptyset$ ,-I]- $\sqrt{\text{eat}}$ -VAR

‘I’ll finish eating it’

b. *terminative potential*

*yan kwaaxaa*

*ỵan=* $\emptyset$ -u- $\emptyset$ -ga-xa-*ỵ*a- $\sqrt{\text{xa}}$ -h

TERM=3.O-IRR-ZCNJ-GMOD-1SG.S-CL[-D, $\emptyset$ ,-I]- $\sqrt{\text{eat}}$ -VAR

‘I may finish eating it’

› in progressive and repetitive forms the preverb switches to *ỵánde=* ~ *ỵandeh=*<sub>T</sub> and *ỵax=* respectively

(107) a. *terminative progressive imperfective*

*yánde yaa naxáein*

*ỵán-dé=yaa=* $\emptyset$ -na-xa- $\emptyset$ - $\sqrt{\text{xa}}$ -n

TERM-ALL=along=3.O-NCNJ-1SG.S-CL[-D, $\emptyset$ ,-I]- $\sqrt{\text{eat}}$ -VAR

‘I’m finishing eating it’

b. *terminative -h repetitive imperfective*

*yax xaxaa*

*ỵax=* $\emptyset$ - $\emptyset$ -xa- $\emptyset$ - $\sqrt{\text{xa}}$ -h

TERM=3.O-IRR-ZCNJ-GMOD-1SG.S-CL[-D, $\emptyset$ ,-I]- $\sqrt{\text{eat}}$ -VAR

‘I keep finishing eating it’, ‘I finish eating it repeatedly’

› the terminative preverb *ỵan=* is becoming distinct from the abmarine preverb *ỵan=* ‘ashore, onto ground’ as can be seen by the distinction in paradigmatic variation of the postposition; e.g. abmarine *ỵan=* appears as *ỵánde=* in the future and potential whereas terminative *ỵan=* only appears as *ỵánde=* in the progressive

33. The manner preverb has two forms in Tongass Tlingit, with *ye'=* occurring where it is thematic and *yeh=* where it is not lexically specified (Leer 1991: 134 fn. 49). Note the use of *y* and not *ỵ* in Tongass for the manner preverb.

- > some people do not have this distinction so that *yánde=* appears in the future and potential
- the exhaustives
  - *yax̣=jä*-[s]- ( $\emptyset$ ; -x Rep) ‘exhausting O; affecting all/much/many O’
    - > unlike the *yán=* ~ *yax̣=* ~ *yánde=* preverb, this *yax̣=* never varies

- (108) a. *exhaustive perfective*  
*yax̣ yax̣wsix̣áa*  
*ỵax̣=θ-ÿa-ÿu-x̣a-si-√x̣a-ÿ*  
 TERM=3.O-VSFC-PFV-1SG.S-CL[-D,S,+I]-√eat-VAR  
 ‘I finished eating all/many of them’
- b. *exhaustive potential*  
*yax̣ wooḳasix̣aa*  
*ỵax̣=θ-ÿa-u-θ-ga-x̣a-ÿa-√x̣a-h*  
 TERM=3.O-VSFC-IRR-ZCNJ-GMOD-1SG.S-CL[-D,θ,+I]-√eat-VAR  
 ‘I may eat all/many of them’
- *N-x̣ jä*-[s]- ( $\emptyset$ ; -x Rep) ‘affecting all/much/many O along N’
  - *N-x̣ (ga)* ‘affecting all/much/many O along N’
  - *yax̣= (ga)* ‘exhausting O; affecting all/much/many O’
- the *daaḳ=* ~ *dahḳ=*<sub>T</sub> derivations
  - these all include the ablitoral preverb *daaḳ=* ~ *dahḳ=*<sub>T</sub> ‘inland from shore, back from open, off of the fire’ — exactly why is unclear
  - *ḳwáaḳx̣=daaḳ=* ( $\emptyset$ ) ‘mistakenly, in error’
- (109) *ḳwáaḳx̣ daaḳ x̣waaax̣áa*  
*ḳwáaḳx̣=daaḳ=θ-ÿu-x̣a-ÿa-√x̣a-ÿ*  
 WRONG=ABLIT=3.O-PFV-1SG.S-CL[-D,θ,+I]-√eat-VAR  
 ‘I mistakenly ate it’ (Leer 1991: 220)
- *ḳunáax̣=daaḳ=* ( $\emptyset$ ) ‘explaining, clarifying’
- excessive *ḳut=* (*ga*) ‘getting carried away’
- (110) *ḳut at x̣waaax̣áa*  
*ḳut=at-ÿu-x̣a-ÿa-√x̣a-ÿ*  
 EXCES=IND.N.O-PFV-1SG.S-CL[-D,θ,+I]-√eat-VAR  
 ‘I got carried away eating’ (Leer 1991: 220)

## 5.10. AUXILIARIES

The auxiliaries are postverbal elements, perhaps enclitics, which can express modes and epimodes replacing or in addition to those marked on the verb. They must occur immediately after the verb.

- there are five auxiliaries which vary widely depending on dialect
  - habitual — *-ch*
    - *neech* — Southern, Transitional, Inland
    - *nooch* — Transitional, Northern
    - *nukch* — Gulf Coast
    - *nuhch* — Tongass
  - decessive habitual — *-ch-éen* (see section 5.11 on epimode for the decessive)
    - *neejeén* — Southern, Transitional, Inland
    - *noojeén* — Transitional, Northern
    - *nuhjeen* — Tongass
  - consecutive — *-:*

- *néekw* — Southern, Transitional, Inland
  - *nóok* — Transitional, Northern
  - *neekw* — Tongass
  - conditional — *-n-ée*
    - *núkwni* — Southern, Transitional, Inland
    - *núkni* — Transitional, Northern
    - *nuknih* — Tongass
  - contingent — *ga-...-n-ín*
    - *ganíkw* — Southern
    - *ganígún* — Transitional, Inland
    - *ganúgún* — Transitional, Northern
    - *ganikw* — Tongass (not verified)
  - as can be readily seen, they all seem to contain a root *nikw ~ nuk*
    - Leer (1991: 156) supposes that the auxiliaries derive from either the verb theme *O-S-CL[-D,∅]-√nikw (∅; -h Act)* ‘S feel O’ or the theme *P-t S-CL[-D,∅]-√nikw (∅; Mot, -k Rep)* ‘S feel like having/doing P’
      - he notes that the habitual auxiliary would be expected to be *uneekwch* or *uníkwch* since the original theme would be a  $\emptyset$ -conjugation class given the lack of a surface conjugation prefix in the conditional or contingent, and that the habitual of a  $\emptyset$ -conjugation class theme has *u-* (probably the perfective as in *haat uwagút* ‘he came here’); the reason why the *u-* is missing in the auxiliary is unknown
    - the auxiliaries seem to have arisen as a way to simply the coda of a verb, shifting consonantal suffixes off of verbs with complex codas
      - the combination of ... mode suffixes with invariable roots or invariant stems may be phonologically awkward and/or hard to parse, and can be avoided by the auxiliaries” (Leer 1991: 211)
- (111) a. *habitual*  
lax’wás’k̄ch  
 $\emptyset$ - $\emptyset$ -la-√x’wás’k̄<sup>x</sup>-ch  
3.O-ZCNJ-CL[-D,l,-I]-√numb-HAB  
‘it’s always numb’
- b. *stative imperfective + habitual*  
lax’wás’gi nooch  
 $\emptyset$ - $\emptyset$ -la-√x’wás’k̄<sup>x</sup> nooch  
3.O-ZCNJ-CL[-D,l,-I]-√numb HAB.AUX  
‘it’s always numb’
- contrast [-I] in the I component of the classifier of the stative imperfective + habitual with the normal [+I] in the regular stative imperfective form
- (112) lix’wás’k̄  
 $\emptyset$ - $\emptyset$ -li-√x’wás’k̄<sup>x</sup>  
3.O-ZCNJ-CL[-D,l,+I]-√numb  
‘it’s numb’
- Leer notes that the auxiliaries are “(virtually) obligatory with invariant stems ending with consonant clusters, and (perhaps) preferred with other invariant stems” (Leer 1991: 211 fn. 8)
  - also, “there is a tendency to avoid the [regular] Consecutive with invariable roots and stems, since they do not distinctively manifest the [-: stem variation suffix], which seems to be perceptually important in recognizing this mode; in this case too, the composite Consecutive is preferred” (Leer 1991: 156–157)
- note that when a verb with a closed root is combined with an auxiliary, what seems to be an epenthetic *i* (or *u* if rounded) is often inserted, but this is not always required

- (113) a. sh kanxalneek nooch  
 sh-ka-na-xa-l-√neek\* nooch  
 RFLX.O-HSFC-NCNJ-1SG.S-CL[+D,l,-I]-√tell HAB.AUX  
 'I always tell a story'
- b. sh kanxalneegi nooch  
 sh-ka-na-xa-l-√neek\* nooch  
 RFLX.O-HSFC-NCNJ-1SG.S-CL[+D,l,-I]-√tell HAB.AUX  
 'I always tell a story'
- with open roots, short vowels generally become long
- (114) a. tlél xwaxá nooch  
 tlél 0-u-0-xa-0-√xa-' nooch  
 NEG 3.O-IRR-ZCNJ-1SG.S-CL[-D,0,-I]-√eat-VAR HAB.AUX  
 'I'm not eating it'
- b. tlél xwaxáa nooch  
 tlél 0-u-0-xa-0-√xa-' nooch  
 NEG 3.O-IRR-ZCNJ-1SG.S-CL[-D,0,-I]-√eat-VAR HAB.AUX  
 'I don't ever eat it'
- the auxiliaries cannot be used with all modes, instead they only occur with three specific modes: imperfectives, future, and consecutive; the following examples are from Leer (1991: 226–228)
- imperfective + auxiliary
- (115) a. *active imperfective + habitual*  
 xaxáa nooch  
 0-0-xa-0-√xa-' nooch  
 3.O-ZCNJ-1SG.S-CL[-D,0,-I]-√eat-VAR HAB.AUX  
 'I always eat it'
- b. *active imperfective + decessive habitual*  
 xaxáa noojéen  
 0-0-xa-0-√xa-' noojéen  
 3.O-ZCNJ-1SG.S-CL[-D,0,-I]-√eat-VAR HAB.DEC.AUX  
 'I always used to eat it'
- c. *active imperfective + consecutive*  
 xaxáa néekw  
 0-0-xa-0-√xa-' néekw  
 3.O-ZCNJ-1SG.S-CL[-D,0,-I]-√eat-VAR CSEC.AUX  
 'after I ate it'
- d. *active imperfective + conditional*  
 xaxáa níkwni  
 0-0-xa-0-√xa-' níkwni  
 3.O-ZCNJ-1SG.S-CL[-D,0,-I]-√eat-VAR COND.AUX  
 'if I eat it'
- e. *active imperfective + contingent*  
 xaxáa ganígún  
 0-0-xa-0-√xa-' ganígún  
 3.O-ZCNJ-1SG.S-CL[-D,0,-I]-√eat-VAR CTNG.AUX  
 'whenever I eat it'
- future + auxiliary
- (116) a. *future + habitual*  
 kukaxaa nooch  
 0-ga-w-ga-xa-0-√xa-' nooch  
 3.O-GCNJ-IRR-GMOD-1SG.S-CL[-D,0,-I]-√eat-VAR HAB.AUX  
 'I'm always going to eat it'
- b. *future + decessive habitual*  
 kukaxaa noojéen  
 0-ga-w-ga-xa-0-√xa-' noojéen  
 3.O-GCNJ-IRR-GMOD-1SG.S-CL[-D,0,-I]-√eat-VAR HAB.DEC.AUX  
 'I was always going to eat it'
- c. *future + consecutive*  
 kukaxaa néekw  
 0-ga-w-ga-xa-0-√xa-' néekw  
 3.O-GCNJ-IRR-GMOD-1SG.S-CL[-D,0,-I]-√eat-VAR CSEC.AUX  
 'after I was going to eat it'

- d. *future + conditional*  
 kukaxaa níkwni  
 0-ga-w-ga-xa-0-√xa-'  
 3.0-GCNJ-IRR-GMOD-1SG.S-CL[-D,0,-I]-√eat-VAR COND.AUX  
 'if I am going to eat it'
- e. *future + contingent*  
 kukaxaa ganígún  
 0-ga-w-ga-xa-0-√xa-'  
 3.0-GCNJ-IRR-GMOD-1SG.S-CL[-D,0,-I]-√eat-VAR CTNG.AUX  
 'whenever I am going to eat it'

## 5.11. EPIMODE

The epimodes are an additional dimension of aspect and mood marking expressed with suffixes.

- the two epimode categories are prohibitive-optative and decessive
- they are mutually exclusive, so that neither can be marked on the same verb
- each epimode can be added to a variety of verb modes to extend the aspect and mood information
- the prohibitive-optative has the suffix *-k* ~ *-éek*
  - the prohibitive-optative *-k* occurs after open stems, the *-éek* can occur with either open or closed stems
  - when optative, it cooccurs with the particle *gu.aal* 'hopefully'
  - when prohibitive, it cooccurs with the particle *líl* 'don't' or with negative *tléil*
  - the irrealis *u-* is always present and the classifier always has [-I]
  - stems with *-'* have a long vowel with high tone
  - for clarity I gloss the suffix as either PHIB or OPT depending on its context
  - the prohibitive-optative expresses either desire (optative) or anti-desire (prohibitive)

- (117) a. *optative + imperfective*                      b. *prohibitive + imperfective*  
 gu.aal xwaxáak                                      líl xwaxáak  
 gu.aal 0-u-0-xa-0-√xa-'*-k*                      líl 0-u-0-xa-0-√xa-'*-k*  
 OPT 3.S-IRR-ZCNJ-1SG.S-CL[-D,0,-I]-√eat-VAR-OPT                      PHIB 3.0-IRR-ZCNJ-1SG.S-CL[-D,0,-I]-√eat-VAR-PHIB  
 'I hope I eat it'                                      'let me not eat it'

- the prohibitive-optative can only occur with imperfective and perfective modes
  - any kind of imperfective, including the progressive, is eligible; examples from Leer (1991: 456)

- (118) a. *-x repetitive imperfective + prohibitive*  
 líl eexéixik!  
 líl 0-0-i-0-√xa-x-éek  
 PHIB 3.0-ZCNJ-2SG.S-CL[-D,0,-I]-√eat-REP-PHIB  
 'don't ever eat it!'
- b. *progressive imperfective + prohibitive*  
 líl neildé yaa neegúdeek!  
 líl neil-dé=yaa=na-i-0-√gut-n-éek  
 PHIB home-ALL=along=NCNJ-2SG.S-CL[-D,0,-I]-√go.SG-VAR-PHIB  
 'don't go along towards home!'

- the prohibitive is functionally the “negative counterpart to the Imperative/Hortative” (Leer 1991: 459), though it is also used without a specific recipient where it means ‘hopefully not’
- the prohibitive-optative is connected to a pattern of privative nominalization with *ka-[l]-...-k̄*
  - *kaltéelk̄* ‘shoeless’ — *ka-l-√téel-k̄* ‘HSFC-CL[1]-√shoe-OPT’
  - *kallítaak̄* ‘knifeless’ — *ka-l-√lítaa-k̄* ‘HSFC-CL[1]-√knife-OPT’
  - Leer (1991: 458) argues that the prohibitive-optative is originally from an “elliptic construction with an omitted verb of existence”
  - he says *líl ixáak!* ‘don’t eat it!’ then was originally ‘be without your eating it!’, comparing the following construction

(119) a *góot dé wé gaax̄!*  
 3N ABES already D.MDST cry  
 it without already that cry  
 ‘enough of that crying!’

- he then extends this analysis to the optative, saying that *gu.aal kwshé ixáak* ‘I hope I eat it’ was originally ‘I wonder why your being without eating (must be the case)?’
- Leer (1991: 457) also notes that the phrases *gu.aalyéi kwshé* ‘I hope so’ and *ill!* ‘don’t!’ are the verbless equivalents to the optative and prohibitive respectively
  - › the *ill!* ‘don’t!’ particle probably contains *i* ‘you (sg.)’ and the prohibitive *líl*, so that *líl* is *lí-l* ‘prohibitive-negative’ with the basic form of the negative particle *tléil ~ héil ~ l*

- the other epimode is the decessive
  - the decessive essentially means that the situation denoted by the verb used to be the case in the past; it implies that the situation is also no longer the case
  - derived from L. *dēcēssus* ‘going down, decreasing’, the antonym of *accēssus* ‘coming up, increasing’
    - Cable suggests a connection to ‘deceased’, so the state of affairs is notionally ‘dead’ and hence ‘used to be the case but no longer’
  - the decessive has the suffix *-éen* and *[-I]* in the classifier
  - the classifier is always *[-I]* regardless of the non-decessive form
  - several modes can be marked with the decessive: imperfectives, perfective, future, potential, habitual

(120) a. *perfective* b. *decessive perfective*  
*x̄wasikóo* *x̄wasakóowoon*  
*∅-ȳu-x̄a-si-√ku<sup>h</sup>-ȳ* *∅-ȳu-x̄a-sa-√ku<sup>h</sup>-ȳ-éen*  
 3.O-PFV-1SG.S-CL[-D,S,+I]-√KNOW-VAR 3.O-PFV-1SG.S-CL[-D,S,-I]-√KNOW-VAR-DEC  
 ‘I know it’ ‘I used to know it’

<i>theme</i>	O	S	[-D]	[s]	√ku <sup>h</sup>
<i>person</i>	∅-	x̄a-			
<i>mode</i>	ȳu-			[+I]	-ȳ
(121) <i>epimode</i>				[-I]	-éen
	x̄wa		sa		kóowoon
	x̄wasakóowoon				
	‘I used to know it’				

- relative and subordinate forms can also have decessive marking, though both are different from the ordinary forms

- relativized verbs don't have *-éen*, instead they have both [-I] and *-i*; note that this combination is normally not found because *-i* occurs with [+I]

(122) a. *relativized perfective*

wé            xwasakóowu            át  
wé            Ø-ÿu-xa-si-√ku<sup>h</sup>-ÿ-i            át  
D.MDST [Rel 3.O-PFV-1SG.S-CL[-D,S,+I]-√know-VAR-REL ] thing  
‘that thing that I know’

b. *relativized decessive perfective*

wé            xwasakóowu            át  
wé            Ø-ÿu-xa-sa-√ku<sup>h</sup>-ÿ-i            át  
D.MDST [Rel 3.O-PFV-1SG.S-CL[-D,S,-I]-√know-VAR-REL ] thing  
‘that thing that I used to know’

- subordinated verbs have a following enclitic (or word?) =jéeyi

(123) a. *subordinated perfective*

xwasakoowú  
Ø-ÿu-xa-sa-√ku<sup>h</sup>-h-ée  
3.O-PFV-1SG.S-CL[-D,S,-I]-√know-VAR-SUB  
‘which/when/while I know it’

b. *subordinated decessive perfective*

xwasakoowú yéeyi  
Ø-ÿu-xa-sa-√ku<sup>h</sup>-h-ée=jéeyi  
3.O-PFV-1SG.S-CL[-D,S,-I]-√know-VAR-SUB=DEC  
‘which/when/while I used to know it’

- > this =jéeyi is also found as a postnominal adjective with nouns meaning ‘former, ex-’

(124) a. a<sub>x</sub>      shát yéeyi  
1SG.PSS wife former  
‘my ex-wife’

b. wé      hasdu hídi      yéeyi  
D.MDST 3PL.PSS house.PSS former  
‘their former house’

## 5.12. EPIASPECT

Epiaspect is a mechanism where a verb that is marked for mode can be recursively re-marked for an additional mode. Alternatively, it can be viewed as a layering of an additional imperfective aspect on top of the basic paradigm of a verb.

- epiaspect is fairly uncommon, so most forms that the linguist encounters will not be epiaspectual
  - epiaspectualized forms should be suspected when the form seems to be “almost right” for a particular mode, but either the stem variation is unusual or a conjugation prefix appears unexpectedly
- some imperfective forms can be combined with other modes to form a secondary verb paradigm
  - some imperfectives cannot be marked for epiaspect: all stative imperfectives, all *-:* and *-'* active imperfectives, and some *-h* active imperfectives
  - all other imperfective types can be marked for epiaspect, particularly progressive and repetitive imperfectives

- Leer (1991: 80) gives an example with the theme  $O-S-[l]-\sqrt{yex}$  ( $\emptyset$ ;  $-$ : Act,  $-x$  Rep) ‘S make O’
  - since the primary imperfective is  $-$ : active, this cannot be marked for epiaspect
  - but the  $-x$  repetitive imperfective can be so marked

- (125) a. *repetitive imperfective*  
 $\underline{x}alay\underline{e}xx$   
 $\emptyset-\emptyset-\underline{x}a-la-\sqrt{yex}-x$   
 3.O-ZCNJ-1SG.S-CL[-D,l,-I]- $\sqrt{make}$ -REP  
 ‘I make it repeatedly’, ‘I keep making it’
- b. *repetitive perfective*  
 $\underline{x}waliy\underline{e}xx$   
 $\emptyset-\ddot{y}u-\underline{x}a-la-\sqrt{yex}-x$   
 3.O-PFV-1SG.S-CL[-D,l,-I]- $\sqrt{make}$ -REP  
 ‘I kept making it’
- c. *repetitive future*  
 $kukalay\underline{e}xx$   
 $\emptyset-ga-w-ga-\underline{x}a-la-\sqrt{yex}-x$   
 3.O-GCNJ-IRR-GMOD-1SG.S-CL[-D,l,-I]- $\sqrt{make}$ -REP  
 ‘I will keep making it’
- d. *repetitive potential*  
 $unkaliy\underline{e}xx$   
 $\emptyset-u-\emptyset-ga-\underline{x}a-la-\sqrt{yex}-x$   
 3.O-IRR-ZCNJ-GMOD-1SG.S-CL[-D,l,-I]- $\sqrt{make}$ -REP  
 ‘I may keep making it’

- notice the appearance of the *na*-conjugation prefix in the potential, even though the verb theme is  $\emptyset$ -conjugation and hence the potential prefix sequence is expected to be  $u-\emptyset-ga-$ 
  - “the Durative epiaspect requires *na-* in place of the lexically specified [conjugation class prefix] in all modes except the Imperfective, Perfective, and Future” (Leer 1991: 217)
  - in essence, epiaspects based on repetitive and active imperfectives are all in the *na*-conjugation class except in their imperfective, perfective, and future forms
  - the perfective and future forms don’t use the verb theme’s conjugation class prefix and the usual stem variation is replaced, so there is no way to tell what conjugation class they belong to

- Leer (1991: 81) says that most active imperfectives can form epiaspectual paradigms, but they are very rare
  - he gives an example of  $O-S-[\emptyset]-\sqrt{ka}$  ( $\emptyset$ ;  $-s'$  Act,  $-x$  Rep) ‘S sew O’
  - first a sample of the basic paradigm of the verb

- (126) a. *-s' active imperfective*  
 $\underline{x}ak\underline{e}is'$   
 $\emptyset-\emptyset-\underline{x}a-\emptyset-\sqrt{ka}-s'$   
 3.O-ZCNJ-1SG.S-CL[-D, $\emptyset$ ,-I]- $\sqrt{sew}$ -SER  
 ‘I am sewing it’
- b. *perfective*  
 $\underline{x}waa\underline{k}aa$   
 $\emptyset-\ddot{y}u-\underline{x}a-\emptyset-\sqrt{ka}-\ddot{y}$   
 3.O-PFV-1SG.S-CL[-D, $\emptyset$ ,-I]- $\sqrt{sew}$ -VAR  
 ‘I sewed it’
- c. *future*  
 $kukak\underline{a}a$   
 $\emptyset-ga-w-ga-\underline{x}a-\emptyset-\sqrt{ka}-:$   
 3.O-GCNJ-IRR-GMOD-1SG.S-CL[-D, $\emptyset$ ,-I]- $\sqrt{sew}$ -VAR  
 ‘I will sew it’
- d. *potential*  
 $\underline{k}waa\underline{k}aa$   
 $\emptyset-u-\emptyset-ga-\underline{x}a-\emptyset-\sqrt{ka}-h$   
 3.O-IRR-ZCNJ-GMOD-1SG.S-CL[-D, $\emptyset$ ,-I]- $\sqrt{sew}$ -VAR  
 ‘I may sew it’

- next the epiaspectual paradigm based on the active imperfective, which is rare

- (127) a. *-s' active imperfective*  
 $\underline{x}ak\underline{e}is'$   
 $\emptyset-\emptyset-\underline{x}a-\emptyset-\sqrt{ka}-s'$   
 3.O-ZCNJ-1SG.S-CL[-D, $\emptyset$ ,-I]- $\sqrt{sew}$ -SER  
 ‘I am sewing it’
- b. *-s' active perfective*  
 $\underline{x}waa\underline{k}eis'$   
 $\emptyset-\ddot{y}u-\underline{x}a-\emptyset-\sqrt{ka}-\ddot{y}$   
 3.O-PFV-1SG.S-CL[-D, $\emptyset$ ,-I]- $\sqrt{sew}$ -VAR  
 ‘I was sewing it’



- |  |   |
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| <p>c. <i>-s' active future</i><br/>         ku<u>ka</u>kéis'<br/>         0-ga-w-ga-<u>xa</u>-0-√<u>ka</u>-s'<br/>         3.O-GCNJ-IRR-GMOD-1SG.S-CL[-D,0,-I]-√sew-SER<br/>         'I will be sewing it'</p> | <p>d. <i>-s' active potential</i><br/>         un<u>ka</u>akéis'<br/>         0-u-na-ga-<u>xa</u>-0-√<u>ka</u>-s'<br/>         3.O-IRR-ZCNJ-GMOD-1SG.S-CL[-D,0,-I]-√sew-SER<br/>         'I may be sewing it'</p> |
|--|---|

– finally the epiaspectual paradigm based on the repetitive imperfective, which is more common

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|--|---|
| <p>(128) a. <i>repetitive imperfective</i><br/>         x<u>ka</u>kéix<br/>         0-0-<u>xa</u>-0-√<u>ka</u>-x<br/>         3.O-ZCNJ-1SG.S-CL[-D,0,-I]-√sew-REP<br/>         'I am sewing it'</p>            | <p>b. <i>repetitive perfective</i><br/>         x<u>wa</u>akéix<br/>         0-<u>y</u>u-<u>xa</u>-0-√<u>ka</u>-x<br/>         3.O-PFV-1SG.S-CL[-D,0,-I]-√sew-REP<br/>         'I kept sewing it'</p>             |
| <p>c. <i>repetitive future</i><br/>         ku<u>ka</u>kéix<br/>         0-ga-w-ga-<u>xa</u>-0-√<u>ka</u>-x<br/>         3.O-GCNJ-IRR-GMOD-1SG.S-CL[-D,0,-I]-√sew-REP<br/>         'I will keep sewing it'</p> | <p>d. <i>repetitive potential</i><br/>         un<u>ka</u>akéix<br/>         0-u-na-ga-<u>xa</u>-0-√<u>ka</u>-x<br/>         3.O-IRR-ZCNJ-GMOD-1SG.S-CL[-D,0,-I]-√sew-REP<br/>         'I may keep sewing it'</p> |

- the essence of epiaspectual construction with active and repetitive imperfectives is that their stem variation replaces that of the ordinary paradigmatically expected stem variation, and that the *na*-conjugation prefix appears even when the verb is *0-*, *ga-*, or *ga*-conjugation
- there is however more morphology with epiaspect based on the progressive imperfective
  - a *0-* or *na*-conjugation verb has the *yaa*= ~ *yah*=<sub>T</sub> preverb, a *ga*-conjugation verb takes *yei*= ~ *yeh*=<sub>T</sub>, and a *ga*-conjugation one takes *kei*= ~ *keh*=<sub>T</sub>
  - strangely, though the progressive imperfective always has the *na*-conjugation prefix, all of the other forms in the progressive epiaspectual paradigm feature the *ga*-conjugation prefix instead
    - perhaps this serves to differentiate the progressive epiaspect from the non-progressive epiaspects?
    - in the future mode, where the *ga*-conjugation prefix is obligatory, there is no distinction from the non-progressive future other than the preverb
  - unlike the other epiaspects, there is no progressive perfective
    - Leer (1991: 501) claims that because the perfective semantically involves a resultative function which returns a state under his analysis, and because his progressive function cannot accept a state as an argument, the progressive perfective is impossible due to the semantics of his lexical entries for progressivity and perfectivity marking
  - Leer (1991: 229) uses the theme *O-S-[0]-√xa* (*0*; -' Act) 'S eat O' to illustrate progressive epiaspectual forms<sup>34</sup>

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|--|--|
| <p>(129) a. <i>progressive imperfective</i><br/>         yaa n<u>x</u>axéin<br/>         yaa=0-na-<u>xa</u>-0-√<u>xa</u>-n<br/>         along=3.O-NCNJ-1SG.S-CL[-D,0,-I]-√eat-VAR<br/>         'I'm going along eating it'</p> | <p>b. <i>progressive future</i><br/>         yaa kw<u>ka</u>xáa<br/>         yaa=0-ga-w-ga-<u>xa</u>-0-√<u>xa</u>-:<br/>         along=3.O-GCNJ-IRR-GMOD-1SG.S-CL[-D,0,-I]-√eat-VAR<br/>         'I'll be going along eating it'</p> |
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34. Leer says that he uses the terminative or completive derivation *yaa*= ~ *yax*= ~ *yánde*= (*0*) 'finishing, terminating' but his examples actually use the *na*-conjugation class derivation instead.

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| <p>c. <i>progressive potential</i><br/> yaa kw̥kaaxaa<br/> ÿaa=θ-ga-w-ga-x̥a-ÿa-√x̥a-h<br/> along=3.0-GCNJ-IRR-GMOD-1SG.S-CL[-D,θ,+I]-√eat-VAR<br/> ‘I may be going along eating it’</p> | <p>d. <i>progressive habitual</i><br/> yaa kx̥axéich<br/> ÿaa=θ-ga-x̥a-θ-√x̥a-ch<br/> along=3.0-GCNJ-1SG.S-CL[-D,θ,-I]-√eat-HAB<br/> ‘I’m always going along eating it’</p> |
|--|---|

- Leer refers to the epiaspectual paradigm formed from an active or repetitive imperfective as the ‘durative’ paradigm of a verb, and the epiaspectual paradigm formed from the progressive imperfective is the ‘progressive’ paradigm of a verb
  - for more transparent terminology, I dispense with his ‘durative’ term and simply state the imperfective type along with the additional mode, e.g. ‘-x̥ repetitive perfective’ for the perfective of a -x̥ repetitive imperfective used for epiaspect
  - to differentiate the two categories, I simply say ‘progressive epiaspect’ or ‘non-progressive epiaspect’
- Leer also refers confusingly to the ‘neutral epiaspect’ which really means no epiaspect at all, i.e. the ordinary paradigm of a verb theme

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## 6. APPENDIX: TABLES AND FIGURES

In this section I have included a variety of tables that catalogue morphological elements, structures, and paradigms in Tlingit, as well as a few illustrative figures. Many have been collected and restructured from original work by Story, Naish, Leer, and Eggleston (née Edwards), but some are the results of my own research and analysis. There are probably some mistakes in them, so I would greatly appreciate being notified if any errors are found. On the other hand, I use these tables on an almost daily basis, so they should be fairly reliable. I have silently corrected any mistakes in the original sources.

### 6.1. DIALECTOLOGY

The following outline is a hierarchical representation of the different dialects and subdialects of Tlingit with associated settlements in both English and Tlingit. Superscript question marks indicate uncertainty about the dialect of a particular settlement.

- Tongass Tlingit (T): Duke Island *Yee'x*, Metlakatla *Taahkw Aahni* (now Coast Tsim. *Max'takxaata*), Port Stewart *Gaahnax*, Tongass *Katukxuka*
- Southern Tlingit (S)
  - Sanya Tlingit (S): Cape Fox *Gaash*, Kah Shakes Cove *Gunéik'an 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'aqjik.aan*, <sup>?</sup>Kuyu *Kooyú*
- Northern Tlingit (N)
  - Transitional Tlingit (R): Wrangell *Kaachxan.áak'w*, Petersburg *Gantiyaakw Séedi ~ Séet Ká*, Kake *Kéex'*, <sup>?</sup>Kuyu *Kooyú*, <sup>?</sup>Sumdum *S'aawdáan*, some in Angoon *Aangóon*
  - Greater Northern Tlingit (N)
    - Central Tlingit (N): Sitka *Sheet'ká*, Angoon *Aangóon*, Killisnoo *Kanasnoow*, Tenakee *T'anageiy*, <sup>?</sup>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 *Tlák.w.aan*, Skagway *Shgagwéi*
    - Gulf Coast Tlingit (G): Lituya Bay *Ltu.áa*, Dry Bay *Gunaxoo*, Yakutat *Yaakwdáat*, Icy Bay *Y'aa's'é*, Kaliakh *Galyáx*
    - Inland Tlingit (I): <sup>?</sup>Sumdum *S'aawdáan*, Atlin *Áatlein*, Teslin *Deisleen*, Tagish *Taagish*, Carcross *Naadaashahéeni ~ Naatasehéeni*

Figure 1 represents the dialects of Tlingit in a pseudo-historical tree of relationships. The dashed line between Southern and Transitional indicates the occurrence of Southern-like features in what is otherwise a Northern dialect.

Table 1 on page 71 gives the cross-dialectal consonant inventory of Tlingit in the Coastal orthography used throughout this document. Consonants in parentheses are nonphonemic in various dialects (*m*, *y*), are found only in loanwords (*b*, *l*), or are idiosyncratic (*hw*, *.w*). The *n* symbol is used to represent a denasalized phonemic *n* – a phonetic lateral approximant [l] – which was recorded from a very few Northern Tlingit elders.

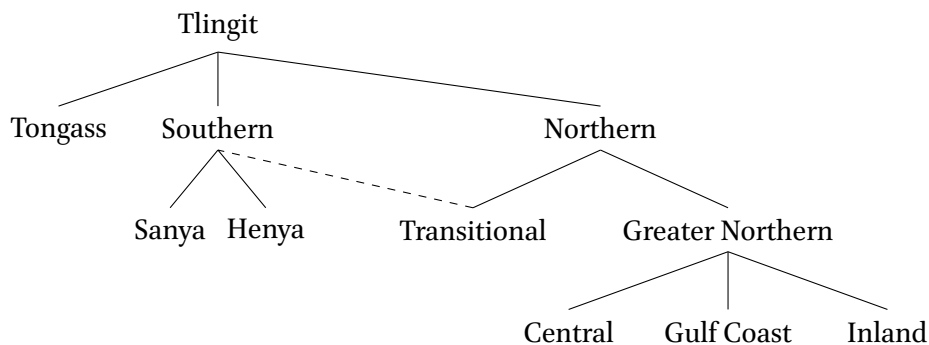


Figure 1: Tlingit dialect overview.

	<i>bilabial</i>	<i>alveolar</i>	<i>postalv.</i>	<i>lateral</i>	<i>palatal</i>	<i>velar</i>	<i>lab.-vel.</i>	<i>uvular</i>	<i>lab.-uvul.</i>	<i>glottal</i>	<i>lab.-glot.</i>
<i>unasp. stop</i>	(b)	d				g	gw	g	gw		
<i>asp. stop</i>		t				k	kw	k̥	k̥w		
<i>ejv. stop</i>		t'				k'	k'w	k̚'	k̚'w	.	(.w)
<i>nasal</i>	(m)	n		(n̥)							
<i>pln. fric.</i>		s	sh	l		x	xw	x̥	x̥w	h	(hw)
<i>ejv. fric.</i>		s'		l'		x'	x'w	x̚'	x̚'w		
<i>unasp. aff.</i>		dz	j	dl							
<i>asp. aff.</i>		ts	ch	tl							
<i>ejv. aff.</i>		ts'	ch'	tl'							
<i>approx.</i>				(l)	y	ÿ	w				

Table 1: Tlingit consonant inventory in Coastal orthography.

	<i>low tone</i> $\check{V}$						<i>high tone</i> $\acute{V}$					
	<i>short</i> $\check{V}$			<i>long</i> $\check{V}:$			<i>short</i> $\acute{V}$			<i>long</i> $\acute{V}:$		
	<i>fmt.</i>	<i>ctr.</i>	<i>bck.</i>	<i>fmt.</i>	<i>ctr.</i>	<i>bck.</i>	<i>fmt.</i>	<i>ctr.</i>	<i>bck.</i>	<i>fmt.</i>	<i>ctr.</i>	<i>bck.</i>
<i>high</i>	i		u	ee		oo	í		ú	ée		óo
<i>mid</i>	e			ei			é			éi		
<i>low</i>		a			aa			á			áa	

Table 2: Northern Tlingit vowel inventory in Coastal orthography.

	<i>short V</i>			<i>long V:</i>			<i>glottalized Vʔ</i>			<i>fading V<sup>h</sup></i>		
	<i>fnt.</i>	<i>ctr.</i>	<i>bck.</i>	<i>fnt.</i>	<i>ctr.</i>	<i>bck.</i>	<i>fnt.</i>	<i>ctr.</i>	<i>bck.</i>	<i>fnt.</i>	<i>ctr.</i>	<i>bck.</i>
<i>high</i>	i		u	ee		oo	ee'		oo'	eeh		ooh
<i>mid</i>	e			ei			ei'			eih		
<i>low</i>		a			aa			aa'			aah	

Table 3: Tongass Tlingit vowel inventory in orthographic representation.

	<i>falling V̂V̂ (V̂:)</i>		
	<i>front</i>	<i>centre</i>	<i>back</i>
<i>high</i>	éè		óò
<i>mid</i>	èì		
<i>low</i>		áà	

Table 4: Southern Tlingit falling tone vowels.

<i>Tongass</i>	<i>Southern</i>		<i>Northern</i>	<i>Leer 91</i>	<i>Translation</i>
	<i>Sanya</i>	<i>Henrya</i>			
V <i>ta</i>	V̂ <i>tá</i>	V̂ <i>tá</i>	V̂ <i>tá</i>	<i>tá</i>	sleep
V <i>ta kaa'</i>	V̂ <i>tá káà</i>	V̂ <i>ta káà</i>	V̂ <i>ta káa</i>	<i>ta qá'</i>	sleeping man
V <sup>h</sup> <i>shaah</i>	V̂: <i>shaa</i>	V̂: <i>shaa</i>	V̂: <i>shaa</i>	<i>ša'</i>	mountain
V <sup>h</sup> R <i>aahn</i>	V̂:R <i>aan</i>	V̂:R <i>aan</i>	V̂: <i>aan</i>	<i>a'n</i>	land, town
Vʔ <i>kaa'</i>	V̂V̂ <i>káà</i>	V̂V̂ <i>káà</i>	V̂: <i>káa</i>	<i>qá'</i>	man
V: <i>aa</i>	V̂: <i>áa</i>	V̂: <i>áa</i>	V̂: <i>áa</i>	<i>á·</i>	lake
V:R <i>jeehwaan</i>	V̂V̂R <i>yeewáàn</i>	V̂V̂R <i>yeewáàn</i>	V̂:R <i>yeewáan</i>	<i>yi'wá·n</i>	you (pl.)
V: <i>haa</i>	V̂: <i>haa</i>	V̂: <i>haa</i>	V̂: <i>haa</i>	<i>ha·</i>	us, our
V:R <i>x'aan</i>	V̂:R <i>x'aan</i>	V̂:R <i>x'aan</i>	V̂:R <i>x'aan</i>	<i>x'a·n</i>	anger

Table 5: Suprasegmental correspondences between dialects. R = sonorant.

Table 2 on page 71 gives the vowel inventory of Northern Tlingit in the Coastal orthography. Table 3 gives the inventory of vowels in Tongass Tlingit, including the laryngeal vowel system. Table 4 shows the inventory of falling vowels that occur in the Southern Tlingit dialect in addition to the vowels also found in Northern Tlingit.

Table 5 shows the suprasegmental correspondences between the laryngeal vowel system of Tongass Tlingit and the tone systems of Southern and Northern Tlingit. The representations are given in IPA with forms in orthography. Leer's combined transcription system from Leer 1991 is also given for the forms.

## 6.2. HISTORICAL RELATIONSHIPS

Figure 2 on page 73 is a tree-representation of the reconstructed historical relationships in the Na-Dene family and the proposed relationship to the Yeniseian languages of Siberia as argued by Edward Vajda. The internal



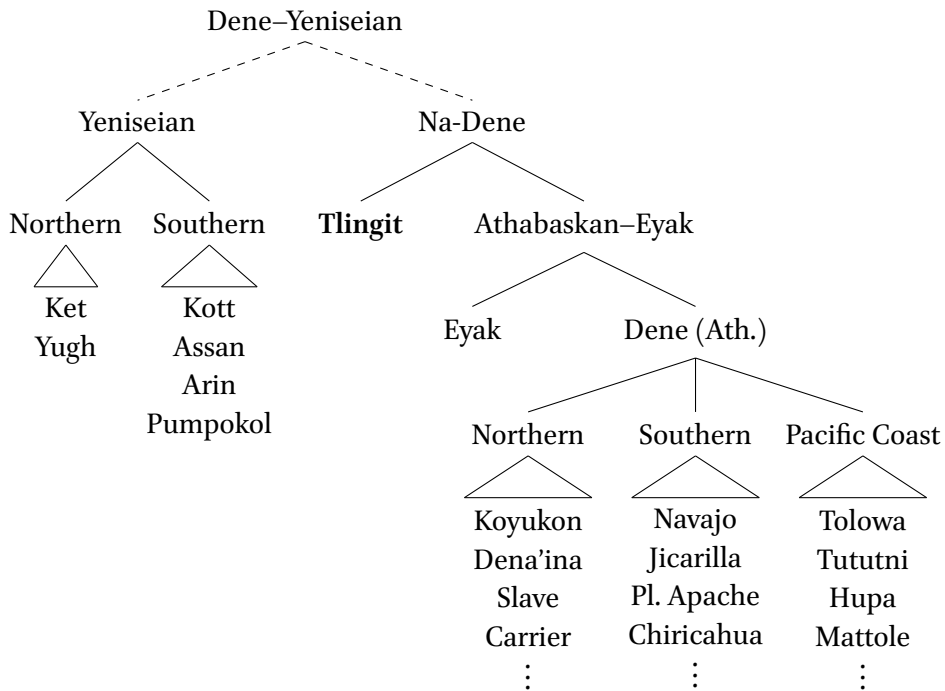


Figure 2: Tlingit's family tree.

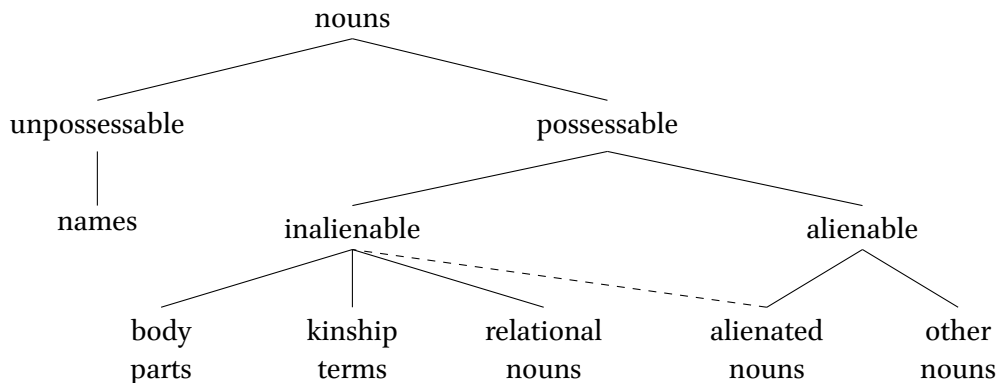


Figure 3: Noun possession types.

relationships shown in the Yeniseian family are proposed from historical reconstructions, though I am unaware of the exact details. In contrast, the internal relationships shown in the Dene (Athabaskan) family are purely geographical; the true internal relationships within the family are still under debate and are not as simple.

### 6.3. NOUNS

Figure 3 charts the relationships between the different classes of nouns defined by their possession properties. Thus all nouns are divided into unpossessable versus possessable classes, possessable nouns are further subdivided into inalienable and alienable classes, and then the leaves are labeled by their semantic class. Alienated nouns are inalienable nouns converted to alienable nouns and that hence can occur with the possessive suffix.

	<i>consonant final</i>		<i>vowel final</i>	
	<i>+round</i>	<i>-round</i>	<i>+round</i>	<i>-round</i>
<i>low</i>	-ú	-í	-wú	-yí
<i>high</i>	-u	-i	-wu	-yi

Table 6: Allomorphs of the possessive suffix *-yí*. The labels describe the syllable preceding the suffix.

<i>Form</i>	<i>Abv.</i>	<i>Name</i>	<i>Meaning</i>
<i>-ch</i>	ERG	ergative	subject of transitive verb
<i>-x'</i>	LOC	locative	at, on, in, by
<i>-t</i>	PNCT	punctual	at a point, to a point, around a point
<i>-x</i>	PERT	pertingent	contacting, form of, concerning
<i>-dé</i>	ALL	allative	to, toward, until, manner of
<i>-dáx</i>	ABL	ablative	from, out of
<i>-náx</i>	PERL	perlative	along, by, via, during, across
<i>-gáa</i>	ADES	adessive	around, about, by, after, for
<i>-n</i>	INST	instrumental	with, using, as soon as
<i>teen</i>	COM	comitative	along, with, accompanying
<i>-ú</i>	LOCP	locative predicate	verbless locative phrase
<i>yáx</i>	SIM	similative	like, as, similar to
<i>yís</i>	BEN	benefactive	for, benefiting
<i>góot</i>	ABES	abessive	without, lacking
<i>nák</i>	ELAT	elative	away from, leaving behind
<i>yáanáx</i>	more	superlative	more than
<i>kín</i>	less	sublative	less than

Table 7: Case suffixes and postpositions.

Table 6 lists the allomorphs of the possessive suffix *-yí* as they occur in Northern Tlingit. The labels indicate the phonological properties of the preceding syllable which provide the conditioning environment for the allomorphy.

Table 7 enumerates the case suffixes and postpositions as they appear in Northern Tlingit. Allomorphy is not indicated. The ‘Abv.’ column gives the morphological abbreviation labels as used in glosses; note that the superlative and sublative are not abbreviated but are instead glossed with their English lexical equivalents.

Table 8 on page 75 lists the pronouns of Tlingit as well as the pronominal prefixes in Tlingit verbs. The possessive pronouns are those pronouns that occur as possessors of other nouns. The postpositional pronouns are those pronouns that occur with postpositions. The independent pronouns are the elsewhere case, occurring as free NPs.

Table 9 on page 76 catalogues the documented irregular allomorphy that occurs for certain CV and CV: nominals in combination with various suffixes. The *-CV~* column applies to CV, CV: and CVC suffixes such as allative *-dé*, ablative *-dáx*, possessive *-yí*, and adessive *-gáa*. The *-C* column applies to suffixes that consist of a lone consonant such as pertingent *-t* and locative *-x'*, but plural *-x'* is excluded due to morphosemantic cooccurrence

		<i>Pronominals</i>		<i>Pronouns</i>		
		<i>Object</i>	<i>Subject</i>	<i>Possessive</i>	<i>Independent</i>	<i>Postpositional</i>
<i>local</i>	1SG	<i>xat-</i> ~ <i>ax-</i>	<i>xa-</i>	<i>ax</i>	<i>xát</i>	<i>ax=ee-</i> ~ <i>xa-</i>
	1PL	<i>haa-</i>	<i>tu-</i>	<i>haa</i>	<i>uháan</i>	<i>haa=ee-</i> ~ <i>haa(n)-</i>
	2SG	<i>i-</i>	<i>i-</i>	<i>i</i>	<i>wa.é</i>	<i>i=ee-</i>
	2PL	<i>ji-</i>	<i>ji-</i>	<i>yi</i>	<i>jiháan</i>	<i>ji=ee-</i>
<i>nonlocal</i>	3H } 3N } 3	$\emptyset-$ ~ <i>a-</i>	$\emptyset-$	<i>du</i>	<i>hú</i>	<i>du=ee-</i> ~ <i>u-</i>
	3PRX	<i>ash-</i>	—	<i>ash</i>	<i>ash</i>	<i>ash=ee-</i>
	3OBV	—	<i>du-</i>	<i>a</i>	<i>á</i>	<i>a=ee-</i> ~ <i>a-</i>
	INDH	<i>k<sub>aa-</sub></i> ~ <i>k<sub>u-</sub></i>	<i>du-</i>	<i>k<sub>aa</sub></i>	<i>k<sub>áa</sub></i>	<i>k<sub>aa-</sub>k<sub>u=ee-</sub></i>
	INDN	<i>at-</i>	—	<i>at</i>	<i>át</i>	<i>at=ee-</i>
	PART	<i>aa-</i>	—	<i>aa</i>	<i>aa</i>	<i>aa=ee-</i>
	AREAL	<i>k<sub>u-</sub></i>	—	—	—	? <i>k<sub>u-</sub></i>
	RFLX	<i>sh-</i> ~ $\emptyset-$	—	<i>chush</i> ~ <i>sh</i>	<i>chúsh</i>	<i>chush</i>
	RECIP	<i>woosh=</i>	—	<i>woosh</i>	<i>wóosh</i>	<i>woosh</i>
	(3)PL	<i>has= + ...</i>	<i>has= + ...</i>	<i>has-du</i>	<i>hás</i>	<i>has-du=ee-</i>

Table 8: Pronouns and verb pronominals.

constraints. The *-n* column applies to the *-n* allomorph of the instrumental, but not to the *=een* allomorph. The *-'* column applies to the *-'* allomorph of the locative *-x'* which surfaces as vowel glottalization in Tongass Tlingit but as a modification of tone and length in Northern and Southern Tlingit. Paradigmatic gaps are indicated with an em-dash —, unknown forms are indicated by a question mark, and questionable forms needing verification are preceded by a superscript question mark.

Table 10 on page 77 lists all the documented adjectives in Tlingit, in their Northern Tlingit forms. There are probably other adjectives that are not listed here, but the inventory is expected to be not much larger than what has been documented.

	<i>Dial.</i>	<i>Unsufl.</i>	<i>-CV~</i>	<i>-C</i>	<i>-n</i>	<i>-'</i> ( <i>loc</i> )
3N	N	á	aa-CV~	á-C	aan	áa
	S	á	aa-CV~	á-C	aan	áà
	T	a	aah-CV~	a-C	aahn	aa'
HSFC	N	-ká	-kaa-CV~	-ká-C	—	-káa
	S	-ká	-kaa-CV~	-ká-C	—	-káà
	T	-ka	-kaah-CV~	-ka-C	—	-kaa'
VSFC	N	-yá	-yaa-CV~	-yá-C	—	-yáa
	S	-yá	-yaa-CV~	-yá-C	—	-yáà
	T	-yá	-yaa-CV~	-yá-C	—	-yaa'
ISG	N	xát	xaa-CV~	xáa-C	xaan	xáa
	S	xát	xaa-CV~	xáa-C	xaan	xáà
	T	xat	xaah-CV~	?	xaahn	?xáa'
BASE	N	=ee	=ee-CV~	=ée-C	=éen	=ée
	S	=ee	=ee-CV~	=ée-C	=éèn	=éè
	T	=ee	?	?	=eehn	?=ee'
poss'n	N	-jee	-jee-CV~	-jée-C	—	-jée
	S	-jee	-jee-CV~	-jée-C	—	-jée
	T	-jeeh	-jeeh-CV~	-jeeh-C	—	-jee'
inside	N	-tú	-too-CV~	-tóo-C	-tóon	-tóo
	S	-tú	-too-CV~	-tóo-C	-tóòn	-tóò
	T	-tu	-too-CV~	-too-C	?	-too'

Table 9: Unpredictable nominal allomorphy. Note that suffixed ISG is often  $ax=ee...$  using BASE instead of  $xáa...$ , but the choice between them is idiolectal.

	<i>Form</i>	<i>Meaning</i>	<i>Compare</i>
<i>Prenominal</i>	<i>aak'é</i> _	good, well	√ <i>k'éi</i> 'good'
	<i>aatlein</i> _	much, lots	_ <i>tlein</i> 'big'
	<i>ch'áagu</i> _	old, ancient	<i>ch'áakw</i> 'long ago'
	<i>káa</i> _	male, he-	<i>káa</i> 'man'
	<i>kúnáx</i> _	very, actual, real	<i>kú-náx</i> 'AREAL-PERL'?
	<i>kustín</i> _	giant, monstrous	<i>ku-CL[+D,s]-√tin</i> ?
	<i>Lingít</i> _	Tlingit, traditional	<i>Lingít</i> 'Tlingit'
	<i>sheech</i> _	female, she-	
	<i>shóogu</i> _	first, initial	- <i>shú</i> 'end, tip'
	<i>tatgéy̅i</i> _	of yesterday	<i>tatgé</i> 'yesterday'
	<i>té</i> _	stone, rock	<i>té</i> 'stone, rock'
	<i>tlagu(wu)</i> _	ancient, forever	<i>tlaagóo</i> 'legend'
	<i>tl'eitákw</i> _	pure	√ <i>tl'en</i> 'dirty', √ <i>tl'it</i> 'trash'
	<i>yées</i> _	new, young	
<i>Postnominal</i>	_ <i>k'wát'</i>	round, egg-shaped	<i>k'wát'</i> 'egg'
	_ <i>k'áatl'</i>	thin and flat	<i>k'áach'</i> 'ribbon kelp'
	_ <i>létl'k</i>	soft, pliable	√ <i>lel</i> 'lax, flabby'?
	_ <i>sákw</i>	future, to be, for	
	_ <i>shaan</i>	old, elderly	√ <i>shan</i> 'old'
	_ <i>shís'k</i>	raw	√ <i>shís'k</i> * 'raw'
	_ <i>téitl'</i>	fat (animal)	√ <i>tetl'</i> 'fat (animal)'
	_ <i>tóoch</i>	fresh (fish)	√ <i>tuch</i> 'fresh caught'
	_ <i>t'éex'</i>	hard	√ <i>t'ix'</i> 'hard; frozen'
	_ <i>tlein</i>	large, big	√ <i>tla</i> 'stout'
	_ <i>tlenx'</i>	large, big (pl.)	_ <i>tlein</i> 'big'
	_ <i>xook</i>	dry, dried	√ <i>xuk</i> 'dry'
	_ <i>uwaa</i>	similar, fake	√ <i>yá</i> 'resemble'
	_ <i>yádi</i>	small, little, childlike	- <i>yát</i> 'child'
	_ <i>yéey̅i</i>	past, former, ex-	<i>yee</i> 'time'?
	_ <i>yéis'</i>	dark, dusky, immature	<i>yéis'</i> 'black stone'

Table 10: Prenominal and postnominal adjectives. \_ is the host noun.

<i>Cable &amp; Crippen</i>		<i>Leer 1991</i>	
+18	bound phrases	—	—
+17	preverbs (A–D, E1, E2, F)	+8	proclitic adjunct phrases
+16	reciprocal & outer distributive	+7	b number prefixes
+15	plural number <i>has=</i> ~ <i>s-</i>		a
+14	objects	+6	b incorp. obj. pronominals
+13	areal <i>ku-</i>	—	—
+12	alienable incorporates		a incorp. alienable nouns
+11	inalienable incorporates	+5	c incorp. inalienable nouns
+10	vertical surface <i>ya-</i>		b
+9	horizontal surface <i>ka-</i>		a
+8	self-benefactive <i>ga-</i>	+4	e schetic prefixes
+7	outer conjugation		d
+6	irrealis		c
+5	inner conjugation		b
+4	perfective and <i>ga</i> -mode		a
+3	inner distributive	+3	distributive prefix
+2	subjects	+2	subject pronominals
+1	classifiers	+1	classifier
0	root	0	ROOT
-1	stem variation	-3	inner mode suffixes
-2	derivation	-1	derivational suffixes
-3	duration (A?, B?)	-2	durative suffixes (a, b)
-4	mode	-4	outer mode suffixes
-5	epimode		epimode and
-6	clause type	-5	clause type suffixes
-7	bound auxiliaries	—	—

Table 11: Verb template structure.

#### 6.4. VERBS

Table 11 is an overview of the Tlingit verb template. The ‘Cable & Crippen’ column lists the slot numbers and names of the slots as used in analyses by Seth Cable and James A. Crippen. The ‘Leer 1991’ column shows the corresponding slot labels and names according to the system used by Leer in his dissertation (Leer 1991).

Table 12 on page 79 enumerates nearly all of the morphemes documented as a part of Tlingit verbs. Only a representative sample of the bound phrases in slot +18 are given, and this particular category has not been completely explored. The preverbs in slot +17E1 have an asterisk \* indicating their regular occurrence with one of the three postpositions *-t*, *-x̣*, or *-dé* depending on the mode of the verb.

Figure 4 on page 80 illustrates the various phonological domains of the verb as represented across the verb template. The bound phrases and enclitics are excluded since they are not associated with verb phonology. Note that these domains are not entirely well defined, and as such they must only be taken as descriptive labels rather than formalizations.

Table 13 on page 80 shows the sixteen possible classifiers in Tlingit.

Position		Affixes
	+18	N- <i>x'</i> , N- $\{t, \underline{x}, d\underline{e}\}$ , N- <i>náx</i> , N- <i>dáx</i> , N <i>x'é-</i> , N <i>dasé-</i> , N <i>gunajá-</i> N <i>eetéenáx</i> , ...
proclitics	+17 F	<i>gunayéi-gunéi=</i> , <i>áa=</i> , <i>shóo=</i> , <i>héeni=</i> , <i>gági=</i> , <i>éegi=</i> , <i>daagi=</i>
	E2	<i>kut=</i> , <i>yux=</i> , <i>yaa=</i> , <i>héenx=</i> , <i>ux=</i> , <i>kwaakx=</i> , <i>yedx=</i> , <i>jaanax~jaahnax<sub>T</sub>=</i>
	E1	<i>jan*=</i> , <i>neil*=</i> , <i>haa*=</i> , <i>yóo*=</i> , <i>kux*=</i> , <i>kux<sub>1</sub>*=</i>
	D	<i>kei~keih<sub>T</sub>=</i> , <i>yei~yeih<sub>T</sub>=</i> , <i>yeik~jeek<sub>S</sub>~eehk<sub>T</sub>=</i> , <i>daak~daahk<sub>T</sub>=</i> , <i>daak~daahk<sub>T</sub>=</i>
	C	<i>yéi~yeih<sub>T</sub>=</i> 'thus'
	B	<i>yaa~jaah<sub>T</sub>=</i> MENT
	A	<i>yaa~jaah<sub>T</sub>=</i> 'along', <i>yoo~yooh<sub>T</sub>=</i> ALT
	+16	<i>woosh=</i> RECIP, <i>dax=</i> DISTB
	+15	<i>has=</i> ~ <i>s-</i> PL
	+14	<i>xat~ax-</i> , <i>haa~haah<sub>T</sub>-</i> , <i>i-</i> , <i>yi-</i> , <i>a~θ-</i> , <i>ash-</i> , <i>kaa~ku-</i> , <i>at-</i> , <i>aa-</i> , <i>sh~θ-</i>
	+13	<i>ku-</i> AREAL
	+12	<i>jaan-</i> , <i>shakux-</i> , <i>yata-</i> , <i>x'asakw-</i> , <i>gax-</i> , <i>xee~xei-</i> , <i>kee~kei-</i> , <i>yee~yei-</i> , <i>l'il-</i> , <i>kanik-</i> , <i>yaka-</i> , <i>saa-</i> , <i>aan-</i> , <i>naa-</i> , <i>sha.axw-</i> , <i>yakw-</i> , <i>hin-</i> , <i>lux'-</i> , <i>has'-</i> , <i>luk-</i>
	+11	<i>ji-</i> , <i>x'a-</i> , <i>k'a-</i> , <i>tu-</i> , <i>sha-</i> , <i>shu-</i> , <i>lu-</i> , <i>se~sa-</i> , <i>xa-</i> , <i>gu-</i> , <i>ta-</i> , <i>daa-</i> , <i>xoo-</i> , <i>xan-</i> , <i>x'aa-</i> , <i>t'éi-</i> , <i>t'aa-</i> , <i>yik-</i> , <i>yee-</i> , <i>ki-</i> , <i>gin-</i> , <i>xi-</i> , <i>s'aa-</i> , <i>lidix'</i> , <i>wak-</i> , <i>s'ak-</i> , <i>x'us-</i> , <i>s'ee-</i> , <i>duk-</i> , <i>laka-</i> , <i>tl'ik-</i> , <i>keey-</i> , <i>tóox'-</i> , <i>x'atu-</i> , <i>tukx'e~tuk'e-</i> , <i>daa.it-</i> , <i>tax'-</i>
prefixes	+10	<i>jä-</i> VSFC
	+9	<i>ka-</i> HSFC
	+8	<i>ga-</i> SBEN
	+7	<i>ga-</i> GCNJ
	+6	<i>u-</i> , <i>w-</i> , <i>oo-</i> (all IRR)
	+5	<i>θ-</i> ZCNJ, <i>na-</i> NCNJ, <i>ga-</i> GCNJ
	+4	<i>jü-</i> PFV, <i>u-</i> PFV.TEL, <i>ga-</i> GMOD
	+3	<i>daga~dax-</i> DISTB
	+2	<i>xá-</i> 1SG.S, <i>tu-</i> 1PL.S, <i>i-</i> 2SG.S, <i>yi-</i> 2PL.S, <i>θ-</i> 3.S, <i>du-</i> 3OBV.S, <i>du-</i> INDH.S
	+1	CL[D, S, I]: D ∈ {+D, -D}, S ∈ {θ, s, l, sh}, I ∈ {+I, -I}
	0	√root (CVC, CVC', CV'C, CV, CV <sup>h</sup> )
	-1	<i>-'</i> , <i>-i</i> , <i>-h</i> , <i>-n</i> , <i>-j</i> (all VAR)
suffixes	-2	<i>-án</i> , <i>-shán</i> , <i>-ch</i> , <i>-ákw</i> , <i>-aa</i> , <i>-xaa</i> , <i>-jé</i> , <i>-ee</i> , <i>-k</i> , <i>-ál'~ch'ál'</i> , <i>-k</i> , <i>-nas</i> , <i>-nás'</i> , <i>-kát'</i>
	-3	<i>-k</i> REP, <i>-x</i> REP, <i>-ch</i> REP, <i>-t</i> ICT.REP, <i>-x'</i> PL, <i>-t'</i> PL, <i>-s'</i> SER, <i>-l'</i> SER
	-4	<i>-ch</i> HAB, <i>-(n)éé~(n)eeh<sub>T</sub></i> COND, <i>-ín</i> CTNG
	-5	<i>-een~eehn<sub>T</sub></i> DEC, <i>-ee<sub>k</sub>~eehk<sub>T</sub>~k</i> PHIB/OPT
	-6	<i>-éé~eeh<sub>T</sub></i> SUB, <i>-i</i> REL
enclitics	-7	<i>=nóok<sub>N</sub>~néekw<sub>SRI</sub>~neekw<sub>T</sub></i> , <i>=nooch<sub>N</sub>~nukch<sub>G</sub>~neech<sub>SRI</sub>~neehch<sub>T</sub></i> , <i>=noojeen<sub>N</sub>~neejeen<sub>SRI</sub>~<sup>3</sup>neehjih<sub>N</sub></i> , <i>=núknee<sub>N</sub>~níkween<sub>1</sub>~níkwni<sub>SRI</sub>~nikwneeh<sub>T</sub></i> , <i>=ganúgun<sub>N</sub>~ganígún<sub>1</sub>~ganíkw<sub>S</sub>~ganíkw<sub>T</sub></i>

Table 12: Verb morphemes.

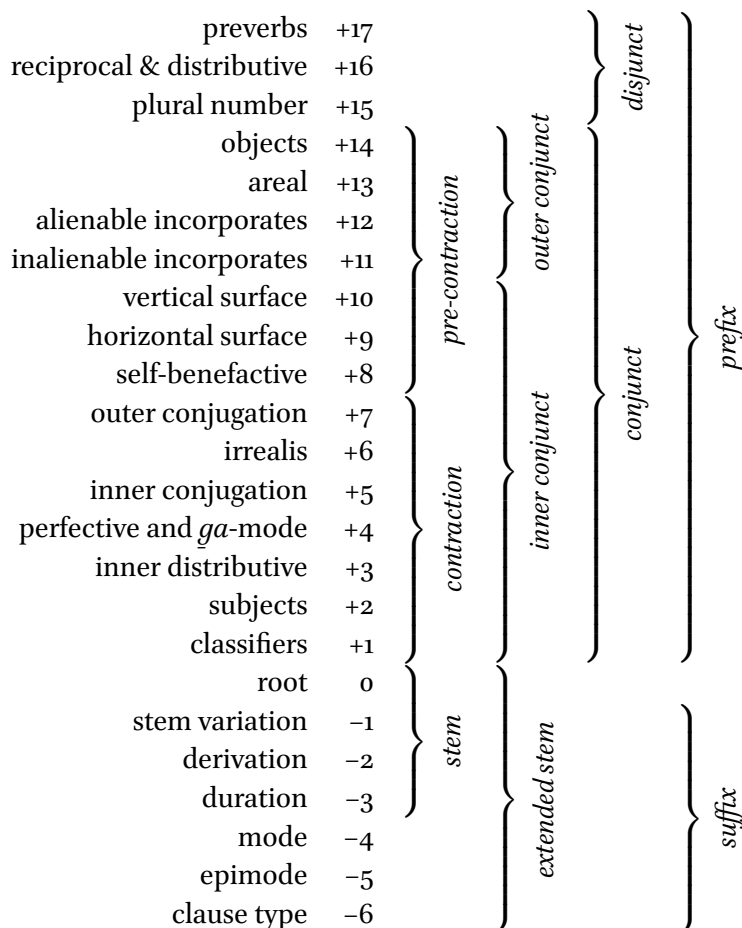


Figure 4: Domains of the verb.

		-D		+D	
		-I	+I	-I	+I
<i>S</i> (series)	∅	∅-	<i>ja</i> -	<i>da</i> -	<i>di</i> -
	s	<i>sa</i> -	<i>si</i> -	<i>s</i> -	<i>dzi</i> -
	l	<i>la</i> -	<i>li</i> -	<i>l</i> -	<i>dli</i> -
	sh	<i>sha</i> -	<i>shi</i> -	<i>sh</i> -	<i>ji</i> -

Table 13: Classifier morphemes.



Grp.	Preverb	Gloss	Cnj.	Description
	<i>gunäyéi~gunéi~gunäyéi'</i> <sub>T</sub>	INCEP	∅	inceptive: beginning, starting
	<i>áa~aa'</i> <sub>T</sub>	LOC	—	locative: there
	<i>áa~aa'</i> <sub>T</sub> (+ <i>jäx</i> )	ROT	∅	rotatory: turning over
F	<i>shóo~shoo'</i> <sub>T</sub> (+ <i>jäx</i> )	ADROT	∅	adrotatory: turning over endwise
	<i>héeni~heeni</i> <sub>T</sub>	INAQ	∅	inaquative: into water
	<i>gági</i>	ABUMB	∅	abumbrative: from shadow into open
	<i>éegi~eegi</i> <sub>T</sub>	ABSILV	∅	absilvative: from woods to shore
	<i>dáagi~daagi</i> <sub>T</sub>	ABAQ	∅	abaquative: from water to shore
	<i>kut</i>	ERR	ga	errative: astray, lost, excessively (- <i>t</i> )
	<i>jän, jäx, jánde</i>	CPLTV	∅	completive: completing, finishing (-*)
	<i>yux</i>	out	na	outside (- <i>x</i> )
	<i>yaax~yaah</i> <sub>xT</sub>	INVEH	ga	invehicular: into vehicle (- <i>x</i> )
E2	<i>héenx~heenx</i> <sub>T</sub>	INAQ	ga	inaquative: into water (- <i>x</i> )
	<i>ux</i> (+ <i>kei~keih</i> <sub>T</sub> )	UNCTL	∅	uncontrolled: blindly, out of control (- <i>x</i> )
	<i>k'wáakx</i> (+ <i>daak~daah</i> <sub>kT</sub> )	wrong	∅	by mistake, wrongly (- <i>x</i> )
	<i>yetx~yedax</i> <sub>T</sub>	INIT	∅	initial: starting off, taking off (- <i>dáx</i> )
	<i>jänax~jäahnax</i> <sub>T</sub>	under	ga	underground (- <i>náx</i> )
	<i>jän, jäx, jánde</i>	shore	∅	abmarine: ashore, onto ground, resting
	<i>neil(t), neilx, neildé</i>	home	∅	inside, homeward, into building
	<i>haat, haax, haadé</i>	here	∅	here, this way, toward speaker
E1	<i>yóot, yóox, yóode</i>	hence	∅	hence, away, off (indefinite location)
	<i>kux, ?kuxx, kúxde</i>	REV	∅	revertive: aback, reversed direction
	<i>kux<sub>1</sub>, kuxx<sub>1</sub>, kúxde<sub>1</sub></i>	AGRND	∅	aground, into shallow water (IT only)
	<i>kei~kéi~keih</i> <sub>T</sub>	up	∅	upward
	<i>yeyi~yéi~yeyih</i> <sub>T</sub>	down	∅	downward, out of vehicle
	<i>jëik~jëék<sub>s</sub>~eehk</i> <sub>T</sub>	ADLIT	∅	adlitoral: down to shore, beachward
D	<i>daak~dáak<sub>s</sub>~daahk</i> <sub>T</sub>	ABLIT	∅	ablitoral: inland from shore, back from open, off of fire
	<i>daak~dáak<sub>s</sub>~daahk</i> <sub>T</sub>	ADMAR	∅	admarine: seaward, into open, falling from sky, onto fire
C	<i>yéi~ye'</i> <sub>T</sub> ~ <i>yeyih</i> <sub>T</sub>	thus	—	manner: thus, so ( <i>yeyih</i> <sub>T</sub> = is thematic)
B	<i>yaa~jä~jäah</i> <sub>T</sub>	MENT	—	mental state or activity
	<i>yoo~yooh</i> <sub>T</sub>	ALT	∅	alternating: back and forth, to and fro
A	<i>yaa~jäah</i> <sub>T</sub>	along	na	along, down, obliquely, progressive

Table 14: Preverbs (+17).

	Gloss	Source		Unmarked	Punctual -t	Pertingent -x̄	Allative -dé
		Form	Trans.				
Northern	ABMAR	<i>yán</i>	'shore'	<i>yán-</i>	<i>yán-</i>	<i>yax̄-</i>	<i>yánde-</i>
	home	<i>neil</i>	'home'	<i>neil-</i>	<i>neil(t)-</i>	<i>neilx̄-</i>	<i>neildé-</i>
	here	<i>haa ?</i>	'us' ?	—	<i>haat-</i>	<i>haax̄-</i>	<i>haadé-</i>
	hence	<i>yóo</i>	'distal'	<i>yóo-</i>	<i>yóot-</i>	<i>yóox̄-</i>	<i>yóode-</i>
	REV	<i>ku</i>	'areal'	<i>kux̄-</i>	<i>kux̄-</i>	<i>kux̄-</i>	<i>kúx̄de-</i>
	aground	<i>kux ?</i>	'dry' ?	<i>?kux<sub>1</sub>-</i>	<i>kux<sub>1</sub>-</i>	<i>kuxx̄<sub>1</sub>-</i>	<i>kúx̄de<sub>1</sub>-</i>
Southern	ABMAR			<i>yán-</i>	<i>yán-</i>	<i>yax̄-</i>	<i>yánde-</i>
	home			<i>neil-</i>	<i>neilt-</i>	<i>neilx̄-</i>	<i>neildé-</i>
	here			<i>?haa-</i>	<i>haat-</i>	<i>haax̄-</i>	<i>haadé-</i>
	hence			<i>?yóo-</i>	<i>yóot-</i>	<i>yóox̄-</i>	<i>yóode-</i>
	REV			<i>?kux̄-</i>	<i>kux̄-</i>	<i>?kuxx̄-</i>	<i>kúx̄de-</i>
Tongass	ABMAR			<i>yán-</i>	<i>yán-</i>	<i>yax̄-</i>	<i>yandeih-</i>
	home			<i>?neihl-</i>	<i>neihlt-</i>	<i>neihlx̄-</i>	<i>neihldei-</i>
	here			<i>?haah-</i>	<i>haah-</i>	<i>haahx̄-</i>	<i>haahdei-</i>
	hence			<i>?yoo-</i>	<i>yoot-</i>	<i>yoox̄-</i>	<i>yoodeih-</i>
	REV			<i>?kux̄-</i>	<i>kux̄-</i>	<i>?kuxx̄-</i>	<i>kúx̄deih-</i>

Table 15: Group E1 preverb (+17) variants. *kux* only in Inland Tlingit.

Table 14 on page 81 gives the preverbs in slot +17. The 'Grp.' column lists the subplot grouping based on order from outer (F) to inner (A) position. The 'Gloss' column contains the conventional gloss abbreviation or word. The 'Cnj.' column is the conjugation class associated with the preverb in motion derivations. The 'Description' column has the name, a loose translation, and the associated postposition if any.

Table 15 lists the preverbs of the E1 subplot. The 'Source' columns have a probable source form and associated translation. The 'Unmarked' column gives the base form that does not actually occur. The other three columns give the output forms with the punctual, pertingent, and allative suffixes respectively.

#### 6.4.1. INCORPORATED NOUNS

Table 16 on page 83 lists all the known alienable incorporated nouns that occur in slot +12, along with the independent nouns from which they are derived.

Table 17 on page 84 lists all the known inalienable incorporated nouns occurring in slot +11. The source nouns for the incorporates are given in the 'Source noun' column where they are known, note that some are actually alienable and some are compounds. The incorporates with (+*ka-*) or with (+*sha-*) are special in that they regularly cooccur with the other given incorporate, either the horizontal surface prefix *ka-*<sub>+9</sub> HSFC or with the prefix *sha-*<sub>+11</sub> 'head'. This latter is actually taken to be part of a compound rather than a separate prefix, and so is not given its own slot; cf. *tukx̄'e-* ~ *tuk'e-* 'anus' which seems to contain *x'a-*<sub>+11</sub> ~ *k'a-*<sub>+11</sub> 'mouth' but which is instead probably a wholly incorporated compound given the fixed vowel *e*. Note that only *t'éi-*<sub>N</sub> 'behind', *lidíx̄-* 'neck, throat', and *tóox-* 'kneeling' occur with high tone in Northern Tlingit; tone and laryngealization of incorporates are not fully documented for Southern and Tongass dialects.

<i>Prefix</i>	<i>Source noun</i>
<i>yaan~jäahn<sub>T</sub>-</i>	<i>yaan</i> ‘hunger’
<i>shakux-</i>	<i>shakoox~shakuhx<sub>T</sub></i> ‘thirst’
<i>jäata-</i>	– <i>jä</i> ‘face, vertical surface’? + <i>tá</i> ‘sleep’
<i>x’asakw-</i>	<i>x’aséikw</i> ‘breath, life’
<i>gax-</i>	<i>gax</i> ‘crying, weeping’
<i>xei<sub>N</sub>~xee<sub>SR</sub>~xeeh<sub>T</sub>-</i>	<i>xee</i> ‘dusk, shadow’ (cf. <i>shaa xei<sub>yí</sub></i> ‘mtn. shadow’)
<i>kei<sub>N</sub>~kee<sub>SR</sub>~keeh<sub>T</sub>-</i>	<i>kee</i> ‘dawn’ (cf. <i>kee.á</i> ‘dawn’, <i>keex’é</i> ‘daybreak’)
<i>yei<sub>N</sub>~<sup>?</sup>yee<sub>SR</sub>~jëeh<sub>T</sub>-</i>	<i>yee</i> ‘time’ (cf. <i>yeedát</i> ‘moment’)
<i>l’il-</i>	<i>l’éel</i> ‘feces’
<i>kanik-</i>	<i>kaneek~kanihk<sub>T</sub></i> ‘report, news’
<i>kayik-</i>	<i>kayéik</i> ‘noise’
<i>yaka-</i>	<i>yaká</i> ‘curse, reproach, rebuke’
<i>saa~saah<sub>T</sub>-</i>	<i>saa</i> ‘name’
<i>aan~aahn<sub>T</sub>-</i>	<i>aan</i> ‘land, town, settlement’
<i>naa~naah<sub>T</sub>-</i>	<i>naa</i> ‘clan, nation, people’
<i>sha.aaxw-</i>	<i>sha.aaxw</i> ‘bundle’
<i>yakw-</i>	<i>yaakw~yahkw<sub>T</sub></i> ‘canoe, boat’
<i>hin-</i>	<i>héen<sub>N</sub>~héèn<sub>S</sub>~heen<sub>T</sub></i> ‘fresh water, river, stream’
<i>lux’-</i>	<i>lóox</i> ‘urine’
<i>has’-</i>	<i>háas</i> ‘vomit’
<i>luk-</i>	√ <i>luk</i> ‘sip’

Table 16: Alienable incorporated nouns (+12).

Prefix	Source noun
<i>ji-</i>	– <i>jín</i> ‘hand, arm’, – <i>jee</i> ‘possession’
<i>x’a~k’a-</i>	– <i>x’éi</i> ‘mouth’
<i>tu-</i>	– <i>tú</i> ‘inside; mind, emotions’
<i>sha-</i>	– <i>shá</i> ‘head’
<i>shu-</i>	– <i>shú</i> ‘end’
<i>lu-</i>	– <i>lú</i> ‘nose, point’
<i>se~sa-</i>	– <i>séi</i> ‘voice’
<i>xa-</i>	– <i>xaaw</i> ‘fur’
<i>gu-</i>	– <i>gú</i> ‘base, butt’
<i>ta-</i>	– <i>tá</i> ‘bottom; head of bay’
<i>daa~daah<sub>T</sub>-</i>	– <i>daa~daah<sub>T</sub></i> ‘around, surrounding, periphery’
<i>taa-</i>	?? ‘lonesome’
<i>xoo-</i>	– <i>xoo</i> ‘among, amidst, within’
<i>xan-</i>	– <i>xán</i> ‘vicinity, near’
<i>x’aa-</i>	– <i>x’aa</i> ‘space between, interstice’
<i>t’éi<sub>N</sub>~<sup>?</sup>t’ée<sub>SR</sub>~<sup>?</sup>t’ee’<sub>T</sub>-</i>	– <i>t’éi</i> ‘behind, screened by, obscured by’
<i>t’aa-</i>	– <i>t’áa~t’áak</i> ‘landward side’
<i>yik-</i>	– <i>yík</i> ‘inside (concave)’
<i>yee-</i>	– <i>yee</i> ‘underneath, beneath’
<i>ki-</i>	√ <i>ki</i> ‘sit’?
<i>gin-</i>	– <i>geen</i> ‘tail flipper’
<i>xi-</i>	– <i>xee</i> ‘shoulder’
<i>s’aan-</i>	?– <i>s’aan</i> ‘limb’?
<i>lidíx’-</i>	– <i>lidíx’</i> ‘neck, throat’
<i>wak- (+ ka-)</i>	– <i>waak</i> ‘eye’
<i>s’aak- (+ ka-)</i>	<i>s’aak</i> ‘bone’ (alienable; <i>kaa s’aagí</i> ‘one’s bone’)
<i>x’us- (+ ka-)</i>	– <i>x’oos</i> ‘foot, leg’
<i>s’ee- (+ ka-)</i>	– <i>s’ee</i> ‘eyebrow’
<i>duk- (+ ka-)</i>	<i>dook</i> ‘skin’ (alienable; <i>kaa doogú</i> ‘one’s skin’)
<i>la- (+ ka-)</i>	– <i>laká</i> ‘inside of mouth’ (cf. – <i>leitóox’</i> ‘in the throat’)
<i>tl’ik- (+ sha-)</i>	– <i>tl’ee<sub>SR</sub>k</i> ‘finger’ + – <i>shá</i> ‘head’ = – <i>tl’ikshá</i> ‘fingertip’
<i>keey-</i>	– <i>keey</i> ‘knee’
<i>tóox’- (+ ka-)</i>	– <i>tóox’-ká</i> ‘kneeling’
<i>x’atu-</i>	– <i>x’éi</i> ‘mouth’ + – <i>tú</i> ‘inside’
<i>tukx’é~tuk’e-</i>	– <i>tukx’é</i> ‘anus’ (< – <i>túk</i> ‘butt’ + – <i>x’éi</i> ‘mouth’)
<i>daa.it-</i>	– <i>daa.ét</i> ‘joint’
<i>tax’-</i>	– <i>téix’</i> ‘heart’

Table 17: Inalienable incorporated nouns (+11).

Stem Var. Suffix	Closed roots			Open roots	
	CVC	CVC'	CV'C	CV	CV <sup>h</sup>
-n	CVC	CVC'	CVC	CV̇:n	CV̇:n*
-j̇					
habitual -ch	CVC	CVC'	CVC	CV̇:j̇-ch	CV̇:j̇-ch
otherwise				CV̇:	CV̇:
-:	CV̇:C	CV̇:C'	CV̇'C	CV̇:	CV̇:
-h					
imperative	<b>CVhC</b>	CV̇'C'	CV̇'C	CV̇	CV̇
otherwise				CVh	CVh
-X ∅ {-k, -x, -ch, -t, -x', -t', -s', -l'} <sub>slot-3</sub>					
two suffixes	CVC-X	CVC'-X	CVC-X	CV̇-X-X	CV̇-X-X
one suffix				CV̇:-X	<b>CV̇h-X</b>
' (open roots only)					
no other suffix				CV̇	CV̇
auxiliary or prohib.-opt. -k				CV̇:-...	CV̇:-...
decessive -ee(h)n				CV̇'-j̇ee(h)n	CV̇'-j̇ee(h)n
other suffixes with i~ee(h)				CVh-j̇...	CVh-j̇...
closed plain					
relative clause	CVC	CVC'	CVC		
otherwise	CVC	CVC'	CVC		

\* Exception: CV<sup>h</sup> stems √ni<sup>h</sup> 'become' and √já<sup>h</sup> 'resemble' have *neen~neehn*<sub>T</sub> and *j̇ein~j̇eihn*<sub>T</sub> instead of \**néen~neen*<sub>T</sub> and \**j̇éin~j̇éin*<sub>T</sub>.

Table 18: Stem variation system (Leer 1991:168). Stem variation realizations that define the distinct root types are emphasized in bold. Invariable stems are excluded.

#### 6.4.2. STEM VARIATION

Table 18 on page 85 represents the stem variation system as described by Leer (1991) with some minor adjustments. The symbol  $\check{V}$  represents a vowel that undergoes apophony,  $a \rightarrow e$  and  $u \rightarrow {}^{(w)}e$ . Vh represents a fading vowel /V<sup>h</sup>/ in Tongass Tlingit and a long low vowel /V:/ elsewhere, and  $\check{V}'$  represents a glottalized vowel /V<sup>ʔ</sup>/ in Tongass, a long falling vowel / $\check{V}\check{V}$ / in Southern, and a long high vowel / $\check{V}'$ / in Northern Tlingit. The symbol -X represents a consonantal suffix in the set {-k, -x, -ch, -t, -x', -t', -s', -l'}, and -X-X indicates a sequence of two such suffixes (specifically -kw-t).

Table 19 on page 86 gives the stem variation system specifically for Northern Tlingit. This is essentially the same as in table 18 but with the suprasegmental properties specific to the Northern dialect.  $\check{V}$  is as before, as are -X and -X-X.

Table 20 on page 87 lists the stem variation suffixes versus the modes in which they occur. Included are the differences between realis and irrealis forms of modes that vary in their stem variation.

Stem Var. Suffix	Closed roots			Open roots	
	CVC	CVC'	CV'C	CV	CV <sup>h</sup>
<i>-n</i>	<b>CVC</b>	<b>CVC'</b>	<b>CVC</b>	<b>CV̇i-n</b>	<b>CV̇i-n*</b>
<i>-j̥</i>					
habitual <i>-ch</i>	<b>CVC</b>	<b>CVC'</b>	<b>CVC</b>	<b>CV̇i:y̥-ch</b>	<b>CV̇i:y̥-ch</b>
otherwise				<b>CV̇i:</b>	<b>CV̇i:</b>
<i>-:</i>	<b>CV̇i:C</b>	<b>CV̇i:C'</b>	<b>CV̇i:C</b>	<b>CV̇i:</b>	<b>CV̇i:</b>
<i>-h</i>					
imperative	<b>CV̇i:C</b>	<b>CV̇i:C'</b>	<b>CV̇i:C</b>	<b>CV̇i</b>	<b>CV̇i</b>
otherwise				<b>CV̇i:</b>	<b>CV̇i:</b>
<i>-X</i> [ <i>-k, -x, -ch, -t, -x', -t', -s', -l'</i> ] <sub>slot -3</sub>					
two suffixes	<b>CVC-X</b>	<b>CVC'-X</b>	<b>CVC-X</b>	<b>CV̇i-X-X</b>	<b>CV̇i-X-X</b>
one suffix				<b>CV̇i-X</b>	<b>CV̇i-X</b>
<i>-'</i> (open roots only)					
no other suffix				<b>CV̇i</b>	<b>CV̇i</b>
auxiliary or prohib.-opt. <i>-k̥</i>				<b>CV̇i:-...</b>	<b>CV̇i:-...</b>
decessive <i>-éen</i>				<b>CV̇i:-ẏeen</b>	<b>CV̇i:-ẏeen</b>
other suffixes with <i>i-ee</i>				<b>CV̇i:-ẏ...</b>	<b>CV̇i:-ẏ...</b>
closed plain					
relative clause	<b>CVC</b>	<b>CVC'</b>	<b>CVC</b>		
otherwise	<b>CVC</b>	<b>CVC'</b>	<b>CVC</b>		

\* Exception: CV<sup>h</sup> stems *√ni<sup>h</sup>* 'become' and *√ja<sup>h</sup>* 'resemble' have *neen* and *jein* instead of \**néen* and \**yéin*.

Table 19: Stem variation system in Northern Tlingit. Stem variation realizations that define the distinct root types are emphasized in bold. Invariable stems are excluded.

<i>Suffix</i>	<i>Modes</i>
- <i>ỵ</i>	- <i>ỵ</i> stative imperfective, - <i>ỵ</i> extensional stative imperfective, realis telic perfective, some active atelic potentials, telic habitual, some telic imperatives, some hortatives
- <i>n</i>	- <i>n</i> active imperfective, - <i>n</i> positional imperfective, progressive, - <i>n</i> stative imperfective, conditional, contingent
- <i>r</i>	realis - <i>r</i> : active imperfective, realis - <i>r</i> : positional imperfective, realis - <i>r</i> : stative imperfective, realizational, realis future, admonitive, consecutive
- <i>h</i>	irrealis - <i>r</i> : active imperfective, irrealis - <i>r</i> : positional imperfective, - <i>h</i> active imperfective, - <i>h</i> positional imperfective, irrealis - <i>h</i> stative imperfective, realis - <i>h</i> stative imperfective of $\sqrt{ti^h}$ 'be', - <i>h</i> extensional stative imperfective, irrealis telic perfective of closed roots, atelic perfective, irrealis future, most potentials, some telic habituals, most telic imperatives, some hortatives
- <i>'</i>	- <i>'</i> active imperfective (open roots only), irrealis - <i>ỵ</i> stative imperfective of open roots, irrealis - <i>ỵ</i> extensional stative imperfective of open roots, irrealis telic perfective of open roots
- <i>X</i>	- <i>k</i> repetitive imperfective, [+I]-...- <i>k</i> repetitive imperfective, <i>yoo</i> =[+I]-...- <i>k</i> repetitive imperfective, - <i>x</i> repetitive imperfective, - <i>ch</i> repetitive imperfective, - <i>t</i> active (repeated) imperfective, - <i>x'</i> active (plural) imperfective, - <i>t'</i> active (plural) imperfective, - <i>s'</i> active (serial) imperfective, - <i>l'</i> active (serial) imperfective

Table 20: Distribution of stem variation suffixes across modes.

<i>Cls.</i>	<i>Pfx.</i>	<i>Preverb</i>	<i>Pfv.</i>	<i>Rep. Impfv.</i>	<i>Telicity</i>	<i>Movement</i>
∅	∅-	none ~ <i>yaa</i> = ‘along’	- <i>y</i>	- <i>x</i>	telic	bounded
na	<i>na</i> -	none ~ <i>yaa</i> = ‘along’	- <i>h</i>	<i>yoo</i> =[+I]-...- <i>k</i>	atelic	unbounded
ga	<i>ga</i> -	<i>yeyi</i> = ‘down’	- <i>h</i>	<i>yeyi</i> =...- <i>ch</i>	atelic	downward
ga	<i>ga</i> -	<i>kei</i> = ‘up’	- <i>h</i>	<i>kei</i> =...- <i>ch</i>	atelic	upward

Table 21: Conjugation classes and their associated features. *yaa*= occurs in the progressive but not in the future.

<i>Class</i>	<i>Preverb</i>	<i>Classifier</i>	<i>Suffix</i>	<i>Example</i>
∅	none	[-I]	- <i>x</i>	<i>as.éex</i> ‘he cooks it’
na	<i>yoo</i> =	[+I]	- <i>k</i>	<i>yoo ayal’únk</i> ‘he hunts it’
ga	<i>yeyi</i> =	[-I]	- <i>ch</i>	<i>yeyi adagánch</i> ‘it gets sunny’
ga	<i>kei</i> =	[-I]	- <i>ch</i>	<i>kei latsínch</i> ‘he gets strong’

Table 22: Conjugation class and repetitive imperfectives. Adapted from Edwards 2009: 26.

<i>Class</i>	<i>Preverb</i>	<i>Example</i>
∅	<i>yaa</i> =	<i>aadé yaa has na.át</i> ‘they are walking along there’
na	<i>yaa</i> =	<i>aagáa yaa kunashéen</i> ‘he is going along searching for it’
ga	<i>yeyi</i> =	<i>yeyi andagán</i> ‘it is getting sunny’
ga	<i>kei</i> =	<i>kei ndahán</i> ‘he is standing up’

Table 23: Conjugation class and progressive imperfective directional preverbs. Adapted from Edwards 2009: 25.

### 6.4.3. CONJUGATION

Table 21 shows the four conjugation classes and their features. The ‘Preverb’ column is the preverb specified by the -X active imperfective, progressive, and future modes. The ‘Pfv.’ column lists the stem variation associated with the perfective mode. The ‘Rep. Impfv.’ column gives the affixes that form the predictable repetitive imperfective of the conjugation class. The ‘Telicity’ column lists the telicity category proposed by Leer and based on motion derivation, and the ‘Movement’ column describes the type of movement associated with motion derivations in the conjugation class.

Table 22 shows the conjugation class–derived repetitive imperfectives in more detail, with examples.

Table 23 shows the conjugation class–derived directional preverbs for progressives, with examples.

### 6.4.4. PREFIX CONTRACTION

Table 24 on page 89 presents the classifiers according to their phonological shapes. These shapes do not fully correspond to morphological features, and prefix contraction is only sensitive to phonological shape.

Table 25 on page 89 lists the CV prefixes from slot +14 to +1 that participate fully in prefix contraction. The division between outer conjunct CV prefixes and inner conjunct prefixes is based on behaviour. The outer CV prefixes are summarily represented in the prefix contraction tables as ‘CV’ and they all behave largely the same. The inner conjunct prefixes however do not behave identically, and hence are listed separately.



Ci-		Ca-		C-	
<i>Form</i>	<i>Features</i>	<i>Form</i>	<i>Features</i>	<i>Form</i>	<i>Features</i>
<i>di-</i>	+D Ø +I	<i>da-</i>	+D Ø -I		
<i>si-</i>	-D s +I	<i>sa-</i>	-D s -I	<i>s-</i>	-D s -I
<i>dzi-</i>	+D s +I			<i>s-</i>	+D s -I
<i>li-</i>	-D l +I	<i>la-</i>	-D l -I	<i>l-</i>	-D l -I
<i>dli-</i>	+D l +I			<i>l-</i>	+D l -I
<i>shi-</i>	-D sh +I	<i>sha-</i>	-D sh -I	<i>sh-</i>	-D sh -I
<i>ji-</i>	+D sh +I			<i>sh-</i>	+D sh -I

Table 24: Classifiers by phonological shape, excluding *Ø-* and *jä-*.

<i>outer conjunct CV prefixes</i>						<i>inner conjunct prefixes</i>					
+14	+13	+11	+10	+9	+8	+7	+6	+5	+4	+2	+1
i-	ku-	ji-	jä-	ka-	ga-	ga-	u-	Ø-	ju-	xa-	Ø-
yi-		x'a-					w-	na-	u-	tu-	jä-
a-		k'a-					oo-	ga-	ga-	i-	da-
ku-		tu-								yi-	di-
		shu-								Ø-	sa-
		lu-								du-	si-
		se-								du-	s-
		sa-									dzi-
		xa-									la-
		gu-									li-
		ta-									l-
		ki-									dli-
		xi-									sha-
											shi-
											sh-
											ji-

Table 25: Verb prefixes participating in prefix contraction.

<i>Prefix</i>	<i>Perfective</i>	<i>Future</i>	<i>Imperfective</i>	<i>Ext–Mul Impfv</i>	<i>Progressive</i>	<i>Realizational</i>	<i>Habitual</i>	<i>Potential</i>	<i>Imperative</i>	<i>Hortative</i>	<i>Admonitive</i>	<i>Consecutive</i>	<i>Conditional</i>	<i>Contingent</i>
<i>ÿu-</i>	+													
<i>u-ÿu-</i>	+													
<i>u-</i>	+													
<i>ga-w-ga-</i>		+												
$\emptyset$ -			+			+			+			+	+	
<i>u-<math>\emptyset</math>-</i>			+				+				+	+	+	
$\emptyset$ - <i>ga-</i>										+				+
<i>u-<math>\emptyset</math>-ga-</i>								+						+
<i>na-</i>				+	+	+	+		+			+	+	
<i>u-na-</i>				+	+						+	+	+	
<i>na-ga-</i>										+				+
<i>u-na-ga-</i>								+						+
<i>ga-</i>				+		+	+		+			+	+	
<i>u-ga-</i>				+							+	+	+	
<i>ga-ga-</i>										+				+
<i>u-ga-ga-</i>								+						+
<i>ga-</i>				+		+	+		+			+	+	
<i>ga-u-</i>				+							+	+	+	
<i>ga-ga-</i>										+				+
<i>ga-u-ga-</i>								+						+

Table 26: Contractable prefix sequences and their associated modes.

Table 26 gives the contractable prefix sequences in the inner conjunct domain and the corresponding modes in which they occur. Note that the conjugation prefix *ga*<sub>+5</sub> and mode prefix *ga*<sub>+4</sub> are listed separately, and that *ga*<sub>+4</sub> does not occur alone.

Tables 27 on page 91 through 36 on page 100 list the prefix contractions for various combinations of conjunct prefixes. Only Northern Tlingit is shown. The combination of mode prefixes and subjects is on the vertical axis of each table, and the classifier shapes to be combined with them are on the horizontal axis. Thus a combination of perfective *ÿu-*, first person singular subject *xa-*, and classifier *si-* as in *xwasiteen* ‘I saw it’ can be found in table 27 by looking on the left side for *ÿu-xa-* and then on top for *Ci-* (the shape of *si-*, see table 24 on page 89). The resulting form is the cross of those two, thus *xwaCi*. Braces indicate that the output can vary, leading to multiple forms. Although the third person subject  $\emptyset$ - and lack of a subject *none* are listed separately in tables 27 and 28, the output forms are in fact identical implying that  $\emptyset$ - has no phonological importance. Because of this, the other tables list  $\emptyset$ - and lack of a subject as *none* together under a single input form.

There may still be some mistakes lurking in these tables, and there may be output forms that are attested elsewhere but not documented here. Please report them.

<i>Subj.</i>	<i>Prefixes</i>	<i>Classifier shape</i>				
		<i>Ci-</i>	<i>Ca-</i>	<i>C-</i>	<i>∅-</i>	<i>ÿa-</i>
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-∅-	wuCi	—	wuC	wu	woo
<i>none</i>	ÿu-	wuCi	—	wuC	wu	woo
3	u-∅-	wuCi	—	wuC	wu	uwa
<i>none</i>	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-∅-	CVwCi	—	CVwuC	CVwu	CV:wa
<i>none</i>	CV-ÿu-	CVwCi	—	CVwuC	CVwu	CV:wa
3	CV-u-∅-	CU: Ci	—	CU: C	CU:	CU:wa
<i>none</i>	CV-u-	CU: Ci	—	CU: C	CU:	CU:wa

Table 27: Northern Tlingit prefix contractions with +4 perfective *ÿu-* or *u-*. U: represents *oo* if V is *a*, or lengthened V otherwise.

Subj.	Prefixes	Classifier shape		
		Ca-	C-	∅-
1SG	ga-w-ga-xa-	kuk̄aCa	kuk̄aC	kuk̄a
		kw̄kaCa	kw̄kaC	kw̄ka
		k̄kwaCa	k̄kwaC	k̄kwa
1PL	ga-w-ga-tu-	gax̄tuCa	gax̄tooC	gax̄too
2SG	ga-w-ga-i-	gagiCa	gageeC	gagee
		k̄giCa	k̄geeC	k̄gee
2PL	ga-w-ga-ÿi-	gax̄ÿiCa	gax̄ÿiC	gax̄ÿi
IND.H	ga-w-ga-du-	gax̄duCa	gax̄duC	gax̄du
3	ga-w-ga-∅-	gux̄Ca	gugaC	guga
			k̄gwaC	k̄gwa
none	ga-w-ga-	gux̄Ca	gugaC	guga
			k̄gwaC	k̄gwa
1SG	CV-ga-w-ga-xa-	CVkw̄kaCa	CVkw̄kaC	CVkw̄ka
1PL	CV-ga-w-ga-tu-	CVgax̄tuCa	CVgax̄tooC	CVgax̄too
2SG	CV-ga-w-ga-i-	CVk̄giCa	CVk̄geeC	CVk̄gee
2PL	CV-ga-w-ga-ÿi-	CVgax̄ÿiCa	CVgax̄ÿiC	CVgax̄ÿi
IND.H	CV-ga-w-ga-du-	CVgax̄duCa	CVgax̄duC	CVgax̄du
3	CV-ga-w-ga-∅-	CVgux̄Ca	CVkw̄gaC	CVkw̄ga
none	CV-ga-w-ga-	CVgux̄Ca	CVkw̄gaC	CVkw̄ga
1SG	ka-ga-w-ga-xa-	kakw̄kaCa	kakw̄kaC	kakw̄ka
		kook̄kaCa	kook̄kaC	kook̄ka

Table 28: Northern prefix contractions with future *ga-w-ga-...CL[-I]-*. The CV prefix *ka-* with 1SG.S *x̄a-* has an additional optional contraction.

Subj.	Prefixes	Classifier shape				
		Ci-	Ca-	C-	∅-	ya-
1SG	∅-x̄a-	x̄aCi	x̄aCa	x̄aC	x̄a	x̄aa
1PL	∅-tu-	tuCi	tuCa	tooC	too	tuwa
2SG	∅-i-	iCi	iCa	eeC	ee	iya
2PL	∅-yi-	yiCi	yeeyCa	yiC	yi	yeey
IND.H	∅-du-	duCi	—	duC	du	duwa
3/none	∅-(∅-)	Ci	Ca	iC	∅	ya
1SG	u-∅-x̄a-	{ x̄waCi ux̄Ci	{ x̄waCa ux̄Ca	x̄waC	{ x̄wa ux̄a	{ x̄waa ux̄aa
3/none	u-∅-(∅-)	uCi	—	uC	u	uwa
IND.H	u-∅-du-	{ — —	{ — —	{ uduC duC	{ udu du	{ — —
1SG	CV-∅-x̄a-	CVx̄Ci	CVx̄Ca	CVx̄aC	CVx̄a	CVx̄aa
1PL	CV-∅-tu-	CVtuCi	CVtuCa	CVtooC	CVtoo	CVtuwa
2SG	CV-∅-i-	CeeCi	CeeCa	CeeC	Cee	Ceeya
2PL	CV-∅-yi-	CVyeeyCi	CVyCa	CVyiC	CVy	CVyeey
IND.H	CV-∅-du-	CVduCi	—	CVduC	CVdu	CVduwa
3/none	CV-∅-(∅-)	CVCi	CVCa	CVC	CV	CVya
3/none	ka-∅-(∅-)	kaCi	kaCa	kaC	ka	kaa
1SG	CV-u-∅-x̄a-	CU:x̄Ci	CU:x̄Ca	CU:x̄aC	CU:x̄a	CU:x̄aa
3/none	CV-u-∅-(∅-)	CU:Ci	CU:Ca	CU:C	CU:	CU:ya
IND.H	CV-u-∅-du-	{ — —	{ — —	{ CU:duC CVduC	{ CU:du CVdu	{ — —
1SG	CV-oo-∅-x̄a-	Cux̄Ci	Cux̄Ca	Cux̄aC	Cux̄a	Cux̄aa
3/none	CV-oo-∅-(∅-)	CooCi	CooCa	CooC	Coo	Cuwa
3/none	CV-w-∅-(∅-)	CuCi	CuCa	CuC	Cu	Coo

Table 29: Northern prefix contractions with +5 ∅-conjugation. U: represents oo if V is a, or lengthened V otherwise.

<i>Subj.</i>	<i>Prefixes</i>	<i>Classifier shape</i>				
		<i>Ci-</i>	<i>Ca-</i>	<i>C-</i>	<i>∅-</i>	<i>ÿa-</i>
1SG	na-x̄a-	nax̄Ci	nax̄Ca	nax̄aC	nax̄a	nax̄aa
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/ <i>none</i>	na-(∅-)	naCi	—	naC	na	naa
1SG	u-na-x̄a-	{ unx̄aCi	unx̄aCa	unx̄aC	unx̄a	unx̄aa
		{ nax̄waCi	nax̄waCa	nax̄waC	nax̄wa	nax̄waa
3/ <i>none</i>	u-na-(∅-)	unaCi	—	unaC	una	unaa
1SG	CV-na-x̄a-	CVnax̄Ci	CVnax̄Ca	CVnxaC	CVnxa	CVnxaa
1PL	CV-na-tu-	CVntuCi	CVntuCa	CVntooC	CVntoo	CVntuwa
2SG	CV-na-i-	CVniCi	CVniCa	CVneeC	CVnee	CVniÿa
2PL	CV-na-ÿi-	CVnaÿCi	CVnaÿCa	CVnaÿC	CVnaÿ	CVnaÿeeÿ
IND.H	CV-na-du-	CVnduCi	—	CVnduC	CVndu	CVnduwa
3/ <i>none</i>	CV-na-(∅-)	CVnCi	—	CVnaC	CVna	CVnaa
1SG	CV-u-na-x̄a-	{ CU:nax̄Ci	CU:nax̄Ca	CU:nxaC	CU:nxa	CU:nxaa
		{ CVnax̄wCi	CVnax̄wCa	CVnxaC	CVnxa	CVnxaa
3/ <i>none</i>	CV-u-na-(∅-)	CU:nCi	CU:nCa	CU:naC	CU:na	CU:naa
1SG	CV-oo-na-x̄a-	Cunax̄Ci	Cunax̄Ca	CunxaC	Cunxa	Cunxaa
3/ <i>none</i>	CV-oo-na-(∅-)	CunCi	—	CunaC	Cuna	Cunaa
3/ <i>none</i>	CV-w-na-(∅-)	CunCi	—	CunaC	Cuna	Cunaa

Table 30: Northern prefix contractions with +5 *na*-conjugation. U: represents *oo* if V is *a*, or lengthened V otherwise.

Subj.	Prefixes	Classifier shape				
		Ci-	Ca-	C-	∅-	ya-
1SG	ga-xa-	kaCi	kaCa	kaC	ka	kaa
1PL	ga-tu-	gatuCi	gatuCa	gatooc	gato	gatuwa
2SG	ga-i-	giCi	giCa	geeC	gee	giya
1PL	ga-yi-	gayCi	gayCa	gayiC	gay	gayeey
IND.H	ga-du-	gaduCi	—	gaduC	gadu	gaduwa
3/none	ga-(∅-)	gaCi	—	gaC	ga	gaa
1SG	u-ga-xa-	kwaCi	kwaCa	kwaC	kwa	kwa
3/none	u-ga-(∅-)	gwaCi	gwaCa	gwaC	gwa	gwa
1SG	CV-ga-xa-	CVkaCi	CVkaCa	CVkaC	CVka	CVkaa
1PL	CV-ga-tu-	CVxtuCi	CVxtuCa	CVxtooC	CVxtoo	CVxtuwa
2SG	CV-ga-i-	CVgiCi	CVgiCa	CVgeeC	CVgee	CVgiya
1PL	CV-ga-yi-	CVxyiCi	CVxyiCa	CVxyiC	CVxyi	CVxyeey
IND.H	CV-ga-du-	CVxduCi	—	CVxduC	CVxdu	CVxduwa
3/none	CV-ga-(∅-)	CVxCi	CVxCa	CVgaC	CVga	CVgaa
1SG	CV-u-ga-xa-	CU:kaCi	CU:kaCa	CU:kaC	CU:ka	CU:kaa
3/none	CV-u-ga-(∅-)	CU:xCi	CU:xCa	CU:gaC	CU:ga	CU:gaa
1SG	CV-oo-ga-xa-	CuKaCi	CuKaCa	CuKaC	CuKa	CuKaa
3/none	CV-oo-ga-(∅-)	CuxCi	CuxCa	CugaC	Cuga	Cugaa

Table 31: Northern prefix contractions with +5 *ga*-conjugation. U: represents *oo* if V is *a*, or lengthened V otherwise.

<i>Subj.</i>	<i>Prefixes</i>	<i>Classifier shape</i>				
		<i>Ci-</i>	<i>Ca-</i>	<i>C-</i>	<i>∅-</i>	<i>ÿa-</i>
1SG	ga-x̄a-	gax̄Ci	gax̄Ca	gax̄aC	gax̄a	gax̄aa
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/ <i>none</i>	ga-(∅-)	gaCi	—	gaC	ga	gaa
1SG	ga-u-x̄a-	goox̄Ci	goox̄Ca	goox̄aC	goox̄a	goox̄aa
3/ <i>none</i>	ga-u-(∅-)	?gooci	—	gooc	goo	?goowa
1SG	CV-ga-x̄a-	CVgax̄Ci	CVgax̄Ca	CVkx̄aC	CVkx̄a	CVkx̄aa
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/ <i>none</i>	CV-ga-(∅-)	CVkCi	CVkCa	CVgaC	CVga	CVgaa
1SG	CV-ga-u-x̄a-	CVgoox̄Ci	CVgoox̄Ca	CVkwx̄aC	CVkwx̄a	CVkwx̄aa
3/ <i>none</i>	CV-ga-u-(∅-)	?CVgooci	—	CVgooc	CVgoo	?CVgoowa

Table 32: Northern prefix contractions with +7 *ga*-conjugation.



Subj.	Prefixes	Classifier shape				
		Ci-	Ca-	C-	∅-	ya-
1SG	∅-ga-xa-	k̄aCi	k̄aCa	k̄aC	k̄a	k̄aa
1PL	∅-ga-tu-	gatuCi	gatuCa	gatooc	gatoo	gatuwa
2SG	∅-ga-i-	giCi	giCa	geeC	gee	giya
1PL	∅-ga-yi-	gayCi	gayCa	gayiC	gay	gayeey
IND.H	∅-ga-du-	gaduCi	—	gaduC	gadu	gaduwa
3/none	∅-ga-(∅-)	gaCi	—	gaC	ga	gaa
1SG	u-∅-ga-xa-	k̄waCi	k̄waCa	k̄waC	k̄wa	k̄waa
3/none	u-∅-ga-(∅-)	gwaCi	gwaCa	gwaC	gwa	gwaa
1SG	CV-∅-ga-xa-	CVk̄aCi	CVk̄aCa	CVk̄aC	CVk̄a	CVk̄aa
1PL	CV-∅-ga-tu-	CVxtuCi	CVxtuCa	CVxtooc	CVxtoo	CVxtuwa
2SG	CV-∅-ga-i-	CVgiCi	CVgiCa	CVgeeC	CVgee	CVgiya
1PL	CV-∅-ga-yi-	CVxyiCi	CVxyiCa	CVxyiC	CVxyi	CVxyeey
IND.H	CV-∅-ga-du-	CVxduCi	—	CVxduC	CVxdu	CVxduwa
3/none	CV-∅-ga-(∅-)	CVxCi	CVxCa	CVgaC	CVga	CVgaa
1SG	CV-u-∅-ga-xa-	CU:k̄aCi	CU:k̄aCa	CU:k̄aC	CU:k̄a	CU:k̄aa
3/none	CV-u-∅-ga-(∅-)	CU:x̄Ci	CU:x̄Ca	CU:gaC	CU:ga	CU:gaa
1SG	CV-oo-∅-ga-xa-	CūkaCi	CūkaCa	CūkaC	Cūka	Cūkaa
3/none	CV-oo-∅-ga-(∅-)	Cux̄Ci	Cux̄Ca	CugaC	Cuga	Cugaa

Table 33: Northern prefix contractions with +5 ∅-conjugation and +4 ga-mode. U: represents oo if V is a, or lengthened V otherwise.

Subj.	Prefixes	Classifier shape				
		Ci-	Ca-	C-	∅-	ya-
1SG	na-ga-xa-	na <sub>ka</sub> Ci	na <sub>ka</sub> Ca	na <sub>ka</sub> C	na <sub>ka</sub>	na <sub>kaa</sub>
1PL	na-ga-tu-	na <sub>x</sub> tuCi	na <sub>x</sub> tuCa	na <sub>x</sub> tooC	na <sub>x</sub> too	na <sub>x</sub> tuwa
2SG	na-ga-i-	na <sub>gi</sub> Ci	na <sub>gi</sub> Ca	na <sub>gee</sub> C	na <sub>gee</sub>	na <sub>gi</sub> ya
2PL	na-ga-yi-	na <sub>x</sub> yiCi	na <sub>x</sub> yiCa	na <sub>x</sub> yiC	na <sub>x</sub> yi	na <sub>x</sub> yee <sub>y</sub>
IND.H	na-ga-du-	na <sub>x</sub> duCi	—	na <sub>x</sub> duC	na <sub>du</sub>	na <sub>x</sub> duwa
3/n	na-ga-(∅-)	na <sub>x</sub> Ci	na <sub>x</sub> Ca	na <sub>ga</sub> C	na <sub>ga</sub>	na <sub>gaa</sub>
1SG	u-na-ga-xa-	{ un <sub>ka</sub> Ci na <sub>k</sub> waCi	{ un <sub>ka</sub> Ca na <sub>k</sub> waCa	{ un <sub>ka</sub> C na <sub>k</sub> waC	{ un <sub>ka</sub> na <sub>k</sub> wa	{ un <sub>kaa</sub> na <sub>k</sub> waa
3/n	u-na-ga-(∅-)	{ un <sub>a</sub> xCi na <sub>x</sub> wCi	{ un <sub>a</sub> xCa na <sub>x</sub> wCa	{ un <sub>a</sub> gaC na <sub>g</sub> waC	{ un <sub>a</sub> ga na <sub>g</sub> wa	{ un <sub>a</sub> gaa na <sub>g</sub> waa
1SG	CV-na-ga-xa-	CVn <sub>ka</sub> Ci	CVn <sub>ka</sub> Ca	CVn <sub>ka</sub> C	CVn <sub>ka</sub>	CVn <sub>kaa</sub>
1PL	CV-na-ga-tu-	CVna <sub>x</sub> tuCi	CVna <sub>x</sub> tuCa	CVna <sub>x</sub> tooC	CVna <sub>x</sub> too	CVna <sub>x</sub> tuwa
2SG	CV-na-ga-i-	CVn <sub>gi</sub> Ci	CVn <sub>gi</sub> Ca	CVn <sub>gee</sub> C	CVn <sub>gee</sub>	CVn <sub>gi</sub> ya
2PL	CV-na-ga-yi-	CVna <sub>x</sub> yiCi	CVna <sub>x</sub> yiCa	CVna <sub>x</sub> yiC	CVna <sub>x</sub> yi	CVna <sub>x</sub> yee <sub>y</sub>
IND.H	CV-na-ga-du-	CVna <sub>x</sub> duCi	—	CVna <sub>x</sub> duC	CVna <sub>x</sub> du	CVna <sub>x</sub> duwa
3/n	CV-na-ga-(∅-)	CVna <sub>x</sub> Ci	CVna <sub>x</sub> Ca	CVn <sub>ga</sub> C	CVn <sub>ga</sub>	CVn <sub>gaa</sub>
1SG	CV-u-na-ga-xa-	{ CU:n <sub>ka</sub> Ci CVn <sub>k</sub> waCi	{ CU:n <sub>ka</sub> Ca CVn <sub>k</sub> waCa	{ CU:n <sub>ka</sub> C CVn <sub>k</sub> waC	{ CU:n <sub>ka</sub> CVn <sub>k</sub> wa	{ CU:n <sub>kaa</sub> CVn <sub>k</sub> waa
3/n	CV-u-na-ga-(∅-)	{ CU:n <sub>a</sub> xCi CVna <sub>x</sub> wCi	{ CU:n <sub>a</sub> xCa CVna <sub>x</sub> wCa	{ CU:n <sub>ga</sub> C CVn <sub>g</sub> waC	{ CU:n <sub>ga</sub> CVn <sub>g</sub> wa	{ CU:n <sub>gaa</sub> CVn <sub>g</sub> waa
1SG	CV-oo-na-ga-xa-	Cun <sub>ka</sub> Ci	Cun <sub>ka</sub> Ca	Cun <sub>ka</sub> C	Cun <sub>ka</sub>	Cun <sub>kaa</sub>
3/n	CV-oo-na-ga-(∅-)	Cun <sub>a</sub> xCi	Cun <sub>a</sub> xCa	Cun <sub>ga</sub> C	Cun <sub>ga</sub>	Cun <sub>gaa</sub>
3/n	CV-w-na-ga-(∅-)	Cun <sub>a</sub> xCi	Cun <sub>a</sub> xCa	Cun <sub>ga</sub> C	Cun <sub>ga</sub>	Cun <sub>gaa</sub>

Table 34: Northern prefix contractions with +5 *na*-conjugation and *ga*-mode. U: represents *oo* if V is *a*, or lengthened V otherwise.

Prefixes	Classifier shape				
	Ci-	Ca-	C-	∅-	ya-
ga-ga-xa-	kaakaCi	kaakaCa	kaakaC	kaaka	kaaka
ga-ga-tu-	gaaxtuCi	gaaxtuCa	gaaxtooC	gaaxtoo	gaaxtuwa
ga-ga-i-	gaagiCi	gaagiCa	gaageeC	gaagee	gaagiya
ga-ga-yi-	gaaxyiCi	gaaxyiCa	gaaxyiC	gaaxyi	gaaxyeeÿ
ga-ga-du-	gaaxduCi	—	gaaxduC	gaaxdu	gaaxduwa
ga-ga-∅-	gaaxCi	gaaxCa	gaagaC	gaaga	gaagaa
u-ga-ga-xa-	kwaakaCi	kwaakaCa	kwaakaC	kwaaka	kwaakaa
u-ga-ga-∅-	gwaaxCi	gwaaxCa	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	CVgaagiya
CV-ga-ga-yi-	CVgaaxyiCi	CVgaaxyiCa	CVgaaxyiC	CVgaaxyi	CVgaaxyeeÿ
CV-ga-ga-du-	CVgaaxduCi	—	CVgaaxduC	CVgaaxdu	CVgaaxduwa
CV-ga-ga-∅-	CVgaaxCi	CVgaaxCa	CVgaagaC	CVgaaga	CVgaagaa
CV-u-ga-ga-xa-	CU:kaakaCi	CU:kaakaCa	CU:kaakaC	CU:kaaka	CU:kaakaa
CV-u-ga-ga-∅-	CU:gaaxCi	CU:gaaxCa	CU:gaagaC	CU:gaaga	CU:gaagaa
CV-oo-ga-ga-xa-	CuakaCi	CuakaCa	CuakaC	Cuaka	Cuakaa
CV-oo-ga-ga-∅-	CugaagaCi	CugaagaCa	CugaagaC	Cugaaga	Cugaagaa

Table 35: Northern prefix contractions with *ga*-conjugation and *ga*-mode. U: represents *oo* if V is *a*, or lengthened V otherwise.

<i>Prefixes</i>	<i>Classifier shape</i>				
	Ci-	Ca-	C-	∅-	ÿa-
ga-ga- <u>xa</u> -	ga <u>ka</u> Ci	ga <u>ka</u> Ca	ga <u>ka</u> C	ga <u>ka</u>	ga <u>ka</u> aa
ga-ga-tu-	ga <u>xtu</u> Ci	ga <u>xtu</u> Ca	ga <u>xtoo</u> C	ga <u>xtoo</u>	ga <u>xtu</u> wa
ga-ga-i-	ga <u>gi</u> Ci	ga <u>gi</u> Ca	ga <u>gee</u> C	ga <u>gee</u>	ga <u>gi</u> ÿa
ga-ga-ÿi-	ga <u>xÿi</u> Ci	ga <u>xÿi</u> Ca	ga <u>xÿi</u> C	ga <u>xÿi</u>	ga <u>xÿe</u> eÿ
ga-ga-du-	ga <u>xdu</u> Ci	—	ga <u>xdu</u> C	ga <u>xdu</u>	ga <u>xdu</u> wa
ga-ga-∅-	ga <u>x</u> Ci	ga <u>x</u> Ca	ga <u>ga</u> C	ga <u>ga</u>	ga <u>ga</u> aa
ga-u-ga- <u>xa</u> -	g <u>ooka</u> Ci	g <u>ooka</u> Ca	g <u>ooka</u> C	g <u>ooka</u>	g <u>ooka</u> aa
ga-u-ga-∅-	g <u>oox</u> Ci	g <u>oox</u> Ca	—	g <u>ooga</u>	g <u>ooga</u> aa
CV-ga-ga- <u>xa</u> -	CV <u>kka</u> Ci	CV <u>kka</u> Ca	CV <u>kka</u> C	CV <u>kka</u>	CV <u>kka</u> aa
CV-ga-ga-tu-	CVg <u>axtu</u> Ci	CVg <u>axtu</u> Ca	CVg <u>axtoo</u> C	CVg <u>axtoo</u>	CVg <u>axtu</u> wa
CV-ga-ga-i-	CVg <u>gi</u> Ci	CVg <u>gi</u> Ca	CVg <u>gee</u> C	CVg <u>gee</u>	CVg <u>gi</u> ÿa
CV-ga-ga-ÿi-	CVg <u>xÿi</u> Ci	CVg <u>xÿi</u> Ca	CVg <u>xÿi</u> C	CVg <u>xÿi</u>	CVg <u>xÿe</u> eÿ
CV-ga-ga-du-	CVg <u>xdu</u> Ci	—	CVg <u>xdu</u> C	CVg <u>xdu</u>	CVg <u>xdu</u> wa
CV-ga-ga-∅-	CVg <u>x</u> Ci	CVg <u>x</u> Ca	CVg <u>ga</u> C	CVg <u>ga</u>	CVg <u>ga</u> aa
CV-ga-u-ga- <u>xa</u> -	CVk <u>wka</u> Ci	CVk <u>wka</u> Ca	CVk <u>wka</u> C	CVk <u>wka</u>	CVk <u>wka</u> aa
CV-ga-u-ga-∅-	CVg <u>oox</u> Ci	CVg <u>oox</u> Ca	CVk <u>wga</u> C	CVk <u>wga</u>	CVk <u>wga</u> aa

Table 36: Northern prefix contractions with *ga*-conjugation and *ga*-mode.

<i>Mode</i>	<i>Preverb</i>	<i>Asp./Conj.</i>	<i>I-Cpnt.</i>	<i>Var</i>	<i>Suff.</i>
	+17	+7 – +4	+1	-1	-3
DECLARATIVE MODES					
<i>imperfectives</i>					
<i>-r</i> active & <i>-r</i> positional					
realis		$\emptyset$ -	-1	-r	
irrealis		<i>u</i> - $\emptyset$ -	-1	- <i>h</i>	
<i>-h</i> active & <i>-h</i> repetitive					
realis		$\emptyset$ -	-1	- <i>h</i>	
irrealis		<i>u</i> - $\emptyset$ -	-1	- <i>h</i>	
<i>-'</i> active & <i>-'</i> positional (open roots only)					
realis		$\emptyset$ -	-1	-'	
irrealis		<i>u</i> - $\emptyset$ -	-1	-'	
<i>-n</i> active & <i>-n</i> positional					
realis		$\emptyset$ -	-1	- <i>n</i>	
irrealis		<i>u</i> - $\emptyset$ -	-1	- <i>n</i>	
<i>-X</i> active ( <i>-s'</i> , <i>-l'</i> , <i>-t</i> , <i>-x'</i> , <i>-t'</i> ) & <i>-X</i> repetitive ( <i>-x</i> , <i>-ch</i> , <i>-k</i> )					
realis	(PVB=)	$\emptyset$ -	-1		- <i>X</i>
irrealis	(PVB=)	<i>u</i> - $\emptyset$ -	-1		- <i>X</i>
[+I]-...- <i>k</i> active & repetitive					
realis		$\emptyset$ -	+1		- <i>k</i>
irrealis		<i>u</i> - $\emptyset$ -	-1		- <i>k</i>
<i>yoo</i> =[+I]-...- <i>k</i> active & repetitive					
realis	<i>yoo</i> =	$\emptyset$ -	+1		- <i>k</i>
irrealis	<i>yoo</i> =	<i>u</i> - $\emptyset$ -	-1		- <i>k</i>
progressive					
realis	PVB=	<i>na</i> -	-1	- <i>n</i>	
irrealis	PVB=	<i>u-na</i> -	-1	- <i>n</i>	

Table 37: Non-stative imperfective (declarative) modes.

#### 6.4.5. MODES

The modes are listed in tables 37 through 40 on page 104. The divisions into ‘declarative’, ‘deontic’, and ‘circumstantial’ are taken from Leer 1991 but are meant purely as organizational conveniences here. Each table gives a mode on the left, then the affixes associated with the mode on the right. The symbol PVB= indicates a conjugation class–derived preverb as listed in table 21 on page 88. The symbol CNJ- is the conjugation class prefix per se. The ‘I-Cpnt.’ column lists the I component of the classifier, either [+I] or [-I]. Column ‘Var.’ gives the stem variation suffix where appropriate, and ‘Suff.’ lists the suffixes in slot –3 where they occur.

Table 37 documents the non-stative imperfectives, i.e. all those imperfectives that are not stative: actives, positionals, repetitives, and the progressive. Modes with the same stem variation are lumped together due to shared morphology, despite differing semantics. The *-X* stands for either one of the active suffixes in {*-s'*, *-l'*, *-t*, *-x'*, *-t'*} or one of the repetitive suffixes in {*-x*, *-ch*, *-k*}. Note that *-k* may occur as *-kw* unpredictably for some verb themes. Both *-X* and *-k* supplant stem variation, but they cause similar suprasegmental change in the stem.

<i>Mode</i>	<i>Preverb</i> +17	<i>Asp./Conj.</i> +7 - +4	<i>I-Cpnt.</i> +1	<i>Var</i> -1	<i>Suff.</i> -3
DECLARATIVE MODES (cont'd)					
<i>imperfectives</i> (cont'd)					
-: stative					
realis		∅-	+1	-:	
irrealis		u-∅-	-1	-h	
-ÿ stative					
realis		∅-	+1	-ÿ	
irrealis					
closed root CVC		u-∅-	-1	-ÿ	
open root CV		u-∅-	-1	-'	
-n stative					
realis		∅-	+1	-n	
irrealis		u-∅-	-1	-h	
-h stative					
realis		∅-	+1	-h	
irrealis					
closed root CVC		u-∅-	-1	-h	
open root CV		u-∅-	-1	-'	
stative with invariable root					
realis		∅-	+1		
irrealis		u-∅-	-1		
-h extensional stative					
realis		CNJ-	+1	-h	
irrealis		u-CNJ-	-1	-h	
-ÿ extensional stative					
realis		CNJ-	+1	-ÿ	
irrealis		u-CNJ-	-1	-'	
-k multipositional stative					
realis					
closed root CVC		CNJ-	+1		-k
open root CV		CNJ-	+1		-kw-t
irrealis					
closed root CVC		u-CNJ-	-1		-k
open root CV		u-CNJ-	-1		-kw-t

Table 38: Stative imperfective (declarative) modes.

<i>Mode</i>	<i>Preverb</i>	<i>Asp./Conj.</i>	<i>I-Cpnt.</i>	<i>Var</i>	<i>Suff.</i>
	+17	+7 - +4	+1	-1	-3
DECLARATIVE MODES (cont'd)					
<i>perfectives</i>					
<i>∅</i> -conjugation perfective					
realis		<i>yü-</i> ~ <i>u-</i>	+I	- <i>ỵ</i>	
irrealis					
open root CV		<i>yü-</i> ~ <i>u-</i>	-I	-'	
closed root CVC		<i>yü-</i> ~ <i>u-</i>	-I	- <i>h</i>	
<i>na-</i> , <i>ga-</i> , <i>ga</i> -conjugation perfective					
realis		<i>yü-</i>	+I	- <i>h</i>	
irrealis		<i>yü-</i>	-I	- <i>h</i>	
<i>realizational</i> — always realis					
realis		CNJ-	+I	-:	
<i>habituals</i>					
<i>∅</i> -conjugation habitual					
closed root CVC		<i>u-∅-</i>	-I	- <i>h</i> ~ - <i>ỵ</i>	- <i>ch</i>
open root CV		<i>u-∅-</i>	-I	- <i>ỵ</i>	- <i>ch</i>
<i>na-</i> , <i>ga-</i> , <i>ga</i> -conjugation habitual		CNJ-	-I		- <i>ch</i>
<i>future</i>					
realis	PVB=	<i>ga-w-ga-</i>	-I	-:	
irrealis	PVB=	<i>ga-w-ga-</i>	-I	- <i>h</i>	
<i>potential</i>					
closed root CVC					
non-decessive		<i>u-CNJ-ga-</i>	+I	- <i>h</i>	
decessive		<i>u-CNJ-ga-</i>	-I	- <i>h</i>	
open root CV					
non-decessive		<i>u-CNJ-ga-</i>	+I	- <i>h</i>	
decessive		<i>u-CNJ-ga-</i>	-I	- <i>h</i>	
open root CV active <i>∅-ỵ</i> themes					
non-decessive		<i>u-∅-ga-</i>	+I	- <i>ỵ</i>	
decessive		<i>u-∅-ga-</i>	-I	- <i>ỵ</i>	

Table 39: Non-imperfective declarative modes.

Table 38 documents the stative imperfectives, all those modes that are imperfectives occurring with stative verb themes. Some have differing stem variation depending on the basic root shape – differing realization of e.g. CVC + *-h* → C $\check{V}$ :C vs. CVC' + *-h* → C $\check{V}$ :C' is ignored here. Verb themes with invariable roots have no stem variation.

Table 39 lists all the 'declarative' modes that are not imperfectives. *∅*-conjugation perfectives take either *yü-* or *u-* depending on the subject prefix. *∅*-conjugation habituals may irregularly show *-h* stem variation rather than *-ỵ*. Potentials, imperatives, and hortatives of open roots may have *-ỵ* stem variation rather than *-h* if the (active) theme is of the *∅-ỵ* subclass of *∅*-conjugation.

<i>Mode</i>	<i>Preverb</i>	<i>Asp./Conj.</i>	<i>I-Cpnt.</i>	<i>Var</i>	<i>Suff.</i>
	+17	+7 - +4	+1	-1	-3
DEONTIC MODES					
<i>imperatives</i> — always realis					
$\emptyset$ -conjugation imperative					
open root CV		$\emptyset$ -	-I	-h	
open root CV active $\emptyset$ - $\dot{y}$		$\emptyset$ -	-I	- $\dot{y}$	
closed CVC with DIR=	DIR=	$\emptyset$ -	-I	-h	
closed CVC otherwise		$\emptyset$ -	-I	- $\dot{y}$	
<i>na-</i> , <i>ga-</i> , <i>ga</i> -conjugation imperative		CNJ-	-I	-h	
<i>hortative</i> — always realis					
open root CV active $\emptyset$ - $\dot{y}$ themes		CNJ- <i>ga</i> -	-I	-h	(- <i>ée</i> )
<i>admonitive</i> — always irrealis					
		<i>u</i> -CNJ-	-I	-:	
CIRCUMSTANTIAL MODES					
<i>consecutive</i>					
		CNJ-	-I	-:	
<i>conditional</i>					
		CNJ-	-I	-n	- <i>ée</i>
<i>contingent</i>					
		CNJ- <i>ga</i> -	-I	-n	- <i>ín</i>

Table 40: Deontic and circumstantial (non-declarative) modes.

Table 40 lists the ‘deontic’ and ‘circumstantial’ modes.  $\emptyset$ -conjugation imperatives depend on root shape,  $\emptyset$ - $\dot{y}$  subclass, and use of a directional preverb DIR=. Hortatives are also sensitive to the  $\emptyset$ - $\dot{y}$  subclass. All hortatives may optionally take the subordinate suffix -*ée*, thus forming a subordinate clause despite being in a matrix clause context. Conditionals were analyzed by Leer (1991) as having a suffix -*née* but this is better analyzed as -*n* stem variation with the subordinate suffix -*ée*, and indeed conditionals only occur as subordinate clauses (the ‘if ...’ of an ‘if ... then ...’ pair). Since -*n* normally produces CVC and CV: stems, the subordinate suffix is usually low.

#### 6.4.6. MOTION DERIVATION

Tables 41 through 43 list the documented motion derivations that are applied to motion themes to produce conjugable forms. Tables 41 on page 105 and 42 on page 106 document the motion derivations that produce  $\emptyset$ -conjugation class themes. Table 43 on page 107 documents the motion derivations producing themes in the other three conjugation classes. The motion derivations are grouped by the kind of repetitive imperfective that they provide. Thus all the  $\emptyset$ -conjugation motion derivations that produce a theme with a -*ch* repetitive imperfective are listed together regardless of other morphology or semantics.

The ‘Cls.’ column in each table gives the conjugation class. The ‘Derivation’ column shows the derivational morphology associated with the motion derivation, mostly comprising preverbs but also adjunct PPs, thematic object prefixes, incorporated nouns (mostly *já*- ‘vertical surface’ vsFC and *sha*- ‘head’), the derivational irrealis *oo-*, and in the case of revertive motion also the middle voice indicator [+D] in the classifier.

Although these tables aspire to exhaustivity, there are probably many attested but undocumented motion derivations that do not occur in these tables. Please report undocumented examples.



<i>Cls.</i>	<i>Derivation</i>	<i>Meaning</i>
with <i>-h</i> repetitive imperfective		
∅	N- $\{t, \underline{x}, \underline{de}\}$	arriving at N, coming to N
∅	$\dot{y}an = \sim \dot{y}ax = \sim \dot{y}ánde =$	moving ashore, to rest, completing
∅	N- $x' \dot{y}an = \sim \dots$	coming to rest at N
∅	N- $náx \dot{y}an = \sim \dots$	moving across N, to other side of N
∅	$\dot{y}an = \sim \dots + k'i-$	setting up, erecting
∅	$\dot{y}an = \sim \dots + sha-$	setting up, leaning against
∅	$kux = \sim kux\underline{x} = \sim kú\underline{x}de =$	moving aground, into shallow water
∅	$neil(t) = \sim neil\underline{x} = \sim neildé =$	moving inside, coming home
∅	N- $x' neil(t) = \sim \dots$	moving inside house at N
∅	$haat = \sim haax = \sim haa(n)dé =$	coming here
∅	$yóo-\{t, \underline{x}, \underline{de}\} =$	going away, going off somewhere
with <i>-ch</i> repetitive imperfective		
∅	$kei =$	moving up
∅	$ux = kei =$	moving out of control, blindly, amiss
∅	N- $\underline{x}'é-x' kei =$	catching up with N
∅	$yei =$	disembark, exit boat or other vehicle
∅	$yee\underline{k}_S \sim \dot{y}eik_N \sim eeh\underline{k}_T =$	moving down to shore
∅	$héni = yee\underline{k} = \dots$	moving down into water
∅	$daak\underline{k} =$	moving up from shore, back from open
∅	$dáagi = daak\underline{k} =$	moving further up from shore
∅	$k\underline{w}áak\underline{x} = daak\underline{k} =$	doing by mistake, wrongly
∅	$daak =$	seaward, out into open, falling from sky
∅	$kux = \sim kú\underline{x}de = [+D]-$	reverting, returning
∅	N- $x' kux = [+D]-$	reverting, returning to N

Table 41: Some  $\emptyset$ -conjugation class (telic) derivation strings for motion themes.

<i>Cls.</i>	<i>Derivation</i>	<i>Meaning</i>
with <i>-x</i> repetitive imperfective		
∅	N- <i>x'</i>	coming near N
∅	N- <i>yə́-</i> '	coming up to N
∅	N <i>gunə́yə́-</i> '	separating from N
∅	N <i>jishá-</i> '	getting ahead of N
∅	<i>gági=</i>	emerging, coming out into open
∅	<i>dáagi=</i>	coming out of water
∅	<i>héeni=</i>	going into water
∅	<i>gunayéi~gunéi=</i>	beginning
∅	N- <i>x̄</i>	moving in place at N, while stuck at N
∅	N- <i>x'</i> <i>yax=</i>	turning over by N
∅	<i>á-'=yax=</i>	turning over
∅	<i>shú-'=yax=</i>	turning over end by end
∅	<i>yətx~yədax<sub>T</sub>=</i>	starting, taking off, picking up
with <i>yoo=[+I]-...-k</i> repetitive imperfective		
∅	<i>yoo~yoo<sub>T</sub>=</i>	moving back and forth, to and fro
∅	<i>yən=yoo~yoo<sub>T</sub>=</i>	moving up and down (from surface)
with <i>yə-oo-~yaa=</i> and <i>-ch</i> repetitive imperfective		
∅	N- <i>x̄</i> <i>yə-oo- ~ yaa=</i>	moving obliquely, circuitously along N
∅	N <i>daa-x̄ ...</i>	circling around N
∅	N- <i>dé</i> <i>yə-oo- ~ yaa=</i>	moving obliquely, circuitously toward N
∅	<i>hé-dé ...</i>	moving over that way, aside, out of the way
∅	N- <i>dáx̄</i> <i>yə-oo- ~ yaa=</i>	moving obliquely, circuitously away from N
∅	N <i>jikaa-dáx̄ ...</i>	getting out of N's way
∅	N- <i>náx̄</i> <i>yə-oo- ~ yaa=</i>	moving obliquely, circuitously along N
∅	N- <i>x'</i> <i>yə-oo- ~ yaa=</i>	moving obliquely, circuitously at N
∅	N <i>daséi-x'</i> ...	exchanging places with N
with N- <i>x̄ sha-yə-oo-</i> and <i>-ch</i> repetitive imperfective		
∅	N- <i>x̄ sha-yə-oo-</i>	hanging up at N
∅	<i>yax=sha-yə-oo-</i>	hanging up
with <i>a-yə-oo-[+D]-</i> and <i>-x̄</i> repetitive imperfective		
∅	<i>a-yə-oo-[+D]-</i>	reverting, turning back

Table 42: More ∅-conjugation class (telic) derivation strings for motion themes.

<i>Cls.</i>	<i>Derivation</i>	<i>Meaning</i>
with <i>yoo</i> =[+I]-...- <i>k</i> repetitive imperfective		
na	—	moving along, lateral, horizontal
na	N- <i>x̄</i>	moving along N
na	N- <i>dé</i>	moving toward N
na	N- <i>dáx̄</i>	moving away from N
na	N- <i>náx̄</i>	moving by way of, through N
na	<i>yux̄</i> =	moving out of house
na	N- <i>x̄'yux̄</i> =	moving out of house at N
without imperfective		
na	N- <i>t</i>	moving around N
na	N <i>áa</i>	moving around
with <i>-ch</i> repetitive imperfective		
ga	—	falling (intransitive uncontrolled themes), downward
ga	<i>yáa</i> =	moving down
ga	<i>yaax̄</i> =	embarking, getting into boat, vehicle
ga	<i>yanax̄</i> =	moving down into ground
ga	N- <i>x̄</i>	moving down along N
ga	<i>héen-x̄</i> =	moving into water
ga	<i>káx̄ sha-</i>	falling over, prone
ga	N- <i>náx̄</i>	moving down by way of, through N
with <i>-ch</i> repetitive imperfective		
ga	—	starting off, picking up, upward
ga	N- <i>dáx̄</i>	starting off or picking up from N

Table 43: *na-*, *ga-* & *ga-* conjugation class derivation strings for motion themes.

<i>Mode</i>	<i>Epimode</i>		<i>Clause type</i>	
	<i>Decessive</i>	<i>Prohib.-Opt.</i>	<i>Subord.</i>	<i>Relative</i>
<i>Declarative modes</i>				
imperfectives	±	±	±	±
perfectives	±	±	±	±
future	±	–	±	±
potential	±	–	–	±
habitual*	±	–	±	±
realizational	–	–	–	–
<i>Deontic modes</i>				
imperative*	–	–	–	–
hortative*	–	–	±	–
admonitive	–	–	–	–
<i>Circumstantial modes</i>				
consecutive	–	–	(+)	–
conditional	–	–	+	–
contingent	–	–	(?)	–
<i>Composite modes with auxiliaries</i>				
imperfective habitual	–	–	±	±
imperfective consecutive	–	–	–	–
imperfective conditional	–	–	–	–
imperfective contingent	–	–	–	–
future habitual	±	–	±	±
future consecutive	–	–	–	–
future conditional	–	–	–	–
future contingent	–	–	–	–

Table 44: Combinations of modes with epimode and clause type suffixes.

#### 6.4.7. EPIMODE AND AUXILIARIES

Table 44 lists all the modes and composite modes (those constructed with auxiliaries) versus which epimode and clause type can be combined with them. It is as yet unclear if both epimode and clause type can be applied to the same form, so these may or may not be mutually exclusive. The symbol ± indicates that the particular mode can host the epimode or clause type of that column but need not, i.e. the epimode or clause type is optional. The symbol – indicates that the particular mode cannot host the epimode or clause type. The symbol + indicates that the particular mode always hosts the epimode or clause type; when parenthesized this means that the mode does in fact host it, but there is no surface morphology, and a parenthesized question mark means that the same may apply but it is unclear. I do not remember why the asterisks appear.

As an example, a verb in the potential mode may optionally be marked with the decessive suffix *-éen* *-eehn<sub>T</sub>* and concomitant [–I] in the classifier. A potential mode verb can also be in a relative clause, thus marked for relativization with the relative clause suffix *-i*. It is known that potential mode verbs can be both relative and decessive, in which case they have [–I] and *-i* (vs. normal relative [+I] and *-i*) but lack *-éen*. Similar combinations

<i>Form</i>	<i>Gloss</i>	<i>Definition</i>	<i>Auxiliary Affixes</i>
<i>neech</i> <sub>SRI</sub>			
<i>nooch</i> <sub>RN</sub>	HAB.AUX	habitual	- <i>ch</i>
<i>nukch</i> <sub>G</sub>			
<i>nooch</i> <sub>T</sub>			
<i>neejéen</i> <sub>SRI</sub>			
<i>noojéen</i> <sub>RN</sub>	DEC.HAB.AUX	decessive habitual	- <i>ch-éen</i>
<i>noohjeen</i> <sub>T</sub>			
<i>néekw</i> <sub>SRI</sub>			
<i>nóok</i> <sub>N</sub>	CSEC.AUX	consecutive	-:
<i>neekw</i> <sub>T</sub>			
<i>níkwnee</i> <sub>SRI</sub>			
<i>núknee</i> <sub>RN</sub>	COND.AUX	conditional	- <i>nee</i>
<i>nukneeh</i> <sub>T</sub>			
<i>ganíkw</i> <sub>SR</sub>			
<i>ganígún</i> <sub>I</sub>	CTNG.AUX	contingent	<i>ga-...-n-ín</i>
<i>ganígún</i> <sub>N</sub>			
<i>ganíkw</i> <sub>T</sub>			

Table 45: Verb auxiliaries (-7).

of epimode and clause type for other modes have yet to be explored. Potential mode verbs cannot under any circumstances be marked for prohibitive-optative epimode nor for subordination.

The hortative mode includes the subordinate suffix *-ée* optionally. It may be the case that hortatives are always subordinate, but this is unexplored. The conditional mode is always a subordinate clause, and always occurs with subordinate *-ée*. The consecutive is always a subordinate clause but lacks *-ée*, hence the parentheses. The same maybe true for the contingent, but this is unexplored. Leer (1991) listed only the imperfective habitual and future habitual composite modes as being subordinable, but since the other three noncomposite forms are probably subordinate, his claims should be revisited.

Table 45 lists the verb auxiliaries that occur in slot -7. These are the auxiliaries that produce the composite modes in combination with imperfective or future mode marking. The forms vary widely by dialect and hence are listed individually. The affixes that occur within the auxiliaries are given in the last column, but these should be thought of as illustrative and not necessarily present as independent elements.

#### 6.4.8. DERIVATION

Table 46 on page 110 lists the known derivational suffixes of roots. When one of these suffixes is applied to a root the root becomes invariable. Some suffixes are unique, only occurring with a single root, but are analyzed out in parallel with the more regular derivational suffixes.

Tables 47 through 49 list roots in Story & Naish 1973 and elsewhere that have derivational suffixes. The page number is in column 'Pg.', where 'S66:xx' means a page number in Story 1966, with the root not occurring in Story & Naish 1973. Probable base roots are listed in the 'Root' column and are given as found in Story & Naish 1973. Noun bases have a subscript *n*.

<i>Suffix</i>	<i>Name</i>	<i>Gloss</i>	<i>Meaning</i>
-án	restorative	REST	restore previous state
-xaa	amissive	MISS	miss the target of action
-ákʷ	deprivative	DEPRV	remove, deprive, lacking
-aa	play	PLAY	playing, pretending
-jaa	radiative ?	RAD	give off something? (<? -ch + -aa)
-shán	intensive ?	INTNS	intensifies meaning? (<? -án)
-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 46: Derivational suffixes (-2).

<i>Sfx.</i>	<i>Stem</i>	<i>Pg.</i>	<i>Root</i>	<i>Stem meaning</i>
	<i>haanán</i>	274	<i>haan</i>	(sg.) restore confidence by reelection
	<i>naagán</i>	284	<i>naak</i>	(pl.) restore confidence by reelection
-án	<i>taanán</i>	292	<i>taan</i>	reconsider; reset bone/joint
	<i>xeexán</i>	325	<i>xeex</i>	be restored to normality; become normal
	<i>xeenán</i>	338	<i>xeen</i>	get back into joint by itself
	<i>.únxaa</i>	270	<i>.oon</i>	miss target when shooting
	<i>t'áchxaa</i>	296	<i>t'aach</i>	miss target when slapping
	<i>dzéixaa</i>	296	<i>dzoo</i>	miss target when throwing round object
-xaa	<i>shátxaa</i>	309	<i>shaat</i>	miss target when grabbing something
	<i>gwálxaa</i>	319	<i>gwaal</i>	miss target when punching with fist
	<i>k'ishxaa</i>	337	<i>k'eesh</i>	miss target when hitting with stick
	<i>xíchxaa</i>	341	<i>xeech</i>	miss target when hitting with stick

Table 47: Some verbs with -2 derivational suffixes in Naish &amp; Story 1973.

<i>Sfx.</i>	<i>Stem</i>	<i>Pg.</i>	<i>Root</i>	<i>Stem meaning</i>
	<i>.éiyákw</i>	265	<i>.eik?</i>	have a useless/injured limb
	<i>nóox'ákw</i>	283	<i>nóox'<sub>n</sub></i>	remove shell, esp. from gumboots
	<i>ch'éeyákw</i>	306	<i>ch'ee?</i>	be slow
<i>-ákw</i>	<i>tl'éilákw</i>	311	<i>tl'eil<sub>n</sub></i>	remove milt from fish
	<i>geiyákw</i>	332	<i>gei<sub>n</sub></i>	scoop out, esp. from clamshell
	<i>xaayákw</i>	340	<i>xaaw</i>	shed hair, esp. of animal in spring
	<i>xoonákw</i>	S66:56	<i>xoon?</i>	drowning?
	<i>séewch'ákw</i>	S66:56	<i>seew<sub>n</sub></i>	tasteless, rain-flavoured
	<i>héixwaa</i>	271	<i>heexw</i>	make magic, perform positive rites
	<i>wéinaa</i>	278	<i>woo<sub>2</sub></i>	powder face; have face powdered
	<i>t'aax'aa</i>	296	<i>t'aax'</i>	play with marbles
	<i>t'ájaa</i>	296	<i>t'aach</i>	play at swimming
	<i>ts'ígwaa</i>	299	<i>ts'eeek</i>	be a delicate issue, require diplomacy
<i>-aa</i>	<i>ts'í(s)x(w)aa</i>	300		sneeze (onomatopoetic?)
	<i>ch'éit'aa</i>	306	<i>ch'eeet'?</i>	play with ball, esp. basketball
	<i>dlénxaa</i>	310	<i>dlaan?</i>	tempt, try out, test
	<i>kíts'aa</i>	321	<i>keets'</i>	play on seesaw
	<i>k'éinaa</i>	322	<i>k'ein</i>	play at jumping or twirling around
	<i>góol'aa</i>	S66:55	<i>gool'</i>	wink
	<i>sáyjaa</i>	301	<i>saay</i>	give off lots of heat; be sweaty
<i>-jaa</i>	<i>gíx'jaa</i>	334	<i>geex'</i>	creak, squeak; play bowed instrument
	<i>x'éel'jaa</i>	S66:55	<i>xeel'?</i>	groan
	<i>.áaxch'án</i>	270	<i>.aax</i>	be fascinating to listen to ( <i>-ch-sh...?</i> )
<i>-shán</i>	<i>tées'shán</i>	289	<i>tees'</i>	be fascinating to watch; be fascinated
	<i>xéetl'shán</i>	338	<i>xéetl'</i>	be dangerous
	<i>x'wáal'shán</i>	342	<i>x'waas'<sub>1</sub>?</i>	be soft like down; (neg.) lack softness
	<i>x'wás'k</i>	330	<i>x'us'<sub>n</sub>?</i>	be numb, circulation cut off
<i>-k</i>	<i>yát'kx'</i>	S66:59	<i>yaat'</i>	be long (pl.)
	<i>tsínkx'</i>	S66:59	<i>tseen</i>	be expensive (pl.)
	<i>yáshk</i>	S66:59	<i>yaach'?</i>	be scarce

Table 48: More verbs with –2 derivational suffixes in Naish & Story 1973. *x<sub>n</sub>* noun.

<i>Sfx.</i>	<i>Stem</i>	<i>Pg.</i>	<i>Root</i>	<i>Stem meaning</i>
	<i>l'eedí</i>	S66:54	<i>l'ee<sub>n</sub></i>	have a tail or handle
	<i>jíni</i>	S66:54	<i>jín<sub>n</sub></i>	have arms or sleeves
-í	<i>x'oo<sub>sí</sub></i>		<i>x'oo<sub>s<sub>n</sub></sub></i>	have feet or legs
	<i>saayí</i>	301	<i>saa<sub>2</sub></i>	have an important name
	<i>koodzí</i>	320	<i>kootl'?</i>	be amazing, awesome
	<i>tleilk'ú</i>	310		make string figures
	<i>s'óoshkw</i>	303		pinch with fingers and thumb
	<i>tlékw</i>	311	<i>tleikw'?</i>	be greedy, eat fast, eat like a pig
-k	<i>tl'ú<sub>nk</sub></i>	312	<i>tl'oon</i>	murmur, grumble (< REP)
	<i>xwáchk</i>	328	<i>xwaach</i>	be paralyzed by sickness
	<i>káchk</i>	336	<i>kaach</i>	be lame, limp
-(á)ch'	<i>geigách'</i>	332	<i>geik<sub>1</sub></i>	swing
	<i>séewch'ákw</i>	S66:56	<i>seew<sub>n</sub></i>	tasteless, rain-flavoured
-ál'	<i>néegwál'</i>	280		paint; make jam, preserve fruit
-gákw	<i>seigákw</i>	300	<i>saa<sub>2</sub></i>	regain breath, get one's wind back
-nás'	<i>kéenás'</i>	334	<i>kei<sub>1</sub></i>	in-law property exchange
-nás'	<i>xaanás'</i>	334	<i>xaa<sub>2</sub></i>	travel by raft
-át'	<i>tl'éekát'</i>	311	<i>tl'een'?</i>	thread stick through to stiffen
-x	<i>ch'ách'x</i>	307	<i>ch'aach'</i>	be spotted (inanimate) (< REP)

Table 49: Even more verbs with –2 derivational suffixes in Naish & Story 1973. *x<sub>n</sub>* noun.