# THE NOUN CLASS SYSTEM OF UT-MA'IN, A WEST KAINJI LANGUAGE OF NIGERIA

by

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### **ABBREVIATIONS**

A Adjective AGT Agentative

AssocP Associative phrase
C Class element
D Definite article

Dem Demonstrative modifier

FUT Future tense
HAB Habitual aspect
IMPERF Imperfect aspect
Indef Indefinite article

M Modifier N Noun

 $NP_{[POSS]}$  Possessive pronoun

O Object

PRES Present progressive aspect

PST Past tense
RelC Relative clause
Q Quantifier

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#### **ABSTRACT**

This present work provides a comprehensive overview of the noun class system of ut-Ma'in, a Benue-Congo (West Kainji) language of Northwestern Nigeria. The ut-Ma'in language is characterized by a complex noun classification system and a robust agreement system that permeates the language. While an understanding of the noun classes is essential to an understanding of the language as a whole, discussion includes the division of nouns into thirteen distinct classes, marked by prefixes on the nouns themselves and by agreement elements on other clause constituents. The relationship of the noun classes of ut-Ma'in to historical reconstruction work available for the noun class systems of both Proto-Benue-Congo and Proto-Kainji is explored, and the robust noun class agreement system that affects numerals, quantifiers, the associative construction, the pronoun system, the indefinite and definite articles, adjectives, and the interrogatives "which?" and "what?" is described.

Of particular interest to the reader are the semantic properties that characterize the noun classes and the noun class pairings; these semantic characteristics also serve as the primary criteria for the assignment of a noun to a particular class or class pairing. Also of interest are the varied forms of the associative markers and the use of both prefixes and suffixes to mark agreement on clause constituents.

#### CHAPTER 1

### INTRODUCTION

In northwestern Nigeria, the ut-Ma'in language employs a complex system of noun classification that is driven by the semantic characteristics of the nouns. Because these noun classes permeate the language, understanding them and the grammatical constructions of which they are a part is essential to understanding the structure of ut-Ma'in as a whole.

### 1.1 Purpose of this study

In this study, I describe the noun classes and associated agreement system of the Benue-Congo language ut-Ma'in<sup>1</sup>, specifically the Ror variety. ut-Ma'in is spoken in northwestern Nigeria, with approximately 36,000 speakers in both Kebbi State and Niger State (Regnier 1992:7). This study looks at the noun in citation form as well as the phenomena that occur as the noun interacts with other noun phrase elements and other clause constituents. It includes how the noun is marked for class, agreement as seen in the noun phrase, and how the noun of a particular class may be referenced anaphorically in a discourse.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> The current ut-Ma'in orthography uses the underlined "u" to represent the near close-mid central vowel [9]. The glottal stop [?] is indicated by the apostrophe "'". Therefore, the language name is pronounced [5t-mā?īn], and the language name is spelled "ut-Ma'in."

<sup>&</sup>lt;sup>2</sup> This work relies heavily on wordlist and data collected at the UMCA Bible School in Tungun Magajiya, Rijau L.G.A., Niger State, Nigeria. Data was collected from Ror speakers who work with the ut-Ma'in Language Development Project, based in Tungun Magajiya between February 2006 and March 2007. The wordlist was collected under the IRB Project # IRB-200601-006.

Chapter 1 includes an introduction and general information about the language with a brief description of appearances of ut-Ma'in in the literature. Chapter 2 provides an overview of the phonology and grammar of ut-Ma'in. Chapter 3 introduces the thirteen noun classes and explains how the numbering system relates to Proto-Benue-Congo. Chapter 4 presents the content of the noun classes and discusses how the individual classes pair together; attention is also given to unpaired classes. Chapter 5 discusses agreement targets within the noun phrase and discusses how the pronoun system reflects the noun classes. Finally, Chapter 6 concludes the study and provides a summary of the findings.

### 1.2 Language information

The name of the language under consideration is not straight forward. The speakers of the Ror language variety are known as Fakkawa to the Hausa, the language itself is known to the Hausa as Fakkanci.<sup>3</sup> Temple (1922) is the first to mention the ut-Ma'in clans. There they are referred to as the Adoma, a subgroup of the Lelna; their language is listed as Kelinchi (Blench n.d.:11). Harris (1938) discusses the Ror and related clans as a subgroup of the Dakarkari (Lelna). Rowlands (1962:78) states that

some confusion arises because the name Dakarkari is used in English to cover a number of groups speaking dialects related to ci-Lela who live in the same area. These are Kəri-ni,...Lyase-ne,...Pəku-nu,...Wipsi-ni,...Geeri-ni.

Rowlands (1962:78) lists these language varieties by their C'Lela<sup>4</sup> name, and all but Lyase-ne are now known as varieties of what the *Ethnologue* (Gordon 2005b) codes as the language [gel]. The language name listed in the *Ethnologue*, Kag-Fer-Jiir-Koor-Ror-Us-Zuksun, reflects

<sup>&</sup>lt;sup>3</sup> The name Fakkanci comes from the town named Fakai, the first town of these related clans along the main road. The political district is also known as Fakai District (Regnier 1992:3).

<sup>&</sup>lt;sup>4</sup> C'Lela, pronounced [tʃ³lela], is the language name of the Lelna people. The term Lela is also used to refer to both the people and their language.

the various clan autonyms, and the code [gel] is taken from the Geeri-ni or Jiir variety that is known as Gelawa in Hausa.

Blench & Crozier (1992:62) refer to the group as the Kag cluster and classify the language as Niger-Congo, Atlantic-Congo, Volta-Congo, Benue-Congo and consider it to be part of the Northern group of the Benue-Congo subgroup Western Kainji, as seen in Figure 1, taken from Regnier (1992:12).

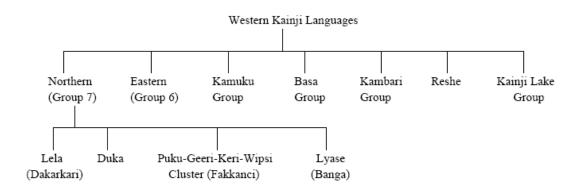


Figure 1: Language relationships

The eight known clans are listed in Table 1 with their C'Lela name, Hausa name, autonym, and language name. As reported by Regnier (1992:4), the autonym of each clans language variety may be derived by adding the *9t*- prefix to the root of the clan name which produces forms such as 9t-Kag, 9t-Us, etc. Two clans, the Ror and Koor, use instead suffix their clan name to the stem *5t-mā* (identical to the word meaning 'salt'). Therefore, a Ror man calls his speech variety *9t-ma-ror*, whereas a Koor man calls his speech variety *9t-ma-koor*.

Table 1: ut-Ma'in clan/dialect names (modified from Regnier 1992:4)

C'Lela name	Hausa name	Autonyms	Language variety name
Pek-nu	Fakkawa	Kag-ne	et-Kag
Pek-nu	Fakkawa	es-Us	sU-te
Geeri-ni	Gelawa	Jiir	et-Jiir
Wipsi-ni	Zussun/Zusu	a-Zuksun	et-Zuksun
Wipsi-ni	Kukumawa/Kukunawa	es-Fer	et-Fer
Keri-ni	Kelawa	Ker-ni	et-Ker
ed-Gwan	Fakkawa/Tuduwa	a-Ror	et-ma-Ror
??	Kulu	a-Koor	ət-ma-Koor

In the year 2000, a small group that represented the different clans chose the name ut-Ma'in (ɔ̄t-mā?īn) as a cover term for the purposes of unity and language development (Heath et al. 2004). Though this name is not yet in common use, the meaning clearly represents the common language shared by all eight clans. Following The first person inclusive pronoun, in, replaces the clan name and results in the word ɔ̄t-mā?īn. The singular Class 5⁵ word ɔ̄r-mā?īn is used by all eight clans as a word meaning 'customs and traditions'. This word existed previously without a plural form, but the ɔ̄r- prefix is often the singular of the Class 5/6 singular/plural pair ɔ̄r-/ɔ̄t-. This new term, ɔ̄t-mā?īn, can be understood as the application of the plural Class 6 prefix, previously not applied, to the root meaning 'customs, tradition'.

Regnier (1992:11) proposes that the Ror variety can serve as "the standard for the written form of a language." Regnier bases his proposal on the following evidence;

- Ror is probably the largest dialect, second perhaps to Kag;
- The Kag clan are historically considered outsiders who learned Ror;
- Other clans exhibit a high degree of accepted understanding of Ror;
- Other clans exhibit a high degree of predicted understanding of Ror;
- The Ror variety is centrally located and other clans have thought to have significant comprehension of the Ror variety as measured by contact patterns.

<sup>&</sup>lt;sup>5</sup> The term noun class or class is defined in section 1.4.

Based on Regnier's (1992) proposal, the Ror variety is reported here. In hope that this study will further the development of the ut-Ma'in language as a whole, the term ut-Ma'in will be used to reference the language throughout this work.

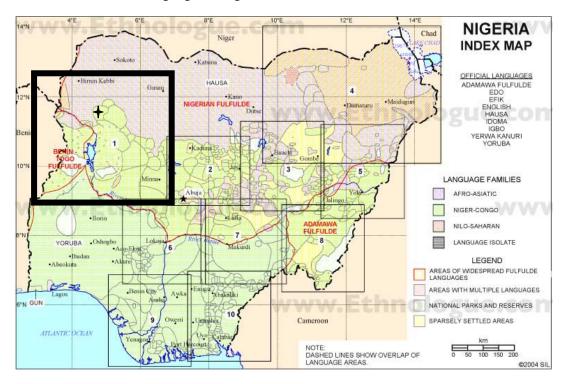


Figure 2: Languages of Nigeria (Gordon 2005c)

ut-Ma'in is spoken in Fakai District, Zuru L.G.A., Kebbi State, Nigeria. Although some groups have moved south of Kontagora, Niger State, in search of farm land, they maintain use of the language and maintain contact with the well established Kebbi groups.

The main ut-Ma'in language area is marked by a star (♦) in the area outlined by a thick black line in the upper left corner of Figure 2. This area is enlarged in Figure 3, where a star (♦) again marks the language area (also numbered 17). The related languages Duka (Hun-Saare), numbered 16, and Dakarkari (C'Lela), numbered 19, are to the south and east respectively.

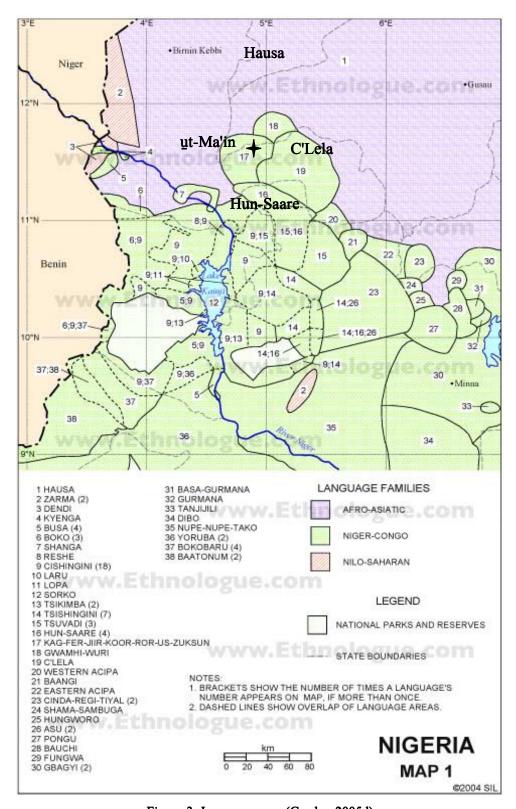


Figure 3: Language area (Gordon 2005d)

Many villagers remain monolingual in ut-Ma'in. Those who are proficient in multiple languages likely still use ut-Ma'in as their language of choice in their homes and villages. The extent of bilingualism in Hausa is not assessed in Regnier's survey report, but, undoubtedly, those who live in the towns along the main roads have a higher proficiency in Hausa as they interact with speakers of other languages daily using Hausa as their language of wider communication (Regnier 1992:10). The ut-Ma'in language area is in close proximity to the homeland of the Hausa. Hausa, the trade language used across northern Nigeria, is the language of choice when interacting with a member of another nearby language group or at gatherings where multiple language groups are represented. English,<sup>6</sup> the language of education and government, is the language of choice when interacting with southerners or expatriates.

The speakers of ut-Ma'in share cultural similarities with their neighbors, the Lelna (speakers of C'Lela), with regard to their traditional religion, food preparation and the crops they grow. These close cultural ties may be the reason that some anthropologists in the first half of the twentieth century included the speakers of ut-Ma'in as a subgroup when describing the Lelna. Similar to the Lelna, the people farm a variety of crops including guinea corn, millet, maize, acha, groundnuts (peanuts), beans, sugar cane and cotton. Other activities include the brewing of alcohol, blacksmithing, mat making, smelting and the making of pottery to supplement farming income. Various elements of the traditional religion, such as wrestling and bride service continue to be important to the culture (Dettweiler & Dettweiler 2005:7).

<sup>&</sup>lt;sup>6</sup> Many Nigerians are also proficient in the English based Nigerian Pidgin.

<sup>&</sup>lt;sup>7</sup> Acha is the name of a grain called *fodio* (Digitaria exilis) in other parts of West Africa.

<sup>&</sup>lt;sup>8</sup> Meek (1936:64) describes this as "marriage by agricultural service." CAPRO (1995:223-234) describes this as "gulmo", possibly a term related to the Hausa word *golo* 'testicles'. At age twelve a boy begins to assist the girl's father with the weeding and the harvesting of crops. An annual festival is held to celebrate the completion of

### 1.3 ut-Ma'in and the Northern West Kainji in the literature

References to ut-Ma'in and all published research, as well as descriptive works in progress, are summarized below. Rowlands (1962) includes a short wordlist from three varieties:

Fakawa (Kag), Kelawa (Ker-ni) and Zusu (Zuksun). Regnier's (1992) survey report includes a list of 281 words with data from five dialects. In Regnier's report, *Papers in ət-Kag* by Clement Tuko is listed as "to appear", and no copy is available at this time. Keating (2003) provides a preliminary phonology of the Ror variety of ut-Ma'in, and Heath et al. (2004) drafted a descriptive grammar of the Ror variety that is still under revision by the ut-Ma'in Language Development Project.

For the closely related Duka (Hun-Saare) language, Bendor-Samuel et al. (1973) describes both phrase and clause level structures, where there is a limited discussion of the noun class system. Heath & Heath (2002) have written an unpublished grammar of the Kir-Ho variety of Duka (Hun-Saare). For the closely related C'Lela language, Hoffman (1967) describes the noun class system. Dettweiler (2001) describes some aspects of the vowel harmony system of C'Lela, and Dettweiler (2006a & 2006b) describes the phonology and grammar of the Zuru variety.

### 1.4 Terminology

A NOUN CLASS, as defined by Aikhenvald (2000:17,19), is a noun categorization device that

- is realized outside of the noun itself within a head-modifier noun phrase
- is realized as agreement markers on modifiers such as adjectives
- may also be realized outside of the noun phrase
- is most often marked by affixes
- usually contain references to inherent properties of nouns

<sup>&</sup>quot;gulmo" at which a boy is "shown the gods and taught endurance." (CAPRO 1995:226)

Where Aikhenvald (2000:19) uses 'noun class' as a cover term for noun class and gender, Corbett (1991:44) uses 'gender' as a cover term for gender and noun class. To add to the confusion, in the Bantu tradition the term noun class refers to the individual class of a noun and the particular set of noun class agreement markers that occur on other clause constituents, and gender refers to the pairing of noun classes into singular/plural sets.

In order to avoid the confusion of the term gender, I use NOUN CLASS to refer to the individual class in which a particular noun occurs and the particular set of noun class agreement markers that occur on other clause constituents. Chapter 3 discusses the noun classes of ut-Ma'in. I use noun class PAIRINGS to refer to sets of two noun classes that occur with the same noun root, where one class prefix marks the singular and a second distinct class prefix marks the plural. These pairings provide insight into the semantic characteristics that unify groups of nouns in ut-Ma'in. Chapter 4 discusses all noun class pairings that occur in the data corpus.

UNPAIRED CLASSES refer to nouns that do not make a singular plural distinction. The term single class genders is avoided. Unpaired classes and their content are discussed in Chapter 4.

AGREEMENT TARGETS are the constituents that occur with agreement marking as triggered by the class of a noun (Corbett 1991:145). Most agreement targets in ut-Ma'in occur with agreement marked by an affixed class element. Some targets occur with a prefix that marks class agreement, and others are marked with a suffix. Chapter 5 discusses the various agreement targets, the morphology that occurs with each and how the noun that occurs with each construction is marked for class. Corbett (1991:105) treats agreement as synonymous with 'concord.' In order to avoid confusion, I avoid the term concord.

### **CHAPTER 2**

# PHONOLOGY AND

### **GRAMMAR OVERVIEW**

# 2.1 Phonology overview

This section provides a brief overview of the speech sounds used in ut-Ma'in. Some discussion of phonological alternations, with focus on those alternations that occur as a result of noun class phenomenon are also included.

### 2.1.1 Phonetic inventory

The inventory of vowels is discussed first, followed by a discussion of the inventory and distirbution of the consonants of ut-Ma'in. Similar to other West Kainji languages, ut-Ma'in has a symmetric eight vowel system, as shown in Figure 4.

	Front	Central	Back
Close	i		u
Near Close-Mid		е	
Close-Mid	e		O
Open-Mid	ε		Э
Open		a	

Figure 4: Vowels

In (1), examples of all eight vowels are shown. Most examples are nouns in which the vowel in focus occurs as part of the noun stem. One exception is the adjective *rīm-jà* 'black', in which the vowel in focus, [i], occurs in the adjective stem.

(1)				
Contrast	Example	Gloss	Example	Gloss
/i/ and /e/	ōr-kìŋg	'stump'	rīm-jà	'black'
	ōr-kèŋgì	'frontier'	<i>ōs-rēm</i>	'speech, discourse'
/i/ and / $\epsilon$ /	<i>kīt</i>	'side (of something)'	<i>ōr-kés</i>	'hatching'
	két	'harvesting maize'	<i>ōr-kìk</i>	'shortness'
/e/ and / $\epsilon$ /	ārké	'going'	ū-tè?	'arriving'
	ōr-híkè	'(moving) away from'	ōt-è?	'laying (eggs)'
/e/ and /a/	ū-k∂?	'pimple'	ōs-kàr	'horns'
	ū-kā?	'skin (of man)'	<i>5t-5k∂r</i>	'cutting open'
/u/, /o/, /ɔ/	ū-kū?	'shell (of turtle)'	5t-kūt	'thighs'
	ōr-kō?	'frog'	ōs-kót	'thorn trees'
	<i>ōs-kó?</i>	'silk, hair (of maize)'	<i>5t-k∕st</i>	'crests (of birds)'

All vowels may occur in lengthened form, as shown in Figure 5. Sometimes the length is lexical, but often it occurs as a result of verb inflection for tense/aspect.

	Front Central Back					
Close	iː		u:			
Near Close-Mid		:e				
Close-Mid	e:		O!			
Open-Mid	13		<b>3</b> :			
Open		a:				

Figure 5: Long vowels

Below are example contrasts for lengthened vowels.

(2)				
Contrast	Example	Gloss	Example	Gloss
/i/ and /i:/	ōt-rìst ¯	'abandoning'	ōt-pìs ¯	'corn cobs'
	ōt-rì:s	'porcupines'	<i>5t-ì:</i> s	'sinking'
/e/ and /e:/	<i>⋽r-ēr</i>	'arrow'	<i>ōt-rèst</i>	'dropping'
	é:r	'eight'	Ōr-Ē:S	'standing'
$/\epsilon$ / and $/\epsilon$ :/	ōm-rég	'trying'	ōr-hé?è	'falling'
	ōm r€:g	'I succeeded'	hēːg	'fell'
/e/ and /e:/	ōr-p <sup>j</sup> ákót	'flower'	<i>ōt-zèm</i>	'spoiling(intr)'
	ū-kớ:t	'chicken'	<i>ōt-t∂:m</i>	'chewing'
/a/ and /a:/	ī-tā:r	'tiny stone'	ōt-kàs	'tracks (animal)'
	tār	'tax'	ōt-tà:s	'villages'
/u/ and /u:/	<i>⋽r-kūg</i>	'trunk (of tree)'		
	ōm-hú:g	'dust'		
/o/ and /o:/	ū-dòr	'nape of neck'	ōm-hóg	'hearing'
	ū-kòx	'valley'	ōr-gó:g	'axe'
/ɔ/ and /ɔ:/	<i>⋽r-kót</i>	'crest (of bird)'	ōt-d∂g	'wilderness (pl)'
	ū-kớ:t	'guinea fowl'	ēs-tō:g	'prayers'

Two contrasts are shown for each vowel set, except for the contrast /u/ and /u:/. The vowel /u/ occurs very infrequently in noun stems and further examples are not available.

ut-Ma'in has thirty seven consonants as shown in Figure 6. Aspiration of plosives is common but not contrastive. E.g., the noun  $\bar{\sigma}r$ - $k\delta t$  'crest (of bird)' can occur as  $\bar{\sigma}r$ - $k^h\delta t^h$  with no contrast in meaning. Labialized consonants and palatalized consonants contrast with their non-labialized and non-palatalized counterparts.

	Bilabial		Labiodental		Alveolar			Alveopalatal		Velar			Glottal	
Plosive	p b	p <sup>j</sup> b <sup>j</sup>			t d					k g	k <sup>w</sup> g <sup>w</sup>	k <sup>j</sup> g <sup>j</sup>	(?)	
Affricate								t∫ dʒ	t∫ <sup>w</sup> dʒ <sup>w</sup>					
Fricative			f v	v <sup>j</sup>	s z	s <sup>w</sup> z <sup>w</sup>		S					h	h <sup>j</sup>
Nasal	m	m <sup>j</sup>			n		n <sup>j</sup>			(ŋ)				
Trill					r	r <sup>w</sup>	r <sup>j</sup>							
Approximant							j				w			
Lateral Approximant					(l:)									

Figure 6: Consonants

Non-contrastive consonants occur in parentheses in Figure 6. The glottal plosive [?] can occur stem intially without contrast to vowel initial segments and often occurs between a vowel prefix and a vowel initial stem. Section 2.1.4 discusses [?] in relation to long vowels and resyllabification of roots. Section 3.1 discusses the free variation between [?] and other consonant prefixes within the noun class system. The alveolar nasal [n] occurs as a velar nasal [n] before velar plosives. In fast speech, the long lateral approximant [l:] occurs when two

alveolar trill [r]'s come together across a morpheme boundary. This phonetic variation is discussed more fully in section 3.1.

The alveolar fricatives and alveolar plosives do not currently have a palatalized form. Historically, there may have been [t<sup>j</sup>], [d<sup>j</sup>], and [s<sup>j</sup>]. Perhaps today these occur as the alveopalatals [tʃ], [dʒ], and [ʃ]. The consonant [n<sup>j</sup>] could be interpreted as [n], but at a morpheme boundary, when [n] occurs as the final segment of the first morpheme and [j] occurs as the first segment of the second morpheme, the result is [n<sup>j</sup>] and not [n], as shown in (4a.). This behavior reflects what happens when a [t] and [j] occur at the morpheme boundary; [t] and [j] occur as the sequence [?j]<sup>9</sup> and not as the affricate [tʃ], as shown in (4b.). This indicates that [n<sup>j</sup>] has maintained its alveolar point of articulation and has not shifted to alveopalatal point of articulation. Also, by positing the segment [n<sup>j</sup>], symmetry is maintained with [m<sup>j</sup>] and [r<sup>j</sup>].

(3)
$$\frac{\bar{u}-n^j\hat{a}?}{\bar{s}r-n^j\bar{s}:w} \quad \text{`gift'}$$

$$\frac{\bar{s}r-n^j\bar{s}:w}{\bar{s}r-n^j\bar{s}:w} \quad \text{`mushroom'}$$
(4)
$$a. \quad \underline{\acute{m}-j\ddot{a}} \quad \rightarrow \quad \underline{in'a} \quad \quad \text{(*ina)}$$

$$\text{Dem-C7}^{10}$$
b. 
$$\underline{j\acute{a}t-j\grave{a}} \quad \rightarrow \quad \underline{j\acute{a}tj\grave{a}} \quad \quad \text{(*j\'{a}t\'{s}\grave{a})}$$

$$\text{big-C7}$$

All consonants occur stem initially except [?],  $[\eta]$  and [l:] the Examples of all consonants that occur in stem initial position are shown in (5).

<sup>&</sup>lt;sup>9</sup> [t] is often realized as [?] before consonants. See section 3.1 for further discussion.

<sup>&</sup>lt;sup>10</sup> The abbreviation C7 refers to Class 7. This type of notation, C followed by the class label, is used in both prose and examples.

```
(5)
/p/
              ōr-pás
                              'ford (n)'
                                                               /m/
                                                                             ū-mák
                                                                                            'kidney'
/b/
              ū-bár
                              'loincloth'
                                                               /n/
                                                                             ū-nát
                                                                                            'wound'
/p^{j}/
              \bar{u}-p^{j}\bar{a}:t
                              'moon'
                                                               /n^{j}/
                                                                             ū-n<sup>j</sup>á?
                                                                                            'gift'
/b^{j}/
              \bar{u}-b^j\bar{a}s
                                                               /m^{j}/
                                                                             ōt-m<sup>j</sup>∂g
                              'broom'
                                                                                            'twist (v)'
              ōr-tàkèn
                                                                             ū-rán
/t/
                              'beginning'
                                                               /r/
                                                                                            'scar'
              ū-dàk
                                                                             ū-r<sup>w</sup>ág
/d/
                                                               /r^{w}/
                              'ground'
                                                                                            'elephant'
                                                                                            'body'
/t\int
              ū-tʃām
                              'anvil'
                                                               /w/
                                                                             ū-wár
d_{3}
              ū-dʒán
                                                                             ōm-jár
                                                                                            'health'
                              'excema'
                                                               /j/
              ū-tſ<sup>w</sup>ár
                                                                             ū-fá?
/t \Gamma^{w}
                                                               /f/
                                                                                            'snake'
                              'throat'
/d3^{w}/
              ū-dʒ wá:k
                              'horse'
                                                               /v/
                                                                             ū-ván
                                                                                            'knife'
/k/
              ū-kā?
                                                               /v^{j}/
                                                                             ōt-v<sup>j</sup>∂n
                              'skin (of man)'
                                                                                            'wringing out'
                                                                             ōt-s<sup>w</sup>à
              ū-gāp
                                                               /s^{w}/
/g/
                              'a slap'
                                                                                            'drinking'
/k^{j}/
              5t-k¹èr
                                                               /z^{w}/
                                                                             ōt-z<sup>w</sup>à
                              'peircing'
                                                                                            'roasting'
              \mathcal{Q}-g^{j}\hat{\varepsilon}\eta k
                                                                             ū-ſák
/g^{j}/
                              'crooked'
                                                               /ʃ/
                                                                                            'seasame seed'
/k^{w}
              \bar{u}-k^w\bar{a}m
                                                               /h/
                                                                             ū-hō
                                                                                            'hole'
                              'iron'
              \bar{u}-g^w\bar{a}b
                                                                             \bar{u}-h^{j}\bar{g}
/g^{w}/
                              'toe'
                                                               /h^{j}/
                                                                                            'guinea corn'
```

A subset of consonants can occur word finally, as shown in (6).

Consonant clusters that can occur stem finally include [nd], [mb], [st], [ks], [kt] and [nt], as shown in (7). The consonant clusters [ks] and [kt] occur only once in the corpus in word final position. For all other word final consonant clusters two examples are shown.

```
(7)
/nt/
                      'mosquito'
                                                              'eggplant'
        ū-rènt
                                                 ū-gànt
/nd/
        ōr-k<sup>w</sup>ō:nd
                      'hoe'
                                                 ū-sônd
                                                              'pestle, pounding stick'
                                                              'okra'
/mb/
        ū-kàmb
                      'stem, stalk'
                                                 ōr-k<sup>w</sup>ōmb
                      'chosing'
                                                              'abandoning'
/st/
        ōt-d∂st
                                                 5t-rìst
/ks/
                      'remembering'
        5t-bàks
/kt/
        ū-mákt
                      'barren woman'
```

Stem medial consonants are shown in (8).

#### 2.1.2 Tone Melodies

ut-Ma'in has three phonetic tone levels: high (H), mid (M) and low (L). Falling tones only occur on syllables with a heavy coda. In this work, tones will be marked as in (9).

(9)

High Mid 
Low Falling ^

Falling tone does not occur in open syllables or in closed syllables that have a short vowel and a plosive in the coda. Falling tones can occur where a vowel is followed by an [r] or [s] as shown in (10a.), where a long vowel is followed by a single consonant as in (10b.), where a vowel is followed by a nasal as in (10c.), as well as where a vowel is followed by a nasal and another consonant as in (10d.). In the corpus, only one root 5t-p3st 'strain (food)' occurred with a falling tone in a coda of a single vowel followed by two consonants as in (10e.).

(10)			
	Coda	Example	Gloss
a.	VC	ū-tf <sup>w</sup> âr	'throat'
		ōr-dá.kôs	'palm (hand)'
b.	V:C	5t-kâ:k	'phlegm'
		Ōr-t∫ <sup>w</sup> Ô:n	'shoot (new plant)'
c.	VN	ōt-v⁵ĝn	'blow nose'
		ōs-gôm	'illness'
d.	VNC	ōr-dôns	'announcement'
		ū-sônd	'pestle, pounding stick'
e.	VCC	ōt-pôst	'straining (food)'

Eighty-eight noun roots with two syllables occur in the corpus. All possible level tone patterns occur, though LM and HM occur infrequently. The tone melodies that occur on two syllable nouns are shown in (11) with their frequency.

(11)		
Tone Melody	No.	% of 88
LL	26	29.5%
LM	1	1.1%
LH	7	8.0%
ML	4	4.6%
MM	28	31.9%
MH	5	5.7%
HL	8	9.0%
HM	1	1.1%
НН	8	9.0%

Three-syllable and four-syllable stems for nouns do occur. Because of the low number of multiple syllable words in the corpus, some of these may contain multiple roots that have acquired new meaning over time. For example, the word  $\bar{u}$ -ándàkà 'ancestor' contains stem initially what occurs elsewhere as the agentative derivational prefix á-. The second part of the stem may be from  $\bar{u}$ -dàk 'land', a C3 noun with the meaning 'ground'. It is then possible to understand that the current form  $\bar{u}$ -ándàkà was once a longer phrase or a derived noun meaning 'people of the ground', which developed into the meaning 'ancestor'. The noun then re-entered the noun class system in Class 7 with the  $\bar{u}$ - prefix.

Examples of other three and four syllable nouns are shown in (12).

(12)		
Root Melody	Example	Gloss
HHL	ōt-kógórò	'beer made at harvest'
MHL	ū-kāráŋkù	'fingernail'
LHL	ū-sàŋślò	'bedbug'
HMM	ū-íŋgēgēr	'ant'
MMM	ū-kērmēſī	'spark'
LLLL	ū-kàskàràtà	'cattle egret'
HHLH	ū-fándárnàkí	'chameleon'
HHMM	ū-kótíndākā	'gecko'

Tone sequences are essential to certain grammatical constructions, but are presumed to occur in predictable patterns. Tone melodies important to noun class constructions are discussed in Chapter 5. Though not in the scope of this study, the verb system relies on tone for some tense/aspect distinctions. Further research is needed to investigate to what extent the verb system relies on tonal changes and tone sequences.

### 2.1.3 Word internal vowel harmony

There is some remnant of a vowel harmony system. Currently word internal vowel harmony operates in two constructions impacted by the noun class system. This harmony is based on the feature specification for back of the noun class element that is affixed to the stem. The class specific prefix *CM*- triggers harmony of the root vowel in the indefinite article *CM*-*k5n* 'some, other'. For example, the indefinite article occurs as *wà*-*k5n* in Class 1, *è*-*kēn* in Class 2, and *ò*-*k5n* in Class 3. See section 5.6 for further discussion of the indefinite article. The class marking on the near-demonstrative modifier also triggers harmony with the vowel of the near-demonstrative modifier form. The vowel is only specified for height. The feature backis controlled by the specifications of the particular noun class element. For example, the near-demonstrative modifier occurs as *in* with Class 1, *in* with Class 3, and *min* with Class 6m. See section 5.2 for further discussion of the demonstrative modifiers.

Hoffman (1967:242) reports active word internal vowel harmony for C'Lela in the formation of animate plurals with the suffix [-nV], in which the vowel of the suffix harmonizes with the height of the final vowel of the root.  $\underline{u}t$ -Ma'in uses a similar suffix to mark human plurals, however there is no evidence of vowel harmony in this construction. Example (13) shows the  $-n\hat{\epsilon}$  suffix in  $\underline{u}t$ -Ma'in not affected by the vowel of the root.

(13)			
Root final vowel	Singular	Plural	Gloss
/i/	Ø-mārímárí	Ø-mārímárí-nè	'the dead'
/٤/	ū-bέb	Ø-béb-nè	'giant'
/e/	Ø-h¹św	Ø-h¹źw-nὲ	'theif'
/a/	Ø-tʃāmpá	Ø-tʃāmpá-nè	'man'
/c/	Ø-tók	Ø-tók-nè	'slave'

### 2.1.4 Resyllabification of roots

(1.4)

Some noun roots that occur with a long vowel [V:], where V is any vowel, may be resyllabified by the insertion of a glottal stop [?]. For example, the Class 5 noun <code>5r-k6t</code> 'cloud' can alternately occur as <code>5r-k6t</code>. There is no change in meaning associated with this resyllabification and there is no evident contrast. This re-syllabification often occurs when a consonant prefix occurs on a noun root that contain a lengthened vowel.

The root tār 'stone' occurs in all classes that designate inanimate objects (i.e., all classes except Classes 1, 2 and 7 which are reserved for animate nouns). The variety of prefixes that can occur with the noun root produces an alternation in the noun root between a lengthened vowel [V:] and the glottal stop alternative [V?V]. With a vowel class prefix, the root maintains its lengthened vowel form, as seen with Classes 3, DIM and AUG in (14).

(14)		
Class	Example	Gloss
3	ū-tā:r	'huge stone'11
DIM	ī-tā:r	'tiny stone'
AUG	ā-tā:r	'huge stones'

With a consonant in the class prefix, the root's syllable boundaries are redefined, as seen with Classes 4, 5, 6 and 6m in (15).

<sup>&</sup>lt;sup>11</sup> Variation in meaning is related to the class prefixes, and is not related to the phonetic variation in the root. See section3.3 for further discussion of semantic variation within the noun class system.

(15)		
Class	Example	Gloss
4	ōs-tā?ar	'long stones'
5	ōr-tā?ar	'stone'
6	5t-tā?ar	'stones'
6m	<i>5m-tā?ar</i>	'gravel'

### 2.1.5 Consonant prefixes and the near close-mid central vowel

In citation form, all consonant noun class prefixes occur with the near close-mid vowel [9] preceding the consonant. The vowel is always present in citation form and in careful (slow) speech, but it is often dropped in fast speech.

The near close-mid vowel [9] is contrastive with other vowels in noun roots as discussed in example (1). This contrast is demonstrated again in (16).

(17)

But this near close-mid [9] also serves as the epenthetic vowel to break up consonant clusters. In (17), the noun root may occur as *mákt* or *mákót*. Either one, with its prefix, gives the meaning 'barren woman'. There is no change in meaning or contrast between the forms. When the vowel [9] occurs to aid the pronunciation of a word, it bears a tone identical to that of the previous syllable.

(17)			
Singular		Plural	
ū-mákt	'barren woman'	mákt-nè	'barren women'
OR		OR	
ū-mák⁄st		mák <del>ó</del> t-nè	

Dettweiler (2001) analyzes the near close-mid vowel [9] as epenthetic in consonant prefixes for C'Lela, since the vowel occurs either to the right or left of the consonant to aid in pronunciation.

A class marker prefix is often incorporated into the same syllable with what immediately precedes it, but never into the initial syllable of the noun to which it is prefixed. [The epenthesis of the near-close central vowel]... is phonologically

predictable. This epenthesis is C'Lela's main strategy for resyllabifying words and phrases in which morphological processes have produced clusters of three or more consonants. (Dettweiler 2001:4, 20)

As a result of Dettweiler's analysis, the C'Lela Language Development Project has chosen not to write the vowel [9] with prefixes. For the Duka (Hun-Saare) language, Heath & Heath (2002:8) analyze the vowel [9], transcribed there as [i], as having full vowel status in the prefixes and analyzes the prefix as a VC sequence. As a result of this analysis, they have chosen to write the vowel [9] with prefixes.

The status of this vowel has not yet been determined for the ut-Ma'in language. The ut-Ma'in Language Development team has chosen to write the vowel with the noun class prefixes and noun class suffixes. Since the vowel occurs with consonantal noun class prefixes in the citation form, I have included it with all transcriptions of individual words. In Chapter 5 I write examples as they are pronounced.

#### 2.2 Grammar overview

This section provides a brief overview of the syntax and morphology of ut-Ma'in.

Discussion begins with the basic clause structure and typological expectations, and then a discussion of the syntax and morphology within the noun phrase follows. See Chapter 5 for further discussion of specific grammatical constructions related to the noun class system.

#### 2.2.1 General

ut-Ma'in has basic SVO clause order, as seen in (18). The noun subject  $\emptyset$ -tʃāmpá 'man' occurs first as the subject, followed by the verb  $m\bar{a}$ :g 'built' and the object  $\bar{u}$ -kúr 'room'.

Greenberg's universals posit that a VO language is likely to have certain other features. A main clause order of VO suggests other phrases will be head initial which suggests prepositions, head initial noun phrases, and prefixed morphology. ut-Ma'in exhibits these features as shown in Table 2.

Table 2: Greenberg's Universals (adapted from Payne 1997:72)

Greenberg's	Parameter	Correlation
Universal	r ai ametei	Correlation
1	main clause	VO
3,4	adpositions	prepositions
17	head noun and modifier	N-M
24	head noun and relative clauses	N-RelCL
27	affixes	prefixes

In Chapter 3, I show that most nouns in citation form occur with a prefixed class marker. And as expected, class elements are prefixed to quantifiers (including numerals), demonstrative modifiers, the associative marker, the indefinite article, the interrogative 'which' and the relative pronoun. But the class element is suffixed to adjectives. Another unexpected trend is the suffixing of class elements to the head noun when a noun occurs alone in the subject position, discussed in section 5.13, or when a noun occurs with an adjective or a possessive pronoun, discussed in section 5.9 and section 5.12.

Table 3 displays some of the morphology associated with the noun class system. A review and discussion of all noun class related morphology occurs in section 5.13.

Table 3: Noun phrase morphology

	Modifier	Не	ad No	oun		Modifier		Example	Gloss
Quantifier Phrase		C-	N		C-	Q		ōs-fàr ōs-bē:t	'all the trees'
Indefinite Article	C-Indef		N					sèkēn fàr sē	'some trees'
Associative Phrase			N		C-	AssocP		fàr s-à-m-wār	'trees of length/ tall trees'
Adjective			N	-C		A	-C	fàr-э̀s ját-sè	'big trees'
Possessive Pronoun			N	-C		NP <sub>[POSS]</sub>		fàr-ès ró	'your trees'
Definite Article			N	-C		D		fàr-ès sē	'the trees'
Demonstrative Modifier			N	-C	C-	Dem		fàr-ès sínsē	'these trees'

# 2.2.2 The noun phrase

When no modification occurs with the head noun, the associative marker occurs between the noun subject and the verb, phonologically suffixed to the noun stem.

In contrast the noun in object position occurs with its prefix as seen in (20).

Within the noun phrase only the optional indefinite article (Indef) precedes the head noun. All other modifiers follow the head noun. A noun can be modified by either a relative clause (RelC) or by a combination of other modifiers.

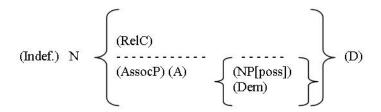


Figure 7: Noun phrase structure

If a noun phrase is fully expanded, all modifiers can co-occur with these exceptions. The indefinite article (Indef) and the demonstrative modifier (Dem) may not co-occur. The demonstrative modifier (Dem) and the possessive pronoun ( $NP_{[POSS]}$ ) may not co-occur. Examples of expanded noun phrases are shown in (21), (22) and (23).

```
(21)
N
            D
fàr-ès
             sē
                      hēːg
tree-C4
            C4.D
                      fall.PST
'the trees fell'
(22)
Indef.
             N
                     AssocP
                                                           NP<sub>[POSS]</sub>
                                                                         D
sèkēn
             fàr
                     s-è m-wér
                                                ját-sè
                                                           ró
                                                                         S\bar{\mathcal{E}}
                                                                                 hĒːg
                     C4-Assoc C6m-length big-C4
C4-Indef
             tree
                                                           2. sg.poss
                                                                         C4.D
                                                                                 fall.PST
'some of your big tall trees (lit. big trees of length), they fell'
(23)
N
        AssocP
                                    Α
                                               Dem
                                                             D
fàr
        s-è m-wér
                                    ját-sè
                                               s-ín
                                                             s\bar{arepsilon}
                                                                     hĒːg
        C4-Assoc C6m-length
                                    big-C4
                                               C4- Dem
                                                                     fall.PST
tree
                                                             C4.D
'these big tall trees, they fell'
```

All modifiers are optional. As seen in Figure 7, the associative phrase (AssocP) occurs to the immediate right of the head noun. Then, the adjective (A), possessive noun phrase, (NP<sub>[POSS]</sub>), and demonstrative modifier (Dem) follow in that order. The definite article, identical to the subject pronoun, occurs following the head noun, but in an expanded noun phrase the use is anaphoric and is analyzed as a separate noun phrase. This is especially apparent when a

quantifier is present. The head noun with its class prefix occurs first, followed by the quantifier with a class agreement prefix. The subject pronoun occurs immediately before the verb.

All noun phrase constituents, except the  $NP_{[POSS]}$ , are marked for agreement with the class of the head noun. Chapter 5 gives a detailed description of the class marking that occurs with each constituent.

<sup>&</sup>lt;sup>12</sup> When a noun occurs with a quantifier these two constituents are analyzed as a sequence of noun phrases, as opposed to the occurrence of the quantifier within the noun phrase. See discussion in section 5.13.

#### CHAPTER 3

### **NOUN CLASSES**

The number of noun classes in any given language is determined by the criteria used to distinguish them. If you count only the prefixes that occur on the nouns themselves, there are seven classes in ut-Ma'in. But you gain a clearer picture if you take into account not only the noun prefixes but also the unique patterns of agreement that are apparent on other clause constituents.

There are thirteen distinct agreement patterns found in  $\underline{u}t$ -Ma'in. Each one manifests itself with a prefix on the noun<sup>13</sup> as well as with agreement marking on a number of targets. Three of the classes occur with  $\overline{u}$ - as the noun prefix, e.g.  $\overline{u}$ - $m\acute{a}kt$  'barren woman',  $\overline{u}$ - $b\grave{u}$  'house' and  $\overline{u}$ - $n\acute{i}n$  'tooth'. If you only consider the prefix on the noun, these three would seem to belong to the same class. However, if you look at the pronouns that agree with each of these  $\overline{u}$ - prefix nouns you discover three different pronouns. The noun  $\overline{u}$ - $m\acute{a}kt$  'barren woman' requires wa,  $\overline{u}$ - $b\grave{u}$  'house' requires a, and a- $n\acute{i}n$  'tooth' requires a. These three different agreement elements show that these nouns, in fact, belong to three distinct classes.

Section 3.1 includes the labels that will be used for noun classes in ut-Ma'in as well as examples of each class. Labels could be applied randomly, however there are certain similarities that make it possible to trace ut-Ma'in classes back to the classes of the proto-

<sup>&</sup>lt;sup>13</sup> Some occur with a null *∅*- prefix.

language. To this end, section 3.2 discusses these labels in relation to other closely related languages and to Proto-Benue-Congo. Section 3.3 reviews the assignment of noun class labels.

## 3.1 Numbering of classes in ut-Ma'in

There are thirteen distinct noun classes in  $\underline{u}$ t-Ma'in. Even though three classes share the same  $\overline{u}$ - prefix, each is distinguished by the unique combination of agreement elements required by the different classes. Similarly, four classes have a null  $\emptyset$ - prefix on the noun, but these four classes can again be distinguished by the agreement elements.

Table 4 shows the thirteen distinct noun classes. The first column gives a reference label that will be used to label each class. The second column shows the prefix that occurs on the nouns of that class. The third column shows the object pronoun that agrees with each class, and the fourth column provides examples from each class. All noun prefixes have been marked with mid-tone, as they occur in citation form.

Table 4: ut-Ma'in noun classes

Class	Noun	Object	Examples	
	Prefix	Pronoun		
1u	Ū-	ú/wá	ū-mákt	'barren woman'
			ū-rāg	'stupid person'
1Ø	Ø-	wá	Ø-hámèt	'visitor'
			Ø-z <sup>w</sup> àr	'young man'
2	Ø-	É	Ø-ná	'oxen, bovines'
			$\mathscr{O}$ - $h^{j}\bar{\mathfrak{g}}$	'guinea corn (pl)'
			Ø-règèr	'stars'
3u	Ū-	ó	ū-bù	'house'
			ū-k⁴óm	'arm'
			ū-sēp	'song'
3Ø	Ø-	5	Ø-bò?	'dream'
			Ø-æāb	'heart'
			Ø-s <sup>w</sup> ás	'entrance hut'
4	ŌS−	sé	ōs-bò?	'dreams'
			ōs-rā	'muscle'
			ōs-bà:t	'medicine'
5	Ōr-	dέ	ōr-kók	'calabash'
			э̄r-ʤāb	'liver'
			э̄r-hí	'head'
6	Ōt-	tó	ōt-kók	'calabashes'
			5t-ís	'eyes'
			5t-rīn	'charcoal'
6m	ōm−	тэ́	э̄т-nà:g	'oil'
			ōm-h¹∕9	'blood'
			ōm-h¹∂r∂g	'sand'
7u	ū-	já	ū-ná	'ox, bovine'
			ū-tʃān	'feather'
			ū-nín	'tooth'
7Ø	Ø-	já	Ø-tʃāmpá	'man'
			Ø-mārímárí	'the dead'
			Ø-r <sup>j</sup> âm	'cripple (n)'
AUG	ā-	á	ā-kók	'huge calabashes
			ā-bà	'big lake'
			ā-ràndí	'strong thread'
DIM	Ī-	έ	ī-kók	'tiny calabash'
			ī-g <sup>w</sup> á	'tiny (piece of) grass'
			ī-ràndí	'thread'

For Classes 1u, 3u and 7u, words occur with the prefix  $\bar{u}$ -. Classes  $1\emptyset$ ,  $3\emptyset$  and  $7\emptyset$  occur with the null  $\emptyset$ - prefix. Both Class 1u and Class  $1\emptyset$  take the same agreement pattern, demonstrated by the object pronoun  $w\acute{a}$ , as shown above. Class 3u and  $3\emptyset$  take  $\jmath$  agreement marking, and Classes 7u and  $7\emptyset$  take ja agreement marking. It is in the combination of the prefix and the agreement pattern that the different classes are made apparent. But the occurrence of similar agreement patterns also points to the close relationship between the two classes. For this reason, classes with identical agreement patterns are labeled with the same number, and the character that follows distinguishes the prefix form (i.e., the label Class 3u is used for nouns with the  $\bar{u}$ - prefix, while the label Class  $3\emptyset$  is used for nouns with the null  $\emptyset$ -prefix).

Some phonetic variation occurs in the noun prefixes as given in the above chart. The C4 prefix  $^{14}$   $\bar{s}s$ - can occur phonetically as  $[\bar{s}?]$ . This occurs before roots with an initial consonant and seems to be in free variation with  $\bar{s}s$ -. The s?- prefix often occurs with roots that have an initial alveolar or alveopalatal fricative or affricate, as shown in (25) below.

```
(25)
5?-só?
                                          'dens, holes'
                     ōs-só?
                                          'weeds'
5?-z5g
                     9s-z9g
5?-∫ār
                                          'bones'
              ~ ōs-∫ār
5?-dòr
                     ōs-dòr
                                          'nape of neck(pl)'
                                          'soup, broth'
\bar{9}?-t\int^{w}\bar{a}
                    \bar{\mathcal{I}}S-t\int^w\bar{a}
                                          'splinter, sliver (n)'
5?-dʒ<sup>w</sup>à
                    ōs-dʒ<sup>w</sup>à
```

The C5 prefix  $\bar{s}r$ - phonetically occurs as  $[\bar{s}l]$  before roots with an initial [r]. The root riss occurs in Class 5 as  $\bar{s}liss$  'porcupine'. The [r] of the C5 prefix and the root initial [r] coalesce to form a long lateral [l:]. The plural C6 form  $\bar{s}t$ -riss 'porcupines' shows that the root contains an initial [r]. Other examples are shown in (26) below.

<sup>&</sup>lt;sup>14</sup> "C" will be used as an abbreviation for Class when using class to identify a class element. For example "Class 4 prefix  $\bar{s}s$ -" will be written as "C4 prefix  $\bar{s}s$ -" with no change in the meaning.

(26)Singular Gloss Plural ōl:ém ōt-rém 'language' ōl:έn 'trap' ōt-rέn 51;"ā?  $\bar{g}t$ - $r^w\bar{a}$ ? 'yam' 'mountain' ōl:òr ōt-r∂r

The C6 prefix  $\bar{\mathfrak{s}t}$ - phonetically occurs as  $[\bar{\mathfrak{s}n}]$  before roots with an initial [n]. The root  $n\acute{\mathfrak{e}t}$  occurs in Class 6 as  $\bar{\mathfrak{s}n}.\acute{\mathfrak{e}t}$  'human beings'. The [t] of the C6 prefix and the root initial [n] coalesce to form a long nasal consonant [n:]. The singular C1 form  $\mathcal{O}$ - $n\acute{\mathfrak{e}t}$  'human being' shows the root initial [n]. Other examples are shown in (27).

(27)

Singular Plural Gloss  $\bar{u}$ -nát  $\bar{o}$ n:át 'wound'  $\bar{u}$ -nú  $\bar{o}$ n:ú 'mouth'  $\bar{u}$ -nòm  $\bar{o}$ n:òm 'thing'

The C6 prefix can occur as  $[\bar{5}?]$  before roots with an initial consonant and seems to be in free variation with  $\bar{5}t$ . Examples in (28) show all root initial consonants that occur in the corpus that allow the free variation of the class marker  $\bar{5}t$ - with  $\bar{5}?$ -.

(28)*5?-túr* 'cooking pots' 5t-túr 'fishing nets' ō?-dēn ōt-dēn *5*?-t∫∂m∂s *5t-t∫èmès* '(clay) stools' 5?-dzér ōt-dʒér 'upper arms' *5*?-sāg 'graves' 5t-sāg 'forests' *5*?-zúp 5t-zúp ōt-s<sup>w</sup>à  $\bar{9}$ ?- $s^{w}$  $\hat{a}$ 'noses' *5*?-z<sup>w</sup>5:n  $\bar{g}t$ - $z^w\bar{g}$ :n'dry season' 5?-[\vec{\varepsilon}br\vec{o} ōt-∫ēbrō 'co-wife, fellow wife' ō?-dʒér ōt-dʒśr 'clubs, cudgels' 'loads, burdens'  $\bar{9}$ ?-t $\int^{w}\bar{9}$  $\bar{g}t$ - $t\int^{w}\bar{g}$ 'knees' *5*?-♂\*°9̂n  $\bar{g}t$ - $dz^{W}\hat{g}n$ *5*?-káp 5t-káp 'shoulders' 'Adam's apple (as seen from outside)' 5?-g∂nt ōt-g∂nt

The C6m prefix  $\bar{s}m$ - usually occurs unchanged regardless of the consonant in root initial position. For example, in  $\bar{s}m$ - $f\bar{s}?\bar{s}t$  'smoke', the class prefix maintains its shape. In one instance,  $\bar{s}m$ - occurs as  $[\bar{s}n$ -] before [f] as seen in (29) below.

### 3.2 Noun classes in relation to Proto-Benue-Congo

I have drawn from Williamson's (1989:38-39) presentation of Proto-Benue-Congo (hereafter PBC) and Gerhardt's (1989:372) work on Proto-Kainji (hereafter PK) to help determine the number labels used for each class. The noun classes of ut-Ma'in, Duka (Hun-Saare) and C'Lela (Dakarkari) are similar enough so as to help draw conclusions as to their relationship as a cluster to the proto-languages. Williamson presents the noun classes of Proto-Benue-Congo in relation to the wider context of Niger-Congo. I have focused only on the classes that occur in Proto-Benue-Congo and of which traces are apparent in ut-Ma'in, Duka and C'Lela.

I will discuss specifically how ut-Ma'in classes map to PBC classes, but comparison with the other two Northern group languages can also be helpful. The class labels, i.e., 1, 2, 3 etc., are not based on synchronic behavior<sup>15</sup>, rather the noun classes in ut-Ma'in that directly reflect a historical connection to PBC noun classes are marked with the same label. This historical association is not apparent for other classes. Discussion begins with ut-Ma'in classes that have the most clear historical connections, then class mergers and splits are discussed. Finally, I discuss the use of arbitrarily assigned class labels that are necessary as a result of class splits and mergers. <sup>16</sup> The class labels also relate to the Bleek-Meinhof system (Welmers 1973:163) used for Bantu languages in that odd numbers are predominantly used to label singular classes and even numbers to label plural classes. When a class label is arbitrarily assigned, this pattern

<sup>&</sup>lt;sup>15</sup> Synchronic behavior of the noun classes in singular/plural pairs is discussed in Chapter 4.

 $<sup>^{16}</sup>$  PBC Classes 2, 4, 6, 6b, 7, 8, 11 and 12 are not presently realized in  $\underline{\text{ut-Ma'in.}}$ 

is maintained in that odd numbers are used for singular classes, and an even numbers are used for plural classes.

Tables 5, 6 and 7 display the different noun classes of these three languages as they relate to both PBC and PK. The relationship between ut-Ma'in classes, and more generally the classes of the Northern group, to a particular PBC class was determined by the comparison of phonological shapes and by identification of similar semantic content.<sup>17</sup> For each of the three Northern group languages, both the noun class prefix and the agreement pronoun is shown. Row one gives the class number of PBC. Row two indicates whether the class is typically used for singular (sg) or plural (pl), as well as what class(es) it potentially pairs with. Though a one to one correspondence is implied by the pairing of singular and plural classes in PBC, the pattern does not hold for the daughter languages. See section 4.1 and following for a fuller discussion of how the singular and plural classes of ut-Ma'in pair together. Row three of each table gives examples of the typical content of the particular class in PBC.

 $<sup>^{17}</sup>$  A fuller discussion of the semantic content of noun classes, and more specifically of noun class pairings, may be found in Chapter 4.

Table 5: Noun classes 1- 6 of Proto-Benue-Congo and Proto-Kainji

	Class label	1	2	3	4	5	6
PBC	Pairing	sg of 2	pl of 1	sg of 4	pl of 3	sg of 6	pl of 5
PE	Content	humans		tree, fire,	tail,	egg, head,	name,
				broom, re	oad	eye, tooth	
Lar	nguage						
PB	С	ù-	ba-	ú-	í-	li-	a-
PK		bu-	ba-	u-	í-	ri-	a-
ut-	Ma'in	u-/Ø-		u-/Ø-		er-	
	agreement	wa		3		dε	
Du	ka	Ø-		0-		er-	
	agreement	ew		3		de	
C'I	Lela	Ø-		V- <sup>18</sup>		d-	
	agreement	u		ev		eb	

Classes 1u and  $1\emptyset$  of ut-Ma'in can be traced back to PBC C1 prefix \* $\hat{u}$ - by the occurrence of a labial consonant [w] apparent in the agreement element and a high back vowel [u] apparent in the noun prefix. Williamson (1989:38-39) states that nouns referring to humans make up the semantic content of PBC Class 1. This content is the same for ut-Ma'in. See the discussion of the semantic content of certain class pairings in section 4.1. For ut-Ma'in, the label Class 1u is used for the class marked by the noun prefix u- that occurs with wa agreement marking. Class  $1\emptyset$  is used for words taking wa agreement marking that occur with a null  $\emptyset$ -prefix.

Classes 3u and 3 $\varnothing$  of ut-Ma'in can be traced back to PBC C3 \* $\acute{u}$ - by the occurrence of the high back vowel [u]. De Wolf (1971:174) also attests this in Duka (Hun-Saare) and links the  $\emph{o}$  to PBC Class \* $\acute{u}$ -, to which Williamson gives the label Class 3. For ut-Ma'in, the label Class 3u is used for the class marked by the noun prefix  $\emph{u}$ - that occurs with  $\emph{o}$  agreement marking. Class  $3\varnothing$  is used for words taking  $\emph{o}$  agreement marking that occur with a null  $\varnothing$ - prefix.

Class 5 can be traced to PBC C5 prefix \**li*- by the occurrence of the alveolar [r] in the noun prefix and the alveolar plosive [d] in the agreement marker.

<sup>&</sup>lt;sup>18</sup> C'Lela [v-] class occurs infrequently and almost always takes its plural from [s-] class.

As seen in Table 6, a recognizable labial nasal [m] links C6a prefix \*ma- of PBC to what will be labeled Class 6m in ut-Ma'in.

Table 6: Noun classes 6a-10 of Proto-Benue-Congo and Proto-Kainji

	Class label	6a	6b	7	8	9	10
PBC	Pairing	none	none	sg of 8	pl of 7	sg of 10	pl of 9
PE	Content	liquids	mass	neck, tho	'n	animals	
			nouns				
Lang	guage						
PBC		ma-	a-	ki-	bi-	ì-	í-
PK		N/ma/na-		?	?	bì-	í-
ut-N	Ma'in	-me				u-/Ø-	Ø-
	agreement	mɔ				ja	ε
Duk	ĸa	-me				0	Ø-
	agreement	mɔ				jo	
C'L	ela	m-	a- <sup>19</sup>			Ø-	Ø-/[-nV]
	agreement	em	a			ù	ne

Many languages within Benue-Congo have maintained a class pairing that is used for most animals. In Proto-Benue-Congo this class Pairing is 9/10. Semantically, the Northern group languages have a class pairing that contains animals, which matches the PBC semantic content. It is difficult to see the link between the phonetic form of the prefixes if you look back through PK,<sup>20</sup> in which Gerhardt (1989:372) presents the bilabial form \*bi-. But the PBC prefix is given as only the high front vowel \*i-. The link could then be made to PBC by the occurrence of the palatal semi-vowel [j]. For ut-Ma'in, the label Class 7u will be used for the class marked by the noun prefix u- that occurs with ja agreement marking. Class 7Ø is used for words taking ja agreement marking that occur with a null Ø- prefix.

PBC Class 10, with prefix \*1-, is given as the plural of 9. In ut-Ma'in, Class 2 is used for most animate plurals. This seems to suggest the merger of PBC Classes 2 and 10. I list them in

<sup>&</sup>lt;sup>19</sup> C'Lela class prefix *a*- occurs on a very small set of noun roots including the following (always the singular): hand, God, heaven, face, journey, land of, roof, death. This class is not apparent in either ut-Ma'in or Dukawa.

<sup>&</sup>lt;sup>20</sup> Gerhardt (1989:372) cites De Wolf (1968). De Wolf's reconstruction of Proto-Kainji does not take into account languages now classified as the Northwest group (Blench 2004) within Western Kainji.

Table 7 under PBC 10, as the front vowel  $[\epsilon]$  of  $\underline{u}t$ -Ma'in is close to the front vowel [i] of both PK and PBC. Because of the merger with PBC 2, Class 2 will be used as the label in  $\underline{u}t$ -Ma'in

Table 7: Noun classes 11-13 of Proto-Benue-Congo and Proto-Kainji

7)	Class label	11	12	13	13a
PBC	Pairing	sg of 12	sg of 13	pl of 3, 12	
	Content				
Lang	guage				
PBC	C	lu-	ka-	ti-	
PK			ka-	si-	
ut-N	Aa'in			es-	et-
	agreement			sε	to
Duk	ta			9S-	et-
	agreement			se	to
C'L	ela			S-	t∫-
	agreement			se	t∫e

Williamson (1989:39) gives the PBC C13 prefix as \*ti-. For PK, Gerhardt (1989:372) gives the same class as \*si-. This class is marked phonetically by an alveolar consonant. Both refer to a plural class that occurs with an alveolar consonant in the prefix. In ut-Ma'in, and the other Northern group languages, there are two distinct plural classes with an alveolar consonant as part of the prefix. Both [t] (or [tf] in the case of C'Lela) and [s] occur. Potentially, this branch of Western Kainji experienced a split of PBC/PK Class 13. De Wolf (1973:174) mentions these two distinct classes that occur in Duka (Hun-Saare). There he links the [s] class to PBC class \*ti-, for which Williamson labels PBC Class 13. He labels the [t] class simply X. For ut-Ma'in, the label Class 4 will be used for \*si-.

### 3.3 Summary and discussion

In summary,  $\underline{u}$ t-Ma'in Classes 1u,  $1\emptyset$ , 3u,  $3\emptyset$  and 5 relate directly back to their PBC counterpart. Class 6m relates back to PBC Class 6a. Class 2 represents a merger of PBC Class 10 and PBC Class 2. Class 4 and Class 6 represent a split of PBC Class 13, and Classes 7u and

7∅ relates back to PBC Class 9. Table 8 summarizes all classes in ut-Ma'in with reference to their potential link to Proto-Kainji and Proto-Benue-Congo class labels.

Table 8: Summary of class numbers

Class	Noun	Object	Examples		PBC
Label	Prefix	Pronoun			Class Label
1u	Ū-	ú/wá	ū-mákt	'barren woman'	1
1Ø	Ø-	wá	Ø-hámèt	'visitor'	1
2	Ø-	É	Ø-ná	'oxen, bovines'	merge of 10 and 2
3u	Ū-	5	ū-bù	'house'	3
3Ø	Ø-	5	Ø-bò?	'dream'	3
4	ŌS−	sé	ōs-bò?	'dreams'	split from 13
5	Ōr-	dέ	ōr-kók	'calabash'	5
6	Ōt-	tś	5t-kók	'calabashes'	split from 13
6m	ōm-	тэ́	э̄т-nɔ̀:g	'oil'	6a
7u	ū-	já	ū-ná	'ox, bovine'	9
7Ø	Ø-	já	Ø-tʃāmpá	'man'	9

There are two classes, given in Table 4 in section 3.1, that have not been discussed in relation to PK and PBC. These are AUG and DIM, and they will be referenced by their abbreviation, rather than by a number. These are repeated from Table 4 in (30).

(30)

AUG  $\bar{a}$ - $k\acute{o}k$  'huge calabashes' DIM  $\bar{i}$ - $k\acute{o}k$  'tiny calabash'

There is some discussion regarding the placement of the diminutive class in PBC. Both PBC C7 and PBC C19 are under consideration. Welmers (1973:166) mentions that Bantu<sup>21</sup> Classes 7/8 may have diminutive significance. If that is true for PBC as well, ut-Ma'in Class DIM might be placed under PBC Class 7. This would entail the loss of the velar consonant [k]. De Wolf (1971:170-171) discusses the problematic \*pi- class, mentioning that its "meager attestation might be due to the special [diminutive] status in PBC." Williamson(1989:39) does

<sup>&</sup>lt;sup>21</sup> Bantu languages are considered a sub-family within Benue-Congo on the same level as Kainji (Gordon 2005a).

not include the \*pi- class as described by De Wolf in her chart of the classes of PBC, but rather specifically for Proto-Bantu, labeled by Williamson (1989) as 19. Either location, PBC Class 7 or Proto-Bantu Class 19, would require the deletion of the consonant and leave the high front vowel [i].

The phonetic shape of the Class AUG *a*- prefix in ut-Ma'in may correspond to PBC Class 6. In ut-Ma'in, AUG is used as the augmentative plural form. This would match the plural nature of the PBC Class 6.

#### CHAPTER 4

### NOUN CLASS SEMANTICS AND PAIRINGS

Most nouns occur in a singular/plural pair, one class indicates singular another indicates plural. Following the classic Bantu numbering system, odd numbers are used for singular classes and even numbers for plural classes. When both a singular and a plural class can occur with the same noun stem, that stem is said to belong to a noun class PAIRING. These pairings will be discussed in section 4.1.

Nouns that do not make a distinction between singular and plural occur with only one class prefix and are said to belong to UNPAIRED CLASSES. Classes 2, 3u,  $3\emptyset$ , 4, 5, 6, and 6m are used as unpaired classes. Only one noun occurs in Unpaired Class 7u. These unpaired classes are discussed in section 4.2.

Individual classes exhibit certain core semantic characteristics that are further specified when the class pairings are considered. Class 1u and  $1\emptyset$  nouns refer to humans, Class 2 nouns refer to animates, Class 3u and  $3\emptyset$  nouns refer to inanimate objects, Class 4 nouns refer to objects considered long, Class 5 nouns refer to round objects. Class 6 is the most common plural form and may be the class that nominalizes verbs. Class 6m nouns refer to liquids and other non-countables. Class 7u and  $7\emptyset$  nouns refer to a subset of animates that have an observable life cycle. Classes DIM and AUG nouns are derivations from other classes to specify the size as markedly smaller or larger, respectively. The semantic characteristics of each class pairing and each unpaired class are discussed throughout the following sections.

# 4.1 Noun class pairings

In the sections below, each pairing attested in the data corpus<sup>22</sup> is listed with examples of class content and a discussion of the semantic characteristics of the pairing. Figure 8 presents a diagram of all attested pairings.

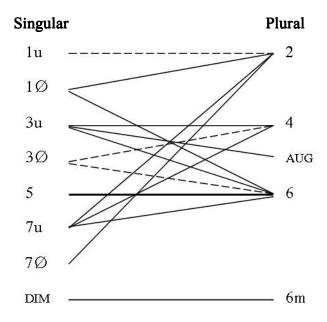


Figure 8: Noun class pairings

The most common noun class Pairing 5/6 is represented in the diagram by a think connecting line. Pairings 7u/2,  $7\varnothing/2$ , 7u/4,  $7\varnothing/4$ , 3u/6 and  $3\varnothing/6$  occur frequently and are represented in the diagram by solid connecting lines. Pairings that occur fewer than five times are represented by dotted lines. Pairings that occur fewer than three times are not included unless it is the only pairing in which a class occurs; for example, Pairing 1u/2 occurs with only two nouns, but is included in the diagram to show how Class 1u fits into the system.

<sup>&</sup>lt;sup>22</sup> Most examples in Chapter 4 have been taken from the corpus of 604 nouns. The count of 604 nouns does not include any loanwords or compounds formed using the associative construction (as described in section 5.3.)

Numerical counts given in the discussion below are for single root pairings. Items with identifiable multiple roots (e.g., compound forms) are omitted from the counts. Loanwords are also not included in the counts, but available examples of loanwords are included as they give further insight to the semantic characteristics of each group. An (H) in the gloss of a loanword indicates its original language as Hausa. Though some words appear as if they have been borrowed directly from English, most of these come by way of Hausa. These will be indicated as (H/E). Discussion begins with the most common pairings and then moves on to the least common.

### 4.1.1 Pairing 5/6 (5r-/5t-)

By far the noun class Pairing 5/6 is the largest pairing. Nouns occur with the noun class prefixes  $5r-\sqrt{5}t$ - and object pronouns  $d\varepsilon/t\delta$ . There were one hundred and thirty-nine nouns in the corpus within this pairing.

(31)

Class 5 Singular	Class 6 Plural	Gloss
ōr-kô:r	ōt-kô:r	'basket'
ōr-n∂m	ōn:òm (ōt-nòm)	'round thing'
ēr-dú	ōt-dú	'well (n)'
ōr-dʒśr	ōt-dʒśr	'club, cudgel'
ōr-gē	ōt-gē	'egg'
ēr-hō	ōt-hō	'sun/day'
ēr-bàn	<i>⋽t-bàn</i>	'crowd/swarm'
ōr-p <sup>j</sup> ákót	<i>ōt-p¹ákét</i>	'flower'

Many round or spherical objects are included in Pairing 5/6. Specific spherical body parts and spherical plants/foods can be seen in (32).

(32)

Class 5 Singular	Class 6 Plural	Gloss
ōr-hí	<u> 5</u> t-hí	'head'
Ōr-ÍS	Ōt-ÍS	'eye'
ōr-gēkòs	ōt-gēkès	'neck'
ōr-gá?	5t-gá?	'mush food/tuwo'
<i>อิเ-ก¹อิ:W</i>	<i>ōt-n¹ō:w</i>	'mushroom'
ōl:wā? (ōr-rwā?)	<i>5t-r<sup>w</sup>ā?</i>	'yam'

Most of these nouns are inanimate, though a number of animals do occur in Pairing 5/6. The majority of animals occur in Pairing 7u/2 (see section 4.1.2). Animals that occur in Pairing 5/6 are characterized by their round shape.

(33)

Class 5 Singular	Class 6 Plural	Gloss	
ōr-gòròp	ōt-gòròp	'dove'	
ēl:ì:s (ēr-rì:s)	<u> 5t-rì:</u> s	'porcupine'	
ōr-kāːr	ōt-kā:r	'tortoise'	
ōr-∫ák	<i>5t-∫ák</i>	'turtle'	
ōr-z <sup>w</sup> á	ōt-z <sup>w</sup> á	'maggot'	

Loanwords that occur in Pairing 5/6 include inanimate objects like 'plate', 'bucket' and 'drum'. Animals include 'pig' and 'leech'. Foods include 'banana', 'pineapple' and 'tomato'. (34)

Class 5 Singular	Class 6 Plural	Gloss
<u> </u>	ōt-fēréntì	'plate' (H)
ēr-bākítì	ōt-bōkítì	'bucket' (H/E)
ēr-gòŋgú	ōt-gòŋgú	'drum'(H)
<i>ōr-àlēdè</i>	<i>ōt-àlēdè</i>	'pig' (H)
ēr-mádàmbōrò	ēt-mádàmbōrò	'leech' (?)
<i>ōr-àjàbà</i>	ōt-àjàbà	'banana' (H)
<i>ōr-abarba</i>	ōt-abarba	'pineapple' (H)
ōr-tùmátùr	5t-tùmátùr	'tomato' (H/E)

## 4.1.2 Pairings 7u/2 ( $\bar{u}$ -/ $\varnothing$ -) and $7\varnothing/2$ ( $\varnothing$ -/ $\varnothing$ -)

Pairing 7u/2 is marked on the noun with the prefix set  $\bar{u}$ - $\varnothing$ -; the object pronouns are  $j\acute{a}/\emph{\varepsilon}$ . Seventy-seven nouns occur in Pairing 7u/2, including most animals – mammals of all sizes, birds and insects.

(35)

Class 7u Singular	Class 2 Plural	Gloss
ū-sớr	Ø-sér	'hare'
ū-r <sup>w</sup> ág	$\mathscr{O}$ - $r^w$ á $g$	'elephant'
ū-nō	Ø-nō	'bird'
ū-jāg	Ø-jāg	'crow'
ū-wàp	Ø-wàp	'earthworm'
ū-r <del>à</del> nt	Ø-r <del>è</del> nt	'mosquito'

When I elicited the names of animals, the plural was often given first, perhaps signifying the more marked nature of the singular form. The plural Class 2 has a  $\varnothing$ - prefix, the singular Class 7u a  $\bar{u}$ - prefix.

(36)

Class 7u Singular	Class 2 Plural	Gloss
ū-5?	Ø-5?	'dog'
ū-mús	Ø- mús	'cat'
ū-t <del>ò</del> ròm	Ø-tèrèm	'warthog'
ū-zūr	Ø-zūr	'lion'
ū-kāːr	Ø-kāːr-nὲ	'prostitute'
<i>ū-b5n</i>	Ø-bōn-nὲ	'witch'

This marked singularity is in contrast to the Pairing  $7\emptyset/2$  used for humans. The singular and plural forms both occur with the  $\emptyset$ - prefix, but the plural is marked by an additional suffix  $-n\hat{e}$ . Two exceptions are  $\bar{u}$ - $b\bar{b}n$  'witch' and  $\bar{u}$ - $k\bar{a}x$  'prostitute', which both occur with the  $\bar{u}$ -prefix. In the singular they occur with the  $\bar{u}$ -prefix and in the plural they occur with the  $-n\hat{e}$  suffix. This may suggest that the subgroup  $7\emptyset/2$  is operating within the Pairing 7u/2 and not separate from it. Other plural nouns that do not occur with the  $-n\hat{e}$  suffix and refer to humans are discussed in section 4.1.6.

Only four nouns occur in the corpus in Pairing  $7\emptyset/2$ ; all refer to humans, as shown in (37). This pairing triggers the same ja/se agreement triggered by Pairing 7u/2.

(37)

Class 7Ø Singular	Class 2 Plural	Gloss
Ø-tʃāmpá	Ø-tʃāmpá-nè	'man'
Ø-nētá	Ø-nētá-nè	woman'
Ø-r <sup>j</sup> âm	Ø-r <sup>j</sup> âm-nè	'cripple'
Ø-mārímárí	Ø-mārímárí-nè	'the dead'

There are also a number of crops included in this pairing, as seen in example (38).

(38)

Class 7u Singular	Class 2 Plural	Gloss
$ar{u}$ - $h^jar{s}$	$\mathscr{O}$ - $h^{j}\!ar{s}$	'guinea corn'
ū-sàp	Ø-sàp	'rice'
$\bar{u}$ - $g^w\bar{\jmath}n$	$\mathscr{O}$ - $g^w$ $\bar{\mathfrak{I}}$ $n$	'ground-nut'
ū-∫ák	Ø-Sák	'sesame seed'

Certain inanimate body parts with a visible growth cycle are also included. For example,  $\bar{u}$ - $g \hat{g} g$  'molar tooth' occurs in Pairing 7u/2; other examples are shown in (39).

(39)

Class 7u Singular	Class 2 Plural	Gloss
ū-nín	Ø-nín	'tooth'
<u>ū</u> -ʤó	$\mathscr{Q}$ - $\mathcal{C}$ $\acute{o}$	'finger'
ū-kāráŋkù	Ø-kāráŋkù	'fingernail'

From the variety of semantic content in this pairing, it seems that all are items which change (shape/length/height) over time and have a visible life cycle. Other examples include  $\bar{u}$ - $k^h\bar{e}rm\bar{e}f\bar{i}$  'spark' and  $\bar{u}$ - $r\dot{e}g\dot{e}r$  'star'. One possible exception may be  $\bar{u}$ - $z\acute{e}r$  'sourness'. Given the semantic cohesiveness of other items in Pairing 7u/2, it may be that speakers of  $\underline{u}$ -Ma'in apply the same criteria to  $\bar{u}$ - $z\acute{e}r$  as well.

Loanwords that occur within the Pairing 7u/2 include only animals not native to the area, like  $\bar{u}$ -jímínà 'ostrich'. Other examples are demonstrated in (40).

(40)

Class 7u Singular	Class 2 Plural	Gloss
ū-rākūm	Ø-rākūm	'camel' (H)
ū-dʒāŋkā	Ø-dʒāŋkā	'horse' (H)
ū-k <sup>w</sup> ānā	Ø-k <sup>w</sup> ānā	'bat' (H) <sup>23</sup>
ū-pāŋgà	Ø-pāŋgà	'hawk' (H) <sup>24</sup>
ū-kórkótò	Ø-kớrkớtờ	'louse' (H)

# 4.1.3 Pairing 7u/4 (ū-/¬s-)

Pairing 7u/4, marked by the prefixes  $\bar{u}$ -/ $\bar{o}s$ - and the object pronouns  $j\acute{a}/s\acute{e}$ , is characterized by items with relative length or cycle, or things that have a ridge or an edge. Seventy-two nouns occur in the Pairing 7u/4. Inanimate examples from the pairing are given in (41).

(41)

Class 7 Singular	Class 4 Plural	Gloss
ū-bór	ōs-bór	'boundary'
ū-f <del>ò</del> n	ōs-f∂n	'road'
ū-tór	5s-tór	'tail'
ū-n∂m	ōs-n∂m	'long thing'
ū-r <sup>j</sup> àp	ōs-r¹àp	'whip'
ū-hóm	ōs-hóm	'crevice'
ū-kò:r	<i>ōs-kò:r</i>	'valley'
ū-rōkórōm	ēs-rōkórōm	'rainbow'
$\bar{u}$ - $p^j\bar{a}$ : $t$	ēs-p⁵ā:t	'moon, month'
ū-hāk	<i>ōs-hāk</i>	'year'

Some body parts are also included here, including  $\bar{u}$ - $tf^{w}\hat{a}r$  'throat',  $\bar{u}$ -hi 'hair (of head)',  $\bar{u}$ - $f\bar{a}r$  'bone' and  $\bar{u}$ - $r\bar{a}$  'muscle'. Others can be seen in (42).

<sup>&</sup>lt;sup>23</sup> The Hausa word is *kwana* 'to pass the night'.

<sup>&</sup>lt;sup>24</sup> The Hausa word is *manga* 'hawk'.

(42)

Class 7u Singular	Class 4 Plural	Gloss
ū-dòr	ōs-dòr	'nape of neck'
ū-g∂g	ōs-g∂g	'voice box, larynx'
ū-tʃàn	ōs-tʃàn	'hair (of body)'
ū-gàs	ōs-gàs	'side (of body)'
ū-kōkôn	ēs-kōkôn	'elbow'
ū-mák	<i>ōs-mák</i>	'kidney'
ū-tên	ōs-tên	'gall bladder'

Only two animals occur in Pairing 7u/4 as seen in (43); interestingly, they are both characteristically long.

(43)

Class 7u Singular	Class 4 Plural	Gloss
ū-tóŋgèn	ōs-tóŋgèn	'guinea worm, thread worm'
ū-ròmbìn	ōs-ròmbìn	'millepede'

All trees and grasses (non-food) as well as plant-related words are included in Pairing 7u/4. Examples can be seen in (44).

(44)

Class 7u Singular	Class 4 Plural	Gloss
ū-té	ōs-té	'tree'
ū-kót	ōs-kót	'thorn-tree'
ū-rékés	ōs-rókó	'tamarind tree'
$\bar{u}$ - $g^w$ á	ōs-g <sup>w</sup> á	'(blade of) grass'
ū-g <sup>w</sup> áb	ōs-g <sup>w</sup> áb	'bamboo'
ū-fè?	ōs-fè?	'branch'
ū-∫āb	<i>ōs-∫āb</i>	'(piece of) bark'
ū-gār	ōs-gōr	'root'
ū-kàmb	<i>ōs-kàmb</i>	'stem/stalk'

Loanwords in Pairing 7u/4 include clothing words like  $\bar{u}$ - $t3?g\dot{\sigma}$  'shirt' and clothing related words like  $\bar{u}$ - $\bar{a}rdz\bar{n}h\bar{u}$  'pocket', as well as other domains as seen in (45).

(45)

Class 7u Singular	Class 4 Plural	Gloss
ū-rézà	ōs-rézà	'razor' (H/E)
ū-mágógí	ōs-mágógí	'tooth stick, toothbrush' (H)
ū-k <sup>w</sup> álbá	ōs-k <sup>w</sup> álbá	'bottle' (H)
ū-hítíl:ā	ōs-hítíl:ā	'lamp, torch' (H)
ū-lōdʒì	э̄s-lōdʒì	'sickle' (H)
ū-k <sup>w</sup> èmpí	ōs-k <sup>w</sup> èmpí	'fishhook' (H)
<i>นิ-mวิโว</i>	<i>อิร-mวิโว</i>	'harp' (H)
ū-tābà	<i>ōs-tābà</i>	'(leaf of) tobacco' (H/E)
ū-kòtòrkò	ēs-kòtòrkò	'bridge' (H)

# 4.1.4 Pairing 3u/6 ( $\bar{u}$ -/ $\bar{9}t$ -) and $3\mathcal{O}/6$ ( $\mathcal{O}$ -/ $\bar{9}t$ -)

Sixty-one nouns occur in the Pairing 3u/6, with the prefixes  $\bar{u}$ -/ $\bar{s}t$ - and the object pronouns 5/t5. The Pairings 3u/6 is characterized by mostly inanimate objects that are not otherwise characterized by roundness or length.

(46)

Class 3u Singular	Class 6 Plural	Gloss
ũ-nòm	ēn:òm (ēt-nòm)	'thing'
ū-dàk	5t-dàk	'ground/country/ethnic area'
ū-jō	<i>ēt-jē</i>	'rain'
ū-kúr	5t-kúr	'room'
ū-tàːs	5t-tà:s	'village'
<i>ū-tə́l:</i> э̀	ēt-tál:è	'market'
ū-rān	<u> ēt-rān</u>	'leaf'
ū-só?	ōt-só?	'cave'

Body parts in this pairing include  $\bar{u}$ - $k\acute{o}m$  'arm',  $\bar{u}$ - $s\acute{o}k$  'upper chest' and  $\bar{u}$ - $f\acute{o}$  'face'. Other examples appear in (47). The semantic properties that distinguish these body parts from those in other classes have not been fully explored.

(47)

Class 3u Singular	Class 6 Plural	Gloss
ū-tớ	Ōt-tố	'ear'
ū-nú	<i>จิก:น์ (จิt-ทน์)</i>	'mouth'
ū-kūt	5t-kūt	'thigh'

There are also a number of kinship terms like  $\bar{u}$ - $\bar{s}s\bar{o}$  'father' included in Pairing 3u/6.

(48)

Class 3u Singular	Class 6 Plural	Gloss
$ar{U}$ - $ar{\mathcal{J}}$ S $ar{O}$	<i>5t-5sō</i>	'father'
ū-īnō	5t-īnō	'mother'
ū-kớmrò	ōt-kớmrò	'in-law'25
ū-∫ēbrō	<i>ōt-∫ēbrō</i>	'fellow-wife, co-wife'

Only three loan words occur in this pairing,  $\bar{u}$ - $\hat{a}k$  " $\hat{a}t$ " 'box',  $\bar{u}$ - $z \hat{\sigma} t \hat{\sigma}$  'saw (n)' and  $\bar{u}$ - $l\bar{e}mb\hat{u}$  'garden' borrowed from Hausa.

Pairing  $3\emptyset/6$  has two members given in (49). These occur with a  $\emptyset$ - prefix on the singular form, but they also trigger the C3  $\delta$  object pronoun. In the plural they resemble other Class 6 nouns and trigger the C6  $t\delta$  object pronoun.

(49)

Class 3Ø Singular	Class 6 Plural	Gloss
$\mathscr{O}$ - $p^{i}$ 9	<i>ōt-p¹</i> ∕	'entrance hut'
$\mathcal{O}$ -s $^{w}$ ás	5t-s <sup>w</sup> ás	'fish trap'

## 4.1.5 Pairing 3u/4 ( $\bar{u}$ -/ $\bar{9}s$ -) and $3\emptyset/4$ ( $\emptyset$ -/ $\bar{9}s$ -)

Pairing 3u/4 is marked on nouns by the singular C3 prefix  $\bar{u}$ - and the plural C4 prefix  $\bar{s}s$ -. Class 3 triggers the object pronoun  $s\acute{e}$ . Ten nouns occur with the Pairings 3u/4. Body parts include  $\bar{u}$ -gár 'jaw' and  $\bar{u}$ -ná 'leg'. All are inanimate, with some idea of length (or line) as a feature. The remainder of the Pairing 3u/4 nouns can be seen in (50).

<sup>&</sup>lt;sup>25</sup> More specifically, the husband's parents or the wife's husband.

(50)

Class 3u Singular	Class 4 Plural	Gloss
ū-úz	ōs-úz	'bead'
ū-gā?	-5s-gā	'plait, braid'
ū-pân	ēs-pân	'facial incisions, tattoo'
ū-pāmā	ēs-pāmā	'work'
ū-dʒēr	ēs-dʒēr	'sewing'26
ū-tō:g	ēs-tē:g	'prayer'
ū-wés	ōs-wés	'odor, smell'
ū-só?	ōs-só?	'island'

Only three nouns occur with the Pairing  $3\emptyset/4$ . These can be seen in (51).

(51)

Class 3Ø Singular	Class 4 Plural	Gloss
Ø-ʤāb	ōs-ʤāb	'heart'
Ø-bò?	ōs-bò?	'dream'
Ø-k <sup>w</sup> ár	ōs-k <sup>™</sup> ár	'island'

Two loanwords occur in Pairing 3u/4. Both inanimate objects are shown in (52).

(52)

Class 3u Singular	Class 4 Plural	Gloss
ū-lábárì	ōs-lábárì	'news' (H)
ū-∫īŋgì	ōs-∫īŋgì	'fence' (H)

The noun  $\bar{u}$ -lábárì 'news' refers to information shared person to person, as opposed to the evening television show or even the written "news" of a newspaper. This relationship to spoken words links it to other speech words, found in Unpaired Class 4. (See section 4.2.5 for further discussion).

No loan words occur in Pairing  $3\emptyset/4$ .

<sup>&</sup>lt;sup>26</sup> The gloss 'sewing' may not be the best; likely it is a noun associated with the action of sewing. I elicited this pair when asking for the word 'sew' (v).

## 4.1.6 Pairing $1\emptyset/6$ ( $\emptyset$ -/ $\overline{9}t$ -)

There are six nouns that occur in the corpus in Pairing 1%/6 with a %-prefix in the singular. The plural takes the Class 6 5t- prefix. All six of the nouns denote human beings. None of the human plurals employ the  $-n\grave{e}$  suffix, indicating that the  $-n\grave{e}$  suffix is reserved for the distinction between human and non-human in Class 2. (See section 4.1.2 and section 4.1.7 for discussion.)

(53)

Class 1Ø Singular	Class 6 Plural	Gloss
Ø-nét	<u> ēn:έt (ēt-nέt)</u>	'person'
Ø-má:n	ōt-má:n	'in-law'27
Ø-bómós	ōt-bómós	'widow'
Ø-hō:b	ēt-hē:b	'friend'
Ø-hāmōt	<i>ōt-hāmōt</i>	'guest'
Ø-fàrèk	ōt-fàrèk	'chief'28

No loan words occur in this class pairing.

# 4.1.7 Pairing 1u/2 ( $\bar{u}$ -/ $\varnothing$ -) and $1\varnothing/2$ ( $\varnothing$ -/ $\varnothing$ -)

Two nouns occur in Pairing 1u/2 and are shown in (54). In the singular form they occur with the  $\bar{u}$ - prefix and trigger the  $w\acute{a}$  object pronoun. Three nouns occur in Pairing  $1\emptyset/2$  and are shown in (55). In the singular form they occur with a null  $\emptyset$ - prefix and trigger the  $\acute{e}$  object pronoun. Nouns in both pairings occur with a null  $\emptyset$ - prefix and employ the plural suffix  $-n\grave{e}$  that is used only for nouns that refer to human beings, also discussed in section 4.1.2.

<sup>&</sup>lt;sup>27</sup> More specifically, the wife's parents or the daughter's husband.

<sup>&</sup>lt;sup>28</sup> This word *fàrèk* 'chief' may be borrowed from Arabic.

(54)Class 1u Singular Class 2 Plural Gloss ū-mákt Ø-mákt-nè 'barren woman' ū-rāg Ø-rāg-nè 'stupid person' (55)Class 1Ø Singular Class 2 Plural Gloss Ø-pś Ø-pź-nè 'blind man'  $\mathscr{O}$ - $h^{j}$  $\acute{9}^{w}$ Ø-h¹św-nὲ 'thief' Ø-t5k Ø-tók-nè 'slave'

The number of items in this class pairing is relatively small, but there is a very productive derivational process that feeds nouns into the Pairing  $1\emptyset/2$ . The derivational prefix,  $w\acute{a}$ - in the singular and  $\acute{a}$ - in the plural, is added to a noun (or verbal noun<sup>29</sup>) preceding the nouns inherent class prefix to derive an agent closely associated with the noun. In example (56) the noun  $\vec{u}$ - $b\grave{\partial}r$  'boundary' occurs with the prefix  $w\acute{a}$ - 'AGT'. This results in the form  $w\acute{a}$  " $b\grave{\partial}r$  meaning 'neighbor', and the application of the plural prefix  $\acute{a}$ - results in the form  $\acute{a}$ s $b\grave{\partial}r$  'neighbors'.

(56) 
$$w\acute{a} + \bar{u}$$
- $b\grave{\partial}r \rightarrow w\acute{a}$ - $w$ - $b\grave{\partial}r$  'neighbor' AGT + C3-boundary AGT-C3-boundary  $\acute{a} + \bar{\sigma}s$ - $b\grave{\partial}r \rightarrow \acute{a}$ - $s$ - $b\grave{\partial}r$  'neighbors' AGT + C4-boundary AGT-C4-boundary

Twenty-nine such derivations are attested in the data corpus. These derivations are considered in Pairing 1%/2 because they trigger the object pronouns  $w\acute{a}/\acute{e}$ . Other examples are given below.

<sup>&</sup>lt;sup>29</sup> Verbal nouns occur distributed throughout the unpaired classes. See section 4.2, and following, for discussion.

(57)

Class 1Ø Singular	Class 2 Plural	Gloss	
wá- <sup>w</sup> -bū	á- <sup>w</sup> -bū	'master'	from <u>ū-bū</u> 'house'
wá-s-kón	á-s-kón	'beggar'	from ōs-kón 'begging'30
wá-r-hí	á-r-hí	'intelligent person'	from <u>ū-hí</u> 'head'
wá- <sup>w</sup> -g <sup>j</sup> èr	á- <sup>w</sup> -g <sup>-j</sup> èr	'coward'	from <u>u-g'èr</u> 'fearing'
wá-m-h <sup>j</sup> án	á-m-h <sup>j</sup> án	'fortune-teller'	from 5m-h <sup>j</sup> án 'seeing'
wá-m-hā	á-m-hā-nè	'traveler'	from <u>5m-hā</u> 'going'

### 4.1.8 Pairing DIM/6m (ī-/¬5m-)

The noun class Pairing DIM/6m is a derivational option for the speaker to categorize some inanimate object as markedly small. There are six examples in the corpus, but presumably many other inanimate objects can occur within this pairing.

(58)

Class DIM Singular	Class 6m Plural	Gloss
ī-g <sup>w</sup> á	ōm-g <sup>w</sup> á	'tiny grass'
ī-ràndí	ōm-ràndí	'thread'
ī-tā:r	<i>⋽m-tā?ār</i>	'tiny stone'
ī-k <sup>w</sup> ām	<i>⋽m-k<sup>w</sup>ām</i>	'tiny iron (piece of)'
ī-bà	<i>⋽m-bà</i>	'tiny lake'
ī-nòm	<i>จิm-nòm</i>	'tiny thing'

Noun roots normally found in other classes can take the prefix i- in the singular,  $\delta m$ - in the plural, and trigger the object pronouns  $\delta m$ , to indicate a diminutive size.

# 4.1.9 Pairing 7u/6 (ū-/¬t-)

The Pairing 7u/6 has only four members in the data corpus, and the content is varied. The singular form occurs with the  $\bar{u}$ - prefix and triggers the  $j\acute{a}$  object pronoun. The plural form occurs with the  $\bar{s}t$ - prefix and triggers the  $t\acute{s}$  object pronoun.

<sup>&</sup>lt;sup>30</sup> The ut-Ma'in words for 'begging', 'fearing' and 'seeing' occur here as verbal nouns within the noun class system. See sections 4.3 and 6.1.2 for further discussion of verbal nouns

The two nouns,  $\bar{u}$ - $n\bar{e}\eta g\bar{e}n$  'elder' and  $\bar{u}$ - $tf\bar{a}n$  'feather', fit with the semantics of Pairing 7u/2 in that they grow/change over time. The other two nouns,  $\bar{u}$ - $h\bar{a}p$  'baby sling' and  $\bar{u}$ - $k^{hw}\bar{a}m$  'iron', do not seem to fit that pattern.

(59)

Class 7u Singular	Class 6 Plural	Gloss
นิ-ทธิทูgธิท	อิท:ยิŋgɛิn (อิt-ทิยิŋgɛิn)	'elder (male)'
ū-hāp	<i>ōt-hāp</i>	'baby sling'
ū-t∫ān	ōt-t∫ān	'feather'
ū-k <sup>w</sup> ām	<i>5t-k<sup>w</sup>ām</i>	'iron (piece of)'

The four loan words that belong to Pairing 7u/6 appear in (60). These provide more evidence of the similarity of Pairing 7u/6 with the semantic content of Pairing 7u/2.

(60)

Class 7u Singular	Class 6 Plural	Gloss
ū-kúrúmá	<i>5t-kúrúmá</i>	'deaf person'
ū-bīsá?	ēt-bīsá?	'animal'
ū-tōlòtōlò	<i>5t-tōlòtōlò</i>	'turkey'
ū-māgánā	ōt-māgánā	'maize, corn'

# 4.1.10 Pairing 3u/AUG (ū-/ā-)

Noun class Pairing 3u/AUG is a derivational option for speakers who wish to indicate marked increase in size. Inanimate objects that normally occur in another noun class pairing can occur here with the singular C3u prefix  $\bar{u}$ - and the plural CAUG prefix  $\bar{a}$ -. The object pronouns that occur with these words in Pairing 3u/AUG are  $\delta$  in the singular and  $\hat{a}$  in the plural.

(61)

Class 3u Singular	Class AUG Plural	Gloss
ū-ràndí	ā-ràndí	'strong thread'
ū-tā:r	ā-tāːr	'large rock'
ū-bà	ā-bà	'big lake'
ū-nòm	ā-nòm	'big thing'

The four examples given in (61) are the only nouns attested in the corpus that occur with the Pairing 3u/Aug. Presumably, many other inanimate objects could occur with Pairing 3u/Aug to emphasize an increased size.

### 4.1.11 Pairing 5/4 (5r-/5s-)

The Pairing 5/4 contains only two nouns, which both appear in (62). The singular form occurs with the C5 prefix  $\bar{s}r$ - and triggers the object pronoun  $d\epsilon$ , and the plural form occurs with the C4 prefix  $\bar{s}s$ - and triggers the object pronoun  $s\epsilon$ .

(62)

Class 5 Singular Class 4 Plural Gloss  $\bar{g}r - g^w \hat{a}$   $\bar{g}s - g^w \hat{a}$ 'thatch'  $\bar{g}r - \bar{e}r$ ' $\bar{g}s - \bar{e}r$ 'arrow'<sup>31</sup>

These two nouns seem to exhibit a combination of the roundness characteristic Pairing 5/6 and the length characteristic of Pairing 3u/4. Suggesting that there may be semantic characteristics associated with the individual classes as well as the class pairings. In traditional ut-Ma'in culture, all buildings are round and covered with a certain grass thatch. The grass thatch must be a long variety to cover the roof. Similarly, arrows are round and long.

## 4.1.12 Pairing 3u/2

Only the noun  $\bar{u}$ -béb 'giant' occurs in the Pairing 3u/2. This is probably due to the augmentative and human qualities inherent in the word's meaning. The augmentative is reflected in the use of C3u singular prefix  $\bar{u}$ - (from the Pairing 3u/AUG), and the human quality is reflected in the use of the C2 null  $\varnothing$ - prefix with the human suffix  $-n\hat{e}$  (which occurs with Pairings  $7\varnothing/2$ , 1u/2 and  $1\varnothing/2$ ). Class 3u and Class 2 pair together here to mark the unique characteristics of this noun.

<sup>&</sup>lt;sup>31</sup> This word *5r-ēr* 'arrow' does not include the 'arrow head'.

(63)

Class 3u Singular Class 2 Plural Gloss  $\bar{u}$ - $b\acute{e}b$   $\emptyset$ - $b\acute{e}b$ - $n\grave{e}$  'giant'

### 4.1.13 Pairing 5/2

Only one noun in the data corpus occurs in Pairing 5/2, as seen in (64). The singular form takes a  $\bar{u}$ - prefix similar to other animals in Class 7u, but triggers  $d\acute{e}$  object pronoun similar to Class 5. It may be that this word can trigger agreement marking in either Class 7u or Class 5. Further elicitation is necessary to determine the flexibility of this noun in regards to the agreement system. This combination of classes only occurs with this word and may be the result of elicitation pressure. This pattern may also be a reflection of a particular speakers preference.

(64)

Class 5 Singular Class 2 Plural Gloss  $\bar{u}$ - $d\hat{p}$  'puff adder'

The combination of these two classes seems to bring together the roundness characteristic of Class 5 from Pairing 5/6 and the animacy characteristic of Class 2 from Pairing 7u/2. It is likely that the shape of this snake dictates that it take *de* agreement from Class 5. Other snakes occur in Pairing 7u/2.

## 4.1.14 Pairing DIM/4

Only one word occurs in Pairing DIM/4. Presumably, the word occurs with the plural C4 prefix because many words related to speech occur in Unpaired Class 4 discussed in section (65). The DIM prefix may indicate that it denotes dispreferred behavior.

(65)

Class DIM Singular Class 2 Plural Gloss *ī-nàn ōs-nàn* 'argument'

### 4.2 Unpaired classes

Classes 2, 3u,  $3\emptyset$ , 4, 5, 6, and 6m occur as unpaired classes, with no distinction made for either singular or plural. These include such categories as mass nouns, non-countable nouns and abstract nouns.

Classes 3u,  $3\emptyset$ , 4, 5, 6 and 6m, i.e., all unpaired classes except C2 and C7u, also contain words with verb-like meaning. These verb-like words occur with a noun class prefix that is identical to that of other nouns in the class; they can be modified like other nouns, and they require the same agreement marking on modifiers. Because of the morphological similarity to noun phenomena, these verb-like words will be called verbal nouns and will be considered within the noun class system in the discussion below. A brief discussion of verbal constructions is included in section 6.1.2. English glosses for verbal nouns include the *-ing* suffix in order to reflect the idea of activity. Verbal nouns are not included in the counts given for the unpaired classes, but examples of the verbal nouns that occur in each unpaired class are given at the end of each section.

All unpaired classes are discussed in the sections below in order from those with the most members, then moving on to the those with the fewest members.

#### 4.2.1 Class 6m

Class 6m is by far the largest of the unpaired classes, with seventy-eight nouns occurring in the data corpus. The noun prefix associated with the class is  $\bar{s}m$ -, and the object pronoun is  $m\acute{o}$ . Mass nouns, including words that denote liquids and diseases, occur here. E.g.,  $\bar{s}m$ -tá 'tears',  $\bar{s}m$ -àp 'meat' and  $\bar{s}m$ -kútſákùtſî 'fungal infection'. Other examples can be seen in (66).

(66)

Class 6m	Gloss
ōm-b∕s	'water'
ōm-z∕n	'light'
э̄т-ká:rì	'rust'
ōm-óg	'juice'
э̄т-g <sup>j</sup> э́р	'night'

Four abstract nouns occur in C6m, as seen in (67).

(67)

Class 6m	Gloss
э̄т-náр	'knowledge'
ōm-έ?	'shame'
ōm-sék	'honor'
ōm-jō?	'wickedness'

Words that refer to the senses, like  $\bar{\partial}m-k\partial l$  'bad smell' and  $\bar{\partial}m-l^2ab\partial r$  'softness'; and words that denote measurement, like  $\bar{\partial}m-w\partial r$  'length' and  $\bar{\partial}m-d3dl$  'height'; and perception, as in  $\bar{\partial}m-r\dot{\partial}$  'pain',  $\bar{\partial}m-h\partial k$  'largeness' and  $\bar{\partial}m-h\bar{\partial}r$  'speed', are also included.

Twenty five verbal nouns occur in Class 6m. Examples are shown in (68).

(68)

Class 6m	Gloss
ōm-zàp	'shivering'
э̄т-àŋk	'working (for a salary)'
ōm-hóg	'feeling'
<i>⋽m-bàkэ̀t</i>	'shining'

### 4.2.2 Class 6

Class 6 is marked by the prefix 5t- on the noun and triggers the to object pronoun. There are forty nouns found in the corpus, and examples of those can be seen in (69).

(69)

Class 6	Gloss
<i>5t-sàm</i>	'fireplace'
ōt-kútáràŋk	'brain'
ōt-ōní	'music'
อิก:íp (อิt-níp)	'truth'
ōt-kógórò	'beer made at harvest
<i>ōt-mā</i>	'salt'
<i>ōt-kús</i>	'clothing'
ōt-hót	'crossroads'
<i>ōt-bómós</i>	'mourning'

Several descriptive nouns occur in Class 6; including, ōt-mòr 'nearness'. Others are shown in (70).

(70)

Class 6	Gloss
ōt-gàg	'bitterness'
ōt-nò:s	'heaviness'
อีt-rēʔúrī	'blueness (color)'
5t-gà?	'drvness'

Two hundred and forty verbal nouns occur in the data corpus in Class 6. Examples are shown in (71).

(71)

Class 6	Gloss
ōt-fèr	'blowing (with mouth)'
ōt-b¹àràn	'turning around'
<i>5t-màr</i>	'dying'
5t-dòròt	'ruleing over, dominating'
ōt-pôst	'straining (food)'
ōt-m¹∂g	'twisting'

## 4.2.3 Class 3u and 3Ø

Class 3u is marked by the prefix  $\bar{u}$ - on the noun, and Class 3 $\varnothing$  is marked by the null  $\varnothing$ prefix. Both 3u and 3 $\varnothing$  trigger the  $\mathfrak{S}$  object pronoun. In the corpus, only four nouns occur in
Class 3 $\varnothing$ , as seen in (72).

(72)

Class 3Ø Gloss

∅-tār 'tax'

∅-hōr 'game'

∅-tō:g 'sacrifice'

∅-g¹óp 'tomorrow'

Nineteen nouns in the data corpus occur in Unpaired Class 3u. Nouns in this class include words used for time delineation, like  $\bar{u}$ - $s\bar{o}t$  'tomorrow' and  $\bar{u}$ - $tf^{w\bar{o}r}$  'harmattan (the season when dust is blown down from the Sahara)'.

(73)

Class 3u	Gloss
ū-rā	'fire'
ū-hàr	'quarrel'
ū-sèt	'day after tomorrow
ū-tát	'many'
ū-dớm	'east/up'
ū-tá?	'west/down'

When I attempted to elicit a plural for words like those in (73), I was only given a puzzled look, although it is possible that some of these words to occur in a plural form. These words are typically considered not to have a plural, but examples of the plural form of some nouns are included in (74). Words that cannot have a plural are marked by N/A in the plural column.

(74)

Singular	Plural	Gloss
ū-rā	ōt-rā	'fire'
ū-hàr	ōs-hàr	'quarrel'
ū-sèt	N/A	'day after tomorrow'
ū-tát	N/A	'many'
ū-dớm	N/A	'east/up'
ū-tá?	N/A	'west/down'

The use of  $\bar{u}$ -tát 'many' is discussed more fully in section 5.1.

To complete the inventory of C3u nouns, the remaining class members found in the corpus can be seen in (75). Only one loan word,  $\bar{u}$ -gá:dò 'inheritance', borrowed from Hausa, occurs in Unpaired Class 3u.

(75)Gloss Class 3u ū-dāk 'country, ethnic area' ū-n<sup>j</sup>á? 'gift' 'adultery' u-as ū-kàp 'foam' *นิ-r*9 'sky/god' ū-dà 'season'  $\bar{u}$ - $t\int^w \bar{\jmath} m$ 'darkness' ū-hớ 'daytime' ū-tʃàm 'thickness' ū-k5r 'sharpness' ū-hε̄n 'cleanliness'

Eighteen verbal nouns occur in Class 3u. Examples are shown in (76). Only one verbal loanword,  $\bar{u}$ - $k^h$ / $\hat{w}$  $\hat{o}$  'feed (animals)' occurs in Class 3u, borrowed from Hausa.

(76)

Class 3  $\bar{u}$ - $m\bar{a}$ 'building'  $\bar{u}$ - $t\hat{e}$ ?
'weaving'  $\bar{u}$ -dók'burying'  $\bar{u}$ - $h^{l}\bar{u}w$ 'stealing'

Eight verbal nouns occur in Class  $3\emptyset$  and are shown in (77).

'bartering'

(77)Class 3Ø Gloss Ø-s<sup>w</sup>àb 'swimming' Ø-ſág '(being) satisfied' Ø-úb '(being) pregnant' Ø-nén 'growing up'  $\mathcal{O}$ - $k^h \acute{9} w$ 'sowing, planting' Ø-két 'harvesting' Ø-bák 'hunting'

Ø-ſás

### 4.2.4 Class 5

Class 5 is marked with the  $\bar{s}r$ - prefix on the noun, and it triggers the  $d\vec{\epsilon}$  object pronoun.

Twenty-five nouns occur in the data corpus in Unpaired Class 5, and examples of these are shown in (78).

(78)Class 5 Gloss ōl:ég (ōr-rég) 'hernia (umbilical)' 'invitation' *ōr-bōn* 'announcement' ōr-dôns 'frontier (edge of ethnic area)' ōr-kèŋgì 'debt' э́r-mág 'tradition/custom' *5r-mā?īn* 'beginning' ōr-tàkèn ōr-mà? 'end (n)'

A number of descriptive nouns occur here, including <u>\$\sigmar\$r-f\textit{a}\$</u> 'youth' and <u>\$\sigmar\$r-w\sigmath{\textit{7}}\$</u> 'old age',

 $\bar{\partial}r$ - $b\acute{e}b$  'strength' and  $\bar{\partial}r$ -z<sup>w</sup>ar 'beauty'. Other descriptive nouns can be seen in (79).

(79)

Class 5	Gloss
ōr-sō	'joy'
ōr-ón	'pity (n)'
<i>ār-∫āb</i>	'jealousy'
ōr-k∂b	'hardship, distress'
ōr-sō?	'nakedness'
<i>ōr-kìk</i>	'shortness'
อีไ:ลิ? (อิr-rลิ)	'depth'

Forty six verbal nouns occur in Class 5. Examples are shown in (80).

(80)

Class 5	Gloss
ōr-póksè	'stumbling'
ōr-hέ?έ	'failing'
ōr-k <sup>₩</sup> óp	'obstructing'
ōr-∫átè	'sliding'
ōt-èŋk	'losing'

### 4.2.5 Class 4

Nouns that occur in Class 4 are marked with the prefix 5s- and trigger se agreement. A total of nineteen nouns occur in this class, and examples are shown in (81).

(81)	
Class 4	Gloss
5s-kàt	'beard'
ōs-r∂r	'beard (goatee)'
$\bar{\mathfrak{I}}$ S- $t \int^w \bar{a}$	'soup, broth'
ōs-dʒ <sup>w</sup> à	'splinter, sliver (n)'
ōs-héw	'dance (n)'
ōs-rān	'cooked leaves'
<i>ōs-kó?</i>	'silk, hair (of maize)'
ōs-ràndí	'heap of cotton from field'
<i>ōs-vōjē</i>	'air (breathed)'

As mentioned above in section 4.1.3, Pairing 7u/4 includes 'length' as a semantic characteristic; for example, consider the pair  $\bar{u}$ - $n \ge m/5 \le n \ge m$ . It is the plural C4 prefix  $\bar{s} \le m$  that implies 'length', as the singular C7u prefix  $\bar{u}$ - can have a broader range of semantic characteristics. The concept of relative length holds for the Unpaired Class 4 as well. For example, the root  $k^{w}\bar{a}m$ , meaning 'iron', that usually occurs in the Pairing 7u/6 can take the C4 prefix  $\bar{s} \le m$  to alter the meaning and imply 'long iron'. Similarly, the root  $g \le m$  'seed', that usually occurs in Pairing 7u/2, can occur with the Class 4 prefix. The resulting form  $\bar{s} \le m$  implies 'the seed used for planting sweet potatoes or cassava'.

Five nouns related to speech occur in Unpaired Class 4. Examples include *ōs-vēr* 'wisdom' and *ōs-bī* 'lie/falsehood'. Others can be seen in (82).

Class 5	Gloss
ōs-zàŋg	'plan (n)'
ōs-p <sup>j</sup> áp	'insult (n)'
<i>ōs-rēm</i>	'speech, discourse'

(82)

Other abstract nouns are given below in (83).

(83)

Class 5

S̄s-mēr

'hunger'

S̄s-bà:t

'medicine'

S̄s-gôm

'illness'

Twenty six verbal nouns occur in the data corpus in Class 4. Examples are shown in (84).

(84)

Class 4
Gloss

5s-fág
'calling'
5s-dòròg
'thinking'
5s-nōkōm
'stretching'
5s-vók
'greeting'

#### 4.2.6 Class 2

Class 2 nouns occur with a null  $\emptyset$ - prefix. Only three nouns in the corpus occur in Unpaired Class 2, and these are shown below in (85).

(85)

Class 2  $O-k\acute{e}?$  O-fik  $O-h^i\grave{g}r\grave{g}$ Gloss

'beer (traditional)'

'money'

'beach'

## 4.2.7 Class 7u

Only one noun in the data corpus, ū-dʒán 'eczema', occurs in Unpaired Class 7.

### 4.3 Summary and discussion

In summary, it is helpful to look at nouns in terms of the noun classes within which they can occur. Recall Figure 8, repeated as Figure 9 below. Each set of noun class pairings marks a set of nouns marked to at least some degree by certain identifiable semantic qualities.

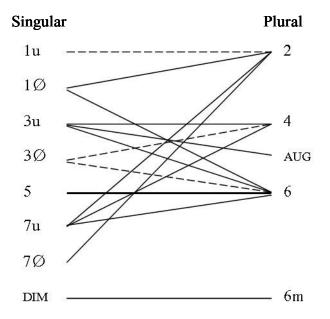


Figure 9: Noun class pairings

In section 4.1, pairings commonly used by ut-Ma'in speakers are presented along with common semantic traits that unify each pairing. Pairing 5/6, for example, has many nouns with spherical features. Pairings 7u/2 contains nouns that denote animates, and Pairing  $7\emptyset/2$  contains only nouns that denote humans. Interestingly, the nouns that denote humans in Pairing  $7\emptyset/2$  are more marked in their plural form by the additional  $-n\hat{e}$  suffix, while animals in Pairing 7u/2 are more marked in their singular form by the presense of the  $\bar{u}$ - prefix. Pairings 3u/6 and 7u/4 contain mostly nouns that denote inanimate objects. Pairing 3u/4 contains only nouns that denote inanimate objects. Pairings  $1\emptyset/6$  and 1u/2 contain only nouns that denote humans. It is unclear what semantic characteristics, if any, unify the nouns in Pairing 7u/6, as it contains only four nouns. Pairing DIM/6m is used derivationally to form diminutives. Pairing 3/AUG is also used derivationally to form augmentatives. Very few nouns occur in Pairings 5/4, 3u/2, 5/2 and DIM/4. Sometimes the semantic characteristics are clear, while at other times, they remain a mystery.

Table 9 gives a list of all singular/plural noun class pairings found in the data. Column two lists the agreement pronoun associated with each pairing. Column three lists the number of nouns that occur in that pairing in the data corpus. Column four lists the percentages of that pairing in relation to the total number of nouns (604) in the corpus. Column five lists identifiable semantic characteristics of each pairing.

Table 9: Frequency of nouns in class pairings

Class	Class Prefixes	Object Pronouns	Frequency	% of 604	Semantic characteristics/ content
5/6	<i>5r-/5t-</i>	dé∕tó	139	23.1%	mostly inanimate / spherical
7u/2	ū-/Ø-	já/é	77	12.5%	animates / change over time
7u/4	ū-∕5s-	já/sé	71	11.8%	inanimates / long edge / plants
3u/6	ū-/5t-	<i>5/t5</i>	61	10.1%	inanimate objects
1Ø/2	Ø-/Ø-	wá/é	27	4.5%	humans <sup>32</sup>
3u/4	ū-∕5s-	ó∕sé	9	1.5%	only inanimate objects
1Ø/6	Ø-/ <u>5</u> t-	wá/tó	6	<1.0%	humans
DIM/6m	<i>ī-∕⋽m-</i>	έ/mɔ́	6	<1.0%	diminutives
7u/6	ū-∕ <u>5</u> t-	já/tó	4	<1.0%	change over time/'baby sling'
7Ø/2	Ø-/Ø-	já/έ	4	<1.0%	humans
3u/AUG	ū-/ā-	ó/á	4	<1.0%	augmentatives
3Ø/6	Ø-/ <del>5</del> t-	ó/tó	2	< 0.5%	inanimate objects
3Ø/4	Ø-/ <del>5</del> s-	ó∕sé	2	< 0.5%	only inanimate objects
1u/2	ū-/Ø-	wá/é	2	< 0.5%	humans
5/4	ōr-∕ōs-	dé/sé	2	< 0.5%	'thatch'/'arrow'
3u/2	ū-/Ø-	<i>5/έ</i>	1	< 0.5%	'giant'
5/2	ōr-∕Ø	dé/é	1	< 0.5%	'puff adder'
DIM/4	Ĩ-∕ŌS-	é/sé	1	< 0.5%	'argument'

Section 4.2 presents seven noun classes that do not distinguish between singular and plural. Non-countable nouns, nouns that denote liquids, abstract concepts, descriptive nouns, and nouns that relate to perception and measurement characterize most of the content of the Unpaired Classes.

Table 10 lists all unpaired classes found in the data. Column two lists the agreement pronoun associated with each class. Column three lists the number of nouns that occurred in

<sup>&</sup>lt;sup>32</sup> All *wá/á* derivations are included in this count.

each unpaired class. Column four lists the percentages of the unpaired class in relation to the total number of nouns (604) in the corpus.

Table 10: Frequency of nouns in unpaired classes

Class	Agreement Pronouns	Frequency	% of 604
6m	mo	76	12.6%
6	to	39	6.5%
3u	0	24	4%
5	dε	24	4%
4	SE	19	3.2%
2	ε	3	<1.0%
7u	ja	1	< 0.5%

The semantic characteristics of a word are used as the primary basis for the assignment of loanwords to a particular unpaired class or class pairing. Loanwords are distributed throughout the pairings and unpaired classes, and typically, they align with semantic characteristics that define each group. This is in stark contrast to the assignment processes that are apparently active in many other noun class languages. For example, Corbett (1991:49), quoting Stroganova (1952:206-207) regarding modern Swahili, states that "the fact that genders are now largely formal is shown by the assignment of loanwords, which are allocated according to their form rather than their meaning." All loan words in ut-Ma'in seem distributed throughout the noun classes based solely on semantic characteristics. Nouns that denote to humans are assigned to Pairing 1u/6, and nouns that denote animals are assigned to Pairing 7u/2. Nouns that denote animates are assigned to Pairing 7u/4, and nouns that denote round plants and animals are assigned to Pairing 5/6.

Other evidence for the semantic nature of the classes includes the possible manipulation of a noun stem. Bendor-Samuel et. al (1973:121) and McGill (n.d.:7) mention similar phenomena

in Duka and Cicipu respectively. The stem  $t\bar{a}/2\bar{a}r$  'stone' occurs with it's most common form, that is Pairing 5/6, in example (86).

(86)

When specified as rather large rocks, the noun stem  $t\bar{a}?\bar{a}r$  occurs in the Pairing 3u/AUG, as seen in example (87).

(87)

ū-tā:r ā-tā:r

C3u-stone CAUG-stone 'big stone' 'many big stones'

When specified as small stones, the noun stem occurs in the Pairing DIM/6m, as in (88).

(88)

ī-tārōm-tā?ārCDIM-stoneC6m-stone'very small stone''gravel'

One final occurrence of the noun stem  $t\bar{a}$ ? $\bar{a}$ r is with Unpaired Class 4. Here the word is specific to the long pointed stones used to form the base of a granary. The stones are placed as the foundation of the clay brick granaries constructed in traditional ut-Ma'in homes. This Unpaired C4 noun can be seen in example (89).

(89)
5s-tā?ār
C4-stone
'long stones (used as base of granary)'

Certain nouns move between classes with no change of meaning. For example the noun roots  $t \sqrt[3]{ampá}$  'man' and n = t a 'woman' can occur in Pairing  $1 \varnothing / 2$  and trigger w = t a / t a object pronouns. Or, alternately, they can occur in Pairing 7u/6 and trigger u = t a / t a object pronouns. Because these different forms do not result in different meanings, these nouns are said to be unstable.

Verbal nouns are distributed throughout six of the eight unpaired classes, but a majority, 67 percent, occur in Class 6. Of the 359 verbal nouns in the corpus, 241 occur in Class 6. Compare the relative size of the unpaired classes that contain verbal nouns in Table 11.

Table 11: Frequency of verbal nouns in unpaired classes

Class	Agreement Pronouns	Frequency	% of 359
6	to	241	67.1%
5	$d\varepsilon$	46	12.8%
4	SE	26	7.2%
6m	тэ	13	3.6%
3u	0	8	2.2%

The large number of verbal nouns that occur in Class 6 in contrast to the relatively small number in Classes 3u, 4, 5 and 6m may give some evidence as to the process of nominalization. Perhaps the verbal nouns that occur in Class 6 are the result of a derivational process in which the Class 6 noun class prefix  $\bar{\mathfrak{H}}$  is applied to the verb stem. Verbal nouns in the other classes may in fact be more basically nouns. The distibution of verbal nouns throughout the noun class system has not been fully explored. Further research may reveal a semantic basis for their distribution.

## CHAPTER 5

## **AGREEMENT TARGETS**

The class of a noun triggers agreement marking on other constituents, or agreement targets, within the noun phrase as well as outside of the noun phrase (Corbett 1991:145). The object pronouns that represent the agreement marking for each class are reviewed in Table 12 below.

Table 12: Noun class prefixes and object pronouns

Class	Noun Prefix	Object Pronoun
1u	Ū-	ú/wá
1Ø	Ø-	wá
2	Ø-	έ
3u	Ū-	5
3Ø	Ø-	ó
4	ŌS−	SÉ
5	Ōr-	dέ
6	ōt-	tó
6m	ōm-	mớ
7u	Ū-	já
7Ø	Ø-	já
AUG	$ar{a}$ -	á
DIM	Ī-	έ

Numerals and other quantifiers, demonstrative modifiers, the associative marker, the definite and indefinite article, the relative pronoun and adjectives are marked for the class of the noun they modify. Class specific pronouns are used to reference nouns, previously mentioned, outside of the noun phrase but within the same discourse. The interrogatives 'what?' and 'which?' can also be marked for the class of the noun. The sections below demonstrate each of

these constructions as they relate to noun class marking. Most constructions are shown with the C4 noun <u>5s-fàr</u> 'shae-butter tree (pl)', which is glossed as 'tree' throughout. Examples are then given for each class.

# 5.1 Numerals and other quantifiers

Numerals (1-19) and the quantifier  $b\bar{e}t$  'all' follow the head noun and agree with the head noun in class, marked by a prefix on the quantifier. The quantifiers  $\bar{u}$ -tát 'many' and  $t/\bar{a}/\bar{t}$  'few' occur in the same position following the noun but take no agreement marking.  $\bar{u}$ -tát 'many' maintains the C3u marking that is inherent to the word itself, while  $t/\bar{a}/\bar{t}$  'few' occurs with no overt class marking. These two quantifiers occur in contrast to descriptive nouns used in the associative construction discussed in section 5.3, in which the associative marker occurs between the head noun and the descriptive noun. The quantifiers follow the head noun with no associative marker occurring between the head noun and quantifier.

The ut-Ma'in numerical system is decimal, based on ten. Numerals one through one thousand can be seen in Table 13 as they are used in counting, i.e., not specified for class.

<sup>&</sup>lt;sup>33</sup> Further investigation may show that t∫ā∫ī 'few' is a member of Class 3Ø.

Table 13: Numerals 1-1000

Numeral	Gloss	Numeral	Gloss	
tʃōːn	one (1)	ōp ś éx	eighteen (18)	
jōːr	two (2)	ōp ∕ dʒ <sup>w</sup> ō:r	nineteen (19)	
t <del>ō</del> t	three (3)	ōr-∫īk	twenty (20)	
ná:s	four (4)	ōr-∫īk ū-gàn	twenty-one (21)	
tán	five (5)	ōr-∫īk ó jō:r	twenty-two (22)	
ſìſìn	six (6)	ōr-∫īk ó tōt	twenty-three (23)	
tà?èr	seven (7)	ōr-∫īk ó ōp	thirty (30)	
éx	eight (8)	ōt-∫īk ōt-jō:r	forty (40)	
dʒ <sup>w</sup> ōːr	nine (9)	ōt-∫īk ōt-jō:r ó ōp	fifty (50)	
ōр	ten (10)	ōt-∫īk ōt-tōt	sixty (60)	
ōp á gān	eleven (11)	ōt-∫īk ōt-tōt ó ōp	seventy (70)	
ōp á jā:r	twelve (12)	ōt-∫īk ōt-ná:s	eighty (80)	
ōp á tōt	thirteen (13)	ōt-∫īk ōt-ná:s ó ōp	ninety (90)	
ōp é ná:s	fourteen (14)	ōt-ʃīk ōt-tán	hundred (100)	
ōp ó tán	fifteen (15)	ōt-∫īk ōt-ōp	two hundred (200)	
ōp á ∫ì∫ìn	sixteen (16)	ōt-kók ōt-tán	five hundred (500)	
ɔ̄p	seventeen (17)	ōt-kók ōt-ōp	thousand (1000)	

Numerals ten through nineteen employ the conjunction 5 'and' that produces forms such as  $5p \circ tan$  'fifteen (lit. ten and five)'. When used as a numeral meaning 'twenty', the root fik occurs in Pairing 5/6 with the 5r-/5t- prefixes. For numerals between twenty and one hundred this base becomes the head noun within the quantifier phrase. For example, consider the numeral 5t-fik 5t-t5t 'sixty (lit. three twenties)'. The first noun in its C5 singular form 5r-fik means 'twenty', but here it is in the C6 plural form 5t-fik. Notice that the numeral 5t-t5t 'three' agrees with the class of 5t-fik, marked by the C6 5t- prefix on the numeral. The root fik is also used in the noun 6t-fik 'money' that occurs in Class 2; further investigation is needed, but perhaps there is some historical or cultural connection between the two ideas, 'twenty' and 'money'.

The root *kók* normally occurs in Pairing 5/6, *5r-/5t-kók* 'calabash'. For the numerals that are multiples of one hundred the plural C6 form is used with another numeral following it. For example, the numeral *5t-kók 5t-tán* 'five hundred' is literally 'five calabashes'. It seems that the extension of meaning from 'calabash' to 'one hundred' is not complete because the singular form *5r-kók* is only used to mean 'calabash' and is not used for 'one hundred'. Instead, the phrase *5t-fīk 5t-tán* 'one hundred (lit. five twenties)' is used.

When numerals one through nineteen modify a noun, they occur with agreement marking in the form of a prefix on the numeral. The prefix is identical to that of the head noun. In the structure, as seen in (90), the numeral occurs immediately after the noun.

(90)

N NUMERAL

C-N C-NUMERAL

5s-fàr 5s-tán sē hē:g

C4-tree C4-five C4 fall.PST

'five trees, they fell'

The numeral  $tf\bar{s}m$  'one' is used in counting, but to modify a noun the numeral  $g\bar{a}n$  'one' is used. Not surprisingly, this occurs with only the odd numbered singular Classes 1u, 1 $\varnothing$ , 3u, 3 $\varnothing$ , 5, 7u, 7 $\varnothing$  and DIM. For Classes 1 $\varnothing$ , 3 $\varnothing$ , and 7 $\varnothing$ , in which the noun has a null  $\varnothing$ -prefix, the numeral occurs as  $\varnothing$ - $g\bar{a}n$  with a null  $\varnothing$ - prefix.

(91)			
Class	Example		Gloss
	Noun	Numeral	
1u	ū-mákt	ū-gān	'one barren woman'
	C1-barren.woman	C1-one	
$1\emptyset$	$\mathscr{O}$ - $z^{w}$ à $r$	Ø-gān	'one young man'
	C1∅-young.man	C1∅-one	
3u	ū-?úz	ū-gān	'one bead'
	C3-bead	C3-one	
$3\emptyset$	Ø-k <sup>w</sup> ár	Ø-gān	'one island'
	C3Ø-island	C3∅-one	
5	<i>ōr-p<sup>j</sup>ákét</i>	ōr-gān	'one flower'
	C5-flower	C5-one	
7u	ū-ván	ū-gān	'one knife'
	C7-knife	C7-one	
$7\emptyset$	Ø-nét	Ø-gān	'one person'
	C7∅-person	C7Ø-one	
DIM	ī-bà	ī-gān	'one small lake'
	CDIM-lake	CDIM-one	

Numerals two through nineteen occur with the (even-numbered) plural Classes 2, 4, 6, and AUG. In (92) the numeral *tán* 'five' is demonstrated with each class.

(92)			
Class	Example		Gloss
	Noun	Numeral	
2	Ø-r <del>è</del> nt	Ø-tán	'five mosquitoes'
	C2-mosquito	C2-five	
4	ōs-b⁵ās	ōs-tán	'five brooms'
	C4-broom	C4-five	
6	<i>ōt-bó</i>	5t-tán	'five towns'
	C6-town	C6-five	
AUG	ā-tā:r	ā-tán	'five huge rocks'
	CAUG-rock	CAUG-five	

The quantifier  $b\bar{e}t$  'all' occurs with all noun classes. With the (odd-numbered) singular Classes 1u,  $1\emptyset$ , 3u,  $3\emptyset$ , 5, 7u,  $7\emptyset$  and DIM, it caries the meaning 'whole'. Agreement is marked by a prefix on  $b\bar{e}t$  that is identical to the prefix found on the head noun. In (93), the head noun occurs first followed by the quantifier and then the class specific definite article (see section 5.6 for further discussion).

An alternate word order occurs in (94). In order to give emphasis to the head noun, the noun is followed immediately by the definite article (D), and then by the quantifier *bēt* 'all'.

```
(94)
N
               D
                         ALL
C_1-N_1
                         C_1-b\bar{\epsilon}:t
               D
ōs-fàr
                         ōs-bē:t
               s\bar{arepsilon}
                                        hĒːg
C4-tree
               C4.D
                         C4-all
                                        fall.PST
'the trees, they all fell'
```

This quantifier can also function anaphorically to refer back to an established antecedent in a text. In such a case, *best* occurs with the appropriate agreement prefix.

```
(95)

bó m-ò gòp ū-bu hémòssè ū-bē:t

water C6m-Assoc hit.PST C3u-house fall.PERF C3u-whole

'water hit the house having fallen completely'
```

When *bēt* 'all' modifies a noun in the object position, the definite article is not obligatory, as in (96), see section 5.13.

The quantifier  $\bar{u}$ -tát 'many' does not bear any agreement marking and occurs with its inherent Class 7u noun class prefix. In (97) below, the noun  $\bar{s}t$ -n $\bar{e}t$  'people' occurs in Class 6, yet the quantifier  $\bar{u}$ -tát 'many' maintains its Class 7u prefix.

```
(97)

5t-nēt ū-tát hā:n

C6-people C7u-many came

'many people came'
```

In (98), the noun *5s-f3n* 'roads' occurs in Class 4, and again *ū-tát* 'many' maintains its Class 7 prefix.

```
(98)
5s-f3n ū-tát
4-roads 7u-many
'many roads'
```

The quantifier *tfāfī* 'few' also follows the noun it modifies, but this quantifier has no overt class marking and is not marked for agreement with the noun it modifies.

#### 5.2 Demonstrative Modifiers

Demonstrative modifiers agree in class with the nouns they modify. There is a two way deictic distinction made in  $\underline{u}t$ -Ma'in. The base of the "near demonstrative" is  $\overline{V}N$ , where the V is a high tone high vowel and N is a nasal consonant. For classes with a consonantal element, the agreement element of the modified noun prefixes the demonstrative base. For classes that have a vowel prefix or a null  $\emptyset$ - prefix, there is a null  $\emptyset$ - prefixed agreement element.

An example of this appears in (99), in which the form of the demonstrative that modifies a C4 noun is *s-ín*. The demonstrative base *ín* occurs with the C4 *s*- prefix. The class specific definite article (D) always follows.

The quality of the vowel of the near demonstrative has two forms, [i] and [u] and is determined by whether the following definite article has the feature front or back. For the front vowel [ $\epsilon$ ] of Classes 2, 4 and 5 and the semi-vowel [j] of Classes 7u and 7 $\varnothing$ , the demonstrative base vowel occurs as the front vowel [i].

(100)		
Class	Dem	D
2	Ø-ín	$ar{\mathcal{E}}$
4	s-ín	$sar{arepsilon}$
5	d-ín	dē
7u	Ø-ín	jā
$7\emptyset$	Ø-ín	jā

For the back unrounded vowel [5] of the Classes 3u,  $3\emptyset$ , 6 and 6m suffixes and the semi-vowel [w] of Classes 1u and  $1\emptyset$ , the near demonstrative base vowel occurs as the back vowel [u], as seen in (101).

(101)		
Class	Dem	D
1u	Ø-ún	wā
$1\emptyset$	Ø-ún	wā
3u	Ø-ún	$\bar{\mathfrak{I}}$
$3\emptyset$	Ø-ún	$\bar{\mathfrak{I}}$
6	t-ún	tō
6m	m-úm	тō

All near demonstrative forms are summarized in (102).34

(102)		
Class	Dem	D
1u	Ø-ún	wā
$1\emptyset$	Ø-ún	wā
2	Ø-ín	$ar{arepsilon}$
3u	Ø-ún	5
$3\emptyset$	Ø-ún	$\bar{\mathfrak{I}}$
4	s-ín	$Sar{\mathcal{E}}$
5	d-ín	$dar{arepsilon}$
6	t-ún	t5
6m	m-úm	тō
7u	Ø-ín	jā
$7\emptyset$	Ø-ín	jā

The use of this form of the demonstrative is limited to a certain discourse environment, i.e., to signal that new information immediately follows. In (103), the C7u noun  $\bar{u}$ -5 'dog' is old information already known within the discourse. The new information presented is 'fear of children'.

<sup>&</sup>lt;sup>34</sup> No data is available for the near demonstrative forms of Classes DIM and AUG.

```
(103) 5-\dot{u} \emptyset-\dot{n} j\bar{a} g^{j}\bar{e}r \emptyset-j\bar{a}g: dog-C7u C7u-Dem C7u.D fears C2-children 'this dog is afraid of children'
```

In order to introduce new information, such as when one identifies an item by pointing, there is a change in word order. In (104) the demonstrative  $\emptyset$ -in 'C7u-Dem' occurs first immediately followed by the class specific definite article. The bare noun stem  $\delta$  from the noun  $\bar{u}$ - $\delta$  'dog' then occurs next, followed by another class specific definite article. This construction is similar to the indefinite article construction (see section 5.6) in that the bare noun stem occurs between the demonstrative and the definite article.

```
(104)

O-ín

jā

5

jā

Dem-C7u

C7u.D

dog

C7u.D

'this (is) a dog'
```

When the demonstrative pronoun occurs at the beginning of the clause, the consonantal prefixed element for Classes 4, 5, 6 and 6m is optional, but the definite article always follows the demonstrative stem. For example, in (106) *m-úm* 'C6m-Dem' occurs as *úm* 'C6m.Dem'.

```
(105)

<u>úm</u>

Dem.C6m

C6m.D

water

C6m.D

'this (is) water'
```

To indicate the "far demonstrative," the morpheme *jit* is added to the end of the near demonstrative form. The far demonstrative for Class 4 is *s-ín sē jit* 'there', as seen in (106).

```
(106) far-\partial s s-in s\bar{e} jit h\bar{e}:g tree-C4 C4-Dem C4.D FAR fall.PST 'those trees fell'
```

#### 5.3 Associative constructions

When a noun is modified by another noun, the associative construction is used. The head noun occurs first followed by the associative marker with a prefixed class element that shows agreement with the class of the head noun. The noun that modifies the head noun follows the

associative marker. The associative marker is a low tone, carried by the near close-mid central vowel [9]. If the second noun has the vowel [u] as a prefix, then the low tone is carried by the vowel [u].

If the head noun is clause initial, which is usually the subject position, the head noun occurs without its class prefix, as seen in (107). In a clause final position, which is usually the object position, the head noun occurs with its class prefix, as seen in (108).<sup>35</sup>

```
(107)
fàr
          s-è
                           m-wớr
                                             h\bar{\varepsilon}ig
          C4-Assoc
                                            fall.PST
tree
                          6m-length
'the tall trees fell'
(108)
ōт
          h<sup>j</sup>áη
                       ōs-fàr
                                                    m-wớr
                                    s-è
          see.PST
                                                    6m-length
1.sg
                       C4-tree
                                    C4-Assoc
'I saw the tall trees'
```

Example (109) shows the order of constituents for a clause initial associative construction. Here the head noun is marked with a subscript '1'. Class elements also occur with a subscript number to show agreement. The second noun and its class element are marked with a subscript '2' to show agreement.

In (110), one associative construction is embedded within another associative construction. The head noun *5s-fàr* 'shea-butter tree' occurs first, followed by the associative marker *s-à* 'C4-Assoc'. In the position of the second noun there is another associative construction with the C6

<sup>&</sup>lt;sup>35</sup> The associative marker could be analyzed as a suffix on the noun root, but then a noun in the object position would be marked for class by both a prefix and a suffix. In this work, the associative marker is analyzed as a morpheme, syntactically separate from the noun stem, that occurs with a prefixed class agreement element.

noun  $\delta t$ -rān 'leaf' as the head, followed by the associative marker t- $\hat{\sigma}$  'C6- Assoc'. The descriptive noun  $\delta m$ -w $\delta r$  'length' occurs last.

When asked to divide an associative phrase into words, speakers often attach the associative marker to either the first noun or to the class prefix of the second noun. This results in two phonological surface forms for the associative construction. A noun with an associative phrase modifier can occur as either (111) or (112), in which an equal sign (=) signifies phonological attachment and a pound sign (#) signifies a word boundary.

(111)  

$$N_1 = C_1 - Assoc = C_2 \# N_2$$
  
(112)  
 $N_1 \# C_1 - Assoc = C_2 \# N_2$ 

In (113) through (115), the associative marker (Assoc) and the class prefix of the second noun ( $C_2$ ) are spoken attached to the stem of the first noun ( $N_1$ ). The final two columns show the citation forms of the two nouns in the associative construction, i.e.  $N_1$  and  $N_2$ . If the agreement prefix on the associative marker is null  $\mathcal{O}$ - or C3  $\mathcal{I}$ - and the class prefix of the second noun is a consonant, the affixed associative marker and second noun's class element have the shape [ $\partial C$ ], where C is a consonant.

(113)

Class Combination	$N_1 = C_1 - Assoc = C_2$	N <sub>2</sub>	Gloss	$N_1$	N <sub>2</sub>
2+4	$n \partial m = \emptyset - \partial = s$	té	'evil spirits'	$\emptyset$ -n $\grave{\partial}m$ 'things <sup>36</sup> '	<i>ōs-té</i> 'trees'
3u+5	$k^{w} \not \ni k = 9 -  = r$	$gar{arepsilon}$	'eggshell'	<i>ū-k™⁄jk</i> 'shell'	<i>ōr-gē</i> 'egg'
3u+6	$n \partial m = \theta - = t$	rè	'food'	<i>ū-n∂m</i> 'thing'	<i>5t-rè</i> 'eating'

The noun  $[\emptyset$ -nòm] 'thing' is used here in Class 2, to personify 'things.' [nòm] generally occurs in classes denoting inanimate objects.

If the agreement prefix on the associative marker is null  $\mathcal{O}$ - or C3  $\mathcal{O}$ - and the class prefix of the second noun is the back rounded vowel [u]. The associative marker has the shape [ù]. (114)

Class Combination	$N = C_1$ -Assoc = $C_2$	N <sub>2</sub>	Gloss	N <sub>1</sub>	N <sub>2</sub>
2 + 7u	$nin = \emptyset$ - $= u$	fá?	'fangs'	<i>Ø-nín</i> 'teeth'	<i>ū-fá?</i> 'snake'
3u + 7u	$h \partial r = \emptyset -  = u$	dʒán	'fins'	$\bar{u}$ - $h \hat{\sigma} r$ 'hide (animal)'	<i>ū-dʒán</i> 'fish'

If the agreement prefix on the associative marker is C3  $\theta$ - and the class prefix of the second noun is null  $\emptyset$ -, the affixed associative marker has the shape  $[\vartheta]$ , as seen in (115). (115)

Class Combination	$N_1 = C_1 - Assoc = C_2$	N <sub>2</sub>	Gloss	N <sub>1</sub>	N <sub>2</sub>
3u+2	$k^h \acute{a} p = 9$ - $= \emptyset$	dʒán	'fin'	ū-káp 'shoulder'	Ø-dzán 'fish(pl)'

In (116) through (118), the associative prefix that agrees with the first noun ( $C_1$ ), the associative marker (Assoc) and the class prefix of the second noun ( $C_2$ ) are pronounced together as separate word between the noun stems. If the agreement prefix on the associative marker and the class prefix of the second noun are consonants, the associative marker has the shape [ $C\hat{O}$ ].

(116)

Class Combination	N <sub>1</sub>	$C_1$ -Assoc = $C_2$	N <sub>2</sub>	Gloss	N <sub>1</sub>	N <sub>2</sub>
4+4	rém	S-Э̂-S	vèr	'proverbs'	<i>ōs-rém</i> 'words'	<i>ōs-vèr</i> 'wisdom'
6m + 5	rè	m-∂-r	hí	'headache'	<i>ōm-rè</i> 'pain'	<i>ōr-hí</i> 'head'
7u + 6m	fền	j-∂-m	h¹∕9́	'vein'	<i>ū-f∋n</i> 'road'	<i>ōm-h<sup>j</sup>ó</i> 'blood'

If the agreement prefix on the associative marker is a consonant and the class prefix of the second noun is null  $\emptyset$ -, the the associative marker has shape  $[C\hat{\theta}]$ .

(117)

Class Combination	N <sub>1</sub>	$C_1$ -Assoc = $C_2$	N <sub>2</sub>	Gloss	N <sub>1</sub>	N <sub>2</sub>
5+2	bàn	<i>d-</i> ∂-Ø	ná	'herd'	<i>ōr-bàn</i> 'crowd'	Ø-ná 'oxen'
6+2	káp	t-∂-Ø	dzán	'fins'	<i>ōt-káp</i> 'shoulder'	Ø-dzán 'fish(pl)'

If the agreement prefix on the associative marker is a consonant and the class prefix of the second noun is the high back rounded vowel [u], then the associative marker has the shape [Cù], as in (118).

(118)

Class Combination	N <sub>1</sub>	$C_1$ -Assoc = $C_2$	N <sub>2</sub>	Gloss	$N_1$	N <sub>2</sub>
6m + 3u	bá	m- $=u$	dàk	'brown'	<i>ōm-b</i> ∕ 'water'	<i>ū-dàk</i> 'ground'
6m + 7u	mέ	<i>m</i> - `= <i>u</i>	zśr	'curdled milk'	<i>5̄m-mέ</i> 'milk'	<u>ū-zớr</u> 'sourness'
7 + 3u	té	<i>j</i> - ` = <i>u</i>	rā	'firewood'	<i>ū-té</i> 'wood'	<i>ū-rā</i> 'fire'

There is one combination of classes that results in a different tone on the near close-mid central vowel [9]. When noun one is from a null class that would result in the null  $\mathcal{O}$ - prefix occurring on the associative marker, and the class prefix on the second noun is null  $\mathcal{O}$ -, a high tone and near close-mid vowel [6] occurs between the two noun roots. Hoffman (1967:249) mentions, but does not explain, the tonal alternation within associative constructions of C'Lela. Data for this high tone marker in ut-Ma'in is only available for C2 nouns as seen in (119).

(119)

Class Combination	N <sub>1</sub>	Assoc word	N <sub>2</sub>	Gloss	N <sub>1</sub>	N <sub>2</sub>
2+2	gōb	á	ná	bulls	Ø-gob 'male animal'	<i>Ø-ná</i> 'oxen'
2+2	kāg	á	kớ:t	roosters	Ø-kag 'male bird'	<i>Ø-k∮:t</i> 'chicken'

I collected no data for associative constructions that contain nouns from Classes DIM and AUG. Data from these classes would provide further information about the shape of the associative marker, particularly in the case of vowel class elements.

# 5.4 Subject pronouns

Pronouns are given below as they occur in subject position. A distinction is made between inclusive and exclusive first person plural, and an indefinite pronoun that is neither singular nor plural is used when the agent is unspecified or not in focus. The class specific pronouns occur as part of the pronoun system and are marked as third person. These class specific

pronouns are suppletive since there is no identifiable base to which a class element is prefixed.

All personal and class specific pronouns are listed in Table 14.

Table 14: Subject pronouns

Class	Person	Singular	Plural		Indefinite
	1	ōm	Inclusive	Exclusive	
	1	9111	ín	īt	
	2	$b\bar{\mathfrak{z}}$	пō		
	3	w <u>ā</u> n	<u>5</u> n		nā
1u	3	ū/wā			
1Ø	3	wā			
2	3		$ar{\mathcal{E}}$		
3u	3	$\bar{\mathfrak{I}}$			
3Ø	3	$\bar{\mathfrak{I}}$			
4	3		$Sar{\mathcal{E}}$		
5	3	$dar{arepsilon}$			
6	3		tō		
6m	3		тō		
7u	3	jā			
7Ø	3	jā		·	
AUG	3		ā		
DIM	3	$ar{\mathcal{E}}$			

In (120) the first and second person pronouns and the indefinite pronoun are shown in typical environments. The pronouns occur in subject position preceding the verbs  $h\bar{\epsilon}g$  'fall.PST' and  $n\delta k$  'know.HAB'.

(120)

,			
Example	Gloss	Example	Gloss
ōm hē:g	'I fell'	ōm nák	'I know'
bō hē:g	'you (sg) fell'	bō nák	'you (sg) know'
ín hē:g	'we (incl.) fell'	ín nák	'we (incl.) know'
īt hē:g	'we (excl.) fell'	īt nák	'we (excl.) know'
nō hē:g	'you (pl) fell'	nō nák	'you (pl) know'
nā hē:g	'they (indef) fell'	nā nák	'they (indef) know'

In (121) third person pronouns, including all the noun class pronouns, are shown in the same environment, preceding the verb  $h\bar{\epsilon}g$  'fall.PST'.

(121)			
Class	Example	Gloss	Noun Referent
	w <del>ə</del> n hē:g	'he/she fell'	any human referent (sg)
	ōn hē:g	'they fell'	any human referent (pl)
1u	ū/wā hē:g	'he/she fell'	<i>ū-mákt</i> 'barren woman'
$1\emptyset$	wā hē:g	'he/she fell'	<i>⊘-hō:b</i> 'friend'
2	ē hē:g	'they fell'	<i>⊘-tèrèm</i> 'warthogs'
3u	ō hē:g	'it fell'	<i>ū-rān</i> 'leaf'
$3\emptyset$	ō hē:g	'it fell'	<i>Ø-s <sup>w</sup>ás</i> 'entrance hut'
4	sē hē:g	'they fell'	<i>ōs-té</i> 'trees'
5	dē hē:g	'it fell'	<i>ōr-túr</i> 'pot'
6	tō hē:g	'they fell'	<i>ēt-p<sup>j</sup>ákét</i> 'flowers'
6m	mō hē:g	'it/they fell'	<i>ōm-b</i> ∕ 'water'
7u	jā hē:g	'it fell'	$\bar{u}$ - $k\bar{\varepsilon}z$ 'antelope'
$7\emptyset$	jā hē:g	'it fell'	<i>Ø-t∫āmpá</i> 'man'
AUG	ā hē:g	'they fell'	ā-túr 'many huge pots'
DIM	ē hē:g	'it fell'	<i>ī-túr</i> 'tiny pot'

The third person pronouns  $w\bar{s}n$  and  $\bar{s}n$  can be understood as coming from Class 1 and 2 nouns, historically  $\bar{u}$ - $\bar{s}n$  and  $\varnothing$ - $\bar{s}n$ , that have been reanalyzed as pronouns. As a result, there are multiple pronoun options for pronouns that refer to humans. Nouns from Classes 1u (always human) can be referenced with the pronouns  $w\bar{s}n$  or  $w\bar{a}$  or  $\bar{u}$ , and Class  $1\varnothing$  (always human) can be referenced with the pronouns  $w\bar{s}n$  or  $w\bar{a}$ . Class  $7\varnothing$  nouns (always human) can be referenced with the pronouns  $w\bar{s}n$  or  $j\bar{a}$ , and there is some evidence that pronoun  $w\bar{a}$  can also be used. Class 2 human nouns can be referenced with either the pronouns  $\bar{s}n$  or  $\bar{\epsilon}$ , but Class 2 non-human nouns are generally only referenced with the pronoun  $\bar{\epsilon}$ . These variations can be used by speakers to follow two or more referents through a discourse to minimize confusion.

#### 5.5 Definite articles

(121)

When the class specific subject pronouns occur together with their noun referents, the discourse effect is one of specification. In (122), the head noun occurs first, with its class element suffixed. The class specific pronoun follows, shown as the definite article (D).

(122) N D N-C D  $far-\dot{\vartheta}s$   $s\bar{\epsilon}$   $h\bar{\epsilon}:g$ tree-C4 C4.D fall.PST 'the trees fell'

Though this pronoun is often translated into English as 'that' or 'those', it differs significantly in form from the demonstratives seen in section 5.2. This use of the pronoun may be best understood as a definite article or determiner that specifies a particular and specific noun referent.

#### 5.6 Indefinite articles

In contrast to the definite article presented in section 5.5, when the noun referent is unspecified, the indefinite article precedes the head noun. The indefinite article is formed by prefixing the appropriate low tone class element to the root  $k\bar{s}n$  'there'. The bare noun root follows, followed by the definite article. In (123), the C4 indefinite article (Indef)  $s\hat{e}-k\bar{e}n$  precedes the C4 noun stem (N)  $t\hat{a}r$  'tree', and the mid-tone C4 definite article (D) follows.

(123)Indef N D C-kān N D sè-kēn fàr  $sar{arepsilon}$ hĒιg C4-Indef C4 fall.PST tree 'some trees fell'

The  $[\varepsilon]$  and  $[\mathfrak{d}]$  of the class element trigger vowel harmony with regard to backness on the vowel  $[\mathfrak{d}]$  of  $k\bar{\mathfrak{d}}n$ . For Classes 2, 4, 5 and DIM the agreement prefixes contain the front unrounded vowel  $[\varepsilon]$ , so the root  $[k\bar{\mathfrak{d}}n]$  surfaces as  $[k\bar{\mathfrak{d}}n]$ . For Classes 3u, 3 $\emptyset$ , 6, and 6m, the agreement prefixes contain the back rounded vowel  $[\mathfrak{d}]$ , so the root  $[k\bar{\mathfrak{d}}n]$  surfaces as  $[k\bar{\mathfrak{d}}n]$ . In (124) the form of the indefinite article can be seen for each class. Notice that the low vowel  $[\mathfrak{d}]$ 

of the agreement prefixes of Classes 1u,  $1\emptyset$ , 7u,  $7\emptyset$  and AUG have no affect on the vowel of the root  $k\bar{\delta n}$ .

(124)

Class	Example	Gloss
1u	wàkōn mákt wā	'a certain barren woman'
$1\emptyset$	wàkōn hámòt wā	'a certain visitor'
2	èkēn dʒán ē	'some fish'
3u	òkōn rān ō	'a certain leaf'
$3\emptyset$	òkōn bò? ō	'a certain dream'
4	sèkēn bò? sē	'some dreams'
5	dèkēn kók dē	'a certain calabash'
6	tòkōn rān tō	'some leaves'
6m	mòkōn nò:g mō	'a certain oil'
7u	jàkēn ná jā	'a certain ox'
$7\emptyset$	jàkēn r <sup>j</sup> âm jā	'a certain cripple'
AUG	àk <del>ō</del> n kók ā	'some huge calabashes'
DIM	èkēn kók ē	'a certain tiny calabash'

This indefinite article is often used when a new character is introduced in a discourse. In (125), the noun phrase containing the indefinite pronoun occurs in the object position.

At other times, the indefinite article occurs alone to refer anaphorically to unspecified members of a known group.

(126)

è-kēn tàkèn ōs-rém

C2-Indef begin.PST C4-talking

'some (of them/people) began talking'

# 5.7 Object pronouns

Object pronouns are shown in Table 15. The first and second person pronouns are identical to their subject pronoun counterparts except in the first person singular, where the subject

pronoun is  $\underline{\delta m}$  and the object pronoun form is  $\underline{m \epsilon}$ . The class specific pronouns are identical to their subject pronoun counterparts, except that in object position they occur with a high tone.

Table 15: Object pronouns

Class	Person	Singular	Plural	
	1	mέ	Inclussive	Exclusive
	1	IIIE	ín	īt
	2	$b\bar{\mathfrak{z}}$	пō	
	3	w <u>ā</u> n	Ōn	
1u	3	ú/wá		
1Ø	3	wá		
2	3		É	
3u	3	5		
3Ø	3	5		
4	3		SÉ	
5	3	dé		
6	3		tś	
6m	3		тэ́	
7u	3	já		
7Ø	3	já		

In (127) the first and second person pronouns are shown in a typical environment. They occur in the object position after the verb *tōk* 'push.over.PST'. The subject pronoun *wōn* '3.sg' and it can be translated as 'he' or 'she' because it is not specified for gender. For simplicity in the examples below, *wōn* is glossed as 'he'.

(127)

Example

won tōk mé

won tōk in

won tōk in

won tōk it

won to

won tōk it

won to

The pronouns  $w\bar{o}n$  '3.sg' and  $\bar{o}n$  '3.pl' can be used to reference any human noun in the discourse, or any person in the reality of a live discourse situation. The class specific pronouns are also used to reference nouns already established within a particular discourse. In (128) all third person pronouns are shown in object position after the verb  $t\bar{o}k$  'push.over.PST'. The final column lists an example noun referent for each pronoun.

(128)			
Class	Example	Gloss	Noun Referent
	w <u>ə</u> n tək w <u>ə</u> n	'he pushed him/her'	any human referent (sg)
	w <del>ə</del> n tək ən	'he pushed them'	any human referent (pl)
1u	w <del>ə</del> n tək ú	'he pushed her'	<i>ū-mákt</i> 'barren woman'
$1\emptyset$	w <del>ɔ</del> n tɔk wá	'he pushed him'	<i>∅-hō:b</i> 'friend'
2	w <del>ə</del> n tək é	'he pushed them'	<i>∅-tèrèm</i> 'warthogs'
3u	w <del>ɔ</del> n tɔk ś	'he pushed it'	<i>ū-rān</i> 'leaf'
$3\emptyset$	w <del>ɔ</del> n tɔk ś	'he pushed it'	$\mathcal{O}$ -s wás 'entrance hut'
4	w <del>ə</del> n tək sé	'he pushed them'	<i>ōs-té</i> 'trees'
5	w <del>ə</del> n tək dé	'he pushed it'	<i>ōr-túr</i> 'pot'
6	w <del>ɔ</del> n tɔk tɔ́	'he pushed them'	<i>ōt-p<sup>j</sup>ákét</i> 'flowers'
6m	w <del>ɔ</del> n tɔk mɔ́	'he pushed it'	<i>5m-b</i> ∮ 'water'
7u	w <del>ō</del> n tōk já	'he pushed it'	<i>ū-kēz</i> 'antelope'
$7\emptyset$	w <del>ɔ</del> n tɔk já	'he pushed him'	<i>Ø-t∫āmpá</i> 'man'
AUG	w <del>ō</del> n tōk é	'he pushed them'	ā-túr 'many huge pots'
DIM	w <del>ɔ</del> n tɔk á	'he pushed it'	<i>ī-túr</i> 'tiny pot'

## 5.8 What?

When a person asks the question 'what?' the object can be specified for class, if the class of the object is known. The root  $j\bar{a}n$  'what?' is followed by the appropriate high tone object pronoun suffixed to the root. If the class of the object is not known, C3u or C6 agreement pronouns are used. Therefore, the most commonly used forms are C3u  $j\bar{a}n$ - $\acute{o}$  'what (singular non-human) thing?' or C6  $j\bar{a}n$ - $t\acute{o}$  'what (plural non-human) things?'.

Since this construction is only applicable to non-humans, it therefore does not occur with Classes 1u,  $1\emptyset$  or  $7\emptyset$ , which contain only humans. The question word *wàná* 'who?' would instead be used for humans. All class forms are listed below in (129).

Example	Gloss	Noun referent
jān-έ	'what things?'	<i>Ø-nín</i> 'teeth'
jān-ś	'what thing?'	<i>ū-rān</i> 'leaf'
jān-ś	'what thing?'	$\mathcal{O}$ - $s^{w}$ ás 'entrance hut'
jān-sé	'what things?'	<i>ōs-té</i> 'trees'
jān-dέ	'what thing?'	<i>ōr-túr</i> 'pot'
jān-tớ	'what things?'	<i>ōt-túr</i> 'pots'
jān-mớ	'what thing?'	<i>ōm-g<sup>j</sup>∕sp</i> 'evening'
jān-já	'what thing?'	<i>ū-té</i> 'tree'
jān-έ	'what thing?'	<i>ī-túr</i> 'tiny pot'
jān-á	'what things?'	<i>ā-túr</i> 'many huge pots'
	jān-é jān-ó jān-ó jān-sé jān-dé jān-tó jān-mó jān-já jān-é	$j\bar{a}n-\dot{\epsilon}$ 'what things?' $j\bar{a}n-\dot{\delta}$ 'what thing?' $j\bar{a}n-\dot{\delta}$ 'what thing?' $j\bar{a}n-s\dot{\epsilon}$ 'what things?' $j\bar{a}n-d\dot{\epsilon}$ 'what things?' $j\bar{a}n-t\dot{\delta}$ 'what things?' $j\bar{a}n-m\dot{\delta}$ 'what thing?' $j\bar{a}n-j\dot{a}$ 'what thing?' $j\bar{a}n-\dot{\epsilon}$ 'what thing?'

## 5.9 Adjectives

There are only eight known adjectives in ut-Ma'in, as shown in (130). Adjectives always occur with an agreement element suffixed to the adjective stem.

Adjectives have no class marking of their own, but rather they occur with a suffix that marks agreement with the class of the noun they modify. Adjectives differ from nouns by this suffixed agreement element. In contrast to adjectives, descriptive nouns occur with their own inherent class marking. To describe something as 'old' the descriptive C6 noun  $5t-\bar{u}t$  is used in an associative construction in (131a). In (131b), the adjective  $p\hat{o}$  'new' follows the noun and occurs with the C6m agreement element  $-m\hat{o}$  suffixed to the adjective root.

(131)
a. b. 
$$N_1 \quad C_1\text{-Assoc} \quad C_2\text{-}N_2 \quad N_1\text{-}C_1 \quad A\text{-}C_1$$
b\(\delta\) m-\(\delta\) t-\(\overline{u}t\) b\(\delta\)-m p\(\delta\)-m\(\delta\)
water C6m-Assoc C6-old water-C6m new-C6m 'old water'

When a noun is modified by an adjective, the head noun occurs first with its class element  $(-C_1)$  suffixed to the noun stem  $(N_1)$ , and the suffix shares the same tone as the final syllable of the noun stem. The adjective stem (A) then follows with the low tone class agreement suffix  $(-C_1)$ .

(132) 
$$\begin{aligned} &N_1 & A \\ &N_1\text{-}C_1 & A\text{-}C_1 \\ & \textit{far-se} & \textit{ját-se} & \textit{hē:g} \\ &\text{tree-C4} & \text{big-C4} & \text{fall.PST} \\ \text{'big trees fell'} \end{aligned}$$

In (133) examples for each noun class are shown; the head noun occurs first with its class element suffixed, the adjective *dʒás* 'red' follows with the agreement element suffixed to the stem.

(133)		
Class	Example	Gloss
1u	mákt-ú dzás-wà	'a red barren woman'
$1\emptyset$	hō:b-∅ dʒás-wà	'a red friend'
2	tèrèm-∅ dʒás-è	'red warthogs'
3u	rān-ū dʒás-ò	'a red leaf'
$3\emptyset$	s <sup>w</sup> ás-∅ dʒás-ò	'a red entrance hut'
4	té-és dzás-sè	'red trees'
5	túr-ér dzás-dè	'a red pot'
6	p <sup>j</sup> ákét-ét dzás-tò	'red flowers'
6m	bś-śm dʒás-mò	'red water'
7u	kēz-ū dʒás-jà	'a red antelope'
$7\emptyset$	t∫āmpá-Ø dʒás-jà	'a red man'
AUG	túr-á dzás-à	'many huge red pots'
DIM	túr-í dzás-ì	'a tiny red pot'

## 5.10 Relative constructions

Relative pronouns have a base of  $\hat{\mathfrak{g}}$  with the noun class element prefixed. For Classes DIM and AUG, the Relative pronoun is a low tone on class element, i.e.,  $\hat{\mathfrak{g}}$  'CDIM-REL' and  $\hat{\mathfrak{g}}$  'CAUG-REL'. The head noun  $(N_1)$  occurs first with its noun class prefix  $(C_1$ -), and then the relative pronoun (REL) marked by a prefix  $(C_1$ -) for the class of the head noun follows as the head of the relative clause.

(134) 
$$N_1 \qquad \text{REL} \\ C_1\text{-N}_1 \qquad C_1\text{-REL} \\ \hline \underline{\mathfrak{s}m} \qquad h^{\underline{l}}\underline{\acute{a}}\underline{\emph{n}} \qquad \underline{\mathfrak{s}s}\text{-}\underline{\acute{a}}\underline{\emph{r}} \qquad s\text{-}\underline{\grave{o}} \qquad h\underline{\tilde{e}}\underline{\emph{i}}\underline{\emph{g}} \\ 1.s \qquad \text{see.PST} \qquad \text{C4-tree} \qquad \text{C4-REL} \qquad \text{fall.PST} \\ \text{`I saw the tree that fell'}$$

In (135) each a relative clause for each noun class is shown. The noun with its relative clause occurs in the object position of the sentence  $\delta m h^l \delta g$  'I saw \_\_\_\_\_'. In the object position, the nouns occur with their class prefix and the relative clause follows. Note that nouns that have a null  $\varnothing$ - prefix occur with  $\delta$  as the relative pronoun form.

(135)			
Class	REL	Example	Gloss
1u	éw	ōm h <sup>j</sup> áŋ ū-mákt wờ hē:g	'I saw the barren woman who fell'
$1\emptyset$	éw	ōm h¹áŋ ∅-fàrèk wè hē:g	'I saw the chief who fell'
2	é	ōm h <sup>j</sup> áŋ ∅-r <sup>w</sup> āg ∂ hē:g	'I saw the elephants that fell'
3u	é	ōm h <sup>j</sup> áŋ ū-jō ∂ hē:g	'I saw the rain that fell'
$3\emptyset$	é	ōm h <sup>j</sup> áŋ s <sup>w</sup> ás ծ hē:g	'I saw the entrance hut that fell'
4	éa	ōm h <sup>j</sup> áŋ ōs-r <sup>j</sup> àp sờ hē:g	'I saw the whips that fell'
5	éb	<i>⋽m h<sup>j</sup>áŋ ⋽r-∫ár d∋̀ hē:g</i>	'I saw the water pot that fell'
6	tè	ōm h <sup>j</sup> áŋ ōt-tōròm tò hē:g	'I saw the hail that fell'
6m	ém	<i>⋽m h<sup>j</sup>áŋ ⋽m-óg m</i> ∋ <i>hē:g</i>	'I saw the juice that fell'
7u	jè	ōm h <sup>j</sup> áŋ ū-fề j∋̀ hē:g	'I saw the branch that fell'
$7\emptyset$	éį	ōm h <sup>j</sup> áŋ t∫āmpá j∂ hē:g	'I saw the man who fell'
AUG	à	ōm h¹áŋ ā-tāʔār à hē:g	'I saw the huge rocks that fell'
DIM	ì	ラ̃m h j́áŋ ī-tāʔār ì hē:g	'I saw the tiny stone that fell'

The form of the relative pronoun is identical to the associative marker for each class, but in this relative construction, the associative marker is linking the head noun to a clause.

## 5.11 Which?

In the interrogative construction meaning 'which one?', the noun stem  $(N_1)$  occurs first followed by the class specific form  $(C_1$ -) prefixed to relative pronoun (REL). The interrogative stem  $h\hat{e}$  'where?' follows. This class specific form is also identical to the relative pronoun (see section 5.10) and the associative marker (see section 5.3).

(136)  $N_1$  WHICH  $N_1$   $C_1$ -REL-WHICH  $\hat{far}$  s- $\hat{gag}$ - $h\hat{e}$  tree C4- REL -where 'which tree?'

The interrogative can occur with or without the noun referent as seen in (137) below. For simplicity, the class forms are written below as the fully inflected class specific relative pronoun. E.g., the Class 4 form s- $\hat{\sigma}$  'C4-Assoc' is written as  $s\hat{\sigma}$ - prefixed to the interrogative stem  $h\hat{\epsilon}$  'where'.

(137)				
Class	Example	Gloss	Example	Gloss
1u	mákt w <del>ò</del> -hè	'which barren woman?'	w <del>ò</del> -hè	'which one?'
$1\emptyset$	fàrèk wè-hè	'which chief?'	w <del>ò</del> -hè	'which one?'
2	dʒán è-hè	'which fish?'	э̀-hὲ̀	'which ones?'
3u	rān э̀-hè	'which leaf?'	э̀-hὲ̀	'which one?'
$3\emptyset$	s <sup>w</sup> ás ð-hè	'which entrance hut?'	э̀-hὲ̀	'which one?'
4	bò? s <del>ò</del> -hè	'which dreams?'	sè-hè	'which ones?'
5	kók d <del>ò</del> -hè	'which calabash?'	dà-hè	'which one?'
6	rān tè-hè	'which leaves?'	tè-hè	'which ones?'
6m	nờ:g mà-hệ	'which oil?'	m∂-hὲ	'which one?'
7u	ná j <del>ò</del> -hè	'which ox?'	j <del>ò</del> -hὲ	'which one?'
$7\emptyset$	tʃāmpá jð-hè	'which man?'	j <del>ò</del> -hè	'which one?'
AUG	kók à-hè	'which huge calabashes?'	à-hè	'which ones?'
DIM	kók ì-hè	'which tiny calabash?'	ì-hè	'which one?'

## 5.12 Possessive pronouns

The possessive pronouns occur with no noun class agreement marking. The head noun occurs first with its class element suffixed, and the tone of the suffix is identical to the tone of the final syllable of the noun stem. The possessive pronoun follows with no class agreement marking.

```
\begin{array}{lll} \text{(138)} & & & \\ \text{N}_1 & & \text{NP}_{\text{[POSS]}} \\ \text{N}_1 \text{-C}_1 & & \text{NP}_{\text{[POSS]}} \\ \textit{far-ès} & \textit{r\'o} & & \textit{h\'e}\textit{:g} \\ \text{tree-C4} & 2.\text{sg.POSS} & \text{fall.PST} \\ \text{'your trees fell'} & & & \\ \end{array}
```

When both adjective and possessive pronoun occur in the same construction, the head noun with suffixed class marking occurs first followed by the adjective with suffixed class agreement marking and then the possessive pronoun with no class agreement marking, as seen in (139).

```
(139)
N_1
            Α
                         NP<sub>[POSS]</sub>
N_1-C_1
            A-C_1
                         NP<sub>[POSS]</sub>
fàr-ès
            ját-sè
                         ró
                                         hēːg
tree-C4
           big-C4
                                         fall.PST
                         2.sg.poss
'your big trees fell'
```

Because the adjective can occur between the head noun and the possessive pronoun, the class marking that is suffixed to the noun cannot be interpreted as prefixed to the possessive pronoun.

A paradigm of the possessive pronouns are shown in Table 16. The plural possessive pronouns are identical to the subject pronouns from section 5.4. The singular possessive pronouns are a set unrelated to the subject or object pronouns, and they are marked by the occurrence of the [r] consonant. Notice that the distinction between the second person singular and the third person singular is a tonal contrast.

Table 16: Possessive personal pronouns

Person	Singular	Plural		
1	and .	Inclussive	Exclusive	
1	H	ín	īt	
2	ró	пō		
3	rò	Ōn		

Further investigation is needed to determine if there are class specific pronominal forms that occur in possessive constructions.

## 5.13 Summary and discussion

Table 17 summarizes the class agreement morphology that occurs with modified nouns in the subject position.

Table 17: Noun class morphology

Modifier	Morphology on Noun	Morphology on Modifier	Modifier	Head Nour	n	Modifier		
Quantifier	prefix	prefix		C- N		C-	Q	
Indefinite Article	none	prefix	C-Indef.	N				
Associative Phrase	none	prefix		N		C-	AssocP	
Adjective	suffix	suffix		N -	-C		A	-C
Possessive Pronoun	suffix	none		N -	-C		NP <sub>[POSS]</sub>	
Definite Article	suffix	suppletive		N -	-C		D	
Demonstrative Mod.	suffix	prefix		N -	-C	C-	Dem	

The noun only occurs with its prefix when it is modified by a quantifier (Q). When a quantifier is used to modify a noun in the subject position, a subject pronoun must occur following it. Recall that when a subject pronoun occurs with a full noun the effect is one of specification or focus (see discussion in section 5.5). Both the noun and the quantifier occur with the noun class prefix and the class specific subject pronoun follows as a third noun phrase.

In the object position the pronoun is not obligatory, as shown in (141). The pronoun could occur to further specify the noun, but then the pronoun occurs following the noun with its suffixed class element as in (142). The numeral follows as a separate noun phrase.

```
(141)
          vāk hāstè
w<u>5</u>n
                        5t-nĒt
                                       ōt-bē:t
          greet.PST
                                       C6-all
                        C6-people
3.sg
'he greeted all of the people'
(142)
w<u>5</u>n
          vāk hāstè
                                nēt-ēt
                                              tō
                                                      ōt-bē:t
          greet.PST
                        C6-
                               people-C6
                                             C6.D C6-all
3.sg
'he greeted all of those people'
```

A noun that occurs with any modifier other than a quantifier occurs either as a bare noun root or with a suffixed class element. With only a quantifier, the noun occurs with its prefix as it is in citation form, as shown in (141). If the noun occurs with other modifiers and a quantifier, the quantifier follows the definite article, the last element that can occur within a noun phrase. For this reason, I interpret the noun and quantifier to be a sequence of noun phrases rather than a single noun phrase. There is still a relationship between the noun and the quantifier that is marked by the agreement prefix on the numeral, but the structure seems to indicate these are separate phrases.

In a sentence with a simple one noun object, the noun object occurs with its class prefix. The class prefix has a mid tone as in the citation form. See the example below of the C3 noun  $\bar{u}$ - $k\hat{u}r$  'room'.

```
(143)

wōn mā:g ū-kúr

3.s build.PST C3-room

'he built a room'
```

But when a single noun subject is used, its class prefix does not occur. The noun's class is marked by a suffix on the noun stem.

```
(144)
N_1
N_1-C<sub>1</sub>-Assoc
far-s-\dot{\vartheta}
tree-C4-Assoc
fall.PST
```

This suffixed class element, s-à 'C4-Assoc', is identical to the relative pronoun and the associative marker, and only occurs when there is only a single noun in subject position. If there is any expansion of the noun phrase, the suffix does not occur and the class of the noun is marked by other constituents of the noun phrase. Previously, this associative form may have been a prefixed class element marking agreement on the verb; currently, the associative form is suffixed to the noun stem which matches the phonological variations of the associative phrase discussed in section 5.3. No other construction occurs with this form immediately preceding the verb.

#### CHAPTER 6

# **CONCLUSION**

#### 6.1 Further research

The semantic properties of noun class pairings, the interaction of the verb system with the noun class system, the possible presence of a locative class and the varied morphology of noun class system morphology are all potential topics for further research.

#### 6.1.1 Semantic categorization

The noun class pairings of singular classes and plural classes exhibit observable semantic properties. column one of Table 18 reviews all pairings that occur in the corpus, and column two displays the semantic properties that characterize the pairing. Pairings that contain humans are listed first, followed by pairings that contain animates, then pairings that contain inanimate objects. Finally, the diminutive and augmentative class pairings are listed.

For some pairings the majority of nouns are unified by a clear semantic characteristic, e.g., Pairing 5/6 conatins round objects, including nouns that refer to round body parts. But other pairings contain body parts that are not as easily identified in regard to the characteristic that would group them together. Further investigation into the culture and semantic divisions given to noun classes and noun class pairings is needed to understand why certain nouns have been grouped together.

Table 18: Semantics of noun class pairings

Pairing	Semantic characteristics of content
1Ø/2	humans
1Ø/6	humans
1u/2	humans (possibly pejorative)
7Ø/2	humans
7u/2	animates / change over time
7u/4	long, mostly inanimate objects / plants
7u/6	change over time/'baby sling'
5/2	'puff adder'
5/4	'thatch'/'arrow'
5/6	mostly inanimate / spherical
3u/2	'giant'
3u/4	inanimate objects
3u/6	inanimate objects
3Ø/4	inanimate objects
3Ø/6	inanimate objects
DIM/4	'argument'
DIM/6m	diminutives
3u/AUG	augmentatives

## 6.1.2 The interaction of the verb system and the noun class system

Classes 2, 3u, 4, 5, 6, 6m and 7u occur as unpaired classes for nouns that do not make a singular/plural distinction. Verbal nouns occur in a subset of these unpaired classes, i.e.

Classes 3u, 4, 5, 6, and 6m. Further research is needed to determine the full function of these verbal nouns in the language. Example (145) repeats the structure of a basic transitive clause from (18) in which the verb is followed by its noun object, and the noun object occurs with its noun class prefix. The verb aspect particles can also take a noun compliment as shown in (146).

```
(145)
tʃāmpá-j-ð
                                 ū-kúr
                   māːg
man-C7-Assoc
                  build.PST
                                C3u-room
'a man built a room'
(146)
w<u>5</u>n
             5
                          ū-dàrīdàŋg
3sg
             PRES
                          C7u-spider
'he is a spider'
```

Consider the following paradigm of verbal constructions.<sup>37</sup> The first three occur with the main verbal idea in the nominal form following the verb aspect particle. The subject for each clause is the Class 4 pronoun  $s\bar{\epsilon}$ .

(147	<b>'</b> )			
a.	$Sar{\mathcal{E}}$	dé	ōr-hé?è	'they will fall'
	C4.they	FUT	C5-falling	
b.	$Sar{\mathcal{E}}$	5	ōr-hé?è	'they are falling'
	C4.they	PRES	C5-falling	
c.	$Sar{\mathcal{E}}$	óg	ōr-hé?è	'they were falling'
	C4.they	<b>IMPERF</b>	C5-falling	
d.	$Sar{\mathcal{E}}$	hé		'they fall'
	C4.they	fall.HAB		
e.	$Sar{\mathcal{E}}$	hē-:g		'they fell'
	C4.they	fall.PST		

The verbal noun 5r-he?e 'falling', that occurs in (147a-c), is identical to the form of the object of a simple transitive clause in (145) and the form of the noun complement of the verb particle 5 in (146). The verbal noun occurs in the object position with the noun class prefix, while at the same time carrying the main semantic verbal idea. When the verb is in the habitual or unmarked aspect (147d), the main verbal morpheme occurs as the bare root. When the verb is in the past tense (147e), the main verbal morpheme occurs with the past tense marker -g suffixed to the verb root.

If the verbal noun, when following a verb particle, is the main semantic verb of an intransitive clause, then that verbal noun occurs with the prefix of the noun class to which it belongs. For example, the C4 verbal noun that means 'greeting' occurs as 5s-v5k when it occurs with one of the three verb particles, as seen in (148).

<sup>&</sup>lt;sup>37</sup> I assume that this is an incomplete paradigm. More data is needed.

If a verb particle plus a verbal noun is used in a transitive clause, the verbal noun occurs with its noun class prefix and the object of the main verbal idea occurs inside an associative construction marked for agreement with the class of the verbal noun, as seen in (149).<sup>38</sup> The associative construction in ut-Ma'in is reminiscent of, if not identical to, the associative construction described in section 5.3.

Because the verbal nouns occur in only a subset of available noun classes, there may be restrictions within the verb system that are not apparent in the noun class system. Further research is needed in order to determine the extent to which the noun class system and the verbal system work in tandem and the extent to which the two systems overlap.

#### 6.1.3 Locative class

There is a small set of words with locative meaning that occur with a high tone [6] that is prefixed to the stem. Further research is needed in order to understand how these locative words fit into the framework of the noun class system. Some of the stems can be related to other nouns. In Table 19, these locative words are listed with possibly related nouns in the second column.

<sup>&</sup>lt;sup>38</sup> Crozier (1984:101) describing the Cishingini variety of Kambari states that the "associative construction is used extensively in nominalizations."

Table 19: Locative words

Locative	Gloss	Source noun	Gloss
<i>ģ</i> :	'of'	??	
<i>9-∫á</i>	'before'	ū-ſá	'face'
<i>á-dím</i>	'back'	??	
<i>ó-dóm</i>	'above'	ū-dớm	'up/east?'
<i>5-tá?</i>	'below'	ū-tá?	'down/west'
<i>-</i> 5-kèn	'infront of'	??	
<i>∮-mέ</i>	'inside'	э́г-те̂п	'stomach'
<i>5-d</i> ∂?	'outside'	ōt-d∂?	'burning'
<i>5-tèk</i>	'between/ in the middle of'	??	
<i></i>	'like'	??	
∕9-hÈ	'where/place'	??	

## 6.1.4 Morphology of the noun class system

The citation form of the noun occurs with its noun class prefix, but when the noun occurs with modifiers the class element is suffixed to the noun stem. Recall the variety of noun class morphology, both prefixes and suffixes, shown in Table 20.

Table 20: Noun class morphology

Modifier	Morphology on Noun	Morphology on Modifier	Modifier	Head Noun			Modifier	
N/A	prefix	N/A		C- N				
Quantifier	prefix	prefix		C- N		C-	Q	
Indefinite Article	none	prefix	C-Indef.	N				
Associative Phrase	none	prefix		N		C-	AssocP	
Adjective	suffix	suffix		N -C	7)		A	-C
Possessive Pronoun	suffix	none		N -C	7)		NP <sub>[POSS]</sub>	
Definite Article	suffix	suppletive		N -C	7		D	
Demonstrative Mod.	suffix	prefix		N -C	7	C-	Dem	

Hoffman (1967:252-253) discusses the possibility that the suffixed class elements that occur on nouns in C'Lela developed from agreement prefixes that historically occurred on the modifier following the noun. De Wolf (1971:180-182) follows Hoffman's proposal in his work on the noun class system of Proto-Benue-Congo in his attempt to explain the variety of prefixes and suffixes that occur as noun class marking within the Benue-Congo languages. Greenberg (1974:450-451) disagrees with both Hoffman (1967) and De Wolf (1971) though he dose not fully state his reasons.

De Wolf (1971) proposes that the noun class system of Proto-Benue-Congo used prefixes to mark the class of a noun. This includes the idea that agreement elements on other clause constituents also occurred as prefixed class elements. The question is then, what process does a language undergo in order to make the shift from a prefixing to a suffixing language? A comparative study of the noun class morphology of ut-Ma'in, C'Lela and Duka might well provide insight into the current state of each language regarding prefixing or suffixing.

## 6.2 Summary

This present work provides a comprehensive overview of the noun class system of ut-Ma'in that is summarized in Table 21 below.

Table 21: Comprehensive overview of the noun class system of ut-Ma'in

			Indep	Indep	Indep	C-N,	N-C	C-Assoc,	C-hè	jān-C	A-C	C-
						C-Q		C-Dem				kēn
Class Label	PBC Label	Person/Number	Subject Pronoun, Definite Article	Object Pronoun	Relative Pronoun	Noun (Citation form) Quantifier	Noun w/ Modifier	Associative, Demonstrative Modifier	Which one?	What?	Adjective	Indefinite Article
		1sg	ēm	mέ								
		2sg	bō	b5								
		3sg	wēn	wēn								
1u	1	3sg	ū/wā	ú/wá	éw	ū-	-Ø	u-/w-/Ø-	-éw	N/A	-wà	wà-
1Ø	1	3sg	wā	wá	éw	Ø-	-Ø	u-/w-/Ø-	-éw	N/A	-wà	wà-
		1pl incl	ín	ín								
		1pl excl	īt	īt								
		2pl	nō	nō								
		3pl	ēη	ēη								
2	2&10	3pl	Ē	έ	È	Ø-	-Ø	Ø-	è-	N/A	-è	è-
3u	3	3sg	5	ó	é	ū-	-u	u-/Ø-	-é	-5	-ò	ò-
3Ø	3	3sg	5	5	é	Ø-	-u	u-/Ø-	-é	-5	-ò	ò-
4	13	3pl	sē	sέ	éa	ēs−	- <del>9</del> s	S-	-éa	-sé	-sè	sè-
5	5	3sg	dē	dέ	éb	5r-	-er	d-	-éb	-dέ	-dè	dè-
6	13	3pl	tō	tó	tè	5t-	-et	t-	tè-	-tó	-tò	tò-
6m	6a	3pl	mō	mś	ém	ēm-	-em	m-	-ém	-mớ	-mò	mò-
7u	9	3sg	jā	já	éį	ū-	-u	j-/Ø-	-éj	-já	-jà	jà-
7Ø	9	3sg	jā	já	éį	Ø-	-u	j-/Ø-	-éj	-já	-jà	jà-
AUG		3pl	ā	á	à	ā-	-Ø	a-	à-	-á	-à	à-
DIM	7~19	3sg	Ē	έ	ì	ī-	-i	i-	ì-	-έ	-è	è-

The first three columns of Table 21 review the noun class labels, how the ut-Ma'in classes relate to Proto-Benue-Congo noun classes, and how the noun classes fit into the pronoun system. The second set of three columns reviews the subject, object and relative pronoun forms. The next two columns review the class marking that occurs on the nouns themselves, with both the prefix and the suffix for each noun class. Note that the noun class prefix is identical to the agreement prefix used with quantifiers. The final five columns review the agreement prefixes and suffixes that occur on other clause constituents.

Nouns are grouped together in each class on the basis of a certain set of semantic characteristics, as reviewed in Table 22, and these semantic characteristics are further specified when the singular and plural class combinations of a particular noun are taken into consideration.

Table 22: Review of the semantic characteristics of the noun class

Class Label	Subject Pronoun,	Noun (Citation form) Quantifier	Semantic Characteristics
	ēт		human
	b5		human
	wēn		human
1u	ū/wā	ū-	human
1Ø	wā	Ø-	human
	ín		human
	īt		human
	nō		human
	ēη		human
2	$\bar{\epsilon}$	Ø-	animate
3u	5	ū-	inanimate
3Ø	5	Ø-	inanimate/augmentative sg
4	sē	ōs−	long, mostly inanimate
5	dē	ēr-	round, mostly inanimate
6	tō	ōt−	default plural, nominalizer
6m	mō	-mē	mass, diminutive pl
7u	jā	ū-	animate
7Ø	jā	Ø-	human
AUG	ā	ā-	augmentative pl
DIM	ε	ī-	diminutive sg

While further work is still needed in a number of areas, this study has described the robust noun class system of ut-Ma'in and provided a basic understanding of the function of noun classes in the language as a whole. This study of the noun classes of ut-Ma'in should contribute to better understanding of this particular language, but may also provide insight into the noun class systems of closely related West Kainji languages

## **APPENDIX**

## SIL COMPARATIVE AFRICAN WORDLIST

This appendix contains the SIL comparative African wordlist (Snider & Roberts 2004) for the Ror variety of ut-Ma'in. Column one (labeled Ref.) references the number used in the original wordlist except where an alternate or additional word was given in the elicitation. If an alternate or additional word was given the number is left aligned and occurs with a letter (e.g. a or b) to distinguish it. Column two (labeled Gloss) shows the gloss from the original wordlist. Most words occur with noun class marking, shown in column three (labeled Class). Column four (labeled Main/Singular) contains the singular form of nouns and/or the main form of other categories of words. If a noun occurs in an unpaired class, that form is listed in column three. The final column (labeled Plural) contains the plural form of each noun as it was available. Italics are used on the entire row where a loanword is suspected. Note that many loanwords have been incorporated into the noun class system by the application of a noun class prefix. Plans exist to archive the digital files of this wordlist at the University of Jos, Nigeria.

		Gloss	Class	Main/Singular	Plural
	1	body	3u/6	ūwár	<u>5</u> twár
	2	skin (of man)	3u/6	ūkā?	5tkā?
	3	head	5/6	ērhí	<u>5</u> thí
	4	forehead	5/6	ērpôŋ	<u>ē</u> tpôŋ
	5	face	3u/6	ū∫э́	ōʔ∫ś
	6	eye	5/6	<del>5</del> rís	<b>5</b> tís
	7	eyebrow	5/6	kók <del>ò</del> rís	kókt <del>ò</del> rís
	8	eyelid	3Ø/6	kā?èrísèdóm	kā?tèrístèdóm
	9	eyelash	3Ø/6	tſápèrís	tfápt <del>ò</del> rís
	10	pupil (of eye)	5/6	jádð:rísdðrīmdê	játè:rístèrīmtò
	11	nose	5/6	ērs <sup>w</sup> à	5?s <sup>w</sup> à
	12	bridge (of nose)	7Ø	kéŋjðrs <sup>w</sup> à	kéŋjè?s <sup>w</sup> à
	13	ear	3u/6	ūtó	5∕2tó
	14	cheek	5/6	ērgèt	<u>ētg</u> èt
	15	mouth	3u/6	ūnú	ēn:ú
	16	lip	5/6	ērgòp	ētgòp
	17	tongue	5/6	ōl:ém	ētrém
	18	tooth	7u/2	ūnín	nín
	19	molar tooth	7u/2	ūgèg	gèg
	21	jaw	3u/4	ūgár	<del>5</del> sgár
	22	chin	5/6	ēl:ék	<u>ētr</u> ék
	23	neck	5/6	ērgēkès	ētgēkès
	24	nape of neck	7u/4	ūdòr	5?dòr
	25	throat	7u/4	ūt∫ <sup>w</sup> âr	5st∫ <sup>w</sup> âr
	26	voice box, larynx,	7u/4	ūgòg	ōsgòg
26b		Adam's apple (as seen form outside)	5/6	ērgònt	5∂gònt
	27	hair (of head)	7u/4	ūhí	<del>5</del> shí
	28	beard (hair on cheeks)	4	<del>5</del> skàt	
28b		beard (goatee)	4	- 5srèr	
	29	hair (of body)	7u/4	ūt∫àn	ēst∫àn
	31	shoulder	3u/6	ūkáp	5?káp
	33	chest	3u/6	ūsók	<del>5</del> ?sók
	34	breast	5/6	5rdέ	<del>5</del> ?dέ
	35	side (of body)	7u/4	ūgàs	ēsgàs
	36	waist	3u/6	ūb <sup>j</sup> ên	∮tb <sup>j</sup> ên

	Gloss	Class	Main/Singular	Plural
37	navel	5/6	ēróp	ētóp
40	stomach (internal)	5/6	ērmên	ōtmên
41	womb	3u/6	ūzùm	5?zùm
42	back	3u/6	ū∫în	ō?∫în
44	buttock	5/6	ērnò	ēn:ò
45	anus	7Ø/4	héjèrnò	hésèrnò
46	penis	5/6	<u>5</u> rzèr	5?zèr
47	testicle	5/6	ōl:έg	ōtrég
48	vagina	5/6	5l:èt	<u>5</u> trèt
49	clitoris	7Ø/4	héjèl:èt	hésèl:èt
50	arm	3u/6	ūkóm	<u></u> 5tkóm
51	armpit	3Ø/6	só?ùkóp	só?ètkóp
52	upper arm	5/6	ērʤ <sup>w</sup> āk	ō?ʤ <sup>w</sup> āk
53	elbow	7u/4	ūkōkôn	<del>5</del> skōkôn
55	wrist	5/6	ērk <sup>w</sup> áz	ētk <sup>w</sup> áz
56	hand	3u/6	ūkòm	ōtkòm
57	fist	5/6	ớrk <sup>w</sup> ôr	5tk <sup>w</sup> ôr
58	palm (of hand)	5/6	<del>5</del> rdák <del>3</del> s	5?dákŝs
59	finger	7u/2	ūʤó	фó
60	thumb	7Ø/2	ʤójùkī∫ímì	
62	fingernail	7u/2	ūkāráŋkù	kāráŋkù
63	leg	3u/4	ūná	<del>5</del> sná
64	hip	5/6	ērkār∫é	ētkār∫é
65	thigh	3u/6	ūkūt	<u> </u> <u> </u>
66	knee	5/6	ērʤ <sup>w</sup> ên	ē?ʤ <sup>w</sup> ên
67	shin	7u/2	ūtêŋk	ēstêŋk
68	calf of leg	5/6	ērtòk	<b>9</b> ?tòk
69	ankle	5/6	ísdùná	ístùná
70	foot	5/6	bádùná	bátèsná
73	toe	7u/2	ūg <sup>w</sup> āb	g <sup>w</sup> āb
74	bone	7u/4	ū∫ār	ōʔ∫ār
75	bone marrow	6m	ēm:èg	
76	skeleton	6	ōʔ∫ār	
77	skull	5/6	kókdèrhí	kóktèrhí
79	spine, backbone	7Ø/4	∫ārù∫în	∫ārsù∫în

	Gloss	Class	Main/Singular	Plural
8	30 rib	7Ø/4	∫ārjùgàs	∫ārsùgàs
8	31 brain	6	5tkútáràŋk	
8	22 heart	3Ø/4	ʤāb	ēsʤāb
82b	upper chest	5/6	ērgèn	ōtg <sup>i</sup> ὲn
8	3 liver	5/6	ērʤāb	5?ʤāb
8	4 kidney	7u/4	ūmák	ēsmák
8	35 lung	6	5thòk	
8	36 intestines	7Ø/2	jájùmên	jágèmên
8	37 bladder	5/6	ērdèndēp	ō?dèndōp
8	88 gall bladder	7u/4	ūtên	ōstên
8	9 muscle	7u/4	ūrā	<del>-</del> 5srā
9	1 vein	7Ø/4	fènjèmh <sup>j</sup> é	fènsèmh <sup>j</sup> é
9	22 breath	5/6	ērvējē	ētvējē
9	93 saliva	6m	<del>5</del> mtá	
9	94 phlegm	6	5tkâ:k	
9	nasal mucus, snot	6	5th <sup>j</sup> âm	
9	06 earwax	6m	dámùtó	
9	77 tears (n)	6m	<del>5</del> mís	
9	98 blood	6m	5mh¹ś	
9	9 bile, gall	6	<b>5</b> tgwà	
10	00 semen	6	5tbás	
10	1 urine	6m	<del>5</del> mbás	
10	2 excrement, faeces	6m	<del>5</del> mbàs	
10	03 blink	6	ētgèpèt	
10	04 wink (eye)	4	réms <del>è</del> ís	
10	5 blow nose	6	ōtv <sup>j</sup> ôn	
10	06 breathe	4	ēsvējē	
10	07 yawn	4	<del>5</del> shāk <del>5</del> t	
10	08 snore	4	5sk <sup>w</sup> ár	
10	9 pant	4	ēsvējē dóm dóm	
11	0 blow (with mouth)	6	ētfèr	
11	1 spit	6	ē?tēpès	
11	2 cough (v)	4	<del>5</del> swár	
11	3 belch	5	- ērgèsέ	
11	4 hiccough (n)	6	<b>5</b> théksè	

	Gloss	Class	Main/Singular	Plural
117	grunt (from effort)	4	- 5síkès	
119	urinate	6m	jàdémbás	
120	break wind, fart		férè∫í	
121	defecate	6m	<del>5</del> mbàs	
122	shiver, tremble	6m	<b></b>	
123	perspire, sweat	4	- 5shùnd	
124	bleed	6m	wédèmh <sup>j</sup> é	
125	coagulate, clot	6m	h <sup>j</sup> é:mèmgágèn	
126	(be) dizzy	6m	<u>ēmkárkāt</u>	
127	faint	6	ētb <sup>i</sup> dtē	
128	sleep (v)	6m	ēmró:g	
129	dream (n)	3Ø/4	bò?	?ódzē
130	wake up (intr)	5	ērzétè	
131	see	6m	ōmh <sup>j</sup> án	
133	look at, watch	5	kád <del>ò</del> ís	
134	hear	6m	ēmhóg	
135	listen	6	<b>5</b> tèr	
136	smell (v)	6	ētwēsè	
137	feel (passive)	6	<u>ē</u> thóg	
138	touch, feel (active)	6	5?tàm	
139	taste	6	<b>5tràk</b>	
140	eat	6	5trὲ	
141	bite (v)	6	<b>5</b> tjàb	
142	crunch	6	<u> </u> <u> 5</u> twān	
143	chew	6	5?tŝ:m	
144	gnaw	6	<u>ēth</u> ègèr	
145	swallow	6	5?t∫ <sup>w</sup> àr	
146	choke	6	5?se:ŋk	
147	lick	6	ētrēkèm	
149	drink	6	5?s <sup>w</sup> à	
150	sit	5	ēr∫é:t	
151	rise up (intr)	5	ērjínè	
152	lie down	5	ēl:èt	
152b	lie down	6	<u>ētr</u> èt	
153	turn round (intr)	6	ētb <sup>i</sup> èrèn	
	·		<del>.</del>	•

		Gloss	Class	Main/Singular Plural
	154	walk	6m	ēmhā
	155	step (v)	5	wádùná
	156	stumble	5	<u>ērpéks</u> è
-	157	limp	4	<u> </u> 5stēgèr
-	158	crawl	6	<u>5tkùrùp</u>
158b		walk sideways (like a crab)	6m	5mgèŋk
	159	run	6m	5msòm
	160	swim	3Ø	s <sup>w</sup> àb
	161	jump (v)	3Ø	tàrímàk
	162	kick	6	ēγdʒ <sup>w</sup> è
	163	stamp (with foot)	6	5?dʒâŋk
	165	wave (hand as a greeting) (v)	5	jádùkóm
	166	indicate, point (as with the finger)	6	<u>5</u> tògè
	167	clap (hands)	6	gápdùkóm
	168	slap (v)	5	ērgáp
168b		slap (n)	3u	ūgāp
	169	stand	5	ērē:s
	170	straddle	5	té?dùná
	171	lean against (intr)	6	5?tòst
	172	bend down, stoop	5	ērkākēs
	173	bow (as in greeting)	6	5tk <sup>w</sup> èg
	174	(be) seated	5	∫ớ:tèn
	175	squat	5	- 5rs5k5t
	176	kneel	6	ēthēdʒ <sup>w</sup> ∮n
	177	(be) lying down	6m	5mr <del>ś</del> t
	178	(be) hot (of person)	6m	5mdэŋk
	179	(be) hungry, hunger (v)	4	5smēr
	180	(be) sated	3Ø	∫ <del>ó</del> g
	181	(be) thirsty, thirst (v)	3u	ūs <sup>w</sup> á:t / s <sup>w</sup> átèmbé
	182	(be) drunk	5	ké? hó:g wōn
	183	(be) tired	6m	5mpò
	184	(be) sleepy	6m	hógdèmró:g
	185	rest	5	5rhúrè
	186	(be) awake, alert	5	ūhōg
	187	wrinkle (on skin)	6	ē?s <sup>w</sup> ētēr

	Gloss	Class	Main/Singular	Plural
188	B pimple	3u/6	ūkė	ētkè
190	(be) bald	5	sámkó / <del>ō</del> rkòndà	
191	(be) blind	6m	pś	
193	B (be) thin	6m	5mgà?	
195	barren woman	1u/2	ūmákt	máktnè / mákétnè
196	blind person	1Ø/2	pś	pónè
197	7 deaf (mute) person	7u/6	ūkúrúmá	<u> ētkúrúmá</u>
199	cripple (n)	7Ø/2	r <sup>j</sup> âm	r <sup>j</sup> âmnè
200	) dwarf	5/6	ōrkì?ká?	ōtkì?ká?
201	giant	3u/ 2	ūbéb	bébnè
202	2 stupid person	1u/2	ūrāg	rāgnè
203	senile person	5	ērwé?	
204	1 mad person	1Ø/2	wá <sup>w</sup> dàk	
205	(be) healthy, (be) well	6m	ēmjár	
206	(be) sick, (be) ill		kōbdèmjár	
207	hurt oneself	5	ērhónsè	
209	) medicine	4	5sbà:t	
210	get well, recover	5	kúmdèmjár	
212	2 abscess	5/6	ērzup	ētzup
213	3 swelling	6m	ēnfé?	
214	tumour	5/6	ērkè?	ētkè?
216	burn (n)	6	5?d3?	
218	B hernia (umbilical)	5	ēl:ég	
219	ulcer (leg)	3u/6	ūbėbé?	ētbèbé?
220	) wound, sore	3u/6	ūnát	5n:át
221	pus	3u/6	ū?ám	<b>5</b> tám
222	2 scar	3u/6	ūrán	<u> 5trán</u>
223	3 intestinal worm	6	z <sup>w</sup> átèmèn	
223b	guinea worm, thread worm	7u/4	ūtóŋgèn	ōstóŋgèn
223c	worm	5/6	ērz <sup>w</sup> á	<b>ó</b> ?z <sup>w</sup> á
224	l illness, disease	4	ēsgôm	
227	7 leprosy	6m	ēmkīm	
229	e fever (not malaria)	6m	dəŋgəmūwár	
230	pain (n)	6m	5mrè	
230b	sharpness	6m	ēmré	

		Gloss	Class	Main/Singular	Plural
	231	give pain, hurt	6	5thónsè	
	233	vomit (v)	6	ētg <sup>w</sup> à?	
	234	stomachache, upset stomach	6m	rèmètmèn	
234b		sharpness of stomach	6m	rémètmèn	
	235	headache	6m	rèmèrhí	
235b		sharpness of head	6m	rémèrhí	
	236	diarrhea	6m	ēmbèsèr	
	237	scabies (the itch)	6	ētk <sup>w</sup> ὲ?	
237a		excema	7u	ūdʒán	
237b		fungal infection	6m	<del>ō</del> mkút∫ákùt∫ì	
	238	life	5/6	ērfát	<del>5</del> tfát
	240	menstrual period	6m	ēmnētá	
	241	(be) pregnant	6	5tmèn	
241b		(be) pregnant	3Ø	úb	
	242	miscarriage	6m	nàmètmèn	
242b		abortion	5	àzgètmèn	
	243	labour (n), birth pains	6m	rèmètmèntèrmát	
243b		sharpness of stomach of giving birth	6m	rémètmèntèrmát	
	244	bear (child), give birth	5	ērmát	
	246	(be) young	5	<del>5</del> rfá	
	247	grow up	3Ø	nén	
	248	(be) old (not young)	5	ērwé?	
	249	die	6	<b>5</b> tmàr	
	250	death	6m	ēm:àr	
	251	(be) dead	6m	márég	
251a		the dead	7Ø/2	mārímárí	mārímárínè
	252	think	4	ēsdòròg	
	253	believe	5	jádèdʒáb	
	254	hope (v)	5	wád <del>ò</del> rís	
	255	know (something or someone)	6	ēn:àp	
	256	knowledge	6m	ēmnáp	
	257	wisdom	4	ēsvēr	
	259	(be) intelligent	1Ø/2	wárhí	árhí
	260	(be) stupid	5	kòbdèrhí	
	262	learn	3u	ūìs	

	Gloss	Class	Main/Singular Plural	
263	teach	6	ētkósè	
265	remember	6	ētbàks	
266	forget	6	kágmètó	
267	(be) happy, (be) joyful	5	ērsō	
268	rejoice	5	nómdèrsò	
269	laugh	5	nómdèn:èmés	
270	smile	6	ēn:émés t∫á∫ì	
271	(be) sad	6m	nāmèdʒáb	
272	cry, weep	4	ēskán	
274	shame (n)	6m	ēmέ?	
275	pity (n)	5	ērón	
276	fear (n)	3u	ūg <sup>i</sup> êr	
277	frighten	5	jádùg <sup>j</sup> èr	
278	startle, surprise	6m	mèrim:ò	
279	(be) angry	DIM(i)	īdʒáb	
280	calm (oneself)	5	dʒábèrkét	
281	(be) proud	6m	hèkèmèrhí	
282	respect (v)	5	jádèmzég	
283	honour (v)	6m	ēmsék	
284	love (v)	6	5?t∫ <sup>w</sup> àn	
285	hate (v)	6	ētgēgèm	
287	want, desire (v)	3u	ūsa	
289	choose (tr), pick (tr)	6	5?dèst	
290	hesitate	6	ētk <sup>w</sup> èz	
291	abstain	5	5rhátè	
292	allow, permit	6	ētjā?	
293	forbid	6	ēthò:z	
295	plan (n)	4	ē?zòŋg	
296	try	6	5trèg	
296b	try (n)	6m	ēmrég	
298	fail	5	ērhέ?έ	
302	(be) selfish	6	t∫ <sup>w</sup> ànt <del>ò</del> rhí	
303	(be) honest		wál:èn:íp	
305	(be) wicked	6m	ēmjō?	
307	(be) jealous	5	ēr∫ēb	
			<del></del>	

	Gloss	Class	Main/Singular	Plural
30	8 (be) shy	6m	5mé?	
30	9 (be) courageous, (be) brave	5	wádèdʒáb	
31	0 coward	1Ø/2	wá ūg <sup>j</sup> èr	á <sup>w</sup> g <sup>j</sup> èr
31	4 (be) patient	5	résdèdʒáb	
31	5 (be) impatient	5	kòbdèrésdèdzáb	
31	6 (be) restless, (be) unsettled	5	kòbdèrhúrè	
31	7 (be) stubborn	5	kòbdè hógdètò	
31	9 hardship, distress	5	ērkòb	
32	1 suffer	5	s <sup>w</sup> ád <del>ò</del> rkòb	
32	2 obstruct	5	ērk <sup>w</sup> ép	
32	6 human being, person	1 Ø 2	nét	nétnè
32	7 self	5	híl:ì	
32	8 man (male)	7Ø/2	t∫āmpá	t∫āmpánὲ
32	9 woman	7Ø/2	nētá	nētánè
33	0 white man	1Ø/2	wátó:tdzáztò	átó:tdʒáztò
33	2 baby	5/6	<del>5</del> rjā?	5tjā?
33	3 twin	2	jà:gə́jə̀r	
33	4 child	3Ø/2	wá?	já:g
33	5 boy	5/6	jādèrt∫āmpá	jātèt∫āmpá
33	6 girl	5/6	jādèrnētá	jāt <del>ò</del> n:ētá
33	8 young man	1Ø/2	z <sup>w</sup> àr	jā?z <sup>w</sup> àr
33	9 virgin	1Ø/2	g <sup>w</sup> ép	jātg <sup>w</sup> ép
34	1 relative (by blood)	6	ēthēnō	
341a	blood relations	5/6	ērmâŋg	ētmâŋg
34	2 ancestor	7u/2	ū?ándàkà	ándàkà
343a	parent	5/6	wármát	ármát
34	4 father	3u/6	ū?ēsō	- ētēsō
34	5 mother	3u/6	ū?īnō	<u> </u>
346a	sibling (elder)	7Ø/6	jè wé jà	tà wó tà
346b	sibling (younger)	5/6	dè fá dè	tà fá tò
35	2 cousin	1Ø/2	wàśgnò?ínò	
35	3 firstborn	5	má?dù∫è	
35	7 grandchild	1u/6	ūɟíkà	5?jíkà
35		5/6	ērdím	5?dím
36	0 namesake	1Ø/2	wàrdímrī	àrdímrī

	Gloss	Class	Main/Singular	Plural
61a	in-law, relative by marriage	3u/6	ūkémrò	<u>ātk</u> śmrò
61b	inlaw 2	1Ø/6	má:n	ētmá:n
362	husband	1Ø/6	t∫āmpârgē	t∫àmpátèrgē
363	wife	1Ø/6	nētárgè	nētátèrgè
364	fellow-wife, co-wife	3u/6	ū∫ēbrō	<del>ō</del> ?∫ēbrō
371	widow	1Ø/6	bómós	<del>5</del> tbómós
373	orphan	3Ø/2	kòbèwá?	kòbòjâ:g
374	fiancé (betrothed boyfriend)	1Ø	z <sup>w</sup> àr <del>ś</del> rī	
375	fiancée (betrothed girlfriend)	1Ø	g <sup>w</sup> èpérī	
377	tribe, ethnic group	5/6	ēl:ém	ētrém
378	clan	5/6	ērkō?	ētk5?
379	family	3u/6	ūbū	ētbū
380	friend	1Ø/6	hēːb	ēthē:b
381	neighbour	1Ø/2	wá <sup>w</sup> bòr	ásbòr
384	guest, visitor	1Ø/6	hāmēt	ēthāmēt
387	traitor	7Ø/6	nétéjô:	nétètjòtò
388	thief	1Ø/2	h <sup>j</sup> św	h <sup>j</sup> ównè
389	guide (n)	1Ø/2	wá?dòrt	á?dòrt
390	messenger	1Ø/2	wátóm	átóm
391	crowd	5/6	<del>5</del> rbàn	<b>5</b> tbàn
392	chief, headman	1Ø/6	fàrèk	<u>ētf</u> arèk
393	elder	7u/6	นิทธิทูgธิท	- อิท: <b>ะ</b> ิทูgะิท
394	master	1Ø/2	wă <sup>w</sup> bū	ă <sup>w</sup> bū
395	slave	3Ø/2	tók	tóknè
396	farmer	1Ø/2	wártóm	ártóm
397	fisherman	1Ø/2	wámàsédʒàn	ámàsédʒàn
398	hunter	1Ø/2	wábák	ábák
399	blacksmith	1Ø/2	wă <sup>w</sup> z <sup>w</sup> ā	ă <sup>w</sup> z <sup>w</sup> ā
400	potter	1Ø/2	wámá?ètúr	ámá?ètúr
401	weaver	1Ø/2	wă <sup>w</sup> tē	ă <sup>w</sup> tē
402	butcher (n)	1Ø/2	wǎ <sup>w</sup> pān	ă <sup>w</sup> pān:è
403	trader	1Ø/2	wá <sup>w</sup> sà?	á <sup>w</sup> sà?
405	beggar	1Ø/2	wáskón	áskón
406	soldier	1Ø/2	wámgāg	ámgāg
			·	

	Gloss	Class	Main/Singular	Plural
410	fetish priest	1Ø/2	wátò:g	átò:g
412	witch (female)	7u/2	ūbōn	bōn:è
413	fortune-teller, diviner	1Ø/2	wámh <sup>j</sup> án	ámh <sup>j</sup> án
414	meet, encounter	5	ērgó:nè	
415	accompany	5	ēr∫é?ὲ	
418	invite	5	ērbēn	
420	abandon	6	<b>5</b> trìst	
422	drive away	6	<b>5</b> tjàn	
424	(be) same	4	gānsé	
425	(be) different	6	tớ?óbāmbām	
426	resemble	6m	ēm∫á	
427	imitate	5	ēr∫ēgèsὲ	
428	admire	5	t∫ <sup>w</sup> ádèdʒáb	
429	befit, suit	6	ētkèmè	
430	language	5/6	ēl:ém	ētrém
431	word	5/6	ērgóm	ētgóm
432	meaning (n)	5	híd <del>à</del> srém	
433	say		ēzē	
434	voice (mouth)	3u	ūnú	
436	whisper (v)	4	rémsùtó	
437	shout (v), cry out	6	5?dʒār	
438	chat (v)	5	ērwâ:s	
439	mumble	4	tēmèsrém	
440	stutter	6	ētbèbèg	
441	(be) eloquent	6	wāl:èsrémhónhón	
442	(be) silent	5	hōdèsràm	
443	greet (v.)	4	ēsvék	
444	call (someone)	4	ēsfág	
445	say goodbye, take leave of		séwá:stē	
446	announce	5	ērdōnsὲ	
447	announcement	5	ērdôns	
448	news	<i>3u/4</i>	ūlábárì	<u> ēslábárì</u>
449	explain	6	<b>5</b> twàr	
450	advise	6	ēth <sup>i</sup> èm	
451	gossip (v)	6m	ēm∫àt	

		Gloss	Class	Main/Singular	Plural
	452	lie (n) (falsehood)	4	- 5sbī	
	453	ask, request	5	ēr∫èt	
	454	plead, implore	6	<u>5tk</u> òn	
	456	answer, reply (v)	4	5?∫às	
	457	thank	6	<u> </u> 5tvām	
	458	promise (n)	5	éstēdèsrém	
	460	swear	4	ēstônd	
	461	insult (v)	6	5tp <sup>j</sup> âp	
	462	insult (n)	4	ēsp <sup>j</sup> áp	
	463	slander (v)	5	nómdèsbí	
	464	threaten	5	jádùg <sup>j</sup> èr	
	466	argument	DIM/4	īnàn	- 5snàn
	467	grumble, complain	6m	ēmk <sup>w</sup> ε?	
	470	deny	6m	5msé?	
	472	agree	6	ētē:s	
	476	bless, praise (someone)	3Ø	núsó?ò	
	477	congratulate	5	ségēd <del>ò</del> rsó	
	479	tell, recount (story)	6	<b>5tw</b> àr	
	480	story (tale)	6m	∫ámèsrém	
	481	proverb	6m	rémsèsvér	
	482	speech, discourse	4	ēsrēm	
	484	embrace, hug (v)	6	ēthāmèt	
	485	caress (v)	6	5tpà?àt	
	486	kiss (v)	6	ēts <sup>w</sup> ê:t	
	487	copulate, have sexual intercourse	6m	ēmhóm	
	488	nurse, suckle (baby) (tr)	6	ētwèrèg	
	489	tickle (v)	6	ōtk <sup>w</sup> έ?έl:έg	
	490	spank (child)	6	ētgáp	
	491	whip (n)	7u/4	ūr <sup>j</sup> àp	ēsr <sup>j</sup> àp
	492	help	5	ērségē	
	494	look after	6	ōtg <sup>w</sup> àt	
	495	bring up (a child)	4	5∕?sóksē	
495b		bringing up of a child (n)	5	ērsóksē	
	496	rule over, dominate	6	5?dòròt	
	500	send (someone to do something)	4	- 5stóm	

	Gloss	Class	Main/Singular	Plural
503	follow	6	ē?dòr	
505	please, satisfy	5	hógdèrz <sup>w</sup> àr	
506	annoy, disturb		nāmèdʒáb	
507	deceive	6	ētpò?òt	
508	quarrel	3u	ūhàr	
509	fight	6m	ēmdúm	
510	stab	4	5?z <sup>w</sup> à	
511	kill, murder	6	ēthò	
512	take revenge	6	ētmò:t	
513	resolve, settle (dispute)	3u	ūmàŋg	
514	intercede, mediate	6	ētmòt	
515	compromise	6	ēthàb	
517	steal	3u	ūh <sup>j</sup> ūw	
518	rape	5/6	ēl: <sup>j</sup> āpèg	ētr <sup>j</sup> āpèg
519	judge (v)	4	kúpdèsrém	
520	law	7u/4	ūbór	ēsbór
522	(be) guilty	1Ø/2	wázán:îp	ázán:îp
523	(be) innocent	1Ø/2	wán:íp	án:íp
524	punish	5	jád <del>ò</del> rkòb	
525	penalty, punishment	5	s <sup>w</sup> ádèrkəb	
526	dwell, inhabit	5	<u>ērjē</u>	
527	inhabitant, resident	1Ø/2	wárj <del>ō</del>	árj <del>ō</del>
528	bush dweller	1Ø/2	wárdòg	árdòg
529	move away, migrate	5	ērjúnē	
530	country, ethnic area	3u	ūdāk	
531	frontier (of ethnic area)	5	ērkèŋgì	
532	town, city	3u/6	ūbó	ētbó
533	village	3u/6	ūtà:s	5?tà:s
535	market (n)	3u/6	ūtál:è	5?tál:è
536	article of clothing, clothes	6	<b>5</b> tkús	
537	wear clothes	6	5twà?	
539	undress	6	<b>5</b> thòst	
540	(be) naked	5	ērsē?	
541	hat	5	nòmdèrhí	
542	shirt	7u/4	ūtó?gò	ōstó?gó
	<u></u>			<u></u>

	Gloss	Class	Main/Singular	Plural
543	3 trousers	7u/4	ūwàndò	<i>ēswàndò</i>
544	loincloth	3u/6	ūbár	ētbár
545	robe (man's gown)	7Ø/4	tó?gò ō t∫āmpá	
546	cloth worn by a woman	7Ø/4	tó?gò ō nētá	
547	baby sling	7u/6	ūhāp	ēthāp
548	shoe, sandal	3u/6	ūká?át	5tká?át
549	bead bead	3u/4	ū?úz	<del>5</del> s?úz
550	string, thread (beads) (v)	4	5?t∫ <sup>w</sup> ôr	
551	bracelet	7u/4	ūk <sup>w</sup> á	ēsk <sup>w</sup> á
552	necklace	7u/4	ūrègès	ōsrègès
553	ankle ring, bangle	7Ø/4	k <sup>w</sup> ájùná	k <sup>w</sup> ásùná
554	ring (finger)	7u/4	ūk <sup>w</sup> à:t	ēsk <sup>w</sup> à:t
555	earring	5/6	nòmdùtó	nòmtùtó
556	pierce (ears)	6	5tk <sup>j</sup> èr	
558	g plait, braid (hair)	3u/4	ūgā?	ēsgā
559	(facial) incision(s), tattoo(s)	3u/4	ūpân	<del>5</del> spân
560	cane, walking stick	7Ø/4	kòmjùmhā	kòmsùmhā
561	bathe, wash oneself	6	ūnóŋgùzōr	
561b	bath (n)	3u	ūzōr	
562	apply (ointment), besmear	6	<del>5</del> ttâ:m	
563	wipe off (excreta)	6	<u>ē</u> tkòk	
564	cut (hair)	6	ētkūp	
565	shave (v)	3u	ūśr	
566	s razor	7u/4	ūrézà	<i>ōsrézà</i>
567	comb (n)	5	<del>5</del> rsà?	
568	8 tooth stick, toothbrush	7u/4	<u>ūmágógí</u>	<u>ēsmágógí</u>
569	ofood	3Ø	nòmètrè	
570	) meat	6m	э̄та̀р	
571	fat	6m	ōmsém	
572	e oil	6m	ēmnō:g	
573	soup, broth	4	5?t∫ <sup>w</sup> ā	
574	pap, mushy food	5/6	<del>5</del> rgá?	5tgá?
575	5 bread	5/6	<u>ērbérédì</u>	<u>ētbérédì</u>
576	crust (n)	3u/6	ūkū?	5tkū?
577	flour	6m	ē <sup>i</sup> dmē	

	Gloss	Class	Main/Singular	Plural
578	8 salt	6	ētmā	
579	9 breakfast	5	gé?èrwèn	
580	0 evening meal	3Ø/6	rè?èmrím	rètèmrím
58	1 feast	5/6	mōrōgdùrè	mɔ̄rɔ̄gtùrè
582	2 leftovers	5/6	gádèk <sup>w</sup> ékés	
583	3 spoil (food) (intr)	6	ō?zèm	
584	4 mould (n)	6m	<del>э</del> mpú	
58:	5 milk (n)	6m	<del>5</del> m:é	
580	6 curdled milk	6m	mémùzér	
588	8 beer (traditional)	2	ké?	
588b	bear made at harvest time	6	<del>5</del> tkógórò	
59	1 prepare (food to cook)	4	5?zòŋg	
592	2 cut (tr)	6	5tk <sup>j</sup> ēg <sup>j</sup> èr	
593	3 cut open (fruit)	6	<u>ē</u> tēkèr	
594	4 slice	6	ētp <sup>i</sup> ē:r	
590	6 mix (v)	6	5?sāmē	
59′	7 stir	6	<u>ētrēmēs</u>	
598	8 strain (food) (v)	6	ētpêst	
599	9 pound	6	5?d₃ <sup>w</sup> à?	
600	0 grind	5	ērná	
60	1 knead	6	<b>ē</b> tr <b>ē</b> k	
602	2 pluck (feathers)	4	ē?s <sup>w</sup> ēmēr	
603	3 cook (v)	6	ētēr <sup>j</sup> ēs	
604	4 roast	6	5?z <sup>w</sup> à	
60:	5 fry	6	<del>5</del> tkâ:r	
60	7 (be) smoked	6	<b>5tg</b> â:s	
608	8 boil (water), bubble up	6	<u>ātk</u> àwàg	
609	9 ferment (alcohol) (v)	6	ētfê:n	
610	0 cooking pot (earthenware)	5/6	<u> </u> 5rtúr	5?túr
610b	pot of clay	5/6	túl:èl: <sup>w</sup> áb	túrtèl: <sup>w</sup> áb
61	1 metal pot	5/6	túl:èrk <sup>w</sup> àm	túrtèrk <sup>w</sup> àm
612	2 pot (for water)	5/6	ēr∫ár	5?∫ár
61.	3 ladle	<i>7Ø</i>	gōmbájētſ <sup>w</sup> ā	
61:	5 grinding stone	5	tā:rdèrná	tā:rtèrná
610	6 upper grinding stone	5/6	ērné:t	ēn:ét

	Gloss	Class	Main/Singular	Plural
618	pestle, pounding stick	7u/4	ūsônd	5?sônd
619	mortar, pounding pot	5/6	ērdú	5?dú
620	plate	5/6	<u> Ērfēréntì</u>	<u> 5tfēréntì</u>
621	bowl	5/6	ōrk <sup>w</sup> ánò	ōtk <sup>w</sup> ánò
622	cup	3Ø/6	kókèmbé	kóktèmbé
623	spoon (traditional)	7u/4	ūgòmbá	<u> ēsgòmbá</u>
624	bag	5/6	ērbā	ētbá
625	box	3u/6	ū?àk <sup>w</sup> àtí	<u> ētàk <sup>w</sup>àtí</u>
626	basket	5/6	ērkô:r	ētkô:r
627	bucket, pail	5/6	<u> ērbākítì</u>	<u> ētbēkítì</u>
628	calabash	3u/6	ūkók	ētkók
629	bottle	7u/4	ūk <sup>w</sup> álbá	ēsk <sup>w</sup> álbá
631	handle	7Ø/4	nòmjè∫èp	nòmsè∫èp
632	pour	6	5?dà?às	
633	spill (liquid) (tr)	6	<u>ētàz</u> èg	
634	take out (from container)	6	<b>5tgà</b> s	
635	fill	6	ē?∫é?ès	
636	(be) full		∫é:g	
637	(be) empty	6m	ēmzān	
638	(be) open	5	ērhék	
639	open (tr)	6	<b>ē</b> tūpūs	
640	close, shut (tr)	6	ētwèbèg	
641	stop up	6	ē?z <sup>w</sup> āpὲ	
642	cover (v)	6	ētwegeb	
643	uncover	6	ō?tèkès	
644	store (up)	5	ērt∫ēn	
645	bundle (n)	5/6	ērgég	ētgég
646	heap (n)	5/6	ērk <sup>w</sup> ès	<b>5tk</b> <sup>w</sup> ès
648	wrap up	6	ētèrbèsè	
649	unwrap	6	5tùst	
650	pack (v)	6	ētkārāgēstè	
651	strap (n)	7u/4	ūbár	ēsbár
653	rope	7u/4	ūho	ēshō
654	knot	7u/4	ūgór	ēsgór
656	tie (knot)	6	5tgàg	

	Gloss	Class	Main/Singular	Plural
658	3 tighten (tr)	6	ēth <sup>j</sup> êm	
660	) loosen	6	<u>ētw</u> èz	
661	l (be) loose, slack	6	<del>5</del> ?sōròg	
662	2 compound, house	3u/6	ūbū	<u> </u> ētbū
66.	3 hut	5/6	<u> ērbúkà</u>	<u> ētbúkà</u>
664	4 wall	5/6	<del>5</del> rsàr	<b>5</b> tsàr
66	7 window	5/6	<u> ērtágà</u>	5?tágà
668	3 roof	5/6	ērb <sup>j</sup> ām	ētb <sup>j</sup> ām
668b	roof (v)		b <sup>j</sup> àm	
669	beam, rafter	5/6	ērgó	ētgó
670	) floor	3Ø/6	dākùkúr	dāktùkúr
671	1 room	3u/6	ūkúr	<del>5</del> tkúr
672	2 bedroom	3Ø/6	kúrèmró:g	kúrtèmrō:g
673	3 kitchen	3u/6	ūsàm	5?sàm
674	4 entrance hut	3Ø/6	p <sup>i</sup> ś	ōtp <sup>i</sup> é
675	5 courtyard	3Ø	gónùbū	
670	6 fence (n)	<i>3u/4</i>	ūſīŋgì	ōʔʃīŋgì
678	3 granary	5/6	5rb¹á	ōtb <sup>i</sup> á
679	e well (n)	5/6	ōrdù	5?dù
680	) bathing place	5/6	bédùzōr	bétùzōr
681	l latrine, toilet	5/6	bédèmbàs	bétèmbàs
682	2 garbage dump	5/6	<del>-</del> 5rbús	<b>5</b> tbús
68.	3 garden	<i>3u/6</i>	ūlēmbú	<u> ētlēmbú</u>
68-	4 shelter (n)	5/6	ōl:ìmpà	<u> ētrìmpà</u>
685	5 build	6	5?dògòb	
685b	build	3u	ūmā	
687	7 mud block	5/6	ērkúŋkú	<u>ē</u> tkúŋkú
688	8 thatch (n)	5/4	ūg <sup>w</sup> á	ēsg <sup>w</sup> á
	plaster (v)	6	ētōpὲ	
691		6	5?tà:m	
692	2 ladder	7u/4	ūkán	ētkán
694	4 stool	5/6	ērt∫èmès	ō?t∫èmès
	stool	5/6	<del>5</del> rpórá	<u>ē</u> tpórá
695	5 wickerwork	3u/6	ūkāgēm	ētkāgēm
696		5/6	- 5rbág	

	Gloss	Class	Main/Singular	Plural
697	mat	3u/6	ūk <sup>w</sup> ākā	<del>ō</del> tk <sup>w</sup> ākā
698	lamp, torch	7u/4	ūhítíl:ā	<u> ēshítíl:ā</u>
699	fan (n)	7u/4	ūp <sup>j</sup> àk	ēsp <sup>j</sup> àk
700	bell	5/6	ērpam	ētpam
702	act, do	6	ēn:òm	
703	work (n)	3u/4	ūpāmā	- ēspāmā
	work (for a salary)	6m	<del>5</del> màŋk	
704	mend, repair	3u	ūmaŋg	
706	hammer	7Ø/4	t∫āmjètkōm	t∫āmsètkōm
707	anvil	7u/4	ūt∫ām	ēst∫ām
712	wood	7u/4	ūté	ōsté
713	cut down (tree)	6	ētk <sup>w</sup> ēp	
714	log	5/6	ērkòn	<u>5tk</u> àn
715	hollow out (log)	7u/4	ū∫àb	ēs∫àb
716	axe	5/6	ērgó:g	ētgó:g
718	saw (n)	3u/6	ūzòrtò	<i>ōʔzòrtò</i>
719	saw (wood) (v)	6	ētk <sup>w</sup> ēpēr	
720	plank (n)	3u/6	ūbèkèr	<u>ētb</u> èkèr
721	knot (in wood)	5/6	ērkè?	5tkè?
722	splinter, sliver (n)	4	5?dʒ <sup>w</sup> à	
723	chisel (n)	6	ē?dēkēr	
725	sew	3u/4	ūdʒ <del>-</del> 5r	ēs <sup>x</sup> dʒēr
726	needle	7u/4	ūbér	5̄s <sup>x</sup> bέr
727	thread (n)	6m	5mràndí	
728	hem (n)	6	k <sup>w</sup> akdùkūs	
729	pocket	7u/4	นิ?ārdʒīhū	<u> ēsārdzīhū</u>
730	(be) torn	6	5tkè:s	
731	weave	3u	ūtè?	
732	cloth	3u/6	ūkūs	<b>5</b> tkūs
734	broom	7u/4	ūb <sup>j</sup> ās	ēsb <sup>j</sup> ās
735	sweep	6	ētōpōs	
736	polish	6	- 5thàr	
737	wash (clothes, utensils)	6m	ēmdzā:s	
738	draw water	6	nákdèmbē	
		3Ø		
738 739	draw water fetch (firewood)		nákdèmbē sā?ā?té	

	Gloss	Class	Main/Singular	Plural
740	dig	6	<del>5</del> tkâw	
741	rubbish	5/6	ērbús	<del>5</del> tbús
742	cultivate, farm (v)	6	ētg <sup>w</sup> á	
743	field	3u/6	ūtāk	∮?tāk
744	boundary (of field)	7u/4	ūbór	ēsbór
745	fertile soil	5/6	bé:r sòdè	bé:t sòtò
746	(be) barren (of land)	5/6	dākèmāré	dāktèmāré
747	clear (land for planting)	6	ē?zēg	
748	sow, plant	3Ø	kéw	
749	transplant	6	<del>5</del> ?sērē	
750	weed (v)	6	5?z5g	
751	hoe (v)	5	<u> 5</u> rtóm	
752	hoe (n)	5/6	ērk <sup>w</sup> ē:nd	ētk <sup>w</sup> ē:nd
753	big hoe	5/6	k <sup>w</sup> ō:ndərjá?dè	k <sup>w</sup> ē:nderjá?tò
754	sickle	7u/4	ūlōdʒì	<i>ōslōdʒì</i>
755	machete, cutlass	5/6	ū?à?dā	<i>ōs?à?dā</i>
756	harvest season	3Ø	dā?èkét	
757	harvest (maize) (v)	3Ø	két	
758	harvest, dig up (yams)	6	kâ <sup>w</sup> dètr <sup>w</sup> ā	
759	pick, pluck (fruit)	5	ētkâ:	
760	harvest, collect (honey from hive)	5	tápd <del>à</del> só	
761	threshing-floor	5/6	béd <del>ò</del> rvú	bétèrvú
762	thresh, beat (grain)	5	Ōrvú	
763	winnow (n)	6	ōmdér	
764	winnow, throw in air (grain) (v)	6	5?dʒàr	
765b	shell of groundnut	5/6	k <sup>w</sup> ékdèg <sup>w</sup> èn	k <sup>w</sup> éktèg <sup>w</sup> èn
766	husk (corn) (v)		kón	
768	herd (cattle, sheep) (n)	5/6	- 5rbàn	<b>5</b> tbàn
769	herd, tend (cattle, sheep) (v)	6	g <sup>w</sup> á?d <del>à</del> tbìsá	
770	cattle pen	<i>3u/4</i>	ūſīŋgì	ōʔʃīŋgì
771	tether (sheep, goats) (v)	6	<u>5tgàg</u>	
772	feed (animals)	<i>3u</i>	ūkíwò	
773	milk (cows, goats) (v)	6m	ēm:έ	
	castrate	5	vúdùg <sup>w</sup> àr	
774	custrate			

		Gloss	Class	Main/Singular	Plural
7	776 s	stalk (v)	6	ē?dēbērēsὲ	
7	777 c	chase (v)	6	ētbēz	
7	778 t	rack (animal) (n)	5/6	<del>5</del> rkàs	5?kàs
7	779 f	Cootprint (human)	3Ø/6	bádùná	bátèsná
7	780 t	pow (hunting)	7u/4	ūtá	<del>5</del> stá
7	781 a	nrrow	5/4	<u> </u> ērēr	<u> </u> 5sēr
7	782 p	poison (on arrow)	6m	<u>5</u> mráb	
7	783 ł	nead of arrow	5/6	núdērēr	nútèsēr
7	784 c	quiver (n)	7u/4	ūpór	ēspór
7	785 1	ance (spear) (n)	7u/4	ūsáp	5?sáp
7	786 k	nife	7u/4	ūván	ōsván
7	788 c	club, cudgel	5/6	- 5rdzér	ō?dʒér
7	790 t	pirdlime (adhesive to catch birds)	5/6	réndèmdáp	réntèmdáp
7	791 t	rap (n)	5/6	ōl:én	ōtrén
7	792 s	eet (trap)	5	nómdèl:én	nómdètrén
7	794 e	evade	6	<u>ātkās</u> èm	
7	796 v	wound (animal)	6	5thònsè	
7	797 s	slaughter, kill (animal )	6	<b>5</b> tpàn	
7	798 s	skin (animal) (v)	6	- 5tmòn	
798b	S	skin (of animal)	5/6	ērmón	ētmón
7	799 f	ish (v)	3Ø	māsēdʒán	
8	300 f	ìsh dam	5/6	bàdèdʒán	bàtèdʒán
8	301 f	ish trap	3Ø/6	s <sup>w</sup> ás	5?s <sup>w</sup> ás
8	302 f	ishing net	3u/6	ūdε̄n	5?dēn
8	804 1	fishhook	7u/4	ūk <sup>w</sup> èmpí	ōsk <sup>w</sup> èmpí
8	306 l	nave, possess	6	ōtk <sup>w</sup> èm	
8	307 r	need (v)	3u	ūsà?	
8	808 g	get, obtain	6	5?kúm	
8	309 g	give	6	ō?n <sup>j</sup> ā	
8	310 r	return (tr), give back	6	ētmètèn	
8	311 t	pelongings	6	nòmètrī	
8	312 c	owner	1Ø	wè 5?tē	
8	313 r	ich man	1Ø/2	wátk <sup>w</sup> èm	átk <sup>w</sup> èm
8	314 p	poor man	1Ø/2	kòbènēt	kàbànē?nè
8	317 r	money	2	∫ĩk	

	Gloss	Class	Main/Singular	Plural
819	barter, exchange (of goods)	3Ø	∫ás	
820	buy	6	ētà	
821	sell	6	<b>5</b> tbàb	
822	(be) scarce	6m	ēmké∫īn	
823	(be) expensive	3Ø	tátè∫íkūnòm	
824	(be) inexpensive	5	kòbdè∫íkūnòm	
826	haggle, negotiate a price	4	ēsr <sup>j</sup> āb	
827	payment	6	ē?t∂p	
829	gift	3u	ūn <sup>j</sup> á?	
831	beg (for money)	4	- ēskān	
832	borrow	6m	ēm∫ág	
833	lend	6	<b>5</b> tmàg	
834	debt	5	ērmág	
835	offer (v)	6	5tjà?	
836	accept, receive	6	ētkàb	
837	refuse	6	ētgègèm	
838	tax (n)	3Ø	tār	
840	inheritance	<i>3u</i>	ūgá:dò	
842	journey, trip (n)	6m	<u>5</u> mhā	
843	travel, go on a trip (v)	5	ērdé?è	
844	traveler	1Ø/2	wámhā	ámhānè
845	wander	6	ētrī:g	
846	(be) lost	5	5tèŋk	
847	path, road	7u/4	ūfðn	ēsfèn
848	fork (in path)	5	mó?dùf <del>ề</del> n	
849	crossroads, intersection	6	<u>5th</u> 5th	
850	cross (river)	5	<b>ētpàs</b>	
851	canoe	7u/4	ūhát	<del>5</del> shát
854	bale out (canoe, boat)	6	<b>5tàn</b>	
855	capsize	6	<u>ēth</u> ògòb	
856	bring	6	ēthà:tèn	
857	take (away), carry away	6	<b>5thàst</b>	
858	send (something to someone)	6	ō?tòm	
859	carry (in arms)	6	dʒàksén:ētētkóm	
860	carry (child) on back	6m	sákdèwà?ū∫în	

		Gloss	Class	Main/Singular	Plural
8	361	carry on head	5	ērtā:s	
8	362	headpad	5/6	<del>5</del> rát	<u> 5</u> tát
8	363	load, burden (n)	6	ē?t∫ <sup>w</sup> ē	
8	364	load (v)	4	5?z5ŋg	
8	365	unload	5/6	5?t∫èst	
8	366	war	6m	5mgàg	
8	367	peace	5	∫ē?dèmjār	
8	368	army	7Ø/2	wámgàg	ámgàg
8	369	spy (n)	1Ø/2	wáwōksèn:ēt	áwēksèn:ēt
8	371	sword	7u/4	ūsáp	<b>5</b> ?sáp
8	372	gun	3Ø/AUG	téùrā	téàùrā
872b		firewood	7Ø/4	téjùrā	tétùrā
8	374	conquer, defeat	6	<b>5</b> trên	
8	375	(be) defeated	6	<u>ē</u> trè	
8	376	prisoner, captive	1Ø/2	tók	tóknè
8	377	plunder (a town)	6	kōsénòmtūbó	
8	378	music	6	<u>5</u> t5ní	
8	379	song	3u/6	ūsēp	5?sēp
8	380	sing	6	ētfè	
8	382	whistle (v)	4	5skê:r	
8	383	dance (n)	4	ēshέw	
8	384	dance (v)	6	5thèw	
8	885	big(gest) drum	5/6	gòŋgū: jātò	
8	886	small(est) drum	5/6	gòŋgūr rèkdè	
٤	887	talking drum	5/6	gòŋgūdèsrém	
		long drum	7u/4	ūkír	ēskír
		other drum	5/6	kil:esta	kil:testa
		other drum	<i>3u</i>	ukələŋgu	
		other drum	5/6	ərkaŋga	ətkaŋga
		other drum	5/6	ərza?ka	<del>s</del> tza?ka
ε	890	harp	7u/4	นิฑวิไวิ	ēsmēlē
8	392	horn (musical instrument)	7u/4	ūkàr	<del>5</del> skàr
8	395	play instrument	6	ēt?òs	
8	396	blow (horn)	6	ētfèr	
8	397	draw (picture)	6	5n:àk	

	Gloss	Class	Main/Singular	Plural
898	decorate	6	<del>5</del> tmāŋg	
899	carve	6	∍?∫àb	
900	play (child) (intr)	3Ø	nómdèhōr	
901	game	3Ø	hōr	
902	tobacco pipe	5/6	kúdètābà	kútètābà
904	tobacco	7u/4	ūtābà	<u> ēstābà</u>
906	God (supreme being)	3u	ūrē	
907	god (lesser), fetish (spirit)	3u/6	ūr <del>5</del> ?5mgīr	ōtrōʔōmgīr
908	demon, evil spirit	7Ø/2	nòmjèsté	nòmèsté
909	ghost (visible apparition)	7u/2	ū?ándàkà	ándàkà
910	soul, spirit (of living person)	5/6	ērfát	<del>5</del> tfát
911	spirit (of dead person) (invisible)	7u/2	ū?ándàkà	ándàkà
912	pray	3u/4	ūtō:g	ēstā:g
913	blessing	3Ø/6	nú:sò?ò	nú:tsò?ò
914	divine, prophesy (v)	6m	ōmh <sup>j</sup> ān	
918	witchcraft	6m	ēmbōn	
922	poison (n)	6m	ēmráb	
924	amulet, charm, fetish	7u/4	ūkōmā	ēskōmā
925	protect by charm	5	é:dùwár	
927	(be) taboo	3Ø/6	nòmèmé	nòmtèmé
928	exorcise	6	rūténòmjèsté	rūténòmèsté
929	sacrifice	3Ø	tō:g	
931	dwelling place of the dead (spiritual)	5	bédèr∫édèmárímárínè	
		5	bédèr∫édè?āndākànè	
932	tradition, custom	5	<del>5</del> rmā?īn	
933	feast (n)	5/6	ērmòròg	<u>ētm</u> òròg
934	naming ceremony (baby)	5/6	tēdèrdím	tēdètdím
935	circumcision (male)	5/6	ērpès	<b>5</b> tpès
939	marry	5	nómdèrgē	
940	marriage (state of wedlock)	5/6	ērgē	ētgē
941	(be) engaged, (be) betrothed	3u	ūkámè	
942	brideprice (for bride's family)	2	∫íkègòròm	
943	wedding (ceremony)	5/6	mòrògdèrgē	mòrògdètgē
944	bride	1Ø	gōpērgē	
945	groom	1Ø	t∫āmpáērgē	

	Gloss	Class	Main/Singular	Plural
946	polygamy	3Ø	ē?∫ēbrō	
947	adultery	6m	ēmó?	
	adultery	3Ø	u?as	
948	divorce (v)	5	jándènētá	
950	mourning	6	<b>5</b> tbómós	
952	condole, comfort (v)	3Ø/4	vékm:àr	
953	corpse	5/6	ērú?	ētú?
954	bury	3u	ūdók	
955	grave	3u/6	ūsāg	5∕3sāg
956	cemetery	5/6	bédùdók	bétùdók
957	animal	7u/6	ūbīsá?	ōtbīsá?
958	ox (general term), bovine	7u/2	ūná	ná
959	bull	7Ø/2	gōbjùná	gōbéná
960	cow (female)	7Ø/2	sðjùná	sòéná
963	calf	7Ø/2	jádùná	játùná
964	herd (of cattle)	5/6	bànd <del>à</del> ná	bàntèná
965	goat	7u/2	ūg <sup>w</sup> ā:r	g <sup>w</sup> ā:r
966	he-goat, billy goat	7Ø/2	gōbjùg <sup>w</sup> ā:r	gōbég <sup>w</sup> ā:r
967	she-goat, nanny goat	7Ø/2	sðjùg <sup>w</sup> ā:r	sð:g <sup>w</sup> ā:r
968	kid	5/6	jádùg <sup>w</sup> ā:r	játùg <sup>w</sup> ā:r
969	sheep	7u/2	ūt∫á?	tſá?
970	ram	7Ø/2	kāgjùt∫á?	kāg•t∫á?
971	ewe	7Ø/2	s∂jùt∫á?	sð:tʃá?
972	lamb	5/6	jádùtʃá?	játùt∫á?
973	flock (of sheep, goats)	5/6	bàndùbīsá?	bàntùbīsá?
974	chicken	7u/2	ūkś:t	k <del>ó</del> :t
975	rooster (cock)	7Ø/2	kāgjùkś:t	kāgéké:t
977	chick	5/6	jádùk <del>ś</del> :t	játùk <del>ś</del> :t
978	turkey	7u/6	ūtōlòtōlò	<i>5?tōlòtōlò</i>
979	guinea fowl	7u/2	ūkó:t	kó:t
980	duck	5/6	ērāg <sup>w</sup> āg <sup>w</sup> á	5tāg <sup>w</sup> āg <sup>w</sup> á
981	camel	7u/2	ūrākūm	rākūm
982	horse	7u/2	ūdʒ <sup>w</sup> á:k	dʒ <sup>w</sup> á:k
983	stallion	7Ø/2	t∫āmpájùdʒ <sup>w</sup> á:k	t∫āmpátùdʒ <sup>w</sup> á:k
984	mare (female horse)	7Ø/2	nētájùdʒ <sup>w</sup> á:k	nētátùdʒ <sup>w</sup> á:k

	Gloss	Class	Main/Singular	Plural
985	colt	5/6	jádùdʒ <sup>w</sup> á:k	játùdʒ <sup>w</sup> á:k
986	donkey	7u/2	ūdʒāŋkā	dʒāŋkā
987	pig	5/6	<u>ēràlēdè</u>	<u>ētàlēdè</u>
988	boar (male pig)	5/6	t∫āmpád∋ràlēdè	t∫āmpátètàlēdè
989	sow (female pig)	5/6	nētádèràlēdè	nētátètàlēdè
990	piglet	5/6	jád <del>è</del> ràlēdè	játètàlēdè
991	dog	7u/2	ūś?	5?
992	pup	5/6	jádùó?	ját <sup>3</sup> ?5?
993	cat	7u/2	ūmús	mús
994	kitten	5/6	jádùmús	jádt <del>ò</del> mús
995	elephant	7u/2	ūr <sup>w</sup> ág	r <sup>w</sup> ág
1000	warthog	7u/2	ūtèrèm	tèrèm
1001	monkey	7u/2	ūwám	wám
1003	hyena	7u/2	ūgòmòr	gòmòr
1005	antelope	7u/2	ūkēz	ūkēz
1010	rat	7u/2	ūrōg	rōg
1011	cane rat, cutting grass, grass cutter	7u/2	ūr <sup>j</sup> ēm	r <sup>j</sup> ēm
1016	hare	7u/2	ūsér	sér
1017	squirrel	7u/2	ūdèrèg	géréb
1018	porcupine	5/6	ēl:ì:s	ētrì:s
1019	bat	7u/2	ūbòm	bòm
1020	fruit bat	7u/2	ūk <sup>w</sup> ānā	k <sup>w</sup> ānā
1021	wild cat	7Ø/2	músjèrdòg	músèrdòg
1025	lion	7u/2	ūzūr	zūr
1026	hide (of animal)	3u/6	ūhòr	<u></u> 5thòr
1027	fur	3u/6	ūt∫ān	5?t∫ān
1028	horn	7u/4	ūkàr	<del>5</del> skàr
1029	hump (of cow)	5/6	<u>ērt</u> òzò	<u> ēttàzà</u>
1031	tail	7u/4	ūtór	ēstór
1034	elephant's trunk	5/6	s <sup>w</sup> ādùr <sup>w</sup> ág	s <sup>w</sup> ātùr <sup>w</sup> ág
1036	den, lair, hole	3u/4	ūsó?	5?só?
1037	bark (as dog) (v)	6	ōʔ∫án	
1038	bare, show (teeth)	5/	jákd <del>ò</del> nín	
1039	growl	6	<u> 5</u> thūm	
1040	ruminate, chew cud	3u	ūbòk	
	-		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·

	Gloss	Class	Main/Singular	Plural
1041	bird	7u/2	ūnō	nō
1042	crow	7u/2	ūjāg	jāg
1043	dove	5/6	ērgòròp	ētgòròp
1044	weaver-bird	7u/2	ūsâ:t	sâ:t
1047	cattle egret	7u/2	ūkòskòròtò	kòskòròtò
1053	ostrich	7Ø/2	ujimina	jimina
1055	eagle	7u/2	ūg <sup>w</sup> ám	g <sup>w</sup> ám
1056	hawk	7u/2	ūpāŋgà	pāŋgà
1057	vulture	7u/2	ūsāgrà	sāgrà
1058	feather	7u/6	ūt∫ān	5?t∫ān
1059	wing	3u/6	ūkáp	<u>5</u> tkáp
1060	beak, bill	3u/6	ūgòp	ētgòp
1061	crest (of bird)	5/6	ērkót	<u>5</u> tkót
1065	claw	7u/2	ūkāráŋkù	kāráŋkù
1066	egg	5/6	ērgē	ētgē
1067	eggshell	3Ø/6	k <sup>w</sup> ékèrgē	k <sup>w</sup> éktètgē
1068	yolk (of egg)	5/6	ērmèr	5tmèr
1069	nest	5/6	<u>ē</u> rtèkès	5?tèkès
1070	flock (of birds)	5/6	bàndènō	bàntènō
1071	fly (v)	5	ērjēnè	
1072	dive	6	- ētf <del>ô</del> n	
1073	soar	3u	ūzər	_
1074	land (v), alight	5	ērt∫ézèn	
1076	flap the wings	5	gápdètkáp	
1079	peck (tr)	6	5?dègèr	
1080	lay (eggs)	6	5tê?	
1081	incubate, set (on eggs)	6	5thògòb	
1082	hatch	5/6	<b>5</b> rkés	
1083	fish	7u/2	ūdʒán	dʒán
1085	mudfish	7Ø/2	dʒánjètr <sup>w</sup> àbèr	dʒánètr <sup>w</sup> àbèr
1087	fish bone	7Ø/4	∫ārjùdʒán	∫ārsùdʒán
1088	fish-scale	3Ø/6	hòrùdʒán	hòrtùdʒán
1089	gill	5/6	s <sup>w</sup> ādùdʒán	s <sup>w</sup> ātùdʒán
1090	fin	3Ø/6	kápèdʒán	káptèdʒán
1091	crab	7u/2	ūàw	àw

	Gloss	Class	Main/Singular	Plural
1094	snail	5/6	ū?ālkōtó	<u> ētālkōtó</u>
1095	snake	7u/2	ūfá?	fá?
1096	spitting cobra	7Ø/2	fá?úrīmjà	fá?rīmè
1097	puff adder	5/2	ūdèp	dèp
1098	python	7u/2	ūè?	è?
1099	green mamba	7Ø/2	fájèmk <sup>w</sup> ék	fá?èmk <sup>w</sup> ék
1100	lizard	7u/2	ūgè?	γέg
1101	agama lizard (red-headed)	7Ø/2	t∫ikūgэ̂?	
1102	chameleon	7u/2	ūfándárnàkí	fándárnàkí
1103	gecko	5/6	ūkótíndākā	kótíndākā
1104	monitor lizard	7u/2	ū?ún	?ún
1105	crocodile	7u/2	ūtú?	tú?
1106	frog	5/6	ērkō?	5tkō?
1107	toad	7u/2	ūtò	tò
1108	tortoise (land)	5/6	ērkā:r	ētkā:r
1109	turtle (water)	5/6	ōr∫ák	5?∫ák
1110	fang (of snake)	7Ø/2	nínjùfá?	nínùfá?
1111	venom (of snake)	6m	rábmùfá?	
1112	shell (of turtle)	3u/6	ūkū?	ētkū?
1113	slither (snake)	3∅	f <del>š</del> ktùfá?	
1114	bite (snake)	6m	épmùfá?	
1115	crawl (lizard)	6	5tkùrùp	
1116	hiss	4	5st∫ <sup>w</sup> ε?εt	
1117	insect	7Ø/2	nómjùhóg	nəməhəg
	insect	7u/2	ū-z <sup>w</sup> ând	$z^{\mathrm{w}}$ ând
1119	louse	7u/2	ūkórkótò	
1120	bedbug	7u/2	ūsòŋólò	
1121	maggot (in rotten meat)	5/6	ērz <sup>w</sup> á	5̂?z <sup>w</sup> á
1122	cockroach	7u/2	ūt∫àk∋̀s	t∫àkès
1123	ant	7u/2	ūʔíŋgēgēr	íŋgēgēr
1124	army ant, soldier ant	7u/2	ūkap	kap
1126	termite	7u/2	ūhé?	hé?
1127	spider	7u/2	ū+E2165	dàrīdàŋg
1128	tarantula	5/6	ērandʒi	• stand3i
1129	scorpion	7u/2	ūtót	tót

	Gloss	Class	Main/Singular	Plural
1130	dung beetle	5/6	<u>ērbìmbì</u>	<u>ētbìmbì</u>
1132	grasshopper	7u/2	ūí?	í?
1133	cricket	7u/2	ūr <sup>j</sup> àk <del>ò</del> s	r <sup>j</sup> àkès
1134	locust	7u/2	ūtàmsk <del>ò</del> rī	tàmsk <del>ò</del> rī
1136	leech	5/6	<u> ērmádàmbōrò</u>	<u> 5tmádàmbōrò</u>
1137	caterpillar	7u/2	ūsōk	sōk
1138	centipede	7u/2	ūreremten	reremten
1139	millipede	7u/4	ūròmbìn	ēsròmbìn
1140	earthworm	7u/2	ūwàp	wàp
1141	fly (n)	7u/2	ūgí?	gí?
1142	mosquito	7u/2	ūrènt	rènt
1143	bee	7u/2	ūs5?	s <b>5</b> ?
1144	mud wasp	7u/2	ūrátázùn	rátázùn
1145	dragonfly	7u/2	ūkàŋgárgó:g	kàŋgárgó:g
1146	butterfly	7u/2	ūp <sup>j</sup> āktínp <sup>j</sup> àr	p <sup>j</sup> āktínp <sup>j</sup> àr
1149	sting (v)	6	5?tòt	
1150	stinger	7u/4	ūtóróg	ēstóróg
1151	spider's web	6m/6	ràndímùdàrīdàŋg	ràndítùdàrīdàŋg
1153	termite hill	5/6	- 5rsε̄r	5?sēr
1154	beehive	5/6	<del>5</del> rgùs	<b>5</b> tgùs
1155	beeswax, bee-bread	5/6	<u>ērkāk</u> ès	<b>5</b> tkàkès
1157	swarm (n)	5/6	<u>5</u> rbàn	<b>5</b> tbàn
1158	tree	7u/4	ūté	ōsté
1162	baobab tree	7u/4	ūk <sup>w</sup> ék	ēsk <sup>w</sup> ék
1164	shea-butter tree, shea-nut tree	7u/4	ūfàr	<del>5</del> sfàr
1165	fig tree	7Ø/4	téjùlūmbā	<i>tésùlūmbā</i>
1166	thorn-tree	7u/4	ūkót	⁵skót
	thorn tree (sp.)	7u/4	ūbâ:r	<del>5</del> sbâ:r
1167	tamarind tree	7u/4	ūrékés	ēsréké
1168	oil palm	7u/4	ūsé?	5̂?sέ̂?
1169	coconut palm	7u/4	ūk <sup>w</sup> àk	5sk <sup>w</sup> àk
1170	raffia palm	7u/4	ūkèrèm	ōskèrèm
1173	grass	7u/4	ūg <sup>w</sup> á	ēsg <sup>w</sup> á
	bundle of tied grass	5/6	5rg <sup>w</sup> á	5tg <sup>w</sup> á

	Gloss	Class	Main/Singular	Plural
1174	bamboo	7u/4	ūg <sup>w</sup> áb	ēsg <sup>w</sup> áb
1176	weeds	7u/4	ūzēg	ē?zēg
1177	leaf	3u/6	ūrān	<b>5</b> trān
	cooked leaves	4	<b>5</b> srān	
1178	branch (of tree)	7u/4	ūfè?	ēsfè?
1179	trunk (of tree)	5/6	ērkūg	ētkūg
1180	bark (of tree)	7u/4	ū∫āb	ē?∫āb
1181	sap	6m	ēmdáp	
1182	stump	5/6	ērkìŋg	ōtkìŋg
1183	root	7u/4	ūg <del>ō</del> r	ēsgēr
1185	stem, stalk (of maize, millet, etc.)	7u/4	ūkàmb	<del>5</del> skàmb
1186	silk, hair (of maize)	4	ēskó?	
1188	flower	5/6	ērp <sup>j</sup> ákét	ētp <sup>j</sup> ákét
1190	shoot (new plant)	5/6	ērt∫ <sup>w</sup> ê:n	5?t∫ <sup>w</sup> ê:n
1190b	shoot (new plant) (v)	6	ē?t∫ <sup>w</sup> è:n	
1193	thorn	7u/4	ūhír	ēshír
1194	palm branch, frond	3Ø/6	kápùsé	káptùsé
1197	juice	6m	ōтóg	
1198	stone, pit	5/6	ērkòn	ētkòn
1200	corn cob	5/6	<del>5</del> rpìs	<b>5</b> tpìs
1201	kernel (of corn, maize)	7Ø/2	jàjèrh <sup>j</sup> è	jàgàh <sup>i</sup> è
1202	seed	7u/2	ūgớ	gó
	seed (yam for planting)	5/6	ērgó	ētgó
	seed (sweet potato, cassava)	4	ēsgó	
1203	skin (of fruit)	3u/6	ūkā?	ētkā?
1204	shell (of groundnut)	3u/6	ūk <sup>w</sup> ék	ētk <sup>w</sup> ék
1205	corn husk (n)	3u/6	ūkòk	ētkòk
1206	chaff	3u/6	ūkón	ētkón
1207	fruit	5/6	jàdùté	jàtùsté
1208	banana	5/6	<u> ērājābā</u>	<u> 5tàjàbà</u>
1210	lemon	5/6	lémùdùz <del>ś</del> r	lémùtùzér
1211	orange	5/6	lémùdèmrēmēr	lémùtèmrēmēr
1213	pawpaw, papaya	5/6	ōrg <sup>™</sup> ándà	<i>5tg <sup>w</sup>ándà</i>
1214	pineapple	5/6	<u> ērabarba</u>	<u> ētabarba</u>
1215	guava	5/6	ōrg <sup>™</sup> ébà	ōtg <sup>w</sup> ébà

	Gloss	Class	Main/Singular	Plural
1218	date	5/6	ūdàbínò	<u> ētdàbínò</u>
1219	tomato	5/6	<u> 5rtùmátùr</u>	5?tùmátùr
1220	onion	5/6	<u> ē</u> ràlbásà	<u> 5tàlbásà</u>
1223	red pepper, hot pepper	7u/2	ūzàŋgálì	zàŋgálì
1224	okra	5/6	ērk <sup>w</sup> ēmb	5tk <sup>w</sup> 5mb
1225	egg-plant	7u/2	ūgònt	gònt
1226	mushroom	5/6	ērn <sup>j</sup> ē:w	ētn <sup>j</sup> ē:w
	mushroom (big)	5/6	<del>5</del> rgàk	ētgàk
1227	cassava, manioc	5/6	ērzó	ēʔzó
1228	cocoyam, taro	5/6	<u>ārmàŋkàní</u>	<u>ētm</u> àŋkàní
1229	yam	5/6	ēl: <sup>w</sup> ā?	ētr <sup>w</sup> ā?
1230	sweet potato	5/6	<u>ērkútùŋkù</u>	<u>ētkútùŋkù</u>
1232	maize, corn	7u/6	ūmāgánā	<u> ētmāgánā</u>
1233	millet (rainy season)	7u/2	ūnàt	nàt
1235	guinea corn	7u/2	ūh <sup>j</sup> ē	h <sup>j</sup> ē
1236	rice	7u/2	ūsàp	sàp
1237	groundnut, peanut	7u/2	$\bar{u}g^w\bar{9}n$	$g^w\bar{9}n$
1238	sesame seed	7u/2	ū∫ák	ſák
1239	cola nut	5/6	ērgoro	ētgoro
1240	palm nut	7Ø/2	jàjùk <sup>w</sup> àk	jàtùk <sup>w</sup> àk
1241	sugar cane	7u/4	ūrèké	<del>5</del> srèké
1244	cotton (from field)	5/6	5l:àndí	5tràndí
-	heap of cotton from field	4	ēsràndí	
	thread	DIM/6m	īràndí	ēmràndí
	strong thread	3u/AUG	ūràndí	āràndí
1245	grow (of plants)	6	<u>5trògòm</u>	
1246	sprout (v)	5	ēráp	
1247	(be) ripe	5	nén	
1248	ripen, become ripe	6	- อิท:èn	
1249	(be) unripe	5/6	ērgòp	ētgòp
1250	(be) rotten	6	5?zèm	
1251	(be) shrivelled, (be) wrinkled (fruit)	6	5tr <sup>j</sup> à:m	
1253	blight (n)	6m	ēmbā:t	
1254	world	3u/6	ūdàk	5?dàk
1255	place	5/6	<del>5</del> rbé	5tbé

	Gloss	Class	Main/Singular	Plural
1257	grassland	3Ø/6	dàkèsg <sup>w</sup> á	dàktèsg <sup>w</sup> á
1258	forest	5/6	ērzúp	ē?zúp
1259	open place, clearing	5/6	<del>5</del> rkàndà	<u>5</u> tkàndà
1260	bush country, rural area	5/6	ērdòg	ētdòg
1261	ground, land	3u/6	ūdàk	5?dàk
1262	mountain	5/6	ēl:òr	<u> </u> 5tròr
1263	summit, highest point	5/6	dốmèl:òr	dómètròr
1265	valley	7u/4	ūkò:r	<del>5</del> skò:r
1267	pit	5/6	ūkúb	<u></u> 5tkúb
1268	hole	7u/4	ūhē	ēshē
1269	crevice	7u/4	ūhóm	ēshóm
1270	cave	3u/6	ūsó?	5?só?
1271	rock (large)	3u/AUG	ūtā:r	ātā:r
	rock (average)	5/6	ērtā?ār	5?tā?ār
1272	stone (small)	DIM/6m	ītā:r	
1273	gravel	6m	ēmtā?ār	
1274	sand	6m	ēmh <sup>j</sup> èrèg	
1275	dust	6m	5mhú:g	
1277	clay	5/6	ēl: <sup>w</sup> āb	ētr <sup>w</sup> āb
1279	iron	7u/6	ūk <sup>w</sup> ām	5tk <sup>w</sup> ām
	long iron	4	ēsk <sup>w</sup> ām	
	tiny iron	DIM/6m	$\bar{\imath}k^w\bar{a}m$	ēmk <sup>w</sup> ām
1283	rust (n)	6m	ēmká:rì	
1284	water	6m	ēdmē	
1285	ocean, sea	6m	ēmsá	
1286	lake	5/6	- 5rbà	<u>ē</u> tbà
	big lake	3u/AUG	ūbà	ābà
	small lake	DIM/6m	ībà	ēmbà
1287	pool	5/6	ērkapkin	ētkapkin
1289	marsh		vab	
1290	spring	7Ø/4	fènjèmbé	fènsèmbé
1291	waterfall	5	róbdùjè	
1293	river	7u/4	ūgí	ēsgí
1294	current (river, stream)	5	èdmébdàd	
1295	riverbed (dry)	6	5thò	

	Gloss	Class	Main/Singular	Plural
1297	ford (n)	5/6	<del>5</del> rpás	ētpás
1298	bridge	7u/4	ūkòtòrkò	<u> āskòtòrkò</u>
1299	island	3Ø/4	k <sup>w</sup> ár	ōsk <sup>w</sup> ár
1300	beach	2	h <sup>j</sup> èrèg	
1301	wave	7Ø/4	hójèmbé	hósèmbé
1303	foam	3u	ūkòp	
1304	slime (organic)	6m	ōm∫átὲ	
1305	fire	3u	ūrā	
1306	flame	5/6	rémdùrā	rémtùrā
1307	spark	7u/2	ūkērmē∫ī	kērmē∫ī
1308	smoke	6m	ēmfē?ēt	
1309	fireplace	6	5?sàm	
1310	firewood	5/6	tédùrā	tétùrā
1311	charcoal	5/6	ēl:īn	ētrīn
1312	ashes	6m	ēmt∫ <sup>w</sup> ā?	
1313	sky	3u	ūr <del>ō</del>	
1314	air (breathed)	4	<u>āsvājē</u>	
1315	cloud	5/6	ērké:t/ ērké?ét	5tké?ét
1316	rainbow	7u/4	ūrōkórōm	<del>5</del> srōkórōm
1317	sun	5/6	ērhō	5th5
1318	moon	7u/4	ūp <sup>j</sup> ā:t	ēsp <sup>j</sup> ā:t
1320	new moon	7Ø/4	p <sup>j</sup> ā:tūpòjà	p <sup>j</sup> ā:tēspòsè
1322	star	7u/2	ūrègèr	règèr
1327	noise, sound (n)	5/6	ērdúm	5?dúm
1330	wind (n)	6m	ēm:jā	
1331	harmattan	3u	ūt∫ <sup>w</sup> ēr	
1333	thunder	7u/4	ūkágágág	kágágág
1334	lightning	7u/4	ūjākēt	
1335	rain	3u/6	ūjē	<u>ētjē</u>
1337	hail	5/6	ērtērēm	ē?tērēm
1338	dew	3u/6	ūrāpēt	ētrāpēt
1339	flood (n)	3Ø/6	j <del>ō</del> ʔūjátò	jētējá?tò
1341	drought, famine	4	<u>-</u> 5smēr	
1342	season	3u	ūdà	
1343	rainy season	3u/6	ūgós	<b>5</b> tgós

	Gloss	Class	Main/Singular	Plural
1344	dry season	3u/6	ūz <sup>w</sup> ē:n	ē?z <sup>w</sup> ē:n
1345	hot weather	3Ø	dà?èhūnd	
1346	cold weather	3Ø	dà?èmtòr	
1347	light	6m	ēmzén	
1348	sunshine	6m	zénmèrhō	
1349	moonlight	6m	zénmùp <sup>j</sup> ā:t	
1350	shadow	3u/6	ūr <sup>j</sup> èn	ētr <sup>j</sup> èn
1351	darkness	3u	ūt∫ <sup>w</sup> ēm	
1352	time	3u	ūdà	
1353	now		édà?á	
1354	before		kàndà	
1359	again		tēmsē	
1360	sometimes		òkōndà?ō	
1363	always		ūdà ūbē:t	
1366	wait	6	<del>5</del> tèstè	
1367	day	5/6	ērhō	5th5
1368	month	7u/4	ūp <sup>j</sup> ā:t	ēsp <sup>j</sup> ā:t
1369	year	7u/4	ūhāk	<del>-</del> 5shāk
1370	today	3Ø	ējā?ò	
1371	yesterday	3Ø	g <sup>j</sup> ép	
1372	day before yesterday	3Ø	g <sup>j</sup> épèl:īndè	
1373	tomorrow	3u	ūsōt	
1374	day after tomorrow	3u	ūsèt	
1375	olden times	3Ø	dà?ēdím	
1376	dawn (before sunrise)	4	kánsèké:t	
1377	sunrise	5/6	r <sup>w</sup> éndèrhō	
1378	morning	5/6	ērwèn	
1379	noon	3∅	<b>ś</b> tēkūh <b>ś</b>	
1382	dusk, twilight (after sunset)	6m	- 5mrím	
1383	daytime	3u	ūhớ	_
1384	night	6m	ōmg <sup>j</sup> óp	
1385	thing	3u/6	ūnòm	ēn:òm
	big thing	3u/AUG	ūnòm	ānòm
	tiny thing	DIM/6m	īnòm	ēmnòm
	round thing	5/6	ērnòm	ēn:òm

	Gloss	Class	Main/Singular	Plural
	long thing	7u/4	ūnòm	ēsnòm
1386	piece	5/6	ērbōsā	<b>ē</b> tbōsā
1387	top		édóm	
1388	bottom		tá	
1389	front (of something)		∫ <del>ś</del>	
1390	back (of something)		dim	
1391	side (of something)		kīt	
1392	middle		tēk	
	inside		mέ	
1393	edge (n)	6m	ēmvástè	
1394	point (n)	5/6	ērnú	ēn:ú
1399	come		hā:né	
1400	go		ārké	
1402	arrive	5	ērté	
1403	remain, stay	6	ētè:s	
1404	leave (place)		hāmhà	
1405	return, go back		я̄пēm	
1406	go round, detour	6	- 5n:à:r	
1407	enter, go in		t∫ <sup>w</sup> āné	
1408	come (or go) out, exit (v)		r <sup>w</sup> ̄̄̄̄̄̄̄nɛ́	
1409	ascend, go up		dá?	
1410	descend, go down		t∫ēsnέ	
1411	fall (intr)	5	5rhé?è	
1413	slide	5	<del>5</del> r∫átὲ	
1414	roll	6	<b>5</b> tìrìg	
1415	spread (disease, fire)	6	<del>5</del> tjàr	
1416	burst	6	<b>5</b> tkès	
1417	disappear	6	ētèŋk	
1418	speed (n)	6m	ēmhōr	
1420	(be) slow		t∫ <sup>w</sup> ènt∫ <sup>w</sup> èn	
1421	hasten, hurry		nōm:hōr	_
1422	take		kāb	_
1423	snatch, seize	6	ētr <sup>w</sup> èm	_
1424	catch (object in air)	6	<b>5</b> tèst	
	chase and catch	6	ētmàs	

	Gloss	Class	Main/Singular Plural
1425	pick up	6	ētdèst
1426	hold	3Ø	∫íp
1427	raise, lift	6	ē?dʒàkès
1428	lower (tr)	6	ē?t∫èstèn
1429	drop (tr)	6	- 5trèst
1430	throw	6	5?dʒèrè
1431	shoot (v)	6	5?tà
1433	turn over (tr)	6	ētbàrgè?sè
1434	pull	6	ēn:àk
1435	drag	6	- 5tfèk
1436	push	6	5?tòk
1438	overtake, pass (tr)	6	- ētkèsèm
1439	surround	6	ētkèŋgsè
1440	twist	6	ētm <sup>j</sup> èg
1441	fold (v)	6	- 5tf <del>3</del> t
1443	hang up	6	5?sèrèg
1444	spread out (maize) (tr)	6	ētbèrgè?sè
1445	stretch	4	- 5sn <del>-</del> 8k <del>-</del> 5m
1446	hit, strike	6	- - - - - - - - - - - - - -
1447	beat	6	ētvè
1449	rub	6	5Ŷtà:m
1450	scrape (v)	6	5tk <sup>w</sup> à:t
1451	scratch (v)	6	- ētkò:t
1452	pierce	4	5?dùp
1453	tear (tr)	6	ētkè:s
1454	strip off (bark)	6	ē?∫àb
1455	shake (tr)	6	<u> </u> <u> </u>
1456	squeeze	6	ē?s <sup>w</sup> ∂t∂r
1458	create, make	6	- ēn:òm
1460	break (tr)	6	ētjò:k
1461	destroy, spoil	6	ēn:à:s
1462	(be) ruined, (be) spoiled	6	ēn:àtèl'sè
1463	join, put together	6	5?dàmè
1464	accumulate	6	ētkàrgèγsε
1466	divide, separate (tr)	6	- 5tmòt

	Gloss	Class	Main/Singular Plural
1469	put, place, set	6	-5twà?
1470	leave (something somewhere)	6	<u> </u> 5tjàgè
1471	keep, save	5	ērt∫ēn
1472	hide (tr)	6	<u>5tjàs</u> è
1473	lose (tr)	6	<u> ētùst</u>
1474	look for	6	- ētgò:t
1476	blow (of wind) (v)	6	ētfèr
1478	blow away (intr)	6	ēthùrùp
1480	flow	6m	ēmdʒà
1482	leak (v)	6	ētwè
1483	sprinkle	6	ētm <sup>i</sup> èkès
1484	smear (tr)	6	ēts <sup>w</sup> èk
1485	dip	6	ētjèbè?sè
1486	soak	6	ētmàs
1487	wring out	6	ētv <sup>i</sup> èn
1488	dry out (clothes)	6	ētdʒànε
1490	sink (v)	6	ētì:s
1491	drown (intr)	6m	ēm:àrēmbé
1492	shine	6m	ēmbàkèt
1493	fade	6	ētì:kòb
1496	light (fire) (v)	6	5?dàpès
1497	quench, extinguish	6	<u> ētrìm</u> ès
1498	burn (intr), blaze	6	5?dò?
1499	melt (intr)	6	ētà?è
1500	singe	6	ētfàp
1501	begin	6	5?tàkèn
1502	beginning	5	ērtàkèn
1503	continue, resume	5	rēd∂∫é
1504	end (n)	5	ērmà?
1505	cease, stop	6	<u>5tjàgè</u>
1506	finish, complete (v)	6	5?tà:s
1507	(be) big		játjà
1508	enlarge	6m	ēmhèk
1509	(be) small		rèkjà
1510	diminish	6	<u>5thàb</u>

	Gloss	Class	Main/Singular Plural
1511	(be) high	6m	- 5mdʒá?
1512	(be) low	3u	ūdàkūdàk
1513	(be) long	6m	ēmwér
1514	lengthen	6	ōγs <sup>w</sup> èr
1515	(be) short	5	- 5rkìk
1517	(be) fat, (be) thick	3u	ūt∫àm
1518	(be) thin		<u> fájà</u>
1522	(be) deep	5	<u> </u>
1523	deepen	6	5trè?èt
_		6	5trù?ùt
1524	(be) shallow		dómdóm
1526	flatten	6	5thòŋgè?sè
1528	swell (intr)	6	ētfè?
1529	(be) round	6m	ēmnā:r
1530	(be) straight	6m	ēmkím
1531	straighten	6	5tjè:ns
1532	(be) crooked		g <sup>j</sup> èŋk
1533	bend, crook, curve (n)	6	5tk <sup>w</sup> èg
1534	(be) heavy	6	5tnò:s
1535	weight	6m	ēmnō?
1536	(be) light (not heavy)	5	kòbdèmnō?
1537	(be) sharp	6m	5mré
1538	sharpen (knife)	3u	ūkōr
1539	sharpen, bring to point (arrow)	6	5?Jàb
1540	(be) blunt, dull	6	5tr <sup>j</sup> èndè?sè
1541	(be) rough	5	kòbdèmràng
1542	(be) smooth	6m	5mràng
1543	make smooth	6	5thàr
1545	harden		gāgèn
1546	(be) soft	6m	5mr <sup>j</sup> àbèr
1547	soften	6	ētr <sup>j</sup> àbèrsɛ
1548	(be) dry	6	5tgà?
1550	(be) slippery	6m	5mvàtèr
1551	(be) sticky	6m	5mdáp5mdáp
1552	(be) hot (objects)	6m	эmdэŋg

1553     (be) cold (objects)     6m     5mtòr       1554     colour     5/6     5rgó     5tgó       1555     (be) white     púsò       1556     (be) black     rīmjà       1557     (be) red     jásò       1558     (be) blue     6     5trē?úrī	
1555 (be) white     púsò       1556 (be) black     rīmjà       1557 (be) red     jásò       1558 (be) blue     6     5trē?úrī	
1556 (be) black       rīmjà         1557 (be) red       jásò         1558 (be) blue       6       5trē?úrī	
1557 (be) red jásð  1558 (be) blue 6 5trē?úrī	
1558 (be) blue 6 5trē?úrī	
C	
1559 (be) green 6m bémètrān	
1560 (be) brown 6m bśmùdàk	
1561 (be) yellow 6m bémètró	
1562 (be) dark (colour) 6m b5:m rīm:5	
1564 taste (n) 6 5tràk	
1565 (be) sweet 6m 5mrēmēr	
1566 (be) sour 7u/2 ūzśr zśr	
1567 (be) bitter 6 5tgàg	
1568 odour, smell (n) 3u/4 ūwśs/wśs 5swśs	
1569 stink, smell (bad) 6m 5mk3?	
1570 (be) able (to) 6 5tkèrè	
1572 strength 5 <b>5 5</b> rbέb	
1574 (be) great, (be) powerful n5mdèrbεb	
1575 splendour, glory 6m 5msék	
1576 (be) good sɔ̃?ɔ̀	
1577 (be) bad j3?3	
1578 right, (be) correct hónhón	
1579 truth 6 5n:íp	
1581 (be) wrong 5 k5bdèmhónhón	
1582 (be) beautiful 5 5rz <sup>w</sup> àr	
1583 (be) ugly nòmèzásò?òdā	
1584 (be) clean 3u ūhēn	
1585 (be) dirty 6m 5mdʒīgīn	
1586 (be) important k\(\bar{9}\)mg\(\hat{\center}\)	
1587 (be) amusing, funny 6 5n:5m5s	
1588 (be) new pò?ò	
1589 (be) old (not new) 3u/6 ū?ūt 5tūt	
1590 one (1) t∫5:n	
1591 two (2) j5:r	

	Gloss	Class	Main/Singular	Plural
1592	three (3)		tēt	
1593	four (4)		ná:s	
1594	five (5)		tán	
1595	six (6)		∫ì∫ìn	
1596	seven (7)		tà?èr	
1597	eight (8)		éir	
1598	nine (9)		dʒ <sup>w</sup> ̄sɪr	
1599	ten (10)		<b>5</b> p	
1600	eleven (11)		ōpégān	
1601	twelve (12)		ōpéjē:r	
1602	thirteen (13)		5pét5t	
1603	fourteen (14)		5péná:s	
1604	fifteen (15)		ōpétán	
1605	sixteen (16)		ōpé∫ì∫ìn	
1606	seventeen (17)		5pétà?èr	
1607	eighteen (18)		ōр∕́9?́є:г	
1608	nineteen (19)		ōpédʒ <sup>w</sup> ē:r	
1609	twenty (20)		ēr∫īk	
1610	twenty-one (21)		ēr∫īkūgàn	
1611	twenty-two (22)		ēr∫īkéjē:r	
1612	thirty (30)		ōr∫īkó?ōp	
1613	forty (40)		ē?∫īkētjē:r	
1614	fifty (50)		ō?∫īkōtjō:ré?ōp	
1615	sixty (60)		ē?∫īkē?tēt	
1616	seventy (70)		ē?∫īkē?tēté?ōp	
1617	eighty (80)		ōʔ∫īkōn:á:s	
1618	ninety (90)		ō?∫īkōn:á:só?ōp	
1619	hundred (100)		5?∫īk5?tán	
1620	two hundred (200)		ō?∫īkōtōp	
1621	five hundred (500)		5tkók5?tán	
1622	thousand (1000)		<u>ētkókēt</u> ōp	
1623	(be) first	5	<u>5rtàk</u> èn	
1624	(be) second		jērēmsè	
1625	(be) third		tētērsè	
1626	(be) last		ēmvástè	

1627   add   6   572° 5r     1628   subtract, take away   6   5thàb     1629   increase (intr)   6   5trògòm     1631   count (v)   6   5tògòm     1632   arrange   6   5tsètp     1633   (be) equal   4   5sgàn     1635   enough   6   5tkòrè     1636   lack (v)   5   5rkòb     1637   (be) used up   tärg     1638   all   bēt     1639   many   3u   ūtát     1640   few   tjäjī     1641   half   3u/6   ūrðak   5tāk     1643   everybody   kówàn     1644   everything   kójàn     1645   everywhere   kóhènè     1646   nobody   zàwàk5n     1647   nothing   zàrðak5n     1648   1   5m/mē     1649   you (mase., sing.)   b5     1650   he (human)   wén     1651   we (nel.)   in     we (excl.)   īt     1652   you (pl.)   n5     1653   there   ānèd     1654   bere   ānè     1657   near   6   5tmòr     1666   cast   3u   ūtár     1667   near   6   5tmòr     1668   backward (direction)   5f5     1666   forward (direction)   5f5     1666   backward (direction)   5df6     1666   backward (direction)   5df6     1666   backward (direction)		Gloss	Class	Main/Singular	Plural
1629	1627	add	6	ō?s <sup>w</sup> èr	
1631   count (v)   6	1628	subtract, take away	6	<u>5</u> thàb	
1632 arrange	1629	increase (intr)	6	<u>5</u> trògòm	
1633 (be) equal	1631	count (v)	6	<u>5</u> tògòr	
1635 enough   6   5tkàrè     1636 lack (v)   5   5rkàb     1637 (be) used up   tärg     1638 all   bërt     1639 many   3u titát     1640 few   tjäjī     1641 half   3u/6 ti?āk   5t5k     1643 everybody   kówàn     1644 everything   kójàn     1645 everywhere   kóhènè     1646 nobody   zàwàkōn     1647 nothing   zà?ākōn     1648 I   5m/mē     1649 you (masc., sing.)   b5     1650 he (human)   wön     1651 we (incl.)   fin     we (excl.)   it     1652 you (pl.)   n5     1653 they (human)   5n     1654 here   ānè     1657 near   6   5tmòr     1660 east   3u titá?     1662 up   3u titá?     1664 forward (direction)   5f5     1665 forward (direction)   5f5     1666 forward (direction)   5f5     1667 forward (direction)   5f5     1668 forward (direction)   5f5     1668 forward (direction)   5f5     1668 forward (direction)   5f5	1632	arrange	6	ētsè:p	
1636   lack (v)   5   5rk3b     1637 (be) used up   tä:g     1638   all   bēt     1639   many   3u   ūtát     1640   few   tʃaʃī     1641   half   3u/6   ū/8k   5t8k     1643   everybody   kówàn     1644   everything   kójàn     1645   everywhere   kóhènè     1646   nobody   zàwàk5n     1647   nothing   zà/3k5n     1648   I   5m/mē     1649   you (masc., sing.)   b5     1650   he (human)   wðin     1651   we (incl.)   ín     we (excl.)   it     1652   you (pl.)   n5     1653   they (human)   5in     1654   here   ānè     1655   there   ānèdʒít     1666   far   6m   5mrā     1667   near   6   5tmòr     1660   east   3u   ūdóm     1661   west   3u   ūtá?     1662   up   3u   ūdóm     1664   forward (direction)   5f5	1633	(be) equal	4	<del>5</del> sgàn	
1637 (be) used up	1635	enough	6	<u>5tk</u> òrè	
1638 all   bEt     1639 many   3u	1636	lack (v)	5	ērkòb	
1639 many   3u	1637	(be) used up		tā:g	
1640   few   tʃāʃī     1641   half   3u/6   ū/5k   5t5k     1643   everybody   kówàn     1644   everything   kójàn     1645   everywhere   kóhènè     1646   nobody   zàwàkōn     1647   nothing   zà/3kōn     1648   1   5m/mē     1649   you (masc., sing.)   bō     1650   he (human)   wōn     1651   we (incl.)   fin     we (excl.)   it     1652   you (pl.)   nō     1653   they (human)   5n     1654   here   ānè     1655   there   ānèdʒít     1656   far   6m   5mrā     1657   near   6   5tmòr     1660   east   3u   ūdóm     1661   west   3u   ūdóm     1662   up   3u   ūdóm     1663   down   3u   ūtá?     1664   forward (direction)   6jó	1638	all		bē:t	
1641   half   3u/6   \tilde{u}^2\tilde{s}k   5t\tilde{s}k     1643   everybody   k\tilde{o}wan     1644   everything   k\tilde{o}jan     1645   everywhere   k\tilde{o}h\tilde{e}h\tilde{e}h\tilde{e}     1646   nobody   z\tilde{a}wak\tilde{s}n     1647   nothing   z\tilde{a}^2\tilde{s}\tilde{s}\tilde{s}n     1648   I   \tilde{5}m/m\tilde{e}     1649   you (masc., sing.)   b\tilde{o}     1650   he (human)   w\tilde{s}n     1651   we (incl.)   fin     we (excl.)   it     1652   you (pl.)   n\tilde{o}     1653   they (human)   \tilde{5}n     1654   here   \tilde{a}n\tilde{d}\tilde{g}     1655   there   \tilde{a}n\tilde{d}\tilde{g}     1656   far   6m   \tilde{5}mr\tilde{a}     1657   near   6   \tilde{5}tm\tilde{r}     1660   east   3u   \tilde{u}d\tilde{s}m     1661   west   3u   \tilde{u}d\tilde{s}m     1662   up   3u   \tilde{u}d\tilde{s}m     1663   down   3u   \tilde{u}t\tilde{a}     1664   forward (direction)   \tilde{6}\tilde{s}\tilde{s}\tilde{s}	1639	many	3u	ūtát	
1643   everybody   kówàn     1644   everything   kójàn     1645   everywhere   kóhènè     1646   nobody   zàwàkōn     1647   nothing   zà?3kōn     1648   I   5m/mē     1649   you (masc., sing.)   bō     1650   he (human)   wōn     1651   we (incl.)   ín     we (excl.)   ît     1652   you (pl.)   nō     1653   they (human)   5n     1654   here   ānè     1655   there   ānèdʒít     1656   far   6m   5mrā     1657   near   6   5tmòr     1660   cast   3u   ūdóm     1661   west   3u   ūdóm     1662   up   3u   ūdóm     1663   down   3u   ūtá?     1664   forward (direction)   5jó	1640	few		t∫ā∫ī	
1644         everything         kójàn           1645         everywhere         kóhènè           1646         nobody         zàwàk5n           1647         nothing         zà?òk5n           1648         I         5m/mē           1649         you (masc., sing.)         b5           1650         he (human)         w5n           1651         we (incl.)         ín           we (excl.)         it           1652         you (pl.)         n5           1653         they (human)         5n           1654         here         ānè           1655         there         ānèdʒít           1656         far         6m         5mrā           1657         near         6         5tmòr           1660         east         3u         ūdóm           1661         west         3u         ūdóm           1663         down         3u         ūdóm           1664         forward (direction)         5j5	1641	half	3u/6	ū? <del>5</del> k	<u>ē</u> tēk
1645         everywhere         kóhènè           1646         nobody         zàwàk5n           1647         nothing         zà?òk5n           1648         I         5m/mē           1649         you (masc., sing.)         bō           1650         he (human)         w5n           1651         we (incl.)         ín           we (excl.)         īt         nō           1652         you (pl.)         nō           1653         they (human)         5n           1654         here         ānè           1655         there         ānèdʒít           1656         far         6m         5mrā           1657         near         6         5tmòr           1660         east         3u         ūdóm           1661         west         3u         ūdóm           1662         up         3u         ūdóm           1663         down         3u         ūtá?           1664         forward (direction)         6J6	1643	everybody		kówàn	
1646   nobody   zàwàk5n     1647   nothing   zà?òk5n     1648   I   5m/mĒ     1649   you (masc., sing.)   b5     1650   he (human)   W5n     1651   we (incl.)   fin     we (excl.)   it     1652   you (pl.)   n5     1653   they (human)   5n     1654   here   ānè dʒít     1655   there   ānè dʒít     1656   far   6m   5mrā     1657   near   6   5tmòr     1660   east   3u   ūdóm     1661   west   3u   ūdóm     1662   up   3u   ūdóm     1663   down   3u   ūtá?     1664   forward (direction)   5ʃ5	1644	everything		kójàn	
1647       nothing       zà?òkōn         1648       I       5m/mē         1649       you (masc., sing.)       bō         1650       he (human)       won         1651       we (incl.)       fin         we (excl.)       it         1652       you (pl.)       nō         1653       they (human)       ōn         1654       here       ānè         1655       there       ānèdʒít         1656       far       6m       ōmrā         1657       near       6       5tmòr         1660       east       3u       ūdóm         1661       west       3u       ūdóm         1662       up       3u       ūdóm         1663       down       3u       ūtá?         1664       forward (direction)       5ʃ5	1645	everywhere		kóhènè	
1648   I   5m/mē     1649   you (masc., sing.)   b5     1650   he (human)   w5n     1651   we (incl.)   ín     we (excl.)   īt     1652   you (pl.)   n5     1653   they (human)   5n     1654   here   ānè     1655   there   ānèdʒít     1656   far   6m   5mrā     1657   near   6   5tmòr     1660   east   3u   ūdóm     1661   west   3u   ūdóm     1662   up   3u   ūdóm     1663   down   3u   ūtá?     1664   forward (direction)   5∫5	1646	nobody		zàwàkōn	
1649 you (masc., sing.)   b5     1650 he (human)   W5n     1651 we (incl.)   fin     we (excl.)   It     1652 you (pl.)   n5     1653 they (human)   5n     1654 here   ānè d3ft     1655 there   ānèd3ft     1656 far   6m   5mrā     1657 near   6   5tmòr     1660 east   3u   ūdóm     1661 west   3u   ūdóm     1662 up   3u   ūdóm     1663 down   3u   ūtá?     1664 forward (direction)   5∫6	1647	nothing		zà?òkōn	
1650 he (human)       wēn         1651 we (incl.)       ín         we (excl.)       it         1652 you (pl.)       nō         1653 they (human)       ōn         1654 here       ānè         1655 there       ānèdʒít         1656 far       6m       ōmrā         1657 near       6       ōtmòr         1660 east       3u       ūdóm         1661 west       3u       ūdóm         1662 up       3u       ūdóm         1663 down       3u       ūtá?         1664 forward (direction)       5ʃó	1648	I		5m/mε̄	
1651     we (incl.)     in       we (excl.)     it       1652     you (pl.)     nō       1653     they (human)     ōn       1654     here     ānè       1655     there     ānèdʒít       1656     far     6m     ōmrā       1657     near     6     ōtmòr       1660     east     3u     ūdóm       1661     west     3u     ūdóm       1662     up     3u     ūdóm       1663     down     3u     ūtá?       1664     forward (direction)     5jó	1649	you (masc., sing.)		bō	
we (excl.)       īt         1652 you (pl.)       n5         1653 they (human)       5n         1654 here       ānè         1655 there       ānèdʒít         1656 far       6m       5mrā         1657 near       6       5tmòr         1660 east       3u       ūdóm         1661 west       3u       ūtá?         1662 up       3u       ūtá?         1663 down       3u       ūtá?         1664 forward (direction)       5ʃ5	1650	he (human)		wēn	
1652       you (pl.)       n5         1653       they (human)       5n         1654       here       ānè         1655       there       ānèdʒít         1656       far       6m       5mrā         1657       near       6       5tmòr         1660       east       3u       ūdóm         1661       west       3u       ūdóm         1662       up       3u       ūdóm         1663       down       3u       ūtá?         1664       forward (direction)       5ʃó	1651	we (incl.)		ín	
1653 they (human)   5n     1654 here		we (excl.)		īt	
1654   here	1652	you (pl.)		nō	
1655       there       ānèdʒít         1656       far       6m       5mrā         1657       near       6       5tmòr         1660       east       3u       ūdóm         1661       west       3u       ūtá?         1662       up       3u       ūdóm         1663       down       3u       ūtá?         1664       forward (direction)       5ʃó	1653	they (human)		ēп	
1656     far     6m     5mrā       1657     near     6     5tmòr       1660     east     3u     ūdóm       1661     west     3u     ūtá?       1662     up     3u     ūdóm       1663     down     3u     ūtá?       1664     forward (direction)     5ʃó	1654	here		ānè	
1657     near     6     5tmòr       1660     east     3u     ūdóm       1661     west     3u     ūtá?       1662     up     3u     ūdóm       1663     down     3u     ūtá?       1664     forward (direction)     5∫5	1655	there		ānèdʒít	
1660 east     3u ūdóm       1661 west     3u ūtá?       1662 up     3u ūdóm       1663 down     3u ūtá?       1664 forward (direction)     5∫5	1656	far	6m	ēmrā	
1661 west   3u	1657	near	6	<u>ētm</u> òr	
1662 up 3u ūdóm 1663 down 3u ūtá?  1664 forward (direction) 5∫5	1660	east	3u	ūdóm	
1663 down 3u ūtá?  1664 forward (direction) 5∫5	1661	west	3u	ūtá?	
1664 forward (direction) 5∫5	1662	up	3u	ūdóm	
	1663	down	3u	ūtá?	
1665 backward (direction) 5dím	1664	forward (direction)		<b>∮</b> ∫á	
	1665	backward (direction)		ódím	

	Gloss	Class	Main/Singular	Plural
1666	right (direction)		kóm <sup>§</sup> ?tſ <sup>w</sup> à?	
1667	left (direction)		kómèrbè:r	
1668	over, above		édóm	
1669	under, below		<del>ó</del> tá?	
1670	in front of, before		ékèn	
1671	behind		dím	
1672	beside		kīt	
1673	inside		émέ	
1674	outside		96bè	
1675	between		<b>śt</b> èk	
1677	away from	5	ērhíkè	
1679	this (man)		ín <sup>j</sup> ā	
1680	that (man)		ín <sup>j</sup> ādʒít	
1681	some (men)		èkēn	
1683	who?		wàná	
1684	what?		jànó	
1685	which (one)?		wèhè	
1686	where?		éhὲ	
1687	when?		dà?èhè	
1688	why?		rémùjàn	
1689	how?		rènè	
1690	how many?		nènè	
1691	and		é:	
1692	if		àbíté	
1693	because		rémù	
1694	perhaps		ál:àdʒídá	
1695	really, truly	6	ēn:íp	
1696	well (adv)	6m	<u>ē</u> mjār	
1697	poorly		ērkòb	
1698	only		kōwè <sup>j</sup>	
1699	yes		è:	
1700	no		ō?ò	

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