1. A Guide to the Tinellbian Languages

This is a grammar of the languages of Tinellb. All these languages descend from a single common ancestor, High Lulani. Lulani and its descendants were taken into each of the Ptokan worlds by the Gu

1.1 High Lulani

𐤟𐤏𐤒 Created by Queen Loren on Mala Ptokonoi.

2. Introduction

The Tinellbian languages are a range of constructed languages, as befits the constructed universe of Tinellb. In that world, the ancestor language was created by Queen Loren of the Ptokonoi, and then ev naturally as different groups of people moved through space, time and reality.

3. History

The internal history of the Guozu and their languages is written as if it were a chronicle of actual ev The external history is the more prosaic record: a description of the genesis and evolution of my ideas

4. Internal History

Within the universe named Tinellb, there is a planet named Ptoko. There arose on this world a race humanoids, the Ptokan. Over millions of years, their race evolved and became the dominant force on planet.

There had been many conflicts, small and large, throughout their history. One particularly bloody w had much of the population brought into it: a World War. The survivors of this war were ruled by a sin monarch.

Generations passed. The people rebuilt their shattered world. The newest ruler, Queen Loren, decid create an international language to promote peace amongst her subjects. She named this language Lul after herself.

Despite their shared language, as more time went by, fractures again showed between nations. Ano world war ensued. A great weapon was created, one that tore apart space-time, flinging its victims far into the universe.

One such group were the Fezhel. They found themselves on an empty world. The Fezhel tongue ev independently from Lulani, and was later heavily influenced by Zhaladi dialects.

The people that remained on Ptoko slowly grew back towards peace. Their vernacular evolved into Ptokan, and thence into Tsarin. By the time of Tsarin, Lulani was used only for science and the arts, n everyday use.

Tsarin was spoken in the realm of Tsarein.

- HL: High Lulani
- VL: Vulgar Lulani
- EF: Early Fezhel
- LF: Late Fezhel
- KF: Koine Fezhel
- OP: Old Ptokan
- MP: Middle Ptokan
- SP: Standard Ptokan
- AS: Ancient Solajin
- MS: Medieval Solajin
- CS: Contemporary Solajin
- NS: New Solajin
- PZ: Proto-Zhaladi
- TZ: Traditional Zhaladi
- RZ: Reformed Zhaladi
- PB: Pre-Brequèn
- AB: Archaic Brequèn
- CB: Common Brequèn
- CT: Classical Tsarin
- MT: Modern Tsarin

5. External History

I have been interested in language and linguistics since at least the age of 10. I remember making u words when I was quite young. In fact, the High Lulani word **mica** ɾd *hello* dates from that time.

When I decided to write a novel, a constructed language (conlang) was an obvious prospect for inc in the background information. I had the beginnings of what was to be the Ptokan language, and the language of the Fezhel. The latter was once designed as a daughter language of Ptokan, but it had son features, mostly phonological, that seemed to come from an earlier language. Thus was Lulani born. Originally intended to be a phonology sketch, Lulani has expanded greatly into a language in its own So much so, in fact, that Ptokan and Fezhel have been forced to change somewhat to adapt.

6. High Lulani

High Lulani is the language created by Loren, queen of the Ptokonoi. It features a semi-closed verb and extensive compounding. It has a featural script.

7. Phonology

High Lulani phonology has 18 consonant sounds and 3 vowels. Plosives are the only class that hav voicing distinction; fricatives are prototypically voiceless, and resonants are prototypically voiced. Vo are defined in terms of openness and frontness; there are no oral, length or tone distinctions. All High words are formed from alternating consonant-vowel pairs. Any word-internal consonant can be gemi which can palatalise or change the voicing of the original sound.

This page will show each of the International Phonetic Alphabet characters used in High Lulani pronunciations.

Consonant	Example	Consonant	Example	Consonant	Ex
b	**b**a'u	h	**h**isuba	ɲ	ja**n**
bʱ	sa**bb**a	j	fa**ʔ**a[1]	ŋ	**q**a
c	qa**cc**a	ɟ	**j**usi	p	**'**a**p**
cʰ	**c**u'i	ɟʱ	ma**jj**a	pʰ	**p**ut
ɕ	**x**u'a	k	ta**kk**i	r	gu**r**
d	**d**aru	kʰ	**k**a'u	ɾ	**r**us
dʱ	**'**a**dd**a	l	**l**isa	s	**s**ip
f	**f**ara	ʌ	mu**ll**u	t	ni**tt**
g	**g**usu	m	**m**ullu	tʰ	**t**a'i
gʱ	sa**gg**i	n	**n**isa	ʔ	xu**'**

[1]The phone /j/ only appears as the second segment of an allophonic variant of /ʔ/, when that sou geminated.

Vowel	Example	Vowel	Example
a	b**a**tu	ə	su'**a**
i	b**i**tta	ɨ	kas**i**
u	c**u**ra	ʉ	l**u**lani

The suprasegmental symbols are all exemplified in /ˌpʰam.ɨ.ˈlam.ɨ/.

8. Consonants

Consonants are differentiated by manner and place of articulation, and by word-internal geminatio Plosives also have contrasting voice.

	labial	alveolar	retroflex	palatal	velar	glottal
stop	p b	t d		c ɟ <j>	k g	ʔ <'>
nasal	m	n			ŋ <q>	
lateral		l				
tap			ɾ <r>			
fricative	f	s		ɕ <x>		h

This table shows the consonants phonemically, using the International Phonetic Alphabet. Where it from IPA, the transliteration is given in <triangular brackets>.

Capital or geminate glottal stops are transliterated with <ʔ>. Examples:

ba'u — usual word-internal glottal stop
nasiʔu — geminate word-internal glottal stop
'usu — usual glottal stop within sentence
ʔusu — capitalised glottal stop at beginning of sentence
ʔallisi — capitalised glottal stop for proper noun (Alice)

8.1 Stops

Stops are differentiated by voicing, although voiced consonants tend to be rarer than their voiceless counterparts.

The voiced stops are fully voiced word-internally and partially voiced word-initially. Voiced gemin stops are given breathy voice. Voiceless stops are lightly aspirated, which is suppressed in voiceless geminate stops.

Geminate stops are held for approximately twice as long as non-geminate stops.

8.1.1 Labials

The plosives /p/ and /b/ are bilabial.

pu'iba /pʰʉ.ˈʔib.ə/ *ball*
qapi /ˈŋapʰ.ɨ/ *rope*
kuppu /ˈkʰup.pʉ/ *be strong*
bufi /ˈbuf.ɨ/ *pebble*
huba /ˈhub.ə/ *to live*
kibba /ˈkʰibʱ.bʱə/ *stick*

8.1.2 Alveolars

The plosives /t/ and /d/ are apical.

turassi /tʰʉ.ˈɾas.sɨ/ *redhead*
fi'atu /fɨ.ʔatʰ.ʉ/ *certain*
matta /ˈmat.tə/ *again*
daru /ˈdaɾ.ʉ/ *road*
xidu /ˈɕid.ʉ/ *far away*
kuddu /ˈkudʱ.dʱʉ/ *rain*

8.1.3 Palatal

The plosives /c/ and /ɟ/ are laminal. In fast speech, they can approach the affricates /tʃ/ and /dʒ

cissa /ˈcʰis.sə/ *air*
xuci /ˈɕucʰ.ɨ/ *feather*
nacca /ˈnac.cə/ *clothing*
jagaru /ɟə.ˈgaɾ.ʉ/ *sand*
sajimu /sə.ˈɟim.ʉ/ *crack*
majja /ˈmaɟʱ.ɟʱə/ *here*

8.1.4 Velars

The velar plosives are /k/ and /g/.

ka'u /ˈkʰaʔ.ʉ/ *jump*
'isaki /ʔɨ.sakʰ.ɨ/ *company*
nukki /ˈnuk.kɨ/ *strawberry*

gurrisu /ˈgur.rɨ.sʉ/ 𐤔𐤋𐤓𐤎 *door*
danagi /də.nag.ɨ/ 𐤇𐤍𐤊 *decree*
saggi /ˈsagʰ.gʰɨ/ 𐤇𐤓𐤑 *iron pyrites*

8.1.5 Glottal

The glottal stop /ʔ/ is one of the most common sounds. Non-geminate glottal stops are often suppr between unstressed vowels. The second of a geminate glottal stop becomes a palatal approximant /j/

'anu /ˈʔan.ʉ/ 𐤀𐤏 *to balance*
kuli'a /kʰʉ.ˈliʔ.ə/ 𐤏𐤋𐤃 *friend*
nasiʔu /na.ˈsiʔ.jʉ/ 𐤏𐤓𐤉𐤍 *sheep*

8.2 Nasals

There are nasal consonants at each of the places of articulation of the plosives. However, the palata is only found when geminating the alveolar nasal. Nasals are prototypically voiced. Geminate nasals a held for 1 ½ times as long as non-geminates.

8.2.6 Labial

The labial nasal /m/ is bilabial.

mana /ˈman.ə/ 𐤍𐤏𐤋 *bubble*
salumi /sə.ˈlum.ɨ/ 𐤆𐤔𐤑 *seven*
girammi /gɨ.ˈʁam.mɨ/ 𐤆𐤓𐤁𐤇 *thunder*

8.2.7 Alveolar

The alveolar nasal /n/ is apical. When geminated, this sound is palatal and laminal.

nu /nuː/ 𐤀 *to stop*
lulani /lʉ.ˈlan.ɨ/ 𐤋𐤒𐤔 *queen*
sinna /ˈsiɲ.ɲə/ 𐤍𐤓𐤉 *story*

8.2.8 Velar

The nasal /ŋ/ is velar.

quliru /ŋʉ.ˈliʁ.ʉ/ 𐤒𐤆𐤃 *family*
kunaqi /kʰʉ.ˈnaŋ.ɨ/ 𐤈𐤍𐤊 *earth*
laqqu /ˈlaŋ.ŋʉ/ 𐤃𐤓𐤒 *wealth*

8.3 Liquids

The liquids are mainly differentiated by laterality. This language lacks phonemic glides. Like nasal approximants are prototypically voiced, and geminates are held for 1 ½ times as long as non-geminate

The consonant /l/ is lateral and apical. When geminated, this sound is laminal and palatal.

The consonant /ɾ/ is central, retroflex and sub-apical. When geminated, this sound becomes a trill.

lassi /ˈlas.sɨ/ *baby*
kulu /ˈkʰul.ʉ/ *fork*
malliju /ˈmaʌ.ʌɨ.ɟʉ/ *happiness*
ru'iha /ɾʉ.ˈʔih.ə/ *history*
karafi /kʰə.ˈɾaf.ɨ/ *enlightenment*
qarri /ˈŋar.rɨ/ *to open*

8.4 Fricatives

Fricatives do not have complete closure of the vocal tract, but are formed with enough constriction bring turbulence to the airstream.

Fricatives are prototypically voiceless. The lips remain unrounded for all fricatives unless followed preceded by a rounded vowel. Geminate fricatives are held for 1 ½ times as long as non-geminates.

8.4.9 Labial

The fricative /f/ is realised as labiodental.

faxi /ˈfaɕ.ɨ/ *to survive*
bufiqi /bʉ.ˈfiŋ.ɨ/ *illness*
'iffa /ˈʔif.fə/ *it*

8.4.10 Alveolar

The fricative /s/ is apical.

sikka /ˈsik.kə/ *skin*
husabi /hu.ˈsab.ɨ/ *finger*
'alissa /ʔə.ˈlis.sə/ *requirement*

8.4.11 Palatal

The palatal fricative /ɕ/ is laminal.

xaha /ˈɕah.ə/ *name*
puxila /pʰʉ.ˈɕil.ə/ *message*
dixxa /ˈdiɕ.ɕə/ *drink*

8.4.12 Glottal

The fricative /h/ is a voiceless sound. When geminate, it is pronounced as a palatal fricative.

hannaku /ˈhaɲ.ɲə.kʉ/ *cat*
tihu /ˈtʰih.ʉ/ *to dwell*
quhha /ˈŋuç.çə/ *river*

9. Vowels

There are three phonemic vowels, with two main allophones for each. The vowels are distinguished closeness and frontness.

	front	central	back
close	i	(ɨ) (ʉ)	u
mid		(ə)	
open	a		

There are three phonemic vowels: two close vowels and one open. These are given in the above ch with the variant allophones in (round brackets). The central and mid vowels are considered the lax va

9.1 Front

The front close vowel is unrounded. It is realised as /i/ or /ɨ/.

mici /ˈmic.ɨ/ *peace*
salilu /sə.ˈlil.ʉ/ *night sky*
dibada /dɨ.ˈbad.ə/ *life*

9.2 Open

The open vowel is unrounded. It can be realised as /a/ or /ə/.

kanama /kʰə.ˈnam.ə/ *to play*
naru /ˈnaɽ.ʉ/ *slowly*
ʾiʾuja /ʔɨ.ʔuɟ.ə/ *table*

9.3 Back

The back close vowel is rounded. It can be realised as /u/ or /ʉ/.

mulu /ˈmul.ʉ/ *blood*
hulla /ˈhuʌ.ʌə/ *to have sex*
riccu /ˈɽic.cʉ/ *sphere*

10. Phonotactics

Phonemically, all syllables are CV, that is, one consonant followed by one vowel. Word-internal consonants can be geminated. The only consonant clusters are geminate consonants, and there are no phonemic vowel clusters or long vowels.

11. Suprasegmentals

11.1 Syllabication

Syllable breaks are placed between two geminate consonants.

bat.ta

If there are no geminates, then the final vowel, and every second vowel going backwards are their c syllables.

tuc.i
lu.lan.i
pam.i.lam.i

These two rules are in order of priority, and two closed syllables can only appear next to one anothe they both end in geminates, thus:

jan.ni.ga
rad.dil.la

11.2 Stress

There are four levels of stress which are assigned to particular forms of syllables. Stress effects the and pitch of vowels. The top two levels are grouped together as ‘stressed’, leaving the other two level ‘unstressed’.

11.2.1 Primary Stress

Primary stress is characterised by tense vowels with a high pitch. In polysyllabic words, primary st falls on the last closed syllable. Monosyllabic content words also receive this stress, although this is n explicitly marked in the pronunciation guide.

/tʰu/
/ˈbit.tə/
/ˈtʰucʰ.ɨ/
/lʉ.ˈlan.ɨ/
/ˌpʰam.ɨ.ˈlam.ɨ/
/ˈɟaɲ.ɲɨ.ɟa/
/ˌɽadʱ.ˈdʱiʌ.ʌə/

11.2.2 Secondary Stress

Secondary stress is also characterised by the use of the tense vowels, however, the pitch is lower th average. This falls on any other closed syllables.

/ˌpʰam.ɨ.ˈlam.ɨ/
/ˌɽadʱ.ˈdʱiʌ.ʌə/

11.2.3 Tertiary Stress

Tertiary stress is charateristed by use of tense vowels with a median pitch. This stress falls on any c syllable after one with quaternary stress. It is also the stress attracted by monosyllabic functional wor not explicitly marked; instead denoted by use of a tense vowel symbol with no stress mark.

/ˈlaɲ.ɲʉ.hu/
/pʰi/ **(functional word)**
/kʰə.lu/ **(functional word)**

11.2.4 Quaternary Stress

Quaternary stress is characterised by a lax vowel with median pitch. It is not explicitly marked. Thi falls on any open syllable directly following one with primary or secondary stress, or an initial syllabl has not yet received a stress. This latter implies that quaternary stress is assigned before the tertiary, d being of lower rank.

/ˈnaɾ.ə/
/ɕə.ˈnakʰ.ɨ/

11.3 Vowel Length

Stressed vowels are slightly longer than other vowels. WIth this proviso, long and short vowels are variation. An unstressed vowel between two identical consonants is elided. This elided vowel is repla with a central dot (·) in the transliteration. This dot also appears in the compound word **ku·li** to distin from the stem word **kuli**.

11.4 Prosody

Interrogative and imperative sentences (questions and orders) are denoted by tone. This tone is eith rising tone (ă) or a falling tone (â), placed on the syllable of the appropriate word which has the greate stress.

Falling tone can also be used to bring focus to a particular word.

12. Orthography

As well as the syllabary for most written use, there are also special-use syllabaries. One of these en more redundancy for use with noisy channels. The other is a non-visual written code for blind and oth visually impaired users.

13. Syllabary

The Lulani syllabary was developed as a featural script, with similar sounds having similar symbol

It is written in horizontal rows, right-to-left, and top-to-bottom.

	stop	voiced	nasal	lateral	tap	fricative
	pa: ᗝ	ba: ᗜ	ma: ᗝᐧ			fa: ᖘ
labial	pi: ᖶ	bi: ᖷ	mi: ᖹ			fi: ᖻ
	pu: ᖽ	bu: ᖾ	mu: ᖿ			fu: ᗅ
	ta: ᐱ	da: ᐳ	na: ᐴ	la: ᐷ	ra: ᐸ	sa: ᐵ
alveolar / retroflex	ti: ᐣ	di: ᐤ	ni: ᐦ	li: ᐨ	ri: ᐧ	si: ᐢ
	tu: ᐩ	du: ᐪ	nu: ᐫ	lu: ᐬ	ru: ᐭ	su: ᐮ
	ca: ᒣ	ja: ᒥ				xa: ᒢ
palatal	ci: ᒋ	ji: ᒌ				xi: ᒍ
	cu: ᒎ	ju: ᒏ				xu: ᒐ
	ka: ᒃ	ga: ᒄ	qa: ᒉ			
velar	ki: ᒡ	gi: ᒢ	qi: ᒣ			
	ku: ᒪ	gu: ᒫ	qu: ᒩ			
	’a: ᗝ					ha: ᕆ
glottal	’i: ᕽ					hi: ᕐ
	’u: ᕒ					hu: ᕓ

Geminate consonants are shown as ᔕ, placed before the geminated consonant.

A central dot · is placed between words, and sentences begin and end with a ᛫ symbol.

14. Spelling Syllabary

There is a spelling syllabary, used for transmitting words across potentially noisy communication channels, such as telephone lines. It is also used for communicaing in situations where every syllable important, such as giving names. Each syllable corresponds to a disyllabic word, which begins with tl same consonant and ends with its vowel. The geminate symbol is represented by the word **faʔa** *langu*

’a: ’ara *face*	’i: ’ussi *gift*	’u: ’iku *hunger*
pa: pacca *number*	pi: paji *fruit*	pu: pusu *zirconium*
ba: bitta *time*	bi: basi *lid*	bu: batu *group*
ta: tila *shell*	ti: tuhhi *farming*	tu: tadu *pig*
da: diha *bureaucrat*	di: dicci *cold*	du: diru *money*
ca: cula *egg*	ci: cadi *wall*	cu: ciqu *mould*
ja: jana *elder*	ji: jakki *candle*	ju: jixu *dictionary*
ka: kaqqa *brother*	ki: kiri *marigold*	ku: kipu *horse*
ga: gata *pendulum*	gi: gapi *soup*	gu: gusu *person*
ma: marru *flies*	mi: mixi *room*	mu: maʔu *gingla*
na: nassa *euphoria*	ni: niddi *alertness*	nu: nuku *world*
qa: qasa *fish*	qi: quxi *mountain*	qu: qumu *woman*
la: liffa *speech*	li: lu’i *love*	lu: laqqu *wealth*
ra: rippa *surprise*	ri: rali *back*	ru: riccu *sphere*
fa: fipa *storey*	fi: faxi *to survive*	fu: famu *completely*
sa: sinna *story*	si: sutti *fear*	su: silu *spouse*
xa: xima *morning*	xi: xalli *spouse*	xu: xaʔu *child*
ha: hafa *race*	hi: huri *ocean*	hu: halu *algorithm*

15. Tactile Syllabary

There is a tactile syllabary for use by blind and visually-impaired language users.

Each cell is three rows by two columns of raised dots. The upper four dots generally denote the consonant, with syllables beginning with b, d, j, g, f, or x being the exceptions. The lowest pair gener denote the vowel.

	ʔ	p	b	t	d	c	j	k	g
a	⠂	⠒	⠢	⠶	⠦	⠤	⠬	⠱	⠩
i	⠆	⠒	⠧	⠖	⠩	⠴	⠱	⠭	⠫
u	⠳	⠣	⠵	⠤	⠵	⠤	⠒	⠳	⠵

	m	n	q	l	r	f	s	x	h
a	⠴	⠦	⠭	⠵	⠤	⠬	⠳	⠱	⠂
i	⠖	⠴	⠭	⠵	⠤	⠬	⠳	⠱	⠆
u	⠶	⠦	⠭	⠵	⠤	⠬	⠳	⠱	⠳

Dot 5 (⠂) by itself is the geminate. Word separation is shown by ( ) an empty space, clause separa (⠤) the comma, and sentence separation by (⠲) the period. Numbers are prefixed with (⠆) the numbe and the first syllable of each number is used.

16. Morphology

High Lulani is an analytic agglutinative language, as morphemes tend to keep their own shape, eve forming words.

17. Nouns

Common and proper nouns are open classes; the pronouns are closed.

17.1 Common Nouns

Common nouns can refer to abstract or concrete items.

lu'i *love*
bata *caution*
'ahati *happiness*
caga *mouth*
purissiji *circle*

17.1.1 Stem Nouns

Stem nouns are those that are neither compounded nor derived.

17.1.1.1 Mass Nouns

Mass nouns refer to an undifferentiated aggregation rather than separate units. These cannot take numbers, except for a postpended **xita** *one* to denote the smallest individual piece of that aggregate.

'iti *milk* / **'itixita** *drop of milk*
marru *flies* / **marruxita** *fly*

17.1.1.2 Animacy

This determines which derivational suffixes can be applied, and which pronouns are used as referen

17.1.1.2.1 Animate Noun

These refer to people and other multicellular organisms capable of independent movement.

gusu *person*
lulani *queen*
kitisu *father*
sula *goat*

17.1.1.2.2 Inanimate Noun

These refer to things such as natural phenomena, plants, fungi and unicellular life.

tissa *wind*
linu *tree*
hurru *yeast*

17.1.1.2.3 Abstract Noun

This category encompasses concepts, ideas and other intangibles. They are referred to by inanimat pronouns.

sutti *fear*

'adda *past*
tuhhi *agriculture*
laru *year*
sajja *silence*

17.1.2 Compound Nouns

The first part of a compound noun must be a noun, and the subsequent parts specify the meaning o noun. These parts can be nouns or verbs. The whole noun is usually written without spaces. The syllabification and stress of nonce words are determined on a stem-by-stem basis. However, a compou common use will start being treated whole.

jifiru'inulli
jifiru'i-nulli
lake-mountain
"mountain lake"

xu'abaju
xu'a-baju
bird-blue
"bluebird"

17.2 Proper Nouns

Proper nouns begin with a capital letter in the transliteration. These are names that refer to individu people, places or things.

Ra'ani *Ryan* **(name of a person)**
ʔikinnisa *Eakins* **(name of a family)**
Sa'imi *Caemi* **(name of a deity)**
Tinalli *Tinellb* **(name of a universe)**
ʔirri'a *Irìa* **(name of a city)**
Lulani *Lulani* **(name of a language)**
Xucipura Cula *The Crackled Egg* **(name of a story)**

18. Verbs

A verb is a necessary part of any sentence, except when making **copular sentences**. Verbs can be categorised on the basis of how many elements compose them.

18.0.1 Stem Verbs

The class of stem verbs is semi-closed — there are only about 100 pure verbs in the entire languag verbs consist of a single element.

'i *to say*
dissu *to feel*

'usa ᔑᐅ *to see*
janni ᔐᓀᒣ *to move*
kissa ᔑᓀᑦ *to fight*
miku ᓚᑲ *to be red*

18.0.2 Compound Verbs

In order to extend or specify meaning, verbs can be compounded much as a noun can. Compound v are, however, much more common than compound nouns, to make up for the relative lack of stem ver

'isinna
ᐱᓀᐞᐁ
'i + sinna
say-story
"to tell a story"

dissu'ahati
ᐞᔕᐅᐢᓀᓀᐞ
dissu + 'ahati
feel-happiness
"to be happy"

pamilami
ᑲᒪᓂᑲᐅ
pa + milami
think-surroundings
"to be conscious"

19. Intransitivity

Intransitive verbs are monovalent. For the archetypal intransitives, the verbal patient is the **subject**.

Badiri ru cura.
᛬ᔑᓐ᛬ᔭ᛬ᐁᐞᑐ᛬
Badiri ru cura.
World PRS;GNO *change*.
"The world is always changing."

cura ᔑᓐ *to change; to be different*
huba ᑐᑲ *to breathe; to be alive*
giri ᐁᕽ *to conceive; to be pregnant*
gupi ᚠᓚ *to sit down; to wait*
siku ᓚᐞ *to die; to be dead*
hacci ᒥᓀᔕ *to awaken; to be awake*
nara ᔑᐢ *to sleep; to be asleep*
nu'ifi ᔓᐁᐢ *to hide; to be hidden*

19.1 Adjectival Verbs

These verbs allow the speaker to describe an attribute of the **subject**.

> **Linu ra'u ki. / Linu qixa ki.**
> Linu ra'u ki. / Linu qixa ki.
> *Tree* PRS;STA *big*. / *Tree* PRS;DYN *big*.
> "The tree is big. / The tree is growing."

The actor who imparts such an attribute is put in the **ablative** case.

> **Juffila kaluMa'iliguna pani.**
> Juffila kalu-Ma'iliguna pani.
> *Dragon* ABL-Maelgwn *tame*.
> "The dragon was tamed by Maelgwn."

The experiencer who perceives such an attribute is put in the **dative** case.

> **Liqu kuhisuba bi'u.**
> Liqu ku-hisuba bi'u.
> *Head* DAT-*administrator hurt.*
> *lit:* "The head seems sore to the administrator."
> "The administrator has a headache."

mu *good*
'anu *balanced*
guqqi *bad*
tuhi *little*
ki *big*
ri *smooth*
qira *rough*
nama *light*
kuppu *strong*
pani *tame*
nittu *wild*
suqa *ready*
bi'u *sore*

19.1.1 Chromatic Verbs

These are adjectival verbs specifically dealing with **colour**.

kiʔa *white*
ga *black*
miku *red*
baju *blue*
sa *yellow*
millu *brown*

19.2 Kinetic Verbs

These verbs deal with motion of the **subject**. The origin of the movement is in **ablative** case, the destination in **dative**, and the general direction is marked with the adposition **pa**.

janni 𐤟𐤉𐤋 *to accelerate; to move around*
'ussa 𐤎𐤉𐤍 *to follow*
nura 𐤑𐤔 *to leave; to be apart from*
madi 𐤉𐤍𐤄 *to rise; to be high*
ka'u 𐤍𐤉 *to jump*
hussu 𐤔𐤉𐤅𐤅 *to fall; to be low*
saja 𐤋𐤎 *to lie down; to be lying down*
tiku 𐤕𐤊𐤔 *to turn*
na 𐤟 *to turn towards; to face*
raca 𐤋𐤑 *to be hung; to be hanging*
fiqu 𐤓𐤎 *to float; to be floating*
tihu 𐤅𐤊𐤔 *to move to; to abide*
malu 𐤍𐤄 *to move to; to be in a place*

19.3 Quasi-Transitive Verbs

These are intransitive verbs in that they do not require a noun phrase in the object position. Howev act transitively by having a second noun phrase marked in a particular way.

19.3.2 Oblique Arguments

These are marked with an **oblique case marker**:

Luna kalujifiru'i mala; luna kalu'ilupagu mala.
𐤟𐤍𐤄·𐤊𐤏𐤍𐤎𐤒𐤍𐤉·𐤟𐤍:𐤍𐤄·𐤒𐤑𐤎𐤒𐤍𐤉·𐤟𐤍𐤎·
Luna kalu-jifiru'i mala; luna kalu-'ilu-pagu mala.
Moon ABL-*lake reflect; moon* ABL-*heart*-1GEN reflect.
"The moon is reflected in the lake; the moon is reflected in my heart."

The usual case assignment for objects of each of these verbs is shown here:

mala 𐤍𐤄 *to reflect* — **ablative**
faxi 𐤓𐤇 *to survive* — **dative**

19.3.3 Comparatives

These verbs are used to denote the degree of similarity between two nouns. Their nuance can be m by use of different case markers or adpositions.

Case denotes unmarked similarity or difference, **dative** for the former, **ablative** for the latter.

Nimalu kuquliruxita runihi.
Nimalu ku-quliru-xita runihi.
Bear DAT-*family-one similar.*
“The bear is like one of the family.”

The adposition **haru** *with* denotes a slight similarity or difference.

ʔusu ra’u haruxissatanissa runihi.

ʔusu ra’u haru-xissatanissa runihi.
1INT PRS;STA *with-musician similar.*
“I am somewhat of a musician.”

The adpositions **’adi** *near* and **xidu** *far* denote a large similarity or difference.

Mari ra’u xidupajiga tina.
Mari ra’u xidu-pajiga tina.
This PRS;STA *far-olive different*.
“This is nothing like an olive.”

runihi *to be similar to*
tina *to be different from*

19.3.4 Symmetric Relations

The participants of these verbs are equivalent to each other, that is, if Alice acts on Bob, then Bob a Alice in the same way. When the subject is Alice, say, then Bob can:

1. Be placed in the object position. Despite the structure, this is not transitive, as the verb has no **pa** and pronouns use the intransitive form:

ʔallisi sisa Bubu.
ʔallisi sisa Bubu.
Alice contact Bob.
“Alice is touching Bob.”

2. Take **dative** marking:

ʔallisi kuBubu ju’i.
ʔallisi ku-Bubu ju’i.
Alice DAT-*Bob link*.
“Alice is married to Bob.”

3. Be conjoined with the **subject**:

> **ʔallisi Bubuta hulla**.
> ʔallisi Bubu-ta hulla.
> *Alice Bob-and copulate.*
> "Alice and Bob are having sex."

The basic meaning of these sentences is not changed when swapping the participants or using the alternate structures.

> **ju'i** *to join*
> **sisa** *to touch*
> **haru** *to accompany*
> **hulla** *to copulate; to have consumated*

20. Transitivity

The divalent verbs are called transitive, and these require an object to complete its meaning. It is po to elide this object if it is obvious or irrelevant. The **subject** is the agent, and the **object** is the patient.

> **Nimalu dasi (nukki).**
> Nimalu dasi (nukki).
> *Bear eat (strawberry)*.
> "The bear is eating (the strawberry)."
> **dasi** *to consume*
> **nidu** *to use*

20.1 Transformative Verbs

Unlike those above, these verbs involve a fundamental change to their **objects**.

> **'idu** *to make*
> **pifa** *to create*
> **pura** *to change; to be*
> **si'a** *to repair*
> **lakka** *to break*
> **qarri** *to open*
> **turu** *to close*

20.2 Motive Verbs

The unmarked argument structure is as follows: the oblique arguments for these are the same as for **kinetic** verbs, *i.e.:* **ablative** *source*, **dative** *destination*, and *direction* with **pa**. As for the core argume agent of the movement is the **subject**, and the patient being moved is the **object**.

20.2.1 Dative

These are motive verbs focussing on movement *to* the destination.

Suma gi pa.
∴ㅇ·킈·이슴·
suma gi pa.
1TRA *carry* 3INA;INT.
“I picked it up.”

The agent may be moved into the **dative** position, since it is identical to the destination.

Pixi duci ’iffa.
∴ʔっ우·ᄀ犬·ᄇф·
Pixi duci ’iffa.
1INT *own* 3INA;TRA.
lit: “(I) own it to me.”
“It’s mine.”

An animate source may be swapped with the patient, *i.e.:* the **ablative** becoming an **object** and vice

ʔusu ku tali fu.
∴ᄋ·ᄉㅅ·ᄃ·슴으っ·
ʔusu ku tali fu.
1INT 3INA;DAT *take* 2TRA.
lit: “I took you to it.”
“I’ve relieved you of it.”

duci ᄀ犬 *to gain; to possess*
gi 킈 *to pick up; to carry*
tali ᄉㅅ *to take*

20.2.2 Ablative

These are motive verbs focussing on movement *away* from a source.

Suma maku pa.
∴ㅇ·ᄃ이·이슴·
Suma maku pa.
1TRA *throw* 3INA;INT.
“I threw it.”

Similarly to dative motive verbs, the agent can be placed in **ablative** position, as they are identical source.

Puttu funi ’iffa.
∴ʔっ우·쑤ᄋ·ㅍっㅇ·
Puttu funi ’iffa.
1ABL *lack* 3INA;TRA.
lit: “(I’ve) lost it from me.”
“I don’t have it.”

With similarity again to the dative verbs, an animate destination may be swapped with the patient, with the **dative** becoming an **object** and vice versa.

ʔusu kalu kuffa fu.
ʔusu kalu kuffa fu.
1INT 3INA;ABL *give* 2TRA.
lit: "I gave you from it."
"I've given you it."

kuffa *to give*

saki *to share*

ga *to put*

maku *to throw*

funi *to lose; to lack*

20.3 Apparent Verbs

These act like the transitive counterpart of the **adjectival** verbs, *i.e.:* the patient as the **subject**, the in **ablative** and the experiencer in **dative**. The additional **object**, which makes these transitive, is an a noun that refers to a quality or attribute, or an inanimate noun that refers to an actual substance or ene being released. The precise verb is chosen by whether the 'radiation' is physical or **subtle** in nature.

Hifumari ba'u xi huba ra'u?
Hifu-mari ba'u xi huba ra'u?
House-this 2DAT *seem important* PRS;STA?
"Does this house seem important to you?"

Musa xu sa'i.
Musa xu sa'i.
Sun radiate light.
"The sun is shining."

These verbs can also be used to signify the patients resemblance to something else. In this case, the item or person is governed by the adposition **ka** *as.*

Filli ka'aggami xu. / Filli ka'aggami xi.
Filli ka-'aggami xu. / Filli ka-'aggami xi.
2INT *as-police_officer appear*. / 2INT *as-police_officer seem*.
"You look like a police officer." / "You act like a police officer."

xi *to broadcast subtly*

xu *to broadcast physically*

20.4 Vital Verbs

These verbs require that both their **objects** and **subjects** are animate.

kuli *to meet; to know*

ca *to help*

hisu *to administer*

kissa *to fight*
'ussa *to obey*

20.5 Action Verbs

These verbs take an activity as an **object**. These can take the form of pure nouns:

Hisutuba tara sinna.
hisutuba tara sinna.
Babysitter begin story.
"The babysitter started the story."

They can also take **gerunds**:

Kipu nu dasiruqa hafi.
Kipu nu dasi-ru-qa hafi.
Ox stop eat-GER-GEN *grass*.
"The cow stopped its eating of the grass."

la *to do*
tara *to begin*
tuni *to repeat*
nu *to stop*
naqa *to need*
tapu *to look forward to; to enjoy*

21. Ambitransitivity

Ambitransitive verbs can be used with or without an argument in the object position.

21.1 Perceptive Verbs

These verbs deal with the subject's ability to perceive stimuli.

When used purely intransitively, *i.e.:* with no direct or dative object, they refer to a general ability t that sense:

Guli ruku 'usa.
Guli ruku 'usa.
Blind_person FUT;GNO *see*.
"The blind person can now see."

When used with a direct **object**, this denotes a conscious effort at perception:

Ju'ipu'a 'usa bumaki.
Ju'ipu'a 'usa bumaki.
Assembly see screen.
"The audience watched the screen."

When used with a **dative** object, this instead lacks that effort:

Mihu kulasidaxi ju'isataduru 'usa.
Mihu ku-lasida-xi ju'isatadu-ru 'usa.
3ANI;INT DAT-*secret-seem conversation*-GER *see*.
"She saw the secret meeting."

'usa *to see*
hulu *to hear*
cussi *to feel*
ji'i *to taste*
cikki *to perceive*
dissu *to emote*
lu'i *to love*
qacca *to choose*
qi *to experience*

21.2 Communicative Verbs

The communication itself is the **object**, and the recipient is **dative**.

Kimilli kul·lani 'i 'issi.
Kimilli ku-lulani 'i 'issi.
King DAT-*song speak queen*
"The king sang to the queen."

Indirect speech is signified by a **complement object**.

Kimilli jusi 'i li lu'i lulani ru.
Kimilli jusi 'i li lu'i lulani ru.
King 3ANI;DAT *speak* COM *love queen* PRS;GNO.
"The king told him he loved the queen."

Directly reported communication is separated from the main clause by a comma, and may be put o side. In this case, the recipient may be in either the **object** position or **dative**. This argument structure also be used without a specific communication.

(Mica,) kimilli 'i lulani.
(Mica,) kimilli 'i lulani.
(*Hello,) king speak queen.*
"The king said 'hello' / spoke to the queen."

’i *to speak*
buma *to draw*
pa *to think*
ma *to consider*

22. Auxiliaries

Auxiliaries are a type of **verb**, however, they are sufficiently different from main verbs for them to treated separately in this grammar. They are used to mark tense (the time at which an action takes pla aspect (the nature of the passage of time during the action). The auxiliary can be dropped from a sente it is obvious from context, or is the same as that of the sentence immediately prior. They are a closed

	dynamic	**stative**	**negative**	**habitual**	**gnomic**
past	qixa	pi	qilu	taku	rusa
present	cani	ra’u	ji	na	ru
future	lanu	nagi	funi	hu	ruku

Auxiliary stacking gives a poetic or archaic nuance.

ʔusu rusarukuru lu’i fu.
ʔusu rusarukuru lu’i fu.
1INT PST;GNO-FUT;GNO-PRS;GNO *love* 2TRA.
“I have always and will always love you.”

22.1 Tense

The three tenses are past, present and future. In conversation, the tenses tend to mark the time at wl the action began or occurred.

On the other hand, narratives are mainly told in present tense. The other tenses are then used relativ that past tense is used for things that happened earlier than the narrative present, and the future tense f things that happened later.

Quhu qixa dasi si’apa pada, jimuli cani janni qu, lanu haruqikanni la kiluqu.
Quhu qixa dasi si’apa pada, jimuli cani janni qu, lanu haru-qikanni la kiluqu.
3ANI;TRA PST;DYN *eat meal and_then, outside* PRS;DYN *move and,* FUT;DYN *with-dog do walk.*
lit.: She did eat the meal, and then is going outside, and will do a walk with a dog.
“She ate the meal, went outside and walked the dog.”

22.2 Aspect

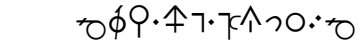
The aspects of positive polarity can be categorised in two different ways. Each of these has two possibilities, and thus there are four altogether:

	episodic	generic
activity	dynamic	habitual
state	stative	gnomic

There is a single category of auxiliaries with the opposite polarity — the **negative**.

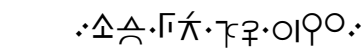
22.2.1 Episodic and Generic

The difference between episodic and generic markers is one of extent. Events in **episodic** sentences place over a finite duration; generic ones are prototypically unbounded, although this doesn't literally to cover all of time.

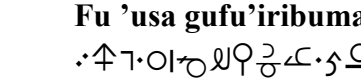
Pannaxa cani 'ibibu. / **Pannaxa na 'ibibu.**

Pannaxa cani 'ibibu. / Pannaxa na 'ibibu.
Warrior PRS;DYN *complain*. / *Warrior* PRS;HAB *complain.*
Episodic: "The warrior is complaining now." / Generic: "The warrior always complains."

22.2.2 Activity *versus* State

The difference between activity and state for most verbs is one of focus, *ie.:* emphasis can be place the event itself (**activity**), or on the results (**state**).

ʔa'ima cani duci sunu. / **ʔa'ima pi duci sunu.**

ʔa'ima qixa duci sunu. / ʔa'ima pi duci sunu.
Traveller PST;DYN *possess cloak.* / *Traveller* PST;STA *possess cloak.*
Activity: "The traveller gained a cloak." / State: "The traveller owned a cloak."

Perceptive verbs are treated slightly differently. Here, dynamic and habitual markers act as normal, however, the stative and gnomic are used to denote an ability to perceive a stimulus.

Fu 'usa gufu'iribuma cani? / **Filli 'usa gufu'iribuma ra'u?**

Fu 'usa gufu'iribuma cani? / Filli 'usa gufu'iribuma ra'u?
2TRA *see television* PRS;DYN? / 2INT *see television* PRS;STA?
Activity: "Are you watching the TV?" / State: "Can you see the TV?"

22.2.3 Negative

The negative aspect is used for actions, attributes and perceptions which do not occur. These act as negation of any other aspectual marker. That is, while positive sentences can be classified by aspect, negative sentences all use the same auxiliaries.

23. Adpositions

Adpositions are a closed class. They can be used in three different ways.

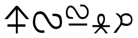
23.0.1 As a Preposition

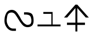
The most basic use for an adposition is prefixed to a noun to signify where the action is taking plac

relation to a reference. These act as prefixes.

di'i'uja

di-'i'uja
up-table
"atop the table"

harul·lani

haru-lulani
with-queen
"with the queen"

nicula

ni-cula
at-egg
"in an egg"

Their nature as a prefix continues to apply even when the noun is already case-marked

qakalu'ita'i

qa-kalu-'ita'i
down-ABL-*car*
"down from the cart"

23.0.2 As a Nominal or Verbal Modifier

Adpositions can be used to form compound nouns:

gusu'adi

gusu-'adi
person-near
"nearby people"

and compound verbs:

jannigibi

janni-gibi
move-east
"to go east"

23.0.3 As an Adverb

Adpositions can be used independently to show the position of the action relative to the speaker, or direction in which the action proceeds. Unlike other adverbs, these are placed before or instead of the auxiliary.

Luxira’uxxi qu’u cani dasi.
Luxira’uxxi qu’u cani dasi.
Twins inside PRS;DYN *eat*.
“The twins are eating inside.”

Kuddu qa hussu.
Kuddu qa hussu.
Rain down fall.
lit: “Rain is falling down.”
“It’s raining.”

The auxiliary must appear to support an adverbial adposition in copular clauses.

Nimalu sani ra’u.
Nimalu sani ra’u.
Bear north PRS;STA.
“The bear is to the north.”

Kuhisuba ’adi na cijja.
Ku-hisuba ’adi na cijja.
DAT-*administrator near* PRS;HAB *alcohol.*
“The minister is usually having a drink around now.”

23.1 Directions

This list includes both relative and absolute terms.

saqa *right*
gi *left*

ka *south*
sumika *west*
sani *north*
gibi *east*

23.2 Locations

These can be used to refer to locations in either space or time.

’adi *near* / *now*
xidu *far* / *then*

di *up* / **upstream**
qa *down* / **downstream**

’ari *front* / *before*

capi ϕ ᒣ *behind* / *after*

pa ○ *towards* / *at*
ni ᛏ *at* / *during*
kika ᑐ ᚳ *over* / *over*

23.3 Spatial Locations

These can only be used to refer to locations in space.

jimuli ᖰ ⊕ ᒥ *outside*
qu'uᘐ ᖶ *in; inside*
nifi ᖿ ᛏ *beside*
raqu ᖶ ᙕ *among*
ca ᒣ *encircling*
du'iᘁ ᛕ *beyond*
la'a ○ᑕ *on a horizontal surface*
kadu ᛕ ᑐ *on a vertical surface*

23.4 Motion

These refer to motion.

data ᐱᐱ *backwards*
tirri ᘐ ᓭ ᚴ *forwards*
ja ᒣ *along*
ma'iki ᚳ ᘁ ○ ᛁ *across*
tiku ᓫ ᑐ ᚴ *around*
bi ϕ *out of*

23.5 Animates

This group have animate objects.

haru ᙕ ᓀ *with*
ha ᓀ *for the benefit of*

23.6 Inanimates

This group have inanimate objects.

nidu ᛕ ᛏ *using*
sarru ᙕ ᓭ ᔆ *instead of*
haru ᙕ ᓀ *consisting of*
nina ᐱ ᛏ *used for a purpose*
sata ᐱ ᔆ *in order to obtain*

'arri *along with*

24. Adverbs

Adverbs are a closed class. Adverbs can be used either as a verbal suffix or independently to descri entire utterance. See Also: **Adverbial Clauses**

matta *also*
gicirri *instead*
naku *together*
basa *unlawfully*

24.0.1 Purpose

piddi *on purpose*
qiriji *with effort*
hibu *allow oneself to*
dumi *try to*
danna *successfully*
ca'alla *must*
fuca *can*
ritada *by fate*
macu *unexpectedly*
xani *unwillingly*
dukku *not by choice*

24.0.2 Extent

dapi *more than is necessary*
famu *completely*
rali *intensely*
kupira *in many different ways*
ti'ici *to a certain extent*
cipati *to that extent*
tuci *barely*
miru *about to*
xibbuti *never again*

24.0.3 Time

xuga *instantly*
cidatu *suddenly*
karu *commonly*
gaqqu *usually*
naru *slowly*

nigi ᚻᛏ *quickly*
dura ᛟᛥ *repeatedly*

24.1 Modals

These adverbs cannot be used as verbal suffixes, and can only describe an entire sentence.

matta ᚠᚸᚑᛁ *again*
hiru ᛟᛅ *contrariwise*

24.1.3.1 Likelihood

These tell how likely an event is to have occurred, or to occur in the future.

'ili ᚾᛉ *actually*
da'aru ᛟᚑᚠ *experience*
fa ᚸ *maybe*
tasi ᚱᚳ *probably*
qaxa ᚴᚲ *predicted to*
mica �higᛞ *permitted to*
nufira ᛟᚿᛏ *want to*
rixi ᚏᛒ *would be better to*

24.1.3.2 Evidential

These give the means by which the speaker gained information with regards to their utterance.

raqa ᚹᛟ *obviously*
da ᚠ *clearly*
jami ᛞᚱ *evidentially*
qaffi ᚿᚸᚹ *seemingly*
jati ᛯᚱ *apparently*
xakila ᚲᚴᚴ *thought to be*
lisina ᛏᚱᚾ *by assumption*
rafa ᚸᛟ *by hearsay*

24.1.3.3 Emotion

These convey the feelings of the speaker towards the utterance or the listener.

pu'i ᛉᚳ *incredulity ("I can't believe it!")*
rapi ᚦᛟ *disregard ("I don't care!")*
tappa ᚑᚸᚠ *seeking confirmation ("Isn't it?")*
rani ᚻᛟ *giving confirmation ("I agree.")*
qarihu ᚥᛒᚹ *regret ("I'm sorry.")*
tupi ᚦᛣ *respect ("With all due respect…")*

24.2 Derivation

Suffixes can derive adverbs from other parts of speech. Zero-derivation, *i.e.:* having a null suffix, is productive for some categories of words, such as references to time, which are used as modals.

musa *today*
laru *this year*
tariti *at noon*

Numbers can be suffixed to denote other times.

musahha
musa-hha
day-zero
lit: “0-day”
“yesterday”

musara
musa-ra
day-two
lit: “2-day”
“tomorrow”

larumullu
laru-mullu
year-minus_one
lit.: “1-day”
“two years ago”

25. Suffixes

Suffixes can be used to derive new word from existing vocabulary. A suffix beginning with a vowe replaces the final vowel of the base.

25.1 Derivational Suffixes

These derive words within a class, *i.e.:* a noun from a noun, or a verb from a verb.

The augmentative **-aku** is most often attached to nouns to reference something large or impor is rarely used for people.

tissaku *wind*
’isilaku *depression*

The diminutive **-ini** is used to form words which reference something small or unimportant. W used with animate nouns, it creates a word for the young of non-sapient creatures. However, with sapi creatures, this word is obscene.

'ahatini *contentment*
tissini *breeze*
qikannini *puppy*
ranini *potato chips*

bi'ini *to itch*

The honorific **-fi** confers a nuance of sacredness upon a base word.

karafi *sacredness*
lulanifi *great queen*

The pair **-tu'i** and **-da** are used to highlight the positive and negative aspects of a word, respectively.

dasatu'i *passion* / **dasada** *anger*
ta'itu'i *aroma* / **ta'ida** *stink*

25.1.1 Nominal suffixes

These derive nouns from other nouns.

	inanimate base	abstract base
animate	-rra	-sa / -ri
inanimate		-di
abstract	-ja	

The above table shows the suffixes used for deriving nouns between different animacy classes.

An animate noun is derived from an inanimate noun by the suffix **-rra**.

tisakarra *townsperson*

Both **-sa** and **-ri** derive an animate noun from an abstract noun, however, these are not predicta For instance, note the difference between **dis·sa** *youth* and **dissuri** *stranger*. Other ex are:

pucasa *optimist*
sasa *introvert*
dattusa *god*
mulisa *fool*
luxirasa *twin*
tuhhisa *farmer*

'axasiri *adult*
'asilari *friend*

The **-ri** 𐑤 suffix also denotes people from a particular place.

Tinalliri 𐑤𐑓𐑩𐑣𐑨 *Tinellbian*

The suffix **-di** 𐑨 derives an inanimate noun from something abstract, and **-ja** 𐑩 does the opposite.

sinnadi 𐑨𐑣𐑩𐑞 *book*

ru'ihaja 𐑩𐑮𐑪𐑯 *history*

The suffix **-li** 𐑓 derives nouns which are somehow distinct from their stem.

daruli 𐑓𐑯𐑧 *wrong way*
gusuli *non-Guozu person*

The names of parts of the body are derived using **-kku** 𐑗𐑩 on either nouns or verbs.

'itikku 𐑗𐑩𐑨𐑪 *breast*
mulukku 𐑗𐑩𐑺𐑭 *heart*

dasikku 𐑗𐑩𐑞𐑧 *digestive system*

The animate giver of the inanimate or abstract base is denoted by **-mi** 𐑛.

'aggami 𐑛𐑖𐑩𐑪 *police officer / law giver*
Sa'imi 𐑛𐑪𐑦 *Caemi / light giver*

The feminine and masculine are denoted by **-qi** and **-kati** respectively, however, they are infrequen used.

25.1.2 Verbal suffixes

These are only applied to verbs.

The suffix **-ni** 𐑯 is used to derive inceptive verbs.

ducini 𐑯𐑗𐑔 *to receive*

The suffix **-ulu** 𐑺𐑳 denotes reversal of an action, and can only be applied to stem verbs.

lulu 𐑺𐑺 *to undo*
jannulu 𐑺𐑡𐑩𐑤 *to return*
turulu 𐑺𐑯𐑤 *to open*
ju'ulu 𐑺𐑳𐑫 *to unlink*

The repetition marker **-tuni** 𐑯𐑤 has similar form and meaning to the full verb **tuni** 𐑯𐑤 *repeat*.

latuni 𐑯𐑤𐑩 *to do again*

The augmentative **-ssasu** 𐑟𐑦𐑩 is used specifically for verbs.

bi'ussasu *to really hurt*

25.1.3 Auxiliary Infix

The infix **-ar-** is placed before the final vowel of auxiliaries, and denotes an end to the action descr the sentence.

lanaru *will finish doing*
nagari *will finish being*

25.1.4 Adverbial Suffixes

There are two kinds of negation for adverbs. The suffix **-hita** is standard negation.

jamihita *not in evidence*
'ilihita *not in reality*

On the other hand, **-ma** forms terminatives, *i.e.*: the situation described by the adverb was true i past, but no longer applies.

nufirama *no longer wanting*
dumima *no longer trying*

25.2 Nominalisation

These derive a noun from another part of speech, most often a verb.

The suffix **-qa** derives generic nouns from numerals or alienable genitive pronouns.

disiqa *hers*

nuruqa *the four of them*

The suffix **-muka** is used with prepositional phrases.

disinnamuka *prologue*

Other suffixes in this group are divided into animacy classes.

25.2.5 Abstract

The productive general suffix **-'a** derives abstract nouns.

cura'a *time*
qacca'a *choice*
pa'a *thought*

The suffix **-ru** forms gerunds.

dasiru *eating*

janniru *moving*
hubaru *breathing*

Application of **-ppa** derives terms for times and occasions.

dasippa *mealtime*
sikuppa *funeral*

The suffix **-ahi** is used with adverbs.

nufirahi *expectation*

25.2.6 Inanimate

The patientive suffix **-du** is applied to stem verbs.

dasidu *food*
maladu *reflection*
kassudu *trade goods*

The instrumental suffix **-ffi** is applied to a verb.

dasiffi *cutlery, tools for eating*
sikuffi *spear, tool for killing*

The suffix **-kku** derives names for parts of the body from verbs or nouns.

dasikku *digestive system*
'itikku *breast*
mulukku *heart*

When applied to a number, **-ssiji** gives rise to the names of shapes.

kifissiji *triangle*
nurussiji *quadrilateral*

25.2.7 Animate

There are three suffixes for deriving animate nouns from verbs. The suffix **-la'i** is used with intrans verbs, while **-ba** and **-pu'a** derive generic agents and patients respectively.

narala'i *sleeper*

'ussaba *follower*
caba *helper*
hisuba *administrator*

ju'ipu'a *group*
lu'ipu'a *lover*
cikkipu'a *telepath*

25.3 Adverbialisation

The pair of suffixes **-atinna** ᛏᓀᚣᛜ· and **-niqqi** ᚷᓀᛏ derive adverbs from verbs and nouns respecti

'usatinna ᛏᓀᚣᛊᛟ *visibly*
katinna ᛏᓀᚣᛋ *increasingly*
lu'atinna ᛏᓀᚣᛜᛍ *lovingly*

'ahatiniqqi ᚷᓀᛏᚣᚸᛜ *happily*
'isilakuniqqi ᚷᓀᛏᚳᛍᛝᛊᛜ *depressingly*
bataniqqi ᚷᓀᛏᚠᚢᚩ *carefully*
bufiniqqi ᚷᓀᛏᚼᚱᚩ *stonily*
ga'iniqqi ᚷᓀᛏᛜᚸ *in time*

26. Determiners

A determiner can be used to narrow the reference of a noun. They appear at the end of a noun phras after any normal suffixes. They do not move the stress of the noun, and can only receive up to second stress themselves.

cama ᚩᛁᚱ *usual*
nisa ᛊᛏ *only*
sabufi ᚼᚱᚩᛊ *different*

26.0.1 Quantity

These are used to answer "how many?"

mimu'i ᛜᛞᛞ *some*
lumi ᛞᛍ *several*
raqi ᚷᛦ *more*
'uhu ᚩᛟ *many*
takki ᚳᓀᚠ *many*

26.0.2 Choice

There are two sets of determiners that are both used to select a part from the whole. One group is us with count nouns, the other with mass nouns.

26.0.2.1 Count Nouns

These refer to particular members of a group.

ca ᚱ *only*
fi'atu ᛣᚩᚼ *certain*
tapa ᚩᚠ *next*
cari ᛯᚱ *remaining*

qafa ㆆᑭ *last*

26.0.2.2 Mass Nouns

These refer to sections of a substance.

cari ᘐㄱ *remaining*
sukki ㅋᄀ亼 *entire*

26.0.3 Degree

These mark the degree to which the noun matches its referent.

nata ∧个 *complete*
naci Γ个 *somewhat*
ji'a ○ᒉ *not*

27. Deixis

Deixis encompasses words and phrases which rely on an external context to complete their meanin

27.1 Topicality

Once a topic is introduced in a discourse or narrative, it can be assumed to be the subject until chan

27.2 Pro-forms

The two groups of pro-forms are classified on the basis of their semantic properties.

Definite pro-forms are those that encode case, person, animacy and topicality. **Indefinite pro-forr** comprise the remaining deictic terms.

28. Personal Pronouns

These are a closed class. They are marked for **case** and **person**. The third person pronouns are additionally marked for topicality or **animacy**. The alienable genitive acts as the nominal head of a possessive phrase, the inalienable genitive is a determiner, and the other pronouns all act as nouns.

		1st person	2nd person	3rd person		
				topic	animate	inanimate
intranstitive		’usu	filli	(su’a)	mihu	pa
transitive		suma	fu	(su’a)	quhu	’iffa
ablative		puttu	sacu	raja	kassi	kalu
dative		pixi	ba’u	datu	jusi	ku
genitive	(alienable)	pagu	ba	su’a	disi	-
genitive	(inalienable)	-pahi	-ba	-	-disi	-qa

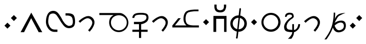
28.1 Number

Pronouns are not generally marked for number.

> **ʔusu ra’u pannaxa. / ʔusu ra’u pannaxa’uxxi.**
> ʔusu ra’u pannaxa. / ʔusu ra’u pannaxa’uxxi.
> 1INT PRS;STA *warrior*. / 1INT PRS;STA *army*.
> “I am a warrior.” / “We are an army.”

However, if reference is made to a group that includes more than one of these persons, then additio pronouns can be constructed. The second person transitive pronoun **-fu** *and you* can be suffixed to first person pronouns to form first person inclusive plural pronouns. The third person intransitive inar pronoun **-pa** *and them* can be suffixed to first or second person pronouns, including those with -fu, form other plural pronouns. These pronouns have no inalienable genitive form.

	1st person		2nd person	all persons
	inclusive	exclusive	inclusive	
intransitive	’usufu	’usupa	fillipa	’usufupa
transitive	sumafu	sumapa	fupa	sumafupa
ablative	puttufu	puttupa	sacupa	puttufupa
dative	pixifu	pixipa	ba’upa	pixifupa
alienable genitive	pagufu	pagupa	bapa	pagufupa

Fillipa pixi guqqipullata!

Fillipa pixi guqqipullata!
2INT-3RD 1DAT *betray!*
"You and he have betrayed me!"

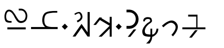
28.2 Genitive Forms

The genitive forms mark a connection between nouns, including one noun possessing another.

28.2.1 Alienable Possession

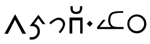
Possession is alienable when the possessed item can be transferred from one owner to another. Alie possessions include objects bought or received by a person. There is no inanimate alienable genitive pronoun as objects cannot own anything.

The structure of the possessive phrase for alienable possession is "*possessor* **genitive** *possessed".*

julliga disi kulu

julliga disi kulu
mother 3ANI;GEN *fork*
lit: "the mother, her fork"
"the mother's fork"

su'a 'ita'i

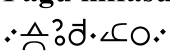
su'a 'ita'i
3TOP;GEN *car*
"her car"

pagu xissata

pagu xissata
1GEN *musical_instrument*
"my musical instrument"

disi nukki

disi nukki
3ANI;GEN *strawberry*
"his strawberry"

This structure is also used in a hierarchy when the 'possessor' is of higher rank than the 'possessed

Pagu mifasu.

Pagu mifasu.
1GEN *subject.*
"My vassal"

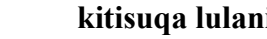
28.2.2 Inalienable Possession

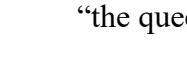
Inalienable possession refers to items which are unable to be transferred from one individual to anc
Inalienable possessions include relatives, parts of the body and objects created by a person.

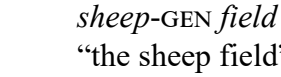
For inalienable possession, as well as genitive constructions that do not involve literal possession, t
structure is "*possessed*-**genitive** *possessor*", that is, the genitive marker is an enclitic on the possessed
This marker is always the third person inanimate genitive pronoun, unless the possessor is a plain pro

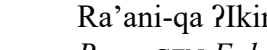
kahipahi

kahi-pahi
arm-1GEN
"my arm"

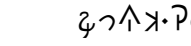
kitisuqa lulani

kitisu-qa lulani
father-GEN *queen*
"the queen's father"

hafiqa nasiʔu

hafi-qa nasiʔu
sheep-GEN *field*
"the sheep field"

Ra'aniqa ʔIkinnisa

Ra'ani-qa ʔIkinnisa
Ryan-GEN *Eakins*
"Ryan (of the family) Eakins"

Sa'imiqa Tinalli

Sa'imi-qa Tinalli
Caemi-GEN *Tinellb*
"Caemi of Tinellb"

This structure is also used in a hierarchy when the 'possessor' is of lower rank than the 'possessed'
contrast to the alienable example above.

lulanipahi

lulani-pahi
monarch-1GEN
"my queen"

Items inalienably possessed by the topic appear without a genitive pronoun.

'ara

'ara
face
"the face" / "his face"

Some kinship terms have suppletive forms when used with a plain possessive pronoun. See **that se** for details.

29. Indefinite Pro-forms

The indefinite pro-forms are sets of deictic words which can be placed into a table.

	noun	**object determiner**	**place**	**action**	**manner**	**state**
proximate	mari	-mari	majja / miru	marila	madusi	marika
distal	kasi	-kasi	kasuja	kalisa	kadusi	kasika
interrogative	sama	-diku	satta	sulla	lara	saqqa
negative	cu'i	-cu	qa'i	buni	-	
universal	'aba	-'aba	batuja	'abala		
existential	'umi	-mi	mituja	'amila	fana	

Proximate forms have referents physically or psychologically near the speaker, whereas distal form used when the referent is far away. Interrogative forms are used in questions, and negative forms are u negative sentences. Universal means "all" or "every", and existential means "some" or "any".

The existential markers are also used in complements.

> **ʔusu li xaha 'umi ru padissu.**
> ʔusu li xaha 'umi ru padissu.
> 1INT COM *name something* PRS;GNO *learn.*
> "I learned what her name is."

29.1 Object Noun

Object nouns are pronouns. Unlike some personal pronouns, these are not marked for animacy, and thus used to represent people, animals or things.

> **Mari ra'u 'aggami. / Mari ra'u linu.**
> Mari ra'u 'aggami. / Mari ra'u linu.
> *This* PRS;STA *police.* / *This* PRS;STA *tree*.
> "This (person) is a police officer." / "This (object) is a tree."

Fu kusama kuffa diru? / Fu kusama kuffa qikanni?
[illegible]
Fu ku-sama kuffa diru? / Fu ku-sama kuffa qikanni?
2TRA DAT-*what give money?* / 2TRA DAT-*what give dog?*
“To whom did you give the money?” / “What did you give the dog”

This latter example exploits the ability to swap dative and object for **motive verbs**.

Reduplicated indefinite pronouns with suffixed **-ta** ∧ *and* are used for emphasis.

sama samata?
[illegible]
sama sama-ta?
what what-and?
lit.: “what and what?”
“what the…?”

cu’i cu’ita
[illegible]
cu’i cu’i-ta
nothing nothing-and
lit.: “nothing and nothing”
“nothing and no one”

qa’i qa’ita
[illegible]
qa’i qa’ita
nowhere nowhere-and
lit.: “never and nowhere”
“never ever”

’aba ’abata
[illegible]
’aba ’aba-ta
everything everything-and
lit.: “everything and everything”
“absolutely everybody”

29.2 Object Determiner

Object determiners act as determiners. In most cases, derivations from the object noun forms are ol

takacu
[illegible]
taka-cu
sound-nothing
“no sound”

manafamari
manafa-mari
country-this
"this country"

lulanimi
lulani-mi
queen-some
"some monarch"

kulu'aba
kulu-'aba
fork-every
"every fork"

nullidiku
nulli-diku
mountain-what
"which mountain?"

'usu'aba filli'abata
'usu-'aba filli-'aba-ta
1INT-*every* 2INT-*every-and*
"every me and every you"

29.3 Place

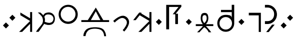
Place pronouns are used for locations in any, some or all of: space, time, reality and **gingla**. They c function as **adverbial adpositions**,

Xudda majja dasi da.
Xudda majja dasi da.
Elephant here consume water.
"The elephant drank water here" / "The elephant is drinking water now."

or as nouns.

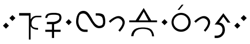
Filli kalusatta tihu?
Filli kalu-satta tihu?
2INT ABL-*where move?*
"Whence came you?"

As opposed to **majja** *here or now,* the word **miru** *here and now* is used for a specific poi four categories of dimension.

Gaca miru ji dissu’ahati.

Gaca miru ji dissu’ahati.
Minister now PRS;NEG *feel_happy*
lit.: “The minister is not happy here, now, on this plane, or in this reality.”
“The minister is not happy under these circumstances.”

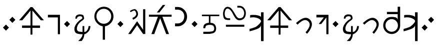
29.4 Action

The action terms are pro-verbs, which can be used to replace ordinary verbs in sentences.

Sabba sulla qixa?

Sabba sulla qixa?
father;2gen do_what PRS;DYN?
“What does your father do?”

29.5 Manner

Manner pro-forms are used to refer to the way in which an action is undertaken. They function as n adverbs in active sentences, *i.e.:* sentences with overt or implied auxiliaries of **activity**.

Kimilli jannikiluqu kadusi ’ili cani?

Kimilli janni-kiluqu kadusi ’ili cani?
King move-walk that_way really PRS;DYN?
“Does the king really walk that way?”

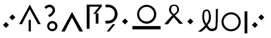
29.6 State

State pro-forms are used as modal adverbs in stative sentences, *i.e.:* sentences with overt or implie auxiliaries of **state**.

Filli (ra’u) saqqa?

Filli ra’u saqqa.
lit.: “What state are you in?”
“How are you?”

They can also function as deteminers.

Mari ra’u gajitafana.

Mari ra’u gajita-fana.
This PRS;STA *treasure-somehow*
“This is some kind of treasure.”

30. Conjunctions

Conjunctions are a closed class of words which are used to join phrases or clauses together.

30.1 Phrase-level Conjunctions

These conjunctions are used to join words or phrases. They are enclitics on the second and subsequ nouns.

-ta ∧ *and*
-sija ㄱ시 *or*

30.2 Clause-level Conjunctions

These conjunctions are used to join clauses or sentences. They are used as independent words.

30.2.1 Coordinating Conjunctions

Coordinating conjunctions are used to separate two matrix clauses. They are placed at the beginnin the second clause.

qu ㅎ *and*
nuki ㅋ쇼 *or*
pada ㅅㅇ *and then*

30.2.2 Subordinating Conjunctions

Subordinating conjunctions are used to introduce a dependent clause. See the section on **subordina clauses** for syntactical information.

surra *if*
daru'i *because*
gi'a ㅇㅋ *that is*
gi'ika ㄱㅇㅋ *in order to*
ma *when*
rika *and thus*
haru ㅗㅇ *while*
fati ㅓㆆ *enough to*

31. Particles

There are very few particles. These are simply words that do not fit neatly into any other category. includes:

- **interjections**,
- **numbers**,
- pronouns of the **alienable genitive**,
- **content** and **relative** clause introductory markers, and
- the **superlative** marker.

32. Interjections

These are exclamations that do not fit the syntactic rules of the other parts of speech, hence their classification among the particles. All interjections end with the same vowel, either naturally,

ta ∧ *um*
ti'a ○ㅑ *oh!*

or because the interjection marker **-a** ○· has derived them from nouns or verbs.

mica ㄱㄷ *hello*
nara ㅅㅅ *goodbye; good night*
hacca ㄱㄴㅇ *good morning*
kica ㄱㅋ *what?*
hira ㅅㅇ *please; thank-you*

33. Syntax

High Lulani is head-initial in compounds, but tends to be head-final in phrases and clauses. The lar has Subject-Verb-Object order, but shows signs of an SOV nature, as dative and ablative complement become more common.

34. Case

34.1 Alignment

The three basic arguments for any verb (intransitive subjects, transitive subjects and transitive obje marked in High Lulani. Because intransitive subjects cannot co-occur with transitive arguments, it is possible to mark either of the transitive arguments in the same way as the intransitive without confusi the ergative alignment, it is the transitive object that is marked the same as the intransitive subject. In accusative alignment, it is instead the transitive subject that shares marking with intransitive subjects. either alignment, the intransitive case is the one treated like the intransitive subject, and the transitive the other.

High Lulani has an ergativity split, made down aspectual lines. A clause using dynamic or iterative auxiliaries uses ergative alignment; gnomic, stative and negative aspects attract the accusative.

34.2 Core Cases

The core cases mark the basic arguments of the verb. Common or proper nouns have no case marki these, but the pronouns have different forms. Therefore only pronouns show the alignment of a senter

34.2.1 Intransitive

The intransitive case is used for the sole argument of an intransitive verb and for the unmarked argu of transitive sentences. This case is also used for adpositions.

34.2.2 Transitive

The transitive case is used for the marked argument of transitive sentences, that is, the object in an

accusative clause, and the subject in ergative clauses.

34.3 Oblique Cases

The two oblique cases are marked on the pronouns. For common and proper nouns, a clitic with the form as the appropriate third person inanimate pronoun is placed before the noun phrase.

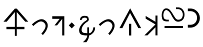
Sometimes the verb requires an oblique rather than a traditional object. In these cases, the subject is usually in intransitive case, although it is not incorrect to use transitive case with dynamic and iterativ auxiliaries.

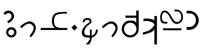
34.3.3 Ablative

The ablative case is used to mark the proximate cause or the instigator of an action. With verbs of t or motion, it is also used to mark the source of a movement.

sacu  *because of you / from you*

The clitic is **kalu-**  .

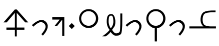
kaluTinalli janni

kalu-Tinalli janni
ABL-*Tinellb move*
"come from Tinellb"

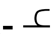
kalukimilli kuffa

kalu-kimilli kuffa
ABL-*king give*
"given by the king"

34.3.4 Dative

The dative case was originally only used to mark the receiver with verbs of giving and transfer. The meaning has since broadened to show indirectness on the part of the patient for a number of verbs, inc verbs of perception and emotion.

pixi  *to me*

kuʔirri'a janni

ku-ʔirri'a janni
DAT-*Irìa move*
"go to Irìa"

The clitic is **ku-**  .

kululani kuffa

ku-lulani kuffa
DAT-*queen give*
"give to the queen"

35. Matrix Clauses

The standard word order for matrix clauses is:

Subject - Auxiliary - Adposition - Oblique - Verb - Object - Adverb.

None of these slots are compulsorily filled. If a subject is obvious from context, or is the same as th
the immediately prior sentence, it can be dropped. The adverb can act as a pro-sentence.

35.1 Intransitive Clauses

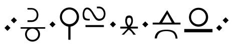
As already discussed, intransitive clauses do not have objects.

Mihu ra'u nara.

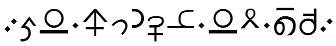
Mihu ra'u nara.
3INT PRS;STA *sleep*
"He is asleep."

35.2 Transitive Clauses

Transitive clauses do require an object.

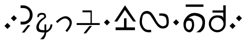
ʔusu ru lu'i fu.

ʔusu ru lu'i fu.
1INT PRS;GNO *love* 2TRA.
"I love you."

Sometimes the object is in an oblique case.

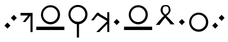
Mihu ra'u kuqikanni 'usa.

Mihu ra'u kuqikanni 'usa.
3ANI;INT PRS;STA DAT-*dog see*.
"She can see the dog."

35.3 Copular Sentences

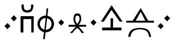
Copular sentences do not have a main verb. These sentences are used to show an equivalence relati
between two nouns, or to show that one noun is an element of the set described by the other noun. Th
transitive sentences.

Mihu lanu julliga.

Mihu lanu julliga.
3ANI;INT FUT;DYN *married_woman*
"She will become a married woman."

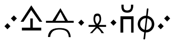
Another use of copular sentences is to tell the location of something in relation to something else.

Pa ra'u di'i'uja.

Pa ra'u di'i'uja.
3INA;INT PRS;GNO *down-table*
"It's under the table."

The copular sentence structure for ownership is as follows. It has the possessor in the dative case, a possessum as the subject.

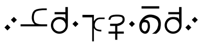
Sunu ru pixi.

Sunu ru pixi.
Cloak PRS;GNO 1DAT
I have a cloak.

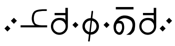
The arguments may be swapped without a change in meaning.

Pixi ru sunu.

Pixi ru sunu.
1DAT PRS;GNO *cloak.*
I have a cloak.

35.4 Contrasting Pronouns

These example sentences have been given to clarify alignment and the correct use of pronouns witl different auxiliaries.

Mihu qixa miku.

Mihu qixa miku.
3ANI.INT PST;DYN *red*
"She turned red."

Mihu pi miku.

Mihu pi miku.
3ANI.INT PST;STA *red*
"She was red."

Quhu qixa dasi pa.
[illegible]
Quhu qixa dasi pa.
3ANI.TRA PST;DYN *eat* 3INA.INT
"She ate it."

Mihu pi dasi 'iffa.
[illegible]
Mihu pi dasi 'iffa.
3ANI.INT PST;STA *eat* 3INA.TRA
"She was eating it."

As can be seen, the only time the transitive case is used for the subject of a clause is in transitive (a as copular) sentences using dynamic or iterative auxiliaries.

36. Argument Promotion

The first noun in a clause is the subject, which is prototypically the agent in transitive sentences an patient in intransitive sentences. However, suffixes can be added to the verb to promote other nouns i clause, other than the genitive.

There are three such verbal suffixes, which can be stacked, however, once something has been shif from the subject position, it can't be promoted again.

36.1 Passive

The passive suffix promotes the object. This suffix has the forms:

- **-'illu** [illegible] when the last element of a verb is monosyllabic,
- **-ilu** [illegible] replacing the final vowel if the final consonant is geminated, and
- **-illu** [illegible] replacing the final vowel of the verb elsewise.

The old subject is then marked with the ablative case. A sentence with this marker is intransitive. T demoted item is not compulsory, but if it is put in, it is the first ablative-marked noun in the new sente

Fu qixa kissa kilatu'i!
[illegible]
Fu qixa kissa kilatu'i!
2TRA PST;DYN *fight deer*
"You fought a deer!"

Kilatu'i qixa (sacu) kissilu.
[illegible]
Kilatu'i qixa (sacu) kissa-ilu.
deer PST;DYN (2ABL) *fight*-PSV
"A deer was fought (by you)."

36.2 Ablative

The ablative suffix promotes the ablative. It has the form:

- **-ka** ᓐ when the final consonant of a verb is geminate, or
- **-kka** ᓐᓀ elsewise.

The old subject is demoted to object, and the old object is demoted to dative. A sentence with this r is transitive. The first dative-marked noun in the new sentence is the demoted item.

Lulani qixa kalukimilli dasi qasa.
∴ᔭᑭ·ᖻᐱ·ᕒᓀᑯᖻᓐᐧ·ᖶᖷ·ᔑᑕᓐᐧ·
Lulani qixa kalu-kimilli dasi qasa.
queen pst;dyn abl-king eat fish
“The queen ate a fish because of the king.”

Kimilli qixa kuqasa dasikka lulani.
∴ᔑᑕᓐᐧ·ᓐᓀᖻᐱ·ᔭᑭᒧ·ᖶᖷ·ᕒᓀᑯᖻ·
Kimilli qixa ku-qasa dasi-kka lulani.
king pst;dyn dat-fish eat-ABP *queen*.
“The king made the queen eat fish.”

Kimilli qixa (kal·lani) dasilluka qasa.
∴ᔭᑭ·ᓐᐧᓀᖻᐱ·ᔑᑕᓐᐧᐧᓐᐧ·ᖶᖷ·ᕒᓀᑯᖻ·
Kimilli qixa kalu-lulani dasi-illu-ka qasa.
king PST;DYN (ABL-QUEEN) *eat*-PSV-ABP *fish*
“The king made the fish get eaten (by the queen).”

36.3 Dative

The suffix **-xa** promotes a dative. The old subject is demoted to object, and the old object (if any) is demoted to dative. A sentence with this marker is transitive.

Mulisa ru kuquxi kuffa laqqu.
∴ᖷᓀᑕ·ᖾᓀᒧ·ᕆᖷᒧ·ᘐ·ᔭᕒᕀ·
Mulisa ru ku-quxi kuffa laqqu.
fool PRS;GNO DAT-*mountain give money*.
“A fool gives money to the mountain.”
Quxi ru kulaqqu kuffaxa mulisa.
∴ᔭᕒᕀ·ᖶᖾᓀᒧ·ᖷᓀᑕᒧ·ᘐ·ᕆᖷ·
Quxi ru kulaqqu kuffaxa mulisa.
mountain PRS;GNO DAT-*money* give-DTV *fool*
“It is to the mountain that fools give money.”

Quxi ru (kalumulisa) kuffiluxa laqqu.
∴ᖷᓀᑕ·ᖶᐧᐣᘔᓀᒧ·ᔭᕒᕀ·ᐧᐣᑕᘐ·ᕆᖷ·
Quxi ru (kalumulisa) kuffa-ilu-xa laqqu.
mountain PRS;GNO (ABL-*fool*) *give*-PSV-DTV *money*.
“It is to the mountain that money is given (by fools).”

36.4 Adposition

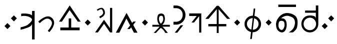
To promote a adpositional phrase to subject, prefix the verb with the adposition. The old subject is demoted to object. The old object, if any, is demoted to dative.

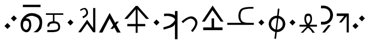
Mihu pi nijagaru gupi.

Mihu pi ni-jagaru gupi.
3ANI;INT PST;STA *at-sand sit*
"She sat in the sand."

Jagaru pi nigupu quhu.

Jagaru pi ni-gupi quhu.
sand PST;STA *at-sit* 3ANI;TRA
"It was the sand that she sat in."

Mihu pi nijagaru dasi nukki.

Mihu pi ni-jagaru dasi nukki.
3ANI;INT PST;STA *at-sand eat strawberry*
"He was eating a strawberry in the sand."

Jagaru pi kunukki nidasi quhu.

Jagaru pi ku-nukki ni-dasi quhu.
sand PST;STA DAT-*strawberry in-eat* 3ANI;TRA.
"It was in the sand that he was eating the strawberry."

37. Dependent Clauses

A dependent clause is a clause that is unable to stand meaningfully by itself.

They are marked by having the auxiliary at the end.

37.1 Subordinate Clauses

A subordinate clause is one introduced by a subordinating conjunction in the matrix clause. A com used to separate a subordinate from its matrix. The conjunction is placed on the side of the main claus is closest to the subordinate. The clauses can be put in either order.

ʔusu ru lu'i fu daru'i, ba pu'iba miku ra'u.

ʔusu ru lu'i fu daru'i, ba pu'iba miku ra'u.
1INT PRS;GNO *love* 2TRA *because*, 2GEN *ball red* PRS;STA
"I love you because your ball is red."

Ba pu'iba miku ra'u, daru'i 'usu ru lu'i fu.

Ba pu'iba miku ra'u, daru'i 'usu ru lu'i fu.
2GEN *ball red* PRS;STA, *because* 1INT PRS;GNO *love* 2TRA
"I love you because your ball is red."

Here the subordinate clauses are hightlighted. The cause is subordinate to the effect.

37.1.1 Location Adverbial Clauses

The word **ma** ᗝᑊ *where* is often used as a prefix for adpositions used as clausal conjunctions.

ʔusu lu'i fu madi, ba pu'iba miku qixa.
·ᛙᛇᐧᓭᘐᐧᗝᕫᑐᐧᗝːᛣᗝᑊᐧᑒᕫᐧᕮᓰᐧᔑᗝᐧᔑᗝᐧ
ʔusu lu'i fu ma-di, ba pu'iba miku qixa.
1INT *love* 2TRA *where-up,* 2GEN *ball red* PST;DYN.
"I loved you before your ball turned red."

37.2 Content Clauses

A content clause is one that takes the place of a noun. They begin with the complementiser **li** ᑫ and separated from the matrix clause by commas. The auxiliary is not optional, and is given a low tone. Q marks are used around reported speech, replacing the complementiser.

Li 'usu kissajisuka kugibiʔasi'a rusa, qixa puttu pa'illu.
·ᕮᓀᕫᗝᐧᗑᓀᐧᑐᛇːᔑᘐᐧᗝᘁᐧᕮᘓᒋᓀᐧᔑᓀᐧᔑᗝᐧᑫᐧ
Li 'usu kissa-jisuka ku-gibi**ʔasi'a** rusa, qixa puttu pa-'illu.
1INT *fight-ideology* DAT-*east-Asia* PST;GNO, PST;DYN 1ABL *think*-PSV
"That we've always been at war with Eastasia, is what I think."

Suma qixa kul·lani 'icipu, li quhu pixi kuffa dissudanagi qixa.
·ᛙᛇᐧᘓᐱᐧᐞᔑᓀᐧᘓᐧᔭᓀᐧᓰᐧᕮᑎᕫᐧᔑᘁᐧᓭᓀᐧᛙᛇᐧ
Suma qixa ku-lulani 'icipu, li quhu pixi kuffa dissu-danagi qixa.
1TRA PST;DYN DAT-*queen ask*, COM 3ANI;TRA 1DAT *give new-decree* PST;DYN
"I asked the queen if she had pardoned me."

Mihu qixa 'i, "Filli mulisa ra'u?"
·ᓭᗝᘐᐧᑫᕫᐧᑐᑫᐧᔑᓭːᕫᐧᛙᛇᐧᘁᓭᐧ
Mihu qixa 'i, "Filli mulisa ra'u?"
3ANI;INT PST;DYN *speak "*2INT *fool* PRS;STA*?"*
"He said, 'Are you a fool?'"

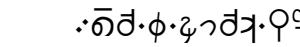
37.3 Relative Clauses

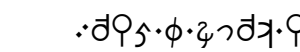
Relative clauses specify the noun by describing it. They begin with the relativiser **xiku** ᓭᑎ and are before the modified noun, The auxiliary is not optional, and is given a rising tone. Only subjects can b relativised. Other cases must be promoted to subject.

Xiku lu'i kimilli pi lulani.
·ᔑᘁᓀᐧᕫᐧᑫᐧᘁᕮᐧᕫᓀᐧᓭᑎᐧ
Xiku lu'i kimilli pi lulani.
REL *love king* PST;STA *queen*
"The queen who loved the king."

Xiku kalukimilli lu'illu pi lulani.
·ᔑᘁᓀᐧᕫᐧᓀᐧᕫᓀᐧᑫᐧᘁᕮᓀᐧᐧᓭᑎᐧ
Xiku kalu-kimilli lu'i-illu pi lulani.
REL ABL-*king love*-PSV PST;STA *queen*.
"The queen whom the king loved."

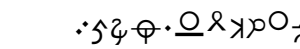
Any noun can be modified by relative clauses, including pronouns and proper nouns.

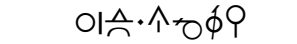
Xiku lu’i kimilli pi mihu.

Xiku lu’i kimilli pi mihu.
REL *love king* PST;STA 3ANI;INT
“The one who loved the king.”

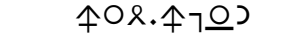
Xiku lu’i kimilli pi Sa’imi.

Xiku lu’i kimilli pi Sa’imi.
REL *love king* PST;STA *Caemi*
“Caemi, who loved the king.”

37.3.2 Intransitives

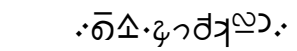
If the only argument of the relative verb is the modified noun, the auxiliary is appended to the verb the relativiser is dropped. This auxiliary is given a mid-tone.

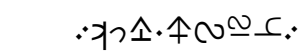
dissu’ahatira’u mulisa.

feel_happy-PRS;STA *fool*
dissu’ahatira’u mulisa
“the happy fool”

’ibibuna suma

complain-PRS;HAB 1TRA
’ibibuna suma
“the occasionally complaining me”

ka’ucani Ra’ani

jump-PRS;DYN Ryan
ka’ucani Ra’ani
the jumping Ryan

Similar are intransitives utilising the case markers and other adpositions.

kalukimilli nuhu.

kalu-kimilli nuhu
ABL-*king folding_paper*
“the letter from the king”

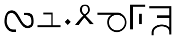
kul·lani nukki.

ku-lulani nukki
ABL-*queen strawberry*
”the strawberry for the queen“

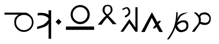
di'i'uja pa

di'i'uja pa
up-table 3INA;INT
"the thing atop the table"

37.3.3 Transitives

If the only arguments of the relative verb are the modified noun and a direct object, the verb is appe to the object, with or without the auxiliary, and the relativiser is dropped.

xucipura cula

xuci-pura cula
feather-change egg
"hatching egg"

hafidasira'u kipu

hafi-dasi-ra'u kipu
*grass-eat-*PRS;STA *ox*
"the grass-eating cow."

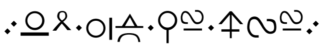
37.4 Questions and Requests

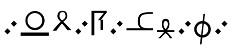
Questions and requests are main clauses, but have the same auxiliary movement as dependent claus thus are treated alongside them here.

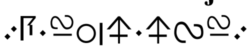
37.4.4 Interrogatives

An interrogative is a question sentence. There are two main types, polar questions and content ques

Polar questions are one in which the answer is "yes" or "no". They are spoken with a rising tone or last word. The auxiliaries are used to answer.

Lulani lu'i suma ra'u?

Lulani lu'i suma ra'u?
queen love 1TRA PRS;STA?
"Does the queen love me?"

Ra'u. / Ji. / Ruku. / Pi.

Ra'u. / Ji. / Ruku. / Pi.
PRS;STA. / PRS;NEG. / FUT;GNO. / PST;STA.
"Yes." / "No." / "She will." / "She did."

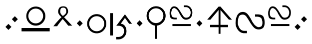
Lulani nimalu ji?

Lulani nimalu ji?
queen bear PRS;NEG?
"Is the queen not a bear?"

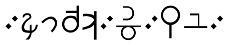
Ji. / Ra'u. / Na.

Ji. / Ra'u. / Na.
PRS;NEG. / PRS;STA. / PRS;HAB.
"Yes, she's not." / "No, she is." / "Usually."

If the focus of the question is on a particular noun, that noun receives a falling tone.

Content questions are ones in which the expected answer is more than just "yes" or "no". These qu have a rising tone on the main question word itself.

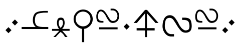
Lulani lu'i sama ra'u?

Lulani lu'i sama ra'u?
Queen love what PRS;STA?
"Whom does the queen love?"

Kimilli. / Fu. / Cu'i.

Kimilli. / Fu. / Cu'i.
King. / 2TRA. / *Nothing*.
"The king." / "You." / "No one."

37.4.5 Imperatives

An imperative statement is an order.

Second person imperatives are directed to the listener. In these, the subject is dropped, a future aux in the appropriate aspect is suffixed to the verb, and this verb complex is moved to the end of the sent These are spoken with a falling tone on the auxiliary.

Lulani lu'iruku!

Lulani lu'i-ruku!
Queen love-FUT;GNO!
"Love the queen!"

38. Noun Phrases

The full noun phrase is made up of these components in the following order:

1. adposition-
2. case marker-
3. number
4. relative clause
5. main noun
6. -determiner
7. -conjunction
8. -genitive marker

The highlighted component denotes the only one that is compulsory, *i.e.*: the main noun itself. The hyphens represent the lack of a word space in both the Tinellbian script and the transcription.

faluki **(v)** *journey*

kukimilli (ii-v)
ku-kimilli
ABL-*king*
“to the king”

diku’i’uja (i-ii-v)
di-ku-’i’uja
up-DAT-*table*
“onto the table”

harubijju nimalu (i-iii v)
haru-bijju nimalu
with-first bear
“with the first bear”

xiku dasi nukki na gusulumi (iv v-vi)
xiku dasi nukki na gusu-lumi
REL *eat strawberry* PRS;HAB *person-several*
“several people who eat strawberries”

kaluxiku kuluna ’usi na ’aba (ii-iv v)
kalu-xiku ku-luna ’usi na ’aba
ABL-REL DAT-*moon see* PRS;HAB *all*
“because of everyone who looks at the moon”

’adira qikannihisupi xaʔu (i-iii iv v)
’adi-ra qikanni-hisu-pi xaʔu
near-two dog-administer-PST;STA *child*
“near the two children who had looked after dogs”

julliga nuraqixa kasataqa ’ara (iv v-vii-viii)
julliga nura-qixa kasa-ta-qa ’ara
mother leave-PST;DYN *man-and*-GEN *face*
the faces of the mothers and the men who left.

39. Gerunds

The gerund suffix **-ru** changes basic verbs into nouns describing the activity.

hubaru *breathing*
malaru *reflecting*
mikuru *being red*

Compound verbs, as well as those involving noun incorporation, can also be changed like this.

dissu'ahatiru 𐤔𐤉𐤏𐤀𐤔𐤓𐤉 *feeling happy*
pakicuru 𐤔𐤂𐤉𐤀 *believing to be true*
'i'issiru 𐤔𐤅𐤓𐤀𐤀 *singing*

The genitive determiners, including **-qa** 𐤅, allow for (only) the subject of the verb to be mentioned.

jannikiluquruqa nimalu
𐤍𐤀𐤊𐤔·𐤅𐤔𐤃𐤍𐤊𐤓𐤁

jannikiluqu-ru-qa nimalu
walk-GER-GEN *bear*
"the bear's walking"

guqqirupahi
𐤆𐤀𐤔𐤕𐤓𐤌
guqqi-ru-pahi
bad-GER-1GEN
"my being bad"

This continues to apply in instances using argument promotion.

dasilluruqa dasu
𐤔𐤔·𐤅𐤔𐤍𐤓𐤔
dasi-illu-ru-qa dasu
eat-PSV-GER-GEN *meat*
"the eating of meat"
sikukkarudisi
𐤓𐤉𐤔𐤓𐤌𐤓𐤓
siku-kka-ru-disi
die-ABV-GER-3ANI;GEN
"his murdering of another"

'usaxaruqa luna
𐤖𐤍·𐤅𐤔𐤕𐤎𐤀
'usa-xa-ru-qa luna
look-DTV-GER-GEN *moon*
"looking at the moon"

40. Apocrypha

This section details particular categories of vocabulary items.

41. Numbers

41.1 Cardinal Numbers

The number system in High Lulani uses balanced sesquidecimal (base 15), and so numbers are wri

with the positive digits (1, 2, 3, 4, 5, 6 and 7), their negative counterparts (1, 2, 3, 4, 5, 6 and 7) and a (0). A period (fractional point: .) is used to separate the integer part of the number from the mantissa. comma (,) is used in the integer part to separate the digits into groupings of four, beginning from the fractional point.

41.1.1 One-digit Numbers

Here are the names for the one-digit numbers:

(qi)hha	ᔐᔧᔦ	*0*	(qi)hha	ᔐᔧᔦ	*0*
xita	ᐱᐃ	*1*	mullu	ᐢᔧᔮ	*1*
ra	ᔕ	*2*	kannu	ᔓᔧᔭ	*2*
kifi	ᔨᔬ	*3*	bila	ᐢᔪ	*3*
nuru	ᔕᔓ	*4*	missu	ᔑᔧᔅ	*4*
guhi	ᔋᔪ	*5*	laffi	ᔨᔧᐢ	*5*
’usi	ᔦᔍ	*6*	jusiti	ᔦᔦᔡ	*6*
salumi	ᔅᐢᔭ	*7*	haki	ᔬᔐ	*7*

The full form **qihha** ᔐᔧᔦ *zero* is only used when by itself, or first in a number or noun phrase.

41.1.2 Two-digit Numbers

Numbers between 17 and 16 are composed of the prefix **sa-** ᔭ and the final two syllables of the nur except for **salura** (not **sara**) *12*.

Round numbers, *i.e.:* numbers ending with a single zero, use the suffix **-hha** ᔐᔧ.

sahha ᔐᔧᔭ *10*
rahha ᔐᔧᔕ *20*
kifihha ᔐᔧᔨᔬ *30*

All other two digit numbers, except for *22*, are formed by juxtaposing the tens digit with the units.

mullukifi ᔨᔬᐢᔧᔮ *13*
xitasalumi ᔅᐢᔭᐱᐃ *17*
ranuru ᔕᔓᔕ *24*
kifilaffi ᔨᔧᐢᔨᔬ *35*

The word for *22*, the exception, is **ranira** ᔕᔝᔕ.

41.1.3 Three- and Four-digit Numbers

Three- and four-digit numbers are divided into the number of hundreds, and the remainder. This remainder is always the last two digits of the number.

The word for *100* is **takki** ᔬᔧᐱ. Other three-digit numbers beginning with a 1 are formed by prefix this word to the remainder, while even larger three- and four-digit numbers append it to the number o hundreds, which is then followed by the remainder as a separate word.

takkinurukannu *142*

guhitakki 'usibila *563*
sahhatakki kifinuru *1034*
kannuratakki missumullu *2241*

In any of these cases, if the remainder is zero, it is left off.

mullutakki *100*
ratakki *200*
saguhitakki *1500*
bilasalumitakki *3700*

41.1.4 Higher and Lower Order Numbers

When a number is written out in digits, each set of four digits from the fractional point makes up a The group furthest from the fractional point may not have this full quota of digits. An index marker n the identity of a particular group.

The index marker is composed of the prefix **pa-** ○ followed by the number of groups between this and the fractional point. Positive index numbers are for the integer part of the number, and negative ir numbers are for the mantissa.

The index marker is suffixed to the group word.

paxita *1,0000*
para *1,0000,0000*
pakifi *1,0000,0000,0000*
pamullu *0.0001*
samissu paxita *14,0000*
takkiranira paxita *122,0000*
'usitakki mullura paxita *612,0000*

There is nothing preventing an index-marked number being used within another index marker, alth the second **pa-** is usually geminated.

pappaxita $1{,}0000^{1,0000}$
papappaxita $1{,}0000^{1,0000\text{^}1,0000}$

41.1.5 Non-integral Numbers

41.1.5.1 Reading Mantissas

There are two ways to read a mantissa. One uses the above method of index markers, and the secon reads out the digits in pairs or individually. These methods are often combined: using index markers f first digit groups, and then continuing to read digits separately.

41.1.5.2 Repeating and Reflecting Strings

All rational numbers end with a repeating string of digits. For some numbers, this string is "0". In r

zero cases, the word **tuni** 𐤟𐤠 *repeat* is inserted before the repeating string. The string must be read o individual digits.

There are also numbers for which the repeating string can be cut in half, with digits in the second h being the negative of the digits in the first half. For these, only the first half is read out, with the word 𐤍𐤏𐤉 *reflect* inserted.

tuni guhira 𐤀𐤂𐤅·𐤟𐤠 *0.5252…*
paqihha xita tuni guhira 𐤀𐤂𐤅·𐤟𐤠·𐤋𐤓·𐤐𐤍𐤒𐤏 *0.15252…*
paqihha xita mala guhira 𐤀𐤂𐤅·𐤍𐤏𐤉·𐤋𐤓·𐤐𐤍𐤒𐤏 *0.152525252…*

41.1.5.3 Fractions

The suffix **-ki** 𐤊 separates the numerator from the denominator. **Saki** 𐤊𐤎 is used if the numerator is There is also a commonly used variant for ½: **'ima** 𐤏𐤉𐤖.

'ima / saki ra 𐤏𐤉𐤖·𐤀·𐤊𐤎 *½*;
saki kifi 𐤁𐤊·𐤊𐤎 *⅓*
kifiki nuru 𐤀𐤔·𐤊𐤁𐤊 *¾*

41.2 Ordinal Numbers

Ordinal numbers are used to mark position in a line or a list.

The first two ordinal numbers are suppletive, that is, they are not related to their cardinals. All othe ordinals are formed by adding the suffix **-uju** 𐤇 to the cardinal number.

bijju 𐤇𐤍𐤃 *1st*
matta 𐤋𐤍𐤏𐤉 *2nd*
kifuju 𐤇𐤅𐤊 *3rd*
nuruju 𐤇𐤀𐤔 *4th*
salumuju 𐤇𐤕𐤌𐤎 *7th*
saqikkuju 𐤇𐤂𐤍𐤒𐤎 *10th*
saxituju 𐤇𐤟𐤓𐤎 *11th*
takkuju 𐤇𐤂𐤍𐤋 *100th*

41.3 Using Numbers

Ordinal and cardinal numbers are used in noun phrases, and are inserted between any case markers adpositions, and the noun.

nuruju kimilli
𐤆𐤍𐤄𐤊·𐤇𐤀𐤔
nuru-uju kimilli
four-ORD *king*
"the fourth king"

kalusalumi lulani
kalu-salumi lulani
ABL-*seven queen*
"due to the seven queens."

Numbers can be suffixed to a noun to denote not the quantity, but a quality.

salumi sinnadi
salumi sinnadi
seven book
"seven books"

sinnasalumi
sinnasalumi
story-seven
"septet"

The number **ra** *two* can be used in this way to refer to a pair of something.

luffura *eyes*
'itikkura *breasts*
tibara *legs*

42. Colours

The basic colour terms are all verbs:

baju *blue*
sa *yellow*
miku *red*

millu *brown*

kiʔa *white*
ga *black*

Baju *blue* covers both light and dark blue, the darkest violets, and all but the lightest shades of
Sa *yellow* covers the lightest shades of orange and green, as well as standard yellow. **Miku** *red*
to all of red and pink, light purples and most of the orange spectrum, however, dark orange is subsum
under **millu** *brown*.

The figure above shows which shades are referred to by which term. **Kiʔa** *white* is used to ref
very light greys, as well as the usual white. **Ga** *black* is used to refer to the darker greys, tending to

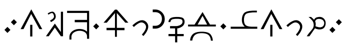
the black.

All colour terms can be compounded to refer to specific hues.

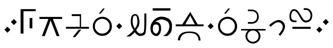
mikumulu *blood red*
bajukunubi *sky blue*
kiʔamasi *snow white*

43. Comparatives

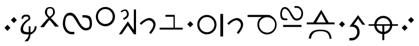
The comparative marker is an adposition **su** *than* placed on the noun being compared against.

Hannaku suqikanni xusina.

Hannaku su-qikanni xusina.
Cat than-dog be_pretty.
"Cats are cuter than dogs."

For "little more", the qualifier **tuci** *half-do* is affixed to the verb.

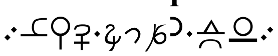
Luffuba suhuri bajutuci.

Luffu-ba su-huri baju-tuci.
*Eyes-*2GEN *than-ocean blue-half_do.*
"Your eyes are slightly bluer than the ocean."

For "a lot more", the qualifier is **rali** *intensely*.

Musa sulupumma cussi'alarali.

Musa su-lupumma cussi'ala-rali.
Sun than-fire feel_hot-intensely.
"The Sun is much hotter than fire.

43.1 Equalatives

The equalative marker is **ka** *as*, an adposition.

ʔusu kafilli qi'iku.

ʔusu ka-filli qi'iku.
1INT *as*-2INT *feel_hungry.*
"I am as hungry as you are."

43.2 Superlative

The superlative marker, contrary to the other two, is a particle **piba** placed before the verb.

Jamahi piba xusajja.
·ᐧᒉᔑᑌ·ᕯᕽ·ᘐᐞᒉ·
Jamahi piba xusajja.
Garden most be_quiet.
“The gardens are the quietest.”

piba xusajjara’u jamahi
ᘐᐞᒉ·ᐅᔕᒉᔑᑌ·ᕯᕽ
piba xusajja-ra’u jamahi
most be_quiet-PRS;STA *garden*
“the quietest garden.”

44. Kinship

44.1 Marriage

Ju’idukuru ᔓᓗᐠᕯᖳᖪ *marriage* is the life-bonding of two people. It is intended to be eternal, but c broken if requested by either partner. It is not an exclusive arrangement, and one can be involved in concurrent marriages.

A bonded person is called a **silu** ᓐᖘ *spouse* when using possessive pronouns, and **xalli** ᔑᒉᒣ *marri person* otherwise.

44.2 Nuclear Family

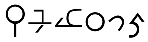
The words **kitisu** ᓴᘃᘎ *father* and **julliga** ᔦᔑᒉᖪ *mother* usually refer to biological parents, but can applied to the main guardians if the biological parents are not around. These are used without possess except for the inalienable genitive marker **-qa** ᖷ GEN

The following table shows the possessive forms:

	mother	**father**
1st person	pi’apagu ᓀᐤᐞᕽ	sappagu ᓀᐤᒉᕽ
2nd person	pihaba ᕯᐣᕽ	sabba ᕯᒉᕽ
3rd person topic	pihasu’a ᐞᓴᐣᕽ	sassu’a ᐞᓴᒉᕽ
3rd person animate	pi’adisi ᖘᘃᐞᕽ	saddisi ᖘᘃᒉᕽ

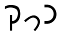
There are two terms for children: **tu** ᖶ *offspring* for postnatal children, **’appu** ᖳᒉᐞ *foetus* for ante Both of these are gender-neutral, and are most often used with possessives.

There can be a suffixed **ju’i** ᖪᖳ *link* for spouses’ offspring and parents’ spouses.

sappaguju'i

sappagu-ju'i
father;1GEN-link
"my step-father"

tuju'iba

tu-ju'i-ba
offspring-link-2GEN
"your step-daughter"

Other kinship terms began as nuclear family names, but were thence extended across a generation. **kaqqa**  *elder sibling* and **kica**  *younger sibling* can also be applied to cousins.

45. Elements

The first 118 chemical elements have been named.

li’a	kuxalu	laqa	quffi	sahha	fasami	’ittika
helium	*neon*	*argon*	krypton	xenon	radon	*oganesson*
la	ca’a	limma	bi	papa	sicu	buccata
hydrogen	*fluorine*	*chlorine*	*bromine*	*iodine*	*astatine*	*tennessine*
	sa	ta	matirra	lasu	cakassu	suda
	oxygen	*sulfur*	*selenium*	*tellurium*	*polonium*	*livermorium*
	sutta	pibi	da’u	salari	’aggini	rili
	nitrogen	*phosphorus*	*arsenic*	*antimony*	*bismuth*	*muscovium*
	xu	’ama	xuhhi	laji	musaqu	xa’a
	carbon	*silicon*	*germanium*	*tin*	*lead*	*flerovium*
	kuxxu	disa	’ali	luka	silla	rabaci
	boron	*aluminium*	*gallium*	*indium*	*thallium*	*nihonium*
			hika	kaca	’usa	hatanu
			zinc	*cadmium*	*mercury*	*copernicium*
			suki	ni	fi	su’usi
			copper	*silver*	*gold*	*roentgenium*
			tasa	qala	jala	na’ipa
			nickel	*paladium*	*platinum*	*darmstadtium*
			gaxiki	fula	natu	nakaku
			cobalt	*rhodium*	*iridium*	*meitnerium*
			’a	nasufi	supu	’i’ami
			iron	*ruthenium*	*osmium*	*hassium*
			qumalli	nikili	hasuki	cabahi
			manganese	*technetium*	*rhenium*	*bohrium*
			fada	sula	minaʔi	saniki
			chromium	*molybdenum*	*tungsten*	*seaborgium*
			nussa	lakka	hila	nullasu
			vanadium	*niobium*	*tantalum*	*dubnium*
			ka’i	pusu	tacuca	famati
			titanium	*zirconium*	*hafnium*	*rutherfordium*
					kixa	nulina