???

Tíməh, the language of Shaygų

M.M.N.H.

A descriptive grammar

Dedicated to my haters

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1 | Introduction

1.1 | External history

The Timah language (t^2 ím \rightarrow h [t^2 ím \rightarrow h]; lit. <u>language, speech</u>) is a constructed language (*conlang*) made by me, Mareck (M.M.N.H.). It may be further classified as an artistic language (*artlang*). Its primary goal is simply to be documented entirely in $\mathbb{E}_{T}X$ (*LaTeX*).

Like most of my constructed languages, it tries to focus balancing between the interesting and the naturalistic, in terms of phonology, grammar, etc. Naturalism, however, is not the primary goal. I have therefore given myself the freedom to take liberties in terms of naturalism.

1.2 | Internal history

The Timah language is spoken by the Khokan people (khokan people (

1.2.1 | People

The Khokan people are a largely matriarchal and polyandrous society. The practice of polyandry, wherein a woman may take multiple spouses, is due to limited land and natural resources.

Large communities (consisting of several family clans governed by a single clan) are on or around the more mountainous island centers, where terrace-farming is practiced. On the flatter shores, there are smaller communities (consisting of only a few family clans with no single governing clan).

TODO expand this

1.2.2 | Place

The Saykung Archipelago consists of five main islands and hundreds of smaller islands surrounding the main islands. The main islands are mainly flat, with mountainous centers and forested areas. TODO expand this

1.2.3 | Beliefs & practices

TODO expand this

1.2.3.1 | Magic

TODO expand this

1.2.4 | Dialects

There are four main dialects of Timah. They are, from northmost to southmost, the *Cliff, Far Lake*, *Near Lake*, and *Shore* dialects. The Near Lake dialect is the prestige dialect, and is the one

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described here. The Far Lake and Shore dialects are fairly similar to the Near Lake dialect; the Cliff dialect is the most divergent.

2.1 | Consonants

	Labial	Alveolar	Palatal	Velar	Glottal	Placeless
Nasal	m	n				N
Plosive		th t t?	t¢ ^h t¢ t¢?	$k^h \; k \; k^?$?	
Fricative		$s^h s s^?$			h	
Approximant	w	1	j			

Figure 2.1: Consonant phonemes

- $/n t^h t t^2 / are dental [n t^h t t^2]^1; /s^h s s^2 l / are alveolar.$
- /tch tc tc²/ are alveolo-palatal; /j/ is palatal.
- /h/ is articulated with true frication of the glottis, i.e., it is not a voiceless glottal approximant.
- /n/ is a nasal coda archiphoneme, i.e., not an uvular nasal².
- The aspirated obstruents $/t^h\ tc^h\ k^h\ s^h/$ may be accompanied by slight breathy-voice on the following vowel.
- The glottalized obstruents $/t^2$ tc^2 k^2 s^2 / are articulated with laryngeal tension, and may be accompanied by slight creaky-voice on the following vowel.

2.1.1 | Consonant allophony

- The nasals /m n/ surface as implosives [6 d] word-initally except in clusters.
- The alveolar nasal /n/ surfaces as palatal [n] before [i] word-medially. The cluster /nj/ surfaces as [n].
- The coda archiphoneme /n/ surfaces as [n n n] before alveolar, (alveolo-)palatal, and velar plosives, respectively. It surfaces as nasalization of the preceding vowel before all other consonants. It surfaces as [n] word-finally after non-back vowels, and as $[\widehat{nm}]$ word-finally after the back vowels /o $\frac{1}{2}$ and before the labio-velars $[\widehat{kp}^2 \widehat{kp} \widehat{kp}^h]$.
- The alveolar plosives /th t t?/ surface as trills [r r r²] before [i]. This does not occur after /n/ nor in clusters.
- The aspirated plosives $/t^h t_c^h k^h / surface$ as fricatives $[\theta \ c \ x]$ before /a/. This does not occur after /n/ nor in clusters.

 $^{^{1}}$ [$n t^{h} t^{2}$] (and, when applicable, their allophones) will be transcribed as [$n t^{h} t^{2}$] (i.e., without the dental bridge diacritic) for aesthetic reasons.

²Yes, I say /ən ¹uvjələ⁄. Deal with it.

The aspirated obstruents /t^h tç^h k^h s^h/ are deäspirated to [t tç k s] intervocalically and after /m n w j N/.

- The tenuis obstruents /t tc k s/ are voiced to [d dz g z] intervocalically and after /m n w j N/.
- The velars $/k^2 k k^h$ surface as labio-velars $[kp^2 kp kp^h]$ before the back vowels /o o/. [kp] is voiced to [gb] and $[kp^h]$ is deaspirated to [kp] intervocalically and after /w j n/.
- The sibilants $/s^h$ s s^2 / are palatalized to $[\varsigma^h \varsigma \varsigma^2]$ before [i]. $[\varsigma]$ is voiced to [z] and $[\varsigma^h]$ is deaspirated to $[\varsigma]$ intervocalically and after /w j N/.
- The labiovelar /w/ surfaces as labiodental [v] before [i].
- The liquid /l/ surfaces as a tap [r] intervocalically and after /w j N/.
- The clusters (see § 2.3.1.1) /hm hn hw hl hj/ surface as voiceless sonorants [m n w-φ l-4 j-ç]⁴. The sonorants also surface as voiceless when clustered with the aspirated plosives /th tch kh/.

2.1.2 | Dialectal variations of consonants

- In some [which?] dialects, the alveolo-palatals /tch tc tcr/ surface as alveolar affricates [tsh ts tsr], true palatals [ch c cr], or non-affricated alveolo-palatals [th t tr].
- In some [which?] dialects, the glottalized plosives /t² tç² k² s²/ surface as ejectives [t' tç' k' (t)s'] or geminates [tt ttç kk ss-tts].
- Depending on dialect [which ones?] and idiolect, the glottal fricative /h/ may variously surface as any of $[x \chi h \tilde{h}]$.
- In some [which?] dialects, the liquid [l] has merged with either /j/ or /n/.
- In the Shore dialect, /w/ surfaces as $[\psi^{\beta}]$, i.e., it has lip compression instead of protrusion.

⁴Although often articulated with varying frication, the voiceless approximants will be transcribed as $[\psi \]$ $[\psi \]$ for aesthetic reasons.

2.2 | Vowels

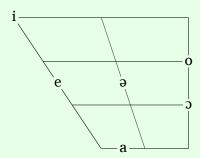


Figure 2.2: Vowel phonemes

- All vowels may occur as long or short (see § 2.3.1)
- All vowels may occur with high tone /\(\delta\), low tone /\(\delta\), or as toneless see § 2.5.
- /e/ is true mid [e]⁴.
- /a/ is near-front [a] (i.e., not central [ä]).

2.2.1 | Vowel allophony

- · All vowels are nasalized before nasal consonants.
- /i/ backs to [i] after the velars /kh k k²/ and before coda [ŋ].
- /a/ fronts to [æ-ε] after the palatals /tç^h tç tç² j/ and before coda /j/.
- /o \mathfrak{d} raise to $[\mathfrak{u}\ \mathfrak{d}]^4$ word-finally in open syllables, after the velars $/k^h$ k k^2 w/, and before coda $[\mathfrak{g}]$.

2.2.2 | Dialectal variations of vowels

- Some [which?] dialects merge the front vowels /i e/ into [i~i].
- Some [which?] dialects merge the central vowels /ə a/ into [a].
- Some [which?] dialects merge the back vowels /o o/ into true mid [o].
- In the Shore dialect, the back vowels /o σ / (and their allophones) surface as $[\gamma^{\beta} \Lambda^{\beta}]$, i.e., they have lip compression instead of protrusion.

 $^{^{4}}$ [e o] will be transcribed as [e o] for aesthetic reasons.

2.3 | Phonotactics

2.3.1 | Syllable structure

$(\#C)CV(T)(V^{5}(T)|G|S)$

 $G = \{?,h\}$ $S = \{n,w,j\}$ $T = \{\acute, \grave{}\}$

Figure 2.3: Syllable structure

2.3.1.1 | Consonant clusters

Only the following consonant clusters (in black) are allowed:

								C_1						
		m	n	t^{h}	t	t?	t¢ ^h	tç	t¢?	\mathbf{k}^{h}	k	k?	?	h
	m	m	n	$t^h m$	tm	t²m	tc^hm	t¢m	t¢²m	$k^{\rm h} m$	km	k²m	?m	hm
	n	m	n	nt^h	nt	nt?	ntc^h	ntç	nt¢?	$k^{\rm h} n$	kn	k^2n	?n	hn
	$\mathbf{t}^{\mathbf{h}}$	mt ^h	nt^h	t^h	t^h	t	t¢ ^h	tc^h	tç	$k^{\rm h}t^{\rm h}$	$k^{\rm h}t^{\rm h}$	kt	t	t^{h}
	t	mt	nt	t^h	t?	t?	t¢ ^h	t¢?	t¢?	$k^{\rm h}t^{\rm h}$	kt	$k^{2}t^{2}$	t?	t^h
	t?	mt²	nt?	t	t?	t?	tç	t¢?	t¢?	kt	$k^{2}t^{2}$	$k^{2}t^{2}$	t?	t
	tc^h	mt¢ ^h	ntc^h	tc^h	$t c^h$	tç	t¢ ^h	tc^h	tç	$k^{\rm h}tc^{\rm h}$	$k^{\rm h}tc^{\rm h}$	kt¢	t¢	tc^h
	t¢	mtç	nt¢	tc^h	t¢?	t¢?	t¢ ^h	t¢?	t¢?	$k^{\rm h}tc^{\rm h}$	kt¢	$k^{2}tc^{2}$	t¢?	tc^h
	t¢?	mt¢?	nt¢?	tç	t¢?	t¢?	tç	t¢?	t¢?	kt¢	$k^{2}tc^{2}$	$k^{2}tc^{2}$	t¢?	tc^h
	\mathbf{k}^{h}	mk ^h	nk^h	$t^{h}k^{h}$	$t^{h}k^{h} \\$	tk	$t c\!\!\!\!/^h k^h$	$t c\!\!\!\!/^h k^h$	t¢k	\mathbf{k}^{h}	\mathbf{k}^{h}	k	k	\mathbf{k}^{h}
C_2	k	mk	nk	$t^{h}k^{h} \\$	tk	t^2k^2	$t c\!\!\!\!/^h k^h$	t¢k	t¢?k?	\mathbf{k}^{h}	\mathbf{k}^{2}	\mathbf{k}^{2}	$\mathbf{k}^{?}$	\mathbf{k}^{h}
	$\mathbf{k}^{?}$	mk [?]	nk?	tk	t^2k^2	$t^{?}k^{?} \\$	t¢k	tc^2k^2	tc^2k^2	k	\mathbf{k}^{2}	\mathbf{k}^{2}	$\mathbf{k}^{?}$	k
	?	?m	?n	t	t?	t?	tç	t¢?	t¢?	k	\mathbf{k}^{2}	\mathbf{k}^{2}	?	h
	S^h	mt ^h	nt^h	t^h	t^h	t	t¢ ^h	t¢ ^h	tç	\mathbf{k}^{h}	\mathbf{k}^{h}	k	S	S^h
	S	mt	nt	t^h	t?	t?	t¢ ^h	t¢?	t¢?	\mathbf{k}^{h}	\mathbf{k}^{2}	\mathbf{k}^{2}	$s^{?}$	S^h
	$s^{?}$	mt²	nt?	t	t?	t?	tç	t¢?	t¢?	k	\mathbf{k}^{2}	\mathbf{k}^{2}	$s^{?}$	S
	h	m	n	t^h	t^h	t	t¢ ^h	t¢ ^h	tç	\mathbf{k}^{h}	\mathbf{k}^{h}	k	?	h
	w	m	nw	t^hw	tw	$t^{2}w$	tc^hw	t¢w	t¢²w	$k^{h}w$	kw	k^2w	?w	hw
	1	ml	n	t^h	t	t?	t¢ ^h	tç	t¢?	$\mathbf{k}^{\mathrm{h}}\mathbf{l}$	kl	k²l	?1	hl
	j	mj	nj	tc^h	tç	t¢?	t¢h	tç	t¢?	t¢ ^h	tç	t¢?	?j	hj

Figure 2.4: Consonant clusters⁶

⁵Long vowel morae must be homorganic in vowel quality, but not necessarily in tone.

⁶Cells are unmerged for the purpose of clarity.

Clusters may only occur word-initially. If a prefix or proclitic is appended to a word that begins with a cluster, the C_1 of the cluster migrates to the beginning of the word. In fig. 2.4, entries in blue denote the result of C_1 -migration (i.e., cluster resolution); i.e., if C_1 forms an illegal cluster after migration, the illegal cluster is resolved by returning the corresponding entry.

2.3.1.2 | Restraints

These phonotactic restraints govern allomorphy.

- The coda nasal /n/ cannot precede a nasal /m n/.
- The coda glottals /? h/ cannot precede another glottal /? h/.
- The coda glottal /h/ cannot precede a sonorant /m n w l j/.
- The glides /w j/ cannot precede another glide /w j/.
- The coda glide /w/ cannot follow /o ɔ/.
- The coda glide /j/ cannot follow /i e/.

In roots, the following coda reductions occur if the former rules are violated. The coda is deleted and lengthens the preceding vowel (if short). It may also apply tone to the long vowel.

$$\begin{array}{ccc}
? & & & & & & \\
h & \rightarrow & & & & & \\
N W J & & & & & \\
\end{array}$$

Figure 2.5: Coda reductions

2.4 | Phonological processes

There are three types of phonological processes: basic, active, and dormant processes.

Basic processes occur on the phonetic level. *Active* processes are highly productive and often morphophonological in nature. In contrast, *dormant* processes only occur in set environments, e.g., certain affixes.

2.4.1 | Basic processes

2.4.1.1 | Stress

Stress placement is phonologically determined and is not phonemic.

Stress occurs on the left-most live syllable, wherein a syllable ending in a sonorant /n w j/ or long vowel are grouped as *live* and those ending in /? h/ are grouped as *dead*.

Open syllables (i.e., syllables with a short vowel and no coda) are superseded by live syllables but take precedence over dead syllables in terms of stress hierarchy.

Clitics are ignored by stress placement.

2.4.1.2 | Degemination

Timah does not allow gemination of consonants, even across word boundaries. When a coda /? h w j/ precede a word with an identical onset, the onset is elided and the coda takes its place. This occurs on the phonetic level.

s²áw wíini /s²áw wíini/ [s²áv ji͡ŋi] some cats

2.4.2 | Active processes

2.4.2.1 | **Vowel harmony**

Timah displays vowel harmony based on tongue root position.

Vowels are divided into two classes: [+ATR] and [-ATR], traditionally grouped as *light* and *heavy* vowels.

Figure 2.6: Vowel harmony

Vowel harmony is very pervasive; within a word, harmony spreads rightward from a stressed vowel until it is terminated.

Vowel harmony is terminated after dead syllables (i.e., syllables ending in /? h/, represented in fig. 2.7 by σ_{\dagger}) and non-harmonizing morphemes, such as clitics.



Figure 2.7: Harmony spread

2.4.2.2 | Obstruent weakening

Initial obstruents in compound words (including verbs with incorporated nouns, *see § 8.6.2*), here represented by $\omega_1\omega_2$, may undergo weakening. If an obstruent is present initially in ω_2 , it undergoes one of the following mutations:

Figure 2.8: Obstruent weakening

2.4.2.3 | Obstruent contraction

Sequences of $P_1^*VP_2^*V$, wherein P^* represents any obstruent and V represents any vowel, the sequence $P_1^*VP_2^*$ is contracted to P_3^* if the following conditions are met:

- non-initial
- P₁*V is unstressed
- after obstruent weakening (see § 2.4.2.2)
- at a morpheme boundary

In fig. 2.9, P^h represents the aspirated obstruents $/t^h$ $t c^h$ k^h s^h h/, P represents the tenuis obstruents /t $t c^h$ t^2 t^2

P_1^*		\mathtt{P}_2^*		P_3^*
P ^h , P		P ^h , P		$P^{\rm h}$
\mathbf{P}^{h}	+	$\mathbf{P}^{?}$	\rightarrow	P
P, P [?]		P, P [?]	,	$\mathbf{P}^{?}$
$P^{?}$		\mathbf{P}^{h}		P

Figure 2.9: Obstruent contraction

The specific place and manner of articulation of P_3^* is dependent on a hierarchy of the obstruents in the positions P_1^* and P_2^* , i.e., obstruents lower in the hierarchy assimilate to those higher in the hierarchy.

$$k^* > tc^* > t^* > s^* > ?, h$$

Figure 2.10: Obstruent hierarchy

If there is a tone associated with the elided vowel, it and all tones left of it are shifted one syllable leftward until a toneless syllable (see § 2.5.3).

 $^{^{7}}$ /?/ is classed as tenuis when it is either P_{1}^{*} or P_{2}^{*} , and as both tenuis and glottalized when it is P_{3}^{*}

2.4.3 | Dormant processes

2.4.3.1 | Nasal harmony

In certain environments, the approximants /w l j/may alternate with the nasals /m n/. This is marked by a subscript n.

Oral		Nasal
w		m
1	\rightarrow	n
j		11

Figure 2.11: Nasal harmony

Nasal harmony is regressive, i.e., it moves right-to-left within a word. Nasal forms are triggered by the nasals /m n N/. Nasal harmony is blocked by the non-glottal obstruents $/t^h$ t t^r t

2.4.3.2 | Palatal harmony

In certain environments, the alveolars $/t^h$ t t^2 l/ may alternate with the palatals $/tc^h$ tc tc^2 j/. This is marked by a subscript y.

$$\begin{array}{ccc}
Alv. & Pal. \\
t^* & & tc^* \\
1 & & i
\end{array}$$

Figure 2.12: Palatal harmony

Palatal harmony is progressive, i.e., it moves left-to-right within a word. Palatal forms are triggered by the palatals $/t c^h t c t^2 j$; alveolar forms are triggered by the alveolars $/n t^h t t^2 s^h s s^2$ l/. Palatal harmony is blocked by the velars $/k^h k k^2$ / and labials /m w/.

2.4.3.3 | Phonation harmony

In certain environments, the non-glottal obstruents $/t^h$ t t^2 t c^h the phonation, i.e., they align in the qualities of being aspirated, tenuis, or glottalized. This is marked by a subscript c^h



Figure 2.13: Phonation harmony

Phonation harmony is progressive. Aspirated forms are triggered by the aspirated obstruents $/t^h t_s^h k^h s^h$; tenuis forms are triggered by tenuis obstruents $/t t_s^h k^h s^h$; glottalized forms are

triggered by the glottalized obstruents $/t^2$ tc^2 k^2 s^2 /. Phonation harmony is blocked by the glottals /2 h/.

2.5 | Tone

Timah has two distinct tonemes: *high* and *low*, as well as the option of being unmarked for tone. Tonally unmarked syllables are phonetically realized identically to the low tone, but unlike low tone, it can be affected by various tonological processes such as *tone mobility* and *tone association*.

2.5.1 | Depression

The high tone / $\acute{}$ surfaces as mid $[\bar{}$] when preceded by another high tone (with no regard to intervening segments). This occurs on the phonetic level.

```
sóósa, mólá, hèló?ló//sóósə, mólá, hèló?ló/
[sóōzè, bórē, hèró?lū]
container, wave/wash, late winter
```

2.5.2 | **Polarity**

Certain affixes (marked as ¬AFFIX) may take the inverse tone of the immediately preceding or following tone-bearing mora (the trigger) under the following conditions:

- if the trigger has a high tone, the target takes a low tone
- if the trigger has a low tone, the target takes a low tone
- otherwise, the target takes its default tone

Tonal inversion applies to the entire affix.

2.5.3 | Mobility

Tones may move from their inherent position to a different surface position.

2.5.3.1 | Leftward tone shift

At the end of a prosodic unit (PU), all tones are shifted one syllable leftward until a toneless syllable, leaving the final syllable toneless. Unlike tone association (*see § 2.5.4*), tone shift is not blocked by dead syllables. This also occurs when a tonic vowel is elided by obstruent contraction (*see § 2.4.2.3*).



Figure 2.14: Leftward tone shift

2.5.3.2 | Rightward tone movement

If the stressed syllable of a word contains a toneless vowel, the nearest tone leftward of the stressed syllable moves to the stressed toneless vowel. If the stressed syllable contains a toneless long vowel, the two nearest tones leftward move to the stressed toneless long vowel.



Figure 2.15: Rightward tone movement

2.5.4 | Tone association

Tone association is the process in which the tone of a given syllable may spread to the preceding toneless syllable under certain circumstances. This applies after tone mobility.

In fig. 2.16, S represents a sonorant /n w j/ and G represents a glottal /? h/.

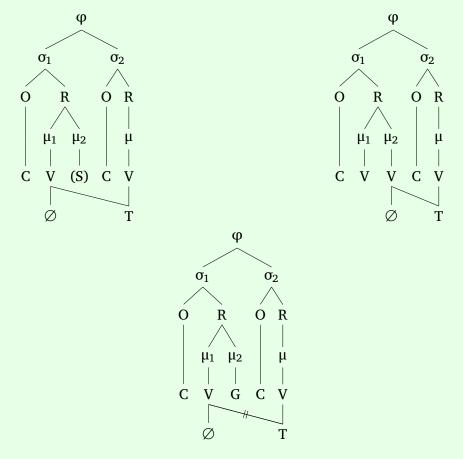


Figure 2.16: Tone association

Floating tones follow similar rules, but associate in the direction in which they moved.

3.1 | Isochrony

Timah is moraically-timed, i.e., the duration of every mora is approximately equal. Nuclei and live codae both count as one mora; onsets and dead codae do not contribute to mora count (*see* § 2.4.1.1).

3.2 | Prosodic hierarchy

Prosodic units can be separated into a hierarchy of sub-units. In fig. 3.1, PU represents a prosodic unit, ϕ represents a prosodic foot, σ represents a syllable, and μ represents a mora. Superscript numbers represent the amount of that to which they are superscripted.

TODO all of this

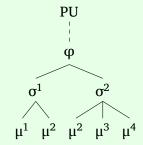


Figure 3.1: Prosodic hierarchy

3.3 | Intonation

TODO all of this

4 | Orthography

The Timah language uses the *Loma* script (hlɔ́ma [lɔ́mà] lit. smooth-word), a defective abugida that was borrowed from a neighboring language Maryu (Timah májlo [bǽjrò]). It was originally written on the large, durable leaves of the s²ə́lə́w ([s²ə́rə́w]) plant, which contributes to the script's curled aesthetic.

TODO native, script, other adaptations; tone markers

4.1 | Other scripts

4.1.1 | Latin

	Labial	Alveolar	Palatal	Velar	Glottal	Placeless
Nasal	(m)	(n)				⟨ृ⟩ ⁹
Plosive		(th d t)	(ch j c)	(kh g k)	$\langle \dot{ m h} \rangle_{ m 9}$	
Fricative		(sh x s)			⟨h⟩	
Approximant	(w)	(1)	(y)			

Figure 4.1: Latin (consonants)

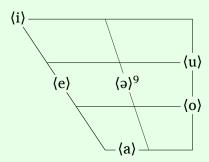


Figure 4.2: Latin (vowels)

Vowels are marked with (\(\delta \) for high tone, (\(\delta \)) for low tone, and unmarked for toneless.

⁹/N ? ə/ may alternatively be romanized as (n 'v), respectively.

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4.1.2 | Tibetan

	Labial	Alveolar	Palatal	Velar	Glottal	Placeless
Nasal	(ম)	(ব)				\langle জঁ $ angle^{10}$
Plosive		(9 5 5)	(ಹ ₹ ₹)	(पि ची गी)	\langle ਧ, ਧ੍ $ angle^{10}$	
Fricative		(₽ ₹ ₹)			$(5, \Im)^{10}$	
Approximant	\langle 떡, 펓 $ angle^{10}$	(∓)	(ષ, ષ્) ¹⁰			

Figure 4.3: Tibetan (consonants)

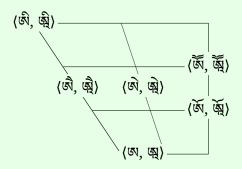


Figure 4.4: Tibetan (vowels)¹⁰

Tone is not marked.

4.1.3 | Mkhedruli

	Labial	Alveolar	Palatal	Velar	Glottal	Placeless
Nasal	(6)	(6)				(°€)
Plosive		(თ დ უ)	(B g &)	(ქგკ)	(g)	
Fricative		(β % Ն)			(8)	
Approximant	(3)	(რ)	(Ω)			

Figure 4.5: Mkhedruli (consonants)

¹⁰(জ) is a filler letter. In slots with two elements, the second element is the coda form for consonants, and the long form for vowels.

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Figure 4.6: Mkhedruli (vowels)

Vowels are marked with (g) for high tone, (g) for low tone, and unmarked for toneless.

4.1.4 | Hacm

	Labial	Alveolar	Palatal	Velar	Glottal	Placeless
Nasal	(a)	(n)				(○ ⁿ)
Plosive		(l ^h α l)	⟨lʰ y l⟩	(lh φl)	(p)	
Fricative		⟨յʰlյ⟩			(h)	
Approximant	(o)	(1)	(s)			

Figure 4.7: Hacm (consonants)



Figure 4.8: Hacm (vowels)

Vowels are marked with (\(\cdot \) for high tone, (\(\cdot \)) for low tone, and unmarked for toneless.

5 | Syntax

5.1 | Sentence structure & word order

The *subject* is the argument that performs the verb. It consists of one or more noun phrase(s).

The (*direct*) *object* is the argument upon which the verb is directly performed. It, like the subject, consists of one or more noun phrase(s).

The *peripheral*, or indirect/oblique object, is the argument upon which the verb is indirectly performed. It is marked with a *postposition* (*see § 7.6*) or *oblique case* (*see § 7.5.2*) and consists of one or more noun or postpositional phrase(s).

The *verb* is the action that is performed within a clause, and is obligatory. It consists of one or more verb phrase(s). Some verbs may not take a subject or object (*see § 8.3*). A verb must agree with its subject and object (*see § 8.6.1*).

Timah is *direct-inverse*, so word order in independent and clausal dependent clauses (*see* § 5.1.1) is largely dependent on an *empathy hierarchy*.

The empathy hierarchy is based on both person (see § 7.4) and integrity (see § 7.2).

$$1^{st} > 2^{nd} > 3^{rd} > Cmplt. \ Anim. > Cmplt. \ Inan. > Ncmplt.$$
 Figure 5.1: Empathy hierarchy

If the arguments of a clause differ in rank in the empathy hierarchy, the higher-ranked argument is always placed first. If the arguments are the same in rank, the most proximate argument is placed first. Otherwise, argument placement defaults to *subject-object-peripheral-verb*.

The empathy hierarchy does not apply to partial dependent clauses (see § 5.1.1) and copular clauses (see § 8.8). Word order is verb-initial head-final in partial dependent clauses and is always subject-copula-attribute in copular clauses, wherein the attribute is what is being associated with the subject of the copular phrase.

Dependents are placed before their head unless noted otherwise.

5.1.1 | Dependent clauses

Dependent clauses are divided into two types, partial and replete dependent clauses. They are introduced by one of three clausal conjunctions (a subset of verbal conjunctions see § 11.1). All dependent clauses are placed before their head and are deranked (see § 8.6).

```
nəj introduces basic dependent clause
ten introduces causal dependent clause
motó introduces consecutive dependent clause
ní introduces restrictive dependent clause
```

Partial dependent clauses consist of both relative and adverbial clauses (i.e., they are not differentiated). They modify a word or phrase and take verb-initial head-final word order, wherein the verb is placed initially and the head of the dependent argument is placed finally, with the

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background argument (i.e., the argument of the dependent clause that is not the head) placed medially. Thus, the word order of a partial dependent clause may be either *verb-object-peripheral-subject* or *verb-subject-peripheral-object*. In the former, the subject is the head; in the latter, the object is the head. Only subjects and objects (i.e., not peripherals) may be relativized, and must take the same role in the relative clause as in the main clause. The *restrictive* clausal conjunction limits that which it modifies.

TODO example sentences

Replete dependent clauses consist of content clauses. Word order is the same as in independent clauses, with mandatory introduction by a clausal conjunction. Colloquially, the clausal conjunction may be dropped in replete dependent clauses.

TODO example sentences

5.2 | Alignment

The morphosyntactic alignment is a type of dually-split-ergative that is dependent of factors of *perfectiveness*, *valency*, and *volition*.

Perfectiveness describes the completeness of the verb (see § 8.6.6), valency describes the number of arguments of the verb (see § 8.3), and volition describes the degree of control or intent concerning the verb (see § 8.4).

The *ergative-absolutive* alignment is used in perfective clauses; the *active-stative* alignment is used in imperfective clauses.

Within imperfective clauses, monovalent may mark the subject as either *agentive* or *patientive*, depending on volition. In volitional clauses, the subject is marked as *agentive*; in non-volitional clauses, the subject is marked as *patientive*.

In fig. 5.2, S represents the subject of a monovalent verb, A represents the subject of a multivalent verb, O represents the object of a multivalent verb.

		Mval.	Mtval.	
Pfv.		S=O=ABS, A=ERG		
Npfv.	Vol.	S=AGT	A=AGT, O=PAT	
	Nvol.	S=PAT	71 7101, 0 1711	

Figure 5.2: Alignment

Timah is secundative, with the *theme* (object that is directed toward the recipient) of a trivalent verb (i.e., a polyvalent verb that takes three arguments, *see* § 8.3) acting as the peripheral and being marked by a postposition (*see* § 7.6), and the recipient acting as the object.

5.3 | Repeat argument dropping

In ergative-absolutive statements, a repeated absolutive argument can be dropped. In active-stative statements, a repeated subject can be dropped. Switching grammatical voice (*see § 8.6.3*) allows the opposing argument to be dropped.

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5.4 | Clitics

What are termed *clitics* are actually *phrasal affixes*, i.e., they are affixes that attach to the initial or final component of their head phrase. These are glossed and referred to as clitics, but may also be considered phrasal affixation or *gruppenflexion*.

6 | Lexical categories & stems

6.1 | Lexical categories

There is largely no lexical noun-verb distinction, i.e., most content words can act either as a noun or as a verb. The exceptions are the closed classes of *nominal limitives*, or true nouns, and *verbal limitives*, or true verbs (*see §§ 7.1 and 8.1*). These are grouped together as *limitives*, and contrast with *formatives*, which consist of content words that can act as either a noun or a verb.

6.2 | Stems

Roots are divided into two stems based on *perspective*, which is the distinction between *concrete* and *abstract*. This distinction functions inversely, i.e., each root is, by default, unmarked as either being concrete or abstract (the *intrinsic* state); marking inverts this (i.e., to the *extrinsic* state). Some formatives may be both concrete and abstract depending on nominal or verbal function. Pronouns and copulae do not alternate stems.

Concrete	tangible, physical, actual, real; CONC
Abstract	intangible, cognitive, conceptual, unreal; ABSTR

Alternation of stems functions derivationally as well as morphologically, i.e., some inflections are dependent on stem alternation.

Perspective is marked by applying the following processes in consecutive order until one succeeds:

- internal metathesis (*see fig. 6.1*); this applies to the first syllable and proceeds rightward until success; C₁ of C₁C₂ initial clusters is ignored (until cluster resolution)
- external metathesis; $[{}_1^{\sigma}C_1...][{}_2^{\sigma}C_2...] \rightarrow [{}_1^{\sigma}C_2...][{}_2^{\sigma}C_1...]$ / #_, i.e., the onsets of the first two syllables are metathesized; this fails if C_1 and C_2 are identical; C_1 cannot be a cluster
- suffixial reduplication of the initial syllable, i.e., $|\neg \sigma_i|$

Cluster resolution and coda reductions (see §§ 2.3.1.1 and 2.3.1.2) apply after these processes.

Intrinsic	Extrinsic
$C\{N^{11},w,j\}V$	$CV\{n,w,j\}$
$CV\{n,w,j\}$	$C\{n,w,j\}V$
$P{h,?}V$	PV{h,?}
PV{h,?}	$\rightarrow \qquad P\{^{\rm h},^{\rm ?}\}V$
$\{m,n\}V\{?,h,w,j\}$	(?,h,w,j}Vn
${7,h,w,j}VN$	$nV{?,h,w,j}$
$\{w,j\}V\{?,h\}$	${?,h}V{w,j}$
${?,h}V{w,j}$	$\{w,j\}V\{?,h\}$

Figure 6.1: Internal metathesis

¹¹The nasals /m n/.

7.1 | Nominal limitives

Nominal limitives consist of a set of content words that cannot be used as verbs. See App. A for a list. Some nominal limitives are used as classifiers in tandem with a numeral (see Ch. 12) to describe a noun.

7.2 | Integrity

Grammatical class, or *integrity*, is divided by compositional integrity, or completeness of the entity. The *complete* class is further divided by animacy. Animacy distinction may not always occur in inflections.

Complete	entity is viewed in its entirety; as sufficient, complete, whole; CMPLT
Animate	living, mobile, warm; more prominent; ANIM
Inanimate	non-living, immobile, cold; less prominent; INAN
Incomplete	entity is viewed partially; as deficient, incomplete, condensed; NCMPLT

Generally, these refer to the compositional integrity within the context of the situation. With concrete stems, integrity refers to physical composition; with abstract stems, it refers to conceptual composition.

7.3 | Probability

Grammatical number is divided not by amount, but *probability*, i.e., if the amount is likely or unlikely to change.

Stable	the amount is not likely to change; STBL
Unstable	the amount is likely to change; NSTBL
Panstable	probability to change is unknown; generally associated with mass nouns; PNSTBL

With concrete stems, probability refers to the likeliness to change within the context of the situation; with abstract stems, it refers to the likeliness to change of the entity in general.

7.4 | Pronouns

Pronouns are a subset of nominal limitives that take the function of another noun or noun phrase.

7.4.1 | Personal

Personal pronouns inflect for person, integrity (in the 3rd person), and case.

Personal pronouns are *absolutely-sequenced* (in contrast to *relatively-sequenced* pronouns, which encode person relative to oneself). That to which a pronoun refers is dependent on the order in which conversation is initiated. 1^{st} refers to the initial speaker(s), 2^{nd} to the initial listener(s), and 3^{rd} to the non-initial participant(s) and/or non-participating referent(s).

While these may overlap with their relatively-sequenced counterparts, this is not always the case. Take the following conversation:

(1) lə kawmeləhmɔ́ɔ ləhamishoh

```
lə kaw- melə -h = mɔ́ɔ lə= ha= 1.AGT CMPLT.INAN.STBL- bread -PAT.CMPLT =REF.VIS.STBL 1.AGT = 3.CMPLT.INAN.PAT= \emptyset- míshoh -\emptyset NPFV.REAL- detest -AV.DIR I detest bread
```

To which the listener might reply:

(2) lətəjá teh

```
lə= təjá teh
1.AGT= REF.REV SURPRISE
you do?!
```

In both cases, the person in (1) is referred to using agreement for 1.AGT ($l \ni = 1$).

			Agt.	Pat.	Erg.	Assoc.	Loc.
1 st			lə	ləhi	ján	s ^h aj	t¢ʰà
2^{nd}			nó	nə	1	nò	nə
	Cmplt.	Anim.	tá?	táhi	tçàn	kéh	té
3 rd	опри	Inan.	h	an	ιφιιν	Kell	
	Ncmplt.		sá	he	1	ΚÍΝ	s²əw

Figure 7.1: Personal pronouns

The *associative* personal pronouns may be used possessively by appending one after the object of possession (i.e., as a suffix). It is sometimes appended as a prefix.

(3) hònshaj

```
hòn -s<sup>h</sup>aj
dog -1.ASSOC
my dog
```

The *animate-inanimate* distinction in 3rd person pronouns may also be used as a *proximate-obviate* distinction. *Proximate* entities are more prominent, while *obviate* entities are less prominent.

TODO expand; example sentences

7.4.2 | Interrogative

Interrogative pronouns inflect for integrity, probability, and *function*. They are used to mark the specific characteristics of a question (*see § 8.6.6.2*).

		Person	Location	Proportion	Manner	Reason
Cmplt.	Anim.	?əsè	k ^h ànaj	silə	sáj	s ^h èh
Стри.	Inan.	tansà	K ond	0110	oaj	5 611
Ncn	ıplt.	?ehi	kéhe	sa?ií	səmɔ́ɔ	s ^h əjna

Figure 7.2: Interrogative pronouns

Person	person, thing; WH.PRSN
Location	place, time; WH.LOC
Proportion	extent, degree; WH.PROP
Manner	way, method; WH.MAN
Reason	reason, rationale; WH.REAS

7.4.3 | Demonstrative

Demonstrative pronouns inflect for number, proximality, laterality, and deictic position. They express spatial and temporal position relative to the speaker.

They may stand independently or be appended as a suffix to that which they modify.

	Ant.		Post.	Prop.	Man	
	Sin.	Dex.	1 000	ттор.	mar.	
Prox.	tàá	kò	тэм	já	wój	
Med.	sáwhe	kàme?	jéhə	jín	kàn	
Dist.	k²itò		jeno	J111	KON	

Figure 7.3: Demonstrative pronouns

Proximal	near the speaker; within short timeframe; PROX
Medial	away from speaker and/or near the listener; within a medial timeframe; MED
Distal	far from all participants; within a distant timeframe; DIST
Anterior	in front of the speaker; associated with the past; ANT
Sinister	to the left of the speaker; associated with volitional events; SIN
Dexter	to the right of the speaker; associated with non-volitional events; DEX
Posterior	behind the speaker; associated with the future; POST

Thus, the deictic space may be modeled as such:

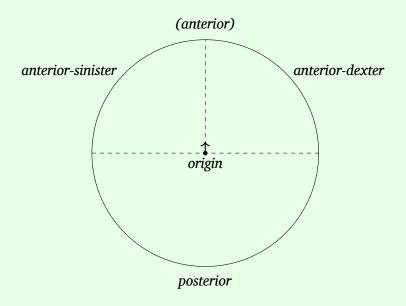


Figure 7.4: Deictic space

The laterally-neutral distal demonstratives $k^2it\hat{a}$ and tekí may be compounded with a medial or proximal sinister demonstrative to form laterally-neutral medial and proximal demonstratives.

(4) tàák²itò
tàá- k²itò
DEM.ANT.SIN.PROX- DEM.ANT.DIST
this (in front of)

7.5 | Nominal inflections



Figure 7.5: Nominal inflection template

7.5.1 | Noun classes

Noun classes are separated into the groups complete and incomplete, which are associated with semantic wholeness or entirety of the noun (see § 7.2).

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	(C mplt.	Ncmplt.	
	Anim.	Inan.	1ventpte.	
Stbl.	Ø-	kaw _p -, kɔ _p -		
Nstbl.	tə-	jé-	wí _n -	
Pnstbl.	na(N)-	Ø-		

Figure 7.6: Noun classes

7.5.2 | Cases

Case expresses syntactic roles and relations. *Open* forms are appended to words that end in an open syllable (i.e., a vowel); *closed* forms are appended to words that end in a closed syllable (i.e., a non-vowel coda).

	Cmplt. Ncmplt.		Cmplt. Ncmplt.
Agt.	-∅ (ć)-n	Agt.	-Ø -né
Pat.	-h	Pat.	-si
Erg.	-? -h	Erg.	-ki -ho
Assoc.	-w	Assoc.	-wə
Loc.	¬t¢ó _y	Loc.	¬t¢ó _y
	(a) Open		(b) Closed

Figure 7.7: Cases

Agentive	In active-stative clauses (see § 5.2), this marks the subject of a multivalent verb (see § 8.3) or the subject of a volitional monovalent verb. In ergative-absolutive clauses, this marks the object of a multivalent verb or the subject of a monovalent verb; AGT
Patientive	In active-stative clauses, this marks the object of a multivalent verb or the subject of a non-volitional monovalent verb; PAT
Ergative	In ergative-absolutive clauses, this marks the subject of a multivalent verb. This can also be used as an inalienable genitive; ERG
Associative	This marks genitive and genitive-like relations, which can be further clarified using postpositions; ASSOC
Locative	This marks physical and/or temporal location and movement that can be further clarified using postpositions; LOC

The associative and locative cases, collectively called *peripheral cases*, may be accompanied by a postposition (see § 7.6). In isolation, the associative takes the meaning of an alienable genitive

(in contrast to the ergative, which may have an inalienable genitive meaning) and the locative takes on the meaning of a general locative or temporal (i.e., marking place or time).

TODO example sentences

7.5.3 | Article enclitics

Article enclitics inflect for referentiality, visibility, and probability. They attach as enclitics to the final element of their head phrase.

	Ref.		Nref.	
	Vis.	Nvis.	Vis.	Nvis.
Stbl.	=mɔ́ɔ	=han	= Ø	=t ² é?
Nstbl.	=mé		=t ¢áá	
Pnstbl.	= já		$=\mathbf{k}^{h}$	

Figure 7.8: Article enclitics

Referentiality

Referential	a specific instance of the class comprised of the given entity; REF
Non-referential	any instance of the class comprised of the given entity; NREF

Visibility

Visible	entity can be seen; VIS
Non-visible	entity cannot be seen; NVIS

7.6 | Postpositions

There two types of *postpositions*: those of *association* and those of *location*. These types are directly related to the *associative* and *locative* noun cases, as the postpositional peripheral must take the respective case of its postposition.

Associative

```
lí accompaniment/use; basic theme of trivalent verb; with k²e lack of accompaniment/use; negatory theme of trivalent verb; without intent of benefit/purpose; beneficial/purposive theme of trivalent verb; for sì intent of reference/relation; for tçé state of being; as khò change of state; causation; to míh similarity/comparison; like
```

Locative

```
tí
        movement toward; toward
   k<sup>h</sup>ì
        movement away from; from
   mí
        movement onto; onto
  tçàa
        movement under; under
 t<sup>h</sup>ìsé
        movement into; into
 sii?i
         movement out of; out
kan?ɔ
         movement through, by way of, adjacent to; via
 so?a
         in front of/before, below; before
 sàkə
        behind/after, above; after
        between, amidst, within; between
see?á
 sət<sup>h</sup>e
        surrounding, around, encompassing; around
```

7.7 | Noun reduplication

Many nouns (including pronouns) may be fully reduplicated and attached to their root (i.e., $|-\omega|$) to indicate plurality or intensity. Reduplication to mark plurality is never used when a numeral is used to quantify the root noun.

tçò?i ~tçò?i person ~person

people

In some nouns, full reduplication may also be used to derive mass nouns.

(7) hòn

hòn

dog

a dog

(8) hònhòn

hòn ~hòn

dog ~dog

a pack of dogs

Plural reduplication may be used in tandem with integrity (see § 7.2) in order to quantify the arguments of a verb. Marking an argument as both plural and complete indicates that all participants performed the action together; marking an argument as both plural and incomplete indicates that each of the participants performed the action separately.

(9) ketehketeh télajkála

 \emptyset - ketch -ketch - \emptyset tó= laj- kála - \emptyset CMPLT.ANIM.STBL- child -child -AGT.CMPLT 3.CMPLT.ANIM.AGT= PFV.REAL- fish -AV the children all went fishing (collectively)

(10) wíketehketehné sálajkála

wí- keteh -keteh -né sá = laj- kála - Ø NCMPLT- child -child -AGT.NCMPLT 3.NCMPLT.AGT = PFV.REAL- fish -AV the children each went fishing (individually)

8.1 | Verbal limitives

Verbal limitives consist of a set of content words that cannot be used as nouns. See App. B for a list. Some verbal limitives can be used in tandem with other verbs to form *serial verb constructions* (see \S 8.7).

8.2 | Verbal negation

Verbs are negated by appending a negatory particle (*see § 11.3*) before the negated verb. The verb must be in an *irrealis* mode (*see § 8.6.6*). As negatory (as well as affirmatory) particles inherently indicate evidentiality, the corresponding epistemic modality (*see § 8.6.6.1*) is dropped (if present).

```
(11) ləlajkála
```

```
lə= laj- kála -∅
1.AGT= PFV.REAL- fish -AV
I went fishing
```

(12) ləkəj hajkala

```
lə= kəj haj- kála -∅
1.AGT= NEG.BAS PFV.IRR- fish -AV
I did not go fishing
```

8.3 | Valency classes

There are five main valency classes: avalent, monovalent, ambivalent, subvalent, and polyvalent.

```
Avalent zero arguments; AVAL

Monovalent zero or one arguments; MVAL

Ambivalent one or two arguments; BVAL

Subvalent one or two arguments, see § 8.3.1; SVAL

Polyvalent two or more arguments; PVAL
```

Ambivalent and polyvalent verbs that take exactly two arguments are grouped as *divalent* (DVAL), polyvalent verbs that take exactly three arguments are grouped as *trivalent* (TVAL), and ambivalent and polyvalent verbs that take two or more arguments are grouped as *multivalent* (MTVAL). These terms (*divalent*, *trivalent*, *multivalent*) are used only in analysis and metagrouping.

Essential and existential copulae ($see \S 8.8$) are considered monovalent, while referential copulae are considered ambivalent.

8.3.1 | Subvalency & salience

Some verbs are classed as *subvalent*. Although these verbs may take up to two arguments, the argument that would prototypically be the object is demoted to the peripheral argument, called the *subvalent peripheral* (The subject behaves as normal). This demotion is motivated by the property of *salience*, or how much the object is affected by the subject. Verbs with less salient objects tend to be subvalent.

The subvalent peripheral is put in the locative case (see § 7.5.2) and takes the postposition tí (see § 7.6). When negated, the postposition s^h ì is used instead. There is no verbal agreement for the subvalent peripheral.

Colloquially, the subvalent peripheral may be treated as the object (i.e., as if the verb *were not* subvalent) to express that it *was* strongly affected. Inversely, the object of an ambivalent verb may be treated as the subvalent peripheral (i.e., as if the verb *were* subvalent) to express that it *was not* strongly affected.

```
(13) *lə tçò?ihmóɔ lətéhkʰajtè
```

```
*lə \oslash- tçà?i -h = máɔ lə= *1.AGT CMPLT.ANIM.STBL- person -CMPLT.PAT = REF.VIS.STBL 1.AGT = téh = \oslash- k<sup>h</sup>ajtè -\oslash 3.CMPLT.ANIM.PAT = NPFV.REAL- see -AV
```

*I see the person (colloq. and the person was affected)

(14) lə tçò?itçó tímóɔ ləkʰajtè

```
lə \varnothing- tçò?i -tçó tí =mɔ́ɔ lə= \varnothing-1.AGT CMPLT.ANIM.STBL- person -CMPLT.LOC toward =REF.VIS.STBL 1.AGT= NPFV.REAL-khajtè -\varnothing see -AV I see (toward) the person
```

8.4 | Volitional classes

Verbs are inherently classed as either *volitional* or *non-volitional*. These classes determine the case of the subject in monovalent verbs in active-stative-aligned clauses. They denote inherent intent of the agent, regardless of the situational intent. They directly affect alignment ($see \S 5.2$).

```
Volitional denotes an action that is intentionally performed; VOL

Non-volitional denotes an action that is unintentionally performed; NVOL
```

8.5 | Verbal reduplication

Reduplication is more prominent in verbs than in nouns. Full reduplication of the root may be used to indicate greater intensity, but partial reduplication is used in verbal paradigms.

```
TODO example sentences
```

 $|\sigma_{i^{\sim}}|$ indicates prefixial reduplication of the initial syllable, and $|\sigma_{f}|$ indicates suffixial reduplication of the final syllable.

8.6 | Verbal inflection

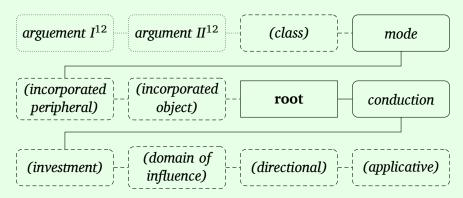


Figure 8.1: Verbal inflection template

In dependent clauses, verbs are deranked—they take a more limited inflection template.



Figure 8.2: Deranked inflection template

Copulae also take more limited inflection.



Figure 8.3: Copular inflection template

8.6.1 | Pronominal proclitics

Pronominal proclitics are obligatorily appended to verb phrases and must agree with their respective argument. Pronouns are dropped when pronominal proclitics are present.

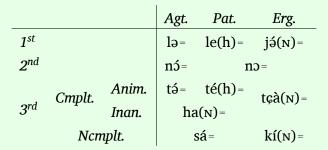


Figure 8.4: Pronominal proclitics

 $^{^{12}}$ The placement of arguments in the argument slots (which may convey subject or object) is dependent on the empathy hierarchy (*see § 5.2*). Additionally, pronominal proclitics are optional when the corresponding argument is not present.

Additionally, there is a set of pronominal proclitics that fuse 1st and 2nd person arguments, as well as a set that fuses 3rd person arguments. In fig. 8.5, AGT>PAT and ERG>AGT.

		Agt.		
		1 st	2^{nd}	
Pat.	1 st	×	náà=	
	2^{nd}	lo(n)=	×	
Erg.	1 st	×	jáw=, jú=	
Lig.	2^{nd}	naa=	×	
(a) $1^{st} \& 2^{nd}$				

		Agt.			
		Стр	Ncmplt.		
		Anim. Inan.		rompta	
Pat.	Cmplt.	t²éè=	haa=	×	
rut.	Ncmplt.	s²áá=	$s^ha=$	sáhə=	
Erg.	Cmplt.	t¢ànté=	t¢àà=	tçàná=	
Li g.	Ncmplt.	×		t¢àkí(n)=	
	(b) 3 rd				

Figure 8.5: Polypersonal pronominal proclitics

8.6.2 | Noun incorporation

In certain verbs, object and peripheral nouns may be *incorporated*, or attached, onto the verb. The incorporated noun may be phonologically reduced or even undergo suppletion. Incorporated nouns are not inflected and are never in focus.

Incorporation may perform one of three functions:

- · semantically-reductive derivation
- allow a more prominent argument to take its (previous) role
- background known or unimportant information

TODO example sentences

8.6.3 | Conduction

The property of *conduction* expresses both *voice* and *bias*. Voices are symmetric, i.e., they do not alter the valency of the verb, only the arguments' roles. *Bias* describes the arguments' roles in relation to their rank in the empathy hierarchy (*see § 5.2*).

$$\begin{array}{c|ccccc} \textit{Dir.} & \textit{Inv.} & & & & \textit{Dir.} & \textit{Inv.} \\ \hline \textit{AV} & -\varnothing & -j & & & \textit{AV} & -\varnothing & -ji \\ \hline \textit{UV} & \acute{\circ} -? & \neg t \mathring{\varsigma} \grave{e}_p & & & \textit{UV} & -t \acute{a} & \neg t \mathring{\varsigma} \grave{e}_p \\ \hline \textit{CV} & \acute{\circ} - \text{Nt} \grave{e} & & & \textit{CV} & - \text{m} \acute{\sigma}_n t \grave{e} \\ \hline \textit{(a) Open} & & & \textit{(b) Closed} \\ \hline \end{array}$$

Figure 8.6: Conduction

Voice

Actor voice	the subject is the agent, the object is the patient; AV
Undergoer voice	the subject is the patient, the object is the agent; UV
Correlative voice	the agent/patient distinction of the subject (and object) is reduced; CV

Bias

The *correlative* voice is often used for reflexive constructs, but can also be used for reciprocal constructs.

TODO explain

(15) ləmólámótè

lə=
$$\emptyset$$
- mólá -mótè
1.AGT= NPFV.REAL- wash -CV
I wash myself

(16) lələmólámótè

$$l \ni = l \ni = \emptyset$$
- mólá -mótè
1.AGT = 1.AGT = NPFV.REAL- wash -CV
we wash ourselves

(17) ləlemólámótè

8.6.4 | Investment

The property of *investment* expresses interest or sympathy of the subject toward the event, e.g., give (uninvested) vs. loan (invested) (uninvested is the default, unmarked state). With concrete

stems, investment indicates an interest in the result of the action; with abstract stems, it indicates an interest in the action itself.

```
-n, -né weakly invested; WK.INVST
-tçà moderately invested; INVST
¬mán strongly invested; STR.INVST
```

8.6.5 | Domain of influence

Domain of influence describes the area in which the object is able to be affected by the subject. With certain verbs this is fairly straightforward, e.g., sensory verbs—the domain of influence describes the area in which the subject can sense the object.

Verbs inflect for the presence of the object inside or outside the domain of influence of the subject.

```
\acute{}-N, -n\acute{}a? inside the domain of influence; \inDOI -1\acute{}3\acute{}n outside the domain of influence; \notinDOI
```

Only multivalent verbs in either the actor or undergoer voices may be marked for domain of influence, i.e., avalent and monovalent verbs.

When verbs in which the object is understood to be inherently inside or outside the domain of influence take domain of influence marking, it indicates the success or failure of the verb.

(18) jón hònmóo jóntálaj?análóò

```
jśn Ø- hòn -Ø =mśɔ jśn= té=

1.ERG CMPLT.ANIM.STBL- dog -CMPLT.AGT =REF.VIS.STBL 1.ERG= 3.CMPLT.ANIM.AGT=
laj- ?aná -Ø -lóò

PFV.REAL- hit -AV -∉DOI

I (tried to) hit the dog (and failed)
```

In abstract stems, the domain of influence instead describes the perceived attainability of the object (i.e., the subjective probability of it being able to enter the domain of influence).

```
(19) lə hònsi lətéhənán
```

```
lə \varnothing- hòn -si = \varnothing lə= té= 1.AGT CMPLT.ANIM.STBL- dog -CMPLT.PAT =NREF.VIS.STBL 1.AGT= 3.CMPLT.ANIM.PAT= hɔnɔ́ -\varnothing -N want -AV -\inDOI I want a dog (and believe this to be attainable)
```

(20) la hònsi latéhanáláa

```
lə \varnothing- hòn -si = \varnothing lə= té= 1.AGT CMPLT.ANIM.STBL- dog -CMPLT.PAT =NREF.VIS.STBL 1.AGT= 3.CMPLT.ANIM.PAT= hɔnɔ́ -\varnothing -lɔ́ɔ̀ want -AV -\notinDOI
```

I want a dog (and believe this to be unattainable)

8.6.6 | Modals

Mode (which expresses both *mood* and *aspect*) are obligatorily marked on a verb using prefixes. All moods (expressive, basic, and epistemic) are collectively called *modals*.

	Imperfective	Habitual	Perfective	Experiential	Iterative
Realis	Ø-	ka(?) _p -	laj-, le-	jíhi-	σ_{i} ka(?) _p -
Affirmative	\sim $\sigma_{ m f}$	$k^{?}a_{p}\text{-}\sqrt{\sim}\sigma_{f}$	laj- $\sqrt{\sigma_f}$, le- $\sqrt{\sigma_f}$	$j\mathbf{\hat{n}}\text{-}\!\sqrt{\sim}\sigma_f$	$\sigma_i{^\sim}k^{?}a_p\text{-}\sqrt{^\sim}\sigma_f$
Irrealis	tɔ(?)-	tew _y -, tə _y -	haj-, he-	já-	σ_{i} -tew _v -, σ_{i} -tə _v -
Conditional	?o	¬	né(h)-	Ju	of tewy, of toy
Hypothetical	tàj-,	tè-	kʰà-		σ _i ~tàj-, σ _i ~tè-

Figure 8.7: Mode

The realis and affirmative moods, and epistemic modals are classed as realis; the irrealis, conditional, and hypothetical moods, and expressive modals are classed as irrealis.

With realis modals, concrete stems are prototypically used; with irrealis modals, abstract stems are prototypically used. This trend may be superseded by other perspective-dependent distinctions.

Mood

Realis	event is known to be real; REAL
Affirmative	event is emphasized as being real; AFF
Irrealis	event is unknown or unreal; IRR
Conditional	event is dependent upon other events; COND
Hypothetical	event is unknown or unreal, but possible; HYP

Aspect

Imperfective	event is incomplete; NPFV
Habitual	event is repeated within multiple timeframes; HAB
Perfective	event is complete; PFV
Experiential	event is experienced; EXP
Iterative	event is repeated within a single timeframe; ITER

8.6.6.1 | Epistemic modals

Epistemic modals express the subject's forms of knowing. Epistemic markers are placed before their head, and may be stacked. They are classed as *realis*.

TODO example sentences

$k^h e k^h i$	Witness; direct sensory witness, i.e., sight, sound, touch; WIT
sésən	Evidential; indirect sensory witness, i.e., smell, taste, indirect sight, sound; EVID
tonke	Anecdotal; knows of event via prior experience(s); ANEC
móho	Reportative; non-firsthand knowledge, i.e., from another source; REP
?in	Assimilative; knowledge is a firmly integrated part of one's perception; ASSM
mìwe	Acquirative; knowledge is newly acquired; may express surprise and/or doubt; ACQ
?aj	Quotative; marks quoted speech, dialogue; QUOT

8.6.6.2 | Expressive modals

There are five moods that are independent from basic moods. These are called *expressive moods*, and are placed at the beginning of a clause. They are classed as *irrealis*.

TODO example sentences

```
tç5 Imperative; commands, wishes, desires; IMP
sha Interrogative; questions, requests; INT
təj Polar; yes/no questions; tag questions; POL
kì Precative; polite requests and commands; PREC
t²5N Suggestive; suggestions, admonitions, warnings; SUG
```

The *interrogative* marker $s^h a$ may be used in tandem with an interrogative pronoun (see § 7.4.2).

8.6.6.3 | Conditionals

Conditionals are formed by using a statement in the conditional mood (the *consequence*) in tandem with a statement in another mood (the *condition*). The statements are always separated by a conjunction (see § 8.6). They may occur in either order (i.e., *condition-consequence* or *consequence condition*), but *condition-consequence* is the most common order.

```
Implicative REAL + ten; basic factual conditional

Emphatic AFF + ten; the consequence is emphasized

Counterfactual IRR + motó; the condition is considered unlikely

Predictive HYP + motó; the condition is considered likely
```

8.6.7 | Directional specifiers & applicatives

The *venitive* and *andative* suffixes, collectively called *directional specifiers*, are commonly used with verbs of movement, such as wé move, walk, shoj carry, give/take, and others.

TODO example sentences

```
-tí Venitive; motion toward, with; VEN
-shì Andative; motion away from, against; AND
```

Applicatives are argument-affecting operations that switch the syntactic position of the peripheral with that of the object. They are formed by appending an applicative suffix after the verb, which can be used in tandem with a directional specifier in order to express direction or efficiency.

TODO example sentences

```
-lí Relational; accompaniment; REL
-khòn Beneficial; intent of benefit/purpose or reference/relation; BEN
-t²ɔ? Causal; causation, final causation; CAUS
-mîi Complemental; similarity/comparison, state of being; COMP
-tçòy Locational; physical or temporal location and movement; LOCL
```

The applicatives -lí and - k^h òn may be used to invert the secundative construction (see § 5.1), making it indirective. This allows the theme to be relativized (see § 5.1.1).

Further specifications can be made by supplementing the applicative suffix with a postposition (*see § 7.6*) placed after the object.

8.6.8 | Verbal classifiers

Verbal classifiers are used with certain verbs to describe characteristics of the object. They are often used with verbs of handling.

TODO example sentences

kɔj-, ka-	Handled; entity is used with one's hand; HND
?i-	Standing; entity is taller than it is wide; STA
maa _n -	Sitting; entity is as tall as it is wide; SIT
t¢è-	Lying ; entity is wider than it is tall; LNG
sàj-, sè-	Hollow ; entity is hollow; HOL
k²áj-, k²í-	Generic; unspecified category; GEN

8.7 | Serial verb constructions

A *serial verb construction* (SVC) is a verb phrase that contains two or more verbs that, within a clause, share one or more arguments. They may be *continuous* or *discontinuous*. *Continuous* SVCs obligatorily share the same subject and object, while *discontinuous* SVCs only obligatorily share the same subject (i.e they may take different objects). The constituent verbs are prototypically placed directly adjacent to each other, but may occur separated by another element.

TODO expand on specific SVCs

8.7.1 | Perceptive

Perceptive SVCs are always discontinuous, and express sensory interactions.

8.7.2 | Capacitive

Capacitive SVCs are always continuous, and express ability, attitude, or causality.

8.8 | Copulae

Timah copulae are a subset of verbal limitives that are used to connect arguments.

Copulae only inflect for person and mode (*see §§ 8.6.1 and 8.6.6*). The constituent arguments within a copular phrase (i.e., the subject and attribute) both take the (unmarked) agentive case (the attribute agrees as the object in copular person agreement).

Copulae are divided into three classes: *essential* (ESSNT), *existential* (EXIST), and *referential* (REF). These are further divided into the subclasses *assertive* (ASSRT), *negative* (NEG), and *revelatory* (REV).

As noted in § 5.1, all copular phrases have *subject-copula-attribute* word order. Essential and existential copulae are monovalent, although pronominal proclitics agree identically as in multivalent verbs (i.e., the attribute is treated as the object in terms of agreement). Referential copulae are considered ambivalent.

	Essential	Existential	Referential
Assertive	kew	nén	t ^h èh
Negatory	klé	níjé	t ^h àné
Revelatory	?owó		təjə́

Figure 8.8: Copulae

The essential copulae express nominal predication (be). The existential copulae express locational, existential, and possessive predication (be at, have). The location of existential copulae take the locative case; the verb does not agree for location (i.e., it is considered a peripheral).

The referential copulae, while traditionally classed as such due to how they pattern, do not act like the other two classes of copula. They are considered ambivalent, and may either refer to the inherent action of the subject or, if present, to the directly preceding verb (\underline{do}), but cannot refer to preceding copulae. Additionally, they may be used to form verbs from nouns (e.g., \underline{do} X); they pattern as normal divalent verbs in this situation with regard to word order, case marking, and inflection template.

TODO example sentences

The assertive subclass expresses the basic form of the copula. The negatory subclass negates the copula. The revelatory subclass expresses surprise, doubt, and/or interest, and suppletes the assertive form of a copula when any irrealis modal is present (see §§ 8.6.6, 8.6.6.1 and 8.6.6.2).

8.9 | Asymmetric copular construction

The *asymmetric copular contruction* expresses inequality between the subject and attribute, i.e., wherein one argument is a subset or superset of the other. It may only be formed using an essential copula and the following rules:

- the superset argument must be in the *incomplete* integrity (see § 7.2)
- the subset argument must be in the *complete* integrity

TODO example sentence

9 | Descriptives

There are twelve descriptives, which function as adjectives or adverbs, or independently as formatives. They are placed before their head. All descriptives may be fully reduplicated to indicate greater intensity.

t¢ ^h àné	good, positive; full
sìnkà	bad, negative; empty
semó?	fast; loud; hard, rough
hló	slow; quiet; soft, smooth
$k^h a k^2 a$	big, strong; many
t¢ ^h i	small, weak; few
SON	short, wide; feminine
?in	long, narrow; masculine
t¢ós ^h a	white, light; fresh, new
káj	warm (color); hot, dry
sàt¢e	cool (color); cold, wet
t ^h awsá	black, dark; stale, old

Order of descriptives is as listed from top to bottom, i.e., quality-agility-capacity-length-color.

9.1 | Dyadic color terms

In addition to the four main color terms, there exists a set of terms that describe the transition from one color to another, called *dyadic color terms*.

		A			
		white	warm	cool	black
	white	×	két¢óh	sòt¢²áh	s ^h át¢ ^h á
Ω	warm	t¢ókʰáj	×	sòk²áj	sáké
	cool	tçósè	két¢²è	×	t ^h ósòh
	black	t¢át ^h á	két¢á	sàt¢ʰéw	×

Figure 9.1: Dyadic color terms

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9.2 | Comparison

Comparative constructions are formed by appending a postposition after the descriptive in a copular clause. The placement of the *recipient* of comparison is dependent on the empathy hierarchy (see § 5.1).

```
shì positive comparison
míh equative comparison
tí negative comparison
```

(21) ketehmóp tçò?itçó shìmóp tékew tçósha

```
\oslash- keteh -\oslash = m50 \oslash- tç3?i
ANIM.STBL.CMPLT- child -AGT.CMPLT = REF.VIS.SG ANIM.STBL.CMPLT- person -tçó s<sup>h</sup>ì = m50 t5= kew tçós<sup>h</sup>a -LOC.CMPLT from = REF.VIS.SG 3.CMPLT.ANIM.AGT = COP.ESSNT.ASSRT new the child is younger than the man
```

Superlative constructions are formed by placing a quantifier (prototypically ní all, every, see § 11.4) before the recipient, or using it in place of the recipient. Excessive constructions are formed by omitting the recipient entirely.

```
(22) ketehmóɔ séè (tçòʔitçó) s<sup>h</sup>ì(móɔ) tékew tçós<sup>h</sup>a
```

```
\oslash- keteh -\oslash = m50 séè (\oslash- tçò?i ANIM.STBL.CMPLT- child -AGT.CMPLT =REF.VIS.SG all (ANIM.STBL.CMPLT- person -tçó) s<sup>h</sup>ì = (m50) tó= kew tçós<sup>h</sup>a -LOC.CMPLT) from = (REF.VIS.SG) 3.CMPLT.ANIM.AGT = COP.ESSNT.ASSRT new the child is the youngest of all (men)
```

(23) ketehmóo shì tókew tcósha

```
\oslash- keteh -\oslash = m50 s<sup>h</sup>ì t5=
ANIM.STBL.CMPLT- child -AGT.CMPLT = REF.VIS.SG from 3.CMPLT.ANIM.AGT= kew tçós<sup>h</sup>a
COP.ESSNT.ASSRT new the child is very/too young
```

10 | Word formation

Word formation is achieved through the processes of derivation and compounding.

10.1 | Derivation

Derivation is possible by appending a descriptive onto a noun or verb as a prefix. Additionally, there exists a small closed class of various derivational affixes, as well as specific processes that utilize sound symbolism.

Prefixes		Suffixes	
tòj-, tò-	opposite, reverse	-t¢²á	attempt, try
t¢ ^h à(?)-	person, profession	-tàj _y	product, result
lə(h)-(ဴ)	place; time	(´)-sɔ́h	container, captivity, portation
kósó _p -	homorganic group/mass	-k²ə́?	tool, instrument
$k^h e_p$ -	heterorganic group/mass	(`)-s²00	abstraction, mass
t¢á(n)-(`)	prevent, stop, interrupt	-tçáh	animals, inedible plants
sáj-, sé-	pretend, mimic, falsify	-jə́h _n	edible plants, food
sóo-	cause, source	-k²ée	pejorative, derogatory
?ikà-	expected accompaniment		

10.1.1 | Sound symbolism

Sound symbolism can also be used as a means of derivation, using processes of alteration.

Magnitude is associated with the process of *strength alteration*, wherein certain consonants are classed as either *strong* or *weak*. Strong forms are associated with greater magnitude, while weak forms are associated with lesser magnitude.

Strong		Weak
t*	\leftrightarrow	s*
t¢*	\rightarrow	Ü
k*	\leftrightarrow	t¢*
?	\leftrightarrow	h

Figure 10.2: Magnitude

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Movement is associated with the process of *nasal alteration*, wherein certain consonants are classed as either *oral* or *nasal*. Oral forms are associated with slower movement, while nasal forms are associated with faster movement.

Oral		Nasal
w	\leftrightarrow	m
1	\leftrightarrow	n
j	\rightarrow	11
-w, -j ¹³	\rightarrow	-N ¹³
<u>್</u>	\leftarrow	-1 N

Figure 10.3: Movement

10.2 | Compounding

Compounding is divided into coördinating and subordinating compounding.

10.2.1 | Coördinating

In coördinating compounds, the elements are equal and may be in any order. These are formed by appending one word onto another.

TODO example

10.2.2 | Subordinating

In subordinating compounds, elements are order-dependent; each element is a subset of the following element. These are formed by appending the reduced form (if one exists) of a word before the word by which it is subordinated.

TODO example

 $^{^{13}}$ These are the coda phonemes /w j N/.

11 | Function words

11.1 | Conjunctions

The two groups of conjunctions are *nominal* and *verbal*. *Nominal* conjunctions connect nouns, noun phrases, and descriptives; *verbal* conjunctions connect verbs and verb phrases, and can be used to introduce clauses.

Nominal

```
ní presents non-contrast; NCNTRST.NML

?ika presents contrast; CNTRST.NML

teh presents alternative; ALTRN.NML
```

Verbal

```
nəj presents non-contrast; introduces basic (dependent) clause; NCNTRST.VRBL

ten presents rationale, causality; introduces causal (dependent) clause; RATNL.VRBL

motó presents consequence; introduces consecutive (dependent) clause; CNSQN.VRBL

?ihi presents contrast; CNTRST.VRBL

kàh presents alternative; ALTRN.VRBL
```

11.2 | Satellite conjunctions

Conjunctions may be used initially or finally in a statement as discourse markers.

ní	indicates weak affirmation of the statement; WEAK_AFFIRM
?ika	inquires weak affirmation of the listener's experience; WEAK_AFFIRM_LISTNR
teh	indicates surprise, doubt, or interest toward the statement; SURPRISE
nəj	indicates strong affirmation and/or discourse-completion of the statement; STRONG_AFFIRM
ten	indicates agreement with the listener; AGREE
motó	inquires strong affirmation of the listener's experience; STRONG_AFFIRM_LISTNR
?ihi	inquires contrast of the listener's experience to the speaker's statement; CONTRAST
kàh	requests more information from the listener; INQUIRY

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11.3 | Affirmatory & negatory

Affirmatory and negatory particles are used to affirm and negate, respectively, e.g., when answering a polar question. Various levels of evidentiality are expressed in them.

Affirmatory

sén	Affirmatory-basic; affirms with no regard to evidence; AFF.BAS
s ^h è	Affirmatory-witness; affirms via visual evidence; AFF.WIT
ς ^h δ	Affirmatory-sensory; affirms via non-visual evidence; AFF.SNS
s²ó	Affirmatory-evidential; affirms via direct evidence; AFF.EVID
t¢²én	Affirmatory-anecdotal; affirms via prior experience(s); AFF.ANEC
јо́м	Affirmatory-reportative; affirms via indirect evidence; AFF.REP

Negatory

káj	Negatory-basic; negates with no regard to evidence; NEG.BAS
k ^h àj	Negatory-sensory; negates via sensory/direct evidence; NEG.SNS
sə́j	Negatory-inferential ; negates via direct evidence/prior experience(s); NEG.INF
wáj	Negatory-reportative; negates via indirect evidence; NEG.REP

11.4 | Quantifiers

Quantifiers are particles that indicate or delimit the amount of that which they modify.

```
hi? none, no
?ika none, no
ní all, every
teh some, few
séè many, most
hakhìn countable, finite
sòntó? uncountable, infinite
```

11.5 | Extension

Extension describes temporal limitation on the two axes of *locus* and *restraint*. Extension particles may apply to formatives, limitives, descriptives (see Ch. 9), and conjunctions (see § 8.6). They are

11 | Function words 53

placed directly before their head.

	Retro.	Prosp.	Delim.
Antmp.	né	kəsí	tɔś
Postmp.	liís ^h i	tòje	?ɔjke
Cistmp.	tçətì	s ^h àn	×

Figure 11.1: Extension

Locus defines the temporal beginning and end.

Retrospective	beginning is focused; RETRO
Prospective	end is focused; PROSP
Delimitive	both beginning and end are focused; DELIM

Restraint describes the point at which the locus is defined.

Antemporal	locus is defined before the point of reference; ANTMP
Postemporal	locus is defined after the point of reference; POSTMP
Cistemporal	locus is defined during the point of reference; CISTMP

When applied to limitives, formatives, and descriptives, extension is used to express when the entity starts and/or ends relative to the time of reference.

The cistemporal retrospective and prospective extensions focus the development and the consequences of the event, respectively.

TODO example sentences

11.5.1 | Use with conjunctions

When applied to conjunctions, extension expresses the temporal relation between the phrases modified by the conjunction.

TODO example sentences

12 | Numerals

Timah uses a base-60 numeral system. This is not a pure base-60 system orthographically, as it uses base-12 as a sub-base to construct the constituent numeric symbols. There is no overt difference between cardinal and ordinal numbers. All numerals may be used as descriptives or as formatives.

0	hi?	12	tçíha	24	sín	36	sekó	48	t ^h àse
1	t ^h è	13	t¢³əə	25	kon	37	hino	49	s ^h ii
2	nin	14	nə́?ah	26	?əəha	38	s ^h àə	50	s²óo
3	kə	15	s^ha	27	t ^h aà	39	tè	51	k ^h òj
4	k^h ì	16	s^h oh	28	tòo	40	k²ò?	52	15?en
5	t¢ ^h ajá	17	$k^{\scriptscriptstyle h} e\acute{e}$	29	tçən	41	sómán	53	t ^h òn
6	soo	18	jo	30	s^h ìh	42	has ^h è	54	tçəh
7	sə́h	19	tàn?a	31	s²ə	43	kè	55	sò
8	?ɔsə	20	t¢ ^h à	32	nój	44	$k^{h}o$	56	taloh
9	\mathbf{k}^{h} ii	21	tək²o	33	sàt¢íí	45	lato	<i>57</i>	jíli
10	t¢é	22	?ət¢²ó	34	satça?	46	tçəh	58	t ^h ò
11	láha	23	tɔkʰo	35	t¢ ^h on	47	c^{h} tiís	59	hent ^h e

Figure 12.1: Numerals

12.1 | Higher & lower numerals

Higher numerals are formed by using a positional numbering system, wherein each consecutive slot n contains a numeral x and indicates 60nx.

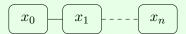


Figure 12.2: Higher numerals

12.1.1 | Numeric distributors

Numeric distributors may also be used to form higher as well as *lower numerals*. They multiply or divide the numeral to which they are appended by a set value.

12 | Numerals 55

Numerals may be added and subtracted using the postpositions $\mathbf{l}\mathbf{i}$ and $\mathbf{k}^2\mathbf{e}$ (which are placed after their arguments), respectively.

13 | Units of measure

13.1 | Time

13.1.1 | Seasons

A year is divided into eight main seasons.

móloló	spring
mii?ló	late spring/early summer
t¢ii?ló	midsummer
kʰàʔoló	late summer/early autumn
lóo?ló	autumn
níjò?ló	late autumn/early winter
wo?òló	midwinter
hèló?ló	late winter/early spring

14 | Register terms & personal names

14.1 | Register terms

Register terms are used to describe the social relationship between people using the three properties of *status*, *age*, and *formality*.

	Inferior			Equivalent			Superior		
	Younger	Equal	Elder	Younger	Equal	Elder	Younger	Equal	Elder
Formal	tèh	ah	waj	kát¢ ^h è	s ^h ò	s^h əw	lét¢a?	jó?oh	sako
Polite	ləj	t¢ ^h aw	tçoo	sáhkəh	3 0	wo?ɔ	k ^h emé	mii?í	sako
Familiar	10)	t¢ ^h ɔs ^h ə	to?a	k ^h a	ì	tʰìiʔɔj	t ^h ìt¢	ÍN	t ^h è
Pejorative		kəj			ket¢ʰɔ̀		k ^h èle		

Figure 14.1: Register terms

These terms can also be used to describe familial relations. Status corresponds to the position of kin in relation to one's generation, i.e., *inferior* corresponds to kin below one's generation, *equivalent* to kin within one's generation, and *superior* to kin above one's generation. Age corresponds to relative age, while formality corresponds to relative social status.

14.2 | Personal names

A personal name consists of many elements:

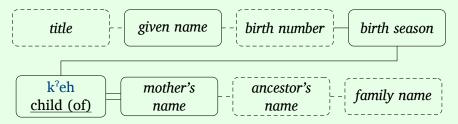


Figure 14.2: Personal name structure

Title	an optional social title, often a register term and/or profession
Given name	one's given name
Birth number	an optional number corresponding to the birth order of oneself in relation to one's siblings (if one has siblings)
Birth season	the season of one's birth (see § 13.1.1)
Mother's name	one's mother's given name, always preceded by k^2eh
Ancestor's name	an optional ancestor's given name, real or mythical
Family name	an optional word or phrase that describes the family (e.g., a common family profession or a family descriptor)

The elements $(k^2eh (mother's given name))$ may be repeated an arbitrary amount of times, each consecutive matriarch applying to the previous one.

15 | Ideophones

15.1 | Ideophonemes

There exists a set of phonemes that can appear only in ideophones. These are called *ideophonemes*, and they cannot cluster (i.e., codae /? h N w j/ may not precede them). Basic consonants can appear in ideophones, but ideophones are restricted to a reduced vowel inventory.

				_		Dental	Alveolar	Lateral
	Labial	Alveolar	Dorsal		Tenuis		!	
Nasal	^m b	ⁿ d	$^{\eta}g$ \sim η		Aspirate	h	! h	$\ ^{\mathbf{h}}$
Liquid	В В		$\mathring{B}_{\sim} \chi \ \text{B-R}$		Nasal	n	n i	ŋ
(a) Pulmonic					Glottal	$\mathfrak{d} _{\mathfrak{Z}}$	υ i 3	\mathfrak{g}_3
				(b) Non-pulmonic				

Figure 15.1: Ideophonemes

Another notable feature of ideophones is that they are vocalically underspecified, i.e., ideophone roots consist only of consonants. Vowels may be inserted (respecting phonotactics) in order to convey meaning.

15.2 | Ideophones

There are three types of ideophones: *phonomimes*, *phenomimes*, and *psychomimes*. See App. D for a list of ideophones. Ideophones may function as descriptives or as formatives.

Phonomimes	imitate sounds directly; PHON
Phenomimes	imitate sounds associated with tangible states and conditions; PHEN
Psychomimes	imitate sounds associated with intangible states and conditions; PSYCH

Certain patterns of reduplication and vowel insertion have certain connotations when applied to ideophone roots.

15 | Ideophones 60

Light vowels /i ə o/ light, sharp, soft **Heavy vowels** /e a ɔ/ heavy, blunt, rough Front vowels /i e/ order, uniformity Central vowels /ə a/ natural structure, innate form Back vowels /o o/ chaos, disformity Initial reduplication $|\sigma_{i^{\sim}}|$ reductive, diminutive, negative Final reduplication $|-\sigma_f|$ casual, informal, playful Full reduplication $|-\omega|$ intensive, augmentative, affirmative Lengthening general, associative **Toneless** natural measure, innate size High tone narrow, shallow; thin, tall **Low tone** | *wide, deep; fat, squat*

16 | Pragmatics

16.1 | Focus

Focus is an important element of discourse. Generally, the focus consists of unknown or new information.

The focus of a clause may be explicitly marked by placing one of three *focus markers* before the head of the phrase containing the focus.

TODO example sentences

k²itò focuses the entire phrase
 tàá focuses the head of the phrase
 kò focuses the dependents of the phrase

The specific focus will always be intonationally emphasized.

17 | Speech registers

There exists many special *speech registers*. While identical in grammar, these registers differ in lexicon content and size.

Nuptial registers	used by people who are or have been in an intimate relationship			
Internal subregister	used when speaking directly to one's intimate partner			
External subregister	used by people who are or have been in a relationship, with no regard to the status of the listener			
Avoidance subregister	used when speaking to and around one's previous intimate partners			
Foreign registers	used when around foreigners, i.e., non-Khokan people			
Positive subregister	used when speaking to foreigners that are considered favorable by the speaker			
Negative subregister	used when speaking to foreigners that are considered hostile by the speaker			
Vital registers	used when hunting, gathering, and/or observing certain animals or plants			
Shallow subregister	used when hunting and observing inherently terrestrial animals			
Deep subregister	used when hunting and observing inherently aerial and/or aquatic animals			
Passive subregister	used when gathering plants and collecting spoils			

TODO all of this

Appendices

Within these dictionary appendices, entries are notated as *«word, (reduced form): (inherent inflections/classes), function, definition»*. The *reduced form* may not appear for all entries.

Entries followed by a superscript «NI, NX, NA, FP, FN, VS, VD, VP» correspond to the nuptial internal, nuptial external, nuptial avoidance, foreign positive, foreign negative, vital shallow, vital deep, and vital passive registers, respectively (*see Ch. 14*).

TODO all of this

A | Nominal limitives

- t¢ɔ̂ʔi (t¢²è): (CONC, ANIM) *n*. person, human, humanoid creature ‡ *cl*. people, all humanoids
- kon: (CONC, INAN, PNSTBL) *n.* place, location, area ‡ *cl.* places, locations
- ketch (k^7 eh), tçatih^{FP}: (CONC, ANIM) n. baby, offspring; child, young person ‡ cl. young (of an animal), offspring, products
- mowo : (CONC, ANIM) *n*. parent, guardian; elder person ‡ *cl*. parent, producers
- sisì (s²iì): (CONC, ANIM, PNSTBL) *n.* water, air; liquid, fluid; motion, movement ‡ *cl.* all fluids
- neh: (CONC, INAN) *n.* rock, stone, solid; immobility, inactivity ‡ *cl.* rocks, stones, natural solids; rigid body parts e.g., shells, bone, teeth, nails
- tçì: (CONC, ANIM) *n*. animal, creature, beast ‡ *cl*. all wild terrestrial animals excluding insects
- tçasí : (CONC, INAN) *n*. tree, plant; foliage, vegetation ‡ *cl*. all non-edible plants

- sóósa : (CONC, INAN) *n*. container, vessel, receptacle ‡ *cl*. all containers; all foods that can contain other food
- $k^2 \acute{a}$?e: (CONC, INAN) n. tool, instrument, weapon ‡ cl. all tools, instruments, weapons; functional body parts e.g., appendages, sensory organs
- thìlí: (CONC, ANIM) n. body; flesh, meat (living); physical form; body language, behavior
- thè?: (CONC, INAN) *n.* corpse; flesh, meat (dead/raw); death ‡ *cl.* soft body parts e.g., flesh, hair, skin; all animal-derived foods
- khàtí: (CONC, ANIM) n. flesh, meat (cooked); meal, feast
- j\u00e4ho: (CONC, INAN) *n.* fruit; edible plant; the flesh of a fruit; flower \u00e4 *cl.* all plant-derived foods; all flowers
- ?olowí (?oló) : (ABSTR, ANIM) *n.* season, the division of a year; time ‡ *cl.* time, all temporal concepts
- ma : (ABSTR, INAN) *n.* word, symbol, name; writing ‡ *cl.* all symbols, names

B | Verbal limitives

- wớ : (CONC, VOL, MVAL) n. move, walk, come/go
- mớ : (CONC, VOL, MVAL) n. run, move quickly; jump, leap
- shoj: (CONC, VOL, PVAL) n. carry, give/take
- niwi : (CONC, VOL, BVAL) *n*. consume, eat, drink
- tçɔ́j : (ABSTR, VOL, PVAL) n. speak, write, communicate
- k^hajtè : (ABSTR, VOL, SVAL) *n.* hear, see, directly sense; read, understand

- hasì : (ABSTR, VOL, SVAL) *n.* smell, taste, indirectly sense
- jékɔ : (ABSTR, VOL, BVAL) n. feel, sense; know
- se?mɔ́: (ABSTR, VOL, PVAL) n. make, cause
- k^h o : (ABSTR, NVOL, AVAL) n. occur, happen, exist
- hɔnɔ́: (ABSTR, VOL, BVAL) n. want, desire, wish

m

- míshoh: (ABSTR, ANIM) *n.* aversion, repulsion, disgust ‡ (ABSTR, NVOL, BVAL) *v.* be averse, repulsed, disgusted
- melə (mii): (CONC, INAN) n. bread; food made from grain; grain ‡ (CONC, VOL, MVAL) v. prepare/eat bread; prepare grain
- mtóósa (máh) : (CONC, INAN) *n.* book, writing; collection of words ‡ (CONC, VOL, BVAL) *v.* read; write
- mólá: (CONC, INAN) *n*. wave, gust; flow, movement, direction ‡ (CONC, VOL, BVAL) *v*. make wet; wash, clean; push, move

l n

- níjò: (ABSTR, ANIM) *n.* awareness of something dangerous, premonition; warning, caution, advice; omen, prophecy; foresight ‡ (ABSTR, VOL, BVAL) *v.* warn, caution, advise; prophesize, foresee, predict
- ntçè : (CONC, INAN) *n*. solid food ‡ (CONC, VOL, MVAL) *v*. prepare solid food
- nómɔ (nón) : (CONC, ANIM) *n*. tooth; bite ‡ (CONC, VOL, BVAL) *v*. bite, chew

$| t^h, t, t^?$

- tha?wá (tháw): (CONC, ANIM) n. yak, cow, dzo; wisdom, strength, power; work, effort ‡ (CONC, VOL, BVAL) v. be a yak, cow, dzo; be wise, strong, powerful; (do) work, put effort into
- tkisháj (ti?sé): (CONC, INAN) n. hardness, durability, endurance ‡ (CONC, VOL, BVAL) v. be/make hard, durable, enduring; improve, enhance, fix

- títçikòn (títçì?): (CONC, ANIM) n. master, superior; guide, leader; direction ‡ (ABSTR, VOL, BVAL) v. be a master, be superior; guide, lead, direct
- tɔnlá: (CONC, ANIM) n. voice, sound; song, music ‡ (ABSTR, VOL, MVAL) v. make sound, music; sing
- tətçin (tç²in) : (CONC, ANIM) *n*. eye, pair of eyes; sight ‡ (ABSTR, NVOL, SVAL) *v*. see, visually sense

- tç^hàs²ah (tç^hà?): (CONC, INAN) *n.* that which is contained; injury ‡ (CONC, VOL, BVAL) *v.* contain (within); incapacitate, debilitate
- tçii : (CONC, INAN) *n.* sand, dust, gravel, grain; sugarcane, sugar, sweetness ‡ (ABSTR, VOL, BVAL) *v.* separate, crumble; be particulate, granular; be sweet
- tçóhk^hð (tçoh) : (CONC, INAN) *n*. milk, fat ‡ (CONC, NVOL, MVAL) *v*. be/have/drink milk; be fat

$$| k^h, k, k^?$$

- $k^h \hat{a}$: (CONC, ANIM) n. breast; fat ‡ (CONC, VOL, BVAL) v. produce milk; nurture, care (for)
- tchkhòo: (CONC, ANIM) n. fingers, hand, arm ‡ (ABSTR, VOL, BVAL) v. touch, interact (with)
- ki?əj (k²ii): (CONC, INAN) *n.* boat, method of travel; transportation; trade, commerce; goods, cargo, something to be transported ‡ (ABSTR, VOL, PVAL) *v.* travel (by boat); transport; trade (goods)

C | Formatives 66

- któhi^{FP} (mii): (CONC, INAN) *n*. any grain, cereal or pulse; bread ‡ (CONC, VOL, MVAL) *v*. grow/harvest grain
- kála (kɔ́ɔ): (CONC, ANIM) n. fish; conspiracy, scheme ‡ (CONC, VOL, MVAL) v. fish, go fishing; conspire, scheme
- $k^2 \dot{e} \dot{c}^2 \dot{e} (j \dot{a} N)$, $j \dot{a} N^{NI}$: (CONC, ANIM) n. friend, spouse; expected accompaniment; friendship, relationship ‡ (ABSTR, VOL, BVAL) ν . accompany; be in a relationship

| ?

- ?elśw (lóo): (CONC, ANIM) n. squamate reptile, lizard, snake; tail; self-amputation (of an appendage) ‡ (CONC, VOL, BVAL) v. be a squamate reptile, lizard, snake; have/move/be a tail; self-amputate (an appendage)
- ?ahee: (CONC, INAN) *n.* cold food; raw food; something to be made cold ‡ (CONC, VOL, MVAL) *v.* prepare cold food; cool, make cold
- ?aná: (CONC, INAN) n. injury, damage; sickness; immobility, laziness; rope ‡ (CONC, VOL, BVAL) v. injure, damage; make immobile; be lazy; tie (up), bind, restrain
- ?anko: (CONC, INAN) *n.* bed, place of rest; sleep, rest; dream, hallucination ‡ (ABSTR, VOL, MVAL) *v.* sleep, rest; dream, hallucinate

$| s^h, s, s^?$

- sènéj (séj) : (CONC, ANIM) n. bear; fear ‡ (CONC, NVOL, MVAL) v. be a bear; be afraid
- set[?]o?: (CONC, ANIM) *n*. river, moving body of water; narrow portion of material, strip ‡ (CONC, VOL, BVAL) *v*. travel by river, moving body of water; make into narrow portions, strips

- sələn: (CONC, ANIM) *n*. intestines, that which is digested ‡ (CONC, NVOL, BVAL) *v*. digest, break down (naturally); dissolve
- s²áláw: (CONC, INAN) n. saraw plant, a squat wide-leafed plant used as material on which to write; the leaf of the saraw plant; any material on which one writes ‡ (CONC, VOL, MVAL) v. harvest (the leaves of) a saraw plant; write
- sóo : (CONC, INAN) *n*. excrement, waste ‡ (CONC, NVOL, MVAL) *v*. excrete, produce waste
- sɔ̀jsi: (CONC, ANIM) n. hot food; cooked food; something to be made warm ‡ (CONC, VOL, MVAL) v. prepare hot food; heat, make warm

h

- hmon (hmoo): (ABSTR, ANIM) *n.* thought, mind; memory; heart, center; spirit, soul; personal connection ‡ (ABSTR, NVOL, MVAL) *v.* think, concentrate, focus; remember; personally connect
- hèlóo: (CONC, INAN) *n.* root; source, origin, cause; stability ‡ (ABSTR, NVOL, BVAL) *v.* be a source, origin; cause; be stable; stabilize
- hòn: (CONC, ANIM) *n.* dog, wolf, canine; any domesticated animal ‡ (CONC, NVOL, BVAL) *v.* be a dog; domesticate
- hój (hoj): (CONC, ANIM) *n.* number, numeral; amount, quantity; group, collection ‡ (ABSTR, VOL, BVAL) *v.* count, enumerate, quantify; collect, amass

W

• win: (CONC, ANIM, PNSTBL) n. rain, precipitation; tears ‡ (CONC, NVOL, AVAL) v. rain, precipitate; fall, come down, descend; cry, weep

C | Formatives 67

• mínwo : (CONC, ANIM) n. bird; flight; gossip ‡ (CONC, VOL, MVAL) v. be a bird; fly; gossip

- wítç^hə: (ABSTR, INAN) *n*. weakness, laziness ‡ (ABSTR, NVOL, MVAL) *ν*. be weak, lazy
- wíini (wíi): (CONC, ANIM) *n*. cat; cleverness, wit ‡ (CONC, NVOL, MVAL) *ν*. be a cat; be clever, witty
- wíkən (wén): (CONC, ANIM) *n.* mouth, opening, orifice ‡ (CONC, VOL, BVAL) *v.* hold in one's mouth, suck; fellate
- wówkho (wó?): (CONC, INAN) *n.* that which is broken; breakage, damage, injury ‡ (CONC, NVOL, BVAL) *v.* break, damage, injure; be broken, damage, injured
- wónəj (wój) : (CONC, INAN) *n.* small amount; poverty ‡ (ABSTR, NVOL, MVAL) *v.* have few; be poor
- wolòh: (CONC, INAN) *n*. snow, ice, frost, cold water ‡ (CONC, NVOL, AVAL) *v*. snow, hail, rain coldly

| 1

- lìjók²o (lìjó?): (CONC, INAN) *n*. face, flat surface; table ‡ (CONC, VOL, BVAL) *v*. flatten, make flat; be flat; lay flat
- lethitça (litçha): (CONC, ANIM) n. liquid food ‡ (CONC, VOL, MVAL) v. prepare liquid food
- ləneh : (CONC, INAN) *n.* mountain, collection of rock/stone ‡ (CONC, VOL, BVAL) *v.* be/climb a mountain; stop, prevent
- lɔtç²ś: (CONC, ANIM) *n*. rain ceremony ‡ (CONC, VOL, MVAL) *v*. perform a rain ceremony
- lónlə (lón): (CONC, INAN) *n*. dumpling, dough; smallness, roundness; cuteness ‡ (CONC, VOL, MVAL) *v*. have/eat/prepare/be (a) dumpling(s), dough; be small and round; be cute

| j

• jon : (CONC, INAN) n. cave, dwelling; quiet, silence \ddagger (ABSTR, VOL, MVAL) ν . live in a cave; be quiet, silent

D | Ideophones