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No. 2

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MURLE GRAMMAR

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Occasional Papers in the Study of
Sudanese Languages
No.2

College of Education, University of Juba
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List of Abbreviations

acc	accusative
adj	adjective
C	consonant
cl	clause
com	comment
cons	consonant
demon	demonstrative
dep	dependent
direc	directional
ex	exclusive
excl	exclusive
gen	genitive
iden	identity
imb	imbedded
imp	imperfect
in	inclusive
incl	inclusive
ind	indirect
ins	instrumental
intr	intransitive
intro	introducer
loc	locative
man	manner
mar	margin
mod	modifier
neg	negative
nom	nominative
NP	noun phrase
nuc	nucleus
num	number
obj	object
P	phrase
pass	passive
per	person
perf	perfect
pl	plural
poss	possessive
pre	prefix
pred	predicate
PSO	predicate, subject, object
qual	quality
quan	quantity
ques	question
rec	reciprocal
redup	reduplication
rel	relator
sent	sentence
sing	singular
SPO	subject, predicate, object
sta	statement
sub	subordinate
subj	subject
subjc	subjunctive
suf	suffix
tr	transitive
und	undergoer
V	vowel

List of Symbols

~	fluctuation
>	governed by
<	governs
+	plus
±	plus or minus
=	equals
' '	English translation
/ /	phonemic data
[ ]	phonetic data
-	suffix or prefix
⟨ ⟩	only one member of class
.	syllable break
•	length

Preface

The following grammar book is presented as an overview of the Murle language. The presentation and terminology is such that it is intended to be understood by a person with a minimum of linguistic training. This book was completed in November, 1979. Since that time I have continued language study and there have been some new discoveries as well as further working of material presented in the book. Several of these are mentioned as addenda at the back of the book. Further discoveries and more theoretically oriented description will have to await future work.

Appreciation has been extended to Wanda Pace and others in the introduction on page xi. Wanda spent considerable effort helping me organize a number of papers into this single volume. The addenda has resulted from further suggestions by Professor Kenneth Pike, Dick Watson, and Eileen Kilpatrick.

Introduction

1. Background

The Murle people number about 70,000 and live in southeastern Sudan between the Nile River and the Ethiopian border. The main group, the Lowland Murle, occupies the area around the junction of the Kengen, Lotilla, and Veveno rivers where they join to form the Pibor River. The town of Pibor is the administrative headquarters for this group of people. Since the land in this area is flat, the rise and fall of the rivers alternately causes flooding and then drought. The Murle are therefore a semi-nomadic people who move with their cattle in order to find sufficient grazing and water.

A second group, the Highland Murle, inhabit the Boma Plateau about 130 miles southeast of Pibor. These people belong to the same group, but are agricultural due to the superior soil and rainfall on the plateau. All cattle in the area have died because of trypanosomiasis, carried by the tsetse fly. The two groups of Murle are separated by about 90 miles, which is used as hunting land for both groups. The two groups keep in touch with each other, and frequent trips are made back and forth between the areas.

The language of the Lowland Murle and the Highland Murle is basically the same. A few of the words are different, but not enough that there is any problem in communication between these two groups. There are also two splinter groups south of the Murle. The Longarim, which live in the Boya Hills, number about 10,000, and the Tenet, living in the Lafit Mountains, number about 2,000. These two groups have been separated from the main body of the Murle for several generations. They still find it possible to understand the Murle language, although there are some basic differences.

The linguistic classification of Murle is Nilo-Saharan, Chari-Nile, Eastern Sudanic, Didinga-Murle.

The first work with the Murle language was done by A. E. Lyth, who was the District Commissioner at Pibor Post during the 1940's. He wrote a monograph and dictionary which was re-published by Khartoum in 1971. Later work was done by Paul Hostetter and Harvey Hoekstra, who worked at Pibor during the late 1950's with the American Presbyterian Mission. They did some linguistic research, as well as translating several books of the New Testament into the Murle language. A. N. Tucker has also done some writing on Murle.

The data for this paper has been taken at Lukuriinyang, which is about one mile from the town of Pibor. Therefore, analysis presented here is specifically from the Lowland Murle language.

I first visited Pibor and Boma on a linguistic survey in January, 1975, under the auspices of the Summer Institute of Linguistics. I later returned to Pibor as a S.I.L. researcher working under the Ministry of Education of the Southern Region, and began linguistic research in May, 1977. Most of the past two years have been spent on this work. I would like to extend thanks and acknowledgment to Idris Malos and John Atiel, who both served faithfully as my language teachers; also to Wanda Pace, who served as my linguistic consultant, and to Dr. John Bendor-Samuel who has advised us in our work and encouraged me to produce this book. Also thanks to Lois Rowley who typed the manuscript, and last but not least, to my wife, Barbara, who has assisted me in the work among the Murle.

2. Model

In this paper I am not attempting to present a specific linguistic model, but am, rather, endeavoring

to give an accurate description of the Murle phonology and grammar. On the phonology level I am using phonemes, rather than features, to describe the sounds of the language.

On the grammar level the formulas are given in the 4-box tagmemic system, as presented by Pike and Pike, (1977). In such a formula, the four basic features of each constituent of a construction (tagmeme) are presented. The four features are:

Slot	Class(es)
Role	Cohesion

The Slot describes the grammatical function of the tagmeme, e.g. subject, predicate, object, margin, nucleus, etc. The Class is the kind or kinds of units which fill that specific slot in the construction, e.g. noun phrases and pronouns may fill the subject slot of a clause; adjectives, possessives, and numerals may fill the margin slot of a noun phrase. The Role is the underlying or "deep structure" purpose of the tagmeme, e.g. the subject has the role of actor, the predicate has the role of action, a margin may have the role of quality, possession, quantity, and so on. Cohesion states any requirements the tagmeme must meet in order to fit correctly into the rest of the construction, e.g. adjectives have to agree with nouns in number, and predicates have to agree with subjects in person and number.

The following presentation is divided into chapters dealing with various levels of the language. It begins with the simplest unit and builds toward the most complex. In the phonology the order is:

phoneme
syllable
word
pause group

In the grammar section the order is:

morpheme
word
phrase
clause
sentence
paragraph
discourse

3. Overview

Chapter 1 deals with the phonology of Murle. It describes the various consonants and vowels with their allophonic variations, and establishes the phonemes by pairs of contrasting words. Syllable patterns, distribution of phonemes within syllables, tone, stress, and length on the word level, and intonation on the pause group level, are also discussed in this chapter.

Chapter 2 describes morphophonemic phenomena. In Murle some consonants and vowels change when in the environment of other phonemes. The rules for these changes are given and exemplified in this chapter.

Chapter 3 deals with the pluralization of nouns. Pluralization can be done in a variety of ways in Murle. A set of general rules, broken down into specific rules, is the basis for dividing Murle nouns into 18 classes for pluralization purposes. A total of 500 nouns in singular and plural forms are listed with the various rules, to illustrate how the rules apply. Morphophonemic adjustments are also noted in the lists of nouns.

Chapter 4 describes the four cases in which Murle nouns occur when used in a clause. In this chapter the uses of the various cases are described and the suffixes given for each case.

Chapter 5 describes the morphology of a verb. The verb has three basic modes, and these are marked for person and number. The three basic modes make up the core

of the verb. Four margins can be attached to the core: undergoer, reciprocal, passive, and directional.

Chapter 6 discusses the personal pronouns. Murle has different sets of pronouns for each case, and these sets of pronouns are listed with examples of their usage. The possessive pronouns have alternate sets and also differ depending on whether the noun they modify is singular or plural. A table showing all the pronouns is given at the end of the chapter.

Chapter 7 deals with the noun phrase. It shows how a noun can be modified by various margins, such as adjectives, possessives, demonstratives, numbers, etc. Explanations are given for how each of these modifiers are used in a noun phrase. Adjective phrases and possessive phrases are also covered in this chapter, because they are part of the noun phrase.

Chapter 8 discusses the clause level. It gives formulas and examples of the various types of clause cores that can be used in Murle. The various margins which can be attached to the clause cores are also discussed and illustrated.

Chapter 9 contains a Murle text that has been broken down into clauses, with a word-by-word translation into English, and followed by a free translation. A brief analysis of the discourse features of this text is then given, with some comments on paragraph and sentence boundaries. It is felt that this level of Murle is too large to include in its entirety, so the analysis is confined to the text given in the chapter.

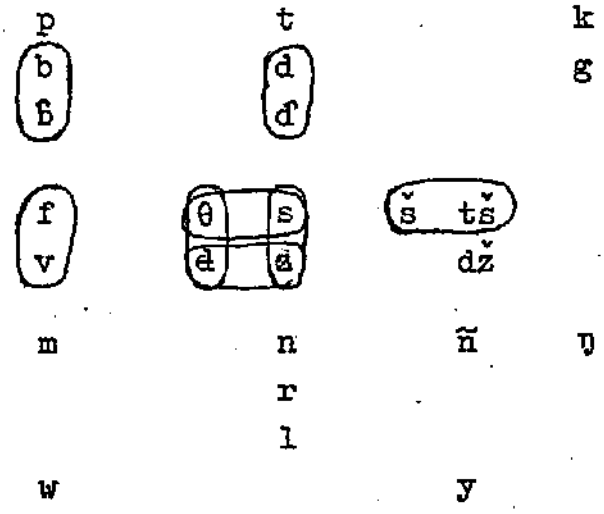
CHAPTER 1

Phonology

1. Phonemes

1.1. Consonants

Following is a phonetic chart of Murle consonants. Sounds which fluctuate with each other or are allophones of the same phoneme are circled.



1.1.1. Stops

Stops occur at the bilabial, alveolar, and velar points of articulation and have both voiced and voiceless forms. Voiceless stops occur in any position in a word; initial, medial, and final. Voiced stops occur word initial and word medial, but do not occur word final, because in this position they change to their voiceless counterpart. See Ch. 2; 1.1.

The three voiceless stops /p/, /t/, and /k/ are slightly aspirated in the word-initial and word-medial positions, but they have no aspiration in the word-final position.

a. The voiceless bilabial stop [p] is in contrast with the voiced bilabial stop [b].

/p/	/poc/	'young grass'
/b/	/boc/	'fish spear'
/p/	/apak/	'he splits'
/b/	/abakbak/	'he encloses'

b. The voiceless alveolar stop [t] is in contrast with the voiced alveolar stop [d].

/t/	/taal/	'buy'
/d/	/daal/	'choke'
/t/	/atɔɔk/	'he chases'
/d/	/adɔɔk/	'he beats'

c. The voiceless velar stop [k] is in contrast with the voiced velar stop [g].

/k/	/ki/	'mussel'
/g/	/gi/	'thing'
/k/	/akul/	'it flies'
/g/	/agul/	'crocodile'

d. The voiced bilabial stop with ingressive lung air [ɓ] and the voiced alveolar stop with egressive lung air [ɗ] occur only before back vowels. In this position they fluctuate with [b] and [d] respectively. These ingressives are not used at all by many Murle speakers.

[ɓ]~[b]	[ɓuk] ~ [buk]	'also'
	[ɓorra]~[borra]	'cat'
	[ɓɔɔt] ~ [bɔɔt]	'cave'
[ɗ]~[d]	[ɗoon] ~ [doon]	'only'
	[ɗɔl] ~ [dɔl]	'children'

/b/ and /d/ are chosen to represent the fluctuation of these two phones, since [b] and [d] are the more commonly used forms and also occur elsewhere in the language.

Rewrite:

/buk/	'also'
/borra/	'cat'
/bɔɔt/	'cave'
/doon/	'only'
/dɔl/	'children'

1.1.2. Fricatives

a. The voiceless labiodental fricative [f] and the voiced labiodental fricative [v] are in complementary distribution.

[f] occurs word final.

[aduuf]	'he boasts'
[kɛɛf]	'I cultivate'

[v] occurs elsewhere.

[vɔlɔŋ]	'lie'
[kavaçi]	'I throw'

/v/ is chosen to represent these allophones.

Rewrite:

/aduuv/	'he boasts'
/kɛɛv/	'I cultivate'
/vɔlɔŋ/	'lie'
/kavaçi/	'I throw'

b. The voiceless alveolar grooved fricative [s] fluctuates with the interdental fricative [θ] .

[ceeθ] ~ [ceeθ]	'house'
[kabaθ] ~ [kabaθ]	'knife'

The voiced alveolar grooved fricative z fluctuates with the voiced interdental fricative đ .

[ziit] ~ [điit]	'metal'
[guzul] ~ [guđul]	'hyena'

Furthermore, [z ~ đ] and [s ~ θ] are in complementary distribution.

[s~θ] occurs word final.
[z~đ] occurs elsewhere.

There is a great deal of latitude permitted in this fricative and both the interdental and the alveolar are acceptable. However, the norm is somewhere in between these two positions.

The symbol chosen to represent these phones is /z/ since it is a simple symbol and the voiced allophone is more common than the voiceless allophone.

Rewrite:

/ceez/	'house'
/kabaz/	'knife'
/ziit/	'metal'
/guzul/	'hyena'

1.1.3. Affricates

a. The voiceless alveopalatal grooved affricate [tš] is in contrast with the alveopalatal grooved affricate [dž].

/tš̌/	/tš̌in/	'see'
/dž̌/	/dž̌in/	'ask'
/tš̌/	/matš̌ar/	'brisket'
/dž̌/	/adž̌aar/	'he passes'

/tš̌/ and /dž̌/ will be interpreted as /c/ and /j/ respectively since the Murle language does not have consonant clusters.

Rewrite:

/cin/	'see'
/jin/	'ask'
/macar/	'brisket'
/ajaar/	'he passes'

b. The voiceless alveolar grooved affricate [c] is in fluctuation with the voiceless alveopalatal grooved fricative [š̌]. In fast speech [š̌] is commonly used. This is especially true near the end of words. However, when these words are spoken distinctly, the sound is clearly a [c].

[c] ~ [š̌]	[wanico] ~ [waniš̌o]	'today'
	[toloc] ~ [tološ̌]	'chicken'

/c/ is chosen as the phoneme to represent this fluctuation, since careful speech is used as the basis for phonological analysis. (Hooper, 1976)

Rewrite:

/wanico/	'today'
/toloc/	'chicken'

c. The voiced alveopalatal grooved affricate [j] is in contrast with the voiced alveolar grooved fricative [z].

/j/	/jook/	'god'
/z/	/zooc/	'foot'
/j/	/kajac/	'kob'
/z/	/kazac/	'sand'

1.1.4. Nasals

The voiced bilabial nasal [m] and the voiced alveolar nasal [n] and the voiced alveopalatal nasal [ñ] and the voiced velar nasal [ŋ] are all in contrast with each other in all positions.

/m/	/maa/	'lion'
/n/	/naana/	'I'
/ñ/	/ñaan/	'beer'
/ŋ/	/ŋaa/	'woman'
/m/	/amot/	'he grabs'
/n/	/anot/	'he sees'
/ñ/	/añɛt/	'he builds'
/ŋ/	/aŋɛdɛt/	'he chops'
/m/	/agam/	'he holds'
/n/	/azan/	'thigh'
/ñ/	/vañ/	'den'
/ŋ/	/taŋ/	'cow'

The phoneme /ñ/ will be written as /ny/ since this is the form used in African languages.

Rewrite:

/ny/	/nyaan/	'beer'
	/ɛnyɛt/	'he builds'
	/vany/	'den'

1.1.5. Resonants

a. The voiced alveolar flap [r] is in contrast with the voiced alveolar lateral [l] in all positions.

/l/	/laan/	'arrow'
/r/	/raane/	'bathe'
/l/	/alaam/	'he stops'
/r/	/caraam/	'skirt'
/l/	/kol/	'open'
/r/	/kor/	'sun'

b. The voiced alveolar flap [r] is in contrast with the voiced alveolar stop [d].

/r/	/raal/	'bewitch'
/d/	/daal/	'choke'
/r/	/aromɛ/	'he meets'
/d/	/adoma/	'he takes'

c. In the Murle language there are two semivowels: the voiced labiovelar vocoid /w/ and the voiced palatal vocoid /y/, as in the following examples:

/w/	/walaak/	'crow'
	/kowat/	'snake'
	/yawyaw/	'dirt'
/y/	/yubuz/	'rest'
	/biyɛn/	'stones'
	/toy/	'fish trap'

More discussion can be found on semivowels under 2.2.2.

1.1.6. Phonemic chart of consonants

	Labial	Alveolar	Alveopalatal	Velar
Stops, Voiceless	p	t	c	k
Voiced	b	d	j	g
Fricatives	v	z		
Nasals	m	n	ny	ŋ
Resonants, Flap		r		
Lateral		l		
Semivowels	w		y	

1.2. Vowels

Phonetic chart of vowels

(i ɪ)		u
e		o
ɛ	(ə a)	ɔ

1.2.1. The voiced high close front unrounded vocoid [i] is in contrast with the voiced mid close front unrounded vocoid [e].

/i/	/itat/	'ear'
/e/	/etom/	'twenty'

1.2.2. The voiced high close front unrounded vocoid [i] fluctuates with the voiced high open front unrounded vocoid [ɪ] between consonants.

[i]~[ɪ]	kacin	kacɪn	'I see'
	dila	dɪla	'spear'

[i] occurs elsewhere.

[i]	/itat/	'ear'
	/kawudi/	'I drink'

/i/ is chosen to represent this phoneme because it has a wider distribution.

Rewrite:

/kacin/	'I see'
/dila/	'spear'

1.2.3. The voiced mid close front unrounded vocoid [e] is in contrast with the voiced mid open front unrounded vocoid [ɛ].

/e/	/arek/	'he puts'
/ɛ/	/arɛk/	'she grinds'

1.2.4. The voiced mid open front unrounded vocoid [ɛ] is in contrast with the voiced low open central unrounded vocoid [a].

/ɛ/	/akɛtkɛt/	'sweet'
/a/	/akat/	'he spears'

1.2.5. The voiced high close back rounded vocoid [u] is in contrast with the voiced mid close back rounded vocoid [o].

/u/	/iju/	'pot'
/o/	/ijo/	'load'

1.2.6. The voiced mid close back rounded vocoid [o] is in contrast with the voiced low close back rounded vocoid [ɔ].

/o/	/kawo/	'I call'
/ɔ/	/kawɔ/	'I walk'

1.2.7. The voiced low open central unrounded vocoid [a] is in contrast with the voiced low close back rounded vocoid [ɔ].

/a/	/daŋ/	'argue'
/ɔ/	/dɔŋ/	'mortar'

1.2.8. The voiced low open central vocoid [a] is in fluctuation with the voiced mid open central vocoid [ə]. has been found to occur in only the following word, in which it is slightly nasalized.

[a]~[ə] [na] ~ [nə] 'why'

Since both pronunciations are in fluctuation and the phone [ə] is so rare, /a/ is chosen as the symbol for this phoneme.

/a/	/na/	'why'

1.2.9. All vowels can be lengthened, and these are in contrast with their short conterparts.

/i/	/libir/	'side'
/i•/	/abi•r/	'it ripens'
/e/	/merkec/	'sheep'
/e•/	/me•ri/	'red'
/ɛ/	/ɛlɛ/	'body'
/ɛ•/	/ɛ•l/	'are'

/a/	/kadak/	'to eat'
/a•/	/kada•k/	'to die'
/u/	/gumut/	'ibis'
/u•/	/gu•mun/	'owl'
/o/	/dokol/	'serval cat'
/o•/	/do•k/	'all'
/ɔ/	/cɔk/	'wet'
/c•/	/cɔ•k/	'smell'

Lengthened vowels are interpreted as a single phoneme rather than a vowel cluster since there are no other vowel clusters in the language. All lengthened vowels, however, will be written in this paper as double vowels.

Rewrite:

/abiir/	'it ripens'
/meeri/	'red'
/ɛɛl/	'are'
/kadaak/	'to die'
/guumun/	'owl'
/dook/	'all'
/cɔɔk/	'smell'

1.2.10. Phonemic chart of vowels.

	Front	Central	Back
High	i		u
Mid	e		o
Low	ɛ	a	ɔ

1.2.11. When vowels occur word initial, they are preceded by a slight glottal stop [ʔ]. There is also a glottal stop at the end of an imperative verb if the imperative form ends in a vowel. The strength of this glottal stop depends on how loudly or forcefully the imperative is spoken.

[ʔ]	[ʔaku]	'he comes'
	[ʔoroz̄]	'dog'
	[bitɔʔ]	'go !'
	[ijaʔ]	'come !'

Since the glottal stop is predictable and consistent, it will not be written in the remainder of this paper.

Rewrite:

/aku/	'he comes'
/oroz/	'dog'
/bitɔ/	'go!'
/ija/	'come !'

2. Syllable Patterns and Distribution of Phonemes

2.1. Syllable Patterns

The maximum expanded syllable pattern in Murle is (C) V (•) (C). The following examples show the syllable types that can occur.

V	/o/	'of'
V•	/ii/	'day'
CV	/co/	'this'
VC	/ɔl/	'people'
CVC	/cap/	'tie'
CV•	/kaa/	'to'
V•C	/ɛɛz/	'goat'
CV•C	/buul/	'age-set'

2.2. Distribution of Phonemes

In general, the distribution of phonemes within a syllable has few restrictions. There are no co-occurrence restrictions between vowels and consonants. Fricatives, nasal, resonants, and voiceless stops can stand in any consonant slot. Voiced stops occur syllable initial and occasionally syllable final. However, voiced stops can never occur syllable final if that syllable is the final syllable in a word.

2.2.1. Consonant clusters do not exist within the Murle syllable, although consonants will stand next to each other within a word across syllable boundaries. This is most common with identical consonants, as in the following examples.

/bor.ra/	'cat'
/ki.baal.lic/	'bird'
/a.bak.ki/	'drunk'

Unlike consonants may also stand next to each other word medially across syllable boundaries, as the following examples show.

/cam.kit/	'tiger fish'
/ar.tɛ/	'grass'
/ko.roog.jok/	'homesteads'

2.2.2. The semivowels are interpreted as consonants because it keeps the language consistent with the above syllable patterns, which do not include any vowel clusters. (Welmers, 1973, p. 29-30)

When [u] or [i] occur initially before another vowel, they take on a definite [w] or [y] quality, and are interpreted as consonant in this position.

/w/	/waaz/	'noon'
/y/	/yatigan/	'my mother'

When [u]or[i] occur intervocalicly, they again take on a definite consonant quality and are interpreted as /w/ or /y/ respectively.

/w/	/kowat/	'snake'
/y/	/biyɛn/	'stones'

When [u] or [i] occur word final following another vowel, they are interpreted as consonants. However, the suffix -i is attached to many nouns and verbs, and in some cases the final consonant drops out, leaving the suffix -i directly following another vowel. In this situation the vowel /i/ will be written, in order to give a clear understanding of the grammatical constructions, even though phonologically it is interpreted as a /y/.

/yitoi/	'guide'
/kabaai/	'I live'

3. Phonological Word

3.1. Syllable Distribution

A word can be made up of only one syllable; however, usually two or more syllables stand together to form a single word. As many as six syllables can be put together to form a single word.

/ki.zi.wa.nɛ.ta/	'buffalos'
/ki.jin.to.zo.ze.ya/	'we were asked for'

The four syllable types beginning with a consonant (CV, CVC, CV•, and CV•C) can occur in any position in a word. The four syllable types beginning with a vowel (V, V•, VC, and V•C) occur only word initial. The exception to this restriction is when a vowel suffix attaches to the end of a word ending in a vowel. In this case it is possible to get a V syllable word final.

/ŋaa.o/	'of a woman'

3.2. Tone and Stress

Tucker & Bryan (1966, p. 371) state that there are three tones, and that they may be lexically significant. However, my findings show that on the word level, tone does not have lexical significance. In an isolated word, tone is closely connected with stress and lengthened vowels, and the three must be considered as one entity. When a word has a lengthened vowel, the high tone and stress also occur on the syllable with the lengthened vowel. If there is no lengthened vowel in a two-syllable word, then the stress and high tone are usually put on the first syllable. *

/ǩádak/	'to eat'
/kaǩáak/	'to die'

Words of three or more syllables are more unpredictable, although again the stress and high tone usually go on the first syllable if there is no syllable with a lengthened vowel.

/ǩíziwan/	'buffalo'
/moʈɓoŋtoc/	'tamarind tree'

4. Pause Group

Words are put together into pause groups. The end of each pause group is marked by a change in tone pattern and a pause. Although tone and stress are sometimes confusing in isolated words, pause group intonation is a more important factor than tone and stress on the word level, and overrides any stress-tone pattern on isolated words. The last syllable of each succeeding word in a pause group is normally stressed, and carries a high tone. The last word of a declarative pause group carries a dropping tone and little, if any, stress.

* Further study of the implication of the exceptions needs to be made.

[Karɔɔŋ naana kicin taŋ can.]
I want I to see cow my
'I want to see my cow.'

A pause group containing a yes/no question has high tone and stress on the final syllables of the pause group.

[Arɔɔŋ niina ako mɛlɛgenyai?]
want you to go market
'Do you want to go to the market?'

A pause group containing a question word at the end has high tone and stress on the penultimate syllable of the pause group and a sharp drop in tone on the last syllable.

[Ako niina ŋaadaŋ?]
go you where
'Where are you going?'

CHAPTER 2

Morphophonemic Phenomena

1. Voiced and Voiceless Stops

1.1. /p/ and /b/, and /t/ and /d/, and /c/ and /j/, and /k/ and /g/ are all separate phonemes in contrast with each other, as proved in Chapter 1. However, in a word-final position the voiced stops /b/, /d/, /j/, and /g/ change to their voiceless counterparts /p/, /t/, /c/, and /k/. This becomes obvious when words drop or add suffixes, since the stops change back and forth between voiced and voiceless forms depending on whether they are at the word-medial position or word-final.

1.2. Examples:

/b/→/p/	/kilibwa/ ⟶	/kilip/
	'shields'	'shields'
/d/→/t/	/katoodi/ ⟶	/katoot/
	'I climb'	'we climb'
/g/→/k/	/kulugit/ ⟶	/kuluk/
	'fish'	'fishes'
/j/→/c/	/yeelajo/ ⟶	/yeelac/
	'of a dove'	'dove'

1.3. It is important that the surface forms be written rather than the underlying forms, because there are vowel changes that are conditioned by the surface forms.

Therefore, when these voiced stops become their voiceless counterparts, the voiceless forms will be written in order to explain the vowel changes.

/kawudi/ ⟶ /awot/
'I drink' 'he drinks'

In the above example, the /d/ in /kawudi/ becomes /t/ when it occurs word final in /awot/. This triggers the change of the /u/ in /kawudi/ to the /o/ in /awot/.

1.4. This raises the problem of determining the underlying form of the root of a word. The root cannot be found by looking at the shortest form. For example, if one looks at the imperative form of a verb (the shortest form) which ends in a stop, the stop will always be voiceless because of its final position in the word. There is no way of knowing whether that final stop is inherently a voiceless or a voiced stop. In a verb one must look at a form which contains a suffix. The stop then becomes word medial and occurs in its underlying form. It is important to realize that stops which are inherently voiceless retain the voiceless quality even when they occur word medially; only the stops which are inherently voiced will change back to their voiced forms.

/tɛɛt/ ⟶ /kateedi/
'cut' 'I cut'

/not/ ⟶ /kanoti/
'look at' 'I look at'

In the above examples, the final /t/ in /tɛɛt/ is inherently voiced and it therefore reverts back to /d/ when followed by a suffix, as in /kateedi/. However, the final /t/ in /not/ is inherently voiceless and therefore maintains its voiceless form even when a suffix is added.

2. Weak Vowels.

2.1. The vowels /ɛ/, /o/, and /ɔ/ are weak vowels and are raised to the vowel above them in certain environments.

/ɛ/→/e/
/o/→/u/
/ɔ/→/o/

2.2. The environment which causes these changes works from the end of the word, going from right to left. Therefore when a suffix is added or deleted from a word, it influences changes in the word to which it is attached. (Antell et al.)

2.3. The weak vowels are raised in the environments of high vowels /i/ and /u/, and to a lesser degree by mid vowels /e/ and /o/. However, sometimes if a medial /t/ precedes these vowels, it blocks the raising effect on the preceding weak vowels. The weak vowels also will be raised in the environments of voiced stops /b/, /d/, /j/, and /g/, and the pull upward is especially strong if a high vowel and voiced consonant occur together. The weak vowels are also raised in the environments of the alveopalatals /c/, and /ny/, and sometimes by a final /n/ or /t/. (See Addendum 2 for revised treatment.)

2.4. /o/ raises to /u/

/awot/ ⟶ /kawudi/
'he drinks' 'I drink'

In this example the suffix -i is added in the word /kawudi/. The final /t/ of /awot/ reverts back to a /d/, and the strong pull of the voiced stop /d/ and the high vowel /i/ pulls the weak vowel /o/ up to a /u/ in the form /kawudi/.

/otok/ ——————→ /utugeti/
'mouth' 'mouths'

Here the plural suffix -eti is added to the singular form /otok/. The final /k/ thus becomes medial and reverts back to /g/, and the environment of the voiced stop /g/ and the vowels /e/ and /i/ of the new suffix pull the original /o/ phonemes up to /u/ phonemes, thus forming the word /utugeti/.

2.5. /ɛ/ raises to /e/

/akɛɛp/ ——————→ /kakeebi/
'he reads' 'I read'

In this example the suffix -i is added. The /p/ of /akɛɛp/ is no longer word final so it reverts back to a /b/. The combined environment of the voiced stop /b/ and the high vowel /i/ pull the /ɛɛ/ up to /ee/ forming the word /kakeebi/.

/kɛberɛ/ ——————→ /keberec/
'eyes' 'eye'

When the singular marker -c is added, all the weak /ɛ/ vowels are raised to /e/.

2.6. /ɔ/ raises to /o/

/arɔɔt/ ——————→ /karoodi/
'he hides' 'we hide'

When the suffix -i is added, the final /t/ of /arɔɔt/ reverts back to /d/. The combined environment of the voiced consonant /d/ and the high vowel /i/ pull the /ɔ/ up to an/o/.

/dɔl/ ⟶ /dole/
'children' 'child'

When the singular suffix -e is added, the /ɔ/ of /dɔl/ is raised to /o/.

2.7. This situation means that the underlying form of the root of some words is unpronouncable in the language but the stop-voicing rule and the vowel-raising rule change the root to its pronouncable surface forms.

tɛɛd ⟶ kateedi 'I cut'
tɛɛd ⟶ atɛɛt 'he cuts'

The form tɛɛd is actually never found within the language.

2.8. The vowel-raising rule described here works together with a vowel-agreement rule. When a weak vowel is raised by its environment, all the like vowels in a word will also change in order to agree. In the perfect and subjunctive modes of the verb, the mode marker is a reduplication of the vowel in the stem of the verb, which is placed in front of the stem. When the vowel in the stem is a weak vowel which changes with a new environment, then even the mode marker will change in order to keep in agreement with the change in the verb stem.

/ɛtɛɛt/ ⟶ /eteedu/
'he cut' 'you cut' past

/koroma/ ⟶ /urumu/
'I joined' 'you joined'

3. Weak Consonants

3.1. The consonants /k/, /t/, and /c/ have both weak and strong forms. When they are strong they will stand

in all positions. A weak consonant will stand word final, but will drop out when a suffix is added. When one of these consonants is seen in a word-final position, there is no way of knowing whether it is weak or strong until a suffix is added to the word.

3.2. The following are examples of the strong /k/, /t/, and /c/.

/k/	/ajuk/ ⟶	/kajuki/
	'he throws'	'I throw'
	/ŋɛŋɛk/ ⟶	/ŋɛŋɛknya/
	'stinging fish'	'stinging fishes'
/t/	/agumut/ ⟶	/agumutwa/
	'sacred ibis'	'sacred ibises'
/c/	/boloc/ ⟶	/boloci/
	'pool'	'pools'

3.3. The following are examples of weak /k/, /t/, and /c/

/k/	/aruk/ ⟶	/karui/
	'he beats'	'I beat'
	/kadikok/ ⟶	/kadikonya/
	'axe'	'axes'
/t/	/karwɛt/ ⟶	/karwenya/
	'crested crane'	'crested cranes'
/c/	/loróc/ ⟶	/lorowa/
	'male kob'	'male kobs'

4. Semivowels

4.1. A /w/ or /y/ is placed between the vowels if a

word ends in a vowel and the suffix begins with a vowel.

/boca/ + /-ɛt/ ⟶ /bocawɛt/
'fish-hook' 'fish-hooks'

/ti/ + /-ɛn/ ⟶ /tiyɛn/
'ring' 'rings'

/kala/ + /-i/ ⟶ /kalayi/
'we beg' 'I beg'

4.2. There is no way of predicting which semivowel will be used before a given suffix. The Murle themselves will sometimes vary on their choice of semivowels in certain words.

4.3. When a weak consonant drops out, it may frequently cause a situation where the addition of the new suffix would put two vowels together. In this situation a semivowel is inserted where the weak consonant dropped out. The weak consonant does not actually change to a semivowel, but rather it is the working of the two rules in sequence: first the dropping out of a weak consonant, and then, since the vowels are now contiguous, an insertion of a semivowel.

/cabak/ + /-ɛt/ ⟶ /cabayɛt/
'net' 'nets'

/tuuk/ + /-anɛ/ ⟶ /tuuwanɛ/
'well' 'wells'

4.4. The only exceptions to the insertion of a semivowel are in some of the verbs which end in a weak /k/. When the /k/ drops out because of a -i suffix, the -i will sometimes be attached directly to the preceding vowel.

/kabaak/ + /-i/ ⟶ /kabaai/
'we live', 'I live'

/katɔɔk/ + /-i/ ⟶ /katooi/
'we chase' 'I chase'

5. Elision

5.1. There are some small particles in Murle which end in vowels, such as /ci/ and /ma/. When these occur in casual speech in front of a word beginning with a vowel, the vowel of the particle drops out.

/ci alaano/ ⟶ /calaano/
'of the chiefs' 'of the chiefs'

/ma azi/ ⟶ /mazi/
'and says' 'and says'

In careful speech however, the vowel of the particl is retained. Using careful speech as the basis for analysis, these particles will therefore maintain their separate identity.

5.2. When the particle /o/ occurs before a word beginning with a vowel in casual speech, the /o/ takes on the quality of a word-initial /w/.

/o alaano/ ⟶ /walaano/
'of a chief' 'of a chief'

/o arukan/ ⟶ /warukan/
'who beat me' 'who beat me'

Again, however, in careful speech the particle /o/ takes on its vowel quality and therefore retains its separate identity.

5.3. There is one notable exception to the particle retaining its separate identity. Some possessive pronouns in Murle are a combination of /ci/ and a dependent possessive suffix: -an, -un, -in. Since the dependent suffixes cannot stand alone, elision has occured below the surface level and the elided forms have become independent and meaningful words in their own right.

/ci/ + /-an/ ⟶ /can/ 'my'
/ci/ + /-un/ ⟶ /cun/ 'your'

6. Other Morphophonemic Rules

6.1. If a word ends in either /l/ or /r/ and is followed by a suffix beginning with a low or mid vowel, a /y/ is inserted before the suffix.

/boor/ + /-ok/ ⟶ /booryok/
'clan' 'clans'

/dɔl/ + /-a/ ⟶ /dɔlya/
'children' 'children' (nom)

6.2. If a /b/ or /g/ comes before a suffix beginning with a low vowel, a /j/ is inserted before the suffix.

/kɔrɔɔk/ + /-ok/ ⟶ /koroogjok/
'home' 'homes'

/kakɛɛp/ + /-a/ ⟶ /kakɛɛbja/
'we all count' 'we count' (excl)

6.3. When a word ends in a velar nasal /ŋ/, it adds a /ny/ before taking a suffix beginning with a vowel.

/gaaŋ/ + /-ok/ ⟶ /gaaŋnyok/
'fight' 'fights'

/karɔɔŋ/ + /-a/ ⟶ /karɔɔŋnya/
'I want' 'we want'

6.4. When a noun ends in a /n/ it often adds a /t/ before adding the vowel case suffix.

/kuduvaan/ + /-i/ ⟶ /kuduvaanti/
'vulture' (acc) 'vulture' (nom)

/dɛmziin/ + /-o/ ⟶ /dɛmziinto/
'learning' 'of learning'

6.5. The nasal /n/ is sometimes placed between vowels if a word ends in a vowel and the suffix begins with a vowel. It divides the vowels in the same way as the semivowels. There is no way to predict whether a /n/ or a semivowel will be used in any given word, but the semivowels are by far the most common.

/kaluwa/ + /-ɛn/ ⟶ /kaluwanɛn/
'fence' 'fences'

6.6. When a word ends in a /z/ preceded by a vowel, the vowel drops out when a suffix is added.

/oroz/ + /-ɛ/ ⟶ /orzɛ/
'dog' 'dogs'

/zɛnɛz/ + /-eti/ ⟶ /zenzeti/
'heart' 'hearts'

6.7. All of the above morphophonemic rules generally apply throughout the language; however, there are always some exceptions to the rules. Sometimes weak vowels will resist the vowel-raising rule and maintain their weak form throughout. Occasionally a weak consonant will resist dropping out when a suffix is added. These are, nevertheless, highly productive rules in the language, even though there are a few forms for which they do not account.

CHAPTER 3

Pluralization of Murle Nouns

1. Introduction

Welmers (1973, p. 239) states, "For sheer complexity or irregularity in nominal morphology it is hard to beat a number of nilo-Saharan languages." Lythe (1971, p.6) also attests to this when he says in his Murle grammar that "There are no rules for forming the plurals of nouns and plural forms of each noun must be learned separately." He then proceeds to give a list of 30 nouns; each with a different method of pluralization. At first impression, one tends to agree that there is no system. After studying the problem, however, one can see that while there are a large number of ways to form plurals, most nouns do follow some system. Nouns can be classified into groups which follow the same rules of pluralization.

This chapter is based on a miscellaneous selection of 500 nouns and their plurals. These are divided into classes which handle pluralization in the same way. In most cases the nouns put into each category have no semantic relationship to each other. There are some cases, however, in which words with semantic relationships form plurals in the same way. Examples are body parts, vocations, relatives, birds, collectives, etc. Semantic relationships are only an indication of how a word will form the plural and is not foolproof since there are always exceptions. There is also a tendency for words ending with the same phoneme to pluralize in the same way. For example singular nouns ending with the phoneme /c/ usually drop the /c/ to form the plural.

Again, however, there are always exceptions.

In the 500 words used for analysis, 18 pluralization systems were found. Although 18 ways of pluralization are a great many, it is still better than having no classification at all. The largest group contains 69 examples and the smallest contains only 3. No classification is indicated unless there are a minimum of 3 examples. The remaining nouns, 35 out of 500, do not fit a system and are therefore classified as irregular. Given more nouns some of these irregular nouns may also fit into additional systems.

There are 4 general rules for forming plurals and this is confirmed by Tucker & Bryan (1966, p. 375 .)

a. Addition of a suffix.
b. Deletion of final phoneme or phonemes.
c. Substitution of final phoneme or phonemes by other phonemes.
d. Irregular--often internal changes.

Within each of these general rules, more specific rules can be applied. The following pages present these rules along with a list of the nouns to which the rules apply. The noun in the left hand column is the singular form and the noun in the central column is the plural form. The right hand column is the English translation which will only be given in the singular form. The number of examples in each system will also be given. When a semantic relationship exists this will also be noted. Some words can form plurals in more than one way so it is possible to find the same noun listed in two different sections.

2. Morphophonemic Changes

Often morphophonemic changes take place in order

to agree with the new suffix. These changes were discussed in Chapter 2. The rules for these changes are here codified and included with the various nouns wherever applicable in order to assist the reader to understand the differences in form between the singular and plural.

Codified morphophonemic rules

a. /p/⟶/b/
b. /t/⟶/d/
c. /c/⟶/j/
d. /k/⟶/g/
e. /ɛ/⟶/e/
f. /o/⟶/u/
g. /ɔ/⟶/O/
h. /k/⟶/ø/
i. /t/⟶/ø/
j. /c/⟶/ø/
k. insertion of /w/ between vowels
l. insertion of /y/ between vowels
m. insertion of /j/ after /b/ or /g/
n. insertion of /y/ after /r/ or /l/
o. insertion of /n/ between vowels
p. deletion of vowel before /z/

At times two or three of these rules take place in the same word. When this happens it will be indicated by the letter code following the noun.

3. Noun Classifications

3.1. Addition of a suffix to form the plural

This is the most common method of pluralization and contains 320 examples out of the 500 nouns used in the analysis.

3.1.1. Addition of suffix -nya 47 examples

1.	abuu	abuunya		'small child'
2.	aŋwa	aŋwanya		'sand cat'
3.	baarin	baarinnya		'bachelor'
4.	biizir	biizirnya		'bastard'
5.	botot	bototnya		'goose'
6.	camɛn	camɛnnya		'hartebeest'
7.	camkit	camkitnya		'tiger fish'
8.	damatozɛt	damatozenya	e,i	'addims stork'
9.	dila	dilanya		'spear'
10.	gelegelec	gelegelenya	j	'wood dove'
11.	gol	golnya		'color'
12.	goo	goonya		'fire'
13.	guumun	guumunnya		'owl'
14.	ii	iinya		'day'
15.	ijju	ijjunya		'pot'
16.	irii	iriinya		'bow'
17.	jaaman	jaamannya		'metal'
18.	jaloc	jalonya	j	'starling'
19.	kadikok	kadikonya	h	'axe'
20.	karwet	karwenya		'crested crane'
21.	kidikidik	kidikidiknya		'armpit'
22.	kɔrɔɔkac	kɔrɔɔkanya	j	'bateleur'
23.	logoor	logoornya		'throat'
24.	look	looknya		'hole'
25.	lorec	lorenya	j	'wet season home'
26.	loro	loronya		'rope'
27.	ŋaraagam	ŋaraagamnya		'hippopotamus'
28.	ŋɛnɛk	ŋɛŋɛknya		'stinging fish'
29.	ŋɔyɛt	ŋɔyɛtnya		'warthog'
30.	nyadɔric	nyadɔrinya	j	'short club'
31.	nyagɛzgɛzac	nyagɛzgɛzanya	j	'wire bracelet'
32.	nyaguma	nyagumanya		'tortoise'
33.	ole	olenya		'bull'
34.	olo	olonya		'hide rope'
35.	ɔɔrir	ɔɔrirnya		'wood ibis'

36. paypac ——→ paypacnya 'papaya'
37. rii ——→ riinya 'shade'
38. takrɛn ——→ takrɛnnya 'soldier'
39. tamarac ——→ tamaranya j 'magic'
40. toloc ——→ tolonya j 'chicken'
41. tuu ——→ tuunya 'wilderness'
42. walaak ——→ walaaknya 'crow'
43. warage ——→ waragenya e 'paper'
44. wudwut ——→ wudwudnya b 'small pipe'
45. zemun ——→ zemunnya 'reedbuck'
46. ziirlaak ——→ ziirlaaknya 'large bull'
47. ziir ——→ ziirnya 'hill'

3.1.2. Addition of suffix -wa 50 examples

1. agul ——→ agulwa 'crocodile'
2. agumut ——→ agumutwa 'sacred ibis'
3. aŋol ——→ aŋolwa 'elephant'
4. bolol ——→ bololwa 'female kob'
5. boot ——→ bootwa 'cave'
6. cecɛr ——→ cecɛrwa 'honey guide'
7. cɛɛrcɛr ——→ cɛɛrcɛrwa 'flycatcher'
8. ciliz ——→ cilizwa 'female hyena'
9. dokol ——→ dokolwa 'serval cat'
10. doodop ——→ doodobwa a 'shoulder'
11. dumar ——→ dumarwa 'male baboon'
12. ɛlyaz ——→ ɛlyazwa 'gazelle'
13. gogom ——→ gogomwa 'bush rat'
14. gorbit ——→ gorbitwa 'goliath heron'
15. gogol ——→ gogolwa 'drinking place'
16. karam ——→ karamwa 'colobus'
17. kabaz ——→ kabazwa 'knife'
18. katuv ——→ katuvwa 'bustard'
19. kilip ——→ kilibwa a 'shield'
20. kirɛɛr ——→ kirɛɛrwa 'jackal'
21. lɛtɛn ——→ lɛtɛnwa 'club'
22. loot ——→ loodwa b 'big bell'

23. loroc ——→ lorowa j 'male kob'
24. lɔmɔɔt ——→ lɔmɔɔtwa 'wet season'
25. luculuc ——→ luculucwa 'bird tail'
26. mɛlɛɛk ——→ mɛlɛɛkwa 'axe'
27. mɛrɛl ——→ mɛrɛlwa 'house pole'
28. nuknuk ——→ nuknukwa 'coucal'
29. ŋaantir ——→ ŋaantirwa 'hammerkop'
30. ŋetel ——→ ŋetelwa 'rhinoceros'
31. ŋolol ——→ ŋololwa 'cliff'
32. nyamurɛt ——→ nyamurɛtwa 'chin'
33. nyanan ——→ nyananwa 'mudpacked hair'
34. nyappɛl ——→ nyappɛlwa 'bracelet'
35. nyɛl ——→ nyɛlwa 'frog'
36. nyigɔk ——→ nyigogwa d 'male giraffe'
37. tanaariyak ——→ tanaariyakwa 'male lion'
38. telec ——→ telecwa 'forked stick'
39. tibor ——→ tiborwa 'female buffalo'
40. tɔlɔl ——→ tɔlɔlwa 'beehive'
41. totomot ——→ totomatwa 'goat stall'
42. tubez ——→ tubezwa 'guinea fowl'
43. vɛrlec ——→ vɛrlejwa c 'king vulture'
44. vorɛt ——→ vorɛtwa 'side of face'
45. zɛɛl ——→ zɛɛlwa 'marabou'
46. zeŋir ——→ zɛŋirwa 'mane'

In some cases the final two phonemes are dropped before the suffix -wa is added.

47. diizuc ——→ diizwa 'cloud'
48. ŋirococ ——→ girocwa 'locust'
49. karatot ——→ karatwa 'backbone'
50. zɛɛroc ——→ zɛɛrwa 'griffon'

Many of the nouns taking the -wa suffix have a semantic relationship in that many animals and birds can be found in this classification.

3.1.3. Addition of suffix -ɛt 69 examples

1.	aggoy	aggoyɛt		'chameleon'
2.	alawan	alawanɛt		'daughter-in-law
3.	boca	bocawɛt	k	'fish hook'
4.	boloc	bolocɛt		'stopper'
5.	bora	borawɛt	k	'cat'
6.	bokɔr	bokoɾɛt		'chest skin'
7.	bolu	boluwɛt	k	'back of head'
8.	bɔrɔy	bɔrɔyɛt		'thunder'
9.	cabak	cabayɛt	h,l	'net'
10.	ciliiman	ciliimanɛt		'lower leg'
11.	docom	docomɛt		'pipe holder'
12.	dɛɛr	dɛɛrɛt		'pipe'
13.	dɔŋ	doŋɛt		'mortar'
14.	gɛl	gɛlɛt		'turtle'
15.	guva	guvawɛt	k	'basket'
16.	ivool	ivoolɛt		'roan antelope'
17.	jaaman	jaamanɛt		'metal'
18.	kacawoc	kacawocɛt		'saddle bill'
19.	kavool	kavoolɛt		'boat'
20.	kavur	kavuɾɛt		'hat'
21.	kɛlaŋ	kɛlaŋɛt		'leopard'
22.	kidoy	kidoyɛt		'cloud'
23.	kiziwan	kiziwanɛt		'buffalo'
24.	kullɛn	kullɛnɛt		'ford'
25.	lotoŋkol	lotoŋkolɛt		'hand shield'
26.	morrootan	morrootanɛt		'scar'
27.	ŋadavar	ŋadavaɾɛt		'spider'
28.	ŋaantir	ŋaantiɾɛt		'hammerkop'
29.	ŋaza	ŋazawɛt	k	'hadada ibis'
30.	nyakilal	nyakilalɛt		'white beads'
31.	nyataran	nyataranɛt		'bride'
32.	olom	olomɛt		'ostrich'
33.	tabany	tabanyɛt		'table'
34.	tarabak	tarabayɛt	n,l	'fall trap'
35.	tor	toɾɛt		'gun'

36. torombil ——→ torombilɛt 'car'
37. voocu ——→ voocuwɛt k 'belt'
38. zeekmam ——→ zeekmamɛt 'darter'

When the singular noun ends in a vowel, the vowel is often dropped before adding the suffix -ɛt. The exceptions are 3, 5, 7, 8, 9, 15, 29, 34, and 37 above, where a semivowel is placed between the final vowel and the suffix.

39. agolo ——→ agolɛt 'fish hook'
40. akuba ——→ akubɛt 'bellows'
41. avuna ——→ avunɛt 'fish trap'
42. baaza ——→ baazɛt 'monitor'
43. barkama ——→ barkamɛt 'stool'
44. bavura ——→ bavurɛt 'manioc'
45. calli ——→ callɛt 'small garden'
46. cirlili ——→ cirlilɛt 'kite'
47. curri ——→ currɛt 'snare'
48. daŋki ——→ daŋkɛt 'sack'
49. darkama ——→ darkamɛt 'stool'
50. doŋka ——→ doŋkɛt 'club'
51. gizaza ——→ gizazɛt 'bottle'
52. karogɛ ——→ karogɛt 'fence'
53. kubaya ——→ kubayɛt 'cup'
54. loborri ——→ loborrɛt 'gecko'
55. lubuli ——→ lubulɛt 'elbow'
56. luguri ——→ luguɾɛt 'dung beetle'
57. lulli ——→ lullɛt 'basket'
58. momo ——→ momɛt 'womb'
59. motododo ——→ motododɛt 'large ox
60. ŋabolo ——→ ŋabolɛt 'debt'
61. ŋadodo ——→ ŋadodɛt 'woodpecker'
62. ŋazɛɛzi ——→ ŋazɛɛzɛt 'lioness'
63. ŋanabe ——→ ŋanabɛt 'sandpiper'
64. nyakaale ——→ nyakaalɛt 'camel'
65. nyaluru ——→ nyaluɾɛt 'quail'

66. nyawolo ——→ nyawolɛt 'big rat'
67. nyelaado ——→ nyelaadɛt 'fly whisk'
68. tambu ——→ tambɛt 'tobacco'
69. tavaara ——→ tavaarɛt 'mongoose'

3.1.4. Addition of a vowel as a suffix 35 examples

Addition of -a

1. caram ——→ carama 'skirt'
2. lotiim ——→ lotiima 'baboon'
3. tallamu ——→ talaamuwa k 'patas monkey'
4. titim ——→ titima 'shallow water'
5. tollom ——→ tolloma 'open-bill stork'

Addition of -ɛ

6. abic ——→ abicɛ 'hook'
7. akum ——→ akumɛ 'small trap'
8. apiyok ——→ apiyowɛ h,k 'ivory bracelet'
9. bilbil ——→ bilbilɛ 'minnow'
10. kodooc ——→ kodoocɛ 'large gourd'
11. lɛcɛrɛ ——→ lɛcɛrɛ 'chair'
12. loydoŋ ——→ loydoŋɛ 'small box'
13. locorlolloc ——→ locorlolowɛ j,k 'nile cabbage'
14. ŋolen ——→ ŋolenɛ 'tobacco cake'
15. ŋool ——→ ŋoolɛ 'lame person'
16. nyabok ——→ nyabowɛ h,k 'whip'
17. nyeelok ——→ nyeelowɛ h,k 'moon'
18. oriyaŋ ——→ oriyaŋɛ 'python'
19. oroɛ ——→ orɛɛ p 'dog'
20. rabarap ——→ rabarabɛ a 'slab of rock'
21. tibil ——→ tibilɛ 'sheath'
22. tiir ——→ tiirɛ 'swift runner'
23. zoloboc ——→ zolobocɛ 'bat'

Addition of -i

24.	bawuc ——→ bawuci		'back'
25.	boloc ——→ boloci		'lake'
26.	ceez ——→ ceezi		'house'
27.	guzul ——→ guzuli		'hyena'
28.	gunec ——→ guneci		'neutered goat'
29.	kuul ——→ kuuli		'tail'
30.	merkec ——→ merkeci		'sheep'
31.	morok ——→ moroki		'spear handle'
32.	ŋaa ——→ ŋaai		'woman'
33.	zigir ——→ zigiri		'donkey'

Addition of -o

34.	inyik ——→ inyigo	d	'mother-in-law'
35.	libir ——→ libiro		'side'

3.1.5. Addition of suffix -ti 12 examples

1.	aat ——→ aatti		'tongue'
2.	ibaa ——→ ibaati		'arm'
3.	inya ——→ inyati		'neck'
4.	kɛɛŋ ——→ kɛɛŋti		'stomach'
5.	kozoŋ ——→ kozoŋti		'knee'
6.	ŋuum ——→ ŋuumti		'face'
7.	oo ——→ ooti	g	'head'

Some nouns add the phoneme /e/ before the suffix -ti.

8.	alɛm ——→ alemeti	e	'throat'
9.	ɛlɛ ——→ eleeti	e	'body'
10.	magiz ——→ magizeti		'hunger'
11.	otok ——→ utugeti	f,d	'mouth'
12.	zɛnɛz ——→ zenzeti	e,p	'heart'

The above 12 nouns have a semantic relationship; all being body parts. Other body parts, however, take other plural forms.

3.1.6. Addition of suffix -ɛn 37 examples

1.	abarabarac	abarabaranɛn	j,o	'pepper'
2.	ariz	arzɛn	p	'ox'
3.	bayɛn	bayɛnɛn		'mark'
4.	burrɛn	burrɛnɛn		'tendon'
5.	caalu	caaluwɛn	k	'gruel'
6.	door	dooryɛn	k	'shelter'
7.	durec	durɛnɛn	e,j,o	'dry female'
8.	gɛnwaac	gɛnwaanɛn	j,o	'bandage'
9.	golu	goluwɛn	k	'grinding stone'
10.	gurguryɛn	gurguryɛnɛn		'round stone'
11.	kaluwa	kaluwanɛn	o	'fence'
12.	ki	kiyɛn	l	'mussel'
13.	koliyac	koliyanɛn	j,o	'hoe'
14.	kondec	kondɛnɛn	e,j,o	'gonolek'
15.	lamurdeen	lamurdɛɛnɛn	e	'pool'
16.	mom	momɛn		'womb'
17.	roweec	rowɛɛnɛn	e,j,o	'brain'
18.	talakec	talakɛnɛn	e,j,o	'forked stick'
19.	ti	tiyɛn	l	'grass ring'
20.	toy	toyɛn		'fish basket'
21.	tiyɛɛn	tiyɛɛnɛn		'zebra'
22.	toloyac	toloyanɛn	j,o	'yoke'
23.	zirac	ziranɛn	j,o	'eland'
24.	zoloc	zolɔnɛn	g,j,o	'bladder'
25.	zuurteen	zuurtɛɛnɛn	e	'brass wire'

Some of these nouns drop the final vowel before adding the suffix -ɛn.

26.	bɛrtu	bɛrtɛn	'female giraffe'
27.	cɔɔri	cɔɔrɛn	'leg bell'
28.	dɔɔri	dɔɔrɛn	'colobus tail'
29.	dɔŋka	dɔŋkɛn	'staff'
30.	kɛrca	kɛrcɛn	'bed'
31.	mana	manɛn	'garden'
32.	mɛɛdi	mɛɛdɛn	'grinding stone'
33.	miiji	miijɛn	'cattle camp'

34. vaco ——→ vacɛn 'guard platform'
35. vuuro ——→ vuurɛn 'whirlwind'
36. zari ——→ zarɛn 'thick grass'
37. ziizi ——→ ziizɛn 'twitch'

3.1.7. Addition of suffix -ok 35 examples

1. araan ——→ araanok 'thorn gate'
2. atiin ——→ atiinok 'relation'
3. ayɛn ——→ ayɛnok 'crack'
4. baagit ——→ baagitok 'side'
5. baal ——→ baalok 'dance ground'
6. baalin ——→ baalinok 'night'
7. baaz ——→ baazok 'treeless plain'
8. balal ——→ balalok 'uninhabited bush'
9. bɛnin ——→ bɛninok 'song'
10. boor ——→ booryok n 'clan'
11. boyɛn ——→ boyɛnok 'joke'
12. buul ——→ buulok 'age set'
13. caal ——→ caalok 'marriage song'
14. dayiin ——→ dayiinok 'food'
15. diilɛn ——→ diilɛnok 'payment'
16. gool ——→ goolok 'road'
17. irkit ——→ irkitok 'year'
18. korook ——→ koroogjok g,d,m 'homestead'
19. kuruma ——→ kurumayok l 'dance'
20. liŋliŋon ——→ liŋliŋonok 'work'
21. looc ——→ loocok 'world'
22. loolo ——→ looloyok g,l 'wet season'
23. mooriz ——→ moorizok 'disease'
24. ŋɛrloc ——→ ŋɛrlocok 'border'
25. ŋomtiin ——→ ŋomtiinok 'secret'
26. ŋoot ——→ ŋootok 'wind'
27. nyarat ——→ nyaratok 'channel'
28. okcaan ——→ okcaanok 'birth'
29. riiriny ——→ riirinyok 'dirt'
30. riiriton ——→ riiritonok 'reflection'
31. rooni ——→ rooniyok l 'judgment place'
32. tawan ——→ tawanok 'flood'

33. orbon ——→ oroonok 'battle'
34. weet ——→ weetok 'trip'
35. zɔɔz ——→ zɔɔzok 'word'

3.1.8. Addition of suffix -anɛ 22 examples

1. agiŋ ——→ agiŋanɛ 'fish dam'
2. ajwaal ——→ ajwaalanɛ 'shell'
3. akɔt ——→ akɔdanɛ b 'hiccup'
4. arut ——→ arudanɛ b 'north wind'
5. aturac ——→ aturaanɛ j 'nile perch'
6. balal ——→ balalanɛ 'gall'
7. botor ——→ botoranɛ 'egyptian goose'
8. dalduuk ——→ dalduuwanɛ h,k 'box'
9. dolaac ——→ dolaacanɛ 'ailment'
10. dɔm ——→ dɔmanɛ 'hammer'
11. jom ——→ jomanɛ 'horse'
12. luwak ——→ luwayanɛ h,l 'cattle byre'
13. luuruc ——→ luurucanɛ 'pestle'
14. mayuuk ——→ mayuuwanɛ h,k 'body odor'
15. molook ——→ mɔloowanɛ h,k 'sound'
16. nyool ——→ nyoolanɛ 'tortoise'
17. nywany ——→ nywanyanɛ 'wrist knife'
18. piim ——→ piimanɛ 'grain store'
19. rum ——→ rumanɛ 'cloth'
20. tuuk ——→ tuuwanɛ h,k 'well'
21. voroor ——→ vorooranɛ 'bank'
22. zuut ——→ zuutanɛ 'hawk'

3.1.9. Addition of suffix -it 13 examples

1. bɔc ——→ bɔcit 'fish spear'
2. borkony ——→ borkonyit 'waist'
3. cam ——→ camit 'arm band'
4. diic ——→ diicit 'small gourd'
5. duny ——→ dunyit 'hair of forehead'
6. dutuny ——→ dutunyit 'small pot'
7. laan ——→ laanit 'small arrow'
8. ŋaari ——→ ŋaariit 'medicine man'

9. nyoo ——————→ nyoowit k 'liver'
10. teny ——————→ tenyit 'herd'
11. vany ——————→ vanyit 'lair'
12. vɔɔl ——————→ vɔɔlit 'rabbit'
13. zɛɛr ——————→ zɛɛrit 'beard'

3.2. Deletion of final phoneme or phonemes to form the plural. (For alternate treatment of final consonant as suffix see Chapter 2, Section 2.5.)

Semantic relationships exist among many of these words. Altogether there are 96 examples in this section.

3.2.1. The final phoneme of the singular noun is dropped to form the plural. The phonemes dropped are always a /c/, /n/, /ŋ/, or /t/.

61 examples

Animals and Insects

1. agunac ——— aguna 'black ant'
2. bawot ——— bawo 'goat'
3. kajac ——— kaja 'kob'
4. kututuwec ——— kututuwɛ e 'snail'
5. locordowec ——— locordowɛ e 'safari ant'
6. nyoon ——— nyoo 'lamb'
7. rabɛnyoc ——— rabɛnyo 'locust'
8. zuben ——— zube 'young ewe'

Birds

9. boŋboŋec ——— boŋboŋɛ e 'pelican'
10. kibaallic ——— kibaalli 'bird'
11. kuduvan ——— kuduva 'hooded vulture'
12. minminyoc ——— minminyo 'tree duck'
13. toŋdowec ——— toŋdowɛ e 'knob nose goose'
14. wawoc ——— wawo 'white heron'
15. yɛɛlac ——— yɛɛla 'dove'

Body Parts

16. azan	aza			'thigh'
17. amɛn	amɛ			'bone'
18. bolanec	bolanɛ	e		'shoulder bone'
19. cɔdanec	cɔdanɛ	e		'shoulder'
20. dɔkizec	dɔkizɛ	e		'sore'
21. lobootot	lɔbɔɔtɔ	g		'ear lobe'
22. lomunyoŋec	lomunyoŋɛ	e		'hip'
23. kapuŋec	kapuŋɛ	e		'lung'
24. kɛberec	kɛbɛrɛ	e		'eye'
25. koloktec	kolokte	e		'intestines'
26. ŋalyamoc	ŋalyamo			'jaw'
27. ŋilolomec	ŋiloloms			'cheek'
28. oŋec	oŋɛ	e		'nose'
29. onyiit	onyii			'rib'
30. oton	oto			'horn'
31. otit	ɔti	g		'vein'
32. rucin	ruci			'skin'
33. zooc	zɔɔ	g		'foot'

Food

34. idiŋ	idi			'meat'
35. letec	lɛtɛ	e		'honey'
36. marac	mara			'biltong'
37. meyoc	meyo			'coffee'
38. morec	morɛ	e		'fat meat'
39. ŋadɛɛrac	ŋadɛɛra			'onion'

People

40. botoroc	botoro			'rich person'
41. codɛn	codɛ			'twin'
42. dakoc	dakɔ	g		'unloved person'
43. dole	dɔl	g		'baby'
44. kolen	kolɛ	e		'crowd'
45. matuwoc	matuwɔ	g		'old person'
46. rottin	rotti			'warrior'

Related to Plants

47. areemac	areema		'firewood'
48. arten	artɛ	e	'grass'
49. azanec	azanɛ	e	'wall pole'
50. baroc	barɔ	g	'bark rope'
51. bazoc	bazɔ	g	'yam'
52. iriyoc	iriyɔ	g	'acacia tree'
53. karradac	karrada		'thorny vine'
54. moloktoc	molɔktɔ	g	'joghan tree'
55. zolomon	zolomɔ	g	'charcoal'

Miscellaneous

56. donykonyec	donykonyɛ	e	'pipe stem'
57. kalben	kalbɛ	e	'bead'
58. korton	kɔrtɔ	g	'anthill'
59. ŋaracec	ŋaracɛ	e	'valley'
60. ŋarawec	ŋarawɛ	e	'small anthill'
61. nyamaarac	nyamaara		'yellow bead'

3.2.2. The plural is formed by dropping the final two phonemes. 26 examples

Animals, Insects, and Fish

1. kareecitot	kareecit		'red ant'
2. keloc	kel		'flea'
3. kɛlɛgit	kɛlɛk	d	'animal'
4. kulugit	kuluk	d	'fish'
5. mɛddɛnoc	mɛddɛn		'cricket'
6. ŋalamit	ŋalam		'sugar ant'
7. otonoc	oton		'maggot'
8. zizaacoc	zizaac		'termite'
9. zigicac	zigic		'tick'

Collectives

10. awococ	awoc		'possession'
11. cinotot	cinot		'moustache'
12. diicɛn	diic		'army'
13. kazacoc	kazac		'sand'
14. miniŋit	miniŋ		'spirit'
15. zirɛnoc	zirɛn		'cowrie'

Liquids

16. amotat	amot		'saliva'
17. dololonoc	dɔlɔlɔn	g	'phlegm'
18. maamoc	maam		'water'
19. molowot	molok	h,k	'sweat'
20. ŋolomoc	ŋolom		'gravy'

Plants

21. atiicoc	atiic		'3rd durra crop'
22. dazaac	daza		'2nd durra crop'
23. guulec	guul		'yooey tree'
24. imaacoc	imaac		'sorghum grass'
25. mutulac	mutul		'resin'
26. muuroc	muur		'habil tree'

The nouns which pluralize by dropping the final two phonemes are all words which infer vast amounts in the plural. Some of these words such as water, sand, and resin are usually used only in the plural although they do have singular forms.

3.2.3. The plural is formed by dropping the final three phonemes.

1. gɔracoc	gɔra		'maize'
2. iracoc	iɾa		'milk'
3. motooŋtoc	mɔtɔɔŋ	g	'tamarind'
4. ŋooruwoc	ŋooru		'bean'

5. labitot ——— labi 'durra'
6. tabacoc ——— taba 'wing'

All but one of the above examples are food commonly eaten by the Murle.

3.2.4. The plural is formed by dropping the final four phonemes. 3 examples

1. boŋitot ——— boŋ 'thread'
2. imitat ——— im 'hair'
3. inyitat ——— iny 'louse'

All the examples above are things found in large amounts.

3.3. Substitution of final phoneme or phonemes by other phonemes

There are 49 examples in this section.

3.3.1. The plural is formed by dropping the final /n/ and replacing it with a /t/. 3 examples

1. alaan ——— alaat 'chief'
2. kaboon ——— kaboot 'bag'
3. tagoon ——— tagoot 'giraffe'

3.3.2. The plural is formed by changing the final /i/ to a /k/.

This may be an example of a weak /k/ which has dropped out in the singular form when followed by the vowel /i/. With the removal of the /i/ in the plural, the /k/ then re-establishes itself. However, there is no way to prove this since the /k/ only appears in the plural form. 22 examples

Roles of People

1.	alɛmnyui	alɛmnyuk	'glutton'
2.	aliyai	aliyak	'fool'
3.	agoryai	agoryak	'thief'
4.	bacoi	bacok	'elder'
5.	boyoi	boyok	'orphan'
6.	cɛlloi	cɛllok	'hunter'
7.	dukcai	dukcak	'servant'
8.	kɛrnoi	kɛrnok	'guest'
9.	labjoi	labjok	'deceiver'
10.	layoi	layok	'beggar'
11.	libjoi	libjok	'criminal'
12.	miroi	mirok	'stranger'
13.	ŋilizo	ŋilizok	'incestuous persons'
14.	raaloi	raalok	'magician'
15.	toonyai	toonyak	'follower'
16.	voloŋyoi	voloŋyok	'liar'
17.	waŋnyai	waŋnyak	'adulteress'
18.	yitoi	yitok	'guide'

Pertaining to Plants

19.	balanoi	balanok	'grass band'
20.	payoi	payok	'branch'
21.	rukcoi	rukcok	'withe'
22.	toddoyoi	toddoyok	'amulet'

3.3.3. The plural is formed by dropping the last two phonemes /ac/, /ec/, or /oc/ and replacing them with /ɛn/. 21 examples

1.	akondoc	akondɛn	'pumpkin'
2.	banyoc	banyɛn	'earthworm'
3.	bokaacoc	bokaacɛn	'squacco heron'
4.	cavolec	cavolɛn	'groin'
5.	ciiroc	ciirɛn	'weed'
6.	coboc	cobɛn	'morning star'
7.	domkoc	domkɛn	'stork'

8.	donoc	donɛn		'waterbuck'
9.	dowoc	dowɛn		'seed'
10.	duŋac	duŋɛn		'tsetse fly'
11.	ginyginyec	ginyginyɛn		'heel'
12.	golec	golɛn		'cow with calf'
13.	lonorec	lonorɛn	g	'big calf'
14.	mudec	mudɛn		'mouse'
15.	ŋooroc	ŋoorɛn		'butter'
16.	nyogec	nyogɛn		'fence gate'
17.	pareec	parɛɛn	e	'arrow'
18.	riimoc	riimɛn		'toothbrush'
19.	roobec	roobɛn		'feather'
20.	tondowec	tondowɛn		'knob-nose goose'
21.	zezejoc	zezejɛn		'boil'

3.3.4. The plural is formed by dropping the final /ɛt/ or /ɛɛt/ and replacing it with /a/ or /aa/.

3 examples

1.	azɛɛt	azaa		'ewe'
2.	bilɛt	bila		'thorn'
3.	cavɛt	cava		'shoe'

3.4. Irregular

The following nouns are irregular in forming the plural. Many of these words involve internal changes. Other nouns however, are similar or contain combinations of the regular classifications. It takes a stretching of the rules to make these nouns fit into a regular system so they have been classified as irregular.

35 examples

1.	agɛrnat	agɛro		'root'
2.	ayiyoc	ayiyi		'dry twig'
3.	aziit	azɛɛn		'finger'
4.	bɛ	biyɛn		'stone'
5.	bolotot	bolok	g	'leaf'
6.	buurnɛt	buuro		'egg'
7.	caramkurumoc	caramkurumɛ		'jacana'
8.	coolnot	coolo	g	'animal dung'

9.	coloyit	colok	'claw'
10.	dortot	dorinya	'forest'
11.	ɛɛt	ɔl	'man'
12.	gabareen	gabara	'slave'
13.	gi	kaal	'thing'
14.	iniyot	inik	'eyelash'
15.	itat	in	'ear'
16.	kɛɛz	kɛɛzin	'breast'
17.	kɛɛt	kɛɛn	'tree'
18.	kiroŋit	kɛroŋ	'fly'
19.	komolit	komolo	'thumb'
20.	kuwin	kuwa	'skin'
21.	logooz	lɔgɔɔz	'youth'
22.	lonitot	loo	'mosquito'
23.	loŋorboboc	loŋorbobu	'cobweb'
24.	maa	maat	'lion'
25.	maanyi	maanyigi	'owner'
26.	mazeec	mazi	'firestick'
27.	meegowot	meegok	'bee'
28.	mol	maala	'calf'
29.	monyatot	monyon	'star'
30.	taŋ	tiin	'cow'
31.	tɛɛrnat	teeri	'testicle'
32.	valeyit	vallak	'finger nail'
33.	wannoc	wa	'hip'
34.	ziit	ziik	'hour, metal'
35.	zuuri	zuuritwa	'male buffalo'

CHAPTER 4

Noun Cases

1. Introduction

Nouns in Murle take case endings: accusative, nominative, genitive, and locative/instrumental. These are the same four cases mentioned by Tucker and Bryan. (1966,p. 376) The nouns therefore take different suffixes depending on their use in a given clause. Pronouns also take case, but will be discussed in Chapter 6.

A noun has both a singular and plural form. Each case therefore has two forms, one for singular and one for plural. The case suffixes are added to the end of the singular and plural noun forms.

The following is the formula for nouns.

noun =	+	Nuc Item	noun	+	Mar Num	sing/pl	
	+	Mar Case	acc,nom,gen,loc/ins				

2. Accusative Case

This case marks the object in a clause.

2.1. The accusative case has no case marker. When a noun appears in a clause with no case marker, it is usually in the accusative case. The elicitation form of a noun is also in the accusative case. Nominative, genitive, and locative/instrumental cases can only be found in the context of a clause, never in isolation.

2.2. Singular noun

Kacin naana aŋɔl.
I see I elephant
'I see an elephant.'

aŋɔl Item = aŋɔl = noun
Num = Ø = sing
Case = Ø = acc

2.3. Plural noun

Kacin naana aŋɔlwa.
I see I elephants
'I see elephants.'

aŋɔlwa Item = aŋɔl = noun
Num = -wa = pl
Case = Ø = acc

3. Nominative Case

This case marks the subject of a clause.

3.1. The nominative case is marked by -i or -ɛ in the singular, -a in the plural.

3.2. Singular noun

Abil guumuni kɛɛt taddina.
stands owl tree up
'There is an owl up in the tree.'

guumuni Item = guumun = noun
Num = Ø = sing
Case = -i = nom

The nominative marker -i is by far the most common, however, -ɛ is occasionally used.

Or torɛ kajac.
shoots gun kob
'The gun shoots a kob.'

torɛ
Item = tor = noun
Num = Ø = sing
Case = -ɛ = nom

3.3. Plural noun

ɛɛl torɛta ceeza.
stand guns in house
'The guns are in the house.'

torɛta
Item = tor = noun
Num = -ɛt = pl
Case = -a = nom

3.4. When the noun form ends in a vowel, an /n/, /y/, or /w/ is inserted before the nominative suffix. This insertion of a consonant before a vowel suffix takes place with all case endings. See Chapter 2: 4.1 and 6.5.

Adak agulwana kulugit.
eat crocodiles fish
'The crocodiles eat the fish.'

agulwana
Item = agul = noun
Num = -wa = pl
Case = -(n)a = nom

Agam kayuuwi kulugit.
catches eagle fish
'The eagle catches a fish.'

kayuuwi
Item = kayuu = noun
Num = Ø = sing
Case = -(w)i = nom

3.5. There are some common nouns that do not take nominative case endings. When this happens the nominative case must be understood by clause context and position to keep it separate from the accusative. Most of these are nouns ending in a vowel. These usually take no nominative endings in either the singular or the plural. Others will take no singular nominative case ending but will take the plural case ending.

Akat dila kajac.
kills spear kob
'The spear kills the kob.'

dila
Item = dila = noun
Num = Ø = sing
Case = Ø = nom (by clause context)

Akat dilanya kaja.
kill spears kobs
'The spears kill the kobs.'

dilanya
Item = dila = noun
Num = -nya = pl
Case = Ø = nom (by clause context)

Other nouns will take no singular nominative case ending, but will take the plural case ending if the plural form ends in a consonant.

Acin maa kiziwan.
sees lion buffalo
'The lion sees the buffalo.'

maa
Item = maa = noun
Num = Ø = sing
Case = Ø = nom (by clause context)

Acin maata kiziwan.
see lions buffalo
'The lions see the buffalo.'

maata Item = maa = noun
Num = -t = pl
Case = -a = nom

3.6. The normal clause order in Murle is PSO. See Chapter 8. When this word order is used, the above nominative rules apply. It is also acceptable to change the word order. This happens frequently in negative or question clauses, but can also happen occasionally in declarative clauses. When the word order changes, there are specific rules concerning nominative case endings.

3.6.1. When the subject precedes the predicate, the nominative ending is dropped and the subject is understood by its position in the clause.

Acin kirɛɛri oroz.
sees jackal dog
'The jackal sees the dog.'

Kirɛɛr acin oroz.
jackal sees dog
'The jackal sees the dog.'

3.6.2. When the subject is followed by a modifier but maintains the normal PSO order, the nominative case marker is still mandatory. See Chapter 7.

Akɔ aguli ci appi liila.
goes crococile big into river
'The big crocodile goes into the river.'

3.6.3. When the subject is followed by a modifier but

reverses the word order to SPO, then the nominative case marker is optional.

Aguli ci appi akɔ liila.
Agul ci appi akɔ liila.
crocodile big goes into river
'The big crocodile goes into the river.'

3.6.4. When the subject is in the normal PSO order and is followed by a possessive pronoun, the nominative marker does not occur on the noun, but the nominative marker -ɛ occurs on the possessive pronoun instead. This happens only with singular pronouns. See Chapter 7.

Agam oroz cinɛ dokol.
catches dog his cat
'His dog catches the cat.'

4. The Genitive Case

This case marks possession.

4.1. The genitive case is marked by -o or occasionally -u in the singular, -u in the plural.

4.2. The noun in the genitive case is always preceded by the particle ci or o. These two particles are interchangeable and generally carry the meaning 'of'.

4.3. Singular noun

Kacin ɔɔ ci taŋo.
I see head of cow
'I see the head of the cow.'

taŋo Item = taŋ = noun
Num = Ø = sing
Case = -o = gen

Kanyuugi karogɛ ci ceezu.
I close door of house
'I close the door of the house.'

ceezu
Item = ceez = noun
Num = Ø = sing
Case = -u = gen

4.4. Plural noun

Kanyei kɛɛn ci mɛlɛɛkwanu.
I have trees of axes
'I have the handles of the axes.'

mɛlɛɛkwanu
Item = mɛlɛɛk = noun
Num = -wa = pl
Case = -(n)u = gen

Kateedi payok ci kɛɛnu.
I cut branches of trees
'I am cutting the branches of trees.'

kɛɛnu
Item = kɛɛn = noun
Num = kɛɛn = pl (portmanteau)
Case = -u = gen

4.5. When the genitive noun is followed by a modifier, the noun drops its case ending.

Kacin kuul ci oroz cin.
I see tail of dog his
'I see the tail of his dog.'

oroz
Item = oroz = noun
Num = Ø = sing
Case = Ø = gen (indicated by the preceding ci.)

Kacin zɔɔ ci kiziwanɛt ci adikir.
I see tracks of buffalos big
'I see the tracks of the big buffalos.'

kiziwanɛt Item = kiziwan = noun
Num = -ɛt = pl
Case = Ø = gen (indicated by the preceding ci.)

5. Locative/Instrumental Case

This case marks a noun either as a specific location or as an instrument.

5.1. The locative/instrumental case is marked by -a in the singular, -i or -ɛ in the plural.

5.2. Singular noun

Adɔkɔny mudeci ceeza.
runs mouse into house
'The mouse runs into the house.'

ceeza Item = ceez = noun
Num = Ø = sing
Case = -a = loc

Kakati naana kajac tora.
I kill I kob with a gun
'I kill a kob with a gun.'

tora Item = tor = noun
Num = Ø = sing
Case = -a = ins

5.3. Plural noun

Kor naana kuluk maami.
I spear I fish in the water
'I spear fish in the water.'

maami

Item = maam = noun
Num = Ø = pl
Case = -i = loc

Kakati naana kaja dilanyai.
I kill I kobs with spears
'I kill kobs with spears.'

dilanyai

Item = dila = noun
Num = -nya = pl
Case = -i = ins

Kagoon ceez koroyɛnɛnɛ.
I make house with bamboos
'I am making a house with bamboos.'

koroyɛnɛnɛ

Item = koroyɛn = noun
Num = -ɛn = pl
Case = -ɛ = ins

5.4. When a noun in the locative/instrumental case is followed by a modifier, the case marker changes to -ɛ in both the singular and the plural.

Abil dila ceezɛ ci colai.
stands spear in house new
'The spear is in the new house.'

Kacin naana kibaalli kɛɛnɛ ci appi.
I see I birds in trees large
'I see birds in the large trees.'

Kakati naana kajac dilawɛ ci appi.
I kill I kob with spear large
'I kill the kob with a large spear.'

Katɛɛt naaga kɛɛn mɛlɛɛkwanɛ ci appi.
We cut we trees with axes large
'We are cutting the trees with big axes.'

5.5. The exact meaning of the locative, (to, from, in, out, etc.) is understood by the context in which it is used. There are also some locative words which can be used to emphasize the location or make it more specific. These locative words follow the locative noun, which then drops the locative suffix.

Arek kɛlaŋi idiŋ kɛɛt taddina.
puts leopard meat tree up
'The leopard puts the meat up in the tree.'

Abil maa kɛɛn loota.
stand lion trees under
'The lion stands under the trees.'

5.6. Locative can also be marked in the verb by attaching a directional suffix. When this happens, the locative case marker is dropped from the noun. The locative noun is then understood by context and by its position within the clause. In the first example below, the locative noun carries the normal case ending. In the second example the suffix -ek on the verb aturanek marks directional and replaces the locative marker on the noun.

Aturan logoti tiin balala.
drives boy cows to wilderness
'The boy drives the cows to the wilderness.'

Aturanek logoti tiin balal.
drives to boy cows wilderness
'The boy drives the cows to the wilderness.'

5.7. Place Names.

When the locative is a place name which ends in a vowel, the locative suffix is -kti.

Awo logoti Jubakti.
walks boy to Juba
'The boy walks to Juba.'

5.8. When a place name ends in a consonant, it takes the normal -a suffix.

Kabaai naana Pibora.
I live I at Pibor
'I live at Pibor.'

6. Chart of Case Suffixes

	Singular	Plural
Acc	ø	ø
Nom	-i (-ɛ)	-a
Gen	-o (-u)	-u
Loc/Ins	-a (-ɛ)	-i (-ɛ)

CHAPTER 5

Verb Morphology

1. Introduction

1.1. In Murle each verb has three modes: imperfect, perfect, and subjunctive. These are the key to the entire verb system. The other margins--reciprocal, passive, directional, and undergoer--are built on these three modes.

Imperfect Mode:	action presently going on
kajin naana	'I am asking'
Perfect Mode:	action complete
kijina naana	'I asked'
Subjunctive Mode:	a subordinate form which only follows another verb
karɔɔŋ kijin	'I want to ask'

1.2. Seven persons can be marked in each mode:

1st person singular
2nd person singular
3rd person singular

1st person plural inclusive
1st person plural exclusive
2nd person plural
3rd person plural

Gender is not indicated in the verbs.

1.3. The stem of each verb is the 2nd person singular subjunctive, which is the same as the singular imperative form. All verb forms are built on this stem.

2. Verb Core

2.1. The verb forms within the three active modes comprise the verb core because they are the minimal forms which can stand alone. Included within this verb core are person, mode marker, nucleus, and number.

verb core = ± Mar (Per) ⟨k-⟩ / >per of subj + Mar (Mode) mode marker
+ Nuc (Action) verb stem ± Mar (Num) num marker / >num of subj ± Mar (Per) per marker / >per of subj

2.2. General Rules for the Three Active Modes

2.2.1. The following 2 paradigms, jin 'ask', and tɔɔt 'climb' will serve as a reference for the following rules.

	Imperfect	Perfect	Subjunctive
Sing			
1st	kajin	kijina	kijin
2nd	ajin	ijinu	jin
3rd	ajin	ijin(un)	kijin
Plural			
1st in	kajin	kijinit	kijinit
1st ex	kajinna	kijinta	kijinta
2nd	ajinnu	ijintu	ijinit
3rd	ajin	ijinit	kijinit
Sing			
1st	katoodi	kotooda	kɔtɔɔt
2nd	atoodi	otoodu	tɔɔt
3rd	atɔɔt	otɔɔt (un)	kɔtɔɔt
Plural			
1st in	katɔɔt	kotoodit	kotoodit
1st ex	katoodda	kotoodda	kotoodda
2nd	atooddu	otooddu	otoodit
3rd	atɔɔt	otoodit	kotoodit

The changes from /ɔ/ to /o/ and /d/ to /t/ are morphophonemic changes. See Chapter 2.

2.2.2. k- before the mode marker is the sign for 1st person singular and plural.

k- is also the 3rd person marker for both singular and plural in the subjunctive mode.

2.2.3. The mode marker for the imperfect mode is the prefix a-.

The mode marker for the perfect and subjunctive modes is the stem vowel occurring immediately before the stem.

2.2.4. Reduplication of the final consonant of the stem is the sign of the 1st person plural exclusive and the 2nd person plural in the imperfect mode.

2.2.5. -it after the verb stem is the marker for plural in the perfect and subjunctive modes. The /i/ drops out when this suffix is followed by another suffix, leaving -t as the plural marker.

2.2.6. -a is the marker for the 1st person plural exclusive in all three modes.

-a is also the marker for the 1st person singular in the perfect mode.

2.2.7. -u is the marker for the 2nd person plural in both the imperfect and perfect modes.

-u is also the marker for 2nd person singular in the perfect mode.

2.2.8. Because some prefixes and suffixes can mark different things, a number of homophonous forms occur in a paradigm.

a. The 3rd person imperfect is the same form in both the singular and the plural. The 2nd person singular is also the same if the verb stem does not end in a stop.

b. The 1st person singular and the 3rd person singular are the same in the subjunctive mode.

c. The 1st person plural exclusive is the same in both the perfect and subjunctive modes.

d. The 3rd person plural perfect and the 2nd person plural subjunctive are the same.

e. The 1st person plural inclusive is the same in both the perfect and the subjunctive, and the 3rd person plural in the subjunctive is also the same.

2.3. The Imperfect Mode

2.3.1. The sign of the imperfect mode is the prefix a- immediately before the verb stem.

2.3.2. The 1st person singular imperfect is marked by a k- before the imperfect marker a-. When the verb stem ends in a stop, the suffix -i is added following the stem.

1st per sing imp = + Mar (1st Per) <k-> + Mar (Imp) <a-> + Nuc (Action) | verb stem

+ Mar (Sing) <-i> / final stop

kajin			katoodi			
k	a	jin	k	a	tood	i
Per	Mode	Action	Per	Mode	Action	Num
1st	imp	ask	1st	imp	climb	sing
'I am asking'			'I am climbing'			

2.3.3. In the second person singular imperfect, the person is unmarked before the imperfect marker a-. If the final consonant of the verb stem ends in a stop, then -i is added after the stem.

2nd per sing imp = + Mar (Imp) <a-> + Nuc (Action) | verb stem

+ Mar (Sing) <-i> / final stop

ajin		atoodi		
a	jin	a	tood	i
Mode	Action	Mode	Action	Num
imp	ask	imp	climb	sing
'you are asking'		'you are climbing'		

2.3.4. The 3rd person singular imperfect is unmarked before the mode marker a-. It is exactly like the 2nd person singular in the imperfect mode except that it does not take a number suffix even after a stop.

3rd per sing imp = + Mar (Imp) <a-> + Nuc (Action) verb stem

ajin		atɔɔt	
a	jin	a	tɔɔt
Mode	Action	Mode	Action
imp	ask	imp	climb
'he is asking'		'he is climbing'	

2.3.5. The 1st person plural inclusive imperfect is marked by the prefix k- before the imperfect mode marker a-. It is therefore often the same as the 1st person singular, except that it does not take a suffix if the verb stem ends in a stop.

1st per pl incl imp = + Mar (1st Per) <k-> + Mar (Imp) <a-> + Nuc (Action) verb stem

kajin			katɔɔt		
k	a	jin	k	a	tɔɔt
Per	Mode	Action	Per	Mode	Action
1st	imp	ask	1st	imp	climb
'we all are asking'			'we all are climbing'		

2.3.6. The 1st person plural exclusive imperfect is marked by the prefix k- before the imperfect marker a-. At the end of the word there is a reduplication of the final stem consonant plus -a.

1st per pl excl imp = + Mar (1st Per) ⟨k-⟩ + Mar (Imp) ⟨a-⟩
+ Nuc (Action) verb stem + Mar (Pl) redup of final cons
+ Mar (1st Per Ex) ⟨-a⟩

Kajinna					katoodda				
k	a	jin	n	a	k	a	tood	d	a
Per	Mode	Action	Num	Per	Per	Mode	Action	Num	Per
1st	Imp	ask	pl	1st ex	1st	Imp	climb	pl	1st ex
'We are asking.'					'We are climbing.'				

2.3.7. The 2nd person plural imperfect is marked by the lack of a phoneme before the imperfect marker a- and a reduplication of the final consonant of the stem plus -u.

2nd per pl imp = + Mar (Imp) ⟨a-⟩ + Nuc (Action) verb stem
+ Mar (Pl) redup of final cons + Mar (2nd Per) ⟨-u⟩

ajinnu				atooddu			
a	jin	n	u	a	tood	d	u
Mode	Action	Num	Per	Mode	Action	Num	Per
imp	ask	pl	2nd	imp	climb	pl	2nd
'you all are asking'				'you all are climbing'			

The reduplication of the final consonant of the verb stem in 1st person plural exclusive and 2nd person plural imperfect has some exceptions.

a. When the verb stem ends in either /m/ or /ŋ/, the following letter becomes /ny/.

nim	kanimnya
'be able'	'we are able'
doŋ	kadoŋnya
'carry'	'we are carrying'

b. When the verb stem ends with either /b/ or /g/, the following phoneme becomes /j/.

kɛɛp	kakɛɛbja
'read'	'we are reading'
nyook	kanyoogja
'close'	'we are closing'

c. When the verb stem ends in an/r/, the following phoneme becomes /n/.

tarar	kararna
'laugh'	'we are laughing'

There are several other exceptions where /n/ is added rather than a reduplication of the consonant, but these are rare and unpredictable.

d. When the verb stem ends in a vowel, then /n/ or /y/ is added before the final person suffix. /n/ is the phoneme most commonly used in this position, but there is no way of predicting which one will be used in a given verb.

mada	kamadana
'find'	'we are finding'
kavɔ	kavɔya
'we are all going'	'we are going'

2.3.8. The 3rd person plural imperfect is marked only by the imperfect marker a- before the stem. This form is identical with the 3rd person singular.

3rd per pl imp = + Mar (Imp) ⟨a-⟩ + Nuc (Action) | verb stem

ajin		atɔɔt	
a	jin	a	tɔɔt
Mode	Action	Mode	Action
imp	ask	imp	climb
'they are asking'		'they are climbing'	

2.4. The Perfect Mode

2.4.1. The sign of the perfect mode is a reduplication of the vowel of the verb stem immediately before the stem.

2.4.2. The 1st person singular perfect is marked by a k- before the perfect marker and an -a following the stem.

1st per sing perf = + Mar (1st Per) ⟨k-⟩ + Mar (Perf) redup of stem vowel + Nuc (Action) verb stem + Mar (1st Per) ⟨-a⟩

kijina				kotooda			
k	i	jin	a	k	o	tood	a
Per	Mode	Action	Per	Per	Mode	Action	Per
1st	perf	ask	1st	1st	perf	climb	1st
'I asked'				'I climbed'			

2.4.3. The 2nd person singular perfect is marked by the lack of a prefix before the perfect marker and a -u following the stem.

2nd per sing perf = + Mar (Perf) redup of stem vowel + Nuc (Action) verb stem + Mar (2nd Per) ⟨-u⟩

ijinu			otoodu		
i	jin	u	o	tood	u
Mode	Action	Per	Mode	Action	Per
perf	ask	2nd	perf	climb	2nd
'you asked'			'you climbed'		

2.4.4. The 3rd person singular perfect has no prefix before the perfect marker and usually no suffix after the stem. There is an alternate form which adds an -un suffix after the stem.

3rd per sing perf =	+ Mar (Perf)	redup of stem vowel			
	+ Nuc (Action)	verb stem	+ Mar (3rd Per)	⟨-un⟩	

ijin ~ ijinun			otoot ~ otoodun		
i	jin	(un)	o	toot	(un)
Mode	Action	Per	Mode	Action	Per
perf	ask	3rd	perf	climb	3rd
'he asked'			'he climbed'		

2.4.5. The 1st person plural inclusive perfect is marked by k- before the perfect marker and the suffix -it after the stem.

1st per pl incl perf =	+ Mar (1st Per)	⟨k-⟩				
	+ Mar (Perf)	redup of stem vowel	+ Nuc (Action)	verb stem	+ Mar (Pl)	⟨-it⟩

kijinit				kotoodit			
k	i	jin	it	k	o	tood	it
Per	Mode	Action	Num	Per	Mode	Action	Num
1st	perf	ask	pl	1st	perf	climb	pl
'we all asked'				'we all climbed'			

2.4.6. The 1st person plural exclusive perfect is marked by the prefix k- before the perfect marker and the -it suffix plus the -a suffix after the stem. When the suffix -it is followed by another suffix, the /i/ drops out so the surface form becomes -t.

1st per pl excl perf =	+ Mar (1st Per)	⟨k-⟩	+ Mar (Perf)	redup of stem vowel			
	+ Nuc (Action)	verb stem	+ Mar (Pl)	⟨-t⟩	+ Mar (1st Per Ex)	⟨-a⟩	

kijinta					kotoodda				
k	i	jin	t	a	k	o	tood	d	a
Per	Mode	Action	Num	Per	Per	Mode	Action	Num	Per
1st	perf	ask	pl	1st ex	1st	perf	climb	pl	1st ex
'we asked'					'we climbed'				

There are some exceptions where the plural is not marked by -t.

a. When the verb stem ends in a /d/, then the following /t/ also becomes a /d/, as in kotoodda.

b. When the verb stem ends in a vowel, then the /t/ is replaced by a /w/ or /y/.

mada	kamadawa
'find'	'we found'
no	kunuya
'follow'	'we followed'

c. When the verb stem ends in a /ny/, the /t/ changes to /c/.

tɛny	kɛtɛnyca
'build'	'we built'

The above three morphophonemic adjustments also occur in the 2nd person plural in the perfect mode.

2.4.7. The 2nd person plural perfect is marked by the perfect marker and the suffixes -it and -u after the stem. Again the /i/ drops out of the suffix -it, so the actual surface form becomes -t.

2nd per pl perf = + Mar (Perf) | redup of stem vowel

+ Nuc (Action) | verb stem + Mar (Pl) | ⟨-t⟩ + Mar (2nd Per) | ⟨-u⟩

ijintu	otooddu
i jin t u	o tood d u
Mode Action Num Per	Mode Action Num Per
perf ask pl 2nd	perf climb pl 2nd
'you all asked'	'you all climbed'

2.4.8. The 3rd person plural perfect is marked by the perfect marker before the stem, and the suffix -it after the stem.

3rd per pl perf = + Mar (Perf) | redup of stem vowel

+ Nuc (Action) | verb stem + Mar (Pl) | ⟨-it⟩

ijinit	otoodit
i jin it	o tood it
Mode Action Num	Mode Action Num.
perf ask pl	perf climb pl
'they asked'	'they climbed'

2.5. The Subjunctive Mode.

2.5.1. The sign of the subjunctive mode is a reduplication of the stem vowel immediately before the stem.

2.5.2. The 1st person singular subjunctive is marked by a k- preceding the subjunctive marker.

1st per sing subjc = + Mar (1st Per) | ⟨k-⟩

+ Mar (Subjc) | redup of stem vowel + Nuc (Action) | verb stem

karɔɔŋ kijin	karɔɔŋ kɔtɔɔt
k i jin	k ɔ tɔɔt
Per Mode Action	Per Mode Action
1st subjc ask	1st subjc climb
'I want to ask'	'I want to climb'

It is necessary to use karɔɔŋ 'want' in the above examples, since subjunctive only occurs in a subordinate position.

2.5.3. The 2nd person singular subjunctive does not have an overt mode marker, so the surface form is the stem standing alone. As before mentioned, this is also the singular imperative form.

2nd per sing subjc = + Mar (Subjc) Ø + Nuc (Action) verb stem

arɔɔŋ jin	arɔɔŋ tɔɔt
jin	tɔɔt
Action	Action
ask	climb
'you want to ask'	'you want to climb'

2.5.4. The 3rd person singular subjunctive is marked by k- before the subjunctive marker. It is exactly the same form as the 1st person singular subjunctive.

3rd per sing subjc = + Mar (3rd Per) ⟨k-⟩

+ Mar (Subjc) redup of stem vowel + Nuc (Action) verb stem

arɔɔŋ kijin	arɔɔŋ kɔtɔɔt
k i jin	k ɔ tɔɔt
Per Mode Action	Per Mode Action
3rd subjc ask	3rd subjc climb
'he wants to ask'	'he wants to climb'

2.5.5. The 1st person plural inclusive subjunctive is marked by the prefix k- preceding the subjunctive marker, and the suffix -it following the stem.

1st per pl incl subjc = + Mar (1st Per) ⟨k-⟩

+ Mar (Subjc) redup of stem vowel + Nuc (Action) verb stem + Mar (Pl) ⟨-it⟩

karɔɔŋ kijinit				karɔɔŋ kotoodit			
k	i	jin	it	k	o	tood	it
Per	Mode	Action	Num	Per	Mode	Action	Num
1st	subjc	ask	pl	1st	subjc	climb	pl
'we all want to ask'				'we all want to climb'			

2.5.6. The 1st person plural exclusive subjunctive is marked by the prefix k- before the subjunctive marker, and by the suffixes -it and -a following the stem. As before, the /i/ drops out.

1st per pl excl subjc = + Mar (1st Per) ⟨k-⟩
+ Mar (Subjc) | redup of stem vowel + Nuc (Action) | verb stem + Mar (Pl) ⟨-t⟩
+ Mar (1st Per Ex) ⟨-a⟩

karɔɔŋnya kijinta					karɔɔŋnya kotoodda				
k	i	jin	t	a	k	o	tood	d	a
Per	Mode	Action	Num	Per	Per	Mode	Action	Num	Per
1st	subjc	ask	pl	1st ex	1st	subjc	climb	pl	1st ex
'we want to ask'					'we want to climb'				

2.5.7. The 2nd person plural subjunctive is marked by the subjunctive marker, and the suffix -it following the stem.

2nd per pl subjc = + Mar (Subjc) | redup of stem vowel
+ Nuc (Action) | verb stem + Mar (Pl) ⟨-it⟩

arɔɔŋnyu ijinit			arɔɔŋnyu otoodit		
i	jin	it	o	tood	it
Mode	Action	Num	Mode	Action	Num
subjc	ask	pl	subjc	climb	pl
'you all want to ask'			'you all want to climb'		

2.5.8. The 3rd person plural subjunctive is marked by k- preceding the subjunctive marker, and the suffix -it following the stem.

3rd per pl subjc = +Mar (3rd Per) ⟨k-⟩

+Mar (Subjc) | redup of stem vowel + Nuc (Action) | verb stem + Mar (Pl) ⟨-it⟩

aɔɔŋ	kijinit			aɔɔŋ	kotoodit		
k	i	jin	it	k	o	tood	it
Per	Mode	Action	Num	Per	Mode	Action	Num
3rd	subjc	ask	pl	3rd	subjc	climb	pl
'they want to ask'				'they want to climb'			

2.6. See Table 1 on the following page which is a chart of verbs in all three modes.

2.7. Irregularities

2.7.1. Most verbs follow the system given in the preceding pages. Altogether about 2/3 of the verbs have stems ending in a consonant and these are generally the most regular, consistently following the normal rules.

2.7.2. Verbs which have a stem ending in a vowel are more inconsistent, since morphophonemic adjustments must be made in order to attach the suffixes. Even these are usually consistent with the rules except for one or two forms.

2.7.3. Some verbs have different stems in the singular and plural. However, the prefixes and suffixes usually remain consistent with the preceding rules.

kakɔ	kavɔ
'I go'	'we go'

TABLE 1 Chart of Verbs in All Three Modes

	IMPERFECT	PERFECT	SUBJUNCTIVE
General Rule	a- before the verb stem	reduplication of stem vowel before stem	reduplication of stem vowel before stem
1st Sing	Pre = k- kajin Suf = -- or -i if final consonant ends in a stop	Pre = k- kijina Suf = -a	Pre = k- kijin Suf = --
2nd Sing	Pre = -- ajin Suf = -- or -i if final consonant ends in a stop	Pre = -- ijinu Suf = -u	Pre = -- jin Suf = -- The mode is not overtly marked.
3rd Sing	Pre = -- ajin Suf = --	Pre = -- ijin Suf = -- or -un	Pre = k- kijin Suf = --
1st Pl Incl	Pre = k- kajin Suf = --	Pre = k- kijinit Suf = -it	Pre = k- kijinit Suf = -it
1st Pl Excl	Pre = k- kajinna Suf = reduplication of final consonant plus -a	Pre = k- kijinta Suf = -it + -a (the i drops out)	Pre = k- kijinta Suf = -it + -a (the i drops out)
2nd Pl	Pre = -- ajinnu Suf = reduplication of final consonant plus -u	Pre = -- ijintu Suf = -it + -u (the i drops out)	Pre = -- ijinit Suf = -it
3rd Pl	Pre = -- ajin Suf = --	Pre = -- ijinit Suf = -it	Pre = k- kijinit Suf = -it

2.7.4. There are some verbs where the imperative form (2nd person subjunctive) is not the stem used in the rest of the paradigm. These only involve a few commonly used verbs.

ija	kakun
'come'	'I come'
bitɔ	kakɔ
'go'	'I go'

2.7.5. Verb stems beginning with a /t/ can do one of two things: the stem can remain consistent throughout the paradigm, or it can metathesize in the imperfect. When metathesis occurs, the imperfect marker becomes a reduplication of the stem vowel, rather than the normal imperfect marker a-. The following verbs are examples of metathesis.

tɛny	kɛnyɛti
'build'	'I build'
tur	kurùti
'pound'	'I pound'

3. Margins

3.1. The following formula shows all the possible margins which can occur on a verb core.

expanded verb = +Nuc (Action) | verb core +Mar (Rec) | rec marker

+Mar (Pass) | pass marker + Mar (Direc) | direc marker + Mar (Und) | per marker per of object

+Mar (Intr) | intr marker

The only two margins which can co-occur are directional and undergoer.

3.2. Reciprocal

3.2.1. The reciprocal is used in verbs in which the subjects do the action to each other, e.g. 'they talk with each other', 'we fight with each other', 'you all argue with each other'. Reciprocal can also indicate doing things together, e.g. 'we cook together', 'they pound grain together'.

3.2.2. Since there must be two or more participants in the reciprocal, it can occur only in the plural forms.

3.2.3. The reciprocal occurs in all three modes and is formed by adding the reciprocal marker -ɔ. In the imperfect mode, this reciprocal marker occurs immediately following the verb stem. In the perfect and subjunctive modes, the reciprocal marker follows the number marker. The reciprocal marker -ɔ will change to an -o when followed by another suffix, in order to agree with its environment.

3.2.4. Reciprocal Forms

Imperfect Mode

1st per pl incl = kadaŋɔ
'we are all arguing with each other'
1st per pl excl = kadaŋona
'we are arguing with each other'
2nd per pl = adaŋonu
'you all are arguing with each other'
3rd per pl = adaŋɔ
'they are arguing with each other'

kadaŋona

k	a	daŋ	o	n	a
Per	Mode	Action	Rec	Num	Per
1st	imp	argue	rec	pl	1st ex

'we are arguing with each other'

Perfect Mode

1st per pl incl = kadaŋto
'we all argued with each other'
1st per pl excl = kadaŋtowa
'we argued with each other'
2nd per pl = adaŋtowu
'you all argued with each other'
3rd per pl = adaŋto
'they argued with each other'

adaŋtowu
a daŋ t o wu
Mode Action Num Rec Per
perf argue pl rec 2nd
'you all argued with each other'

Subjunctive Mode

1st per pl incl = kadaŋto
'we all (want to) argue with each other'
1st per pl excl = kadaŋtowa
'we (want to) argue with each other'
2nd per pl = adaŋto
'you all (want to) argue with each other'
3rd per pl = kadaŋto
'they (want to) argue with each other'

kadaŋto
k a daŋ t o
Per Mode Action Num Rec
3rd subjc argue pl rec
'they (want to) argue with each other'

3.3. Passive

3.3.1. The passive margin occurs when the subject of the clause is acted upon or receives the action.

3.3.2. The passive is marked by the suffix -ɛ. In the singular, the passive marker occurs immediately after the verb stem in all three modes. It also follows the stem in the imperfect plural. However, in the perfect and subjunctive plural, the passive marker follows the number marker. The passive marker -ɛ will change to -e when followed by another suffix, in order to agree with its environment.

3.3.3. Passive Forms

Imperfect Mode

1st per sing = kajinɛ
'I am being asked'
2nd per sing = ajinɛ
'you are being asked'
3rd per sing = ajinɛ
'he is being asked'

1st per pl incl = kajinɛ
'we all are being asked'
1st per pl excl = kajinena
'we are being asked'
2nd per pl = ajinenu
'you all are being asked'
3rd per pl = ajinɛ
'they are being asked'

kajinena
k a jin e n a
Per Mode Action Pass Num Per
1st imp ask pass pl 1st excl
'we are being asked'

Perfect Mode

1st per sing =kijinɛ
'I was asked'
2nd per sing =ijinɛ
'you were asked'
3rd per sing =ijinɛ
'he was asked'

1st per pl incl =kijintɛ
'we all were asked'
1st per pl excl =kijintewa
'we were asked'
2nd per pl =ijintewu
'you all were asked'
3rd per pl =ijintɛ
'they were asked'

ijintewu
i jin t e wu
Mode Action Num Pass Per
perf ask pl pass 2nd
'you all were asked'

Subjunctive Mode

1st per sing . =kijinɛ
'I (want to) be asked'
2nd per sing =jinɛ
'you (want to) be asked'
3rd per sing =kijinɛ
'he (wants to) be asked'

1st per pl incl =kijintɛ
'we all (want to) be asked'
1st per pl excl =kijintewa
'we (want to) be asked'
2nd per pl =ijintɛ
'you all (want to) be asked'
3rd per pl =kijintɛ
'they (want to) be asked'

kijintɛ

k	i	jin	t	ɛ
Per	Mode	Action	Num	Pass
3rd	subjc	ask	pl	pass

'they (want to) be asked'

3.4. Directional

3.4.1. The directional aspect is used when the action of the verb is directed to or for something. It is often equivalent to a verb followed by a preposition in English. The Murle language has few prepositions and the directional marker therefore often fills the role of a preposition in the Murle language. The directional suffix on the verb does not give an exact prepositional meaning, so the meaning must be gotten from the context of the clause in which it is used.

3.4.2. The following examples will help to show how the directional aspect is used.

acodek tuu	'he moves <u>to</u> the forest'
ayizek ayɛn	'he <u>pushes</u> into the crack'
anawek azɛɛn	'he puts <u>on</u> the hand'
jukek otok	'throw <u>into</u> the mouth'
buŋek yeelac	'put <u>on</u> the dove'
arɔɔŋak dayiin	'he searches for food'
eteedek goo	'he cuts and puts <u>on</u> the fire'
awozek goo	'he puts wood <u>under</u> the fire'
kubuŋtek todo	'we covered <u>with</u> earth'
ajukei cabak liil	'you throw the net <u>into</u> the river'
ateedekan	'it crosses <u>in front of</u> me'
kajinei galam	'I ask <u>for</u> a pen

3.4.3. When the directional suffix is used on the verb, then there is no location suffix on the location word. If the location marker is used on the noun, then there is no directional marker on the verb. The use of the directional suffix is probably the more commonly used. See Chapter 4: 5.6.

ajukek cabak liil 'he throws the net into the river'
ajuk cabak liila 'he throws the net into the river'

3.4.4. The directional is marked by the suffix -ek. In the singular, the directional marker occurs immediately after the verb stem in all three modes. It also follows the stem in the imperfect plural. However, in the perfect and subjunctive plural, the directional marker follows the number marker. The final /k/ of the directional marker -ek is weak and will therefore drop out when followed by another suffix, leaving just -e as the directional marker.

3.4.5. Directional Forms

Imperfect

1st per sing = kajinei
'I am asking for'
2nd per sing = ajinei
'you are asking for'
3rd per sing = ajinek
'he is asking for'

1st per pl incl = kajinek
'we all are asking for'
1st per pl excl = kajinekka
'we are asking for'
2nd per pl = ajinekku
'you all are asking for'
3rd per pl = ajinek
'they are asking for'

kajinekka
k a jin ek k a
Per Mode Action Dir Num Per
1st imp ask for pl 1st excl
'we are asking for'

Perfect

1st per sing = kijineya
'I asked for'
2nd per sing = ijineyu
'you asked for'
3rd per sing = ijineya
'he asked for'

1st per pl incl = kijintek
'we all asked for'
1st per pl excl = kijintewa
'we asked for'
2nd per pl = ijintewu
'you all asked for'
3rd per pl = ijintek
'they asked for'

kijineya

k	i	jin	e	(y)a
Per	Mode	Action	Dir	Per
1st	perf	ask	for	1st

'I asked for'

In the singular forms, the weak /k/ drops out before the perfect person markers. A /y/ is then inserted to keep the vowels apart.

In the plural, the /k/ is weak in the 1st person plural exclusive and the 2nd person plural. It drops out and is replaced by a /w/ to keep the vowels apart. These forms are identical with the passive in these two persons. Although the surface forms are identical, they have been formed by different morphophonemic processes.

Subjunctive

1st per sing = kijinek
'I (want to) ask for'
2nd per sing = jinek
'you (want to) ask for'
3rd per sing = kijinek
'he (wants to) ask for'

1st per pl incl = kijintek
'we all (want to) ask for'
1st per pl excl = kijintewa
'we (want to) ask for'
2nd per pl = ijintek
'you all (want to) ask for'
3rd per pl = kijintek
'they (want to) ask for'

kijintewa

k	i	jin	t	e	(w)a
Per	Mode	Action	Num	Dir	Per
1st	subjc	ask	pl	for	1st excl

'we (want to) ask for'

Directional suffixes are not always regular. The most common forms are the ones above, but it is also possible to find -ai and -ak suffixes. These suffixes occur only on certain verbs. The following are a few examples.

anyai	'you bring to'
aroonak	'he searches for'
odomak	'he took to'
avunak	'they come to'
kakunai	'I come to'

When the -ak suffix is used, it always marks directional. However, the -ai suffix can also be an irregular passive suffix, so the exact meaning must be gotten from the context in which it is used.

3.5. See Table 2 for verb chart on the following page.

3.6. Undergoer

3.6.1. There is a set of pronoun suffixes which indicate the object (undergoer) of the verb. These can follow either the verb core or the directional margin.

TABLE 2

Verb Chart

jin---'ask'

IMPERFECT MODE				
Person	Active	Direc	Rec	Passive
1st sing	kajin	kajinei	-----	kajinɛ
2nd sing	ajin	ajinei	-----	ajinɛ
3rd sing	ajin	ajinek	-----	ajinɛ
1st pl incl	kajin	kajinek	kajinɔ	kajinɛ
1st pl excl	kajinna	kajinekka	kajinona	kajinena
2nd pl	ajinnu	ajinekku	ajinonu	ajinenu
3rd pl	ajin	ajinek	ajinɔ	ajinɛ

PERFECT MODE				
Person	Active	Direc	Rec	Passive
1st sing	kijina	kijineya	-----	kijinɛ
2nd sing	ijinu	ijineyu	-----	ijinɛ
3rd sing	ijin(un)	ijineya	-----	ijinɛ
1st pl incl	kijinit	kijintek	kijintɔ	kijintɛ
1st pl excl	kijinta	kijintewa	kijintowa	kijintewa
2nd pl	ijintu	ijintewu	ijintowu	ijintewu
3rd pl	ijinit	ijintek	ijintɔ	ijintɛ

SUBJUNCTIVE MODE				
Person	Active	Direc	Rec	Passive
1st sing	kijin	kijinek	-----	kijinɛ
2nd sing	jin	jinek	-----	jinɛ
3rd sing	kijin	kijinek	-----	kijinɛ
1st pl incl	kijinit	kijintek	kijintɔ	kijintɛ
1st pl excl	kijinta	kijintewa	kijintowa	kijintewa
2nd pl	ijinit	ijintek	ijintɔ	ijintɛ
3rd pl	kijinit	kijintek	kijintɔ	kijintɛ

3.6.2. The undergoer person markers are as follows.

1st per sing	-an ~ -aŋ	'me'
2nd per sing	-in	'you'
1st per pl	-ɛt	'us'
2nd per pl	-un ~ -uŋ	'you all'

There are no undergoer person markers for 3rd person singular or plural.

3.6.3. Examples

Verb core

-an	arukan	'he beats me'
-in	karukin	'I beat you'
-ɛt	arukɛt	'he beats us'
-un	karukun	'I beat all of you'

Directional margin

atoonekan	'he sends me to'
katoonekin	'I send you to'
atooneket	'he sends us to'
katoonekun	'I send all of you to'

3.7. Intransitive

3.7.1. Most Murle verbs take the same form in both transitive and intransitive clauses. The verbs discussed up to now are all transitive in the imperfect, perfect, and subjunctive modes. Many verbs can be used only in the transitive, while other verbs take the same forms in both transitive and intransitive clauses. However, there are a number of verbs which take an intransitive marker. These are often the more commonly used verbs, like those for eating, drinking, cultivating, and fishing. When a clause contains an object, these verbs take the normal transitive form, but when there is no object, then these verbs add the intransitive marker.

3.7.2. The intransitive verb is formed by adding the intransitive marker after the stem in the imperfect singular and plural and in the subjunctive singular. The intransitive marker occurs after the number marker in the subjunctive plural. The intransitive marker does not occur in the perfect mode.

3.7.3. The intransitive marker in the imperfect is a reduplication of the final consonant of the verb stem plus an /i/. When the stem ends in a /v/ or /r/, a /y/ is added instead of the reduplication. Stems ending in /m/ or /n/ add a /ny/ before the /i/, following the normal morphophonemic rules.

1st per sing = kɛɛvyi
'I am cultivating
2nd per sing = ɛɛvyi
'you are cultivating'
3rd per sing = ɛɛvyi
'he is cultivating'

1st per pl incl = kɛɛvyi
'we all are cultivating'
1st per pl excl = kɛɛvyina
'we are cultivating'
2nd per pl = ɛɛvyinu
'you are cultivating'
3rd per pl = ɛɛvyi
'they are cultivating'

kɛɛvyina

k	ɛ	ɛv	yi	n	a
Per	Mode	Action	Intr	Num	Per
1st	imp	cultivate	intr	pl	1st ex

'we are cultivating'

3.7.4. The intransitive is marked in the subjunctive by -ɔ. The same morphophonemic rules apply as in the imperfect.

1st per sing = kɛɛvɔ
'I (want to) cultivate'
2nd per sing = ɛvɔ
'you (want to) cultivate'
3rd per sing = kɛɛvɔ
'he (wants to) cultivate'

1st per pl incl = kɛɛvtɔ
'we all (want to) cultivate'
1st per pl excl = kɛɛvtowa
'we (want to) cultivate'
2nd per pl = ɛɛvtɔ
'you all (want to) cultivate'
3rd per pl = kɛɛvtɔ
'they (want to) cultivate'

kɛɛvtɔ

k	ɛ	ɛv	t	ɔ
Per	Mode	Action	Num	Intr
1st	subjc	cultivate	pl	intr

'we all (want to) cultivate'

The subjunctive intransitive forms are sometimes identical with subjunctive reciprocal forms, so the meaning of the verb must be gotten from the context.

3.7.5. Irregularities are common in the intransitive. In some verbs a different vowel suffix is used, and there are often morphophonemic changes within the stem.

4. Non-Predicative Verb Forms

4.1. Nominalized Verb Forms

4.1.1. There are several rules for nominalizing a verb.

a. If the verb stem ends in a consonant, it usually adds the suffix <u>-iin</u> or <u>-inɛt</u> to form the singular noun.

verb		noun
pak	⟶	payiin
'judge'		'judgment'
kɛɛp	⟶	keebinɛt
'read'		'reading'

b. If the verb ends in a vowel or weak /k/, the noun is usually formed by adding a -z or -iz.

verb		noun
amadi	⟶	madiz
'it is sweet'		'sweetness'
daak	⟶	daayiz
'die'		'death'.

c. To form the plural noun, the suffix -ok is added to the singular form. If the singular suffix -inɛt is used, the final /ɛt/ drops off before adding the -ok suffix.

singular		plural
payiin	⟶	payiinok
'judgment'		'judgments'
keebinɛt	⟶	keebinok
'reading'		'readings'
madiz	⟶	madizok
'sweetness'		'sweetnesses'
daayiz	⟶	daayizok
'death'		'deaths'

4.2. Verbs as Adjectives

4.2.1. There are actually very few true adjectives in the Murle language. Most words which serve as adjectives are actually verbs which are used as modifiers in the adjective slot. When a verb follows the noun and is introduced by a relator, it is always in the 3rd person imperfect, and serves as an adjective modifying the noun.

4.2.2. Examples

Kamoor naana ɔrɔɔt.
I am sick I very
'I am very sick'.

Kacin naana ɛɛt ci amoor.
I see I man sick
'Isee the sick man!'

CHAPTER 6

Personal Pronouns

1. Introduction

Personal pronouns are marked for three persons, and for singular and plural number. The forms of the pronouns differ in the nominative, accusative, genitive, and dative cases. There are also dependent forms in the accusative and genitive cases.

2. Nominative Pronouns

2.1. In the nominative case there are six personal pronouns which are used as the subject of a clause.

2.2.

		Singular		Plural	
Per	1st	naana	'I'	naaga	'we'
	2nd	niina	'you'	niiga	'you all'
	3rd	niini	'he,she,it'	niigi	'they'

2.3. 1st person is marked by aa-a.
2nd person is marked by ii-a.
3rd person is marked by ii-i.

2.4. Singular is marked by the intermedial n.
Plural is marked by the intermedial g.

2.5. In a clause the use of the nominative pronoun is optional since person is also marked within the verb form itself. The nominative pronoun is therefore used for a clearer understanding or for emphasis.

Kakɔ naana baagita.
I go I across
'I am going across the river.'

Kakɔ baagita.
I go across
'I am going across the river.'

3. Accusative Independent Pronouns

3.1. In the accusative case there are six independent pronouns which are used as direct objects of a clause.

3.2.	Singular		Plural	
Per 1st	aneeta	'me'	ageeta	'us'
2nd	ineeta	'you'	igeeta	'you all'
3rd	nɔnnɔ	'him,her'	nɔɔgɔ	'them'

3.3. 1st person is marked by the initial a.
2nd person is marked by the initial i.
3rd person is marked by the vowel ɔ.

3.4. The singular is marked by the intermedial n.
The plural is marked by the intermedial g.

3.5. The final /a/ in the 1st and 2nd person pronouns often drops off when used in a clause. This is optional and has no significance but is merely a shortened form of the word.

Kacin naana ineeta.
Kacin naana ineet.
I see I you
'I see you.'

4. Accusative Dependent Pronouns

4.1. The following suffixes are accusative dependent pronouns which occur in the undergoer margin of a verb. See Chapter 5: 3.6.

4.2.	Singular		Plural	
Per 1st	-an∼-aŋ	'me'	-ɛt	'us'
2nd	-in	'you'	-un∼-uŋ	'you all'
3rd	---		---	

4.3. Dependent accusative pronouns can be used as the only direct object in a clause or they can be used together with the independent pronouns for added clarification and understanding. Dependent accusative pronouns do not exist in the 3rd person so the independent accusative pronouns are used. The following examples show how dependent and independent accusative pronouns may be used together in a clause.

Kacin ineeta.
'I see you.'

kacinin naana
I see you I

kacinin naana ineeta
I see you I you

kicinin ineeta
I see you you

Kicinin.
'I see you.'

The most commonly used form would be kacinin ineeta in which both the dependent and independent accusative pronouns are used.

4.4. The accusative dependent pronouns can also be used

as the indirect object. These must be understood from the context of the clause in which they are used.

Kanyin guruc.
I give him money
'I give him the money.'

5. Dative Pronouns

5.1. Unlike nouns, pronouns have a dative case which has six personal pronouns used as the indirect object of a clause.

5.2.

		Singular		Plural	
Per	1st	ŋaatan	'to me'	ŋaatinaaŋ	'to us'
	2nd	ŋaatun	'to you'	ŋaatinooŋ	'to you all'
	3rd	ŋaatin	'to him,her'	naatineeŋ	'to them'

5.3. ŋaati means 'to' or 'for' and is a preposition before nouns used as indirect objects.

Kayɛlɛk taŋ ŋaati ɔl.
I show cow to men
'I show the cow to the men'.

In the singular dative pronouns, the final /i/ of ŋaati drops out before adding the following suffixes:

-an 'me'
-un 'you'
-in 'him,her'

In the plural dative pronouns, the word ŋaati is intact and the following plural pronoun suffixes are attached to the end.

-naaŋ 'us'
-nooŋ 'you all'
-neeŋ 'them'

5.4. Lythe (1971, p. 18) lists another set of dative pronouns which are used when the subject of the clause is plural. My language teachers used the set given in 5.2 whether the subject of the clause was in the singular or the plural. One older man recognized one or two words from the plural set as belonging to Boma Murle speakers of long ago, but no longer in present use.

6. Genitive Independent Pronouns

6.1. In the genitive case there are two sets of six independent pronouns indicating possession of singular nouns and another two sets of six independent pronouns indicating possession of plural nouns.

6.2. As with nouns in the genitive case, the particles ci or o are used between the noun possessed and the possessor. When the possessor is a pronoun, the ci or o become part of the pronoun itself. The two alternating sets of pronouns are based on these two particles plus the genitive suffixes.

6.3. If the noun being possessed is singular, either of the following two sets of pronouns is used.

6.3.1.		Singular		Plural	
Per	1st	can~onan	'my'	cinaaŋ~onaaŋ	'our'
	2nd	cun~unun	'your'	cunooŋ~unooŋ	'your'
	3rd	cin~onin	'his'	cineeŋ~oneeŋ	'their'

6.3.2. The person endings in the singular are as follows:

Per	1st	-an
	2nd	-un
	3rd	-in

6.3.3. The possessive pronouns are formed by combining the particles ci or o and the dependent person suffixes.

When ci combines with the above singular suffixes, the /i/ drops out. See Chapter 2: 5.3.

ci + -an → can 'my'

When the particle o combines with the above singular suffixes a /n/ is placed between the vowels.

o + -an → onan 'my'

The vowel of the particle is often irregular in the 2nd person, where it changes to /u/. This is true in all the possessive pronouns.

6.3.4. The person endings in the plural are as follows:

Per	1st	-naaŋ
	2nd	-nooŋ
	3rd	-neeŋ

6.3.5. The possessive pronouns in the 1st person plural have shortened forms which are equally acceptable.

cinaaŋ ~ cinai 'our'
onaaŋ ~ onai 'our'

6.4. If the noun being possessed is plural, either of the following two sets of possessive pronouns may be used.

6.4.1.

		Singular		Plural	
Per	1st	cigan~ogan	'my'	cigaac~ogaac	'our'
	2nd	cigun~ugun	'your'	cugooc~ugooc	'your'
	3rd	cigin~ogin	'his'	cigeec~ogeec	'their'

The intermedial /g/ indicates that the pronoun is modifying a plural noun.

6.4.2. The person endings in the singular are the same as those of the pronouns modifying a singular noun. (See 6.3.2)

6.4.3. The person endings in the plural are as follows.

Per	1st	-aac
	2nd	-ooc
	3rd	-eec

6.4.4. The plural pronouns also have lengthened forms made by adding the suffixes -ak, -uk, -ik.

cigaac ~ cigaacak	ogaac ~ ogaacak	'our'
cugooc ~ cugoocuk	ugooc ~ ugoocuk	'your'
cigeec ~ cigeecik	ogeec ~ ogeecik	'their'

6.5. The following examples show usage of genitive independent pronouns modifying singular and plural nouns.

Kacin kavool can.
I see boat my
'I see my boat.'

Kacin kavoolɛt cigan.
I see boats my
'I see my boats.'

Ateedi niina kɛɛt onaaŋ.
you cut you tree our
'You are cutting our tree.'

Ateedi niina kɛɛn ogaac.
you cut you trees our
'You are cutting our trees.'

7. Genitive Dependent Pronouns

7.1. When the noun possessed is a kinship word, a dependent possessive suffix is added directly to the possessed noun. These kinship words are obligatorily possessed, and therefore have no singular or plural form without a possessive suffix.

7.2. If the kinship word ends in a consonant, the following suffixes are used.

Per	1st	-a
	2nd	-u
	3rd	-i

These suffixes are used in both the singular and plural persons, and whether the noun possessed is singular or plural.

7.2.1. Singular noun:

Per	1st	gotona	'my brother', 'our brother'
	2nd	gotonu	'your brother', 'your (pl brother'
	3rd	gotoni	'his brother', 'their brother'

7.2.2. Plural noun

Per	1st	gotonoga	'my brothers', our brothers'
	2nd	gotonogu	'your brothers', 'your (pl brothers'
	3rd	gotonogi	'his brothers', 'their brothers'

7.2.3. Both dependent and independent possessives can be used together and this can help clarify the meaning.

gotona can	'my brother'
gotona cinaaŋ	'our brother'

7.3. Most kinship words end in a vowel and take the following dependent suffixes. These dependent possessive suffixes are actually identical with the independent possessive pronouns except that the initial /c/ is changed to a /t/.

7.3.1. Singular noun

		Singular	Plural
Per	1st	-tan	-tinaaŋ
	2nd	-tun	-tunooŋ
	3rd	-tin	-tineeŋ

Example

abetan	'my grandmother'
abetun	'your grandmother'
abetin	'his grandmother'
abetinaaŋ	'our grandmother'
abetinooŋ	'your (pl grandmother'
abetineeŋ	'their grandmother'

7.3.2. Plural noun

		Singular	Plural
Per	1st	-tigan	-tigaac
	2nd	-tugun	-tugooc
	3rd	-tigin	-tigeec

Example

abetigan	'my grandmothers'
abetugun	'your grandmothers'
abetigin	'his grandmothers'
abetigaac	'our grandmothers'
abetugooc	'your (pl grandmothers'
abetigeec	'their grandmothers'

7.4. In dative and genitive pronouns there is a general pattern of /a/ marking 1st person, /u/ marking 2nd person, and /i/ marking 3rd person. This is a productive pattern although it does not hold true in every situation due to some morphophonemic adjustments below the surface level.

8. See Table 3 on the following page for a chart of pronouns.

TABLE 3

Pronoun Chart

	Nominative	Accusative	Dep Acc	Dative
1st sing	naana	aneeta	-an -aŋ	ŋaatan
2nd sing	niina	ineeta	-in	ŋaatun
3rd sing	niini	nɔnnɔ	---	ŋaatin
1st pl	naaga	ageeta	-ɛt	ŋaatinaaŋ
2nd pl	niiga	igeeta	-un -uŋ	ŋaatinooŋ
3rd pl	niigi	nɔɔgɔ	---	ŋaatineeŋ

	Genitive modifying sing noun		Genitive modifying pl noun	
1st sing	can	onan	cigan	ogan
2nd sing	cun	unun	cigun	ugun
3rd sing	cin	onin	cigin	ogin
1st pl	cinaaŋ	onaaŋ	cigaac	ogaac
2nd pl	cinooŋ	unooŋ	cigooc	ugooc
3rd pl	cineeŋ	oneeŋ	cigeec	ogeec

	Dep Gen modifying sing noun ending in V	Dep Gen modifying pl noun ending in V	Dep Gen modifying noun ending in C
1st sing	-tan	-tigan	-a
2nd sing	-tun	-tugun	-u
3rd sing	-tin	-tigin	-i
1st pl	-tinaaŋ	-tigaac	-a
2nd pl	-tunooŋ	-tugooc	-u
3rd pl	-tineeŋ	-tigeec	-i

CHAPTER 7

Noun Phrase

1. Introduction

A noun phrase consists of a nucleus which is filled by a noun and this nucleus can be followed by optional margins.

1.1. Noun Phrase = +Nuc | noun
Item | <num of demon, adj, and poss pro

± Mar | demon
Demon | > num of noun

± Mar | num/⟨dool⟩
Quan

± Mar | Adj P (up to 3)
Mod | > num of noun

± Mar | Poss P/poss pro
Poss | > num of noun

± Mar | Imb Cl
Mod

1.2. There can be up to four margins following a nucleus at one time. These margins, however, do not follow the nucleus in any specific order. Generally the numbers, demonstratives, and possessive pronouns will precede the longer modifying phrases and imbedded clauses.

2. Demonstratives

2.1. Demonstratives usually follow directly after the noun which they modify.

2.2. Demonstratives are either singular or plural in agreement with the noun they modify.

2.3. Examples

Acin maa nicini kajac.
sees lion this kob
'This lion sees a kob.'

Aruk ɛɛti orozɛ nicigi.
beats man dogs these
'The man beats these dogs.'

3. Quantity

3.1. The quantity margin is filled by a cardinal number or the morpheme dook meaning 'all'.

3.2. Cardinal numbers do not take singular or plural endings but remain the same in all situations.

3.3. Examples

Kanyei naana ijunya ram.
I have I pots two
'I have two pots.'

Aliŋliŋ ol dook mana.
work people all in field
'The people are all working in the field.'

4. Adjective Phrase

4.1. When a single adjective phrase follows a noun it is introduced by the relator ci or o and an adjective.

4.2. Adj P = +Intro/Rel |⟨ci/o⟩ + Comment/Qual |adj

4.3. Examples

Kanoti naana ɛɛt ci wun.
I look I man tall
'I am looking for the tall man.'

ci wun
Rel Qual

4.5.4. Examples

Agam dɔl kuluk ci kidicik.
catches children fish small
'The children catch small fish.'

kidicik Com = kidic = Qual
Num = -ik = Pl

Aturan niini tiin ci gidaŋɛ.
herds he cows brown
'He herds the brown cows.'

gidaŋɛ Com = gidaŋ = Qual
Num = -ɛ = Pl

4.5.5. Most adjectives are regular and add the suffixes without any internal changes. The following are two notable exceptions.

Singular		Plural	
appi	⟶	appintik ~ appintɛ	'big'
wun	⟶	wuntik ~ wuntɛ	'tall'

4.5.6. In a situation where there are several adjectives modifying a plural noun, an -ik suffix is added to the first adjective and then the suffix -ɛ to subsequent adjectives. This rule is not always adhered to, but is the one preferred by most Murle.

Kacin kibaalli ci maanik kizi gidaŋɛ kizi vɔɔrɛ.
I see birds yellow and brown and white
'I see yellow, brown, and white birds.'

5. The Possessive Phrase

5.1. The possessive phrase is always introduced by ci or o. The noun which is the possessor has a genitive

Agam oroz ci mac kajac.
catch dog male kob
'The male dog catches a kob.'

4.4. When two or more adjective phrases modify the same noun, the relator is obligatory in only the first phrase. In subsequent phrases the relator is optional or can be replaced by kizi or ba meaning 'and'.

Kacin kibaallic ci maan kizi gidaŋ.
I see bird yellow and brown
'I see a yellow and brown bird.'

Kacin ol ci appintik ba wuntik.
I see men big and tall
'I see the big tall men.'

Kacin ariz ci koli adikir.
I see ox black big
'I see the big black ox.'

Kacin ariz ci koli ci gidaŋ.
I see ox black brown
'I see the black and brown ox.'

4.5. Adjectives

4.5.1. Adjectives agree with the noun that they modify in number only. An adjective modifying a singular noun will have no suffix and an adjective modifying a plural noun will have a plural suffix.

4.5.2. $adj = +\underset{Qual}{Comment} \mid adj \quad \pm \underset{Pl}{Num} \mid \langle -ik/-\varepsilon \rangle$

4.5.3. The adjective modifying a plural noun adds the -ik suffix if the adjective ends in a consonant, or just -k if the adjective ends in a vowel. There is an alternate plural form which uses the suffix -ɛ. Some Murle prefer to use this when the adjective modifies a person.

4.5.4. Examples

Agam dɔl kuluk ci kidicik.
catches children fish small
'The children catch small fish.'

kidicik Com = kidic = Qual
Num = -ik = Pl

Aturan niini tiin ci gidaŋɛ.
herds he cows brown
'He herds the brown cows.'

gidaŋɛ Com = gidaŋ = Qual
Num = -ɛ = Pl

4.5.5. Most adjectives are regular and add the suffixes without any internal changes. The following are two notable exceptions.

Singular		Plural	
appi	⟶	appintik ~ appintɛ	'big'
wun	⟶	wuntik ~ wuntɛ	'tall'

4.5.6. In a situation where there are several adjectives modifying a plural noun, an -ik suffix is added to the first adjective and then the suffix -ɛ to subsequent adjectives. This rule is not always adhered to, but is the one preferred by most Murle.

Kacin kibaalli ci maanik kizi gidaŋɛ kizi vɔɔrɛ.
I see birds yellow and brown and white
'I see yellow, brown, and white birds.'

5. The Possessive Phrase

5.1. The possessive phrase is always introduced by ci or o. The noun which is the possessor has a genitive

suffix. The possessor can also be modified by optional margins and in this case the genitive suffix does not occur.

5.2. Poss P = + Intro (Rel) | ⟨ci/o⟩ + Nuc (Item) | gen noun

± Mar (Mod) | demon, num, poss pro, Adj, P, Poss P, Imb cl

5.3. Examples

Karɔɔŋ naana idiŋ ci taŋo.
I want I meat of cow
'I want the meat of the cow.'

ci taŋo
Rel Item

Karɔɔn naana idiŋ ci taŋ can.
I want I meat of cow my
'I want the meat of my cow.'

ci taŋ can
Rel Item Mod

Note that in the first example the possessor has the genitive ending o but when the possessor is itself possessed as in the second example, that the genitive ending does not occur.

6. Possessive Pronouns

6.1. In the possessive pronouns the introducer ci or o has elided with the appropriate possessive suffixes to form single morphemes. Therefore the pronoun follows the noun it modifies without a separate introducer. See Chapter 6:6.3.3..

6.2. Examples

Daa onan alinliŋ oroot.
wife my works very
'My wife works very hard.'

Kacin taŋ can.
I see cow my
'I see my cow.'

7. Imbedded Clause

7.1. A noun can also be modified by an imbedded clause. An imbedded clause begins with the introducer o, which is followed by a dependent clause. The dependent clause formula is found in Chapter 8:5.

7.2. Imb Cl = +Intro (o) + Nuc | Dep Cl
Rel | Sta

7.3. Examples

Set o akat kajac anyak dila can.
man who kills kob has spear my
'The man who kills the kob has my spear.'

o akat kajac
Rel Statement

Kacin naana kiziwan ci appi o kor naana
I see I buffalo big which I shot I
'I see the big buffalo which I shot.'

o kor naana
Rel Statement

CHAPTER 8

Clause Level

1. Introduction

There are three independent clause core types in Murle; transitive, intransitive, and topic-comment. Imperative, dependent, and subordinate clausecores are variants of the three independent clause cores. There are several word order patterns for each type of clause. However, each type of clause has one basic word order which is most commonly used. This is normally found in the affirmative declarative clause and this word order will be used in the formulas for the clause cores. The clause core describes the minimal clause without margins. Various margins can be attached to a clause core. Sections 2 through 7 deal with clause cores and section 8 discusses the various margins.

2. Independent Transitive Clause

2.1. The transitive clause core has PSO word order. It contains an obligatory predicate slot filled by a verb, an obligatory subject slot filled by a noun phrase, pronoun, or person marker affixed to the verb, and an optional indirect object slot, filled by a noun phrase, pronoun, or a person marker suffixed to the verb, and an obligatory object slot filled by a noun phrase, pronoun, person marker suffixed to the verb or subordinate clause. In a discourse, the subject or object slot may be left empty if the subject or object is mentioned in an earlier clause. When this happens the empty slots are understood from the earlier subject or object. This, however, applies on a higher level and is not covered by the clause level formula.

2.2. Tr Cl Core = +Pred | verb
Action | >subj,obj

+ Subj | NP/pro/Ø ± Ind Obj | NP/pro/Ø
Actor | <per marker on verb Scope | <per marker on verb

+ Obj | NP/pro/Ø/Sub Cl
Und | <per marker on verb

The subject is always marked in the verb by a person marker. A noun phrase or pronoun may occupy the subject slot; however, if the subject slot is empty, the subject is still marked by the person marker in the verb. The object or indirect object is sometimes marked in the verb by a person marker. A person marker can co-occur with an indirect object or object pronoun; however, if the indirect object or object slot is empty, the person marker can mark the indirect object or object by itself.

2.3. Examples

Adak maa kajac ci koli.
Pred Subj Obj
eats lion kob black
'The lion eats the black kob.'

Aruk niini oroz can.
Pred Subj Obj
beats he dog my
'He beats my dog.'

Kacin kiziwan ci adikir.
Pred Obj
I see buffalo big
'I see the big buffalo.'

In the above example the k- in the verb marks the subject since no overt subject is named.

Kacinin.
Pred
'I see you.'

In the above example, the prefix k- marks the subject and the suffix -in marks the object since they do not occur in the usual slots.

Kacinin	naana	ineeta.
Pred	Subj	Obj
I see you	I	you

'I see you.'

In the above example the subject and object pronouns occur in the subject and object slots as well as being marked in the verb.

Anyik	ɛɛti	ŋaa		gʊruc.
Pred	Subj	Ind Obj		Obj
gives	man	woman		money

'The man gives the money to the woman.'

Anyin	ɛɛti	gʊruc.
Pred	Subj	Obj
gives to you	man	money

'The man gives the money to you.'

In the above example the suffix -in on the verb marks the indirect object which does not occur in the normal slot.

2.4. Although the most common word order is PSO, it is possible for the subject to precede the predicate. This is normally done in order to emphasize the filler of the subject slot. It is also usual for a subject having several modifiers to precede the predicate.

Cirlili agam idiŋ ci ŋaao.
Subj Pred Obj
kite grabs meat of woman
'The kite grabs the woman's meat.'

Taŋ can ci giday adak artɛ.
Subj Pred Obj
cow my brown eats grass
'My brown cow is eating grass.'

2.5. The subject, indirect object, and object of a clause can be filled by co-ordinates. In other words there can be more than one filler in each of the above slots. These co-ordinates are joined by the conjuction ki or kibeen meaning 'and'.

Akat ɛɛti kajac kibeen megeer.
Pred Subj Obj Obj
spears man kob and oribi
'The man spears a kob and an oribi.'

Ɛɛt ci adikir ki dole ci miliny ɛɛv mana.
Subj Subj Pred Obj
man grown and child small cultivate garden
'The grown man and the small child cultivate the garden.

3. Independent Intransitive Clause

3.1. The intransitive clause core contains an obligatory predicate slot filled by a verb, and an obligatory subject slot filled by a noun phrase, pronoun, or person marker affixed to the verb. Some transitive verbs must take an intransitive marker when they are used in an intransitive clause.

3.2. Intr Cl Core = +Pred (Action) | verb > subj

+ Subj (Actor) | NP/pro/Ø < per marker on verb

3.3. Examples

Ɛɛvyi	ɔl	ci mɛɛlik.
Pred	Subj	
cultivate	people	many

'Many people are cultivating.'

Koryi	naana.
Pred	Subj
I fish	I

'I am fishing.'

4. Independent Topic-Comment Clause

4.1. The topic-comment clause is made up of an obligatory topic slot and an obligatory comment slot. However, there are three sub-types depending on word order and fillers of the comment slot.

4.2. In the topic-comment clause type 1, the obligatory comment slot precedes the obligatory topic slot and is filled with a quality verb or adjective. A quality verb is one that can also serve as an adjective in a noun phrase. See Chapter 5:4.2. The obligatory topic slot is filled by a noun phrase, pronoun, or can be marked in the quality verb.

4.2.1. T/C_1 Cl Core = + Comment (Qual) | qual verb/adj >Topic

+ Topic (Item) | NP/pro/Ø <per marker on verb

4.2.2. Examples

Kabona	naana.
Qual	Item
I well	I

'I am well.'

Wun ɛɛti nico.
Qual Item
tall man this
'This man is tall.'

4.3. In the topic-comment clause type 2, the topic slot comes first and is filled by a noun phrase. It is followed by a comment slot which is filled by an adjective phrase or a noun phrase. The adjective phrase gives the quality of the topic and the noun phrase gives the identity of the topic.

4.3.1. T/C_2 Cl Core = + Topic/Item | NP + Comment/Qual/Iden | Adj P/ NP

4.3.2. Examples

Ɛɛt ci wun.
Item Qual
man tall
'The man is tall.'

Boŋboŋeci kibaali.
Item Iden
pelican bird
'The pelican is a bird.'

4.4. The topic-comment clause type 3 has a predicate slot filled by the stative verb, a topic slot filled by a noun phrase, pronoun, or marked in the verb, and a comment slot filled by an adjective or a noun phrase.

4.4.1. T/C_3 Cl Core = + Pred/Stative | stative verb >Topic
+ Topic/Item | NP/pro/Ø <per marker on verb + Comment/Qual Iden | adj/NP

4.4.2. Examples

Kɛɛn naana kutur.
Stative Item Qual
I am I short
'I am short.'

Ɛɛn kiziwan kɛlɛgit ci appi.
Stative Item Iden
is buffalo animal big
'The buffalo is a big animal.'

5. Imperative Clause

5.1. An imperative clause can be transitive, intransitive, or topic-comment. In the transitive it is comprised of an obligatory predicate slot filled by an imperative verb and an object slot filled by the normal fillers. The imperative clause in the intransitive is comprised of only an obligatory predicate slot filled by an imperative verb. The imperative clause in topic-comment is comprised of only an obligatory comment slot filled by an imperative quality verb. The imperative verb in all three clauses is always the second person singular or plural of the subjunctive mode.

5.2. Examples

5.2.1. Imperative Transitive Clause

Ruk oroz!
Pred Obj
'Beat the dog!'

5.2.2. Imperative Intransitive Clause

Ɔɔtɔ!
Pred
'You all go!'

5.2.3. Imperative Topic-Comment Clause

Ajakki !
Pred
'All of you be quiet !'

6. Dependent Clauses

All three clause types have dependent forms which occur on the phrase level modifying nouns. They follow the noun which they modify and are introduced by the relator o. See Chapter 7:7.

6.1. The dependent transitive clause has an obligatory predicate and either a subject or an object but not both. When the subject does not occur, the noun being modified by the clause fills the subject role. When the object does not occur, the noun being modified by the clause fills the object role.

Kanyei naana oroz o agam tolonya.
I have I dog which catches chickens
'I have a dog which catches chickens.'

The above dependent clause agam tolonya has no subject, so the subject is understood to be oroz.

Kɛɛti naana kiziwan o or niina.
I skin I buffalo which shot you
'I am skinning the buffalo which you shot.'

The above dependent clause or niina has no object, so the object is understood to be kiziwan.

6.2. The dependent intransitive clause has an obligatory predicate but no subject. The subject role is always filled by the noun being modified by the clause.

ɔl o ɛɛvyi aliŋliŋ ɔrɔɔt.
people who cultivate work very
'The people who are cultivating are working hard.'

The above dependent clause ɛɛvyi has no subject so the subject is understood to be ɔl.

6.3. Only the third type of topic-comment clause can be dependent. This dependent clause has an obligatory stative predicate and an obligatory comment. The topic slot does not occur and the topic role is filled by the noun being modified.

Kaga zɔɔz o een didi.
I know word which is true
'I know the message which is true.'

The above dependent clause een didi has no topic, so the topic is understood to be zɔɔz.

7. Subordinate Clause

All three clause types can function as subordinate clauses. A subordinate clause fills the object slot in a transitive clause. In this clause type the subject always precedes the predicate and is in the accusative case. In a topic-comment clause the topic is also in the accusative case.

7.1. Subordinate Transitive Clause

Kaga naana nɔnnɔ aak idiŋ.
Pred Subj Obj
I know I she cooks meat
'I know that she is cooking the meat.'

nɔnnɔ aak idiŋ
Subj Pred Obj

7.2. Subordinate Intransitive Clause

Karoɔŋ naana ɔl kiliŋliŋit
Pred Subj Obj
I want I people to work
'I want the people to work.'

ɔl kiliŋliŋit
Subj Pred

7.3. Subordinate Topic-Comment Clause

Kaga naana ineeta alaan.
Pred Subj Obj
I know I you chief
'I know that you are the chief.'

ineeta alaan
Topic Comment

8. Margins

8.1. The following formula shows the margins which can occur with any of the clause cores.

8.2. Expanded Cl = $\pm \underset{\text{Ques}}{\text{Mar}}\,|\,\text{ques word} \pm \underset{\text{Time}}{\text{Mar}}\,|\,\text{time word}$

$\pm \underset{\text{Neg}}{\text{Mar}}\,|\,\langle \text{alaŋ/ŋaan} \rangle + \underset{\text{Sta}}{\text{Nuc}}\,|\,\text{Cl Core} \pm \underset{\text{Man}}{\text{Mar}}\,|\,\text{adverb}$

$\pm \underset{\text{Ins}}{\text{Mar}}\,|\,\text{ins noun} \quad \pm \underset{\text{Loc}}{\text{Mar}}\,|\,\text{loc} \quad \pm \underset{\text{Ques}}{\text{Mar}}\,|\,\text{ques word}$

8.3. Question Margin

8.3.1. Question slots occur both before the clause core and at the very end of the expanded clause. A clause can be made into a question by putting a question word

into either of the question slots. In an emphatic question the same question word can be used in both slots at the same time.

Awot	taŋ	maam	ŋaa?
Core			Ques
drinks	cow	water	where

'Where is the cow drinking water?'

Na	akat	niini	oroz	na?
Ques	Core			Ques
why	kill	he	dog	why

'Why is he killing the dog?'

8.3.2. There is one exception where the question word does not occur in the margin. The question word ŋɛnɛ 'who' occurs in the normal subject and object slots and then serves as the subject or the object in a clause.

Akatun	ŋɛnɛ	kajac	nico?
Pred	Subj	Obj	
killed	who	kob	this

'Who killed this kob?'

8.4. Time Margin

8.4.1. An expanded clause includes an optional time slot before the clause core which is filled by a time word. Alternatively, the time slot can occur after the clause core.

Bilija	agamit	niigi	kuluk	ci	meelik	ŋaadaŋ?
Time	Core					Ques
last night	catch	they	fish	many		where

'Where did they catch many fish last night?'

Kicina	naana	kiziwan	balawaaz.	
Core			Time	
I saw	I	buffalo	yesterday	

'I saw a buffalo yesterday.'

8.4.2. Future in Murle is indicated by a future time word in the time margin slot.

Tedeec awudi niina maam.
Time Core
later drink you water
'Later you will drink water.'

8.5. Negative Margin

An expanded clause may include an optional negative slot immediately before the clause core. This negative slot can be filled by the negative words alaŋ or ŋaan meaning 'not'. Often when a negative word is used, the predicate and subject will reverse.

ŋaan kacin naana guzul.
Neg Core
not I see I hyena
'I do not see the hyena.'

Inoko alaŋ naana kacin guzul.
Time Neg Core
now not I I see hyena
'Now I do not see the hyena.'

8.6. Manner Margin

In an expanded clause, the optional manner slot occurs after the clause core and is filled by an adverb.

Tedeec kano naana zɔɔ ci maatu kidicɛlɛm.
Time Core Man
later I follow I tracks of lions carefully
'Later I will follow the lions' tracks carefully.'

Alaŋ aliŋliŋ niina katamaan na?
Neg Core Man Ques
not work you quickly why
'Why are you not working quickly?'

8.7. Instrumental Margin

In an expanded clause, the optional instrumental slot follows the clause core and is filled by a noun in the instrumental case. See Chapter 4:5.

Balawaaz akatun ɛɛti maa dilawa.
Time Core Ins
yesterday killed man lion with spear
'Yesterday the man killed a lion with a spear.'

Alaŋ adɔɔk ɛɛti ŋaa kɛɛta ɔroot.
Neg Core Ins Man
not beat man wife with stick very
'The man is not beating his wife very bad with a stick.'

8.8. Locative Margin

8.8.1. In an expanded clause, the optional locative slot follows the clause core and is filled by a noun in the locative case. See Chapter 4:5. The noun in the locative case may be followed by an optional specifier, in which case it drops the locative case suffix.

8.8.2. Loc Mar = + Nuc (Loc) | loc noun + Mar (Specifier) | specifier word

8.8.3. Examples

Inoko abil guumuni kɛɛta.
Time Core Loc
Now stands owl in tree
'Now there is an owl in the tree.'

Balawaaz kicina naana maat kɛɛt loota.
Time Core Loc
yesterday I saw I lions tree under
'Yesterday I saw lions under the tree.'

CHAPTER 9

Higher Levels
Sentence, Paragraph, and Discourse

1. Introduction

Since it covers such a broad subject, this chapter does not attempt to deal with all the data on the higher levels of sentence, paragraph, and discourse. One short text is presented and only the data within that particular text will be discussed. This is not meant to be a comprehensive presentation but only attempts to give the reader a feel for what is happening on the higher levels.

The text chosen for analysis is a short narrative discourse which is a well-known Murle story. The story is presented by means of a display recommended by Longacre and Levinsohn (1978).

Each page of the display has been divided into five columns. The three center columns show the core of each clause and contain the predicate, subject, and object. The column preceding the core contains the pre-core margins, and the column following the core contains the post-core margins.

Each row contains the words from an independent clause. Sentences can have one or more clauses and each sentence is given a consecutive number. Clauses are set off from each other by a single line, and sentences are set off by a double line.

The participants are numbered 1, 2, or 3. The number occurs whether or not the participant is overtly mentioned. This assists the reader to follow the participant roles.

Occasionally the PSO word order is not followed. When there is a word order change, it is indicated by the words Pred, Subj, or Obj placed in the upper right hand corner of the box.

There will be a word-for-word English translation under each Murle word. An English free translation follows the display. The sentences in the free translation are numbered the same as in the display for easy reference.

2. Display of Text, Table 4.

		Core			
	Pre-Core	Pred	Subj	Obj	Post-Core
1			zɔɔz ci word of baal long ago cirlilo of kite been ¹zeelu. and stork		
2		adaŋɔ argue together	cirlili been kite and ¹zeelu. stork		
3		anno they say to each other	1, 2		nɛ, thus
	"inoko ma now if	kavɔ we go	1,2		dim disappear zɛɛ on & on been toward tammu, heaven
		arum tammu [Obj.] arrives heaven	ŋɛnɛ?" who		

		Core			
	Pre-Core	Pred	Subj	Obj	Post-Cor
4		azi says	2zeelwe stork	1	nɛ, thus
		"karum I arrive	2naana. I		
5	alaŋ not	[subj] 1cirlili kite [loc] tammu heaven	[pred] alaŋ arum". not arrive		
6		aneek says	1cirlili kite	2zeelu stork	nɛ, thus
	"bar but	1naana I	karum I arrive		oroot". very
7		adaŋto. they argued together	1, 2		
8	ba and	adaŋo they argue	1, 2		zɛɛ on & on
	bakacin until	iziti say	3kibaalli birds ci gaga all		nɛ, thus
	inoko now ma and	avoyu you go	1, 2		tamma." heaven
9		[loc] arum tammu arrives heaven	cirlili. kite		
10	aji 2zeelwe as for stork	alaŋ arum. not arrives			
11		[subj] 2zeelwe stork	[pred] adiŋdiŋ. heavy		
12		appi big	2niini. he		
13		[subj] 1cirlili kite	[pred] avolvol. light		

	Pre-Core	Core: Pred	Core: Subj	Core: Obj	Post-Core
14		arun arrives [loc] zee on & on tammu heaven	1 cirlili. kite		
15		azi says	2 zeelve stork		nɛ, thus
	"akom, ba no but	karum I arrive	2 naana I		
16		aneek say	3 ol birds	1, 2	nɛ, thus
		"abon. it is good			
17	inoko now tineeri tomorrow	akulla. you all fly	1, 2		
18		avoyu you all go	1, 2		
	ba and	arumnyu you arrive	1, 2	tammu." heaven	
19		aneek they say	1, 2	3 ol birds	nɛ, thus
		"yon." yes			
20		gavtiya they stayed	1, 2		
	ba and neeri in the morning	ukulita. they flew	1, 2		
21	ba and	avo they go	1, 2		zɛɛ on & on been toward tammu. heaven

		Core			
	Pre-Core	Pred	Subj	Obj	Post-Core
22	nazi when nɔɔn wants ajɔŋɔz to near tammu, heaven	adaak dies	2 zoelwe stork		goola. on the way
23		ɛpɛɛra he perished	2		
	ba and	awoya goes	2		zɛɛ on & on
	bakacin until	iita he falls	2		gov. thud
24	ba aji and as for 'cirlili kite	idicok proceeds	'niini. he		
25	ba and	ako goes	niini he		been tammu. to heaven
26	ba and	ako aavi goes stays	1		tamma in heaven iinya nan days two
	ma and	abada. returns	1		
27	ma and	abada aku returns coming	1		
	ma and	aku arum comes arrives	1		todo. at earth
28		aneek say	3 pl birds	1	nɛ, thus
		2"geelu [Obj] stork	ci anya [Pred] brings	ŋooti [Subj] wind	
	bar out			taba doon wings only kibeen anɛ. and bones	

	Pre-Core	Core: Pred	Core: Subj	Core: Obj	Post-Core
29		adaak he dies	2		goola on the way zee on & on
	ma and	aku he comes	2		noko. like this
30		ivita olla came just	ame bones		bar doon." but only
31	ma and	acin sees	1 cirlili kite	zooz ci word of adaai 2 zeelwe death stork o (agrees with 'ci')	
		atalo is happy	1 niini. he		
32		aga knows	1 niini he	eet ci tiir person fast	oroot. very
33		erun arrives	1	tammu heaven	labak. even
34	ma bodo and again	3 ol (Subj) birds	alan bodo (Pred) not again arpon want kelebezit measure	2 zeelu kibeen stork and 1 cirlili kaa kite to koot tammu. go heaven	
35		aga know	3 ol birds	1 cirlili kite ajaar beat 2 zeelu. stork	

		Core			
	Pre-Core	Pred	Subj	Obj	Post-Core
36			zooz ci story of ²zeeluwo been stork and ¹cirlili o. kite (agrees with 'ci')		
37		ɛpɛɛra perished	²zeeluwe. stork		
38	alaŋan ki not with ¹cirlili kite	alaŋan not ɔrkɔr. accompany	2		
39			zooz ci story of zin baal then long ago ²zeeluwo been of stork and ¹cirlili o kite (agrees with 'ci') nɛɛn, truly		
40		odota. it ends			

3. Free Translation

1. This is the story of what happened to the kite and stork long ago.

2. The kite and the stork were arguing together. 3. They said to each other, "If we fly up into the sky, who will arrive in heaven first?"

4. The stork said, "I will arrive first. 5. The kite will not arrive at all."

6. The kite said to the stork, "I will easily arrive first."

7. They argued together some more. 8. They argued on and on until some other birds said to them, "Now go fly to heaven."

9. The kite reached heaven. 10. As for the stork, he did not reach heaven. 11. The stork was too heavy. 12. He was too big. 13. The kite was lighter 14 and was able to arrive in heaven.

15. When they returned, the stork lied and said, "No, I also reached heaven."

16. The birds then said, "Alright, tomorrow you fly again. 18. You go and you fly until you arrive in heaven."

19. The stork and kite said to the birds, "Okay."

20. They rested and in the morning they took off 21 and they went up and up toward heaven.

22. When he got near heaven, the stork died on the way.23He died and fell on and on until he hit the ground 'thud'.

24. As for the kite he proceeded onward 25 and went to heaven 26 and stayed in heaven two days and then returned 27. He came back and finally arrived back on earth.

28. The birds said to him, "The wind brought the stork but only the wings and bones. 29. He died on the way to heaven and came back like this. 30. Only the bones came back."

31. When the kite heard about the death of the stork

he was very happy. 32. He knew that he was the fastest bird 33 since he had even reached heaven.

34. The other birds no longer wanted to judge whether the kite or stork could reach heaven. 35. They knew that the kite defeated the stork.

36. This is the story of the kite and the stork which is now known.

37. The stork perished. 38. It was not able to accompany the kite to heaven.

39. This is the story then of long ago about the kite and stork.

40. It is finished.

4. Discourse Constituents

All discourse types have basic constituents. The basic constituents of the previous narrative are title, setting, minor plot, major plot, and closure. Following is a breakdown of the narrative into its basic constituents

DISCOURSE CONSTITUENTS TABLE 5

1	Title
2-8	Setting
9-19	Minor Plot
20-35	Major Plot
36-40	Closure

5. Discourse Boundaries

All Murle discourses have devices which mark their boundaries. The boundaries of the previous narrative are typical of most narrative discourses. The first line of the narrative is a title beginning with the word zoɔz meaning 'story'. In this title the word baal is used meaning 'long ago' and this establishes the time of the story to be related. The two main characters of the story, cirlili 'kite', and zeelu 'stork' are also introduced in this title.

To close the narrative, the title of the story is given again in sentence 36. Then there is a short resume of the story to emphasize the highpoint of the narrative. The title is again repeated in sentence 39 and then the word odota occurs meaning 'the end'.

6. Paragraph Level

Each constituent of a narrative can be made up of one or more paragraphs. A new paragraph is indicated by a change in participant focus, a change in time or location of action, or a difference in content or function of material.

A typical example of a change in participant focus is found between sentences 27 and 28, in which the focus changes from the kite to the other birds. Within dialogue a change in speaker also indicates a new paragraph as between sentences 5 and 6, where the stork stops speaking and the kite begins.

A change in time is found between sentences 19 and 20, where the word neeri 'morning' indicates a new time and therefore a new paragraph. A change in location is found between sentences 8 and 9 where the scene changes

from earth to heaven, and therefore indicates a new paragraph.

In the text under analysis, there are three ways in which a new paragraph is indicated by a difference in content or function of material.

The first is a change from dialogue to action as between sentences 19 and 20. The second is a change from action to dialogue as between sentences 27 and 28. The third is a change from dialogue to emotional response as between sentences 30 and 31.

The following is a display of the paragraph breaks made in the preceding narrative. The above criteria are used to assess where the paragraph breaks should take place. Often more than one criterian function together to indicate a paragraph break.

DISPLAY OF PARAGRAPHS..TABLE 6

Discourse Constituents	Paragraph	Sentence	Content
Title	1	1	Title
Setting	2	2,3	kite and stork argue
	3	4,5	speech of stork
	4	6	speech of kite
	5	7,8	birds intervene in argument
Minor Plot	6	9-14	outcome of flight
	7	15	speech of stork
	8	16-18	birds' suggestion
	9	19	stork and kite agree
Major Plot	10	20,21	stork and kite flew
	11	22,23	stork died
	12	24-27	kite arrives in heaven
	13	28-30	birds report death of stork
	14	31-33	kite is happy
	15	34,35	birds know winner
Closure	16	36	Title
	17	37,38	Resume
	18	39	Title
	19	40	Ending

7. Sentence Level

Each paragraph is made up of one or more sentences. A sentence may be composed of a single independent clause or it may be composed of two or more clauses joined by connectors. Normally if there are no connectors between the clauses then each clause is a sentence by itself. For an example see sentences 4 and 5 in the preceding text.

The independent clause or clauses are the core of the sentence. A clause core may have various margins which precede it. Following are some examples taken from the text under analysis.

Sent 10 - margin of topic
aji zeelwe 'as for the stork'

Sent 15 - margin of response
akɔm 'no'

Sent 17 - margin of time
inoko 'now'

Sent 21 - margin of link
ba - 'and'

Sent 22 - margin of time
mazi aroɔŋ ajɔŋɔz tammu 'when he neared heaven'

Some words which fill the margin of link also serve as connectors between clauses within a sentence. Common examples of these are the words ma and ba meaning 'and'. Therefore one must also look at the meaning of the clauses as well as pause breaks in order to assess whether a word is a margin of a sentence or serving as a clause connector. Time words must also be assessed as to whether they are functioning on a sentence or clause level. Pike and Pike (1977, p. 256) state that

there is not yet enough specific criteria for making these decisions without some indeterminacy.

8. Participant Anaphora

Whenever there is a change in participant, the participant is mentioned by name. As before mentioned this is also a strong indication of a new paragraph. This participant is seldom mentioned again by name within the same paragraph. The subsequent subject slots are normally left empty and these automatically refer back to the participant before mentioned in that paragraph. See paragraph 11. These slots are left empty until there is a change in participant focus, in which case the new participant is mentioned by name and a new paragraph is begun.

Pronouns are also used as the means of anaphora but are not as common as leaving the subject slot empty. See sentences 12, 24, 25, 31, and 32.

The above types of anaphora apply to the major participants only. Minor participants are always identified specifically. For example, the minor participants, kibaalli 'birds' are introduced in sentence 8, and are mentioned again each time as ol meaning 'people' in sentences 16, 19, 28, 34, and 35.

9. Event-Line

There is an event-line which serves as the backbone of the narrative. Other things such as background, repartee, description, reason, and reaction are all digressions from the backbone.

The normal events are given in the imperfect mode even though the narrative takes place in the past. The most important events are highlighted by the verb occurring in the perfect mode.

The following sentences comprise the backbone of the preceding narrative. In sentences 7, 20, and 23 the verb is in the perfect mode, indicating that these are the most important events of the story.

Backbone

Sent 2	adaŋɔ	'they argue'
Sent 7	adaŋtɔ	'they argued'
Sent 9	arum	'kite arrives'
Sent 20	aavtiya	'they stayed'
	ukulita	'they flew'
Sent 21	avɔ	'they go'
Sent 22	adaak	'stork dies'
Sent 23	ɛpɛɛra	'he died'
	awoya	'he went down'
	iita	'he fell'
Sent 24	idicek	'kite proceeds'
Sent 25	akɔ	'he goes'
Sent 26	aavi	'he stays'
	abada	'he returns'
Sent 27	arum	'he arrives'

10. Back-Reference

There is one instance of back-reference in the preceding narrative. In sentence 22 the time margin clause mazi arɔɔŋ ajoŋɔz tammu 'when he neared heaven', makes a reference to the former sentence. It also focuses attention on the exact time and location of the turning point of the entire narrative which takes place in the following sentence.

Addenda

As noted in the Preface, a few discoveries which were made following the writing of this grammar were simply added as addenda so as not to delay publication. The addenda are the following.

1. Two additional phonemes.
2. Vowel harmony with -i.
3. From 'mode' to 'aspect'.
4. The transitivity system of clause types.

Addendum 1

Two Additional Phonemes

Upon further research and with the help of some sophisticated Murle readers, two more consonant phonemes have been identified in Murle. In the earlier description (see Chapter 1, Section 1.1), /t/ and /d/ were treated as alveolar stops and no dental stops were included. However, we have found that /t/ is actually a voiceless dental stop [t̪] and contrasts with a voiceless alveolar stop /T/. Furthermore there is a voiced dental stop /d̪/ which contrasts with the voiced alveolar stop /d/.

/t/	[t̪]	[t̪ɔr]	'curse'
/T/	[t]	[tɔr]	'only'
/d̪/	[d̪]	[d̪ɔkd̪ɔk]	'handicapped'
/d/	[d]	[dɔkdɔk]	'big mouth'

The alveolar /T/ [t] and the dental /d̪/ [d̪] are both rare, only occurring in words which are not in frequent use. This is the reason they were not found earlier. Since the dental is the most common of the two voiceless stops, it has been symbolized as /t/ in this book. The alveolar [t] is symbolized here as /T/; however, it is so rare that it does not occur elsewhere in this book. Apparently the dental-alveolar stop system is in transition, leaving an unbalanced system in which the voiceless dental and voiced alveolar stops are common but the voiceless alveolar and voiced dental stops are rare. *

* In Murle orthography the dental [d̪] and [t̪] are symbolized as dh and th in order to conform with other Sudanese languages.

Addendem 2

A Vowel Harmony Reflex

The high front vowel /i/ usually pulls preceding weak vowels upward as the other high vowels /u/, /e/, and /o/ always do (see Chapter 2, Section 2.1). However, there are many cases in which the same vowel /i/ appears to have the opposite effect, that is, lowering preceding weak vowels.

My hypothesis is that historically there were two /i/ phonemes. One was articulated with advanced tongue root (+ATR) and thus pulled preceding weak vowels upward. The other was articulated with retracted tongue root (+RTR) and caused a lowering of preceding weak vowels (cf. Pike, 1967).

It is no longer possible to predict phonologically whether /i/ will raise or lower preceding weak vowels. However, its raising or lowering can be determined within lexical groupings. For example the /-i/ suffix which functions as a person marker in verbs pulls preceding weak vowels upward. (i.e. historically it was a (+ATR) phoneme.)

nyok	a-nyug-i
'close'	'you close'

The /-i/ suffix which functions as case marker with nouns lowers preceding weak vowels. (i.e. historically it was a (+RTR) phoneme.)

otok	ɔtɔg-i
'mouth'	'mouth'(nom)

A complete listing of morphemes which lower preceding weak vowels must await further analysis.

Addendum 3

From 'Mode' to 'Aspect'

The word 'mode' was used in this book to refer to the three main sets of verb forms. (See Chapter 5.) These have been called the imperfect, perfect, and subjunctive modes. Other suffixes such as directional, passive, and reciprocal have been referred to as aspects (cf. Tucker and Bryan, 1966).

Further study has shown that the word 'mode' should be changed to 'aspect'. So Murle would then have three aspects: imperfect, perfect, and subordinate. (Subordinate aspect is a more accurate description of the third set than the former term 'subjunctive'.) The other set of suffixes could be relabeled 'voice'. i.e. passive, reciprocal, and directional voice. However, note in Addendum 4 below that the latter fit even better into a different system of transitivity types occurring with the imperfect, perfect, and subordinate aspects.

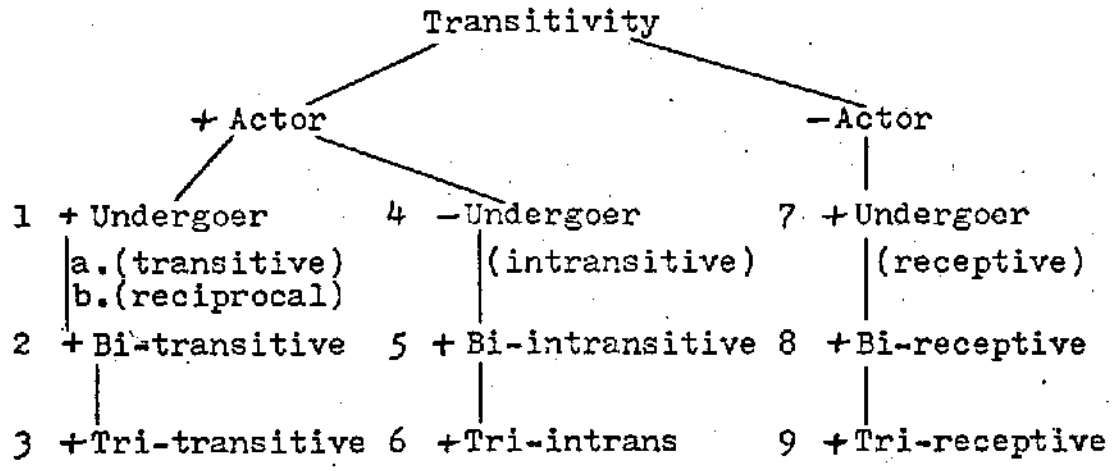
Addendum 4

The Transitivity System

The Directional as handlesd in Chapter 5 of this book is only one of several forms (see Section 3.4). I have now added two more suffixes which were omitted in earlier material because of their rarity.

However, a deeper look at how these suffixes are used sheds a great deal of light on the entire Murle clause system. The following is a short description on another method of handling the Murle verb. It focuses on transitivity types which handle the directional, passive, and reciprocal voices in a balanced system.

The insight for this explanation is taken from a chart on clause-root types found in Pike and Pike (1977:146). There are 9 nuclear clause types in Murle as shown in the chart below. Types 2,3,5,6,8, and 9 include the original 'directional voice'. Types 7-9 cover the original 'passive voice'. Type 1b covers the original 'reciprocal voice'



To more fully explain this chart, I have built up a syntactic paradigm for the transitivity set using as few variables as possible for ease of understanding. For each

clause type numbered on the chart there is a clause formula and an example from Murle. (S/A stands for subject-as-actor and S/U for subject-as-undergoer.)

1.a. Transitive

Trans = +Tr verb stem + S/A + O

V	S	O
Ajuk	ɛɛt-i	dila.
throws	man	spear

'The man throws a spear.'

1.b. Reciprocal

Rec = +Tr verb stem + -ɔ +Pl S/A and U

V	S
Adaŋ-ɔ	ɔl.
argue	men

'The men argue back and forth with each other.'

The subject of a reciprocal clause must always be plural. The reciprocal suffix /-ɔ/ on a transitive verb stem indicates that the participants filling the subject of the clause function as both actors and undergoers of the action.*

2. Bi-transitive

Bi-trans = +Tr verb stem +-ek +S/A +O +Dir or Ben

* The /-ɔ/ suffix can also occur on certain verb stems to indicate multiple actors functioning together, but this is not yet clear.

V	S	O	Dir
Ajuk-ek	ɛɛt-i	dila	liil.
Throws to	man	spear	river

'The man throws the spear into the river.'

Whenever the /-ek/ suffix occurs on a verb stem, there must be a noun in the direction or beneficiary slot. When the noun in the direction or beneficiary slot is inanimate it is generally directional. If the noun is animate it can be either direction or beneficiary. It must be understood from context and can be ambiguous.*

Note that /-ek/ performs the same function in bi-transitive clauses as /-onek/ performs in bi-intransitive and bi-receptive clauses (see types 5 and 8 below).

3. Tri-transitive

Tri-tr = +Tr verb stem + -ɛkɛ + S/A + O + Dir + Ben

V	S	O	Dir	Ben
Ajuk-ɛkɛ	ɛɛt-i	dila	liil	nɔɔnɔ.
throws to/for	man	spear	river	him

'The man throws the spear into the river for him.'

The /-ɛkɛ/ suffix indicates that both the direction and beneficiary slots are filled. In addition to the example descr ibed above, the direction or beneficiary can occur in focus position preceding the object.

* The /k/ in the suffix /-ek/ is weak and will drop out when followed by another suffix. e.g. kajuki + -ek ⟶ kajukei 'I throw to'. (See Chapter 2, Section 3.2.)

V	S	Ben	O	Dir
Ajuk-<u>ɛkɛ</u>	ɛɛt-i	nɔɔnɔ	dila	liil.
throws to/for man		him	spear	river

'The man throws the spear for him into the river.'

4. Intransitive

Intr = + Intr verb stem + S/A

V	S
Adokony	ɛɛt-i.
runs	man

'The man runs.'

5. Bi-intransitive

Bi-int = + Intr verb stem + -<u>onek</u> + S/A + Dir + Ben

V	S	Dir
Adokony-<u>onek</u>	ɛɛt-i	liil.
runs to	man	river

'The man runs to the river.'

Note that the /-onek/ suffix performs the same function, i.e. signalling direction or beneficiary, in bi-intransitive clauses as /-ek/ performs on bi-transitive clauses.

/-onek/ is used only with imperfect aspect. It is replaced by /-ozek/ in the perfect and subordinate aspects.*

* There is an /-ɔ/ intransitiviser (see Chapter 5,Section 3.?) which could be the same /o/ as in the first part of the /-onek/ suffix. In such case it would have been raised from /ɔ/ to /o/ in the environment of /-ek/. (See Chapter 2,Section 2.3). /n/ would then function to separate the vowels. (See Chapter 2,Section 6.5). However, this is still speculation and needs more evidence.

6. Tri-intransitive

Tri-in = +Intr verb stem + -onɛkɛ + S/A +Dir +Ben

V	S	Dir	Ben
Adokony-onɛkɛ	ɛɛt-i	liil	nɔɔnɔ.
runs to/for	man	river	him

'The man runs to the river for him.'

7. Receptive

Recep = +Tr verb stem + -ɛ + S/U

V	S
Ajuk-ɛ	ɛɛt-i.
is thrown	man

'The man is thrown.'

This construction is called 'passive' in Chapter 5. The subject of the clause is not the actor but the undergoer of the action. The verb must be transitive even though the object slot is absent. The actor is unknown or unstated.

8. Bi-receptive

Bi-rec = +Tr verb stem + -onek + S/U + Dir or Ben

V	S	Dir
Ajuk-onek	ɛɛt-i	liil.
is thrown into	man	river

'The man is thrown into the river.'

As stated for bi-intransitive clause type 5 above, /-onek/ performs the same function in bi-receptive clauses as /-ek/ performs in bi-transitive clauses.

9. Tri-receptive

Tri-rec=+Tr verb stem + -onɛkɛ + S/U + Dir + Ben

V	S	Dir	Ben
Ajuk-onɛkɛ	ɛɛt-i	liil	nɔɔnɔ.
is thrown to/for	man	river	him

'The man is thrown into the river for him.'

Putting the Murle verbs into this transitivity chart helps explain what I once thought of as problem areas. All the various voice suffixes can be easier explained in terms of transitivity clause types. What remains in the Murle verb system is three verb aspects: imperfect, perfect, and subordinate. These aspects can function with all transitivity clause types.

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