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LOWER TANANA ATHABASCAN VERB PARADIGMS

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LOWER TANANA ATHABASCAN VERB PARADIGMS

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LOWER TANANA ATHABASCAN VERB PARADIGMS

A

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Abstract

This thesis presents documentation of verb paradigms in the Minto-Nenana dialect of the Lower Tanana Athabascan language, based on fieldwork with four native speakers of the language. Lower Tanana is a severely endangered language spoken in the Interior region of Alaska. The paradigms document the combinations of five Athabascan verb prefixes: classifier, subject, mode, conjugation, and negation. Introductory material describes the Lower Tanana language and outlines the grammar of Lower Tanana verbs, with reference to properties of verbs exemplified in the paradigms. These introductory sections are addressed to teachers and learners of the Lower Tanana language, that they might make optimal use of this thesis as a reference tool in language revitalization efforts.

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1.0 INTRODUCTION

This thesis presents a set of verbal paradigms and supporting material in the Minto-Nenana dialect of the Lower Tanana Athabascan language. Introductory material orients the reader to the Lower Tanana language.

The paradigms and introductory material in this thesis explore the two questions – what kinds of combinations of the classifier, subject, mode, conjugation, and negation prefixes are possible in the Lower Tanana language, and what forms will such combinations take?

The heart of this project is the set of tables containing verbal paradigms in section 6. Verbs in sections 6.1-6.10 were chosen based on two criteria: 1) grammatically as representatives of a category based on conjugation marker (see section 4.2.3.3); and 2) based on user-friendliness and ability to have multiple subjects (e.g. ‘I/you/he sits’ rather than ‘a trail extends’). Section 6.11 presents examples of verbs fully conjugated in each of the four modes (see section 4.2.3.2).

This thesis is meant as a reference tool for adolescent and adult language learners and teachers, as well as linguists. In part, this project is attempting to serve the double function of endangered language documentation and of being a reference guide (including an introductory grammar of the Lower Tanana language). This second function would be rendered irrelevant if there were a readily available grammar of Lower Tanana, but there is not. Without an explanation of the grammar of Lower Tanana, however, these paradigms become next to meaningless, so it is essential to bridge that gap for the user here. Accordingly, preceding the paradigms is a guide to Lower Tanana

verb structure to facilitate the comprehension and use of the paradigms. The guide presents general principles of Athabascan verb structure and specific rules of the Minto-Nenana dialect of Lower Tanana, as they apply to the data presented in the paradigms. Linguistic terms used in this thesis are defined in Appendix A, the Glossary of Linguistic Terminology.

2.0 LOWER TANANA

2.1. LOCATION AND SPEAKER POPULATION

Lower Tanana (also referred to as Tanana) is an Alaskan Athabascan language belonging to the Na-Dene language family. The Na-Dene language family includes about 35 Athabascan languages, Eyak, Tlingit, and possibly Haida. The Athabascan languages can be divided into three major geographic regions in North America: Apachean (including Navajo and Apache, in the southwestern United States), Pacific (including Hupa, Tolowa, and several languages formerly spoken in Oregon and Washington), and Northern (Alaskan and Canadian).

Lower Tanana was historically spoken in the region surrounding the middle and lower-middle stretches of the Tanana River in the Interior of Alaska.



Figure 1: Languages of Alaska (Krauss 1982)

This region is bounded by the Goodpaster River to the south and the village of Minto to the north, and includes the towns of Salcha, Fairbanks, and Nenana, as exemplified in Figure 2 below.

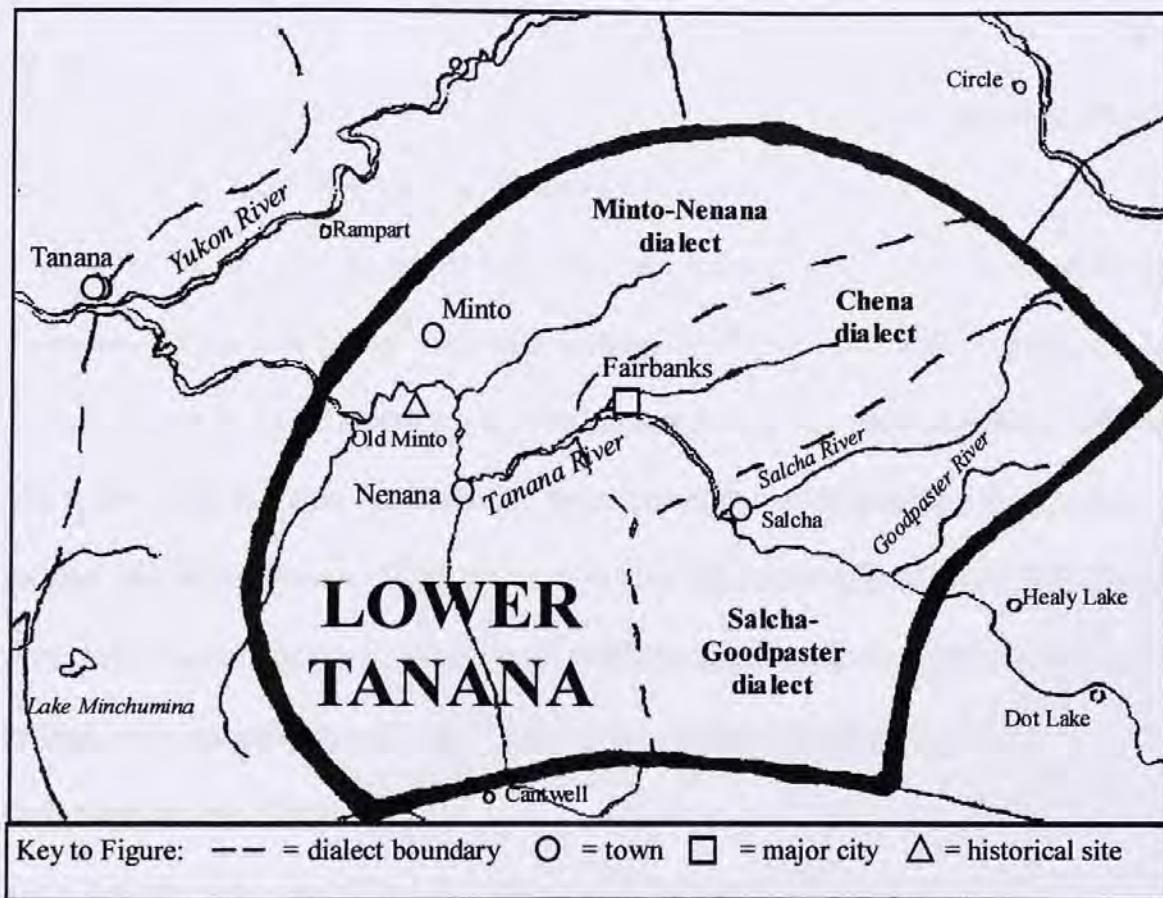


Figure 2: Lower Tanana Language Area: based on Krauss (1982)

Mithun (1999), following Krauss (1982), identifies three dialects (or language sub-divisions) of Lower Tanana: Salcha-Goodpaster, Chena, and Minto-Nenana. Of these, Minto-Nenana is the only one still spoken today.

Today, the Lower Tanana people reside primarily in Minto. Some Lower Tanana people live in Nenana and Fairbanks as well, with a total Lower Tanana population of

about 380 people (Krauss 1997). Of these 380, only 30 were recorded as fluent speakers in 1997 (Krauss 1997).

2.2 BRIEF HISTORY OF CONTACT/LANGUAGE POLICY

This thesis contains data in the Minto-Nenana dialect of Lower Tanana. Minto is a fairly isolated community, located about 125 miles by road from Fairbanks. Community members still practice many of the elements of a subsistence lifestyle.

The Lower Tanana people first came into contact with European, Russian, and American settlers during the nineteenth century. In the early twentieth century, the Lower Tanana people began to move down to Nenana and what was then known as "Minto," and is now referred to as "Old Minto," from the original village site of Cache, near present day Minto (Olson 1968). This move was initiated to take advantage of growing trade opportunities along the Tanana river. Sweeping lifestyle changes were not far behind, with steamboats passing by Old Minto, and the establishment of Nenana as a major hub for the Alaskan telephone line and railroad. A boarding school was established by St. Mark's Episcopal Mission in Nenana between 1905 and 1906, and later a day school was established at Old Minto in 1937 by the Bureau of Indian Affairs (BIA) (Olson 1968). Secondary education was achieved by sending children to boarding schools as far away as Sitka, and even Oregon or New Mexico. Lower Tanana community members have reported being physically reprimanded for speaking in their native language. Parents were advised that if they wanted their children to succeed in the new economy, they should speak only English to their children. Consequently, the generations

affected by BIA policy experience reticence and aversion to speaking their native language. The Lower Tanana people were relocated to the current community of Minto in 1969 following flooding at Old Minto.

Linguistic study of Lower Tanana began in 1903 when James Wickersham compiled the first word list. Study was not resumed until 1959 with the work of Herbert Zimmerman. Serious linguistic investigation was begun by Michael Krauss in 1961, whose Lower Tanana work also made significant contributions to Athabascan linguistics more generally. Other linguists who made major contributions to the field, and continue to do so, are Jeff Leer, James Kari, and Siri Tuttle. See Tuttle (1998) for a more thorough treatment of the history of linguistic research on the Lower Tanana language. Krauss and McGary (1980) lists extant Lower Tanana linguistic materials through 1980, including manuscripts and notebooks. Appendix C gives a complete bibliography of available published materials relevant to learning the Lower Tanana language. The student or linguistic researcher interested in the study of Lower Tanana should visit the Alaska Native Language Center (ANLC) Archives located at the University of Alaska Fairbanks to access the most complete collection of Lower Tanana linguistic and pedagogical materials in the world.

2.3 CURRENT STATUS

2.3.1 Speaking Community

In this section, I define elders as over 65 years in age; the adult generation as from those under 65 to those approximately 30 years old; and the youth generation as those younger than 30. The Minto-Nenana dialect of Lower Tanana was spoken by 30 fluent speakers in 1997 (Krauss 1997), most of whom were then elders. In the ten years that have passed since that last census, this small group has grown yet smaller, and many of the remaining elders are in failing health. The elders are all bilingual in English and Lower Tanana. Lower Tanana is sometimes used on a conversational basis among elders, but English continues to dominate these exchanges (Madeline Riley, p.c.). The adult generation can primarily be classified as latent speakers (understanding some Lower Tanana, but not speaking it), and are conspicuously absent in the Tanana linguistic life of the community. A handful of members of the adult generation have put great time and effort towards learning Lower Tanana, and at least one such learner has achieved conversational fluency in Tanana as a second language. The youth generation knows some vocabulary, but members of this group are unable to produce creative utterances or carry on conversations. It is my hope that the present document, together with others in production, will give these learners additional helpful resources.

2.3.2 Minto School

Minto School has a current enrollment of 80 students in grades K-12. Both teachers who have been responsible for the language program there are native speakers of Koyukon, who learned Lower Tanana as a second language while living in Minto. The language program at the school is currently under the auspices of the Yukon-Koyukuk School District (YKSD). It is the only school in the district teaching a native language other than Koyukon. The language program currently operates for one half hour per day, five days per week, serving preschool through grade 5. YKSD recently secured a federal grant which provides funds for elders to serve as experts in the language classroom. Currently, there are three elders participating in this program.

Content units for study include primarily animals, body parts, weather, and self-introduction. The teaching style is audiolingual (listen and repeat) with some use of games and visual aids. Literacy is not introduced until grades 4/5. There are few available teaching or learning aids, mostly produced through the Alaska Native Language Center. In addition, the current teacher has adapted some materials, such as short stories, from other Athabascan languages.

3.0 ON THE NATURE AND UTILITY OF PARADIGMS

3.1 WHAT IS A PARADIGM?

A paradigm is a set of grammatically related word forms. For verbs, which can roughly be described as words describing actions, events, or states, this includes the set of forms which vary by subject, called a subject paradigm, e.g. in English:

I talk
you talk
he talks
we talk
you guys talk
they talk

All of these forms take place in the here and now, the present tense, with variation in the subject alone. A paradigm can also vary along the time dimension, keeping the subject the same, e.g. in English:

I talk
I am talking
I talked
I will talk

Paradigms can vary by many different parameters, including subject and time, as shown above. The available parameters for variation differ according to the language.

Table 3.1 below shows a subject paradigm for Lower Tanana.

Table 3.1: Lower Tanana Subject Paradigm

Lower Tanana	English Translation
dhesdo	I am sitting
dhido	you are sitting
dhedo	he/she is sitting
tr'edhdo	we are sitting
dhwxdo	you guys are sitting
xedhdo	they are sitting

Table 3.2 below shows a table using the same verb for sitting as in Table 3.1, this time as a paradigm by time period (mode).

Table 3.2: Lower Tanana Mode Paradigm

Lower Tanana	English Translation
dhesdo	I am sitting
ghesdo'	I sat
teghesdol	I will sit
ghwsdo'	I should sit

This thesis chooses to vary paradigms by the occurrence of five separate Athabaskan morphological categories: classifier, subject, mode, conjugation, and negation (these will be defined in section 4.2 below). Section 6.11 shows paradigms varying simultaneously along the subject and mode dimensions. All other paradigms in section 6 are subject and negation paradigms, which differ from each other by classifier, mode, and conjugation.

3.2 HOW ARE PARADIGMS USEFUL TO LANGUAGE LEARNING?

There are many different theories about the way that people learn second languages (languages besides the language spoken in their home), and consequently many different theories about the best way to teach second languages. Theories of second language teaching vary in their approach to how much natural language and how much

explicit grammar instruction should be used in the teaching or learning situation.

Methods that advocate only natural language use (e.g. the Natural Approach) or only grammar instruction (e.g. Grammar-Translation) fail to acknowledge evidence that different people have different styles of learning and therefore benefit from different approaches to instruction.

One theory that embraces a marriage between natural language use and grammar instruction is called Focus-on-Form (Doughty 2003, Ellis 1990). According to this theory, students benefit most from practicing language use during exercises which highlight points of grammar embedded in natural communicative situations. These exercises raise the learner's consciousness about the forms in the language, while staying within a communicative framework. This addresses complaints about the Grammar-Translation theory – namely that grammar that is taught only by lecture and repetition may not be available to the learner in actual communicative situations, and also mends the Natural Approach by addressing evidence that teenage and adult language learners benefit from grammar instruction (Brown 1994). In order to design such exercises, however, the teacher or learner will need to have access to reference materials documenting language structure and variation.

This thesis can be used in many ways, from learning about the grammar of Lower Tanana, to looking up particular verbs, to serving as a reference guide for Lower Tanana verb structure in the form of paradigms.

If the focus-on-form exercises are designed to emphasize paradigmatic properties, they can help the learner to form rules for word use, which act as shortcuts during the

learning process. The rules save time and energy for the learner by fitting each individual word into a class based on grammatical properties. Shared grammatical properties mean that all words in the same class can be altered in similar, predictable ways in given circumstances (e.g. a change of subject, tense, etc.). Knowledge of the class a word belongs to gives a learner access to a whole set of information about how that word will vary as it is used in different ways.

The sample word, translation, parse, and gloss (see section 5.3) immediately preceding each paradigm are meant to help the reader understand the parts of each word and how they combine with one another. This presentation of information is by no means necessary to the learning process (engaging in meaningful and contextualized conversations and language practice is far more effective), but while it may be tedious at first to unravel this information, it should help learners to organize their growing command of the language and come to a fuller understanding of how Athabascan verbs work. Each learner will benefit from different techniques, however. If the learner has questions about pronunciation or phrase-building, they should consult an elder if possible, and should practice with an elder or other learners whenever possible.

Several of the verbs in the paradigms may only be practical for use in very specialized contexts. This is because I have attempted to present all of the possible combinations of classifier, subject, mode, conjugation, and negation. Some of these combinations have few or no possible manifestations, resulting in verbs that may be used only in very specific circumstances.

Verbs belonging to the same class as that in the paradigm are given below each paradigm for further practice with verbs of each class, when available. These lists should help the learner form further rules about class membership. Rules of class membership are very general, and may overlap or even be seemingly contradictory at times. Nevertheless, there are recognizable patterns in assigning class membership (see, e.g. section 4.2.3.3 on conjugation).

4.0 AN INTRODUCTION TO THE LOWER TANANA LANGUAGE

The following sections introduce the reader to the grammar of the Minto-Nenana dialect of the Lower Tanana Athabascan language. This treatment of the grammar is by no means comprehensive, but outlines basic concepts necessary for making sense of the paradigms in section 6. Section 4 uses the convention of underlining to highlight parts of examples which illustrate the points of grammar under discussion.

4.1 SOUND SYSTEM

This section presents the sounds found in the Minto-Nenana dialect of Lower Tanana Athabascan. The X-Orthography is used to represent these sounds (see discussion of orthographies in section 4.1.4 below). Lower Tanana sound system practice can be achieved with James Kari's Lower Tanana Listening and Writing Exercises (1991) which includes an audio cassette and sample words.

4.1.1 Consonants

Tables 4.1 and 4.2 show the phonemes (sounds) of Lower Tanana Athabascan, Minto-Nenana Dialect in the X-Orthography (see section 4.1.4 below for a discussion of orthographies).

Table 4.1: Lower Tanana phonemic consonant inventory

	Bilabial	Interdental	Lateral	Alveolar	Post-alveolar	Retroflex	Palatal	Velar	Glottal
Stops									
Plain	b			d				g	'
Aspirated				t				k	
Glottalized				t'				k'	
Fricatives									
Voiced		dh	l	z		zr		gh	
Voiceless		th	ł	s	sh	sr		x	h
Affricates									
Plain		ddh	dl	dz	j	dr			
Aspirated		tth	tl	ts	ch	tr			
Glottalized		tth'	tl'	ts'	ch'	tr'			
Sonorants									
Voiced	m			n				y	
Voiceless				nh				yh	

Table 4.2: Comparison of Lower Tanana and English consonants.¹

LT sound	English equivalent
'	Glottal stop. Similar to the “catch” in the middle of the English phrase <i>uh-oh</i>
b	Like the <i>b</i> in the English word <i>book</i> .
ch	Like the <i>ch</i> in the English word <i>child</i> .
ch'	Not in English. Similar to the <i>ch</i> in the English phrase <i>each one</i> , when said quickly, with heavy emphasis on <i>one</i> .
d	Like the <i>t</i> in the English word <i>stove</i> .
ddh	Not in English. Similar to the middle of the English phrase <i>add the</i> , when said quickly.
dh	Like the <i>th</i> in the English word <i>this</i> .
dl	Like th <i>dl</i> in the English word <i>waddle</i> .
dr	Not in English. Similar to the <i>dr</i> in the English word <i>drape</i> , but with the tongue tip curled back.
g	Like the <i>c</i> in the English word <i>scary</i> .
gh	Not in English. Arrange your mouth for <i>g</i> , but make it soft like <i>y</i> .
h	Like the <i>h</i> in the English word <i>happy</i> .
j	Like the <i>j</i> in the English word <i>joke</i> .
k	Like the <i>k</i> in the English word <i>cake</i> .
k'	Not in English. Similar to <i>k</i> in the English phrase <i>break out</i> , when said quickly, with heavy emphasis on <i>out</i> .
l	Like the <i>l</i> in the English word <i>look</i> .
ł	Not in English. Place the tongue for English <i>l</i> , but allow air to escape around the side of the tongue.

¹ Based on Tuttle (2006).

Table 4.2 continued

m	Like the <i>m</i> in the English word <i>mother</i> .
n	Like the <i>n</i> in the English word <i>noon</i> .
nh	Not in English.
s	Like the <i>s</i> in the English word <i>sun</i> .
sh	Like the <i>sh</i> in the English word <i>shoe</i> .
sr	Not in English. Similar to the <i>shr</i> in the English word <i>mushroom</i> , but with the tongue tip curled back.
t	Like the <i>t</i> in the English word <i>tie</i> .
th	Like the <i>th</i> in the English word <i>thigh</i> .
tl	Not in English. Similar to the <i>t'll</i> in the English phrase <i>it'll go</i> .
tl'	Not in English. Similar to the <i>t'll</i> in the English phrase <i>the fist'll open</i> .
tr	Not in English. Similar to the <i>tr</i> in the English word <i>true</i> , but with the tongue tip curled back.
tr'	Not in English. Similar to the <i>tr</i> in the English word <i>true</i> if broken in half while pronouncing it.
ts	Not in English. Similar to the <i>ts</i> in the English word <i>cats</i> .
ts'	Not in English. Similar to the <i>t's</i> in the English phrase <i>it's after six</i> when said quickly, with heavy emphasis on <i>after</i> .
tth	Not in English. Similar to the middle of the English phrase <i>fat thigh</i> .
tth'	Not in English. Similar to <i>tth</i> , but with a “break” following.
x	Not in English. Like <i>h</i> but farther forward, where <i>k</i> is pronounced.
y	Like the <i>y</i> in the English word <i>yes</i> .
yh	Not in English.
z	Like the <i>z</i> in the English word <i>zoo</i> .
zr	Not in English. Similar to the middle of the English phrase <i>beige rug</i> when said quickly, but with the tongue tip curled back.

4.1.2 Vowels

Lower Tanana has both plain and nasalized vowels. Nasalization happens by releasing some of the air during the production of the sound through the nose. The nasalized vowels are /ə/, /ɛ/, and /ʊ/. This effect can be simulated by putting the vowel next to an *n* in English, as in Table 4.4 below. Lower Tanana also draws a distinction between “full” (long) vowels: /i/, /o/ and /u/ and “reduced” (short) vowels: /a/, /e/, /w/.

Table 4.3: Lower Tanana phonemic vowel inventory

	Front unrounded	Central unrounded	Back unrounded	Back rounded
High	i			u, ɿ
Mid-High				w
Mid		e, ɿ		
Mid-Low				
Low	a, ɻ		o	

English equivalents and approximations of Lower Tanana vowels are given below:

Table 4.4: English equivalents of Lower Tanana vowels

Lower Tanana	English Example
i	Like the <i>ee</i> in the English word <i>feet</i> .
o	Like the <i>a</i> in the English word <i>fall</i> .
u	Like the <i>oo</i> in the English word <i>boot</i> .
ɿ	Not in English. Similar to the <i>oo</i> in the English word <i>boon</i> .
a	Like the <i>a</i> in the English word <i>cat</i> .
ɻ	Not in English. Similar to the <i>a</i> in the English word <i>can</i> .
e	Like the <i>a</i> in the English word <i>sofa</i> .
ɛ	Not in English. Similar to the <i>u</i> in the English word <i>until</i> .
w	Like the <i>oo</i> in the English word <i>good</i> .

4.1.3 Tone

In addition to sound qualities, some languages distinguish sounds by the pitch level at which the sounds are produced. When this pitch level is used to distinguish the meanings and functions of words and parts of words that would otherwise be identical, it is called tone. Athabaskan languages vary in their expression of tone. Some Athabaskan languages have low tone as a reflex of proto-Athabaskan constricted syllables, some have high tone, and some have no tone at all. The reader is referred to Krauss (2005[1979]) for a thorough treatment of tone development and expression in Athabaskan languages. Krauss was the first to investigate the Minto-Nenana dialect of Lower Tanana for the

presence of tone. His findings indicate that Lower Tanana once had low tone, but that speakers no longer produce the tones consistently. Tuttle (1998) confirmed these findings with a quantitative study. Low tone is present for some speakers (more notably in older and linguistically more conservative speakers) on historically glottal-closed verb and noun roots and some prefixes. Two verb prefixes in particular were subjectively tested for the presence of tone during the course of this study. Low tone is marked by a grave accent mark ' in Table 4.5 below. Findings indicate that the following prefixes tend to exhibit low tone:

Table 4.5: Tone-bearing verb prefixes

Prefix	Definition
àdh-	alternate form of dh-conjugation when preceded by a conjunct prefix
k'ò-	perambulative (going around)

The study of tone is beyond the scope of this thesis, though some notes regarding impressionistic findings for tone on a limited number of stems can be found in Appendix E. Tone is not marked in the main body of this thesis or in the paradigms in section 6. Those wishing to investigate tone in Lower Tanana should consult Tuttle (1998), Krauss (1961), and consult the collection of Lower Tanana field recordings housed in the ANLC Archives.

4.1.4 Orthographies

Two primary practical orthographies (writing systems) have been developed for writing the Lower Tanana language, referred to here as the X-Orthography and the Kh-Orthography. Stories and learning materials have been published in both orthographies (see Appendix C for an annotated list of these materials). The X- and Kh- Orthographies

are outlined and compared below. Table 4.6 below lists examples of each orthographic character (grapheme) in each writing system for ease of comparison. Each orthography can also be compared to the International Phonetic Alphabet (IPA) in this section. For interpretation of the IPA, the reader is referred to *Lagefoged* (2001).

The Kh-Orthography first appeared in *Krauss* (1974). This orthography is designed to mirror its neighboring language, Koyukon, for which there are fairly extensive published educational and linguistic materials. Some additional materials in Lower Tanana (see Appendix C) are published in this orthography. The Kh-Orthography remains the more popular system among language users in the community.

The X-Orthography first appeared in *Kari* (1991). This orthography was developed to be streamlined, efficient, and easily typed. It is similar to the orthographies used for other Tanana River languages, including Tanacross and Upper Tanana. It uses *x* rather than *kh* to represent the voiceless velar fricative. This orthography is less popular among the speaker and learner population, perhaps because it is so different from its neighbor, Koyukon. However, a fair amount of published material, and the only extant comprehensive dictionary of the language (*Kari* 1994) is written in this orthography.

For ease of reading, the paradigms in Section 6.0 are presented in only one orthography, the X-Orthography. Users who wish to use one of the other orthographies in their learning or writing can do so by making some fairly minor modifications as presented and described below.

Table 4.6: Comparison of Lower Tanana Orthographies and IPA²

Kh-Orthography 1975	X-Orthography 1991	IPA	Translation
Vowels			
a sanh	a sanh	æ sən̥	star
ä netl-’eelä	ä netl-’ilä	æ nət̪l̫?ilä	he didn’t see it
e ɬet	e ɬet	ə ɬət	smoke
ɛ ɬeɬ’	ɛ ɬeɬ’	ə ɬeɬ?	yes
ee desnee	i desni	i təsn̥i	I said
o oyh	o oyh	ɑ aç	snowshoe
oo too	u tu	u tʰu	water
ø eekhøq	ü ixu	ü ixu	in vain
u kun’	w kwn’	ʊ kʰun?	fire
Consonants			
(’) be’ot	(’) be’ot	? bə?at	his wife
b baba	b baba	b bæbæ	food
m Menhtee	m Menhti	m mən̥t̪hi	Minto
ch chonh	ch chonh	tʃ’ tʃən̥	rain
ch’ ch’ukh	ch’ ch’wx	tʃ’ tʃ’ux	big
d dena	d dena	t tənæ	people
ddh ddhel	ddh ddhel	dð dðət̪	mountain
dh ch’edheth	dh ch’edheth	ð tʃ’əðəθ	skin
th thoyh	th thoyh	θ θaç	sand
dl edlee	dl edli	dl ədli	cold
dr dranh	dr dranh	dz dzən̥	day
dz dzenh	dz dzenh	dz dzən̥	muskrat
g gukh	g gwx	k kux	rabbit
gh seghoo’	gh seghu’	ɣ səyuu?	my eye
kh khał	x xał	x xæł	pack
h hał	h hał	h hæł	trap
j jega	j jega	dʒ dʒəkæ	berry
k yeetlkuyh	k yitlkwyh	kʰ jitłkʰuç	he poked it
k’ k’o’	k’ k’o’	k’ k’o?	arrow
l seliga’	l seliga’	l səlikæ?	my dog
ɬ łook’a	ɬ łuk’a	ɬ Łuk’æ	fish
n tenghetl-’eeł	n tenghetl-’il	n tən̥yətl̫?il	I will see it

² Based on Kari (1996).

Table 4.6 continued

nh	nenh	nh	nenh	ɳ	nəɳ	you
sh	shath	sh	shath	ʃ	ʃæθ	wart
t	tenh	t	tenh	t ^h	t ^h əɳ	ice
t'	t'asr	t'	t'asr	t'	t'æʂ	charcoal
tl	tlukh	tl	tlwx	tɬ	tɬux	oil
tl'	tl'ooɬ	tl'	tl'uɬ	tl'	tɬ'uɬ	rope
tr	tretr	tr	tretr	tʂ	tʂətʂ	dry wood
tr'	tr'akha	tr'	tr'axa	tʂ'	tʂ'æxæ	woman
ts	tso'	ts	tso'	ts	tsa?	beaver
ts'	ts'eba	ts'	ts'eba	ts'	ts'əbæ	tree/spruce
tth	netthee'	tth	netthi'	tθ	nətθi?	your head
tth'	tth'ok	tth'	tth'ok	tθ'	tθ'ak	dish
y	yo	y	yo	j	ja	sky
yh	thoyh	yh	thoyh	ç	θaç	sand
z	noghelzoot	z	noghelzut	z	nayəlzut	he slid down
s	see	s	si	s	si	me
zr	nezroonh	zr	nezrunh	ʐ	nəʐuɳ	it's good
sr	sreesr	sr	srisr	ʂ	ʂis	sheefish

As can be seen from the table above, the differences between the orthographies are fairly minor. Conversion from the X-Orthography to the Kh-Orthography can be summarized by making the following substitutions:

Table 4.7: X-Orthography to Kh-Orthography substitutions

X-	Kh-
x	kh
i	ee
w	u
u	oo
ü	øø

4.2 VERB STRUCTURE

Lower Tanana is one of approximately 35 Athabascan languages, 11 of which are spoken in Alaska. The generalizations made below are gleaned from the research of many different individuals working with different languages in the Athabascan language family. This section will orient the reader to the components of the Athabascan verb in general, with examples from Lower Tanana.

4.2.1 Overview

Athabascan languages are highly polysynthetic. This means that Athabascan words may have many components, each of which contributes to the meaning of the word. Athabascan verbs are often the functional equivalents of sentences in English. For example, the word *noch'etenghesdlwt* in (1) below consists of at least eight meaningful components (morphemes), but translates into English as an entire sentence.

- (1) Stem: dlwt = ‘classify mushy object’
 Sample: noch'etenghesdlwt³
 Parse: no#ch'e-te-n-gh-e-s-dlwt
 Gloss: ADS.REV#INDEF.OBJ-INCEP-G-CONJ-MD-1.SG.SUBJ-ST.FUT.REV⁴
 Translation: ‘I will make Indian ice cream’

Example (1) above separates an Athabascan verb into its component parts, which are called morphemes. Morphemes are the smallest meaningful parts of a word. Morphemes above are separated by dashes in the Parse. The “#” mark indicates what is called the “disjunct boundary,” which is discussed in more detail below. As can be seen from (1) above, Athabascan verbs are primarily prefixing, which is to say that most of the

³ Example from Kari (1994), p.96

⁴ See section 5.3.3 for a list of abbreviations used in this thesis

components that form the verb word are located before the stem (abbreviated ST). Many different models have been used to explain how the prefixes are arranged, and we will not cover that topic in depth here. At its most basic and noncontroversial, the Athabaskan verb can be divided into four phonological and structural regions:

(2) disjunct # conjunct % stem – suffixes/enclitics

The stem is the core element of the verb, around which everything else hinges (see section 4.2.2.1 below). Every verb must, at a minimum, contain a verb stem. The conjunct region contains prefixes that are more closely engaged phonologically (sound) and morphologically (structure) with the stem and other conjunct prefixes than the disjunct prefixes are with the stem, conjunct prefixes, or each other. Prefixes in the conjunct region interact with each other to produce a complex blending of their sounds. The prefixes in the disjunct region are sometimes represented orthographically as a separate word from the conjunct prefixes, stem, and suffixes.

Each region can be said to contain a number of positions or “slots” for morphemes. Some slots contain only one possible morpheme, while others can house any one of a wide variety. The morphemes within any given slot are generally, but not always, mutually exclusive, as will be seen below. The following sections walk the reader through each of the prefix positions. It may be of help to consult the verb template in Appendix B, which presents the positions in order and lists some of the morphemes which can occur in each position.

4.2.2 Thematic Material

In Athabascan languages, all verbs include morphemes which refer to the subject and time. The concept of the verb theme is used to denote an abstract verb form which does not include reference to subject and time. It is like a skeleton of a verb that can be used as a shortcut to talk about structure and verb classes without naming each form that the verb can ultimately take. The verb theme consists minimally of the stem and classifier, but may contain additional “thematic” prefixes. The verb theme also indicates whether the verb requires an object (O), postpositional object (P), or gender prefix (G). Theme representations are a mixture of abbreviations for a morpheme category (e.g. O, P and G, see section 5.3.3 for a list of abbreviations) and specific required morphemes (e.g. *gh-*, *e-* and *d-* in Table 4.8 below).

Many different themes can be built from the same stem, and their meanings can be quite varied, as in Table 4.8 below.

Table 4.8: Themes from the stem *-nik*: ‘move the hand; feel’

Theme	Meaning
P+e#d+Ø+nik	‘release, quit, stop P’
P+e#l+nik	‘push, touch P with the hand’
P+PP+yeni#gh+Ø+nik	‘inspect, examine, watch over P’
k'o#D+nik	‘work’
P+e+k'o#Ø+nik	‘cook P’
O+G+gh+l+nik	‘handle fabric-like O’
xw+Ø+nik	‘be alive, awake, live, alert, wary, etc.’
P+'et D+nik	‘know, notice, realize, be aware of, etc.’

‘+’ separates morphemes in a theme representation. “#” stands for the disjunct boundary.

Abbreviations used in the themes are explained in section 5.3.3.

4.2.2.1 The Stem

Table 4.9: Stem position

Disj.	Obj.	O.Subj.	Qual.	Neg.	Conj.	Md.	I.Subj.	Class.	Stem	Sfx.	Enc.
-------	------	---------	-------	------	-------	-----	---------	--------	-------------	------	------

Lower Tanana verbs are right-headed. This means that the stem, which is the most basic building block of the verb, is positioned near the right-hand edge of the verb, and most of the other morphemes precede it to the left.

A stem is part of a set of related morphological forms. The form of a stem depends on both the mode and aspect. Table 4.10 shows some ways that a single stem can vary according to its mode and aspect (see section 4.2.3). Corresponding to each aspect are four stem forms (one for each mode: imperfective, perfective, future, and optative), though these might not all be pronounced differently. These four forms are called a stem-set. The top row of Table 4.10 indicates the mode. A few aspects are listed vertically in the far left column.

Table 4.10: Stem set for '*an* – ‘do, see’

	Imperfective	Perfective	Future	Optative
momentaneous	'iyh	'anh	'il	'an'
durative	'anh	'an'	'il	'an'
neuter	'anh	'an'	'il	'an'
customary	'iyh			

There are over 20 different aspects (section 4.2.3), though not every aspect occurs with every stem. A stem can usually be ascribed general meaning, though it may not correspond to a single English verb. However, the themes built from a stem (and subsequently, the individual forms) can vary to the point of making it difficult to identify a shared, underlying meaning (see Table 4.8 above).

The set of related morphological forms that constitute a stem set is characterized by patterns of suffixation, stem vowel ablaut (change), and some suppletive forms for differing modes and aspects. The patterns of stem variation follow regular and predictable patterns (see Leer 1979). Paradigmatic stem patterning has not been a topic of investigation in the present work, but it is anticipated that the data presented in section 6 may prove useful for pursuing research in this area.

Some stems are specified for number. This means that some stems are for use only with a singular subject, some only with dual subjects, and some only with plural subjects. This manifests itself especially with verbs referring to motion that have only one verb in English for each concept, but can have two or more verbs for each concept in Athabaskan languages, based on how many people are performing the action. English has only a few verbs like this. For example, *congregate* can only have a plural subject. Most stems, however, are not specified for number. Examples appear in Table 4.11 below.

Table 4.11: Stems specified for number

Stem	Stem meaning	Example	Translation
(y)o	'sg., dual goes, walks'	<i>niyo</i>	'he arrived'
'ots	'dual go, walk'	<i>xeni'ots</i>	'they (2) arrived'
datl	'plural go, walk; pl. fish swim'	<i>xenidatl</i>	'they (3+) arrived'

4.2.2.2 Classifier

Table 4.12: Classifier position

Disj.	Obj.	O.Subj.	Qual.	Neg.	Conj.	Md.	I.Subj.	Class.	Stem	Sfx.	Enc.

The Classifier occupies the prefix position directly to the left of the stem.

Classifiers are assigned in two major ways. First, all verb themes have a classifier

naturally assigned to them. The four classifiers are: Ø-, D-, l-, l-. The symbol Ø refers to the absence of a morpheme. The symbol D- refers to a morpheme which can occur as *d-*, *de-*, or *t'*- depending on its environment (see section 4.3 below). Any of the four classifiers can occur in a verb theme.

Second, classifiers can be added or changed by additional processes that act on the verb. This often results in a change in the number or prominence of participants in a verb situation, or in the nature of the action that is taking place. Adding a D-classifier (symbolized +D) changes a Ø-classifier to a D-classifier, and a l-classifier to an l-classifier. The addition of a D-classifier performs a variety of functions, including the formation of reflexive, passive, and iterative constructions, as in (3) – (5) below.

(3) + D (Reflexive – doing something to self)

doyonh ghela'	→	koxt'ana dhedla'
[doyonh] Ø-gh-Ø-Ø-la		[koxt'ana] dh-e-Ø-D-la
[chief] G-CONJ-3.SG.SUBJ-		[people] CONJ-MD-3.SG.SUBJ-
CL-ST.IMPF.NEU		CL-ST.PERF.TRANS
'he was chief'		'he turned (himself) into a person'

(4) + D (Passive – having something done to self)

[xwtl] tr'iniłbeth	→	tr'enilbeth
[sled] tr'-n-i-l-beth		tr'-n-i-l-beth
[sled] 1.PL.SUBJ-CONJ-PERF- CL-ST.PERF		1.PL.SUBJ-CONJ-PERF- CL-ST.PERF
'we dragged [the sled]'		'we got dragged'

(5) + D (derivational string /no + D-CL/ = iterative aspect – coming back or happening again)

neskanh ⁵	→	notadhesdekanh
n-Ø-s- Ø-kanh		no#t-dh-Ø-s-D-kanh
CONJ-PERF-1.SG.SUBJ-CL-		ITER#CONJ-PERF-1.SG.SUBJ-CL-
ST.PERF.MOM		ST.PERF.MOM/ITER
'I arrived by boat'		'I returned by boat'

Changing the classifier to a l- forms a causative.

(6) + l (Causative – causing something to happen)

k'onesdeneyh	→	k'onetlneyh
k'o-n-e-s- <u>D</u> -nik		k'o-n-e-s-l-nik
PERAMB-CONJ-IMPF-1.SG.SUBJ-CL		PERAMB-CONJ-IMPF-1.SG.SUBJ-CL-
ST.IMPF.PERAMB		ST.IMPF.PERAMB
'I am working'		'I am making him work'

Classifiers may also change in form depending on the first sound of the stem, and on the subject and/or conjugation morpheme that precedes them. A full list of rules for these changes is given in section 4.3.

4.2.2.3 Qualifiers

Table 4.13: Qualifier position

Disj.	Obj.	O.Subj.	Qual.	Neg.	Conj.	Md.	I.Subj.	Class.	Stem	Sfx.	Enc.

Qualifiers occupy several prefix positions that can co-occur. Many qualifiers have adverbial meanings. They are located between the conjugation marker and outer subject. Qualifiers can occur as necessary parts of a theme, or can be added by other processes. Table 4.14 below gives examples of qualifiers, with each qualifier underlined in the theme (if thematic), and in the example.

⁵ Examples from Kari (2004)

Table 4.14: Sampling of Lower Tanana Qualifiers⁶

Qualifier	Meaning	Theme	Example	Translation
d-	gender (sometimes thematic)	<u>d</u> +l+kwth	<u>delkwth</u>	'he coughs'
d-	speech	COMP (d+)d+Ø+ni	<u>desni</u>	'I say'
dh-	(unknown)	O+u+dh+l+tth'onh	<i>ch'udhatltth'onh</i>	'he listens'
i-	finding	O+l+ta	<i>no'iltanh</i>	'he found it'
i-	transitional (changing states)	O+G+l+k'wtl	<i>ighedek'wl</i>	'it is turning white'
i-	semelfactive (doing something once)	O+G+Ø+t'otth	<i>yidht'wth</i>	'he cut it once'
n-	gender (roundish, rope)	O+ <u>u</u> +n+Ø+ya	<i>jega unya</i>	'she picks berries'
n-	assume a position	<u>n</u> +Ø+do	<u>nadhesdo</u>	'I sat down'
n-	flying	<u>n</u> +Ø+t'wk	<u>not'wx</u>	'it is flying along'
t-	inceptive (beginning)	no+Ø+'wt	<i>noyetadh'wt,</i>	'he started to rip out, unravel'
u-	conative (attempting, at)	O+ <u>u</u> +dh+l+tth'onh	<u>udhadhetltth'onh</u>	'I was listening to him'
u-	directive	P#O+d+l+nen	<i>settha'udanilnenh</i>	'he threw a stone at me'

As can be seen in Table 4.14 above, several of the Qualifiers sound alike but mean different things. Some can apply to a broad range of themes, e.g. inceptive, semelfactive, and transitional. Others are limited to a very few themes, such as in n-flying, or d-speech.

4.2.2.4 Disjunct

Table 4.15: Disjunct position

Disj.	Obj.	O.Subj.	Qual.	Neg.	Conj.	Md.	I.Subj.	Class.	Stem	Sfx.	Enc.

Prefixes in the disjunct region can be lexical (thematic) or derivational (added later). These include postpositions and postpositional objects, indirect objects, incorporates, and even some aspectual components. Postpositions are like prepositions in English, but they follow their object, as in *be 'at* = 'with him'.

⁶ "Qualifier" and "Meaning" from Tuttle (1998), p. 91-92. Most examples from Kari (1994).

Table 4.16: Disjunct prefixes⁷

Prefix	Meaning	Example	Translation
k'o#	perambulative (around, about)	<i>k'oxdebayh</i>	'they're swimming around'
no#	iterative (again, back)	<i>noxodekal</i>	'they're returning by boat'
-'al#	postposition (with)	<i>be'al yidhdo</i>	'she stayed with him'
-k'ah#	postposition (like, as, on P)	<i>beto' deghit'a' ts'e xek'ah dent'a</i>	'he is like his father was'
-k'e#	postposition (on)	<i>tenel k'e dedhdo</i>	'he sat on the box'
-gho#	postposition (along, according to, awaiting P)	<i>sogho ghelbeth</i>	'it is rolling along side me'
-uko#	postposition (in quest of)	<i>sresr uko dexel'anh</i>	'they hunt for black bear'
ta#	underwater	<i>tahalxedhdlo</i>	'they set traps underwater'

The last example *tahalxedhdlo* also includes the incorporate *hal*, meaning 'traps'.

Incorporates are usually nouns that are imbedded inside the verb structure.

4.2.3 The Aspectual System

The term "aspect" refers to the temporal shape of a verb, the way an event or state unfolds over time. Aspect differs from tense, which refers to when an event or state occurs. For example, the progressive aspect in English is marked by the suffix -ing. English verbs with progressive aspect can occur in past, present, or future tenses. The aspectual system in Athabascan languages consists of combinations of prefixes, and changes in the stem. The following section describes each category of prefix. Table 4.17 lists a selection of aspects and examples in Lower Tanana. There are over 20 aspects, only a selection of which are listed below.

⁷ Examples from Kari (1994)

Table 4.17: Aspect⁸

Aspect	Meaning	Example	Translation
Conclusive	finish	<i>etltsi</i>	'I am making (an object)'
Continuative	round trip	<i>ne'eskā'</i>	'I am paddling there and back'
Durative	over time	<i>k'onesdeniyh</i>	'I am working'
Momentaneous	one point in time	<i>neskanh</i>	'I arrived by boat'
Neuter	state/description	<i>na'esdhet</i>	'I am warm'
Onomatopoetic	sound	<i>dejedhak</i>	'I am hoarse'
Perambulative	around	<i>k'onesdekayh</i>	'I am paddling around by boat'
Reversative		<i>ch'ejedzes</i>	'I am dancing'
Semelfactive	one time	<i>ch'est'oth</i>	'I cut it once'
Successive	several times	<i>'est'oth</i>	'I am cutting it'
Transitional	changing state	<i>nidhil</i>	'He becomes warm'

4.2.3.1 Stem variation

Athabaskan stems undergo transformations to express different *states* of time and completion, called mode, and different *ways* of completing an action or being in a state, called aspect. These transformations include a change in the vowel of the stem (called ablaut), and patterns of suffixation. See section 4.2.2.1 for further information, with examples in Table 4.10 above

4.2.3.2 Mode

Table 4.18: Mode position

Disj.	Obj.	O.Subj.	Qual.	Neg.	Conj.	Md.	I.Subj.	Class.	Stem	Sfx.	Enc.

There are many different theories about the composition and position of the mode morphemes in Athabaskan languages (Axelrod 1993, Kari 1979, Rice 2000, Rice and Hargus 1989, Hargus and Tuttle 1997). In this analysis, "mode" includes imperfective,

⁸ Examples from Kari (2004)

perfective, future, optative, and progressive. Imperfective mode refers to incomplete actions in the present or past. Perfective mode refers to completed actions, which are viewed in their entirety. Optative mode refers to desires and intentions, often translated by phrases such as ‘should’, or ‘might’. Future refers to potential occurrences, and progressive describes ongoing actions.

Mode is marked by a combination of a mode prefix and a choice of stem.

Following Hargus (1988), imperfective and perfective mode prefixes are interpreted here as the vocalic morphemes *e-* and *i-*. *e-* marks imperfective, and *i-* marks perfective, though there are some exceptions to this.

The optative is formed with the prefix *ghw-*. The progressive mode is *gh-* conjugation with *e*-imperfective mode. Future formation takes place with a combination of *gh-* conjugation, *t-* inceptive, and future/progressive verb stem. Future and progressive, then, are composed from morphemes that also serve other purposes in the verb. Table 4.19 summarizes mode morphemes and gives examples.

Table 4.19: Mode

Imperfective	Perfective	Future	Optative
Incomplete action	Completed action	Future (will)	Desire, wish, intention
<i>e-</i>	<i>i-</i>	<i>t- + gh- + e-</i>	<i>ghw-</i>
<i>etrex</i> – ‘he’s crying’	<i>ghitrx</i> – ‘he cried’	<i>totrex</i> ⁹ – ‘he will cry’	<i>ghwtrex</i> – ‘he should cry’

⁹ See section 4.3 for morphophonemic rules.

4.2.3.3 Conjugation

Table 4.20: Conjugation position

Disj.	Obj.	O.Subj.	Qual.	Neg.	Conj.	Md.	I.Subj.	Class.	Stem	Sfx.	Enc.
-------	------	---------	-------	------	--------------	-----	---------	--------	------	------	------

The conjugation marker can take any of four forms¹⁰ Ø-, *gh-* (*o-*, *u-*), *dh-* (*d-*, *t-*), and *n-* (*i-*). Semantic properties have been assigned to each prefix form in combination with mode. In Tables 4.21 and 4.22 below, different researchers' assessments of the general meanings of conjugation markers are compared. Rice (2000b) uses the terms “telicity” and “durativity.” If an event or action is telic, it means that it has an endpoint. If an event or action is durative, it means that it is drawn out over time, rather than punctual (happening in an instant, or with a single stroke).

Table 4.21: Semantic domains of conjugation markers with imperfective mode

Source	Ø- imperfective	n- imperfective	dh- imperfective	gh-imperfective
Tenenbaum (1978)	action incomplete, moving towards completion in manner of perfective with which it is paired	“action compleative with respect to a point of reference in time or space (98)”	state of being resulting from action which put it in that state or incomplete action moving towards completion, where it will remain stative	neuter aspect
Axelrod (1993)	all aspects except those listed for n-, dh- and gh-	perambulative, some momentaneous, and neuter aspects	some momentaneous and neuter aspects	neuter aspect
Rice (2000b)	EVENT/ STATE(description) durative telicity irrelevant	EVENT/ STATE(extension) non-durative telic	EVENT/ STATE(locational) durative telic	

¹⁰ See section 4.3 for morphophonemic rules.

Table 4.22: Semantic domains of conjugation markers with perfective mode

Source	Ø-perfective	n-perfective	dh-perfective	gh-perfective
Krauss (1969)		“to a point, completive”	“static”	“from a point, inceptive”
Tenenbaum (1978)	Action complete without reference to resulting condition	“action completive with respect to a point of reference in time or space (98)”	action completed, resulting in stable, durative, static condition	action complete without reference to resulting condition, usually actions over time or repeated
Axelrod (1993)	“entrance into a state or the inception of a process or activity”; movement down at an angle or vertical upward movement	“terminative, completive activity”	“punctual, unitary activities”; movement upward at an angle	“repeated, ongoing, habitual activities or states”; vertical downward movement or movement into something
Rice (2000b) ¹¹	durative telicity irrelevant	achievements (non-durative, telic)	accomplishments (durative, telic)	activities EVENT/ STATES (all); durative, atelic

Conjugation marker selection for a given verb is either lexical, or determined by other factors, such as aspectual prefixes and stem suffixation pattern (i.e. verb theme category; see Kari (1979), Leer (1979)).

Conjugation markers can take different forms (called allomorphs) depending on their environment. Rules for allomorphic variation are described in detail in section 4.3.

4.2.3.4 Derivational Strings

Derivational strings are sets of non-adjacent prefixes that are associated with the formation of particular aspects. These include qualifiers and disjunct prefixes, and often require a particular conjugation and/or mode morpheme. Examples include:

¹¹ Rice (2000b) also distinguishes a fifth mode, i-, which she refers to as semelfactive, or atelic and nondurative. It will not be discussed in this paper.

Table 4.23: Derivational Strings¹²

Derivational String	Meaning	Aspect
n#	'round trip'	continuative
n#	'keeping on VERBing'	continuous
k'e+no#	'making a round trip'	dh-
#u+gh	'surrounding, wrapping'	dh-momentaneous
le+do#n+D	'for a long time'	dh-momentaneous
de#	'up, at an elevation'	dh-neuter
P+n#	'up and onto P'	dh-neuter
de#l	'comparative, -er , more than'	dimensional
de#	'peeling bark'	gh-momentaneous
ti+do#	'wrongly, badly, forebodingly'	gh-momentaneous
xw+de+deghw#d	'down an incline, descending'	gh-momentaneous
P+lo#	'taking from P'	i-momentaneous
do#d+n	'filling, full'	n-momentaneous
ni#	'to a point, stopping, terminative'	n-momentaneous
ni+ch'o#	'off from shore'	n-momentaneous
ni+ko#	'ashore, landing'	n-momentaneous
P+gho	'fetching, obtaining P'	n-momentaneous
ta#	'underwater'	n-momentaneous
ti+ch'o#	'into the snow'	n-momentaneous
P+e#d+i	'out into an area'	Ø-momentaneous
P+ko#gh+i	'climbing P'	Ø-momentaneous
k'o+D	'around'	perambulative
niłgho#	'round-trip'	reversative
i-	'one time'	semelfactive
i-	'changing state'	transitional

4.2.3.5 Active and Stative

Some of the paradigms in section 6 are distinguished by an additional category, that of active versus stative. Active verbs denote actions or events, and occur in particular aspects. Stative verbs describe states, such as descriptions (to be black, to be tall), and modes of being (sitting, lying down), and are denoted by different aspects. Stative

¹² Kari (1994, 2004)

morphology is also different. For example, the stative imperfective stem is the same as the active perfective stem.

4.2.4 Subject and Object

This section describes how to mark the subject and object, which are the core participants required by a verb. Subjects are the more agent-like participant of an event with two participants or the single participant of an event or state with one participant. Objects are the recipients or undergoers of the action. In Lower Tanana there are two different prefix positions for subjects and one for objects.

4.2.4.1 Inner Subject

Table 4.24: Inner Subject position

Disj.	Obj.	O.Subj.	Qual.	Neg.	Conj.	Md.	I.Subj.	Class.	Stem	Sfx.	Enc.
-------	------	---------	-------	------	-------	-----	---------	--------	------	------	------

The term “inner subject” refers to the position just to the left of the classifier, and contrasts with “outer subject” (which will be discussed below). The inner subjects are first person singular ‘I’, second person singular ‘you’, and second person plural ‘you guys’. The underlying representations of the inner subjects in Lower Tanana are given below. Rules for allomorphic variation will be given in section 4.3.

Table 4.25: Inner subjects in Lower Tanana

Person	Lower Tanana morpheme	Example	Translation
First person singular (1s) – ‘I’	s-	<i>ghes'otl</i>	‘I ate’
Second person singular (2s) – ‘you’	in-	<i>ghin'otl</i>	‘you ate’
Second person plural (2p) – ‘you guys’	wx-	<i>wx'otl</i>	‘you guys ate’

4.2.4.2 Outer Subject

Table 4.26: Outer subject position

Disj.	Obj.	O.Subj.	Qual.	Neg.	Conj.	Mode	I.Subj.	Cl.	Stem	Sfx.	Enc.
-------	------	----------------	-------	------	-------	------	---------	-----	------	------	------

This position is occupied by two prefixes: *tr'*- first person plural ‘we’ and *x-* third person plural ‘they’. Third person singular subject is not marked, though it may be included as a zero-morpheme Ø- as an outer subject since it behaves in many ways like an outer subject.

Table 4.27: Outer Subjects in Lower Tanana

Person	Lower Tanana morpheme	Example	Translation
Third person singular (3s) – <i>he/she/it</i>	Ø-	<i>ghi'otl</i>	‘he/she/it ate’
First person plural (1p) - <i>we</i>	<i>tr'</i> -	<i>tr'eghi'otl</i>	‘we ate’
Third person plural (3p) - <i>they</i>	<i>x-</i>	<i>xeghi'otl</i>	‘they ate’

The third person singular null prefix (Ø-) can be classified as an outer subject, because like the first person plural and third person plural subjects, it is characterized by the absence of an inner subject, and therefore participates in the same morphophonemic rules as first person plural and third person plural. Only one subject can occur; that is, inner and outer subjects cannot co-occur.

Table 4.28: Comparison of morphological behavior of inner and outer subjects with dh-negative

Subject	Example	Translation
1s	<i>ch'edhes'olq</i>	‘I am not eating’
2s	<i>ch'edhi'olq</i>	‘you are not eating’
3sO	<i>ch'eth'olq</i>	‘he/she/it is not eating’
1p	<i>ch'etr'eth'olq</i>	‘we are not eating’
2p	<i>ch'edhwx'olq</i>	‘you pl. are not eating’
3pO	<i>ch'exeth'olq</i>	‘they are not eating’

Note that when there is an outer subject (shaded) – which is the same as saying that the inner subject position is not occupied – the imperfective negative morpheme dh- devoices to th-. Note that the third person singular patterns with the first person and third person plural subjects. This effect manifests itself in other environments as well, such as with dh-conjugation before an l-classifier:

Table 4.29: Comparison of inner and outer subject morphophonemic behavior with dh-conjugation with l-classifier

Subject	Example	Translation
you (inner)	<i>benodhilnek</i>	'you forgot it'
he/she (outer)	<i>yenodlenek</i>	'he/she forgot it'

4.2.4.3 Object

Table 4.30: Object position

Disj.	Obj.	O.Subj.	Qual.	Neg.	Conj.	Md.	I.Subj.	Class.	Stem	Sfx.	Enc.

Objects in Lower Tanana take the following forms:

Table 4.31: Objects in Lower Tanana

Person	Lower Tanana morpheme
First person singular (1s) - <i>me</i>	s-
Second person singular (2s) - <i>you</i>	n-
Third person singular (3s) – <i>him/her/it</i>	y-
First person plural (1p) - <i>us</i>	dena-
Second person plural (2p) – <i>you guys</i>	nwx- ~ nexw-
Third person plural (3p) - <i>them</i>	xebe-
Indefinite (indef) - <i>someone/something</i>	ch'-

In Table 4.31 above, the third-person singular object y- is used only with outer subjects.

The following paradigm presents a single theme that can be used to illustrate all of the

combinations of subjects and objects. Subjects are listed vertically in the left column, and objects are listed horizontally across the top row.

Table 4.32: Single theme with all subject and object combinations¹³

O + n + l + 'anh

e.g. *nenetl-'anh* = 'you see me'

	1sO (me)	2sO (you)	3sO (him/her/it)	1pO (us)	2pO (you pl.)	3pO (them)
1sS (I)		nenetl-'anh	netl-'anh		ywxnetl-'anh	xebnetl-'anh
2sS (you)	senil'anh		ninl'anh	denaninl'anh		xebninl'anh
3sS (he/she)	senil'anh	nenil'anh	yenil'anh	denanil'anh	nexnil'anh	xebenil'anh
1pS (we)		netr'enil'anh	tr'enil'anh		ywxtr'enil'anh	xebr'enil'anh
2pS (you pl.)	senwl'anh		nwl'anh	denanwl'anh		xebnwl'anh
3pS (they)	sexenilanh	nexenil'anh	xeyenil'anh	denaxenil'anh	ywxwxnili'anh	xwxnili'anh

4.2.5 Negation

Table 4.33: Negation position

Disj.	Obj.	O.Subj.	Qual.	Neg.	Conj.	Md.	I.Subj.	Class.	Stem	Sfx.	Enc.

In Lower Tanana, non-perfective negatives (imperfective active, future, optative, progressive) are formed using the prefix *dh-*, which precedes conjugation in some circumstances, and follows in others (see section 4.3). Non-perfective negative *dh-* is mutually exclusive with conjugation prefixes, except in future, optative, and progressive modes, where it co-occurs with *gh-*-conjugation. *Dh*-non-perfective negative participates in the same type of allomorphy as *dh*-conjugation, namely, that with outer subjects, it appears to the right of the mode prefix (see Table 4.34 below).

¹³ Not independently elicited for verification. Based on Michael Krauss, Fieldnotes, 1961, Notebook I (TNMN 961 K1961a), p.25. 3sO forms regularized: *b* substituted for *m*.

Perfective active, perfective stative, and imperfective stative negatives take the morpheme *i-*. This morpheme is deleted preceding inner subjects (see Table 4.34 below).

In addition to prefixes, negatives are expressed with an enclitic, which takes the form /-ä/, written *-q* which is both nasalized and has high rising tone. This enclitic varies widely in vowel quality from /ɛ/ to /æ/ to /i/ to /ɪ/, all with the characteristic nasalization and high rising tone.

Table 4.34: Imperfective and perfective negative

Subject	Impf. Neg. (dh-)	Translation	Perf. Neg. (i-)	Translation
1s	<i>ch'edhes'olq</i>	'I am not eating'	<i>es'odlq</i>	'I did not eat'
2s	<i>ch'edhi'olq</i>	'you are not eating'	<i>inin'odlq</i>	'you did not eat'
3sO	<i>ch'eth'olq</i>	'he/she/it is not eating'	<i>yi'odlq</i>	'he/she/it did not eat'
1p	<i>ch'etr'eth'olq</i>	'we are not eating'	<i>tr'i'odlq</i>	'we did not eat'
2p	<i>ch'edhwx'olq</i>	'you pl. are not eating'	<i>wx'odlq</i>	'you pl. did not eat'
3pO	<i>ch'exeth'olq</i>	'they are not eating'	<i>xeyi'odlq</i>	'they did not eat'

4.2.6 Suffixes and Enclitics

Table 4.35: Suffix and Enclitic positions

Disj.	Obj.	O.Subj.	Qual.	Neg.	Conj.	Md.	I.Subj.	Class.	Stem	Sfx.	Enc.

While Athabaskan languages are primarily prefixing, suffixes and enclitics perform important functions in the verb as well. Suffixes come after the stem, and interact closely with it. Enclitics also follow the stem, but interact less with it. The aspectual system relies highly on stem suffixation. Negative formation, nominalization, and question formation are expressed by enclitics.

Table 4.36: Examples of suffixes and enclitics

Suffix/enclitic	Meaning/function	Example	Translation
-hi' (enclitic)	question	[tsayi] k'at- <u>hi'</u>	'would you like some tea?'
-l (suffix)	future/progressive	[tsayi] note <u>ghesdenul</u>	'I will drink [tea]'
-q (enclitic)	negative	ch'edhes'olq	'I'm not eating anything'
-i (enclitic)	nominalizer	dhe'on <u>i</u>	'stone' (lit. 'the small, compact object which is sitting there') ¹⁴

4.3 MORPHOPHONEMIC RULES

Morphophonemic rules describe the interactions between the sounds (phones) of particular word-components (morphemes) which are next to, or near, each other. The rules outlined in this section are presented in two formats. The first is a shorthand rule notation, and the second is a prose description of that rule. In addition, each rule is illustrated by an example. This is not meant to be an authoritative or comprehensive treatment of the morphophonemic rules of the Lower Tanana language. The rules presented here are those relevant to understanding the paradigms in section 6. Some of the following rules were described for Lower Tanana in Tuttle (1998), and all of them have been confirmed in the present study.

4.3.1 Classifier/Stem interactions

- (11) D % ' → % t'

D-classifier followed by a glottal-initial stem results in t'-.
ts' ex est'anh – 'I have a hat'

¹⁴ Kari (1994).

- (12) $D \rightarrow de / _ \% C$

D-classifier is realized as the allomorph *de-* before a consonant-initial stem.
esdenunh – ‘I am drinking’

4.3.2 Subject/Classifier interactions

- (13) $s + l \% \rightarrow tl \%$

When the first person singular subject precedes *l*-classifier, the two combine to form *tl*.

xwtl etltsi – ‘I am making a sled’

- (14) $s + l \% \rightarrow eje \%$

The first person singular subject morpheme and *l*-classifier together become the portmanteau morpheme *-eje-*.

nejejet – ‘I am afraid’

- (15) $wx \rightarrow w / _ l \%$

The *x*- of the second person plural subject morpheme deletes preceding a *l*-classifier

denigi nwł'anh – ‘you guys see a moose’

4.3.3 Mode/Subject interactions

- (16) $i \rightarrow \emptyset / _ (\text{inner subject})$

i-perfective mode only shows up with outer subjects

(*see any perfective paradigm*)

- (17) $gh + e \rightarrow o / (\text{outer subject}) + \dots + _$

In future and progressive modes, *gh*-conjugation and *e*-mode become *o*- following an outer subject, except when the outer subject is both null (3s) and word-initial or follows a disjunct prefix.

Future: *triyh notodzak* – ‘he will caulk the canoe’

Progressive: *tr'obel* – ‘we are swimming’

- (18) $gh + e + wx \rightarrow ux / (\text{future, progressive})$

In future and progressive modes, *gh*-conjugation, *e*-mode, and second person plural subject morphemes combine to form *ux*-.

Future: *tatuxdenik* – ‘you guys will be tired’

Progressive: *uxbal* – ‘you guys are swimming’

- (19) $ghw \rightarrow u / (\text{outer subject}) + \dots + _$

Optative mode becomes *u*- following the outer subject, except when the outer subject is both null (3s) and word-initial or follows a disjunct prefix.
tr'enul'anh deju' – ‘could we look at it?’

- (20) ghw + in → ghu

Optative mode combined with the second-person singular subject morpheme results in the form *ghu-*.

cheghuldzes – ‘you should dance’

4.3.4 Conjugation/Subject/Classifier interactions

- (21) dh + l % → dle % / (outer subject) + ... + ___ %

An dh-conjugation marker preceding l-classifier and preceded by an outer subject becomes *d-*, and the l-classifier generally syllabizes to *le-*.
tryh tr'edletonh – ‘we are just sitting still in a canoe’

- (22) dh + l % → tl % / (outer subject) + ... + ___ %

An dh-conjugation marker preceding l-classifier and preceded by an outer subject becomes *t-*, and forms the affricate *tl-* with the classifier.
lanch'edatlkon – ‘she was sewing’

- (23) dh → th / (outer subject) + ... + ___ D %

An dh-conjugation marker preceding D-classifier and preceded by an outer subject devoices to *th-*.
k'oxethdenik – ‘they worked’

4.3.5 Conjugation/Mode/Subject/Classifier interactions

- (24) n → i / # (outer subject) + ... + ___

n-imperfective is realized as *i-* when the outer subject is word-initial or follows a disjunct prefix.

ch'exek'o iłniyh – ‘they are cooking something’

- (25) gh → o / (outer subject) + ... + ___ e + D %, l %

u- / (2pS) + D %, l %

gh-perfective preceding *e-* is realized as *o-* following an outer subject, and as *u-* with the second person plural prefix preceding a D- or l-classifier.

taxodenik – ‘they became tired’

dolkwth – ‘he was coughing’

uxdenun – ‘you guys drank’

ch'uldzits – ‘you guys danced’

- (26) n → i / # (outer subject) + ... + ___

n-conjugation is realized as *i-* following an outer subject

tr'iduth – ‘we arrived crawling’

4.3.6 Other interactions

- (27) dh → adh / # ... Ce _____

dh-conjugation is realized as the allomorph *adh-* when it follows any conjunct prefix of the form Ce- (Consonant-reduced vowel).
nadhesyonh – ‘I grew up’

- (28) dh → th / _____ Stop

dh-negative devoices before any stop.
noghethdekalq – ‘he is not returning by boat’

4.3.7 Second person singular subject allomorphy:

The second person singular subject morpheme is /in-/ , with the allomorphs [i-] and [inin-]. I have been unable to uncover all of the rules for this allomorphy, but (26) and (27) mark a beginning to this investigation.

- (26) in → i / dh _____

/ (progressive) _____

/ (future) _____

/ (optative) _____

/ (n-conjugation) _____

The n- of the second person singular subject morpheme deletes following dh- conjugation, n-conjugation, dh- non-perfective negative, or in the progressive, future, and optative.

(see section 6 for examples)

dhido – (you) sit down!

- (27) in → inin- / n-perf neg

/ stat neg

The second person singular subject appears as the allomorph inin- in n-perfective negative and stative negative constructions.

ininkalq - ‘you did not arrive by boat’

traxa ininla'q - ‘you are not a woman’

5.0 ABOUT THE PARADIGMS

5.1 PARADIGM ORGANIZATION

The verb paradigms presented in this paper are organized on morphological principles. There is one paradigm presented for each possible combination of classifier, subject, mode, conjugation marker, and negation. However, paradigms are not shown for the combinations of n-imperfective with l-classifier, n-perfective with l- and l-classifiers, and progressive mode with l-classifier, due primarily to semantic constraints. The idea behind this choice of organization is that the first four elements constitute the minimal requirements for putting together a verb. To show each permutation of their combination is to present the basis on which all verbs can be built, so that the user can predict how other verbs will behave structurally and phonologically. The negative is included because the alternation between positive and negative forms shows interesting alternations in prefix morphology.

Due to morphological and semantic constraints, not every verb in the charts is a minimal form. That is, in addition to the stem, and classifier, subject, mode and conjugation prefixes, some of the verbs may contain other prefixes as well. Since there is less phonological “squishing” in the outer reaches of the verb, it is usually easy to take off the additional prefixes and use the minimal form as a template for building other verbs.

The organization of the paradigms is based on that of Young (2000) for Navajo. The highest level of organization in the paradigms in section 6 is by conjugation marker,

followed by mode, then classifier, and finally by subject. When available, other verbs that the user can expect to follow a given pattern are listed at the end of each section. A few features of particular help for navigating the paradigms are the List of Tables on p. x, the English index in Appendix D, and the notes on the paradigms in Appendix E.

5.2 METHODS

The data in section 6 is the result of my evolving understanding of Athabascan languages, Lower Tanana, and linguistic elicitation methods. The basic process that was followed to arrive at the paradigms in this thesis started with reviewing paradigms in existing notebooks and manuscripts in the Alaska Native Language Center Archives collected by Michael Krauss, Jeff Leer, James Kari, and Siri Tuttle. I began this thesis following the verb theme categorization template as exemplified in Kari (1979) and Jetté and Jones (2000), but found that I was inadequately equipped to explain the theory behind this presentation method to the learning community I intended as my audience. Tuttle referred me to Young (2000), and I adopted this as a template for the paradigms in section 6.

I used the notes from ANLC Archives as a basis for beginning my elicitation sessions with consultants Isabel Charlie, Sarah Silas, Neal Charlie, and Geraldine Charlie, who were all chosen for their speaking ability in Lower Tanana. All sessions took place either at the homes of the consultants or at the home of Siri Tuttle in Fairbanks. Consultants were compensated monetarily for their work in accordance with the University of Alaska Fairbanks Institutional Review Board Application Number 05-

39. Sessions were transcribed by hand, recorded on mini-disc recorder or Marantz tape recorder, and sometimes on CD recorder as well for backup. I then digitized the tapes and re-transcribed the sessions into IPA by reviewing the recordings. Data was entered into a Microsoft Access database as Kh-Orthography, X-Orthography, an experimental orthography, and IPA. All data from other sources (notes and manuscripts) has been independently verified by this researcher. Information about the source which I originally consulted for my hypotheses about each paradigm can be found in Appendix E, along with the name of the consultant(s) for each paradigm, and notes on phonetic and morphological variation. Any errors found in the data or its interpretation are mine alone.

Elicitation sessions were conducted by placing the target word in a context, which included a frame for elicitation, such as “Last weekend I took my dogs out with the sled. When I turned the corner coming out of my driveway onto the main road, the sled flipped over and I got dragged all the way down the road. If I were to tell a story about this in your language, how would I say ‘I got dragged’?” As I became more familiar with Lower Tanana, I stopped using other Lower Tanana paradigmatic notes as a basis and consulted other sources of Athabascan data such as Hoijer for Navajo (1945, 1946a, 1946b, 1948, 1949, 1971), Jetté and Jones for Koyukon (2000), Kari (1979) for Ahtna, and Kari (1994) for Lower Tanana, to form hypotheses for elicitation, based on targeted conjugation marker, mode, and classifier combinations.

5.3 LAYOUT

This section describes the layout of each paradigm and the conventions that are used.

5.3.1 Sample Paradigm

- ① Ø-Imperfective, l-CL, Active—eltsi ('make')
- ② Head Root: tsi
- ③ O + G + l + tsi = 'make, build, create sg. O'
- ④ eltsi
- ⑤ Ø - Ø - Ø - e - Ø - l - tsi
- ⑥ OBJ - G - CONJ - IMPF - 3.SG.SUBJ - CL - ST.IMPFCONC
- ⑦ He/she makes a singular object

⑧	⑨	⑩
	Positive	Negative
1s	etltsi	dhetltsi'q
2s	iltsi	dhiłtsi'q
3s	eltsi	etltsi'q
3sO	yeltsi	yetltsi'q
1p	tr'eltsi	tr'etltsi'q
2p	wxłtsi	dhwłtsi'q
3p	xeltsi	xetltsi'q
3pO	xeyeltsi	xeyethlsi'q

- ⑪ Additional Themes

O + G + l + batr = 'cook O by boiling'
 O + dh + l + gha = 'kill sg O'
 l + tats = 'pl. animate sleep, lie, recline'
 D + yejh = 'breathe'

Figure 3: Sample Paradigm

5.3.2 Key to Using Paradigms:

1. Paradigm designation: a short phrasal description of each paradigm. The first element is the conjugation marker, the second is the mode, and the third is the classifier. The designation also indicates whether the theme is Active or Stative. These are the components governing the variation in this set of paradigms. (see section 4.2).
2. Head root: the dictionary entry in Kari (1994) where you will find further information about this verb, usually including short phrases and other words built on the same theme.
3. Theme (see section 4.2.2), followed by an English definition of the theme.
4. Sample word: a word from the paradigm given in third person singular subject ‘he/she/it’ which is parsed into its morphemes in the lines below (see #5-6 below)
5. Parse: morpheme-by-morpheme analysis of the sample word (see #4 above). May include parts of the frame used to elicit the sample word (in brackets) in order to place the sample in context.
6. Gloss: each parsed morpheme is identified in order by an abbreviation of its name (see section 5.3.3 for a complete list of abbreviations used in the paradigms). May include parts of the frame used to elicit the sample word (in brackets) in order to place the sample in context. I depart from standard practice in labeling the stem with the abbreviation ST, rather than labeling it with its translation in the gloss.
7. Translation: English translation of the sample word. May include parts of the frame used to elicit the sample word (in brackets) in order to place the sample in context.
8. Subject: Subjects are listed by abbreviation in the far left column.
 - 1s – first person singular (I)
 - 2s – second person singular (you)
 - 3s – third person singular (he/she/it)
 - 3sO – third person singular subject with third person singular object
 - 1p – first person plural (we)
 - 2p – second person plural (you guys)
 - 3p – third person plural (they)
 - 3pO – third person plural subject with third person singular object
9. Positive Paradigm: Verbs in this column are presented in the X-Orthography used in Kari (1994). Please see section 4.1.4 for a discussion of orthographic representation.

10. Negative Paradigm

11. Additional Themes(s): a list of other verb themes belonging to the same paradigmatic class, and whose form will be predictable based on the combinations of components exhibited by the example paradigm.

5.3.3 Abbreviations

The following abbreviations are used throughout this thesis, and are based on those used in Kari (1994).

- + = morpheme boundary in themes
- = morpheme boundary in parses and glosses
- # = disjunct boundary
- 1 = first person
- 2 = second person
- 3 = third person
- CL = classifier
- COMP = complement
- CON = conative
- CONCL = conclusive
- CONJ = conjugation
- CONV = conversive
- D = dual
- DIST = distributive
- DUR = durative
- FUT = future
- G = gender
- IMPF = imperfective
- INCEP = inceptive
- INDEF = indefinite
- ITER = iterative
- MD = mode
- MOM = momentaneous
- NEG = negative
- NEU = neuter
- NPERF = non-perfective
- OBJ = object
- OPER = operative
- OPT = optative

PL = plural
PERAMB = perambulative
PERF = perfective
PP = postposition
PPO = postpositional object
PROG = progressive
Q = qualifier
REV = reversative
SEMEL = semelfactive
SFX = suffix
SG = singular
ST = stem
STAT = stative
SUBJ = subject
THM = thematic
TRANS = transitional

6.0 PARADIGMS

This section presents verb paradigms in the Minto-Nenana dialect of the Lower Tanana Athabascan language. A guide to the layout of the paradigms can be found in §5.3. A list of abbreviations used can be found in §5.3.3. Appendix D is an index by English translation of the verbs in the paradigms. Notes about the consultant(s), phonetic details, and interesting variations for each paradigm can be found in Appendix E. Any errors in the data or its interpretation are mine alone.

6.1 Ø-IMPERFECTIVE

6.1.1 Ø-Imperfective, Ø-Classifier

Table 6.1: Ø-Imperfective, Ø-CL, Active – ch’e’ol (‘eat something’)

Head Root: ’otl

Theme: O + G + Ø + ‘otl = ‘eat, chew O’

Example: ch’e’ol

Parse: ch’ - Ø - Ø - e - Ø - Ø - ’ol

Gloss: INDEF.OBJ - G - CONJ - IMPF - 3.SG.SUBJ - CL - ST.IMP.F.DUR

Translation: ‘He/she/it is eating something’

	Positive	Negative
1s	ch’es’ol	ch’edhes’olq
2s	ch’i’ol	ch’edhi’olq
3s	ch’e’ol	ch’eth’olq
1p	ch’etr’e’ol	ch’etr’eth’olq
2p	ch’wx’ol	ch’edhwx’olq
3p	ch’exe’ol	ch’exeth’olq

Table 6.2: Ø-Imperfective, Ø-CL, Active – ye'oł ('eat it')

Head Root: 'otl

Ø + G + Ø + 'otl = 'eat, chew Ø'

ye'oł

ye - Ø - Ø - e - Ø - Ø - 'oł

3.SG.OBJ - G - CONJ - IMPF - 3.SG.SUBJ - CL - ST.IMPF.DUR

'He/she/it eats it'

	Positive
1s	es'oł
2s	i'oł
3s	'oł
3sO	ye'oł
1p	tr'e'oł
2p	wx'oł
3p	xe'oł
3pO	xeye'oł

Table 6.3: Ø-Imperfective, Ø-CL, Active – etrex ('cry')

Head Root: trax¹

Ø + trax = 'sg. cries, mourns'

etrex

Ø - e - Ø - Ø - trex

CONJ - IMPF - 3.SG.SUBJ - CL - ST.IMPF.DUR

'He/she cries'

	Positive	Negative
1s	estrex	dhestreghä
2s	itrex	dhitreghä
3s	etrex	ethtreghä
1p	tr'etrex	tr'ethtreghä
2p	wxtrex	dhwxtreghä
3p	xetrex	xethtreghä

Table 6.4 Ø-Imperfective, Ø-CL, Stative – nedhet ('stand')

Head Root: dhet

n # Ø + dhet = 'sg, dual stands'

nedhet

n # Ø - e - Ø - Ø - dhet

DIST # CONJ - IMPF - 3.SG.SUBJ - CL - ST.IMP.F.NEU

'He/she/it stands'

	Positive	Negative
1s	ne'esdhet	ne'esdhedə̄
2s	ne'indhet	ne'indhedə̄
3s	nedhet	ne'ethdhedə̄
1p	netr'edhet	netr'ethdhedə̄
2p	ne'wdxhet	ne'wdxhedə̄
3p	nexedhet	nexethdhedə̄

Table 6.5: Ø-Imperfective, Ø-CL, Stative – nelanh ('is')

Head Root: la

COMP G + Ø + la = 'be COMP, is COMP, COMP exists'

nelanh

[traxa] Ø - n - Ø - e - Ø - Ø - lanh

[woman] G - STAT - CONJ - IMPF - 3.SG.SUBJ - CL - ST.IMP.F.NEU

'She is [a woman]'

	Positive	Negative
1s	esdlanh	esdla'q
2s	inlanh	ininla'q
3s	nelanh	nela'q
1p	tr'ilanh	tr'ilala'q
2p	wxdlanh	wxdla'q
3p	xilanh	xila'q

Additional Themes

G + Ø + chox = 'be big, large, tall, high, great in quantity or volume'

n # Ø + dax = 'pl stand'

tso # yeni + Ø + dhen = 'smile'

O + G + Ø + dzak = 'caulk, smear O with gum, resin, pitch, glue'

O + G + Ø + ghon = ‘make, build, kill pl. O’
Ø + ka = ‘go by boat, paddle boat’
O + G + Ø + leyh = ‘taste O’
COMP (d +) d + Ø + ni = ‘say, tell COMP’
O + u + n + Ø + nik = ‘like, love, enjoy, be fond of O, be pleased with’
no # i + Ø + ’o = ‘find compact object’
O + G + Ø + t’otth = ‘cut, score O with knife, saw, scythe’
O + u + n + Ø + ya = ‘pick O (berries)’
G + n + Ø/l + yo⁵ = ‘grow, grow up, mature’

6.1.2 Ø-Imperfective, D-Classifier

Table 6.6: Ø-Imperfective, D-CL, Active – yedenunh (‘drink it’)

Head Root: nun¹

O + D + nun = ‘drink O’

yedenunh

y - Ø - e - Ø - D - nunh

3.SG.OBJ - CONJ - IMPF - 3.SG.SUBJ - CL - ST.IMPF.DUR

‘He/she/it drinks it’

	Positive	Negative
1s	esdenunh	dhesdenunq
2s	idenunh	dhidenunq
3s	edenunh	ethdenunq
3sO	yedenunh	yethdenunq
1p	tr’edenunh	tr’ethdenunq
2p	wxdenunh	dhwxdenunq
3p	xedenunh	xethdenunq
3pO	xeyedenunh	xeyethdenunq

Additional Themes

Ø + ba³ = ‘sg swims on surface’
Ø + ka = ‘go by boat, paddle boat’
n + Ø + t’wk = ‘sg. flies’
D + yejh = ‘breathe’

6.1.3 Ø-Imperfective, l-Classifier

Table 6.7: Ø-Imperfective, l-CL, Active – nił’anh ('see')

Head Root: 'an¹

O + n + l + 'an = 'look at, see, observe O'

nił’anh

[liga] n - Ø - i - e - Ø - l - 'anh

[dog] Q - CONJ - THM - IMPF - 3.SG.SUBJ - CL - ST.IMP.F.DUR

'He/she/it sees [the dog]'

	Positive	Negative
1s	netl-'anh	nedhetl-'aną
2s	ninł'anh	nedhił'aną
3s	nił'anh	netl-'aną
3sO	yenił'anh	yenetl-'aną
1p	tr'enil'anh	tr'enetl-'aną
2p	nwl'anh	nedhwł'aną
3p	xenil'anh	xenetl-'aną
3pO	xeyenił'anh	xeyenetl'aną

Table 6.8: Ø-Imperfective, l-CL, Active – eltsi ('make')

Head Root: tsı

O + G + l + tsı = 'make, build, create sg. O'

eltsi

Ø - Ø - Ø - e - Ø - l - tsı

OBJ - G - CONJ - IMPF - 3.SG.SUBJ - CL - ST.IMP.F.CONCL

'He/she/it makes a singular object'

	Positive	Negative
1s	etltsi	dhetltsi'ą
2s	iłtsi	dhiłtsi'ą
3s	eltsi	etltsi'ą
3sO	yełtsi	yetltsi'ą
1p	tr'ełtsi	tr'etltsi'ą
2p	wxłtsi	dhwłtsi'ą
3p	xełtsi	xetltsi'ą
3pO	xeyełtsi	xeyetltsi'ą

Additional Themes

O + G + l + batr = 'cook O by boiling'

O + dh + l + gha = 'kill sg O'

l + tats = 'pl. animate sleep, lie, recline'

D + yejh = 'breathe'

6.1.4 Ø-Imperfective, l-Classifier

Table 6.9: Ø-Imperfective, l-CL, Active – ch'eldzes ('dance')

Head Root: dzits

ch' + l + dzits = 'to dance'

ch'eldzes

ch' - Ø - e - Ø - l - dzes

INDEF.OBJ.THM - CONJ - IMPF - 3.SG.SUBJ - CL - ST.IMP.F.OPER-REV

'He/she is dancing'

	Positive	Negative
1s	ch'ejedzes	ch'edhejedzezä
2s	ch'ildzes	ch'edhildzezä
3s	ch'eldzes	ch'edledzezä
1p	ch'etr'eldzes	ch'etr'edledzezä
2p	ch'wxledzes	ch'edhuldzezä
3p	ch'exeldzes	ch'exedledzezä

Table 6.10: Ø-Imperfective, l-CL, Active – delkwth ('cough, have a cold')

Head Root: kwth¹

d + l + kwth = 'cough, have a cold'

delkwth

d - Ø - e - Ø - l - kwth

G - CONJ - IMPF - 3.SG.SUBJ - CL - ST.IMP.F.DUR

'He/she is coughing, has a cold'

	Positive	Negative
1s	desjekwth	desjekwdhä
2s	dilkwth	dedhilkwdhä
3s	delkwth	dedlekwdhä
1p	tr'edelkwth	tr'ededlekwdhä
2p	dwlkwth	dedhwlkwdhä
3p	xedelkwth	xededlekwdhä

Table 6.11: Ø-Imperfective, 1-CL, Stative – neljet ('be scared')

Head Root: jet, jit

(P + a) # n + l + jet = 'be afraid, scared, frightened (of P)'

neljet

n - Ø - e - Ø - l - jet

Q - CONJ - IMPF - 3.SG.SUBJ - CL - ST.IMPF.NEU

'He/she/it is afraid'

	Positive	Negative
1s	nesjejet	nesjejedä
2s	niljet	niniljedä
3s	neljet	niljedä
1p	tr'eneljet	tr'eniljedä
2p	nwxlejet	nwxlejedä
3p	xeneljet	xeniljedä

Additional Themes

l + 'atl = 'pl. swim'

6.2 dh-IMPERFECTIVE

6.2.1 dh-Imperfective, Ø-Classifier

Table 6.12: dh-Imperfective, Ø-CL, Stative – dhedo ('sit, stay')

Head Root: do^o

Ø + do^o = 'sg sits, stays'

dbedo

dh - e - Ø - Ø - do

CONJ - IMPF - 3.SG.SUBJ - CL - ST.IMP.F.NEU

'He/she/it is sitting/staying'

	Positive	Negative
1s	dhesdo	dhesdo'q
2s	dhido	dhido'q
3s	dbedo	ithdo'q
1p	tr'edhdo	tr'ithdo'q
2p	dhwxdo	dhwxdo'q
3p	xedhdo	xithdo'q

Table 6.13: dh-Imperfective, Ø-CL, Stative – dhetanh ('sleep')

Head Root: ta³

Ø + ta = 'sg sleeps, reclines'

dhetanh

dh - e - Ø - Ø - tanh

CONJ - IMPF - 3.SG.SUBJ - CL - ST.IMP.F.NEU

'He/she/it is sleeping'

	Positive	Negative
1s	dhestanh	dhesta'q
2s	dhitanh	dhita'q
3s	dhetanh	dheta'q
1p	tr'edhetanh	tr'etha'q
2p	dhwxtanh	dhwxta'q
3p	xedhetanh	xetha'q

6.2.2 dh-Imperfective, D-Classifier

Table 6.14: dh-Imperfective, D-CL, Stative – ethdetlak ('sprawl')

Head Root: tlak

G + D + tlak = 'classify mushy object'

ethdetlak

\emptyset - e - dh - \emptyset - D - lo

G - IMPF - CONJ - 3.SG.SUBJ - CL - ST.IMPF.NEU

'He/she/it is sprawled out'

	Positive	Negative
1s	dhesdetlak	dhesdetlag̫
2s	dhidetlak	dhidetlag̫
3s	ethdetlak	ethdetlag̫
1p	tr'ethdetlak	tr'ethdetlag̫
2p	dhwxdetlak	dhwxdetlag̫
3p	xethdetlak	xethdetlag̫

Additional Themes

P + a # d + D + nik = 'try, attempt P'

G + D + ten = 'freeze'

6.2.3 dh-Imperfective, l-Classifier

Table 6.15: dh-Imperfective, l-CL, Stative – ch'udhatltth'onth ('listen')

Head Root: tth'on

O + u + dh + l + tth'on = 'be listening to O'

ch'udhatltth'onth

ch' - u - dh - dh - e - Ø - l - tth'onh

INDEF.OBJ - CONJ - Q - CONJ - IMPF - 3.SG.SUBJ - CL - ST.IMP.F.NEU

'He/she/it is listening to something'

	Positive	Negative
1s	ch'udhadhetltth'onth	ch'udhetltth'onaq
2s	ch'udhadhiłtth'onth	ch'udhinłtth'onaq
3s	ch'udhatltth'onth	ch'udhiłtth'onaq
1p	ch'etr'udhatltth'onth	ch'etr'udhiłtth'onaq
2p	ch'udhadhwłtth'onth	ch'udhwłtth'onaq
3p	ch'exudhatltth'onth	ch'exudhiłtth'onaq

6.2.3 dh-Imperfective, l-Classifier

Table 6.16: dh-Imperfective, l-CL, Stative – edltonh ('sit still in a canoe')

Head Root: ton¹

l + ton = '(fish, person in canoe) is motionless, still in, on the water'

dhedltonh

[tryh] dh - e - Ø - l - tonh

[tryh] CONJ - IMPF - 3.SG.SUBJ - CL - ST.IMP.F.NEU

'He/she is just sitting still [in a canoe]'

	Positive	Negative
1s	dhejetonh	dhejetonaq
2s	dhiltonh	dhiltonaq
3s	edltonh	edltonaq
1p	tr'edletonh	tr'edletonaq
2p	dhwxletonh	dhwxletonaq
3p	xedletonh	xedletonaq

6.3 n-IMPERFECTIVE

6.3.1 n-Imperfective, Ø-Classifier

Table 6.17: n-Imperfective, Ø-CL, Active – niko'ikayh ('land by boat')

Head Root: ka³

Ø + ka = 'go by boat, paddle boat'

niko'ikayh

[teghełdi] (ni - ko) # n - e - Ø - Ø - kayh

[right now] (a.d.s.:n.MOM) ashore, landing # CONJ - IMPF - 3.SG.SUBJ - CL - ST.IMP.F.MOM
‘He/she is landing [right now]’

	Positive	Negative
1s	nikoneskayh	nikodheskayaq
2s	nikoninkayh	nikodhikayaq
3s	niko'ikayh	niko'ethkayaq
1p	nikotr'ikayh	nikotr'ethkayaq
2p	nikonwxkayh	nikodhwxkayaq
3p	nikoxikayh	nikoxethkayaq

Additional Themes

Ø + u + Ø + twn' = 'hold, grasp, grip, clutch O firmly'

6.3.2 n-Imperfective, D-Classifier

Table 6.18: n-Imperfective, D-CL, Active – k'o'ideneyh ('work')

Head Root: nik²

k'o # D + nik = 'work'

k'o'ideneyh

k'o # n - e - Ø - D - neyh

PERAMB # CONJ - IMPF - 3.SG.SUBJ - CL - ST.IMPF.PERAMB

'He/she is working on it'

	Positive	Negative
1s	k'onesdeneyh	k'odhesdeniyä
2s	k'onideneyh	k'odhideniyä
3s	k'o'ideneyh	k'o'ethdeniyä
1p	k'otr'ideneyh	k'otr'ethdeniya
2p	k'onwxdeneyh	k'odhwxdeniyä
3p	k'oxideneyh	k'oxethdeniyä

6.3.3 n-Imperfective, Ł-Classifier

Table 6.19: n-Imperfective, Ł-CL, Active - łanch'edanłkoyh ('sew')

Head Root: kon'

la + n # O + d + Ł + kon' = 'sew O'

łanch'edanłkoyh

la - n # ch' - d - n - Ø - Ł - koyh

? - DIST # INDEF.OBJ - Q - CONJ - 3.SG.SUBJ - CL - ST.IMPF.DIST

'He is sewing'

	Positive	Negative
1s	łanch'edanetłkoyh	łanch'edadhetłkoya
2s	łanch'edaniłkoyh	łanch'edadhiłkoya
3s	łanch'edałkoyh	łanch'edatlkoya
1p	łanch'etr'edałkoyh	łanch'etr'edatlkoya
2p	łanch'edanwłkoyh	łanch'edadhwłkoya
3p	łanch'exdałkoyh	łanch'exdatlkoya

Table 6.20: n-Imperfective, Ł-CL, Active – ch'ek'o'iłniyh ('cook something')

Head Root: nik²

P + e + k'o # Ł + nik = 'cook P'

ch'ek'o'iłniyh

ch' - e - k'o # n - e - Ø - Ł - niyh

INDEF.OBJ - NULL PP - PERAMB # CONJ - IMPF - 3.SG.SUBJ - CL - ST.IMPF.PERAMB

'He/she/it's cooking it/something'

	Positive	Negative
1s	ch'ek'onetłniyh	ch'ek'odhetłniyq
2s	ch'ek'oniłniyh	ch'ek'odhiłniyq
3s	ch'ek'o'iłniyh	ch'ek'o'itlniyq
3sO	yek'o'iłniyh	yek'o'itlniyq
1p	ch'ek'otr'iłniyh	ch'ek'otr'itlniyq
2p	ch'ek'onwłniyh	ch'ek'odhwłniyq
3p	ch'erek'o'iłniyh	ch'ek'oxitlniyq
3pO	xeyek'o'iłniyh	xeyek'o'itlniyq

Table 6.21: n-Imperfective, l-CL, Active – ek'o'iłniyh ('cook')

Head Root: nik²

P + e + k'o # l + nik = 'cook P'

ek'o'iłniyh

[jega] - e - k'o # n - e - Ø - l - neyh

[berries] - NULL PP - PERAMB # CONJ - IMPF - 3.SG.SUBJ - CL - ST.IMPF.PERAMB

'He/she is cooking [berries]'

	Positive	Negative
1s	ek'onetlneyh	ek'o'etlneyq
2s	ek'oniłneyh	ek'oniłneyq
3s	ek'o'iłneyh	ek'o'iłneyq
1p	ek'otr'iłneyh	ek'otr'iłneyq
2p	ek'onwłneyh	ek'o'włneyq
3p	ek'oxiłneyh	ek'oxiłneyq

6.4 Ø-PERFECTIVE

6.4.1 Ø-Perfective, Ø-Classifier

Table 6.22: Ø-Perfective, Ø-CL, Active – no’i’onh (‘find’)

Head Root: ’o

no # i + Ø + ’o = ‘find compact object’

no’i’onh

no # i - i - Ø - Ø - 'onh

ITER # TRANS.THM - PERF - 3SG.SUBJ - CL - ST.PERF.MOM

‘He found it’

	Positive	Negative
1s	no’es’onh	no’es’olq
2s	no’i’onh	no’inin’olq
3s	no’i’onh	no’i’olq
3sO	noyi’onh	noyi’olq
1p	notr’i’onh	notr’i’olq
2p	no’wx’onh	no’wx’olq
3p	noxi’onh	noxi’olq
3pO	noxeyi’onh	noxeyi’olq

Additional Themes

Ø + ka = ‘go by boat, paddle boat’

COMP d # O + Ø + lok = ‘do to, affect O in manner of COMP, cause O to be so; fix, make, prepare, alter, afflict O’

6.4.2 Ø-Perfective, D-Classifier

Table 6.23: Ø-Perfective, D-CL, Stative – ededzak ('dirty')

Head Root: dzak

G + D + dzak = 'be dirty'

ededzak

Ø - i - Ø - e - Ø - D - dzak

G - TRANS - CONJ - PERF - 3SG.SUBJ - CL - ST.PERF.NEU

'He/she/it got dirty'

	Positive	Negative
1s	esdedzak	esdedzag̃
2s	indedzak	inidedzag̃
3s	ededzak	idedzag̃
1p	tr'eddedzak	tr'idedzag̃
2p	wxdedzak	uxdedzag̃
3p	xeddedzak	xidedzag̃

6.4.3 Ø-Perfective, l-Classifier

Table 6.24: Ø-Perfective, l-CL, Active – no'iłtanh ('find')

Head Root: ta³

O + l + ta = 'handle sg. animate O (living or dead)'

no'iłtanh

no # y - i - Ø - i - Ø - l - tanh

ITER # 3.SG.OBJ - THM.TRANS - CONJ - PERF - 3.SG.SUBJ - CL - ST.PERF.MOM

'He/she/it found it'

	Positive	Negative
1s	no'etltanh	no'etltalą
2s	no'ininłtanh	no'ininłtalą
3s	no'iłtanh	no'iłtalą
3sO	noyiłtanh	noyiłtalą
1p	notr'iłtanh	notr'iłtalą
2p	no'włtanh	no'włtalą
3p	noxiłtanh	noxiłtalą
3pO	noxeyiłtanh	noxeyiłtalą

6.4.4 Ø-Perfective, l-Classifier

Table 6.25: Ø-Perfective, l-CL – xek'a'ilnik ('find out about, realize')

Head Root: nik²

P + k'a # l + nik = 'find out about, realize P'

xek'a'ilnik

xe - k'a # Ø - i - Ø - l - nik

PP.3PL - PP.WANT # CONJ - PERF - 3.SG.SUBJ - CL - ST.PERF

'He/she found out about it (unexpectedly, as a surprise)'

	Positive	Negative
1s	xek'a'ejenik	xek'a'ejeniyä
2s	xek'a'ilnik	xek'a'inilniyä
3s	xek'a'ilnik	xek'a'ilniyä
1p	xek'atr'ilnik	xek'atr'ilniyä
2p	xek'a'ułnik	xek'a'ułniyä
3p	xek'axilnik	xek'axilniyä

Additional Themes

u + l + yun = 'be on guard, prepared, ready, alert, watchful (for P)'

6.5 gh-PERFECTIVE

6.5.1 gh-Perfective, Ø-Classifier

Table 6.26: gh-Perfective, Ø-CL, Active – ghighon' ('kill plural')

Head Root: ghon¹

O + G + Ø + ghon = 'make, build, kill pl. O'

ghighon'

Ø - Ø - gh - i - Ø - Ø - ghon'

OBJ - G - CONJ - PERF - 3.SG.SUBJ - CL - ST.PERF.DUR

'He/she/it killed a bunch'

	Positive	Negative
1s	ghesghon'	esghon'q
2s	ghinghon'	ininghon'q
3s	ghighon'	ighon'q
3sO	yeghighon'	yighon'q
1p	tr'eghighon'	tr'ighon'q
2p	wxghon'	wxghon'q
3p	xeghighon'	xighon'q
3pO	xeyeghighon'	xeyighon'q

Table 6.27: gh-Perfective, Ø-CL, Active – ghi'otl ('eat')

Head Root: 'otl

O + G + Ø + 'otl = 'eat, chew O'

ghi'otl

[jega'] Ø - gh - i - Ø - Ø - 'otl

[berry] G - CONJ - PERF - 3.SG.SUBJ - CL - ST.PERF.DUR

'He/she/it was eating/ate [a berry]'

	Positive	Negative
1s	ghes'otl	es'odla
2s	ghin'otl	inin'odla
3s	ghi'otl	i'odla
3sO	yeghi'otl	yi'odla
1p	tr'eghi'otl	tr'i'odla
2p	wx'otl	wx'odla
3p	xeghi'otl	xi'odla
3pO	xeyeghi'otl	xeyi'odla

Table 6.28: gh-Perfective, Ø-CL, Active – ghitrax ('cry')

Head Root: trax¹Ø + trax¹ = 'sg. cries, mourns'

ghitrax

gh - i - Ø - Ø - trax

CONJ - PERF - 3.SG.SUBJ - CL - ST.PERF.DUR

'He/she/it cried'

	Positive	Negative
1s	ghestrax	estraghq
2s	ghintrax	inintraghq
3s	ghitrax	itraghq
1p	tr'eghitrax	tr'itraghq
2p	uxtrax	wxtraghq
3p	xeghitrax	xitraghq

Table 6.29: gh-Perfective, Ø-CL, Stative – ghido' ('sit, stay')

Head Root: do^oØ + do^o = 'sg sits, stays'

ghido'

gh - i - Ø - Ø - do'

CONJ - PERF - 3.SG.SUBJ - CL - ST.PERF.NEU

'He/she/it sat, stayed'

	Positive	Negative
1s	ghesdo'	esdolą
2s	ghindo'	inindolą
3s	ghido'	idolą
1p	tr'eghido'	tr'idolą
2p	uxdo'	wxdolą
3p	xeghido'	xidolą

Table 6.30: gh-Perfective, Ø-CL, Stative – ghita' ('sleep')

Head Root: ta³

Ø + ta = 'sg sleeps, reclines'

ghita'

gh - i - Ø - Ø - ta'

CONJ - PERF - 3.SG.SUBJ - CL - ST.PERF.NEU

'He/she/it slept'

	Positive	Negative
1s	ghesta'	estalą
2s	ghinta'	inintala
3s	ghita'	italą
1p	tr'eghita'	tr'italą
2p	uxta'	wxtala
3p	xeghita'	xitala

Additional Themes

G + Ø + chox = 'be big, large, tall, high, great in quantity or volume'

COMP (d +) d + Ø + ni = 'say, tell COMP'

G + Ø + t'eyh = 'be stretched, taut; flexible object extends in a line, hangs, etc.'

O + G + Ø + t'oth = 'cut, score O with knife, saw, scythe'

O + u + n + Ø + ya = ‘pick O (berries)’

6.5.2 gh-Perfective, D-Classifier

Table 6.31: gh-Perfective, D-CL – taghedenik (‘tired’)

Head Root: nek²

ta # D + nek = ‘become tired’

taghedenik

ta # gh - e - Ø - D - nik

THM # CONJ - PERF - 3.SG.SUBJ - CL - ST.PERF

‘He/she/it was tired’

	Positive	Negative
1s	taghesdenik	ta'esdeniqä
2s	taghidenik	ta'ideniqä
3s	taghedenik	tadeniqä
1p	tatr'odenik	tatr'ideniqä
2p	ta'uxdenik	ta'wxdeniqä
3p	taxodenik	taxideniqä

Table 6.32: gh-Perfective, D-CL, Active – ghedunun' ('drink')

Head Root: nun¹

O + D + nun = 'drink O'

ghedenun'

gh - e - Ø - D - nun'

CONJ - PERF - 3.SG.SUBJ - CL - ST.PERF.DUR

'He/she/it drank'

	Positive	Negative
1s	ghesdenun'	esdenulə̄
2s	ghidenun'	inidenulə̄
3s	ghedenun'	idenulə̄
3sO	yodenun'	yidenulə̄
1p	tr'odenun'	tr'idenulə̄
2p	uxdenun'	wxdenulə̄
3p	xeyodenun'	xeyidenulə̄
3pO	xodenun'	xidenulə̄

Additional Themes

D + yejh = 'breathe'

6.5.3 gh-Perfective, l-Classifier

Table 6.33: gh-Perfective, l-CL, Active – neghil'an' ('see')

Head Root: 'an'

O + n + l + 'an' = 'look at, see, observe O'

neghil'an'

(ye) - n - gh - i - Ø - l - 'an'

(3.SG.OBJ) - Q - CONJ - PERF - 3.SG.SUBJ - CL - ST.PERF.DUR

'He/she/it saw/looked at (him/her/it)'

	Positive	Negative
1s	neghetl-'an'	netl-'ilq
2s	neghinq'an'	ninq'ilq
3s	neghil'an'	nil'ilq
3sO	yeneñeghil'an'	yeniñ'ilq
1p	tr'eneghil'an'	tr'eniñ'ilq
2p	nuł'an'	nwl'ilq
3p	xeneghil'an'	xeniñ'ilq
3pO	xeyeneghil'an'	xeyeniñ'ilq

Table 6.34: gh-Perfective, l-CL, Stative – xeghiłtats ('plural sleep')

Head Root: tats

l + tats = 'pl. animate sleep, lie, recline'

xeghiłtats

x - gh - i - l - tats

3PL.SUBJ - CONJ - PERF - CL - ST.PERF.NEU

'They slept'

	Positive	Negative
1p	tr'eghiłtats	tr'iladzä
2p	ułtats	włtadzä
3p	xeghiłtats	xiltadzä

Additional Themes

O + u + dh + l + tth'on = 'be listening to O'

6.5.4 gh-Perfective, l-Classifier

Table 6.35: gh-Perfective, l-CL, Active – ch'oldzits ('dance')

Head Root: dzits

ch' + l + dzits = 'to dance'

ch'oldzits

ch' - gh - e - Ø - l - dzits

INDEF.OBJ.THM - CONJ - PERF - 3.SG.SUBJ - CL - ST.PERF.OPER-REV

'He/she/it danced'

	Positive	Negative
1s	ch'eghejedzits	ch'ejedzezä
2s	ch'eghildzits	ch'inildzezä
3s	ch'oldzits	ch'ildzezä
1p	ch'etr'oldzits	ch'etr'ildzezä
2p	ch'uldzits	ch'uldzezä
3p	ch'exoldzits	ch'exildzezä

Table 6.36: gh-Perfective, l-CL, Active – dolkwth ('cough')

Head Root: kwth¹

d + l + kwth = 'cough, have a cold'

dolkwth

d - gh - e - Ø - l - kwth

THM - CONJ - PERF - 3.SG.SUBJ - CL - ST.PERF.DUR

'He/she was coughing'

	Positive	Negative
1s	deghejekwth	dejekwdhä
2s	deghilkwth	dilkwdhä
3s	dolkwth	dilkwdhä
1p	tr'edolkwth	tr'edilkwdhä
2p	dulkwth	dwlkwth
3p	xedolkwth	xedilkwdhä

Table 6.37: gh-Perfective, 1-CL, Stative – noljit ('afraid')

Head Root: jet

(P+a) # n + l + jet = 'be afraid, scared, frightened (of P)'

noljit

(ye) - n - gh - e - Ø - l - jit

(3.SG.OBJ) - THM - CONJ - PERF - 3.SG.SUBJ - CL - ST.PERF.NEU

'He/she/it was afraid'

	Positive	Negative
1s	neghesjejit	nesjejidə
2s	neghiljit	niljidə
3s	noljit	niljidə
3sO	yenoljit	yeniljidə
1p	tr'enoljit	tr'eniljidə
2p	nuljit	nuljidə
3p	xenoljit	xeniljidə
3pO	xeyenoljit	xeyeniljidə

6.6 dh-PERFECTIVE

6.6.1 dh-Perfective, Ø-Classifier

Table 6.38: dh-Perfective, Ø-CL, Active – nadheyonh ('grow up')

Head Root: yo⁵

G + n + Ø/l + yo = 'grow, grow up, mature'

nadheyonh

Ø - n - adh - e - Ø - Ø - yonh

G - THM - CONJ - PERF - 3.SG.SUBJ - CL - ST.PERF.REV

'He/she/it grew up'

	Positive	Negative
1s	nadhesyonh	nesyonq
2s	nadhiyonh	ninyola, nininyola
3s	nadheyonh	niyola
1p	tr'enadhyonh	tr'eniyolq
2p	nadhwxyonh	nwxyolq
3p	xenadhyonh	xeniyolq

Additional Themes

P + a + no # Ø + loł = 'dream of P'

Ø + G + Ø + gat = 'stab, spear, poke, prick, lance O with pointed instrument'

Ø + ka = 'go by boat, paddle boat'

Ø + G + Ø + 'otl = 'bite O'

6.6.2 dh-Perfective, D-Classifier

Table 6.39: dh-Perfective, D-CL, Active – k'othdenik ('work')

Head Root: nik²

k'o # D + nik = 'work'

k'othdenik

k'o # dh - e - Ø - D - nik

PERAMB # CONJ - PERF - 3.SG.SUBJ - CL - ST.PERF.PERAMB

'He/she/it worked on it'

	Positive	Negative
1s	k'odhesdenik	k'o'esdeniyä
2s	k'odhidenik	k'o'inindeniya
3s	k'othdenik	k'o'ideniya
1p	k'otr'ethdenik	k'otr'ideniya
2p	k'odhwxdenik	k'o'wxdeniya
3p	k'oxethdenik	k'oxideniya

Additional Themes

Ø + ba³ = 'sg. swims on surface'

Ø + ka = 'go by boat, paddle boat'

n + Ø + t'wk = 'sg. flies'

6.6.3 dh-Perfective, l-Classifier

Table 6.40: dh-Perfective, l-CL, Active – yedhatlghanh ('kill')

Head Root: gha

O + dh + l + gha = 'kill sg O'

yedhatlghanh

y - dh - dh - e - Ø - l - ghanh

3.SG.OBJ - THM - CONJ - PERF - 3.SG.SUBJ - CL - ST.PERF.CONCL

'He/she/it killed him/her/it'

	Positive	Negative
1s	dhadhetlghanh	dhetlghalq
2s	dhadhiłganh	dhiłghalq
3s	dhatlghanh	dhiłghalq
3sO	yedhatlghanh	yedhiłghala
1p	tr'edhatlghanh	tr'edhiłghala
2p	dhadhwłganh	dhwłghalq
3p	xedhatlghanh	xedhiłghala
3pO	xeyedhatlghanh	xeyedhiłghala

Table 6.41: dh-Perfective, l-CL, Active - łanch'edatlkon' ('sew')

Head Root: kon'

la + n # O + d + l + kon' = 'sew O'

łanch'edatlkon'

la - n # ch' - d - dh - Ø - l - kon'

THM - DIST # INDEF.OBJ - THM - CONJ - 3.SG.SUBJ - CL - ST.PERF.DIST

'He sewed'

	Positive	Negative
1s	łanch'edadhetlkon'	łanch'edetlkon'a
2s	łanch'edadhiłkon'	łanch'ediłkon'a
3s	łanch'edatlkon'	łanch'ediłkon'a
1p	łanch'etr'edatlkon'	łanch'etr'ediłkon'a
2p	łanch'edadhwłkon'	łanch'edwłkon'a
3p	łanch'exdatlkon'	łanch'exdiłkon'a

Table 6.42: dh-Perfective, l-CL, Active – etltsinh ('make')

Head Root: tsi

O + G + l + tsi = 'make, build, create sg. O'

etltsinh

[xwtl] Ø - dh - e - l - tsinh

[sled] G - CONJ - PERF - CL - ST.PERF.CONCL

'He/she/it made [the sled]'

	Positive	Negative
1s	dhetltsinh	etltsilq
2s	dhiłtsinh	ininłtsilq
3s	etltsinh	iłtsilq
3sO	yetaltsinh	yiłtsilq
1p	tr'etltsinh	tr'iłtsilq
2p	dhwłtsinh	włtsilq
3p	xetaltsinh	xiłtsilq
3pO	xeyetaltsinh	xeyiłtsilq

6.6.4 dh-Perfective, l-Classifier

Table 6.43: dh-Perfective, l-CL, Active – yenodlenek ('forget')

Head Root: nek²

P + no # l + nek = 'forget P'

yenodlenek

ye - no # dh - e- Ø - l - nek

3.SG.OBJ.PP - THM # CONJ - PERF - 3.SG.SUBJ - CL - ST.PERF.MOM

'He/she/it forgot it'

	Positive	Negative
1s	benodhejenek	beno'ejenegä
2s	benodhilnek	beno'ilnegä
3s		
3sO	yenodlenek	yeno'ilnegä
1p	benotr'edlenek	benotr'ilnegä
2p	benodhwlnek	beno'wlnegä
3p		
3pO	yenoxedlenek	yenoxe'ilnegä

6.7 n-PERFECTIVE

6.7.1 n-Perfective, Ø-Classifier

Table 6.44: n-Perfective, Ø-CL, Active – xenidatl ('plural go')

Head Root: datl

Ø + datl = 'plural go, walk; pl. fish swim'

xenidatl

x - n - i - Ø - Ø - datl

3PL.SUBJ - CONJ - PERF - 3.SG.SUBJ - CL - ST.PERF.MOM

'They arrived'

	Positive	Negative
1p	tr'enidatl	tr'idadlaq
2p	nwxdatl	wxdadlaq
3p	xenidatl	xidadlaq

Table 6.45: n-Perfective, Ø-CL, Active – nikanh ('go by boat')

Head Root: ka³

Ø + ka = 'go by boat, paddle boat'

nikanh

[tr'iyi] n - i - Ø - Ø - kanh

[canoe] CONJ - PERF - 3.SG.SUBJ - CL - ST.IMPF.MOM

'He/she went by boat, traveled by boat'

	Positive	Negative
1s	neskanh	eskalaq
2s	ninkanh	ininkalaq
3s	nikanh	ikalaq
1p	tr'enikanh	tr'ikalaq
2p	nwxkanh	wxkalaq
3p	xenikanh	xikalaq

Table 6.46: n-Perfective, Ø-CL, Active – xeni'ots ('dual go')

Head Root: 'ots

Ø + 'ots = 'dual go, walk'

xeni'ots

x - n - i - Ø - Ø - 'ots

3.PL.SUBJ - CONJ - PERF - 3.SG.SUBJ - CL - ST.PERF.MOM

'They arrived'

	Positive	Negative
1p	tr'eni'ots	tr'i'odzä
2p	nwx'ots	wx'odzä
3p	xeni'ots	xi'odzä

Table 6.47: n-Perfective, Ø-CL, Active – niyo ('arrive')

Head Root: yo^{o1}

Ø + (y)o = 'sg., dual goes, walks'

niyo

n - i - Ø - Ø - yo

CONJ - PERF - 3.SG.SUBJ - CL - ST.PERF.MOM

'He/she/it went (arrived)'

	Positive	Negative
1s	nisyo	esyolä
2s	ninyo	ininyolä
3s	niyo	iyolä
1p	tr'iyo	tr'iyolä
2p	nwxyo	wxyolä
3p	xiyo	xiyolä

6.7.2 n-Perfective, D-Classifier

Table 6.48: n-Perfective, D-CL, Active – iduth ('crawl')

Head Root: uth

D + uth = 'crawl'

iduth

i - i - Ø - D - uth

CONJ - PERF - 3.SG.SUBJ - CL - ST.PERF.MOM

'He/she/it arrived crawling'

	Positive	Negative
1s	nesduth	esdudh&
2s	ninduth	inidudh&
3s	iduth	idudh&
1p	tr'iduth	tr'idudh&
2p	nwdxuth	wxdudh&
3p	xiduth	xidudh&

6.8 FUTURE

6.8.1 Future, Ø-Classifier

Table 6.49: Future, Ø-CL, Active – notodzak ('caulk')

Head Root: dzak

O + G + Ø + dzak = 'caulk, smear O with gum, resin, pitch, glue'

notodzak

no # te - gh - e - Ø - Ø - dzak

ITER # INCEP/FUT - CONJ - NPERF - 3.SG.SUBJ - CL - ST.FUT.CONV

'He/she will caulk it'

	Positive	Negative
1s	noteghesdzak	tedheghesdzag̃
2s	noteghidzak	tedheghidzagã
3s	notodzak	tothdzag̃
3sO	yenotodzak	yetothdzag̃
1p	notr'etodzak	tr'etothdzag̃
2p	notuxdzak	tedhuxdzag̃
3p	noxtodzak	xetothdzag̃
3pO	xeyedzak	xeyetothdzag̃

6.8.2 Future, D-Classifier

Table 6.50: Future, D-CL – tatodenik ('tired')

Head Root: nek²
ta # D + nek = 'become tired'

tatodenik

ta # t - gh - e - Ø - D - nik

THM # INCEP - CONJ - NPERF - 3.SG.SUBJ - CL - ST.FUT

'He/she/it will be tired'

	Positive	Negative
1s	tateghesdenik	tatedheghegesdeniga
2s	tateghidenik	tatedheghideniga
3s	tatodenik	tatothdeniga
1p	tatr'etodenik	tatr'etothdeniga
2p	tatuxdenik	tatedhwxdeniga
3p	taxtodenik	taxtothdeniga

Table 6.51: Future, D-CL, Active – notodenuł ('drink')

Head Root: nun¹
O + D + nun = 'drink O'

notodenuł

[tsayi] no - t - gh - e - Ø - D - nuł

[tea] THM - INCEP - CONJ - NPERF - 3.SG.SUBJ - CL - ST.FUT.DUR

'He/she will drink [tea]'

	Positive	Negative
1s	noteghesdenuł	notedheghegesdenuł
2s	noteghidenuł	notedheghidenuł
3s	notodenik	notothdenik
1p	notr'etodenik	notr'etothdenik
2p	notuxdenuł	notedhwxdenuł
3p	noxetodenik	noxetothdenik

6.8.3 Future, ɻ-Classifier

Table 6.52: Future, ɻ-CL, Active – yetenoɻ’iɻ (‘see’)

Head Root: ’an¹

O + n + ɻ + ’an = ‘look at, see, observe O’

yetenoɻ’iɻ

y - t - n - gh - e - Ø - ɻ - ’iɻ

3.SG.OBJ - INCEP - THM - CONJ - NPERF - 3.SG.SUBJ - CL - ST.FUT

‘He/she/it will look at it’

	Positive	Negative
1s	tenghetl-’iɻ	tendheghetl-’ilq
2s	tenghiɻ’iɻ	tendheghiɻ’ilq
3s	tenoɻ’iɻ	tenotl-’ilq
3sO	yetenoɻ’iɻ	yetenotl-’ilq
1p	tr’etenoiɻ’iɻ	tr’etenotl-’ilq
2p	tenuɻ’iɻ	tendhuɻ’ilq
3p	xetenoiɻ’iɻ	xetenotl-’ilq
3pO	xeyetenoiɻ’iɻ	xeyetenotl-’ilq

Table 6.53: Future, ɻ-CL, Active – noyitoɻtaɻ (‘find’)

Head Root: ta³

O + ɻ + ta = ‘handle sg. animate O (living or dead)’

noyitoɻtaɻ

no # y - i - t - gh - e - Ø - ɻ - taɻ

ITER.THM # 3.SG.OBJ - FIND.THM - INCEP - CONJ - NPERF - 3.SG.SUBJ - CL - ST.FUT.MOM

‘He/she will find it’

	Positive	Negative
1s	no’iteghetltaɻ	no’itedheghetltaɻ
2s	no’iteghiɻtaɻ	no’itedheghiɻtaɻ
3s	no’itoɻtaɻ	no’itotltaɻ
3sO	noyitoɻtaɻ	noyitotltaɻ
1p	notr’itoɻtaɻ	notr’itotltaɻ
2p	no’ituɻtaɻ	no’itedhultalq
3p	noxitotltaɻ	noxitotltaɻ
3pO	noxeyitoɻtaɻ	noxeyitotltaɻ

6.8.4 Future, l-Classifier

Table 6.54: Future, l-CL, Active – ch'etoldzes ('dance')

Head Root: dzits

ch' + l + dzits = 'to dance'

ch'etoldzes

ch' - t - gh - e - Ø - l - dzes

INDEF.OBJ.THM - INCEP - CONJ - NPERF - 3.SG.SUBJ - CL - ST.FUT.OPER-REV

'He/she/it will dance'

	Positive	Negative
1s	ch'eteghejedzes	ch'etedheghejedzezə
2s	ch'eteghildzes	ch'etedheghildzezə
3s	ch'etoldzes	ch'etodledzezə
1p	ch'etr'etoldzes	ch'etr'etodledzezə
2p	ch'etuldzes	ch'etedhuldzezə
3p	ch'extoldzes	ch'extodledzezə

6.9 OPTATIVE

6.9.1 Optative, Ø-Classifier

Table 6.55: Optative, Ø-CL, Active – ghwdzax ('caulk')

Head Root: dzak

O + G + Ø + dzak = 'caulk, smear O with gum, resin, pitch, glue'

ghwdzax

[detr'iya] Ø - ghw - Ø - Ø - dzax [deju']

[his/her boat] CONJ - OPT - 3.SG.SUBJ - CL - ST.OPT.CONV [could]

'He/she should caulk [his/her boat]'

	Positive	Negative
1s	ghwsdzax	dheghwsdzaghą
2s	ghudzax	dheghudzaghą
3s	ghwdzax	ghwthdzaghą
3sO	yudzax	yuthdzagą
1p	tr'udzax	tr'uthdzaghą
2p	uxdzax	dhuxdzaghą
3p	xudzax	xuthdzaghą
3pO	xeyuthdzax	xeyuthdzagą

Table 6.56: Optative, Ø-CL, Active – noyighw’oł (‘find’)

Head Root: ’o

no # i + Ø + ’o = ‘find compact object’

noyighw’oł

no # y - i - Ø - ghw - Ø - Ø - ’oł [ts’wxk’at]

ITER.THM # 3.SG.OBJ - FIND.THM - CONJ - OPT - 3.SG.SUBJ - CL - ST.OPT.MOM [I would like to]

‘I really want him to find it’

	Positive	Negative
1s	no’ighws’oł	no’idheghws’olą
2s	no’ighu’oł	no’idheghu’olą
3s	no’ighw’oł	no’ighwth’olą
3sO	noyighw’oł	noyighwth’olą
1p	notr’ighw’oł	notr’ighwth’olą
2p	no’i’ux’oł	no’idhux’olą
3p	noxighw’oł	noxighwth’olą
3pO	noxeyighw’oł	noxeyighwth’olą

6.9.2 Optative, D-Classifier

Table 6.57: Optative, D-CL, Active – noghwdenuñ (‘drink’)

Head Root: nun¹

O + D + nun = ‘drink O’

noghwdenuñ

[tsayi] no - Ø - ghw - Ø - D - nun

[tea] THM - CONJ - OPT - 3.SG.SUBJ - CL - ST.OPT.DUR

‘He/she might drink [tea]’

	Positive	Negative
1s	noghwsdenun’	nodheghwsdenun’ą
2s	noghudenun’	nodheghudenun’ą
3s	noghwdenuñ	noghwdenuñ’ą
1p	notr’udenun’	notr’uthdenun’ą
2p	no’uxdenun’	nodhuxdenun’ą
3p	noxudenun’	noxuthdenun’ą

6.9.3 Optative, ɿ-Classifier

Table 6.58: Optative, ɿ-CL, Active – yenuɿ’anh (‘see’)

Head Root: ’an¹

O + n + ɿ + ’an = ‘look at, see, observe O’

yenuɿ’anh

y - n - Ø - ghw - Ø - ɿ - ’anh [deju’]

3.SG.OBJ - Q - CONJ - OPT - 3.SG.SUBJ - CL - ST.OPT

‘[Could] he look at it?’

	Positive	Negative
1s	neghwtl-’anh	nedheghwtl-’anq
2s	neghul’anh	nedheghul’anq
3s	nul’anh	neghwtl-’anq
3sO	yenuɿ’anh	yenghwtl-’anq
1p	tr’enuɿ’anh	tr’enghwtl-’anq
2p	nuɿ’anh	nedhwł’anq
3p	xenuɿ’anh	xenghwtl-’anq
3pO	xeyenuɿ’anh	xeyenghwtl-’anq

6.9.4 Optative, l-Classifier

Table 6.59: Optative, l-CL, Active – ch’uldzes (‘dance’)

Head Root: dzits

ch’ + l + dzits = ‘to dance’

ch’uldzes

ch’ - Ø - ghw - Ø - l - dzes

INDEF.OBJ.THM - CONJ - OPT - 3.SG.SUBJ - CL - ST.OPT.OPER-REV

‘He/she/it should dance’

	Positive	Negative
1s	ch’eghwjedzes	ch’edheghwjedzezə
2s	cheghuldzes	chedheghuldzezə
3s	ch’uldzes	ch’udledzezə
1p	ch’etr’uldzes	ch’etr’udledzezə
2p	ch’uxledzes	ch’edhuldzezə
3p	ch’exuldzes	ch’exudledzezə

6.10 PROGRESSIVE

6.10.1 Progressive, Ø-Classifier

Table 6.60: Progressive, Ø-CL, Active – ghebał ('swim')

Head Root: ba³

Ø + ba³ = 'sg. swims on surface'

ghebał

gh - e - Ø - Ø - bał

CONJ - NPERF - 3.SG.SUBJ - CL - ST.PROG.MOM

'He/she/it is swimming steady'

	Positive	Negative
1s	ghesbał	dhegħesbalą
2s	ghibał	dhegħibala
3s	ghebał	ghethbalą
1p	tr'obał	tr'othbalą
2p	uxbał	dhuxbalą
3p	xobał	xothbalą

6.10.2 Progressive, D-Classifier

Table 6.61: Progressive, D-CL, Active – noghedekał ('return by boat')

Head Root: ka³

Ø + ka = 'go by boat, paddle boat'

noghedekał

no # gh - e - Ø - D - kał

ITER # CONJ - NPERF - 3.SG.SUBJ - CL - ST.PROG

'He/she is returning by boat, returning paddling'

	Positive	Negative
1s	noghesdekał	nodhegħesdekalą
2s	noghidekał	nodhegħidekalą
3s	nogħedekał	nogħethdekalą
1p	notr'odekał	notr'othdekalą
2p	no'uxdekał	nodħuxdekalą
3p	noxodekał	noxothdekalą

Table 6.62: Progressive, D-CL, Active – gheduth ('crawl')

Head Root: uth

D + uth = 'crawl'

gheduth

gh - e - Ø - D - uth

CONJ - NPERF - 3.SG.SUBJ - CL - ST.PROG.MOM

'He/she/it is crawling'

	Positive	Negative
1s	ghesduth	ghesdudhą
2s	ghiduth	dheghidudhą
3s	gheduth	ghethdudhą
1p	tr'oduth	tr'othdudhą
2p	uxduth	dhuxdudhą
3p	xoduth	xothdudhą

6.10.3 Progressive, l-Classifier

Table 6.63: Progressive, l-CL, Active – ghelbeth ('drag')

Head Root: beth²

l + beth = 'drag'

ghelbeth

gh - e - Ø - l - beth

CONJ - NPERF - 3.SG.SUBJ - CL - ST.PROG

'He/she was dragging it'

	Positive	Negative
1s	ghetlbeth	dheghetlbedhą
2s	ghinlbeth	dheghinlbethą
3s	ghelbeth	ghetlbedhą
1p	tr'ołbeth	tr'otlbedhą
2p	ułbeth	dhułbedhą
3p	xołbeth	xotlbedhą

Table 6.64: Progressive, l-CL, Active – ghełtał ('carry singular object')

Head Root: ta³

O + l + ta = 'handle sg. object (living or dead)'

gheltał

[guga'] gh - e - Ø - l - tał

[baby] CONJ - NPERF - 3.SG.SUBJ - CL - ST.PROG

'He/she/it is carrying [a baby]'

	Positive	Negative
1s	ghetłtał	dheghetłtalą
2s	ghiłtał	dheghiłtalą
3s	gheltał	ghetłtalą
1p	tr'ołtał	tr'otłtalą
2p	ułtał	dułtalą
3p	xoltał	xotłtalą

6.11 FULL PARADIGMS (verbs conjugated in imperfective, perfective, future, and optative modes)

Table 6.65: Full paradigm – ch'eldzes ('dance')

Head Root: dzits
ch' + 1 + dzits = 'to dance'

Ø-IMPERFECTIVE			gh-PERFECTIVE	
	<i>Positive</i>	<i>Negative</i>	<i>Positive</i>	<i>Negative</i>
1s	ch'ejedzes	ch'edhejedzezə	ch'eghejedzits	ch'ejedzezə
2s	ch'ildzes	ch'edhildzezə	ch'eghildzits	ch'inildzezə
3s	ch'eldzes	ch'edledzezə	ch'oldzits	ch'ildzezə
1p	ch'etr'eldzes	ch'etr'edledzezə	ch'etr'oldzits	ch'etr'ildzezə
2p	ch'wxledzes	ch'edhuldzezə	ch'uldzits	ch'uldzezə
3p	ch'exeldzes	ch'exedledzezə	ch'exoldzits	ch'exildzezə

FUTURE			OPTATIVE	
	<i>Positive</i>	<i>Negative</i>	<i>Positive</i>	<i>Negative</i>
1s	ch'eteghejedzes	ch'etedheghejedzezə	ch'eghwjedzes	ch'edheghwjedzezə
2s	ch'eteghildzes	ch'etedheghildzezə	cheghuldzes	chedheghuldzezə
3s	ch'etoldzes	ch'etodledzezə	ch'uldzes	ch'udledzezə
1p	ch'etr'etoldzes	ch'etr'etodledzezə	ch'etr'uldzes	ch'etr'udledzezə
2p	ch'etuldzes	ch'etedhuldzezə	ch'uxledzes	ch'edhuldzezə
3p	ch'extoldzes	ch'extodledzezə	ch'exuldzes	ch'exudledzezə

Table 6.66: Full paradigm – dhedo ('sit, stay')

Head Root: do^oØ + do^o = 'sg. sits, stays'

	dh-Imperfective	gh-Perfective	Future	Optative
1s	dhesdo	ghesdo'	teghesdoł	ghwsdo'
2s	dhido	ghindo'	teghidoł	ghudo'
3s	dhedo	ghido'	todoł	ghwdo'
1p	tr'edhedo	tr'eghido'	tr'etodoł	tr'udo'
2p	dhwxdo	uxdo'	tuxdoł	uxdo'
3p	xedhedo	xeghido'	xetodoł	xudo'

Table 6.67: Full paradigm – ełtsi ('make')

Head Root: tsı

O + G + Ł + tsı = 'make, build, create sg. O'

	Ø-Imperfective	dh-Perfective	Future	Optative
1s	etltsi	dhetltsinh	teghetltsił	ghwtltsił
2s	iłtsi	dhiłtsinh	teghiltsił	ghułtsił
3s	ełtsi	etltsinh	toltsił	ghwłtsił
3sO	yełtsi	yetltsinh	yetoltsił	yułtsił
1p	tr'ełtsi	tr'etltsinh	tr'etołtsił	tr'ułtsił
2p	wxłtsi	dhwłtsinh	tultsił	ułtsił
3p	xeltsi	xetltsinh	xetołtsił	xułtsił
3pO	xeyełtsi	xeyetltsinh	xeyetołtsił	xeyułtsił

Table 6.68: Full paradigm – ch'e'oł ('eat')

Head Root: 'otl

O + G + Ø + 'otl = 'eat, chew O'

	Ø-Imperfective	gh-Perfective	Future	Optative
1s	ch'es'oł	ch'eghes'oł	ch'eteghes'oł	ch'eghws'oł
2s	ch'i'oł	ch'eghin'oł	ch'eteghin'oł	ch'eghu'oł
3s	ch'e'oł	ch'eghi'oł	ch'eto'oł	ch'u'oł
1p	ch'etr'e'oł	ch'etr'eghi'oł	ch'etr'eto'oł	ch'etr'u'oł
2p	ch'wx'oł	ch'ux'oł	ch'etux'oł	ch'wx'oł
3p	ch'exe'oł	ch'exeghi'oł	ch'exeto'oł	ch'exu'oł

Table 6.69: Full paradigm: et'oth ('cut')

Head Root: t'otth

O + G + Ø + t'otth = 'cut, score O with knife, saw, scythe'

	Ø-Imperfective	gh-Perfective	Future	Optative
1s	est'oth	ghest'oth	teghest'oth	ghwst'oth
2s	it'oth	ghint'oth	teghit'oth	ghut'oth
3s	et'oth	ghit'oth	tot'oth	ghwt'oth
3sO	yet'oth	yeghit'oth	yetot'oth	yut'oth
1p	tr'etoth	tr'eghit'oth	tr'etot'oth	tr'ut'oth
2p	wxt'oth	wxt'oth	twxt'oth	uxt'oth
3p	xet'oth	xeghit'oth	xetot'oth	xut'oth
3pO	xeyet'oth	xeyeghit'oth	xeyetot'oth	xeyut'oth

Table 6.70: Full paradigm: nił'anh ('see')

Head Root: 'an'¹

O + n + l + 'an = 'look at, see, observe O'

	Ø-Imperfective	gh-Perfective	Future	Optative
1s	netl-'anh	neghetl-'an'	tenghetl-'il	neghwtl-'anh
2s	ninl'an	neghinl'an'	tenghi'l'il	neghu'l'an
3s	nił'an	neghił'an'	teno'l'il	nuł'an
3sO	yenił'an	yeneghił'an'	yetenol'il	yenuł'an
1p	tr'enil'an	tr'eneghił'an'	tr'etenol'il	tr'enuł'an
2p	nwl'an	nuł'an'	tenu'l'il	nuł'an
3p	xenił'an	xeneghił'an'	xetenol'il	xenuł'an
3pO	xeyenił'an	xeyeneghił'an'	xeyetenol'il	xeyenuł'an

Table 6.71: Full paradigm – etrex ('cry')

Head Root: trax¹

Ø + trax = 'sg. cries, mourns'

	Ø-Imperfective	gh-Perfective	Future	Optative
1s	estrex	ghestrax	teghestrex	ghwstrex
2s	itrex	ghintrax	teghitrex	ghutrex
3s	etrex	ghitrax	totrex	ghwtrex
1p	tr'etrex	tr'eghitrax	tr'etotrex	tr'utrex
2p	wxtrex	uxtrax	tuxtrex	uxtrex
3p	xetrex	xeghitrax	xetotrex	xutrex

Table 6.72: Full paradigm – nechwx ('be big')

Head Root: chwx, chox

G + Ø + chox = 'be big, large, tall, high, great in quantity or volume'

	Ø-Imperfective	gh-Perfective	Future	Optative
1s	eschwx	gheschwx	tegheschwx	ghwschwx
2s	inchwx	ghinchwx	teghichwx	ghuchwx
3s	nechwx	ghichwx	tochwx	ghwchwx
1p	tr'ichwx	tr'eghichwx	tr'etochwx	tr'uchwx
2p	wxchwx	uxchox	tuxchwx	uxchwx
3p	xichwx	xeghichwx	xetochwx	xuchwx

Appendix A
Glossary of Linguistic Terminology

ADVERB: A word that describes how an action takes place. In English, adverbs often end in *-ly*, such as “slowly,” “happily,” “easily.”

ADVERBIAL: Having the properties of an adverb.

AFFIX: A morpheme that is added to the beginning (prefix), end (suffix), or middle (infix) of a word.

AFFIXATION: The process of adding affixes to a word.

DERIVATION: A linguistic process which changes the inherent meaning or function of a word by affixation, sometimes involving a change in part of speech. Examples in English include:

invent > reinvent

do > undo

institute > institution > institutional > institutionalize

INFLECTION: A linguistic process whereby affixes are added or suppletion occurs, but no change in inherent meaning or function occurs. Examples in English include:

sit > sits > sitting > sat

INTRANSITIVE: A verb that has only one participant. English examples include: sit, pray, walk, jump, cry, etc. See also, Transitive.

LEXICAL: The lexicon is a language user’s inventory of words and morphemes. When something is referred to as “lexical,” it refers to its existence as an entity in the lexicon.

MINIMAL FORM: An Athabascan verb that has only a stem, classifier, subject, mode, and conjugation prefixes.

MORPHEME: A part of a word with identifiable meaning and/or function, including affixes and stems. Examples in English include (morphemes are separated by dashes):

re-do, exist-ence, govern-ment, un-fair, thwart-ed, ravish-ing, sit-s

MORPHOLOGY: A language’s system of morpheme properties, types, and distribution.

MORPHOLOGICAL: Referring to morphology.

NOUN: A class of word usually designating a concrete or bounded entity, including a person, place, thing or idea.

OBJECT: The noun which has something done to it by the subject. Examples in English include: "I kicked him," "The dog ate my homework," "She loves the color red."

PART OF SPEECH: A category of the different types of words: noun, pronoun, verb, adverb, adjective, preposition, postposition, etc.

PHONEME: A unit of sound in a language which meaningfully distinguishes between similar words. For example in English, the initial sounds in the following words correspond to different phonemes:

cat, hat, sat, fat, pat, that, bat

PHONOLOGY: The study of the systematic organization of sounds in language.

PHONOLOGICAL: Having to do with sound systems of languages.

PREFIX: An affix that is added to the beginning of a word.

PRONOUN: A part of speech that refers to an entity without referring to it by name. In English, these include: I, you, he, she, it, we, they. In Lower Tanana, these may occur as part of the verb word.

PRONOMINAL: Pronoun-like in nature.

SEMANTICS: The study of the system of meaning in languages.

SUBJECT: The doer of an action. Examples in English include: "I yawned," "They went to church," "You kicked him."

SUFFIX: An affix added to the end of a word.

SUPPLETION: When a form in a set of words has a very different shape than the others, and can only be explained as coming from a different historical origin. For example in English:

I go, I went

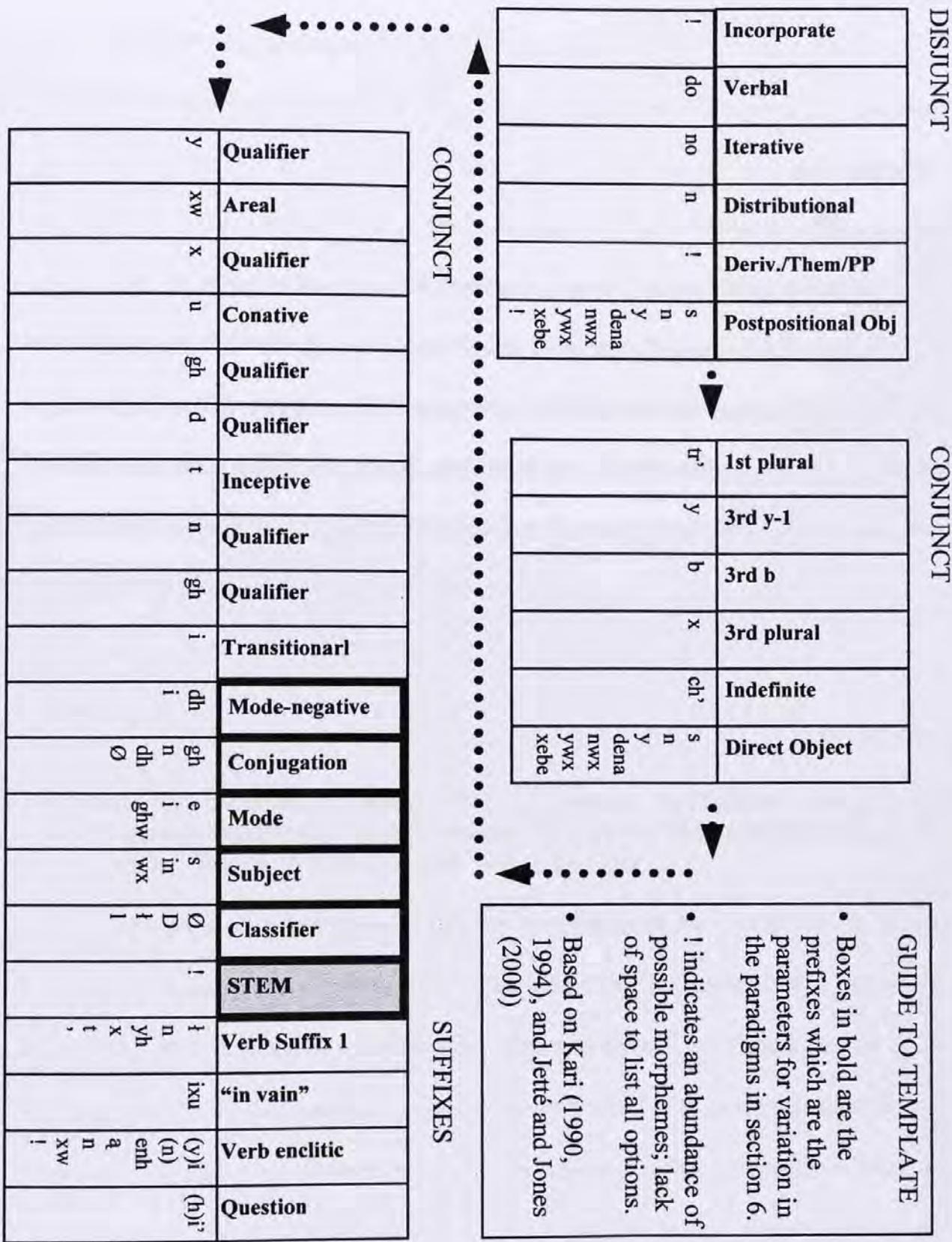
SUPPLETIVE: A form characterized by suppletion.

TRANSITIVE: A verb whose theme requires an object: either an object prefix or a noun referring to the object, for example in English: kick, like, buy, take, carry, kill.

TRANSITIVITY: The state of being transitive.

VERB: A word that refers to an action, event, process, or the state-hood of something.

Appendix B
Lower Tanana Athabascan Verb Template



Appendix C Annotated List of Lower Tanana Learning Materials

The following is an annotated list of all published resources that have been produced in the Lower Tanana language which could be used for learning and teaching. Many of the items listed are out of print, and much more work has been done with the language than what is represented by the following list. The intention is to list resources which might be of use to teachers and learners of Lower Tanana. Most of these materials have been produced through the Alaska Native Language Center (ANLC). At the beginning of each description, the orthography (writing system) used in the work is noted in italics (see section 4.1.4 for an explanation of the different orthographies). Resources are listed by category. For readers interested in non-pedagogical linguistic articles, please refer to the Bibliography at the end of this thesis.

1. Curriculum:

THOMPSON, CHAD AND ELLEN FRANK. 1987. Denakenaga' for Children. Lesson Plans for Teaching Denakenaga' (Minto-Nenana Tanana) to Children in Elementary Grades. Nenana: Yukon Koyukuk School District.

The only curriculum resource that has been produced for Lower Tanana, this book is a direct translation of a Koyukon curriculum resource, Thompson (1987). Thompson and Frank (1987) is based in Audiolingual (listen and repeat) and Total Physical Response (listen and do) language teaching theories. Most of the exercises involve repetition, memorization of short conversations, and responding to directions. Most units also incorporate games such as Bingo or Tic-Tac-Toe. The book is divided according to

daily activities, such as morning routines and how to greet people, and subsistence-based activities, such as hunting and recognizing animals. These units are very relevant to the daily life of students and other learners. The lessons can be contextualized by drawing on outside resources. Opportunity also exists to seek student reflections on the material, opening the way for creative language use. If used as a framework, to be fleshed out with other material, this book constitutes a very solid curriculum design.

One drawback is that the corresponding student workbook has not yet been translated into Lower Tanana. The curriculum book itself is no longer in print, however, Yukon-Koyukuk School District has recently recorded the vocabulary and phrases from the lessons, and these recordings have been passed out to school children and interested learners. Another drawback is that there are no accompanying evaluation instruments or guidelines.

2. Lesson Books:

FRANK, ELLEN. 1998. Lower Tanana Athabaskan Language Lessons. Whitehorse: Yukon Native Language Center.

Kh-Orthography. I have had much personal experience using this particular resource. I have used it for the bulk of my language learning efforts. One of the most outstanding features of this particular material is the accompanying audio tapes. The audio tapes are primarily in Lower Tanana, with only subject headings given in English. Each word or phrase is repeated twice with ample time for practice between repetitions.

The lessons are structured by thematic unit – greetings, animals, plants, weather, relatives, food, activities, and so on. I have found that with enough listenings, I begin to

make morphological connections, perhaps also in combination with my linguistic training. I have found it an invaluable resource for familiarizing myself with phonology, including stress and pitch patterns. I have also found it to be encouraging for creative language use in that I begin to play around with new permutations of the short phrases, e.g. “this is a dog,” and “my mother is sitting” can become “the dog is sitting” and “this is my mother.” These phrases are about as complicated as the exercises get, however. As with Frank and Thompson (1987), there are neither practice exercises for the student nor evaluation mechanisms.

KARI, JAMES. 1991. Lower Tanana Athabaskan Listening and Writing Exercises. Fairbanks: Alaska Native Language Center.

X-Orthography. This exercise book also has an accompanying audio tape. Each phoneme and orthographic representation is reviewed and illustrated by a keyword featuring that sound or character. The book also includes a list of useful phrases for classroom management, a short narrative about fishing, and a list of place names. The work features three different speakers. I find this very enriching, as hearing different speakers paints a more thorough picture of the language.

The different pieces of the book are not connected, and no direction is given for building lessons around the material, but it is a nice cross-section of language uses: linguistic, authentic narrative, pedagogical, and cultural. It shows what can be done with the language, and provides opportunities for comprehension and production practice.

As with the Thompson and Frank (1987) and Frank (1998), there are no exercises designed for student practice, nor any evaluation tools.

3. Narratives:

FRANK, ELLEN. 1983. K'okhethdeno de'on: Moving Around in the Old Days. Fairbanks: Alaska Native Language Center.

Kh-Orthography. This book features several short narratives about traditional activities, focusing on descriptions of how people moved around the landscape. Several of the vignettes are about canoes and the activities that took place in and around canoes. The narratives are presented with facing page translations.

JOHN, PETER. 1991. The First Christmas Tree. Ts'eba Tthadala. The Young Spruce Tree. An aboriginal Athabaskan Christmas story. Fairbanks: Alaska Native Language Center and Cultural Heritage and Education Institute.

X-Orthography. In the introduction to this narrative, Peter John makes a connection between the story of Christmas, and a traditional story about a young spruce tree. The story is accessible to western thinkers because it seems to have a clear moral. In addition, Peter John's integration of Christian and traditional themes performs a larger function in making traditional culture relevant to modern society in Minto. The story is presented with interlinear English translation. Madeline Riley successfully adapted this story to play format for the elementary students to present to the community in Lower Tanana.

CHARLIE, TEDDY. 1992. Ode Setl'oghwnh Da'. Long After I Am Gone. Fairbanks: Alaska Native Language Center.

X-Orthography. This collection features short narratives describing how to participate in traditional subsistence activities, with interlinear translations.

TITUS, DOROTHY AND MATTHEW TITUS. 1979. This is the Way We Make Our Baskets. Dats'en' Lo K'eyth'ok Tr'eghonh. Fairbanks: Village Art Program and the Alaska Native Language Center.

Kh- and X-Orthographies. A beautifully photographed text about how to make a birch-bark basket, this narrative takes the reader through the process from finding and peeling bark and pulling spruce roots to the finished product. This book has been produced in both orthographies, resulting in the production of three different editions.

4. Reference Books:

ANDREWS, ELIZABETH, CHAD THOMPSON, AND PETER JOHN. 1980. Native Place Names of Minto Flats and Vicinity, Central Alaska. Prepared for Tanana Chiefs Conference, Inc. and Minto Village Council.

Kh-Orthography. While the introduction and guide to the book are in English, the body of the work features a comprehensive place names list, with English equivalents where available. Each facing page contains a topographical map to which the names are keyed.

KARI, JAMES. 1994. Lower Tanana Athabaskan Dictionary. Draft version. Fairbanks: Alaska Native Language Center.

X-Orthography. One of the greatest drawbacks of this dictionary is that it has not been published. It has existed and been circulated on a limited basis since 1994. The reason for the delay in publication has been the need for verification of many of the forms listed, which are given in Ahtna or Koyukon, but have not been attested for Lower Tanana. Another drawback is that it was produced in the X-Orthography. This causes some learners to avoid using it, thereby cutting themselves off from a terrific resource.

KRAUSS, MICHAEL. 1974. Minto Nenana Athabaskan Noun Dictionary. Preliminary version. Fairbanks: Alaska Native Language Center.

Kh-Orthography. The first dictionary for Lower Tanana, the data has all been since incorporated into Kari (1994). This dictionary is still in print, however, and presents the nouns according to topical lists, making it more accessible than Kari (1994). With only a fraction of the number of pages and no verbs, however, it is not as comprehensive as Kari (1994).

5. Unpublished manuscripts

There are many other materials available in ANLC Archives that have reached the level of pre-publication, such as a book called Old Minto, which is full of beautiful diagrams accompanying procedural texts about how to make canoes and set up a dog team (in the Kh-Orthography). There is a collection of traditional narratives by Moses Charlie, which has been not only transcribed, but entered into a computer and translated (in the X-Orthography). Beyond materials at pre-publication stage are a wealth of audio tapes and handwritten notes that could be mined to produce traditional narrative and procedural text collections, as well as pedagogical tools, including curriculum, and grammar handbooks and linguistic tracts.

Appendix D
English Index to Paradigms

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Appendix E
Notes on the Paradigms

This appendix contains notes about the consultant(s), phonetic details, and interesting variations for each paradigm. Notes can be keyed to their corresponding paradigm by the table number. Consultants for each paradigm are listed first, followed by any source which I used to form hypotheses, and then by phonetic and morphological information. Adjustments to paradigms were made when it was determined that researcher error during the elicitation process had misled the speaker into the production of an aberrant form. All such adjustments are noted below.

Table 6.1: Ø-Imperfective, Ø-CL, Active – ch'e'ol ('eat something')

Isabel Charlie

Negative: Source first consulted for data: Siri Tuttle Dissertation 1998, p. 111.

Table 6.2: Ø-Imperfective, Ø-CL, Active – ye'ol ('eat it')

Isabel Charlie, Neal and Geraldine Charlie

Source first consulted for data: Michael Krauss, Fieldnotes, 1961, Notebook I (TNMN 961 K1961a), p. 32.

This paradigm is not often used in the negative.

Table 6.3: Ø-Imperfective, Ø-CL, Active – etrex ('cry')

Isabel Charlie

Source first consulted for data: Siri Tuttle Dissertation 1998, pp. 100-101.

Table 6.4 Ø-Imperfective, Ø-CL, Stative – nedhet ('stand')

Isabel Charlie, Neal and Geraldine Charlie

Positive: Source first consulted for data: Michael Krauss, Fieldnotes, 1961, Notebook I (TNMN 961 K1961a), p. 29.

Negative: According to Isabel Charlie, *ne 'indhet* is used as a statement of fact (indicative), and *ne 'idhet* is used as a command (imperative). Neal and Geraldine Charlie only acknowledged *ne 'indhet* as a second person singular form.

Isabel Charlie produced the forms *nedhedq*, *netr'edhedq*, and *nexedhedq* for 3s, 1p, and 3p respectively (i.e. with no negative morphology).

Neal and Geraldine Charlie only acknowledged the presence of the dh-negative morpheme in the outer subjects, but rejected it with inner subjects.

Table 6.5: Ø-Imperfective, Ø-CL, Stative – nelanh ('is')

Isabel Charlie, Neal and Geraldine Charlie

Positive: Source first consulted for data: Michael Krauss, Fieldnotes, 1961, Notebook II (TNMN 961 K1961a), p.225.

Irregular paradigm. *n-* of 3s is the stative manifestation in this paradigm.

Negative: 3s produced with n-suffixed root, 1s produced alternately with n-suffixed and glottal-suffixed root. Others produced with glottal-final root. 3s regularized to fit paradigm. 3p negative form by deduction only.

Table 6.6: Ø-Imperfective, D-CL, Active – yedenunh ('drink it')

Isabel Charlie

Source first consulted for data: Siri Tuttle Dissertation 1998, pp. 100-101.

3sO and 3pO negative not elicited; formed by deduction.

Table 6.7: Ø-Imperfective, l-CL, Active – nil ('see')

Isabel Charlie

According to Kari (pc), the *i-* prefix in this paradigm is an unaccountable irregularity.

Positive: Source first consulted for data: Michael Krauss, with Teddy Charlie, from Fieldnotes, 1961, Notebook I (TNMN 961 K1961a), p. 25. Krauss has *nwl'anh* with a “small cap i-” (equivalent to schwa, e-) for the 3s.

2p *nwxl'an* also possible, but *nwl'an* preferred.

3s and 3p not elicited; formed by deduction.

Negative: Actual quality of negative enclitic is non-nasalized /-i/

Table 6.8: Ø-Imperfective, l-CL, Active – eltsi ('make')

Isabel Charlie

Source first consulted for data: Siri Tuttle Dissertation 1998, pp. 100-101.

Table 6.9: Ø-Imperfective, l-CL, Active – ch'eldzes ('dance')

Isabel Charlie

Table 6.10: Ø-Imperfective, l-CL, Active – delkwth ('cough, have a cold')

Isabel Charlie, Neal and Geraldine Charlie

Source first consulted for data: Michael Krauss, Fieldnotes, 1961, Notebook I (TNMN 961 K1961a), p. 29.

dwxlekwt also possible for Isabel Charlie for 2p, but *dwlkwth* preferred.

Isabel Charlie had *dejekwth* for 1s. Double 1s morphology occurs in this and some other verbs.

Table 6.11: Ø-Imperfective, l-CL, Stative – neljet ('be scared')

Positive: Isabel Charlie

Source first consulted for data: Siri Tuttle Dissertation 1998, pp. 100-101.

Checked 7/16/05 with Isabel Charlie: *ninlejet* also possible for 2s, but *niljet* preferred. *nwxljet* and *nwljet* both possible for 2p, but *nwxlejet* preferred.

Checked 11/2/05 with Neal and Geraldine Charlie:
nesjejet preferred for 1s; *nexwljet* preferred for 2p.

Negative: Sarah Silas, Isabel Charlie

Double 1s morph occurs in this verb and others sometimes.

Cheked with Isabel Charlie 7/16/05:

nilqedq also possible for 2s. *ninilqedq* preferred by Sarah Silas and Isabel Charlie.
nulqedq also possible for 2p. *nuxleqedq* preferred by Isabel Charlie. *nuxlqedq* also possible.

Neal and Geraldine Charlie 11/2/05:

nilqedq preferred for 2s, *nexwlqedq* preferred for 2p.

Table 6.12: dh-Imperfective, Ø-CL, Stative – dhedo ('sit, stay')

Isabel Charlie

Source first consulted for data: Michael Krauss, Fieldnotes, 1961, Notebook I (TNMN 961 K1961a), p. 19.

Table 6.13: dh-Imperfective, Ø-CL, Stative – dhetanh ('sleep')

Isabel Charlie, Neal and Geraldine Charlie

Source first consulted for data: Michael Krauss, Fieldnotes, 1961, Notebook I (TNMN 961 K1961a), p. 12, 19; Notebook II, p. 221.

Neal and Geraldine Charlie produced the alternate outer subject forms: *ihta'q*, *tr'ihta'q*, and *xe'ihta'q* in the frame '*tth'iku ihta'q ...etc.*' – 'he's not sleeping yet.'

Table 6.14: dh-Imperfective, D-CL, Stative – ethdetlak

Neal and Geraldine Charlie

Negative not elicited; formed by deduction.

Table 6.15: dh-Imperfective, l-CL, Stative – ch'udhatltth'ohn ('listen')

Positive: Isabel Charlie

Negative: Sarah Silas

Table 6.16: dh-Imperfective, l-CL, Stative – edltonh ('sit still in a canoe')

Isabel Charlie

Negative not elicited; formed by deduction

Table 6.17: n-Imperfective, Ø-CL, Active – niko'ikayh ('land by boat')

Positive: Isabel Charlie

Negative: Neal and Geraldine Charlie

Table 6.18: n-Imperfective, D-CL, Active – k'o'ideneyh ('work')

Positive: Isabel Charlie

Source first consulted for data: Siri Tuttle Dissertation 1998, p. 102.

Negative: Sarah Silas, Isabel Charlie, Neal and Geraldine Charlie

Table 6.19: n-Imperfective, l-CL, Active - lanch'edanlkoyh ('sew')

Neal and Geraldine Charlie

Table 6.20: n-Imperfective, l-CL, Active – ch'ek'o'iłniyh ('cook something')

Isabel Charlie

3sO and 3pO negative not elicited; formed by deduction.

Table 6.21: n-Imperfective, l-CL, Active – ek'o'iłniyh ('cook')

Positive: Isabel Charlie

Negative: Neal and Geraldine Charlie

Only 1s and 3s negative attested. Other negative forms by deduction.

Table 6.22: Ø-Perfective, Ø-CL, Active – no'i'onh ('find')

Isabel Charlie

Actual quality of negative enclitic is non-nasalized rising tone /-i/

Kari (p.c.) says -l root-final consonant is from -ł of future, progressive negative.

1s, 2s, 3sO, 3pO positive not elicited; formed by deduction

Table 6.23: Ø-Perfective, D-CL, Stative – ededzak ('dirty')

Isabel Charlie

3p negative regularized to include i-.

Actual negative enclitic is nonnasalized /-i/.

Table 6.24: Ø-Perfective, l-CL, Active – no'iłtanh ('find')

Isabel Charlie

3s, 3p negative not elicited; formed by deduction.

Table 6.25: Ø-Perfective, l-CL – xek'a'ilnik ('find out about, realize')

Isabel Charlie

Table 6.26: gh-Perfective, Ø-CL, Active – ghighon' ('kill/make plural')

Isabel Charlie

Positive: Source first consulted for data: Michael Krauss, Fieldnotes, 1961, Notebook I (TNMN 961 K1961a), p.64.

Checked with Neal and Geraldine Charlie 11/17/05: Stem is low-toned, elicited in relative clause *xwtl ghinghoni nezrunk* – 'the sleds you make are good.'

Negative: *xwtl dhesghonaq* = 'I never made sleds.'

Checked with Neal and Geraldine Charlie 11/17/05: Stem is low-toned, elicited in relative clause *xwtl ghinghoni nezrunk* – 'the sleds you make are good.'

3sO and 3pO not elicited; formed by deduction

Table 6.27: gh-Perfective, Ø-CL, Active – ghi'otl ('eat')

Isabel Charlie

Source first consulted for data: Michael Krauss, Fieldnotes, 1961, Notebook I (TNMN 961 K1961a), p. 32.

Checked with Neal and Geraldine Charlie 11/17/05: Stem is low-toned. Elicited in 2s question: *nenh ju'*, *nelani ghin'otl k'o de' onh?* = 'and you, did you eat meat yesterday?'

3sO and 3p negative not elicited; formed by deduction

Table 6.28: gh-Perfective, Ø-CL, Active – ghitrax ('cry')

Isabel Charlie

Table 6.29: gh-Perfective, Ø-CL, Stative – ghido' ('sit, stay')

Positive: Isabel Charlie

Source first consulted for data: Michael Krauss, Fieldnotes, 1961, Notebook I (TNMN 961 K1961a), p. 19.

Checked with Neal and Geraldine Charlie 11/17/05: Stem tone inconclusive.

Negative: Sarah Silas

Checked with Isabel Charlie 8/8/05.

Table 6.30: gh-Perfective, Ø-CL, Stative – ghita' ('sleep')

Isabel Charlie

Source first consulted for data: Michael Krauss, Fieldnotes, 1961, Notebook I (TNMN 961 K1961a), p. 12, 19; Notebook II, p. 221.

Checked with Neal and Geraldine Charlie 11/17/05: Stem is low-toned.

Plural paradigm here may exist only by overextension during the elicitation process.

Table 6.31: gh-Perfective, D-CL – taghedenik ('tired')

Isabel Charlie

Negative not elicited; formed by deduction.

Table 6.32: gh-Perfective, D-CL, Active – ghedunun' ('drink')

Isabel Charlie

Source first consulted for data: Michael Krauss, Fieldnotes, 1961, Notebook I (TNMN 961 K1961a), p. 31; Notebook II, p. 221.

ghindenun' also possible for 2s, but *ghidenun'* preferred.

Checked with Neal and Geraldine Charlie 11/17/05: Stem is low-toned. Elicited in relative clause: *tsayi ghesdenuni* = 'the tea that I drank.'

3sO and 3pO not elicited; formed by deduction.

Table 6.33: gh-Perfective, l-CL, Active – neghil'an' ('see')

Positive: Isabel Charlie

Source first consulted for data: Michael Krauss, Fieldnotes, 1961, Notebook I (TNMN 961 K1961a), p. 25.

Checked with Neal and Geraldine Charlie 11/17/05: preliminary findings indicate that this stem is low-toned.

Negative: Isabel Charlie, Sarah Silas

Table 6.34: gh-Perfective, l-CL, Stative – xeghiłtats ('plural sleep')

Isabel Charlie

Source first consulted for data: Michael Krauss, Fieldnotes, 1961, Notebook I (TNMN 961 K1961a), p. 12, 19; Notebook II, p. 221.

Negative not elicited; formed by deduction.

Table 6.35: gh-Perfective, l-CL, Active – ch'oldzits ('dance')

Isabel Charlie

Table 6.36: gh-Perfective, l-CL, Active – dolkwth ('cough')

Isabel Charlie

Source first consulted for data: Michael Krauss, Fieldnotes, 1961, Notebook I (TNMN 961 K1961a), p. 29.

Negative not elicited; formed by deduction.

Table 6.37: gh-Perfective, l-CL, Stative – noljit ('afraid')

Sarah Silas, Isabel Charlie

Positive: Checked with Isabel Charlie 7/16/05. 1s and 2p root vowels very definitely /e/ and not /i/. Cf. Kari (1994) where only root entry = jet.

3pO elicited as *yexenoljit*. Regularized to conform to paradigm.

Negative: 3sO and 3pO negative not elicited; formed by deduction.

Table 6.38: dh-Perfective, Ø-CL, Active – nadheyonh ('grow up')

Isabel Charlie

Source first consulted for data: Michael Krauss, Notebook I (TNMN 961 K1961a), p. 19; Notebook II, p. 225.

Actual vowel quality of negative enclitic is /-ě/.

Table 6.39: dh-Perfective, D-CL, Active – k'o thdenik ('work')

Isabel Charlie

Table 6.40: dh-Perfective, l-CL, Active – yedhatlghanh ('kill')

Isabel Charlie

Source first consulted for data: Michael Krauss, Notebook I (TNMN 961 K1961a), p.63.

3s, 3p not elicited; formed by deduction.

Actual vowel quality of negative enclitic is /-ɪ/

Table 6.41: dh-Perfective, l-CL, Active - lanch'edatlkon' ('sew')

Neal and Geraldine Charlie

Positive: 3p elicited as *lanch'edathkon'*; regularized for paradigm.
3s elicited as *lanch'edadlikon'*; regularized for paradigm.

Negative: Negative not elicited; formed by deduction.

Table 6.42: dh-Perfective, l-CL, Active – etltsinh ('make')

Isabel Charlie

Source first consulted for data: James Kari, Ahtna paradigms converted to Lower Tanana, unpublished ms, done in 1994, 1995 with Isabel Charlie and Ellen Frank.

2p *dhwxtsinh* also possible, but *dhwlsinh* preferred.

3sO not elicited; formed by deduction.

Table 6.43: dh-Perfective, l-CL, Active – yenodlenek ('forget')

Isabel Charlie

3pO positive and negative produced as *xeyenodlenek* and *xeyeno'ilnega*.
Regularized to fit paradigm.

Actual vowel quality of negative enclitic is /ɪ-/.

Table 6.44: n-Perfective, Ø-CL, Active – xenidatl ('plural go')

Isabel Charlie

Negative not elicited; formed by deduction.

Table 6.45: n-Perfective, Ø-CL, Active – nikanh ('go by boat')

Isabel Charlie

Table 6.46: n-Perfective, Ø-CL, Active – xeni’ots ('dual go')

Isabel Charlie

Negative not elicited; formed by deduction.

Table 6.47: n-Perfective, Ø-CL, Active – niyo ('arrive')

Isabel Charlie

Positive: Dual positive not elicited; formed by deduction.

Negative: Actual negative enclitic vowel quality is /-i/.

Table 6.48: n-Perfective, D-CL, Active – iduth ('crawl')

Positive: Isabel Charlie

Source first consulted for data: Siri Tuttle Dissertation 1998, p. 103.

Negative: Sarah Silas, Isabel Charlie

Table 6.49: Future, Ø-CL, Active – notodzak ('caulk')

Isabel Charlie

3sO positive and 3p negative not elicited; formed by deduction.

Positive: *xetodzak* = 'whenever'

Negative: Actual negative enclitic is non-nasalized /-i/.

Actual quality of stem-final consonant in the negative paradigm is /gh/.

I am unsure why *no-* does not appear in negative.

Table 6.50: Future, D-CL – tatodenik ('tired')

Isabel Charlie

Positive: 2s elicited as *tatodenik*; regularized to fit paradigm.

3s elicited as *tateghedenik*; regularized to fit paradigm.

Negative: Negative not elicited; formed by deduction.

Table 6.51: Future, D-CL, Active – notodenuł ('drink')

Isabel Charlie

Negative not elicited; formed by deduction.

Table 6.52: Future, l-CL, Active – yetenoł’ił ('see')

Isabel Charlie

3s, 3p, positive not elicited; formed by deduction.

Negative not elicited; formed by deduction.

Table 6.53: Future, l-CL, Active – noyitołtał ('find')

Isabel Charlie

3s, 3p, positive not elicited; formed by deduction.

Negative not elicited; formed by deduction.

Table 6.54: Future, l-CL, Active – ch’etoldzes ('dance')

Isabel Charlie

Table 6.55: Optative, Ø-CL, Active – ghwdzax ('caulk')

Isabel Charlie

The actual quality of the negative enclitic is non-nasalized /-i/.

3s negative and 3p positive not elicited; formed by deduction.

Table 6.56: Optative, Ø-CL, Active – noyighw’ol ('find')

Isabel Charlie

Positive: 2p elicited as *no i’wx’ol*; regularized to fit paradigm. 3s not elicited; formed by deduction.

Negative: Negative not elicited; formed by deduction.

Table 6.57: Optative, D-CL, Active – noghwdenun’ (‘drink’)

Isabel Charlie

Negative not elicited; formed by deduction.

Table 6.58: Optative, l-CL, Active – yenuł’anh (‘see’)

Isabel Charlie

Note, with the areal prefix *xw-*, *tr’exwnul’anh* means ‘we should look at a place.’

3s, 3p not elicited; formed by deduction.

Table 6.59: Optative, l-CL, Active – ch’uldzes (‘dance’)

Isabel Charlie

Table 6.60: Progressive, Ø-CL, Active – ghebał (‘swim’)

Isabel Charlie

Positive: Source first consulted for data: Michael Krauss, Notebook II (TNMN 961 K1961a), p.223.

Negative: Negative not elicited; formed by deduction.

Table 6.61: Progressive, D-CL, Active – noghedekał (‘return by boat’)

Isabel Charlie

Source first consulted for data: James Kari, Ahtna paradigms converted to Lower Tanana, unpublished ms, done in 1994, 1995 with Isabel Charlie and Ellen Frank.

Table 6.62: Progressive, D-CL, Active – gheduth (‘crawl’)

Isabel Charlie

Source first consulted for data: Siri Tuttle Dissertation 1998, p. 104-5.

Listed in Kari (1994) under root -duth.

Earlier session had interchangeable suffixes *-dh* and *-l* for negative. In the most recent session, Isabel Charlie preferred *-dh*.

Table 6.63: Progressive, l-CL, Active – ghełbeth ('drag')

Isabel Charlie

Negative not elicited; formed by deduction.

Table 6.64: Progressive, l-CL, Active – ghełtał ('carry singular object')

Isabel Charlie

The actual vowel quality of the negative enclitic is /-i/.

Table 6.65: Full paradigm – ch'eldzes ('dance')

Isabel Charlie

Table 6.66: Full paradigm – dhedo ('sit, stay')

Imperfective: Isabel Charlie

Source first consulted for data: Michael Krauss, Fieldnotes, 1961, Notebook I (TNMN 961 K1961a), p. 19.

Perfective: Isabel Charlie

Source first consulted for data: Michael Krauss, Fieldnotes, 1961, Notebook I (TNMN 961 K1961a), p. 19.

Checked with Neal and Geraldine Charlie 11/17/05: investigation for stem tone inconclusive.

Future: Isabel Charlie, Ellen Frank

From James Kari, Ahtna paradigms converted to Lower Tanana, unpublished ms, done in 1994, 1995 with Isabel Charlie and Ellen Frank.

3s, 1p, 2p, 3p not elicited; formed by deduction.

Optative: Isabel Charlie, Ellen Frank

Source first consulted for data: James Kari, Ahtna paradigms converted to Lower Tanana, unpublished ms, done in 1994, 1995 with Isabel Charlie and Ellen Frank.

3s, 1p, 2p, 3p not elicited; formed by deduction.

Table 6.67: Full paradigm – ełtsi ('make')

Imperfective: Isabel Charlie

Source first consulted for data: Siri Tuttle Dissertation 1998, pp. 100-101.

Perfective: Isabel Charlie

Source first consulted for data: James Kari, 1994/1995 unpublished ms.

2p *dhwxtsinh* also possible, but *dhwłtsinh* preferred.

3sO not elicited; formed by deduction

Future: Isabel Charlie, Ellen Frank

Source first consulted for data: James Kari, Ahtna paradigms converted to Lower Tanana, unpublished ms, done in 1994, 1995 with Isabel Charlie and Ellen Frank.

3sO and 3p not elicited; formed by deduction.

Optative: Isabel Charlie, Ellen Frank

Source first consulted for data: James Kari, Ahtna paradigms converted to Lower Tanana, unpublished ms, done in 1994, 1995 with Isabel Charlie and Ellen Frank.

3sO and 3p not elicited; formed by deduction.

Table 6.68: Full paradigm – ch'e'ol ('eat')

Isabel Charlie

Future: 1s elicited as *ch'etos'ol*; regularized to fit paradigm. 2s elicited as *ch'eton'ol*; regularized to fit paradigm.

Optative: 2s not elicited; formed by deduction.

Table 6.69: Full paradigm: et'oth ('cut')

Sarah Silas

Imperfective: 3s not elicited; formed by deduction.

Perfective: 3s not elicited; formed by deduction.

Future: 3s not elicited; formed by deduction.

Optative: 3p not elicited; formed by deduction.

Table 6.70: Full paradigm: nil'anah ('see')

Isabel Charlie

Imperfective: According to Kari (p.c.), the *i*- prefix in this paradigm is an unaccountable irregularity.

Source first consulted for data: Michael Krauss, with Teddy Charlie, from Fieldnotes, 1961, Notebook I (TNMN 961 K1961a), p. 25.

2p *nwxl'anah* also possible, but *nwl'anah* preferred.

Perfective: Source first consulted for data: Michael Krauss, Fieldnotes, 1961, Notebook I (TNMN 961 K1961a), p. 25.

Checked with Neal and Geraldine Charlie 11/17/05: preliminary findings indicate that this stem is low-toned.

Future: Note, with areal, can say, e.g. *tr'exwnul'anah* - we should look at a place.

3s, 3p not elicited; formed by deduction.

Optative: 3s, 3p not elicited; formed by deduction.

Table 6.71: Full paradigm – etrex ('cry')

Isabel Charlie

Imperfective: Source first consulted for data: Siri Tuttle Dissertation 1998, pp. 100-101.

Optative: gotten by prohibitive (+ *sru'u*). 3p Optative understood but not used.

1s not elicited; formed by deduction

Table 6.72: Full paradigm – nechwx ('be big')

Sarah Silas

Future: 3s not elicited; formed by deduction.

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