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 Guozu.

High Lulani

♠∾ Created by Queen Loren on Mala Ptokonoi.

Volume 1: 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 evolved naturally as different groups of people moved through space, time and reality.

Section 1: History

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

Chapter 1: Internal History

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

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

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

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

One such group were the Fezhel. They found themselves on an empty world. The Fezhel tongue evolved 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, not for 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

Chapter 2: External History

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

When I decided to write a novel, a constructed language (conlang) was an obvious prospect for inclusion 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 some 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 right. So much so, in fact, that Ptokan and Fezhel have been forced to change somewhat to adapt.

Volume 2: High Lulani

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

Section 1: Phonology

High Lulani phonology has 18 consonant sounds and 3 vowels. Plosives are the only class that have a voicing distinction; fricatives are prototypically voiceless, and resonants are prototypically voiced. Vowels are defined in terms of openness and frontness; there are no oral, length or tone distinctions. All High Lulani words are formed from alternating consonant-vowel pairs. Any word-internal consonant can be geminated, 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
b	b a'u	h	hisuba
b ⁶	sa bb a	j	fa ? a ¹
C	qa cc a	ţ	j usi
Ch	c u'i	J ĥ	ma jj a
Ģ	x u'a	k	ta kk i
d	d aru	k^h	k a'u
d ^ĥ	'a dd a	1	lisa
f	fara	٨	mullu
g	g usu	m	m ullu
g ^ĥ	sa gg i	n	nisa

Consonant Example

ŋ	ja nn i
ŋ	q a
р	'a pp u
p ^h	p uttu
r	gurrisu
١	rusa
S	sippa
t	ni tt u
t ^h	t a'i
7	xu'a

¹The phone /j/ only appears as the second segment of an allophonic variant of /?/, when that sound is geminated.

Vowel	Example	Vowel	Example
a	batu	ə	su'a
i	bitta	÷	kasi
u	cura	u	l u lani

The suprasegmental symbols are all exemplified in / pham.i.'lam.i/.

Chapter 1: Consonants

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

labial alveolar retroflex palatal velar glottal

stop	рb	t d		c j <j></j>	k g	?<'>
nasal	m	n			ŋ <q></q>	
lateral		1				
tap			(<r></r>			
fricative	f	S		ς <χ>		h

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

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

```
ba'u — usual word-internal glottal stop
nasi?u — geminate word-internal glottal stop
'usu — usual glottal stop within sentence
?usu — capitalised glottal stop at beginning of sentence
?allisi — capitalised glottal stop for proper noun (Alice)
```

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 geminate 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.

Labials

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

```
pu'iba /phu.'?ib.ə/ όρο ball
qapi /'ŋaph.i/ φρ rope
kuppu /'khup.pu/ τος be strong
bufi /'buf.i/ βτο pebble
huba /'hub.ə/ όδ to live
kibba /'khibĥ.bĥə/ ός stick
```

Alveolars

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

turassi /thu. ras.si/ 沿っぺ木 redhead

```
fi'atu /fi.?ath.u/ 木〇 s certain
matta /'mat.tə/入つ이 again
daru /'dar.u/ 糸A road
xidu /'sid.u/ 木苗 far away
kuddu /'kudf.dfu/ 木つ드 rain
```

Palatal

The plosives /c/ and /f/ are laminal. In fast speech, they can approach the affricates /tf/ and /dg/.

```
cissa /'cʰis.sə/ うつ「air
xuci /'ɕucʰ.ɨ/「オ feather
nacca /'nac.cə/ コット clothing
jagaru /ナə.'ga[.ʉ/ キラコ sand
sajimu /sə.'ナim.ʉ/ 中ドケ crack
majja /'maナʰ.ナʰə/ コッロ here
```

Velars

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

```
ka'u /'kha?.u/ 으) jump
'isaki /?i.sakh.i/ オタマ company
nukki /'nuk.ki/ オク全 strawberry
gurrisu /'gur.ri.su/ 会りから door
danagi /də.nag.i/ オケム decree
saggi /'sagh.ghi/ オラカ iron pyrites
```

Glottal

The glottal stop /7/ is one of the most common sounds. Non-geminate glottal stops are often suppressed between unstressed vowels. The second of a geminate glottal stop becomes a palatal approximant /j/.

```
'anu /'ʔan.ʉ/ 全<sup>o</sup> to balance
kuli'a /kʰʉ.'liʔ.ə/ <sup>o</sup>ç - friend
nasiʔu /na.'siʔ.jʉ/ 으っ込か sheep
```

Nasals

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

Labial

The labial nasal /m/ is bilabial.

```
mana /'man.ə/ かい bubble
salumi /sə.'lum.ɨ/ ਰੈ<sup>\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tilde{\tii</sup>
```

Alveolar

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

Velar

```
The nasal /\eta is velar.
```

```
quliru /ŋʉ.'liӷ.ʉ/ キ゚ᡐ둫 family
kunaqi /kʰʉ.'naŋ.ɨ/ ネヘ⊆ earth
laqqu /'laŋ.ŋʉ/ ょっつ wealth
```

Liquids

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

The consonant /1/ is lateral and apical. When geminated, this sound is laminal and palatal.

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

```
| lassi / las.si/ 1200 baby
| kulu / khul.tt/ 25 fork
| malliju / malliju / malliju / palliju /
```

Fricatives

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

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

Labial

The fricative f is realised as labiodental.

Alveolar

The fricative /S/ is apical.

Palatal

The palatal fricative /6/ is laminal.

```
xaha /'ɕah.ə/ ア下 name
puxila /pʰʉ.'ɕil.ə/ ○ॉつ message
dixxa /'diɕ.ɕə/ 下つオ drink
```

Glottal

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

```
hannaku /ˈhaɲ.ɲə.kʉ/ エヘッツ cat
tihu /ˈtʰih.ʉ/ あオ to dwell
quhha /ˈŋuç.çə/ アつउ river
```

Chapter 2: Vowels

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

front central back

```
close i (†) (<del>u</del>) u
mid (ə)
open a
```

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

Front

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

```
mici /ˈmic.ɨ/ [rd peace
salilu /sə.ˈlil.ʉ/ □çʃ night sky
dibada /dɨ.ˈbad.ə/ ሌÓ⁄ life
```

Open

The open vowel is unrounded. It can be realised as /a/ or $/\vartheta/$.

```
kanama /k<sup>h</sup>ə.'nam.ə/ \bigcirc | ^{\bigcirc} to play naru /'nar. + ^{\bigcirc} slowly 'i'uja /? + ^{\bigcirc} /  ^{\bigcirc} / table
```

Back

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

```
mulu /ˈmul.ʉ/ \stackrel{\circ}{\sim} \varphi blood
hulla /ˈhuʎ.ʎə/ \circ oo to have sex
riccu /ˈric.cʉ/ユっม sphere
```

Chapter 3: 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.

Chapter 4: Suprasegmentals

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 own 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 another if they both end in geminates, thus:

```
jan.ni.ga
rad.dil.la
```

Stress

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

Primary Stress

Primary stress is characterised by tense vowels with a high pitch. In polysyllabic words, primary stress falls on the last closed syllable. Monosyllabic content words also receive this stress, although this is not explicitly marked in the pronunciation guide.

```
/t<sup>h</sup>u/
/'bit.tə/
/'t<sup>h</sup>uc<sup>h</sup>.ɨ/
/lʉ.'lan.ɨ/
/ˌp<sup>h</sup>am.ɨ.'lam.ɨ/
/'ɟaɲ.ɲɨ.ɟa/
/ˌrad<sup>6</sup>.'d<sup>6</sup>iλ.λə/
```

Secondary Stress

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

```
/ˌpʰam.ɨ.ˈlam.ɨ/
/ˌradʰ.ˈdʰiʎ.ʎə/
```

Tertiary Stress

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

```
/'lan.nu.hu/
/p<sup>h</sup>i/ (functional word)
/k<sup>h</sup>ə.lu/ (functional word)
```

Quaternary Stress

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

```
/ˈnar̞.ə/
/ɕə.ˈnakʰ.ɨ/
```

Vowel Length

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

Prosody

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

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

Section 2: Orthography

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

Chapter 1: Syllabary

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

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

	stop	voiced	nasal	lateral	tap	fricative
	pa: O	ba: Ó	ma: Ol			fa: 3
labial	pi: φ	bi: φ	mi: đ			fi: ⁄6
	pu: つ	bu: ✝	mu: Q			fu: $\frac{3}{6}$
/	ta: ∧	da: 🔨	na: ↑	la: ♡	ra: A	sa: 5
alveolar / retroflex	ti: 🛪	di: ⅍	ni: 🌩	li: ራ	ri: ป	si: X
	tu: 🔨	du: Á	nu: 소	lu: [≌]	ru: 🞗	su: 🛆
	ca: ٦	ja: 1				xa: 🍞
palatal	ci: 「ī	ji: r				хi: й
	cu: ユ	ju: →				R: ux
	ka:)	ga: 🤾	qa: P			
velar	ki: 기	gi: 🛪	qi: ⊋			
	ku: ←	gu: ∠⊂	qu: 굴			
glottal	'a: O					ha: ア
	'i: ♀					hi: 9
	'u: <u>O</u>					hu: ō

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

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

Chapter 2: 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 communicating in situations where every syllable is important, such as giving names. Each syllable corresponds to a disyllabic word, which begins with the same consonant and ends with its vowel. The geminate symbol is represented by the word fa?a language.

pa: pacca number
ba: bitta time
ta: tila shell
da: diha bureaucrat
ca: cula egg
ja: jana elder
ka: kaqqa brother
ga: gata pendulum

'a: 'ara face

ma: marru flies
na: nassa euphoria
qa: qasa fish

la: liffa *speech*ra: rippa *surprise*fa: fipa *storey*sa: sinna *story*xa: xima *morning*

ha: hafa *race*

'u: 'iku *hunger* pu: pusu *zirconium*

bu: batu *group* tu: tadu *pig*

du: diru money

cu: ciqu mould

ju: jixu dictionary

ku: kipu horse

gu: gusu *person* mu: maʔu *gingla*

nu: nuku world

qu: qumu woman

lu: laqqu wealth

ru: riccu sphere

fu: famu completely

su: silu spouse

xu: xa?u *child*

hu: halu algorithm

'i: 'ussi *gift* pi: paji *fruit* bi: basi *lid*

ti: tuhhi farming
di: dicci cold
ci: cadi wall
ji: jakki candle
ki: kiri marigold
gi: gapi soup
mi: mixi room

ni: niddi *alertness* qi: quxi *mountain*

li: lu'i *love* ri: rali *back*

fi: faxi to survive

si: sutti fear xi: xalli spouse

hi: huri ocean

Chapter 3: 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 generally denote the vowel.

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

Section 3: Morphology

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

Chapter 1: Nouns

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

Common Nouns

Common nouns can refer to abstract or concrete items.

```
lu'i ♀≌ love
bata ∧ó caution
'ahati ォルロ happiness
caga ?¬ mouth
purissiji 『メンリロ circle
```

Stem Nouns

Stem nouns are those that are neither compounded nor derived.

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 ∧ \ i > | drop of milk marru + 2 | flies / marruxita ∧ \ i + 2 | fly
```

Animacy

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

Animate Noun

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

Inanimate Noun

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

```
tissa かみwind
linu 全な tree
hurru もつの yeast
```

Abstract Noun

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

```
sutti メッ会 fear
'adda へっ<sup>©</sup> past
tuhhi <sup>©</sup>っ木 agriculture
laru & vear
sajja コッケ silence
```

Compound Nouns

The first part of a compound noun must be a noun, and the subsequent parts specify the meaning of that 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 compound in common use will start being treated whole.

```
jifiru'inulli

タッ全やもらい

jifiru'i-nulli

lake-mountain

"mountain lake"

xu'abaju

ナらっる

xu'a-baju

bird-blue

"bluebird"
```

Proper Nouns

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

```
Ra'ani キャネ Ryan (name of a person)
Pikinnisa ケキャラト Eakins (name of a family)
Sa'imi マケケ Caemi (name of a deity)
Tinalli チャトオ Tinellb (name of a universe)
Pirri'a ロリット Iria (name of a city)
Lulani キャル Lulani (name of a language)
Xucipura Cula ロー・ネートラ To The Crackled Egg (name of a story)
```

Chapter 2: 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.

Stem Verbs

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

```
'i ♀ to say
dissu ☆ つ to feel
'usa ♪ ♀ to see
janni ♀ っ to move
kissa ♪ っ to fight
miku ← ð to be red
```

Compound Verbs

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

'isinna

```
个つ以〇
'i + sinna
say-story
"to tell a story"
```

dissu'ahati

```
メグロークタ
dissu + 'ahati
feel-happiness
"to be happy"
```

pamilami

```
dodo
pa + milami
think-surroundings
"to be conscious"
```

2.3.2.1 Intransitivity

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

Badiri ru cura.

・ペユ・メ・リカÓ・Badiri ru cura.

World PRS;GNO change.
"The world is always changing."

cura $^{\ }$ to change; to be different huba $\circ \overline{\circ}$ to breathe; to be alive giri $\$ to conceive; to be pregnant gupi $\$ $\$ to sit down; to wait siku $\$ to die; to be dead hacci $\$ to awaken; to be awake nara $\$ to sleep; to be asleep nu'ifi $\$ $\$ $\$ to hide; to be hidden

Adjectival Verbs

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

Linu ra'u ki. / Linu qixa ki.

· ት [፡] የተተጥፈት የተመደም የተ

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.

·40·4~2POIDD.ODE77.

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.

.¿ᡓᡣ᠌2€♠ò.ф<u>o</u>.

Liqu ku-hisuba bi'u.

Head DAT-administrator hurt.

lit: "The head seems sore to the administrator."

"The administrator has a headache."

'anu 🌣 O balanced

guqqi ⊋っ⊆ bad

tuhi 9π little

ki 🛪 big

ri 외 smooth

qira ^{\$}⊋ rough

nama ○|↑ light

```
kuppu ¬¬¬¬ strong
pani ¬¬¬ tame
nittu ¬¬¬ wild
suqa ¬¬¬ ready
bi'u □ o sore
```

Chromatic Verbs

These are adjectival verbs specifically dealing with colour.

```
ki?a <sup>O</sup>¬¬¬ white
ga ¬ black
miku ← d red
baju → Ó blue
sa ¬ yellow
millu <sup>©</sup>¬ d brown
```

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 ♣७७ to accelerate; to move around

'ussa ७०० to follow

nura १० to leave; to be apart from

madi २०० to rise; to be high

ka'u ०० to jump

hussu ♠०० to fall; to be low

saja १० to lie down; to be lying down

tiku ५३ to turn

na १ to turn towards; to face

raca ११ to be hung; to be hanging

fiqu ४७ to float; to be floating

tihu ७३ to move to; to abide

malu ००। to move to; to be in a place
```

Quasi-Transitive Verbs

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

Oblique Arguments

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

Luna kalujifiru'i mala; luna kalu'ilupagu mala.

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:

Comparatives

These verbs are used to denote the degree of similarity between two nouns. Their nuance can be modified 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** \mathcal{P} with denotes a slight similarity or difference.

?usu ra'u haruxissatanissa runihi.

?usu ra'u haru-xissatanissa runihi.

1INT PRS:STA with-musician similar.

"I am somewhat of a musician."

The adpositions 'adi $^{\circ}$ near and xidu $\acute{\pi}$ if far denote a large similarity or difference.

Mari ra'u xidupajiga tina.

·IOU·20·IT TO NEVENT

Mari ra'u xidu-pajiga tina.

This PRS;STA far-olive different.

"This is nothing like an olive."

runihi 94% to be similar to

tina ↑≯ to be different from

Symmetric Relations

The participants of these verbs are equivalent to each other, that is, if Alice acts on Bob, then Bob acts on 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 **passive**, and pronouns use the intransitive form:

?allisi sisa Bubu.

・・つつ・う 刈・刈みつ^〇・
?allisi sisa Bubu. *Alice contact Bob*.
"Alice is touching Bob."

2. Take dative marking:

Pallisi kuBubu ju'i. ・マナ・つっこ・以らっつ・ Pallisi ku-Bubu ju'i. Alice DAT-Bob link.

"Alice is married to Bob."

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

Pallisi Bubuta hulla.

・いって・ハっつ・刈らっつ・ ?allisi 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 우ナ to join
sisa かれ to touch
haru もか to accompany
hulla いつ fo to copulate; to have consumated
```

2.3.2.2 Transitivity

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

Nimalu dasi (nukki).

```
・コッ全・刈入・≌○|牛・
Nimalu dasi (nukki).
Bear eat (strawberry).
"The bear is eating (the strawberry)."
dasi 込入 to consume
nidu 大争 to use
```

Transformative Verbs

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

'idu $\dot{\pi}$ \operatorname to make pifa '\dop to create

```
pura <sup>&</sup>つ to change; to be
si'a <sup>○</sup> ito repair
lakka <sup>)</sup>つ to break
qarri りっ to open
turu & to close
```

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 arguments, the agent of the movement is the **subject**, and the patient being moved is the **object**.

Dative

These are motive verbs focussing on movement to the destination.

Suma gi pa.

```
··O·À·OI♠·
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.
・・3つや・Γ木・ἤφ・
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 versa.

?usu ku tali fu.

```
ででなる。

?usu ku tali fu.

1INT 3INA;DAT take 2TRA.

lit: "I took you to it."

"I've relieved you of it."

duci 「木 to gain; to possess

gi 対 to pick up; to carry

tali そ to take
```

Ablative

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

Suma maku pa.

·o·-<u>c</u>ol·ol\\ ·

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 to the source.

Puttu funi 'iffa.

·37P·43·x70·

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, *i.e.*: with the **dative** becoming an **object** and vice versa.

?usu kalu kuffa fu.

?usu kalu kuffa fu.

11NT 3INA; ABL give 2TRA.

lit: "I gave you from it."

"I've given you it."

saki 75 to share

ga? to put

maku ^{_}○| to throw

funi $\stackrel{\circ}{\uparrow}$ to lose; to lack

Apparent Verbs

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

Hifumari ba'u xi huba ra'u?

.O.8.65.H.O.6.NOI39.

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.

·P<·A·>

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 other item or person is governed by the adposition $\mathbf{ka} \supset as$.

Vital Verbs

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

```
kuli \mathcal{G}^{\perp} to meet; to know ca \neg to help hisu \mathcal{A}^{9} to administer kissa \mathcal{A}^{1} to fight 'ussa \mathcal{A}^{2} to obey
```

Action Verbs

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

```
Hisutuba tara sinna.
```

```
・ハゥル・ネハ・Ó木 今 9・
hisutuba tara sinna.
Babysitter begin story.
"The babysitter started the story."
```

They can also take **gerunds**:

Kipu nu dasiruqa hafi.

```
・ ゟア・ア&以入・仝・つ月・
Kipu nu dasi-ru-qa hafi.
Ox stop eat-GER-GEN grass.
"The cow stopped its eating of the grass."
```

```
la ○ to do

tara <sup>8</sup> ∧ to begin

tuni <sup>4</sup> ⊼ to repeat

nu <sup>4</sup> to stop

naqa <sup>7</sup> ↑ to need

tapu to look forward to; to enjoy
```

2.3.2.3 Ambitransitivity

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

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 to use that sense:

Guli ruku 'usa.

·24.82.00c.

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.

·+90-0-0-2·0-10k·

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.

··ϧϘ·϶Ϯ៱ϧϘϽ·ϳͷϪͶϘʹϹ·ͽͿ·

Mihu ku-lasida-xi ju'isatadu-ru 'usa.

3ani;int dat-secret-seem conversation-ger see.

"She saw the secret meeting."

'usa 5 ○ to see

hulu ${}^{\triangle}$ ō to hear

cussi 刈っユ to feel

ji'i ^{QΓ} to taste

cikki オット to perceive

dissu 合つけ to emote

lu'i $\cap^{\underline{N}}$ to love

qacca コット to choose

 $qi \ni to experience$

Communicative Verbs

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

Kimilli kul·lani 'i 'issi.

·Kbc&·ユロの中・P·P·K·

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.

・ある・マ・ネ・全へ空・マン・ダー・ダー ですった。 Kimilli jusi 'i li lu'i lulani ru. King 3anı;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 on either side. In this case, the recipient may be in either the **object** position or **dative**. This argument structure can also be used without a specific communication.

(Mica,) kimilli 'i lulani.

・・ 个い[○]・ や・ なっすすい では (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

Chapter 3: Auxiliaries

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

dynamic stative negative habitual gnomic

past	qixa	pi	qilu	taku	rusa
	73	φ	$^{\odot}$ 2	\overline{L}^{V}	5 *
present	cani	ra'u	ji	na	ru
	个7	<u>0</u> %	r	\wedge	&
future	lanu	nagi	funi	hu	ruku
	$\Delta \odot$	净个	₽ ∂	ิ	<u>_</u>

Auxiliary stacking gives a poetic or archaic nuance.

?usu rusarukuru lu'i fu.

?usu rusarukuru lu'i fu.

1INT PST;GNO-FUT;GNO-PRS;GNO love 2TRA.

"I have always and will always love you."

Tense

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

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

Quhu qixa dasi si'apa pada, jimuli cani janni qu, lanu haruqikanni la kiluqu.

$$\cdot \overline{\sigma} \cdot \overline{\tau}^{\Delta} + \nabla \cdot \overline{\tau}^{\Delta} \cdot \overline{\tau}^{\Delta} + \nabla \cdot \overline{\tau}^{\Delta} \cdot \overline{\tau}^{\Delta} \cdot \overline{\tau}^{\Delta} + \nabla \cdot \overline{\tau}^{\Delta} \cdot \overline{\tau}^{\Delta}^{\Delta} \cdot \overline{\tau}^{\Delta} \cdot \overline{\tau}^{$$

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."

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**.

Episodic and Generic

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

Activity versus State

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

7a'ima cani duci sunu. / 7a'ima pi duci sunu.

?a'ima qixa duci sunu. / ?a'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?"

Negative

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

Chapter 4: Adpositions

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

As a Preposition

The most basic use for an adposition is prefixed to a noun to signify where the action is taking place with 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"
```

As a Nominal or Verbal Modifier

Adpositions can be used to form compound nouns:

```
gusu'adi

¬O♠←
gusu-'adi

person-near

"nearby people"
```

and compound verbs:

As an Adverb

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

Luxira'uxxi qu'u cani dasi.

·¼**∧**·↑¬·Оз·йоОхй∾·

Luxira'uxxi qu'u cani dasi.

Twins inside PRS;DYN eat.

"The twins are eating inside."

Kuddu qa hussu.

·☆っō·ʔ·★っ<u>←</u>·

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.

.·<u>○</u>8.45.[∞]014.

Nimalu sani ra'u.

Bear north PRS;STA.

"The bear is to the north."

Kuhisuba 'adi na cijja.

·12@A0.06.4.71cr.

Ku-hisuba 'adi na cijja.

DAT-administrator near PRS;HAB alcohol.

"The minister is usually having a drink around now."

Directions

This list includes both relative and absolute terms.

saqa P3 right

gi 🛪 left

ka > south

sumika [⊃]đ<u></u> west

sani \$\gamma\gamma\north

gibi \$\daggerightarrow{\pi}{\pi} east

Locations

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

'adi 'd^O near / now

xidu ∱ĭ far / then

```
di \( \text{if } up \) upstream
qa \( \text{P} \) down \( \text{downstream} \)
'ari \( \text{N}^{\circ} \) front \( \text{before} \)
capi \( \phi \) behind \( \text{after} \)
pa \( \text{towards} \) \( \text{towards} \) \( \text{at} \)
ni \( \phi \) at \( \text{during} \)
kika \( \text{N} \) \( \text{over} \) \( \text{over} \)
```

Spatial Locations

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

```
jimuli 华中 outside
qu'u 으 in; inside
nifi 冷 beside
raqu 5 among
ca rencircling
du'i 个 beyond
la'a oo on a horizontal surface
kadu 木 on a vertical surface
```

Motion

These refer to motion.

```
data ∧∧ backwards
tirri 刘⊃≯ forwards
ja ¬along
ma'iki ¬♀○| across
tiku ←≯ around
bi ∳ out of
```

Animates

This group have animate objects.

```
haru &⊅ with
ha ⊅ for the benefit of
```

Inanimates

This group have inanimate objects.

```
nidu 木牛 using
sarru もつう instead of
```

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haru *P consisting of
nina ^ used for a purpose
sata ^ in order to obtain
'arri 以つ along with

Chapter 5: Adverbs

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

```
matta へつ이 also
gicirri 刈っ は instead
naku ー together
basa か unlawfully
```

Purpose

```
piddi 为今 on purpose
qiriji 『以字 with effort
hibu つ allow oneself to
dumi d木 try to
danna か入 successfully
ca'alla 〇つつ must
fuca つ can
ritada 入入以 by fate
macu 二〇| unexpectedly
xani 年下 unwillingly
dukku 二つ木 not by choice
```

Extent

```
dapi $\( \text{\chi} \) more than is necessary

famu $\( \phi \) completely

rali $\( \phi \) intensely

kupira $\( \phi \) in many different ways

ti'ici $\( \phi \) \( \phi \) to a certain extent

cipati $\( \rho \) in that extent

tuci $\( \phi \) \( \rho \) barely

miru $\( \phi \) about to

xibbuti $\( \rho \) \( \pi \) never again
```

Time

xuga ラ河 instantly
cidatu 不本「suddenly
karu もっ commonly
gaqqu 五つ usually
naru も slowly
nigi 月年 quickly
dura 冬木 repeatedly

Modals

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

```
matta ∧>○| again
hiru +9 contrariwise
```

Likelihood

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

```
'ili & \ actually

da'aru & \ A experience

fa & maybe

tasi A \ probably

qaxa \ P predicted to

mica ¬d permitted to

nufira \ \ \ \ \ want to

rixi \ \ \ \ Would be better to
```

Evidential

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

```
raqa P<sup>®</sup> obviously
da A clearly
jami da evidentially
qaffi $ap seemingly
jati *apparently
xakila *apparently
xakila *apparently
thought to be
lisina *apparently
rafa *apparently
by assumption
rafa *apparently
y
kakila *apparently
y
kakila
```

Emotion

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

```
pu'i ♀ o incredulity ("I can't believe it!")

rapi ♠ ^ disregard ("I don't care!")

tappa ○ ↑ \( \text{seeking confirmation ("Isn't it?")} \)

rani ♠ \( \text{giving confirmation ("I agree.")} \)

qarihu o \( \text{D} \) \( \text{regret ("I'm sorry.")} \)

tupi ♠ \( \text{respect ("With all due respect...")} \)
```

Derivation

Suffixes can derive adverbs from other parts of speech. Zero-derivation, i.e.: having a null

suffix, is also productive for some categories of words, such as references to time, which are used as modals.

```
musa 分⇔ today
laru ♣♡ this year
tariti オリ∧ at noon
```

Numbers can be suffixed to denote other times.

musahha

ሥንያ φ musa-hha day-zero lit: "0-day" "yesterday"

musara

⁸5⊕ musa-ra day-two lit: "2-day" "tomorrow"

larumullu

[∞]γ⊕♣♥ laru-mullu year-minus_one lit.: "1-day" "two years ago"

Chapter 6: Suffixes

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

Derivational Suffixes

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

The augmentative -aku -CO. is most often attached to nouns to reference something large or important. It is rarely used for people.

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

```
'ahatini キャー contentment
tissini キャッカ breeze
qikannini キャーラマ puppy
ranini キャー potato chips
bi'ini キャー to itch
```

The honorific -fi 1/6 confers a nuance of sacredness upon a base word.

```
karafi \beta^{0} sacredness lulanifi \beta^{0} great queen
```

The pair -tu'i $\nabla \pi$ and -da \wedge are used to highlight the positive and negative aspects of a word, respectively.

Nominal suffixes

These derive nouns from other nouns.

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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** k ?.

Both -sa f and -ri \mathcal{V} derive an animate noun from an abstract noun, however, these are not predictable. For instance, note the difference between dis·sa $f \triangleq \gamma \forall youth$ and dissuri $\mathcal{V} \triangleq \gamma \forall x$ stranger. Other examples are:

```
pucasa かつ optimist
sasa かか introvert
dattusa かかん god
mulisa かゆ fool
luxirasa かいる twin
tuhhisa かって farmer
'axasiri リンドロ adult
'asilari リンパロ friend
```

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

The suffix -di 3 derives an inanimate noun from something abstract, and -ja 7 does the opposite.

```
sinnadi オヘつ刈 book
ru'ihaja ファマル history
```

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

```
daruli &*A wrong way
gusuli non-Guozu person
```

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

```
'itikku ニッパ breast
mulukku ニッペ + heart
dasikku ニッパ digestive system
```

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

```
'aggami ð?¬<sup>○</sup> police officer | law giver
Sa'imi ð?<sub>↑</sub> Caemi | light giver
```

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

Verbal suffixes

These are only applied to verbs.

The suffix -ni \triangle is used to derive inceptive verbs.

ducini ↑ † to receive

The suffix -ulu $\stackrel{\circ}{\sim}$ denotes reversal of an action, and can only be applied to stem verbs.

lulu $\overset{\triangle \triangle}{\rightarrow}$ to undo

jannulu $\overset{\triangle}{\rightarrow}$ $\overset{\triangle}{\rightarrow}$ 7 to return

turulu $\overset{\triangle}{\rightarrow}$ $\overset{\triangle}{\rightarrow}$ to open

ju'ulu $\overset{\triangle}{\rightarrow}$ $\overset{\triangle}{\rightarrow}$ to unlink

The repetition marker **-tuni** $\Delta \pi$ has similar form and meaning to the full verb **tuni** $\Delta \pi$ repeat.

latuni \uparrow \uparrow \sim to do again

The augmentative **-ssasu** $\triangle \circ \gamma$ is used specifically for verbs.

bi'ussasu 今からか to really hurt

Auxiliary Infix

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

lanaru 糸介♡ will finish doing nagari 刘子介 will finish being

Adverbial Suffixes

There are two kinds of negation for adverbs. The suffix -hita $\wedge 9$ is standard negation.

jamihita $\wedge 9$ d7 not in evidence 'ilihita $\wedge 9$ &\range not in reality

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

nufirama no longer wanting dumima no longer trying

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.

The suffix -muka $^{\circ} \oplus$ is used with prepositional phrases.

Other suffixes in this group are divided into animacy classes.

Abstract

The productive general suffix -a derives abstract nouns.

The suffix -ru & forms gerunds.

```
dasiru キガヘ eating
janniru キケっヿ moving
hubaru もらる breathing
```

The suffix -ci is applied to adjectival verbs. This includes chromatic verbs, whence come the name for colours.

```
namaci 「OIA weakness
ki?aci 「「Oつフ」white
```

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

The suffix -ahi is used with adverbs.

Inanimate

The patientive suffix $-du \stackrel{\star}{\uppi}$ is applied to stem verbs.

dasidu 大沿へ food maladu 木〇〇| reflection kassudu 木合つ trade goods

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

dasiffi ちつみん cutlery, tools for eating

```
sikuffi たっこえ spear, tool for killing
```

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

```
dasikku ニッカム digestive system
'itikku ニッカウ breast
mulukku ニュッシャ heart
```

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

```
kifissiji 「刈った」 triangle
nurussiji 「刈っ糸仝 quadrilateral
```

Animate

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

```
narala'i \\\^\\^\\ sleeper

'ussaba \\( \beta \cap \) \\ follower

caba \( \cap \) \\ helper

hisuba \( \cap \) \\ administrator

ju'ipu'a \( \cap \) \\ \\ group

lu'ipu'a \( \cap \) \\ \\ lover

cikkipu'a \( \cap \) \\ \\ \\ \\ \\ i \telepath
```

Adverbialisation

```
'usatinna 个つおう ○ visibly
katinna 个つおう increasingly
lu'atinna 个つお○ lovingly

'ahatiniqqi マっキ メ > happily
'isilakuniqqi マっキ ← ○ おり depressingly
bataniqqi マっキ ∧ o carefully
bufiniqqi マっキ トゥ stonily
ga'iniqqi マっキ トゥ in time
```

2.3.6.1 Determiners

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

```
cama ○|¬ usual
nisa �� only
sabufi �� different
```

Quantity

These are used to answer "how many?"

```
mimu'i ♀♀♂ some
lumi ♂<sup>∞</sup> several
raqi ♀<sup>⋄</sup> more
'uhu ௯○ many
takki ¬¬∧ many
```

Choice

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

Count Nouns

These refer to particular members of a group.

```
ca ¬ only
fi'atu ⊼ ○ /6 certain
tapa ○ ∧ next
cari 以¬ remaining
qafa ? P last
```

Mass Nouns

These refer to sections of a substance.

```
cari IJ¬remaining
sukki ¬¬ ← entire
```

Degree

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

```
nata ∧↑ complete
naci 「↑ somewhat
ji'a ○ ⊓ not
```

Chapter 7: Deixis

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

Topicality

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

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 proforms** comprise the remaining deictic terms.

2.3.7.1 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 nerson	2nd person	3rd person			
		1st person		topic	animate	inanimate	
int	anstitive	'usu	filli	(su'a)	mihu	pa	
intra	ansuuve	<u> </u>	3,0p	$\circ \overline{\forall}$	ดีฮี	0	
trans		suma	fu	(su'a)	quhu	'iffa	
	insitive	OI☆	0	$\circ \overleftarrow{\nabla}$	ភ ភ	326	
ما	hlativa	puttu	sacu	raja	kassi	kalu	
abi	olative	$\nabla \gamma \nabla$	<u> </u>	٦8	刈っ ^つ	⊙ >	
1 4*		pixi	ba'u	datu	jusi	ku	
dati	dative	йφ	<u>0</u> ó	$\Lambda\Lambda$	시 구		
genitive	(alienable)	pagu	ba	su'a	disi		
		40	Ó	$\circ \overleftarrow{\vee}$	とな	-	
	e (inalienable)	-pahi	-ba		-disi	-qa	
		9 0	Ó	-	とな	7	

Number

Pronouns are not generally marked for number.

?usu ra'u pannaxa. / ?usu ra'u pannaxa'uxxi.

?usu ra'u pannaxa. / ?usu 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 additional pronouns can be constructed. The second person transitive pronoun -fu $\frac{5}{0}$ and you can be suffixed to the first person pronouns to form first person inclusive plural pronouns. The third person intransitive inanimate pronoun -pa 0 and them can be suffixed to first or second person pronouns, including those with -fu, to form other plural pronouns. These pronouns have no inalienable genitive form.

	1st person inclusive exclusive		2nd person	all persons	
			inclusive		
intransitive	'usufu	'usupa	fillipa	'usufupa	
	→ <u>O</u> O	O <u>♠</u> O	Oみつゟ	O O O O O	
transitive	sumafu	sumapa	fupa	sumafupa	
	[→] OI ←	OOI☆	O O O	O♂OI☆	
ablative	puttufu	puttupa	sacupa	puttufupa	
	う	O不つつ	Oユゔ	Oo へ へ へ へ へ の の の の の の の の	
dative	pixifu	ріхіра	ba'upa	pixifupa	
	∂ πφ	Ойф	○○Ó	O⊖йф	
alienable genitive	pagufu	pagupa	bapa	pagufupa	
	540	O∠CO	OÓ	O O ∠CO	

Fillipa pixi guqqipullata!

ℳℴ℀ℴℴ℟℩ℸ℄℄℄℄℄

Fillipa pixi guqqipullata!

2INT-3RD 1DAT betray!

"You and he have betrayed me!"

Genitive Forms

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

Alienable Possession

Possession is alienable when the possessed item can be transferred from one owner to another. Alienable 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

[∞]上・刈分・ラスフナ julliga disi kulu mother 3ANI;GEN fork lit: "the mother, her fork" "the mother's fork"

su'a 'ita'i

O∧O.⇔ su'a 'ita'i 3TOP;GEN *car* "her car"

pagu xissata

A介づれてO pagu xissata 1GEN musical_instrument "my musical instrument"

disi nukki

マク全・沿分 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.

・☆?d・∠o・ Pagu mifasu.

1GEN subject.

"My vassal"

Inalienable Possession

Inalienable possession refers to items which are unable to be transferred from one individual to another. 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, the structure is "possessed-genitive possessor", that is, the genitive marker is an enclitic on the possessed item. This marker is always the third person inanimate genitive pronoun, unless the possessor is a plain pronoun.

kahipahi

9090

kahi-pahi

arm-1GEN

"my arm"

kitisuqa lulani

↑○○・7△ォオ kitisu-qa lulani father-GEN queen "the queen's father"

hafiqa nasi?u

Oつ以介・アルル hafi-qa nasi?u sheep-GEN field "the sheep field"

Ra'aniqa ?Ikinnisa

今年つ月ウ・ア本^O Ra'ani-qa ?Ikinnisa Ryan-GEN Eakins "Ryan (of the family) Eakins"

Sa'imiqa Tinalli

スクトライラ 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', in contrast to the alienable example above.

lulanipahi

90↑000 lulani-pahi monarch-1GEN "my queen"

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

```
'ara

%O

'ara

face

"the face" / "his face"
```

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

2.3.7.2 Indefinite Pro-forms

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

		object determiner	place	action	manner	state
proximate		-mari มoเ	majja / miru 1つ이・よਰ	marila ∾VOI		marika VNOI
distal	kasi X)>	-kasi ଧ୍ର	kasuja ¬♠⊃	kalisa ኇኇ ^ጋ	kadusi 刈んっ	kasika O _A O
interrogative	sama Olĵ	-diku -C∕∂	satta へつか	sulla ∾ኅ♠		saqqa アっか
negative	cu'i Ол	-cu ユ	qa'i ♀ʔ	buni ♣∽		
universal	'aba ó0	-'aba óO	batuja 1πό	'abala ∾ó°	-	
existential	'umi ਰ <u>ੈ</u>	-mi ਰ	mituja 1⊼đ	'amila ∾đ ⁰		

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

The existential markers are also used in complements.

?usu li xaha 'umi ru padissu.

·A>>40-8-40-00-4-

?usu li xaha 'umi ru padissu.

1INT COM name something PRS;GNO learn.

"I learned what her name is."

Object Noun

Object nouns are pronouns. Unlike some personal pronouns, these are not marked for animacy, and are 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?

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 \wedge and are used for emphasis.

sama samata?

AOISOIS sama sama-ta? what what-and? lit.: "what and what?" "what the...?"

cu'i cu'ita

ヘウユ・ウユ
cu'i cu'i-ta
nothing nothing-and
lit.: "nothing and nothing"
"nothing and no one"

qa'i qa'ita

'aba 'abata

^Ó°·Ó°

'aba 'aba-ta

everything everything-and

lit.: "everything and everything"

"absolutely everybody"

Object Determiner

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

takacu

ᠴ᠈∨

taka-cu
sound-nothing
"no sound"

manafamari

別の「3个の」 manafa-mari country-this "this country"

lulanimi

lulani-mi queen-some

"some monarch"

kulu'aba

<u>ن</u>00∞_ر

kulu-'aba

fork-every

"every fork"

nullidiku

 Δ c4k2

nulli-diku

mountain-what

"which mountain?"

'usu'aba filli'abata

Λό⁰ζη 6.ό⁰ΔΩ

'usu-'aba filli-'aba-ta

1INT-every 2INT-every-and

"every me and every you"

Place

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

Xudda majja dasi da.

·K·NV-100-K·NV-V.

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?

•∂, ς, δ, ς Ω, γ, κ. Θ. •

Filli kalu-satta tihu?

2INT ABL-where move?

"Whence came you?"

As opposed to **majja** 7701 here or now, the word **miru** \$d\$ here and now is used for a specific point in all four categories of dimension.

Gaca miru ji dissu'ahati.

·(r.b4.11.kc.000Kr.

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."

Action

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

Sabba sulla qixa?

・下字・いっ合・Óっら・ Sabba sulla qixa? father;2gen do_what PRS;DYN? "What does your father do?"

Manner

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

Kimilli jannikiluqu kadusi 'ili cani?

State

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

Filli (ra'u) saqqa?

・アッ介・〇名・なった・ Filli ra'u saqqa. lit.: "What state are you in?" "How are you?"

They can also function as deteminers.

Mari ra'u gajitafana.

·IOU·20·571/5个·

Mari ra'u gajita-fana.

This PRS;STA treasure-somehow

"This is some kind of treasure."

Chapter 8: Conjunctions

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

Phrase-level Conjunctions

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

```
-ta ∧ and
-sija ¬¾ or
```

Clause-level Conjunctions

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

Coordinating Conjunctions

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

```
qu 5 and
nuki 기소 or
pada 사이 and then
```

Subordinating Conjunctions

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

```
surra if
daru'i because
gi'a a that is
gi'ika and in order to
ma when
rika and thus
haru & while
fati \alpha enough to
```

Chapter 9: Particles

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

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

2.3.9.1 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 ○≯ oh!
```

or because the interjection marker -a O. has derived them from nouns or verbs.

mica ¬♂ hello
nara & goodbye; good night
hacca ¬¬ good morning
kica ¬¬ what?
hira & please; thank-you

Section 4: Syntax

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

Chapter 1: Case

Alignment

The three basic arguments for any verb (intransitive subjects, transitive subjects and transitive objects) are 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 confusion. In 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. In either alignment, the intransitive case is the one treated like the intransitive subject, and the transitive case is 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.

Core Cases

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

Intransitive

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

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.

Oblique Cases

The two oblique cases are marked on the pronouns. For common and proper nouns, a clitic with the same 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 iterative auxiliaries.

Ablative

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

sacu →5 because of you / from you

The clitic is kalu- $^{\infty}$).

kaluTinalli janni

牛っマーチょっ个ォ[™] kalu-Tinalli janni ABL-*Tinellb move* "come from Tinellb"

kalukimilli kuffa

?っ上・よっdオ[™]⊃ kalu-kimilli kuffa ABL-*king give* "given by the king"

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, including verbs of perception and emotion.

pixi ἤφ to me

ku?irri'a janni

全つれ・りょうやった ku-?irri'a janni DAT-*Irìa move* "go to Irìa"

The clitic is \mathbf{ku} .

kululani kuffa

?っ上・◆心[○]上 ku-lulani kuffa DAT-*queen give* "give to the queen"

Chapter 2: 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 that of the immediately prior sentence, it can be dropped. The adverb can act as a pro-sentence.

Intransitive Clauses

As already discussed, intransitive clauses do not have objects.

Mihu ra'u nara.

·パか・<u>○</u>パ・あす・

Mihu ra'u nara.

3INT PRS;STA sleep

"He is asleep."

Transitive Clauses

Transitive clauses do require an object.

?usu ru lu'i fu.

·글·Ŷ∾·ጱ·<u>⇔</u>o.

?usu 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.

·から·牛っつって・0×·あす・

Mihu ra'u kuqikanni 'usa.

3ANI;INT PRS;STA DAT-dog see.

"She can see the dog."

Copular Sentences

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

Mihu lanu julliga.

·シネッチ・��·あ**ð**・

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.

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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, and the possessum as the subject.

Sunu ru pixi.

·μφ·κ·φ·γ

Sunu ru pixi.

Cloak PRS; GNO 1DAT

I have a cloak.

The arguments may be swapped without a change in meaning.

Pixi ru sunu.

·Δ\.δ·Ψ·μφ·

Pixi ru sunu.

1DAT PRS;GNO cloak.

I have a cloak.

Contrasting Pronouns

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

Mihu qixa miku.

᠂᠆ᢗᠯ᠂ᡎ᠌ᡒ᠗ᠯ᠂

Mihu qixa miku.

3ani.int pst;dyn red

"She turned red."

Mihu pi miku.

-∠₫.φ.ਙ₫.

Mihu pi miku.

3ani.int pst;sta red

"She was red."

Quhu qixa dasi pa.

・O・タル・ヤঽ・<u>o</u>エ・

Quhu qixa dasi pa.

3ani.tra pst;dyn eat 3ina.int

"She ate it."

Mihu pi dasi 'iffa.

·326·3V·4·2gq·

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 (as well as copular) sentences using dynamic or iterative auxiliaries.

Chapter 3: Argument Promotion

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

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

Passive

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

- -'illu $\stackrel{\circ}{=} \gamma$ when the last element of a verb is monosyllabic,
- -ilu $\stackrel{\circ}{\sim}$? replacing the final vowel if the final consonant is geminated, and
- -illu $\stackrel{\circ}{\sim} \gamma \stackrel{\circ}{\rightarrow}$ 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. The demoted item is not compulsory, but if it is put in, it is the first ablative-marked noun in the new sentence.

Fu qixa kissa kilatu'i!

・・ウ木ペオ・ケッオ・下字・ゔ・ Fu qixa kissa kilatu'i! 2TRA PST;DYN *fight deer* "You fought a deer!"

Kilatu'i qixa (sacu) kissilu.

・☆ 刈っオ・ユケ・下⊋・♀ へいオ・ Kilatu'i qixa (sacu) kissa-ilu. *deer* PST;DYN (2ABL) *fight*-PSV "A deer was fought (by you)."

Ablative

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

- -ka) when the final consonant of a verb is geminate, or
- -kka ²? elsewise.

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

Lulani qixa kalukimilli dasi qasa.

・・ケア・刈水・なっぱオペラ・マネ・本へペー・ 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.

·kpcδ·2√-L5·γγ·ς·_∞ωφ·

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.

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)."

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.

·5700.37-C-HZ-C-8.58+

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.

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.

·3700·7^{\infty} \bankles 2 \infty \cdot \infty \inf

Quxi ru (kalumulisa) kuffa-ilu-xa laqqu.

 $mountain \ {\tt PRS;GNO} \ ({\tt ABL-} fool) \ give{\tt -PSV-DTV} \ money.$

"It is to the mountain that money is given (by fools)."

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.

・ゆべ・*シュ本・ゆ・ある・

Mihu pi ni-jagaru gupi.

3ANI;INT PST;STA at-sand sit

"She sat in the sand."

Jagaru pi nigupu quhu.

·<u>o</u>z·⊃←4·φ·ӿシィ·

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.

・コッ全・以入・糸ラオキ・ゆ・あさ・ 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.

Chapter 4: 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.

Subordinate Clauses

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

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

?usu 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.

·ò·070,4·070,4·07.4·07.4·07.6·

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.

Location Adverbial Clauses

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

?usu lu'i fu madi, ba pu'iba miku qixa.

?usu 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."

Content Clauses

A content clause is one that takes the place of a noun. They begin with the complementiser $\mathbf{li} \ \boldsymbol{\zeta}$ and are separated from the matrix clause by commas. The auxiliary is not optional, and is given a low tone. Quote marks are used around reported speech, replacing the complementiser.

Li 'usu kissajisuka kugibi?asi'a rusa, qixa puttu pa'illu.

Li 'usu kissa-jisuka ku-gibi?asi'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.

・ 下字・ オ个 本合っついる つ 上・ 市 ゆ・ あ す・ よ・ つ に 中・ かっ さ 上・ 下字・ 〇 | 合・ トコート と Suma qixa ku-lulani 'icipu, li quhu pixi kuffa dissu-danagi qixa.

1 TRA PST; DYN DAT-queen ask, COM 3ANI; TRA 1 DAT give new-decree PST; DYN "I asked the queen if she had pardoned me."

Mihu qixa 'i, "Filli mulisa ra'u?"

ジョ 으 [&]・うな 中・よっ かま: ウ・下字・あ さ・ Mihu qixa 'i, "Filli mulisa ra'u?" 3ANI;INT PST;DYN *speak* "2INT *fool* PRS;STA?" "He said, 'Are you a fool?""

Relative Clauses

Relative clauses specify the noun by describing it. They begin with the relativiser $xiku \stackrel{\frown}{\vdash} n$ and are placed before the modified noun, The auxiliary is not optional, and is given a rising tone. Only subjects can be relativised. Other cases must be promoted to subject.

Xiku lu'i kimilli pi lulani.

Xiku kalukimilli lu'illu pi lulani.

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

Xiku lu'i kimilli pi mihu.

・あਰ・ゅ・ゅっぱつ・♀☆・ 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.

・ すぐか・ゅっすっく いっぱい Xiku lu'i kimilli pi Sa'imi. REL *love king* PST;STA *Caemi* "Caemi, who loved the king."

Intransitives

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

dissu'ahatira'u mulisa.

・うな中・〇ペメル〇合っ分・ feel_happy-PRS;STA fool dissu'ahatira'u mulisa "the happy fool"

'ibibuna suma

OI Δ·Λ·Δ·ΦΩ

complain-PRS;HAB 1TRA

'ibibuna suma

"the occasionally complaining me"

ka'ucani Ra'ani

个ペ・ペック

jump-prs;DYN Ryan ka'ucani Ra'ani *the jumping Ryan*

Similar are intransitives utilising the case markers and other adpositions.

kalukimilli nuhu.

・あ소・ゅっぱね^{™ン}・ kalu-kimilli nuhu ABL-king folding_paper "the letter from the king"

kul·lani nukki.

・オっ소・本へ○○ ←・ ku-lulani nukki ABL-queen strawberry "the strawberry for the queen"

di'i'uja pa

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

Transitives

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

xucipura cula

Cユ・ペートラ xuci-pura cula feather-change egg "hatching egg"

hafidasira'u kipu

つす・으 & えん た か hafi-dasi-ra'u kipu grass-eat-PRS;STA ox "the grass-eating cow."

Questions and Requests

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

Interrogatives

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

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

```
Lulani lu'i suma ra'u?
```

.·OՋ.OI♠.Qº.♠♡º. 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?

·º·204·410²⁰·11·.

Lulani nimalu ji?

queen bear PRS;NEG?

"Is the queen not a bear?"

Ji. / Ra'u. / Na.

ド. 〇 久. 介

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 questions have a rising tone on the main question word itself.

Lulani lu'i sama ra'u?

.. ○ १.0|5.0 ° . ↑ ° . Lulani lu'i sama ra'u? Queen love what PRS;STA? "Whom does the queen love?"

Kimilli. / Fu. / Cu'i. ・なっすす・う・ウユ・ Kimilli. / Fu. / Cu'i. King. / 2TRA. / Nothing. "The king." / "You." / "No one."

Imperatives

An imperative statement is an order.

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

Lulani lu'iruku!

Chapter 5: 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 \nearrow^{\circ} (v) journey
```

kukimilli (ii-v)

子にちいる

ku-kimilli

ABL-king

"to the king"

diku'i'uja (i-ii-v)

7<u>0</u>0<u>4</u>

di-ku-'i'uja

*up-*DAT-*table*

"onto the table"

harubijju nimalu (i-iii v)

[∞]OIΦ·→η∮*»

haru-bijju nimalu

with-first bear

"with the first bear"

xiku dasi nukki na gusulumi (iv v-vi)

᠗᠆ᠰᠺ᠂ᡯᡳᠰ᠂ᠴᠵᢓ᠘᠘

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)

C2H2-124.00

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 xa?u (i-iii iv v)

02 1 4 0 2 1

'adi-ra qikanni-hisu-pi xa?u

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.

Chapter 6: Gerunds

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

hubaru ♣ÓŌ breathing malaru ♣♡○| reflecting mikuru ♣스đ being red

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

dissu'ahatiru キメア〇合つ feeling happy pakicuru キュオロ believing to be true 'i'issiru キメックロ singing

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

jannikiluquruqa nimalu

²○14·7₄5²34²10²

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

guqqirupahi

90キネッム
guqqi-ru-pahi
bad-GER-1GEN
"my being bad"

This continues to apply in instances using argument promotion.

dasilluruqa dasu

☆^?♣♡?IJ^ dasi-illu-ru-qa dasu eat-PSV-GER-GEN meat "the eating of meat" sikukkarudisi IJみようっこIJ

刈分&っこ刈 siku-kka-ru-disi die-abV-GER-3ani;GEN "his murdering of another"

'usaxaruqa luna

小º・アぇ下ゥº
'usa-xa-ru-qa luna
look-DTV-GER-GEN moon
"looking at the moon"

Section 5: Apocrypha

This section details particular categories of vocabulary items.

Chapter 1: Numbers

Cardinal Numbers

The number system in High Lulani uses balanced sesquidecimal (base 15), and so numbers are written 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 zero (0). A period (fractional point: .) is used to separate the integer part of the number from the mantissa. A comma (,) is used in the integer part to separate the digits into groupings of four, beginning from the fractional point.

One-digit Numbers

Here are the names for the one-digit numbers:

(qi)hha	とっち	0	(qi)hha	かっち	0
xita	ΛĬ	1	mullu	$^{\circ}_{\circ}$	1
ra	ጸ	2	kannu	소 _ኅ ၁	2
kifi	<i>[</i> 63,	3	bila		3
nuru	<u>۰</u>	4	missu	⇔っす	4
guhi	ےو	5	laffi	<i>1</i> 62€	5
'usi	<u> 있으</u>	6	jusiti	-KK	6
salumi	đ∞ş	7	haki	٦ ٢	7

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

Two-digit Numbers

Numbers between 17 and 16 are composed of the prefix sa- 5 and the final two syllables of the number, except for salura (not sara) 12.

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

```
sahha アウタ 10
rahha アウ<sup>&</sup> 20
kifihha アウルオ 30
```

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

The word for 22, the exception, is **ranira** \$\$.

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** \$\frac{1}{2}\Lambda\$. Other three-digit numbers beginning with a 1 are formed by prefixing this word to the remainder, while even larger three- and four-digit numbers append it to the number of hundreds, which is then followed by the remainder as a separate word.

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

```
mullutakki オット<sup>い</sup>っ 中 100
ratakki オット<sup>り</sup> 200
saguhitakki オット<sup>り</sup>によ 1500
bilasalumitakki オット <sup>さい</sup>ない か 3700
```

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 group. The group furthest from the fractional point may not have this full quota of digits. An index marker notes the identity of a particular group.

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

The index marker is suffixed to the group word.

```
paxita A no 1,0000
para <sup>&</sup>O 1,0000,0000
pakifi ゟ no 1,0000,0000,0000
pamullu <sup>©</sup> no 0.0001
samissu paxita A no no no 14,0000
takkiranira paxita A no ルルル 122,0000
'usitakki mullura paxita A no ルルル 122,0000
```

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

```
раррахіtа ∧йоло 1,0000<sup>1,0000</sup> рараррахіtа ∧йолоо 1,0000<sup>1,0000</sup>^1,0000
```

Non-integral Numbers

Reading Mantissas

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

Repeating and Reflecting Strings

All rational numbers end with a repeating string of digits. For some numbers, this string is "0". In non-zero cases, the word **tuni** $\uparrow \pi$ *repeat* is inserted before the repeating string. The string must be read out with individual digits.

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

```
tuni guhira ^{\circ}9 エ・ ^{\circ} ^{\circ}
```

Fractions

The suffix -ki \dashv separates the numerator from the denominator. Saki \dashv 5 is used if the numerator is 1. There is also a commonly used variant for $\frac{1}{2}$: 'ima \circlearrowleft 1.

```
'ima / saki ra 이우・<sup>义</sup>・オケ ½;
saki kifi ゟオ・オケ ⅓
kifiki nuru &소・オゟオ ¾
```

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 other ordinals are formed by adding the suffix $-\mathbf{uju} \neq \text{to the cardinal number}$.

Using Numbers

Ordinal and cardinal numbers are used in noun phrases, and are inserted between any case

markers or adpositions, and the noun.

nuruju kimilli

よっぱれ・チネケ nuru-uju kimilli four-ORD king "the fourth king" kalusalumi lulani 中心心・d心かい 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

オかえいる○か salumi sinnadi seven book "seven books"

sinnasalumi

d[∞]ケトゥル sinnasalumi story-seven "septet"

The number $\mathbf{ra}^{\ \ \ \ }$ two can be used in this way to refer to a pair of something.

luffura ^{& ⊕} ¬[™] eyes 'itikkura ^{& ⊕} ¬⋊[©] breasts tibara [®] ⊝ ⋊ legs

Chapter 2: Colours

The basic colour terms are all verbs:

baju → Ó blue
sa か yellow
miku ← d red
millu ⇔ ¬ d brown
ki?a ○ ¬ d white
ga → black

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

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

mikumulu [○] ♀ ← ♂ blood red bajukunubi �� ← → Ó sky blue ki?amasi 刈이[○]つヲ snow white

Chapter 3: Comparatives

The comparative marker is an adposition $\mathbf{su} \stackrel{\triangle}{\frown} than$ placed on the noun being compared against.

Hannaku suqikanni xusina.

・・ へ 刈 ラ・ キャッショ トートゥット・ Hannaku su-qikanni xusina. *Cat than-dog be_pretty*. "Cats are cuter than dogs."

For "little more", the qualifier **tuci** $\lceil T \rceil \wedge half-do$ is affixed to the verb.

Luffuba suhuri bajutuci.

・「「不子台・以る合・台 つった」 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** $\mathcal{L}^{\mathcal{R}}$ intensely.

Musa sulupumma cussi'alarali.

·・なりへいついつついかいかい。
Musa su-lupumma cussi'ala-rali.

Sun than-fire feel_hot-intensely.

"The Sun is much hotter than fire.

Equalatives

The equalative marker is ka^{3} as, an adposition.

?usu kafilli qi'iku.

· ← ♀·ఢゥゟɔ·♠으· ?usu ka-filli qi'iku. 1INT as-2INT feel_hungry. "I am as hungry as you are."

Superlative

The superlative marker, contrary to the other two, is a particle **piba** $\acute{O}\phi$ placed before the verb.

Jamahi piba xusajja.

・コックラ・Óφ・タロコ・
Jamahi piba xusajja.

Garden most be_quiet.

"The gardens are the quietest."

piba xusajjara'u jamahi ೨୦|٦・으ペカッタラ・Óゆ piba xusajja-ra'u jamahi most be_quiet-PRS;STA garden "the quietest garden."

Chapter 4: Kinship

Marriage

Ju'idukuru $A \subset \Lambda Q \rightarrow marriage$ is the life-bonding of two people. It is intended to be eternal, but can be 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** $\overset{\circ}{\sim}$ λ *spouse* when using possessive pronouns, and **xalli** α γ *married person* otherwise.

Nuclear Family

The words **kitisu** $\triangle \lambda \not | father$ and **julliga** $? \not > ? \rightarrow mother$ usually refer to biological parents, but can be applied to the main guardians if the biological parents are not around. These are used without possessives, except for **-qa** ? GEN

the inalienable genitive marker. The following table shows the possessive forms:

	mother	father
1st person	pi'apagu ∠⊙ ^O φ	sappagu <u></u> へつっか
2nd person	pihaba Óρφ	
3rd person topic	pihasu'a O♠ρφ	sassu'a O♠?ĵ
3rd person animate	pi'adisi 刈分 ^O φ	saddisi みつら

There are two terms for children: **tu** π *offspring* for postnatal children, '**appu** $\neg \circ \circ$ *foetus* for antenatal. Both of these are gender-neutral, and are most often used with possessives.

There can be a suffixed $\mathbf{ju'i} \circlearrowleft \mathbf{jik}$ for spouses' offspring and parents' spouses.

```
sappaguju'i
```

マナムのう sappagu-ju'i father;1GEN-link "my step-father"

tuju'iba

óγ→π 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. So kaqqa ?? elder sibling and kica ? younger sibling can also be applied to

cousins.

Chapter 5: Elements

The first 118 chemical elements have been named.

li'a	kuxalu	laqa	quffi	sahha	fasami	'ittika
O _Z ,	$_{\odot}$ k-C	? ⊘	た つ五	P75	g³.	Q_{cK}^{c}
helium	neon	argon	krypton	xenon	radon	oganesson
la	ca'a	limma	bi	papa	sicu	buccata
<i>(></i>	٥٦	0 7Y	ф	00	ユ刈	▼ 」ン <i>*</i> ○
hydrogen	fluorine	chlorine	bromine	iodine	astatine	tennessine
	sa	ta	matirra	lasu	cakassu	suda
	5	٨	OK c [∞]	$\stackrel{\wedge}{\sim}$	$rac{1}{4}$	∧ <u></u>
	oxygen	sulfur	selenium	tellurium	polonium	livermorium
	sutta	pibi	da'u	salari	'aggini	rili
	Λ 2 △	$\phi\phi$	<u>0</u>	ી્રા	4 対20	ራ ህ
	nitrogen	phosphorus	arsenic	antimony	bismuth	muscovium
	xu	'ama	xuhhi	laji	musaqu	xa'a
	月	Olo	Ξ_{c}	r∾	ͻϧ Ϙ	0 k
	carbon	silicon	germanium	tin	lead	flerovium
	kuxxu	disa	'ali	luka	silla	rabaci
	2cE	57	٥٫٤	⊃ ∾	∾าฝั	ΓÓՋ
	boron	aluminium	gallium	indium	thallium	nihonium
			hika	kaca	'usa	hatanu
			29	Γ	<u>5</u>	Δ_{Λ} $^{\circ}$
			zinc	cadmium	mercury	copernicium
			suki	ni	fi	su'usi
			1 ☆	4	<i>)</i> 5	ス ㅇ 슷
			copper	silver	gold	roentgenium
			tasa	qala	jala	na'ipa
			څ ٨	℃ ?	№1	094
			nickel	paladium	platinum	darmstadtiun
			gaxiki	fula	natu	nakaku
			Άμϡ	00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	$\pi \wedge$	$\neg c$
			cobalt	rhodium	iridium	meitnerium
			'a	nasufi	supu	'i'ami
			0	Æ₳↑	AC	900
			iron	ruthenium	osmium	hassium
			qumalli	nikili	hasuki	cabahi
			द् र ाठार	ራ ጎ	7 ☆ 🌣	9 ó₁
			manganese	technetium	rhenium	bohrium
			fada	sula	mina?i	saniki
			۸3	$\overset{\circ}{\sim}$	Pっ 个す	7 个 分
			chromium	molybdenum	tungsten	seaborgium
			nussa	lakka	hila	nullasu
			今つ 全	0°C	CO	<u> </u>
			vanadium	niobium	tantalum	dubnium
			ka'i	pusu	tacuca	famati
			γ)		コユヘ	SIOK
			titanium	zirconium	hafnium	rutherfordiun
					kixa	nulina
					ጉ 계	<u> </u>

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