

SOME ASPECTS OF SENGHA PHONOLOGY AND MORPHOLOGY

BY

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for the Degree of Master of Arts in Linguistic Science

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DECLARATION

I, Martin Nkhata, do hereby declare that this dissertation is my own work and that it has not been submitted for a degree at this university or any other and that it does not include any published work or material from another dissertation.

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APPROVAL

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ABSTRACT

This study examined some aspects of the phonology and morphology of Senga, a language spoken in Chama district of Muchinga Province of Zambia. The main assumption underlying this study was that natural languages were systematically structured and that this structure was evident at all levels of linguistic analysis, including phonology and morphology.

The study used a descriptive research design which was mainly informed by a qualitative approach to research. Data were collected mainly from five people who were selected on the basis that they were knowledgeable in the language. Furthermore, the researcher being a speaker of the language also acted as a source of information. In order to ensure validity of the data, two of the informants were used for the purposes of verifying the data. Primary data were collected using self semi-structured interview guides comprising lists of words and sentences. These guides were three and each comprised 250 lexical items and 200 phrases and sentences which were in English. Two of these interview guides were given to knowledgeable and educated speakers of Senga language who provided some Senga glosses. The other one was used in the interview with three competent speakers of the language. Data analysis started immediately the interview began. The researcher sat inside the house with the three in a semi-circle so that the informants faced each other. He started by reading out words one by one in English to which Senga translations were given. The same happened with the sentences and after this was done, the researcher was able to compare with what the other two informants had written. Later, the work was subjected to analysis in the library. Data analysis which involved coding, classification and interpretation was done in line with the set aim and objectives, which included providing a descriptive analysis of the language from a phonological and morphological point of view.

At the phonological level, the study established that there were 28 consonants (including glides) and obeying a five vowel system at segmental level. At the suprasegmental level, it was discovered that lexical tone is not distinctive, although tone can be used to distinguish some grammatical sentences like relative clauses. Senga allows a seven syllable structure which is always unchecked and commonly with a CV structure although V and C structures are also found. Some phonological processes like coalescence, deletion, epenthesis, and assimilation were observed.

In addition, the language exhibited common morphological features found in Bantu languages and in particular, the structure of pronouns and demonstratives. Furthermore, nominal morphology and verbal morphology demonstrated some interesting features such as the roots and their affixes. The conclusion drawn was that the phonological and morphological compositions of Senga in many ways were similar to the many Zambian languages. This also was true with most Bantu languages in general, though few unique features were noted.

Key words: phonology, morphology, segmental, suprasegmental

DEDICATION

To my beloved wife, Faith Ziwa Nkhata, my daughters, Tiza Joy Nkhata and Nothando Nkhata, my dear parents, Mr.Nkhata, B., and Mrs Nkhata Steen. You were an inspiration during this not so easy journey.

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ABBREVIATIONS AND SYMBOLS

1	singular
1pl	1 st person plural
1sg	1 st person singular
APPL	applicative
ATR	advanced tongue root
CAUS	causative
C	consonant
cl	noun class
COP	copular
ENCL	enclitic
EXT	extension
FV	final vowel
FUT	future tense
GEN	genitive
G	glide
GP	general present.
IMP	imperative
INF	infinitive
INFM	infinitive marker
INT	Intensive
MOD	modal
NEG	negation
O	object
OM	object marker

PASS	passive
PAST	past tense
PERS	persistive
POSTSM	post subject marker
PROCL	proclitic
PROG	progressive (continuous) marker
Pre.pref	pre prefix
pp	pronoun prefix
Pref.	prefix
PRES	present tense
RAD	radical
REC	reciprocal
REV	reversive
ROL	Regional Official Languages
SM	subject marker
STAT	stative
TM	tense marker
V	vowel
Ø	zero morpheme

CHAPTER ONE

INTRODUCTION

Overview

This chapter introduces the study of some aspects of Senga language of Zambia by giving a background of the Senga people, the statement of the problem, aims, objectives and research questions. The chapter also brings out the rationale or significance of the study, conceptual framework and a look at some levels of linguistic analysis.

1.1.0 Background of the Senga People

1.1.1. The Senga People

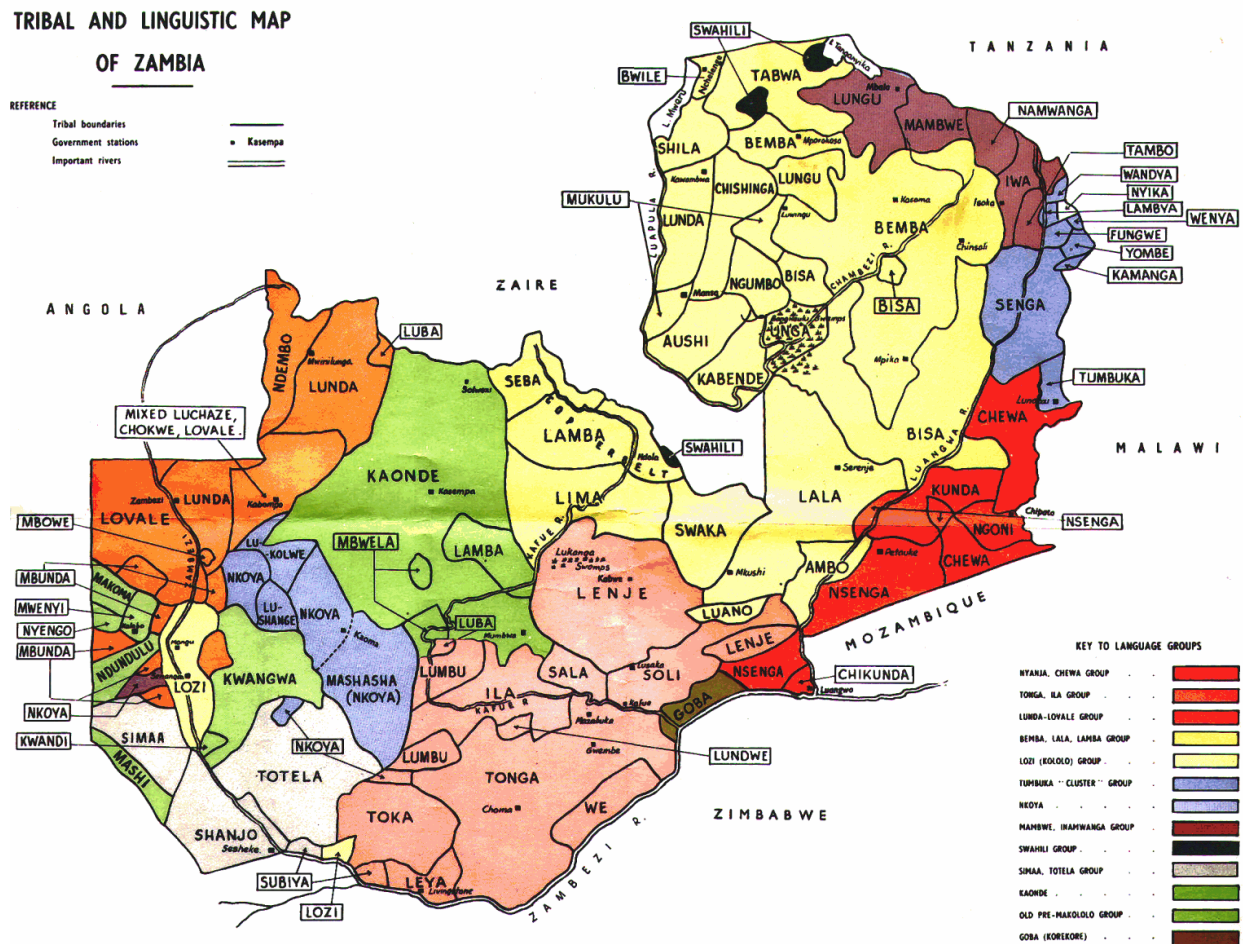
The Senga people are found in Chama district of Muchinga province of Zambia. Speakers of this language, particularly those found in Chama call themselves ‘Asenga’ to mean the Senga people. According to 2010 Zambia Census of Population and Housing Report (pg 231), 112,118 people listed as ethnically belonging to this grouping.

Chondoka and Bota (2007) contend that before 1720 the Bisa (Biza), moving eastward from Luapula settled and established themselves in present Mpika district and south of Muchinga Escarpment. Later, they extended eastwards to the westbank of Luangwa River and came into contact with the Tumbuka whose territory extended westward up to the eastbank of the Luangwa River. Between 1780 and 1800, the Bisa settled on the eastbank among the Tumbuka in the Luangwa valley. By 1800 the Bisa set up chiefdoms amongst the local people using treacherous means under their pioneer leader called Chibeza Kambombo.

According to Chondoka and Bota (2007), the Bisa abandoned the matrilineal system and started the patrilineal system of succession to political power. They subdued the centralised Tumbuka and established Chiefs among them beginning with Chief Kambombo under Chibeza. Others that were created and still cover much of Chama include: Mulilo and Chibale to the north-west, Tembwe, Chikwa and Chifunda in the South and Lundu to the west.

Initially the wandering Bisa, to the locals, had no name. But as they reached a point where they declared that they would not go any further in their voyages, the local people called them the Senga-to mean people of the backwoods. This has remained up to to-day in Chama district.

Agriculture is the mainstay of the people of Chama. Maize is the main crop. Chama is also notoriously known for rice growing. Other crops include cotton, sorghum, groundnuts, sweet potatoes, pumpkins, sunflower and beans. There is also fishing industry that is done at subsistence level.



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Figure 1: File: Tribal and Linguistic map of Zambia.jpg-wikimedia commons

1.1.2. The Senga language

Senga is one of the many languages spoken in Zambia by an ethnic group of people called Senga. The language (Senga), which should not be confused with Nsenga spoken in places such as Chipata, Petauke and Nyimba, is mainly spoken in Chama district of Muchinga province and its surrounding areas. According to the classification by Guthrie (1948), Senga is N21d .This means that it is a dialect of the major language group called Tumbuka. Other Tumbuka dialects found in Zambia include Tumbuka mainly spoken in some parts like Lundazi and Muyombe districts and some surrounding areas of Lundazi. Tumbuka is also spoken in northern parts of Malawi like, Mzimba, Karonga, Mzuzu, Rumphu and other areas.

If one looks at the area where Senga is spoken, one will notice that it is surrounded by the heavy presence of other languages like; Bemba (M42a) and Bisa (M51) in the western part and Tumbuka (N21a) in the southern and eastern parts (of Malawi). The language has been sandwiched by these languages. It is perhaps for this reason that it sounds more like a remnant of these languages.

As to whether Senga should be looked at as a language or dialect, is a matter for debate or brings with it controversies because of different understanding of the subject. Fromkin, Rodman and Hyams (2003) posit that when there are systematic differences in the way a language is spoken by groups, each group is said to be speaking a dialect of that language. This means that dialects are mutually intelligible forms of a language that differ in systematic ways. It is, therefore, not easy to say whether these differences between two or among many speech communities reflect two or many dialects or languages. According to Fromkin, Rodman and Hyams (2003), a rule of thumb is sometimes used to define the difference and it asserts that when dialects become mutually unintelligible, they become different languages. This, however, does not always agree with the way languages are recognised when determined by political and social considerations (Fromkin, Rodman and Hyams, 2003). Examples are given of three people speaking Swedish, Norwegian and Danish. These three can converse with each other, but because the ‘dialects’ are spoken in different countries and have regular differences in their grammar, they are considered different languages.

The fact that Guthrie classifies Senga as N21d means that he considers it as a dialect and not a language. According to Guthrie, there is a language called Tumbuka with nine dialects the main of which is called Tumbuka (N21a), which means that Senga is one of the nine dialects of the Tumbuka as a language since Tumbuka is also used to refer to the main dialect of Tumbuka.

In short, the difference between a language and a dialect is difficult to define. Neither mutual intelligibility nor degree of grammatical differences, nor the existence of political or social boundaries can be decisive. Fromkin, Rodman and Hyams (2003) indicate that a rule of thumb is used to try to go round this problem. This rule refers to dialects of one language as mutually intelligible linguistic systems with systematic differences among them. In view of this controversy of whether a linguistic code is a dialect or language, the researcher referred to Senga as a language in this study.

1.1.3. Senga orthography

It has to be mentioned that as Senga is not one of the Regional Official Languages (ROL) in Zambia, one will not find any established writing system that has been officially endorsed specifically for it. This is more so in that the language is not taught in schools. However, the study adopted the recommendations by the Ministry of Education of the Republic of Zambia in 1977-(GRZ, 1977) for Chewa. Thus, the orthography used in this study was mainly borrowed from Chewa which is a ROL in Eastern Province of Zambia. For those graphemes that had no representation in Chewa, other orthographies from other Zambian ROL were adopted.

1.2. Statement of the problem

Most of the languages which were documented and described in Zambian languages were done by the (White) missionaries with the view to developing orthography (ies) for the concerned languages; in order to reduce them into the written form. However, there are still several languages across Zambia which remain un-documented and un-described. One such language, although seen by White scholars as a dialect of Tumbuka, is Senga-a language spoken in Chama district of Zambia. Even though Senga is generally classified as one of the Bantu languages, the grammatical structure of the language largely remained unknown. It is for this reason that the study was designed in order to have insights into some linguistic aspects of the language, namely its phonology and morphology.

1.3. Aim

The study aims to investigate and provide a descriptive analysis of some aspects of Senga phonology and morphology.

1.4. Objectives

The research seeks to achieve the following objectives:

- i) Provide an analysis of some aspects of Senga phonology;
- ii) Identify the morphological structure of Senga and
- iii) Analyse the interface between phonology and morphology in Senga.

1.5. Research questions

- i) What is the Senga sound system like?
- ii) What morphological patterns are found in Senga?
- iii) How does phonology and morphology interact in Senga?

1.6. Significance of the study

Every language is important and should be exploited (studied). This is in view of the controversies arising from the use of Regional Official Languages (ROL) in many parts of Zambia, and also policy changes in regard to language use.

This work offers an opportunity to contribute to the linguistic knowledge about Senga in that there was investigation, documentation and exposition of what was not there.

In addition, the work would contribute to the preservation of endangered languages and culture of people like the Senga, as language conveys culture.

1.7. Descriptive linguistics

Crystal (2008) asserts that one of the aims of descriptive linguistics is to give a comprehensive, systematic, objective and exact account of the patterns and use of a specific language or dialect at a particular point in time. What this means is that emphasis is placed on objectivity,

systematicness and so on, differentiating it from prescriptive aims which tell how one should speak (Fromkin, Rodman and Hyams, 2003). The aim of descriptive or synchronic linguistics is to describe facts of language use as they are, and not how they should be, with reference to some ideal state of a language that people imagine.

The mere fact that in descriptive linguistics, emphasis is placed on describing a language at a given time means that it is different from historical linguistics. Historical linguistics aims to demonstrate a change in the structure of language over time.

Fromkin, Rodman and Hyams (2003) state that to understand the nature of language, we must understand the nature of grammar, particularly the internalised, unconscious set of rules that form grammar of every language. This grammar consists of sounds and sound patterns, basic units of meaning such as words and rules to combine all of these in order to come up with sentences with desired meanings.

Crystal (2008) posits that it should be born in mind that there is interdependence between different branches of linguistics. He holds that a description is a result of an analysis which in turn is based on a set of theoretical assumptions. In descriptive linguistics, the theory is a means to an end, viz, the production of one or all of its subdivisions like phonology, syntax, morphology and lexicon.

1.8.0. Some levels of linguistic analysis

1.8.1. Phonetics and phonology

Spencer (1996) contends that both these terms (phonetics and phonology) come from a Greek word meaning 'sound'. He asserts that there is an overlap in what concerns these two, hence, making the difference between these two difficult to draw. However, each of these relies on the other in that phonological analyses have to be grounded in phonetic facts, and phonetic research has to be geared towards those capacities of the human vocal tract which subserve language specifically (unlike, say, eating or breathing).

Spencer (1996) posits that phonetics is the study of the physical aspects. This means the acoustic and physiological bases of speech. He states that phonetic research might investigate the

collection of frequencies of sound that is observed in the production of particular types of vowel, or it might examine the precise movements of the tongue in producing the sound(s).

Matthews (1997), on the other hand, states that phonology is “the study of the sound system of individual languages and of the nature of such systems generally.” The concern mainly here is with the way the sounds and suprasegmental features defined by phonetics are put to use in natural human languages. More precisely, phonology is concerned with the study of the speech sounds and patterns displayed by sounds and prosodic features in natural human languages. Phonology covers the study of suprasegmentals (tone, length, stress and intonation), syllables, phonotactics and phonological processes and rules.

1.8.2. Morphology

Crystal (2008) contends that morphology is the branch of grammar that studies the structure of words through the use of morpheme construct. He states that, generally, this is divided into two fields: the study of inflections (inflectional morphology) and word formation (derivational morphology). Fromkin, Rodman and Hyams (2003) hold that morphology simply is the study of the internal structure of the words and of the rules by which words are formed. Part of knowing a language is knowing its morphology and most of this is unconscious knowledge.

1.8.2.1. Morpheme

This, according to Rodman, Fromkin and Hyams (2003), is an arbitrary union of sound and meaning that cannot be further analysed. Every word consists of one or more morphemes as exemplified below:

One morpheme	desire
Two morphemes	desire + able
Three morphemes	desire+able+ity
Four morphemes	un+desire+able+ity
More than four	anti+dis+establish+ment+ari+an+nism

1.8.2.2 Discreteness

In all languages discreteness is one of the properties of human language. The knowledge one has of these units and the rules that are employed to combine them account for the creativity of human language. This creativity involves the ability to produce and understand an infinite number of words and sentences never heard before.

1.8.2.3. Bound and free morphemes

Our knowledge of morphemes is that they can either stand alone or be attached to a host morpheme. Morphemes like, desire, boy, eat, may stand alone and form words. These are free morphemes. Others like -ish, -ness, un- are not words on their own and at all times are parts of a word. These affixes are examples of what are known as bound morphemes.

1.8.2.4. Prefixes, infixes and suffixes

Morphemes like un-, bi-, pre-, (unhappy, bipolar and premature) are prefixes. These are placed before other morphemes. Some occur as suffixes, following other morphemes. These include, -ing, -ist, -er (eating, typist, kicker) and so on in English language. It has to be said that Languages differ in the way they deploy their morphemes. Many languages have prefixes and suffixes. However, a morpheme that may be a prefix in one language may be a suffix in another and vice-versa (Fromkin, Rodman and Hyams, 2003). Languages may also differ in what meanings they express meanings through affixation. Some languages have infixes. These are morphemes that are inserted into the other morphemes. For example, Bontoc, spoken in Philippines is one such language as shown below.

Nouns/ adjectives

Fikas ‘strong’

Kilad ‘red’

verbs

fumikas ‘to be strong’

kumilad ‘to be red’

The infix -um- is inserted after the first consonant of the noun or adjective

1.8.2.5. Circumfixes

Some languages have circumfixes. These are morphemes that are attached to another morpheme both initially and finally. These (morphemes) are also called discontinuous morphemes. Fromkin, Rodman and Hyams, (2003), give an example, of Chickasaw, a Muskogean language that is spoken in Oklahoma, USA. The negative is formed with a prefix 'ik-' and suffix '-o'. The final vowel of the agreement is deleted before adding the negative affix as below:

Affirmative	Negative
Chokma 'he is good'	ik+chokm+o 'he is not good'
Lakna 'it is yellow'	ik+lakn+o 'it is not yellow'

1.8.2.6. Content and function words

Languages in most cases make a difference between content and grammatical words. Nouns, verbs, adjectives and adverbs are content words. These are sometimes referred to as open class words because new words can be added to the dictionary. They denote concepts such as ideas actions, attributes, objects that we can think about. The others that do not have a clear lexical meaning or obvious concepts are function words. These include conjunctions, articles, preposition and pronouns. These are function words because of their grammatical function and sometimes are referred to as grammatical words. They are a closed class because they are difficult to add to the already existing ones.

1.8.3. Syntax

Valin (2001) quotes Matthew (1982:1), who gives syntax the following characterisation:

“The term syntax is from the ancient Greece syntaxis, a verbal noun which literary means ‘arrangement’ or ‘setting out together’. Traditionally it refers to the branch of grammar dealing with the ways in which words, with or without appropriate inflections, are arranged to show connections of meaning within the sentence.”

Valin (2001) states that syntax deals with the way sentences are constructed. Speakers of languages employ a striking number of possible arrangements in sentences. One way in which

languages differ is the order of the main elements in a sentence. For example, in English, the subject comes before the verb and the direct object follows the verb. In Lakhota (a Siouan language of North America) on the other hand, the subject and direct object both precede the verb. There are also languages in which the order of elements is irrelevant to the interpretation of which element is the subject or object. These are examples of the many differences that exist in human languages.

1.8.4. Semantics

According to Crystal (2008), this is a branch of linguistics which is devoted to the study of meaning in language. The term is also used in logic and philosophy but not with the same emphasis as in linguistics. Philosophical semantics focuses on the relations between linguistic expressions and the phenomena in the world to which they refer, and considers the conditions under which such expressions can be said to be true or false, and the factors which affect the interpretation of language as used. Its history of study, reach as far back to the writings of Plato and Aristotle. Logical or ‘pure’ semantics studies the meaning of expressions in terms of logical systems of analysis, or calculi, and is thus more akin to formal logic or mathematics than to linguistics.

In linguistics, according to Crystal (2008), the emphasis is on the study of the semantic properties of natural languages as opposed to logical ‘languages’. The term ‘linguistic semantics’ is often used to make the distinction clear, although the term ‘semantics’ is used without qualification to refer to its linguistic sense.

Different approaches by linguists to the meaning nonetheless illustrate the influence of general philosophical or psychological positions. The ‘behaviourist’ semantics of Leonard Bloomfield for example, refer to the application of the techniques of the behaviourist movement in psychology, restricting the study of meaning to only observable and measurable behaviour. Partly because of the pessimism of this approach, which concluded that semantics was not yet capable of elucidation in behavioural terms, semantics came to be much neglected in post-Bloomfieldian linguistics, and has received proper attention only since the 1960s. The approach of structural semantics is what is of importance in studies such as this. This shows the

application of the principles of structural linguistics to the study of meaning through the notion of semantic relations (sense or ‘meaning’ relations such as synonymy and antonymy).

Rodman, Fromkin and Hyams (2003), define **semantics** as the study of the linguistic meaning of morphemes, words, phrases and sentences. They contend that there are subfields in this study which include **lexical semantics**, concerned with the meaning of words and meaning relationship among words; **phrasal** or **sentential semantics**, concerned with syntactic units larger than the word. There is also how context affect meaning in certain conditions in certain situations. For example if someone says *it is cold in here* comes to be interpreted ‘close the window’. Such kind of study is called **pragmatics**.

In order that a proper descriptive (synchronic) analysis of aspects of grammar is realised, the researcher heavily relied on the following levels of linguistics: phonology and morphology.

1.9. The syllable structure

Part of phonology that deals with rules governing the possible phoneme sequence is phonotactics, and it is one of the commonest topics in syllable structure. Crystal (2008) alludes to the fact that the concept of syllable is not easy to define as can only be defined by other concepts. Meyer (2009) discusses the concept of a syllable and contends that it comprises three parts: an onset (On), a nucleus (Nu), and a coda (Cd). The nucleus consists of a vowel that is preceded by the onset and followed by the coda. In a simple word such as ‘hat’, the nucleus would be the vowel /æ/, the onset /h/, and the coda /t/. While the nucleus is usually a vowel, it is also possible to have, the nasal consonants /m / and /n/ to be syllabic in words such as bottom and for the approximant /l/ to be syllabic in words such as bottle /batl/ and little /litl/.

Katamba (1996) posits that many phonologists envisage a branching hierarchical syllable structure which can be presented as in figure (2).

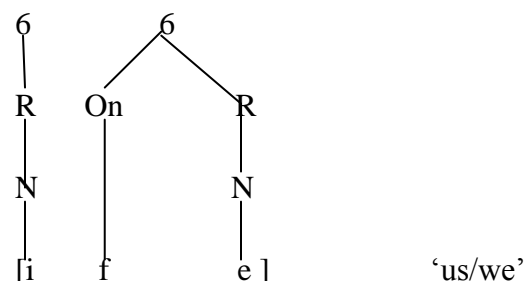


Figure 2: syllable structures for *ife* ‘we/us’

Note: 6= syllable, N=nucleus, R=Rhyme, O= Onset

In the Chewa word *ife* ‘us/ we’, in the first syllable, the rhyme is simple and does not branch. It consists of one constituent, the vowel. The rhyme is the only compulsory constituent, meaning it is the head constituent (Katamba, 1996)

There are two types of syllables and these are open and closed syllables. Open or free syllables are those that are coda-less, that is, they end in a vowel. Conversely, closed syllables are those which have a coda, that is, they end in a consonant.

1.9.1. The generative CV-Phonology model of syllable structure

This was expounded by Clements and Keyser (1983) specifically to deal with the syllable structure. According to them, the syllable is assumed to have a three -tiered structure consisting of a syllable node, a CV –tier, and a segmental tier which consists bundles of distinctive feature matrices as shown in figure (3) of syllable ‘pe’ from a Chewa word *Peza*[pe.za] ‘find’.

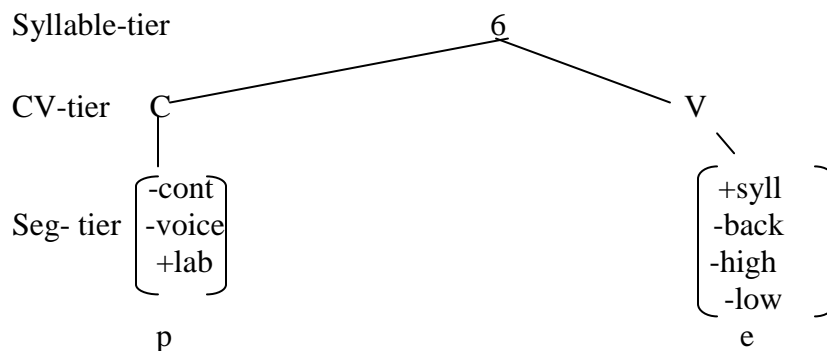


Figure 3: an example of a three- tiered structure of CV -phonology

As in syntax, a constituent is immediately dominated by the higher element. Like in the example above, the element of the CV- tier are all dominated by 6 while the elements [pe] of the segmental tier are all dominated by CV and C.

In CV phonology, the linking is done by **association lines** which are subject to **well-formedness condition**. To relate the CV- tier to the segmental tier certain universal rules are drawn. These

link V elements to [-cons] (vowels) and C elements to [+cons]. A V element of the CV-tier represents a syllable nucleus (peak of sonority) while the C element represents a syllable onset or Margin.

Clements and Keyser's model also performs the task of describing syllable typology by including a number of core syllables. Linguistic elements which are part of the core grammar are present in all languages. No language lacks a CV type syllable. Other types are seen as modifications of prototypical CV type (Katamba, 1996). Some languages like English have syllables containing only V (as in e-ver). Such languages may be assumed to have a rule which deletes the syllable initial C and hence allowing the canonical syllable with V only. According to Clements and Keyser, elements may have any of the following canonical syllable types.

Type 1	CV	e.g ta
Type 2:	CV, V	e.g ta, a
Type 3:	CV, CVC	e.g ta, tat
Type 4:	CV, V, CVC, VC	e.g ta, a, tat, at.

Figure 4: Canonical syllable types

Mtenje (1980) gives the syllable structure for Chichewa, a Bantu language, which is the canonical CV. Meanwhile, Mchombo (2004) notes that in Chichewa, consonant clusters are permitted, but subject to some phonotactic constraints. For example, while any consonant can appear in the C position, in CCV structures the first C cannot be any one of the glides. In fact, the palatal glide appears to be more restricted than the labial glide. For instance, there are words such as the following: *phwanya* 'smash,' *khwacha* 'erase' *thyola* 'break,' *pyola* 'go past'

On tone, the following scholars, Welmers (1973); Mchombo (2004); Crane, Hyman and Tukumu (2008) and Letsholo (n.d.) seem to agree that most Bantu languages are tone languages. These languages can use tone for lexical, grammatical and syntactic functions. This has been mentioned in their works. For example, Mchombo (2004) points out that Chichewa has two level tones: L (ow) and H (igh). Contour tones arise from combinations of these level tones. He gives an example of lexical contrast brought about by tone. This is in words like, *m.te'ngo* 'tree' and *m.tengo* 'price'

The other examples in (1) display different tone patterns of the verb stem induced by proclitics and these are common in Bantu as well. The behaviour of tone in these verb units is interesting as exemplified in Chichewa by Mchombo (2004).

- (1) a. *Njobvu zi-ma-ímb-íts-án-á mingoli* ‘the elephants were making each other play harmonics’
 b. *Njobvu zí-ma-imb-its-án-á mingoli* ‘the elephants make each other play harmonics’

Apart from the contrast noted under tone, African languages may also be distinctive when one vowel is short and another long. In Nyanja, the following are the examples (Zambian Languages; Orthography Approved by the Ministry of Education, 2005).

(2)	Short vowel		long vowels	
a.	<i>bvika</i>	[bvika]	‘thatch’	<i>bviika</i> [bvi:ka] ‘to soak’
b.	<i>pfula</i>	[pfula]	‘dig out’	<i>pfuula</i> [pfu:la] ‘soak in water.’

1.10. The minimal-pair test

When two words are identical in all respects except for one segment, they are referred to as a minimal pair. Minimal-pair test, that is, the way of determining that a single sound difference distinguishes the meanings of two words, is a key principle of phonemic analysis (Katamba 1996). Sounds are classified as separate if they are responsible for a difference in meaning in a minimal pair. Examples in Tonga language of Zambia include, *bowa* ‘mushroom’ and *boya* ‘hair’, *cisamu* ‘tree’ and *cisanu* ‘five’.

1.11. Some aspects of the morphology of Bantu languages.

Studies done show that many Bantuists agree that the structure of Bantu noun comprises a nominal stem and nominal prefix (Mchombo, 2004). Others like Ikalanga (Letsholo, n.d.) may have the prefix +root+suffix as in the word *i-te-nyan-a* ‘small gourds’.

Chanda (2015) contends that the structure of a noun in Bantu can comprise the following: Stem only or with a zero prefix (Ø-prefix). For example, *tata* ‘father’ in Bemba. Other structures include: prefix and stem (*ci-soti* ‘hat’ in Chewa), an augment and prefix and stem (*i-fi-ntu* ‘things’ in Bemba), and augment and stem (*e-baba* ‘father’ in Mambwe language). Chanda

(2015) also points out that the augment has no function, but is just there for structural reasons. If removed, it does not change the semantic realisation of a word.

In nouns, usually the prefix signals the class the noun belongs to. The formal structure of the noun, which does have some bearing on its class membership, has relevance to the regulation of the agreement patterns of the languages (Childs, 2003; Mchombo, 2004; Kioko, 2005, Chanda, 2015). In brief, noun modifiers are marked for agreement with the class features of the head noun, and these features are also what are reflected in the subject marker(SM) and the object marker (OM) in the verbal morphology. This can be illustrated by the following as adopted from Mchombo (2004).

3) a. *Chi-soti ch-ang'a ch-a-ts'opan'o chi-ja ch'i-ma-sangal'ats-a a-lenje.*

7-hat 7SM- my 7SM-assoc-now 7SM-that 7SM-hab-please -fv 2-hunters

‘That new hat of mine pleases hunters.’

b. *M-k'ond'o w-ang'a w-a-ts'opan'o u-ja u-ma-sangal'ats-a alenje.*

3-spear 3SM-my 3SM-assoc-now 3SM-that 3SM-hab-please -fv 2-hunters

‘That new spear of mine pleases hunters.’

The agreement markers in these examples are *chi* and *u*; the *i* vowel in *chi* is elided when followed by a vowel, and the *u* is replaced by the glide *w* in a similar environment. Mchombo (2004) says Chichewa is a head-initial language, hence, the head noun preceding its modifiers within a noun phrase.

Kioko (2005) quotes Denny and Creider (1986) who made efforts to reconstruct the proto-Bantu noun prefix system where each prefix was associated with a particular characteristic meaning. Many Bantuists have proposed the idea that noun classes are constituted on the basis of a characteristic semantic content, but faced with the synchronic grammaticalised system, some scholars have suggested historical change which obscured the once clear cut conceptual taxonomy of Proto-Bantu nominal classification (Kioko,2005). Because of these discrepancies, most modern scholars have mainly depended on the noun prefix and the concord systems to explain membership of nominals to particular classes.

Kioko (2005) gives the composition of noun classes in Kikamba, a Bantu language spoken in northern Kenya. She says this language uses 17 of the 23 noun classes proposed by Welmers (1973) for Proto-Bantu. The following are the noun classes for Kikamba with examples of words that can be used with these classes: 1. /mo/ (mo-ndo 'person'), 2. /a-/ (a-ndo 'people'), 3. /mo/ (mo-te) 'tree', 4. /me/ (mete 'trees'), 5. /e-/ (e-to 'leaf'), 6. /ma-/ (ma-to 'leaves'), 7. /ke/ (ke-veti 'woman'), 8. /i-/ (i-veti 'women'), 9. /n-/ (n-omba 'horse'), 10. /n-/ (n-omba 'horses'), 11. /o-/ (o-lii 'thread'), 12. /ka-/ (ka-ana 'child'), 13. /to-/ (to-ana 'children'), 14. /o-/ (o-emi 'farming'), 15. /ko-/ (ko-ema 'farming'), 16. /Θa-/ (Θa-ndo 'place'), 17. /ko-/ (ko-ndo 'places').

There is much duplication in the class prefixes shown above. This can be explained in terms of the other two criteria of classification. For example class 1 and 3 can be differentiated on semantic and concordial grounds. Those (nouns) in class 1 in Kikamba share the feature [+Human] whereas most of those in class 3 are names of trees. Classes 9 and 10 are distinguished on concord grounds as can be exemplified below: Though the noun class prefixes are the same, the subject-verb agreement marker in (4a) is *y*, class 9, whereas in (4b), class 10, it is *sy* :

(4) a. *Nyumba yakwa niyavaluka*

N-umba i-akwa ni-i-a-valuk-a.

9-house 9-of mine FOC-9-TNS-fall-fv.

'My house fell'

b. *Nyumba syakwa ni syavaluka*

N-umba_i-akwa ni-i-a-valuk-a

10-houses 10-of mine FOC-10-TNS-fall-fv.

'My houses fell'.

Other languages like Bemba, Nyanja, Kaonde and Tonga have 18 noun classes (Chanda, 2015). However, there are also sub-classes that have been reconstructed for Proto Bantu (PB). For example, 1a and 2a in Kaonde. On this basis, Muke (2014) contends that Kaonde has 20 noun classes.

As noticed, most of the noun classes can be paired to express singulars and plurals. This is one very important feature of the semantics of the classes in Bantu languages except for those that cannot be pluralized. The following are the possible pairs in Kaonde as given by Muke (2014) .1/2, 1a/2a, 3/4, 5/6, 7/8, 9/6, 12/13, 14/6, 15/6 and 11/4. For instance, 12/13 are paired and these contain small things which are diminutive as is the case in Kikamba noted earlier as well.

When it comes to the structure of the verb, Mchombo (2004) notes that in Chichewa (and other Bantu languages), it is traditionally analysed as consisting of a verb-root (VR) to which such verbal extensions as the causative, applicative, reciprocal, passive, and so on are suffixed, and to which prefixes are added. The latter encode information pertaining to agreement with the subject and object(s) of the verb, tense/aspect, negation, modality, and so on.

Nkolola (1997) seems to agree with Mchombo in the composition of Tonga verb morphology as thus: pre-prefix, prefix, post prefix, tense and aspect marker, object marker, root (radical) extensions, and ending in this very order.

Pre-prefix-this in Tonga denotes negation in most cases and, therefore, it is a negative marker as ‘ta-` in *tatuyandi* (ta-tu-yand-i) ‘we do not want’

Prefix-these are verbal constituents and they come before the verbal and refer to the subject as subject markers. These vary depending on the noun classes. For instance, ‘ba-‘as shown (5):

(5) *Baleenda* (ba-la-eend-a) ‘they are walking’

Post prefix- these immediately follow the prefix and denote negation as well. This is a general rule in Tonga relative form. A special ending is used in such negatives. Below is the example Bantu *batabeleki* (ba-ta-belek-i) ‘people who do not work’, different from Bantu *babeleka* (ba-belek-a) ‘people who work’

Tense marker-denote tenses, aspects together with the ending. The tense marker and ending make up what marks for tense (Nkolola, 1997). The tense marker is said to be a discontinuous morpheme made of verbal ending like *-a* and *-i* and in many cases a morpheme that comes before the root. In Tonga there are tense markers for different tenses. The examples are given in (6) where *-aka-* and *-la-* show some distinction:

- (6) a. *Twakalima* (tu –**aka**-lim-a) ‘we cultivated’
 b. *Tulalima* (tu-**la**-lim-a) ‘we are cultivating’

Object Markers-can refer to an object noun phrase. This is equivalent to the English object pronouns such as me, you, and so on. These too may vary according to the classes to which the object nouns referred to belong. An example is given in (7) of noun class 1:

- (7) *Twakamubelekela* (tu-a-ka-**mu**-belek-il-a) ‘we worked for him’

The root (radical)-this is the core or nucleus of the verb. Considering that verb forms constructed by addition of affixes to the roots, the core of the construction is the root. For example in the verb *kulila* (ku-**lil**-a, the root is -lil- which carries the meaning ‘cry’.

Extensions- these are attachments to a verb root to add meaning to the verb. This semantic information added depends on a particular verb extension. These come after a verb root or primitive structure. The following Tonga extensions were noted by Nkolola (1997): the applied, causative, and passive extensions as exemplified in (8) below:

- (8) a. *Kulima* (ku-lim-a) ‘to cultivate’
 b. The applied extension: *kulimina* (ku-lim-**il**-a) ‘to cultivate for’
 c. The causative extension: *kulimya* (ku-li-mi-**i**-a) ‘to cause to cultivate’
 d. The passive extension: *kulimwa* (ku-li-mu-a) ‘to be cultivated’

There are some general restrictions on where extensions can be placed and with what other extensions in Bantu, as seen in morphotactics of Bantu verb extensions (Welmers, 1973). The applicative and the causative may appear in any order. The passive and the stative may only be the last extension. The reciprocal may be followed by the applicative, causative, or stative, but not by others.

Childs (2003) quotes (Mchombo 1997) on Chichewa verb extensions. He says Chichewa allows four such extensions, shown below in the following order: Reciprocal, Causative, the Applicative (Benefactive) and Passive.

	<i>meny-a</i>	‘hit’
Reciprocalisation	<i>meny-an-a</i>	‘hit each other (fight)’

Causativisation	<i>meny-an-its-a</i>	‘cause to hit each other (cause to fight)’
Applicativisation	<i>meny-an-its-ir-a</i>	‘cause to hit each other for (cause to fight for)’
Passivisation	<i>meny-an-its-ir-idw-a</i>	‘be caused to be fought for’

Ending-the endings in Tonga verbals are *-a, -e, -i*. The *-e* and *-i* occur with verbals in some past tense and negatives forms. *-a* is found with verbals in the past and present tenses (10).

- (9)
- a. *Tababooli* (ta-ba-bool-i) ‘they do not come’
 - b. *Baboola* (ba-bool-a) ‘they have come’

Chanda (2015) posits that some Bantu verbs may have a pre-ending and even a post-ending. The following are the examples from Kaonde and Bemba respectively. Kaonde (pre-ending): *kumonanga* (ku-mon-**ang**-a) ‘to be seeing’ of *kumona* (ku-mon-a) ‘to see’

Bemba (post-ending): in *lya* (li-**a**) ‘eat’ (singular), ‘-a’ is the ending. The plural (eat) is formed by adding *-ini* to singular form, that is *lyeni* (li-a-**ini**). *Li-* is the radical; *-a-* is the ending; *-ini-* is the post ending

1.12 Conclusion

This chapter exposed the linguistic structures that are generally found in many Zambian languages, let alone Bantu languages. There was a look at the phonological perspective which included the syllable structure and suprasegmental phonology. There was also a look at the structural composition of words common in most Bantu languages. These included the nominal, noun modifiers, pronominal, verb and other word structures.

CHAPTER TWO

Literature Review

Overview

It has to be said from the outset that literature, particularly on the linguistic nature of Senga, to the best of the researcher's knowledge is hardly found. However, since Senga is a language that can be analysed like any other, it is prudent to bring out some of the phonological and morphological phenomena as obtained in other languages. The literature will first look at some Zambian literature, thereafter, some African Languages outside Zambia and finally those from outside Africa including Australia, Asia and the America's.

2.1. Studies on some Zambian languages

One of the studies regarding the phonological and morphological make-up of a language is that of Miti (2001). In his book *A Linguistic Analysis of Cinsenga*, he provides a morphological and phonological description of Nsenga, a language mainly spoken in Petauke, Nyimba and Chipata. In this book, however, he also provides some aspects of the Nsenga syntax.

At the level of phonology, Miti posits that Nsenga falls into a five -vowel system of a language. These are /a, e, i, o, and u/. In terms of consonants, he says there are twenty-two of them. These include approximants or semi-vowels. The following are the ones he outlines: /p, b, t, d, c, j, k, g, m, n, ny, ng' f, v, s, z, sh, zh, w, l, y, w/

When it comes to tone and tone marking, he submits that the language uses pitch to indicate lexical and grammatical distinctions. He thus identifies basic tones as High and Low. Besides, ciNsenga has a surface falling (F) tone. This contour tone, as he describes it, is derived by the association of H and L tone with a single tone bearing unit (TBU). A rising tone also exists though it is a rarity. Senga being a Bantu language it is likely that it may have a similar way of assessing tone

On the syllable, Miti identifies four major syllable types. These include: the V-syllable, found in words (in bold) like ***i**-nde* 'yes', *ka-**i**-ngo* 'leopard' and *ma-**i*** 'woman' where the '*i*' can be found in initial, medial and final positions. The C- syllable comprises a syllabic nasal only and occurs

word initially and word medially as in *n-twa-le* ‘take’, and *a-m-po-zhe* ‘he will silence him’ where *n* and *m* respectively, are syllabic nasals. The CV-syllable is also found as in the word *ci-nthu* ‘thing’, where *ci-* shows a CV kind of syllable. The CsvV syllable is also part of the syllable in Nsenga as in *mwa-*, in the word, *mwa-na* ‘child’

On the morphological make-up, Miti looks at the nominal and verbal forms. He identifies seventeen noun classes for Nsenga, typical of many Bantu languages. He further provides the pronominal forms that include the absolute pronoun, the possessive pronoun, the connective pronouns, the quantitative pronouns, the possessive pronouns and the interrogative pronouns. The personal absolute pronouns in Nsenga, according to Miti (2001) are four. The verbal structure in Nsenga, as in most Bantu languages comprises the radical and affixes. The affixes include the subject marker(sm), object markers (ob) and various derivational suffixes. In addition, Miti brings out the morphophonemic processes affecting nouns in Nsenga and these include elision, glide formation, truncation and coalescence.

Furthermore, Miti’s book gives a description of tense, aspect and mood. There is also an exposure of verbal extensions and these are passive /-iw-/, causative /-ish-/, applicative /-il-/, persistive /-ilil-/, reversive /-ulul-/, potential /-ik-/, intensive /-ish-/ and reciprocal /- an-/. Miti also brings out semantic categorization and morphological analysis of adverbial forms which include manner, time, and place. This study is important to this work because it provides an insight into the structure of sounds and words. However, the work is on Nsenga and not Senga, hence the need to investigate the Senga sound and word compositions.

Another work which gives an insight into the morphological and phonological aspect is one by Horton (1949). In this work, he shows that Luvale, one of the Zambian languages mainly spoken in North Western region of Zambia and parts of Angola- like many Bantu languages-comprises five vowels, namely /a, e, i, o/ and /u/. The language consists of twenty-two consonants, and these include /p, b, t, d, k, g, m, n, ny, ŋ, f, v, s, z, x, j, h, c, ɟ, l, w, y/. According to Horton, Luvale vowel length is determined by three factors and these are stress and position, semantic distinction and coalescence. Horton points out that the nouns are divided into ten classes and four subclasses depending on the prefixes they assume. There is also a detailed look at the pronouns,

verbal derivatives and that verbs in Luvale may be inflected in various ways by suffixes to form derivatives. Structures of grammar like word-division, word-order and parts of Luvale are also looked at. The work on Luvale by Horton, though not directly related to Senga proved to be helpful especially in regard to morphology and phonology which are the main areas under study in this work. Besides Senga will look at other things tense and aspect and compounding of words.

An Outline of iciBemba Grammar, by Mann (1999), is another work which brings out some aspects of phonology and morphology. On consonants, the sounds *m*, *n*, *ny* and *ŋ* are said to be special ones called nasals. When there is another consonant after them, the two sounds are called nasal compound. Mann states that nasals are the only consonants that can have another consonant after them in Bemba without a vowel in between. English loan words that are used often have extra vowels inserted. For instance, school ‘*isukulu*’, blanket ‘*ibulangeeti*’, though a Bemba speaker who knows English may pronounce them in the English way.

Mann also brings out how certain consonants are pronounced. For example [β] (not after *m*) is a voiced bilabial fricative phonetic. The lips are put together as if for an English /b/. /l/ is an alveolar flap. When a nasal comes in front of it, the sound is written (and pronounced) *nd* / *l*/ and /d/ are variants of the same sound in Bemba. /s/ always becomes *sh* before an *i* or *y* sound so that these two are really varieties of the same sound. It can even become *sh* before *e* when the *e* runs together with the following vowel to make a sound beginning *y*. for example, *mukeese uluceelo*, ‘come in the morning’, is pronounced mukeesh(y) *oluceelo*. *C* is pronounced like *ch* in English ‘church’. /ŋ/ is a velar nasal, represented by *ng* in English. It is sometimes spelt *ng* in other Zambian languages.

The pronoun for ‘I, me’ is always represented by a nasal consonant in Bemba but is always spelt as *m*, *n* sometimes *ŋ* recognised by linguist as a homorganic nasal, pronounced with the tongue and lips in the same position as in words like *ng-owe* ‘should I swim, *nj-pushe* ‘should I ask.’ Where the verb root begins with a vowel, or semi-vowel, *g* or *j* are inserted as already exemplified.

According to Mann (1999), Bemba has a five vowel system /a, e, i, o/ and /u/ pronounced like other Zambian languages but different from English. Bemba vowels are monophthongs, spoken

with the tongue still. Bemba vowels are sometimes written double to show that they take longer to say. Every word ends in a vowel and many begin with a vowel. In most cases instead of saying the two vowels that come together one after the other, they run together to form a single sound as in *baashita ubwalwa* ‘they have bought beer’ is pronounced *baashitoobwalwa*.

When it comes to length and tone, Mann states that Bemba uses length and tone to make some syllables more prominent. Differences in length can be heard in words like *ukupela* ‘to finish’ and *ukupeela* ‘to give’. Tone changes can be distinctive in Bemba. There are also other words which may be pronounced the same but may have different meanings in Bemba. For example, *ulukungu* ‘dust’ and *ulukungu* ‘verandah’.

In the case of the Noun, Mann (1999) states that every noun in Bemba belongs to a class. Nouns have different forms according to their job in a sentence. Some nouns have no prefix but still have words agreeing with them. Mann identifies 18 classes in Bemba. Sometimes, in addition to their usual prefix, nouns in Bemba have an extra prefix added to modify their meaning as in *umu-tondo wandi na-utobeka* ‘my jar is broken. There are relatively few adjectives in Bemba. The job done by adjectives is done by participles or sometimes by nouns with a possessive pre-prefix. Mann contends that there are two kinds of adjectives in Bemba. These are some, like – *suma* (umu-suma)-‘good’. These may have a prefix of two syllables. Others like *-mbi* (*u-mbi*) ‘other’ never have a two syllable prefix. Bemba does not usually use a separate personal pronoun to express ‘I’ or ‘we’ or ‘you’. For example ‘we eat millet’ is translated into Bemba *tulya amale* where ‘we’ is expressed by the form of the verb. Bemba only uses personal pronouns when it wants to contrast two sets of people. For example, *ifwe tulya amale, leelo imwe nikalunweyeye* ‘we eat millet but you just cassava’.

Mann also gives details of the verb-form which he posits that it has a pronoun prefix that agrees with the subject of the verb. He also brings out the tense signs which show when the action happened. This is contained in the word besides the root of a verb. For instance, *twa-fik-ile* ‘we arrived’, and *tu-ka-fik-a* ‘we will arrive. These tense signs may be found at the end or within a verb form. He further provides different types of tenses that Bemba verb forms can take. These include the indicative tenses, perfect and habitual tenses, hypothetical tenses, the subjunctive and the imperative. In addition, Mann notes the derived forms of verb root. Mann’s account of the

Bemba grammar provides a rich basis that gives enough literature that forms the basis on which this work can be centred , though not in the exact same manner because the work is on Senga.

Lehmann (2002) outlines the grammar of ciNyanja. In opening his analysis of ciNyanja grammar, Lehmann points out that ciNyanja has five contrastive vowels which occur in short or long duration .For instance, *mbale* ‘plate’ is contrasted with *mbaale* ‘brother’. He also points out the commonality of juxtaposition of two vowels as in *Kumbukani ici* ‘remember this’ which may be written as *kumbukaniici*, the first syllable of the second word being used with the last syllable of the first word. A few cases show fusion of two vowels of different quality as in *a+i* becoming *ee*, *u+o* becoming *oo*. The final vowels of a syllable ending in *i* and *u* occur as *y* and *w* before next vowel as exemplified in *mwana* (*mu-ana* ‘child’)

Lehmann identifies twenty nine consonants. These are labials / p , ph , pf, f, b, bv, v, m, w/ , alveolar sounds /t, th, ts, s, d, dz, z, l(r) , n/ , palatal /ty, tsh=c, thsh=ch,dy, dzh =j, ny ,y/ and velar sounds /k, kh ,g , n=ng/

In his analysis of ciNyanja grammar, Lehmann points out that the language can use tone and intonation to distinguish meaning of a words or grammatical items.

Like other Bantu languages, ciNyanja exhibits agglutination in the formation of words or sentences. This is a situation in which morphemes tend to ‘glue’ together in forming words or sentences. For example, *cabwino* ‘it is all right’ is written as one word, yet in English it is equivalent of four words (Lehmann, 1999). In addition, in ciNyanja, the simplest nouns consist of stems which have no prefixes in the singular but which have prefixes in the plural. The prefixes mark the classes to which a noun belongs. Lehmann identifies Nyanja as having eighteen classes of words. The agreement between the head noun, modifiers and predicate is shown by concord prefixes, identical with or related to the noun class prefix. The verb roots are of different forms. C(consonant) is the simplest form consisting of a single consonant as in *-b-* ‘steal’, *-ph* ‘kill’; C+W or Y , some roots consist of a consonant followed by an approximant (or semi-vowel) as in *-dy* ‘eat’. Lastly, there is the CVC(consonant , vowel ,consonant) being the most common as in *-nen-* ‘speak’ *-pim* ‘measure’.

The verb final suffixes are *-a* and *-e*. The post final verbal suffixes occur in various forms. For example, in the verb *ima-ni* ‘work up’ there is an indication of the plural in imperatives. Verb

extensions also feature in Lehman's work. These include applicative, stative, associative, reciprocal, passive, causative, reverse and extension by reduplication of the full stem. There is also mention of verb prefixes being the markers of the concords, tense, aspect and the negative where their order is also fixed. The Senga work of course will take the same direction as the work by Lehman in many ways, though it is on Senga which is a departure.

One of the early pioneers in so far as documentation of some Zambian languages is concerned is Doke. Doke (1922) outlines the grammar of Lamba, a language predominantly spoken on the Copperbelt province of Zambia. In his work, he gives a detailed account of Lamba by looking at some phonology, morphology and syntax. At phonological level, Doke submits that there are five main vowels in Lamba and these include /a, e, i, o, u/. He notices that the language has 18 consonants. These are nasals [m, ɱ, n, ɲ, ŋ], fricatives [f, v, w̥, s,], laterals [l] and semi-vowels [w, y] and plosives [p, b, t, d, c, k, j, g].

In terms of morphology, Doke submits that there are eleven nominal classes with singular and plural prefixes. Doke also details the pronominal forms, the verb, derivative verb forms indicating the passive, neuter and neuter passive voices, applied form, intensive, causative, reflexive and reciprocal forms. In addition, Doke provides a description of the adverbs, prepositions and conjunctives. Doke centres his work on Lamba, but this work will be on Senga, and it will add other things like tense, aspect, compounding to mention but a few.

Another work done by a Zambian which is related to this work was done by Zemba, M. In her unpublished study, *The Grammatical Sketch of Kunda Language* (2016), she reveals that Kunda has five distinctive phonemic vowels and twenty four consonants. The study also reveals that the language shares the syllable structures with many other Bantu languages and its common syllable patterns being the open type that include V, C, CV and CSV. With regard to morphology, the study has established that Kunda has eighteen noun classes most of which consist of nominal prefixes which are followed by a stem. The study further reveals that some noun classes may be involved in the formation of diminutives and augmentatives. At nominal morphology, the study deals with the Kunda noun phrase which includes pronouns, adjectives, demonstratives possessives and quantifiers. The study observes that the verbal structure of Kunda contains numerous prefixes and suffixes and that the basic verbal root for Kunda is CVC. It has also been established that Kunda uses a series of suffixes in verbal derivations. Zemba did

her research on Kunda, a different language from Senga. There are a lot of things that she looked at in her work but they do not answer the phonological and morphological compositions of Senga, hence the study.

2.2. Studies on some African languages outside Zambia

In a book which is a revised version of her doctoral thesis, Kioko (2005), describes some key aspects of Kikamba grammar in the context of advances in theoretical linguistics. As a preliminary to the main discussion, she outlines the phonology and morphology and syntax of the language. There is a detailed description of the agreement system, the pronominal system, the passive construction, and the applicative. This, though, was done in light of theoretical literature falling within the Government and Binding, relational Grammar, and lexical functional grammar. Suffice to say that much as this work did not take an approach she took, the fact remains that she looked at the aspects of phonology and morphology. However, the work centred on Kikamba and not Senga.

One other work that has a look at morphology and phonology is by Eva-marie (2013). In this doctoral dissertation, he describes the phonology and morphology of Ndengeleko language of Tanzania. In his description he focuses on the noun and verb phrases. He points out that the morpho-phonological processes are important in Ndengeleko and result in nasal consonant sequences as well as geminate nasals. It is argued that the nasal consonant combinations are sequences rather than unit segments. Moreover, processes related to vowel concatenation play an important role in this language.

As a fairly typical Bantu language, Ndengeleko has 18 noun classes, with singular, plural or non-count reference. Besides more regular pairings of singular and plural classes, there is a habit to accept classes 4 and 6 as the plural of almost any singular class, rendering the number of possible combinations numerous. The division into noun classes underlies the system of agreement. Agreement is not always formal. However, it is influenced by semantic aspects such as animacy. Ndengeleko exhibits elaborate agglutinating morphology in the verb phrase, both derivational and inflectional. The system of tense-aspect-mood is largely aspectual in its nature, and morphemes are combined to form the different categories of this system. Moreover, there is a distinction between conjoint and disjoint forms of the same tense-aspect-mood category, which

is related to focus. This work is detailed enough and provides much of the information on morphology and phonology of a Bantu language, but this does not address the needs of Senga language. It only acts as a basis for the study as most of the concepts are attempted by the writer.

Olson (2001) in his study describes in detail the phonology and morphology of Mono, a language found in the northwestern corner of the Democratic Republic of Congo. He provides acoustic evidence to back his claims regarding the sound system. This was the first acoustic study of Mono in the literature. He points out that there are several unique features in the Mono phonological system. Mono has a phonemic labial flap; a rare speech sound found almost exclusively in central Africa. Olson devotes one appendix to a cross-linguistic study of this sound. The vowel system has two front and three back vowels, which contradicts a putative universal concerning vowel systems. Mono has three level tones which have both lexical and grammatical function. Tonal melodies and tonal polarity are attested. There are two secondary articulations, labialisation and palatalisation, which are said to be phonetically mid rather than high, and which are a challenge for interpretation. A big number of words comprise a bisyllabic CV1 LV1 sequence in which the two vowels are similar in quality and tone. The first V may be shortened or elided in rapid speech. A word minimality condition on nouns requiring two syllables is satisfied via the reduplication of a vowel. A large number of words have the shape V1CV1LV1 suggesting that the reduplication overapplies in such cases. Mono morphology is predominantly prefixing, but reduplication and suprasegmental modification are also attested. There are implicational restrictions on the leftward spread of vocalic features. This work too, does not look at Senga but a language from Congo. However, the work has looked at many different areas which will provide a platform for the writing of some aspect of Senga phonology and morphology.

Lodge (1994), in a paper on Kalenjin, a southern Nilotic language, says it has a harmony system normally associated with the feature advanced tongue root (ATR). His paper demonstrates that ATR is not an appropriate description of the phonetic correlates of the harmony system and that the system operates at least at syllable level and in many cases at word level. To avoid recourse to feature changing and deletion rules, phonological representation is conceived of as layered and radically underspecified in the lexical entry forms. Furthermore, he says these representations are

non-segmental. This work adds to the many linguistic works that have been done by linguists. Nevertheless, it concentrates on some ATR, but the Senga one will look at a number of areas including the word extensions and so on.

Pastor (2006) in her paper *Aspects of Maay Phonology and Morphology* presents a descriptive overview of the lower Jubba dialect, a language that is spoken in southern Somalia. The paper highlights several points of typological, dialectological, and theoretical interest in this language. For example, the nominal morphology shows a somewhat strange pattern of plural marking that interacts in a complex way with the gender marking system. Where relevant, comparisons are drawn between this dialect and other dialects of Maay and Somali. This work has some aspects that can be compared to the work on Senga in that there are some structures of words. However, it seems to be focusing on some comparisons with other dialects which this study does not do.

Walters (2015) in his study, describes the phonology, morphology, and syntax of Dazaga, a Saharan language spoken in Niger and Chad. This is based on a corpus of about 2,600 lexical items, as well as hundreds of sentences, gathered over three decades. The phonemic /p/ is lacking from the twenty consonants. The nine vowel phonemes harmonize in ATR within the phonological word, although /a/ is transparent. This work in many ways has got a lot of similarities with the work under study. However, it was done in a different language and not Senga.

A dissertation by Hantgan (2013) provides a description of aspects of the phonology, morphology, and morphosyntax of Bangime, a language isolate spoken in the Dogon language speaking area of Central Eastern Mali. He says Bangime has limited productive morphological processes whereas Dogon languages are agglutinating, with productive morphemes to indicate inflectional and derivational verbal and nominal processes. Bangime has a complex tonal system. General tendencies of the tonal patterns are described, with the many exceptions which frequently occur also outlined. Nominal tonal melodies are apparent in plural forms. Objects in verb phrases receive tonal agreement with tones on the verb in accordance with the subject of the sentence. The tense, aspect, and mood system of the language is also complicated. Inflectional marking on the verb, auxiliaries, and the word order of the sentence all contribute to the indication of the tense, aspect or mood of the sentence. An overview of these multifaceted

phonological and morphological processes is provided in this dissertation with hypotheses as to how the language may have evolved. This is another of the works that is detailed in phonology and morphology but like many of the works analysed, does not look at Senga, hence this study.

In a doctoral thesis, Farhan (1984) presents an account of the most important phonological and morphological processes operating in a Berber language, -Kabyle-, spoken in parts of Algeria. The study was conducted within the framework of the theories of syllable structure (with emphasis on the CV and Onset and Rime tiers), autosegmental phonology, and lexical phonology and morphology. First, the syllable structure of Kabyle is investigated. This language is seen to have a simple syllable structure, compatible with universal rules. He further shows that a puzzling problem of the schwa in Kabyle and another Berber dialect can be easily accounted for if a set of syllable-building rules specific to these languages is devised. The syllabification scheme is also demonstrated to explain the phonological alternations associated with the 'bound' state of the Kabyle noun as well as with some vowel sandhi phenomena. In addition, the problem of syllabification at the word and/or the phrase level and its implications for the linguistic theory is discussed. Finally, in the domain of phonology, he shows that the distinction made within lexical phonology between lexical and post-lexical rules is able to account for some consonant sandhi phenomena. In the realm of verbal morphology, two attempts are made, that is, the model of autosegmental analysis which allows reference to levels of representation or tiers, the other the surface segmental representation of a string is made use of in order to explain the Kabyle verbal allomorphy. The study has looked at some theories like the CV phonology which this study will analyse. Detailed as it is, it looks at some things which are in Berber language and not Senga people.

Another scholar Aviles (2008) conducted a research presenting data limited to the phonology and morphology of the Dar Daju Daju language which was not intended to be an exhaustive presentation of its grammar. The morphology discussed includes the morphology of pronouns and demonstratives, nominal morphology and lastly, verbal morphology. Information as to its relationship with and similarities to other Daju or Eastern Sudanic language varieties is included where applicable. This work is more or less like a replica of the work on Senga in that it covers the compositions of words and sounds though this is done in a different language which is not in any way related to Senga, hence the need to investigate Senga.

Mohamed (n.d) did a research where he looked at the aspects of the phonology and morphology of Ghanaian Hausa. The research presents both the vowel and consonant inventory. It discusses vowel length and the distributions of the vowels in syllables. He establishes that vowel length is phonemic. After the distribution of the consonants, it was realised that all but the velar nasal /ŋ/, can occur at the onset position. The nasals, laterals and flap are those that occur at the coda position of the syllable. He further mentions the syllable type of the language; it establishes a, CV and CVC syllable types for Ghanaian Hausa. There is also a discussion on some assimilation processes in Ghanaian Hausa. The most intriguing among the processes is the palatalisation process. He discusses the composition of palatalisation; triggers, targets, and outputs. The highest form of constraint under palatalisation is that a vowel spreads its +high feature to preceding consonant.

Aspects of the morphology of Ghanaian Hausa are well documented. For example, there is a discussion about the structure of nouns in relation to the stem (s) and, in some cases, affixes. It is observed that there are two types of stems in the language; simple stems and compound stems. Syllable structure processes are also discussed. They include: elision and epenthesis. There is also a look at some of the major differences between Standard Hausa and Ghanaian Hausa.

2.3. Some studies on languages that are not African

One scholar who researched on the phonological and morphological aspects is Campbell (2014). His dissertation is an analysis of aspects of the phonology and morphology of Zenzontepec Chatino a Zapotecan language spoken in a remote area of Oaxaca, Mexico. The phonological analysis starts with the segmental inventory. After that, the autosegmental contrasts are treated, with the highlight being the tone system. The tone bearing unit is the mora, which can bear high tone /H/, mid tone /M/, or no tone Ø. In tone systems with a three-way contrast, the unspecified category is usually the mid-level one. Therefore, Zenzontepec Chatino is typologically unusual in this respect. Special chapters are devoted to phonotactics and phonological processes.

Another chapter bridges the phonology and the morphology, defining and comparing phonological word versus the grammatical word, and outlining the basic morphological building blocks: roots, affixes, clitics, and particles. Verbal morphology, which is the locus of most of the

language's morphology is also given in his study. The study of Senga, however, considered all that has been highlighted here but the fact that it was done in Senga for the first time means that the gap somewhat is being filled.

Wilde (2008) in *A Sketch of the Phonology and Grammar of Rājbandhi* attempts to describe the phonology, morphology and syntax of the language, and also one aspect of its discourse structure. For the most part the phonology follows the basic Indo-Aryan pattern. Derivational morphology, compounding, reduplication, echo formation and onomatopoeic constructions are considered, as well as number, noun classes (their assignment and grammatical function), pronouns, and case and postpositions. In verbal morphology there is a coverage of the causative stems, the copula, primary and secondary agreement, tense, aspect, mood, auxiliary constructions and non-finite forms.

Wilde (2008) points out that Rājbandhi has an open set of adjectives, and, additionally, it makes use of a restricted set of nouns which can function as adjectives. Various particles and the emphatic and conjunctive clitics are also considered. There is also an explanation on how the future, present and past tenses in Rājbandhi oral narratives seem not to maintain a time reference, but to indicate a distinction between background and foreground information. This is called "tense neutralisation". This study is a bit comprehensive in that it includes the syntactic part of the language. On the phonology and morphology, there are a lot of similar areas that it touches to Senga though the major difference is that they are two different languages.

In a doctoral dissertation, Caballero (2004) aims to fulfill two goals. The first goal is to make an empirical contribution and describe an endangered language without employing theoretical formalisms. She gives details of regular morphological and phonological patterns, while also addressing some of the widespread inter- and intra-speaker patterns of variation found in the data. The second goal sheds light on how Choguita Rarámuri fits into the larger, cross-linguistic picture. There is an analysis of four phenomena that have significant implications for developing theories of the phonology-morphology interface: i) the morphologically conditioned stress system (which features an initial three-syllable window); ii) morphophonologically conditioned multiple exponence of derivational morphology; iii) outwardly conditioned allomorph selection; and (iv) patterns of variable suffix ordering. These topics are analysed under two main

assumptions: i) morphophonological processes are intimately related to the word's hierarchical structure; and ii) languages may contain several phonological sub-grammars pertaining to lexical class, morphological categories, or particular morphological constructions. Each particular topic is analysed as part of a coherent whole, taking into account both the detailed analysis of the language and the adequacy of the formal tools provided by specific theoretical frameworks. The proposed nested structure of the morphology is exploited to understand the constraints on stress assignment, allomorph selection, and the limited appearance of multiple exponence and variable suffix order. This work is detailed enough in that it covers a lot of areas which Senga will look at. However, it has to be mentioned that the difference between these studies lies squarely on the fact that they are different and one has not been investigated.

Aggasena (2009) did a research on Shan phonology and morphology. The purpose of this research was to study the Shan phonology and morphology of Keng Tung dialects. The results of the study reveal that the phonological word bears strong stress (S) on monosyllabic words or on final syllables while the weak stress (W) or unstress (U) falls on non-final syllables. This work is similar to the work on Senga in many ways because it looks at the phonology and morphology of a language though the difference is that it is on a different language.

The syllabic structures in Shan are i) smooth syllables which end with vowel or continuant consonants /-m, n, -ŋ, -w, -j and ii), checked syllables which end with checked consonants /-p -t -k/. The syllabic / m / which is a deduction form of / ʔam/ 'not' is also found.

The Shan of Keng Tung has 17 consonant phonemes / p, t, k, ʔ, ph, th, kh, m, n, ŋ, ɲ, l, s, c, h, w, j/ and 8 of them / -p, -t, -k, -m, -n, -w, -j / are found in the final position. The 3 consonant clusters are / l, w, j /. There are 11 vowels in Shan, 10 monophthongs / i, e, ε, ə, u, a, u, o, ɔ/ and 1 diphthong / au /. The two central low vowels / a, a: / are contrasting in vowel length. The 5 tones in Shan are 1) a rising tone 2) a low tone 3) a mid tone 4) a high tone and 5) a falling tone. The rising tone never occurs in checked syllables.

Shan words are formed by nominalization, compounding, reduplication and expressive without changing the word's original form. This is another of the works that brings out some

phonological and morphological make-up of a language, but it is surely not on Senga, hence the study being undertaken.

Prince (1975) in a thesis *The Phonology and Morphology of Tiberian Hebrew* investigated the phonology and certain morphological structures of the Hebrew of the Biblical period. Attention was focused on the network of stress-related mutations of syllabic structure. The SPE theory of theological formalism, which abjures easy reference to the notion ‘heavy syllable’, is supported, as is the linear ordering of rules. The reduction and deletion phenomena which so markedly distinguish the language from proto-north west Semitic are shown to devolve from a single rule of de-stressing that operates in an alternating fashion.

The phonology of the construct state is shown to be very simply related to that of the rest of the language when it is understood that the entire aggregation of nouns forms a single phonological word, in the sense of SPE. This work may not be directly related to Senga but the fact that it looks at the morphology and phonology of a language, albeit in a different language means that it provides some data that is helpful in the Senga study.

Westerland (2007) in his thesis *The Basic Grammatical Structure of Normal Speech Style of the Western Australian language, Ngarla* is described using example sentences taken from the *Ngarla –English Dictionary* (unpublished). The focus lies on the morphology of the nominal word class. The preliminary results show that the language shares many grammatical traits with other Australian languages, for instance, the ergative/absolutive case marking pattern. The language also appears to have an extensive verbal inflectional system, and many verbalisers. This study focuses on the morphology of nominal word class, but the Senga one looks at phonology as well.

Guekguezian (2011) in a study where there is an analysis of the phonology and morphology of verbs in the Chukchansi dialect of Yokuts, he explores epenthesis and syllabification, prosodic templates and vowel quality changes. He makes a response to previous accounts of Yokuts verbs and proposes some new analyses building upon these accounts. The study is in many ways similar to the Senga in what it is looking at but the fact that it is not Senga means that there is need to look at Senga.

In a doctoral dissertation, *The Phonology, and Morphology of Kbeo: The Documentation, Theory, and Description of an Amazonian Language*, Chacon (2011) gives a detailed account of the phonology, morphophonology and elements of the morphosyntax of Kubeo, a language from the Eastern Tukanoan family, spoken in the Northwest Amazon. Kubeo has numerous elements of great theoretical interest, such as nasal harmony, tone and stress, complex morphophonology, noun classes and noun classifiers, evidentiality, interlocking system of lexical aspect and tense, and so on. The goal of this dissertation was to present data with as much detail, transparency and information as possible, aligned with a high analytical concern to account and search for explanations of the complex and fascinating aspects of the language in different foundations of modern Linguistics, such as by exploring different theoretical proposals and typological generalisations, using historical and comparative approaches and applying acoustic. It has to be said that this document is comprehensive in that it is a doctoral dissertation. However, it has a lot of things in common regarding aspects of phonology and morphology which Senga will be based on.

2.4. Conclusion

A lot has been written on aspects of grammar in general both in Zambia and outside Zambia, but, like has already been said, none, to the best of the researcher's knowledge, is found on Senga. This means that, as yet, nothing is known regarding the grammatical realisation of this language, particularly the phonology and morphology, hence this study. The review cut across a wide range of studies both from Zambia and outside that are almost similar to this study so as to give a perspective of what this study is all about and that it is worth embarking on.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

Overview

This chapter is about the research design and methodology used during the gathering of data. Thus, the chapter begins by presenting the research design. There is also a look at how data were collected using semi-structured interview guides as some of the ethical considerations during data gathering are noted. Data collection instruments and methods used are also found in this chapter. The chapter also looks at the way data was analysed. There is also a look at the scope of the study and its limitations.

3.1.0. Research design

A research design is a blueprint for the collection, measurement and analysis of data. Decisions of where, when, how much, by what means concerning an inquiry constitute a research design. Simply put, a research design must contain a clear statement of the research problem; procedures and techniques for gathering information; the population to be studied and methods to be used in processing and analyzing of data (Kothari, 2004).

3.1.1. Non-experimental design

Here the researcher observed the phenomena as they were and did not intervene in any way. Particularly, the researcher took a descriptive design as there was exploration and examination of aspects of linguistic phenomena. This design falls under the qualitative research approach which collects qualitative data.

3.2 Qualitative approach

Punch (1998) states that qualitative data are data not in the form of numbers (most of the time, though not always). This means words. Qualitative is a way of thinking or approach which involves a collection or cluster of methods as well as data in non-numerical form. The researcher often makes knowledge claims based on constructivist perspectives, that is, the multiple meanings of a person's experiences, meanings which are socially and historically constructed (Creswell, 2014). Reasons for conducting a qualitative study is that the study is exploratory. This

means that not much has been written about the topic being studied and the researcher seeks to listen to participants and build an understanding based on their ideas (Creswell, 2014). The researcher in this study employed this approach as it was deemed appropriate for this exercise.

3.3.0 Study area, sample size and sampling technique

3.3.1 Study area

Study area simply refers to the area where the study is conducted. In this case, the research was done in Chama, a district in Muchinga province of Zambia.

3.3.2 Sample size and sampling technique

From the area alluded to above, a purposive sample of five people of different age group was chosen. One of the two women was in her late fifties, the other in her mid sixties while the male was in his late twenties. The other two gentlemen who helped with some written translations were in their early thirties. One was a teacher and the other one an accountant by profession.

The researcher deliberately targeted informants who were indigenous speakers of the language under investigation. The five individuals were drawn from different parts of Chama so they would provide a balanced coverage of the data needed for the research. Two of these individuals were born and bred in Chama and still lived there, while three were born and lived in Chama for a long time to a point where they knew the language very well.

3.4.0 Research instruments

3.4.1. Interview guides

The researcher used a semi-structured interview guide in this research. A list of words, phrases and sentences was employed. This consisted of a number of pre-set words, phrases and sentences in English in a mostly determined order. This was to be used in the extraction of primary data from different individuals.

3.4.2. Notebook and a pen

The researcher was able to record in a notebook any peculiar or strange phenomenon as regards language production as the research was being carried out.

3.5.0 Methods of collecting data

3.5.1. Interviews

Interview is a flexible method that enables researchers to collect detailed conversational material for analysis. The researcher used this strategy to allow interviewees to express themselves as they were being asked certain questions. As data were gathered from participants, attention was made to the way the informants were pronouncing words and constructing sentences.

3.5.2. Observation

Ng'andu (2014) submits that direct observation is useful as some behaviours involve habitual routines of which people are unaware of. The researcher employed this strategy to notice how indigenous speakers who he could meet randomly elicited sounds and constructed sentences as it was useful in this exercise.

3.5.3 Desk research

The University of Zambia (UNZA) Library provided a platform for the researcher to do analysis proper of the systems that operate in this language. This is because much of the secondary data are found there.

3.6. Data collection procedure

Primary data were collected using interview guides comprising a list of words and sentences. Three of these guides were prepared and each of these comprised 250 lexical items and 200 and sentences which were in English. These were self-designed and randomly constructed. Two of these were administered to speakers of Senga language who provided some Senga glosses over a period of two weeks. The other one was used in the interview with three local speakers of the language. In other words, these were part of the informants for this study as they provided some Senga glosses or translations. During the gathering of data, the researcher sat in a house with these three speakers. As the interview was going on, the researcher recorded in the spaces of the same guides which, apparently, had some spaces to write in. Much as the researcher was part of the informants by virtue of him being knowledgeable in the language, attention was paid to the way elicitation of words and sentence constructions were made by people who only spoke Senga

so as to get authentic data. Besides, the researcher entrusted other people to provide data so as to avoid falling into the trap of, unconsciously, misinterpreting some data because of the many languages that can be spoken by the researcher. If the researcher was not clear in some data the co-informants aptly were able to correct.

3.7. Data analysis

After data were collected, they were processed. This is essential for a scientific study and for ensuring that all relevant data for making comparisons and analysis is readily available. Kothari (2004) says, technically speaking, processing implies editing, coding, classification and tabulation of collected data. This research, of course, involved processing by editing, coding and classification of the data that was got from the educated and knowledgeable informants of the Senga glosses in line with the set aim and objectives, which included providing a descriptive (synchronic) analysis of the language from a phonological and morphological point of view.

In trying to analyse the data, the researcher had to first look at individual words, and how they were pronounced in order to establish the phonological system of the language. Afterwards the researcher had to analyse the phrases and sentences and see how these were pronounced. Considering that the work was to look at the sounds and structures, the researcher also analysed the words. The researcher also analysed the unprocessed data using the knowledge obtained from the years of studying linguistics, particularly in Bantu languages. Being a descriptive study the work did not specifically adopt any theoretical framework but applied an array of theoretical concepts to the data.

3.8. Scope

This work strictly focused on the phonological and morphological make up of Senga. Much as there were some morphosyntactic and semantic analyses of some phenomena, the study generally aimed at exposing the sound patterns and structures of words in Senga.

3.9. Limitations

The researcher had assumed that the people interviewed would be able to provide necessary data pertaining to the sound patterns and morphology of Senga. The other assumption was that the informants would be able to give translations to all data supplied since they were people who

were both educated and knowledgeable in the language. However, when it came to the morphological patterns, it was not possible for the co-informants to help in determining these structures due to the complicated nature of the structure of the Bantu languages. This meant that the informants provided data which needed further analysis. Besides, there were instances where certain words (like chlorophyll) seemingly did not have the Senga glosses, either because they were new or never existed in Senga, making it difficult for the informants. It has also to be said that Senga is a language spoken in a vast area and the researcher did not get data from all the areas of Chama, though suffice to say that the informants were from different parts of the district.

3.10. Ethical considerations in collection of data

A researcher who involves human sample in doing his or her research has to have certain responsibilities towards them. As the activities of the sample subjects are often closely associated with data collection process, it is proper to bear in mind ethical considerations (Singh, 2006). The following was taken into consideration as data were being collected: The researcher protected the dignity and welfare of human sample subjects. Their freedom to decline participation was respected. The confidentiality of research data was maintained. In addition, the researcher guarded against violation or invasion of privacy. The researcher also attempted not to mention the names of some subjects anywhere in the report who never consented to do so. All this was done so as to follow the laid down rules required for any researcher. As Singh (2006) says, the responsibility for maintaining ethical standard remains with the individual researcher. The principal investigator or supervisor is also responsible for actions of his scholars. As a general rule, he must respect the human sample subjects selected in his or her specific research study.

3.11. Conclusion

This chapter looked at the research design and methodology used during the gathering of data. The research used a non-experimental design. The chapter also highlighted the approach used, that is, qualitative approach. There was also a look at how data were collected using semi-structured interview schedule as some of the ethical considerations were noted. Data collection instruments and methods used were also found in this chapter. The chapter also looked at the way data was analysed, the scope and limitations of the study.

CHAPTER FOUR

PHONOLOGICAL ASPECTS OF SENG A

Overview

This chapter presents findings and discussions on aspects of Senga phonology. The chapter begins by presenting aspects of segmental phonology which includes the phonemic analysis of the language and the syllable structure, which includes phonotactics and related areas. The chapter also presents aspects of suprasegmental phonology. It has to be mentioned that morphophonological processes will be dealt with in chapter six.

4.1. Segmental phonology

From the findings, Senga has 28 consonants, which include semi-vowels as shown in table (1)

Table 1: Phonemic chart of the consonants and semi-vowels in Senga

	Bilabial	Labial-alveolar	Alveolar	Post -alveolar	Palatal	Velar	Glottal
Voice	- +	- +	- +	- +	- +	- +	- +
Plosive	p b p ^h		t d t ^h			k g k ^h	
Fricative	β	f v	s z	ʃ ʒ			h
Affricate				tʃ dʒ tʃ ^h			
Nasal	m	ɱ	n		ɲ	ŋ	
Lateral			l				
Glide					J	w	

To show that phonemes can be used in Senga to contrast the meanings of words, a minimal- pair test was used as shown below:

/l/ and /t/ *otimbana* [otimbana] ‘they are fighting’

Olimbana [olimbana] ‘they are quarelling’

/a/ and /e/ *imwa* [imwa] ‘drink’

Imwe [imwe] ‘you’

/i/ and /u/ *Lima* [lima] ‘cultivate’

Luma [luma] ‘bite’

/o/ and /u/ *Lota* [lota] ‘dream’

Luta [luta] ‘go’

/s/ and /k/ *Sula* [sula] ‘ignore’

Kula [kula] ‘grow’

/t/ and /f/ *Tuma* [tuma] ‘send’

Fuma [fuma] ‘get out’

/tʃ/ and /v/ *Ici* [itʃi] ‘this’

Ivi [ivi] ‘these’

/b/ and /β/ *kuba* [kuba] ‘to steal’

Kuwa [kuβa] ‘to be’

It has to be pointed out that Senga has four aspirated phonemes. These are /p^h/, /t^h/, /tʃ^h/, /k^h/ as shown in table (1), and as used in the following words: *phika* [p^hika] ‘cook’, *khala* [k^hala] ‘sit’, *nchane* [ntʃ^hane] ‘mine’ and *munthu* [munt^hu] ‘person’. However with a few exceptions, consonants may be prenasalised, and this is marked by /m/, /n/ or /ŋ/ depending on the point of articulation: /m/ on bilabials /n/ on alveolar and /ŋ/ on the velars.

The following are the consonant and glide sounds as found in Senga:

Plosives: /p, ph, b, t, d, th, k, g, kh/

Fricatives: /β, f, v, s, z, ʃ, ʒ, h/

Affricates: / tʃ , tʃh , dʒ/

Nasal: / m, n, ŋ/

Glide: /j, w/

Lateral /l/

These sounds can be illustrated in the following words:

Sound	description	orthography	words	gloss
/p/	voiceless, bilabial, plosive	p	<i>pala</i> [pala]	‘there’
/p ^h /	voiceless, aspirate, bilabial, plosive	ph	<i>phika</i> [p ^h ika]	‘cook’
/b/	voiced, bilabial, plosive	b	<i>bala</i> [bala]	‘bear’
/t/	voiceless, alveolar, plosive	t	<i>temwa</i> [temwa]	‘love’
/d/	voiced, alveolar, plosive	d	<i>dongo</i> [dongo]	‘soil’
/t ^h /	voiceless, aspirate, alveolar, plosive	th	<i>munthu</i> [munt ^h u]	‘person’
/k/	voiceless, velar, plosive	k	<i>kale</i> [kale]	‘old’
/g/	voiced, velar, plosive	g	<i>gula</i> [gula]	‘buy’
/k ^h /	voiceless, aspirate, velar, plosive	kh	<i>khala</i> [k ^h ala]	‘sit’
/β/	voiceless, bilabial, fricative	w	<i>zuwa</i> [zuβa]	‘sun’,
/f/	voiceless, labial- dental, fricative	f	<i>fungo</i> [funɡo]	‘smell’
/v/	voiced, labial dental, fricative	v	<i>vula</i> [vula]	‘rain’
/s/	voiceless, alveolar, fricative	s	<i>seka</i> [seka]	‘laugh’
/z/	voiced, alveolar, fricative	z	<i>muzi</i> [muzi]	‘village’
/ʃ/	voiceless, post alveolar ,fricative	sh	<i>shamo</i> [ʃamo]	‘misfortune’

/tʃ ^h / voiceless, aspirate, post-alveolar affricate	ch	<i>nchane</i> [nɪ ^h ane]	‘it is mine’
/h/ voiced, glottal, fricative	h	<i>uheni</i> [uheni]	‘bad’
/tʃ/ voiceless, post alveolar, affricate	c	<i>cola</i> [tʃola]	‘bag’
/dʒ/ voiced, post-alveolar, affricate	j	<i>jiso</i> [dʒiso]	‘eye’
/ɱ/ labial-alveolar, nasal	my	<i>zimya</i> [zimja]	‘extinguish’
/m/ bilabial, nasal	m	<i>meno</i> [meno]	‘teeth’
/n/ alveolar, nasal	n	<i>kana</i> [kana]	‘refuse’
/ɲ/ palatal, nasal	ny	<i>nyimbo</i> [nimbo]	‘song’
/ŋ/ velar, nasal	ng’	<i>ng’wina</i> [ŋwina]	‘crocodile’
/j/ voiced, palatal glide	y	<i>vyose</i> [vjose]	‘all’
/l/ voiced, alveolar, lateral	l	<i>tola</i> [tola]	‘get’
/w/ voiced, velar, glide	w	<i>mwana</i> [mwana]	‘child’
/ʒ/ voiced, post-alveolar, fricative	zh /zy	<i>nozhya</i> [noʒa] / <i>nozya</i> [nozja]	‘repair’

Senga, like many Bantu languages, displays a five -vowel system. In other words these vowels consist of one low, centralised vowel [a], with an equal number of back and front vowels as shown in table (2) below:

Table 2: Vowel Phonemes

	FRONT	CENTRAL	BACK
High	i		u
Mid	e		o
Low		a	

The vowels can be described as follows:

/i/- an unrounded, high, front vowel, for example in a word, *uli* [uli] ‘how’

/e/- an unrounded, mid, front vowel, as in a word, *mwezi* [mwezi] ‘moon’

/u/- a rounded, high, back, vowel, for example in a word *uteka* [uteka] ‘grass’,

/a/- low, centralised, vowel as in *ambuya* [ambuya] ‘grandmother’

/o/ a rounded, mid, back vowel, as in *tola* [tola] ‘get’

4.2.0 The allophonic variants of /b/, /p/, /k/, /t/, /tʃ/ and the phoneme /ʒ/

4.2.1 The phoneme /b/

Senga has two /b/ sounds; one is a fricative [β] and the other is a stop [b]. The fricative one is usually recognized as ‘w’ orthographically or when writing. In short, the phoneme /b/ has its allophones [b] and [β] and it may be rather difficult for non-speakers of the language to know when to use each as there are no hard and fast rules determining their placement in a word. These are distinctive as shown in the minimal-pair test in (10).

(10) [b] and [β] *kuba* [kuba] ‘to steal’

Kuwa [kuβa] ‘to be’

Wala [βala] ‘those’

Bala [bala] ‘give birth’.

4.2.2. The phonemes /p, k, t, tʃ/

Each of these phonemes has two allophones. In the case of /p/, there is the aspirated one, [p^h], as in *phiri* ‘hill’ and [p], as in the plural of the same word *mapiri* ‘hills’. These allophones may be said to be in **complementary distribution**, that is, they do not occur in the same linguistic environments simultaneously.

Similar phenomena occur in phonemes like /k/ and /t/ with the aspirated /k^h/ and /t^h/ which are contrastive and can also be said to be in complementary distribution. The minimal-pair test in

words like *kala* ‘that’ and *khala* [k^hala] ‘sit’, *tumba* [tumba] ‘manner of walking’ and *thumba* [t^humba] ‘bag’ shows the distinction. The same variants may be noticed in the sound /tʃ/ as in, *cema* [tʃema] ‘call’ and its aspirated /tʃ^h/ as in, *chema* [tʃ^hema] ‘clearing of throat’

With the exception of /tʃ/, the other phonemes are also in complementary distribution as exemplified in words like: *khutu* [k^hutu] ‘ear’ and its plural, *makutu* [makutu] ‘ears’, *thako* ‘buttock’ and its plural form *matako* ‘buttocks’ and *thumbo* [t^humbo] ‘intestine’ and the plural being *matumbo* [matumbo] ‘intestines’

4.2.3. The phoneme /ʒ/

Listening to many speakers of Senga, it is clear that mostly the sound [ʒ] appears to have two different pronunciations. Some may pronounce it as ‘zy’ as in the word *mazyo* [mazjo] ‘message’ while others pronounce it as *mazhyo* [mazjo]. This kind of a distinction can only be noticed when one pays attention to the way different speakers of Senga pronounce words.

4.3. Senga syllable structures

As in most Bantu languages, Senga syllables are predominantly open or unchecked. The common syllable structure is CV, although V and C syllables are also found. This is to say that there are instances where just the syllable nucleus occurs by itself, that is, a V or a syllabic consonant and this occurs mostly word initially. Some words are monosyllabic; others disyllabic while some are polysyllabic. For example, *ee!* [e:] ‘Expression of surprise’ is monosyllabic. *Ena* [e.na] ‘yes’, is disyllabic and *munkhwele* [mu.ŋkhwe.le] ‘monkey’ is polysyllabic. These can be illustrated in the tree diagrams below:

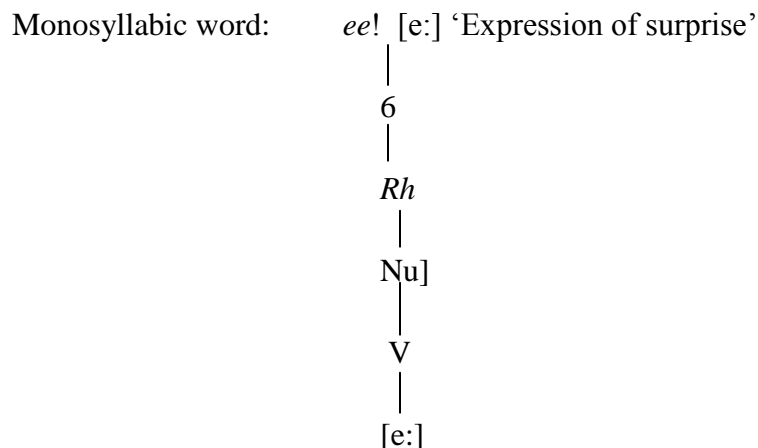


Figure 5: Monosyllabic structure

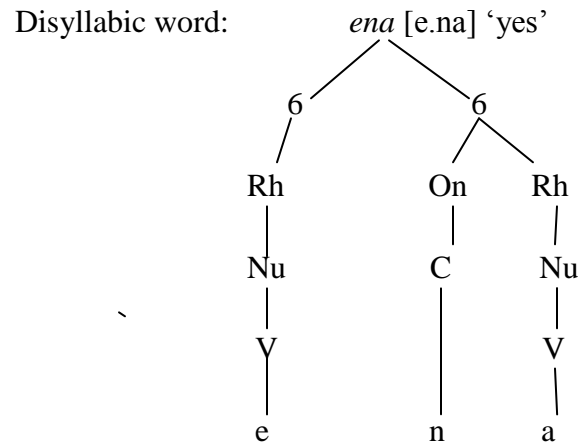


Figure 6: disyllabic structure

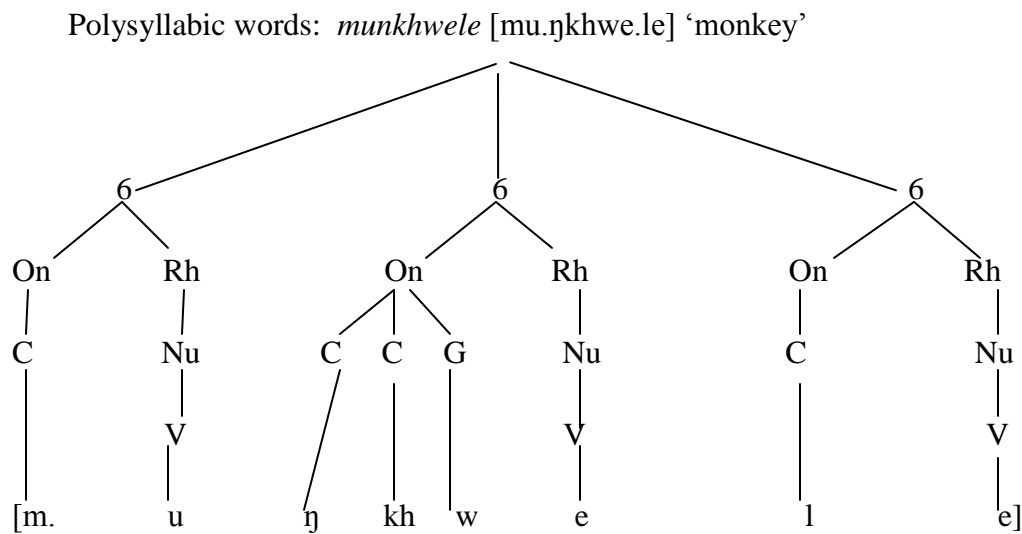


Figure 7: polysyllabic structure of Senga

What can be seen is that there is no coda in Senga as the syllables are open. On the whole, Senga allows a seven syllable pattern. These patterns are allowed: V, C, CV, CCV, GV, CGV, and CCGV. As for C syllables, they consist of a syllabic pre-consonantal nasal only and occur word initially as shown below for mpunga ‘rice’:

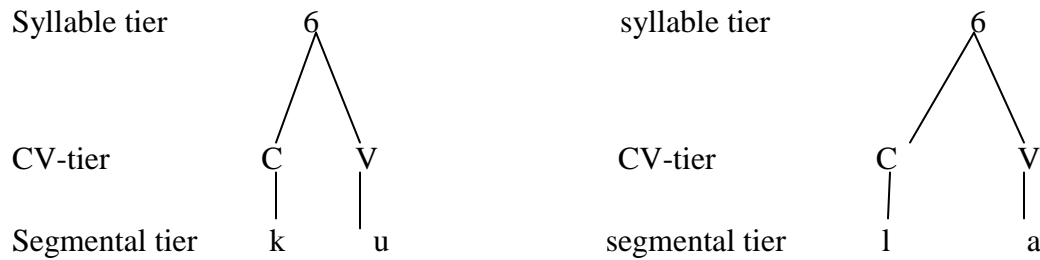
Table 3: Patterns of Senga syllables

	Syllable	Example of a Senga word	Gloss
1	V	<i>ambuya</i> [a.mbu.ya]	Grandmother
2	C	<i>mpunga</i> [m.pu.ŋga]	Rice
3	CV	<i>ena</i> [e.na]	Yes
4	CCV	<i>nkhuku</i> [ŋkhu.ku]	Chicken
5	GV	<i>uyo</i> [u.jo]	that one
6	CGV	<i>ungwelu</i> [u.ŋwe.lu]	Light
7	CCGV	<i>munkhwele</i> [mu.ŋkhwe.le]	Monkey

4.4. Generative CV –phonology

The following are examples of Senga words showing a CV-phonology model in exhibiting the recommendations by Clements and Keyser:

a) *Kula* [kula] ‘there’



b) *Ona* [ona] ‘see’



Figure 8: CV-phonology models

What can be seen is that in the first two syllables, the CV of the CV-tier are immediately dominated by the syllable-tier. The segmental tiers [ku], and [la] are dominated by the CV –tiers. To relate the CV- tier to the segmental tier, association lines are drawn following the rule that link V elements to [-cons] segments (vowels) and C elements to [+cons] segments as demanded in this theory (Katamba, 158). What we also notice is that any segments dominated by C element like the [k, l, n], in the diagrams above are non-syllabic, while those dominated by V [u, a, o and a] are syllabic. The V constituent of the CV- tier of the syllable contains the sonority peak. These include [o, a, e, and u] in our examples above.

Senga also falls into a category of languages that have only V syllables. Therefore, the canonical syllable type of Senga falls under type two, which is CV, V, as proposed by Clements and Keyser

4.5.0. Combination of phonemes

4.5.1. Combination of vowels

The study shows that vowel sounds in Senga can combine with all consonants, including semi-vowels or glides.

4.5.2. Combination of two consonants.

It is usually the nasals that combine with other consonants such as plosives, fricatives, and affricates within the same syllable. For example, ‘mbu’ in *ambu*ya [a.mbu.ja] ‘grandmother’ and ‘nɲ’ in *nɲhunga* [nɲhunga] ‘beans’. The nasal /m/ is **homorganic** with the plosive /b/ as they are both bilabials. Similarly, /n/ is homorganic with /ɲ/ as they are both post-alveolars.

4.5.3. Combination of consonants with glides

Like most Zambian languages, the consonant clusters with three phonemes have the nasal as their initial consonant followed by a stop and then semi-vowel or glide as in the word *munkhwele* [mu.ŋkhwe.le] ‘monkey’.

Like in Cewa as noticed by Mchombo (1986) any consonant can appear in the C position, in CCV structures, although the first C cannot be any one of the glides. The palatal glides are more

restricted than the labial glide. The following words are examples: *phwanya* ‘smash,’ *khwaŋa* ‘climb’ *thyola* ‘break,’

4.5.4. Constraints on the occurrence of consonant clusters

Some combinations of consonants are not possible in Senga like is the case with many Zambian languages. For instance the following consonants are im-permissible : / kn,gn,pn, ps,kt,pk,wl ,wt/ and many more.

4.6.0. Suprasegmental phonology

4.6.1. Tone

4.6.1.1. The functional load of tone

Senga falls into the category of register tone and the tone bearing unit (TBU) in a syllable is the vowel. Tone features which are commonly used can be indicated by writing the appropriate diacritic above the TBU. The diacritics for Senga are:

High: marked by (´), as in á

Mid: marked by (˘) or (˙) or nothing

Low: marked by (ˋ)

4.6.1.2. Lexical tone contrasts

From the many words analysed, the researcher came to a conclusion that there was no use of tone in Senga to signal contrasts in its lexicon.

4.6.1.3. Grammatical tone

Grammatical tone plays a significant role especially in marking a difference between a plain statement and re-affirming, signaling a relative clause and to some extent interrogative marker as in the examples in (11) below:

- 11 a) *Anakázì òkúmwà móbà* ‘women drink beer’ (statement)
 b) *Anakazì okumwà móbà* ‘women who drink beer’ (relative clause)
 c) *Anyamátà okólà sómbà* ‘the boys catch fish’ (statement)

- d) *Anyamata okolà sómbà* ‘the boys who catch fish’(relative clause)
- e) *atátà okwízà* ‘father is coming’ ‘statement’
- f) *atátà okwízá* ‘father is coming ?’ (Interrogative)

From the data above, it is not a foregone conclusion that Senga is a tonal language because, like already mentioned, there was no evidence of use of tone to distinguish lexical meanings, though tone was used to distinguish grammatical meanings. But if what Katamba (1996) alludes that in a tone language pitch differences are used phonemically either to differentiate between word meanings or to convey grammatical meanings, then we can safely say that Senga is a tonal language.

4.6.2. Quantity/vowel length

From the findings, length in Senga is distinctive, that is, it can be used to differentiate meanings of words. However, it has to be said that there are not many of such words. The following are the examples in (12):

- 12
- a) *Boola* [bo: la] ‘prick’
 - b) *Bola* [bola] ‘ball’
 - c) *Oónà* [o: na] ‘those seeing’
 - d) *Ónà* [ona] ‘see’
 - e) *Uúníkéngè* [u: nikenge] ‘you should be lighting’
 - f) *Unikéngè* [unikenge] ‘you should be drying’

4.7. Conclusion

This chapter presented some findings on aspects of Senga phonology. There was a look at segmental phonology which included the phonemic analysis of the language, minimal-pair analysis, and phonotactics, including syllable structure. There was also a look at Generative CV phonology. The chapter also discussed suprasegments like tone and quantity to find out whether they are applicable in Senga.

CHAPTER FIVE

MORPHOLOGICAL ASPECTS OF SENG

Overview

In this chapter, there is a linguistic analysis of the structures of words in Senga and the areas, among other areas to look at, include the nominal structures, pronominals, noun modifiers which include enumeratives and adjectives. Verbal morphology (including subject, object, negation, tense and mood markers) and the structures of compound words and many other morphological make-ups of words are also exposed in this chapter.

5.1. The linguistic structure of Senga words

The structure of words in Senga, like most Bantu languages as observed by Kioko (2005), is mainly agglutinative in nature or in other words, the structure mainly contains morphemes which are attached together. In the noun system, including most of the elements of the noun phrase, there is generally an agreement affix and a root. In this section we look at the features of words like the noun, the verb and other word classes.

5.2.0 Nominal structure

The structure of Senga noun, like Chanda (2015) observes of other Bantu languages, can comprise the following: Stem only or with zero prefix (\emptyset -prefix) as in the word *cule* ‘frog’, or a prefix and stem as in the word *ci-kuni* ‘tree’. The full class of nominal class as discovered are presented in table (4).

Table 4: Nominal class system and prefixes

Class	prefixes	Examples
1	Mu- { mu-,mw-,m }	<i>Munthu</i> ‘person’, <i>mnyamata</i> ‘young man’ <i>m’nkhwela</i> ‘monkey
1a	\emptyset	<i>cule</i> ‘frog’ , <i>ciuta</i> ‘God’
2	$\hat{w}a-$, a-	<i>wanthu</i> ‘people’, <i>anyamata</i> ‘young men’, <i>am’nkhwela</i> ‘monkeys’ , <i>aciuta</i> ‘God’, <i>acule</i> ‘frogs’
3	Mu- { mu-,mw-,m- }	<i>Munda</i> ‘field’, <i>mutu</i> ‘head’

4	Mi-	<i>Minda</i> ‘fields’, <i>mitu</i> ‘heads’
5	Ji-, Li-	<i>Jiso</i> ‘eye’, <i>lisumbi</i> ‘egg’
6	Ma-	<i>Maso</i> ‘eyes’, <i>masumbi</i> ‘eggs’
7	Ci-	<i>Cilonda</i> ‘wound’ , <i>cikuni</i> ‘tree’
8	Vi-	<i>Vilonda</i> ‘ wounds’, <i>vikuni</i> ‘trees’
9	N {n- ,m-‘ng’- }	<i>Nkhuku</i> ‘chicken’, <i>mbuzi</i> ‘goat’ , <i>ng’wina</i> ‘crocodile’
10	N	<i>Nkhuku</i> ‘chicken’, <i>mbuzi</i> ‘goat’, <i>ng’wina</i> ‘crocodile’
11	Lu	<i>Luswazu</i> ‘ rod’
12	Ka-	<i>Kanthu</i> ‘ a small thing’ , <i>kovwala</i> ‘a cloth’, <i>kamwana</i> ‘ a child’
13	Tu-	<i>Tunthu</i> ‘small things’, <i>tovwala</i> ‘small cloths’, <i>tuwana</i> ‘small children’.
14	U-	<i>Ukulu</i> ‘bigness’ <i>uheni</i> ‘badness’, <i>ufipa</i> ‘darkness’
15	Ku-	<i>Kulya</i> ‘ to eat’, <i>kukola</i> ‘to hold’, <i>kujitemwa</i> ‘ to love yourself’
16	Pa-	<i>Padambo</i> ‘at the river’, <i>pacanya</i> ‘at the top’
17	Ku-	<i>Kutali</i> ‘far away’, <i>kumasinda</i> ‘at the back’, <i>kumutu</i> ‘on the head’
18	Mu-	<i>Mumaji</i> ‘ in the water’ , <i>munyumba</i> ‘ in the house’

Ø means zero prefix (null prefix)

5.2.1. Nominal class 1, /mu-/.

This group mainly comprises human beings, although some names refer to non-humans and most are in sub -category of the class that is 1a. A main class and its sub-class always have the same concord prefix as shown in (13) below:

13. a) Cl 1, *munthu muheni* ‘bad person’
b) Cl 1a, Ø-cimbwi *muheni* ‘bad hyena’

5.2.2. Nominal class 2, /w̥a-/, /a-/

These are plural forms of class 1 and 1a nouns, and are also used to show respect in Senga as in (14):

- 14 a) *ŵanthu* ‘people’ (plural)
 b) *Ŵanthu* ‘eldery person’ (honourific)
 c) *Acimbwi* ‘hyenas’
 d) *Acule* ‘frogs’

5.2.3. Nominal class 3, /mu-/

The prefix is identical to class 1, though they are different in a number of ways as is the case with other Bantu languages. Some criteria used to distinguish the two include the singular/plural dichotomy and agreement criteria as table (5) shows:

Table 5: Examples of sg/pl dichotomy and agreement criteria

singular plural dichotomy	agreement criteria
<i>M'cekulu</i> ‘old man’ / <i>acekulu</i> ‘old men’ Cl 1 cl2	<i>Munthu wali kumuzi</i> ‘ a person is in the village’
<i>mutu</i> ‘ head’/ <i>mitu</i> ‘heads’ cl3 cl4	<i>muzi uli kutali</i> ‘ the village is far”

5.2.4. Nominal class 4, /mi-/

This is a plural for class 3 as shown in (15) below.

- | | | |
|------|------------------------------|-------------------------------|
| (15) | singular | plural |
| a) | <i>Musi</i> ‘pestle’ | <i>Misi</i> ‘pestles’ |
| b) | <i>Muzi</i> ‘village’ | <i>Mizi</i> ‘villages’ |
| c) | <i>Munda</i> ‘field’ | <i>Minda</i> ‘fields’ |

5.2.5. Nominal class 5, /ji-/ ,/li-/

Classes 5, 9 and 10 like in many languages are problematic because of the existence of many variations, as Miti (2002) observes for Nsenga too. These pertain to parts of the body, plants or fruits, natural phenomena and other miscellaneous semantic fields as in (16) below:

- 16 a) *Jiso* ‘eye’
 b) *Lisumbi* ‘egg’
 c) *Ø-sisi* ‘hair’
 d) *Ø-siku* ‘day’

5.2.6. Nominal class 6, /ma-/

This is the plural for class 5 as in (17)

- 17 a) *Meso* ‘eyes’
 b) *Masumbi* ‘eggs’
 c) *Masiku* ‘days’
 d) *Meno* ‘teeth’

5.2.7. Nominal class 7, /ci-/

This class contains miscellaneous items as shown in and of (18 a, b). This class is also used augmentatively or perjoratively as in (18 c, d and e)

- 18 a) *Cikuni* ‘tree’
 b) *Cilonda* ‘wound’
 c) *Cimwana* ‘big or bad child’
 d) *Cindele* ‘a fool’
 e) *Cinyumba* ‘a big or bad house’

5.2.8. Nominal class 8, /vi-/

This is the plural for class 7 as in (19)

- 19 a) *vikuni* ‘trees’
 b) *Vilonda* ‘wounds’
 c) *Vindele* ‘fools’

In most cases the prefix in class 7 gives way to the plural form /vi-/ which also shows augmentation and perjoration.

5.2.9. Class 9 and 10, /N-/

These two are identical in form. Like in many Bantu languages, they contain words that have miscellaneous semantic fields and basically these classes are of animals, birds, and insects. Parts of human body, plants and loan words are also found here. Usually, class 9 is for singular nouns and 10 plural.

- 20 a) *Nkhokwe* ‘granary/granaries’
 b) *Nthoci* ‘banana/bananas’
 c) *Nyumba* ‘house/houses’
 d) *Ng’ombe* ‘cow/cows’

6.2.10. Noun class 11, /lu-/

- 21 a) An example of this is *Luswazu* ‘rod’.

5.2.11. Nominal class 12, /ka-/

These contain items that are small (diminutives) or adorable. Some, though, carry prefixes denoting smallness but do not show items which are small as exemplified in (22).

- 22 a) *Katemo* ‘axe’ no indication that it is small or big.
 b) *Kashapato* ‘small shoe or adorable shoe’

- c) *Kankhuku* ‘small chicken’
- d) *Kanyimbwa* ‘small dog’

5.2.12. Nominal class 13, /tu-/

This is the plural for class 12 as shown in (23) below:

- 23
- a) *Tutemo* ‘axes’
 - b) *Tunthu* ‘things’
 - c) *Tovwala* ‘clothes’
 - d) *Tuwana* ‘children’

5.2.13. Noun class 15 /ku-/

Generally, these are infinitives in nature. Words for some parts of the body are also a feature here as exemplified in (24):

- 24
- a) *Kulya* ‘to eat’
 - b) *Kujitemwa* ‘to love yourself’
 - c) *Kukola* ‘to hold’
 - d) *Kuvina* ‘to dance’
 - e) *kulundi* ‘to leg’

Plural forms for some parts of the body are found in class 6.

5.2.14. Nominal class 16, /pa-/

A locative to mean, ‘on’, or ‘at’ as in the following examples in (25):

- 25
- a) *Padambo* ‘at the river’
 - b) *Pacanya* ‘at the top’

- c) *Paŵanthu* ‘on people’
- d) *Paciŵili* ‘on Tuesday’

5.2.15. Noun class 17, / ku-/

As a locative the class may loosely mean ‘at’, ‘to’ or ‘from’.

- 26
- a) *Kumasinda* ‘at the back’
 - b) *Kumoŵa* ‘from beer (drinking)’
 - c) *Kucigayo* ‘from the milling plant’
 - d) *Kucanya* ‘to the sky’

5.2.16. Noun class 18, /mu/

This simply means ‘in’ as shown in (27) below.

- 27
- a) *Mumaji* ‘in the water’
 - b) *Munyumba* ‘in the house’
 - c) *Mucipatala* ‘in the hospital’
 - d) *Mukamwa* ‘in the mouth’

One important feature of the semantics of these classes in Bantu is the pairing of these classes to express singulars and plurals. This is with exception of locative classes (16, 17, and 18).The following obtains as observed in Senga:

Table 6: Pairs of classes

Pairs of classes	Examples of prefix
Singular/plural	singular /plural
1/ 2	mu/ŵa, mu/a
1a/ 2	Ø/ŵa, Ø/a
3/4	mu/mi

5/6	ji/li/, ma
7/8	ci/vi
9/10	n/n
11/6	Lu/ma
12/13	Ka/tu
14/14	u/u
14/6	u/ma
15/6	Ku/ma

5.3.0 Pronominal forms

5.3.1. Personal absolute pronouns

There are four personal absolute pronouns in Senga and these have a pattern as shown in (28):

28	a) 1 sg	<i>ine</i>	‘me’	b) 1 pl	<i>ise</i>	‘us’
		i-	n-	e		i- s - e
		pre. pref	pp-	stem		pre. pref pp stem
	c) 2sg	<i>iwe</i>	‘you’	d) 2pl	<i>imwe</i>	‘you’
		i-	w-	e		i- mw- e
		pre. pref	pp	stem		pre. pref pp stem

The absolute pronoun in Senga consists of a pre.prefix, pronominal prefix (pp) and a stem /-e/

5.3.2 Demonstrative determiners and pronouns (demonstratives)

According to Crystal (2008) deixis is a term used in linguistic theory to subsume those features of language which denote directly to the personal, temporal or locational characteristics of the situation within which an utterance takes place, whose meaning is thus relative to that situation. Table (7) shows deictic pronouns in Senga.

Table 7: Showing deictic pronouns and demonstratives

Deictic pronouns and demonstrations	Near		Far	
	me	you	me	you
<i>Ivi(vino)</i> ‘these’	+	–	–	+
<i>Ivo (ivyo)</i> ‘those’	–	±	+	±
<i>Vila</i> ‘those’	–	–	+	+

What this means is that, *ivi* ‘these’, is a common proximal demonstrative to mean that things are near speaker but far from the addressee. *Ivo* ‘those’ is none proximal, that is, referents are situated either close to the addressee or distal. *Vila* ‘those’ shows distal demonstrative to refer to things that are remote to both the speaker and addressee. Where there is positive and negative in table (9), it means the things can either be far or near. These pronouns can be morphologically presented as follows:

29 a. *ivi* ‘these’

i- vi- i

pre. pref cl 8 stem

i- vi after / i/ is truncated it comes to *ivi* ‘these’.

b. *Vila* ‘those’

vi- la

cl 8 stem

What we can see is that (29 a) consists of a pre-prefix, pronominal prefix and a stem while (29 b) consists of a pronominal prefix and stem only. The pronominal prefixes for deictic pronouns are the same as the nominal class subject markers.

5.3.3. Connective/associative pronouns

These are used to render the expression ‘of’ as shown below:

30 a) *Nkhuku za ambuya* ‘chickens of grandmother’

b) *Cinthu ca asambizyi* ‘the thing of a teacher’

The connective pronouns ‘za’ and ‘ca’ can be morphologically analysed as consisting of pronoun prefix (pp) and a genitive marker serving as a stem as in (31).

31	a)	za	b)	ca
		zi- a		ci- a
		pp stem		pp stem
		cl 10		cl 7

After /i/ is deleted in the pp, we remain with ‘za’ and ‘ca’ respectively. These mean ‘of’

5.3.4. Possessive pronouns

From the findings, possessives in Senga are likely to occur immediately after the head nouns. The morphological composition of these pronouns is pronominal prefix and a genitive marker; a genitive marker being what has been said to be a stem under connective pronoun. Here, nevertheless, it no longer serves as a stem because it comes before a possessive stem as in *wane* ‘mine’ and *cane* ‘mine’. The agreement prefix *u-* undergoes gliding to *-w-* before vowels [a, i] as shown in example (32 a). Some possessive pronouns are summarized in table (8) below..

Table 8: Summary of some possessive pronouns

Type	Stem	Example	Gloss
1st person (sg)	-ne	<i>muzi wane</i>	my village
1 st person (pl)	-thu	<i>muzi withu</i>	Our village
2nd person (sg)	-ko	<i>Muzi wako</i>	Your village
2 nd person (pl)	-nu	<i>Muzi winu</i>	Your village
3rd person (sg)	-ke	<i>Muzi wake</i>	his/her/its village
3rd person (pl)	-o	<i>Muzi wao</i>	their village

32(a) *muzi wane* ‘my village’ (lit: village my) (b). *Cingoma cane* ‘maize my’ (lit: maize mine)

u- a- ne c i- a - ne

pp gen stem

cl 1

u-a-ne gide formation

wane ‘my/mine’

pp gen stem

cl 7

ci- a- ne deletion

cane ‘my/mine’

Possessive stems vary depending on person, number and nominal class as shown in the examples in table (8).

5.3.5. Quantitative pronouns

Quantitative pronouns in Senga are with the stem *-ose* to mean ‘all or whole’ and *-ekha* to mean alone. The pronoun prefix like most words varies according to person, number and noun class as in *vyose* ‘all’ and *cekha* ‘alone’ as exemplified in (33).

(33)

a. *Vinthu vyose viza* ‘all things have come’ b. *Cinthu cekha cawa* ‘the thing has fallen alone’

vi-nthu vi-ose vi-iz-a

ci-nthu ci- ekha ci- a - wa

cl 8-things cl8- all cl8 –come-FV

cl 7- thing cl7 - alone cl 7 gen - fall

5.3.6. Interrogative pronoun

From the analysis of Senga, some of the interrogative pronouns are noticed. These have stems *-ti* ‘which, who’, *-ci* ‘what’, *-ni* ‘who, where’, and *-li* ‘how’ as exemplified in (34).

34 a. *njuni wangwiza?* ‘Who came?’

b. *nivici mufwaya?* ‘What do you want?’

ni- u- ni

ni- vi- ci

cop cl 1 stem

cop cl 7 stem

pp

pp

It is who?

It is what?

c. <i>titole nchiti?</i> ‘Which one should we get?’	d. <i>wanguchaya uli</i> ‘how did they play?’
Ti-tol-e	ni- ci - ti
	cop cl7 stem
	pp
2s –get-FV	it is which?
	u-li
	cl 1 -stem
	pp
	how?

5.3.7. Relative pronouns

Morphological marking of relative clauses exists in Senga whereby typically the Senga speakers make use of segmental relative markers. Morphologically, the relative marker takes the shape of the series of demonstratives like, *ivo* ‘which’ , *aŵo* ‘who’ as in (35) below:

- 35 (a) *vinthu ivo wakamwa* ‘the things which he drank’

Vi-nthu i- vi- o wa-ka-mw-a

cl 8-things pr.prefix cl 8-stem cl1- TM-drink –FV

- (b) *Ŵanthu aŵo ŵagona* ‘the people who have slept’

Ŵa-nthu a-ŵa-o ŵa-gon-a

cl 2-people pre.prefix- cl2-stem cl2-sleep-FV

What can be seen in (35) is that the relative marker has two prefixes attached to a stem.

5.3.8. Reflexive pronouns

The following examples in (36) give the structure of reflexive pronouns.

- 36 (a) *wakujitemwa* ‘he loves himself’

Wa-ku-**ji**-temw-a

cl 1-TM –REFL-love-FV

- (b) *Ŵakajitimba* ‘they beat themselves’

ŵa-ka-**ji**-timb-a

What can be seen is that in Senga, reflexive pronouns are incorporated in a word. The morpheme -ji- in (36) above refers to the nominal class within the same word. In other words it is a reflexive marker.

5.4. Adjectives

The proper sense of the usage of adjectives in Senga should be semantic adjectives as stated by Dryer (2007), who points out that semantic adjectives denote a set of words on the basis of their meanings regardless of their grammatical properties in a particular language. Such words denote properties like size, and colour and meanings that correspond to, for instance, red, good, long, fast. Just like Dryer (2005) states of some Bantu languages that some semantic adjectives exhibit nominal properties and occur with a noun class prefix, the same happens for Senga as in (37). There are few adjectives in Senga like in many Bantu languages. Miti (2001) quoting Welmers (1973), says adjectives in Bantu languages are expressed in many ways, and very few of them may be said to be true adjectives as in the sense adjectives are viewed in languages like English. A very small number of adjectives is observed and these are the examples: -*tali* ‘tall’, -*fupi* ‘short’, -*kulu* ‘big’, -*doko* ‘small’, -*wemi* ‘good’, -*heni* ‘bad’, -*fipa* ‘black’, -*tuwa* ‘white’, -*swesi* ‘red’. The following examples show the usage of adjectives.

37

- a) *Citanje **ciheni*** ‘bad pumpkin’ (Lit: pumpkin bad) b) *cilundi **cifupi*** ‘short leg’ (Lit: leg short)

Ci-tanje ci- heni

ci-lundi ci- fupi

cl7- pumpkin cl7 - bad

cl 7 – leg cl7- short

What can be seen is that adjectives are morphologically similar to nouns. The gender numbers attached to adjectives are identical to those attached to nouns as in (36) below.

- 38 a) ***munthu wankhongono*** ‘powerful man’ (b) ***mwana waulesi*** ‘a lazy child’

mu - nthu wa- n-khongono

mu-ana wa-u-lesi

cl 1- person cl 1 –cl 9- power (noun)

cl1 –child cl1 –cl 14-lazy(noun)

5.5.0 The enumerative in Senga

5.5.1. Cardinal enumerative

These, like in most Bantu languages, consist of an enumerative prefix and an enumerative stem. The enumerative prefix follows the noun prefix. In Senga there are six stems for cardinal enumerative as shown below:

-mo (za) ‘one’

-wili ‘two’

-tatu ‘three’

-nai ‘four’

-sanu ‘five’

-khumi ‘ten’

These six stems may be used to count up to as many numbers as possible for example in (39b):

- 39 a) *wanthu wawili* ‘two people’ b) *vinthu visanu na viwili* ‘seven things’

wa- nthu *wa -wili*

vi- nthu *vi- sanu* *na vi -wili*

cl2 people cl 2 two

cl8 - things cl 8 -five and cl8 - two

Senga does not have names for certain numbers like one hundred, one thousand and so on.

5.5.2. Ordinal enumeratives

There are seven ordinal enumeratives in Senga. These have the stems shown below:

-yamba ‘first’

-wili ‘second’

-tatu ‘third’

-nai ‘fourth’

-malilo ‘last’

40	a)	<i>Coyamba</i>	‘first’	b)	<i>cinthu cacinai</i>	‘fourth thing’
		ci-	a	-ku-	yamb-a	
		ci-	a	-	ci-	nai
		cl7 -	gen-	GNP -	first	-FV
		cl 7-	thing	cl7 -gen	cl7	four
		<i>Coyamba</i>		<i>cinthu cacina</i> i		

65

- b) *Kathwilo* (N) ‘instrument for pounding’ from *kuthwa* (V) ‘pound’
- c) *Kandelo* (N) ‘manner of walking’ from *kuyenda* (V) ‘walk’

5.6.2.0. Denominative

Derivation of nouns from other nouns through:

5.6.2.1 Augmentation/perjoration depending on context

- 43 a) *Mwana* (cl 1) ‘child’ to *kamwana* (cl12) ‘small or adorable child’
- b) *Cimunda* (cl7) ‘big field) to *vimunda* (cl 8) ‘big fields)

5.6.2.2 Abstraction as in the word

- 44 a) *Mwanakazi* ‘woman’ to *uwanakazi* (cl 14) ‘womanly’
- b) *Cindele* ‘fool’ to *ucindele* (cl 14) ‘foolery’

5.6.3. De-adjectival

One way of deriving nouns from adjectives involves prefixation of class 14 nominal prefix to the adjectival root as in (45)

- 45 a) *-wemi* ‘good’ to *uwemi* ‘goodness’,
- b) *-fipa* ‘dark’ to *ufipa* ‘darkness’
- c) *-tali* ‘tall’ to *utali* ‘tallness’

5.6.4. Onomatopoeic nouns

These come from the sounds made by particular things. These nouns are few in Senga .For example in (46):

- 46 a) *zimu* ‘bees’
- b) *Membe* ‘flies’
- c) *Ngoma* ‘drum’

5.6.5.0. Compounding

Words formed by combining stems are common in Senga. These stems mainly are written conjoined and are understood as one word. These compounds can vary. There are those that combine different stems, and those that reduplicate stems. All are written without breaking a word.

5.6.5.1. Compounds that combine different stems

The examples in (47) show one word comprising two words, but, as already stated, they are supposed to be treated as one word.

- 47 a) *Cimanyavyose* ‘someone who knows everything’ (lit: know everything’

ci-many-a-vi-ose

Cl7-know-FV- cl 8-all

- b) *Mkhalabweka* ‘someone who can settle anywhere’

mu-khal-a-bweka

cl1-settle-FV-anyhow

As can be seen, there are two stems in each of the words. In (47a), the stems are ‘-many-’ and ‘ose’ while in (47b), they are ‘khal’ and ‘-bweka’. The words are to be understood as one word and not two.

There is also what are known as exocentric compounds or bahuvrihi, where they are a hyponym of some an unexpressed semantic head as exemplified in (48).The composition is used as metaphorical.

- 48 *Kamutukunchi* ‘kinds of groundnuts’ (Lit: head tilt)

Ka-mutu-kunchi

Cl 12-head-tilt

When eating these groundnuts, the head usually is frequently tilted so as to properly swallow. It has no literal meaning but is metaphorical.

49 *Asimwana* ‘father of child’

a-wisi-mu-ana

cl2-father- cl 1-child

There are two stems in (49) above, that is *-si-* ‘father’ and *-ana* ‘child’. *-si-* ‘father’ is incorporated in the word.

5.6.5.2. **Compounds that reduplicate stems.**

These are formed by reduplicating the stem, and are written as one word and are understood as such as shown in the examples below:

5.6.5.2.1. **Compound verbs**

These usually reduplicate a verb stem. *Kwenda* ‘walk’ is reduplicated. The meaning usually differs from the one with a single stem when duplicated as shown in the examples in (50) below:

50 (a) *Kwenda* ‘walk’ ***kwendayenda*** ‘walking a lot’ (lit: to walk walk)

Ku-end-a -end-a

INFM –walk-FV- walk-FV

(b) *Kola* ‘touch’ ***cikolekole*** ‘to touch anyhow’

ci- kol-e -kol-e

cl 7- touch-FV- touch-FV

5.6.5.2.2. **Compound adverbs**

In Senga these are formed by reduplicating stems of adverbs. These forms will be written as single words as in (51)

51 a) *padoko* ‘slowly’ *padokopadoko* ‘very slowly’ (lit ‘slow slow’)

Kulya padokopadoko ‘eating slowly’

Pa- doko- pa-doko

PROCL –small- PROCL-small

b) *Kawili* ‘twice’ ***kawili-kawili*** ‘frequently’ (Lit: twice- twice)

Wakazanga kawili-kawili ‘they were coming frequently’

Ka-wili-ka-wili

PROCL-two-PROCL- two

From the examples above, it can be seen that there is a repetition of stems in reduplication of verbs and adverbs. The meaning in these instances changes as can be seen.

5.7. The Verb Structure

The verb structure in Senga like many Bantu languages consists of a verb root (VR) or radical (RAD) to which affixes (prefixes and suffixes) are attached. These may include subject markers(SM), post subject markers (POSTSM), tense markers(TM), extensions (EXT) and the final vowel (FV) as in the examples below:

Table 9: Verb structure showing tense among others

Ni	li	ku	Mu	Kol	El	el	a
SM	TM	IMFM	OM	RAD	EXT	EXT	FV

Nilikumukolelela ‘I held on to him’.

Table 10: Verb structure showing negation among others

ni	nda	mu	on	esh	esh	e
SM	POSTSM	OM	RAD	EXT	EXT	FV

Ni- nda-mu-on- esh- esh-e ‘I have not seen him clearly’

Table 11: Verb structure with two subject markers

Mu	za	mu	Ku	iz	A
SM	TM	SM	IMFM	RAD	FV

Muzamukwiza ‘you will come’

Table 12: Verb structure showing a POST FV and enclitic

lut	a	ni	So
RAD	FV	POST FV	ENCL

Lutaniso ‘go again’

What one can see from the tables (9, 10, 11) above is that affixation in Senga, like in many Bantu languages, is quite complex. The prefixes come before the root and the suffixes occur after the root. In some verbs, there are no prefixes as in, *lutani* ‘go’. What can also be noticed is that some words may have two subject markers as shown in table (11). After the extensions, there is the final vowel which may take different forms. It can be ‘a’ or ‘e’. This vowel can change the meaning of a word and can come after some extensions or just after a radical as shown in the tables above. One can also notice that the post-subject in Senga may show negation (table 10). The post-ending may indicate plurality like in the example given in table (12).

5.7.1 The subject marker(SM)

These (prefixes) are attached to the verb root and usually come before the verb root either immediately or before other prefixes. These mark who or what is performing the action as shown in (52).

52 *Mwana wakutola maji* ‘the child is getting water’

mu-ana **wa**-ku-tol-a ma-ji

cl1-child SM-GP-get-FV cl 6-water

Sometimes in a word there can be two subject markers as in (53).

53) *Muzamutola* ‘you will come and get’

mu-za-mu-tol-a

SMcl1 –TM-SM-get-FV

5.7.2 The post-subject marker (POSTSM)

These can show negation in Senga. They come after the SM, but also can precede the verb root (VR) or OM as in (54) below where the –nda- shows negation.

54 a) *Anyamata wandatole* ‘the boys have not married’

a-nyamata wa-**nda**-tol-e

cl2 –boys cl2 –NEG-marry-FV

(b) *Anyamata w^handamutole* ‘the boys have not got him

A-nyamata w^ha-**nda**- mu-tol-e

Cl 2- youths cl2 –NEG-OM-get-FV

5.7.3. The object marker (OM)

Object Markers (OM) are appended to the verb to show that it is being performed on that object.

55 *Mukam^hutole* ‘you go and get him’

Mu- ka- **mu**- tol- e

SM-TM –OM-get- FV

5.7.4 Ending or final vowel (FV)

In Senga, the ending or final vowel (FV) is *-a*, and *-e*.

This mostly is attached immediately after the radical, though not always. The FV can change the grammatical meaning of a word as in (56) below.

56) (a) *Waluta* ‘he has gone’

Wa-lut-**a**

cl1-go-FV

(b) *walute* ‘he should go’

wa-lut-**e**

cl1 -go-FV

There is another phenomenon in Senga where the FV comes after another element as in (57) where the *-nga-* precedes the FV. The *-nga-* can either show progression or modality. In fact, the FV looks like a discontinuous element because it comes before and after the *-ng-* as noticed

57 a) *Walut-ang-a* ‘he was going’

Wa-lut-ang-**a**

cl1-go-PROG-FV

b) *walutenge* ‘he will go’

wa-lut-eng-**e**

cl1- go-MOD-FV

5.7.5 The post ending (POSTEND)

Senga too has a post- ending. In the imperative words *senyani* ‘lift’ and *khalani* ‘sit’, we can see that the *-ni* comes after the FV as shown in (58).

58 a) *Seny-a-ni* ‘lift’

Get-FV-POSTEND

b) *Khal-a-ni* ‘sit’

Sit-FV-POSTEND

5.7.6. Verb derivational extensions

Extensions in Senga, like in most Bantu languages as observed by Bantuists, come after the radical.

5.7.6.1 The passive extensions

Have the morphemes /-ik-/ and /-iw-/ as in examples in (59)

59 (a) *Kutimbika* ‘to be beaten’.

(b) *Kukakiwa* ‘to be arrested’

Ku- timb- ik- a

ku- kak- iw- a

INFM –beat-PASS- FV

INFM- arrest-PASS- FV

5.7.6.2 The causative extension

This has /-ish/ as its morpheme and has [-esh] and [-ish] as allomorphs.

60 a) *Kunozyesha* ‘to cause to be repaired’

(b) *Kuvinisha* ‘to cause to dance’

Ku-nozy-ish-a

Ku- vin- ish- a

INFM – repair-CAUS-FV

INFM-dance-CAUS-FV

5.7.6.3 The applicative extension

The morpheme is /-il-/ but can have the allomorphs of /-el-/ as shown in (61) below.

- | | | | | |
|----|----|------------------------------|-----|---------------------------|
| 61 | a) | <i>Ku-tol-el-a</i> | (b) | <i>ku-kak-il-a</i> |
| | | INFM-get- APPL- FV | | INFM - tie-APPL- FV |
| | | <i>Kutolela</i> ‘to get for’ | | <i>kukakila</i> ‘tie for’ |

5.7.6.4 Persistive extension

This has these morphemes /-ilil-/ with its allomorph of [-e-lel-]. It also has /-eshesh-/

- | | | | | |
|----|----|---|-----|-------------------------------------|
| 62 | a) | <i>Ku-on-eshesh-a</i> | (b) | <i>ku-tol-elel-a</i> |
| | | INFM-see- PERS-FV | | INFM- get-PERS-FV |
| | | <i>Kuoneshesha</i> ‘to continue seeing’ | | <i>kutolelela</i> ‘to get for good’ |

5.7.6.5. The stative (potential, subjective, neuter or capable) extensions

The morpheme is /-ik-/

- | | |
|--|--|
| 63 (a) <i>Ku-nang-ik-a</i> | (b) <i>ku-suzy-ik-a</i> |
| INFM- spoil-STAT- FV | INFM-problem-STAT-FV |
| <i>Kunangika</i> ‘to be capable of being spoilt’ | <i>kusuzyika</i> ‘to be capable of being poor’ |

5.7.6.6. The intensive extension

This may be similar to a causative but has a different meaning as shown below.

- | | | | | |
|----|-----|--------------------------------------|-----|----------------------------------|
| 64 | (a) | <i>Ku-temw-esh-a</i> | (b) | <i>ku-mw-ish-a</i> |
| | | INFM-love- INT-FV | | INFM –drink- INT- FV |
| | | <i>Kutemwesh-a</i> ‘to love so much’ | | <i>kumwisha</i> ‘to drink a lot’ |

5.7.6.7. The reciprocal

Its morpheme is /-an/ as in the following words

65 (a) *Ku-timb-an-a*

INFM-beat-REC-FV

Kutimbana 'beating each other'

(b)

ku-low-an-a

INFM-bewitch-REC-FV

kulowana 'bewitching each other'

5.7.6.8. The reversive

The morpheme for this is /-ulul-/

66 *Kuvumbulula* 'to uncover'

Ku-vumb-ulul-a

INFM-cover-REV-FV

5.8.0 Mood

Mood markers, which describe the speaker's attitude toward the situation discussed, are also common. Senga makes a distinction between imperative, infinitive, the subjunctive, and indicative moods.

5.8.1.0 The imperative

The imperative form of a verb, like many Bantu languages is the simplest verbal form in Senga. Positive imperative addressed to one person consists of a verb radical, a particular tone and the FV as below.

67 (a) *Lút-a* 'go'

Go-FV

(b) *Khál-a* 'sit'

Sit -FV

- (c) *Ímb-a* ‘sing’

Sing -FV

5.8.1.1. Some negative imperative addressed to one person

The negative imperative uses a special element *osa* which is prefixed to the verb stem as shown in (68) below:

- 68 (a) *Osaluta* ‘do not go’

Osa-lut-a

NEG-go-FV

- (b) *Osakhala* ‘don’t sit’

Osa-khal-a

NEG-sit –FV

- (c) *Osaimba*

Osa-imb-a ‘don’t sing’

NEG-sing-FV

5.8.1.2. Positive imperative addressed to many

This consists of the verb radical, the final vowel and the imperative plural suffixes illustrated in (69) below:

- 69 (a) *Lutani* ‘go’ (many people)

Lut-a-ni

Go-FV –IMP PL

- (b) *Gonani* ‘sleep’ (many people)

Gon-a-ni

The negative imperative plural operates like the one addressed to singular shown above. There is no difference. The context will determine who is being addressed.

5.8.2. The infinitive

This is marked by the invariable prefix /ku-/ which loosely translates into ‘to’ as shown in (70) below:

70 (a) *Kutunda* ‘to urinate’

Ku-tund-a

IMF-urinate-FV

(b) *Kuseka* ‘to laugh’

Ku-sek-a

INF-laugh-FV

5.8.3. The subjunctive

Instead of the imperative, sometimes the subjunctive form is used. This makes the order less peremptory. These express an order, a wish, or an invitation to do something. The distinctive feature for the subjunctive is the FV /-e/ as opposed to /-a/ of the imperative mood as shown in (71).

71 (a) *Tiyeni tijule cijalo* ‘let us open the door’

Ti-ye-ni ti-jul-e ci-jalo

1p-go-pl suffix 1p -open-FV cl 7-door

(b) *Nicite vici?* ‘What shall I do?’

Ni-cit-e vi-ci

1s-do-FV cl 8-what

(c) *Anyamata wafume* ‘boys should move out’

A-nyamata wa-fum-e

cl2- boys cl2 –get out-FV

5.8.4. The indicative mood

These are used for general statements and questions as in the example (72) below.

72 a) *Amdala wotimba mwana* ‘the man is beating a child (in statement form)

A-mdala wa-u-timb-a mu-ana

cl 2- man cl2-GP-beat-FV cl1-child

5.9.0. The clitic

5.9.1 The proclitic

The class of proclitics in Senga consists of a limited number of particle-like elements that fall into well defined class. There are those whose hosts are ‘nominals’ as shown below.

73 a) *a=* class 2 *anyamata* ‘boys’

b) *ku=* class 17 *kumasinda* ‘behind’

c) *mu=*class 18 *munyumba* ‘in the house’

d) *na* ‘with/ and/even , as in *waza nankhuku* ‘they have come with chickens’

5.9.2. The enclitics /-po/, /-ko/, /-so/ and /-mo/

74 (a) /-po/: This loosely means ‘on’, ‘at’ or ‘through’ as in the examples below.

Wa- li -tol- a- po ‘s/he got from’

SM- PAST- get –FV- ENCL

(b) /-ko/: This loosely has the meaning ‘to’ ‘at’

Nkhapitako ‘I went there’

Ni-ka-pit-a-**ko**

1s- PAST- go-FV- ENCL

- (c) /-mo/: This means ‘in’ as in the following example:

Ku-tund-il-a-**mo** ‘to urinate in’

IMFM- urinate- APPL- FV - ENCL

- (d) /-so/ means ‘again’ as in

Kwizaso ‘coming again’

Ku-iz-a- **so**

IMFM- come- FV- ENCL

5.10. The copular verb in Senga

The copula verb /ni-/ means ‘it is’. The following are the examples:

- 75 (a) *Ni wanthu* ‘it is people’

Ni wa-nthu

Cop cl 2- people

- (b) *Nicane* ‘it is mine’

Ni ci-a-ne

Cop cl7- gen- mine

- (c) *Ni nyimbo* ‘it is a song’

Ni n-imbo

Cop cl9- song

In some constructions where the copular is used, stabilisation is mostly noticed as exemplified in (76):

- 76 (a) *ni wanthu* will be *mbanthu*. ‘It is people’
 (b) *Ni cane* will be *nchane* ‘it is mine’

But a construction ‘ni nyimbo cannot be stabilized.

5.10.1 . Negative forms of the copular

The negative forms may use a negative particle as in (77) below.

- 77 (a) *Nga - ni wanthu* ‘ it is not people’
 NEG (part) cop- people
 (b) *Nga ni mw-ana* ‘it is not a baby’
 Neg (part) cop cl 1- baby

5.11. Adverbs

Adverbs in Senga as is the case with many Bantu languages belong to a category of true and derived. The true adverbs are few though are able to designate several functions as in the examples below.

5.11.1. Examples of true adverbs

5.11.1.1 Adverb of time

- 78 (a) *Tiye sono* ‘let us go **now**’
 Ti-ye sono
 1pl -go now
 (b) *Walikwiza kale* ‘they came a **long time**’
 Wa-li-ku-iz-a **kale**

cl 2-PAST-cl15-come-FV long time

5.11.1.2. Adverb of manner

79 a) *wavina makola* ‘you have danced well’

b) *Wakulya lubilo* ‘he eats quickly’

5.11.2. Derived adverbs

These are formed by the presence of another morpheme or word like nouns and prepositions as exemplified below:

5.11.2.1 Adverb of place

80 *Waluta pawalo* ‘he has gone outside’

Wa-lut-a Pa-walo

cl2-go -FV cl16- outside

As already explained, the locative classes 16, 17, 18, in Bantu languages have the basic marking strategy of location. Similarly, we see this occur in Senga as well.

5.11.2.2. Adverb showing frequency

This indicates that the process or action or activity took place or will occur several times as shown in (81). There may also be repetition of the stems in most instances in the adverbs of this nature.

81 *Wakwiza kabili pamwezi* ‘he comes twice per month

Wa-ku-iz-a Ka-wili pa-mw-ezi

cl1-cl 15-come-FV cl 12-two cl16-cl1- month

5.11.2.3. Adverb showing direction

82 *Tizam’pita kudambo* ‘we shall go to the river’

Ti-za-m'pit-a Ku-dambo

1p-FUT-SM-go-FV cl 17-river

5.11.2.4. Adverb showing agency

(83) *Wakalumiwa na nyimbwa* 'he was bitten **by a dog**

Wa-ka-lum-iw-a Na n-imbwa

Cl1 –PAST-beat-PASS-FV PROCL cl9- dog.

Here the use of the proclitic, *na* 'by' preceding the agent, dog, is part of the adverb

5.11.2.5 Adverb of degree

This is often used to intensify the word category under which it occurs as exemplified below

84 *Wakacitanga padoko* 'he was doing **little**'

Wa-ka-cit-ang-a Pa-doko

cl1-PAST-do-PROG-FV cl 16 – little

5.11.2.6 Conditional adverb

85 *Tilute Pala wiza* 'we go **if he comes**

ti-lut-e pala wa-iz-a

1p –go –FV If cl1-come –FV

As can be seen, there are two words here pala 'if' and wiza 'come' showing conditional adverb

5.11.2.7 Adverb of duration

86 *Wakaseweza mwezi umo* 'he worked **for one month**'

Wa-ka-sewez-a Mw-ezi u-mo

cl1-PAST-work-FV cl 3- moon cl1-one

5.12. Tense/ aspect system

Tense systems in Senga relate to the event talked about to a reference point, usually the time of utterance. Commonly these tense systems distinguish past/present/future, past/non-past or future/non-future. Sometimes a difference between recent and remote past is also expressed. In short Senga distinguishes degrees of past (or future) tense.

Common aspectual markers in this language separate perfective (where a situation is seen in its entirety) and imperfective aspect (where a situation is seen as an ongoing process). Markers for continuative/progressive (used for an ongoing process), and habitual aspect (referring to events that regularly take place) are also frequently found as shown below.

5.12.1. Present tense/present progressive tense

It seems it is hard to find overt present tense markers in Senga as this may also mean present progressive tense as in the example given in (87):

5.12.2. Present Tense

87 *Wakwiza* ‘he comes’

Wa-ku-iz-a

cl 1-GP-come-FV

5.12.3. Present progressive tense

This, as already said above, has the same form as the present tense. The context determines which tense is being used.

5.12.4. Present perfect tense

88 *Waza* ‘S/he has come’

Wa-iz-a

cl 1-come-FV

5.12.5.0. Past tense

5.12.5.1. Completed hodiernal past (today).

This kind of past is for the actions that happened within the same day as in (89). This is noticed by the marker ‘-ngu-’ as shown.

(89) a) *Wangwiza* ‘he came’

Wa-ngu-iz-a

cl1 –TM-come-FV

(b) *wanguluta* ‘they went’

ŵa-ngu-lut-a

cl 2-TM-go-FV

5.12.5.2 Completed non- hodiernal past (before today)

Senga differentiates the past for the same day and yesterday for instance. This past is for actions that happened in the past other than the same day. The tense marker used is -li- as in (90). This could mean yesterday or before yesterday or any day in the past.

(90) *Walikwiza* ‘he came’

Wa-li-ku-iz-a

cl1 -PAST-cl15 -come-FV

There is another past tense which is different from the one mentioned above. This past tense is peculiar because, much as it refers to the actions in the past other than today, it is different from the one in (91). This is because this means that a person came but is no longer there. It could be that he went back. The marker here is -ka- as shown.

(91) *Wakaza* ‘he came’

Wa-ka-iz-a

cl1-PAST-come-FV

5.12.5.3 Past progressive/habitual

(92) *Wakazanga* ‘he was coming/he used to come’

Wa-ka-iz-ang-a

cl1-PAST-come-PROG-FV

The -nga- in the word shows progression /continuity, but because of the tense marker -ka- which is in the past, it means that it is a past progressive. It also shows that the action was done habitually.

5.12.6.0. The future tense

5.12.6.1 Hodiernal future (today)

(93) *Wazenge* ‘he will come’

Wa-iz-eng-e

cl1-come-MOD part- FV

Actions that will happen in future of the same day can be realized with a modal marker ‘-eng- in Senga as shown in (93).

5.12.6.2 Non-hodiernal future (after today)

94 *Wazamukwiza* ‘he will come’

Wa-za-mu-ku-iz-a

cl1-TM- SM -cl1- cl15-come-FV

This is for the future actions which are for a date other than the same day. The -za- marker shows future which may be far remote.

5.12.6.3 Future progressive tense/habitual

95 *Wazamzanga* ‘he will be coming’

Wa-za-mu-iz-ang-a

SM -cl1 –TM-SM-cl1 –come-PROG –FV

This shows that an action will be happening in future, but not of the same day. It also shows that the action will be done habitually. The marker -za- shows future while -nga- shows progression/habit.

5.13. Conclusion

This chapter has exposed the morphological composition of Senga and in doing so it has looked at the structures of words like nominals and their modifiers, pronominals, verbals, enumeratives, compounding and other elements of the language. What one can conclude is that the morphological make-up is such that there are words that have a stem only and others that have a stem and affixes attached. Like in many Bantu languages, a lot of structures are complicated in that they are agglutinative.

CHAPTER SIX

SOME MORPHOPHONEMIC PROCESSES

Overview

This chapter brings out some of the morphological processes that are found in Senga language. The processes that were noticed in Senga included the following: gliding, coalescence, phoneme addition (also known as epenthesis or insertion), deletion, and assimilation processes which included velarisation. The study also presented some of the feature changes that take place in the language.

6.1 Gliding

The process simply shows that the sound [u] becomes a semi-vowel or glide in the environment before [e]. The process also shows that the sound [i] becomes a glide[y] in the environment before [a]. The vowel sound /i/ becomes a glide in the environment before /o/. These are shown in the examples given in (96).

- (96) (a) ***Kwenda sono*** ‘walk now’

Ku-end-a

cl 15 -walk- fv

- (b) ***Tola vyose*** ‘get everything’

Tol-a vi-ose

Get-fv cl 8- everything

- (c) ***Kulya mbwete*** ‘eating sweet potatoes’

Ku-li-a cl 9- mbwete

Cl 15- eat- fv sweet potato

6.2 Coalescence

Coalescence is noticed in the following words:

- 97 *na-ku-pita-so* → *nopitaso* ‘and going again’

Here, after /k/ has been deleted, the sound /a/ and /u/ in the first two syllables fuse to form /o/ to form *nopitaso* ‘and going again’.

A similar example of this nature is (98)

- 98 *wa-ku-sewêz-a* → *wosewêza* ‘he is working’

/k/ is deleted and /a/ and /u/ coalesce to form /o/ in *wosewêza*.

Coalescence is also noticed in the word *wa-li-uli* ‘how is he?’ to form *weuli*. /a/ and /i/ in the first two syllables coalesce to form /e/.

- 99 *Walitimbika* [walitimbika] ‘he was beaten’ → *wetimbika*

Wa-li-timb-ik-a

cl 2 –TM – beat- EXT-fv

What can be seen here is that /-l-/ in *walitimbika* is deleted and the /a/ preceding it and /i/ following it coalesce into /e/ to maintain tense.

6.3 Phoneme addition/epenthesis/insertion

This process creates new elements and is common in loan words. Senga has plenty of these words. Loan words that have closed syllables in the source languages are made to conform to the forms acceptable in Senga language. Some consonant clusters are not allowed, and for this reason, consonant clusters in the loan words are re-syllabified. The most common method for consonant cluster simplification is vowel insertion. For example in the words below, vowels /o, a, u, e/ are inserted to simplify consonant clusters. Mainly, these words are originally English.

6.3.1 Paragoge

This is insertion that takes place at the end of a word. This simply means that a vowel sound is added in the environment after a consonant sound as shown in (100).

- 100 a) pot → *potə*
 b) cup → *kapu*
 c) pan → *pani*
 d) bank → *banki*

6.3.2 Anaptyxis or epenthesis

This is insertion which is done medially or in-between consonants. The process simply means that in the environment between two consonants, a vowel is inserted.

- 101 a) Market → malikete
 b) Spoon → sapuni
 c) Glass → gilasi

6.4 Deletion or elision

Deletion is also prevalent in Senga. The following examples exhibit this phenomenon.

- 102 (a) *wiza* ‘they have come’

wa - iz - a

cl 2 - come- FV

/ a/ is deleted in this word so that what remains is ‘wiza’

- (b) *Nikuluta* ‘I am going’

ni- ku- lut- a

1s – TM-go- FV. The two phonemes /ik/ are deleted to form *nuluta* ‘I am going’

(c) *Kocha* [kotʃha] ‘to burn’

Ku- och-a

INFM-burn-FV The /u/ in the first syllable is deleted to form *kocha*

(d) *Walikwiza* [walikwiza] ‘he came’ → *wekwiza*

Wa-li-ku-iz-a

Cl 2 –TM-cl15-come-FV

Much as there is coalescence as already explained, deletion also exists. The /l/ in the second syllable is deleted following the coalescence of /a/ and /i/ in the first two syllables.

6.5. Assimilation process

6.5.1. Velarisation

This is an assimilation process in which a sound is adjusted to a neighbouring velar by raising the back of the tongue. In the examples below such a process occurs.

Ni wane [niwane] ‘he is mine’ → *ngwane* [ŋgwane]

Nikakhale [nikakhale] ‘I go and sit’ → *nkhakhale* [ŋkhakhale]

6.6 Feature changing rules

It has to be said that feature changing mainly occurs in words that have been borrowed from other languages, particularly English. These include lateralization, and ð - θ-change. The following are the examples:

6.6.1. Lateralisation of /r/.

The feature / r/ in words with this sound in English is realised as /l/ once used in Senga as in the words that follow below. Basically, the trill ‘r’ changes into a lateral ‘l’, hence the word lateralisation.

	English	Senga
103	(a) Rape	<i>lep<u>u</u></i>
	(b) Report	<i>lip<u>o</u>ti</i>
	(c) Break	<i>bul<u>e</u>ki</i>
	(d) Brush	<i>bul<u>a</u>sho</i>

6.6.2. ð - θ - change .

The English / θ /and / ð / sounds are realised as /f/, /t/ and /s/ as in

104	(a)	Sabbath <u>th</u>	—————→	<i>saba<u>t</u>a</i>
	(a)	Th <u>ir</u> ty	—————→	<i><u>s</u>ate</i>
	(c)	Bath <u>th</u> -room	—————→	<i>baf<u>a</u></i>

6.7. Conclusion

This chapter brought out some of the morphological processes that were found in Senga language. The processes that were noticed in Senga included the following: gliding, coalescence, phoneme addition (also known as epenthesis or insertion) deletion, and assimilation processes which included velarisation. Feature change processes were also noticed.

CHAPTER SEVEN

CONCLUSION

Overview

This chapter presents the summary, conclusion and recommendations stemming from the study of some aspects of Senga phonology and morphology. The summary is based on the objectives which focus mainly on two levels of linguistic analysis. These include morphology and phonology of Senga.

7.1.0 Summary of the findings

7.1.1 Phonological aspects

What the research discovered was Senga has 28 consonants together with glides. These are plosives: /p, ph, b, t, d, th, k, g, kh/, Fricatives: /β, f, v, s, z, ʃ, ʒ, h/, Affricates: /tʃ, dʒ/, Nasal: /m, n, ŋ/, Glide: /j, w/, Lateral /l/. The research also discovered that Senga follows a five vowel system. These are /i/- an unrounded, high, front vowel, /e/ - an unrounded, mid ,front vowel, /u/- a rounded,high, back vowel , /a/- an unrounded, centralized, low, vowel , and /o/ -a rounded , mid ,back vowel

A minimal pair-test to show that phonemes could be used to contrast words was presented.

The allophonic variants of /p, k, t/ and /b/ were also noted. These were [ph], [kh] [th], and [β].

The research was able to expose some syllable patterns for Senga. The common one was CV though V and C syllables were also noted. On the whole, Senga allows a seven vowel pattern and these are V, C, CV, CCV, GV, CGV.

In trying to further understand the syllable, the researcher used a CV-phonology model, recommended by Clements and Keyser. The syllable tier, CV-tier and segmental tier were noted.

The research also revealed that phoneme combination is not done anyhow. Vowels can combine with all consonants and glides. When two consonants combine, it is usually the nasals that combine with them. The nasals are usually homorganic with the host sound. The combinations of

consonants and glides revealed that, the consonant clusters with three phonemes have the nasal as their initial consonant followed by a stop and then semi vowel or glide

The research also exposed that some combinations of consonants are not possible. For instance ,the following consonants are non- permissible : / kn,gn,pn, ps,kt,pk,wl ,wt and many more.

Senga falls into the category of register tone. There was no use of tone in Senga to signal contrasts in lexicon. Grammatical tone plays a significant role especially in marking a difference between a plain statement and re-affirming, signaling a relative clause and to some extent interrogative marker.

Length in Senga is distinctive, that is, can be used to differentiate words as in *Boola* [bo: la]'prick' and *Bola* [bola] 'ball'. However, it was discovered that there were not many of such words.

7.1.2. Morphological Aspects

What the research revealed regarding the structure of Senga words is that, like many Bantu languages, it is mainly agglutinative, that is, containing morphemes attached together as in the word, *ni-li-ku-mu-kol-el-el-a* 'I held on to him'. There are also monomorphemic words that one will find. These are words like *ciuta* 'God', *cule* 'frog'

Senga comprises 18 nominal class system. In the noun system, and elements of the noun phrase, which include among others, adjectives, deictic, associative, possessive, quantitative, interrogative, reflexive pronouns and other such elements, there is generally an **agreement affix** and a root. For example, *mu-nthu mu-heni* 'bad person'. The much **duplication** in the class prefixes is differentiated on **semantic** and **concordial** grounds (for example, class 1 and 3)

A noun may comprise a stem only or with zero prefix (Ø-prefix) (e.g, *cule* 'frog 'or a prefix and stem (*a+nyamata* 'boys').Most noun classes can be paired to express **singulars and plurals** (as in **class** 1 and 2, 3 and 4)

The verb morphology of Senga is in contrast to the nouns. Verbs are more complex. The components of Senga verbs are the root, the inflections ,made up of a chain of prefixes which include a subject, negative marker, tense and object and a number of suffixes that include the

ending, extensions like the applicative, causative, locative, persistive, the final vowel and others, as in the word, *wā-ka-mu-tol-el-el-a* ‘they got her permanently’

7.1.3. Some morphophonemic processes

The study observed some morphophonemic processes affecting formation of words in Senga. These processes included: Gliding (*ku-end-a* to *kwenda*), Coalescence (*wa-li-uli* to *weuli* ‘how is he?’), Phoneme Addition/Epenthesis/Insertion(*market* to *malikete*), Deletion or Elision (*wā-iz-a* to *wīza* ‘they have come’, Assimilation Process (including velarisation as in *ni-ka-khal-e*[nikakhale] to *nkhakhale*[ŋkhakhale] ‘I go and sit’. There is also feature- changing that was noticed.

7.2. Conclusion

What one can conclude in this study is that Senga shares a lot in terms of its phonology and morphology with most Zambian languages, let alone Bantu languages. However, there are some aspects which are quite unique to Senga when compared to some Zambian languages.

7.3 Recommendations

Since the research is the study of the phonological and morphological systems of Senga, the grammar which deals with the full characteristics of Senga is worth studying. Besides, comparative analyses, either with English, other dialects of Tumbuka or any other Bantu language can provide an interesting study. The researcher is so sure that grounds will have to be found by whomever to either improve or add to this work especially that it is the first one of its kind.

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Appendix 1

List of 250 Words Translated into Senga

SN	GLOSS	WORDS
1	One	Cimoza
2	Whole	Cose
3	Animal	Nyama
4	Eye	Jiso
5	Monkey	Munkhwele
6	Person	Munthu
7	Crocodile	Ng'wina
8	Hyena	Cimbwi
9	Snake	Njoka
10	Father	Tata
11	Uncle	Sibweni
12	Elephant	Zovu
13	Hand	Woko/ciwoko
14	Nose	Mphuno
15	Bad	Uhene
16	Swim	Kushamba
17	Beer	Moŵa
18	Big	Ukulu
19	Bee	Zimu
20	Bathe	Kugeza
21	Beard	Mwembe
22	Grandmother	Ambuya
23	Old	Kale
24	Black	Ufipa
25	Red	Uswesi
26	blind person	Mphofu
27	Crippled	Olemala
28	Bone	Ciwangwa
29	Blood	Ndopa
30	unmarried man	Nkhungulume
31	Chlorophyll	-
32	Brain	Bongo
33	Smell	Fungo
34	Eat	Kulya
35	Breast	Bele

36	Catch	Kola
37	Teeth	Jino/meno
38	Rain	Vula
39	Sky	Kucanya
40	Child	Mwana
41	Chest	Nganga
42	at the top	Pacanya
43	Cloud	Khumbi
44	Go	Luta
45	Come	Iza
46	Walk	Yenda
47	Cook	Phika
48	Light	Ungwelu
49	Cover	Kubenekela
50	Cold	Kuzizila
51	Eye	Jiso
52	Six	Chisanu na kamoza
53	Ten	Khumi
54	Tuesday	Cibili
55	Extinguish	Zima/ zimya
56	Fire	Moto
57	to stand	Kuimilila
58	Bite	Luma
59	Egg	Lisumbi
60	Chicken	Nkhuku
61	Fear	Mwezo
62	Firewood	Nkhuni
63	Tree	Cikuni
64	Fly	Kubuka
65	Scorpion	Kalizya/kalizhya
66	Leg	Lundi
67	Fish	Somba/sabi
68	Aunt	Nkhazi
69	Frog	Cule
70	Heart	Mtima
71	Hair	Sisi
72	Hear	Pulika
73	Here	Pano
74	There	Pala/kula

75	give birth	Bala
76	Tongue	Lulimi
77	Grow	Kula
78	Sweet	Kunowa/ kunyong'omela
79	getting married	Kutengwa
80	Honey	Uci
81	Village	Muzi
82	Jump	Duka
83	Protein	-
84	Kidney	Mphewa
85	Hide	Bisa
86	Hunger	Njala
87	Poor	Sauka/ukavu
88	Knee	Khongono
89	Kill	Koma
90	Laugh	Seka
91	Vomit	Bokola
92	Sit	Khala
93	Louse	Nyinda
94	Lion	Nkhalamu
95	Buffalo	Njati
96	Inside	Mukati
97	Late	Celwa
98	Love	Temwa
99	Mountain	Phiri
100	Pull	Guza
101	Uproot	Zyula
102	Neck	Singo/mukosi
103	Now	Nomba/sono
104	Tomorrow	Macelo/mailo
105	Yesterday	Mailo
106	dress(v)	Vwala
107	Push	Tutuzya /tutuzhya
108	Cultivate	Lima
109	Work	Sebeza
110	Milk	Mukaka
111	Finger	Munwe
112	Seed	Mbuto
113	Spit	Thunya

114	Send	Tuma
115	Mucus	Mamphina
116	tie(v)	Kaka
117	Stir	Vundula
118	Tears	Masozzi
119	Pregnant	Nthumbo
120	Baby	Mwana
121	Stars	Nthanda
122	Sun	Zuba
123	Moon	Mwezi
124	Smoke	Josi
125	Enemy	Mulwani
127	Friend	Munyane/m'bwezi
128	Wound	Cilonda
129	Short	Cifupi
130	Big	Cilkulu
131	Small	Cidoko
132	Salt	Mcele
133	Look	Cencheŵa/labisha
134	Knife	Cimai
135	Soil	Dongo
136	These	Ivi
137	Those	Ivo
138	That	Cila
139	When	Pauli
140	How	Uli
141	Visitor	Mulendo
142	Thatch	Kuvwimba
143	Maize	Chingoma
144	Millet	Kambala
145	Tortoise	Fulu
146	Dog	Nyimbwa
147	Cat	Pusi
148	Wet	Kuzumbwa
149	Dry	Kumila
150	Sleep	Gona
151	Witch	Fwiti
152	Bird	Kayuni
153	Dance	Vina

154	Hundred	-
155	Grandchild	Mzukulu
156	Again	Kuwelezyaso
157	Faint	Zinduka
158	Me	Ine
159	Them	Iwo
160	Fat	Kututuŵa
161	Visit	Kucezya/kwendela
162	Only	Cekha
163	Misfortune	Shamo
164	Weed	Vipeta
165	Groundnuts	Shaŵa
166	Rice	Mpunga
167	Fishing	Kubeza/kukola
168	Six	Tusanu na kamoza
169	Sick	Kulwala
170	Danger	Paheni
171	Food	Cakulya
172	Water	Maji
173	Fool	cindele
174	Hunt	Kuŵamba
175	Rot	Kuvunda
176	Ripe	Kuphya
177	Rib	Mbambo
178	Saliva	Mata
179	Run	Cimbila
180	Protect	Chingilizya/cingilizhya
181	Help	Vwila
182	Urine	Matuzi
183	Teach	Sambizya/ sambizhya
184	Beg	Lomba
185	Before	Tinda-
186	Buy	Gula
187	Lazy	Ukata
188	Rope	Nthambo
189	Bitten	Kulumika/kulumiwa
190	Bite	Luma
191	Smile	Mwemwetela
192	Beat	Timba/puma

193	Intelligence	Mano
194	Chief	Mambo
195	Owner	Mweneco
196	Onion	Hanyezi
197	Smear	Kuluŵa
198	Dig	Kumba
199	Fly	Buka
200	Feaces	Matuvi/mavi
201	Young	M'doko
202	Stingy	Mzukusi
203	Swallow	Kumila
204	ancestral spirits	Mzimu
205	Armpit	Munkhwapa
205	Phone	Foni
206	Nails	Zyala
207	Beautiful	Kutowa
208	Know	Manya
209	Fast	Luŵilo
210	Spear	Mkondo
211	Call	Cema
212	Rat	Mbeŵa
213	Branch	Msambo
214	Pay	Lipila
215	Burn	Kuocha
216	Cheek	Thama
217	Skin	Nkhanda
218	Back	Masinda
219	Refuse	Kana
220	Dream	Lota
221	Night	Usiku
222	Darkness	Cisi
223	Dust	Lukungu
224	Feathers	Maweya
225	Chair	M'pando
226	Cut	Kudumula
226	Ignore	Sula
227	Wing	Mapapindo
228	Hospital	Cipatala
229	Soon	Sono-sono

230	Climb	Kwela
231	Found	Sangika
232	Grass	Uteka
233	Pray	Pemphela/sopa
234	Play	Seŵela
235	What	Vici
236	Tasting good	Kuwama
237	Call	Cema
238	wake up	Uka
239	Sweet- potatoes	Mbwete
240	Colour	Mtundu
241	Heavy	Cizito/ kulema
242	God	Ciuta
243	Clothes	Vovwala
244	Ask	Fumba
245	Question	Fumbo
246	Answer	Zyolo
247	Thirst	Nyota
248	Suck	Kuwonkha
249	Swell	Kutumba
250	Sweat	Thukuta

Appendix 2

List of 200 Phrases, Clauses and Sentences Translated into English

SN	ENGLISH SENTENCE	SENGA SENTENCE
1	How are you?	Muli uli
2	This is ms nyirenda	Aba mba nyamnyirenda
3	What do you want?	Mupenjaci
4	We will eat.	Tilyenge
5	She went to the river to draw water	Wakapita kudambo kuteka maji
6	No, i did not beat him	Awe, nilije kum'puma
7	You will see them again	Uzamuŵaonaso
8	Is what you are telling me the truth?	Ico muniphalila nchaunenesho?
9	Are you boys going to school?	Imwe anyamata mupita kusukulu?
10	Let us both go home and pray	Tiyeni tose tipite kunyumba tikapemphele
11	Are you also going?yes i am going	Nawe upita?ena nupita
12	His chickens are bigger than mine,aren't they	Nkhuku zake nizekulu kupambana zane, asi nthana?
13	Are these things for the headman	Ivi vinthu nivya fumu?
14	Do you want to sell your rice	M'penja kugulisa mpunga winu?
15	Is this bag yours	Ici cola nchinu/ici nchola cinu?
16	It is not tomorrow	Nimailo yayi
17	I am I late?	Nacelwa?
18	Are you hungry	Unanjala?
19	Are you thirsty?	Unanyota
20	No , these people are not good	Awe, aŵa ŵanthu mbawemi yayi.
21	Yes i have a lot of books	Ena,ninamabuku yanandi
22	Is this the boy who was bitten by a snake	Ndiye mnyamata uyo njoka ikamuluma?
23	Is the school near?	Sukulu ili pafupi
24	There is no toilet here	Paliye cimbuzi pano
25	The firewood has finished	Nkhuni zamala
26	Are you going away?	Muluta kutali?
27	They beat each other	Wotimbana
28	My younger brothers do not work hard	Ŵasaza ŵane ŵoseŵeza comene yayi
29	Is it very painful	Cuŵinya comene?
30	Thank you very much	Naonga comene
31	Come so we can drink	Iza kuti timwe
32	These villages belong to the children	Iyi mizi njaŵana
33	It is extremely sad to laugh at mad people	Nchiheni comene kuseka ŵanthu ŵofuntha
34	It is mine	Ni cane/nchane

35	They came on Tuesday	Ŵakiza paciŵili
36	Twenty people came	Makhumi yaŵili ya ŵanthu ŵakiza
37	Those are the people you want	Aŵo ndiŵo ŵanthu mupenja
38	The child is crying	Mwana olila
39	My brother smokes a lot	Musaza wane okoka comene
40	Sengas grow a lot of rice	Asenga ŵolima comene mpunga
41	The guinea fowl have eatern up my millet	Nkhanga zalya kambala wane.
42	They have gone to the hospital	Ŵaluta kucipatala
43	They don't like us	Ŵakutitemwa yayi/ ŵotipenja yayi ise
44	Fighting for the woman	Kutimbana pa mwanakazi
45	Passing through	Kupitilako
46	Lets cook nsima and beans	Tiyeni tiphike sima na nchunga
47	Nsima,beans and rape are good	Sima,nchunga na lepu ni viwemi
48	Trees are good	Vikuni ni viwemi
49	The monkeys are bad	Amunkhwele mbaheni
50	People who like stealing	Ŵanthu ŵotemwa kuba
51	Let us go and cultivate	Yiyeni tikalime
52	Going in the morning and evening	Kupita ucecelo na cakumise
53	The people with children on the road	Ŵanthu na ŵana pa mseu
54	If they come ,we will go	Pala ŵiza tupita
55	Have they lost the game	Ŵaluza maseŵela?
56	Wake me up	Ni usheko
57	They want it here and not there	Wocipenja pano osati apo.
58	So what?	Sono nivici?
59	How do you manage without that?	Ukwanisha uli kwambula ico?
60	Clean your teeth	Suka meno yako
61	One man and woman	Mwanalume umoza na mwanakazi umoza
62	They will come	ŵazenge
63	She is a useless woman	Nimwanakazi cindele
64	Feed her	Mulyeshe
65	The people at thee police	ŵanthu pa polisi
67	Chicken and eggs	Nkhuku na masumbi
68	The elephant and hyena chased each other	Zovu na cimbwi vucimbwizyana
69	She dances well	Ovina makola
70	Tell all those to come and sleep	Ŵaphalilani ŵose ŵaze kuzogona
71	All the people have gone into the field	Ŵose ŵanthu ŵapita ku munda
72	Before you come,let me know	Apa mundafike ,nimanyishani
73	The man who came	Mwanalume uyo wakiza
74	He said that he was young	Wakayowoya ati nimdoko

75	That which they like	Cila ico wotemwa
76	All of them came	Ŵakiza ŵose
77	The three people	Ŵanthu ŵatatu
78	Biting each other for	Kulumana cifukwa ca
79	He said he reached in the evening	Wakati wakafika kumise
80	How is my cousin today	Weuli msiŵani wane
81	She was a tall ,beautiful lady	Wakaŵa msungwana mtali wotowa
82	She came,got in and left again	Wakiza , nonjila nokupitaso
83	He is very sick and weak	Ngolwala comene nofoka
84	The crocodile smiled	Ng'wina yimwemweteela
85	Long long time ago	Kale comene/kumasinda comene
86	Come we eat rice	Iza tilye mpunga
87	Don't walk slowly	Kwenda padoko yayi
88	God said	Ciuta wakati
89	Listening to music	Kupulikizya sumo
90	Flies and cockroaches	Membe na mphezi
91	A scorpion has entered into that hole	Kalizya wanjila mukhululu
92	He is wearing a new pair of shoes	Wovwala shapato za nyowani
93	He beat him	Wakam'puma
94	It is mr phiri and not banda	Mbaphiri osati a banda
95	He vomits when he eats	Obokola /owukula pala walya
96	You should read for you to pass	Uŵelengenge kuti ukaphase
97	Schools have opened	Sukulu za julika
98	Mary and his friend	Malia na m'nyake
99	The dog that came saw him	Nyimbwa iyo ikaza ikamuwona
100	They don't like him	Omupenja yayi/omukhumba yayi
102	These people are clever	Aŵa ŵanthu mbocenjela
103	The baby is very small	Mwana nimudoko
104	He wasn't late	Wakacelwa yayi,
105	He has gone to another village	Wapiti kumuzi unyake
106	He forgot because he was drunk	Wakaluwa cifukwa wakaŵa okumwa
107	What is the time now	Ninyengo uli sono
107	I do not think the chief is coming today	Numanya yayi pala amambo okwiza nalelo
108	The shoes you bought are there	Shapato izi mukagula zilikula
109	If that is what you are telling me,then forget about it	Pala ndico unifumba, nishi luwako waka.
110	The only other way is to love	Nthowa inyakeso njotemwa
111	Some people find joy when others are suffering	Ŵanthu ŵanyake ŵotemwa pala ŵanyake ŵosuziyika

112	Blessed are those that know how to do it	Ŵakucindikika niawo ŵakumanya ciuta
113	If marriage is like this ,then i would rather remain single	Pala nthengwa ili nthana, cawama kukhala wambula tola
114	She does not bath	Ogeza yayi
115	Mrs nyirenda likes gossiping	Amuka nyirenda otemwa kutungula
116	The message was loud and clear	Mazyo yakaŵa yopulikika
117	The farming season has not been good	Nyengo yolima indaŵe iweme
118	We do not know some of these things	Tumanya yayi ivi vinthu vinyake
119	Are you going to tell him that Ms Lungu has come?	Wakumfumba kuti nyalungu waza?
120	Call them so that we discuss	Ŵacemani kuti tiyowoye
121	He has been sleeping from morning	Wagona kufuma ucecelo
122	When you go to the market, buy some onions for me.	Pala wapiti ku malikete, ukanigulileko hanyezi
123	You have to repent of your sins	Ukwenela kulapila pa zakwananga zako
124	He likes eating but he is lazy	Otemwa kulya kwene nimukata
125	It is okay	Ilimakola
126	Working early in the morning	Kuseŵeza ucecelo
127	You have to rest	Ukwenekela kupumula
128	Since morning i have not eaten anything	Kufuma ucecelo nindalyepo kalikose
129	Frequent visits will not help you	Kwiza kaŵili-kaŵili kumuvwilaninge yayi
130	I want to go and live in chikumbilo village	Nkhupenja nkhakhale m'muzi wa cikumbilo
131	He has been cooking rice and now he is eating	Waphikanga mpunga sono wakulya
132	The word of god is good	Mazyo ya ciuta njaweni
133	He went hunting	Wakapita koŵamba
134	He caught a lot of fish	Wakakola somba zinandi
135	The fish in this river is no tasty	Somba za padambo iyi zuwama yayi
136	He is well known	Ngomanyikwa comene
137	He was beaten because of that girl	Wetimbika cifukwa ca mwanakazi yula
138	They started fighting each other for that girl	Ŵakayamba kutimbana cifukwa ca mwanakazi yula
139	He is a polygamous man	Mwanalume wa mphali
140	He has married two women	Watola anakazi ŵabili
141	Try to call him	Yezya kumucema
142	I suspect he allowed him to come	Nkhusacizya kuti wakamuzomelezya
143	She is a prostitute	Nihule
144	The pumpkins are not cooked yet	Atanje andaphikike

145	We want to try the next person	Tupenja tiyezye munthu munyake
156	Everyone welcomed him	Waliyose wakamuzomelezya
157	If she is jealous ,she will not win	Pala ngwa sanje wangapambana yayi
158	My grandpa killed a lot of elephants	Asekulu wane walikoma zovu zinandi
159	The birth of a child	Kubadwa kwa mwana
160	I want to do it again	Nufwaya niciteso
161	He sings a lot	Okumba comene
162	She dances well	Ovina makola
163	She is looking at herself in the mirror	Ojiona ekha pa gilasi
164	The blood came out	Ndopa zikafuma
165	Everything was taken there	Vyose/vose vikatoleka kula
166	The hoe and axe are not sharp	Jembe na mbavi nivyokuthwa yayi
167	The knife is cutting well	Cimayi cuceka makola
168	She is a teacher at buli primary school	Nimusambizyi pa sukulu ya buli pulaimale
169	If you dontlike me, send me to my parents	Pala unipenja yayi unipelekekwa papi wane
170	The war was between the two villages	Nkhondo ikaŵa ya mizi iwili
171	We have come from very far	Tafuma patali
172	One.two, three, four, five, six and more	Kamoza,tubili, tutatu, tusanu,tusanu na tubili navinandi
173	She is a witch and has bewitched three people	Nifwiti ndipo walowa wanthu watatu
174	He is back from work	Wawela koseweza
175	He is a powerful man	Nimunthu wankhongono
176	He is fat and tall	Nimutali na kututuŵa
177	He does business	Ocita malonda
178	Maybe he is sick	Panyake ngolwala
179	Do you think zambia will win	Muganiza kuti zambiya ipambanenge
180	The baby is learning how to walk	Mwana osambilila kwenda
181	The stones are not there	Malibwe ekula yayi
182	So he is very unwell	Ndipo ali makola yayi
183	If you are to look at it, you may be surprised	Kuti mucione mungadabwa
184	Working early in the morning is good for you	Kuseweza ucecelo nchiwemi kwa iwe
185	He is smoking marijuana	Okoka camba
186	It is a big thing	Nicinthu cikulu
187	That black pot there	Poto mufipa yula
188	He is a person	Nimunthu
189	They are people	Niwanthu

190	A person is young	Munthu ni mudoko
191	Living in a village	Kukhala m'muzi
192	God will punish the sinners	Ciuta wamukaŵapa cilango onanga
193	He is the chief of the area	Mbamambo ŵa mucalo
194	You can go and come back	Ungaluta nokwiza
195	If you want it now ,lets go	Pala ucipenja sono, tiye
196	The only good person is the one who is dead	Munthu muwemi niwokufwa
197	Drinking beer the whole day makes you poor	Kumwa moŵa zuŵa lose kupangisha kuti ukhale osauka
198	He is learning	Osambila
199	He is in grade seven	Wali mugeredi seveni
200	One of the three is short	Yumoza/umoza mwa atatu nimufupi.