A Concise Grammar of Ishiculu

A GRAMMAR CONSTRUCTED
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AS THE FINAL PROJECT
OF THE COURSE
LING 242

Contents

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Demographics and ethnographics

Ιsнιсυμυ ιs а сκεοle ιδαρουδαε spoken by the Kuhuchɣwe, a community in KwaZulu-Natal, South Africa of people of mixed Zulu and Chinese ancestry. The term "Kuhuchɣwe" comes from Zulu for "mixed," and is the self-referent of the Kuhuchɣwe people.

Before the 2020s, there had been American scholars and organizations in eastern South Africa building health infrastructure. This trend motivated other organizations, mostly from the Greater China Region, to add to their presence in eastern South Africa. By the end of the 2020s, because of a strengthened South African government and a pivot of US international policies, most

Zulu	71.8%
English	15.2%
Xhosa	4.4%
Afrikaans	2.6%
Ishiculu	$< 0.01\%$

Table 1.0.1: Major languages spoken in KwaZulu-Natal (2105)

Americans set out to contribute to cross-nation collaborations had left. In 2034, a private corporation from Taiwan discovered an oil well just off Richards Bay, a town in KwaZulu-Natal, South Africa. This incentivized more Chinese people to reside in eastern South Africa, and a community of Ishiculu speakers descended from a mixture of Zulu and Chinese people. By 2105, Ishiculu had about 1500 speakers in KwaZulu-Natal.

Ishiculu is now mostly spoken in KwaZulu-Natal near the east coast. In these communities where Ishiculu is spoken, Zulu and Chinese are usually also used. The Kuhuchɤwe people usually live and engage in social interactions with Zulu and Chinese people. Both Chinese and Ishiculu have seen a slight decrease in the number of speakers since the 2080s, a fact possibly attributed partially to their lack of legal status. There has been some but insufficient literature on marginalization of the Kuhuchɤwe people in both Zulu- and Chinese-speaking communities, but the existing research has indicated that the interactions between Ishiculu speakers and other peoples are mostly friendly and social, and that the marginalization stems from the way local educational and legal systems are set up. The major languages spoken in KwaZulu-Natal is listed in Table 1.0.1, and the racial makeup of Richards Bay is shown in Table 1.0.2.

Black African	43.0%
Coloured (Including Kuhuchɣwe)	4.2%
Indian/Asian	19.2%
White	33.1%
Other	0.4%

Table 1.0.2: Racial makeup of Richards Bay (2101)

Figure 1.0.1: Migration of Chinese people to South Africa in the 2030s

2
Phonology

2.1 Phoneme inventory

There are 31 consonants and six vowels in Ishiculu, shown in Table 2.1.1 and Figure 2.1.1. This consonant-vowel ratio is considered moderately high crosslinguistically [4].

2.2 Syllable structure

Possible syllable structures in Ishiculu are (C)V and N_1C_1V, where N_1 is a nasal with the same place of articulation as obstruent C_1. Some examples of syllabification are shown in Example 1.

		Labial	Alveolar	Postalveolar	Palatal	Velar
Stop	voiced	b		d		g ⟨g⟩
	voiceless	p		t		k
	aspirated	pʰ ⟨ph⟩		tʰ ⟨th⟩		kʰ ⟨kh⟩
Nasal		m		n	ɲ ⟨gn⟩	ŋ ⟨ng⟩
Trill				r		
Fricative	voiced			ʒ ⟨zh⟩		ɣ ⟨gh⟩
	voiceless	f	s	ʃ ⟨sh⟩		x ⟨h⟩
Affricate	voiced		d͡z ⟨dz⟩	d͡ʒ ⟨j⟩		
	voiceless		t͡s ⟨ts⟩	t͡ʃ ⟨ch⟩		
Lateral fricative	voiced			ɮ		
	voiceless			ɬ		
Approximant		ʋ			j ⟨y⟩	w
Lateral approximant				l		
Click				ŋǀ ⟨c⟩		

Table 2.1.1: Phonemic consonants in Ishiculu. Letters in angle brackets represent the phonemes in Ishiculu orthography.
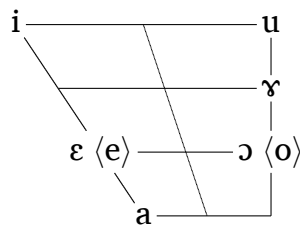

Figure 2.1.1: Phonemic vowels in Ishiculu. Letters in angle brackets represent the phonemes in Ishiculu orthography.

(1) Syllabification in Ishiculu

    a. ⟨Ishiculu⟩ /i.ʃi.ŋ|u.lu/ V.CV.CV.CV

    b. ⟨unjani⟩ /u.ɲd͡ʒa.ni/ V.NCV.CV

As a lexically tonal language, it's uncommon for Ishiculu to have no coda. Mandarin and Cantonese both have some simple codas and lexical tones. The lexical tones survived, but the codas did not. On the other hand, Zulu has no coda and only grammatical tones.

2.3 TONES AND STRESS

2.3.1 TONEMES

Ishiculu has four tones, shown in Table 2.3.1. Note that the tones are not indicated in Ishiculu orthography.

Description	low	high	rising	falling
IPA diacritic	à	á	ǎ	â
Tone contour	11	55	35	51

Table 2.3.1: Tonemes in Ishiculu.

2.3.2 INTERACTIONS BETWEEN VOICED STOPS AND TONES

Voiced stops in Ishiculu (i.e. /b/, /d/, and /g/) add a low-tone onset to the normal tone.

Normal tone	à (low)	á (high)	ǎ (rising)	â (falling)
New tone	bà (low)	bǎ (rising)	bǎ (rising)	bǎ (rising-falling)

Table 2.3.2: Tone change after voiced stops.

2.3.3 STRESS

The stress of an Ishiculu word falls on the penultimate syllable and results in lengthening of the vowel. Some examples are shown in (2).

(2) a. ⟨Ishiculu⟩ /i.ʃi.ᵑ|u.lu/ [iʃiᵑ|uːlu]
   b. ⟨unjani⟩ /u.ɲd͡ʒa.ni/ [uɲd͡ʒaːni]

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Constituent order

3.1 Basic word order

Ishiculu is subject-prominent, with a basic word order of SVO.

(3) Ari pa ka-shiy-ioani   ntało kitabu.
     Ari not CL1.SG-CL7.SG-like CLF.7 book(7)

     'Ari doesn't like the book.'

(4) Shi-shiy-ioani-mbi   ntało kitabu.
     1PL-CL7.SG-like-PST CLF.7 book(7)

     'We used to like the book.'

(5) Fu   Philadelphia shi-ka-shi-ke-ła   Ari
     PREP.INT Philadelphia 1PL-CL1.SG-CL7.SG-have-CAUS Ari

ntało kitabu.
CLF.7 book(7)

'We will give Ari the book in Philadelphia.'

Sometimes in Ishiculu, the predicate position can be filled by an uninflected adjectival phrase, such as an adjective or an adpositional phrase.

(6) Ari fu   Philadelphia tso.
     Ari PREP.INT Philadelphia POST.ABL

     'Ari is from Philadelphia.'

(7) Ari łoło.
     Ari small

     'Ari is little.'

3.1.1 LOCATIVE EXPRESSION

A locative phrase can occupy the subject position of an intransitive verb of existence or movement while the subject is then moved to the object position.

(8) Tsɤ   ntało nji   tso   łi-huma   ntało
     PREP.SUR CLF.7 table(7) POST.ABL CL6.SG-jump CLF.6
     ika.
     cat(6)

     'Off the table jumps a cat.'

(9) Fu   ntało heje   shi-paka   aʒo ntochɤ.
     PREP.INT CLF.7 courtyard(7) CL8.SG-park CLF.8 car(8)

     'In the courtyard is parked a car.'

3.1.2 TOPICALIZATION

Topicalization can be carried out on the object to put emphasis, but a classifier for the object needs to remain in the post-verbal position.

(10) Kitabu   shi-shi-so-mbi   *ntało.*
     book(7) 1PL-CL7.SG-read-PST CLF.7
     'The book, we have read it.'

(11) Ntochɤ ngi-shiy-ioani   *aʒo.*
     car(8)   1SG-CL8.SG-like CLF.8
     'The car, I like it.'

3.2 MODIFIERS OF NOUN

When demonstrative and/or numeral modify a noun, they always precede the noun. If they both modify the same noun, they are also found in this order. This particular word order is not uncommon among world's languages [3]. When a numeral modifies a noun, a classifier must also be used, which directly precedes the noun. See Chapter 6.

(12) laba ntało kitabu
     these CLF.7 book(7)
     'these books'

(13) aʒo   ntochɤ
     CLF.8 car(8)
     'the car(s)'

(14) nta   ntało kitabu
     three CLF.7 book(7)
     'three books'

(15) laba nta   ntało kitabu
     these three CLF.7 book(7)
     'these three books'

An attributive adjective or a genitive follows the noun it modifies.

(16) ntochɤ caca
     car   big
     'big car(s)'

(17) ntało kitabu   ce-mama
CLF.7 book(7) GEN-mother
'mother's book(s)'

(18) Fu   u   conkei łoko
PREP.INT CLF.4 house(4) 4-red
shi-ka-shi-ke-ła   Ari nta   ntało kitabu
1PL-CL1.SG-CL7.SG-have-CAUS Ari three CLF.7 book(7)
ce-Mel.
GEN-Mel
'We will give Ari Mel's three books in the red house.'

Example 19 illustrates the ordering of all types of modifiers and adpositions with the same noun.

(19) fu   laba   nta   u   conkei
PREP.INT   these   three   CLF.4   house
Preposition Demonstrative Numeral Classifier **Noun**
caca   ce-John   tso
big   GEN-John POST.ABL
Adjective Genitive   Postposition
'out of these three big houses of John'

4
Verbs

4.1 AGREEMENTS

ISHICULU EXHIBITS HIGHLY SYNTHETIC verbal morphology. In this sense, it is predominantly head-marking. Prefixation and suffixation are responsible for marking the agreements and the tense. Ishiculu is mostly agglutinative in terms of its verb affixation: different grammatical features of the verb are expressed through different affixes, except for the person and the number, which are contained in the same prefix. There are both inflectional and derivational verb affixes in Ishiculu.

The Ishiculu verb is marked according to a nominative-accusative alignment system. The verb stem is inflected based on the person,

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	singular		plural	
	before C	before V	before C	before V
1st person	-ngi-	-ngiw-	-shi-	-shiy-
2nd person	-u-	-uw-	-ni-	-niy-
CL 1/2	-ka-		-ba-	
CL 3/4	-u-	-uw-	-i-	-iy-
CL 5/6	-ɬi-	-ɬiy-	-a-	
CL 7/8	-shi-	-shiy-	-ʒi-	-ʒiy-

Table 4.1.1: Personal agreement prefixes of Ishiculu verbs.

number, and, for 3rd person nominal phrases, the noun class. The structure of an inflected Ishiculu verb consists of nominative agreement, dative agreement, accusative agreement, stem, derivational suffixes, and tense, in this order. The same set of prefixes, shown in Table 4.1.1, is used for all three agreements.

(20) *Shi-shiy-ioani* ntaɬo kitabu.
1PL-CL7.SG-like CLF.7 book(7)

‘We (will) like the book.’

(21) Ari pa *ka-uw-ioani* shidzi.
Ari not CL1.SG-CL4.SG-like cheese(4)

‘Ari doesn’t like cheese.’

4.2 TENSES

Ishiculu has two tenses: present and past. The present tense is marked with a *-ø* suffix, and can be used for future events. The past tense is marked with suffix *-mbi*.

(22) Shi-shiy-ioani-*mbi* ntaɬo kitabu.
1PL-CL7.SG-like-PST CLF.7 book(7)

‘We used to like the book.’

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	Alone	With object
Singular	*-a*	*-e*
Plural	*-ani*	*-eni*

Table 4.3.1: Imperative suffixes in Ishiculu.

4.3 IMPERATIVE

The imperative can occur either alone or with an object prefix,
using one of the imperative suffixes shown in Table 4.3.1.

(23) So-a!
      read-IMP
      'Read!'

(24) Shi-so-e   ntało kitabu!
      CL7.SG-read-IMP CLF.7 book(7)
      'Read the book!'

4.4 VALENCY-CHANGING PROCESSES

4.4.1 PASSIVE

Morphological passive in Ishiculu is marked with *-walɣ* and
decreases the valency of transitive verbs.

(25) U   -bonɣ -*walɣ* -mbi.
      2SG -see   -PASS -PST
      'You were seen.'

(26) Ntało kitabu   shi-so-*walɣ*-mbi.
      CLF.7 book(7) CL7.SG-read-PASS-PST
      'The book was read.'

The agent of the verb is then ineffable in the passive construction.

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(27) * Ntało kitabu   shi-ngi-so-walɣ-mbi   mina.
          CLF.7 book(7) CL7.SG-1SG-read-PASS-PST PRON.1SG
       Intended meaning: 'The book was read by me.'

4.4.2 IMPERSONAL

When the verb is impersonal, it does not bear a subject agreement prefix. The commonest impersonal is meteorological predicates.

(28) Cofi   ha-mbi.
       yesterday rain-PST
       'It rained yesterday.'

Impersonal construction is also used for indefinite subjects. Note that this decreases the valency of the verb.

(29) a. Pa ngi-shi-so   ntało kitabu.
           not 1SG-CL7.SG-read CLF.7 book
           'I don't/won't read the book.'

      b. Pa shi-so ntało kitabu.
           not 7-read CLF.7 book
           'One doesn't/shouldn't read the book.'

4.4.3 CAUSATIVE

The suffix -ła marks the morphological causative form of a verb. Accordingly, as the valency of the verb is increased, the causee of the causative verb is marked as dative agreement on the verb.

(30) Ngi-ka-shi-so-ła   Ari ntało kitabu.
       1SG-CL1.SG-CL7.SG-read-CAUS Ari CLF.7 book(7)
       'I (will) make Ari read the book.'

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DITRANSITIVE

Prototypical verbs in Ishiculu are transitive at most, and events that semantically require three core thematic arguments are expressed through causatives of transitive verbs.

(31) Fu   Philadelphia ngi-ka-shi-ke-ła   Ari
     PREP.INT Philadelphia 1SG-CL1.SG-CL7.SG-have-CAUS Ari
     ntało kitabu.
     CLF.7 book(7)

     'I (will) give Ari the book in Philadelphia.'

(32) Wɣ   babamama ba-ngiw-u-nde-ła-mbi
     CLF.2 parents(2) CL2.PL-1SG-CL4.SG-eat-CAUS-PST
     mina   shizi.
     PRON.1SG cheese(4)

     'My parents fed me cheese.'

(33) Fu   Philadelphia ngi-ka-shi-hi-ła   Ari
     PREP.INT Philadelphia 1SG-CL1.SG-CL7.SG-hear-CAUS Ari
     ntało kitabu.
     CLF.7 book(7)

     'I (will) read the book to Ari.' (lit. 'I make Ari hear the book.')

4.4.4 PASSIVE OF CAUSATIVE

In a causative construction, the causee or the object can be promoted to the subject position with the passive construction.

PROMOTING CAUSEE

This refers to the passive construction similar to the following:

(34) Passive of causative of intransitive in English
     John makes me cringe. → I am made to cringe (by John).

(35) Passive of causative of transitive in English
John makes the computer change the date. → The computer is made to change the date (by John).

(36) Passive of ditransitive in English
John gives the teacher the book. → The teacher is given the book (by John).

This construction in Ishiculu is formed by a passive suffix *-walɤ* after the causative suffix. The personal suffix of the causer on the verb is then dropped.

(37) Passive of causative of intransitive in Ishiculu

    a. Ngi-ka   -hulu-ła-mbi   John.
       1SG-CL1.SG -cry-CAUS-PST John
       'I made John cry.'

    b. John ka   -hulu-ła-walɤ-mbi.
       John CL1.SG -cry-CAUS-PASS-PST
       'John was made to cry.'

(38) Passive of ditransitive/causative of transitive in Ishiculu

    a. Shiy-u-ło   -mełi-ła-mbi   hehe.
       1PL-2SG-CL5.SG -receive-CAUS-PST cake(5)
       'We mailed you cake.'

    b. U-ło   -mełi-ła-walɤ-mbi   hehe.
       2SG-CL5.SG -receive-CAUS-PASS-PST cake(5)
       'You were mailed cake.'

PROMOTING OBJECT

There is no passivization of a causative verb that directly promotes the underlying object, but it is possible to passivize the underlying verb, promoting the object to the causee position before promoting it further to the subject position of the matrix clause. As the subject

in the active voice becomes impossible to be salient in the passive, the causee becomes ineffable in this passive construction.

(39) a. Active voice

John ka-u-shi   -ke-ła   meyi
John CL1.SG-CL3.SG-CL7.SG -have-CAUS CLF.3
shɤ   ntało kitabu.
teacher(3) CLF.7 book(7)

'John gives the teacher the book.'

b. Impossibility of direct promotion of object

* Ntało kitabu   shi-u   -ke-ła-walɤ   meyi
  CLF.7 book(7) CL7.SG-CL3.SG -have-CAUS-PASS CLF.3
shɤ.
teacher(3)

Intended meaning: 'The book is given to the teacher.'

c. Causative of passive

John ka-u-shi   -ke-walɤ-ła   ntało
John CL1.SG-CL3.SG-CL7.SG -have-PASS-CAUS CLF.7
kitabu.
book(7)

'John gives the book.' (lit. 'John makes the book be had.')

d. Passive of causative of passive

Ntało kitabu   shi-ke-walɤ-ła-walɤ.
CLF.7 book(7) CL7.SG-have-PASS-CAUS-PASS

'The book is given.' (lit. 'The book is made to be had.')

e. Ineffability of the causee

* Ntało kitabu shi-u -ke-walɣ-ła-walɣ
  CLF.7 book(7) CL7.SG-CL3.SG -have-PASS-CAUS-PASS
meyi shɣ.
CLF.3 teacher(3)

Intended meaning: 'The book is given to the teacher.'

(lit. 'The book is made to be had.')

5
Adpositions

ISHICULU NOUNS DO NOT EXHIBIT case markings but rather receive
prepositions and postpositions. Prepositions are used to mark
locative case, and overt postpositions are only used in marking the
lative or the ablative, shown in 5.0.1. Note that the presence of
both prepositions and postpositions is uncommon, especially among
VO languages [1].

	ø: static	*tso*: ablative	*ghu*: lative
fu: interior	'in, at, inside'	'out of'	'into'
tsɤ: surface	'on the surface of'	'off the surface of'	'onto the surface of'

Table 5.0.1: Prepositions and postpositions in Ishiculu.

(40) Fu   Philadelphia ø   shi-ka-ke-ła   Ari
PREP.INT Philadelphia POST.STA 1PL-CL1.SG-have-CAUS Ari
ntało kitabu.
CLF.7 book(7)

'We will give Ari the book in Philadelphia.'

(41) Ari fu   Philadelphia tso.
Ari PREP.INT Philadelphia POST.ABL

'Ari is from Philadelphia.'

6
Classifiers

APPROXIMATELY 35% of world languages have numeral classifiers, among which are Mandarin and Cantonese [2]. Even though in traditional grammar, Zulu is not considered to have any classifier, the noun classes in Zulu fit nicely with the classifiers coming from Chinese languages, especially from Cantonese, where classifiers are more versatile outside of contexts with numerals. In Ishiculu, the classifier modifying a noun is determined by the class of the modified noun, shown in Table 6.0.1

When the noun is used generically instead of as reference to its instances, no classifier is used.

noun class	classifier
1	wo
2	wɤ
3	meyi
4	u
5	ishi
6	iʑi
7	ntaɬo
8	aʑo

Table 6.0.1: Classifiers in Ishiculu.

(42) Ngi-u-nde-mbi   shidzi.
1SG-CL4.SG-eat-PST cheese(4)

'I ate cheese.'

A classifier is required when a numeral modifies the noun.

(43) Ngi-zhi-ke   *nta* *ntaɬo* kitabu.
1SG-CL7.PL-have three CLF.7 book

'I have three books.'

Ishiculu employs classifiers to accompany nouns when they refer to entities in a non-generic ways. When the noun is specified in the following ways, a classifier is obligatory.

(44) Modified by a genitive

Ngiw-u-nde-mbi *u*   shidzi   *ce-John.*
1SG-CL4.SG-eat-PST CLF.4 cheese(4) GEN-John

'I ate John's cheese.'

(45) Modified by a demonstrative

Ngiw-u-nde-mbi *ligha u*   shidzi.
1SG-CL4.SG-eat-PST this CLF.4 cheese(4)

'I ate this cheese.'

(46) Modified by a relative clause

Ngiw-u-nde-mbi *u* shidzi *uw-uw-ioani*
1SG-CL4.SG-eat-PST CLF.4 cheese(4) 2SG-CL4.SG-like
wona.
PRN.CL4.SG

'I ate the cheese that you like.'

7

Embeddings

7.1 COORDINATION

NOUNS, VERBS, AND CLAUSES all coordinate in Ishiculu. The coordination of nouns makes use of the conjunction *hɤ*. Verbs and clauses coordinate by juxtaposing.

(47) iwai hɤ shidzi
      wine and cheese
      'wine and cheese'

(48) Ngi-nde, ngi-hulu.
      1SG-eat 1SG-cry
      'I eat, and I cry.'

7.2 RELATIVE CLAUSES

Relative clauses are restrictive in Ishiculu. They are externally headed and post-nominal and do not include a complementizer or relative pronoun.

The primary construction of the relative clauses relativizes the subject in the clause.

(49) Ngiw-uw-ioani meyi shɤ
     1SG-CL3.SG-like CLF.3 teacher(3)
     u-ka-shi-ke-ła-mbi   Ari ntało kitabu.
     CL3.SG-CL1.SG-CL7.SG-have-CAUS-PST Ari CLF.7 book(7)
     'I like the teacher that gave Ari the book.'

Direct objects cannot be relativized through the same construction. Rather, the speaker makes use of two strategies, the first of which is to passivize the relative clause so that the direct object is promoted to the subject position.

(50) * Ngi-shiy-ioani   ntało kitabu   meyi shɤ
       1SG-CL7.SG-like CLF.7 book(7) CLF.3 teacher(3)
     u-so-mbi.
     CL3.SG-read-PST
     Intended meaning: 'I like the book that the teacher read.'

(51) Ngi-shiy-ioani ntało kitabu   u-so-walɤ-mbi.
     1SG-7.SG-like CLF.7 book(7) 3.SG-read-PASS-PST
     'I like the book that was read.'

The other strategy is to include a resumptive pronoun in the relative clause.

(52) Ngi-shiy-ioani ntało kitabu   meyi shɤ
     1SG-7.SG-like CLF.7 book(7) CLF.3 teacher(3)
     u-so-mbi   *sona*.
     3.SG-read-PST PRN.7.SG
     'I like the book that the teacher read.'

8

Interrogatives

8.1 POLAR QUESTIONS

POLAR QUESTIONS in Ishiculu are formed with the question particle *le* at the end of the sentence.

(53) a. Meyi shɣ   u-ka-shi-ke-ła-mbi
          CLF.3 teacher(3) CL3.SG-CL1.SG-CL7.SG-have-CAUS-PST
          Ari ntało kitabu.
          Ari CLF.7 book(7)
          'The teacher gave Ari the book.'

      b. Meyi shɣ   u-ka-shi-ke-ła-mbi
          CLF.3 teacher(3) CL3.SG-CL1.SG-CL7.SG-have-CAUS-PST

Ari ntało kitabu le?
Ari CLF.7 book(7) Q

'Did the teacher give Ari the book?'

8.1.1 RESPONDING TO POLAR QUESTIONS

Ishiculu uses particles *yebo,* 'yes' and *cha,* 'no' to respond to polar questions. Response strategy is also truth-based; i.e., *cha* confirms a negative question, and *yebo* contradicts the negation of a negative question.

(54)   a. Meyi shɤ   u-ka-shi-ke-ła-mbi
             CLF.3 teacher(3) CL3.SG-CL1.SG-CL7.SG-have-CAUS-PST
             Ari ntało kitabu le?
             Ari CLF.7 book(7) Q

             'Did the teacher give Ari the book?'

       b. Yebo.
             yes

             'Yes(, the teacher gave Ari the book).'

       c. Cha.
             no

             'No(, the teacher did not give Ari the book).'

(55)   a. Meyi shɤ   pa
             CLF.3 teacher(3) not
             u-ka-shi-ke-ła-mbi   Ari ntało
             CL3.SG-CL1.SG-CL7.SG-have-CAUS-PST Ari CLF.7
             kitabu le?
             book(7) Q

             'Did the teacher not give Ari the book?'

       b. Yebo.
             yes

             'Yes(, the teacher gave Ari the book).'

c. Cha.
   no
   'No(, the teacher did not give Ari the book).'

8.2 CONTENT QUESTIONS

Content questions are formed with the question particle *le* at the end of the sentence. Some WH-words in Ishiculu include *uba*(2), 'who;' *uni*(4), 'what;' *una*, 'where.'

When the WH-word is the subject, the question is formed with the WH-word *in situ*.

(56) a. Wɣ   babamama ba-uw-u-nde-ła-mbi
        CLF.2 parents(2) CL2.PL-2SG-CL4.SG-eat-CAUS-PST
        wena shizi.
        2SG   cheese(4)
        'Your parents fed you cheese.'

     b. Uba   ka-uw-u-nde-ła-mbi   wena
        who(2) CL2.SG-2SG-CL4.SG-eat-CAUS-PST 2SG
        shizi   le?
        cheese(4) Q
        'Who fed you cheese?'

Non-subject WH-words need to be moved to the post-verbal position.

(57) Wɣ   babamama ba-ka-u-nde-ła-mbi
     CLF.2 parents(2) CL2.PL-CL2.SG-CL4.SG-eat-CAUS-PST
     uba   shizi   le?
     who(2) cheese(4) Q
     'To whom did your parents feed cheese?'

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(58) Wɣ   babamama ba-uw-u-nde-ła-mbi
CLF.2 parents(2) CL2.PL-CL4.SG-CL4.SG-eat-CAUS-PST
uni   wena le?
what(4) 2SG   Q
'What did your parents feed you?'

(59) Wɣ   babamama ba-uw-u-nde-ła-mbi   *una*
CLF.2 parents(2) CL2.PL-2SG-CL4.SG-eat-CAUS-PST where
wena shizi   le?
2SG   cheese(4) Q
'Where did your parents feed you cheese?'

When there are more than one WH-word, one of them is regarded as the primary WH-word, which follows the WH-word movement strategies described above. The remaining WH-words are *in situ.* In Example 60, the WH-word in italics in the primary one.

(60) a. *Uba*   ka-uw-u-nde-ła-mbi   wena uni
who(2) CL2.SG-2SG-CL4.SG-eat-CAUS-PST 2SG   what(4)
le?
Q
'Who fed you what?'

b. Uba   ka-uw-u-nde-ła-mbi   *uni*   wena
who(2) CL2.SG-2SG-CL4.SG-eat-CAUS-PST what(4) 2SG
le?
Q
'What did who feed you?'

Glossary

babamama parents, *2*

bonɤ see

caca big

cofi yesterday

conkei house, *4*

ha rain, IMPERS

hehe cake, *5*

heje courtyard, *7*

hi hear

hulu cry

huma jump

ika cat, *6*

ioani like

iwai wine, *4*

ke have

kitabu book, *7*

laba these

ligha this

meɬi receive

nde eat

nji table, *7*

nta three

ntochɤ car, *8*

pa not

paka park (a vehicle)

rɤ hot

shidzi cheese, *4*

shɤ teacher, *7*

so read

tumɤ tomorrow   **łoło** small

łoko red

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[4] Ian Maddieson. *Consonant-Vowel Ratio*. Max Planck Institute for Evolutionary Anthropology, Leipzig, 2013. URL http://wals.info/chapter/3.