A GENERATIVE APPROACH TO THE VERB MORPHOLOGY OF SAMBA LEEKO

A dissertation submitted in partial fulfillment of the requirements for the award of the postgraduate diploma "Diplôme d'Etudes Approfondies" (D.E.A) in linguistics.

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(Maître de Conférences)

July 2004
DEDICATION

To the Lord Almighty who has kept me alive
and who has given me the privilege to come out with
this work. May his name be glorified.
ACKNOWLEDGEMENTS.

A work like this one could never have been done single-handedly. I therefore owe much gratitude to the following people for their invaluable support and contributions:

-My supervisor, Prof. Mutaka Ngessimo who, despite his many commitments, took time off to read and correct my work, advise and encourage me.

-The entire staff of the Linguistics department to whom I owe the knowledge I have acquired up till now in the field of linguistics.

-My husband, Bonglaisin Julius Nsawir and our children Lawrence Junior, Lorna Odile and Honoura Nsawir for their invaluable support and love.

-Mr. Vernyuy Francis for the helpful contributions he made to the analysis of some of the data in this work.

-My informants for all the data they gave me.

-Mrs. Jackie Mutaka for typing this work.
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<table>
<thead>
<tr>
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<th>Description</th>
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<tbody>
<tr>
<td>C</td>
<td>Consonant</td>
</tr>
<tr>
<td>V</td>
<td>Vowel</td>
</tr>
<tr>
<td>e.o</td>
<td>each other</td>
</tr>
<tr>
<td>s.o</td>
<td>someone</td>
</tr>
<tr>
<td>#</td>
<td>word boundary</td>
</tr>
<tr>
<td>+</td>
<td>morpheme boundary</td>
</tr>
<tr>
<td>~</td>
<td>alternates with</td>
</tr>
<tr>
<td>[...]</td>
<td>phonetic data.</td>
</tr>
<tr>
<td>/.../</td>
<td>phonemic data.</td>
</tr>
<tr>
<td>[...]</td>
<td>morphological data.</td>
</tr>
<tr>
<td>TbU</td>
<td>Tone bearing unit.</td>
</tr>
<tr>
<td>Sm</td>
<td>Subject marker</td>
</tr>
<tr>
<td>Tm</td>
<td>Tense marker</td>
</tr>
<tr>
<td>UAC</td>
<td>Universal Association Conventions.</td>
</tr>
<tr>
<td>UR</td>
<td>Underlying representation</td>
</tr>
<tr>
<td>PR</td>
<td>Phonetic representation</td>
</tr>
<tr>
<td>α place</td>
<td>place of articulation α</td>
</tr>
<tr>
<td>→</td>
<td>becomes or is realized as.</td>
</tr>
<tr>
<td>Äm</td>
<td>Aspectual marker</td>
</tr>
<tr>
<td>P.</td>
<td>Past tense</td>
</tr>
<tr>
<td>F.</td>
<td>Future tense</td>
</tr>
<tr>
<td>Perf.</td>
<td>Perfective</td>
</tr>
<tr>
<td>Prog.</td>
<td>Progressive</td>
</tr>
<tr>
<td>' or H</td>
<td>High tone</td>
</tr>
<tr>
<td>' or L</td>
<td>Low tone</td>
</tr>
<tr>
<td>_ or m</td>
<td>Mid tone</td>
</tr>
<tr>
<td>HTS</td>
<td>High tone Spreading.</td>
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CHAPTER I

GENERAL INTRODUCTION

I-1. INTRODUCTION

This work sets out to study the way verbs are built up in Samba Leek and how they function in the language. In this introductory part of the work, we will examine the geographical, historical, and linguistic location of the language as well as present a review of previous studies on the language, the aim of our study, the theoretical framework, methodology and the outline of our work.

I-2. GEOGRAPHICAL LOCATION

Samba also known as Tchamba or Chamba is spoken in Cameroon and in Nigeria. The Samba spoken in Nigeria is called Samba-daka while the one spoken in Cameroon is called Samba-Leeko.

In Cameroon, the Samba language is spoken in two different provinces, namely the North province (in Faro Division) and the North West Province. In the North province, Samba-Leeko is spoken in localities like Poli, Béka, Laro, Wangay, Balkoss and Yelli. Our work however is focused on the Samba-Leeko spoken in the North West Province.

In the North West province, Samba Leeko is spoken in four different villages which are found in two divisions, namely: Mezam and Ngohketunjia divisions. These four villages are the following:

- Bali - Gham in Mezam Division.
Bali - Kombat, Bali - Gangsin and Bali - Gashu in Ngohketunjia Division.

Bali - Kombat lies in the Northern territory, Bali-gashu at the centre and Bali-Gangsin at the South eastern region. The Cameroon population census of 1987 puts its population at about 42,000 inhabitants. Griffins, (1994), says Bali - Kombat has the highest population of about 14,000 inhabitants and Bali - Gashu has the least population with about 1500 inhabitants.

The three villages found in Ngohketunjia Division are bounded geographically and linguistically on the north by Babanki (Kejom Ketingoh [824] and Bamali (Kænseti nsei [842])), on the west by Awing [917], on the east by Basamji (mængambo [908]) and on the South by the Bamboutous Division in the west Province.

Bali - Gham found in Mezam Division is located to the south west of the other three villages and it is separated from them by Awing [917] which bounds it on the eastern and northern regions. Bali-Gham is further bounded on the north and on the west by Akum (ngamambo [868]), a village which stretches Southwards into the Bamboutos Division.

The two different locations of these villages and the distant location of their brother village, Bali-Nyonga (see maps next page) suggest that they forced themselves into their present sites after their emigration from the North of Cameroon. Even in recent times, these Bali villages still have boundary problems with neighbouring villages.
Figure 1 shows the different linguistic zones found in Cameroon. It shows the location of the Adamawa Oubangian family which is the linguistic family of Samba leek and the area where it is found in Cameroon.
I-3. HISTORICAL BACKGROUND

The Bali people of the North West Province of Cameroon emigrated from the Northern region of Cameroon and from across the borders of the present day Gongola state of Nigeria some 150 years ago (Griffins, 1994). Samba Leekɔ which is spoken in Cameroon originated from Samba Daka found in Nigeria. Its name evolved from Tschamba to Tchamba and then to Chamba. The people are called Chamba as in the appellation Bali Chamba (Nyamndi, 1988) and the language is called Samba as in Samba Leekɔ. Their migration originated from the time of the Fulani Jihad (Nyamndi, 1988). This is illustrated in the map on page 6.

These people were warmongers and they usually fought among themselves. Their warlike nature resulted in their migration to their present settlement. The death of their Fon, Gawolbe, in one of their many battles posed a hereditary problem. This led to a struggle for leadership which separated them into five different groups, each paying allegiance to a leader.

As a result of this, these five groups became five different villages including Bali Nyonga that speaks Mungaka1 [900], a completely different language from Samba Leekɔ. (See map on page 7)

There are however some few lexical similarities that exist between Samba Leekɔ grassfield and Mungaka.
Figure 2  Les parlers samba

Différents sites d'occupation du Peuple Bali

Itinéraire migratoire du Peuple Bali

samba – daka (daga - mumi)

kolen

daganyenga

SOURCE : KOUONANG (1986 : 6)
THE SITUATION OF THE DIFFERENT SAMBA LEKKO VILLAGES AND ITS
BROTHER VILLAGE, BALI NYONGA

Figure 4

KEY

=Samba

= mungaka

© ALCAM
CREA-ISH
R. BRETON 1997
I- 4. LINGUISTIC CLASSIFICATION

Samba Leekɔ is a language spoken in two regions of Cameroon, namely the North and the North West Provinces. Nyamndi (1988:14) calls the language spoken in the North Province Samba Leekɔ Benue and the one spoken in the North West province Samba Leekɔ grassfield. Our focus in this work, as earlier said, is on Samba Leekɔ spoken in the North West province of Cameroon, that is Samba Leekɔ Grassfield. During our field work, we realized that the native speakers of this language are ignorant of the appellation ‘Samba Leekɔ’ as the name of their language. Some call it ‘Mubaako’ and others ‘Daganyonga’.

The linguistic family tree of Samba Leekɔ originates from the Niger Kordofanian phylum. It then descends to the Niger Congo sub-phylum which is further divided into different families. From the Adamawa Oubangian family, it descends to the Adamawa sub-family and then to the Samba group which has Samba Leekɔ as its language. Samba Leekɔ has different dialects but our focus is on Daganyonga (see genetic classification on the next page.)

The Daganyonga dialect spoken in the North West Province exhibits some limited regional lexical and phonological differences depending on the village of the speaker(s). Thus, the Samba Leekɔ spoken by natives from Bali-Kumbat has some words which are different from those used by the natives from the other three villages: Bali-Gham, Bali-Gashu, and Bali-Gangsin. Below are some examples:

<table>
<thead>
<tr>
<th>English</th>
<th>Bali-Kumbat</th>
<th>The others.</th>
</tr>
</thead>
<tbody>
<tr>
<td>bridge</td>
<td>[kɔlɔm]</td>
<td>[kɔpsijá]</td>
</tr>
<tr>
<td>caterpillar (larva)</td>
<td>[sisiá]</td>
<td>[sùsùá]</td>
</tr>
<tr>
<td>stomach</td>
<td>[bàyàlá]</td>
<td>[bà́yá]</td>
</tr>
<tr>
<td>corner (of a house)</td>
<td>[sáŋsiá]</td>
<td>[tó?tíá]</td>
</tr>
</tbody>
</table>
This regional variation is however not significant since natives from these villages consider their language as one. Also, the level of intelligibility between them is very high. As a result, we will not consider these variations in our work, especially, given the fact that little or no differences were found in the verbal forms. We will thus consider the Samba Leeko spoken in the North West Province as one, irrespective of the region where it is spoken.
GENETIC CLASSIFICATION OF Samba Leekɔ

Phylum
Sub phylum
Family
Sub family
Group
Language
Dialect

NIGER - KORDOFANIAN
NIGER - CONGO
WEST ATLANTIC
KWA
ADAMAWA - UBANGIAN
BENUE - CONGO
ADAMAWA
UBANGIAN
SAMBA
DAKA
KOBODI
MUMUYE
MBUM
FALI
NIMBARI

Samba Leekɔ

SOURCE: ATLAS LINGUISTIQUE DE L'AFRIQUE CENTRALE (ALAC), ATLAS LINGUISTIQUE DU CAMEROUN (ALCAM) GREENBERG'S CLASSIFICATION
Adapted by LOGA (1999)
I-5. PREVIOUS STUDIES ON THE LANGUAGE

Some previous work has been done on Samba Leekə. In 1976, NOSS worked on the phonology of Samba Leekə. In 1983, KOUONANG again worked on the phonology of Samba Leekə. Using the structural approach, they were able to establish a sound system for the language and also propose a writing system, the basis from which further scientific work could be done. LOGA in 1999 also worked on the phonology of Samba Leekə in a work entitled: Aspects of Samba Leekə Phonology. The demarcation between her work and that of NOSS and KOUONANG is that while NOSS and KOUANANG used the structural approach for their analyses, LOGA used the Generative and Autosegmental theoretical frameworks in hers. After presenting the sound system of Samba Leekə, LOGA (1999) went on to present the surface phonological and tonological alternations in the language and propose possible solutions to explain how they come about. After LOGA, the most recent work on which we have laid our hands is ESSAMBA's maîtrise dissertation entitled: Morphologie Nominale du Sàmbá in which she works on noun morphology.

Apart from these works, we have not been able to lay hands on any other previous work on the language although it is possible that they might exist.

I-6. AIM OF STUDY AND CHOICE OF TOPIC

The aim of this work is to study the way verbs are built up in Samba Leekə and how they function in the language. Our goal is also to analyse all the surface phonological and tonological alternations witnessed in the language so as to come out with the exact underlying representations. As for our choice of topic, it was influenced by the fact that no work existed on
verb morphology in this language. We therefore thought it important to work on verb morphology because morphological studies are the first step towards the development of the grammar of a language. We also believe that this work will contribute to the study and development of the languages of the grassfield zone and our African languages in general.

I-7. THEORETICAL FRAMEWORK

In our work, we will use two theoretical models namely: Generative model for segmental analyses and the Autosegmental model for tonal analysis. This is in a bid to better describe the various verbal structures and explain the different morphophonological and morphotonological processes that occur in the language.

The Standard Generative Model of Chomsky and Halle (1968) recognizes two levels of representation: the systematic phonemic level (or Underlying representation) and the systematic phonetic level (Phonetic Representation). Phonological rules are considered to relate the Underlying Representation to the Phonetic Representation. While this theory aptly describes and explains segmental phenomena in languages, it has its own shortcomings in the handling of suprasegmental phenomena. That is why we have opted for the Autosegmental Model for tonal analyses.

As proposed by Goldsmith (1976), it is argued in the Autosegmental model that each tier is autonomous with its series of features. This means that the CV- tier, the segmental tier and the tonal tier function independently from each other. This autonomy facilitates the explanation of tonal phenomena.
I-8. METHODOLOGY

Our work started with literature review which orientated and guided us throughout the project. While going through literature review, we made an inventory of words in the English Language, made up mostly of verbs. A majority of the verbs were in isolation, some in phrases and some in sentences. This list was then taken to informants and read to them in English. They in turn translated the words, phrases and sentences into Samba Leekɔ, and the researcher wrote them down for subsequent analyses. Where difficulties were met, the researcher recorded the translations for subsequent careful transcription and analysis.

Below is the list of informants whom we consulted in Yaounde. All of them had lived in the village and had a mastery of their language.

INFORMANTS

<table>
<thead>
<tr>
<th>NAME</th>
<th>PROFESSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. BILA Augustin</td>
<td>Teacher</td>
</tr>
<tr>
<td>Mr. SABLA Edward</td>
<td>Soldier</td>
</tr>
<tr>
<td>Mr. SAMA Alexandre</td>
<td>Student (ASTI)</td>
</tr>
<tr>
<td>Mr. Anthony NJIKAM</td>
<td>Teacher</td>
</tr>
<tr>
<td>Miss Doh Winifred</td>
<td>Hairdresser</td>
</tr>
<tr>
<td>Mr. SABLA Henry</td>
<td></td>
</tr>
</tbody>
</table>
I-9. OUTLINE OR WORK

This work is divided into five chapters. Chapter one presents the general introduction to the work, which gives the geo-historical location and the linguistic classification of Samba Leekə. It goes further to present the previous works on the language, the aim of study, the theoretical framework and methodology used, and an outline of the entire work.

The rest of the work is divided into 4 chapters. Chapters two, three and four, deal with Verbal Elements while chapter five deals with Verbal Flexion. Thus, chapter two presents a review of the Phonology of Samba Leekə and the morphophonological and morphotonological processes that exist in the language; chapter three deals with the morphological structure of the verb and chapter four with verb derivation.

As for chapter five, it deals with the Verbal Flexion.

The work ends with a general conclusion.
Mungaka is a language that originated from Samba Leekɔ but which has undergone a great deal of transformation to such an extent that there exists no mutual intelligibility between it and Samba Leekɔ. There are however some lexical similarities between them.

The Mungaka and Samba Leekɔ speakers still share the same social and cultural values like the belief in their fetish gods realised in the “Vomas” and the “ŋwanas”; the “Voma” and the “ŋwana” being societal dances. They also perform their yearly festivals like the “Lela” which is a royal dance led by the Fon and which is called the Fon’s dance. It is performed in all the Bali villages for purification.

After about 160 years of separation, there exists some intelligibility between Samba Leekɔ Grassfield and Samba Leekɔ Benue. Despite these changes, they still maintain some forms of similarities as observed by Griffins (1994). She makes reference to a comparison made by Edward Mueller between Samba Leekɔ Benue and Samba Leekɔ grassfield. It revealed that 85% of a word list of about two hundred words were lexically similar as illustrated below:

I. NOUNS:

<table>
<thead>
<tr>
<th>English</th>
<th>Grassfield</th>
<th>Benue</th>
</tr>
</thead>
<tbody>
<tr>
<td>“fish”</td>
<td>[dîbá]</td>
<td>[dîbá]</td>
</tr>
<tr>
<td>“foot”</td>
<td>[dûná]</td>
<td>[dûná]</td>
</tr>
<tr>
<td>“star”</td>
<td>[dûdûwá]</td>
<td>[dûdûwàá]</td>
</tr>
<tr>
<td>“neck”</td>
<td>[gààlá]</td>
<td>[gààlá]</td>
</tr>
<tr>
<td>“me”</td>
<td>[mó]</td>
<td>[mó]</td>
</tr>
<tr>
<td>“child”</td>
<td>[wàà]</td>
<td>[wàà]</td>
</tr>
</tbody>
</table>
II. VERBS.

As far as the verbs are concerned, we find that the verb roots remain the same even though the verb prefix and suffixes differ.

<table>
<thead>
<tr>
<th>English</th>
<th>Grassfield</th>
<th>Benue</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;to listen&quot;</td>
<td>[kɔ -zɔŋ - mbà]</td>
<td>[ɔ - zɔŋ - mbiá]</td>
</tr>
<tr>
<td>&quot;to come&quot;</td>
<td>[kɔ - jàá - mbà]</td>
<td>[ɔ - jàá - mbiá]</td>
</tr>
<tr>
<td>&quot;to give&quot;</td>
<td>[kɔ - pì ì - mbà]</td>
<td>[ɔ - pìì - mbiá]</td>
</tr>
<tr>
<td>&quot;to kill&quot;</td>
<td>[kɔ - lòʔ - mbà]</td>
<td>[ɔ - lòʔ - mbiá]</td>
</tr>
<tr>
<td>&quot;to go&quot;</td>
<td>[kɔ - dáá - mbà]</td>
<td>[ɔ - dáá - mbiá]</td>
</tr>
<tr>
<td>&quot;to buy&quot;</td>
<td>[kɔ - lèb - bà]</td>
<td>[ɔ - lèb - mbiá]</td>
</tr>
</tbody>
</table>
CHAPTER TWO

REVIEW OF SAMBA LEEKO PHONOLOGY AND TONOLOGY

INTRODUCTION

Many readers will pose questions on why a morphological study should start with phonology but we deemed it necessary in this work for methodological reasons. Defining the structuralist approach, Dubois et al (1973 : 453) say:

"Les structuralistes définissent des niveaux ou des rangs ... Les phonèmes sont considérés par leurs combinaisons au rang du morphème et les morphèmes par leurs combinaison dans la phrase."

This means that phonemes and morphemes are intimately linked together since phonemes are the building blocks for morphemes. This brings in an intimate relationship between phonology and morphology. Given that the sounds of a language must be used in a morphological study, it is of utmost importance that we identify these sounds and study them in order to better carry out our morphological study.

This chapter will be divided into two sections: part one which deals with phonology and part two which deals with tonology.

II-1. PHONOLOGY

Phonology is defined as the study of the sound systems of languages, that is, how speech sounds structure and function to convey meaning. In
this chapter, therefore, we will identify and study the sounds attested in Samba Leekɔ limiting ourselves only to the phonemic level since much work has been done on the phonology of the language (see NOSS, (1976), Kouonang (1983) and LOGA, (1999)).

Following the works of KOUONANG, (1983) and LOGA, (1999), Samba Leekɔ has nine (9) phonemic vowels namely: three front, three central, and three back vowels. NOSS, (1976) mentions only eight vowels namely: three front, two central and three back vowels. From our data analysis, we have however found out that the third central vowel [i] does exist so Samba Leekɔ has nine (9) vowels. KOUONANG, (1983) talks of the existence of long vowels but NOSS, (1976) LOGA, (1999) and ESSAMBA. (2000) do not mention them. This led us to study the issue of long vowels more closely and from our data analysis, we realised that long vowels do not exist in Samba Leekɔ as will be demonstrated later.

At the level of consonants, Samba Leekɔ has twenty-two (22) phonemic consonants.

Using examples, we will illustrate the phonemic vowels and consonants. After that, we will look at the morphophonological rules that apply in the language.

The alphabet used in our study is the International Phonetic Alphabet (API).

II. 1.1- PHONOLOGICAL INVENTORIES

II.1.1.1- Inventory of phonemic vowels.

Vowels are sounds that are produced with no constriction of the organs of articulation. In this section of the work, we will present all the phonemic vowels attested in Samba Leekɔ, discuss on the question of long
vowels, draw a phonemic vowel chart and present the distinctive features of these sounds.

Samba Leekó has the following phonemic vowels:

[i] High front oral vowel. It occurs at word medial position as seen below:

[i] High central oral vowel. It occurs at word medial and final position as in: [gbísijá] “chin” [sí] Negative marker “not”

[u] High back rounded oral vowel. It occurs word medially as in:

[e] Mid high front vowel. It occurs word medially and finally as seen below: [kpèndéé] “plantain”, [kà(jnwàñi)déémbá] “to read (a book)”

[ə] Mid high central unrounded vowel. It occurs at word medial position as in: [kàtšàmbá] “to sweep” [kàsákmbá] “to keep”

[o] Mid high back rounded vowel. It occurs word medially as seen below:
[gówá] “rope” [gónúwá] “a trap”.

[e] Mid low front vowel. It occurs at word medial position as in the words: [kàbèsìmbá] “to finish” [kàpètba] “to share”

[ə] Mid low back rounded vowel. It occurs word medially as seen below:
[kà tɔmbá] “to tear” [kà (lòt)lòòmbá] “to laugh”

[a] Low central oral vowel. It occurs at word medial and final position as in: [ŋgàmká] “talk” [kàdáàmbá] “to go”.
II.1.1.1.1. The question of long vowels.

KOUMANANG, (1983) identified six long vowels in Samba. They are as follows:

[i], [ee], [ee], [aa], [uu] and [oo].

She used the following minimal pairs to justify the existence of these long vowels in the language.

(1)

\[\begin{align*}
\text{i/i} & \quad \text{in} & \quad \text{j} & \quad \text{"to sing"} \\
& & \text{j} & \quad \text{"to accept"} \\
\text{e/ee} & \quad \text{in} & \quad \text{k} & \quad \text{"pot"} \\
& & \text{k} & \quad \text{"to open"} \\
\text{e/ee} & \quad \text{in} & \quad \text{m} & \quad \text{"tongue"} \\
& & \text{m} & \quad \text{"to fish with a hook"} \\
\text{a/aa} & \quad \text{in} & \quad \text{g} & \quad \text{"chief"} \\
& & \text{g} & \quad \text{"neck"} \\
& & \text{l} & \quad \text{"to cultivate"} \\
& & \text{l} & \quad \text{"to throw"} \\
& & \text{w} & \quad \text{"groundnut"} \\
\text{u/uu} & \quad \text{in} & \quad \text{l} & \quad \text{"to bite"} \\
& & \text{l} & \quad \text{"to burn"} \\
\text{o/oo} & \quad \text{in} & \quad \text{v} & \quad \text{"breast"} \\
& & \text{b} & \quad \text{"wine"} \\
& & \text{d} & \quad \text{"elephant"}
\end{align*}\]
After thorough work with informants, we realised that KOUONANG's assumptions were wrong for the few minimal and quasi-minimal pairs she presented (see data in (1)) to illustrate the pertinence of vocalic length were either wrongly transcribed or wrongly segmented. Working with informants through the list of words she presented, and making necessary corrections, we had the following transcriptions and segmentations:

(2)

(a) For the suspicious pair i/ii
[kā(nāp) - jī - mbā] “to sing (a song).”
[kā - jī - mbā] “to accept”

(b) For the suspicious pair e/ee
[kē - lā] “pot”
[kā - kē - mbā] “to open”

(c) For the suspicious pair e/ee
[mē - lā] “tongue”
[kā(lōb) - lē - mbā] “to fish with a hook”

(d) For the suspicious pair a/aa
- [gā - lā] “chief”
- [gā - lā] “neck”
- [kā(ān)-lāmbā] “to cultivate” (cf. [nlāmānā] “imperative”)
[kā - lā - mbā] “to throw” (cf. [nlāǎkā] “imperative”)
[wā - lā] “groundnut”
Looking at the data we have just presented in (2) above, we realise that KOUONANG had a problem of wrong transcription for the minimal pairs that portray the distinction between the vowels i/ii, e/ee, e/ee and a/aa). This is because all of these words as presented in the data in (2) have double vowels (ii, ee, ee and aa) and there is none with a single vowel.

The forms that present the distinction between u/uu and a/aa portray a problem of wrong segmentation when we compare KOUONANG’s data in (1) and the data in (2).

It is obvious that looking at the verbs, [kəlUMB] ‘to bite’ and [kəlúumb] ‘to burn’, for example, one can immediately draw the conclusion that the prefix is [kə-] while the suffix is [-mbə] and that the verb root portrays a difference in vocalic length: u/uu. This however is a hasty conclusion for as we study the various tenses in the language, we are able to come out with the exact verb roots and suffixes which are those presented in the data in (2e).

As for the forms that present the distinction between o/oo in (2f), we can argue that they are not minimal pairs given that they have differences in tone. The first word, [vɔm], carries a low tone while the two words with which it is contrasted bear mid tones and high tones respectively. It should be noted that in Samba Leekə, tone
plays a lexical function. Secondly, these words do not have the same consonants.

The conclusion we therefore draw is that long vowels do not exist in Samba Leekɔ for we have not been able to come out with any minimal pairs that portray distinction in vowel length. Also, the fact that out of four previous works on Samba Leekɔ, (NOSS 1976, KOUONANG 1983, LOGA 1999, and ESSAMBA 2002), only KOUONANG talks of long vowels is enough proof to the fact that she surely made mistakes in her analysis. Our conclusion therefore is that what KOUONANG calls long vowels is a concatenation of two identical vowels.

11.1.1.1.2 Phonemic Vowel chart.

From the phonemic vowels presented in section II.1.1.1, we can draw the following phonemic vowel chart.

Table 1: Phonemic vowel chart of Samba Leekɔ

<table>
<thead>
<tr>
<th></th>
<th>Front</th>
<th>Central</th>
<th>Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>i</td>
<td>i</td>
<td>u</td>
</tr>
<tr>
<td>Mid high</td>
<td>e</td>
<td>ø</td>
<td>o</td>
</tr>
<tr>
<td>Mid low</td>
<td>e</td>
<td>ø</td>
<td>ø</td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td>ø</td>
<td>a</td>
</tr>
</tbody>
</table>
II.1.1.1.3 Vowel distinctive feature matrix.

Table 2: Vowel distinctive feature matrix.

<table>
<thead>
<tr>
<th>Features</th>
<th>i</th>
<th>i</th>
<th>u</th>
<th>e</th>
<th>o</th>
<th>o</th>
<th>e</th>
<th>o</th>
<th>a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syllabic</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>High</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Back</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Round</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ATR (Tense)</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Low</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

II.1.1.1.4. Justification of vowel features.

SYLLABIC: [syll]: This is a feature assigned to sounds that can be the nucleus or peak of a syllable. All vowels are [+syll].

HIGH [high]: This feature is used to distinguish between high and non high vowels.

BACK [back]: It is used for sounds produced with the body of the tongue further back than the position of front vowels. These sounds are [+back] while front vowels are [-back].

ROUND [round]: This feature distinguishes between sounds that are produced with lip rounding, [+round], and those produced without lip rounding [-round].
ATR [ATR]: This feature is used to distinguish sounds with a tongue root advancement, [+ATR] from those produced with a tongue root retraction [-ATR].

LOW [low]. This feature is assigned to sounds that are produced by lowering the body of the tongue downward from its normal resting position.

II.1.1.2. INVENTORY OF PHONEMIC CONSONANTS.

Simo et al. (1993: 217) define consonants as:

“any speech sound produced by momentarily stopping somehow and then releasing the air stream.”

This means that consonants are produced with constriction of the organs of articulation. In the sections that follow, we will present the phonemic consonants in Samba Leeko, draw a phonemic consonant chart and present a distinctive feature matrix for these sounds.

In Samba Leeko, the following phonemic consonants are attested:

[p] Voiceless bilabial oral stop.

Examples: [køpøtbø] “to share”
           [imwøpka] “break” (calabash)

[b] Voiced bilabial oral stop.

Examples: [kasatba] “to learn”
          [kub] “ten”
          [bej] “money”

[t] Voiceless alveolar oral stop.

Examples: [kemøtbø] “to lick”
          [taal] “parlour”
[d] Voiced alveolar oral stop.
Examples: [kɔdɛsɪmbə] “to measure”
          [dɪbá] “fish”

[k] Voiceless velar oral stop
Examples: [nsàtká] “learn” (imperative)
          [kɔmá?mbə] “to do”

[g] Voiced velar oral stop
Examples: [kɔgùumbə] “to sew”
          [gɔyá] “animal”

[kp] voiceless labio-velar oral stop.
Examples: [kpɔlɔyá] “ladder”
          [kpɔntiŋá] “mortar”

[gb] Voiced labio-velar oral stop
Examples: [gbəsɪjá] “forehead”
          [gbáyá] “chair”

[ʔ] Glottal stop
Examples: [kɔkʊmbə] “to chew”
          [ʃláʔ] “two”

[m] Bilabial nasal
Examples: [ɪmɔká] “do”
          [kʊkɪnù] “hen”

[n] Alveolar nasal.
Examples: [ɲʊnká] “fry”
          [kʊkɪnù] “hen”

[ɲ] Palatal nasal
Examples: [ɲʊnká] “fry”
          [kɔɲisɪmbə] “to fill”
[ŋ] Velar nasal

Examples: [tʊŋá] “ear”
[kpάŋkάlά] “millipede”

[f] Voiceless labio-dental oral fricative

Examples: [fíkɔbá] “spoon”
[fɔ̀má] “measles”

[v] Voiced labio-dental oral fricative

Examples: [mʊvɔtká] “die” (imp.)
[kʊvǎnù] “cock”

[s] Voiceless alveolar oral fricative.

Examples: [kɔsǎkmbā] “to keep”
[kɔbɛsìmbā] “to finish”

[z] Voiced alveolar oral fricative

Examples: [ziǐlā] “year”
[ziǐná] “vein”

[y] Voiced velar oral fricative

Examples: [ tôglɔyá] “worm
[gɔyá] “animal”

[dʒ] Voiced palato-alveolar affricate

Examples: [kədʒʊbə] “to beat”
[dʒəlά] “mud”

[l] Lateral

Examples: [kɔləmbə] “to work”
[hlʊmkə] “bite” (imp.)
[w] Bilabial approximant

Examples: [mʊwɔpká] "break (calabash)"
[wáálá] "groundnut"

[j] Palatal approximant

Examples: [jéwàá] “knife”
[jìdlá] "head”

The syllabic nasals: [m], [n], and [ŋ] are not phonemic given that their occurrence is predictable and can be captured by rules as will be discussed in our subsequent analysis.

II.1.1.2.1. Phonemic Consonant Chart

Following the inventory of phonemic consonants discussed above, we can draw the phonemic consonant chart below:

Table 3: Phonemic consonant chart of Samba Leekō

<table>
<thead>
<tr>
<th>Place Manner</th>
<th>Bilabial</th>
<th>Interdental</th>
<th>Alveolar</th>
<th>Palato-alveolar</th>
<th>Palatal</th>
<th>Velar</th>
<th>Labio-velar</th>
<th>Glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plosive</td>
<td>p b</td>
<td>t d</td>
<td></td>
<td></td>
<td>k g</td>
<td>kp gb</td>
<td>?</td>
<td></td>
</tr>
<tr>
<td>Nasal</td>
<td>m</td>
<td>n</td>
<td></td>
<td>j n</td>
<td>ñ</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fricative</td>
<td>f v</td>
<td>s z</td>
<td></td>
<td>ϭ</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affricate</td>
<td></td>
<td>dʒ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lateral</td>
<td>l</td>
<td></td>
<td></td>
<td>ʃ</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approximant</td>
<td>w</td>
<td></td>
<td></td>
<td>j</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
II.1.1.2.3. JUSTIFICATION OF CONSONANT FEATURES

CONSONANTAL [cons]: A sound is [+cons] if it is produced with constriction (interruption of the air stream) in the oral cavity. This feature is used to distinguish the rest of the consonants from the glottal stop and semi-vowels which are [-cons].

ANTERIOR [ant]: A sound is [+ant] if it is produced with constriction at the teeth ridge or farther forward. This feature is used to distinguish between bilabial, interdental and alveolar sounds from the rest of the sounds.

CORONAL [cor]: The feature [+cor] describes sounds produced by raising the blade of the tongue (including the tip) towards the teeth, alveolar or hard palate. It distinguishes alveolar and palatal sounds from the rest of the sounds which are [-cor].

CONTINUANT [cont]. The feature [+cont] describes sounds produced with air flowing continuously out of the oral cavity or the nasal cavity. It differentiates fricatives, glides and laterals which are [+cont] from stops, affricates and nasals which are [-cont].

NASAL [nas]. Nasal sounds are those produced with air flowing simultaneously through the nasal and oral cavities. It differentiates between nasal and oral sounds.

VOICE [voice]: A sound is [+voice] if it is produced with the vocal cords vibrating. This feature is used to distinguish between voiced and voiceless consonants.

LATERAL [lat]: This feature refers to sounds produced when the tip of the tongue is raised to touch the alveolar region allowing air to flow on both sides of the tongue.

ROUND [rd]: This feature is used to describe sounds produced with lip rounding.
DELAYED RELEASE (del rel): A sound is [+del rel] when during its production, air is trapped somehow and released later. This feature distinguishes [dʒ] from the other sounds.

SYLLABIC (syll): It refers to sounds that can constitute the nucleus of a syllable. All consonants except for syllabic nasals are [-syll]. Glides are both [-consonantal] and [-syllabic].

II.1.2. MORPHOPHONOLOGICAL RULES

Our studies on the verb in Samba Leeko portray a number of morphophonological processes which will be presented in this section of the work. We will begin by listing all the processes, captured by rules, then we will present each morphophonological process with illustrative data, clearly state the rule capturing it and show how it applies.

To begin with the presentation of the processes, the following morphophonological processes occur in Samba Leeko:

- Nasal Asimilation
- Vowel deletion
- Glide insertion
- Lateral insertion
- Frication
- Voicing
- Devoicing
- Dissimilation.

II.1.2.1. NASAL ASSIMILATION

We talk of assimilation when a segment takes on the feature(s) of a neighbouring segment. It could be a consonant taking up the features of
another consonant or vowel or a vowel taking up the feature(s) of another vowel or consonant.

In Samba Leeko, just as in many other African languages, we notice a process of nasal assimilation. This is a process whereby a nasal assimilates the place of articulation of the following consonant. Consider the data below:

(3)

<table>
<thead>
<tr>
<th></th>
<th>(i)</th>
<th>(ii)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>“to come”</td>
<td>“come”</td>
</tr>
<tr>
<td></td>
<td>kàjààmbà “to come”</td>
<td>ñjààkà “come”</td>
</tr>
<tr>
<td></td>
<td>kùlùùmbà “to burn”</td>
<td>ñlùùkà “burn”</td>
</tr>
<tr>
<td></td>
<td>kàdààmbà “to go”</td>
<td>ñdàákà “go”</td>
</tr>
<tr>
<td></td>
<td>kàtìmbà “to push”</td>
<td>ñti?kà “push”</td>
</tr>
<tr>
<td></td>
<td>kàzàìmbà “to listen”</td>
<td>ñzàìkà “listen”</td>
</tr>
<tr>
<td></td>
<td>kànènmbà “to choose”</td>
<td>ñnènkà “choose”</td>
</tr>
<tr>
<td></td>
<td>kàdùùbà “to beat”</td>
<td>ñdùùbkà “beat”</td>
</tr>
<tr>
<td></td>
<td>kànàppààmbà “to dance”</td>
<td>ñnàànàbà “dance”</td>
</tr>
<tr>
<td>b.</td>
<td>“to deny”</td>
<td>“deny”</td>
</tr>
<tr>
<td></td>
<td>kàmààmbà “to deny”</td>
<td>ñmààkà “deny”</td>
</tr>
<tr>
<td></td>
<td>kàpìímbà “to give”</td>
<td>ñpííkà “enter”</td>
</tr>
<tr>
<td></td>
<td>kàbìmbà “to rot”</td>
<td>ñbìmkà “rot”</td>
</tr>
<tr>
<td></td>
<td>kàtàtbà “to cut”</td>
<td>ñvàtkà “cut”</td>
</tr>
<tr>
<td></td>
<td>kàwàppà “to break (calabash)”</td>
<td>ñwàpkà “break”</td>
</tr>
<tr>
<td>b.</td>
<td>“to talk”</td>
<td>“talk”</td>
</tr>
<tr>
<td></td>
<td>kàgàmbà “to talk”</td>
<td>ñgàmkà “talk”</td>
</tr>
<tr>
<td></td>
<td>kàkèìmbà “to help”</td>
<td>ñkèìkà “help”</td>
</tr>
</tbody>
</table>
Given the data in (3) above, the forms in the columns labelled (i) are verbs in the infinitive while those in the columns labelled (ii) are verbs in the imperative mood. Looking at the forms in column (ii), we notice that the verb prefix [kə-] and the verb suffixes [-bə] and [-mbə] are absent. We are left with the verb root which takes on the imperative marker which as will be demonstrated later is the discontinuous morpheme [N...ká].

When the homorganic nasal, [N] is affixed to the verb root, we notice a process of nasal assimilation. This explains why in the forms in (3a), column ii), [N] is realized as the alveolar nasal, [n], before alveolar, palato-alveolar and palatal sounds. In the forms in (3b), it becomes the bilabial nasal, [m], before bilabial and interdental sounds and in the forms in (3c), it is realized as the velar nasal, [ŋ], before velar sounds.

This morphophonological process can be captured by the rule below:

(4) Nasal assimilation rule:
N --> [anything] / -- [nothing]

Prose statement: A nasal assimilates the place of articulation of the following consonant.

(5) Sample derivations¹

<table>
<thead>
<tr>
<th></th>
<th>ñásəŋská “meet”</th>
<th>ńməðká “deny”</th>
<th>ěgámká “talk”</th>
</tr>
</thead>
<tbody>
<tr>
<td>UR</td>
<td>ń- sáŋsi-ká</td>
<td>ń-məð-ká</td>
<td>ń-gámk-ká</td>
</tr>
<tr>
<td>R1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nasal</td>
<td>n</td>
<td>m</td>
<td>ŋ</td>
</tr>
<tr>
<td>Assimilat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PR</td>
<td>[ńásəŋská]</td>
<td>ńməðká</td>
<td>ěgámká</td>
</tr>
</tbody>
</table>

¹ In our derivations in this part of the work, we will not present underlying tones. The question of underlying tones will be treated under the section dealing with tonology.
II.1.2.2. VOWEL DELETION

(6)

a. (i) (ii)
kà djëbbà “to beat” mò djëbbà “I have beaten”
kà gàmbà “to talk” mò gàmmà “I have talked”
kà nàsmbà “to drink” mò nàddà “I have drunk”
kà mësmbà “to deny” mò mëddà “I have denied”

b. (i) (ii)
kà dààmbà “to go” mò dáà “I have gone”
kà jáàmbà “to come” mò jáà “I have come”

In the data in (6), the forms in column (i) present the verbs in the infinitive while those in column (ii) are in the present perfect tense, conjugated with the first person singular pronoun, [mò], “I”. When we examine the verbs in (6a, column ii), we notice that they are made up of: the verb root + [à]. This vowel [à], as will be demonstrated later, is the aspectual marker for the perfective aspect. In the forms in (6b, column ii), the verbs are constituted of the verb root only, in spite of the fact that they are in the present perfect tense. This leaves us with the conclusion that the vowel [à], which acts as aspectual marker has been deleted. The reason for this deletion is that Samba Leekò does not permit a sequence of three identical vowels within one word. This explains why sequences like [màddà, nàddà] ² are admitted while the sequences [*jáàà, dáàà] are not. To break the three identical vowel sequence, the last vowel is deleted giving us the forms in (6b, column ii).

²Sequences with three contiguous vowels like [màddà, nàddà] are very rare in the language. They occur only with the schwa sound, [à].
The vowel deletion rule can be formulated as follows:

(7) Vowel deletion rule.

\[ a \rightarrow \sigma / aa \rightarrow \# \]

Formal statement:

\[ \begin{array}{c}
+ \text{syl}l \smallskip 
+ \text{low} \rightarrow \sigma \\
\end{array} \ / \begin{array}{c}
+ \text{syl}l \smallskip 
+ \text{low} \smallskip 
+ \text{low} \rightarrow \# \\
\end{array} \]

Prose statement: The [+low] vowel [a] is deleted when it occurs after the sequence [aa] at word final position.

(8) Sample derivation

mó màà mà jàá mó dzùbà

<table>
<thead>
<tr>
<th>UR</th>
<th>mó màà-à</th>
<th>mó jàá-à</th>
<th>mó dzùb-à /</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vowel</td>
<td>:</td>
<td>:</td>
<td></td>
</tr>
<tr>
<td>del</td>
<td>a- &gt; o/aa-#</td>
<td>---</td>
<td>( \sigma )</td>
</tr>
<tr>
<td>PR</td>
<td>[mó màà]</td>
<td>mó jàá</td>
<td>mó dzùbà</td>
</tr>
</tbody>
</table>

II.1.2.3. GLIDE INSERTION

Glide insertion refers to the insertion of a glide in the middle of contiguous vowels to break vowel clusters. For this to happen, the contiguous vowels must occur across morpheme boundary. Consider the data below:
The data in (9) present verb and noun roots plus suffixes. The verb roots are accompanied by the perfective aspectual marker, [á]. The verbs are conjugated with the first person singular, [ma]. The noun roots on their part are followed by the noun a noun suffix [a].

In the forms in (9a), all the verb and noun roots end in vowels with the feature [-round]. When the noun suffix, [a], and the perfective aspectual marker, [á], are added, we notice that the palatal glide, [j] is inserted in between the contiguous vowels that are created.

As for the forms in (9b), we find that all the verb and noun roots end with the rounded vowels [ ə, u, o ]. When these vowels get into contact with the noun suffix and the perfective aspectual marker, the bilabial glide, [w], is inserted in between them.

This leads us to the conclusion that a bilabial glide, [w] is inserted after rounded vowels while a palatal glide, [j] is inserted after unrounded vowels. These processes can be captured by the following rules:
(i) Bilabial glide insertion rule:

\[
\sigma \rightarrow w \quad \begin{array}{c}
\varepsilon \\
\theta \\
u
\end{array} -- +V
\]

(ii) Palatal glide insertion rule:

\[
\sigma \rightarrow \begin{array}{c}
i \\
e \\
a
\end{array} \quad -- +V
\]

These two rules can be merged to form one general rule which can be presented as below:

(10) Glide insertion rule

\[
\sigma \rightarrow \begin{array}{c}
w \\
i \\
e \\
a
\end{array} \quad -- +V
\]

Formal statement:

\[
\sigma \rightarrow \begin{array}{c}
-\text{cons} \\
-\text{syl} \\
\alpha \text{ round}
\end{array} \quad / \quad \begin{array}{c}
\text{syll} \\
\text{cons} \\
\alpha \text{ round}
\end{array} \quad -- + \quad \begin{array}{c}
\text{syll} \\
\text{cons}
\end{array}
\]

Prose statement

A glide is inserted in between two vowels at morpheme boundary.

Exceptions: Verb roots ending in [ææ] and [aa]. See section 11.1.2.2.
11.1.2.4. LATERAL INSERTION

In Samba Leekö, there are two processes of lateral insertion: one which inserts a lateral sound in between contiguous vowels and the other which inserts a lateral sound between [t] and a following [a]. To distinguish between these two processes, we shall call one Lateral Insertion 1 and the other lateral Insertion 2.

II.1.2.4.1. LATERAL INSERTION 1

This morphophonological process concerns the insertion of a lateral sound, [I], in between contiguous vowels which is one of the ways in which Samba Leekö simplifies unidentical vowel clusters at morpheme boundary. This lateral insertion rule is phonologically conditioned given that it occurs only in verb roots ending in the vowel [e]. This is illustrated in the data in (11).

(11)

a. /mə dʒuɓ-ə/ --> [mə dʒuɓə] “I have beaten”
/mə leɓ-ə/ --> [mə leɓə] “have bought”

b. /mə dɛɛ-ə/ --> [mə dɛɛə] “I have read”
/mə kɛɛ-ə/ --> [mə kɛɛə] “I have opened”

In the data in (11a), the suffixation of the perfective aspectual marker, [a], has no influence on the verb roots given that they end in consonants. In (11b) on the contrary, the addition of the aspectual marker [ə] provokes a lateral insertion process in between the vowels ; [ee] and [ə]. This process can be captured by rule as below:
(12) Lateral Insertion Rule 1.

\[ \sigma \rightarrow \ell /\text{ee} \rightarrow +V \]

Formal Statement:

\[ \sigma \rightarrow [\ell +\text{lat}] \]

Prose statement

A lateral sound is inserted in between the vowels [ee] and a following vowel at morpheme boundary.

(13) ORDERING OF VOWEL CLUSTER SIMPLIFICATION PROCESSES.

At this point of our work, we need to present a summary of vowel cluster breaking processes in Samba Leekə. We have noticed that Samba Leekə is a language that does not accept unidentical vowel clusters, especially at morpheme boundary. It therefore uses many phonological processes to break these vowel clusters. Given the processes we have just identified, it is necessary to order them if we want to come out with right derivations. Following Mohanan's parameter for ordering rules, (Mohanan 1986 : 9, 24), we have to start from more specific rules to general ones. Thus we propose the following order for vowel cluster simplification processes in Samba Leekə.
1. Vowel deletion: \[ V \rightarrow \emptyset / aa + V \]

2. Lateral Insertion: \[ \sigma \rightarrow l / ee + V \]

3. Glide insertion:

\[ \sigma \rightarrow [j] \]

\[ \{ w, o, u \} \]

\[ \{ i, e, a \} \]

Exception: The vowel sequence [ee] tolerates clusters of three vowels.

Given these rules, we can have the derivations below for the following expressions:

- [mò lìjà] “I have eaten”
- [mò mò̀̀à] “I have denied”
- [mò jàà] “I have come”
- [mò wùwà] “I have planted”
- [mò kò̀̀là] “I have opened”
(14) Sample derivations for cluster simplification processes.

<table>
<thead>
<tr>
<th></th>
<th>m̄o líj̄a</th>
<th>m̄o m̄áá</th>
<th>m̄o j̄áá</th>
<th>m̄o w̄ūw̄a</th>
<th>m̄o k̄èl̄a</th>
</tr>
</thead>
<tbody>
<tr>
<td>UR</td>
<td>m̄o lí̄-à</td>
<td>m̄o m̄ó-à</td>
<td>m̄o j̄áá-à</td>
<td>m̄o w̄ū-à</td>
<td>m̄o k̄è-à</td>
</tr>
<tr>
<td>R1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vowel deletion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V-&gt;ə/aa-+V</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lat. Insertion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ə-&gt;l/ce-+V</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glide insertion</td>
<td>j</td>
<td></td>
<td></td>
<td>w</td>
<td></td>
</tr>
<tr>
<td>PR</td>
<td>[m̄o líj̄a]</td>
<td>m̄o m̄áá</td>
<td>m̄o j̄áá</td>
<td>m̄o w̄ūw̄a</td>
<td>m̄o k̄èl̄a]</td>
</tr>
</tbody>
</table>

II.1.2.4.2. LATERAL INSERTION 2

A second process of lateral insertion is attested after verb roots that end in [1] when they are followed by a vowel at word final position. This process is due to the fact that Samba Leekö does not permit the sequence [t-a] at word final position. As such, each time that this sequence occurs at word final position, a lateral sound has to be inserted in between the two sounds.

This process is presented in the data below:

(15)

a. [m̄o ḏ̄ụ́b] "I beat"
   [m̄o l̄ùm] "I bite"
   [m̄o m̄à?] "I do"
   [m̄o ɲ̄ɛn] "I choose"
b. /mō də́ːb-à/ [mō də́ːbà] "I have beaten"
/mó lùm-à/ [mō lùmà] "I have bitten"
/mó màʔ-à/ [mō màʔà] "I have done"
/mó jèn-à/ [mō jènà] "I have chosen"

c. /mō mèt-à/ [mō mètlà] "I have licked"
/mó vət-à/ [mō vətlà] "I have died"
/mó vət-à/ [mō vətlà] "I have cut"
/mó sàt-à/ [mō sàtlà] "I have learned"

d. /mō mèt-án-à/ [mō mètánà] "I have licked something"
/mó vət-án-à/ [mō vətánà] "I have cut something"
/mó sàt-án-à/ [mō sàtánà] "I have learned something"

In the forms in (15c), the verb roots end in [t] which is followed by the vowel [a] at word final position. In (15b), the verb roots end in other sounds other than [t]. Comparing the forms in (15c) and (15b), we notice that the lateral sound [l] is inserted in the forms in (15c) but not in the forms in (15b). This pushes us to conclude that this insertion is due to the presence of the alveolar sound [t] at the end of the verb root. A look at the forms in (15a) however indicates that [t] alone does not trigger [l] insertion given that [t] occurs at word final position and we find no lateral sound inserted. The possible solution is that [l] insertion is triggered by the sequence [t-a]. This solution however presents some weaknesses when applied to the forms in (15d) where the sequence [t-a] does not provoke [l]
insertion. To explain why Lateral insertion occurs in (15c) but not in (15d), we need to look at the position of the sequence [t-a]. In (15c), the sound sequence [t-a] occurs at word final position, whereas in the forms in (15d), this sequence occurs at word medial position. We can thus say that for lateral insertion to occur, the [t-a] sequence must be at word final position.

The process of lateral insertion can therefore be captured by rule as follows:

(16) Lateral Insertion rule 2
\( \sigma \rightarrow 1 / t \rightarrow a# \)

Formal statement:
\[
\sigma \rightarrow [ + \text{lat}] \\
\begin{array}{c}
+\text{cons} \\
+\text{cor} \\
-\text{voice} \\
-\text{son} \\
-\text{cont} \\
\end{array} \\
\begin{array}{c}
-\text{cons} \\
+\text{syll} \\
+\text{low} \\
\end{array} \\
\]

Prose statement:
A lateral sound is inserted in between the voiceless alveolar stop [t] and a following vowel, [a], at word final position.

II.1.2.5. FRICATION

Frication refers to the change of a sound from a non-fricative to a fricative sound. Consider the data in (17).

(17)
a. Verbs.

(i) [kəsákbə] “to seize”
(ii) [má sàk] “I seize”
(iii) [má sàyá] “I have seized”

[kɔləkəbə] “to shout”
[mɔ lək] “I shout”
[mɔ ləyə] “I have shouted”
"to put"  [mó sák] "I put"  [mó sát] "I have put"
"to look at"  [mó ják] "I look at"  [mó ját] "I have looked at"

b. Nouns.
[gòglí]  "the animal"  [gbáyá]  "animal"
[gbàglí]  "the chair"  [gbáyá]  "chair"
[láglí]  "the hut"  [láyá]  "hut"

Looking at the data in (17a), we notice that the verbs present an alternation between [k ~ y]. The question we ask ourselves at this point is, which of the sounds is at the underlying representation (UR)?

A study of the environments in which the two sounds occur gives us the following distribution:

at word initial position
[k]  at word medial position but never intervocalically

at word final position
[y]  word medially at intervocalic position.

Given that [k] has more environments in which it occurs, we can argue that it is the basic sound which changes to [y] in between two vowels. [y] whose environment of occurrence is predictable is thus not at the underlying representation. This process can be captured by the rule below:

(18) k --> y / V - V

This rule states: the velar plosive, [k], becomes the velar fricative, [y] in between two vowels.
As for the forms in (17b), they present an alternation between the sounds [g ~ ɣ].
A study of the data demonstrates that [g] occurs word initially and word
medially while [ɣ] occurs only intervocally. One could argue that [ɣ] is the
basic sound which changes to [g] before the lateral sound [l] but this argument
is invalidated when we consider that [g] is not limited to this environment. It also
occurs before the vowel [ɔ].

On the other hand, if we consider [g] as being in the underlying
representation, we can argue that [g] becomes [ɣ] in between two vowels. This
solution looks more natural and better since it is similar to the previous process of
frication where [k] becomes [ɣ] intervocally. This leads us to the conclusion
that [g] which has more environments in which it occurs is the basic phoneme,
thus the rule below:

(19) \( g \rightarrow \gamma / v - v \)

This rule states: the voiced velar plosive, [g] becomes the velar fricative [ɣ]
in between two vowels.

It should be noted that this rule does not apply in verbs for Samba Leekɔ does not
have any verbs whose root ends in the velar plosive [g]. The two rules can be
merged to form a general rule of frication which can be presented below:

(20) Frication rule:

\[
\begin{align*}
\left( \begin{array}{c}
\text{+cons} \\
\text{-ant} \\
\text{-son} \\
\text{-cont}
\end{array} \right) & \rightarrow \left( \begin{array}{c}
\text{+cont} \\
\text{+syll}
\end{array} \right) / \left( \begin{array}{c}
\text{-cons} \\
\text{-cont}
\end{array} \right) \rightarrow \left( \begin{array}{c}
\text{+syll} \\
\text{-cons}
\end{array} \right)
\end{align*}
\]
Prose statement: the plosive sounds [k/g] become the fricative sound [ɣ] in between two vowels.

(21) Sample derivations.

<table>
<thead>
<tr>
<th>mə sək</th>
<th>mə səɣə</th>
<th>ɣəgl̥̊</th>
<th>ɣəɣə</th>
</tr>
</thead>
<tbody>
<tr>
<td>UR</td>
<td>/ mə sək-ə</td>
<td>mə sək-ə</td>
<td>ɣəg-ɪl̥</td>
</tr>
<tr>
<td>Frication</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>k/g- &gt; ɣ/V-V</td>
<td>--</td>
<td>ɣ</td>
<td>--</td>
</tr>
<tr>
<td>PR</td>
<td>[mə sək</td>
<td>mə səɣə</td>
<td>ɣəgl̥̊</td>
</tr>
</tbody>
</table>

II.1.2.6. VOICING

Voicing refers to the process whereby an unvoiced sound becomes voiced when it is in the environment of a voiced sound or sounds. Consider the following data:

(22)

a. column 1                      column 2

náp  “song”

kə -náp -jiɭ - mbà “to sing”  má jiɭ - náb - á “I have sung”

kə - náp - nàa - mbà “to dance” má nàa -náb - á “I have danced”

vpfx song v.root v.sfx           sm root song Am

b.

kə - pép - bà “to blow”  má pèb- á “I have blown”

kə - táp - bà “to tie”   má táb- á “I have tied”

vpfx v.root v.sfx                Sm Rt Am
The data in (22a), in the first column present the noun “nâp” in isolation, then within the verbs “to sing” and “to dance” where it acts as an object. In the verbs in the second column in (22a), the verbs “to sing” and “to dance” have been conjugated in the present perfect tense. When the perfective aspectual marker, [à], is added to the noun [nâp], its final [p] sound changes to [b] to give [nâbâ].

We notice a similar process in the verbs in (22b) where the verb roots end in a voiceless sound, [p]. When these verbs are conjugated in the present perfect tense, the [p] sound of the verb root changes into [b], to give [pèbâ] and [tâbâ].

At this level, we can propose two possible solutions:

(i) That [b] becomes [p] at word final position and before consonants giving the rule:

\[
\begin{align*}
b & \rightarrow p \\
& \begin{cases}
-\# \\
\text{[ -- [+cons]} \\
\end{cases}
\end{align*}
\]

(ii) that [p] becomes [b] at intervocalic position giving the rule:

\[
p \rightarrow b / V-V
\]

These two solutions aptly predict the data but we can say that the second solution where [p] becomes [b] in between two vowels looks more advantageous in that the environment of [b] is more predictable. The process captured by this rule is also more natural given that, in many African languages, voiceless consonants have been known to become voiced at intervocalic position.
Besides, considering the first solution with [b] as the basic alternant raises a problem when we look at a form like:

[kanapanaamb] “to dance”

where [p] is found in between two voiced sounds. It is true that it obeys the rule that [b] becomes [p] before consonants, ([b] → [p] / -- [+cons]), but this assumption is not phonologically founded in this context because the neighbouring sounds to [p] are voiced sounds. There is therefore no sound with a [-voiced] feature which we can say is responsible for devoicing [b] to [p].

As such, the second solution is the best and the voicing rule can be stated as follows:

(23) Voicing rule:

\[ p \rightarrow b / V - V \]

Formal statement:

\[
\begin{array}{c}
+\text{cons} \\
-\text{ant} \\
-\text{cor} \\
-\text{cont} \\
-\text{son} \\
-\text{voice}
\end{array}
\rightarrow
\begin{array}{c}
+\text{voice} \\
+\text{syl} \\
-\text{cons}
\end{array}
\]

Prose statement:
The [-voice ] plosive, \([p]\), becomes its [+voice ] counterpart, \([b]\), in between two vowels.

(24) Sample derivations.

\[
\begin{array}{ccc}
\text{mò nàànábhà} & \text{kànnàpààmbà} & \text{mò tábhà} \\
\hline
\text{UR} & / \text{mò nàà-náp-à} & \text{kà-náp-nàà-mbà} & \text{mò táp-à} / \\
\text{Voicing} : & : & : \\
\text{p} \rightarrow \text{b/ V-V} & \text{b} & \text{--} & \text{b} \\
\text{PR} & [\text{mò nàànábhà} & \text{kànnàpààmbà} & \text{mò tábhà} ]
\end{array}
\]

II.1.2.7. DEVOICING

We talk of devoicing when a voiced sound loses its [+voice ] feature and acquires the feature [-voice ] due to the influence of a neighbouring [-voice ] sound or sounds. Consider the data below:

(25)
a. \(\text{jídlà} \rightarrow /\text{jíd-là}/ \quad \text{“head”}\)
\(\text{lídélà} \rightarrow /\text{líd-là}/ \quad \text{“dirt”}\)

b. \(\text{kàtímbà} \quad \text{“to plait”}\)
\(\text{kàsùùpbà} \quad \text{“to wash”}\)

c. \(\text{jít-tsímbà} \quad \text{“to plait (one’ s) head”}\)
\(\text{lít-suùpbà} \quad \text{“to wash dirt”}\)
d. \(\text{jít-gísíjà} \quad \text{“hair on the head”}\)
In the forms in (25a) and (25b) respectively, we have nouns and verbs occurring in isolation. In (25c), these nouns and verbs have been brought together to form phrases. What we notice is that when the nouns [jídlá] and [lídá] occur in isolation, the noun roots, [jíd-] and [líd-] end in the [+voice] alveolar sound [d]. When they are used in phrases as in (25c), their roots end with the [-voice] alveolar consonant, [l], but also with the [+voice] consonant, [d], as in (25d). We thus have the alternation t ~ d from which we have to determine the basic alternant.

The first solution could be to assume that [t] is the basic phoneme which changes into [d] before voiced consonants, thus from the data above we have [d] occurring before [l] in (25a) and [g] in (25d). This argument can be captured by the rule:

\[
t \rightarrow d / +\text{voice} \\
+\text{cons}
\]

A second possible solution could be that [d] is the basic phoneme and that it changes into [t] before [-voice] consonants as illustrated in the forms in (25c). This leads us to formulate the rule below:

\[
d \rightarrow t / -\text{voice} \\
+\text{cons}
\]

These two solutions correctly predict the data that we have presented in (25). None has an advantage over the other given that the environments in which both sounds occur are predictable.

Since we have to come out with just one sound at the underlying representation, we need additional data on the language to better study this alternation between t ~ d. Consider the forms below:
Our first solution states that [t] becomes [d] before [+voice] consonants. This means that we should not have a form where the [-voice] consonant [t] occurs before [+voice] consonants. When we look at the forms in (26) above, we notice that this rule is invalidated. Instead of having [d] before the [+voice] consonant, [b], we have the [-voice] consonant, [t]. This rule is therefore not general and the environment of [t] is not really predictable since it occurs before voiceless consonants in (25c) and before voiced consonants in (26).

This leaves us with the second solution which states that [d] becomes [t] before [-voice] consonants. From the study of our data, we did not notice any forms that disqualify this rule given that each time we find [d], it occurs before voiced consonants. We shall therefore assume that [d] is the basic phoneme which undergoes devoicing before [-voice] consonants, thus, the rule below:

(27) Devoicing rule

\[ d \rightarrow [t] / -\text{voice} \]

Formal statement:

\[
\begin{array}{c}
\text{[+cons]} \\
\text{-ant} \\
\text{[+cor]} \\
\text{-cont} \\
\text{-son} \\
\text{[+voice]}
\end{array}
\rightarrow
\begin{array}{c}
\text{[-voice]} \\
\rightarrow
\begin{array}{c}
\text{[+cons]} \\
\text{-voice}
\end{array}
\end{array}
\]
The voiced alveolar sound [d] becomes its [-voice ] counterpart [t] when it occurs before [-voice ] consonants.

(28) Sample derivations.

<table>
<thead>
<tr>
<th>UR</th>
<th>jídlá</th>
<th>jíttímá</th>
<th>lítsùúbá</th>
</tr>
</thead>
<tbody>
<tr>
<td>Devoicing</td>
<td>:</td>
<td>:</td>
<td></td>
</tr>
<tr>
<td>d &gt; t /-[+ cons ] /</td>
<td>---</td>
<td>t</td>
<td>:</td>
</tr>
<tr>
<td>PR</td>
<td>[jídlá]</td>
<td>jíttímá</td>
<td>lítsùúbá ]</td>
</tr>
</tbody>
</table>

II.1.2.8 DEGEMINATION

In Samba Léké, we noticed that some words occur with an identical consonant cluster. This has to do with words whose verb roots end in the sounds [b] and [k].

In the first group of words whose roots end in a final [b], this [b] gets into contact with the initial sound, [b], of the verb suffix thereby giving birth to a [bb] consonant sequence.

Consider the data below:

<table>
<thead>
<tr>
<th>Pfx</th>
<th>root</th>
<th>suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td>/ kà - dʒúb - bà /</td>
<td>--&gt;</td>
<td>kàdʒúbbà</td>
</tr>
<tr>
<td>/kà - lèb - bà /</td>
<td>--&gt;</td>
<td>kàlèbbà</td>
</tr>
<tr>
<td>/ kà - gáb - bà /</td>
<td>--&gt;</td>
<td>kàgábbà</td>
</tr>
</tbody>
</table>
In the second group of words which have the sound [k] at final position in their verb roots, this final [k] gets into contact with the [k] of the imperative marker which as will be demonstrated later is the discontinuous morpheme [Ñ...ká]. The union between the final [k] of the verb root and the initial [k] of the imperative tense marker brings about a [kk]sequence. This is illustrated in the data below:

a) Pfx root suffix

<table>
<thead>
<tr>
<th>Pfx root</th>
<th>suffix</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>/kà - läk - bà/</td>
<td>---&gt;</td>
<td>“to shout”</td>
</tr>
<tr>
<td>/kà - sók - bà/</td>
<td>---&gt;</td>
<td>“to put/keep”</td>
</tr>
<tr>
<td>/kà - ják - bà/</td>
<td>---&gt;</td>
<td>“to look at”</td>
</tr>
<tr>
<td>/kà - sák - bà/</td>
<td>---&gt;</td>
<td>“to seize”</td>
</tr>
</tbody>
</table>

b) Imp. Root Imp Tm.

<table>
<thead>
<tr>
<th>Imp</th>
<th>Root</th>
<th>Tm.</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ŋ</td>
<td>- lãk - ká</td>
<td>---&gt;</td>
<td>ñlàkká</td>
</tr>
<tr>
<td>ŋ</td>
<td>- sók - ká</td>
<td>---&gt;</td>
<td>ñsákká</td>
</tr>
<tr>
<td>ŋ</td>
<td>- ják - ká</td>
<td>---&gt;</td>
<td>ñjákká</td>
</tr>
<tr>
<td>ŋ</td>
<td>- sák - ká</td>
<td>---&gt;</td>
<td>ñsákká</td>
</tr>
</tbody>
</table>

Given this doubling of identical consonants, a rule of degemination applies to reduce the two consonants to one. This rule can be stated as below:

Degemination:

[bb] ---> [b]
[kk] ---> [k]
A similar rule is proposed by KOUONANG (1983) and also by NGUM (2004) in her work on the metâl language.

After this part of chapter Two which deals with Phonology, we will move on to the second part which deals with tones and tonological processes.

II. 2. TONOLOGY

Pike (1948:3) defines a tone language as any language “having significant contrastive but relative pitch on each syllable”. This means that the pitch of one’s voice either rises or falls depending on the syllable pronounced.

Generally, tone has two functions: the lexical and the grammatical functions but in Samba Leekâ, tone assumes only one function, the lexical function. According to Pike (1948:49) “when pitch is lexical, it distinguishes the meaning of words”. Thus in Samba Leekâ, there are words whose meaning is differentiated only by tones.

(30) Examples.
- kâlêbâ “to buy”
 kâlêbâ “to give birth”

- bîlá “country”
 bîlá “change”

II. 2.1. INVENTORY OF TONES.

Samba Leekâ makes use of three level tones namely; the mid tone, [ - ], the high tone [ ' ], and the low tone [ ` ] . These tones are combined in different ways in different words. At the underlying level, these three tones
do not exist. Only the L and H tones exist and the Mid tone comes about as a result of upstep. As will be demonstrated in chapter Three, some forms are toneless underlyingly.

The examples below exemplify the three level tones found in Samba Leekɔ:

(31)

a. High tone [´]
   [ãlísíká] "eat" [mũwɔpɔká] "respect"

b. Mid tone [-]
   [kàmdëtbɔ] "to lick" [kàndɔmbɔ] "to drink"

c. Low tone [´]
   [ãlùmɔká] "bite" [mìpɛtɔká] "share"

II.2.2. MORPHOTONOLOGICAL PROCESSES.

Samba Leekɔ verbs exhibit five tonological processes which are:

-Tone docking
-default Low assignment
-stray erasure
-upstep
-High Tone Spreading (H.TS.)

II.2.2.1 TONE DOCKING

Tone docking refers to the process whereby a floating tone docks onto the preceding vowel following the Universal Association conventions (UAC) of Goldsmith (1976). These conventions require that tones be linked
to tone bearing units (TBU) one to one, from left to right and that association lines do not cross. Consider the data below:

(32) Illustrative data.³

[kə - sási - mbə]  “to scatter” (Infinitive)
[ə - sási - ká]     “scatter” (Imperative)
[mə sási -j-a]     “I have scattered” (Present perfect tense)

Looking at the data above, the first verb root vowel bears a H tone in the form in the infinitive and a L tone in the forms in the imperative and the present perfect tenses. The H tone in the infinitive forms can only be argued to come from the infinitive marker [kə - ] whose floating H tone docks onto the first root vowel while the second root vowel gets its L tone by default Low assignment.

The rule of tone docking can be presented as follows:

Tone docking.

V V
--- >
T T

Prose statement.

A floating tone docks onto a preceding TBU.

³ As will be discussed later, the infinitive marker in Samba Leeko is the morpheme [Kə-] which bears two tones: L and H. [Kə-] is linked to the low tone through the UAC while the H tone remains floating. It either docks onto the verb root or is stray erased.

The imperative marker is the discontinuous morpheme Ň...Ká with the first part, Ň-, coming before the verb root and the second part, -Ká after the verb root.
II.2.2.2. STRAY ERASURE

The rule of stray erasure states that any floating tone that does not link onto a TBU is deleted. Consider the data below:

\[
\begin{align*}
{kà} - {kàtsî} - {mbà} & \quad \text{"to reduce" (Infinitive)} \\
{ SNMP} - {kàtsî} - {ká} & \quad \text{"reduce" (Imperative)} \\
{mâ} - {kàtsî} - {j - à} & \quad \text{"I have reduced" (Present perfect tense)}
\end{align*}
\]

In the forms above, the first root vowel bears a H tone all through. A possible argument is that this H tone is underlying, if not we won’t be able to explain where the H tone comes from in the forms in the imperative mood and present perfect tense. With this underlying H tone, the floating H tone of the infinitive marker is prevented from docking and is then stray erased. The rule of stray erasure can be formulated as below:

Stray erasure

\[ \forall \]

\[ T------>\sigma \]

Prose statement.

A floating tone that does not dock onto a TBU is erased.
III.2.2.3. DEFAULT LOW ASSIGNMENT

This tonological process involves assigning a low tone to any toneless tone bearing unit. It can be presented as below:

\[
V
\]

Assign a L tone to any toneless TBU.

The rules of tone docking, stray erasure and default Low assignment are better clarified in the derivations in (33)
(33) Sample derivations.

<table>
<thead>
<tr>
<th>Kòsàsimbà</th>
<th>mó sàsijà</th>
<th>kòkótsimbà</th>
<th>ḳòkòtsiká</th>
</tr>
</thead>
<tbody>
<tr>
<td>UR/kà-sasi-mba</td>
<td>mò sasi-a</td>
<td>kà-katsi-mba</td>
<td>N-Katsi-ka /</td>
</tr>
<tr>
<td>/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L</td>
<td>H :</td>
<td>L</td>
<td>LH H</td>
</tr>
<tr>
<td>R1.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glide in</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sertion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R2.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nasal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assimi</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R3.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kò - sasi -mba</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tone</td>
<td>LH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>docking.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stray</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>erasure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kà-katsi-mba</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LH H</td>
<td>L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R5.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kà-sasi-mba</td>
<td>mò sasi-j-a</td>
<td>Kà-Katsi-mba</td>
<td>ḳà-katsi-ka</td>
</tr>
<tr>
<td>Default</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L</td>
<td>H :</td>
<td>L</td>
<td>LH H :</td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L</td>
<td>H :</td>
<td>L</td>
<td>LH H</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[Kòsàsimbà</td>
<td>mó sàsijà</td>
<td>Kòkótsimbà</td>
<td>ḳòkòtsiká]</td>
</tr>
</tbody>
</table>
II.2.2.4. HIGH TONE SPREADING (HTS)

High Tone Spreading is a tonological process whereby a H tone which is already linked to a TBU spreads rightwards to another TBU. In Samba Leeka, there are two processes of High tone spreading:

1. A HTS process that affects underlyingly linked H tones and
2. A HTS process that affects floating H tones which dock onto the verb root.

II.2.2.4.1. HIGH TONE SPREADING 1.

This concerns the HTS process that affects underlyingly linked H tones. Let us examine the data below:

(34)

a. INFINITIVE

kè - dàâ - mbà “to go”
kà - lî́i - mbà “to eat”
kà - jì́i - mbà “to accept”
kà-(lòb)-lèè- mbà “to fish (with a hook)"

b. IMPERATIVE

ǹ- dàá - ká “go”
ǹ- lî́i - ká “eat”
ǹ- jì́i - ká “accept”
ǹlèè-(lòb)-á “fish (with a hook)”
c. PRESENT CONTINUOUS TENSE

mó kó - dā - nà "I am going"
mó kó - li - nà "I am eating"
mó kó - jũ - nà "I am accepting"
Sm Am Vroot Am

The forms in (34a) are verbs in the infinitive. Looking at the verb roots, we notice that they all have two identical vowels, bearing the tones H and L. This gives us a HL tonal melody. In the forms in (34b), the verbs are in the imperative. Instead of the HL tonal melody, the verb roots now bear two H tones. In the (34c) forms conjugated in the present continuous tense, the verb roots again have a HL tonal melody. At this point, we have the alternation HL-HH to deal with.

What provokes this alternation and what is the underlying tonal melody are questions we need to answer.

We can start answering these questions by assuming that underlingly, these verb roots bear the tones H1L. When these tones occur before a L tone as in (34 a and c), they are maintained.

However, when they occur before a H tone as in (34b), the L tone becomes a H tone giving the tonal melody HH. This means that each time we have a HL sequence occurring before a H tone, the HL sequence must change to HH. This solution has its limits when applied to the data below:

(35) ṅ - ɲísì - ká "fill"
    ūm- bësì - ká "finish"
    ŋ - dësì- ká "measure"
In these verbs conjugated in the imperative, the verb roots bear the tonal sequence HIL. Contrary to our expectations, this HIL sequence is followed by a H tone but it doesn’t change to HH following our rule. This solution is therefore not correct since it does not correctly capture the morphotonological process before us.

A second solution could be to assume that the verb roots in (34) underlyingly have only one tone, a H tone which is linked to the first root vowel while the second root vowel is toneless. In the forms in (34a,c), this second root vowel acquires its L tone by default Low. In those in (34b), however, where this second root vowel bears a H tone, we could argue that a process of HTS occurs before the default Low application. This HTS is tonologically conditioned in that it occurs only when the adjacent tone is a H tone. This explains why HTS will occur for the forms in (34b) but not for the forms in (34a,c) where the adjacent tones are L tones.

To explain why HTS does not occur in the forms in (35), we can assume that these forms have a HL tonal sequence underlyingly in the verb roots. Thus, the H tone is blocked from spreading onto the second root vowel by its underlyingly L tone.

Given this solution, we can state the following rule of HTS:

(36) High Tone Spreading 1.

![Prose statement: A H tone spreads rightwards to a toneless TBU.]

*Condition: The adjacent tone must be a H tone.*
II.2.2.4.2. HIGH TONE SPREADING 2.

The tonological process of HTS 2, affects floating 11 tones which dock onto the verb root.

This process is presented in the data below:

(37)

a. INFINITIVE
   kà-làá-mbà        “ to sleep”
   kà-wùú-mbà        “ to plant (a seed)”
   kà-gùù-mbà        “ to sew”
   kà-lùù-mbà        “ to burn”
   kà-dëè-mbà        “ to read”

b. IMPERATIVE
   ŋ - lòò - ká     “ sleep”
   m - wùù - ká     “ plant”
   ĕ - gùù - ká     “ sew”
   ŋ - lùù - ká     “ burn”
   ŋ - dëè - ká     “ read”

   Tm V.root - Tm

c. PRESENT PERFECT TENSE
   mó  lòò ______ à     “ I have slept”
   mó  wùù - w - à      “ I have planted”
   mó  gùù - w - à      “ I have sewn”
   mó  lùù - w - à      “ I have burned”
   mó  dëè - l - à      “ I have read”

   Sm V.root Inserted Am
   sounds
When we compare the forms in (37), it is evident that the H tones in the verb roots in (37a) are not underlying since the verb roots in (37b,c) have no H tones. These H tones can only come from the floating H tone of the infinitive marker which docks onto the first root vowel. This H tone then spreads to the second root vowel (despite the fact that the adjacent tone is a L tone and not a H tone as is the case of HTS 1).

In (38a), the first root vowel also gets its H tone from the docking of the floating H tone marking the infinitive. This H tone, however, does not spread to the second root vowel as is the case in (37a). To explain why HTS occurs in (37a) but not in (38a), we can pose the condition that HTS occurs only if the two vowels are contiguous. With these explanations, we can state the following rule of HTS.

(39) High Tone Spreading 2.

\[
\text{VVC} \quad \text{VVC} \\
\vert \quad \rightarrow \quad \wedge \\
H \quad H
\]
Prose statement: A H tone spreads rightwards to the next vowel.
Condition: The two vowels must be contiguous.

These arguments on HTS1 and HTS 2 are best illustrated in the derivations in (40).

(40)
Sample derivations:

kàdààmbà “to go”
ñdááká “go”
ññísìká “fill”
kàwúúmbà “to plant”
mwùuká “plant” (Imperative).
Kàsásîmbà “to scatter”
kàdáàmbà ñdáákà ññísikà kàwùúmbà ñwùùkà Kàsásimbà

UR /kə-daa-mba n-daa-ka n-ñisi-ka kə-wuu-mba n-wuu-ka kə-sasi-mba/

R1. Nasal assimilation

R2. Htsl

V V V

H H

R3. Tone docking

kə-wuu-mba kə-sasi-mba

R4. HTS2

VVC

H

R5. Stray erasure

kə - dāa - mba

R6 Default

low.

PR [kàdáàmbà ñdáákà ññísikà kàwùúmbà ñwùùkà kàsásimbà]
II.2.2.5. UPSTEP OF LOW TONES.

According to Snider (1999), upstep and downstep are register phenomena. Upstep of Low tones occurs in Samba Leekə when the high register, (h), of a floating high tone, (h), spreads onto a Low tone, (L), thereby delinking its low register feature, (l). To better understand this phenomenon, let's consider the data below:

(41)
a) INFINITIVE       b) IMPERATIVE       c) PRESENT PERFECT

kə - mët - bà "to lick"      m - mët - kā      má mët - l-à
kə - tɔ̊ - mbà "to tear"      n - tɔ̊ - kā      má tɔ̊ - à
kə - ṣën - mbà "to choose"    n - ṣën - kā      má ṣën - à
kə - lăm - bà "to work"       n - lăm - kā      má lăm - à
kə - jàk - bà "to look at"    n - jàk - kā      má jày - à

Pfx root suff              Tm root Tm      Sm(l) root Am

(42)
a) INFINITIVE       b) IMPERATIVE       c) PRESENT PERFECT

kə - ndə - mbà "to drink"    n - ndə - kā      má ndə - à
kə - məd - mbà "to deny"     m - məd - kā      má məd - à
kə - ləd - mbà "to laugh"    n - ləd - kā      má ləd - w - à

1 A register is defined as the range of the human voice, thus we can have an upper range, a middle range or a lower range. For more information on The Register tier Theory, see the endnotes for this chapter.
Looking at the data in (41), we notice that the verb roots bear a Mid tone in (41a) but Low tones in (41 b,c). The most probable explanation we can have for this alternation is that these verb roots, underlyingly, bear a Low tone as in (41b,c). In (41a), this low tone is affected by the floating $H$ tone of the infinitive marker. When the underlying L tone of the verb root and the floating $H$ tone of the infinitive marker come together, the floating high register feature of the $H$ tone spreads onto the $L$ tone, causing its low register feature to delink thereby giving birth to a mid tone with the features [Lh].

In (42), where the verb root has two vowels, we find that this Low upstepping process affects both vowels. This means that this process is iterative. The form in (43), however poses a problem in that although the verb root has two vowels, low upstep occurs only on the first root vowel. The iterative nature of this process thus has some constraints which we can say are linked to the positioning of the vowels. Looking at the verb root vowels in (42) and (43), one can argue that just like in HTS2, low upstep applies iteratively only when the two affected vowels are contiguous. This gives us the rule below:
(44) Upstep of L. tone.

Prose statement:

A floating high register feature spreads rightwards to a L tone delinking its low register feature.

NB: The rule is iterative if the affected tone bearing units are contiguous.

These arguments can be illustrated in the derivation below:
45) Sample derivations.

kàmëtbà “to lick” këmõmbà “to deny” kàkë?simbà “to help”

R1
h spreading h l h l l h l l h l l
+1 delinking  

R2.
Stray erasure of floating features.

PR [kàmëtbà këmõmbà kàkë?simbà ]
II.3. CONCLUSION TO CHAPTER 2

In this chapter, we have carried out a review of Samba Leekɔ phonology and tonology and we have studied the different morphophonological and morphotonological processes that take place in the language. From our study, we have found out that Samba Leekɔ has nine vowels, all short vowels, and twenty-two consonants.

At the level of morphotonological processes, we have realised that Samba Leekɔ does not accept unidentical vowel clusters especially across morpheme boundaries. To separate vowel clusters, the language uses a series of processes ranging from vowel deletion to glide and lateral insertion. The language also uses other morphophonological processes like frication, voicing and devoicing which are known to occur in many other Cameroonian languages.

Finally, our study of the tone system has shown that Samba Leekɔ makes much use of tonological processes like tone docking, HTS, default low assignment, stray erasure and uspstep of L tones.

As earlier announced, we will carry out a deeper study on the tonological melodies in Samba Leekɔ verbs to better understand what its underlying tones are in chapter Three which is entitled the morphological structure of the verb.
ENDNOTES ON CHAPTER TWO

Register Tier Theory (RTT).

The Register Tier Theory propounded by Snider, (1999), is an application of Autosegmental Phonology to tonal phenomena. This theory provides an overview of the composition of what has been globally referred to as the tonal tier. Snider (1999: 23) proposes the following composition for the tonal tier.

\[
\begin{align*}
(1) & \quad h \quad \text{Register tier.} \\
& \quad \quad \text{H} \quad \text{tonal tier.} \\
& \quad \quad \quad \text{O} \quad \text{Tonal root node tier} \\
& \quad \quad \quad \quad \text{P} \quad \text{Tone-bearing unit tier.}
\end{align*}
\]

With the features presented in (1), Snider (1999: 24) fully specifies up to four level tone phonemes: High, Mid 2, Mid 1 and Low (L) which are as below:

\[
\begin{align*}
(2) & \quad h \quad h \quad l \quad l \\
& \quad \quad \text{H} \quad \text{L} \quad \text{H} \quad \text{L} \\
& \quad \quad \quad \quad \text{O} \quad \text{O} \quad \text{O} \quad \text{O} \\
& \quad \quad \quad \quad \mu \quad \mu \quad \mu \quad \mu \\
\end{align*}
\]

High mid 2 mid 1 Low

Given these features, an upstepped low tone is realised as mid 1 or mid 2.
CHAPTER III

THE MORPHOLOGICAL STRUCTURE
OF THE VERB

III.1. INTRODUCTION

The Morphology of a language is defined by Bloomfield (1933: 207) as:

"... Constructions in which bound forms appear among constituents. By definition, the resultant forms are either bound forms or words, but never phrases. Accordingly, we may say that morphology includes the construction of words and parts of words while syntax includes the construction of phrases."

From the above definition, we can say that morphology is the study of how morphemes combine to form words. For us to study the morphological structure of the verb, we have to study the verb in isolation, free from all flexional markers. As such, we will focus on the verb in its infinitive form. This study will enable us to identify the various morphemes that make up the verb in its infinitive form in Samba Leeka.

Mutaka (1990), working on Kinande, presents the structure of the verb in the infinitive as below:

---

1 Kinande is a language spoken in the Democratic Republic of Congo
Looking at the diagram on the verbal structure of Kinande, we realised that Samba Leekö verbs have an almost similar structure except for the fact that they lack the initial vowel and the final vowel which we find in Kinande. This gives us the following presentation for Samba Leekö verbs in the infinitive.

\[ \text{crémiútumira} \quad \text{“to send him”} \]
(2) Verbal Structure of Samba Leekɔ.

Verbal Complex

Infinitive marker

Expanded Stem

Object marker

Stem

Base

Root

Extension

mba

kà

náp

jù

"song"

kànápjimba

"to sing (a song)".

In the following sections, we will examine the various constituents of the verb in the infinitive form in Samba Leekɔ.

III.2. THE INFINITIVE MARKER.

The infinitive form of a verb refers to the non-finite form of that verb that is, the form of the verb that has no flexional markers (Sm, Tm, Am).

The infinitive marker is Samba Leekɔ is the morpheme [kà-] which occurs only in verbs and at word initial position. At the surface level, this morpheme bears a L tone but we will argue that underlyingly it has two
The reason for positing a L.H tonal sequence is that we find some tonological processes in the infinitive forms which can only be provoked by the presence of a H tone. The L tone links onto the infinitive marker [kə-] following the Universal Association Conventions of Goldsmith (1976) while the H tone remains floating. This floating H tone either undergoes tone docking onto the verb root or is stray erased. Consider the data below:

\[(3)\]

a. \[kè-sási-mbà\] “to scatter” (infinitive)
\[è-sási-ká\] “scatter” (imperative)
\[má-sási-j-à\] “I have scattered” (present perfect)

b. \[kà-nèn-mbà\] “to choose” (infinitive)
\[è-nèn-ká\] “choose” (imperative)
\[má-nèn-à\] “I have chosen” (present perfect)

In the forms in (3a), the first verb root vowel bears a H tone in the infinitive form but a L tone in the other forms. This H tone results from the docking of the floating H tone of the infinitive marker onto the verb root, (-sasi-), which as earlier pointed out is toneless underlyingly (see section 11.2.2.1). In the other forms, the verb root vowels get their L tones by default Low assignment.

In the forms in (3b), the root vowel in the infinitive form bears a mid tone but bears a L tone in the other forms. This mid tone can only be argued to result from the process of upstep provoked by the floating H tone of the infinitive marker when it comes into contact with the underlying L tone of the verb root. (For more details see section 11.2.2.5)

Due to these tonological processes, it is obvious that the infinitive marker in Samba Leekò bears two tones: the L tone which is present at the
surface representation and the H tone which is underlying. Its presence is only felt when it comes into contact with verb roots which are underlyingly toneless or which bear low tones.

A second form of the infinitive is attested in Samba Leekọ with its infinitive marker being a zero, (o), morpheme. This form is not very common. It is mostly used by old people, the younger generation preferring the form with the [kà-] prefix. Following some comparative work we did between Samba Leekọ Grassfield and Samba Leekọ Benue, we discovered that the form of the infinitive with the zero morpheme should have been the original form given that it is almost similar to the infinitive, in Samba Leekọ Benue. However since languages evolve, this form of the infinitive is gradually giving way to the form with the [kà-] prefix in Samba Leekọ Grassfield. Below are some examples.

(4)

<table>
<thead>
<tr>
<th>Inf.</th>
<th>Root</th>
<th>Suffix</th>
<th>Samba Leekọ Grassfield</th>
<th>Samba Leekọ Benue</th>
</tr>
</thead>
<tbody>
<tr>
<td>/ɔ</td>
<td>Ṗu - bi / --&gt; [dʒubí]</td>
<td>[dʒubimbiа]</td>
<td>“to beat”</td>
<td></td>
</tr>
<tr>
<td>/ɔ</td>
<td>lùm - bi / --&gt; [lùmbi]</td>
<td>[lùmbíá]</td>
<td>“to bite”</td>
<td></td>
</tr>
<tr>
<td>/ɔ</td>
<td>vát - bi / --&gt; [vàtbí]</td>
<td>[vàtmbíá]</td>
<td>“to cut”</td>
<td></td>
</tr>
<tr>
<td>/ɔ</td>
<td>líi - mbi / --&gt; [lìimbí]</td>
<td>[lìimbíá]</td>
<td>“to eat”</td>
<td></td>
</tr>
<tr>
<td>/ɔ</td>
<td>pii - mbi / --&gt; [pìimbí]</td>
<td>[pìimbíá]</td>
<td>“to give”</td>
<td></td>
</tr>
</tbody>
</table>

Given the data in (4) above, we notice that when the ɔ morpheme is the infinitive marker, the verb suffix changes from [bà] and [mbà] to [bi] and [mbi] respectively.
At the tonal level, we notice that with the o morpheme as the infinitive marker, the tones of the verb roots do not undergo any alternations. This is because the o morpheme carries no tones which can provoke H tone docking and upstep as in the case where the infinitive marker is [k às]. This is illustrated in the examples below:

(5)  (A) o morpheme          (B) [k às]      infinitive
     infinitive marker         marker.

(a) H tone verb roots.
/ o - léb-bì /                  / kès-léb-bà /  “to buy”
/ n- léb-ká /                   / n-léb-ká /  “buy” (imp.)
/ mó léb-à /                    / mó léb-à /  “I have bought”

(b) L tone verb roots.
/ o - dʒúb -bì /                / kà - dʒúb - bà /  “to beat”
/ n - dʒúb -ká /                / n - dʒúb - ká /  “beat” (imp)
/ mó dʒúb - ì /                 / mó dʒúb - á /  “I have beaten”

(c) Toneless verb roots.
/ o - vêt - bì /                / kà - vêt - bà /  “to cut”
/ n - vêt - ká /                / n - vêt - ká /  “cut” (imp.)
/ mó - vêt - 1- á /             / mó vêt - 1- á /  “I have cut”

III.3. THE OBJECT MARKER

The object marker in Samba Leekò verbs is always either a noun or a pronoun. It occurs in between the verb prefix and the verb root. It is not used in all verbs since it is used for semantic reasons: either to clarify
doubts in polysemic words or add more meaning to a word. Two objects can be used within a verb and in that case, the two objects both occur in between the verb prefix and the verb root. Below are some examples:

(6)

a) kɔ - pfi - mbɔ "to give"
   Pfx V.root Suff.

kɔ - mó - án - pfi - mbɔ "to give me something"
Pfx "me" "some V.root suff.
   thing"

kɔ - mó - wani - pfi - mbɔ "to give me a book."
Pfx "me" "book" - V.root suff.

kɔ - jfi - mbɔ "to accept"
Pfx V.root suff.

kɔ - máp - jfi - mbɔ "to sing"
Pfx "song" - V.root suff.

kɔ - liló - jfi - mbɔ "to steal"
Pfx "thief" - V.root suff.

III.4. THE VERB BASE

The verb base in Samba Leeka is made up of the verb root and a suffix. This suffix is a non-productive verbal extension, also called grammatical suffix. In the following section, we will examine the different verb roots and the verb suffixes in Samba Leeka to see how they are formed and how they combine with each other in the language.
III.4.1. THE VERB ROOT

In Samba Leekö, four different types of syllable structures are attested in the verb roots. These are the -CVV-, -CVC-, -CV.CV-, and -CVC.CV- structures.

III.4.1.1. THE -CVV- VERB ROOT

Verbs with -CVV- roots are highly attested in Samba Leekö. They are always preceded by the verb prefix and/or object marker and are followed by the grammatical suffix [mbà / mbi]. Below are some examples:

(7)

<table>
<thead>
<tr>
<th>Pfx</th>
<th>V.root</th>
<th>Suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kà</td>
<td>jìi</td>
<td>mbà</td>
</tr>
<tr>
<td>kà</td>
<td>dáà</td>
<td>mbà</td>
</tr>
<tr>
<td>kà</td>
<td>m55</td>
<td>mbà</td>
</tr>
<tr>
<td>kà</td>
<td>wúú</td>
<td>mbà</td>
</tr>
<tr>
<td>kà</td>
<td>l55</td>
<td>mbà</td>
</tr>
<tr>
<td>α</td>
<td>lìi</td>
<td>mbi</td>
</tr>
<tr>
<td>α</td>
<td>dáà</td>
<td>mbi</td>
</tr>
</tbody>
</table>

From the examples in (7), we realise that the -VV- verb root is made up of two identical vowels. One could argue that the examples above present a -CV- verb root with the -VV- sequence being just one long vowel. This is however not the case for as we pointed out in chapter two, long vowels do not exist in Samba Leekö.
III.4.1.1.1. ITS TONE GROUPS.

The -CVV- verb root has the following surface tonal melodies:

(8)

a) MM.

kà-íng5 - mbà "to drink" (cf. ṅàndáká "drink")
kà- māś- mbà "to deny" (cf. ūndòòká "deny")
kà- ląs - mbà "to laugh" (cf. ùldòòká "laugh")

b) HH

kà-wúú- mbà "to plant a seed" (cf. mwúüká "plant")
kà-gúú- mbà "to sew" (cf. ngúüká "sew")

c) HL

kà-dáá- mbà "to go" (cf. ndááká "go")
kà-ńi- mbà "to eat" (cf. ngííká "eat")

Following the data in (8) above, the -CVV- verb root has three different tonal melodies namely: MM, HH and HL. At the underlying level however, all these tonal melodies do not exist. Looking at the forms in (8a), which have mid tones in the infinitive but low tones in the imperative, we can argue that the mid tones are not underlying but come about as a result of upstep of underlying low tones. (For details see section II.2.2.5)

In the forms in (8b), the verb roots have a HH melody in the infinitive forms but a LL melody in the imperative forms. The possible argument here is that these verb roots are underlyingly toneless. In the infinitive forms, the floating H tone of the infinitive marker, [kà-] docks onto the first root vowel following the Universal Association Conventions of Goldsmith (1976), then spreads onto the second root vowel through HTS 2 (see section II.2.2.4.2.).
In the forms in the imperative, the toneless verb root vowels get their low tones by Default Low assignment.

In (8c), where we have a HIL tonal melody in the verbs in the infinitive, we can say that these verb roots bear a H tone underlyingly. This H tone links onto the first root vowel and then, the second root vowel gets it low tone by default. In the imperative forms where the two root vowels both bear H tones, we can argue that this is as a result of HTS 1 by which a H tone spreads rightwards to another TBU if the adjacent tone is a H tone.

From these arguments, it is evident that the -CVV- verb root has as underlying tones: H and L while other forms are toneless.

III.4.1.2. THE -CVC- VERB ROOT

Meeussen, (1974: 86), in his studies on Proto Bantu verb roots states that "the most common type is CV(N)C". Thus he calls it the "normal type". This statement is true for Samba Leek where the -CVC- verb root is the most recurrent. This verb root is preceded by the verb prefix and/or object marker and is followed by either the -CV suffix [bá / bi] or the -NCV suffix [mbá / mbi].

Examples.

(9)

Pfx V.root Suffix.

σ - lēb - bi "to buy"

kɔ - tûm - bá "to send"

kɔ - tî? - mbā "to push"

σ - nèn - mbi "to choose"
III. 4.1.2.1. ITS TONE GROUPS.

The -CVC- verb root exhibits the following surface tonal melodies:

(10)

(a) M.

kə-nēn - mbə “to choose” (imp. ŋēnkə “choose”)
kə-lām - bə “to work” (imp. ēlāmkə “work”)
kə-dō? - mbə “to knock” (imp. ņdō?kə “knock”)

(b) H

kə- māʔ - mbə “to do” (imp. ŋmāʔkə “do”)
kə-lūm - bə “to bite” (imp. ēlūmkə “bite”)
kə-gāb - bə “to know” (imp. ēgābkə “know”)

(c)

kə-sāt - bə “to learn” (imp. nsātkə “learn”)
kə-sāk - bə “to keep” (imp. nsākə “keep”)
kə-tāp - bə “to tie” (imp. ētāpkə “tie”)

The -CVC- verb root appears with two surface tones: H and M. In (10a), the mid tone in the infinitive forms alternates with a low tone in the forms in the imperative. The possible argument to explain this alternation is that, like in the forms in (8a) these forms bear a low tone underlyingly. This low tone is upstepped by the floating H tone of the infinitive marker.

As for the forms with surface H tone, we have segmented them into two parts: (10b) and (10c). In (10b, the verb root in the infinitive form bears a H tone which is absent in the forms in the imperative. As we argued for the -CVV- verb root, the possible explanation is that these verb roots are
toneless underlyingly and they get their low tone by default low assignment.
In the infinitive forms, the floating H tone of the infinitive marker docks onto the verb root giving it a H tone. In the forms in (10c), the verb roots bear a H tone both in the infinitive and in the imperative. This H tone must be underlying for the H tone of the imperative marker has not been known to spread to adjacent tone bearing units (TBUs).
The underlying tones for this verb root are therefore H, L and ø (zero).

III.4.1.3. THE -CV.CV- VERB ROOT

This verb root type is not very common in Samba Leek. Like all the other verb roots, it is preceded by the infinitive marker and / or object marker. It is followed by the -NCV suffix [-mbà] or [mbì].

Examples.

(11)

Pfx V.root Suff.

kà - bésì - mbà "to finish"
ö - nísì - mbì "to fill"

III.4.1.3.1. ITS TONE GROUPS.

Consider the data below:

(12)

a) kà - sásì - mbà "to scatter" (imp. ñsàsìkà "scatter")
b) kà - nísì - mbà "to fill" (imp. ñnísìkà "fill")
kà - désì - mbà "to measure" (imp. ñdésìkà "measure")
kà - dúsi - mbà "to burn" (imp. ñdúsìkà "burn")
kà - bésì - mbà "to finish" (imp. ñbésìkà "finish")
The -CV.CV- verb root appears with only one surface tonal melody: We have however divided this HL melody into two parts because of the difference in the tonal melody in the imperative forms. In (12a), the HL tonal melody in the infinitive form becomes a LL tonal sequence in the imperative. The explanation to this alternation is that this verb root is toneless underlying. As such, it gets its low tones by default low assignment in the imperative forms while in the infinitive forms, the first root vowel obtains its H tone from the docking of the floating H tone of the infinitive marker. This H tone is prevented from spreading onto the second root vowel because the two verb root vowels are not contiguous; thus, this vowel gets its low tone by default.

As for the forms in (12b), we find the HL tonal melody both in the infinitive and in the imperative forms. These tones must therefore be underlying since the tone of the imperative marker has no effect on adjacent tones.

The -CV.CV- root thus has two underlying tonal patterns: 111 and θ.

III.4.1.4. THE -CVC.CV- VERB ROOT

Just like the -CV.CV- verb root, this verb root is not very common. It is preceded by the verb prefix and/or object marker and is followed by the /-NCV/ suffix [mbà] or [mbi].

Examples.

(13) Pfx V. root Suff.
  kà - sâŋsi - mbà “to meet”
  Ꙑ - sâŋsi - mbi “to meet”
III.4.1.4.1. ITS TONE GROUPS.

Consider the data in (14) below:

(14)

a. HL
kə - kətsi - mbà “to reduce” (imp. ţkátsiká)
kə - sáŋsi - mbà “to meet” (imp. †sáŋśiká)

b. ML.
kə - kësis - mbà “to help” (imp. ţkësisiká)
kə - sëpti - mbà “to sell” (imp. ţsëptiká)

In the forms in (14a), the verb root vowels bear the tones HL both in the infinitive and in the imperative. These tones are therefore underlying tones. In (14b), on the contrary, we have the tonal melody ML in the infinitive alternating with the tonal melody LL in the imperative forms. The only possible explanation which ties in with our former arguments is that these vowels bear low tones underlingly. When these low tones get into contact with the floating H tone of the infinitive marker, the first Low tone is upstepped to mid while the second is prevented from undergoing upstep because the rule of upstep is iterative only when the affected TBUs are contiguous.

This verb root thus has as underlying tones HL and LL.

A summary of all the underlying tones of verb roots is as below:

H, L, Ø, HL and LL.
III.4.2. GRAMMATICAL SUFFIXES.

Samba Leekɔ verbs have two grammatical suffixes. They are the -CV and -NCV suffixes. These suffixes have no meaning of their own and they add no additional meaning to the verb; that is why they are also called non-productive verbal extensions. They bear Low tones underlyingly and they are absent when verbs are conjugated.

III.4.2.1. THE -CV GRAMMATICAL SUFFIX

The -CV grammatical suffix is made up of the morpheme [-bà] or [-bi].
[-bà] is used with the infinitive marker, [kà-] and [-bi] is used with the σ infinitive marker. This suffix is used in specific environments, namely, after the plosives [p,b,t,k] and the nasal [m].

Examples.

(15)
(a) [-bà]

<table>
<thead>
<tr>
<th>Pfx</th>
<th>V.root</th>
<th>Suffix</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ᱩà</td>
<td>tāp</td>
<td>- bà</td>
<td>&quot;to tie&quot;</td>
</tr>
<tr>
<td>ᱩà</td>
<td>lēb</td>
<td>- bà</td>
<td>&quot;to buy&quot;</td>
</tr>
<tr>
<td>ᱩà</td>
<td>sāt</td>
<td>- bà</td>
<td>&quot;to learn&quot;</td>
</tr>
<tr>
<td>ᱩà</td>
<td>jāk</td>
<td>- bà</td>
<td>&quot;to look at&quot;</td>
</tr>
<tr>
<td>ᱩà</td>
<td>lûm</td>
<td>- bà</td>
<td>&quot;to bite&quot;</td>
</tr>
</tbody>
</table>
(b) [-bi]

\[
\begin{align*}
\sigma - & \text{ tāp} - bi \quad \text{“ to tie”} \\
\sigma - & \text{ lēb} - bi \quad \text{“ to buy”} \\
\sigma - & \text{ sāt} - bi \quad \text{“ to learn”} \\
\sigma - & \text{ jāk} - bi \quad \text{“ to look at”} \\
\sigma - & \text{ lūm} - bi \quad \text{“ to bite”}
\end{align*}
\]

III.4.2.2. THE -NCV GRAMMATICAL SUFFIX

The -NCV grammatical suffix is realised as [-mbà ] or [-mbi]. It occurs after vowels and after the nasals [n, ñ] and the glottal stop [ʔ]. [-mbà] is used with the infinitive marker [kà- ] while [-mbi] is used with the o infinitive marker.

Examples:

(16)
Pfx V.root Suffix.

\[
\begin{align*}
kà - & \text{ sāsī} - \text{ mbà / } \sigma - \text{ sāsī} - \text{ mbi} \quad \text{“ to scatter”} \\
kà - & \text{ dāā} - \text{ mbà / } \sigma - \text{ dāā} - \text{ mbi} \quad \text{“ to go”} \\
kà - & \text{ jēn} - \text{ mbà / } \sigma - \text{ jēn} - \text{ mbi} \quad \text{“ to choose”} \\
kà - & \text{ zōŋ} - \text{ mbà / } \sigma - \text{ zōŋ} - \text{ mbi} \quad \text{“ to listen”} \\
kà - & \text{ kū?} - \text{ mbà / } \sigma - \text{ kū?} - \text{ mbi} \quad \text{“ to chew”}
\end{align*}
\]
III. 5. CONCLUSION

In this chapter, we have studied the morphological structure of the verb and we have noticed that the verb in Samba Leeko has the structure:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Om</th>
<th>Root</th>
<th>Ext. (suffixes)</th>
</tr>
</thead>
</table>

We have seen that the language has two infinitive markers: /kà/- and σ, and these two infinitive markers take specific suffixes, namely: /-bà/ and /-mbà/ for the prefix /kà/- and /-bì/ and /-mbì/ for the prefix σ. The object marker which does not occur in all verbs is positioned in between the prefix and the verb root.

At the level of verb roots, the language has four verb root types namely -CVV-, -CVC-, -CV.CV- and -CVC. CV-. These verb roots have many surface tonal melodies but underlyingly only five tonal melodies exist. They are H, L, σ, HL and LL.

Having presented the structure of the verb, we will go on to the next chapter to study the process of verb derivation.
CHAPTER IV
VERB DERIVATION

IV.1. INTRODUCTION

According to Simo (1993: 218), we talk of derivation when "an affix is added to a structure to form a new word" and we will add "with a new meaning". In the case of verb derivation, we have as task to identify the different types of extensions that can be added to the verb base and study the relationships that exist between these morphological units that make up the verb. In this chapter our focus will be on productive verbal extensions.

Essono (2000: 366) defines productive verbal extensions as follows:
"Les suffixes productifs ne font pas corps avec la base verbale à laquelle ils sont attachés. Le lien entre la base verbale et les extensions n'est pas nécessaire. Sur l'axe paradigmique, un suffixe productif peut se substituer à un autre: il peut se détacher du verbe et celui-ci garde sa valeur sémantique initiale."

This means that productive verbal extensions are not necessarily part of the verb in which they are used. They can be deleted or substituted and the verb will still maintain its meaning.

In his article, "Bantu Grammatical reconstructions," Meeussen, (1967:92), lists out the following suffixes as productive extensions in Proto-Bantu:
<table>
<thead>
<tr>
<th>Extension</th>
<th>Meaning</th>
<th>Example</th>
<th>Sense</th>
</tr>
</thead>
<tbody>
<tr>
<td>-i-</td>
<td>causative</td>
<td>dim-i</td>
<td>make S.O. cultivate.</td>
</tr>
<tr>
<td>-id-</td>
<td>applicative</td>
<td>dim-id</td>
<td>cultivate for.</td>
</tr>
<tr>
<td>-ik-</td>
<td>impositive</td>
<td>kuk-ik</td>
<td>put in kneeling position</td>
</tr>
<tr>
<td>-ik-</td>
<td>neuter</td>
<td>bon-ik</td>
<td>be in sight.</td>
</tr>
<tr>
<td>-am-</td>
<td>stative</td>
<td>kuk - an</td>
<td>be in kneeling position</td>
</tr>
<tr>
<td>-an-</td>
<td>reciprocal</td>
<td>bon - an</td>
<td>see each other</td>
</tr>
<tr>
<td>-at-</td>
<td>contactive</td>
<td>kuk - at</td>
<td>sit on knees and heels.</td>
</tr>
<tr>
<td>- u -</td>
<td>passive</td>
<td>dim - u</td>
<td>be cultivated.</td>
</tr>
<tr>
<td>- ud -</td>
<td>transitive</td>
<td>gid - ud</td>
<td>break avoidance</td>
</tr>
<tr>
<td>- uk -</td>
<td>intransitive</td>
<td>dib - uk</td>
<td>become unstopped.</td>
</tr>
</tbody>
</table>

Some additional extensions not mentioned by Meeussen but which are productive in some Bantu languages are the locative and the instrumental (NGUE UM, 2002: 55).

In Samba Leekɔ, Grassfield derivation is not very productive. The language is not morphologically rich like other Bantu languages such as Bɔlɔŋ, Bɔsɔɔ, Mvɔmbɔ and Ewɔndɔ where many productive verbal extensions are attested. (see KONG (2000), BITJAA (1990), NGUE UM (2002), ESSONO (2000).

In Bɔlɔŋ for example, we have the following extensions:

"-i1" for the passive, spontaneous and causative
"-èn" for the reciprocal

(1) Examples: ilɔ "to insult"
             Causative ---> ilɔlil "to make someone insult."
             Reciprocal ---> ilɔnɛn "to insult each other."
Samba Leeko verbs use lexicalised extensions except for the passive extension which is realised as a morpheme. This difference in behaviour between Samba Leeko and other Bantu languages may have been provoked by its contact with grassfield Bantu languages,\(^1\) languages about which Polak (1929: 96) makes the following statement:

"Les langues bantoues des grassfields du Cameroun présentent trop d'irregularités par rapport au bantou central. C'est d'ailleurs Greenberg, qui les a intégrées au bantou; avant cela elles étaient considérées comme "semi-bantoues" bien que l'on ait reconnu depuis que leur caractère bantou ne faisait aucun doute."

Following the list of extensions presented by Meeussen in Proto Bantu, we will pick out some extensions and present them so as to illustrate the lexicalised nature of extensions in Samba Leeko. We will present the causative, the reciprocal, the instrumental and the locative. After that we will present the passive which is the only productive extension.

### IV.2. LEXICALISED VERBAL EXTENSIONS

#### IV.2.1. THE CAUSATIVE

Meeussen (1967: 92) defines the causative as "to make someone do something." In Samba Leeko, the causative is expressed by the verb "to make", \([\text{kàmà?mbà}]\)

---

\(^1\) An interesting study could be to carry out a comparative study between Samba Leeko Grassfield and Samba Leeko Benue in order to see if Samba Leeko Benue has productive verbal extensions or not. This study will either affirm or annul the assumption that Samba Leeko Grassfield may have lost its extensions due to the influence of neighbouring grassfield languages.
This verb conjugated in the simple present tense, realised as [mà?], acts as an auxiliary verb. It accompanies the main verb and the object marker. It occupies phrase initial position when there is no subject and the post-initial position when the main verb has a subject.

(2) Examples.

a. kàdàmbà “to hit”
   mà? wō àndàká “to make s.o. hit”
   make s.o. hit
   fō mà? wō àndàká “we make s.o. hit”
   we make s.o. hit
   fō mà? ü àndàká “we make him hit”
   we make him hit

b. kàtúmbà “to send”
   mà? wō àntùmká “make someone send.”
   fō mà? wō àntùmká “we make s.o. send

IV. 2.2. THE RECIPROCAL

We talk of the reciprocal when expressions can be translated as two persons, two groups or two things having an exchange of the same nature. This means that the person or things exert a certain influence on each other.

In Samba Leeko, this extension is expressed by the word [sìlìyà] meaning “each other.”
(3) Examples.

a. kɔ̀dɔ́mba  "to hit"
   fɔ̀  deʔ sifɔ́yà  "we hit each other."
   we hit e.o.

b. kɔ̀tumbà  "to send"
   fɔ̀  tûm  sifɔ́yà  "we send each other."
   we send e.o.

IV. 2.3 THE INSTRUMENTAL

This extension implies that the action is done with an instrument of some kind. In most cases, the instrument is an inanimate object. When added to a verb, the instrumental suffix necessitates the introduction of an instrumental noun phrase.

Following this definition, we have the following examples in Samba Leeko where the word [kɔ̀], "with", serves as the instrumental extension.

(4)

a. kàvɔ́tbà  "to cut"
   mó  vat  kɔ̀  yɛwàá  "I cut with a knife"
   I cut with knife

b. kàdʒùbà  "to beat"
   mó  dʒùb  kɔ̀  tìwàá  "I beat with a stick"
   I beat with stick

c. kàlìmbà  "to eat"
   mó  lii  kɔ̀  fàkɔ́bà  "I eat with a spoon ." 
   I eat with spoon
IV.2.4 THE LOCATIVE

The locative suffix establishes a relationship between the action expressed by the verb and the time or place in which the action takes place. In Samba Leekɔ, the locative has no marker. We can say that it is a zero morpheme or a zero word. Nevertheless, the native speakers understand and interpret sentences produced with the locative extension as having a locative meaning.

(5) Examples.

a. kɛnɛpɔnɔmbɔă “to dance”
   mɔ nɔm nɔp ɔ dɪfi įlù “I dance in the house”.
   I dance song locative house

b. kɛsɔsɔmbɔă “to meet”
   fɔ sənsi ɔ dɪfi įlù “we meet in the house”.
   We meet locative house

IV.3. PRODUCTIVE VERBAL EXTENSIONS

As earlier said, the only productive verbal extension in Samba Leekɔ Grassfield is the passive.

IV.3.1 THE PASSIVE

The passive presents the subject as acted upon. In this case, it does no action. The passive in Samba Leekɔ is marked by the morpheme /-si/ which is attached to the verb root. The passive thus has the formular below:
Passive = root + /-sǐ/

6) Examples.

<table>
<thead>
<tr>
<th>VERB</th>
<th>VERB ROOT</th>
<th>DERIVATIVE</th>
<th>PASSIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>kàdʒūbà “to beat”</td>
<td>-dʒūb-</td>
<td>-sǐ</td>
<td>dʒūb&lt;sì&gt; “be beaten”</td>
</tr>
<tr>
<td>kàpǐímbà “to give”</td>
<td>-pǐ-</td>
<td>-sǐ</td>
<td>pǐ&lt;sì&gt; “be given”</td>
</tr>
<tr>
<td>kàlēbà “to buy”</td>
<td>-lēb-</td>
<td>-sǐ</td>
<td>lēb&lt;sì&gt; “be bought”</td>
</tr>
<tr>
<td>kànàpjiǐmbà “to sing”</td>
<td>-jǐ-</td>
<td>-sǐ</td>
<td>jǐ&lt;sì&gt; nābà “be sung”</td>
</tr>
</tbody>
</table>

VI.4. CONCLUSION

From the presentation above, we see that extensions in Samba Leekọ Grassfield are lexicalised except for the passive extension. Due to this lexicalised nature, the extensions have no interaction with the verb roots which can trigger morphophonological processes as is the case in other languages. Samba Leekọ Grassfield is therefore not very rich morphologically as far as productive verbal extensions are concerned.

In the previous chapters we have studied the verb in isolation, paying attention to the different elements that make up the verb but in chapter V, we will study the verb within the verb phrase, thus our chapter V is entitled Verbal Flexion.
CHAPTER FIVE
VERBAL FLEXION

INTRODUCTION

LYONS (1970 : 150) defines flexion as follows:
«C’est un changement effectué dans la forme du mot pour exprimer sa relation à d’autres mots dans la phrase.»

This means that flexion refers to the structural changes that occur within a word to express the relationship that word has with other words in the sentence. Thus in this chapter, we will examine the types of changes that the verb, nucleus of the verb phrase, undergoes when it is used in relation with other words, for example, words indicating tense, mood, aspect, and voice.

V. TENSE AND MOOD

According to COMRIE (1985 : 9), tense is defined as the «grammaticalised expression of location in time.» This means that tense links the moment of the action, event or state of things expressed by the verb to the moment of speech.

As for mood, DUBOIS et al (1973 : 321) define it as:
«Une catégorie grammaticale associée en général au verbe et traduisant (1) le type de communication instituée par le locuteur entre lui et son interlocuteur ou (2) l’attitude du sujet parlant à l’égard de ses propres énoncés.»
From this definition, we can say that mood brings out the type of communication the speaker institutes between himself and his listener. This could be, for example, an order or a wish expressed in a subjunctive sentence, an assertion, negation, etc. Thus, mood gives us information on the speaker’s attitude towards his own utterances.

From these definitions we realize that tense permits us to situate the moment of an action or event expressed by a verb while mood enables us to know the attitude of the speaker towards the action going on. Though tense and mood differ in meaning, we notice that their flexional markers are so intimately interrelated that it is difficult to treat them separately. As such, we will treat them together.

In this chapter, we will study in different sections:
- The indicative mood and its tenses,
- The imperative mood,
- The subjunctive mood,
- The conditional mood and,
- Negation.

After this we will study the different aspectual markers in Samba Lekko.

V. 1.1. THE INDICATIVE MOOD AND ITS TENSES.

According to DUBOIS (1973 : 192),

« on emploie le mode indicatif pour exprimer une action ou un état certain considéré comme tel. »

In the same way, BITJAA (1990 : 390) has the following definition of the indicative mood:

« ... l’indicatif est ainsi le mode de l’assertion [... ], du fait certainement réalisé ou réalisable. »

Given these two definitions, we can say that the indicative mood is one that is used in stating facts, that is actions or state of minds that can be realised.
Following COMRIE (1985: 2), we can explicitly represent the tenses of the indicative mood using a time line. Thus in his illustration, the present moment is represented by a point labelled $\emptyset$ (zero) on a straight line; the past is represented conventionally to the left and the future to the right. This gives us the diagramme below:

**Figure 1: Representation of time.**

\[ \text{Past} \quad \emptyset \quad \text{Future} \]

Comrie also talks about «degrees of remoteness» which can help us to carry out more accurate location in time. Thus, on that time line, we should be able to distinguish an action which occurred five minutes ago from one which occurred ten years ago. He therefore proposes further subdivision of the time line to indicate the various times that actions take place, be it in the past or in the future, in relation to the present moment. This gives us the following modification of figure (1).

**Figure 2**

\[ P_4 \quad P_3 \quad P_2 \quad P_1 \quad 0 \quad F_1 \quad F_2 \quad F_3 \quad F_4 \]

**Present**

In Figure 2, $P_1$ represents the immediate past, $P_2$ the recent past and $P_3$, $P_4$, etc. subsequent past tenses following their degrees of remoteness. $F_1$ represents the immediate future, $F_2$, the near future and $F_3$, $F_4$, etc. subsequent future tenses following their degrees of remoteness as well.

With this time line, it is much easier to present time divisions in an explicit manner. In the sections below, we will examine the tenses of the indicative mood.
V.1.1.1. THE PRESENT TENSE

COMRIE (1985: 36) defines the present tense as «coincidence of the time of the situation and the present moment.» This definition ties in with what we observe in Samba Leek where the present tense brings about a coincidence between the moment of the action or event and the present moment.

The present tense in Samba Leek does not present any flexional morpheme which we can consider as the tense marker. We will thus assume that the present tense marker in Samba Leek is a /a/ morpheme. This /a/ morpheme occurs at word initial position following the position of these markers in the language. The present tense can therefore be presented as follows.

| Present tense = Tm (a) + Sm + Verb root. |
|---|---|---|

Examples:

kòlèbà « to buy »

<table>
<thead>
<tr>
<th>Tm</th>
<th>Sm</th>
<th>V.root</th>
</tr>
</thead>
<tbody>
<tr>
<td>o</td>
<td>mò</td>
<td>lèb</td>
</tr>
<tr>
<td>o</td>
<td>ón</td>
<td>lèb</td>
</tr>
<tr>
<td>o</td>
<td>(ü)</td>
<td>lèb</td>
</tr>
<tr>
<td>o</td>
<td>fò</td>
<td>lèb</td>
</tr>
<tr>
<td>o</td>
<td>i</td>
<td>lèb</td>
</tr>
<tr>
<td>o</td>
<td>i</td>
<td>lèb</td>
</tr>
</tbody>
</table>

kàsèptimbà « to sell »

<table>
<thead>
<tr>
<th>Tm</th>
<th>Sm</th>
<th>V.root</th>
</tr>
</thead>
<tbody>
<tr>
<td>o</td>
<td>mò</td>
<td>sèpti</td>
</tr>
<tr>
<td>o</td>
<td>ón</td>
<td>sèpti</td>
</tr>
</tbody>
</table>

1 The third person singular, /ü/ is hardly used in conjugation for the verb phrase maintains its meaning, even in its absence.
V. 1.1.2. PAST TENSES OF THE INDICATIVE MOOD

Samba Leekó distinguishes four (4) tenses in the past. These are the immediate past 1 (P₁), the immediate past 2 (P₂), the recent past (P₃) and the remote past (P₄) tenses. These tenses are distinguished in terms of days. All the tense markers occur at initial position and the perfective aspectual marker accompanies the verb root.

V. 1.1.2.1. THE IMMEDIATE PAST TENSE 1 (P₁)

This tense is used for actions that occurred just a few minutes before the moment of speech. The time interval between the present moment and the time of speech or action is very short. This tense corresponds to the present perfect tense in English and its tense marker is the zero morpheme /o/. Its formula is as below:

\[ P₁ = Tm(σ) + Sm + Root + Am \]

Examples.

kôlêbà « to buy »

<table>
<thead>
<tr>
<th>Tm</th>
<th>Sm</th>
<th>Root</th>
<th>Am</th>
</tr>
</thead>
<tbody>
<tr>
<td>σ</td>
<td>má</td>
<td>lèb - à</td>
<td>« I have bought »</td>
</tr>
<tr>
<td>σ</td>
<td>ôn</td>
<td>lèb - à</td>
<td>« you have bought »</td>
</tr>
<tr>
<td>σ</td>
<td>(ū)</td>
<td>lèb - à</td>
<td>« he has bought »</td>
</tr>
<tr>
<td>σ</td>
<td>fô</td>
<td>lèb - à</td>
<td>« we have bought »</td>
</tr>
<tr>
<td>σ</td>
<td>i</td>
<td>lèb - à</td>
<td>« you (pl) have bought »</td>
</tr>
<tr>
<td>σ</td>
<td>i</td>
<td>lèb - à</td>
<td>« they have bought »</td>
</tr>
</tbody>
</table>
kásačeptimbà “to sell”

Tm Sm R.Root Am

σ mó sèpti-j - à « I have sold »
σ sô sèpti-j - à « you have sold »
σ (û) sèpti-j - à « he has sold »
σ fô sèpti-j - à « we have sold »
σ i sèpti-j - à « you have sold »
σ i sèpti-j - à « they have sold »

NB. Following our rule of glide insertion (see section II.1.2.3.), a palatal glide is inserted in between the final vowel of the verb root and the aspectual marker.

V .1.1.2.2. THE IMMEDIATE PAST TENSE 2 (P₂)

Samba Leekko speakers call this tense the « today past » tense. This means that this past tense is used to refer to past actions or events that occur only on the very day on which the speaker is speaking. The difference between this tense and the immediate past tense 1 is that the time interval between the present moment and the time of speech is longer than that in the immediate past tense 1.

The tense marker for this tense is the morpheme /kâ/ which occupies the initial position in the verb phrase. Its formula is as below:

\[ P₂ = ká + Sm + Root + Am \]

Examples.

kâlébà « to buy »

Tm Sm V.root. Am
ká má léb - à « I bought » (today)
ká ön léb - à « you bought »
ká (ū) léb - à « he bought »
ká fó léb - à « we bought »
ká i léb - à « you (pl) bought »
ká i léb - à « they bought »

kàgúùmbà « to sew »

<table>
<thead>
<tr>
<th>Tm</th>
<th>Sm</th>
<th>V.root. Am</th>
</tr>
</thead>
<tbody>
<tr>
<td>ká</td>
<td>má</td>
<td>guù-w - à  « I sewed » (today)</td>
</tr>
<tr>
<td>ká</td>
<td>ön</td>
<td>guù-w - à « you sewed »</td>
</tr>
<tr>
<td>ká</td>
<td>(ū)</td>
<td>guù-w - à « he sewed »</td>
</tr>
<tr>
<td>ká</td>
<td>fó</td>
<td>guù-w - à « we sewed »</td>
</tr>
<tr>
<td>ká</td>
<td>i</td>
<td>guù-w - à « you (pl) sewed »</td>
</tr>
<tr>
<td>ká</td>
<td>i</td>
<td>guù-w - à « they sewed »</td>
</tr>
</tbody>
</table>

NB : [w ] in /guuw/ comes about as a result of glide insertion.

V .1.1.2.3. THE RECENT PAST TENSE (P₃)

In his thesis, *Le système verbal du básàá*, BITJAA KODY (1990 : 436) defines the recent past tense as follows :

« Le passé récent est utilisé pour exprimer des actions qui ont eu lieu dans le passé allant d’hier à une durée de temps antérieure que le locuteur considère comme proche d’hier. En termes plus clairs, le locuteur peut utiliser ce temps pour exprimer une action qui a eu lieu il y a un ou deux ans, si dans sa mémoire, il garde encore la fraîcheur de l’ évènement … »
Following this definition, the recent past tense is used for actions that took place in the past from yesterday upwards to a certain period in the past which the speaker considers as close to yesterday or to a period of time which is still fresh in his mind.

Samba Leek speakers have a similar definition for this past tense as they qualify it the « yesterday » past tense. The verb phrase in this tense has a similar structure to that of the « today » past tense with the only exception that the tense marker here is /nì/ and not /ká/ as in the first case. The formula of the recent past tense can be presented as below:

\[ P_2 = nì + Sm + Root + Am \]

Examples

kèlébà « to buy »
Tm Sm V.root. Am
\[ nì mò lèb - à \] « I bought » (yesterday)
\[ nì án lèb - à \] « you bought »
\[ nì (ü) lèb - à \] « he bought »
\[ nì fó lèb - à \] « we bought »
\[ nì i lèb - à \] « you (pl) bought »
\[ nì i lèb - à \] « they bought »

dùggúmbà « to sew »
Tm Sm V.root. Am
\[ nì má gùù-w - à \] « I sewed » (yesterday)
\[ nì án gùù-w - à \] « you sewed »
\[ nì (ü) gùù-w - à \] « he sewed »
\[ nì fó gùù-w - à \] « we sewed »
\[ nì i gùù-w - à \] « you (pl) sewed »
\[ nì i gùù-w - à \] « they sewed »
V.1.1.2.4. THE REMOTE PAST TENSE ($P_4$)

The remote past tense is used in Samba Leeko to indicate actions that took place very far in the past. Its tense marker is $/nəm/$ which occurs at initial position in the verb phrase. Its formula is as follows:

$$P_4 = nəm + Sm + Root + Am$$

<table>
<thead>
<tr>
<th>Tm</th>
<th>Sm</th>
<th>V.root. Am</th>
</tr>
</thead>
<tbody>
<tr>
<td>$nəm$ mọ</td>
<td>lēb - à</td>
<td>« I had bought »</td>
</tr>
<tr>
<td>$nəm$ ọn</td>
<td>lēb - à</td>
<td>« you had bought »</td>
</tr>
<tr>
<td>$nəm$ (ụ)</td>
<td>lēb - à</td>
<td>« he had bought »</td>
</tr>
<tr>
<td>$nəm$ ọọ</td>
<td>lēb - à</td>
<td>« we had bought »</td>
</tr>
<tr>
<td>$nəm$ i</td>
<td>lēb - à</td>
<td>« you (pl) had bought »</td>
</tr>
<tr>
<td>$nəm$ i</td>
<td>lēb - à</td>
<td>« they had bought »</td>
</tr>
</tbody>
</table>

V.1.1.3. FUTURE TENSES OF THE INDICATIVE MOOD

COMRIE (1985: 36) defines the future tense as the «location of the situation after the present moment. » This means that the future tense
locates an action or event which shall be accomplished after the present moment.

Samba Leekö makes a clear distinction of three tenses in the future which are the imminent future (F₁), the near future (F₂), and the remote future (F₃).

V.1.1.3.1. THE IMMINENT FUTURE (F₁)

The imminent future is used to talk about actions or events that will take place in a very short time. When translated into English, its tense marker /z̩i̱y̩m/ means «small, a bit, soon.» This means that this tense refers to an action or event that will be accomplished soon or in a small amount of time. Its tense marker appears as an infix in between the first part of the near future (F₂) tense marker and the subject marker. It has the following formula.

\[ F₁ = F₂ \text{Tm} + z̩i̱y̩m + Sm + F₂ \text{Tm} + \text{Root} + \text{Am} \]

Examples
kásákbà « to keep »

<table>
<thead>
<tr>
<th>F₂Tm</th>
<th>F₁Tm</th>
<th>Sm</th>
<th>F₂Tm</th>
<th>V.root Am</th>
</tr>
</thead>
<tbody>
<tr>
<td>dàá</td>
<td>z̩i̱y̩m</td>
<td>mò</td>
<td>tf</td>
<td>sáy- à</td>
</tr>
<tr>
<td>dàá</td>
<td>z̩i̱y̩m</td>
<td>àn</td>
<td>tf</td>
<td>sáy- à</td>
</tr>
<tr>
<td>dàá</td>
<td>z̩i̱y̩m</td>
<td>(ū)</td>
<td>tf</td>
<td>sáy- à</td>
</tr>
<tr>
<td>dàá</td>
<td>z̩i̱y̩m</td>
<td>fò</td>
<td>tf</td>
<td>sáy- à</td>
</tr>
<tr>
<td>dàá</td>
<td>z̩i̱y̩m</td>
<td>i</td>
<td>tf</td>
<td>sáy- à</td>
</tr>
<tr>
<td>dàá</td>
<td>z̩i̱y̩m</td>
<td>i</td>
<td>tf</td>
<td>sáy- à</td>
</tr>
</tbody>
</table>

will soon will keep
NB: The plosive sound [k] of the verb root changes into the fricative [ɣ] due to the process of frication (see Section 11.1.2.5).

kàdáàmbà  « to go »

<table>
<thead>
<tr>
<th>F₂Tm</th>
<th>F₁Tm</th>
<th>Sm</th>
<th>F₂Tm</th>
<th>V.root</th>
<th>Am</th>
</tr>
</thead>
<tbody>
<tr>
<td>dáá</td>
<td>zóyóm</td>
<td>má</td>
<td>tí</td>
<td>dáá-n-à</td>
<td>« I will soon go »</td>
</tr>
<tr>
<td>dáá</td>
<td>zóyóm</td>
<td>án</td>
<td>tí</td>
<td>dáá-n-à</td>
<td>« you will soon go »</td>
</tr>
<tr>
<td>dáá</td>
<td>zóyóm</td>
<td>(ü)</td>
<td>tí</td>
<td>dáá-n-à</td>
<td>« he will soon go »</td>
</tr>
<tr>
<td>dáá</td>
<td>zóyóm</td>
<td>fó</td>
<td>tí</td>
<td>dáá-n-à</td>
<td>« we will soon go »</td>
</tr>
<tr>
<td>dáá</td>
<td>zóyóm</td>
<td>í</td>
<td>tí</td>
<td>dáá-n-à</td>
<td>« you will soon go »</td>
</tr>
<tr>
<td>dáá</td>
<td>zóyóm</td>
<td>i</td>
<td>tí</td>
<td>dáá-n-à</td>
<td>« they will soon go »</td>
</tr>
</tbody>
</table>

will soon will go

kàlúúmbà  « to burn »

<table>
<thead>
<tr>
<th>F₂Tm</th>
<th>F₁Tm</th>
<th>Sm</th>
<th>F₂Tm</th>
<th>V.root</th>
<th>Am</th>
</tr>
</thead>
<tbody>
<tr>
<td>dáá</td>
<td>zóyóm</td>
<td>má</td>
<td>tí</td>
<td>lùù-n-à</td>
<td>« I will soon burn»</td>
</tr>
<tr>
<td>dáá</td>
<td>zóyóm</td>
<td>án</td>
<td>tí</td>
<td>lùù-n-à</td>
<td>« you will soon burn »</td>
</tr>
<tr>
<td>dáá</td>
<td>zóyóm</td>
<td>(ü)</td>
<td>tí</td>
<td>lùù-n-à</td>
<td>« he will soon burn »</td>
</tr>
<tr>
<td>dáá</td>
<td>zóyóm</td>
<td>fó</td>
<td>tí</td>
<td>lùù-n-à</td>
<td>« we will soon burn »</td>
</tr>
<tr>
<td>dáá</td>
<td>zóyóm</td>
<td>í</td>
<td>tí</td>
<td>lùù-n-à</td>
<td>« you will soon burn »</td>
</tr>
<tr>
<td>dáá</td>
<td>zóyóm</td>
<td>i</td>
<td>tí</td>
<td>lùù-n-à</td>
<td>« they will soon burn »</td>
</tr>
</tbody>
</table>

will soon will burn

Morphophonological process.

In this tense we notice a nasal insertion process in verbs with a -CVV- verb root as demonstrated in the examples above. This is done to avoid the occurrence of three vowels in a sequence, thus a nasal, [n] is inserted in between the verb root vowels and the aspectual marker /-à/. This rule applies only in the future tenses and in verbs conjugated in the
progressive aspect. The rule of nasal insertion can be formulated as follows:

Nasal Insertion rule:

\[ \emptyset \rightarrow n / VV + \quad V \]

*Prose statement:* The alveolar nasal, \[ n \], is inserted in between a \(-VV-\) sequence at morpheme boundary and a following vowel.

**Condition:** The verbs must be conjugated in the future tenses or in the progressive aspect.

**V.1.1.3.2. THE NEAR FUTURE (F2)**

This tense is used to refer to actions or events that will take place in the future, within a time interval, starting from «tomorrow» right up to many years so long as the speaker is sure or certain about the time the actions will be accomplished. It should be noted that the speaker's certainty about the time of the action is what determines the use of this tense. The flexional marker for this tense is the discontinuous morpheme \(/ \text{dàá} \quad \text{.\text{.\text{.\text{.}}}} /\) with \(/\text{dàá}-/\) occurring at initial position while \(/\text{-tú}/\) occurs in between the subject marker and the verb root. It has the following formula:

\[ F_2 = \text{dàá} + \text{Sm} + \text{tf} + \text{Root} + \text{Am} \]

The \( F_2 \) tense marker is used in the conjugation of verbs in the imminent future and the remote future. Below are some examples which portray the use of this tense.
V.1.1.3.3. THE REMOTE FUTURE TENSE (F₃)

BITJAA (1990: 433) defines the remote future in these terms:

« Le futur éloigné est employé pour exprimer des actions qui auront lieu dans un futur lointain ou considérées comme tel par le locuteur. En principe, il convient pour des actions qui auront lieu dans plusieurs mois ou plusieurs années ... »

Following Bitjaa’s definition, we can say that the remote future is used to talk about actions which will take place very far in the future. In Samba Leeko, the determining factor for the use of this tense is
uncertainty. This means that, the speaker is uncertain about the time when the future action will take place.

This tense is marked by the morpheme /ɲàŋkà / which means «far ». Like the immediate future tense marker, this tense marker is infixed in between the first part of the Near Furture tense marker and the subject marker. Its formula is as below:

\[
F_3 = \text{dàá + ɲàŋkà + Sm + tf + Root + Am}
\]

### kàlébà “to buy”

<table>
<thead>
<tr>
<th>F₂Tm</th>
<th>F₃Tm</th>
<th>Sm</th>
<th>F₂Tm</th>
<th>V.Root</th>
<th>Am</th>
</tr>
</thead>
<tbody>
<tr>
<td>dàá</td>
<td>ɲàŋkà</td>
<td>mó</td>
<td>tf</td>
<td>lèb - à</td>
<td>« one day, I will buy »</td>
</tr>
<tr>
<td>dàá</td>
<td>ɲàŋkà</td>
<td>án</td>
<td>tf</td>
<td>lèb - à</td>
<td>« one day, you will buy »</td>
</tr>
<tr>
<td>dàá</td>
<td>ɲàŋkà</td>
<td>(ü)</td>
<td>tf</td>
<td>lèb - à</td>
<td>« one day, he will buy »</td>
</tr>
<tr>
<td>dàá</td>
<td>ɲàŋkà</td>
<td>fó</td>
<td>tf</td>
<td>lèb - à</td>
<td>« one day, we will buy »</td>
</tr>
<tr>
<td>dàá</td>
<td>ɲàŋkà</td>
<td>i</td>
<td>tf</td>
<td>lèb - à</td>
<td>« one day, you will buy »</td>
</tr>
<tr>
<td>dàá</td>
<td>ɲàŋkà</td>
<td>i</td>
<td>tf</td>
<td>lèb - à</td>
<td>« one day, they will buy »</td>
</tr>
</tbody>
</table>

### kàdáàm'bà “to go”

<table>
<thead>
<tr>
<th>F₂Tm</th>
<th>F₃Tm</th>
<th>Sm</th>
<th>F₂Tm</th>
<th>V.Root</th>
<th>Am</th>
</tr>
</thead>
<tbody>
<tr>
<td>dàá</td>
<td>ɲàŋkà</td>
<td>mó</td>
<td>tf</td>
<td>dàá-n-à</td>
<td>« one day, I will go »</td>
</tr>
<tr>
<td>dàá</td>
<td>ɲàŋkà</td>
<td>án</td>
<td>tf</td>
<td>dàá-n-à</td>
<td>« one day, you will go »</td>
</tr>
<tr>
<td>dàá</td>
<td>ɲàŋkà</td>
<td>(ü)</td>
<td>tf</td>
<td>dàá-n-à</td>
<td>« one day, he will go »</td>
</tr>
<tr>
<td>dàá</td>
<td>ɲàŋkà</td>
<td>fó</td>
<td>tf</td>
<td>dàá-n-à</td>
<td>« one day, we will go »</td>
</tr>
<tr>
<td>dàá</td>
<td>ɲàŋkà</td>
<td>i</td>
<td>tf</td>
<td>dàá-n-à</td>
<td>« one day, you will go »</td>
</tr>
<tr>
<td>dàá</td>
<td>ɲàŋkà</td>
<td>i</td>
<td>tf</td>
<td>dàá-n-à</td>
<td>« one day, they will go »</td>
</tr>
</tbody>
</table>

NB: In the future tenses, the subject markers /má/ and /fá/, that is, first person singular and plural respectively, are often merged with the second part of the F₂ tense marker, /t/ì/. This merging gives the forms below:
These contracted forms are highly used in the language.

Examples: kɔlɛbà “to buy”

-dàá má lɛb-à / dàá má tí lɛb-à  “I will buy”
-dàá fà lɛb-à / dàá fà tí lɛb-à  “we will buy”

kàdààmbà “to go”

-dàá má dàà-n-à / dàá mó tí dàà-n-à  “I will go”
-dàá fà dàà-n-à / dàá fà tí dàà-n-à  “we will go”

After the study of the tenses of the indicative mood, we can draw a time line to present the indicative tenses of Samba Leekó as follows:

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>P₄</td>
<td>P₃</td>
<td>P₂</td>
<td>P₁</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>F₁</td>
<td>F₂</td>
<td>F₃</td>
</tr>
</tbody>
</table>

Remote Recent Immediate Immediate Present Imminent Near Remote
past  past  Past 2  Past 1  Future  Future  Future

V 1.2. THE IMPERATIVE MOOD

DUBOIS in *Dictionnaire de Linguistique* defines the imperative as:

“Un mode exprimant un ordre donné à un ou plusieurs interlocuteurs (dans les phrases affirmatives) ou une défense (dans les phrases négatives).”
This means that the imperative mood expresses a given order to one or many interlocutors in affirmative sentences or a prohibition in negative sentences.

In Samba Leeko, the imperative has only one form for all the persons. It is marked by the discontinuous morpheme /N ... ká/. /N/ occurs before the verb root while /ká/ comes after the verb root. Like in many other languages, it is used without the subject marker. Its formula is as follows:

\[
\text{Imperative} = \text{N} + \text{Root} + \text{ká}
\]

- kősókba “to keep”
- n-sák - ká “keep”
- Tm V.Root Tm
- kàjáámmb “to come”
- n - jáá - ká “come”
- kàbèsimb “to finish”
- m-bési-ká “finish”
- kàmëtb “to lick”
- m-mët-ká “lick”
- kàkôtsimb “to reduce”
- ū-kôtsi-ká “reduce”
- kàgétb “to have”
- ū-gët-ká “have”

Morphophonological processes.

A process of nasal assimilation takes place in the imperative mood with the first part of the imperative marker /N/ assimilating the place of articulation of the following consonant. For more details on this process, see section 11.1.2.1.2.
Another morphophonological process that takes place in the imperative mood is a consonant deletion process. This happens in verbs which occur with an object. Consider the data below:

(1) 

**Infinitive**

<table>
<thead>
<tr>
<th>Pfx</th>
<th>Om</th>
<th>V.root</th>
<th>Suff.</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>kə -</td>
<td>náp -</td>
<td>nà -</td>
<td>mbà -</td>
<td>“to dance (a song)”</td>
</tr>
<tr>
<td>kə -</td>
<td>náp -</td>
<td>jì -</td>
<td>mbà -</td>
<td>“to sing (a song)”</td>
</tr>
<tr>
<td>kə -</td>
<td>lób -</td>
<td>lèe -</td>
<td>mbà -</td>
<td>“to fish (a hook)”</td>
</tr>
<tr>
<td>kə -</td>
<td>án -</td>
<td>sáʔ -</td>
<td>mbà -</td>
<td>“to play (something)”</td>
</tr>
<tr>
<td>kə -</td>
<td>lót -</td>
<td>bê -</td>
<td>mbà -</td>
<td>“to laugh (laughter)”</td>
</tr>
<tr>
<td>kə -</td>
<td>gó -</td>
<td>pàà -</td>
<td>mbà -</td>
<td>“to dress up (dress)”</td>
</tr>
</tbody>
</table>

From the data in (1), we notice that in the imperative form, the verbs bear the first part of the imperative tense marker, /d-/ , which occurs at initial position. The second part of this tense marker, /-kà/, is however
incomplete as we find only the vowel /á/ present. One could be tempted to think that this /á/ is the aspectual marker found in verbs conjugated in the past and future tenses, but this is not true given that the aspectual marker, /á/ bears a low tone while the /á/ of the imperative tense marker that we find here bears a higher tone. This /á/ is therefore the vowel of the imperative tense marker /-ká/ which is left behind after [k] deletion. This rule is therefore not phonologically conditioned but morphologically conditioned given that [k] is deleted only when an object marker is used. This explains why in the forms in (2), the imperative tense marker is complete since these verbs do not bear an object marker.

We also find a lateral insertion process in the form /n-ĩ3ẽ-lót-ĩ-á/ and a glide insertion process in the form /m-páá-gó-w-á/ in the data in (1). For more details on these morphophonological processes, see Section II.1.2.

V. 3. THE SUBJUNCTIVE MOOD

The subjunctive mood in Samba Leekú is almost similar to the imperative mood. Its tense marker is /ká/ which comes after the verb root. The subjunctive is used with object personal pronouns which occupy phrase initial position. It can be captured by the formula below:

\[
\text{Subjunctive} = \text{Sm} + \text{Root} + \text{ká}
\]

Examples

kãsëptimbã “to sell”

Sm V.Root Tm
má sëpti - ká “let me sell”
(ũ) sëpti - ká “let him sell”
fá sëpti - ká “let us sell”
fã sëpti - ká “let them sell”
kôlébà “to buy”

Sm V.root Tm
má lée - ká “let me buy”
(u) lée - ká “let him buy”
fá lée - ká “let us buy”
fá lée - ká “let them buy”

Just as in the imperative mood, the morphophonological process of consonant deletion also takes place in the subjunctive mood in verbs which occur with an object.

Examples.

Infinitive Subjunctive
Pfx Om Root Suff Sm Root Om Tm
kò - náp - jif - mbà má jif - náb -á
“to sing” (a song) Let me sing
(ʊ) jif - náb - á
Let him sing
fá jif - náb - á
Let us sing
fá- jif - náb - á
let them sing

V.1.4. THE CONDITIONAL MOOD

The conditional mood in Samba Leekô is marked by the discontinuous morpheme /máká... sinú/. The first part, /máká-/ occurs at phrase initial position while the second part /-sinú/ occurs at the end of the conditional clause. As such, it finds itself at phrase medial position when the conditional clause is followed by a result clause. These two morphemes marking the conditional mood can function without each other in
different contexts. Thus the first part, /màká-/ is used alone in negative conditional sentences since the addition of the negative marker causes /-sinú/ to delete. Although both of them are used in affirmative sentences, the second part /-sinú/ can be used alone and the sentence will still make sense. The conditional mood can be captured using the formula below:

**Affirmative conditional sentences.**

\[
\text{COND} = (màká) + Sm + \text{Root} + \text{sinú} 
\]

**Negative conditional sentences**

\[
\text{COND} = màká + Sm + \text{Root} + \text{Neg.m.} 
\]

**Examples**

(1) **Affirmative form**

màká mó léb sinú / mě léb sinú “if I buy”  
Cond Sm buy cond Sm buy cond

Negative form

màká mó léb sít “if I don’t buy ...”  
cond. Sm buy Neg. m

(2) **Affirmative form**

-màká ū jáá sinú, mó tí dáànà  
cond Sm come cond Sm will go  
“If he comes, I will go”

ū jáá sinú, mó tí dáànà  
Sm come cond Sm will go  
“If he comes, I will go”
Negative form
- màkà ü jáá sì, mó tí dáànà
cond Sm come Neg Sm will go
"If he does not come, I will go"

V .2. NEGATION

As earlier said, mood brings out the type of communication the speaker
institutes between himself and his listener or the speaker’s attitude
towards his own utterance. As such, we consider negation to be a mood
on its own because it brings out a type of information which is generally
a prohibition. The speaker’s attitude here is one of refusal or restriction.
In Samba Leekɔ, negation is marked by two flexional markers /sí/ and
/γá/. Their usage is conditioned by the tenses. /γá/ is used for future
tenses and /sí/ for the other tenses. They are always located at phrase
final position after the verb root. In this section, we will examine
negation in the indicative mood, the imperative, subjunctive, and
conditional moods.

V .2.1. NEGATION IN THE INDICATIVE MOOD

V .2.1.1. NEGATION IN THE PRESENT TENSE

Negation in the present tense in Samba Leekɔ is marked by the
morpheme, /sí/ which is placed at final position. Below are some
examples:
kàttìmbà “to push”

**Affirmative form**
mó tì? “I push”
án tì? “you push”

**Negative form**
mó tì? sì “I don’t push”
án tì? sì “you don’t push”
| (ʊ) ti? | "he pushes"               | (ʊ) ti? si | "he doesn’t push"                   |
| fʊ ti? | "we push"       | fʊ ti? si | "we don’t push"                   |
| i ti?  | "you push" | i ti? si | "you don’t push" |
| i ti?  | "they push" | i ti? si | "they don’t push" |

Sm V.Root

| kàdèsimbà | "to measure" |

**Affirmative form**

| mó dési | "I measure" |
| àn dési | "you measure" |
| (ʊ) dési | "he measures" |
| fʊ dési | "we measure" |
| i dési | "you measure" |
| i dési | "they measure" |

Sm V.Root

| má dési | "I don’t measure" |
| àn dési | "you don’t measure" |
| (ʊ) dési | "he doesn’t measure" |
| fʊ dési | "we don’t measure" |
| i dési | "you don’t measure" |
| i dési | "they don’t measure" |

Sm V.Root Neg m.

**V.2.1.2. NEGATION IN PAST TENSES**

Like in the present tense, the negative morpheme /si/ is added at final position to all the past tenses to get their negative form. The only modification is that the addition of /si/ causes the deletion of the perfective aspectual marker, /a/ which occurs in all past tenses at phrase final position.

**V.2.1.2.1. NEGATION IN PAST TENSE 1**

**Examples**

kàsèptimbà “to sell”

<table>
<thead>
<tr>
<th>Affirmative form</th>
<th>Negative form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sm V.Root Am</td>
<td>Sm V.Root Neg m.</td>
</tr>
<tr>
<td>má sèptì-j- à &quot;I have sold&quot;</td>
<td>má sèptì - si “I have not sold”</td>
</tr>
<tr>
<td>ìn sèptì-j- à &quot;you have sold&quot;</td>
<td>ìn sèptì-sì “you have not sold”</td>
</tr>
</tbody>
</table>
(ū) səpti-j- “he has sold”  
fū səpti-j- “we have sold”  
i səpti-j- “you have sold”  
i səpti-j- “they have sold”  
(ū) səpti-sí “he has not sold”  
fū səpti-sí “we have not sold”  
i səpti-sí “you have not sold”  
i səpti-sí “they have not sold”

*Morphophonological process:* Palatal glide insertion in between the final vowel of the verb root and the following aspectual marker in the affirmative form.

**Affirmative form**  
**Negative form**

kəlébā “to buy”

<table>
<thead>
<tr>
<th>Sm V.Root. Am</th>
<th>Sm V.Root Neg m.</th>
</tr>
</thead>
<tbody>
<tr>
<td>má lēb - “I have bought”</td>
<td>má lēb -sí “I have not bought”</td>
</tr>
<tr>
<td>ān lēb - “you have bought”</td>
<td>ān lēb -sí “you have not bought”</td>
</tr>
<tr>
<td>(ū) lēb - “he has bought”</td>
<td>(ū) lēb -sí “he has not bought”</td>
</tr>
<tr>
<td>fū lēb - “we have bought”</td>
<td>fū lēb -sí “we have not bought”</td>
</tr>
<tr>
<td>i lēb - “you have bought”</td>
<td>i lēb -sí “you have not bought”</td>
</tr>
<tr>
<td>ū lēb - “they have bought”</td>
<td>ū lēb -sí “they have not bought”</td>
</tr>
</tbody>
</table>

**V .2.1.2.2. NEGATION IN PAST TENSE 2**

**Examples**

kəlébā “to buy”

<table>
<thead>
<tr>
<th>Affirmative form</th>
<th>Negative form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tm Sm V.root. Am</td>
<td>Tm Sm V.Root Neg m.</td>
</tr>
<tr>
<td>kā má lēb - “I bought”</td>
<td>kā má lēb -sí “I did not buy”</td>
</tr>
<tr>
<td>kā ān lēb - “you bought”</td>
<td>kā ān lēb -sí “you did not buy”</td>
</tr>
<tr>
<td>kā (ū) lēb - “he bought”</td>
<td>kā (ū) lēb -sí “he did not buy”</td>
</tr>
<tr>
<td>kā fū lēb - “we bought”</td>
<td>kā fū lēb -sí “we did not buy”</td>
</tr>
<tr>
<td>kā i lēb - “you bought”</td>
<td>kā i lēb -sí “you did not buy”</td>
</tr>
<tr>
<td>kā i lēb - “they bought”</td>
<td>kā i lēb -sí “they did not buy”</td>
</tr>
</tbody>
</table>
kàguúmbà  "to sew"

**Affirmative form**  

| Action | Pronoun | Affirmation  
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tm Sm V.root. Am</td>
<td>ká má guù-w-à</td>
<td>&quot;I sewed&quot;</td>
</tr>
<tr>
<td>Tm Sm V-root. Am</td>
<td>ká ón guù-w-à</td>
<td>&quot;you sewed&quot;</td>
</tr>
<tr>
<td>Tm Sm V-root. Am</td>
<td>ká (ũ) guù-w-à</td>
<td>&quot;he sewed&quot;</td>
</tr>
<tr>
<td>Tm Sm V-root. Am</td>
<td>ká ō guù-w-à</td>
<td>&quot;we sewed&quot;</td>
</tr>
<tr>
<td>Tm Sm V-root. Am</td>
<td>ká i guù-w-à</td>
<td>&quot;you sewed&quot;</td>
</tr>
<tr>
<td>Tm Sm V-root. Am</td>
<td>ká i guù-w-à</td>
<td>&quot;they sewed&quot;</td>
</tr>
</tbody>
</table>

**Negative form**

| Action | Pronoun | Affirmation  
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tm Sm V.Root Neg m.</td>
<td>kámá guù -si</td>
<td>&quot;I did not sew&quot;</td>
</tr>
<tr>
<td>Tm Sm V-root. Am</td>
<td>ká ón guù -si</td>
<td>&quot;you did not sew&quot;</td>
</tr>
<tr>
<td>Tm Sm V-root. Am</td>
<td>ká (ũ) guù -si</td>
<td>&quot;he did not sew&quot;</td>
</tr>
<tr>
<td>Tm Sm V-root. Am</td>
<td>ká ō guù -si</td>
<td>&quot;we did not sew&quot;</td>
</tr>
<tr>
<td>Tm Sm V-root. Am</td>
<td>ká i guù -si</td>
<td>&quot;you did not sew&quot;</td>
</tr>
<tr>
<td>Tm Sm V-root. Am</td>
<td>ká i guù -si</td>
<td>&quot;they did not sew&quot;</td>
</tr>
</tbody>
</table>

Morphophonological process: Bilabial glide insertion in between the final vowel of the verb root and the following aspectual marker. For details, see Section II.1.2.3.

V .2.1.2.3. NEGATION IN PAST TENSE 3

Examples:  kàlébà  "to buy"

**Affirmative form**  

| Action | Pronoun | Affirmation  
|--------|---------|-------------|
| Tm Sm V.root. Am | ní má léb -à | "I bought (yesterday)"
| Tm Sm V-root. Am | ní ón léb -à | "you bought"
| Tm Sm V-root. Am | ní (ũ) léb -à | "he bought"
| Tm Sm V-root. Am | ní ō léb -à | "we bought"
| Tm Sm V-root. Am | ní i léb -à | "you bought"
| Tm Sm V-root. Am | ní i léb -à | "they bought"

**Negative form**

| Action | Pronoun | Affirmation  
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tm Sm V.Root Neg m.</td>
<td>ní má léb-sí</td>
<td>&quot;I did not buy&quot;</td>
</tr>
<tr>
<td>Tm Sm V-root. Am</td>
<td>ní ón léb-sí</td>
<td>&quot;you did not buy&quot;</td>
</tr>
<tr>
<td>Tm Sm V-root. Am</td>
<td>ní (ũ) léb-sí</td>
<td>&quot;he did not buy&quot;</td>
</tr>
<tr>
<td>Tm Sm V-root. Am</td>
<td>ní ō léb-sí</td>
<td>&quot;we did not buy&quot;</td>
</tr>
<tr>
<td>Tm Sm V-root. Am</td>
<td>ní i léb-sí</td>
<td>&quot;you did not buy&quot;</td>
</tr>
<tr>
<td>Tm Sm V-root. Am</td>
<td>ní i léb-sí</td>
<td>&quot;they did not buy&quot;</td>
</tr>
</tbody>
</table>
kátápbà “to tie”

<table>
<thead>
<tr>
<th>Affirmative form</th>
<th>Negative form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tm Sm V.root. Am</td>
<td>Tm Sm V.Root Neg m.</td>
</tr>
<tr>
<td>ṇí mó táb - à “I tied”</td>
<td>ṇí mó táp - sí “I did not tie”</td>
</tr>
<tr>
<td>ṇí án táb - a “you tied”</td>
<td>ṇí án táp - sí “you did not tie”</td>
</tr>
<tr>
<td>ṇí (ū) táb - à “he tied”</td>
<td>ṇí (ū) táp - sí “he did not tie”</td>
</tr>
<tr>
<td>ṇí fā táb - à “we tied”</td>
<td>ṇí fā táp - sí “we did not tie”</td>
</tr>
<tr>
<td>ṇí i táb - à “you tied”</td>
<td>ṇí i táp - sí “you did not tie”</td>
</tr>
<tr>
<td>ṇí i táb - à “they tied”</td>
<td>ṇí i táp - sí “they did not tie”</td>
</tr>
</tbody>
</table>

Morphophonological process: Voicing

[p] of the verb root in the verb /kátápbà/ undergoes voicing to become [b] in between two vowels in the affirmative form. For details see Section II.2.6.

V .2.1.2.4. NEGATION IN PAST TENSE 4

Examples.

kátumbà “to send”

<table>
<thead>
<tr>
<th>Affirmative form</th>
<th>Negative form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tm Sm V.root. Am</td>
<td>Tm Sm V.Root Neg m.</td>
</tr>
<tr>
<td>ṇàdám má tûm-à “I had sent”</td>
<td>ṇàdám má tûm-sí “I had not sent”</td>
</tr>
<tr>
<td>ṇàdám án tûm-à “you had sent”</td>
<td>ṇàdám án tûm -sí “you had not sent”</td>
</tr>
<tr>
<td>ṇàdám (ū) tûm-à “he had sent”</td>
<td>ṇàdám (ū) tûm -sí “he had not sent”</td>
</tr>
<tr>
<td>ṇàdám fā tûm-à “we had sent”</td>
<td>ṇàdám fā tûm -sí “we had not sent”</td>
</tr>
<tr>
<td>ṇàdám i tûm-à “you had sent”</td>
<td>ṇàdám i tûm -sí “you had not sent”</td>
</tr>
<tr>
<td>ṇàdám i tûm-à “they had sent”</td>
<td>ṇàdám i tûm -sí “they had not sent”</td>
</tr>
</tbody>
</table>
kòsáthá “to learn”

Affirmative form

<table>
<thead>
<tr>
<th>Tm Sm V.root. Am</th>
<th>Tm Sm V.Root Neg m.</th>
</tr>
</thead>
<tbody>
<tr>
<td>jàòm mó sàt-l-à “I had learned”</td>
<td>jàòm mó sàt-sì “I had not sent”</td>
</tr>
<tr>
<td>jàòm ón sàt-l-à “you had learned”</td>
<td>jàòm ón sàt-sì “you had not learned”</td>
</tr>
<tr>
<td>jàòm (ü) sàt-l-à “he had learned”</td>
<td>jàòm (ü) sàt-sì “he had not learned”</td>
</tr>
<tr>
<td>jàòm fó sàt-l-à “we had learned”</td>
<td>jàòm fó sàt-sì “we had not learned”</td>
</tr>
<tr>
<td>jàòm ó sàt-l-à “you had learned”</td>
<td>jàòm ó sàt-sì “you had not learned”</td>
</tr>
<tr>
<td>jàòm ó sàt-l-à “they had learned”</td>
<td>jàòm ó sàt-sì “they had not learned”</td>
</tr>
</tbody>
</table>

V.2.1.3. NEUGATION IN FUTURE TENSES.

In Samba Leeko, negation in the future tenses (F1, F2 and F3) is marked by the morpheme /yá/ which is placed at phrase final position.

V.2.1.3.1. NEUGATION IN F1 (IMMINENT FUTURE).

Negation in this tense is marked by the morpheme /yá/ which, as earlier said, occurs at phrase final position. The Imminent Future tense marker /zóyóm/ is maintained in between the Near Future (F2) tense marker and the subject marker. The second part of F2 tense marker, /-tí/ and the aspectual marker /à/ are deleted with the addition of the negative morpheme. Below are some examples:
**Negative form.**

<table>
<thead>
<tr>
<th>F2Tm</th>
<th>F1 Tm</th>
<th>Sm,</th>
<th>V.Root</th>
<th>Neg.m</th>
</tr>
</thead>
<tbody>
<tr>
<td>daá</td>
<td>zóyóm</td>
<td>mó</td>
<td>léb - yá</td>
<td>“I will not buy soon”</td>
</tr>
<tr>
<td>daá</td>
<td>zóyóm</td>
<td>án</td>
<td>léb - yá</td>
<td>“You will not buy soon”</td>
</tr>
<tr>
<td>daá</td>
<td>zóyóm</td>
<td>(u)</td>
<td>léb - yá</td>
<td>“He will not buy soon”</td>
</tr>
<tr>
<td>daá</td>
<td>zóyóm</td>
<td>fá</td>
<td>léb - yá</td>
<td>“We will not buy soon”</td>
</tr>
<tr>
<td>daá</td>
<td>zóyóm</td>
<td>i</td>
<td>léb - yá</td>
<td>“You will not buy soon”</td>
</tr>
<tr>
<td>daá</td>
<td>zo'ýóm</td>
<td>i</td>
<td>léb - yá</td>
<td>“They will not buy soon”</td>
</tr>
</tbody>
</table>

V.2.1.3.2. NEGATION IN F2. (NEAR FUTURE)

To mark negation in the Near Future, the negative marker, / yá /, is added at final position to the affirmative form of the verb. It also causes the deletion of the perfective aspectual marker and the second part of the F2 tense marker, / daá ....tí /.

Examples.

<table>
<thead>
<tr>
<th>kàtúmbà</th>
<th>“to send”</th>
</tr>
</thead>
</table>

**Affirmative form**
<table>
<thead>
<tr>
<th>F2Tm</th>
<th>Sm</th>
<th>F2Tm</th>
<th>V.Root</th>
<th>Am</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>dàá</td>
<td>mó</td>
<td>tǐ</td>
<td>tùm</td>
<td>-  ò</td>
<td>&quot;I will send&quot;</td>
</tr>
<tr>
<td>dàá</td>
<td>ón</td>
<td>tǐ</td>
<td>tùm</td>
<td>-  ò</td>
<td>&quot;You will send&quot;</td>
</tr>
<tr>
<td>dàá</td>
<td>(ũ)</td>
<td>tǐ</td>
<td>tùm</td>
<td>-  ò</td>
<td>&quot;He will send&quot;</td>
</tr>
<tr>
<td>dàá</td>
<td>fā</td>
<td>tǐ</td>
<td>tùm</td>
<td>-  ò</td>
<td>&quot;we will send&quot;</td>
</tr>
<tr>
<td>dàá</td>
<td>í</td>
<td>tǐ</td>
<td>tùm</td>
<td>-  ò</td>
<td>&quot;You will send&quot;</td>
</tr>
<tr>
<td>dàá</td>
<td>í</td>
<td>tǐ</td>
<td>tùm</td>
<td>-  ò</td>
<td>&quot;They will send&quot;</td>
</tr>
</tbody>
</table>

**Negative form**

<table>
<thead>
<tr>
<th>F2Tm</th>
<th>Sm,</th>
<th>V.Root</th>
<th>Neg m.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>dàá</td>
<td>mó</td>
<td>tùm</td>
<td>yá</td>
<td>&quot;I will not send&quot;</td>
</tr>
<tr>
<td>dàá</td>
<td>ón</td>
<td>tùm</td>
<td>yá</td>
<td>&quot;You will not send&quot;</td>
</tr>
<tr>
<td>dàá</td>
<td>(ũ)</td>
<td>tùm</td>
<td>yá</td>
<td>&quot;He will not send&quot;</td>
</tr>
<tr>
<td>dàá</td>
<td>fā</td>
<td>tùm</td>
<td>yá</td>
<td>&quot;We will not send&quot;</td>
</tr>
<tr>
<td>dàá</td>
<td>í</td>
<td>tùm</td>
<td>yá</td>
<td>&quot;You will not send&quot;</td>
</tr>
<tr>
<td>dàá</td>
<td>í</td>
<td>tùm</td>
<td>yá</td>
<td>&quot;They will not send&quot;</td>
</tr>
</tbody>
</table>

kōlúúmbà  " to burn"

**Affirmative form**

<table>
<thead>
<tr>
<th>F2Tm</th>
<th>Sm</th>
<th>F2Tm</th>
<th>V.Root</th>
<th>Am</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>dàá</td>
<td>mó</td>
<td>tǐ</td>
<td>lùù</td>
<td>-  ò</td>
<td>I will burn</td>
</tr>
<tr>
<td>dàá</td>
<td>ón</td>
<td>tǐ</td>
<td>lùù</td>
<td>-  ò</td>
<td>You will burn</td>
</tr>
<tr>
<td>dàá</td>
<td>(ũ)</td>
<td>tǐ</td>
<td>lùù</td>
<td>-  ò</td>
<td>He will burn</td>
</tr>
<tr>
<td>dàá</td>
<td>fā</td>
<td>tǐ</td>
<td>lùù</td>
<td>-  ò</td>
<td>We will burn</td>
</tr>
<tr>
<td>dàá</td>
<td>í</td>
<td>tǐ</td>
<td>lùù</td>
<td>-  ò</td>
<td>You will burn</td>
</tr>
<tr>
<td>dàá</td>
<td>í</td>
<td>tǐ</td>
<td>lùù</td>
<td>-  ò</td>
<td>They will burn</td>
</tr>
</tbody>
</table>

**Negative form.**

<table>
<thead>
<tr>
<th>F2Tm</th>
<th>Sm,</th>
<th>V.Root</th>
<th>Neg m.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>dàá</td>
<td>mó</td>
<td>lùù</td>
<td>yá</td>
<td>I will not burn</td>
</tr>
<tr>
<td>dàá</td>
<td>ón</td>
<td>lùù</td>
<td>yá</td>
<td>You will not burn</td>
</tr>
<tr>
<td>dàá</td>
<td>(ũ)</td>
<td>lùù</td>
<td>yá</td>
<td>He will not burn</td>
</tr>
<tr>
<td>dàá</td>
<td>fā</td>
<td>lùù</td>
<td>yá</td>
<td>We will not burn</td>
</tr>
<tr>
<td>dàá</td>
<td>í</td>
<td>lùù</td>
<td>yá</td>
<td>You will not burn</td>
</tr>
<tr>
<td>dàá</td>
<td>í</td>
<td>lùù</td>
<td>yá</td>
<td>They will not burn</td>
</tr>
</tbody>
</table>
Morphological process:

Nasal Insertion: \( \sigma \rightarrow n/vv-1v \)

As earlier said, this rule applies only to verbs conjugated in the future tenses and in the progressive aspect.

V. 2.1.3.3. NEGATION IN F3 (REMOTE FUTURE)

Negation in the Remote Future tense functions in exactly the same way as that in the Near Future. The negative marker, /ýá/, is placed at final position causing the perfective aspectual marker and the second part of the near future tense, (F2), marker to be deleted. The only difference is that the remote future tense marker, /ñńká/, is maintained in between the near future tense marker and the subject marker.

Examples.

kēsēptimba “to sell”

<table>
<thead>
<tr>
<th>Affirmative form</th>
<th>Negative form</th>
</tr>
</thead>
<tbody>
<tr>
<td>F2Tm F3Tm Sm F2Tm V.Root Am</td>
<td>F2Tm F3Tm Sm, V.Root Neg m.</td>
</tr>
<tr>
<td>dåá ńńká má tf sēpti - j - ā</td>
<td>dåá ńńká má sēpti ýá</td>
</tr>
<tr>
<td>One day, I will sell.</td>
<td>One day, I will not sell.</td>
</tr>
<tr>
<td>dåá ńńká ǹn tf sēpti - j - ā</td>
<td>dåá ńńká ǹn sēpti ýá</td>
</tr>
<tr>
<td>One day, you will sell.</td>
<td>One day, you will not sell.</td>
</tr>
<tr>
<td>dåá ńńká (ū) tf sēpti - j - ā</td>
<td>dåá ńńká (ū) sēpti ýá</td>
</tr>
<tr>
<td>One day, he will sell.</td>
<td>One day, he will not sell.</td>
</tr>
</tbody>
</table>
One day, we will sell.
One day, you will sell.
One day, they will sell.

*Morphophonological process.*

Palatal glide insertion in between the final vowel of the verb root, /-sɛpti-/ and the following vowel marking aspect. For details see section II.1.2.3.

V. 2.2. NEGATION IN THE IMPERATIVE MOOD

The negative marker in the imperative mood is /si/. It is placed at phrase final position and it causes the deletion of the second part, /-ká/ of the imperative tense marker /N... ká/. As such, it comes immediately after the verb root.

Examples.

1) *Verbs without an object.*

<table>
<thead>
<tr>
<th>Affirmative form</th>
<th>Negative form</th>
</tr>
</thead>
<tbody>
<tr>
<td>-kəsəkbə “to keep”</td>
<td>Å - sək - si “don’t keep”</td>
</tr>
<tr>
<td>Åm Root Åm</td>
<td>Åm Root Neg m.</td>
</tr>
</tbody>
</table>
-kómśàmbà “to deny”

m - mòd - kà “deny”

m - mòd - sì “don’t deny”

-kàkàtsimbà “to reduce”

ñ - kétsì - kà “reduce.”

ñ - kétsì - sì “don’t reduce”

2) **Verbs with an object.**

**Affirmative form**

**Negative form.**

-kànàpjùmbà “To sing (a song)”

ñ - jù - nàb - ā “sing”

ñ - jù - sì “don’t sing”

Tm Root Om Tm

Tm Root Neg m.

-kànàpnàmbà “To dance (a song).”

ñ - nàà - nàb - ā

ñ - nàà - sì “don’t dance”

Tm Root Om Tm

Tm Root Neg m.

-kàànsì mbà “to play (something).”

ñ - sàl - án - ā “play”

ñ - sàl - sì “don’t play”

Tm Root Om Tm

Tm Root Neg m.

From these examples, we notice that the negative marker / sì / is always placed after the verb root in verbs in the imperative. That is why in verbs which have an object marker, the object marker is deleted as exemplified above.

V .2.3. NEGATION IN THE SUBJUNCTIVE MOOD

Negation in the subjunctive mood functions exactly as in the imperative mood. The negative marker is / sì /. It occurs at phrase final position causing the deletion of the subjunctive tense marker /kà / in verbs with an object, the object marker is also deleted so that / sì / can occur immediately after the verb root. The difference between the
imperative mood and the subjunctive mood is that the subjunctive bears a subject marker which is absent in the imperative. Below are some examples:

<table>
<thead>
<tr>
<th>Affirmative form</th>
<th>Negative form.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sm V.Root Tm</td>
<td>Sm, V.Root Neg. m.</td>
</tr>
<tr>
<td>mà sèpti - ká</td>
<td>mà sèpti - sí</td>
</tr>
<tr>
<td>&quot;Let me sell&quot;</td>
<td>Let me not sell&quot;</td>
</tr>
<tr>
<td>ü sèpti - ká</td>
<td>ü sèpti - sí</td>
</tr>
<tr>
<td>&quot;Let him sell&quot;</td>
<td>Let him not sell&quot;</td>
</tr>
<tr>
<td>fā sèpti - ká</td>
<td>fā sèpti - sí</td>
</tr>
<tr>
<td>&quot;Let us sell&quot;</td>
<td>Let us not sell&quot;</td>
</tr>
<tr>
<td>fā sèpti - ká</td>
<td>fā sèpti - sí</td>
</tr>
<tr>
<td>&quot;Let them sell&quot;</td>
<td>Let them not sell&quot;</td>
</tr>
</tbody>
</table>

kòsèptiṃbà "to sell"

<table>
<thead>
<tr>
<th>kònápjǐmbà &quot;to sing (a song).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sm Root Om Tm</td>
</tr>
<tr>
<td>mà jiī - nāb - á</td>
</tr>
<tr>
<td>Let me sing</td>
</tr>
<tr>
<td>ü jiī - nāb - á</td>
</tr>
<tr>
<td>Let him sing</td>
</tr>
<tr>
<td>fā jiī - nāb - á</td>
</tr>
<tr>
<td>Let us sing</td>
</tr>
<tr>
<td>fā jiī - nāb - á</td>
</tr>
<tr>
<td>Let them sing</td>
</tr>
</tbody>
</table>
V .2.4. NEGATION IN THE CONDITIONAL MOOD

Negation in the conditional mood is marked by the morpheme /si/, which is used with the first part of the discontinuous morpheme /mákú/. sinú/ used in marking the conditional mood in affirmative sentences. The negative marker /si/, occurs at phrase final position. Below are some examples.

**Affirmative form**

máká fó lēb sinú cond. Sm buy cond.
“ If we buy....”

máká ū jáá sinú cond. Sm come cond.
“ If he comes....”

máká má sẹpti sinú cond. Sm sell cond.
“ If I sell....”

**Negative form**

máká fó lēb si cond. Sm buy Neg m.
“ If we don’t buy....”

máká ū jáá si cond. Sm come Neg m.
“ If he doesn’t come....”

máká má sẹpti si cond. Sm sell Neg m.
“ If I don’t sell....”

V .3. ASPECT

COMRIE (1976 : 3) defines aspect in the following terms:

Aspects are different ways of viewing the internal temporal constituency of a situation.” That is, “different ways of conceiving the flow of the process itself.”

In other words, aspect refers to the way the actions or states described by a verb are conceived. Comrie makes this definition much more clear by
using an example drawn from the English language which we will also use in our work for better clarity purposes. The two sentences:

(1) John ate       (2) John was eating

do not have any tense difference because they are all in the past tense. The difference between them is aspectual. While "John ate" is in the perfective aspect, "John was eating" is in the imperfective aspect.

This example brings out a clear distinction between perfective aspects, that is, those which view a situation as a single whole and imperfective aspects which pay attention to the internal structure of the situation.

Besides these two aspectual approaches, COMRIE (1970: 41-42), talks about a third type of aspect which he calls "semantic aspectual". These semantic aspects do not bring any morphological changes in the form of the verb. What they add to the verb is more semantic information. As such we will not discuss them in our work since they have no aspectual markers, but are directly contained in the verb. These semantic aspects are the punctual, durative, static, and dynamic aspects.

V.3.1 - THE PERFECTIVE ASPECT

According to COMRIE (1976: 3), we talk of the perfective aspect when:

"The whole of the situation is presented as a single unalysable whole, with beginning, middle and end rolled into one; no attempt is made to divide the situation up into the various individual phases that make up the action."

In other words, a verb is said to be conjugated in the perfective aspect when 'the verb presents the totality of the situation referred to without reference to its internal temporal constituency" (COMRIE, 1976: 16)
In Samba Leekó, the perfective aspect is marked by the morpheme /à/ which occurs at phrase final position after the verb root.

Examples.

(A) Past Perfect tenses.

kàtìmbà “to push”

<table>
<thead>
<tr>
<th>Tm</th>
<th>Sm</th>
<th>V.Root</th>
<th>Am</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td>o</td>
<td>mò</td>
<td>tì?</td>
</tr>
<tr>
<td>3)</td>
<td>ñì</td>
<td>mò</td>
<td>tì?</td>
</tr>
<tr>
<td>4)</td>
<td>ñàòm</td>
<td>mò</td>
<td>tì?</td>
</tr>
</tbody>
</table>

(B) Future perfect tenses.

<table>
<thead>
<tr>
<th>Tm</th>
<th>Sm</th>
<th>V.Root</th>
<th>Am</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td>dàá</td>
<td>zóyóm</td>
<td>mò</td>
</tr>
<tr>
<td>F2Tm</td>
<td>F1Tm</td>
<td>Sm</td>
<td>F2Tm</td>
</tr>
<tr>
<td>2)</td>
<td>dàá</td>
<td>mò</td>
<td>tì?</td>
</tr>
<tr>
<td>F2Tm</td>
<td>Sm</td>
<td>F2Tm</td>
<td>Root</td>
</tr>
<tr>
<td>3)</td>
<td>dàá</td>
<td>ñàŋká</td>
<td>mò</td>
</tr>
<tr>
<td>F2Tm</td>
<td>F3Tm</td>
<td>Sm</td>
<td>F2Tm</td>
</tr>
</tbody>
</table>

From all these examples, we find that the action described by the verb is considered as a whole. There is no distinction of any internal phases that make up the action, for example, beginning of action, end of action, etc.

V .3.2. THE IMPERFECTIVE ASPECT

COMRIIE (1976 : 4) defines the imperfective aspect as follows:

“the imperfective looks at the situation from inside and as such is crucially concerned with the internal structure of the situation since it can both look backwards towards the start of the situation
and look afterwards to the end of the situation. It is equally appropriate if the situation is one that lasts through all time, without any beginning and without any end.”

From this definition, we can say that a verb is said to be in the imperfective aspect when reference is made to the separate phases that make up the situation described by the verb or when the action is still going on.

In Samba Leeko, the imperfective aspectual markers are either lexicalised forms (words) or flexional markers (morphemes). Under the imperfective aspect, we will examine the following aspects:
- The inchoative or inceptive aspect
- The progressive aspect.
- The completive aspect.
- The iterative aspect.
- The habitual aspect.

V .3.2.1. THE INCHOATIVE ASPECT

The inchoative aspect of a verb expresses the beginning of an action or state without paying attention to the following phases as events unfold themselves. In Samba Leeko, the inchoative aspect marker is the morpheme /sotli/, derived from the verb /kâ-sôt-bâ/ “to start”. It occurs at phrase medial position in between the subject marker and the verb base (root + suffix).

Examples.

<table>
<thead>
<tr>
<th>Sm</th>
<th>Am</th>
<th>V.Base</th>
</tr>
</thead>
<tbody>
<tr>
<td>kâtîmbâ “to push” --- &gt; mó sôtli tôëmbâ “I start pushing”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>kâmââmbâ “to deny” --- &gt; û sôtli môëmbâ “He starts denying”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>kôlêbâ “to buy” --- &gt; fô sôtli lëbâ “We start buying”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>kâkâtsimbâ “to reduce”--- &gt; mó sôtli kâtsimbâ “We start reducing”</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
V.3.2.2. THE PROGRESSIVE ASPECT

ESSONO, (2002) defines the progressive aspect as follows:

"Le continuatif ou aspect non-ponctuel exprime le procès en cours de réalisation. Il fait ressortir le déroulement de l'action exprimée par le verbe sans tenir compte ni de son début, ni de sa fin."

In other words, the progressive aspect of a verb expresses actions that continue over a period of time without paying attention neither to the beginning nor to the end.

In Samba Lëekö, the progressive aspectual marker is the same for all the tenses. It is the morpheme /kɔ/ which occurs at phrase medial position in between the subject marker and the verb root. The verb root is followed by the perfective aspectual marker, /à/, which occurs at phrase final position.

V.3.2.2.1 THE PRESENT PROGRESSIVE

The present progressive aspect is formed by adding the progressive aspectual marker /kɔ/ and the perfective aspectual marker /à/ to the verb conjugated in the present tense. It has the formula below:

\[Sm + \text{Prog Am} + \text{Root} + \text{Perf Am}\]

Examples:

<table>
<thead>
<tr>
<th>Sm</th>
<th>Prog Am</th>
<th>Root</th>
<th>Perf Am</th>
</tr>
</thead>
<tbody>
<tr>
<td>kəlèbà  &quot;to buy&quot;</td>
<td>mò  kò</td>
<td>léb - à  &quot;I am buying&quot;</td>
<td></td>
</tr>
<tr>
<td>kɔtúmbà &quot;to send&quot;</td>
<td>án kò</td>
<td>tûm - à &quot;You are sending&quot;</td>
<td></td>
</tr>
<tr>
<td>kɔvɔtɔbà &quot;to cut&quot;</td>
<td>mò kò</td>
<td>vɔt - l - à &quot;I am cutting&quot;</td>
<td></td>
</tr>
<tr>
<td>kɔdjimbà &quot;to accept&quot;</td>
<td>ū kò</td>
<td>jîf - n - à &quot;He is accepting&quot;</td>
<td></td>
</tr>
</tbody>
</table>
Morphophonological processes.

1) Lateral insertion: \( o \rightarrow l / t - a l l \)
A lateral sound is inserted in between the alveolar plosive \( [t] \) and a following low vowel \( [a] \) at word final position. For more details see section II.1.2.4.2

2) Nasal insertion: \( o \rightarrow n \ VV + V \).
As earlier said this process is limited to verbs conjugated in the future tenses and in the progressive aspect.

V 3.2.2.2. THE PAST PROGRESSIVE

In the past, the past tense markers are added to the present progressive form of the verbs. These tense markers occupy phrase initial position.

Examples

<table>
<thead>
<tr>
<th>Tm</th>
<th>Sm</th>
<th>Prog Am</th>
<th>V.Root</th>
<th>Perf Am</th>
</tr>
</thead>
<tbody>
<tr>
<td>o</td>
<td>mōk</td>
<td>lēb -</td>
<td>&quot;I have been buying&quot; -( \rightarrow ) P1</td>
<td></td>
</tr>
<tr>
<td>kā</td>
<td>mōk</td>
<td>lēb -</td>
<td>&quot;I was buying&quot; (today) ( \rightarrow ) P2</td>
<td></td>
</tr>
<tr>
<td>mī</td>
<td>mōk</td>
<td>lēb -</td>
<td>&quot;I was buying&quot; (yesterday) ( \rightarrow ) P3</td>
<td></td>
</tr>
<tr>
<td>mèm+ mōk</td>
<td>lēb -</td>
<td>&quot;I had been buying&quot; ( \rightarrow ) P4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

V 3.2.2.3. THE FUTURE PROGRESSIVE

Like in the past progressive, we add the future tense marker to the present progressive form of the verb to get the future progressive. However only the first part of the F2 (Near future) tense marker \( / dāā- / \) is added. The future progressive thus has the following formula:

\[
\text{Future progressive} = \text{dāā} + \text{Sm} + kō + \text{Root} + à
\]
Examples.

<table>
<thead>
<tr>
<th>Verb</th>
<th>Action</th>
<th>Prog</th>
<th>V.Root</th>
<th>Perf.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kòlbà</td>
<td>&quot;to buy&quot;</td>
<td>dàá</td>
<td>mò</td>
<td>kó</td>
</tr>
<tr>
<td>Kâjûmbà</td>
<td>&quot;to accept&quot;</td>
<td>dàá</td>
<td>mò</td>
<td>kó</td>
</tr>
<tr>
<td>Kâtûmbà</td>
<td>&quot;to send&quot;</td>
<td>dàá</td>
<td>ū</td>
<td>kó</td>
</tr>
<tr>
<td>Kâgûûmbà</td>
<td>&quot;to sew&quot;</td>
<td>dàá</td>
<td>fô</td>
<td>kó</td>
</tr>
</tbody>
</table>

V.3.2.3. THE COMPLETIVE ASPECT

In the completive aspect, stress is placed on the fact that the action or event has come to an end. It resembles the perfective aspect in that the action or event described by the verb is considered as having been completed or accomplished. It however differs in the sense that it makes allusion to one of the phases of the process described by the verb which is "the end".

The completive aspect is marked in Samba Leekò by the word /kábò/ which means "already". This marker is generally contracted by the native speakers to /kô/ so as to facilitate pronunciation. It is situated at phrase initial position where it is followed by the subject marker, the verb root and the perfective aspectual marker, /à/.

Examples.

<table>
<thead>
<tr>
<th>Verb</th>
<th>Action</th>
<th>Prog</th>
<th>V.Root</th>
<th>Perf.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kèsèptimbà</td>
<td>&quot;to sell&quot; --- &gt;</td>
<td>kábò</td>
<td>mò</td>
<td>sëpti - j - à</td>
</tr>
<tr>
<td>Kötûmbà</td>
<td>&quot;to send&quot; --- &gt;</td>
<td>kábò</td>
<td>i</td>
<td>tûm - à</td>
</tr>
</tbody>
</table>

They have already sent
V . 3.2.4. THE ITERATIVE ASPECT

The iterative aspect of verbs refers to actions which are done repeatedly. It is marked in Samba Leekə by the reduplicated word, /bǔlǔlǔ/, meaning "over and over". This marker occurs at phrase final position, and it is preceded by the subject marker and the verb root. Below are some examples.

Examples.
Sm V.Root Iterative Am.
ma tum bǔlǔlǔ "I send over and over"  send
ma lēb bǔlǔlǔ "I buy over and over"  buy
fā māb bǔlǔlǔ "We deny over and over"  deny
i sēpti bǔlǔlǔ "They send over and over"  sell.

V . 3.2.5. THE HABITUAL ASPECT

COMRIE, (1976: 27-28) defines the habitual aspect of a verb as
"the successive occurrence of several instances of the given situation... over an extended period of time."
This means that the habitual aspect does not take any tense into consideration since the action is habitually repeated over a long period of time.
In Samba Leekœ, the habitual aspectual marker is the discontinuous morpheme /mëe... sâŋkólé?/. /mëe-/ has no meaning of its own while /sâŋkólé?/, which is made up of the morphemes /sâŋ/ “time” and /kólé?/ “all”, means “all the time”. /mëe/ occurs at phrase initial position while /sâŋkólé?/ occurs at final position.

Examples:

<table>
<thead>
<tr>
<th>Habit.Am</th>
<th>Sm</th>
<th>V.Root</th>
<th>Habit.Am.</th>
</tr>
</thead>
<tbody>
<tr>
<td>mëe</td>
<td>mó</td>
<td>tûm</td>
<td>sâŋkólé?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>send</td>
<td>“I send all the time”</td>
</tr>
<tr>
<td>mëe</td>
<td>án</td>
<td>tûm</td>
<td>sâŋkólé?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>send</td>
<td>“you send all the time”</td>
</tr>
<tr>
<td>mëe</td>
<td>fô</td>
<td>dzûb</td>
<td>sâŋkólé?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>beat</td>
<td>“We beat all the time”</td>
</tr>
<tr>
<td>mëe</td>
<td>fô</td>
<td>léb</td>
<td>sâŋkólé?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>buy</td>
<td>“We buy all the time”</td>
</tr>
</tbody>
</table>

CONCLUSION

At the end of this chapter, we have seen that Samba Leekœ has one present tense, four past tenses and three future tenses in the indicative mood and one form for the imperative, subjunctive and conditional moods. Negation is marked by two distinct morphemes depending on the tenses. At the level of aspect, we find both perfective and imperfective aspectual markers. It should be noted that we have not treated all aspectual markers in our work for, as earlier stated, the semantic aspectual markers have not been treated since they do not have any flexional markers but simply add additional meaning to verbs.
GENERAL CONCLUSION

In our work, we set out to study the way verbs are built up in Samba Leekõ and how they function, be it in isolation or in the verb phrase. We used the generative model so as to best explain the surface phonological and tonological alternations attested in the language. Thus in our analyses, we found out that Samba Leekõ makes use of many morphophonological and morphotonological processes.

These are:

- Nasal Assimilation, -Tone Docking
- Vowel Deletion -Default low
- Glide Insertion, -Stray Erasure
- Lateral Insertion -Upstep
- Frication -High tone Spreading
- Voicing
- Devoicing
- Degemination
- Nasal Insertion

We notice that Samba Leekõ verbs have a very simple structure made up of Prefix + OM + Base. However, some verbs occur without an object marker (OM).

At the level of verb derivation, we realized that Samba Leekõ Grassfield is not very rich since only one productive verbal extension (the passive) is attested. As for verbal flexion, we discovered that the verb in
Samba Leekọ just as in other languages takes on markers denoting tense, aspect, and mood.

One interesting study as we earlier noted would be to carry out a comparative study between Samba Leekọ Grassfield and Samba Leekọ Benue although they still share much in common (for example verb roots and some nouns.) This will greatly help in setting up a unique writing system for the Samba Leekọ language as a whole. It will also be a stepping stone to the standardization of the language.

We hope that this work be of much help to linguists who might want to work on Samba Leekọ. We cannot claim that the work is perfect, as such, its shortcomings can be used as bases for further linguistic research.
REFERENCES.


APPENDIX

This section presents the data used in the work.

<table>
<thead>
<tr>
<th>WORD</th>
<th>GLOSS</th>
<th>WORD</th>
<th>GLOSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>kàľímbà/ lúmbi</td>
<td>to eat</td>
<td>kàďźùbà</td>
<td>to beat</td>
</tr>
<tr>
<td>kàgámbà gámbi</td>
<td>to talk</td>
<td>kàl5?mbà</td>
<td>to kill</td>
</tr>
<tr>
<td>kàpámbà /jàombi</td>
<td>to drink</td>
<td>kàk5?mbà</td>
<td>to catch</td>
</tr>
<tr>
<td>kàńápàmbà/ to dance</td>
<td>kàw5p Hà</td>
<td>to break</td>
<td></td>
</tr>
<tr>
<td>nápmàmbí</td>
<td>(a song)</td>
<td>kàwùúmbà</td>
<td>to plant</td>
</tr>
<tr>
<td>kànápjúmbà/ to sing</td>
<td>kàm5mbà</td>
<td>to deny</td>
<td></td>
</tr>
<tr>
<td>nàpjúmbí</td>
<td>(a song)</td>
<td>kàkùmbà</td>
<td>to be</td>
</tr>
<tr>
<td>kàłäkbà / tàkbi</td>
<td>to shout</td>
<td>kàgétbà</td>
<td>to have</td>
</tr>
<tr>
<td>kàlëmbà lebi</td>
<td>to buy</td>
<td>kàlùmbà</td>
<td>to work</td>
</tr>
<tr>
<td>kàpámbà/ poàmbi</td>
<td>to cry</td>
<td>kèpëtbà</td>
<td>to share</td>
</tr>
<tr>
<td>kàł5mbà / laòmbi</td>
<td>to laugh</td>
<td>kàmà?mbà</td>
<td>to do / make</td>
</tr>
<tr>
<td>kàgá?mbà/ gàmbi</td>
<td>to cook</td>
<td>kàlùmbà</td>
<td>to bite</td>
</tr>
<tr>
<td>kàgàbà / gàbi</td>
<td>to know</td>
<td>kàd5?mbà</td>
<td>to knock</td>
</tr>
<tr>
<td>kàtìmbà /tì?mbi</td>
<td>to push</td>
<td>kàdámbà</td>
<td>to go.</td>
</tr>
<tr>
<td>kàkátsimbi / kátsimbi</td>
<td>to reduce</td>
<td>kàjámbà</td>
<td>to come</td>
</tr>
<tr>
<td>kèsàsimba / sàsimbi</td>
<td>to scatter</td>
<td>kà(ŋwàni)démbà</td>
<td>to read (a book)</td>
</tr>
<tr>
<td>kèsànsimba / sànsimbi</td>
<td>to meet</td>
<td>kànjëmbà</td>
<td>to walk</td>
</tr>
<tr>
<td>kàzàŋ mbà / zàmbi</td>
<td>to listen</td>
<td>kàtáp Hà</td>
<td>to tie</td>
</tr>
<tr>
<td>kànjëmbà / jëmbi</td>
<td>to walk</td>
<td>kòwëtvátbà</td>
<td>to drown</td>
</tr>
<tr>
<td>kàńknúmbà</td>
<td>to run</td>
<td>kàgúúmbà</td>
<td>to sew</td>
</tr>
<tr>
<td>kàdúsimba</td>
<td>to burn</td>
<td>kàñisimba</td>
<td>to fill</td>
</tr>
<tr>
<td>kàw5p Hà</td>
<td>to respect</td>
<td>kàbéisimba</td>
<td>to finish</td>
</tr>
<tr>
<td>Kámëtbá</td>
<td>to lick</td>
<td>Kàdësimbá</td>
<td>to measure</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
<td>-------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Kàtäämbá</td>
<td>to swallow</td>
<td>Kàtömbá</td>
<td>to tear</td>
</tr>
<tr>
<td>Kàkù́mbá</td>
<td>to chew</td>
<td>Kàpënmbá</td>
<td>to choose</td>
</tr>
<tr>
<td>Kàzámbá</td>
<td>to throw away</td>
<td>Kànjwánbá</td>
<td>to wait</td>
</tr>
<tr>
<td>Kàpímbá</td>
<td>to give</td>
<td>Kàtömbá</td>
<td>to sweep</td>
</tr>
<tr>
<td>Kàsákba</td>
<td>to put/keep</td>
<td>Kàpënmbá</td>
<td>to fry</td>
</tr>
<tr>
<td>Kàánsámbá</td>
<td>to play</td>
<td>Kàkëmbá</td>
<td>to help</td>
</tr>
<tr>
<td>Kàjákba</td>
<td>to look at</td>
<td>Kàsátbá</td>
<td>to learn</td>
</tr>
<tr>
<td>Kàvátbá</td>
<td>to cut</td>
<td>Kàlúúmbá</td>
<td>to burn</td>
</tr>
<tr>
<td>Kàtúmbá</td>
<td>to send</td>
<td>Kàmbímbá</td>
<td>to rot</td>
</tr>
<tr>
<td>Kàlóbiéembá</td>
<td>to fish with a hook</td>
<td>Kàláámbá</td>
<td>to throw</td>
</tr>
<tr>
<td>Kàánlámmbá</td>
<td>to cultivate</td>
<td>Kàtíímbá</td>
<td>to plait (hair)</td>
</tr>
<tr>
<td>Kàsúúphá</td>
<td>to wash</td>
<td>Kàkëmbá</td>
<td></td>
</tr>
<tr>
<td>Gbísijá</td>
<td>chin</td>
<td>Kùkëñú</td>
<td>hen</td>
</tr>
<tr>
<td>Sí/yá</td>
<td>negative marker (not)</td>
<td>Dòjìyóm</td>
<td>little</td>
</tr>
<tr>
<td>Kpëndée</td>
<td>plantain</td>
<td>Tùñá</td>
<td>car</td>
</tr>
<tr>
<td>Gòwá</td>
<td>rope</td>
<td>Ñwàñá</td>
<td>rain</td>
</tr>
<tr>
<td>Gónúwá</td>
<td>trap</td>
<td>Fìkëbá</td>
<td>spoon</td>
</tr>
<tr>
<td>Këélá</td>
<td>pot</td>
<td>Fàmá</td>
<td>measle</td>
</tr>
<tr>
<td>Méélá</td>
<td>tongue</td>
<td>Dòvàánù</td>
<td>cock</td>
</tr>
<tr>
<td>Gàálá</td>
<td>chief, neck</td>
<td>Tògëbyá</td>
<td>worm</td>
</tr>
<tr>
<td>Wáálá</td>
<td>groundnut</td>
<td>Ziilá</td>
<td>year</td>
</tr>
<tr>
<td>Vòm</td>
<td>breast</td>
<td>Jëwaá</td>
<td>knife</td>
</tr>
<tr>
<td>Bòòná</td>
<td>wine</td>
<td>Jìdlá</td>
<td>head</td>
</tr>
<tr>
<td>Dòòná</td>
<td>elephant</td>
<td>Lìdlá</td>
<td>dirt</td>
</tr>
<tr>
<td>Kùb</td>
<td>ten</td>
<td>Bëjà</td>
<td>money</td>
</tr>
<tr>
<td>Tàálá</td>
<td>parie</td>
<td>Dìbá</td>
<td>fish</td>
</tr>
<tr>
<td>Gòýá</td>
<td>sniták</td>
<td>Kpàlëyá</td>
<td>ladder</td>
</tr>
<tr>
<td>kpàntijá</td>
<td>mortar</td>
<td>kpàntijá</td>
<td>mortar</td>
</tr>
<tr>
<td>---------------</td>
<td>----------</td>
<td>---------------</td>
<td>----------</td>
</tr>
<tr>
<td>gbàsijá</td>
<td>forehead</td>
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