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## The morphology of nouns in the Ugoronjmo language (Arara of Pará)

Shirley Dias Cardoso de Souza

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THE MORPHOLOGY OF NOUNS IN THE UGOROÏMO LANGUAGE  
(ARARA OF PARÁ)

by

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A Thesis  
Submitted to the Graduate Faculty

of the

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2010

This thesis, submitted by Shirley Dias Cardoso de Souza in partial fulfillment of the requirements for the Degree of Master of Arts from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

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Chair

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This thesis meets the standards for appearance, conforms to the style and format requirements of the Graduate School of the University of North Dakota, and is hereby approved.

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## ABBREVIATIONS AND SYMBOLS

1SG	First person singular	PERL	Perlative
2	Second person	PL	Plural
3	Third person	POSS	Possessive
1EXCL	First person exclusive	PRED	Predicate
1INCL	First person inclusive	PROG	Progressive
ABST	Absolute	PURP	Purposive
ABSV	Absolutive	Q	Yes-no question particle
ACC	Accompaniment	REC	Recent past
ADJR	Adjectivizer	REFL	Reflexive
AN	Animate	REM	Remote past
AUG	Augmentative	T	The prefix <i>tu-</i> and its allomorphs
AUX	Auxiliary		
COMP	Comparative		
COP	Copula	∅	Null
DIM	Diminutive	√	Root
DIST	Distal		
ELA	Elative		
EMPH	Emphasis		
EXCL	Exclusive		
ERG	Ergative		
FE	Female ego		
ILL	Illative		
IMP	Imperative		
IN	Inanimate		
INCL	Inclusive		
INE	Inessive		
LNKR	Linker		
LOC	Locative		
ME	Male ego		
N	Noun		
NEG	Negation		
NMLZR	Nominalizer		
NP	Noun Phrase		
O	Object		

## ABSTRACT

In this thesis I describe the morphology of nouns in the Ugoron̄mo language (Arara of Pará), which is spoken by just over three hundred people. The Ugoron̄mo people live on the bank of the Iriri river, in two villages (Laranjal and Cachoeira Seca) in the state of Pará, Brazil.

The nouns of this language can be divided in three main groups: those that are not inflected for possession, those that may be inflected for possession, and those that must be inflected for possession (inherently possessed nouns). Possession is marked by two affixes: a possessor prefix and a possessive suffix. Inherently possessed nouns can also be inflected in an absolute form, indicating that the possessor is not expressed.

The nouns can be inflected with five suffixes that indicate case. Most of these relate to location, but one is the comparative case.

Nouns are inflected for plural in two ways, and the interpretation of the plural suffix depends on the type of noun. Possessed nouns can be marked for both plural possessor and plural possessed item.

Compound nouns are formed from two (or occasionally three) roots. All of the attested compound nouns are possessed nouns. Modifying suffixes that denote size, shape, etc., expand the nouns in interesting ways.

Finally, predicate adjectives are derived from nouns. They all have the meaning ‘characterized as having (noun)’.

# CHAPTER 1

## INTRODUCTION

The subject of this thesis is nouns, which belong to one of two major word classes in the Ugoronmo language; the other main class is verbs. In Chapter 2 and Chapter 3 I discuss morphological marking for possession. In Chapter 4, case suffixes are illustrated. Chapter 5 treats the marking of plurality. In Chapter 6 I discuss compound nouns and modifying suffixes. In Chapter 7, the denominal predicate adjective is described. This thesis does not deal with names in detail, nor do I consider them as a type of noun (see Anderson 2007: 239). Nevertheless, the discussion of nouns here includes examples showing how names may or may not work similarly. Other topics related to nouns are not in the scope of this thesis such as: nominalization, verbalization and incorporation.

The data used in this thesis were collected in the village of Laranjal and the Posto de Vigilância 1 under the auspices of the Brazilian nonprofit organization Associação Linguística Evangélica Missionária (ALEM), which is headquartered in Brasília. The data corpus is in a standard format database consisting of about 3,000 entries plus a few texts.

I present the Ugoronmo data using a set of symbols that is slightly different from the standard IPA symbols for the phonemes of the language, as shown in Table 1.<sup>1</sup> Specifically note the symbols for /g/, /ɾ/, /ɛ/ and /ɔ/.

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<sup>1</sup> The phonemes are presented in I. Souza (2010).

Table 1 Phonemes and symbols

Phonemes	p	b	t	d	k	g	tʃ	m	n	ŋ	h	l	r	w	j	a	ɛ	i	ɔ	u
Adaptation	p	b	t	d	k	g	tʃ	m	n	ŋ	h	l	r	w	j	a	e	i	o	u

### 1.1 Location of the Ugorõmo (Arara) area

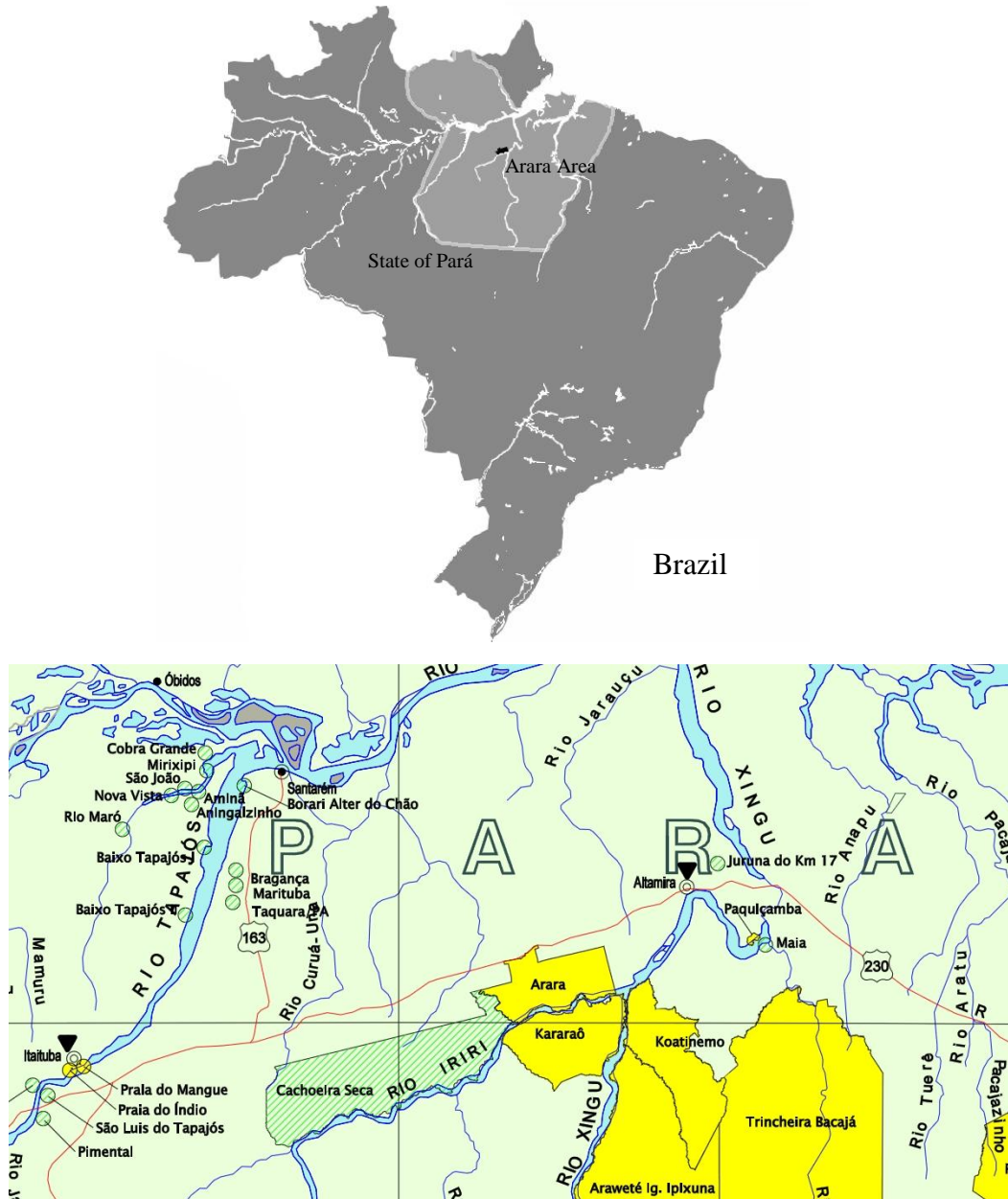


Figure 1 Location of the Ugorõmo (Arara) area<sup>2</sup>

<sup>2</sup> The map of Brazil in which the state of Pará and the Ugorõmo area are shaded was prepared by



## 1.2 General information about the language community

The name “Arara” [a'raɾa], which means ‘macaw’ in Portuguese, is used to refer to four different native ethnic groups of Brazil whose languages are not related to each other.<sup>3</sup> The first is the Arara-Karo group, which is found in the state of Rondônia.<sup>4</sup> Their language belongs to the Ramarama family, a branch of Tupi (Rodrigues 1986). The second group known as Arara lives in the state of Acre.<sup>5</sup> They speak a language classified as Panoan. A third group lives in the state of Mato Grosso.<sup>6</sup> They no longer speak their native language. The fourth Arara group lives in the state of Pará and speaks a language that belongs to the Cariban family (Rodrigues 1986). The particular Arara group to which I refer in this thesis is the last one. The ISO 639-3 code for this language is [aap]. The Cariban family has an estimated 40 members in the Amazonian area. Among them are the Makushi, Karinya, Pemon, Panare, Waiwai, Wayana, Tiriyo, Hixkaryana, Apalaí, Kuikuro, Bakairi and Ikpeng (Meira 2006). The language in this family that is closest to the Arara language is Ikpeng (Rodrigues 1986), also referred to as Txikão.

The earliest information about the Arara of Pará is from a report given in 1853 by Brusque, the president of the province of Pará.<sup>7</sup> Brusque says that for some period of time the Arara had peaceful relationships with rubber tappers; more than once they encamped together. Some years later, in 1864, the Arara people had some conflicts with the Juruna people, and in 1884 Von Den Stein met among the Juruna an Arara man being kept as a

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Jonathan Fuchs and is used with his permission. The second map was extracted from FUNAI (2010).

<sup>3</sup> The name Arara was first used because of the facial tattoos some of these people had in the 1900's (I. Souza, in progress).

<sup>4</sup> The [ISO 639-3](#) code for Arara-Karo is [arr].

<sup>5</sup> Arara from Acre is also called Arara Shawādawa (Instituto Socioambiental - ISA).

<sup>6</sup> Arara from Mato Grosso is also called Arara do Beiradão or Arara do Rio Branco (Poz, 2007).

<sup>7</sup> I. Souza (in progress). All the general information about the early contact period is from this work unless otherwise noted.

prisoner. In 1917 the Arara tried to contact some rubber tappers without success; the rubber tappers shot at them.

Several times the Arara had contact with outsiders.<sup>8</sup> Some of these contacts were peaceful and some not. In 1967, the workers constructing the Trans-Amazonian Highway (Transamazônica) were attacked by indigenous people. So at that time a group sent by the FUNAI<sup>9</sup> went to try to contact them. Among the group were Afonso Alves da Cruz, Cláudio Villas Boas, Orlando Villas Boas and Francisco Meirelles. They did not find the Arara people; they found only a village with vestiges of their presence. During several years only signs of them were found.

However, in the mid-seventies and early eighties, the presence of the Arara in the area was again made known. In 1976 they had some conflict with a group of workers from a metal exploration company. Between 1977 and 1980 some FUNAI workers were shot with arrows by the Arara. In early 1981, five Arara people came to the Posto de Vigilância 1 and made contact with FUNAI workers.

The name “Arara” was used by outsiders before any contact was made, and it still remains in use. However, the people call themselves *Ugoroꞑmo* [ʊɡɔɾɔŋmɔ], which is the free pronoun for first person inclusive, *ugoro*, with a plural suffix. Without the plural suffix this pronoun has an interpretation of first person inclusive dual, while with the plural suffix *-ꞑmo*, it has two interpretations. First, *Ugoroꞑmo* indicates the first person inclusive plural. It also indicates the Arara people in contrast to the non-indigenous people (*karei*) and also in contrast to other indigenous people known to the Arara, such as *awuteka*, *udot*, *udotpuem*, *peleum*, *tumobugamo*, *tutifimilamo*, *tuburubi*, *wapete*,

---

<sup>8</sup> 1935, 1941, 1942, 1943, 1945, 1948 and 1950.

<sup>9</sup> FUNAI stands for Fundação Nacional do Índio (National Indian Foundation).

*watumĩngom*, *tobiũngemnu*, *idareruma* and *imarama*.<sup>10</sup> In this thesis I refer to them by their indigenous name.

Groups of the Ugorõmo were contacted by FUNAI, the Brazilian government agency, in three different stages: 1981, 1983, and 1987. The two groups contacted in 1981 and 1983 had originally lived together, but due to some internal conflicts they split and stayed apart for about 38 years preceding the contacts by FUNAI.<sup>11</sup> The construction of the Trans-Amazonian Highway built in the early 1970s caused them to be more separated than before, although they still had an idea where their relatives were living. The first group to be contacted was on the south side of kilometer 120, where FUNAI had built an observation station (called Posto de Vigilância 1), and the second group was on the north side of kilometer 80. At the time of contact, the first group had only 50 people. During the process of getting acquainted with them, the FUNAI agent responsible for that contact asked them if they still had any relatives in the forest. They said they did, and helped FUNAI contact their relatives, making this second contact much easier than the first. The second group had only 20 people. The two groups together totaled 70 people in 1983.

For a while, the second group stayed apart from the first, but eventually they all began living together at the same place, where they have now lived for many years. Their village, called Laranjal, is located on the bank of the Iriri river, a tributary of the Xingu river, in the state of Pará. The third group was contacted in 1987 by another FUNAI agent. This group lives in another place, Cachoeira Seca, more than six hours upriver by

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<sup>10</sup> I. Souza, (2003). Some of these groups may be extinct; the Ugorõmo do not relate most of these terms to groups with whom they presently interact. The name *awuteka* does, however, refer to the Kayapó people.

<sup>11</sup> I. Souza (in progress) gives this calculation of the length of the split based on information about a conflict that occurred in 1945. The Ugorõmo claim that they separated shortly after that conflict.

speedboat from Laranjal. There are more than 80 people in this group at the time of this writing (2010).<sup>12</sup>

The three groups speak the same language, which they refer to as *Ugoron̄mo worondu* ‘language of the Ugoron̄mo’, but each group displays some small dialectal differences. They differ in some specific words. For example, the first group says [tʃarina] for ‘chicken’ while the second group says [karina]. (I do not have information from the third group for this word.) They also differ in more systematic ways. The first group drops an [n] before a suffix-initial [j], while the second group palatalizes it in that position. (Again, I have no information from the third group for this situation.) For example, the word for ‘big man,’ derived from the root *ugon* ‘man’, is pronounced [ugɔjum] by the first group, and [ugɔɲjum] by the second. The people of the third group are able to communicate in the language easily with the people of the first two groups. My husband and I are also able to talk to them without any comprehension problem. In this thesis I am focusing only on the dialect of the first group.

In this group there is linguistic evidence for long-term cultural interaction between the Ugoron̄mo and other groups. In the region where the Ugoron̄mo people live, there are also other groups, such as the Xipáya, Curuáya, Kayapó, Asurini of Xingu, Araweté, Parakanã and the Juruna. Before contact with outsiders, the relationships among some of these groups were often not peaceful. Now they interact with each other in Altamira, the closest city to the village, where they obtain health services, food, and clothes, as well as attend meetings together, etc. The village closest to their own village is Kararahô, primarily populated by the Kayapó people. Sometimes the Kayapó soccer team goes to

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<sup>12</sup> There is another group of people who belonged to the Arara group. In 1917 they were 17 people and they already worked for a rubber tapper. They live in a village called Maia, near Altamira and speak only Portuguese, I. Souza (in progress).

the Ugoron̄mo village to play against their team, and the older Kayapó go to trade goods with the older Ugoron̄mo, from whom they acquire feathers for making headdresses.

Evidence of linguistic interaction is found in some of their shared vocabulary items. The word for ‘spoon’ for example, is borrowed from the Kayapó. One word the Ugoron̄mo use for a certain drink is a Juruna word. One word for howler monkey, used only in a traditional song, is from the (unrelated) Tupi-Guarani language family. Although these words are borrowed, the Ugoron̄mo are not aware of this fact.

Portuguese is the main language that has influenced the Ugoron̄mo language since 1981. While there are still many older people in the village who know only a few Portuguese words, all people under 40 years of age speak Portuguese, with different levels of fluency. Some of the older ones in this second group were teenagers during the contact phase, so they have had contact with Portuguese since they were young. Nevertheless, the Ugoron̄mo continue to use of their own language among themselves.

The number of speakers has increased considerably in the past three decades. Since 1983 the number in the Laranjal community has increased from 70 people to 250.

## **CHAPTER 2**

### **MORPHOLOGICAL MARKING FOR POSSESSION**

Noun roots in the Ugoronmo language are divided into three groups: 1) those with no morphological possession; 2) those with optional morphological possession; and 3) those with obligatory morphological possession. Nouns in the second and third groups may or must have a prefix that indicates the person and number of the possessor, and a suffix that indicates that the item is possessed.

The first group of nouns (section 2.1) includes most common nouns that refer to items of nature, including inanimate items like the sun, the moon, stones, sand, and trees, as well as animate items like monkeys, birds, snakes, and fish. Some nouns referring to tools (e.g., nail and axe) are also in this class.

The second group (section 2.2) consists primarily of items that people commonly own. This is a small class.

Nouns in the third group (section 2.3) refer to body parts, relatives, and some personal items. A few inherently possessed nouns are used only to express relative location (section 2.3.6). Inherently possessed noun stems may also be derived through an unproductive morphological process (section 2.4).

#### **2.1 Nouns that cannot be inflected for possession**

Noun roots that cannot be inflected for possession consist primarily of items found in nature. The examples in (1) and (2) illustrate this group.

(1) Inanimate items

koŋbo	‘rain’
idua	‘forest’
aptenu	‘wind’
ubur	‘stone’
nuno	‘moon’
tʃitʃi	‘sun’ <sup>13</sup>
iui	‘tree’
paru	‘river, water’
oron	‘land’

(2) Animate items

wakat	‘alligator’
wokori	‘dog’
tawe	‘capuchin monkey (sp.)’ <sup>14</sup>
potpuri	‘wood tick’

Some man-made objects are also included in this class; see examples in (3).

(3) Man-made objects

obine	‘nail, metal, iron’
obineum	‘axe’ <sup>15</sup>
touŋ	‘shotgun’ <sup>16</sup>
putʃiga	‘machete’ <sup>17</sup>
ugeni	‘container for liquids’
tamoegem	‘rake’ <sup>18</sup>

---

<sup>13</sup> The noun for ‘sun’ can also refer to time, watch. With the latter meaning it can be possessed, *u-tʃitʃi-n* (1SG-watch-POSS) ‘my watch’, *o-tʃitʃi-n* (2-watch-POSS) ‘your watch’.

<sup>14</sup> Probably *Cebus* sp.

<sup>15</sup> The noun *obine* is used to refer to any metal (iron, gold, silver, etc.). The word for axe is formed by *obine* and the modifier suffix *-um* ‘Augmentative’, which gives the idea of something bigger or manufactured. More details about this suffix are found in section 6.2.1.

<sup>16</sup> The noun *touŋ* ‘shotgun’ is an ideophone which describes the noise the shotgun makes.

<sup>17</sup> There is another word for machete, *potpipo*, but it is used mainly by the older generation.

<sup>18</sup> The noun *t-amoe-g-em* ‘rake’ literally means ‘the one that has fingernail’: *t-amoe-g-em* (T-fingernail-ADJR-NMLZR).

Nouns of the types shown in (1), (2), and (3) cannot be morphologically possessed, as illustrated in (4), (5) and (6). (Details about morphological possession are presented in Chapter 3.)

- (4) \*u-iui (my tree)  
       \*i-oronj (my land)
- (5) \*u-potpuri (my tick)  
       \*u-wokori (my dog)
- (6) \*k-obine (my nail)  
       \*u-touj (my shotgun)

This morphological restriction does not mean that the Ugoronjmo do not own animals or things, however. If a person wishes to refer to a possession that belongs to this group of nouns, two options are used. One option is to simply use the noun, and the hearer must infer from the situation that a particular possessed item is being referred to, as shown in (7) and (8).

- (7) obineum enep-ko  
       axe bring-IMP  
       ‘Bring the axe!’
- (8) wokori enep-ko  
       dog bring-IMP  
       ‘Bring the dog!’

The second option is to use a possessed generic noun in the general context, as shown in (9) and (10) using the generic nouns meaning ‘tool’ and ‘pet’, respectively.

- (9) Speaker A:  
       u-wu-n enep-ko  
       1SG-tool-POSS bring-IMP  
       ‘Bring my tool!’
- Speaker B:  
       odu  
       what.IN  
       ‘Which (inanimate) one?’



Speaker A:  
 obineum  
 ‘axe’  
 ‘The axe.’

‘A: Bring my tool! B: Which one? A: The axe.’

- (10) Speaker A:  
 i-amu-t            enep-ko  
 1SG-pet-POSS    bring-IMP  
 ‘Bring my pet!’

Speaker B:  
 nok  
 what.AN  
 ‘Which (animate) one?’

Speaker A:  
 wokori  
 dog  
 ‘The dog.’

‘A: Bring my pet! B: Which one? A: The dog.’

## 2.2 Nouns that are optionally inflected for possession

A fairly small number of nouns (perhaps twenty-five in the corpus) are optionally inflected for possession. In (11) seventeen of these nouns are listed; most of them refer to man-made items. In addition to the possessor prefix that occurs on the possessed form, there is a suffix indicating that the object is possessed. The possessed forms are in the third column.

- |      |                       |         |                            |
|------|-----------------------|---------|----------------------------|
| (11) |                       |         | ‘my ...’                   |
| a.   | ‘manioc bread’        | abat    | i-aba-ru <sup>19</sup>     |
| b.   | ‘mortar’              | ajna    | i-ajna-n                   |
| c.   | ‘fireplace, firewood’ | kambot  | u-kambo-ru                 |
| d.   | ‘bead’                | kuri    | u-kuri-n                   |
| e.   | ‘canoe’               | mobu    | u-mobu-n                   |
| f.   | ‘bench’               | murei   | u-murei-n                  |
| g.   | ‘bag’                 | mue     | u-mie-n                    |
| h.   | ‘basket’              | porido  | u-borido-n                 |
| i.   | ‘knife’               | pulepte | u-buulepte-n <sup>20</sup> |

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<sup>19</sup> The final *t* of the root is deleted before the suffix. See the *t*-deletion rule in Appendix A.

j.	‘paper, money’	tapeda	u-tapeda-n
k.	‘plastic bottle’	tororo	u-tororo-n
l.	‘bowl’	wajo	u-wajo-n
m.	‘mirror’	wodeneŋ	u-wodeneŋ-∅
n.	‘toy’	wuri	u-wuri-∅
o.	‘urine’	tʃigu	u-tʃigu-ru
p.	‘blood’	muŋu	u-muŋu-ru
q.	‘feces’	wat	u-wet

### 2.3 Inherently possessed noun roots

Inherently possessed noun roots include terms for kinship, body parts, feelings, some personal items, some generic terms, and some locatives. These nouns are always inflected, either to indicate the possessor or the absence of a possessor. The form without a possessor is referred to here as the absolute form. (More details about the absolute form are given in section 3.2.)

I claim that all inherently possessed nouns have two affixes (section 2.3.1). One is a prefix (sometimes null, sometimes fusing with the root, as discussed in section 3.1) that indicates the person of the possessor. The other is a suffix (null for some nouns) that indicates that the noun is possessed. The inherently possessed nouns can be grouped into six different classes based on the allomorphs of the possessive suffixes. (See section 3.3 for more details.)

#### 2.3.1 *The forms of the inherently possessed nouns*

The inherently possessed noun paradigm consists of up to seventeen forms (some nouns have less), as illustrated in (12) by the paradigm for  $\sqrt{etfit}$  ‘house’.<sup>21</sup> (NP represents any noun phrase, name, demonstrative pronoun, or the first person exclusive pronoun; the latter functions like an NP in various ways. For the sake of consistency, the form of the

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<sup>20</sup> Obstruents are devoiced word-initially. See Appendix A.

<sup>21</sup> The symbol  $\sqrt{\quad}$  is being used before a possessed noun root that is cited in isolation.

noun that follows “NP” is always given as if it were following an NP that ends in a vowel.)

(12) a.	1SG	i-etʃit	‘my house’
b.	2	itʃit	‘your (sg.) house’ <sup>22</sup>
c.	2, plural	itʃit-kom	‘your (plural) house(s)’
d.	1INCL	ug-etʃit	‘our (incl., dual) house(s)’
e.	1INCL, plural	ug-etʃit-kom	‘our (incl., pl.) houses’
f.	3	∅-etʃit	‘his/her/its house’
g.	3, plural	∅-etʃit-kom	‘their house(s)’
h.	3REFL	totʃit	‘his/her own house’ <sup>23</sup>
i.	3REFL, plural	totʃit-kom	‘their own houses’
j.	NP —	etʃit	‘NP’s house’
k.	Absolute	otʃi-ŋo	‘house’
l.	Absolute, plural	otʃi-ŋo-ŋmo	‘houses’
m.	Inessive case	tʃit-tam	‘at (my) home’
n.	Illative case	tʃit-taktʃi	‘towards (my) house’
o.	Elicative case	tʃit-tandubo	‘from (my) house’
p.	Perlative case	tʃit-tako	‘throughout (my) house’
q.	Comparative case	od-etʃi-k	‘the houses (two) are alike’

The words in (13) are denominal forms that are also important for studying these nouns; these are discussed in Chapter 7.

(13) a.	totʃid-e	‘s/he has a house’
b.	totʃid-am-o	‘the ones that have a house, the ones that have houses’

The forms in (12a-i) are the forms that show inflection for a possessor. Plurality is indicated by a suffix. First person inclusive without the plural suffix has an interpretation of dual, while with the plural suffix it has a plural interpretation that must include more than two.

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<sup>22</sup> Here the second person possessor morpheme *o-* and the initial vowel *e* of the stem coalesce to become the high front vowel *i*: *o-+√e* → *i*. More details about this are found in Appendix A.

<sup>23</sup> Here the vowel of the reflexive prefix *tu-* and the initial vowel *e* of the stem coalesce with the initial root vowel *e*: *tu-+√e* → *to*. See Appendix A.

An inherently possessed noun typically has a distinct form that is used when an explicit NP possessor is present, although this is not evident from the example shown in (12j). This form is discussed in detail in section 3.1.3.

An inherently possessed noun also has an absolute form, which means that it is marked and interpreted as unpossessed, as shown in (12k). More details about the absolute form are presented in section 3.2.

These nouns, as well as unpossessed nouns, can be marked for case. More details about case forms are given in Chapter 4.

Another item of interest concerning inherently possessed nouns is that almost all of the vowel-initial noun roots begin with *a* or *e*. At this point in time the corpus contains only twelve words beginning with other vowels: one with *o*, two with *u*, and nine with *i*. These twelve words are all inflected with the set of prefixes used for consonant-initial roots. Details about these irregular forms are presented in section 3.1.6.

### 2.3.2 Kinship noun roots

The kinship terms in the corpus are illustrated by the forms in (14)-(18), cited in the third person singular possessor form. With the exception of the vocative forms, all kinship terms are inflected for possession.<sup>24</sup> Some of them are used only by women and some only by men. The kinship terms in (14)-(18) are grouped according to the allomorph of the possessive suffix that they take. (See section 3.3 for more details).

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<sup>24</sup> The vocative forms are usually very different from the non-vocative forms. For example, the vocative for ‘uncle’ is *koko* while the possessed form is *a-wo-n* (3-uncle-POSS) ‘his/her uncle’; the vocative for ‘sister’ is *tʃelʉ* while the possessed form is  $\emptyset$ -*enaru-t* (3-sister.ME-POSS) ‘his sister’; and the vocative for ‘brother (FE)’ is *muni* while the possessed form is *i-bi-n* (3-brother.FE-POSS) ‘her brother’. For two very irregular nouns, the vocative and the first person possessed form are the same. These nouns are *papa* ‘dad’, ‘my father’, and *jeme* ‘mom’, ‘my mother’. See the paradigms in (23). Only a few kinship terms have an absolute form. I do not discuss them in this thesis.

- (14) a. *ebu-∅* 'his/her relative/friend'  
 b. *edem-∅* 'her husband'<sup>25</sup>  
 c. *ibae-∅* 'her daughter-in-law'  
 d. *ibari-∅* 'his/her father (outside marriage)'  
 e. *imano-∅* 'his younger brother'  
 f. *imuu-∅* 'his/her/its father'<sup>26</sup>  
 g. *io-∅* 'her husband'<sup>27</sup>  
 h. *iru-∅* 'his older brother'  
 i. *tferupi-∅* 'her mother's uncle'  
 j. *je-∅* 'his/her/its mother'<sup>28</sup>
- (15) a. *awo-n* 'his/her uncle'  
 b. *emtʃi-n* 'his daughter'  
 c. *ibadu-n* 'his brother-in-law', 'her son-in-law'  
 d. *ibaimuu-n* 'his son (outside of marriage)'  
 e. *ibi-n* 'her brother'  
 f. *ibe-n* 'her granddaughter'<sup>29</sup>  
 g. *ibetʃa-n* 'his niece'  
 h. *idamgo-n* 'his/her grandfather'  
 i. *idenɓuu-n* 'her grandmother (or 'his girlfriend')'  
 j. *imere-n* 'her child'  
 k. *imoguu-n* 'his niece's son'  
 l. *imu-n* 'his son'
- (16) a. *amuu-t* 'his adopted son'<sup>30</sup>  
 b. *enaru-t* 'his sister'  
 c. *ibi-t* 'her younger sister'  
 d. *ibuu-t* 'his wife'<sup>31</sup>

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<sup>25</sup> The word *edem* is primarily used as 'his/her/its guide (on a trail, a driver of a boat)' and is also used to mean 'her husband'.

<sup>26</sup> The word *imuu* is also used as a modifier meaning 'big' as in *paru imuu* (water big) 'big river'. It is also used as a noun to refer to the 'thumb': *imuu* 'thumb'.

<sup>27</sup> The word *io* refers to the male sex: 'her husband' or 'its mate (male)'.

<sup>28</sup> The expressions for 'his father-in-law' and 'his mother-in-law' are simple phrases: *i-buu-t i-imuu-∅* (3-wife-POSS 3-father-POSS) 'his wife's father', and *i-buu-t je-∅* (3-wife-POSS 3.mother-POSS) 'his wife's mother'. The forms of the nouns are as expected by the general principles presented here. There are no expressions referring to a woman's father-in-law or mother-in-law.

<sup>29</sup> The word *iben* is also used to refer to 'her boyfriend'.

<sup>30</sup> The word *amuu* is also used to refer to a pet: 'his/her pet'.

<sup>31</sup> This word may also refer to the female mate of an animal. Another word for wife that is more polite is *e-wene-no-∅* (3-after-NMLZR-POSS) 'his wife' that literally means 'the one who goes after him' or 'his follower'. It is a noun derived from the postposition *e-wene* (3-after) plus a nominalization suffix *-no*. If one did not know it were a derived noun it would not make any difference since it inflects like the basic

- (17)      iba-ru            ‘her older sister’
- (18) a.    idam-uru            ‘his grandchild’<sup>32</sup>  
        b.    iwaram-uru        ‘his nephew’

A complete kinship term paradigm (with respect to prefixes) plus the denominal predicate adjective is provided in (19).

- (19)      iemtʃin            ‘my daughter’  
             imtʃin            ‘your daughter’  
             emtʃin            ‘his daughter’  
             tomtʃin           ‘his own daughter’  
             ugentʃin          ‘our (inclusive) daughter’  
             NP emtʃin        ‘NP’s daughter’  
             tomtʃik            ‘having daughter’

When kinship term roots are inflected as nouns they must have the appropriate possessive suffix, as shown in (20a), (21a) and (22a).

- (20) a.    i-bi-n  
             3-brother.FE-POSS  
             ‘her brother’
- b.    \*i-bi  
             (‘her brother’)
- c.    \*bi-n  
             (‘her brother’)
- d.    pine      bi-n  
             Pine     brother-POSS  
             ‘Pine’s brother’

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kinship terms: *u-weneno-∅* (1SG-wife-POSS) ‘my wife’, *o-weneno-∅* (2-wife-POSS) ‘your wife’, *ug-weneno-∅* (1INCL-wife-POSS) ‘our wives’.

<sup>32</sup> The word *idamuru* ‘his grandchild’ can be used as a euphemism for ‘his illegitimate child’.

- (21) a. i-bi-t  
3-younger.sister.FE-POSS  
'her younger sister'
- b. \*i-bi  
( 'her younger sister' )
- c. \*bi-t  
( 'her younger sister' )
- d. pine bi-t  
Pine younger.sister.FE-POSS  
'Pine's younger sister'
- (22) a. i-mano-∅  
3-younger.brother.ME-POSS  
'his younger brother'
- b. mano  
(\* 'his younger brother', but grammatical as a vocative form)
- c. mune mano-∅  
Mune younger.brother-POSS  
'Mune's younger brother'

Lack of the possessive suffix makes (20b) and (21b) unacceptable. Furthermore, as with any possessed noun (with two exceptions, *i-muu-∅* 'his/her/its father' and *i-mu-n* 'his son'), the possessor prefix is required unless the kinship terms is immediately preceded by a possessor NP. Examples (20c), (21c) and (22b) are unacceptable because there is neither a possessor prefix as in (20a), (21a) and (22a) nor a possessor noun phrase as in (20d), (21d) and (22c).

The words used for 'mother' and 'father' are highly irregular, as shown in (23)-(24).

- |      |         |                                     |
|------|---------|-------------------------------------|
| (23) | jeme    | 'my mother' (also used as vocative) |
|      | ukte    | 'your mother'                       |
|      | je      | 'his/her/its mother'                |
|      | tude    | 'his/her/its own mother'            |
|      | NP je   | 'NP's mother'                       |
|      | ugukte  | 'our (inclusive) mother'            |
|      | tudeŋje | 'having mother'                     |

(24)	papa	‘my father’ (also used as vocative)
	uŋme	‘your father’
	imuu	‘his/her/its father’
	tum	‘his/her/its own father’
	NP imuu	‘NP’s father’
	uguŋme	‘our (inclusive) father’
	tumge	‘having father’

### 2.3.3 Body part terms and other part-whole terms

There are more than one hundred body part terms and related terms (such as body secretions) in the corpus.<sup>33</sup> The examples below are grouped according to their possessive suffix. I present the surface forms of the possessive suffixes. In addition, there are about twenty words that refer to parts of whole items (branch of tree, leaf of tree, etc.) All of them are inherently inflected for possession.

(25)	a.	amoe-n	‘his/her/its fingernail’
	b.	eŋna-n	‘his/her/its nose’
	c.	iaptagua-n	‘his/her/its armpit’
	d.	iptʃi-n	‘his/her/its shin’
	e.	ipu-n	‘his/her/its foot’
(26)	a.	abore-ruu	‘his/her elbow’ <sup>34</sup>
	b.	emia-ruu	‘his/her/its hand’
	c.	ibo-ruu	‘his/her/its lip’
	d.	imuno-ruu	‘her/its fetus’
(27)	a.	akpum-urru	‘his/her/its hip’
	b.	arig-urru	‘his/her/its coccyx’
	c.	edegum-urru	‘his/her/its knee’
	d.	emegum-urru	‘his/her/its wrist’
	e.	imogorig-urru	‘his/her/its backbone’

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<sup>33</sup> Body part terms have extended meanings for inanimate objects. For example, the noun *i-mum-tʃi* (3-head-POSS) ‘his/her/its head’ is also used to refer to hammock loops and to the part of the yam that is used to plant. It can also be used with water, *paru mumtʃi* ‘lake’ (literally ‘water’s head’). The noun *i-ptʃi-n* (3-shin-POSS) ‘his/her/its shin’ is used to refer to the manioc stalk (*kuden butʃin*), to the central part of the palm tree leaf (*kuaru butʃin*), and also to a table leg (*moropi butʃin*). More details about the changes on the noun *i-ptʃi-n* are presented in section 3.1.3.

<sup>34</sup> These nouns may appear to be vowel-final, but they are not. Compare the inflected form of ‘hand’ with other forms in the following paradigm: *∅-emia-ruu* (3-hand-POSS) ‘his/her/its hand’; *tomiat-ke* (T.hand-ADJR) ‘having hand’; and *omiat-∅* (ABST.hand-ABST) ‘hand’. The root is  $\sqrt{\text{emiat}}$ . More details about these nouns are presented in section 3.3.



- (28) a. aborim-uru 'his/her/its arm'  
 b. amim-uru 'his/her/its stomach'  
 c. em-uru 'his/its testicle'  
 d. eṅ-uru 'his/her/its eye'  
 e. ilagag-uru 'his/her/its saliva'
- (29) a. ila-tfi 'his/her/its mouth'  
 b. imbua-tfi 'his/her arm'  
 c. imum-tfi 'his/her/its head'<sup>35</sup>  
 d. iptā-tfi 'his/her heel'  
 e. iwaka-tfi 'his/her buttock'
- (30) a. ede-t 'his/her name'  
 b. etfi-t 'his/her house'<sup>36</sup>  
 c. ibotpu-t 'his beard'  
 d. iburumi-t 'his/her/its anus'  
 e. iretpu-t 'his/her/its hair'
- (31) a. aro-∅ 'his/her/its lung'  
 b. ilu-∅ 'his/her/its tongue'  
 c. imnu-∅ 'his/her/its body'  
 d. itfigue-∅ 'his/her/its bile'  
 e. iwaṅduṅ-∅ 'his/her large intestine'

A complete paradigm of one body part term and its denominal predicate adjective are given in (32).

- (32) i-amoe-n 'my fingernail'  
 u-amoe-n 'your fingernail'  
 u-amoe-n-gom 'your (plural) fingernails'  
 ∅-amoe-n 'his/her/its fingernail'  
 t-amoe-n 'his/her/its (reflexive) fingernail'  
 ug-amoe-n 'our (incl., dual) fingernails'  
 ug-amoe-n-gom 'our (incl., pl.) fingernails'  
 NP amoe-n 'NP's fingernail'  
 omoe-ŋo 'fingernail'  
 t-amoe-k 'having fingernail'

When the expected affixes are not present, the body part terms are ungrammatical, as shown in (33b) and (34b-d). The lack of the possessor prefix is possible only when the possessed noun is preceded by an overt noun phrase, as shown in (33c) and (34e). The

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<sup>35</sup> The noun for 'head' can refer to 'top' of a mountain, of a big stone, etc.

<sup>36</sup> The noun *etfi* has an extended meaning of 'container'.

appropriate possessive suffix is always required on a possessed noun. Recall, however, that for some nouns this suffix is null.

- (33) a. Ø-eŋna-n  
3-nose-POSS  
'his/her/its nose'
- b. \*eŋna  
( 'his/her/its nose' )
- c. NP eŋna-n  
NP nose-POSS  
'NP's nose'
- (34) a. i-mum-tʃi  
3-head-POSS  
'his/her/its head'
- b. \*mum  
( 'his/her/its head' )
- c. \*i-mum  
( 'his/her/its head' )
- d. \*mum-tʃi  
( 'his/her/its head' )
- e. NP mum-tʃi  
NP head-POSS  
'NP's head'

The words that refer to parts of items (such as 'branch' and 'leaf') do not have such fully developed paradigms, at least in the corpus. (I do not know what would happen if a tree in a story were to talk about its branches and leaves. Animals can talk in stories using the expected sets of prefixes and suffixes on nouns.) Compare the several forms of the paradigm for 'house', which begins with a vowel, with the attested forms of the words for 'branch' and 'leaf'.

- |      |          |          |            |                   |           |
|------|----------|----------|------------|-------------------|-----------|
| (35) |          | 'my ...' | 'your ...' | 'his/her/its ...' | 'our ...' |
| a.   | 'house'  | i-etʃi-t | itʃi-t     | Ø-etʃi-t          | ug-etʃi-t |
| b.   | 'branch' |          |            | Ø-ekta-n          |           |
| c.   | 'leaf'   |          |            | Ø-a-ruu           |           |

Abstract nouns presenting feelings are also inherently possessed nouns. The only ones that I have found in the corpus are presented in (36) using the first person possessor forms.

- (36) a. *u-guri-n*  
1SG-anger-POSS  
'my anger'
- b. *u-moe-n*  
1SG-joy-POSS  
'my joy'
- c. *u-bomnu-∅*  
1SG-sadness-POSS  
'my sadness'
- d. *i-apoel-u*  
1SG-belligerence-POSS  
'my belligerence'

#### 2.3.3.1 Details about the words 'hand' and 'mouth'

The word for 'hand' has two suppletive roots:  $\sqrt{emiat}$  and  $\sqrt{amda}$ . The stem  $\sqrt{emiat}$  (which loses its final consonant under conditions discussed in Appendix A), is used to form common inflected nouns. Examples are given in (37).

- (37) a. *i-emia-ruu*  
1SG-hand-POSS  
'my hand'
- b. *omia-ruu-ηo*  
ABST.hand-POSS-ABST  
'hand'

The root  $\sqrt{emiat}$  can also be incorporated into the verb, as shown in (38).<sup>37</sup> So far I have only observed it incorporated with two verbs.

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<sup>37</sup> Noun incorporation is very productive in the language.

- (38) a. k-od-emia-guruge-luu  
 1-REFL-hand-wash-REC  
 ‘I washed my hands.’
- b. od-emi-at-kod-u-luu  
 REFL-hand-cut-REC  
 ‘He cut his own hand.’

The other stem for ‘hand’,  $\sqrt{amda}$ , cannot be inflected for possessor, nor can it occur in the absolute form.

- (39) a. \*i-amda-n  
 1SG-hand-POSS  
 (‘my hand’)
- b. \*omda  
 ABST.hand  
 (‘hand’)

However, this stem can be part of an inflected compound noun (see Chapter 6), as shown in (40).<sup>38</sup>

- (40) a. i-amda-boi-∅  
 1SG-hand-shirt-POSS  
 ‘my glove’
- b. i-amda-gua-n  
 1SG-hand-?-POSS  
 ‘my palm’

The root  $\sqrt{amda}$  can also be used in compound forms and situations with incorporation (including with the same verb that  $\sqrt{emi-at}$  can be incorporated with), as shown in (41).

- (41) a. t-amda-ku-t<sup>39</sup>  
 T-hand-black-ADJR  
 ‘having blackened hand’, ‘his/her hand is dirty (with something dark)’
- b. k-od-amda-guruge-luu  
 1-REFL-hand-wash-REC  
 ‘I washed my hands.’

---

<sup>38</sup> The stem  $\sqrt{amda}$  can also be followed by a modifying suffix, as discussed in section 6.2. Example: *t-amda-pa* (T-hand-flat) ‘flat handed’.

<sup>39</sup> In his description of Tiriyó, Meira (1999:358) glosses this prefix with a capital ‘T’; I follow that

The word for ‘mouth’ also has two suppletive stems:  $\sqrt{la}$ , and  $\sqrt{mda}$ . The stem  $\sqrt{la}$  is inflected for a possessor prefix and a possessive suffix, as shown in (42).

- (42) a.  $u-la-tfi$   
 1SG-mouth-POSS  
 ‘my mouth’
- b.  $o-la-tfi$   
 2-mouth-POSS  
 ‘your mouth’

The root  $\sqrt{mda}$  is used instead of  $\sqrt{la}$  when the word is inflected for the inessive case, as shown in (43).

- (43) a.  $u-mda-am$   
 1SG-mouth-INE  
 ‘in my mouth’
- b.  $odu \quad o-mda-am$   
 what.IN 2-mouth-INE  
 ‘What do you have in your mouth?’

#### 2.3.4 *Personal items*

Some personal item words cannot be inflected for possession, as shown in section 2.1; some may be inflected, as shown in (section 2.2); but the majority of them must be inflected. Examples of these nouns are given (44)-(48), grouped by the possessive suffix.

- (44) a.  $ietfi-t$  ‘my house’  
 b.  $iedue-t$  ‘my hammock’
- (45) a.  $iaboi-\emptyset$  ‘my shirt’  
 b.  $ieptu-\emptyset$  ‘my medicine’  
 c.  $iejuruboi-\emptyset$  ‘my glasses’  
 d.  $uumumboi-\emptyset$  ‘my hat’  
 e.  $ukpi-\emptyset$  ‘my field’
- (46) a.  $ubanaku-n$  ‘my earring’  
 b.  $urwari-n$  ‘my bag’  
 c.  $iewa-n$  ‘my rope’  
 d.  $ieringo-n$  ‘my pan’

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practice here.

- (47) a. iarog-urru 'my headdress'  
 b. ubuu-ruu 'my arrow'
- (48) uu-dop-tʃi 'my shotgun'

A complete paradigm of a personal item word and the corresponding denominal predicate adjective are given in (49).

- (49)
- |          |  |
|----------|--|
| ietʃit   | 'my house'                                     |
| itʃit    | 'your house'                                   |
| etʃit    | 'his/her/its house'                            |
| totʃit   | 'his/her own house'                            |
| ugetʃit  | 'our (incl., dual) house(s)'                   |
| NP etʃit | 'NP's house'                                   |
| otʃiŋo   | 'house' – Absolute                             |
| totʃide  | 'having house' – Denominal predicate adjective |

Some nouns referring to roles as leader, companion, drinking partner, helper, and fighting partner are also obligatorily inflected for possession.

- (50) a. i-akpo-∅ 'my leader'  
 b. uu-birinda-∅ 'my partner'  
 c. uu-woktarat-∅ 'my drinking partner'  
 d. i-apondera-∅ 'my helper'  
 e. uu-wokta-∅ 'my companion in war'

### 2.3.5 *Generic terms*

There is a group of generic terms that are inherently possessed. From the corpus I have identified ten of these, which are listed in (51).

- (51) a. uu-wog-urru 'my drink'  
 b. uu-mi-∅ 'my food' (meat, hard items, etc.)  
 c. uu-wot-∅ 'my food' (fish, soft items as beans, eggs, pasta, etc.)  
 d. uu-mdabiri-∅ 'my food' (most general)  
 e. uu-u-n 'my food' (derivatives of tubers)  
 f. i-enba-n 'my food' (fruit)  
 g. i-emiagiri-n 'my job'  
 h. uu-wuu-n 'my tool'  
 i. i-amuu-t 'my pet'  
 j. uu-bug-urru 'my bathing toiletries, including water'

The complete paradigms of the nouns for 'drink', 'food' (general), and 'job' are given in (52).

(52)		‘drink’	‘food’	‘job’
	‘my ...’	u-wog-urru	u-mdabiri-∅	i-emiagiri-n
	‘your ...’	o-wog-urru	o-mdabiri-∅	imiagiri-n
	‘his/her ...’	a-wog-urru	i-mdabiri-∅	∅-emiagiri-n
	‘our (incl., dual) ...’	ug-wog-urru	ugu-mdabiri-∅	ug-emiagiri-n
	Reflexive	tuu-wog-urru	tuu-mdabiri-∅	tomiagiri-n
	Absolute	wog-urru-ŋo	mudabiri-ŋo	omiagiri-ŋo
	Denominal predicate adjective		tuu-mdabiri-ŋ	tomiagiri-n-de

### 2.3.6 *Locative*

A few locative words are inflected for possessor. The “possessor” in these cases has nothing to do with the semantic notion of “possess”, but rather refers to the point of reference that is expressed in English and Portuguese as the complement of a preposition. A full discussion of the semantics of these nouns is beyond the scope of this thesis. These are illustrated by the examples in (53), all given in the first person form.

- (53) a. u-buŋbo            ‘on me’  
 b. i-agomno           ‘behind me’  
 c. u-womno           ‘under me’  
 d. u-wap              ‘before me’  
 e. u-umba-p<sup>40</sup>        ‘s/he/it is above me’  
 f. u-boda-p            ‘it is inside me’  
 g. i-eŋue-n            ‘in front of me’

Although the locative nouns in (53) are inflected for possessor, they do not have possessive suffixes. However, they can be inflected for case suffixes. (More details about the case suffixes are included in Chapter 4.) Furthermore, the locative nouns do not have absolute forms.

A complete paradigm of one locative noun is provided in (54).

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<sup>40</sup> This word and the next are only found inflected with some other suffix, such as the inessive case in these particular examples. More details about the inessive suffix are in section 4.1.

(54)	u-womno	‘under me’
	o-womno	‘under you’
	i-womno	‘under him/her/it’
	ug-womno	‘under us (incl., dual)’
	tui-womno	‘under himself/herself/itself’
	NP womno	‘under NP’

These locative nouns, like other inherently possessed nouns, require the possessor prefix when an explicit location is not present, and they disallow the possessor prefix when an explicit location is present, as shown in (55).

- (55) a. paru buŋbo  
water on  
‘on the water’
- b. mogun buŋbo  
that.AN on  
‘on that one (animate)’
- c. tʃimna buŋbo  
1EXCL on  
‘on us (excl.)’
- d. i-buŋbo  
3-on  
‘on him/her/it’
- e. \*buŋbo  
(‘on it/him/her’)

## 2.4 Derived inherently possessed noun stems

There is a suffix *-run* that appears on nouns, and it is used in two ways: derivationally and inflectionally.

### 2.4.1 Derivational use of *-run*

The suffix *-run* occurs on nouns referring to plants, and in this situation it has a derivational use. The derived noun stems refer to the field (or garden) in which the plant is cultivated and not to the plant itself, as shown in (56)-(59). These derived noun stems are inherently possessed. (I do not know if they have absolute forms.) They do not take



any suffix after the morpheme *-run*, although I do not know about plurals or the locative case forms. (For details about the allomorphs, see Appendix A.)

- (56) a. womjum<sup>41</sup>  
banana  
'cultivated banana'
- b. u-womjum-urun  
1SG-banana-POSS  
'my banana field'
- (57) a. mitaum<sup>42</sup>  
'coconut (sp.)'
- b. u-mitaum-urun  
1SG-coconut.(sp.)-POSS  
'my coconut field'
- (58) a. karana  
'hemp'
- b. u-karana-run  
1SG-hemp-POSS  
'my "karana" field'
- (59) a. manan  
'yucca (sp.)'
- b. u-mana-run<sup>43</sup>  
1SG-yucca.(sp.)-POSS  
'my "manan" field'

The nouns for 'papaya' and 'corn' have the absolute prefix marker *o-* when no possessor is indicated, as shown in (60) and (61).

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<sup>41</sup> The word for '(cultivated) banana' is formed from *wom* 'wild banana' plus the augmentative suffix *-jum*. More details about this are given in section 6.2.1.

<sup>42</sup> The word for 'coconut' looks like it might have the augmentative suffix *-um*, but the noun without the suffix *-um* (\*mita) does not appear in the corpus.

<sup>43</sup> Here the final consonant of the noun root is deleted before the suffix *-run*.

- (60) a. o-kajamoum<sup>44</sup>  
 ABST-papaya  
 ‘papaya’
- b. u-kajamoum-urun  
 1SG-papaya-POSS  
 ‘my papaya field’
- c. i-kajamoum-urun  
 3-papaya-POSS  
 ‘his/her papaya field’
- (61) a. o-nat  
 ABST-corn  
 ‘corn’
- b. u-na-ruu  
 1SG-corn-POSS  
 ‘my cornfield’
- c. i-na-ruu  
 3-corn-POSS  
 ‘his/her cornfield’

The derived noun for ‘sweet potato’ makes some idiosyncratic changes, as shown in

(62).

- (62) a. nabiot  
 ‘sweet potato’
- b. u-nobia-ruun  
 1SG-sweet.potato-POSS  
 ‘my sweet potato field’

The noun for ‘rice’ is a compound noun that includes the morphemes *-bu-em*, but the derived noun with *-urun* drops these morphemes, as shown in (63).

- (63) a. turetʃiŋ-bu-em  
 pasture-similar-NMLZR  
 ‘rice’
- b. u-turetʃiŋ-urun  
 1SG-pasture-POSS  
 ‘my rice field’

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<sup>44</sup> The word *okajamoum* looks like it might have the augmentative suffix *-um*, but the noun without the suffix *-um* (\**okayamo*) does not appear in the corpus.

The derived noun for ‘yam field’ has two possible forms. In both forms, the root has an extra *d* that has no parallel anywhere else in the language. One form has the expected suffix *-run*, while the other has only *-n*. Speakers claim that both forms are possible and mean the same.

- (64) a. upu  
‘yam (sp.)’
- b. u-dupu-run  
1SG-yam.(sp.)-POSS  
‘my yam field’
- c. u-dupu-n  
1SG-yam-POSS  
‘my yam field’

#### 2.4.2 *Inflectional use of -run*

The inflectional use of the suffix *-run* is analogous to the possessive case suffix found on possessed nouns (see Chapter 4), and could be viewed as another suppletive allomorph of the possessive suffix. Of the four examples in the corpus, three are compound nouns, as shown in (65)-(67).

- (65) a. puaptebuem < puapte-bu-em  
‘razor blade’ knife-similar-NMLZR
- b. u-buaptebuem-urun  
1SG-razor.blade-POSS  
‘my razor blade’
- (66) a. tapedaum < tapeda-um  
‘box, poster’ paper-AUG
- b. u-tapedaum-urun  
1SG-box/poster-POSS  
‘my big paper’

- (67) a. bakkeni                      <      bak-ke-ni<sup>45</sup>  
          'hoe'                                      noise-do/make-NMLZR
- b. u-bakkeni-run  
          1SG-hoe-POSS  
          'my hoe'

Note that in 'razor blade' (65), the whole compound occurs in the possessed form; the second half (*buem*) is not omitted, unlike in the case of 'rice' in (63b).

One noun that gives no evidence of being a compound, but which, nevertheless, uses the *-run* suffix, is the word for 'ball', as shown in (68).

- (68) a. panbak  
          'ball'
- b. u-banbag-urrun  
          1SG-ball-POSS  
          'my ball'

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<sup>45</sup>*Bak* is an ideophone, and the voiced *b* is implosive. Implosives are common in ideophones or special words.

## CHAPTER 3

### MORPHOLOGY OF POSSESSED NOUNS

As shown in section 2.3, possessed nouns are morphologically complex, sometimes in ways that are obvious and sometimes in ways that are not. An overt possessor prefix appears on possessed nouns to show person and number of the possessor except in two situations, as explained in Chapter 2. The first situation is the null prefix for third person possessor that is used before vowel-initial roots, as shown in (69a).

- (69) a. Ø-eŋna-n  
3-nose-POSS  
'his/her/its nose'
- b. i-eŋna-n  
1Sg-nose-POSS  
'my nose'

The second situation in which no overt possessor prefix occurs is when an NP possessor appears before the possessed noun, as shown in (70b).

- (70) a. i-mum-tʃi  
3-head-POSS  
'his/her/its head'
- b. NP mum-tʃi  
NP head-POSS  
'NP's head'

Under certain conditions phonological fusion takes place, which makes the morphology a bit less transparent (see Appendix A). The present chapter looks at the morphology of the possessor prefix and possessive suffix.

### 3.1 Possessor

The Ugoron̄mo language distinguishes between five persons: first person singular, second person, third person, first person inclusive, and first person exclusive. These, with the exception of first person exclusive (see below), are marked as prefixes on nouns and verbs, as in the related Hixkaryana language (Derbyshire 1985:8). Third person possessed nouns appear in the third person reflexive form when the subject of the clause is coreferential with the possessor.

All of these persons can be pluralized, with the exception of first person singular (but see below for additional details). First person inclusive without the plural suffix has an interpretation as dual – having exactly two in number – while with the plural suffix it has a plural interpretation that must include more than two. The various combinations are shown by the forms in (71).

(71)	u-mum-tʃi	‘my head’
	uŋ-mum-tʃi	‘our (incl., dual) heads’
	uŋ-mum-tʃi-ŋmo	‘our (incl., plural) heads’
	o-mum-tʃi	‘your head’
	o-mum-tʃi-ŋmo	‘your (pl.) heads’
	i-mum-tʃi	‘his/her/its head’
	i-mum-tʃi-ŋmo	‘their heads’
	tu-mum-tʃi	‘his/her/its own head’
	tu-mum-tʃi-ŋmo	‘their own heads’

First person exclusive is expressed by an invariant free pronoun that functions like a noun phrase preceding the possessed noun, requiring no agreement on the noun (see section 3.1.7). This form does not change regardless of the number of people involved. The plural suffix is not used with it, as shown in (72). See Chapter 5 for discussion of plural marking and interpretation.

(72) a.	tʃimna	mum-tʃi
	1EXCL	head-POSS
		‘our (excl.) heads’

- b. \*tʃimna    mum-tʃi-ŋmo  
 1EXCL    head-POSS-PL  
 ('our (excl.) heads')
- c. \*tʃimna-ŋmo    mum-tʃi  
 1EXCL-PL    head-POSS  
 ('our (excl.) heads')

The possessor prefixes often have different forms before consonants than before vowels, as illustrated in (73). Some of these differences may be explained by phonological rules, but some definitely are not. The illustrative paradigms in (73) do not cover all of the complexities of possessor prefix allomorphs, however. In Appendix B, 52 complete paradigms of some possessed nouns are presented.

(73)	C-initial	V-initial
	u-banan    'my ear'	i-aboi-∅    'my shirt'
	o-bana-n    'your ear'	u-aboi-∅    'your shirt'
	i-bana-n    'his/her/its ear'	∅-aboi-∅    'his/her shirt'
	uk-pana-n    'our (incl., dual) ears'	ug-aboi-∅    'our (incl., dual) shirts'
	tu-bana-n    'his/her/its own ear'	t-aboi-∅    'his/her own shirt'

Table 2 shows my proposals for the underlying forms of the possessor prefixes. Phonological rules sometimes insert a vowel, coalesce vowels, and affect voicing, as discussed below.

Table 2 Underlying forms of Possessor prefixes

	Roots beginning with <i>e</i> or <i>a</i>	Other roots
1	i-	u-
2	o-	
3	∅-	a- before several <i>w</i> -initial roots, e- before several <i>w</i> -initial roots i- elsewhere
1Incl.	ug-	
3Refl	tu-	

The morphemes shown in Table 2 are also used on verbs to show the person of one of the core grammatical relations. This thesis does not address those situations. In this section the different allomorphs of the possessor prefixes are discussed. Since these

morphemes also occur on verbs, a complete account of the allomorphs of these morphemes would take verbs into consideration. However this is outside the scope of this thesis. It can be noted, however, that the basic facts about the distribution of the allomorphs in verbs are quite parallel to the distribution shown in the following sections.

### 3.1.1 First person singular possessor

The first person singular possessor prefix is *u-* before a consonant, and *i-* before vowel-initial roots that begin with *a* or *e*, as shown in (74) and (75), respectively. The first person inclusive is also presented for comparison. Noun roots beginning with vowels other than *a* or *e* are discussed in section 3.1.6.

(74)		First person singular possessor	First person inclusive possessor	
	a.	‘thigh’	u-bet-∅	uk-pet-∅
	b.	‘shotgun’	u-dop-tʃi	uk-top-tʃi
	c.	‘fat’	u-ga-t	ugu-ga-t
	d.	‘firewood’	u-kambo-ruu	ugu-kambo-ruu
	e.	‘field’	u-kpi-∅	ugu-kpi-∅
	f.	‘mouth’	u-la-tʃi	ugu-la-tʃi
	g.	‘arm’	u-mbua-tʃi	ugu-mbua-tʃi
	h.	‘head’	u-mum-tʃi	uŋ-mum-tʃi
	i.	‘joke’	u-nmo-n	ugu-nmo-n
	j.	‘waist’	u-ŋuanuaptako-∅	ugu-ŋuanuaptako-∅
	k.	‘flatulence’	u-pko-n	ugu-pko-n
	l.	‘shin’	u-ptʃi-n	ugu-ptʃi-n
	m.	‘foot’	u-pu-n	ugu-pu-n
	n.	‘older brother’	u-ru-∅	ugu-ru-∅
	o.	‘urine’	u-tʃigu-ru	ugu-tʃigu-ru
	p.	‘bowl’	u-wajo-n	ugu-wajo-n

(75)		First person singular possessor	First person inclusive possessor	
	a.	‘manioc bread’	i-aba-ruu	ug-aba-ruu
	b.	‘shirt’	i-aboi-∅	ug-aboi-∅
	c.	‘arm’	i-aborim-uru	ug-aborim-uru
	d.	‘hand’	i-emia-ruu	ug-emia-ruu
	e.	‘nose’	i-eŋna-n	ug-eŋna-n
	f.	‘eye’	i-eŋ-uru	ug-eŋ-uru



### 3.1.2 Second person possessor

The second person possessor prefix is a bit more complicated. It is *o-* before a consonant, as shown in (76).

(76) Second person possessor

- |    |             |                |
|----|-------------|----------------|
| a. | o-bi-n      | ‘brother (FE)’ |
| b. | o-kambo-ruu | ‘firewood’     |
| c. | o-la-tʃi    | ‘mouth’        |
| d. | o-mum-tʃi   | ‘head’         |
| e. | o-pu-n      | ‘foot’         |

Before roots that begin with the vowel *a*, the second person possessor prefix is *u-*.

(This does seem to be a vowel and not the approximant *w-* since it is phonetically longer than one expects for an approximant.) I propose that this is handled by the phonological rule of Vowel Raising (see Appendix A).

(77) Second person possessor

- |    |              |                |
|----|--------------|----------------|
| a. | u-aba-ruu    | ‘manioc bread’ |
| b. | u-aboi-∅     | ‘shirt’        |
| c. | u-aborim-uru | ‘forearm’      |
| d. | u-amim-uru   | ‘stomach’      |
| e. | u-amoe-n     | ‘fingernail’   |

With roots that are clearly *e*-initial (as shown by the first person singular inflection in the paradigm below), second person possessor is indicated by a change of the initial *e* to *i*. I account for this with a rule of Vowel Coalescence (see Appendix A). Underlying *o+e* becomes *i*.

(78)		Second person possessor	First person (singular) possessor
a.	‘hammock’	idue-t	i-edue-t
b.	‘eye’	iŋ-uru	i-eŋ-uru
c.	‘skin, shell’	ipi-∅	i-epi-∅
d.	‘liver’	ire-n	i-ere-n
e.	‘house’	itʃi-t	i-etʃi-t

Noun roots beginning with vowels other than *a* or *e* are discussed in section 3.1.6 below.

### 3.1.3 Third person possessor

The third person prefix has four suppletive allomorphs: *i-*, *a-*, *e-* and  $\emptyset$ -. The most common, and presumably the default marker, before consonant-initial roots (including some that are *w*-initial) is *i-*, as shown in (79). These explicitly marked forms are compared there with the form that occurs when the possessor noun phrase is overtly present.

(79)		Third person possessor	Overt NP possessor present
a.	‘wife’	i-buu-t	NP buu-t
b.	‘whistle’	i-dagin-u	NP dagin-u
c.	‘fat’	i-ga-t	NP ga-t
d.	‘firewood’	i-kambo-ruu	NP kambo-ruu
e.	‘mouth’	i-la-tʃi	NP la-tʃi
f.	‘head’	i-mum-tʃi	NP mum-tʃi
g.	‘son’	i-mu-n	NP imu-n
h.	‘shin’	i-ptʃi-n	NP buutʃi-n
i.	‘foot’	i-pu-n	NP pugu-n
j.	‘older brother’	i-ru- $\emptyset$	NP ru- $\emptyset$
k.	‘bag’	i-wari-n	NP wari-n
l.	‘feces’	i-wet	NP wet
m.	‘maraca’	i-wonga-n	NP wonga-n
n.	‘machete’	i-wuu-n	NP wuu-n

Before several *w*-initial roots, the prefix is *a-* and before several *w*-initial roots it is *e-*, as seen in (80) and (81).

(80)		Third person possessor	Overt NP possessor present
a.	‘uncle’	a-wo-n	NP wo-n
b.	‘mirror’	a-wodeneŋ- $\emptyset$	NP wodeneŋ
c.	‘drink’	a-wog-urru	NP namog-urru
d.	‘burp’	a-wokpa-ru	NP wokpa-ru
e.	‘dream’	a-wonŋet	NP wonŋet
f.	‘word’ <sup>46</sup>	a-worond-u	NP worond-u

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<sup>46</sup> This noun can be used to refer to voice, language and speech.

(81)		Third person possessor	Overt NP possessor present
a.	'necklace'	e-wel- <i>u</i>	
b.	'flashlight'	e-wel- <i>u</i>	
c.	'load'	e-wem- $\emptyset$	NP wem- $\emptyset$
d.	'vomit'	e-wenal- <i>u</i>	
e.	'wife'	e-weneno- $\emptyset$	NP weneno- $\emptyset$
f.	'toy'	e-wuri- $\emptyset$	NP wuri- $\emptyset$

Before the vowels *a* and *e*, with the exception of the cases discussed in section 3.1.6, the prefix is  $\emptyset$ , as shown in (82).

(82)		Third person possessor	Overt NP possessor present
a.	'forearm'	$\emptyset$ -aboi- $\emptyset$	NP aboi
b.	'name'	$\emptyset$ -ede- <i>t</i>	NP edet
c.	'fingernail'	$\emptyset$ -amoe- <i>n</i>	NP amoen
d.	'lung'	$\emptyset$ -aro- $\emptyset$	NP aro
e.	'house'	$\emptyset$ -etʃi- <i>t</i>	NP etʃit

As mentioned in section 2.3.2, a possessed noun may occur with or without an explicit noun phrase. When an overt noun phrase occurs, the noun is not inflected for possessor, as shown in (83) and (84).

- (83) a. i-lu- $\emptyset$   
3-tongue-POSS  
'his/her/its tongue'
- b. wakat lu- $\emptyset$   
crocodile tongue-POSS  
'the crocodile's tongue'
- c. \*wakat i-lu- $\emptyset$
- (84) a. i-muŋu-ru  
3-blood-POSS  
'his/her/its blood'
- b. NP muŋu-ru  
NP blood-POSS  
'NP's blood'
- c. \*NP i-muŋu-ru

However, two kinship terms are exceptions to this pattern, as shown in (85) and (86). In these cases the possessor prefix occurs on these possessed nouns even when the noun

phrase is overtly present. Other kinship terms follow the regular pattern, as shown in (87) and (88).

- (85) a. i-muu-∅  
3-father-POSS  
'his/her father'
- b. NP i-muu-∅  
NP 3-father-POSS  
'NP's father'
- c. \*NP muu-∅
- (86) a. i-mu-n  
3-son.ME-POSS  
'his son'
- b. NP i-mu-n  
NP 3-son-POSS  
'NP's son'
- c. \*NP mu-n
- (87) a. i-bi-n  
3-brother.FE-POSS  
'her brother'
- b. NP bi-n  
NP brother.FE-POSS  
'NP's brother'
- c. \*NP i-bi-n
- (88) a. i-ru-∅  
3-older.brother.ME-POSS  
'his older brother'
- b. NP ru-∅  
NP older.brother.ME-POSS  
'NP's older brother'
- c. \*NP i-ru-∅

Since vowel-initial stems have null for third person possessor prefix, the form of the possessed noun is the same for these when they are preceded by a noun phrase, as shown in (89).

(89)		Third person possessor	Overt NP possessor present
a.	‘house’	∅-etʃi-t	NP etʃi-t
b.	‘shirt’	∅-aboi-∅	NP aboi-∅

Sometimes there is a small phonological difference between the inflected stem and the stem preceded by a noun phrase. One of these differences is the absence of the vowels *u* and *u* between the two initial consonants in the noun inflected for possessor. Examples with the vowel *u* are in (90), and examples with the vowel *u* are in (91). I assume that the vowels *u* and *u* of the forms preceded by the noun phrase are present in the underlying form since the quality of the vowel does not appear to be predictable.

(90)		NP possessor	Third person possessor	Absolute
a.	‘shin’	NP butʃi-n	i-ptʃi-n	puʃi-ŋo
b.	‘diarrhea’	NP butʃig-uru	i-ptʃig-uru	puʃik-∅
c.	‘flatulence’	NP bugo-n	i-pko-n <sup>47</sup>	puʃo-∅
d.	‘food’	NP mudabiri-∅	i-mdabiri-∅	mudabiri-ŋo
(91)		NP possessor	Third person possessor	Absolute
a.	‘arm’	NP mubua-tʃi	i-mbua-tʃi	mubua-tʃi-ŋo
b.	‘armlet’	NP mubua-∅	i-mbua-∅	mubua-ŋo
c.	‘body’	NP munu-∅	i-mnu-∅	munu-ŋo
d.	‘on back’	NP kudupo	i-ktupo	

Once a vowel is deleted in the stem, predictable changes in voicing take place, as illustrated in (90a-c). I. Souza (2010) proposes that a process of devoicing occurs. See section A.3 of the Appendix A. Further phonological discussion is beyond the scope of this thesis.

In two nouns, ‘partner’ and ‘bag’, the vowel *u* in the underlying form is not deleted; it is changed to *i* when the noun is inflected for possessor.<sup>48</sup> The vowel *u* changes to *i*,

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<sup>47</sup> Obstruents are always voiceless when they occur in a sequence. I do not formalize here how this comes about.

<sup>48</sup> This also happens with the nominalization of the word for ‘similar’; compare NP *bu-em* (NP similar-NMLZR) ‘s/he/it is alike NP’, and *ibiem* ‘s/he/it is alike her/him/it’.

regardless of the vowel in the possessor prefix, as shown in (92). The form preceded by the noun phrase is the underlying form.

(92)		NP possessor	Third person	First person	Absolute
	a. ‘partner’	NP buurinda-∅	i-birinda-∅	uu-birinda-∅	puurinda-ŋo
	b. ‘bag’	NP mue-n	i-mie-n	uu-mie-n	mu-e-∅

With the nouns for ‘field’ and ‘thing’, (93), there is an extra syllable *tu* that appears at the beginning of the form preceded by a noun phrase. Note also that the *k* in the noun for ‘field’ (93a) does not appear in the NP-possessed form. With the nouns for ‘egg’ and ‘hair/fur’ the extra syllable that appears is *bu*, (93c) and with the noun for ‘foot’ it is *gu*, as shown in (93d).

(93)		Third person possessor	NP possessor	Absolute
	a. ‘field’	i-kpi-∅	NP tubi-∅	tukto
	b. ‘things’	i-dakono	NP tudakono	
	c. ‘egg’	i-mu-∅	NP bumu-∅	pumu-ŋo
	d. ‘hair/fur’	i-pu-t	NP bugu-t	
	e. ‘foot’	i-pu-n	NP bugu-n	pugu-ŋo

### 3.1.4 First person inclusive possessor

The first person inclusive prefix is *ug-*. The allomorphs are explained phonologically by rules of devoicing, nasalization, and epenthesis. These allomorphs are shown in (94)-(97). The proposed basic form appears before vowels, as shown in (94).

(94)		First person (inclusive) possessor	First person (singular) possessor
	a. ‘shirt’	ug-aboi-∅	i-aboi-∅
	b. ‘arm’	ug-aborim-uru	i-aborim-uru
	c. ‘hand’	ug-emia-ruu	i-emia-ruu
	d. ‘nose’	ug-eŋna-n	i-eŋna-n

The allomorph *uk-* in (95) is accounted for by Regressive Devoicing rule (Appendix A).

(95)		First person (inclusive) possessor	First person (singular) possessor
a.	‘ear’	uk-pana-n	u-bana-n
b.	‘thigh’	uk-pet-∅	u-bet-∅
c.	‘whistle’	uk-tagin-u	u-dagin-u
d.	‘paper, money’	uk-tapeda-n	u-tapeda-n
e.	‘shotgun’	uk-top-tʃi	u-dop-tʃi

The allomorph *uŋ-* in (96) is accounted for by Nasalization of Stops rule (Appendix

A).

(96)		First person (inclusive) possessor	First person (singular) possessor
a.	‘breast’	uŋ-maŋa-ru	u-maŋa-ru
b.	‘oar’	uŋ-marapa-n	u-marapa-n
c.	‘stomach’	uŋ-mi-n	u-mi-n
d.	‘canoe’	uŋ-mobu-n	u-mobu-n
e.	‘joy’	uŋ-moe-n	u-moe-n
f.	‘cough’	uŋ-mul-u	u-mul-u
g.	‘head’	uŋ-mum-tʃi	u-mum-tʃi
h.	‘blood’	uŋ-muŋu-ru	u-muŋu-ru

And finally, the allomorph *ugu-*, shown in (97), is accounted for by a rule of epenthesis (see Vowel Epenthesis in Appendix A.)

(97)		First person (inclusive) possessor	First person (singular) possessor
a.	‘fat’	ugu-ga-t	u-ga-t
b.	‘firewood’	ugu-kambo-ru	u-kambo-ru
c.	‘field’	ugu-kpi-∅	u-kpi
d.	‘mouth’	ugu-la-tʃi	u-la-tʃi
e.	‘tongue’	ugu-lu-∅	u-lu-∅
f.	‘food’	ugu-mdabiri-∅	u-mdabiri-∅
g.	‘bag’	ugu-mie-n	u-mie-n
h.	‘playing’	ugu-nmo-n	u-nmo-n
i.	‘foot’	ugu-pu-n	u-pu-n
j.	‘shin’	ugu-ptʃi-n	u-ptʃi-n
k.	‘older brother’	ugu-ru-∅	u-ru-∅
l.	‘urine’	ugu-tʃig-uru	u-tʃig-uru

As mentioned earlier, the first person inclusive refers to the speaker and only one addressee. If more than one addressee is included, the plural suffix needs to be added, as shown in (98).

- (98) a. ugu-la-tʃi  
 1INCL-mouth-POSS  
 ‘our (incl.) mouths’
- b. ugu-la-tʃi-ŋmo  
 1INCL-mouth-POSS-PL  
 ‘our (incl., plural) mouths’

### 3.1.5 Third person reflexive possessor

The prefix for third person reflexive indicates that the possessor of the possessed noun is co-referential with the subject of the clause in which the noun occurs, as shown in (99)-(100).

- (99) t<sub>i</sub>-aborim-uru                  ueŋ-urru    pide<sub>i</sub>    tema                  dora-tʃi-ptako  
 3REFL-forearm-POSS    put-REC    Pide    Tema                  shoulder-POSS-LOC  
 ‘Pide<sub>i</sub> put her<sub>i,\*j</sub> forearm on Tema’s shoulder.’
- (100) to<sub>i</sub>tʃi-t                          poda-ktʃi                  Ø<sub>i</sub>-omom-ulu  
 3REFL.house-POSS    inside-ILL                  3-enter-REC  
 ‘He<sub>i</sub> entered into his<sub>i,\*j</sub> house.’ (Overheard)

The third person reflexive, *tu-*, loses its vowel before the vowel *a*, as shown in (101).

- |       |              |                        |                             |
|-------|--------------|------------------------|-----------------------------|
| (101) |              | Third person reflexive | Third person (nonreflexive) |
|       | a. ‘shirt’   | t-aboi-Ø               | Ø-aboi-Ø                    |
|       | b. ‘forearm’ | t-aborim-uru           | Ø-aborim-uru                |
|       | c. ‘lung’    | t-aro-Ø                | Ø-aro-Ø                     |

The vowel of this prefix usually seems to fuse with the *e* of a root to become *o*, as shown in (102). In the nouns there is one known exception where we see the *o* but also the *e* of the root, as shown in (103).<sup>49</sup>

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<sup>49</sup> The initial *e* remains on several verbs when the participle is made, for example: *to-ep-te* (?-arrive-PART) ‘arrived’, *to-ige-t* (?-stop-PART) ‘stopped’, *to-ebage-t* (?-wake.up-PART) ‘waked up’, *to-ikpu-ne* (?-heal-PART) ‘healed’, *to-ip-te* (?-bathe-PART) ‘bathed’. There is no apparent phonological reason to delete the initial vowel *e* or keep it. For example, the noun for ‘his/her/its medicine’ is *Ø-eptu-Ø* (3-medicine-



(102)		Third person reflexive	Third person (nonreflexive)
	a. ‘house’	totfĩ-t	∅-etfĩ-t
	b. ‘name’	tode-t	∅-ede-t
	c. ‘hammock’	todue-t	∅-edue-t
(103)	‘rack’	toepkal-u <sup>50</sup>	∅-epkal-u

The allomorph *tu-* occurs before consonants, as shown in (104).

(104)		Third person reflexive	Third person (nonreflexive)
	a. ‘wife’	tuu-buu-t	i-buu-t
	b. ‘older brother (ME)’	tuu-ru-∅	i-ru-∅
	c. ‘mouth’	tuu-la-tfĩ	i-la-tfĩ

### 3.1.6 Roots that begin with the vowels *i*, *o* and *u*

While most vowel-initial roots begin with *e* or *a*, twelve nouns begin with other vowels (one with *o*, two with *u*, and nine with *i*), as shown in (105). The possessor prefixes used with the latter are the same as those used with consonant-initial roots, see Table 2.

(105)		First person	Second person	Third person	First inclusive
	<i>i</i> -initial roots				
	a. ‘molar’	uu-ago-n	o-ago-n	iago-n	ug-iago-n
	b. ‘armpit’	uu-aptagua-n	o-aptagua-n	iaptagua-n	ug-iaptagua-n
	c. ‘smile’	uu-eb-uru	o-eb-uru	ieb-uru	ug-ieb-uru
	d. ‘gums’	uu-emi-n	o-emi-n	iemi-n	ug-iemi-n
	e. ‘tooth’	uu-e-n	o-e-n	ie-n	ug-ie-n
	f. ‘rack’	uu-epkal-u	o-epkal-u	iepkal-u	ug-iepkal-u
	g. ‘front tooth’	uu-eri-n	o-eri-n	ieri-n	ug-ieri-n
	h. ‘bone’	uu-itpuu-n	o-itpuu-n	itpuu-n <sup>51</sup>	ugu-itpuu-n

POSS) and its reflexive counterpart is *toptuu-∅* (3REFL-medicine-POSS), the verb for ‘s/he/it arrived’ is *t-eb-uluu* (3-arrive-REC) and its participle form is *to-ep-te* (?-arrive-PART) ‘arrived’.

<sup>50</sup> In the denominal predicate adjective the noun for ‘rack’ can have two possible forms: *to-epkal-e* (T-rack-ADJR), and *tuu-epkal-e* (T-rack-ADJR) ‘s/he has a rack’. The last form is among the roots that have the vowel *i* in the underlying form, as shown in section 3.1.6.

<sup>51</sup> This form might be *i-itpuu-n*, but even this is not clear from the recording.

i.	‘husband’	u-o-∅	o-io-∅	io-∅	ug-io-∅
<i>o</i> -initial root					
j.	‘owner’	u-odo-∅	o-odo-∅	i-odo-∅	ug-odo-∅
<i>u</i> -initial roots					
k.	‘food’	u-u-n	o-u-n	i-u-n	ug-uru
l.	‘above’	u-umba-p	o-umba-p	i-umba-p	
				NP’s ...	Reflexive
<i>i</i> -initial roots					
a.	‘molar’				
b.	‘armpit’			aptagua-n	tu-aptagua-n
c.	‘smile’				tu-eb-uru
d.	‘gums’				tu-emi-n
e.	‘tooth’			ie-n	tu-e-n
f.	‘rack’				tu-epkal-u
g.	‘front tooth’				
h.	‘bone’			itpu-n	tu-itpu-n
i.	‘husband’			io-∅	tu-o-∅
<i>o</i> -initial root					
j.	‘owner’			odo-∅	tu-odo-∅
<i>u</i> -initial roots					
k.	‘food’			u-n	
l.	‘above’			umba-p	

The root-initial vowel *i* usually appears when the noun is inflected for the first person inclusive and third person. There are two exceptions. The noun for ‘husband’ has the *i* also when inflected for second person. And the noun for ‘bone’ has the *i* in all of its forms.

### 3.1.7 *The first person exclusive pronoun*

The first person exclusive morpheme *tʃimna* is a free pronoun that functions like a third person singular nominal with respect to the syntax and morphology when it is a possessor, as shown in (106). Plural marking is not possible, as illustrated in the beginning of section 3.1.

- (106) a. *tʃimna*      *emia-ruu*  
 1EXCL      hand-POSS  
 ‘our (excl.) hands’
- b. *tʃimna*      *butʃi-n*  
 1EXCL      shin-POSS  
 ‘our (excl.) shins’
- c. *tʃimna*      *eŋ-uru*  
 1EXCL      eye-POSS  
 ‘our (excl.) eyes!’

Recall that a possessed noun almost always has two different forms when the possessor is third person. It has one form when the possessor is an overt NP and immediately precedes the possessed noun, and it has another form when the possessor is not an overt NP. Furthermore, a few nouns have unusual changes between these two stems. See the data in (107).

- |       |           |                     |                    |
|-------|-----------|---------------------|--------------------|
| (107) |           | ‘NP’s ...’          | ‘his/her/its ...’  |
| a.    | ‘partner’ | NP <i>burinda-∅</i> | <i>i-birinda-∅</i> |
| b.    | ‘tongue’  | NP <i>lu-∅</i>      | <i>i-lu-∅</i>      |
| c.    | ‘head’    | NP <i>mum-tʃi</i>   | <i>i-mum-tʃi</i>   |
| d.    | ‘shin’    | NP <i>butʃi-n</i>   | <i>i-ptʃi-n</i>    |
| e.    | ‘foot’    | NP <i>bugu-n</i>    | <i>i-pu-n</i>      |

Two irregular nouns that are identical in both contexts

- |    |          |                   |                |
|----|----------|-------------------|----------------|
| f. | ‘father’ | NP <i>i-muu-∅</i> | <i>i-muu-∅</i> |
| g. | ‘son’    | NP <i>i-mu-n</i>  | <i>i-mu-n</i>  |

The pronoun *tʃimna* acts like a simple NP with respect to this pattern, and determines the possessed noun form as an NP possessor does, as shown in (108).

- |       |           |                         |
|-------|-----------|-------------------------|
| (108) |           | ‘our (excl.) ...’       |
| a.    | ‘partner’ | <i>tʃimna burinda-∅</i> |
| b.    | ‘tongue’  | <i>tʃimna lu-∅</i>      |
| c.    | ‘head’    | <i>tʃimna mum-tʃi</i>   |
| d.    | ‘father’  | <i>tʃimna i-muu-∅</i>   |
| e.    | ‘son’     | <i>tʃimna i-mu-n</i>    |
| f.    | ‘shin’    | <i>tʃimna butʃi-n</i>   |
| g.    | ‘foot’    | <i>tʃimna bugu-n</i>    |

Although *tʃimna* is not a prefix, it has a fixed position before the noun or the verb.

The difference between *tʃimna* and a prefix is that *tʃimna* can occur alone as an answer whereas a prefix cannot, as illustrated in (109).

- (109) a.   nok            n-ep-∅  
           what.AN    3-arrive-REC  
           ‘Who arrived?’
- b.   tʃimna  
           1EXCL  
           ‘we (excl.) did’
- c.   \*ʉ  
           1SG  
           (‘I did.’)

### 3.2 Absolute form

Nearly all inherently possessed noun roots can be inflected in a way to indicate that no possessor is relevant, as shown in (110).<sup>52</sup> I refer to this form as the absolute form.<sup>53</sup>

The possessed form is also presented for comparison.

(110)	Absolute	‘his/her/its ...’
a. ‘shirt’	oboi-ŋo	∅-aboi-∅
b. ‘fingernail’	omoe-ŋo	∅-amoe-n
c. ‘house’	otʃi-ŋo	∅-etʃi-t
d. ‘hand’	omiat-∅	∅-emia-ruu
e. ‘pan’	oringo-∅	∅-eringo-n
f. ‘bone’	∅-itp-o	i-itpu-n
h. ‘foot’	∅-pugu-ŋo	i-pu-n
i. ‘daughter-in-law’	∅-pae-ŋo	i-bae-∅
j. ‘ear’	∅-pana-ŋo	i-bana-n
j. ‘vagina’	∅-tutu-ŋo	i-tutu-n
k. ‘whistle’	∅-taginu-ŋo	i-dagin-u
l. ‘firewood’	∅-kamboru-ŋo	i-kambo-ruu
m. ‘fat’	∅-ka-ŋo	i-ga-t

<sup>52</sup> Only the possessor is obligatorily not expressed. The majority of the nouns also do not have the possessive suffix expressed on the absolute form but some nouns, for a reason that I do not know, keep the possessive suffix, as shown in section 3.2.1.

<sup>53</sup> These affixes are called “depossession” in Derbyshire’s (1985: 203) description of Hixkaryana, a related language.

n.	‘food’	∅-mudabiri-ŋo	i-mdabiri-∅
o.	‘word’	∅-worondu-ŋo	a-worond-u
p.	‘beverage’	∅-woguruu-ŋo	a-wog-uruu

The absolute form is characterized by two affixes: a prefix and a suffix. Some nouns are inflected with both affixes. In some nouns only the prefix is used, and in some only the suffix is used. More details about these affixes are given in section 3.2.1. The possessed form is also presented for comparison.

A few nouns have an unpossessed form that is apparently simple; this form is analogous to the Absolute form but is different in that it has no morphology.

(111)		Unpossessed	‘his/her/its ...’	
	f.	‘blood’	muŋu	i-muŋu-ru
	b.	‘arrow’	purom	i-buu-ruu
	e.	‘urine’	tʃigu	i-tʃigu-ru
	c.	‘field’	tukto	i-kpi-∅
	d.	‘feces’	wat	i-we-t

The noun in the absolute form sometimes has a more generic meaning than the possessed noun, as shown in (112).

(112) a.	i-aboi-∅	∅-eguruge-k
	1SG-shirt-POSS	3-wash-IMP
	‘Wash my shirt!’	
b.	oboi-ŋo	∅-eguruge-k
	ABST.shirt-ABST	3-wash-IMP
	‘Wash the clothes!’	

A noun in its absolute form cannot be the head of a genitive construction. Only inflected nouns can occupy this position, as shown in (113c) and (114c).

(113) a.	∅-etʃi-t
	3-house-POSS
	‘his/her house’
b.	otʃi-ŋo
	ABST.house-ABST
	‘house’

- c. NP etʃi-t  
 NP house-POSS  
 ‘NP’s house’
- d. \*NP otʃiŋo  
 (‘NP’s house’)
- (114) a. i-la-tʃi  
 3-mouth-POSS  
 ‘his/her/its mouth’
- b. la-tʃi-ŋo  
 mouth-POSS-ABST  
 ‘mouth’
- c. NP la-tʃi  
 NP mouth-POSS  
 ‘NP’s mouth’
- d. \*NP latʃiŋo  
 (‘NP’s mouth’)

### 3.2.1 Morphology of the absolute form

As shown by the examples in (110) above, absolute morphology is indicated by a variety of combinations of prefixes and suffixes. The great majority of the absolute nouns end in the suffix *-ŋo*; this is the most important, consistent indicator of the absolute form. Consonant-initial stems have no overt prefix; I posit a null prefix for these because of what happens with vowel-initial stems. In the typical vowel-initial stems, the vowels *a* and *e* are replaced by *o*. It is unclear what the underlying form of this prefix might be. It is unlikely to be *o-* because the second person possessor is *o-* and that prefix interacts very differently with the stem, as shown in section 3.1.2 above.

When a consonant-initial root is inflected in the absolute form, the initial consonant may devoice by the expected rules (see Progressive Devoicing rule in Appendix A), as shown in (115) and (116).

- (115) a. *ur-dagin-u*  
1SG-whistle-POSS  
'my whistle'
- b. *taginu-ŋo*  
whistle-ABST  
'whistle'
- (116) a. *ur-ptʃi-n*  
1SG-shin-POSS  
'my shin'
- b. NP *butʃi-n*  
NP *shin-POSS*  
'NP's shin'
- c. *putʃi-ŋo*  
shin-ABST  
'shin'

All inherently possessed nouns have a suffix which marks the possessive, as shown in section 3.3 below. Though the reason is unknown at this point, some nouns keep the possessive suffixes *-uru*, *-uruu* or *-tʃi* in the absolute form; compare (117) with (118).

(117)	Absolute	'his/her/its ...'
a. 'forearm'	<i>oborim-uru-ŋo</i>	∅-aborim-uru <sup>54</sup>
b. 'hip'	<i>okpum-uruu-ŋot</i>	∅-akpum-uruu
c. 'music'	<i>orem-uruu-ŋo</i>	∅-erem-uruu
d. 'eye'	<i>oŋ-uru-ŋo</i>	∅-eŋ-uru
e. 'mouth'	<i>la-tʃi-ŋo</i>	<i>i-la-tʃi</i>
f. 'head'	<i>mum-tʃi-ŋo</i>	<i>i-mum-tʃi</i>
g. 'buttock'	<i>waka-tʃi-ŋo</i>	<i>i-waka-tʃi</i>

---

<sup>54</sup> The possessive suffix on these nouns occurs in the absolute form. The possessive suffix does not occur in some constructions such as noun incorporation, compound nouns and modifying suffixes. The noun ∅-aborim-uru (3-arm-POSS) 'his/her/its forearm' does not have an absolute form without the suffix *-uru* as some nouns do, for example, the noun *i-ptʃig-uru* (3-diarrhea-POSS) 'his/her/its diarrhea' has two absolute forms: *putʃik* and *putʃig-uru-ŋo* (diarrhea-POSS-ABST). When the noun *aborimuru* is incorporated it does not have the suffix *-uru*: *t-aborim-got-te* (T-arm-cut-PART) 'his/her/its forearm is cut'. The same happens to ∅-eŋ-uru (3-eye-POSS) 'his/her/its eye'. In a compound noun ∅-eŋ-bi-pu-t (3-eye-skin-hair-POSS) 'his/her eyebrow' the suffix *-uru* does not occur.

(118)		Absolute	‘his/her/its ...’
	a.	‘fingernail’ omoe-ŋo	∅-amoe-n
	b.	‘heart’ orebu-ŋo	∅-erebu-n
	c.	‘pan’ oriŋgo-∅	∅-eriŋgo-n
	d.	‘name’ ode-ŋo	∅-ede-t
	e.	‘house’ otʃi-ŋo	∅-etʃi-t
	f.	‘helper’ ono-ŋot	∅-ano-∅
	g.	‘shirt’ oboi-ŋo	∅-aboi-∅

Seven noun roots have two absolute forms. Both are used and there does not seem to be any difference in meaning. For both forms, vowel-initial roots have the vowel change at the beginning, as explained above, and consonant-initial roots take the null prefix, as expected. The two forms differ in the suffixes; one form has no suffix at all and the other has the Absolute suffix as well as the Possessive suffix (in most of them).

(119)		Absolute	‘his/her/its ...’	
	a.	omep	∅-emeb-uru	‘walking stick’
	b.	omeb-uru-ŋo		
	c.	oŋnaptʃik	∅-eŋnaptʃig-uru	‘sneeze’
	d.	oŋnaptʃig-uru-ŋo		
	e.	orok	∅-arog-urru	‘headdress’
	f.	orog-urru-ŋot		
	g.	omiat	∅-emia-ruu	‘hand’
	h.	omia-ruu-ŋo		
	i.	∅-kogu	i-gogu-ru	‘cry’
	j.	∅-kogu-ru-ŋo		
	k.	∅-komtʃi	i-gomtʃi-n	‘fever’
	l.	∅-komtʃi-ŋo		
	m.	∅-pae-ŋo	i-bae-∅	‘daughter-in-law’
	n.	∅-paeru-ŋot		



### 3.3 Possessive suffixes

All inherently possessed nouns have a possessive suffix when inflected for possession. The allomorphy displayed by the suffixes suggests that there are six formatives involved: *-n*, *-∅*, *-t*, *-tʃi*, *-ru* and *-ru*.<sup>55</sup> Their distribution is not predictable and so six arbitrary classes of nouns must be posited.

The formatives *-n*, *-∅* and *-t* all occur after vowels, as shown in (120), (121) and

(122).

(120) a.	√enba	√enba-n	‘food (fruit)’
b.	√ekta	√ekta-n	‘branch’
c.	√ie	√ie-n	‘tooth’
d.	√eriŋgo	√eriŋgo-n	‘pan’
e.	√mu	√mu-n	‘son’
(121) a.	√aboi	√aboi-∅	‘shirt’
b.	√aro	√aro-∅	‘lung’
c.	√epi	√epi-∅	‘skin, shell’
d.	√lu	√lu-∅	‘tongue’
e.	√ru	√ru-∅	‘older brother (ME)’
(122) a.	√au	√au-t <sup>56</sup>	‘rib’
b.	√bu	√bu-t	‘wife’
c.	√ede	√ede-t	‘name’
d.	√etʃi	√etʃi-t	‘house’
e.	√ega	√ega-t	‘fat’

The allomorph *-tʃi* is a very uncommon formative; it occurs only with the roots shown in (123).

---

<sup>55</sup> The formative *-n* is the most used. In a corpus of 295 inherently possessed nouns *-n* occurs 103 (35%), *-∅* occurs with 51 (17%), *-ru* occurs with 51, *-ru* with 49; *-t* with 33 (11%), and *tʃi* with 8 (3%).

<sup>56</sup> The formative *-t* acts in two different ways. With some inflections it is replaced and with some it is not. For example, *etʃit* ‘his/her house’ when in the absolute form *otʃi-ŋo* (ABST.house-ABST) ‘house’, *t* is not present; when pluralized *∅-etʃi-t-kom* (3-house-POSS-PL) ‘their house’, *t* is present; *i-bu-t* ‘his wife’ can be inflected with two plural suffixes, in one the *t* remains and in the other the *t* does not: *i-bu-t-kom* (3-wife-POSS-PL) ‘their wife’ and *i-bu-am* (3-wife-PL) ‘his wives’.

- (123) a.  $\sqrt{\text{bia}}$                      $\sqrt{\text{bia-tfi}}$                     ‘face’  
 b.  $\sqrt{\text{buuta}}$                      $\sqrt{\text{buuta-tfi}}$                     ‘heel’  
 c.  $\sqrt{\text{dop}}$                      $\sqrt{\text{dop-tfi}}$                     ‘shotgun’  
 d.  $\sqrt{\text{dora}}$                      $\sqrt{\text{dora-tfi}}$                     ‘shoulder’  
 e.  $\sqrt{\text{la}}$                      $\sqrt{\text{la-tfi}}$                     ‘mouth’  
 f.  $\sqrt{\text{mbua}}$                      $\sqrt{\text{mbua-tfi}}$                     ‘arm’  
 g.  $\sqrt{\text{mum}}$                      $\sqrt{\text{mum-tfi}}$                     ‘head’  
 h.  $\sqrt{\text{waka}}$                      $\sqrt{\text{waka-tfi}}$                     ‘buttock’

The formatives *-ru* and *-ru* begin with *r* and end with a back vowel, but they seem to be unrelated forms since the vowel quality is not predicatable. Both occur with vowel-final roots as well as consonant-final roots, and both have allomorphs with an epenthetic vowel identical to the vowel of the suffix, and both have allomorphs in which the *r* has been deleted. A root-final coronal obstruent deletes before a *r*-initial suffix.

For the sake of comparison, these two formatives are presented in parallel fashion below.

- |       |   |  |
|-------|---|--|
| (124) | Possession with <i>-ru</i><br>Vowel-final roots | Possession with <i>-ru</i>                   |
| a.    | $\sqrt{\text{muŋu-ru}}$ ‘blood’ <sup>57</sup>   | k. $\sqrt{\text{ba-ru}}$ ‘older sister (FE)’ |
| b.    | $\sqrt{\text{wokpa-ru}}$ ‘burp’                 |  |
|       | Coronal sonorant-final roots                    |  |
| c.    | $\sqrt{\text{wel-u}}$ ‘flashlight’              | l. $\sqrt{\text{wel-u}}$ ‘necklace’          |
| d.    | $\sqrt{\text{mul-u}}$ ‘cough’ <sup>58</sup>     | m. $\sqrt{\text{ejnaptal-u}}$ ‘nosedress’    |
| e.    | $\sqrt{\text{dagin-u}}$ ‘whistle’               |  |
|       | Consonant cluster-final roots                   |  |
| f.    | $\sqrt{\text{aworond-u}}$ ‘word’                |  |

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<sup>57</sup> The root for ‘blood’ is  $\sqrt{\text{muŋu}}$ . This form is used as an absolute form, as shown in section 2.2.

<sup>58</sup> In the nouns for ‘cough’ and ‘word, voice’, the initial *r* of the possessive suffix *-ru* is deleted after a coronal sonorant, see Appendix A.

Coronal obstruent-final roots

n.	√emia-ruu	‘hand’
	(root is √emiat)	
o.	√bo-ruu	‘lip’
	(root is √bot)	
p.	√kambo-ruu	‘firewood’
	(root is √kambot)	

Other consonant-final roots

g.	√aborim-uru	‘forearm’	q.	√akpum-uruu	‘hip’
h.	√eb-uru	‘handle’	r.	√erem-uruu	‘song’
i.	√eŋ-uru	‘eye’	s.	√bereb-uruu	‘thing used to climb trees’
j.	√lagag-uru	‘saliva’	t.	√arog-uruu	‘headdress’

Evidence for the root-final coronal consonant in nouns like ‘hand’ and ‘lip’ (see (124n-p)) is found in other forms in which these roots occur, as shown in (125)-(127).

(125) a. omiat-Ø  
ABST.hand-ABST  
‘hand’

b. tomiat-ke  
T.hand-ADJR  
‘having hand’

(126) i-bot-pu-t  
3-lip-hair-POSS  
‘his mustache, beard’

(127) a. kambot  
‘firewood’

b. kambot-pe  
firewood-PRED  
‘it is firewood’

Since there does not seem to be any phonological basis for the distribution of the formatives, we might look for other factors. But there also seems to be no semantic basis for the distribution. The choice of suffixes does not depend on the semantic category of the noun.<sup>59</sup> For example, the words for ‘son’ and ‘daughter’ have the same suffix as some

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<sup>59</sup> The same happens to Apalai, a related language. “...the choice of suffix depends on each lexical item”, Koehn (1994:41).

words referring to personal items, some body part terms, some feeling terms, etc., as shown in (128).

- |          |              |                              |
|----------|--------------|------------------------------|
| (128) a. | i-bulepte-n  | ‘his/her knife’              |
| b.       | ∅-emiagiri-n | ‘his/her job’                |
| c.       | ∅-emtʃi-n    | ‘his daughter’               |
| d.       | ∅-eringo-n   | ‘his/her pan’                |
| e.       | ∅-ere-n      | ‘his/her/its liver’          |
| f.       | i-gomtʃi-n   | ‘his/her/its fever’          |
| g.       | i-guri-n     | ‘his/her/its anger’          |
| h.       | i-morepu-n   | ‘his/her/its chest’          |
| i.       | i-mu-n       | ‘his son’                    |
| j.       | i-ptʃi-n     | ‘his/her/its shin’           |
| k.       | i-wutpu-n    | ‘his/her/its shadow, spirit’ |

Of the six formatives, *-n* occurs with the greatest number of roots in native Ugoroŋmo vocabulary. It is also the formative used on words borrowed from Portuguese, as shown in (129). (The phonetic facts of the Portuguese facts are not discussed here; the only point of discussion is the use of the formative *-n*.)

- |       |            |                    |           |
|-------|------------|--------------------|-----------|
| (129) |            | Portuguese         | Ugoroŋmo  |
| a.    | ‘my cloth’ | <i>meu pano</i>    | u-bonu-n  |
| b.    | ‘my lot’   | <i>meu lote</i>    | u-lotʃi-n |
| c.    | ‘my glass’ | <i>meu copo</i>    | u-kopu-n  |
| d.    | ‘my land’  | <i>minha terra</i> | u-teha-n  |

## CHAPTER 4

### CASE MARKING

The Ugoroŋmo language does not have any marker inside the noun phrase, whether a postpositional element or case marking on any word in the noun phrase, to indicate a major grammatical function in the clause (such as subject, ergative, absolutive, or direct object).<sup>60</sup> The major grammatical relations are indicated by pronominal agreement marking on the verb and by word order, as shown in (130).<sup>61</sup> Only the basic word order is presented in these examples, however.

- (130)
- |    |  |                     |                     |           |                     |
|----|--|---------------------|---------------------|-----------|---------------------|
|    | O  | V                   | S                   | IO        |                     |
| a. | pawi                                     | udu-lu              | papa                | koko      | wuuna <sup>62</sup> |
|    | curassow.(sp.)                           | give-REC            | 1SG.father          | 1SG.uncle | to                  |
|    | 'My father gave a curassow to my uncle.' |                     |                     |           |                     |
|    |  |                     |                     |           |                     |
|    | O  | V                   |                     |           |                     |
| b. | oboi-ŋo                                  | i-∅-eguruge-lu      |                     |           |                     |
|    | ABST.shirt-ABST                          | 1ERG-3ABSV-wash-REC |                     |           |                     |
|    | 'I washed clothes.'                      |                     |                     |           |                     |
|    |  |                     |                     |           |                     |
|    | O  |                     | V                   |           |                     |
| c. | i-aboi-∅                                 | kure                | i-∅-eguruge-lu      |           |                     |
|    | 1ABS-shirt-POSS                          | good/beautiful      | 1ERG-3ABSV-wash-REC |           |                     |
|    | 'I washed my good/beautiful shirt.'      |                     |                     |           |                     |

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<sup>60</sup> In Kuikuro, a related language, the postposition *heke* is used to mark the ergative case (Santos 2007:31). No morpheme like this exists in Ugoroŋmo.

<sup>61</sup> The pronominal agreement system on the verb involves two main sets of morphemes: absolutive and ergative. The absolutive set marks the subject of an intransitive verb and the object of a transitive verb, while the subject of a transitive verb is marked by the ergative set.

<sup>62</sup> When the object is not overtly expressed, the prefix *t-* occurs on the verb  $\sqrt{udu}$  indicating the pronominal object: *t-udu-lu papa koko wuuna* (3O-give-REC 1SG.father 1SG.uncle to) 'my father gave it to my uncle.' This marker does not occur on most verbs.



#### 4.1 The inessive case suffix

The term inessive refers “to a type of inflection which expresses the meaning of location or position within a place” (Crystal, 2003:232). An example with a noun inflected for inessive case in Ugoroꝃmo is given in (132).

- (132) ogoro tʃimna kun-idaŋ tuktʉ-am  
 jaguar 1EXCL 3REM-hear field-INE  
 ‘We (excl.) heard the jaguar in the field.’ (Ogoro, line 2)

There are three inessive formatives: *-am*, *-tam* and *-p*. The formative *-p* is found only on two nouns (see (133l-m)); the formative *-tam* on perhaps only two, after consonants (133j-k); the formative *-am* is the regular one, after vowels. When the inessive suffix is added, small phonological changes may occur, some of which are regular and some of which are not.

(133)		Noun	Inessive case	
		without case		
a.	‘field’	tukto	tuktʉ-am <sup>65</sup>	‘in the field’
b.	‘basket’	porido	poridu-am	‘in the basket’
c.	‘bag’	muē	muu-am <sup>66</sup>	‘in the bag’
d.	‘mortar’	aŋna	aŋn-am	‘in the mortar’
e.	‘firewood’	kambot	kambu-am <sup>67</sup>	‘in the firewood’
f.	‘pan’ (Abst.)	oriŋgo-∅	oriŋgu-am	‘in the pan’
g.	‘path’ (Abst.)	onma-∅	onm-am	‘on the path’
h.	‘my hand’	i-emia-ruu	i-emi-am	‘in my hand’
i.	‘my back’	uu-mowa-n	uu-mow-am	‘on my back’
j.	‘my house’	i-etʃi-t <sup>68</sup>	tʃi-tam	‘in/at my house’

*abiana du-am* (peccary location-INE) ‘among the peccaries’. With the noun *tʃitʃi* ‘sun’ the small word required is *ŋu* ‘sunny.location’: *tʃitʃi ŋu-am* (sun sunny.location-INE) ‘in the sunlight’. Some locative words use the word *na* ‘location’: *kuronbo n-aktʃi ∅-udo-naŋurru* (outside location-ILL 3-go-Prog) ‘s/he/it is going towards the outside’, *iui womno n-aktʃi ∅-udo-luu* (wood underneath location-ILL 3-go-REC) ‘s/he/it went towards the underside of the wood.’

<sup>65</sup> All instances of *o* become *u* before *a* at morpheme boundaries. See Appendix A.

<sup>66</sup> A root-final vowel is deleted in many of these words. I have not studied the conditions under which this happens.

<sup>67</sup> In *kambot* there is a deletion of the final *t*, and the vowel *o* changes to *u* with all the suffix cases.

<sup>68</sup> The noun *ietʃit* ‘my house’ when inflected in the inessive, illative and elative cases has more

k.	‘his/her/its head’	i-mum-tʃi	i-mum-dam	‘on his/her head’
l.	‘hammock’ (Abst.)	oduat-∅	odua-p	‘in the hammock’
m.	‘its shore’	∅-etpa-n	∅-etpa-p	‘on its shore’

As illustrated in (133h-i and k) the possessive suffix is replaced by the inessive case, except the possessive suffix of the noun for ‘house’.

## 4.2 The illative case suffix

The term illative refers “to a type of inflection which expresses the meaning of ‘motion into’ or ‘direction towards’ a place” (Crystal, 2003: 226), as shown in (134).

(134)	tuktu-aktʃi	∅-uɔdo-lu	papa
	field-ILL	3-go-REC	1SG.father
	‘My father went towards the field.’		

As with the inessive suffix, when the illative suffix is added to a noun root small phonological changes may occur. With possessed nouns, the possessive suffix is replaced with the illative case.

(135)	Noun without case	Illative case	
a.	‘field’	tukto	tuktu-aktʃi ‘towards the field’
b.	‘basket’	porido	poridu-aktʃi ‘towards the basket’
c.	‘firewood’	kambot	kambu-aktʃi ‘towards the firewood’
d.	‘hammock’ (Abst.)	oduat-∅	odu-aktʃi ‘towards the hammock’
e.	‘path’ (Abst.)	onma-∅	onm-aktʃi ‘towards the path’
f.	‘my shoulder’	u-dora-tʃi	u-dor-aktʃi ‘towards my shoulder’
g.	‘its shore’	∅-etpa-n	∅-etp-aktʃi ‘towards its shore’
h.	‘my house’	i-etʃi-t	tʃi-taktʃi ‘towards my house’
i.	‘his/her/its head’	i-mum-tʃi	i-mum-daktʃi ‘towards his/her/its head’

Illative case is expressed by two formatives, *-taktʃi* and *-aktʃi*, the distribution of which is not predictable. The formative *-taktʃi* occurs with very few nouns; the initial

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complications. The initial stem vowel is deleted, and the possessor prefix does not appear; for example: *tʃi-t-tam* (1SG.house-POSS-INE) ‘in my house’ or ‘in our (incl.) house’, *tʃi-t-taktʃi* (1SG.house-POSS-ILL) ‘into my house’, *tʃi-t-tandubo* (1SG.house-POSS-ELA) ‘from my house’.



consonant voices in predictable situations. The formative *-aktfi* occurs with most nouns, some of which end with a consonant in their basic form; this consonant is deleted unexpectedly whenever a case suffix follows the noun.

### 4.3 The elative case suffix

The term elative refers “to a type of inflection which expresses the meaning of motion ‘away from (inside)’ a place” (Crystal, 2003:153), as shown in (136).

- (136) marak        t-eb-wulu        idu-andubo ...  
 cockroach 3-arrive-REC forest-ELA  
 ‘The cockroach arrived from the forest ...’ (Marak 2, line 1)

Parallel to the previous cases, inessive and illative, when the elative suffix is added to a noun root some phonological changes may occur, as shown (137).

(137)		Noun	Elative case	
		without		
		case		
a.	‘forest’	idua	idu-andubo	‘from the forest’
b.	‘field’	tukto	tuktu-andubo	‘from the field’
c.	‘hand’ (Abst.)	omiat-∅	omi-andubo	‘from the hand’
d.	‘its shore’	∅-etpa-n	etp-andubo	‘from the shore’
e.	‘my house’	i-etfi-t	tji-tandubo	‘from my house’

Elative case is expressed by two formatives, *-tandubo* and *-andubo*. The distribution of the first one is after consonant; and *-andubo*, primarily, after vowel.

### 4.4 The perlative case suffix

The suffix perlative suffix has the meaning ‘through’, ‘across’, ‘along’ or ‘throughout’, as shown in (138).<sup>69</sup>

- (138) a.    tuktu-ako        i-aba-naŋuruu  
           field-PERL    1-pass-PROG  
           ‘I was passing through the field’

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<sup>69</sup> There is another suffix *-e* which is similar to *-tako* but I have found its use only with locative words. For example: *otfi-ŋo bod-e pugurimam-be* (ABST.house-ABST inside-PERL dirty-PRED) ‘It is dirty throughout the house.’ Locative words are not part of the scope of this thesis.

- b. i-∅-oŋoŋ-ne-ba      i-amdagua-ako  
 1-3-bite-REM-EMPH    1SG-palm-PERL  
 ‘He (monkey) bit me throughout my palm (of hand)’
- c. mute      i-tutum-wulu      tʃi-tako  
 Mute      3-sleepwalk-REC      house-POSS-PERL  
 ‘Mute sleepwalked through the house.’

Examples with the small phonological changes that occur with this suffix are provided in (139).

(139)		Noun	-tako/-ako	
a.	‘field’	tukto	tuktu-ako	‘across the field’
b.	‘my back’	u-mowa-n	u-mow-ako	‘throughout my back’
c.	‘its shore, edge’	∅-etpa-n	∅-etp-ako	‘along its shore’
d.	‘my forehead’	u-beba-n	u-beb-ako	‘throughout my forehead’
e.	‘your shoulder’	o-dora-tʃi	o-dor-ako	‘throughout your shoulder’
f.	‘my house’	i-etʃi-t	tʃi-tako	‘throughout my house’

The perlocative case has two formatives, *-tako* and *-ako*. The formative *-tako* occurs after consonant, as in (139f); and *-ako* occurs after vowel, as in (139a-e).

#### 4.5 Comparative case suffix

The comparative suffix is used on the object of comparison when two items are being compared, as shown in (140). I have found the comparative suffix only with possessed nouns.<sup>70</sup>

- (140) a. o-buļepte-n      i-buļepte-k  
 2-knife-POSS      3-knife-COMP  
 ‘your knife is like his/her knife’
- b. ∅-amoe-n      i-amoe-k  
 3-fingernail-POSS    1SG-fingernail-COMP  
 ‘her/his fingernail is like mine’

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<sup>70</sup> The comparative suffix is not used on names. If one wants to say, for example, ‘Podat is taller than Mune’ a separate word is used: *podat mune umba-p* (Podat Mune tall-PRED) ‘Podat is taller than Mune’. If one wants to say ‘Podat is like Mune’ the word *banop* ‘alike’ is used: *podat mune banop* (Podat Mune alike) ‘Podat and Mune are alike.’

- c. mouko eŋ-uru Ø-emtʃi-n eŋ-uru-ŋ  
 Mouko eye-POSS 3-daughter-POSS eye-POSS-COMP  
 ‘Mouko’s eyes are like his daughter’s eyes.’

The comparative formatives are *-k*, and *-ŋ*. In chapter 3.3 the nouns were divided into six classes based on the possessive formative they take: *-n*, *-t*, *-ru*, *-Ø*, *-ru*, and *-tʃi*. The comparative formative *-k* is the most widely used, and occurs with all of the nouns in the *-n* and *-t* classes as well as some of those in the *-ru* class, as shown in (141). When a noun is inflected with the suffix *-k*, the possessive suffix is not present.

(141)		Noun	Comparative case	
a.	‘my knife’	u-bulepte-n	u-bulepte-k	‘like my knife’
b.	‘my ear’	u-bana-n	u-bana-k	‘like my ear’
c.	‘my tooth’	u-e-n	u-e-k	‘like my tooth’
d.	‘my fingernail’	i-amoe-n	i-amoe-k	‘like my fingernail’
e.	‘my tool’	u-wu-n	u-wu-k	‘like my tool’
f.	‘my hair’	u-retpu-t	u-retpu-k	‘like my hair’
g.	‘my house’	i-etʃi-t	i-etʃi-k	‘like my house’
h.	‘my hand’	i-emia-ru	i-emi-at-ke	‘like my hand’
i.	‘my breast’	u-maŋa-ru	u-maŋat-ke	‘like my breast’

The comparative formative *-k* has the allomorph *-ke* after consonants, as in (141h-i).

The comparative formative *-ŋ* occurs with the other nouns (a relatively small group), as shown in (142).<sup>71</sup> The possessive suffix remains on the nouns when they are inflected with the comparative formative *-ŋ*.

(142)		Noun	Comparative case	
a.	‘my lip’	u-bo-ru	u-bo-ru-ŋ	‘like my lips’
b.	‘my belligerence’	i-apoel-u	i-apoel-u-ŋ	‘like my belligerence’
c.	‘my eye’	i-eŋ-uru	i-eŋ-uru-ŋ	‘like my eye’
d.	‘my mouth’	u-la-tʃi	u-la-tʃi-ŋ	‘like my mouth’
e.	‘my head’	u-mum-tʃi	u-mum-tʃi-ŋ	‘like my head’

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<sup>71</sup> I did not find any noun which the possessive suffix is null with the comparative suffix. So it is not possible to say which comparative suffix would be used with those forms.

Another way to compare two things that are alike is using the reflexive prefix *ot-* (which is most commonly used on verbs) with the comparative suffix, as shown in (144).

- (143) a. *ot-pana-k*      *tʃimna*  
 REFL-ear-COMP 1EXCL  
 ‘Our (excl.) ears are alike.’
- b. *ot-pana-k*      *ugoro*  
 REFL-ear-COMP 1INCL  
 ‘Our (incl.) ears are alike.’

Some additional forms are given in (144).

(144)		‘his/her/its ...’	Refl-...-Comp	
a.	‘house’	∅-etʃi-t	od-etʃi-k	‘their (two) houses are alike’
b.	‘hand’	∅-emia-ruu	od-emi-at-ke	‘their (two) hands are alike’
c.	‘hair’	i-retpu-t	otʃ-iretpu-k <sup>72</sup>	‘they (two) have similar hair’
d.	‘tooth’	i-e-n	otʃ-ie-k	‘their teeth are alike’
e.	‘fingernail’	∅-amoe-n	od-amoe-k	‘their (two) fingernails are alike’

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<sup>72</sup> The reflexive has three allomorphs: *ot-*, *od-*, and *otʃ-*. The allomorph *ot-* occurs before a voiceless consonant, *otʃ-* occurs before the vowel *i*, and *od-* before the other vowels.

## CHAPTER 5

### PLURAL

In this chapter I discuss only the plural suffixes that occur on nouns. Three formatives indicate something about plurality: *-am*, *-kom*, and *-ηmo*. The latter two could be considered suppletive allomorphs of the same suffix because of their distribution. Therefore I refer to two suffixes in this chapter: the *-am* suffix and the *-kom* suffix. These morphemes have very specific uses and interpretations that are explained in this chapter. In section 5.1 I show the basic uses of the plural suffix *-kom*, and in section 5.2 I discuss the more complicated scenario of indicating plurality on possessed nouns, a topic that includes the plural suffix *-am*.

#### 5.1 Basic uses of the plural suffix *-kom*

Caribanists describing similar suffixes in languages of the same linguistic family use the term “collective” rather than “plural” because in some structures the meaning is more than simple plurality. For instance, the suffix *-kom* gives the idea of a group when used on names or kinship terms. Rather than referring to more than one person with the same name, *-kom* on a name refers to a group of people accompanying the person whose name is being used, or a group of the same age, classmates, coworkers, or people from the same house, etc., as shown in (145).<sup>73</sup>

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<sup>73</sup> No one in the village has the same name as another person there. Names are given according to something that happened during the mother’s pregnancy. A name only can be reused after the name’s ‘owner’ is dead, and even then after a generation or more has passed (I. Souza, In progress)

- (145) a. *podat-kom*  
 Podat-PL  
 ‘Podat and his group’  
 (\*more than one Podat)<sup>74</sup>
- b. *jeme-ηmo t-eb-wulu*  
 1SG.mother-PL 3-arrive-REC  
 ‘My mother and her group arrived.’  
 (\*more than one mother)
- c. *undo ok mune-ηmo?*  
 where AUX Mune-PL  
 ‘Where is Mune and his group?’
- d. *jeme-ηmo abu Ø-udo-lu.*<sup>75</sup>  
 1SG.mother-PL ACC+PL 3-go-REC  
 ‘S/he/it went with my mother and her group.’

This collective meaning is possible only when the plural suffix is attached to a name.

In the examples in (146) and (147), simple plurality is explicitly indicated. (The distribution of the allomorphs is described below.)

(146)	Unpossessed nouns	Unpossessed + plural	
a.	‘spoon’	<i>karatʃu</i>	<i>karatʃu-ηmo</i> ‘spoons’
b.	‘dog’	<i>wokori</i>	<i>wokori-ηmo</i> ‘dogs’
c.	‘woman’	<i>pumie</i>	<i>pumie-ηmo</i> ‘women’
d.	‘man’	<i>ugon</i>	<i>ugon-gom</i> ‘men’
e.	‘guan (sp.)’	<i>wogaraum</i>	<i>wogaraum-gom</i> ‘guans (sp.)’

(147)	Absolute	Abst form + Plural	
a.	‘friend, relative’	<i>obu-ηot</i>	<i>obu-ηot-kom</i> ‘friends, relatives’
b.	‘fetus’	<i>munot</i>	<i>munot-kom</i> ‘pregnantwomen’
c.	‘house’	<i>otʃi-ηo</i>	<i>otʃi-ηo-ηmo</i> ‘houses’
d.	‘article of clothing’	<i>oboi-ηo</i>	<i>oboi-ηo-ηmo</i> ‘clothes’
e.	‘bag’	<i>mue</i>	<i>mue-ηmo</i> ‘bags’

<sup>74</sup> In this thesis I have avoided using the names of living people. The names I use are fictitious but are similar phonologically to real names.

<sup>75</sup> Note that the postposition *abu* is in its plural form; the singular is *ak*. The postposition is in agreement with *jeme*, the kinship term with the plural suffix-*ηmo*.

The formative *-kom* occurs after consonants, while the formative *-ηmo* occurs after vowels, as in (146) and (147).<sup>76</sup>

## 5.2 The structure of a word inflected for plural

The situation is more complicated when the pluralized noun is a possessed noun. When used on inflected nouns, a plural suffix has three possible interpretations: 1) indicating a plural possessor (section 5.2.1); 2) indicating a plural possessed item (section 5.2.2); or 3) indicating that both the possessor and the possessed item are pluralized (section 5.2.3). As shown below, *-kom* (or its suppletive allomorph *-ηmo*) is used in the first situation and *-am* is used in the second. In the third situation, some nouns can have both suffixes *-kom* and *-am* indicating that the possessor as well as the possessed item are pluralized. And, some nouns have only one plural suffix yet have two interpretations – the possessor or the possessed item is pluralized – according to the context.

### 5.2.1 *The possessor is plural*

On the majority of possessed nouns, the plural suffix *-kom* (including its suppletive allomorph *-ηmo*) unambiguously indicates that the possessor of the possessed noun is plural. It does not directly indicate plurality of the possessed item, as shown in (148). This subsection deals only with examples where the possessed item is singular and the possessor is plural.

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<sup>76</sup> The suffix *-ηmo* is also used on verbs when they are inflected for recent past and continuous. These two suffixes *-ulu* and *-uru* end with a vowel, as in: *t-eb-ulu-ηmo* (3-arrive-REC-PL) ‘they arrived’, *Ø-eneη-uru-ηmo* (3-see-REC-PL) ‘they saw it/her/him’. The suffix *-kom* is used after the nominalizer *-tobot*: *t-ep-tobot-kom enem-bura uro* (3-arrive-NMLZR-PL see-NEG I) ‘I did not see their arrival’.

(148)	Singular	Plural
a.	∅-amuu-t 3-pet-POSS 'his/her pet'	∅-amuu-t-kom 3-pet-POSS-PL 'their pet' (*his/her pets)
b.	i-buu-t 3-wife-POSS 'his wife'	i-buu-t-kom <sup>77</sup> 3-wife-POSS-PL 'their wife' (*his wives)
c.	∅-emtʃi-n 3-daughter.ME-POSS 'his daughter'	∅-emtʃi-n-gom <sup>78</sup> 3-daughter.ME-POSS-PL 'their daughter' (*his daughters)
d.	i-mere-n 3-child.FE-POSS 'her child'	i-mere-n-gom <sup>79</sup> 3-child.FE-POSS-PL 'their child' (*her children)
e.	i-mano-∅ 3-younger.brother.ME-POSS 'his younger brother'	i-mano-ηmo 3-younger.brother.ME-PL 'their younger brother' (*his younger brothers)
f.	i-muu-∅ 3-father-POSS 'his/her/its father'	i-muu-ηmo 3-father-PL 'their father' (*his/her/its fathers)
g.	i-ru-∅ 3-older.brother-POSS 'his older brother'	i-ru-ηmo 3-older.brother-PL 'their older brother' (*his older brothers)
h.	∅-ebuu-∅ 3-friend/relative-POSS 'his friend/relative'	∅-ebuu-ηmo 3-friend/relative-PL 'their friend/relative' (*his friends/relatives)
i.	i-birinda-∅ 3-partner-POSS 'his/her/its partner'	i-birinda-ηmo 3-partner-PL 'their partner' (*his/her/its partners)

<sup>77</sup> The noun for 'wife' when inflected with the plural suffix gives the idea of a promiscuous woman.

<sup>78</sup> In the Ugoronmo culture they believe that a baby is formed after having sexual intercourse several times. So, if a woman had relations with more than one man, the child can be referred to as having more than one biological father.

<sup>79</sup> This term is used when a person does not know a child's name. So the person refers to the child as their (mother and grandmother's) child.



With a few nouns, including those for ‘house’ and ‘medicine’, the explicit marking of plurality of the possessor (with *-kom*) may be interpreted as implying the plurality of the possessed item as well as the possessor, as shown in (149). These plural forms are ambiguous.

- |         |   |   |
|---------|---|---|
| (149)a. | ug-etʃi-t<br>1INCL-house-PL<br>‘our (dual) house’ | ug-etʃit-kom<br>1INCL-house-PL<br>‘our (incl.) house(s)’  |
| b.      | ∅-etʃi-t<br>3-house-POSS<br>‘his/her house’       | ∅-etʃi-t-kom<br>3-house-POSS-PL<br>‘their house(s)’       |
| c.      | itʃi-t<br>2.house-POSS<br>‘your house’            | itʃi-t-kom<br>2.house-POSS-PL<br>‘your (plural) house(s)’ |
| d.      | iptu-∅<br>2.medicine-POSS<br>‘your medicine(s)’   | iptu-ηmo<br>2.medicine-PL<br>‘your (plural) medicine(s)’  |

With body part terms and the nouns for ‘word’, ‘bowl’ and ‘shirt’, the presence of the plural suffix *-kom* (or its suppletive allomorph *-ηmo*) indicates a plural possessor, as expected, but the possessed noun is also interpreted as plural, for pragmatic reasons in most of these cases, as shown in (150).

- |          |  |
|----------|--|
| (150) a. | o-pu-n-gom<br>2-foot-POSS-PL<br>‘your (plural) feet’<br>(*your (sg.) feet)       |
| b.       | o-e-n-gom<br>2-tooth-POSS-PL<br>‘your (plural) teeth’<br>(*your (sg.) teeth)     |
| c.       | o-worond-u-ηmo<br>2-word-POSS-PL<br>‘your (plural) words’<br>(*your (sg.) words) |

- d. o-wajo-n-gom  
2-bowl-POSS-PL  
'your (plural) bowls'  
(\*your (sg.) bowls)
- e. u-aboi-ŋmo  
2-shirt-PL  
'your (plural) shirts'  
(\*your (sg.) shirts)

These same nouns, when not occurring with a plural possessor can have singular or plural interpretations, as shown in (151) and (152).

- (151) a. u-worond-u  
1SG-word-POSS  
'my word(s)'
- b. o-worond-u  
2-word-POSS  
'your word(s)'
- c. a-worond-u  
3-word-POSS  
'his/her word(s)'
- d. NP worond-u  
NP word-POSS  
'NP's word(s)'
- (152) a. u-pu-n  
1SG-foot-POSS  
'my foot/feet'
- b. o-pu-n  
2-foot-POSS  
'your foot/feet'
- c. i-pu-n  
3-foot-POSS  
'his/her/its foot/feet'
- d. NP bugu-n  
NP foot-POSS  
'NP's foot/feet'

### 5.2.2 *The possessed item is pluralized*

When the possessed item is plural, the suffix *-am* typically occurs, as shown in (153) and (154). (Some complications are discussed in section 5.2.3.) This suffix does not occur on names nor on unpossessed nouns. When the suffix *-am* occurs, the possessive suffix does not occur.

- (153) a. i-buu-t  
 3-wife-POSS  
 ‘his wife’
- b. i-buu-am  
 3-wife-PL  
 ‘his wives’  
 (\*their wife, \*their wives)
- (154) a. Ø-amuu-t  
 3-pet-POSS  
 ‘his/her pet’
- b. Ø-amuu-am  
 3-pet-PL  
 ‘his/her pets’  
 (\*their pet, \*their pets)

With nouns that use the null or *-n* formatives of the possessive, a “linking” suffix is used between the noun root and plural suffix. The linking suffix is *-neŋg* except with the root  $\sqrt{\text{mano}}$ , for which it is *-bi*. See (155).

- |         |  |  |
|---------|--|--|
| (155)a. | i-mano-Ø<br>3-younger.brother.ME-POSS<br>‘his younger brother’ | i-mano-bi-am<br>3-y.brother.ME-LNKR-PL<br>‘his younger brothers’<br>(*their younger brother) |
| b.      | i-ru-Ø<br>3-older.brother.ME-POSS<br>‘his older brother’       | i-ru-neŋg-am<br>3-older.brother.ME-LNKR-PL<br>‘his older brothers’<br>(*their older brother) |
| c.      | Ø-edem-Ø<br>3-husband-POSS<br>‘her husband’                    | Ø-edem-neŋg-am<br>3-husband-LNKR-PL<br>‘her husbands’<br>(*their husbands)                   |

d.	i-bi-n 3-brother.FE-POSS 'her brother'	i-bi-neng-am 3-brother-LNKR-PL 'her brothers' (*their brothers)
e.	∅-emtʃi-n 3-daughter.ME-POSS 'his daughter'	∅-emtʃi-neng-am 3-daughter.ME-LNKR-PL 'his daughters' (*their daughter)
f.	i-mu-n 3-son.ME-POSS 'his son'	i-mu-neng-am 3-son.ME-LNKR-PL 'his sons' (*their sons)

While the suffix *-am* typically indicates plurality of the possessed item, the noun for 'friend/relative' is irregular.<sup>80</sup> See the data in (156).

		Plural possessor	Plural item
(156)a.	i-ebuu-∅ 1SG-friend/relative-POSS 'my friend/relative'	no	no
b.	i-ebuu-ηmo (*i-ebuu-am) 1SG-friend/relative-PL 'my friends/relatives'	no	yes
c.	ibuu-ηmo 2.friend/relative-PL 'your (plural) friend(s)/relative(s)'	yes	ambiguous
d.	∅-ebuu-ηmo 3-friend/relative-PL 'their friend/relative'	yes	no
e.	∅-ebuu-neng-am 3-friend/relative-LNKR-PL 'his/her friends/relatives' 'their friends/relatives'	ambiguous	yes

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<sup>80</sup> This also happens with the noun for 'child' *u-maraηmo-ηmo* (1SG-child.FE-PL) 'my children' but the paradigm for this noun is not available in the corpus. Only these two nouns in the corpus have the plural suffix *-ηmo* with the first person singular.

### 5.2.3 Pluralizing both the possessor and possessed item

While some nouns have plurality of the item implied when the possessor is plural, as shown in 5.2.1, in others it is possible and necessary to indicate plurality explicitly. In these cases the plural suffix *-am* precedes the plural suffix *-kom/-ŋmo*, as shown in Table 3.

Table 3 Plural suffixes marking the possessor and the possessed item

Singular	The possessor is pluralized	The possessed item is pluralized	Both are pluralized
Ø-amu-t 3-pet-POSS 'his pet'	Ø-amu-t-kom 3-pet-POSS-PL 'their pet'	Ø-amu-am 3-pet-PL 'his pets' *Ø-amu-neng-am	Ø-amu-am-gom 3-pet-PL-PL 'their pets'
i-buu-t 3-wife-POSS 'his wife'	i-buu-t-kom 3-wife-POSS-PL 'their wife'	i-buu-am 3-wife-PL 'his wives'	i-buu-am-gom 3-wife-PL-PL 'their wives'
o-buu-t 2-wife-POSS 'your wife'	o-buu-t-kom 2-wife-POSS-PL 'your (plural) wives'	o-buu-am 2-wife-PL 'your (sg.) wives'	o-buu-am-gom 2-wife-PL-PL 'your (plural) wives'
Ø-emtʃi-n 3-daughter-POSS 'his daughter'	Ø-emtʃi-n-gom 3-daughter-POSS-PL 'their daughter'	Ø-emtʃi-neng-am 3-daughter-LNKR-PL 'his daughters' *emtʃiam	Ø-emtʃi-neng-am-gom 3-daughter-LNKR-PL 'their daughters'
i-mano-Ø 3-younger.brother-POSS 'his younger brother'	i-mano-ŋmo 3-y.brother-PL 'their younger brother'	i-mano-bi-am 3-y.brother-LNKR-PL 'his younger brothers' *i-manu-am	i-mano-bi-am-gom 3-younger.brother-LNKR-PL 'their younger brothers'
i-mere-n 3-child-POSS 'her child'	i-mere-n-gom 3-child-POSS-PL 'their child'	i-mere-neng-am 3-child-LNKR-PL 'her children'	i-mere-neng-am-gom 3-child-LNKR-PL-PL 'their children'
i-muu-Ø 3.father-POSS 'his father'	i-muu-ŋmo 3-father-PL 'their father'	i-muu-neng-am 3-father-LNKR-PL 'his fathers'	i-muu-neng-am-gom 3-father-LNKR-PL-PL 'their fathers'
i-ru-Ø 3-older.brother-POSS 'his older brother'	i-ru-ŋmo 3-o.brother-PL 'their older brother'	i-ru-neng-am 3-o.brother-LNKR-PL 'his older brothers' *i-ru-am	i-ru-neng-am-gom 3-older.brother-LNKR-PL-PL 'their older brothers'

With the nouns for ‘husband’ and ‘mother’, the suffix *-kom* is used to pluralize the possessor and *-am* is used to pluralize both the possessor and possessed item, as shown in (157). Here the suffix *-am* does not give the possibility of pluralizing only the possessed item.

(157)a.	idem-∅ 2.husband-POSS ‘your husband’	idem-gom 2.husband-PL ‘your (plural) husband’	idem-neng-am 2.husband-LNKR-PL ‘your (plural) husbands’ (*your (sg.) husbands)
b.	i-o-∅ 3-husband-POSS ‘her husband’	i-o-ηmo 3-husband-PL ‘their husband’	i-o-neng-am 3-husband-LNKR-PL ‘their husbands’ (*her husbands)
c.	ukte-∅ 2.mother-POSS ‘your mother’	ukte-ηmo 2.mother-PL ‘your (plural) mother’	ukte-neng-am ‘your (plural) mothers’ (*your (sg.) mothers)
d.	ug-ukte-∅ 1INCL-mother-POSS ‘our mother’ (dual)	ug-ukte-ηmo 1INCL-mother-PL ‘our mother’	ug-ukte-neng-am 1INCL-mother-LNKR-PL ‘our mothers’

And with the nouns for ‘friend/relative’ and ‘partner’, the suffix *-ηmo* is used to pluralize the possessor and *-am* has two interpretations, as shown in (158).

(158) a.	∅-ebu-∅ 3-friend/relative-POSS ‘his/her friend, relative’	∅-ebu-ηmo 3-friend/relative-PL ‘their friend, relative’	∅-ebu-neng-am 3-friend/rel.-LNKR-PL ‘his/her friends, relatives’ ‘their friends, relatives’
b.	i-birinda-∅ 3-partner-POSS ‘his/her/its partner’	i-birinda-ηmo 3-partner-PL ‘their partner’	i-birinda-neng-am 3-partner-LNKR-PL ‘his/her/its partners’ ‘their partners’

#### 5.2.4 The suffix *-am* with the former suffix *-tp*

The suffix *-am* can occur after the suffix indicating ‘former’ which comes right after the noun root, as shown in (159).

- (159) a. Ø-emtʃi-tp-un  
3-daughter.ME-former-POSS  
'his former daughter'
- b. Ø-emtʃi-tp-u-am  
3-daughter-former-PL  
'his former daughters'

## CHAPTER 6

### COMPOUND NOUNS AND MODIFYING SUFFIXES

In this chapter I discuss compound nouns and modifying suffixes. Compound nouns contrast with simple nouns in the way that they are formed from two or three noun roots. Both compound and simple nouns have only one possessor prefix and one possessive suffix that occur in the margins.<sup>81</sup>

The modifying suffixes are used to express some qualities such as augmentative, diminutive, long, flat, etc.<sup>82</sup>

#### 6.1 Compound nouns

Crystal (2003:92) defines a compound as a “unit which is composed of elements that function independently in other circumstances”. In section 3.3 I showed that each possessed noun has only one possessor prefix and only one possessive suffix, and they come on the margins of the singular noun. In a compound noun, there is only one possessor prefix and one possessive suffix, forming a unit. The compound nouns I discuss here are composed from two or more inherently possessed nouns.

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<sup>81</sup> There are two more ways of forming a compound noun. It can be formed from a simple noun followed by the word for ‘similar’ plus a nominalizing suffix, for example: *uk-pulepte-bu-em-urrun* (1INCL-knife-similar-NMLZR-POSS) ‘our (incl.) razor blades’. Also it can be formed from an ideophone followed by a verb plus a nominalizing suffix, for example: *uŋ-bak-ke-ni-run-gom* (1INCL-noise-do/make-NMLZR-POSS-PL) ‘our (incl.) hoes’. Nominalization is outside the scope of this thesis.

<sup>82</sup> Some of these qualities as ‘big’ and ‘small’ have another way to be expressed. They can be expressed by words and not suffixes. However they are not discussed here.



As I will show in this chapter, the ordering of possessed and plural suffixes on nouns provides one formal criterion for determining the existence of compounds. When a possessed noun is inflected with a plural suffix, this suffix follows the possessive suffix. A simple example is given in (160).

- (160) a. i-pu-n  
 3-foot-POSS  
 ‘his/her/its foot’
- b. i-pu-n-gom  
 3-foot-POSS-PL  
 ‘their feet’

A compound is different from a sequence of two nouns in a genitive construction. This is an important point since some of the compounds discussed in this chapter may appear at first glance to be simply a sequence of two nouns in a genitive construction. In the genitive construction, a noun phrase is followed by a possessed noun, as shown in (161).

- (161) a. wokori bugu-n  
 dog foot-POSS  
 ‘dog’s foot’
- b. mune bugu-n  
 Mune foot-POSS  
 ‘Mune’s foot’
- c. ugu-tʃigu-ru-ŋmo etʃi-t<sup>83</sup>  
 1INCL-urine-POSS-PL container-POSS  
 ‘our (incl.) bladders’
- d. ug-ere-n mum-tʃi-ŋmo  
 1INCL-liver-POSS head-POSS-PL  
 ‘our (incl.) hearts’.

---

<sup>83</sup> In a genitive construction only one element is pluralized, either the first or the second element, as shown (161c and d).

A compound is formed by the combination of two or more inherently possessed noun roots, resulting in an inherently possessed noun. Consider the example of ‘hair (on the head)’.

- (162)      *i-mumbu-t*  
               3-hair.on.head-POSS  
               ‘his/her hair (on head)’

I claim that the morpheme *mumbu* is a compound formed from the roots *mum* ‘head’ and *pu* ‘hair/fur’. All body parts that have hair can form a compound with *pu* ‘hair/fur’.

The alternative analysis, rejected here, is that this is simply a lexicalized phrase that is essentially ‘his head’s hair’ (although that is certainly the etymological origin of the compound). Comparison with the genitive plus noun construction described above, however, shows that the morphology expected for a genitive phrase does not occur. The word for ‘his/her/its head’ is *i-mum-tfi* (3-head-POSS) and the word for ‘his/her/its hair/fur’ is *i-pu-t* (3-hair/fur-POSS). See Chapter 3 for the inflectional marking relating to possession. The data in (163) repeat the relevant facts for these particular nouns.

- (163) a.      *i-pu-t*  
                   3-hair/fur-POSS  
                   ‘his/her/its hair/fur’
- b.      *i-mum-tfi*  
                       3-head-POSS  
                       ‘his/her/its head’

A genitive plus noun construction formed from these words is, in this case, ungrammatical, as shown in (164).

- (164)      \**i-mum-tfi*      *pu-t*  
               3-head-POSS      hair/fur-POSS  
               (‘his/her hair (on head)’)

The morphological criterion mentioned in the introduction to this chapter is relevant here. We know that the string *mumbu* is a single (but historically complex) noun because

it is inflected as a single noun and not as two nouns. The crucial thing to notice is that the possessive suffix *tʃi* is not permitted between *mum* and *pu*.

In all of the data in the corpus, the allomorph of the possessive suffix on a compound noun is the same as that used for the second root of the compound, as shown in (165).

(165)	‘his/her/its ...’	Compound nouns	‘his/her/its ...’	
a.	‘shin’	i-ptʃi-n	i-ptʃipu-t	‘shin hair’ (shin-hair/fur)
b.	‘head’	i-mum-tʃi	i-mumbu-t	‘head hair’ (head-hair/fur)
			i-mumbi-∅	‘scalp’ (hair/fur-skin)
c.	‘back’	i-mowa-n	i-mopu-t <sup>84</sup>	‘back hair’ (back-hair/fur)
d.	‘lip’	i-bo-ruu	i-botpu-t	‘mustache’ (lip-hair/fur)
			i-botpi-∅	‘skin of lip’ (lip-skin)
e.	‘skin/shell’	∅-epi-∅		
f.	‘hair/fur’	i-pu-t		

A compound noun can be formed from three noun roots, as can be seen by comparing (166a-c) with (166d), which has the compound.

- (166) a. i-eŋ-uru  
1SG-eye-POSS  
‘my eye’
- b. NP epi-∅  
NP skin/shell-POSS  
‘NP’s skin’
- c. NP pu-t  
NP hair/fur-POSS  
‘NP’s hair’
- d. i-eŋbipu-t  
1SG-eyebrow-POSS  
‘my eyebrow’

As can be seen in the examples above, the compound possessed noun (typically composed of two or more roots) is inflected like a common possessed noun, with inflection at the margins.

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<sup>84</sup> The second syllable of *mowa* is deleted with the adding of *put*.

The nouns for ‘shirt’, ‘skin/shell’, and ‘hair/fur’ are the nouns used as the second element in making a compound. All terms for body parts that have hair can be combined with *pu* ‘hair/fur’; some of the nouns can be compounded with *epi* ‘skin/shell’; and, body part terms that can have a cover, such as ‘eye,’ ‘hand,’ ‘head,’ and ‘foot’ can be attached to *aboi* to form ‘eyeglasses,’ ‘hat,’ ‘gloves’ and ‘socks’, respectively.

One compound noun is exceptional and requires mentioning. In the compound noun stem for ‘glasses,’ instead of the possessive suffix being only at the end of the compound word, it occurs in the middle of the words, after the first stem, as shown in (167c).

Compare this form with the inflected nouns in (167a-b)

- (167) a. i-eŋ-uru  
 1SG-eye-POSS  
 ‘my eye’
- b. NP aboi-∅  
 NP shirt-POSS  
 ‘NP’s shirt’
- c. i-eŋuruboi-∅  
 1SG-eyeglasses-POSS  
 ‘my eyeglasses’

The presence of the suffix *-uru* leads to an initial hypothesis that this is really a noun phrase. However, other formal criteria suggest that it is a compound. One of these has to do with the restrictions on the plurality morpheme. When a compound is inflected for plurality, the plural suffix comes in the final position, after the possessive suffix, as can be seen by comparing the compound nouns in (168) with the simple nouns in (169).

- (168) a. uŋ-mumbu-t-kom  
 1INCL-hair.on.head-POSS-PL  
 ‘our (incl.) hair (on head)’
- b. ug-eŋbipu-t-kom  
 1INCL-eyebrow-POSS-PL  
 ‘our (incl.) eyebrows’

- (169) a. i-pu-n-gom  
 3-foot-POSS-PL  
 ‘their feet’
- b. ug-eη-uru-ηmo  
 1INCL-eye-POSS-PL  
 ‘our (incl.) eyes’

If the word for ‘glasses’ were a sequence of two nouns, we would expect to be able to pluralize the first noun (‘eyes’), or the second noun (‘shirts’), as in (170b-c) but this is not acceptable.

- (170) a. ug-eηuruboi-ηmo  
 1INCL-eyeglasses-PL  
 ‘our (incl.) eyeglasses’
- b. \*ug-eη-uru-ηmo      boi-∅  
 (1INCL-eye-POSS-PL    shirt-POSS)  
 (‘our (incl.) eyeglasses’)
- c. \*ug-eη-uru              aboi-ηmo

And also the initial vowel of the root *aboi* would not be deleted. This deletion does not happen when *aboi* occurs in a genitive plus noun construction, as shown in (171b).

- (171) a. ∅-aboi-∅  
 3-shirt-POSS  
 ‘his/her shirt’
- b. ioru      aboi-∅  
 Ioru      shirt-POSS  
 ‘Ioru’s shirt’
- c. \*ioru      boi-∅

This evidence leads to the conclusion that the word *ieηuruboi* ‘my eyeglasses’ is a compound noun despite the presence of the syllable *uru* that corresponds to the possessive suffix for *eη* ‘eye’.

The second root in a compound always loses its initial vowel (if it has one), whether or not the first root ends in a vowel. The examples in (172), compounding with  $\sqrt{epi}$  ‘skin, shell,’ show this type of deletion as with  $\sqrt{aboi}$  ‘shirt’.

- (172) a. i-mum-tʃi  
3-head-POSS  
‘his/her/its head’
- b. Ø-epi-Ø  
3-skin/shell-POSS  
‘his/her/its skin’, ‘its shell’
- c. i-mumbi-Ø  
3-scalp-POSS  
‘his/her scalp’

A further possible example of deletion appears in five compound nouns referring to body part terms, and one referring to a plant part. These compounds have a common morpheme *gua* attached to the root, as shown in (173). This morpheme may be a reduced form of the root for ‘hole’  $\sqrt{egua}$ , which is inherently possessed.

(173)	‘his/her/its ...’	Compound nouns		
a.	‘hole’	Ø-egua-n		
b.	‘mouth’	i-la-tʃi	i-lagua-n	‘his/her palate’
c.	‘heel’	i-pta-tʃi	i-ptagua-n	‘his/her sole’
d.	‘armpit’	i-apta-n <sup>85</sup>	i-aptagua-n	‘his/her armpit’
e.	‘hand’	$\sqrt{amda}$	i-amdagua-n	‘my palm’
f.			Ø-elegua-n	‘its (palm tree) green leaf’

If *gua* is a reduced form of the root  $\sqrt{egua}$ , then the same process of ‘deletion’ which occurs in  $\sqrt{aboi}$  ‘shirt’ and  $\sqrt{epi}$  ‘skin, shell’ is happening with  $\sqrt{egua}$ , as shown in (175b). Compare (174b) with (175b).

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<sup>85</sup> The word *iaptan* ‘his/her armpit’ is used by the group of people who were contacted in 1983 and *iaptaguan* ‘his/her armpit’ is used by the group of people contacted in 1981.

- (174) a. Ø-aboi-Ø  
 3-shirt-POSS  
 ‘his/her shirt’
- b. i-ejuruboi-Ø  
 1SG-eyeglasses-POSS  
 ‘my glasses’
- (175) a. Ø-egua-n  
 3-hole-POSS  
 ‘its hole’
- b. i-lagua-n  
 3-palate-POSS  
 ‘his/her/its palate’

All six compound nouns with *gua* have similar shape: roof of the mouth, sole, armpit, palm, back part of the knee and the place where the palm leaves attach to the trunk. I think *gua* is referring to the shape of these nouns (concave or curved), which resemble a hole in some way.

The evidence of the deletion of the initial vowels of *aboi* ‘shirt’, *epi* ‘skin’ and *egua* ‘hole’ and also the fact that it is not possible to pluralize the noun for ‘eye’ inside of this expression cause me to conclude that *ejuruboi* ‘his/her glasses’ is a compound and not a sequence of two lexical words even though the possessive suffix *-uru* is present.

## 6.2 Modifying suffixes

Nouns can be modified by suffixes that denote the deceased, former, size and shape, etc. Some of these suffixes are very productive, while others are not. These suffixes may attach to noun bases of any sort (unpossessed, inherently possessed, or derived). In some cases, they derive new lexical items. For some of these suffixes, there is an alternative way of communicating the same information through adjective phrases.

### 6.2.1 Augmentative

Augmentative suffixes denote a large size. There are two augmentative suffixes: *-jum*, and *-gemnu*.

The suffix *-um* is used on unpossessed nouns, as shown in (176a-h); and on children names denoting a big or strong person, as shown in (176i and j).<sup>86</sup>

(176)		Noun	Noun + Aug	
a.	‘capuchin monkey (sp.)’	kutʃamit	kutʃamitʃ-jum <sup>87</sup>	‘big capuchin monkey’
b.	‘bowl’	wajon	wajo-jum <sup>88</sup>	‘big bowl’
c.	‘man’	ugon	ugo-jum	‘big man’
d.	‘mirror’	wodeneŋ	wodeneŋ-jum	‘big mirror’
e.	‘paper, money’	tapeda <sup>89</sup>	tapeda-um	‘big paper’
f.	‘woman’	pumie	pumie-um	‘big woman’
g.	‘stone’	ubwu	ubwu-um	‘big stone’
h.	‘knife’	pulepte	pulepte-um	‘big knife’
i.	(a name)	pubit	pubitʃ-jum	‘strong Pubit’
j.	(a name)	tʃidai	tʃidai-um	‘big Tʃidai’

It has two allomorphs: *-jum* after consonants, as in (176a-d); and *-um* after vowels, as in (176e-h).

Some unpossessed nouns with the augmentative *-um* can be inflected for possession and plurality, as shown in (177). The possessive suffix comes after the augmentative, and

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<sup>86</sup> There is only one kinship term that can be inflected with this suffix. It is the term for ‘uncle’ which is only used to refer to the shaman of the village: *koko-um*. In this case, it is not referring to the size of the man but to his availability or authority.

<sup>87</sup> The consonant *t* palatalizes before the suffix *-jum*, as in (176a and b). Stops are palatalized before the coronal glide.

<sup>88</sup> The final *n* is deleted before the suffix *-jum*, as in (176c and d). When two consonants of similar points of articulation are together, there is a violation of the Obligatory Contour Principle, so, the first one is deleted. (I. Souza: 2010)

<sup>89</sup> The noun *tapeda* is used to refer to ‘paper, or money’, depending on the context. When inflected with the augmentative suffix it refers only to ‘paper’.



the plural suffix comes after the possessive, providing evidence for considering the augmentative morpheme as a suffix.

- (177) a. tapeda-um  
paper/money-AUG  
'big paper'
- b. ur-tapedaum-turun  
1SG-paper.big-POSS  
'my big paper'
- c. i-tapedaum-turun-gom  
3-paper.big-POSS-PL  
'their big paper'

The addition of the augmentative suffix sometimes produces a new lexical item. The object that the derived form refers to is viewed as being larger than the object that the base noun refers to, as shown in (178).

(178)		Noun	Noun + Aug	
a.	'fireplace, firewood'	kambot	kambotf-jum	'gas stove'
b.	'curassow (sp.)' <sup>90</sup>	pawi	pawi-um	'turkey'
c.	'peccary (sp.)' <sup>91</sup>	abiana	abiana-um	'pig'
d.	'wild cashew'	orot	orotf-jum	'cashew'
e.	'wild banana'	wom	wom-jum <sup>92</sup>	'banana (sp.)'
f.	'a fish (sp.)'	ado	ado-um	'a fish (sp.)'
g.	'parakeet (sp.)'	eridak	eridag-jum	'large parakeet (sp.)'
h.	'stink bug (sp.)' <sup>93</sup>	kurubak	kurubag-jum	'large stink bug (sp.)'
i.	'honeybee (sp.)'	wan	wa-jum	'large honeybee (sp.)' <sup>94</sup>
j.	'rapids'	edon	edo-jum	'waterfall'
k.	'nail'	obine	obine-um	'axe'

The second augmentative suffix, *-gemnu*, is used with inherently possessed noun, as shown in (179).

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<sup>90</sup> *Cracidae* sp.

<sup>91</sup> Probably *Tayassu albirostris* sp.

<sup>92</sup> This a general term for 'banana'. There are several types of banana.

<sup>93</sup> Probably *Nezara viridula* sp.

<sup>94</sup> There are several species of honey. Honey and honeybees are referred to by the same word.

(179)		‘his/her/its ...’	Noun + Aug	
	a.	‘ear’	i-bana-n	i-bana-gemnu ‘his/her/its big ear’
	b.	‘shin’	i-ptʃi-n	i-ptʃi-gemnu ‘his/her big shin’

The examples in (179) show that *-gemnu* is a suffix. The evidence that it is a suffix is the lack of the possessive suffix, a fact that we would not expect if *-gemnu* were a simple adjective. However, there are some nouns where *gemnu* is following the possessive suffix, as shown in (180).

180)		‘his/her/its ...’	Noun + Aug	
	a.	‘head’	i-mum-tʃi	i-mum-tʃi-gemnu ‘his/her/its big head’
	b.	‘mouth’	i-la-tʃi	i-la-tʃi-gemnu ‘his/her/its big mouth’
	c.	‘eye’	∅-eŋ-uru	∅-eŋ-uru-gemnu ‘his/her big eye’

In the examples above, it seems that *gemnu* could be considered an adjective in a N ADJ phrase: *imumtʃi gemnu* ‘his/her/its big head’; *ilatʃi gemnu* ‘his/her/its big mouth’; *eŋuru gemnu* ‘his/her big eye’; and *ibet egemnu* ‘his/her big thigh’, as a regular N ADJ phrase, as shown in (181).

(181) a.	i-aboi-∅	kure	i-eguruge-lu
	1SG-shirt-POSS	good/beautiful	1-wash-REC
	‘I washed my good/beautiful shirt.’		
b.	ugon	burumon	t-eb-ulu
	man	big	3-arrive-REC
	‘The big man arrived.’		

With two nouns the augmentative suffix *-gemnu* has an extra *-tpu*, as shown in (182). One of these two nouns keeps the possessive suffix and the other does not.

(182)		Third person	Noun + Aug	
a.	‘breast’	i-maŋa-ruu	i-maŋat-tpuagemnu <sup>95</sup>	‘her big breast’
b.	‘arm’	i-mbuaa-tʃi	i-mbuaa-tʃi-tpuagemnu	‘his/her big/thick arm’

Although *-tpuagemnu* is following the possessive suffix *-tʃi* in the second example, it is probably a suffix and not a N ADJ phrase (*imbuaatʃi tpuagemnu*) for two reasons: first, when *imbuaatʃitpuagemnu* ‘his/her big/thick arm’ (182b) is syllabified, then the *t* of *-tpuagemnu* comes with *tʃi* (*im-bua-a-tʃit-puu-gem-nuu*); second, the language does not have any word beginning with a cluster with two consonants, for example, ‘his/her/its shin’ is *i-ptʃi-n* (3-shin-POSS). As a NP one would expect *\*NP ptʃin* ‘NP’s shin,’ but it is not; it is *NP buatʃin*. The underlying form in this case is *butʃin*, as shown in section 3.1.3.

### 6.2.2 Diminutive

The suffix *-giri* denotes a small size. It is used only with words referring to body parts, as shown in (183). The evidence to consider *-giri* a suffix is that the possessive suffix is not present.

(183)		Noun, third person	Noun + Dim	
a.	‘arm’	has no possessed form	∅-ambo-giri <sup>96</sup>	‘his/her thin arm’
b.	‘hand’	∅-emia-ruu	∅-emiat-kiri <sup>97</sup>	‘his/her/its small hand’
c.	‘breast’	i-maŋa-ruu	i-maŋat-kiri	‘her small breast’
d.	‘nose’	∅-eŋna-n	∅-eŋna-giri	‘his/her/its small nose’
e.	‘ear’	i-bana-n	i-bana-giri	‘his/her/its small ear’
f.	‘tooth’	i-e-n	i-e-giri	‘his/her/its small tooth’

<sup>95</sup> The final *t* of *maŋat* is part of the root. It can be seen in the following forms as *i-maŋat-ke-bara* (3-breast-COMP-NEG) ‘It is not alike her breast’; *tuu-maŋat-ke* (T-breast-ADJR) ‘she has breast’; *tuu-maŋat-kae* (T-breast-NEG) ‘She does not have breast (handicapped)’.

<sup>96</sup> There are two roots for ‘arm’:  $\sqrt{mubua}$  and  $\sqrt{ambo}$ . The first one, presented in (182b), can be inflected with possessor prefix and possessive suffix: *u-mbuaa-tʃi* (1SG-arm-POSS) ‘my arm’; the second cannot be inflected with possessive suffix; it is always combined with modifying suffixes, as in (183); noun incorporation, as *od-ambo-pi-ge-luu* (REFL-arm-skin-get-REC) ‘his/her own skin peeled off’; and with a derivational suffix, as *t-ambo-g-a* (T-arm-ADJR-NEG) ‘without arm (handicapp)’.

<sup>97</sup> The final *t* of *emiat* is part of the root. It can be seen by comparing the following paradigm: *omiat* (ABST.hand) ‘hand’; *tomiat-ke* (T.hand-ADJR) ‘s/he/it has hands’; *tomiat-k-ae* (T.hand-ADJR-NEG) ‘s/he/it does not have hand (handicap)’.

g.	‘shin’	i-ptʃi-n	i-ptʃi-giri	‘his/her/its thin shin’
h.	‘foot’	i-pu-n	i-pu-giri	‘his/her/its small foot’
i.	‘tongue’	i-lu-Ø	i-lu-giri	‘his/her/its small tongue’
j.	‘head’	i-mum-tʃi	i-mum-tʃi-giri	‘his/her/its small head’
k.	‘eye’	Ø-eŋ-uru	Ø-eŋ-uru-giri	‘his/her/its small eye’

However, the same thing that occurs with the augmentative suffix *-gemnu* discussed in section 6.4.1 is occurring here. The diminutive suffix *-giri* is following the possessive suffix of the nouns for ‘head’, and ‘eye’, as shown in (183j-k).

### 6.2.3 Deceased

The suffix *-mgeni* ‘deceased’ is used only with names and nouns that refer to people. It is not culturally acceptable to mention a dead person’s name without using this suffix. It can be used with unpossessed nouns such as ‘man’, and ‘woman’, with kinship terms, and with names, as shown in (184). After vowels the allomorph used is *-mgeni*, as in (184b-d), and after consonants it is *-geni*, as in (184a and e). Note in these examples that the final consonant of the noun or name is dropped when the suffix is added.

(184)		Noun	Deceased
a.	‘man’	ugon	ugo-geni
b.	‘woman’	pumie	pumie-mgeni
c.	‘my father’	papa	papa-mgeni
d.	‘Ioru’ (a name)	ioru	ioru-mgeni
e.	‘Piput’ (a name)	piput	pipu-geni

### 6.2.4 Long, flat and short

The qualities of being long, flat, and short have in common the following morphological details: (a) the possessive suffix is not present; (b) the predicate suffix *-k* follows these suffixes and is obligatory; and, (c) they occur mainly with inherently possessed nouns, as shown in (185).

(185)		Noun, third person	Noun + long	
a.	‘shin’	i-ptʃi-n	i-ptʃi-ma-k	‘s/he is long-shinned’
b.	‘tooth’	i-e-n	ogoro i-e-ma-k	‘the jaguar is long-toothed’
c.	‘forehead’	i-beba-n	i-be-ma-k	‘s/he/it is long-foreheaded’
d.	‘thigh’	i-bet-∅	i-bed-ema-k	‘s/he is long-thighed’
e.	‘tongue’	i-lu-∅	i-lu-ma-k <sup>98</sup>	‘it is long-tongued’
f.	‘head’	i-mum-tʃi	i-mum-ma-k <sup>99</sup>	‘s/he/it is long-headed’
	‘its...’			
g.	‘handle’	∅-amde-t	∅-amde-ma-k	‘it is long-handled’
h.	‘tail’	∅-awom-∅	∅-awom-ma-k	‘it is long-tailed’

I have found only three nouns of this type that do not have the predicate suffix. They are used to name animals, as shown in (186).

- (186) a. amda-ma  
hand-long  
‘long-handed’ (bird, sp.)
- b. i-ptʃi-ma-um  
3-shin-long-AUG  
‘long-shinned’ (bird, sp.)
- c. awo-ma  
tail-long  
‘long-tailed’ (jaguar, sp.)

With the noun for ‘nose’ there is an extra morpheme *tʃi* on the suffix, as shown in

- (187).<sup>100</sup>
- (187) a. ∅-eɲna-n  
3-nose-POSS  
‘his/her/its nose’
- b. ∅-eɲna-tʃi-ma-k  
3-nose-DIM-long-PRED  
‘it has a long and thin beak’ (bird, sp.)

<sup>98</sup> ‘Long-tongued’ is used to refer to a part of a flute.

<sup>99</sup> The form *imumak* ‘s/he/it is long-headed’ is used only referring to third person. It is not possible to say ‘I am long-headed’ inflecting it with the prefix for first person *\*u-mum-ma-k* (1SG-head-long-PRED). To say this the free pronoun is needed: *i-mum-ma-k uro* (3-head-long-PRED I) ‘I am long-headed’.

<sup>100</sup> The morpheme *tʃi* is used as a diminutive in the dialect of the group contacted in 1983 in the following lexical item: *ogorotʃi* ‘(domestic) cat’ is literally ‘jaguar-Diminutive’.

The suffix *-apa* refers to the quality of being flat. A noun inflected with *-apa* is always preceded by the prefix *tu-*, as shown in (188).<sup>101</sup>

(188)	Noun, third person	Noun + flat	
a.	‘foot’	i-pu-n	tu-pu-pa-k ‘s/he/it is flat footed’
b.	‘lips’	i-bo-ru	tu-bod-apa-k ‘s/he/it is flat lipped’
c.	‘head’	i-mum-tʃi	tu-mum-ba-k ‘s/he/it is flat headed’
d.	‘nose’	∅-eŋna-n	toŋna-pa ‘flat nosed’
e.	‘hand’		t-amda-pa ‘flat handed’

A noun inflected with *-pa* ‘flat’ but without the prefix *tu-* is used to name an ant species, as shown in (189). The same process was shown in (186) above to name a bird.

(189)	mum-tʃi-pa head-POSS-flat ‘flat headed’ (‘ant’, sp.)
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The suffix *-eburumu* ‘short’ is used with body part words. It needs to have the prefix *tu-* and the suffix *-k*, as shown in (190).

(190)	Noun, third person	Noun + short	
a.	‘foot’	i-pu-n	tu-pu-burumu-k ‘s/he is short footed’
b.	‘head’	i-mum-tʃi	tu-mum-burumu-k ‘s/he/it is short headed’
c.	‘thigh’	i-bet-∅	tu-bed-eburumu-k ‘s/he is short thighed’, ‘s/he is short’

### 6.2.5 Birthmark

A birthmark is marked by the suffix *-pe*. It is attached to the noun root and is used only with body parts, as shown in (191). The suffix *-pe* ‘birthmark’ co-occurs with the prefix *tu-*, *to-*, or *t-*, the same prefix that is used with the suffixes for ‘flat’ and ‘short’.

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<sup>101</sup> The prefix *tu-* is homophonous to the third person reflexive, that is discussed in section 3.1.5.

(191)	Noun, third person	Noun + birthmark	
a.	‘head’	i-mum-tʃi	tu-mum-be-t ‘s/he/it has birthmark on the head’
b.	‘nose’	∅-eŋna-n	toŋna-pe-t ‘s/he/it has birthmark on the nose’
c.	‘neck’		tu-dem-be-t <sup>102</sup> ‘s/he/it has birthmark on the neck’

The suffix *-pe* has the expected allomorph *-be* after a nasal, as shown in (191a and b).

Some people receive their names based on the location of a birthmark. In names, the *-t* ‘having’ is deleted, as shown in (192).

(192) a.	tu-mo-pe	T-back-birthmark	‘birthmark on his back’
b.	tu-mbua-pe	T-arm-birthmark	‘birthmark on his arm’

### 6.2.6 Crooked

The suffix *-gowu* is used to show the quality of being crooked (handicapped).<sup>103</sup> It is attached to the noun root and is used only with body parts, as shown in (193).

(193)	Noun, third person	Noun + crooked	
a.	‘mouth’	i-la-tʃi	tu-la-gowu-t ‘s/he/it is crooked-mouthed’
b.	‘face’	i-bia-tʃi	tu-bia-gowu-t ‘s/he is crooked-faced’
c.	‘tail’	i-pilu-n	tu-pilu-gowu-t ‘it is crooked-tailed’
d.	‘neck’		tu-bum-gowu-t ‘s/he/it is crooked-necked’
e.	‘hand’		t-amda-gowu-t ‘s/he/it is crooked-handed’

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<sup>102</sup> The noun for ‘neck’ seems to have two roots:  $\sqrt{\text{demfitpu}}$  ‘neck’ and  $\sqrt{\text{dem}}$ . The first one can be inflected for possessor (with the possessive suffix): *u-demfitpu-n* (1SG-neck-POSS) ‘my neck’, *o-demfitpu-n* (2-neck-POSS) ‘your neck’, etc. The second one is used with other forms, including noun incorporation: *i-dem-bulu* (3-neck-protuberance) ‘his Adam’s apple’, *i-dem-iako* (3-neck-PERL) ‘throughout his/her/its neck’, *i-dem-daige-lu* ‘his/her throat got hurt’.

<sup>103</sup> The suffix *-gowu* has a variation *-goriwu*. It is used with the noun for ‘tail’ *t-awom-goriwu-t* ‘it is crooked-tailed’ and for ‘shin’ in *tu-ptʃi-goriwu* ‘crooked-shinned’ (a man’s name), as in (195).

A word with the suffix *-gowuu* ‘crooked’ can occur with or without the prefix T- and occur without the suffix ‘having’ to name animals and humans, as shown in (194) and (195). Some people receive their names based on the part of the body that is crooked.

(194)

- |    |  |  |
|----|--|--|
| a. | i-bumtʃitpu-n<br>3-neck-POSS<br>‘his/her/its neck’ | puum-gowuu<br>neck-crooked<br>‘crooked-necked’ (turtle, sp.) |
| b. | i-pu-n<br>3-foot-POSS<br>‘his/her/its foot’        | pu-gowuu<br>foot-crooked<br>‘crooked-footed’ (a girl name)   |

- (195) tu-ptʃi-goriwuu  
T-shin-crooked  
‘crooked-shinned’ (a man’s name)

### 6.2.7 ‘Encircled by black’ and ‘one of a pair’

The suffixes *-burume* ‘encircled by black’, and *-tedun* ‘one of a pair’ occur with body parts. *-burume* seems to refer only to animal’s body part words, as shown in (196). The generic prefix that co-occurs with the suffixes for ‘flat’, ‘short’, and ‘birthmark’, also co-occurs with *-burume*.

- |         |  |   |
|---------|--|---|
| (196)a. | i-bo-ruu<br>3-lip-POSS<br>‘his/her/its lips’ | tu-bot-purume<br>T-lip-black.around<br>‘black-encircled lips’ |
| b.      | ∅-eŋ-uru<br>3-eye-POSS<br>‘his/her/its eye’  | toŋ-burume<br>T.eye-black.around<br>‘black-encircled eye’     |

The suffix *-tedun* refers to ‘one of a pair’ of nouns that have a pair like ‘foot’, ‘shoulder blade’. It is attached to the noun root, as shown in (197).

- |         |  |   |
|---------|--|---|
| (197)a. | i-mbe-∅<br>3-shoulder.blade-POSS<br>‘his/her shoulder blade’ | i-mbe-tedun<br>3-shoulder.blade-one.of.pair<br>‘one of his/her shoulder blades’ |
|---------|--|---|



- |    |   |  |
|----|---|--|
| b. | i-pu-n<br>3-foot-POSS<br>'his/her/its foot' | i-pu-tedun<br>3-foot-one.of.pair<br>'one of of his/her/its feet' |
|----|---|--|

### 6.2.8 *Soft*

The suffix *-pkura* 'soft' occurs in one only example in the data. It is added to the noun root and the possessive suffix comes after it, as shown in (198).

- (198) a. Ø-eŋna-n  
3-nose- POSS  
'his/her/its nose'
- b. Ø-eŋna-pkura-n  
3-nose-soft-POSS  
'soft part of his/her/its nose'

## 6.3 Former

The idea of 'former' is widely used in the language. The 'former' suffix has slightly different meanings when it is used with different nouns. For example, when the noun refers to an inanimate object, the suffix indicates that the item has been abandoned or is now being used for some purpose other than its primary use. The word *mobutpo* 'former canoe', for example, can be used during the process of making manioc flour. They put the former canoe inside the water next to the river bank, and then use it to put the manioc to be softened. On such a noun, it may also indicate that the item has been damaged and is now unusable, even though it is new; *tuktotpo* 'former field' means the field is abandoned; *oboiŋotpo* 'former clothes' means the clothes are old and not used anymore.<sup>104</sup> The word *amutuburuu* 'his/her former pet' may have two meanings: the pet has another owner or is dead. The word *ibutuburuu* 'his former wife' is ambiguous: the

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<sup>104</sup> *oboiŋotpo* 'former clothes' is the absolute form of  $\sqrt{aboi}$  'shirt'. In this form it can have only this meaning. When  $\sqrt{aboi}$  'shirt' is inflected for possession and former, then it has two meanings, as do *pet* and *wife* etc.

couple is no longer married either due to divorce or to death of one or the other. The word *emtfitpuun* ‘his former daughter’ always refers to a deceased daughter.

Two suppletive suffixes are used to indicate this concept: *-tubo*, and *-nbo*.<sup>105</sup> They are attached to the noun root. *-tubo* can occur on unpossessed nouns (199), on nouns inflected for the absolute form (200), and on optionally and inherently possessed nouns (201).

(199)	Unpossessed noun	Former
a. ‘canoe’	mobu	mobu-tpo
b. ‘mat’	aga	aga-tpo
c. ‘ball’	panbak	panbak-tubo
(200)	Absolute	Former
a. ‘shirt’	oboi-ŋo	oboi-ŋo-tpo
b. ‘pan’	oriŋgo	oriŋgo-tpo
c. ‘path’	onma	onma-tpo
(201)	Possessed nouns, first person	Former
a. ‘canoe’	u-mobu-n	u-mobu-tp-un
b. ‘bench’	u-murei-n	u-murei-tp-un
c. ‘pan’	i-eriŋgo-n	i-eriŋgo-tp-un
d. ‘daughter (ME)’	i-emtʃi-n	i-emtʃi-tp-un
e. ‘pet’	i-amu-t	i-amu-tub-uru

The ‘former’ suffix allomorphs are phonologically conditioned: *-tubo* and *-tub* occur after voiceless consonant, (202); *-dubo* and *-dub* occur after nasal, (203); and *-tpo* and *-tp* occur after vowel, as shown in (204). The allomorphs that end in *-o* (*-t(d)ubo*, *-tpo* and *-nbo*) occur with unpossessed nouns or nouns in their absolute forms; and the other allomorphs occur with possessed nouns.

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<sup>105</sup> *-tubo* has six allomorphs: *-tubo*, *-dubo*, *-tpo*, *-tub*, *-dub*, and *-tp*; and *-nbo* has two allomorphs: *-nbo* and *-nb*. More details about them are given below.

- (202) a. panbak-tubo  
ball-former  
'former ball'
- b. i-amu-t-tub-uru  
1SG-pet-POSS-former-POSS  
'my former pet'
- (203) a. topkuun-dubo  
grater-former  
'former grater'
- b. i-edegum-dub-uru  
1SG-knee-former-POSS  
'my former knee'
- (204) a. aga-tpo  
mat-former  
'former mat'
- b. i-eringo-tp-uun  
1SG-pan-former-POSS  
'my former pan'

When the suffix *-tubo* is attached to a possessed noun, inherently or optionally possessed, the final *o* of *-tubo* is dropped and a possessive suffix *-uun* or *-uru* is added to it. It is added independently of the possessive suffix inherent to the noun, which is not overt when the noun is inflected with *-tubo*, as shown in (205) and (206).

(205)	'my ...'	Inherently possessed	Inflected with 'former'
a.	'pet'	i-amu-t	i-amu-tub-uru
b.	'daughter (of a male)'	i-emtʃi-n	i-emtʃi-tp-uun
c.	'husband'	i-edem-∅	i-edem-dub-uru
d.	'hammock'	i-edue-t	i-edue-tub-uru
e.	'wife'	u-buu-t	u-buu-tub-uru
(206)	'my ...'	Optionally possessed	Inflected with 'former'
a.	'canoe'	u-mobu-n	u-mobu-tp-uun
b.	'bench'	u-murei-n	u-murei-tp-uun

The suffix *-tubo* can also occur on derived nouns, through nominalization of a locative or temporal word, as shown in (207).

- (207) a. tan 'here'  
 ta-no 'the one from here'  
 tano-tpo 'the one that was from here'
- b. udelon 'today, now'  
 udelo-no 'the one from today, now'  
 udelono-tpo 'the one that was from today, now'

The other suffix used to indicate 'former' is *-nbo* which occurs mainly on inherently possessed nouns that have zero as their possessive suffix. It has two allomorphs: *-nbo* and *-nb*, which occur only after a vowel. In contrast to *-tubo*, *-nbo* occurs only on unpossessed nouns. There are only two examples inflected with *-nbo*, as illustrated in (208), and they do not have a possessed counterpart. The allomorph *-nb* occurs on possessed nouns that have null as their possessive suffix, as shown in (209). When in their absolute form these possessed nouns use the 'former' suffix *-tpo*, (210).

- (208) a. funai-nbo  
 FUNAI-former  
 'FUNAI's former (worker)'
- b. tegumba-nbo  
 handicap-former  
 'former handicap'

(209)	'my ...'	Inherently possessed	Inflected with 'former'
a.	'leader'	i-akpo-∅	i-akpo-nb-uun
b.	'shirt'	i-aboi-∅	i-aboi-nb-uun
c.	'medicine'	i-eptuu-∅	i-eptuu-nb-uun
d.	'husband'	uu-o-∅	uu-o-nb-uun
e.	'older brother (ME)'	uu-ru-∅	uu-ru-nb-uun
f.	'food'	uu-mi-∅	uu-mi-nb-uun
g.	'toy'	uu-wuuri-∅	uu-wuuri-nb-uun

(210)		Absolute	Inflected with 'former'
a.	'leader'	okpo-ηo	okpo-ηo-tpo
b.	'shirt'	oboi-ηo	oboi-ηo-tpo
c.	'medicine'	optuu-ηo	optuu-ηo-tpo
d.	'tongue'	lu-ηo	lu-ηo-tpo <sup>106</sup>

<sup>106</sup> A 'former tongue' is used in an ethnic story to describe the origin of a fish, *Hoplias malabaricus* sp.

e.	‘husband’	ioru-ŋo	ioru-ŋo-tpo
f.	‘food’	omi-ŋo	omi-ŋo-tpo
g.	‘toy’	wuri-ŋo	wuri-ŋo-tpo

The ‘former’ suffixes *-tubo* and *-nbo* are attached on the noun roots. The noun’s possessive suffix is dropped or replaced with *-tubo* or *-nbo*. However, the noun for ‘his son’, and the nouns that have *-t* as their possessive suffix, keep the possessive suffix when inflected with *-dubo*, (211), and the noun for ‘his/her/its eye’ also keeps the possessive suffix when inflected with *-nbo*, (212).

(211) a.	i-mu-n 3-son-POSS ‘his son’	i-mu-n-dub-uru 3-son-POSS-former-POSS ‘his former son’
b.	i-edue-t 1SG-hammock-POSS ‘my hammock’	i-edue-t-tub-uru 1SG-hammock-POSS-former-POSS ‘my former hammock’
c.	u-buu-t 1SG-wife-POSS ‘my wife’	u-buu-t-tub-uru 1SG-wife-POSS-former-POSS ‘my former wife’
(212).	∅-eŋ-uru 3-eye-POSS ‘his/her/its eye’	∅-eŋ-uru-nb-un 3-eye-POSS-former-POSS ‘his/her/its former eye’

In these two cases, the possessive suffixes are present. Example (211a) could be considered to be two distinct words if other possible sequences were taken into consideration: *i-mu-n dub-uru* ‘his former son’. However, *∅-eŋ-urunb-un* is not possible because the language does not have any word beginning with two consonants, \**∅-eŋ-uru nb-un*, as shown previously, in section 6.2.1.

Table 4 summarizes the forms of the former suffix.

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In that story the crocodile’s tongue was cut and *ilunbun* ‘its former tongue’ turned into a fish.

Table 4 Former suffixes: *-tubo* and *-nbo*

Possessed		Unpossessed		Gloss
‘his/her ...’	‘his/her former ...’	unpossessed or absolute	‘former ...’	
∅-aboi-∅	∅-aboi-nb-un	oboi-ŋo	oboi-ŋo-tpo	‘shirt’
∅-akpo-∅	akpo-nb-un	okpo-ŋo	okpo-ŋo-tpo	‘leader’
∅-eptu-∅	eptu-nb-un	optu-ŋo	optu-ŋo-tpo	‘medicine’
e-wuri-∅	e-wuri-nb-un	wuri-ŋo	wuri-ŋo-tpo	‘toy’
i-lu-∅	i-lu-nb-un	lu-ŋo	lu-ŋo-tpo	‘tongue’
i-o-∅	i-o-nb-un		ioru-ŋo-tpo	‘husband’
i-ru-∅	i-ru-nb-un			‘older brother (ME)’
i-umi-∅	i-umi-nb-un	omi-ŋo	omiŋo-tpo	‘food’
∅-aga-n	aga-tp-un	aga	aga-tpo	‘mat’
∅-emtʃi-n	emtʃi-tp-un			‘daughter (ME)’
∅-enma-n	enma-tp-un	onma	onma-tpo	‘path’
∅-erĩngo-n	erĩngo-tp-un	orĩngo	orĩngo-tpo	‘pan’
i-birinda-∅	i-birinda-tp-un	purinda-ŋot	purinda-ŋo-tpo	‘partner’
i-maraŋmo-∅	i-maraŋmo-tp-un			‘child’
i-mobu-n	i-mobu-tp-un	mobu	mobu-tpo	‘canoe’
i-murei-n	i-murei-tp-un	murei	murei-tpo	‘bench’
i-ptʃi-n	i-ptʃi-tp-un	puʃi-ŋo	puʃi-ŋo-tpo	‘shin’
∅-amu-t	amut-tub-uru	oŋno	oŋno-tpo	‘pet’
∅-ede-t	edet-tub-uru	ode-ŋo	ode-ŋo-tpo	‘name’
∅-edue-t	eduet-tub-uru	oduat	oduat-tubo	‘hammock’
i-bet-∅	i-bet-tub-uru		pet-tubo	‘thigh’
i-bu-t	i-bu-tub-uru			‘wife’
∅-edem-∅	edem-dub-uru		odem-dubo	‘husband’
∅-erem-uru	erem-dub-uru	orem	orem-dubo	‘song’
e-wem-∅	e-wem-dub-uru		wem-dubo	‘load’
i-mu-n	i-mun-dub-uru			‘son (ME)’
—	—	funai	funai-nbo	‘FUNAI’
—	—	tegumba	tegumba-nbo	‘handicap’

## CHAPTER 7

### DENOMINAL PREDICATE ADJECTIVES

In this chapter I discuss one suffix that has six suppletive allomorphs that only co-occur with a certain prefix, /tu-/.<sup>107</sup> The result of this combination seems to be a predicate adjective, and so these suffixes can be viewed as derivational.<sup>108</sup> In section 7.1 I discuss the morphology of these words. In section 7.2 I compare and contrast these words with basic adjectives, looking at both structural and distributional features, in order to explain their syntactic category.

The allomorphs of the suffix under discussion can occur on unpossessed nouns or on inherently possessed nouns. All six of these derivational suffixes seem to have the same meaning ‘characterized as having’ and so I gloss them as ADJR for ‘adjectivizer’. The relationship between a noun and the denominal predicate adjective is shown in (213).

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<sup>107</sup> In his description of Tiriyo, Meira (1999:358) glosses the prefix /tu-/, with which these suffixes occur, with a capital ‘T’; I follow that practice here. The prefix /tu-/ is homophonous with the reflexive prefix, shown in section 3.1.5, and has the same allomorphs as that morpheme. It is also homophonous with the prefix used on verbs to form the participle, and with the prefix used on some transitive verbs to mark the object. I do not take a position here on whether these forms are somehow related or are simply accidentally homophonous.

<sup>108</sup> Hixkaryana, Ikpeng and Tiriyo, related languages to Ugoronmo, have the same type of word. Derbyshire (1985:237) calls it an adverb for Hixkaryana; Pacheco (2001:113) refers to an adjectival construction for Ikpeng; and Meira (1999: 358) calls it an adverb for Tiriyo.

- (213) Noun  
 a. i-e-n  
 3-tooth-POSS  
 ‘his/her/its tooth’
- Derived predicate adjective  
 b. tu-e-k<sup>109</sup>  
 T-tooth-ADJR  
 ‘characterized as having a tooth (or teeth)’

Some simple utterances in which the derived adjective in (213b) appear are given in

(214).

- (214) a. tu-e-k            ka-k<sup>110</sup>  
 T-tooth-ADJR    Q-3  
 ‘Does s/he/it have a tooth/teeth?’
- b. tu-e-k  
 T-tooth-ADJR  
 ‘S/he/it has a tooth/teeth.’
- c. tu-e-g-ebara  
 T-tooth-ADJR-NEG  
 ‘S/he/it does not have tooth/teeth.’

Sometimes a derived adjective has a more active, extended meaning, as shown in

(215)-(217).

- (215) a. i-bana-n  
 3-ear-POSS  
 ‘his/her/its ear’
- b. tu-bana-k  
 T-ear-ADJR  
 ‘S/he/it has ear.’ or ‘S/he/it hears.’

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<sup>109</sup> This form can also be used to refer to a sharp tool, such as knife, machete, or axe.

<sup>110</sup> In yes-no questions there is a particle *ka*, which can carry a marker for second person *-ŋ* ‘2’ or third person *-k* ‘3’ when these persons are not marked on the noun or verb. For example, *m-od-ep ka?* (2-REFL-arrive Q) ‘Did you arrive?’, *to-ep-te ka-ŋ* (?-arrive-PART Q-2) ‘Have you arrived?’, *n-ep ka?* (3-arrive Q) ‘Did s/he/it arrive?’, *to-ep-te ka-k* (?-arrive-PART Q-3) ‘Has s/he/it arrived?’. The *-k* can be used with a first person pronoun, *kure-p ka-k uro* (good/beautiful-PRED Q-3 I) ‘Am I good, beautiful?’ *kure-p ka-k tfimna* (good/beautiful-PRED Q-3 1EXCL) ‘Are we (excl.) good, beautiful?’



- (216) a. a-worond-u  
3-word-POSS  
'his/her word'
- b. to-worond-e  
T-word-ADJR  
'S/he/it is talking.'
- (217) a. Ø-eṅnab-uru  
3-snore-POSS  
'his/her/its snore'
- b. toṅnab-ere  
T.snore-ADJR  
's/he/it is snoring'

## 7.1 The forms of the predicate adjectivizer suffix

Just as the choice of the suppletive allomorphs for the possessive suffix seems to be a matter of arbitrary noun class, the choice of the form of the suppletive allomorphs of the adjectivizer suffixes is generally unpredictable. The six suppletive allomorphs and their phonologically derived allomorphs are presented in (218).

(218)	Derived Adjective	'characterized as having ...'	'his/her/its ...'
-k	t-amoe-k	'fingernail'	Ø-amoe-n
	t-arok-ke	'headdress'	Ø-arog-uruu
-ŋ	t-aboi-ŋ	'shirt'	Ø-aboi-Ø
-ŋie	t-ano-ŋie	'helper'	Ø-ano-Ø
	toborog-ie	'flower'	Ø-eborog-uru
-re	towokpa-re	'burp'	i-wokpa-ru
	toṅ-ere	'eyes' = 'awake'	Ø-eṅ-uru
	t-amu-d-e	'pet'	Ø-amu-t
-igere	tuu-biapu-tʃ-igere	'sideburns'	i-biapu-t
-t	tuu-mumbe-t	'birthmark on the head'	i-mum-tʃi

Each of these morphemes is presented in the following subsections.

### 7.1.1 *tu-...-k*

The formative *-k* can occur with a stem that is an inherently possessed noun root, as shown in (219), or an unpossessed noun, as shown in (220). This suffix is widely used. It

occurs with some of the nouns whose possessive suffixes are *-n*, *-ru*, and *-∅*. On possessed nouns this suffix appears following the root without the possessive suffix.

The suffix *-k* has the phonologically related allomorph *-ge* after nasal consonants, and the allomorph *-ke* after voiceless consonants, as shown in (219)-(220).

(219)	Derived Adjective	‘his/her/its ...’
a.	‘fingernail’ t-amoe-k	∅-amoe-n
b.	‘daughter’ tomtʃi-k	∅-emtʃi-n
c.	‘shorts’ tu-me-k	i-me-n
d.	‘child’ tu-mere-k	i-mere-n
e.	‘son (of male)’ tu-mu-k	i-mu-n
f.	‘foot’ tu-pu-k	i-pu-n
g.	‘leaf’ t-at-ke	∅-a-ru
h.	‘headdress’ t-arok-ke	∅-arog-uru
i.	‘walking stick’ tomp-ke	∅-emeb-uru
j.	‘husband’ todem-ge	∅-edem-∅
(220)	Derived Adjective	Unpossessed noun
a.	‘manioc bread’ t-abat-ke	abat
b.	‘mat’ t-aga-k	aga
c.	‘canoe’ tu-mobu-k	mobu
d.	‘knife’ tu-bulepte-k	pulepte
e.	‘paper, money’ tu-tapeda-k	tapeda

### 7.1.2 *tu-...-ŋ*

This formative *-ŋ* occurs mainly with inflected nouns. It quite unexpectedly occurs with any overt possessive suffix that the possessed noun is expected to take, as shown in

(221). Note that in (221) the possessive suffixes *-tʃi* and *-ru* precede the formative *-ŋ*.

(221)	Derived adjective	‘his/her/its ...’
a.	‘shirt’ t-aboi-ŋ	∅-aboi-∅
b.	‘bridge’ tobiu-ŋ	∅-ebiu-∅
c.	‘toy’ tu-wuri-ŋ	e-wuri-∅
d.	‘field’ tu-kpi-ŋ	i-kpi-∅
e.	‘food’ tu-mdabiri-ŋ	i-mdabiri-∅
f.	‘egg’ tu-mu-ŋ	i-mu-∅
g.	‘itch’ todal-u-ŋ <sup>111</sup>	∅-edal-u

<sup>111</sup> The possessive suffix *-ru* appears here as *-u*. More details about the phonological rules used with

h.	‘mouth’	tuu-la-tʃi-ŋ	i-la-tʃi
i.	‘head’	tuu-mum-tʃi-ŋ	i-mum-tʃi

There is only one example of a vocative being used as the base of a derived adjective, as shown in (222).

(222)		Derived adjective	Vocative
	‘sister’	tuu-tʃeluu-ŋ	tʃeluu

### 7.1.3 *tu-...-ŋie*

The formative *-ŋie* combines with only a small number of nouns, and, like the suffix *-ŋ* above, co-occurs with the possessive suffix *-ru*. Only the nouns listed in (223) were found in the corpus with *-ŋie*.

(223)		Derived adjective	‘his/her/its ...’
a.	‘helper’	t-ano-ŋie	∅-ano-∅
b.	‘trunk (tree)’	tobuu-ŋie	∅-ebuu-∅
c.	‘husband’	tuu-o-ŋie	i-o-∅
d.	‘owner’	t-odo-ŋie	i-odo-∅
e.	‘older brother (of ME)’	tuu-ru-ŋie	i-ru-∅
f.	‘older sister (of FE)’	tuu-ba-ru-ŋie	i-ba-ru
g.	‘(plant) flower’	toborog-ie	∅-eborog-uru
h.	‘fishbone’	tuu-g-ie	i-g-uruu

The formative *-ŋie* appears to have an allomorph *-ie* which appears (so far) with only two nouns that end with the consonant *g*, as shown in (223g-h).

### 7.1.4 *tu-...-re*

The formative *-re* is used with inherently possessed nouns, as shown in (224). The possessive suffix *-t* remains in the derived adjective (though voiced, because it is in intervocalic position, see (224a-d)), but the possessive suffix *-ru* does not.

(224)		Derived adjective	‘his/her/its ...’
a.	‘pet’	t-amuu-d-e	∅-amuu-t
b.	‘tail hair’	t-awombu-d-e	∅-awombu-t
c.	‘sideburns’	tuu-biapu-d-e	i-biapu-t

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this suffix are in Appendix A.

d.	‘(plant) root’	tu-mi-d-e	i-mi-t
e.	‘belligerence’	t-apoel-e	∅-apoel-u
f.	‘rack’	to-epkal-e	i-epkal-u
g.	‘cough’	tu-mul-e	i-mul-u
h.	‘word’	to-worond-e	a-worond-u
i.	‘whistle’	tu-dagin-e	i-dagin-u
j.	‘smile’	tu-eb-ere	i-eb-uru
k.	‘snoring’	toŋnab-ere	∅-eŋnab-uru
l.	‘phlegm’	toŋnaptagag-ere	∅-eŋnaptagag-uru
m.	‘eye’	toŋ-ere	∅-eŋ-uru
n.	‘liquid’	tu-g-ere	i-g-uru
o.	‘diarrhea’	tu-ptʃig-ere	i-ptʃig-uru
p.	‘drop’	tu-tag-ere	i-tag-uru
q.	‘blood’	tu-muŋe-re	i-muŋu-ru
r.	‘burp’	to-wokpa-re	i-wokpa-ru

The formative *-re* has the phonologically related allomorphs: *-e* occurs after coronals (see Appendix A for rule on *R*-deletion), as shown in (224a-i), and *-ere* elsewhere (see Appendix A for rule on Vowel epenthesis), as shown in (224j-p).

So far only one inherently unpossessed noun has been found to be inflected with the derivational suffix *-re*, as shown in (225).

- (225) a. wot  
‘fish’
- b. tu-wod-e  
‘S/he has fish (food).’

### 7.1.5 *tu-...-igere*

The formative *-igere* occurs with nouns that all happen to refer to hair and fiber and co-occurs with the possessive suffix, as shown in (226).<sup>112</sup> The meaning of these forms seem to be ‘characterized as having a lot of X’. (The formative *-re* in section 7.1.4 also occurs with nouns that refer to hair.)

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<sup>112</sup> Details about the *t*-palatalization are shown in Appendix A.

(226)	Derived adjective	‘his/her/its ...’
a.	‘tail’	t-awombu-tf-igere
b.	‘fiber’	tokpu-tf-igere
c.	‘forehead hair’	tu-bepu-tf-igere
d.	‘facial hair’	tu-biapu-tf-igere
e.	‘hair on head’	tu-mumbu-tf-igere

### 7.1.6 *tu-* ... *-t*

The formative *-t* occurs only with nouns that have modifying suffixes, as shown in

(227).

(227)	Derived adjective	
a.	‘head’	tu-mumbe-t
	‘birthmark on the head’	√mum + -pe
		head birthmark
b.	‘nose’	toɲnape-t
	‘birthmark on the nose’	√eɲna + -pe
		nose birthmark
c.	‘mouth’	tu-lagowu-t
	‘crooked mouthed’	√la + -gowy
		mouth crooked
d.	‘face’	tu-biagowu-t
	‘crooked faced’	√bia + -gowy
		face crooked
e.	‘tail’	tu-pilugowu-t
	‘crooked tailed’	√pilu + -gowy

## 7.2 Some common features of basic adjectives and denominal adjectives

In this section, some common features of basic adjectives and denominal adjectives are presented.

### 7.2.1 *Features of the class of basic adjectives*

The class of basic adjectives attested in the corpus is very small. The most common members of this class are presented in (228).

(228)	Basic adjectives	
a.	kure	‘good, beautiful’
b.	wurup	‘bad, ugly’
c.	tarik	‘big’
d.	muren	‘small’
e.	puruumon	‘enormous’
f.	paemnun	‘unripe’

g. amgun 'shallow'

These adjectives can have either an attributive function or a predicative function. The examples in (229) illustrate the use of these adjectives in an attributive function within a noun phrase. Note that they follow the noun.

- (229) a. [oboi-ŋo kure] i-Ø-etʃi-lu  
ABST.shirt-ABST good/beautiful 1-3-acquire-REC  
'I acquired (received or purchased) a good, beautiful shirt.'
- b. [otʃi-ŋo tarik] poda-p  
ABST.house-ABST big inside-INE  
'S/he/it is inside the big house.'
- c. [mobu muren] paru etpa-p  
canoe small river shore-INE  
'the small canoe is on the river shore.'
- d. [pulepte burumon] i-Ø-aruu-lu  
knife enormous 1-3-take-REC  
'I took the enormous knife.'

When a basic adjective is used predicatively, it must be marked with the Predicative suffix, as shown in (230).

- (230) a. kure-p  
good/beautiful-PRED  
'S/he/it is good, beautiful.'
- b. wurup-pe  
bad/ugly-PRED  
'S/he/it is bad, ugly.'
- c. tarik-pe  
big-PRED  
'S/he/it is big.'

The subject of the predicate adjective is expressed externally, and is interpreted as third person if it is not overt, as shown in (231)-(232).

- (231) a. kure-p                                  uro  
 good/beautiful-PRED I  
 ‘I am good.’
- b. kure-p  
 good/beautiful-PRED  
 ‘S/he/it is good, beautiful.’  
 (\*I am good. \*You are good.)
- (232) a. nuno        tarik-pe  
 moon        big-PRED  
 ‘The moon is big.’
- b. tarik-pe  
 big-PRED  
 ‘S/he/it is big.’  
 (\*I am big. \*You are big.)

A construction with a simple adjective that is used predicatively can have the plural marked in three different ways. If the subject is not overt, the plural suffix occurs after the root, as shown in (233)-(235). The distribution of these plural forms is not discussed here.

- (233) a. kure-p  
 good/beautiful-PRED  
 ‘S/he/it is good, beautiful.’
- b. kure-nmo-p  
 good/beautiful-PL-PRED  
 ‘They are good, beautiful.’
- (234) a. wurup-pe  
 bad/ugly-PRED  
 ‘S/he/it is bad, ugly.’
- b. wuru-bi-am-be<sup>113</sup>  
 bad/ugly-LNKR-PL-PRED  
 ‘They are bad, ugly.’

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<sup>113</sup> The adjective *wurup* when inflected with *-am* ‘plural’ refers to ‘bad or ugly things’ and when inflected with *-kom* refers to ‘bad’ or ‘ugly people’ *wurup-kom* (bad/ugly-PL.)

- (235) a. tarik-pe  
big-PRED  
'S/he/it is big'
- b. tarik-kom-be  
big-PL-PRED  
'They are big.'

If the yes-no question particle is used, the plural suffix occurs after the person marker, which is attached to the yes-no question particle, as shown in (236).

- (236) a. kure-p                      ka-ŋ  
good/beautiful-PRED      Q-2  
'Are you good, beautiful?'
- b. kure-p                      ka-ŋ-dom  
good/beautiful-PRED      Q-2-PL  
'Are you (plural) good, beautiful?'

And, if the subject is overt, the plural suffix occurs with it, as shown in (237).

- (237) a. kure-p                      omoro  
good/beautiful-PRED      you  
'You are good, beautiful.'
- b. kure-p                      omoro-ŋmo  
good/beautiful-PRED      you-PL  
'You (plural) are good, beautiful.'

The basic adjectives cannot be nominalized, either when functioning as attributive or when functioning predicatively, as shown in (238).

- (238) a. \*kure-no                      ('the good, beautiful one')
- b. \*kure-pe-no                      ('the good, beautiful one')
- c. \*tariŋ-no<sup>114</sup>                      ('the big one')
- d. \*tariŋ-no-ŋmo                      ('the ones that are big')
- c. \*tarik-pe-no                      ('the big one')

To have the meaning of 'the ... ones' only the plural suffix is used without the predicative suffix, as shown in (239).

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<sup>114</sup> k becomes ŋ before nasals. In Appendix A, see the Nasalization of Stops rule.



- (239) a. kure-ŋmo  
good/beautiful-PL  
'the good, beautiful ones'
- b. imara-ŋmo  
small-PL  
'the small ones'
- c. wuru-bi-am  
bad/ugly-LNKR-PL  
'the bad, ugly ones'
- d. tarik-kom  
big-PL  
'the big ones'

### 7.2.2 Features of denominal adjectives

Denominal adjectives are used predicatively but never attributively (but see below for more details). A set of simple examples is shown in (240).

- (240) a. t-aboi-ŋ  
T-shirt-ADJR  
'S/he is wearing a shirt.'
- b. t-aboi-ŋ          uro                  with externally expressed subject  
T-shirt-ADJR    I  
'I am wearing a shirt.'
- c. t-aboi-ŋ          ka-ŋ                  with yes/no question particle  
T-shirt-ADJR    Q-2  
'Are you wearing a shirt?'

When a denominal adjective has an overt subject or occurs in a yes-no question, the plural suffix occurs on the external subject or the question construction, like the simple adjective does when it is used predicatively, as shown in (241)-(242).

- (241) a. t-aboi-ŋ          omoro  
T-shirt-ADJR    you  
'You are wearing a shirt.'
- c. t-aboi-ŋ          omoro-ŋmo  
T-shirt-ADJR    you-PL  
'You (plural) are wearing a shirt.'

- (242) a. t-aboi-η                      ka-η  
 T-shirt-ADJR                      Q-2  
 ‘Are you wearing a shirt.’
- b. t-aboi-η                      ka-η-dom  
 T-shirt-ADJR                      Q-2-PL  
 ‘Are you (plural) wearing a shirt.’

The denominal adjective can be nominalized. In this case, the nominalizer suffix, meaning ‘the one who ...’, occurs after the adjectivizer suffix, as shown in (243).

- (243) a. t-aboi-η-em  
 T-shirt-ADJR-NMLZR  
 ‘the one who is wearing a shirt’
- b. t-abo-g-em  
 T-wing-ADJR-NMLZR  
 ‘the one who has wing(s)’

The denominal adjective can also be inflected with the plural suffix *-am*, (as the basic adjective *wurup* can, as shown (234)), which occurs after the adjectivizer. In this case, there is another nominalizer suffix, *-o*, that always occur after the plural suffix, as shown in (244).

- (244) a. t-aboi-η-am-o  
 T-shirt-ADJR-PL-NMLZR  
 ‘the ones who are wearing a shirt’
- b. t-abo-g-am-o  
 T-wing-ADJR-PL-NMLZR  
 ‘the ones who have wing(s)’

## CHAPTER 8

### SUMMARY

In this thesis I have presented general and detailed information about the morphology of nouns in the Ugorojmo language. Nouns can be divided in three main groups: those that cannot be inflected for possession, those that can be so inflected, and those that are inherently possessed. Inflection is by both prefixation and suffixation.

Inherently possessed nouns are always inflected, indicating either the possessor or the absence of a possessor (absolute form). They typically have a paradigm of up to seventeen forms, one of which is a distinct form that is used when an explicit NP possessor is present.

Almost all of the inherently possessed noun roots that begin with a vowel begin with either *a* or *e*. Only twelve words begin with a different vowel, and these twelve use allomorphs of prefixes that generally occur with the nouns that begin with consonants.

Possessed nouns require a possessive suffix in addition to a possessor prefix. Six arbitrary classes are required to account for the distribution of the formatives used. The possessive suffix is usually replaced by an absolute suffix, or a comparative case suffix, but the details are complicated and there are some exceptions.

There are five person distinctions in the language: first, second, third, first person inclusive and first person exclusive. All of these are marked on the nouns as prefixes, except for first person exclusive, which is expressed by a separate word that syntactically acts like a noun phrase.

The absolute form, which indicates the lack of a possessor, is formed using two affixes: one prefix (sometimes null) and one suffix (sometimes null). The absolute form has a more generic meaning.

Nouns can be inflected for four locative cases and a comparative case, all suffixes.

The comparative case occurs only with possessed nouns.

Nouns can also be pluralized. There are some complications on the inherently possessed nouns since one may want to pluralize the possessor, or the possessed item, or both. Typically, the suffix *-am* indicates plurality of the possessed item, and *-kom* plurality of the possessor. Some situations are more complicated. In some cases it is necessary to infer the interpretation from the context.

Compound nouns are formed from two or three inherently possessed nouns, as indicated by the fact that they have only one possessor prefix and one possessive suffix. The possessive suffix of a compound is the one used on the last root of the compound.

Modifying suffixes denote size, shape, etc. Besides denoting a large size, the augmentative suffix also sometimes produces a new lexical item.

The denominal predicate adjective is derived from a noun. Basically meaning ‘characterized as having’, it is formed by a prefix and a suffix. The suffix has six suppletive allomorphs, of which the formative *-k* has the widest distribution.

This thesis makes a contribution to the field of linguistics by providing a more detailed description of the nominal morphology of a Cariban language than was previously available. It provides important data that will be useful for comparison with other languages of this family. It also provides a more serious foundation for future development of Ugoronmo language in its written form by demonstrating the complexities of its morphology.

## **APPENDICES**

## APPENDIX A

### PHONOLOGICAL RULES

Some of the phonological rules presented here are lexical rules and some are postlexical (Kiparsky, 1982). Most of them are presented in I. Souza (in progress). Complete justification for each rule is not presented in this appendix.

#### A.1. Progressive Devoicing

An obstruent is devoiced when it follows a voiceless context – that is, when it is either in utterance-initial position or follows a voiceless consonant. The first of these situations is shown in (1).

(1)	After a prefix vowel	After a vowel-final word	Elsewhere
a.	u-bulepte-n 1SG-knife-POSS 'my knife'	bulepte 'knife'	pulepte 'knife'
b.	u-borido-n 1SG-basket-POSS 'my basket'	borido 'basket'	porido 'basket'

Data such as that in (2) show that underlyingly voiceless obstruents remain voiceless in all of these contexts.

(2)	After a prefix vowel	After a vowel-final word	Elsewhere
a.	u-kambo-ruu 1SG-firewood-POSS 'my firewood'	kambot 'firewood'	kambot 'firewood'
b.	u-tutu-n 1SG-vagina-POSS	tutuŋo 'vagina'	tutuŋo 'vagina'

The second situation (namely, following a voiceless consonant) is shown in (3); specifically, note the devoicing in (3c).

- (3) a. i-boda-p  
3-inside-PRED  
'it is inside it'
- b. porido boda-p  
basket inside-PRED  
'it is inside the basket'
- c. i-etfĩ-t           poda-p  
1SG-house-POSS inside-PRED  
'it is inside my house'

## A.2. Progressive Voicing

A consonant is voiced when it follows a sonorant consonant (which happens to always be a nasal), as shown in (4) for the suffixes shown.

- (4) a. tĩ-t-tam           i-mum-dam  
house-POSS-INE   3-head-INE  
'at my house'       'on his/her/its head'
- b. tĩ-t-taktĩ           i-mum-daktĩ  
house-POSS-ILL   3-head-ILL  
'towards my house' 'towards his/her head'  
                              or 'towards its top'
- c. i-la-tĩ                i-mum-dzi  
3-mouth-POSS        3-head-POSS  
'his/her/its mouth' 'his/her/its head'

A voiced obstruent of a preceding root does not cause a voiceless obstruent of a suffix to be voiced. See the following section A.3.

## A.3. Regressive Devoicing

An obstruent becomes voiceless when it precedes a voiceless context – that is, either before a voiceless obstruent, or in utterance-final position, as shown in (5) with roots that

end in voiced obstruents in their underlying forms. This is the mirror-image of the rule shown in A.1.

(5)	Before a suffix vowel	Before a voiceless suffix	Final utterance
a.	∅-emeb-uru 3-walking.stick-POSS 'his/her walking stick'	tomep-ke T.walking.stick-ADJR 'having a walking stick'	omep ABST.walking.stick 'walking stick'
b.	∅-arog-urru 3-headdress-POSS 'his/her headdress'	t-arok-ke T-headdress-ADJR 'having headdress'	orok ABST.headdress 'headdress'

#### A.4. Regressive Voicing

A voiceless obstruent becomes voiced when it precedes a voiced context, as shown in

(6)-(7). This is the mirror-image of the rule shown in A.2.

(6)	a.	i-bana-n 3-ear-POSS 'his/her/its ear'	ot-pana-k REFL-ear-COMP '(their) ear are alike'
	b.	∅-amoe-n 3-fingernail-POSS 'his/her/its fingernail'	od-amoe-k REFL-fingernail-COMP '(their) fingernail are alike'
(7)	a.	kambot 'fireplace, firewood'	kambod                  adak fireplace/firewood two 'two fireplaces, firewoods'
	b.	adak 'two'	adag    adak 'four'

#### A.5. Nasalization of Stops

A nasal consonant causes a preceding oral stop to become a nasal. This may happen within a word, as shown in (8). It also happens across word boundaries, as shown in (9).

(8)	a.	w-ib-wulu 1-bathe-REC 'I bathed'	w-im-naŋuru 1-bathe-PROG 'I am bathing'
	b.	kut-tuke-lu 1INCL-write-REC 'We (incl.) wrote him/her'	kun-moku-lu 1INCL-write-REC 'We (incl.) smelled him/her/it'





### A.7. Vowel Coalescence $u+e \rightarrow o$

Another vowel coalescence happens when prefixes ending in /u/ precede /e/. The vowels coalesce to /o/. It seems that the underlying form of the prefixes is seen when they precede a consonant-initial stem, as shown in (12).

- (12) a. i-pu-n                      tuu-pu-n  
          3-foot-POSS              REFL-foot-POSS  
          ‘his/her/its foot’        ‘his/her/its own foot’
- b. i-la-tfi                    tuu-la-tfi  
          3-mouth-POSS            REFL-mouth-POSS  
          ‘his/her/its mouth’      ‘his/her/its own mouth’
- c. i-ru-Ø                    tuu-ru-Ø  
          3-older.brother.ME-POSS REFL-older.brother.ME-POSS  
          ‘his older brother’      ‘his older brother’

The effects of coalescence are shown in (13).

- (13) a. Ø-etfi-t                    totfi-t  
          3-house-POSS            REFL.house-POSS  
          ‘his/her house’        ‘his/her own house’
- b. Ø-edet                    todet  
          3-name-POSS            REFL.name-POSS  
          ‘his/her/its name’      ‘his/her/its own name’
- c. Ø-eŋ-uru                toŋ-uru  
          3-eye-POSS            REFL.eye-POSS  
          ‘his/her/its eye’        ‘his/her/its own eye’

### A.8. Vowel Raising

The vowels /o/ and /e/ raise to /u/ and /i/ respectively before the vowel /a/ when they are in the same word, as shown in (14).

- (14) a. oringo                    oringu-am  
          ABST.pan                ABST.pan-INE  
          ‘pan’                    ‘in the pan’
- b. porido                    poridu-am  
          ‘basket’                basket-INE  
                                      ‘in the basket’

- |    |                         |                    |
|----|-------------------------|--------------------|
| c. | ∅-anme-lu               | ∅-anmi-a           |
|    | 3-throw.away-REC        | 3-throw.away-DIST  |
|    | ‘s/he/it threw it away’ | ‘threw it (there)’ |

The vowels /o/ and /e/ do not raise before other vowels, as shown in (15).

- |         |           |                 |
|---------|-----------|-----------------|
| (15) a. | o-odo     | ‘your owner’    |
| b.      | o-iptuu-n | ‘your bone’     |
| c.      | ∅-aboi-∅  | ‘his/her shirt’ |
| d.      | oet       | ‘rubber’        |
| e.      | pou       | ‘peccary (sp.)’ |
| f.      | toutfi    | ‘a man name’    |

The vowels /o/ and /e/ do not raise across word boundaries, as shown in (16).

- |         |                           |           |
|---------|---------------------------|-----------|
| (16) a. | porido                    | an̄de-lu  |
|         | basket                    | fall-REC  |
|         | ‘The basket fell.’        |           |
| b.      | mue                       | aru-lu    |
|         | bag                       | take-REC  |
|         | ‘s/he/it took the bag’    |           |
| c.      | wotomo                    | aro-∅     |
|         | tapir.(sp.)               | lung-POSS |
|         | ‘tapir (sp.)’s lung’      |           |
| d.      | mobe                      | a-ruu     |
|         | fruit.tree.(sp.)          | leaf-POSS |
|         | ‘fruit tree (sp.)’s leaf’ |           |

### A.9. Palatalization of /t/

The coronal stop /t/ palatalizes before the vowel /i/ and before /j/, as shown in (17) and (18).

- |         |                            |                           |
|---------|----------------------------|---------------------------|
| (17) a. | i-bana-n                   | ot-pana-k                 |
|         | 3-ear-POSS                 | REFL-ear-COMP             |
|         | ‘his/her/its ear’          | ‘(their) ear are alike’   |
| b.      | ug-ie-n                    | otʃ-ie-k                  |
|         | 1INCL-tooth-POSS           | REFL-tooth-COMP           |
|         | ‘our (incl.) teeth’        | ‘(their) teeth are alike’ |
| c.      | kut-tuke-lu                | kuʃ-ib-ulu                |
|         | 1INCL-write-REC            | 1INCL-bathe-REC           |
|         | ‘We (incl.) wrote him/her’ | ‘We (incl.) bathed.’      |

- |         |                                 |   |
|---------|---------------------------------|---|
| (18) a. | eridak<br>'parakeet (sp.)'      | eridag-jum<br>parakeet-AUG<br>'large parakeet (sp.)'      |
| b.      | orot<br>'wild cashew (sp.)'     | orotʃ-jum<br>wild.cashew-AUG<br>'cultivated cashew (sp.)' |
| c.      | kambot<br>'fireplace, firewood' | kambotʃ-jum<br>fireplace/firewood-AUG<br>'gas stove'      |

The palatalization before /i/ is a lexical rule, and before /j/ is a postlexical rule, as

shown in (19).

- |         |  |                                   |
|---------|--|-----------------------------------|
| (19) a. | i-buu-t<br>3-wife-POSS<br>'his wife'             |                                   |
| b.      | i-muu-∅<br>3-father-POSS<br>'his/her/its father' | ibuud imuu<br>'his father-in-law' |
| c.      | je-∅<br>3.mother-POSS<br>'his/her/its mother'    | ibutʃ je<br>'his mother-in-law'   |

### A.10. R-deletion

There are three suffixes that lose their initial /r/ when it follows a voiced coronal, as shown in (20). These suffixes are *-ru* 'possessive', *-ruu* 'possessive' and *-re* 'Adjectivizer'.

- |         |      |  |
|---------|------|--|
| (20) a. | -ru  | a-wokpa-ru<br>3-burp-POSS<br>'his/her/its burp'                |
| b.      | -ruu | i-ba-ruu<br>3-older.sister.FE-POSS<br>'her older sister'       |
| c.      | -re  | to-wakpa-re<br>T-burp-ADJR<br>'characterized as having a burp' |

Deletion of the *r* is illustrated by the forms in (21).

- (21) a. i-mul-u  
3-cough-POSS  
'his/her/its cough'
- b. i-gunel-u  
3-sweat-POSS  
'his/her sweat'
- c. e-wel-u  
3-flashlight-POSS  
'his/her flashlight'
- d. a-worond-u  
3-word-POSS  
'his/her word'
- e. i-dagin-u  
3-whistle-POSS  
'his/her whistle'
- f. Ø-eɲnaptal-u<sup>1</sup>  
3-nosedress-POSS  
'his/her nosedress'
- g. e-wel-u  
3-necklace-POSS  
'his/her necklace'
- h. tuu-mul-e  
T-cough-ADJR  
'having a cough'
- i. t-apoel-e  
T-belligerence-ADJR  
'having a belligerent behavior'
- j. tuu-dagin-e  
T-whistle-ADJR  
'characterized by whistling'
- k. to-worond-e  
T-word-ADJR  
'characterized as having words' (talking)

---

<sup>1</sup> The suffix *-ru* was not found after nouns ended in /d/ and /n/.

### A.11. Vowel Epenthesis

Vowel epenthesis occurs with the three suffixes mentioned in section A.10. The vowel is inserted after voiced obstruents and nasals, except the coronals. The epenthetic vowel is identical to the one in the suffix, as shown in (22)-(24).

- (22) a. Ø-eb-uru  
3-smile-POSS  
'his/her/its smile'
- b. Ø-amborog-uru  
3-pendant-POSS  
'his/her/its pendant'
- c. Ø-aborim-uru  
3-arm-POSS  
'his/her/its arm'
- d. Ø-eŋ-uru  
3-eye-POSS  
'his/her/its eye'
- (23) a. Ø-aŋ-uruu  
3-worm-POSS  
'its worm'
- b. Ø-arog-uruu  
3-headdress-POSS  
'his/her headdress'
- c. i-b-uruu  
3-arrow-POSS  
'his arrow'
- d. Ø-erem-uruu  
3-song-POSS  
'his/her/its song'
- (24) a. toŋnab-ere  
T.snore-ADJR  
'characterized by snoring'
- b. tuu-g-ere  
T-liquid-ADJR  
'characterized as having liquid'

- c. toŋ-ere  
T.eye-ADJR  
'characterized as having eyes' (awake)

### A.12. T-deletion

A /t/ is deleted when it precedes a voiced coronal, as shown in (25). Compare the nouns in their simple or absolute forms with the ones inflected for possession.

- |         |                                     |  |
|---------|-------------------------------------|--|
| (25) a. | abat<br>'manioc cake'               | ∅-aba-ru<br>3-manioc.cake-POSS<br>'his/her/its manioc cake'              |
| b.      | omiat-∅<br>ABST.hand-ABST<br>'hand' | ∅-emia-ru<br>3-hand-POSS<br>'his/her/its hand'                           |
| c.      | kambot<br>'fireplace, firewood'     | i-kambo-ru<br>3-fireplace/firewood-POSS<br>'his/her fireplace, firewood' |

## APPENDIX B

### COMPLETE PARADIGMS

my ...	your ...	our (incl.) ...	reflexive	absolute	his/her...	NP's ...	Gloss
iaboi	uaboi	ugaboi	taboi	oboijo	aboi	aboi	'shirt'
iaborimuru	uaborimuru	ugaborimuru	taborimuru	oborimurujo	aborimuru	aborimuru	'forearm'
iamoen	uamoen	ugamoen	tamoen	omoenjo	amoen	amoen	'fingernail'
iaroguruu	uaroguruu	ugaroguruu	taroguruu	orok oroguruujo	aroguruu	aroguruu	'headdress'
tubanan	obanan	ukpanan	tubanan	panajo	ibanan	banan	'ear'
uwulepten	obwulepten	ukpwulepten	tuwulepten	pwulepte	ibwulepten	bwulepten	'knife'
uaboridon	oboridon	ukporidon	tuboridon	porido	iboridon	boridon	'basket'
uaboru	oboru	ukporu	tuboru	porujo	iboru	boru	'lip'
udembulu	odembulu	uktembulu	tudembulu	tembulujo	idembulu	dembulu	'throat'
udenjbun	odenjbun	uktenjbun	tudenjbun	enjbun	idenjbun	denjbun	'grandmother'
uadoptji	odoptji	uktoptji	tudoptji	toptjiujo	idoptji	doptji	'shotgun'
iedet	idet	gedet	totet	odejo	edet	edet	'name'
ieduet	iduet	geduet	totuet	oduat	eduet	eduet	'hammock'
ietjit	itjit	getjit	totjit	otjiujo	etjit	etjit	'house'
ueburu	oeburu	ugieburu	tueburu	eburujo	ieburu	?	'smile'
uen	oen	ugien	tuen	oenjo	ien	ien	'tooth'
uepkalu	oepkalu	ugiepkalu	tuepkalu	opka	iepkalu	?	'rack'
ugambilu	ogambilu	ugugambilu	tugambilu	kambilujo	igambilu	?	'wound'
ugat	ogat	ugugat	?	kaajo	igat	gat	'fat'
ugoguru	ogoguru	ugugoguru	tugoguru	kogu kogurujo	igoguru	?	'cry'
ugomtjin	ogomtjin	ugugomtjin	?	komtjiujo	igomtjin	gomtjin	'fever'
uitpunn	oitpunn	uguitpunn	tuitpunn	itpo	iitpunn	itpunn	'bone'
jeme	ukte	ugukte	tude		je	je	'mother'
ukamaburu	okamaburu	ugukamaburu	tukamaburu	kamap	ikamaburu	kamaburu	'liquid container'
ukamboru	okamboru	ugukamboru	tukamboru	kambot kamborujo	ikamboru	kamboru	'firewood'
ukpi	okpi	ugukpi	tukpi	tukto	ikpi	tubi	'field'
ulatji	olatji	ugulatji	tulatji	latjiujo	ilatji	latji	'mouth'
wlu	olu	ugulu	tuwu	?	ilu	lu	'tongue'
umdabiri	omdabiri	ugumdabiri	tumdabiri	mudabirujo	imdabiri	mudabiri	'food'
umuruun	omuruun	umuruun	tumuruun	muruujo	imuruun	muruun	'wound'
umobun	omobun	umobun	tumobun	mobu	imobun	mobun	'canoe'



uumumtʃi	omumtʃi	ujmumtʃi	tuumumtʃi	mumtʃiŋo	imumtʃi	mumtʃi	‘head’
uumun	omun	ujmun	tuumun	muŋo	imun	imun	‘son’
uumuŋuru	omuŋuru	ujmuŋuru	tuumuŋuru	muŋu	imuŋuru	muŋuru	‘blood’
uuo	oio	ugio	tuuo		iio	io	‘male’
uodo	oodo	ugodo	tuodo	odoŋot	iodo	odo	‘owner’
papa	uŋme	uguŋme	tum	?	imu	imu	‘father’
upkon	opkon	ugupkon	?	pugo	ipkon	bugon	‘gas (flatulence)’
uptʃiguru	optʃiguru	uguptʃiguru	tuptʃiguru	putʃik putʃiguruŋo	iptʃiguru	?	‘diarrhea’
uptʃin	optʃin	uguptʃin	tuptʃin	putʃiŋo	iptʃin	butʃin	‘shin’
upun	opun	ugupun	tupun	puguŋo	ipun	pugun	‘foot’
uretput	oretput	ugeretput	toretput	oretpuŋo	iretput	?	‘hair’
uru	oru	uguru	turu		iru	ru	‘older brother’
utapedan	otapedan	uktapedan	tutapedan	tapeda	itapedan	tapedan	‘paper, money’
utororon	otororon	uktororon	?	tororo	itororon	tororon	‘plastic bottle’
ututun	otutun	uktutun	?	tutuŋo	itutun	tutun	‘vagina’
utʃigue	otʃigue	ugutʃigue	?	?	itʃigue		‘gall bladder’
utʃiguru	otʃiguru	ugutʃiguru	tutʃiguru	tʃigu	itʃiguru	tʃiguru	‘urine’
uwarin	owarin	ugwarin	tuwarin	wariŋo	iwarin	warin	‘bag’
uwet	owet	ugwet	tuwet	wat	iwet	wet	‘feces’
uwuri	owuri	ugwuri	towuri	wuri wuriŋo	iwuri	wuri	‘toy’
uworondu	oworondu	ugworondu	toworondu	woronduŋo	aworondu	worondu	‘word/speech’

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