???

Tíməh, the language of Lą́gų

M.M.N.H.

A grammar

Dedicated to my haters

Contents

1	Intr	duction	7	
	1.1	External history	7	
	1.2	Internal history	7	
		1.2.1 People	7	
		1.2.2 Place	7	
		1.2.3 Beliefs & practices	7	
		1.2.3.1 Magic	7	
		1.2.4 Dialects	7	
_	D 1	•		
2		ology	ç	
	2.1	Consonants		
		2.1.1 Consonant allophony		
	0.0	2.1.2 Dialectal variations of consonants		
	2.2	Vowels		
		2.2.1 Vowel allophony		
		2.2.2 Dialectal variations of vowels		
	2.3	Phonological processes		
		2.3.1 Stress		
		2.3.2 Vowel harmony		
		2.3.3 Obstruent weakening		
	2.4	Obstruent contraction		
	2.5	Degemination		
	2.6	Tone		
		2.6.1 Tone mobility		
		2.6.1.1 Leftward tone shift		
		2.6.1.2 Rightward tone movement		
		2.6.2 Tone association		
	2.7	Phonotactics		
		2.7.1 Syllable structure		
		2.7.1.1 Restraints	15	
2	Pros	. A	16	
3	3.1	Isochrony		
	3.1	· ·		
		Prosodic hierarchy		
	3.3	Intonation	16	
4 Orthography				
		Other scripts	17 17	

		4.1.1 Latin	7
		4.1.2 Tibetan	8
		4.1.3 Mkhedruli	8
		4.1.4 Hacm	9
5	Synt		
	5.1	Sentence structure & word order	0
		5.1.1 Dependent clauses	0
	5.2	Alignment	1
	5.3	Repeat argument dropping	
	5.4	Clitics	
6	Lexi	cal categories & properties 2	2
	6.1	Lexical categories	2
	6.2	Integrity	
	6.3	Probability	
7	Nou	ns 2	3
	7.1	Nominal limitives	3
	7.2	Pronouns	3
		7.2.1 Personal	
		7.2.2 Relative/interrogative	
		7.2.3 Demonstrative	
	7.3	Declensions	
	, .0	7.3.1 Noun classes	
		7.3.2 Cases	
	7.4	7.3.3 Article enclitics	
	7.4	Postpositions	
	7.5	Noun reduplication & quantification	ď
8	Verl	bs 3	'n
O		Verbal limitives	_
	8.2	Verbal negation	
		Valency classes	
	0.3	• · · · · · · · · · · · · · · · · · · ·	
	0.4	8.3.1 Subvalency & salience	
	8.4	Volitional classes	
	8.5	Verbal reduplication	
	8.6	Conjugations	
		8.6.1 Pronominal proclitics	
		8.6.2 Noun incorporation	
		8.6.3 Voice	3
		8.6.4 Investment	4
		8.6.5 Domain of influence	4
		8.6.6 Expressive moods	5
		8.6.7 Mode	5
		8.6.7.1 Conditionals	
		8.6.8 Evidential moods	
		8.6.9 Directional specifiers & applicatives	
			-

	8.7	Verbal classifiers				. 37
	8.8	Serial verb constructions				
		8.8.1 Perceptive				
		8.8.2 Directive				
		8.8.3 Capacitive				
	8.9	Copulae				
		.				
9		scriptives				40
	9.1	Dyadic color terms				. 40
	9.2	Comparison				. 41
10		rd formation				42
	10.1	1 Derivation				. 42
		10.1.1 Sound symbolism				. 42
	10.2	2 Compounding				. 43
		10.2.1 Coördinating				. 43
		10.2.2 Subordinating				. 43
11		action words				44
		1 Conjunctions				
	11.2	2 Satellite conjunctions				. 44
	11.3	3 Affirmatory & negatory				. 45
	11.4	4 Quantifiers				. 45
	11.5	5 Extension				. 45
		11.5.1 Use with conjunctions				. 46
12	-	merals				47
	12.1	1 Higher & lower numerals				. 47
		12.1.1 Numeric distributors				. 47
13		ts of measure				49
	13.1	1 Time				
		13.1.1 Seasons	•			. 49
	ъ.	• • • • • • • • • • • • • • • • • • • •				
14		gister terms & personal names				50
		Register terms				
	14.2	2 Personal names	•		٠	. 50
16	Tdoo	onhonos				52
19		ophones				
		1 Ideophonemes				
	15.2	2 Ideophones	٠		٠	. 52
16	Pran	gmatics				54
10	_	I Topic & focus				
	10.1	16.1.1 Topic & focus marking				
	16.2	- · · · · · · · · · · · · · · · · · · ·				
	10.2	2 Deixis				
		10.2.1 Spanolemporal ucixis & domains	٠	• •	•	. 54
17	Snee	ech registers				56

App	endices	57
A N	Iominal limitives	57
вч	erbal limitives	58
C F	ormatives	59
D I	deophones	62
	igures	
2.1	Consonant phonemes	9
2.2	Vowel phonemes	10
2.3	Vowel harmony	
2.4	Harmony spread	
2.5	Obstruent weakening	
2.6	Obstruent contraction	
2.7	Obstruent hierarchy	
2.8 2.9	Leftward tone shift	
	Rightward tone movement	
	Tone association	
	Coda reduction	
2.12		
3.1	Prosodic hierarchy	
4.1	Latin (consonants)	17
4.2	Latin (vowels)	
4.3	Tibetan (consonants)	
4.4	Tibetan (vowels)	
4.5	Mkhedruli (consonants)	
4.6	Mkhedruli (vowels)	
4.7	Hacm (consonants)	
4.8	Hacm (vowels)	19
5.1	Alignment	21
7.1	Personal pronouns	
7.2	Relative/interrogative pronouns	
7.3	Demonstrative pronouns	
7.4	Declension slots	
7.5	Noun classes	26

Figures 6

7.6	Cases	27
7.7	Article enclitics	27
8.1	Conjugation slots	32
8.2	Deranked conjugation slots	32
8.3	Copular conjugation slots	32
8.4	Pronominal proclitics	33
8.5	Mode	35
8.6	Verbal classifiers	38
8.7	Copulae	39
9.1	Oyadic color terms	40
10.2	Magnitude	42
	Movement	
11.1	Extension	46
12.1	Numerals	47
	Higher numerals	
14.1	Register terms	50
	Personal name structure	
15.1	deophonemes	52
16.1	Deictic space	55

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.). Its primary goal is simply to be documented entirely in \LaTeX (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 (khok²otçò?e [khok²odzò?è] lit. many-person). They live on the Lankung Archipelago (lónkon [lấŋgữŋ] lit. our-place)

TODO all of this

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 Lankung 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

1 | Introduction 8

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 th t t?/ are dental; /sh s s? 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 nasal¹.
- 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 /t² tç² k² s²/ are articulated with laryngeal tension, and may be accompanied by slight creaky-voice on the following vowel.

2.1.1 | Consonant allophony

- /m n/ surface as implosives [6 d] word-initally.
- 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 $[\widehat{n}]$ word-finally after the back vowels /o $\frac{1}{2}$ and before the labio-velars $[\widehat{kp}]$ $[\widehat{kp}]$.
- The aspirated obstruents /t^h tç^h k^h s^h/ are deäspirated to [t tç k s] intervocalically and after /w j N/.
- The tenuis obstruents /t tc k s/ are voiced to [d dz g z] intervocalically and after /w j n/.
- $/k^h$ / surfaces as [x] before /a/. This does not occur after /n/.
- The velars $/k^2 k k^h$ / surface as labio-velars $[kp^2 kp kp^h]$ before the back vowels /o ɔ/. [kp] is voiced to [gb] and $[kp^h]$ is deaspirated to [kp] intervocalically and after /w j N/.

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

- /n/ is palatalized to [n] before [i] word-medially.
- 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/.
- /l/ surfaces as [r] intervocalically and after /w j N/.
- /w/ surfaces as [v] before [i].

2.1.2 | Dialectal variations of consonants

- In some [which?] dialects, the glottalized plosives /t² tç² k² s²/ may surface as ejectives [t' tç' k' (t)s'] or geminates [tt ttç kk ss-tts].
- In some [which?] dialects, the alveolo-palatals /tch tc tc²/ may surface as alveolar affricates [tsh ts ts²], true palatals [ch c c²], or as non-affricated alveolo-palatals [th t t²].
- In some [which?] dialects, the lateral [1] has merged with either /j/ or /n/.
- Depending on dialect [which ones?] and idiolect, the glottal fricative /h/ may variously surface as any of [x χ ħ h].
- Depending on dialect^[which ones?] and idiolect, the lateral /l/ may variously surface as any of [r x l t l Ď ţ z].
- In the Shore dialect, /w/ surfaces as $[\psi^{\beta}]$, i.e., it has lip compression instead of protrusion.

2.2 | Vowels

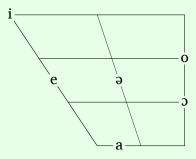


Figure 2.2: Vowel phonemes

- All vowels may occur as long or short (see § 2.7.1)
- /e/ is true mid $[e]^2$.
- /a/ is near-front [a] (i.e., not central [ä]).

2.2.1 | Vowel allophony

- · All vowels are nasalized before nasal consonants.
- /i/ surfaces as [i] after the velars /kh k k²/ and before coda [ŋ].
- /o ɔ/ raise to $[u\ o]^2$ word-finally in open syllables, after the velars $/k^h\ k\ k^2\ w/$, and before coda $[\eta]$.
- /a/ surfaces as [æ-ε] after the palatals /tc^h tc tc² j/ and before coda /j/.

2.2.2 | Dialectal variations of vowels

- Some [which?] dialects have merged the back vowels /o o/ into true mid [o].
- Some [which?] dialects have merged the front vowels /i e/ into [i-1].
- 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.

2.3 | Phonological processes

2.3.1 | Stress

Stress placement in Timah 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.

2.3.2 | 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 2.3: Vowel harmony

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

Vowel harmony is terminated after dead syllables (i.e., syllables ending in /? h/, represented here by $\sigma_{\dot{\tau}}$) and non-harmonizing morphemes, such as clitics.

²[e o] will be transcribed as [e o] for the sake of brevity.



Figure 2.4: Harmony spread

2.3.3 | 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 2.5: Obstruent weakening

2.4 | Obstruent contraction

In non-initial sequences of P_1VP_2V , wherein P_2 represents any obstruent and V represents any vowel, the sequence P_1VP_2 is contracted to P_3 . This does not apply within roots (but can occur at root boundaries e.g., after inflection and in compounds), and applies after obstruent weakening.

 P^h represents the aspirated obstruents /t^h tç^h k^h s^h h/, P represents the tenuis obstruents /t tç k ?³/, and P² represents the glottalized obstruents /t² tç² k² s² ?³/. The glottals /? h/ only affect contraction when they occur as P_2 .

Figure 2.6: Obstruent contraction

The specific place and manner of articulation of P_3 is dependent on an 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.

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

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

Figure 2.7: 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 § 2.6.1).

2.5 | 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 jinì]
some cats
```

2.6 | 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*.

2.6.1 | Tone mobility

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

2.6.1.1 | 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, tone shift is not blocked by dead syllables.



Figure 2.8: Leftward tone shift

2.6.1.2 | Rightward tone movement

If the stressed syllable of a word is toneless, the nearest tone leftward of the stressed syllable moves to the stressed syllable.



Figure 2.9: Rightward tone movement

2.6.2 | 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 these diagrams, S represents a sonorant /N w j/ and G represents a glottal /? h/

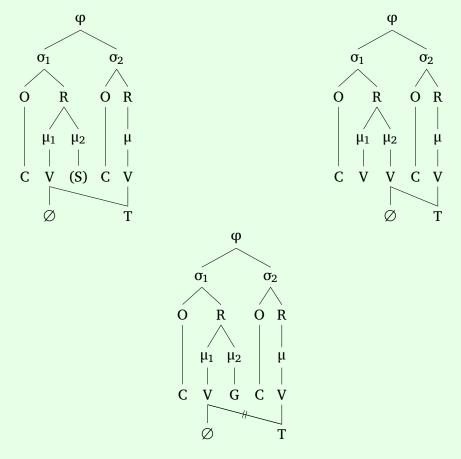


Figure 2.10: Tone association

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

2.7 | Phonotactics

2.7.1 | Syllable structure

$$CV(T)(V^4(T)|H|S)$$
 $H = \{?,h\}$
 $S = \{N,w,j\}$
 $T = \{6,\delta\}$

Figure 2.11: Syllable structure

2.7.1.1 | Restraints

These phonotactic restraints govern allomorphy.

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

$$\begin{array}{ccc} ? & & \circlearrowleft \\ h & \rightarrow & \circlearrowleft \\ \textbf{N} \textbf{W} \textbf{j} & & \circlearrowleft \end{array}$$

Figure 2.12: Coda reduction

⁴Long vowel morae must be homorganic in vowel quality, but not necessarily in tone.

3 | Prosody

3.1 | Isochrony

Timah is a moraically-timed language, 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 § 2.3.1).

3.2 | Prosodic hierarchy

Prosodic units can be separated into a hierarchy of sub-units. TODO all of this

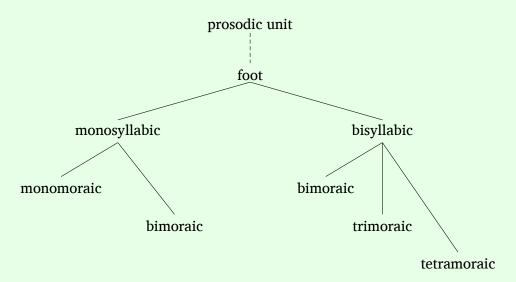


Figure 3.1: Prosodic hierarchy

3.3 | Intonation

TODO all of this

4 | Orthography

The Timah language uses the *Loma* script (lɔ́ma [lɔ́ma] lit. smooth-word), a defective abugida that was borrowed from a neighboring language Maryu (Timah májlo [bæjrò]). 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)				⟨ृ⟩ ⁶
Plosive		(th d t)	⟨ch j c⟩	(kh g k)	$\langle \dot{ m h} \rangle^6$	
Fricative		(sh x s)			(h)	
Approximant	(w)	(1)	(y)			

Figure 4.1: Latin (consonants)

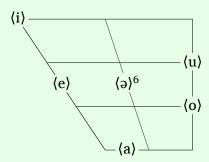


Figure 4.2: Latin (vowels)

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

⁶/N ? ə/ may alternatively be romanized as (n 'v), respectively.

4 | Orthography 18

4.1.2 | Tibetan

	Labial	Alveolar	Palatal	Velar	Glottal	Placeless
Nasal	(전)	(ব)				(জঁ) ⁷
Plosive		(855)	(ಹ ૬ ૱)	(पि यो गो)	(प, प्) ⁷	
Fricative		(₽ ≡ Ŋ)			(5, জঃ) ⁷	
Approximant	(ম্ব, ম্ব্) ⁷	(* \	(ષ, ષ્) ⁷		·	

Figure 4.3: Tibetan (consonants)

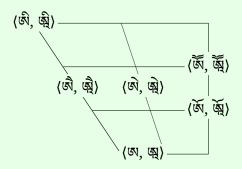


Figure 4.4: Tibetan (Vowels)⁷

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)

 $^{^{7}}$ (5 N) is a filler letter. In slots with two elements, the second element is the coda form for consonants, and the long form for vowels.

4 | Orthography



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

Word order in Timah is primarily *subject-object-peripheral-verb* in independent clauses and clausal dependent clauses, and secondarily *verb-initial head-final* in phrasal dependent clauses (*see § 5.1.1*). Only the verb must be present. In copular phrases (*see § 8.9*), the word order is always *subject-copula-attribute*, wherein the *attribute* is what is being associated with the subject of the copular phrase.

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 usually marked with a *postposition* (see § 7.4) or oblique case (see § 7.3.2) and consists of noun or postpositional phrase(s).

The *verb* is the action that is performed within a clause. 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*).

Dependents are placed before their head unless noted otherwise.

5.1.1 | Dependent clauses

Dependent clauses in Timah are divided into two types, *phrasal* and *clausal* dependent clauses. They are introduced by one of three clausal conjunctions (a subset of *verbal conjunctions*, *see § 11.1*) or a *relative pronoun* (*see § 7.2.2*). They are placed before their head. All dependent clauses are deranked (*see § 8.6*).

Phrasal 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 background argument (i.e., the argument of the dependent clause that is not the head) placed medially. Thus, the word order of a phrasal 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.

Clausal dependent clauses consist of content clauses. Word order does not change, besides mandatory introduction by a clausal conjunction.

nəj introduces basic dependent clause
ten introduces causal dependent clause
motó introduces consecutive dependent clause

The difference between using the conjunction $n \ni j$ as a relativizer and using a relative pronoun is that of *clausal restriction*. With unrestrictive clauses, $n \ni j$ is used as a relativizer. With restrictive clauses, one of the relative pronouns (*see § 7.2.2*) is used as a relativizer.

5 | Syntax 21

5.2 | Alignment

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

Perfectiveness describes the completeness of the verb, *valency* describes the number of arguments of the verb (in this case, a split between one or more than one), and *volition* describes the degree of control or intent concerning the verb (which is directly related to volitional classes, *see § 8.4*). In terms of alignment, these factors are binary, i.e., *[perfective|non-perfective]*, *[monovalent|multivalent]*, *[volitional|non-volitional]*.

The *ergative-absolutive* alignment is used obligatorily in multivalent clauses wherein the subject is specified as perfective.

The *active-stative* alignment is used obligatorily in monovalent clauses wherein the subject is specified as perfective and non-volitional as well as in monovalent clauses wherein the subject is specified only as non-perfective.

Either alignment is possible when the subject in multivalent clauses is specified as non-perfective, as well as in monovalent clauses wherein the subject is specified as both perfective and non-volitional. Which alignment is used is pragmatically determined (*see § 16.1*).

			ErgAbs.	Either	ActStat.
	Pfv.	Vol.		×	
Mono.	1) v.	Nvol.			×
1410110.	Npfv.	Vol.			×
		Nvol.			×
	Pfv.	Vol.	×		
Multi.	1,77.	Nvol.	×		
man.	Npfv.	Vol.		×	
	түр) ү.	Nvol.		×	

Figure 5.1: 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 § 7.4*), 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.

5.4 | Clitics

What are termed *clitics* in Timah 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 *gruppenflexion* or phrasal affixation.

6 | Lexical categories & properties

6.1 | Lexical categories

There is largely no lexical noun-verb distinction in Timah, 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 | Integrity

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

Complete	item is viewed in its entirety; as sufficient, complete, whole; CMPLT
Animate	living, mobile, heat, abstract; ANIM
Inanimate	non-living, immobile, cold, concrete; INAN
Incomplete	item is viewed partially; as deficient, incomplete, condensed; NCMPLT

Generally, these refer to the compositional integrity within the context of the situation.

6.3 | Probability

Grammatical number in Timah 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	it is unknown if the amount is likely or unlikely to change; PNSTBL

Generally, these refer to the probability to change within the context of the situation.

7 | Nouns

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 | Pronouns

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

7.2.1 | Personal

Personal pronouns decline for probability, person, animacy (in 3rd person), case, and integrity.

Personal pronouns in Timah are *absolutely-sequenced* (in contrast to *relatively-sequenced* pronouns, which encode person relative to oneself). That which a pronoun refers to is dependent on the order in which conversation is initiated. 1st refers to the initial speaker(s), 2nd to the initial listener(s), and 3rd 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) kawmeləhmɔ́ɔ ləhamíshoh

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

To which the listener might reply:

(2) lətəjá teh

```
lə= təjá teh
1.STBL.ANIM.AGT= REF.REV surprise
you do?!
```

In both cases, the person (1) is referred to using agreement for 1.STBL.CMPLT.AGT (la=).

			Agt.	Pat.	Erg.	Assoc.	Loc.	
Stbl.	1		lə	ləhi	ján	s ^h aj	t¢ ^h ò	
	2		nó	cn	1	ıò	nə	
	3	Anim.	tá?	táhi	tçàn	kéh	té	
		Inan.	h	an	ιφιιν	Ken		
	1		to tò		t²áw		já	
Nstbl.	2		noó	nóò	néj		tçə	
143101.	3	Anim.	t²ó?	t²óhi	t¢ ^h on	kèè	k^h əw	
	J	Inan.	t ^h	NC	τφ Οιν	Rec	K OW	
(a) Complete								

Agt. Pat. Erg. Assoc. Loc. 1 ká ke tà? tçà ləj 2 náw náá nəw no 3 sásá seh kín s²aw (b) Incomplete

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).

(3) hòns^haj hòn -s^haj dog -1.STBL.CMPLT.ASSOC my dog

The animate-inanimate distinction in $3^{\rm rd}$ person pronouns can also be used as a proximate-obviate distinction.

TODO expand; example sentences

7.2.2 | Relative/interrogative

Relative/interrogative pronouns decline for integrity, probability, and domain. They are used to introduce relative clauses (see § 5.1.1) and to mark the specific characteristics of a question (see § 8.6.6).

		Personal	Location	Proportion	Manner	Reason	
Complete	Anim.			silə	sáj	s ^h èh	
	Inan.	tansà					
Incomplete		?ehi	kéhe	sa?ií	səmóo	s ^h ɔjna	

Figure 7.2: Relative/interrogative pronouns

7 | Nouns 25

7.2.3 | Demonstrative

Demonstrative pronouns decline for number, proximality, laterality, and deictic position. They express spatial and temporal position relative to the speaker (*see § 16.2.1*). Demonstratives of *proportion* and *manner* express to what extent and in what way, respectively.

They may modify a noun or pronoun, or stand on their own. They are placed after the noun they are modifying.

		Ante	rior	Posterior					
		Sinister	Dexter						
	Prox.	tàá	kò	мст			Anterior	Posterior	Indefinite
Stbl.	Med.	sáwhe	kàme?	jéhə		Prox.	s ^h à	kə?	nəj
	Dist.	k²i	tà	Jeno	_	Med.	tòhe	?ankí	mále
	Prox.	tçaà	?akə	wón		Dist.	sawa	TUNKI	
Nstbl.	Med.	?it¢²a	kèho	míí			(b) I	ncomplete	
	Dist.	tekí		11111					
		(a) Comp	lete			1			

		Complete	Incomplete
Prop.	Prox.	já	likòn
	Dist.	jín	IIIOI
Man.	Prox.	wój	misən
mun	Dist.	kàn	11113314

(c) Proportion & manner

Figure 7.3: Demonstrative pronouns

The laterally-neutral distal demonstratives $k^2it\hat{\mathfrak{d}}$ and tekí may be compounded with a medial or proximal sinister demonstrative (that matches in integrity) to form laterally-neutral medial and proximal demonstratives.

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

Proximal	able to be seen and heard by speaker; PROX
Medial	able to be seen by speaker and/or seen and heard by listener; MED
Distal	able to be seen by speaker; may be indistinct or non-visible; 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

7.3 | Declensions



Figure 7.4: Declension slots

7.3.1 | Noun classes

Noun classes in Timah are separated into the groups *complete* and *incomplete*, which are associated with semantic wholeness or entirety of the noun (*see § 6.2*).

The *complete* group is further divided into the classes *animate* and *inanimate*. The *panstable* number is generally associated with mass nouns.

	Con	Incomplete	
	Animate	Inanimate	meompiete
Stbl.	Ø-	kaw-, kɔ-	
Nstbl.	tə-	jé-	wí-
Pnstbl.	na(n)-	Ø-	

Figure 7.5: Noun classes

7.3.2 | Cases

Case in Timah expresses syntactic roles and relations.

	Complete	Incomplete			Complete	Incomplete
Agt.	-Ø	-N-(◌́)		Agt.	-Ø	-té
Pat.	-h	-h-(́)		Pat.	-si	-sén
Erg.	-?	-ho		Erg.	-k²i	-k ^h o
Assoc.	-wɔ	110	110		-kə	-K O
Loc.	-t¢ó	-je		Loc.	-t¢ó	-se
	(a) Oper	ı			(b) Close	d

Figure 7.6: 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 § 7.4). 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).

7.3.3 | Article enclitics

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

Referential describes a specific instance of the class comprised of the given entity, while *non-referential* describes any instance of the class comprised of the given entity.

	Rej	ferential	Non-referential			
	Visible	Non-visible	Visible	Non-visible		
Stbl.	=mɔ́ɔ	=han	$= \emptyset$	=t [?] é ?		
Nstbl.		=mé	=t çáá			
Pnstbl.	=já		$=\mathbf{k}^{\mathbf{h}}$			

Figure 7.7: Article enclitics

7 | Nouns 28

7.4 | Postpositions

The two types of *postpositions* in Timah are 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 Postpositions

```
lí
         accompaniment/use; basic theme of trivalent verb
  k<sup>2</sup>e
        lack of accompaniment/use; negatory theme of trivalent verb
k<sup>h</sup>ono
        intent of benefit/purpose; beneficial/purposive theme of trivalent verb
        intent of reference/relation
    sì
        state of being
  t¢é
  khò
        change of state
  kéh
        similarity/comparison
 t²ɔka
        causation
```

Locative Postpositions

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

7.5 | Noun reduplication & quantification

Many nouns (including pronouns) may optionally be fully reduplicated and attached to their root to indicate plurality or intensity. Reduplication to mark plurality is never used when a numeral is used to quantify the root noun.

7 | Nouns 29

```
(5) tçò?i
tçò?i
person
a person
```

(6) tçò?itçò?i 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 can be used in conjunction with integrity 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

```
\oslash- keteh -keteh -\oslash t\circ= laj- k\circlag- CMPLT.ANIM.STBL- child -child -AGT.CMPLT 3.STBL.CMPLT.ANIM.AGT= PFV.REAL- fish -\oslash-AV the children all went fishing (collectively)
```

(10) wíketehketehté sálajkála

```
wí- keteh -keteh -té 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 a *serial verb construction* (*see* § 8.8).

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 mood (see § 8.6.7). As negatory (and affirmatory) particles inherently indicate evidentiality, evidential modality (see § 8.6.8) is dropped.

```
(11) ləlajkála
```

```
lə= laj- kála -\emptyset
1.STBL.CMPLT.AGT= PFV.REAL- fish -AV
I went fishing
```

(12) káj lahajkála

káj la= haj- kála -∅ NEG.BAS 1.STBL.CMPLT.AGT= PFV.IRR- fish -AV I did not go fishing

8.3 | Valency classes

There are four main valency classes in Timah: avalent, monovalent, ambivalent, 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*, polyvalent verbs that take exactly three arguments are grouped as *trivalent*, and ambivalent and polyvalent verbs that take two or more arguments are grouped as *multivalent*. These terms (*divalent*, *trivalent*, *multivalent*) are used only in analysis and metagrouping.

Copulae (see § 8.9) are considered monovalent.

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*. 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 § 7.3.2) and takes the postposition tí (see § 7.4). 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) *t¢ò?ihmóɔ lətéhkʰajtè
                          t¢ò?i
                                              =mɔ́ɔ
                                                             lə=
                                -h
      *CMPLT.ANIM.STBL- person -CMPLT.PAT = REF.VIS.STBL 1.STBL.CMPLT.AGT =
      téh=
                                Ø-
                                            k⁴ajtè -Ø
      3.STBL.CMPLT.ANIM.PAT= NPFV.REAL- see
      *I see the person (collog. and the person was affected)
(14) tçò?itçó tímóɔ ləkhajtè
      Ø-
                         t¢ò?i
                               -t¢ó
                                             tí
                                                     =mɔ́ɔ
                                                                   1a=
      CMPLT.ANIM.STBL- person -CMPLT.LOC toward = REF.VIS.STBL 1.STBL.CMPLT.AGT =
                  k<sup>h</sup>aitè -∅
      NPFV.REAL- 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 § 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 can optionally be used to indicate greater intensity, but partial reduplication is used in verbal paradigms.

```
TODO example sentences
```

 $|R_{i^{\sim}}|$ indicates full reduplication of the initial syllable, and $|R_{f}|$ indicates full reduplication of the final syllable.

8.6 | Conjugations

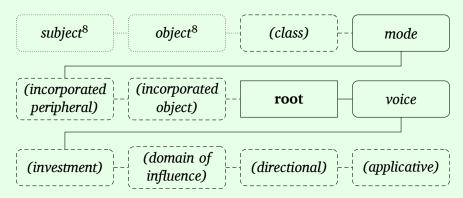


Figure 8.1: Conjugation slots

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



Figure 8.2: Deranked conjugation slots

Copulae also take more limited inflection.



Figure 8.3: Copular conjugation slots

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.

⁸Subject and object/attribute slots are optional when the corresponding argument is not present.

			Agt.	Pat.	Erg.					
	1		lə=	le(h)=	já(N)=					
Stbl.	2		nó=		nə=			Agt.	Pat.	Erg.
	3	Anim.	tá=	té(h)=	t¢à(n)=	_	1			
	3	Inan.	ha(n)=		τφα(Ν)-	1	ká=	ke=	tà(?)=	
	1				174 174		2	n၁ဴ=(ဴ)	nəw=	, no=
	1		l la) =	t^2 áw=, t^2 ó=		3	sá=	se(h)=	kí(n)=
Nstbl.	2		n၁=(ဴ)	n၁ဴ=(ဲ)	néj=, ní=					
143101.	3	Anim.	t²ó=	t²á(h)=	. h			(b) I	ncomplete	
					tç"o(n)=	$tc^ho(N)=$				
		Inan.	[[]	(N)=						
		(0	a) Complet	re						

Figure 8.4: Pronominal proclitics

8.6.2 | Noun incorporation

In certain verbs, object and peripheral nouns may be *incorporated*, or attached to, the verb. The incorporated noun may be phonologically reduced or even undergo suppletion. They are always placed directly before the verb root.

When an object noun is incorporated, the meaning of the phrase becomes more general, e.g., <u>he chops the tree (a specific tree)</u> vs. <u>he chops trees (as a profession, in general)</u>. Furthermore, an incorporated noun is never in focus, allowing other parts of the statement to be emphasized.

Likewise, incorporated peripheral nouns are never in focus, but do not necessarily generalize the phrase. Incorporation of peripheral nouns, especially instruments, is common.

Additionally, the incorporated noun may optionally be marked with a noun class prefix (*see § 7.3.1*). If it is a peripheral object, it may take an associative or locative case marker. The incorporated noun is not marked for anything else.

TODO example sentences

8.6.3 | Voice

The verbal voices in Timah are symmetric, i.e., they do not alter the valency of the verb, only the arguments' roles.

-Ø Actor voice; the subject is the agent, the object is the patient; AV

-tá Undergoer voice; the subject is the patient, the object is the agent; UV

nótè Correlative voice; the agent/patient distinction of the subject (and object) is reduced; CV

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

(15) ləmólámótè

lə= mólá -mótè 1.STBL.CMPLT.AGT= wash -CV <u>I wash myself</u>

(16) lələmólámótè

```
lə= mólá -mótè
1.STBL.CMPLT.AGT= 1.STBL.AGT.CMPLT= wash -CV
we wash ourselves
```

(17) kákámólámótè

```
ká= ká= mólá -mótè
1.NCMPLT.AGT= 1.AGT.NCMPLT= wash -CV
we wash each other
```

8.6.4 | Investment

The property of *investment* indicates that the subject has or does not have some sort of interest or stake pertaining to the action, e.g., give (uninvested) vs. loan (invested).

```
-Ø uninvested
-tçà invested; INV
```

8.6.5 | Domain of influence

Domain of influence in Timah 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 conjugate via suffixes for the presence of the object inside or outside the domain of influence of the subject.

```
ó-N, -ná? inside the domain of influence; ∈DOI
-lɔ́ò outside the domain of influence; ∉DOI
```

Only multivalent verbs in either the actor or undergoer voices may be marked for domain of influence, i.e., avalent and monovalent verbs, and verbs in the correlative voice may not take domain of influence marking.

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) hònmóo jéntélaj?análóò

```
\oslash- hòn -\oslash = m\acute{o} j\acute{o}n = CMPLT.ANIM.STBL- dog -CMPLT.AGT = REF.VIS.STBL 1.STBL.CMPLT.ERG = t\acute{e} laj- ?an\acute{a} -\bigcirc -1<math>\acute{o}\acute{o} 3.STBL.CMPLT.ANIM.AGT = PFV.REAL- hit -AV -\notinDOI I (tried to) hit the dog (and failed)
```

When pertaining to abstract concepts, 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) hònsi lətéhənán

 \oslash - hòn -si = \oslash lə= CMPLT.ANIM.STBL- dog -CMPLT.PAT =NREF.VIS.STBL 1.STBL.CMPLT.AGT = té= hɔnɔ́ - \oslash -n 3.STBL.CMPLT.ANIM.PAT= want -AV - \in DOI

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

(20) hònsi lətéhənólóò

 \oslash - hòn -si = \oslash lə= CMPLT.ANIM.STBL- dog -CMPLT.PAT =NREF.VIS.STBL 1.STBL.CMPLT.AGT = té= hɔnɔ́ - \oslash -lɔ́ɔ̀ 3.STBL.CMPLT.ANIM.PAT= want -AV - \notin DOI

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

8.6.6 | Expressive moods

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

TODO example sentences

t¢ś	Imperative; commands, wishes, desires; IMP
$s^{h}a$	Interrogative; questions, requests; INT
təj	Polar; yes/no questions; tag questions; POL
kì	Precative ; polite requests and commands; PREC
t²́ón	Suggestive; suggestions, admonitions, warnings; SUG

The *interrogative* marker $s^h a$ may be used in tandem with an interrogative pronoun (see § 7.2.2).

8.6.7 | Mode

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

	Imperfective	Habitual	Perfective	Experiential	Iterative
Realis	Ø-	k ² a(?)-	laj-, le-	jíhi-	$R_{i}^{-}k^{2}a(?)$ -
Affirmative	\sim R _f	$k^{2}a(?)-\sqrt{R_{f}}$	laj- $\sqrt{R_f}$, le- $\sqrt{R_f}$	jíhi- $\sqrt{R_f}$	$R_i \sim k^2 a(?) - \sqrt{R_f}$
Irrealis	tɔ(?)-	tew-, tə-	haj-, he-	já-	R _i ~tew-, R _i ~tə-
Conditional	?o-		né(h)-	ja-	$K_1^{-1}CW^{-}, K_1^{-1}U^{-}$
Hypothetical	tàj-, tè-		k ^h à-		R _i ~tàj-, R _i ~tè-

Figure 8.5: Mode

8 | Verbs 36

The *realis* and *affirmative* moods are classed as *realis*, while the *irrealis*, *conditional*, and *hypothetical* moods are classed as *irrealis*.

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 across multiple timeframes; HAB
Perfective	event is complete; PFV
Experiential	event is experienced; EXP
Iterative	event is repeated within the same timeframe; ITER

8.6.7.1 | 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), and may be in either order depending on topic and focus (see § 16.1).

```
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
```

8.6.8 | Evidential moods

Timah optionally marks four levels of evidentiality (as well as a *quotative*), which express how the information was gathered. Evidentiality markers are placed before their head verb. They are considered *realis*.

TODO example sentences

8 | Verbs 37

$k^h e k^h i$	Witness; knows of event directly; WIT
sésən	Evidential; knows of event via evidence; EVID
tɔnke	Anecdotal; knows of event via prior experience(s); ANEC
móho	Reportative; knows of event indirectly; REP
?aj	Quotative; marks quoted speech, dialogue; can be used with other evidentials; QUOT

8.6.9 | Directional specifiers & applicatives

The *venitive* and *andative* suffixes, collectively called *directional specifiers*, are commonly used with verbs of movement, such as wś move, walk, shɔj carry, give/take, and others. These are placed directly after the verb root.

TODO example sentences

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

Applicatives are valency-increasing 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. These are placed directly after the verb root and, if present, after the directional specifier.

TODO example sentences

```
-lí Relational; accompaniment; REL

-khòn Beneficial; intent of benefit/purpose or reference/relation; BEN

-t²ɔ? Causal; causation, final causation; CAUS

-kéh Complemental; similarity/comparison, state of being; COMP

-tçò Locational; relative physical or temporal location and movement; LOCL

-sò? Positional; absolute physical or temporal location and movement; POSL
```

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 § 7.4) placed after the object.

8.7 | Verbal classifiers

Verbal classifiers are used with certain verbs to describe characteristics of the object, specifically integrity and *category*. It is most often used with verbs of handling.

TODO example sentences

8 | Verbs 38

	Complete		Incomplete	
	Animate	Inanimate	псопри	
Standing	?i-	tàj-, tè	sahi-	
Sitting	maa-	taj-, te	mií-	
Lying	t¢è-	tí(n)-	11111	
Generic	k²áj	-, k²í-	?ɔj-, ?ə-	

Figure 8.6: Verbal classifiers

Standing	entity is taller than it is wide; STA
Sitting	entity is as tall as it is wide; SIT
Lying	entity is wider than it is tall; LNG
Generic	unspecified category; GEN

8.8 | Serial verb constructions

A *serial verb construction* (SVC) in Timah is a verb phrase that contains two or more verbs that, within the context of their clause, share the same inflections and one or more arguments. They may be *continuous* (the constituent verbs are placed adjacent to each other) or *discontinuous* (the constituent verbs are separated by an argument.)

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).

TODO expand on specific SVCs

8.8.1 | Perceptive

Perceptive SVCs are always discontinuous, and express sensory interaction.

8.8.2 | Directive

Directive SVCs may be either continuous or discontinuous, and express movement or position.

8.8.3 | Capacitive

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

8.9 | 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 8.6.7*). 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).

As noted in § 5.1, all copular phrases have *Subject-Copula-Attribute* word order. Copulae are always considered monovalent, although pronominal proclitics agree identically as in multivalent verbs (i.e., the attribute is treated as the object in terms of 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).

	Essential	Existential	Referential
Assertive	kew	nén	t ^h àh
Negatory	kəlé	néjé	t ^h àné
Revelatory	?owó		təjə

Figure 8.7: Copulae

The essential copulae express nominal and descriptive predication (<u>be</u>). The existential copulae express locational, existential, and possessive predication (<u>be at, have</u>). 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 may either refer to the inherent action of the subject or, if present, to the directly preceding verb (do). Additionally, referential copulae cannot refer to preceding copulae.

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 to 8.6.8).

9 | Descriptives

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

	1
t¢ʰàné	good, positive; full
sìnkà	bad, negative; empty
semó?	fast; loud; hard, rough
15	slow; quiet; soft, smooth
$k^h \mathfrak{l} k^2 \mathfrak{l}$	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
sòtçe	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-magnitude-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	sʰátçʰá
0	warm	t¢ókʰáj	×	sòk²áj	sóké
22	cool	tçósè	két¢²è	×	t ^h ósòh
	black	t¢ót ^h ó	két¢á	sàt¢ʰéw	×

Figure 9.1: Dyadic color terms

9 Descriptives 41

9.2 | Comparison

Comparative constructions are formed by appending a postposition after the descriptive in a copular clause. The recipient of comparison is placed after the subject, i.e., *Subject-Recipient-Copula-Attribute*.

```
s<sup>h</sup>ì positive comparison
míh equative comparison
tí negative comparison
```

(21) ketehmóɔ tçò?itçó sʰìmóɔ tókew tçósʰa

```
\oslash- keteh -\oslash = m50 \oslash- tç\Im?i

ANIM.STBL.CMPLT- child -AGT.CMPLT = REF.VIS.SG ANIM.STBL.CMPLT- person
-tç\lozenge s^h^1 = m50 t\lozenge= kew tç\lozenges^ha
-LOC.CMPLT ABL = REF.VIS.SG 3.STBL.CMPLT.ANIM.AGT = COP.ESSNT.ASSRT new
the child is younger than the man
```

Superlative constructions are formed by placing the quantifier séè <u>all, every</u> (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) shì(móɔ) tókew tçósha

Ø- keteh -Ø = móɔ séè (Ø- tçòʔi

ANIM.STBL.CMPLT- child -AGT.CMPLT =REF.VIS.SG all (ANIM.STBL.CMPLT- person
-tçó) shì = (móɔ) tó= kew tçósha
-LOC.CMPLT) ABL = (REF.VIS.SG) 3.STBL.CMPLT.ANIM.AGT = COP.ESSNT.ASSRT new
the child is the youngest of all (men)
```

```
(23) ketehmóo shì tókew tçósha
```

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

10 | Word formation

Word formation in Timah 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¢hà(?)-	person, profession	-tàj	product, result
lə(h)-(ဴ)	place; time	(ဴ)-sɔ́h	container, captivity, portation
kósó-	homorganic group/mass	-k²ə́?	tool, instrument
k ^h e-	heterorganic group/mass	(`)-s²00	abstraction, mass
t¢á(n)-(`)	prevent, stop, interrupt	-tçáh	animals, inedible plants
sáj-, sé-	pretend, mimic, falsify	-jə́h	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	3
k*	\leftrightarrow	t¢*
?	\leftrightarrow	h

Figure 10.2: Magnitude

10 | Word formation 43

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 ⁹	\rightarrow	-N ⁹
<u>್</u>	\leftarrow	14

Figure 10.3: Movement

10.2 | Compounding

Compounding in Timah 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

⁹These are the coda phonemes /w j N/.

11 | Function words

11.1 | Conjunctions

The two groups of conjunctions in Timah 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
?ika	presents contrast
teh	presents alternative

Verbal

nəj	presents non-contrast; introduces basic (dependent) clause
ten	presents rationale, causality; introduces causal (dependent) clause
motó	presents consequence; introduces consecutive (dependent) clause
?ihi	presents contrast
kàh	presents alternative

11.2 | Satellite conjunctions

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

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

11 | Function words 45

11.3 | Affirmatory & negatory

Affirmatory and negatory particles in Timah are used to affirm and negate statements, 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
s ^h à	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
jźn	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.

```
kii none, no
séè all, every
s²áw some, few
not²e many, most
hakʰìn countable, finite
sèntó? uncountable, infinite
```

11.5 | Extension

Extension in Timah 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 placed directly before their head.

11 | Function words 46

	Retro.	Protr.	Delim.
Antmp.	né	kəsí	tɔɔ́
Postmp.	liís ^h i	tòje	?ɔjke
Cistmp.	t¢átì	s^h	×

Figure 11.1: Extension

Locus defines the temporal beginning and end.

Retroactive beginning is focused; RETRO

Protractive end is focused; PROTR

Delimitive both beginning and end are focused; DELIM

Restraint describes the 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 item starts and/or ends relative to the time of reference.

TODO example sentences

11.5.1 | Use with conjunctions

When applied to conjunctions, extension expresses the temporal relation between that which the conjunction modifies.

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	?i	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	ná?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	ló?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	$k^{h}ii$	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	tək ^h o	35	$tcheq^{h}on$	47	sìit ^h ɔ	59	hent ^h e

Figure 12.1: Numerals

12.1 | Higher & lower numerals

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

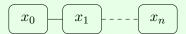


Figure 12.2: Higher numerals

12.1.1 | Numeric distributors

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

12 | Numerals 48

		1
-nii	2× -jih	2÷
-k³́́́́	$3 imes$ - $k^{ m h}\grave{a}$	3÷
-kì	4 × -té	4÷
-t¢é	5× -sì	5÷
-s [?] o	6× -hɔ	6÷

Numerals may be added and subtracted using the postpositions lí and $k^{\text{?}}e$ (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 in Timah 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	loj	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¢ ^h ò			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 in Timah consists of many elements.

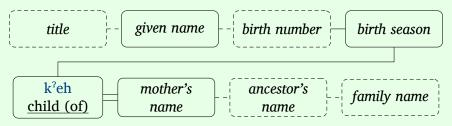


Figure 14.2: Personal name structure

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^2 eh
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 $(k^2eh \pmod{mother's given name})$ 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 in Timah 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	Te	enuis	1	!	
Nasal	^m b	ⁿ d	$^{\eta}g$ \sim η	As	spirate	h	! h	$\ ^{\mathbf{h}}$
Liquid	βВ		$\mathring{B}_{\sim}\chi \ \text{B-R}$	No	asal	ŋ	n i	ŋ
	(a) I	Pulmonic		Gl	lottal	n 3	$\mathfrak{d}_{\boldsymbol{i}_3}$	$\mathfrak{p}\ _{\mathfrak{Z}}$
						(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 in Timah: *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 53

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 chaos, disformity Back vowels /o o/ Initial reduplication $|R_{i^{\sim}}|$ reductive, diminutive, negative Final reduplication $| R_f |$ casual, informal, playful Full reduplication |R|intensive, augmentative, affirmative Lengthening general, associative **Toneless** natural measure, innate size **High tone** narrow, shallow; thin, tall

wide, deep; fat, squat

Low tone

16 | Pragmatics

16.1 | **Topic & focus**

Topic and focus are important elements of discourse in Timah. Under certain circumstances (see § 5.2), the presence of explicit topic-fronting and/or focus-marking can change which alignment is used. Variably-aligned statements default to the active-stative alignment, but take the ergative-absolutive alignment when the speaker wishes to emphasize or topicalize the subject.

In general, the topic marks known or old information, while the focus marks unknown or new information.

16.1.1 | Topic & focus marking

The *topic* of a clause can be explicitly marked by changing the alignment of a variably-aligned clause to ergative-absolutive. In invariably-aligned clauses, the topic is explicitly marked by fronting the topicalized argument.

The topic strongly correlates to the subject of the clause, but this is not always the case. If the speaker wishes to emphasize the object, the arguments must be switched and the verb put into the undergoer voice (see § 8.6.3).

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

TODO example sentences, expand on topic/focus stuff

	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.

16.2 | Deixis

16.2.1 | Spatiotemporal deixis & domains

The deictic space of Timah is divided into three main domains: *anterior-sinister*, *anterior-dexter*, and *posterior*.

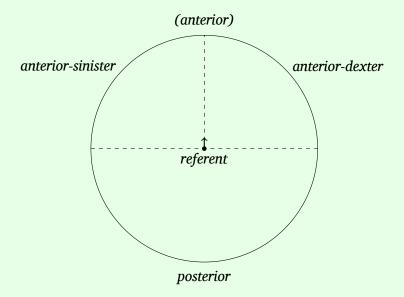


Figure 16.1: Deictic space

As noted in § 7.2.3, these domains encode temporal reference in addition to spatial reference.

17 | Speech registers

TODO all of this

There exists many special *speech registers* in Timah. 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

Appendices

Within these dictionary appendices, entries are notated as word (reduced form): (inherent inflections/classes) definition. Arguments in parentheses do 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) : (ANIM) n. person, human, humanoid creature ‡ cl. people, all humanoids
- kon: (INAN, PNSTBL) *n.* place, location, area ‡ *cl.* places, locations
- keteh (k²eh), tçatih^{FP}: (ANIM) *n*. baby, offspring; child, young person ‡ *cl*. young (of an animal), offspring
- sisì (s²iì) : (ANIM, PNSTBL) *n*. water, air; liquid, fluid; motion, movement ‡ *cl*. all fluids
- neh: (INAN) n. rock, stone, solid; immobility, inactivity ‡ cl. rocks, stones, natural solids; hard body parts e.g., shells, bone, teeth, nails
- tçì : (ANIM) *n.* animal, creature, beast ‡ *cl.* all wild terrestrial animals excluding insects
- tçasí : (INAN) *n*. tree, plant; foliage, vegetation ‡ *cl*. all non-edible plants
- sóósa : (INAN) *n.* container, vessel, receptacle ‡ *cl.* all containers; all foods that can contain other food

- k²á?e: (INAN) *n*. tool, instrument, weapon ‡ *cl*. all tools, instruments, weapons; functional body parts e.g., appendages, sensory organs
- thìló: (ANIM) n. body; flesh, meat (living); physical form; body language, behavior
- thè?: (INAN) *n*. corpse; flesh, meat (dead/raw); death ‡ *cl*. soft body parts e.g., flesh, hair, skin; all animal-derived foods
- k^hàtí : (ANIM) *n*. flesh, meat (cooked); meal, feast
- jáhɔ : (INAN) *n*. fruit; edible plant; the flesh of a fruit; flower ‡ *cl*. all plant-derived foods; all flowers
- ?olowí (?oló) : (ANIM) *n.* season, the division of a year; time ‡ *cl.* time, all temporal concepts
- ma : (INAN) *n*. word, symbol, name; writing ‡ *cl*. all symbols, names

B | Verbal limitives

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

- hasì : (VOL, SVAL) *n*. smell, taste, indirectly sense
- jékə : (VOL, BVAL) n. feel, sense; know
- se?mɔ́: (VOL, PVAL) n. make, cause, do
- kho: (NVOL, AVAL) n. occur, happen, exist
- hɔnɔ́: (VOL, BVAL) n. want, desire, wish

C | Formatives

m

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

l n

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

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

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

- tɔnlá: (ANIM) n. voice, sound; song, music ‡ (VOL, MVAL) v. make sound, music; sing
- tətçìn (tç²ìn): (ANIM) *n*. eye, pair of eyes; sight ‡ (NVOL, SVAL) *v*. see, visually sense

- $tc^h as^2 ah (tc^h a)$: (INAN) n. that which is contained; injury \ddagger (VOL, BVAL) ν . contain (within); incapacitate, debilitate
- tçii: (INAN) n. sand, dust, gravel, grain; sugarcane, sugar, sweetness ‡ (VOL, BVAL) v. separate, crumble; be particulate, granular; be sweet
- tçóhkhð (tçoh): (INAN) n. milk, fat ‡ (NVOL, MVAL) v. be/have/drink milk; be fat

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

- $k^h \hat{a}$: (ANIM) n. breast; fat ‡ (VOL, BVAL) v. produce milk; nurture, care (for)
- khòo: (ANIM) *n.* fingers, hand, arm ‡ (VOL, BVAL) *v.* touch, interact (with)
- ki?əj (k²ii): (INAN) *n*. boat, method of travel; transportation; trade, commerce; goods, cargo, something to be transported ‡ (VOL, PVAL) *v*. travel (by boat); transport; trade (goods)
- kətóhi^{FP} (mii): (INAN) *n*. any grain, cereal or pulse; bread ‡ (VOL, MVAL) *ν*. grow/harvest grain
- kála (kóɔ): (ANIM) n. fish; conspiracy, scheme ‡ (VOL, MVAL) v. fish, go fishing; conspire, scheme

C | Formatives 60

• $k^2 \dot{e} t c^2 \dot{e} (j \dot{a} N)$, $j \dot{a} N^{NI}$: (ANIM) n. friend, spouse; expected accompaniment; friendship, relationship \ddagger (VOL, BVAL) ν . accompany; be in a relationship

| ?

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

$\mid s^h, s, s^?$

- sènáj (sáj) : (ANIM) n. bear; fear ‡ (NVOL, MVAL) v. be a bear; be afraid
- set²o?: (ANIM) *n*. river, moving body of water; narrow portion of material, strip ‡ (VOL, BVAL) *v*. travel by river, moving body of water; make into narrow portions, strips
- sələn: (ANIM) *n.* intestines, that which is digested ‡ (NVOL, BVAL) *v.* digest, break down (naturally); dissolve
- s²ə́lə́w: (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 ‡ (VOL, MVAL) v. harvest (the leaves of) a saraw plant; write
- sóo : (INAN) *n*. excrement, waste ‡ (NVOL, MVAL) *v*. excrete, produce waste

• sòjsi: (ANIM) *n*. hot food; cooked food; something to be made warm ‡ (VOL, MVAL) *v*. prepare hot food; heat, make warm

| h

- hèlóo : (INAN) *n*. root; source, origin, cause; stability ‡ (NVOL, BVAL) *v*. be a source, origin; cause; be stable; stabilize
- hòn: (ANIM) *n.* dog, wolf, canine; any domesticated animal ‡ (NVOL, BVAL) *v.* be a dog; domesticate
- hój (hoj): (ANIM) *n*. number, numeral; amount, quantity; group, collection ‡ (VOL, BVAL) *v*. count, enumerate, quantify; collect, amass

W

- win: (ANIM, PNSTBL) *n.* rain, precipitation; tears ‡ (NVOL, AVAL) *v.* rain, precipitate; fall, come down, descend; cry, weep
- mínwo : (ANIM) n. bird; flight; gossip ‡ (VOL, MVAL) v. be a bird; fly; gossip
- wítç^hə : (INAN) *n*. weakness, laziness ‡ (NVOL, MVAL) *v*. be weak, lazy
- wíini (wíi): (ANIM) *n*. cat; cleverness, wit ‡ (NVOL, MVAL) *v*. be a cat; be clever, witty
- wíkən (wén): (ANIM) *n*. mouth, opening, orifice ‡ (VOL, BVAL) *v*. hold in one's mouth, suck; fellate
- wówkho (wó?): (INAN) *n.* that which is broken; breakage, damage, injury ‡ (NVOL, BVAL) *v.* break, damage, injure; be broken, damage, injured
- wónɨj (wój): (INAN) n. small amount;
 poverty ‡ (NVOL, MVAL) v. have few; be poor
- wolòh: (INAN) *n*. snow, ice, frost, cold water ‡ (NVOL, AVAL) *v*. snow, hail, rain coldly

C | Formatives 61

| 1

- lìjók²o (lìjó?): (INAN) n. face, flat surface; table ‡ (VOL, BVAL) v. flatten, make flat; be flat; lay flat
- let^hitça (litç^ha) : (ANIM) *n*. liquid food ‡ (VOL, MVAL) *v*. prepare liquid food
- ləneh: (INAN) *n.* mountain, collection of rock/stone ‡ (VOL, BVAL) *v.* be/climb a mountain; stop, prevent

- lɔtɕ²ɔ́: (ANIM) n. rain ceremony ‡ (VOL, MVAL) v. perform a rain ceremony
- lónlə (lón): (INAN) *n*. dumpling, dough; smallness, roundness; cuteness ‡ (VOL, MVAL) *ν*. have/eat/prepare/be (a) dumpling(s), dough; be small and round; be cute

| j

• jon: (INAN) *n.* cave, dwelling; quiet, silence ‡ (VOL, MVAL) *v.* live in a cave; be quiet, silent

D | Ideophones