CHALIMBANA UNIVERSITY

DIRECTORATE OF DISTANCE EDUCATION

LBL 2101: THE STRUCTURE OF BANTU LANGUAGES

FIRST EDITION - 2018

Explain the sentence types according to structure.

2. Justify why it is not easy to apply GB Theory to Bantu structural constituents without modifying the theory**.**

Author: **Edith Sikota-Habwanda**

Chalimbana University

Private Bag E 1

Luasaka

Chalimbana University

School of Humanities and Social Sciences

Department of Literature and Languages

Private Bag E 1

Chongwe

Zambia

Acknowledgements

Chalimbana University wishes to thank Edith Sikota-Habwanda for the production of this module.

TABLE OF CONTENTS

MODULE OVERVIEW

Introduction

This course deals with the structure of Bantu languages presented to you in this module. The module offers a comprehensive introduction to the structure of the Bantu languages as studied

in Bantu linguistics. We look in detail at the most salient structural properties of Bantu languages, such as the noun class system, the structure of verbs, and topics in phonology and syntax. The course is organised into Phonological and morphological aspects. Before going into discussions of the phonological aspects in Bantu, the course will deal with the origin of Bantu languages, including the classification of both African and Bantu languages. It offers you insights in the relation of the nominal class as a control factor in most of the languages' phrase structures. Almost all the word classes of Bantu languages, particularly Zambian languages have their structures analysed, including main phrase and sentence structures. This course, as already indicated, is not restricted to Zambian languages but these are a basic point of reference. A student whose native language is not one of the Zambian language should not feel betrayed by that because the course is a Bantu linguistics one.

I hope you have chosen to do this course out of passion. Some people have wondered why you have chosen to study Bantu languages in the University and they will still wonder why you will be interested to teach Zambian languages or a local language if you are from a country other than Zambia. What interests do you have in this course?

African languages and indeed our local languages are worth studying. From an academic point of view everything is worth studying. While we need English and other international languages, local languages are needed for internal communication. We need to understand our own language and be able to develop it. We need to know our culture and be able to transmit it to the new generations. It is, therefore, important to learn the language since language is a vehicle by which culture is transmitted.

The current Zambian language-in-education policy (and many countries in the African region) advocate the use of a local language as medium of instruction from grades one to four in all the subject areas and a local language to be taught as subject to learners from Grade five onwards, (MOE, 2013). There is need to train teachers in colleges and universities who will be able to teach competently in primary and secondary schools before the nation can achieve the objective. What is prevailing currently is that the schools have a number of teachers who are not competent in their own languages because they were introduced to the education system that withdrew them from their mother tongue as early as grade one or pre-school. Actually some of the teachers were alienated from birth. I hope you are not such a one.

Bantu linguistics has many avenues for you. There is, at the moment, advocacy for developing African and Bantu languages through research. You will agree with me that our local languages

are not well researched due to negative attitude towards these languages. Although the situation is changing, it cannot be compared to English where enrolment is always higher.

LET US FIGHT THE NEGATIVES!

Throughout the module, you will be required to collect your own data from published sources or your languages and share your findings with the class or group members. It is very cardinal for you as a student to make reference to the language that you know very well.

Rationale

This course will help you to appreciate the complexity of the phonological and morphological constituents of Bantu and your local languages, including those of others. It is also important for you to have a sound background of Bantu languages; from Proto-Bantu to the present Bantu dialects, looking at the similarities and synchronic changes of the phonemes.

Aim

The aim of this course is to equip you with the knowledge of how Bantu languages are structured.

Course Outcomes

At the end of this course, you are expected to;

- explain the notions of Bantu and African languages and linguistics.
- have a good understanding of aspects of Proto Bantu phonology.
- gain good understanding of the major structural properties of Bantu languages, including the noun class system, verbal morphology and syntax.
- carry out a comparative analysis of Bantu and English morphology.
- gain experience with, and confidence in, developing your own analyses for novel language data.

Summary

This module has two parts; the first dealing with phonological aspects and the other morphological aspects respectively.

Phonological Aspects

This part comprises Units 1 to 8. In this part, the module begins by discussing Bantu and African languages, and what Bantu and African linguistics mean. The module discusses the origin and spread of Bantu languages. A number of concepts have been advanced and theories on where the Bantu speaking people originated. The module advances by giving the classification of both African languages and Bantu languages. Here you will discover that the studies done by Joseph Greenberg and Malcom Guthrie are the basis of the classifications where Greenberg classifies African languages into language families and Guthrie, Bantu languages into language zones. Many Bantu languages are characterised with a class nominal prefix which form agreement with other constituents in grammatical constructions. The other notable feature is the agglutinative typology. The criteria for classification have been discussed in Unit 3.

Most of the phonological aspects of this module deal with Proto-Bantu. Proto-Bantu is a hypothetical language from which all present Bantu languages, it is believed, come from. The module discusses the Proto-Bantu phonemes as reconstructed by Guthrie who is the major proponent in the study of Bantu linguistics. While you study the phonemes of Proto-Bantu, you will make critical comparison with phonemes of the present Bantu languages, stating the diachronic changes that have taken place. You will also be expected to use the schemata to formulate rules in feature terms. The module also discusses the synchronic phonological rules for which you can use in the study of Bantu languages at any point in time.

The last unit discusses the Bantu syllable structure. It is important to have basic knowledge of the characteristics of both English and Bantu syllables and be able to contrast the two. In this unit, you will also be exposed to the concept of ‘markedness’ where a syllable type which is not the most frequent is termed ‘marked’ while the type which is most frequent is ‘unmarked’.

Morphological Structure

This part comprises Units 9 to 22. It deals with the morphological structure of Bantu. It discusses the word classes and the morphological terms used in Guthrie’s Comparative Bantu. The module has discussed the morphological structures of some of the word classes of Bantu language. The word classes that have been dealt with include nouns, adjectives, non-possessive personal pronouns, genitive pronouns, possessive pronouns, demonstratives, and verbal. The

prominent element in the structure for many of these word classes is the prefix. For nominals what you will find is basically 'Prefix + Stem'. Other elements forming the structures are the augment and preprefix in nominals and a number of affixes for verbals. This part, however, has included phrasal and clausal structures as well. Before advancing into morphological structure, the module has given the grammatical terms used by Guthrie in his Comparative Bantu.

For nouns, augment and augmentless languages have been distinguished. The nominal prefixes, basically for Proto-Bantu, Swahili and the seven Zambian Languages have been provided. Using these, a student who is Non-Zambian would establish the Class system of their language. It has been shown that the prefixes of Swahili are closely related to the ancestor language. Students need to provide the semantics of the nominal prefixes of their own languages. For identical prefixes, however, there is need to discuss with the lecturer or tutor. In nominals just as in verbals, there are morphological processes that take place due to the influence of either a preceding or following phoneme. Derived and compound nouns have also been discussed. A suffixed vowel, applied extension and reduplication are common forms used for deriving nouns.

Adjectives are categorised into three; primitive (what Lehmann, 2002 calls adjective proper), derived adjectives and compound adjectives. The major types of morphological structure are; (a) Prefix + Stem, (b) Augment + Prefix + Stem and Prefix1 + V + Prefix2 + Stem. Most derived adjectives in many Bantu languages are deverbal adjectives while others are relativised. Adjectives may be formed by compounding a genitive pronoun and a noun or an adverb for which the structure of genitive pronoun is Prefix + Stem. Genitive pronouns will take pronominal prefix + a stem of a genitive pronoun. Numerals are also nominals for they are controlled by the class prefix. The structure vary but the Prefix + Stem is used for cardinals from 1 to 5.

Verbals have been viewed to be the most complex word class in Bantu. The various verbal morphemes include pre-prefix, prefix, post prefix, tense sign, post-tense sign, infix, radical, extension, pre-ending, ending and post-ending. Some verbal grammatical categories also have been discussed; the nomino-verbal form, mood, aspect, tense, polarity and clausal status. The other aspect that has been discussed here is the word order in the noun phrase, verb phrase and the clause as a whole. The normal word order for both NP and VP is head first while that for the clause is SVO.

Other categories of Bantu linguistics that have been looked at are question words, indefinite pronouns and determiners. For such categories, the nominal prefix plays a role apart from a few invariable forms such as conjunctions, prepositions, adverbs, interjections, onomatopoeia, idiophones and particles. Such forms have not been covered in detail in this module because they do not follow particular structures.

Study Skills

As an adult learner your approach to learning will be different to that from your school days: you will choose what you want to study, you will have professional and/or personal motivation for doing so and you will most likely be fitting your study activities around other professional or domestic responsibilities.

Essentially you will be taking control of your learning environment. As a consequence, you will need to consider performance issues related to time management, goal setting, stress management, etc. Perhaps you will also need to reacquaint yourself in areas such as essay planning, coping with exams and using the web as a learning resource.

Your most significant considerations will be *time* and *space* i.e. the time you dedicate to your learning and the environment in which you engage in that learning.

We recommend that you take time now—before starting your self-study—to familiarize yourself with these issues. There are a number of excellent resources on the web. A few suggested links are:

http://www.how-to-study.com/

The "How to study" web site is dedicated to study skills resources. You will find links to study preparation (a list of nine essentials for a good study place), taking notes, strategies for reading text books, using reference sources, test anxiety.

http://www.ucc.vt.edu/stdysk/stdyhlp.html

This is the web site of the Virginia Tech, Division of Student Affairs. You will find links to time scheduling (including a "where does time go?" link), a study skill checklist, basic concentration techniques, control of the study environment, note taking, how to read essays for analysis, memory skills ("remembering").

http://www.howtostudy.org/resources.php

Another "How to study" web site with useful links to time management, efficient reading, questioning/listening/observing skills, getting the most out of doing ("hands-on" learning), memory building, tips for staying motivated, developing a learning plan.

The above links are our suggestions to start you on your way. At the time of writing these web links were active. If you want to look for more go to www.google.com and type "self-study basics", "self-study tips", "self-study skills" or similar.

Time Frame

One year comprising three residential schooling; two (2) weeks of contact sessions per residential. You need three (3) hours for formal study per week and you are expected not to spend less than ten (10) hours per week for self-study.

Need Help?

Contact: Edith Sikota-Habwanda

Email: edithhabwanda@yahoo.com

Office: Tutorial Block 1, Room 6

Required Resources

Apart from this module, as you may be interested in learning more on this subject, I have provided you with a list of recommended readings; these are books, articles and websites.

Assessment

Continuous Assessment	**50%**
One assignment	20%
One seminar presentation	10%

One test	20%
Final examination	**50%**
Final mark	**100%**

References

Collins, S. J. (1962) *Tonga Grammar*. Lusaka: NECZAM

Fortune, G. (2001) *An Outline of Silozi Grammar.* Lusaka: Book world Publishers

Lehmann, D. (2002) *An Outline of Cinyanja Grammar*. Lusaka: Book world Publishers

Mann, M. (1999) *An Outline of Ici Bemba Grammar*. Lusaka: Book world Publishers

Matthews, P. H. (1997) *Oxford Concise Dictionary of Linguistics*. Oxford: Oxford University Press

Mwisiya, M. W. (1977) *Introduction to Silozi Grammar*. Lusaka: Kenneth Kaunda Foundation

http://linguistics.byu.edu/classes/Ling450ch/reports/afro-asiatic2.html

https://msu.edu/~hanson54/conlanging/phonological-processes.pdf

UNIT 1

BANTU AND AFRICAN LANGUAGES

1.0 Introduction

For you to be tuned smoothly into this course, we will introduce you to the terms and concepts used in the course. This will be done right at the beginning. As a proactive learner, you will be required to make searches beyond this material so that you concretise whatever is presented in the module. You cannot get to any concept before you understand the title, 'The Structure of Bantu Languages'. As you can speculate, Bantu languages are African languages. Therefore, you will be exposed to the knowledge of African languages and Bantu linguistics as well, although we will not delve much on African languages.

Learning Outcomes

By the end of this unit, you are expected to.

- explain the terms African languages and African linguistics.
- explain Bantu languages and Bantu linguistics.
- establish the geographical coverage and linguistic boundaries of Bantu languages.
- distinguish languages within Africa, which are studied under African linguistics from those that are not.

1.1 Defining Bantu languages and Bantu linguistics

The word Bantu is not a strange word to you. What are Bantu languages? Where is their origin? Is there anything special about the study of Bantu languages? Well, the Bantu languages are a large family of languages spoken by the Bantu people throughout Sub-Saharan Africa. Actually the download from the web below has this to say about Bantu languages:

> "…a group of some 500 languages belonging to the Bantoid subgroup of the Benue-Congo branch of the Niger-Congo language family. The Bantu languages are spoken in a very large area, including most of Africa from southern Cameroon eastward to Kenya and southward to the southernmost tip of the continent." (https://www.britannica.com/art/Bantu-languages).

In Greenberg's classification of African languages, Bantu is a small fraction of the major language family. Below is Greenberg's model of classification:

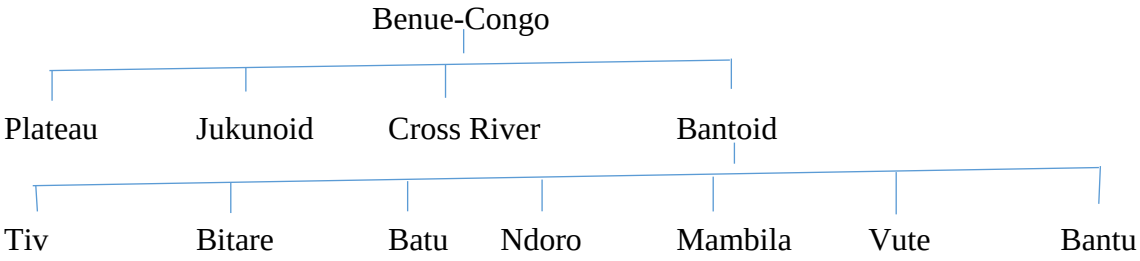


Fig 1: Greenberg's model of the classification of Bantu
(Adopted from Blench)

It should be stated here that although Bantu was coined to refer to the group of languages which presumably developed from an ancestor language, the term is also used to refer to peoples speaking 'Bantu' languages as 'mother tongues' and anything that is characteristic of such people. You have probably heard people talking about 'Bantu culture, Bantu migration, Bantu philosophy etc. What do they imply?

The homogeneity of the Bantu languages is well known and it is such that a speaker of one language can understand many words in other Bantu languages. It is evident even among the Zambian languages that they can understand a number of vocabulary as far as Burundi and Uganda in the east and South Africa in the South or Congo in the West. Actually, linguistic boundaries are different from geographical boundaries.

The term Bantu linguistics refers to a linguistic specialisation in Bantu languages. In addition to general concepts and theories in general linguistics, Bantu linguistics as an academic discipline comprises a number of concepts which are specific to it and a number of specific terms that refer to such specific concepts. You will deal with a number of them throughout the course.

1.2 African Languages and African Linguistics

We have indicated that all Bantu languages are African languages. They are spoken in Africa. Are all languages spoken in Africa African languages? Certainly, no. A language spoken in Africa does not necessarily have to be an African language to that criteria. It's being spoken in

Africa by It must be spoken as first language (L1), in a community recognised or accepted as an indigenous African community.

Considering what has been stated above, are English, French and Portuguese African languages? Yes, they are spoken in Africa, but are they spoken as L1 in any of the African communities? Certainly, they are not. Therefore, they are not African languages.

Let us also look at another category of languages; Arabic, Afrikaans. What conditions do they meet to be categorised as African languages? Arabic and Afrikaans are spoken as first language in Northern Africa and, South Africa and Namibia respectively. However, African linguistics does not cover these languages because they do not have closely related features, rather, they are still closely related to the languages outside the African continent from where they are based. For instance, African Arabic dialects are still closely related to Asiatic Arabic and Afrikaans from Dutch. The case of Malagasy in Madagascar, however, is different. Although it belongs to the Indonesian sub-family of the Malay-Polynesian family of languages, it generally studied under African linguistics because it is no longer closely related to any language outside Africa, (LAL 211 Notes).

Activity 1.1

1. What is the meaning of 'Bantu' among the Bantu people?
2. Explain the meaning of Bantu and Bantu languages.
3. Explain why some of the languages spoken in Africa cannot be classified as African languages.
4. Which among the languages spoken in Africa are not African languages?
5. Make a list of the countries in Africa where Bantu languages are spoken.

Summary

In this introductory unit to Bantu linguistics, you have learnt that Bantu is equivalent to the English term 'people'. You have also seen that Bantu languages are classified differently by the distinguished Bantuists; as a sub-sub-branch in a genetic classification as well as a large group divided into zones. The other information that you should be well vest of is that not all languages spoken in Africa are African languages; neither are the languages that are considered African (eg. Arabic and Afrikaans) included in African linguistics.

UNIT 2

THE ORIGIN AND SPREAD OF BANTU

2.0 Introduction

Let us now look at the origin of Bantu. Where do you think this language family originated from? The origin of Bantu is a hypothetical one as Blench clearly says, "The 'origin of the Bantu' is one of the most widely debated and controversial questions of African ethnography and has at various times engaged the attention of linguists, archaeologists, historians and anthropologists." Well, Bantu is believed to come from an ancestor language called Proto-Bantu. Proto-Bantu is the reconstructed common ancestor of Bantu languages which are spread across Central and Southern Africa. From where does the original type originate? Let us go through a few theories about the origin of Bantu.

Learning Outcomes

By the end of this unit, you are expected to;

- explain both the Mediterranean and Asiatic theories of the origin of Bantu languages.
- discuss the most accepted theory of the origin of Bantu.

2.1 Theories of the origin of Bantu languages

There are various theories about the origin of Bantu languages. Here, we are going to look at the Mediterranean and Asiatic theories before advancing to the more accepted ones.

Mediterranean theories: There are two hypothetical theories:

i. Carl Meinhof's theory to which the Fula language is considered to be the bridge between the Hamitic (Mediterranean) and the Bantu languages. You will need a linguistic map of Africa to clearly locate this area.
ii. Harry Johnstone's theory to which Johnstone attributes the formation of Bantu from the impact of the Negro of some Mediterranean racial and cultural influences. This is evidenced from the class prefix and concord prefix which originated in the Mediterranean basin and invaded Africa.

Asiatic theories: There are also two theories:

i. Holden's theory indicates that the Kafir race migrated from the centre of life in the neighbourhood to the Tigris and Euphrates.

ii. Stulman's theory which states that from the mingling of the Negroes… and Proto-Hamites were formed probably in East Africa, the Bantu languages and Bantu peoples.

Let us also look at the more recent assumptions of the origin and spread of Bantu. Bantu is thought to have originally been spoken in West/ Central Africa in the area of what is now Cameroon. It split off from other Bantoid languages when the Bantu expansion began, to the south and east. Two theories have been put forward about the way the languages expanded: one is that the Bantu-speaking people moved first to the Congo region and then a branch split off and moved to East Africa; the other (more likely) is that the two groups split from the beginning, one moving to the Congo region, and the other to East Africa.

Another assumption is that the Bantu-speaking peoples migrated from Western Africa near modern-day Nigeria, southward and eastward, spreading out across all of the southern half of the African continent.

Let us again look at the following more accepted theories of Bantu origins; the first was advanced by Joseph Greenberg. He had analysed and compared several hundred African languages and found that a group of languages spoken in South-eastern Nigeria were the most closely related to languages from the Bantu group. He theorised that Proto-Bantu (the hypothetical ancestor of the Bantu languages) was originally one of these languages that spread south and east over hundreds of years. This is closely related to the Cameroon-Nigeria border area origin.

This was quickly challenged by Malcolm Guthrie who analysed each Bantu language and found that the most stereotypical were those spoken in Zambia and in the southern Democratic Republic of Congo (DRC). This provided the alternate theory that Bantu speakers had spread from this location in all directions.

(https://www.cs.mcgill.ca/~rwest/wikispeedia/wpcd/wp/b/Bantu.htm)

Guthrie's theory faces criticism by some scholars such as Blench who says:

> "The identity, or even the existence, of aboriginal populations in the Zairean rainforest remains uncertain, but the expansion of the Bantu has been broadly identified with the migrations of hunter-farmers. For reasons that are still unclear, Guthrie (1969-71, 1970) favoured a region in the southeast of the Congo basin as the "nucleus" for the 151 expansion of the Bantu. Such a hypothesis depends on the assumption that the historical links with West African languages were unimportant. As we have seen,

no other major scholar has agreed with this and it is likely that it was only taken seriously because of Guthrie's prestige as a Bantuist,"

Blench; http://horizon.documentation.ird.fr/exl-doc/pleins_textes/pleins_textes_6/colloques2/38088.pdf).

Blench seem to be in support of Greenberg's theory as he says;

"Greenberg (1964, 1972) reaffirmed his original hypothesis and this was later expanded by Williamson (1971). Broadly speaking, the languages most closely related to Bantu were all in the region of the Cameroon Grasslands. The links with West African languages were accepted with the implication that Bantu grew directly from similar languages within West Africa. The striking systems of nom-classification that initially seemed to set Bantu apart were seen to exist in fragmentary form al1 over West Africa. The Cameroon Highlands were therefore assumed to be the "cradle" of the Bantu."

http://horizon.documentation.ird.fr/exl-doc/pleins_textes/pleins_textes_6/colloques2/38088.pdf).

From the onset on the origin of Bantu languages and peoples, many scholars have found Greenberg's theory more convincing and favourable although the 'Bantu homeland' debate remains unsettled. Compare the two maps of Africa above.

Activity 2.1

1. Discuss the origins of Bantu linguistics. Which is the most accept theory of the Bantu language origin?
2. What conclusion do you draw about the origin of Bantu?
3. Which is the most acceptable theory of the origin of Bantu languages? Justify.

Summary

This unit has indicated that the most accepted theories about the origin of Bantu languages and how they spread to where they are presently are Guthrie and Greenberg. According to Guthrie, Bantu languages originated from the Congo basin while Greenberg, the Bantu people originated from the Cameroon-Nigeria border. Most scholars favour Greenberg's theory.

UNIT 3

CLASSIFICATION OF BANTU AND AFRICAN LANGUAGES

3.0 Introduction

There are two distinct contributors in the classification of languages in Bantu linguistics; one by Greenberg and the other by Guthrie. What have you learnt about Greenberg and Guthrie so far? What are their contributions in relation to the origin of Bantu languages?

Learning Outcomes

By the end of this unit, you are expected to;

- explain the genetic classification of African languages.
- state the criteria used in the classification of African languages.
- state the characteristics of the four language families.
- locate Bantu under the genetic classification of African languages.
- explain the classification of Bantu languages.
- locate a number of languages under Guthrie's classification.

3.1 Greenberg's classification of African languages (Classification according to families)

Just as you have seen from the subheading for this section, Greenberg classifies African languages according to families. This kind of classification is known as a genetic or genealogical classification. He establishes four main family languages. These are Niger-Congo, Nilo-Saharan, Afro-Asiatic and Khoisan. These form the basic family languages to which the recent literature forms a modified classification as you will see in the map provided below. However, we are going to deal with the basic four as originally proposed by Greenberg and discuss the recent revised classification.

3.1.1 Niger-Congo

This is the language family that we have passively discussed in the previous unit. What can you remember about the discussion about this family? Are you able to trace and locate Bantu? Yes, it a language belonging to Bantoid, a sub-sub-branch of the Niger-Congo family. Can you state the relationship of Bantoid and Benue-Congo to Bantu?

Table 3. Major Niger-Congo language groups

A. Kordofanian
B. Mande
C. Atlantic-Congo
1. Ijoid
2. Atlantic
3. Volta-Congo
a. Dogon
b. Kwa
c. Benue-Congo
d. Kru
e. North Volta-Congo
i. Gur
ii. Adamawa-Ubangi

(Adopted from Sands, 2009)

The main characteristic of Niger-Congo language family is the use of **a noun class system**. The many noun classes form a concord for sentential construction by means of a prefix. There are pairs of affixes, especially prefixes to express the grammatical category of number, eg. in some Gur languages. In some languages, both prefixes and suffixes are used. The dominant structure in the simple sentence is SVO.

The most widely spoken Niger–Congo languages by number of native speakers are Yoruba, Igbo, Fula and Shona. The most widely spoken by number of speakers is purported to be Swahili (https://www.google.com/search?client=firefox-b&ei=9ivXW8b1HMOasAeb1piIAw&q=characteristics+of+niger+congo+language+family)

3.1.2 Nilo-Saharan

The core of Nilo-Saharan appears to be the East Sudanic group, which includes the following branches: Nubian, Nera, Jebel, Nyimang, Temein, Tama, Daju, Surmic, and Nilotic.

Table 4. Major Nilo-Saharan language groups (after Bender 1996, 2000)

Outliers

Songhay

Kuliak

Saharan

Satellite-core group

Maba

Fur

Central Sudanic

Berta

Kunama

Core group

East Sudanic

Koman

Gumuz

Kadugli

The main characteristics of these languages are;

i. absence of the noun class system.
ii. dominance of SOV word order in the simple sentence.
iii. the plural form of a noun is generally formed by suffixation. In some cases, plural forms are made by suppression of a suffix, eg. *fallo* 'knife' => *fal* 'knives'in Shillux.

3.1.3 Afro-Asiatic

There are a large number of Afro-Asiatic languages in Africa, including such well-known languages as Arabic, Hausa, Somali, and Amharic. Two of the main families of Afro-Asiatic are represented by Berber languages, and by Ancient Egyptian (and its descendant, Coptic, which is also no longer spoken as a mother tongue). Table 2 shows the major, commonly accepted subgroups of the Afro-Asiatic phylum, along with citations of recent surveys.

Table 2. Major Afro-Asiatic language groups

Major language group	Proponents
Cushitic	Tosco 2000; Gragg 2007
Omotic	Bender 2003b, 2007
Berber	Kossmann 1999, 2007
Egyptian	Takács 1999
Chadic	Newman 2003; Schuh 2003
Semitic	Rubin 2008

(Adapted from Sands, 2009).

The main characteristic of Afro-Asiatic languages is the use of vowel changes in word formation. Like in the English example, feet foot, vowels make the difference between separate words. In Arabic, 'ti-ktib' means 'she writes' and 'katab-it' means 'she wrote'. The affixes 'ti-' and '-it' mean 'she'. The root form of the verb has only three consonants in common. Therefore the root is considered 'ktb.' When looking for roots it is important to remember that early Semitic only had consonants and vowels had to be inferred from the context. (http://linguistics.byu.edu/classes/Ling450ch/reports/afro-asiatic2.html), downloaded on 25. 05.18).

3.1.4 Khoisan

If you did a study of history even at junior secondary school, you may recall the peoples of the southern region of Africa as the Khoi-koi and San, forming a language group known as Khoisan. It refers to Hottentots and Bushmen. Although Greenberg's Khoisan is not accepted as a genetic grouping by most Khoisanists working in historical linguistics now (Sands, 2009), the major Khoisan language groups (after Güldemann and Stoneking 2008) are as follows:

Hadza	a language isolate;
Sandawe	a single language, possibly related to Khoe-Kwadi;
Khoe	a Central Khoisan + Kwadi (single language)
Ju	a Northern Khoisan + ‡Hoan (single language)
Tuu	a Southern Khoisan

(https://pdfs.semanticscholar.org/1afa/1e6d5c72f62f91af91dfa8d94927673ef90e.pdf)

by Sands (2009), downloaded on 03.04.18.

The main characteristic of Khoisan is the presence of **clicks** in all such languages. Some neighbouring languages such as Xhosa, Ndebele and Tswana have borrowed clicks. This means that certain characteristics would not be present. Nominal and adjectival roots are generally disyllabic and the occurrence of phonemes in these roots is subject to the following:

i. the first position is often a click;
ii. second position has 'o' or 'u';
iii. third position will have one of these; [r, m, n, labial] or ø (zero).
iv. fourth position will have [a, e, i, o, u].

There is also use of postposition instead of prepositions.

Two other languages, Sandawe and Hatsa in Tanzania contain click sounds and therefore are included in this language family.

The map below shows Greenberg's revised classification of the families of languages. Using the map, state the major contributions in this classification to that of the basic form. What are the possible factors leading to the revised classification?

Revised classification according to families. (Adopted from https://www.google.co.zm/imgres?imgurl=https://upload.wikimedia.org/wikipedia/commons/thumb/3/35/African_language_families.png/300px-African_language_families.png&imgrefurl)

3.1.5 Criteria for Classification

There are three criteria used by Greenberg in the classification of African languages;

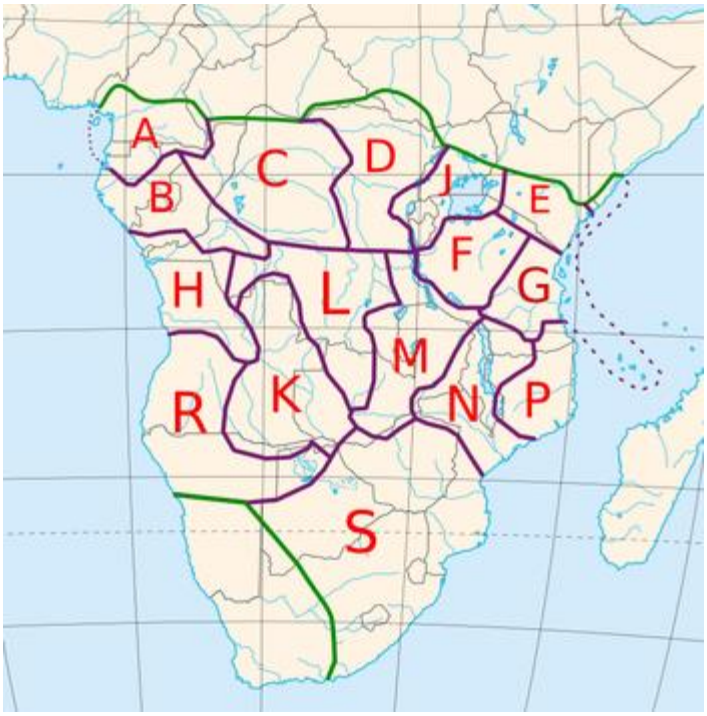
a) morpho-semantic similarity : resemblance in both sound forming a word and meaning in specific forms;
b) mass comparison: the comparison of many languages to find out their similarities; and
c) only linguistic evidence is relevant in drawing conclusions.

As we have seen, Greenberg classifies the African languages into four families which are each subdivided into branches and branches into groups, groups into sub-groups with the possibility of a sub-group being sub-divided into sub-sub-groups (the actual languages, eg. Bantu).

3.2 Guthrie's classification of Bantu languages

3.2.1 Zonal classification

Guthrie classifies Bantu languages according to zones. The map below shows Guthrie's zonal classification of Bantu languages.



Guthrie's classification of Bantu languages (Adopted from https://www.google.co.zm/imgres?imgurl=https://upload.wikimedia.org/wikipedia/commons/thumb/3/35/African_language_families.png/300px-African_language_families.png&imgrefurl)

3.2.2 Criteria for classification

Guthrie uses two criteria; a principal one and a subsidiary one. Let us look at each of these and try to compare the criteria with those of Greenberg.

Principal Criteria

1. There is a system of grammatical genders , usually with these features:
    a) The sign of gender is a prefix, by means of which words may be associated into a number of classes varying roughly from ten to twenty;
    b) There is a regular association of pairs of classes to indicate singulars and plurals of the genders;
    c) When a word has an independent prefix as the sign of its class, any other word which is subordinated to it has to agree with it to class by means of a dependent prefix. For instance, Bemba: umuntu umusuma 'good person'. In this example, -mu- in umuntu an independent prefix while –mu- in umusuma is a dependent prefix.
    d) There is no correlation of the genders with sex reference or with any other clearly defined idea.
2. There is a vocabulary, part of which can be related by fixed rules to a set of hypothetical common roots.

Subsidiary Criteria

1. There is a set of invariable cores, or radicals from which almost all words are formed by an agglutinative process. These radicals have the following features:
    a) They are composed of Consonant-Vowel-Consonant, eg. Tonga: -lal- 'to sleep'.
    b) When a grammatical suffix is attached to the radical, a base is formed on which words identified as verbals are built, eg. Bemba: extensions.

c) When a non-grammatical, or lexical suffix is attached to the radical, a stem is formed on which words identifiable as nominals are built. When a nominal belongs to a two-class gender (singular/plural), the sounds and tones of the stem are the same as in both classes;

d) A radical may be extended by an element found between it and the suffix. Such elements termed extensions are composed either of Vowel-Consonant or single Vowel; eg. ambila 'talk to' in Tonga (M64).

e) The only case of a radical occurring without a prefix of any kind occurs in verbals used as interjections.

2. There is a balanced vowel system in the radicals, consisting of one open vowel 'a' with an equal number of back and front vowels. The balanced vowel system is exemplified below:

	FRONT	BACK
HIGH	i	u
MID	e	o
LOW		a

Remember that Greenberg's classification is a genetic one while Guthrie's is a zonal one. Greenberg deals with African languages whereas Guthrie deals with Bantu languages; a fraction of the Niger-Congo language family in Greenberg's classification. What we can see here with the criteria used is that Guthrie's criteria are solely linguistic.

3.2.3 Some zonal classification

As indicated earlier, Guthrie's classification of Bantu languages is a zonal one. Bantu languages are conventionally divided into geographic zones as first proposed by Malcolm Guthrie (1967–1971). These were assigned letters A–S and divided into decades (groups A10, A20, etc.); individual languages were assigned unit numbers (A11, A12, etc.), and dialects further subdivided (A11a, A11b, etc.). For instance Tonga is classified as M64 where M is the language zone, 60 is the group and Tonga is the fourth language in this group, Guthrie (1971: 57). The M60, therefore has M61 Lenje, M62 Soli, M63 Ila and M64 Tonga. The other six Zambian regional languages are classified as follows:

- Bemba M42

- Kaonde L41
- Lozi K21
- Lunda L52
- Luvale K14
- Nyanja N31

Note that Luvale has been presented as Luena, presently a dialect of Lozi.

However, Guthrie's nomenclature has been of late criticised by some scholars. There are numerous Bantu languages lacking in Guthrie (1971). Due to the many inconsistencies in Guthrie's classification, scholars have indicated that it can only be used as a referential classification, not a linguistic-genetic one. Any linguistic-genetically valid classification will have to await more and better data. (See what Maho says on this link; (https://www.pol.gu.se/digitalAssets/1324/1324035_the-bantu-area.pdf). Scholars stick to Guthrie (1971)'s classification because it is already so widely used and well-established. What is suggested is adding new languages/dialects to that without re-coding old languages. Nevertheless, in this course, we do appreciate Guthrie's data as one of the linguists to deal with Bantu linguistics.

Activity 3.1

1. Define Greenberg's classification of African languages.
2. What is the reason for splitting the Niger-Congo language family?
3. State the four language families in Greenberg's classification
4. Establish the number of groups in Guthrie's zones 'A' to 'S'.
5. Establish the codes for all the regional Zambian languages.
6. Compare Greenberg's classification of African languages to that of Guthries's Bantu.
7. Read more about Guthrie's classification of Bantu languages and state its worthiness.

Summary

In this unit, you have learnt that the two contributors who dealt with the classification of languages in Bantu Linguistics are Greenberg and Guthrie. Greenberg dealt with the classification of African languages whereas Guthrie, Bantu languages. You have also learnt that Greenberg's classification is a genetic one where languages have been classified into four language families; Niger-Congo, Nilo-Sahara, Afro-Asiatic and Khoisan. The criteria for classification are morpho-semantic similarity, mass comparison and linguistic evidence.

Guthrie's classification is a zonal one where languages have been grouped into language zones; A, B, C … Guthrie used two criteria:

a) Principal Criteria which focused on a system of grammatical genders where the noun prefix is the main category. The other criterion considers a vocabulary, part of which can be related by fixed rules to a set of hypothetical common roots.
b) Subsidiary Criteria where a set of invariable cores, or radicals from which almost all words are formed by an agglutinative process. The other criterion used a balanced vowel system in the radicals, consisting of one open vowel 'a' with an equal number of back and front vowels.

UNIT 4

SOME ISSUES IN GUTHRIE'S COMPARATIVE BANTU

4.0 Introduction

In our discussion of the classification of Bantu languages, Guthrie has been mentioned as a key and pioneer in the study of Bantu languages. In this unit, we are going to deal with issues from Guthrie's Comparative Bantu. A four-volume classification of Bantu languages, Comparative Bantu (1967–71), has become the standard reference book used by most scholars, including those who disagree with Guthrie's proposed classification, which sets up a basic western and eastern division in Bantu languages with a further 13 subdivisions, (You can read more on the revised classifications of Bantu languages).

Learning Outcomes
By the end of this unit, you are expected to;

- explain the nomenclature of languages.
- discuss the methodological concepts used in Comparative Bantu.
- explain the development of Proto-Bantu to Pre-Bantu.
- analyse the stems and radicals in Pro-Bantu.
- identify the reconstructed stems and radicals in Bantu languages.

4.1 The nomenclature of languages

You need to understand the term 'nomenclature of languages' before proceeding with this section. The nomenclature of languages is the system used to name and refer to languages or the results achieved by applying the system. The system used in Comparative Bantu is the same as that developed in the Classification of the Bantu languages. Are you able to remember the criteria used in the zoning of the Bantu languages? Since it is Guthrie who did the classification by comparing the languages, the methods used are essentially the same as for the nomenclature of Bantu languages.

Reflection

How have you classified your own language using Guthrie's zonal classification? Can you again read section 3.2.3 above? How are Bantu languages classified?

4.2 Some methodological concepts

Comparative linguistics (originally comparative philology) is a branch of historical linguistics that is concerned with comparing languages to establish their historical relatedness. Genetic relatedness implies a common origin or proto-language and comparative linguistics aims to construct language families, to reconstruct proto-languages and specify the changes that have resulted in the documented languages. To maintain a clear distinction between attested and reconstructed forms, comparative linguists prefix an asterisk (*) to any form that is not found in surviving texts. A number of methods for carrying out language classification have been developed, ranging from simple inspection to computerised hypothesis testing. Such methods have gone through a long process of development.

Let us now look at the concepts used by Guthrie in his Comparative Bantu. Do you have any idea of any of the following?

i. Comparative series
ii. Common Bantu
iii. Starred forms

A comparative series (CS) is a list of items with two distinguishing features:

(a) Each item has the same assignable meaning which acts as a connector of the CS,

(b) The shapes of the items display sets of patterns that recur in other CS.

Take for instance the sets below:

	C	D
	to be extinguished	to burry
Bemba (M 42)	- ʃim-	- ʃiik-
Swahili (G42)	-zim-	-zik-
Sukuma (F21)	-dzim-	-dzik-
Tonga (M64)	-zim-	-zik-

In the C set, the connector is the meaning ‘to be extinguished’ and in the set D, the connector is the meaning ‘to burry’. Therefore, both sets satisfy the condition (a) for a set of items to qualify as a valid CS.

On condition (b), Guthrie says:

> "It is possible to find additional occurrences of the sets of patterns im/im/im and iik/ik/ik/ so these raise no special difficulty. There remain then the sets ʃi/zi/dzi and ʃi/zi/ dzi which are obviously similar. Nevertheless investigation shows that the set ʃi/zi/dzi in list C recurs in a number of CS. While iik/ik/ik/ in list D is apparently unique. This means that while all the three items of list C could be entered in a valid CS, in list D in the first two items only is there fulfilled the condition that all the patterns should belong to recurrent sets. The third form in the list has therefore to be excluded from a valid CS even though some of the patterns in its shape belong to a recurrent set when the shape of an item contains a single feature that preludes its being entered in a CS to which it might otherwise be admitted, it does not follow that it is useless for prehistory."

4.2.1 Common Bantu

The term 'Common Bantu' or simply 'the common language' is used by Guthrie to refer to the entire body of interrelated CS that he has identified and those that could be identified. Therefore, he does not use the term to mean a type of language used by the majority of the population of a speech community.

4.2.2 Starred form

A starred form is any form preceded by a star (*), also called an asterisk. In linguistics, an asterisk has several functions. You may need to know some of these functions:

a) In historical linguistics, it is used to mark forms that have been reconstructed. This means that they are hypothetical (there had been no written evidence for its existence, eg. *-doot- 'dream' in Proto-Bantu.
b) In synchronic linguistics, it is used to mark a form or construction which is unacceptable for some reason, eg. *The students has gone.
c) In X-bar syntax, the asterisk is an operator to indicate any member of instances of a category (including zero). For example, YP* means 'any number of phrases of any type'.

In (c) the asterisk is essentially final.

In Comparative Bantu, Guthrie uses the asterisk in two ways;

a) before reconstructed forms and
b) before a form that merely represents a comparative series or some subset of a CS.

Consider for instance, the C.S in the example below, where what is after the hyphen is the nominal stem for ‘Chin’.

Nyankore E13	aka- -rezu
Lenje M61	ci- -lesu
Sotho S33	se- -ledu
Bemba M42	aka- -lefulefu

Note that the Bemba form has some peculiarities; the reduplication of -lefu. The set of steps in (1) including the Bemba stem, is represented by a single form, the starred form *-dedu.

(2) *-dedu ‘chin’

Nyankore E13:	-refu
Lenje M61:	-lefu
Sotho S33:	-ledu
Bemba M42	-lefulefu

It is important to note that the symbols used for the construction of starred forms are in fact identical with some characters used to transcribe data for individual languages (Guthrie, 1971: 43). The author, however, explains that there is no inherent reason why this should be done, apart from that of pure typographical convenience, since at that stage there was no question of any theory as to the shape of the probable source items which might have had the ancestors of all the entries in a given C.S.

Apart from simply representing CS, starred forms have other functions in comparative Bantu. On this, Guthrie has this to say (1971:55):

(a) When starred patterns are being used in place of source patterns the expression ‘reflex of a starred pattern’ necessarily has a pre-historical significance. As a result, two kinds of equations with starred patterns may be used; for example *bu > R 11 βe means that in items from Mbundu R11 there is a pattern ße which belongs to the recurrent set of patterns symbolized as *bu; while *bu > (R11) ße means that the R11 pattern ße is one

of the reflexes of the source pattern represented by (the starred form) *bu. In other words Proto-Bantu *bu > ße in Mbundu (R11).

(b) Another benefit of using starred patterns instead of source patterns is that it makes possible a study of the various kinds of sound shift as a preliminary to the formulation of hypotheses about the probable characteristics of the source patterns.

As we have seen in (a) above, the plosive has become a fricative in Mbundu.

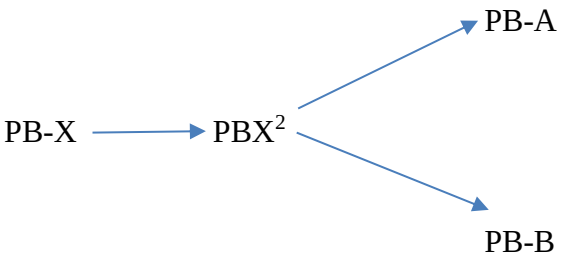
Activity 4.1

1. What is a comparative series in Guthrie's Comparative Bantu? Exemplify.
2. With an example in any Bantu language, explain what Common Bantu is in Guthrie s' Comparative Bantu? Exemplify.
3. Give three uses of 'starred' or 'asterisked' forms in in Guthrie's Comparative Bantu.

4.3 From Proto-Bantu to Pre-Bantu

A proto –X, where X is the name of a given language (e.g. English), is the ancestor of language X which is either attested (= form which there exist written records) or merely hypothetical (= reconstructed on the basis of a systematic comparison of synchronic data). As explained earlier, Proto-Bantu is a hypothetical language (= reconstructed). In fact, Proto-Bantu (PB) has only been partially been reconstructed.

According to Guthrie, in comparative Bantu II, the ancestor of the Bantu languages, termed Proto-Bantu X (abbreviated as PB-X), developed into a variety 'which he terms Proto-Bantu X2 (PB-X2) which added some innovations into PB-X and then into distinct dialects, Proto-Bantu A (PB-A) and Proto-Bantu B (PB-B) spoken respectively in the western part and the eastern part of the Bantu area. Schematically, the development of PB is as follows:



It is important to note that any stage of the Bantu language before the current stage can be referred to as Pre-Bantu. Thus, PB-X, PB-X_2, PB-A, PB-B and all stages between PB-A and PB-B on the one hand and the present-day Bantu languages on the other are pre-Bantu.

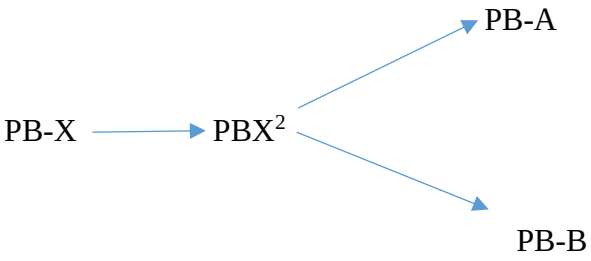
On the difference between PB-X_2 and the Proto-dialects PB-A and PB-B, Guthrie has the following to say, (Part II, Pp. 11-12):

> The principal way in which the inferences about PB-X_2 are distinguished is that they all relate to innovations, whereas in the case of the proto-dialects, on the other hand, it is often necessary to postulate the disappearance or replacement of a PB-X feature. Some of the inferred innovations in PB-X_2 relate to lexical material and other to word-building elements, but in both respects it has to be recognised that the inference are not very firm.

Nevertheless, there are a few general observations that they may have some validity, especially in respect to the emergence of certain nominal classes in PB-X_2.

Activity 4.2

1. Explain the following diagram:



2. Explain the following:
   (a) Pre-Bantu
   (b) Proto-dialects

4.4 Some Proto-Bantu stems and radicals

This unit acquaints you with the knowledge of the stems and radicals used in PB and how they have been reconstructed in present Bantu.

In Comparative Bantu Part 2, there is a "Provisional List of PB-X Stems and Radicals". In this list, the term 'radicals' applies to anything other than a verb. This list is very important as all specialists in Bantu linguistics very often refer to it. If you cannot download it you should ask for a copy from your tutor.

Project

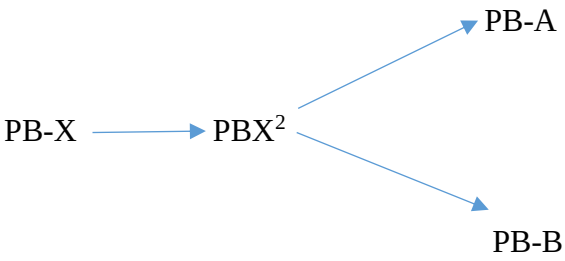
Using the list of PB-X items, create a list which has reflexes in a Bantu language (if you do not speak any Bantu languages, use a speaker of a Bantu language as an informant).

Summary

In this unit, you have learnt some issues in Guthrie's comparative Bantu. We have discussed the nomenclature of the Bantu languages in comparative Bantu where languages are given letters for zones and decade number for groups; and number in ones for the language in that group.

Comparative Series (C.S,), Common Bantu, starred form have also been discussed. A starred form is any form proceeded by a star (*), also called an asterisk. In Comparative Bantu, the term is used in the sense in which it is used in historical linguistics, i.e. to mark forms that have been reconstructed and are therefore, hypothetical, because there had not been written evidence for its existence, e.g. *-nto 'person' in Proto-Bantu.

We have also traced the historical innovations of Proto-Bantu X (PB-X) to PB-X_2, PB-A, PB-B, and then Pre-Bantu. PB developed as follows:



Are you able to explain this? Well! This indicates that Proto Bantu (PB-X) developed into PB-X_2 which introduced some innovations in PB-X and developed into two dialects, namely PB-A in the west and PB-B in the east. From the information you have gathered so far, which of the two; PB-A and PB-B do present Bantu languages belong?

In Comparative Bantu 2, there is a "Provisional list of PB-X Stems and Radicals". In this list, the term radicals applies only to verbs (=verbal root) while the term stems applies to anything other than a verb. This list is very important as specialists in Bantu linguistics very often refer to it.

UNIT 5

THE PHONEMES OF PROTO-BANTU

5.0 Introduction

This unit deals with the phonemes of Proto Bantu. Just as we have established already, the phonemes of the languages are hypothetical just as the language itself. These phonemes have been discussed as reconstructed by Guthrie.

Learning Outcomes
By the end of this unit, you are expected to;

- to present in charts and in a matrix the Proto-Bantu (PB) segmental phonemes as reconstructed by Guthrie.
- define and exemplify the phonetic features used in the PB matrix.
- exemplify the two suprasegmental phonemes reconstructed for PB.
- name a variety of sources of quantity which occurs in many present-day Bantu languages.

5.1 Proto-Bantu Segmental phonemes

We are going to discuss the Proto-Bantu segmental phonemes in categories of vowel, consonants and semi-vowels.

5.1.1 Vowels

Two vowel systems have been reconstructed for PB. They are presented in Table 1a and Table 1b below. For typological reasons, the high back vowel is presented as capital 'U' to represent a 'u' with a cedilla.

Table 1a: Chart of PB vowels

	Front	**Back**
High	Į	U
High-Mid	i	u
Low-Mid	e	o
Low		a

Table 1b: Chart of PB vowels

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

In this unit, only the vowel system in Table 1b will be used.

5.1.2 Consonants and semi-vowels

Table 2: Chart of PB consonants and glides

(- stands for 'voiceless' and + stands for 'voiced')

	Bilabial		Alveolar		Post-alveolar		Palatal		Velar	
	-	+	-	+	-	+	-	+	-	+
Nasal		m		n				ny		
Stop	p	b	t	d					k	g
Affricate					c	j				
Fricative										
Glide								y		

Note the following:

- The symbols ny, c, j, and y are taken from the 'Africa' alphabet, a set of symbols usually employed in the description of African languages. Their phonetic values in IPA (= International Phonetic Alphabet) are the following: ny as in Bantu nyama; c as ch in English 'chain'; j as j in English 'jam'; y as y in English 'yes'.
- As said above, '-' and '+' mean voiceless and voiced, respectively.
- PB also has nasal complexes (*mp,*mp,*nt,*nd,*nc,*nj,*nk,*ng) but we prefer to treat them as sequences of a nasal + consonant although Bantu nasal complexes may be treated, at least phonetically; as single consonants (nasalised consonants) just as affricates (e.g. tʃ, dʒ) are regarded as single consonants.
- No fricative is posited for PB.
- */r/ and*/l/ are not posited: in most cases, Bantu /r/ and /l/ are reflexes of PB */d/.
- There is only one semi-vowel (glide), */y/ in Proto Bantu.

Apart from using charts to describe the PB phonemes, a single matrix may be used. The characteristics of a phonological matrix are the following:

- A matrix is a rectangular figure with cells;
- The columns are segments and the rows are features;
- The cells are filled with pluses (+) or minuses (-).

The set of features to be used in characterising the segmental system of a language must fulfil two conditions. First, the set of features must be such that every segment differs from any other segment in at least one respect. For instance, the set will have to contain feature [consonantal] to distinguish between consonants and non-consonants and the feature [voice] to distinguish /b/ (voiced) and /p/ (voiceless), between /d/ (voiced) and /t/ (voiceless), /g/ (voiced) and /k/ (voiceless) , etc. Second, it must be such that each feature is necessary. For example, if the feature [consonantal] is removed from the set, there will be confusion between at least certain consonants and certain non-consonants. Likewise, if the feature [voice] is removed from the set, there will be no difference between /p/ and /b/; /t/ and /d/ and; /k/and /g/, etc.

5.2 Segmental features in Proto-Bantu

The features that we have chosen to describe the PB segmental system are as follows:

a) Consonantal (cons): partial or total obstruction of the airstream somewhere in the vocal tract (i.e. somewhere between the larynx inclusive and the mouth inclusive). All and only consonants are [+ cons]. All the other segments are [-cons].
b) Vocalic (voc): in the production of segments, there is narrowing of the oral cavity with no obstruction of the airstream. The spectrogram of the sound displays at least two well-defined formants (i.e formants which can be seen clearly). A formant is a kind of picture in the form of a black band for some sounds by which a spectrograph, an instrument used in acoustic phonetics provides a visual representation of acoustic energy of the sounds of the utterance. All vowels, liquids and nasals are [+ voc].
c) Sonorant (son): articulation such that voicing (= vibration of the vocal cords) is naturally expected. [+ son] segments are: all vowels, all glides (= semi-vowels), all nasals, all liquids (= l -sounds and r-sounds). All the other segments are [-son].
d) Syllabic (syll): nucleus (or peak) of a syllable. All vowels are [+syll]. In certain languages, certain consonants (especially nasals and liquids) may be [+syll] in

certain positions. For PB, it is assumed that all and only vowels are [+syll] and all the other segments are [-syll].

e) Nasals (nas): the uvula is lowered so that the airstream keeps flowing from the nasal cavity (i.e. through the nostrils). All and only nasals and nasals complexes (mb, mp, nt, nd) are [+nas] in PB.

f) Anterior (anti): there is a partial or total obstruction of the airstream somewhere in front of the palato-alveolar area. Note that because of the term 'obstruction' only a consonant can be [+ant]. [+ant] segments are: bilabials, e.g. /m/, and alveolar (e.g. /n, t, d/).

g) Back:- retraction (background movement) of the body of the tongue. Note that, unlike for the feature [anterior], a semi-vowel and a vowel can be [+back]. Among consonants, only velars and uvulars are [+back]. According to the definition, back segments are segments produced in the back part of the mouth.

h) Coronal (cor): the blade of the tongue (i.e. the front part of the tongue) is raised above the neutral position. Sounds with this feature include alveolars, postaveolars, retroflexes, dentals and palatals. However, some authors have argued that front vowels are also coronal. Therefore, we can add the front high vowels.

i) Voice: Vibration of the vocal cords. Note that all vowels, nasals, semi-vowels and liquids (i.e. l- and r-sounds) are [+voice]. Others include voiced stops, voiced fricatives and voiced affricates. All sounds produced with vibration in the vocal cords are [+ Vce].

1high; 2 high; 3 high and 4 high; These features have been chosen to refer to the various vertical position of the tongue (= tongue-height) as follows: 4 high = high; 3 high = high-mid, 2 high = low-mid; 1high = low.

In the matrix below, the circled feature values for a given segment are the ones which should be used together with their respective names of features to refer to the segment because all the others are redundant. For instance, if we want to refer to */a/, it is not necessary to use all the features chosen but all is needed is one feature, [+high], since in PB only */a/ is [+1high].

What this means is that PB there is a redundancy rule saying that if a segment is [+1high], then it is also [-cons, +son, +syll, -nas +back, -cor, +voice, -4high, -3high, -2high]. Such a redundancy rule is formulated as follows:

[+1 high]

↓

[-cons, +son, + syll, -nas, -ant, +back, -cor, +vce, -high, -4 high, -3 high, -2 high]

A further characteristic of the feature system is that vowels, semi-vowels and consonants can be described using the same terms, that is, the same features as shown below:

Table: Fully fledged PB phonological matrix

	i	e	ɛ	a	ɔ	o	u	y	m	n	ny	p	b	t	d	c	j	k	g
Cons	-	-	-	-	-	-	-	-	+	+	+	+	+	+	+	+	+	+	+
Voc	+	+	+	+	+	+	+	-	+	+	+	-	-	-	-	-	-	-	-
Nas	-	-	-	-	-	-	-	-	+	+	+	-	-	-	-	-	-	-	-
Ant	-	-	-	-	-	-	-	-	+	+	-	+	+	+	+	-	-	-	-
Cor	-	-	-	-	-	-	-	-	-	+	+	-	-	+	+	+	+	-	-
Back	-	-	-	+	+	+	+	-	-	-	-	-	-	-	-	-	-	+	+
Vce	+	+	+	+	+	+	+	+	+	+	+	-	+	-	+	-	+	-	+
4 high	+	-	-	-	-	-	+	+	-	-	-	-	-	-	-	+	+	+	+
3 high	-	+	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-
2 high	-	-	+	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1 high	-	-	-	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

If you look at the above matrix, you will realise that;

a) no two segments have exactly the same description (they differ in at least one respect); and
b) no feature is redundant (each feature is necessary to distinguish at least two segments.

The matrix in the following table only gives the minimal descriptions of the PB segments ie, descriptions of PB segments in terms of sets of features that are necessary and sufficient for each PB segment to be distinguished from any other PB segment.

Table: Minimal PB phonological matrix

	I	e	ɛ	a	ɔ	o	u	y	m	n	ny	p	b	t	d	c	j	k	g
Cons	-						-	-				+	+	+	+	+	+	+	+
Voc							+	-											
Nas									+	+	+		-		-				
Ant										+	-	+	+	+	+	-	-		
Cor									-	+		-	-	+	+				
Back	-	-	-		+	+	+									-	-	+	+
Vce												-	+	-	+	-	+	-	+
4 high							+												
3 high		+				+													
2 high			+		+														
1 high				+															

Activity 5.1

1. Give a chart for the PB non-vowel segmental phonemes.
2. Give aminimally specified feature matrix for PB phonemes.
3. If PB had no /r/ and /l/ phonemes, what is the source of these phonemes in present Bantu?
4. Define and exemplify the following segmental features:
    i. consonantal
    ii. vocalic
    iii. anterior
    iv. coronal

v. voice

vi. nasal

5. Without referring to the charts above, fill in the following matrix:

	e	y	n	k	b	j	g
Vocalic							
Consonantal							
Anterior							
Back							
Voice							

5.4 Proto-Bantu supra-segmental phonemes

A suprasegmental phoneme is a phoneme or feature of speech, as pitch, stress, and juncture that may extend over and modify series of segmental phonemes. There are two types of distinctive prosodic (ie, suprasegmental) units that have been reconstructed for PB, namely tone and quantity or length.

5.4.1 Tone

Proto-Bantu distinguished two tones, low and high. Each syllable had either a low or a high tone. A high tone is conventionally indicated with an acute accent (´), and a low tone is either indicated with a grave accent (`) or not marked at all.

Compare the following: *-bed- ‘to come to the boil’

*-béd- ‘to call out’

5.4.2 Length

In PB, although quantity or length has not been reconstructed, a long vowel may be interpreted as a sequence of two identical vowels. Note that in PB, as in a number of majority of Bantu languages, only a vowel can be long. The following is an example of vowel length in PB:

*-bék- ‘to announce a death’

*-béék- ‘to put’

Activity 5.2

1. With an appropriate example in PB, explain what a suprasegmental phoneme is.
2. Using Guthrie's provisional list of stems and radicals, identify as many pairs as possible of PB items that are distinguished by tone.
3. What is the purpose of length in PB?

Summary

This unit has discussed the phonemes of PB as reconstructed by Guthrie. You have been introduced to the segmental phonemes of PB where consonants, vowels and glides have been discussed. Segmental features of these phonemes have also been discussed, presenting the phonemes in feature matrixes. Suprasegmental phonemes, tone and length have also been discussed.

UNIT 6

SOME SALIENT REFLEXES OF PROTO-BANTU PHONEMES

6.0 Introduction

As we have already discussed, PB is a hypothetical language reconstructed by comparing the present-day Bantu languages. However, when dealing with reflexes of PB, there is need to treat PB as a real language. The rule by which the PB phoneme has reflected is referred as diachronic or historical rule. In diachronic linguistics, the following terms are necessary:

i. Etymology – the study of the source and history of words and the changes in their forms and meanings, including borrowed words.
ii. Etymon – a linguistic form from which another word is derived.
iii. Reflex – a linguistic form which is derived from an older form of the same language.

The terms etymon and reflex are also used when describing correspondences between a language or languages and a reconstructed language as in the case of present-Bantu languages and PB.

Learning Outcomes
By the end of this unit, you are expected to;

- identify reflexes of PB reflexes.
- identify reflexes of PB tones.
- explain the diachronic rules that apply for PB reflexes.
- formulate and explain some rules in feature terms.

6.1 Proto-Bantu phonemes

Proto-Bantu is generally reconstructed to have a relatively small set of sounds of 11 consonants and 7 vowels. We will start by looking at vowels.

6.1.1 Proto-Bantu vowels

Most Bantu languages take any of the two vowel systems:

a) The seven PB system (as discussed in 5.1.1 above)
   eg. Mikutu (D13): kutína ‘to fear’
   kutúna ‘to cut into pieces’
   kubóa ‘to say’

kubéa ‘to be bad’

Ɛnda ‘go’

ɔnda ‘say!’

or

b) a five-vowel system (i,e,a,o,u) or (i,Ɛ,a,o,u).

Table 6.1 Bantu 7-vowel system

	Front	Back
Close	i	u
Near-close	ɪ	ʊ
Open-mid	e	o
Open	a	

The representation of the vowels may differ in particular with respect to the two ‘middle’ levels of closedness. Some languages use e and o while others use ɛ and ɔ. Regardless of its representation, the third level (e and o in the table) was open-mid [ɛ] and [ɔ] in PB.

In general, the 5-vowel systems are derived from PB as indicated in the table below:

PB	Bantu
*i	i
*e	
*Ɛ	e or Ɛ (depending on language)
*a	a
*u	u
*o	
*ɔ	o or ɔ (depending on language)

What can you note in the table above? If you critically study the table, you would notice that:

a) The PB front high and high-mid vowel /*i/ and /*e/ have reflected a front high vowel /i/

b) The PB back high and high-mid vowels /*u/ and /*o/ have reflected a back high vowel /u/.

c) The low vowel */ɔ/ has reflected as /o/ in some languages while other languages have maintained the PB /ɔ/.

d) In many Bantu languages, */a/ has been maintained.

Study the following table below:

Rule	**Pb**	**Gloss**	**Bemba**	**Mambwe**	**Nsenga**	**Tonga**
*i > i	*-bimb-	to swell	-fimb-	-vimb-	-vimb-	-zimb-
*e > i	*-bede	body	-βili	-βili	-βili	-βili
*Ɛ > e	*-cƐk-	to laugh	-sek-	-sek-	-sek-	-sek-
*a > a	*-daad-	to sleep	-laal-	-laal-	-lal-	-lal-
*u > u	*-kukam-	to kneel	-fukam-	-fukam-	-fukam-	-fwukam-
*o > u	*-tom-	to send	-tum-	-tum-	-tum-	-tum-
*ɔ > o	*-dɔɔt-	to dream	-loot-	-loot-	-lot-	-lot-

Vowel sequence in PB.

What kind of vowel-sequence do your local languages display? You should realise from the analysis of the reflexes of the PB phonemes, there is no sequence of more than two vowels but what should be noted is that there must be a distinction between:

a) Cases where two vowels are identical; eg.

*-daad- ‘to lie down / to sleep’

*- dɔɔt- ‘to dream’

*-beep- ‘to become bad’

*-dƐƐt- ‘to bring’

*-diik- ‘to burry’

*-poom- ‘to breathe’

b) Cases where two vowels are different; eg.

*-biad- ‘to bear a child’

*-boa ‘dog’

*-deat- ‘to tread’

*-ciɔ ‘face’

*-coa ‘terminate’

*-boƐ ‘stone’

*- buang- ‘to mix’

*-dual- ‘to wear’

Syllables in PB always ended in a vowel but could also begin with one. Vowels could also occasionally appear in a sequence but did not form diphthongs; two adjacent vowels were separate syllables. If two of the same vowel occurred together, that created a long vowel as attested above. It is worthy to state that a PB long vowel may reflect a short vowel which is generally evident in languages where length is not distinctive (eg. Luvale and Swahili), although this may also happen in some languages with distinctive length.

Where two PB vowels as those in (b) above (where two different vowels occur in a sequence), one of the following changes may occur in Bantu:

i. V1 becomes a glide (V1 = vowel 1; the first vowel).
ii. V1 is deleted.

Can you provide examples for such changes in a Bantu language of your choice? What processes are these?

In a few languages and a few cases, a PB word-final vowel is deleted as is the case with Wongo and Kanyoka below:

PB	**Wongo**	**Kanyoka**
*mo-to	m-oot	m-uut
*yinɔ	-in (diin)	-in (diin)

Wongo and Kanyoka are some of the few Bantu languages in which some words end in closed syllables.

6.1.2 Semi-vowels

When you were looking at the provisional list of the stems and radicals of PB, how many semi-vowels did you come across? There is only one semi-vowel, ‘y’ in PB. Take for instance the following example:

PB	**Bemba**	**Gloss**
*-yana	-ana (u-mu-ana > umwana)	child
*-yato	-ato (u-bu-ato > ubwato)	canoe

As you can see, the PB semi-vowel poses a problem on how to account for the genesis of the semi-vowel /w/ in present Bantu. In many Bantu languages, the reflection of *y is Ø. Therefore, the rule is:

*y-deletion

[-cons, -voc] ⟶ Ø

6.1.3 Proto-Bantu consonants

	Labial	**Coronal**	**Palatal**	**Velar**
Nasal	*m	*n	*ɲ	
Voiceless	*p	*t	*c	*k
Voiced	*b	*d	*j	*g

(http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199935345.001.0001/oxfordhb-9780199935345-e-59)

The above phonemes exhibited considerable allophony, and the exact realisation of many of them is unclear. However, we can theorise on a few:

- Voiceless consonants *p, *t, *k were almost certainly articulated as simple plosives [p], [t], [k].
- Voiced consonants *b and *g may also have been fricatives [β] (or [v]) and [ɣ] in some environments.
- *d was a plosive [d] before a high vowel (*i, *u) and a lateral [l] before other vowels.
- *c and *j may have been plosives [c] and [ɟ], affricates [tʃ] and [dʒ] or even sibilants (fricatives) [s] and [z]. [j] is also possible for *j.
- Consonants could not occur at the end of a syllable, only at its beginning. Thus, the syllable structure was generally V or CV, and there were only open syllables.
- Consonant clusters did not occur except for the "pre-nasalised" consonants.
- The "pre-nasalised" consonants were sequences of a nasal and a following obstruent. They could occur anywhere a single consonant was permitted, including word-initially.

- Pre-nasalised voiceless consonants were rare, as most were voiced. The nasal's articulation adapted to the articulation of the following consonant so the nasal can be considered a single unspecified nasal phoneme (indicated as *N) which had four possible allophones.
- Conventionally, the labial pre-nasal is written *m while the others are written *n.

  *mb, *mp; phonemically *Nb, *Np

  *nd, *nt; phonemically *Nd, *Nt

  *ɲj, *ɲc; phonemically *Nj, *Nc (actually pronounced as *ɲj, *ɲc)

  *ŋg, *ŋk; phonemically *Ng, *Nk (actually pronounced as *ŋg, *ŋk)

The earlier velar nasal phoneme /ŋ/, which was present in the Bantoid languages, had been lost in Proto-Bantu. It still occurred phonetically in pre-nasalised consonants but not as a phoneme.

Can you relate the information you have just read above and then relate it to a local Bantu language. Let us now look at some diachronic phonological rules for Bantu. These are spirantisation, lateralisation, rolling and nasal assimilation. We will briefly look at each of these.

i. **Spirantisation** also called **fricativisation** is the process whereby a segment that is not a spirant becomes a spirant. What is surprising is that PB has no spirant. The question we may pose here is; 'Where does the many Bantu fricatives come from?' Possibly, they come from:
   - PB non-segments
   - innovation
   - borrowing from non-Bantu languages.

Here, we should be concerned with reflexes from PB. Discuss this with your tutor during residential. Find out how before you come to this discussion. One thing that should be noted is that if a Bantu fricative comes from PB segment, the PB segment is a consonant, eg. *-pá- 'to give'=> Nkore –há-.

In many 5-vowel languages, a PB stop immediately preceding a high vowel */i/or */u/ has reflected a fricative. The fricative reflected is specific to a language and usually depends on the following factors:

- the nature of the PB stop; and

- the type of the high vowel.

Examine the following information:

PB	**Gloss**	**Bemba**	**Kaonde**	**Mambwe**	**Nkore**	**Tonga**
*-bimb-	to swell	-fimb-		-vimb-	-zimb-	-zimb-
*-pik-	to arrive	-fik-	-fik-	-fik-	-hik-	-sik-
*-ku-	to die	-fu-	-fu-	-fu-	-fu- (kufa)	-fu-
*-tig-	to leave behind	-si- (ukusha)	-si- (kusya)	-si- (ukusha)	-tʃĩg- (affrication)	-siy-

In languages where the *i/u-induced spirantisation occurs, it has precedence over any other rule.

Let us also look at other cases of spirantisation. Certain PB non-nasal consonants spirantise either as a general rule or only in some phonological or syllabic positions in some languages. For instance, in Nkore, */p/ has generally reflected as /h/.

PB	**Nkore**	**Gloss**
*-pa-	-ha-	to give
*-pɛmbɛ	-heembe	horn
*-po-	-hu-	to dry up
*-poop-	-huuh-	to blow, as wind

Another frequent case of spirantisation not induced by *i/u involves */c/. In many Bantu languages, this affricate has reflected /s/, eg *-cɛk- ‘to laugh’. From the knowledge you have acquired, comment on the Nkore vowel reflexes.

ii. **Lateralisation and rolling**: This means that a segment which is not a lateral becomes a lateral. Using the provisional list of PB stems and radicals, provide examples of such instances in your language.

iii. **Nasal assimilation**: This is a process whereby the presence of a nasal in the environment where there is a non-nasal causes the latter to become a nasal or to be nasalised.

Analyse what has happened with the Bemba reflex below:

*-mid- => -min-

6.2 Formulating rules in feature terms

You may recall that we have stated that when formulating rules in feature terms, only the minimal descriptions are employed. The following are the phonological rules followed by the meanings:

i. A => B

   This means that A becomes B (or A is transformed into B).

ii. A => B/ — C

   This means A becomes B when it immediately precedes C.

iii. A => B/C —

   This means A becomes B when immediately following C.

iv. A => B/C — D

   This means A becomes B between C and D.

Now look at the following more concrete rules. Can you read and provide examples from any Bantu language (unless specified)

i. /n/ => [m]/ — [p,b]

ii. /s/ => [tʃ]/ — [i]

iii. /t/ => [ʃ]/ — [i]

iv. vowels => [+ nas]/ — [+nas]

v. English plural /s/ => [z]/[+vce] —

https://msu.edu/~hanson54/conlanging/phonological-processes.pdf

Since you are now equipped with the phonological rules, you will need to discuss and formulate in feature terms spirantisation, and nasal assimilation. Discuss this with your tutor by any means.

1. PB high-mid vowel rising

I hope you have by now realised that in many 5-vowel Bantu languages, the two PB high-mid vowels have reflected to higher vowels, an instance of vowel rising. Using the provisional list

of PB stems and radicals can you exemplify such instances in your local language? Can you now formulate this in feature terms? Well, the rule in feature terms is as follows:

*[+3 high] [⟶ [+ 4 high]

This rule states that the PB front high-mid vowel */e/ has as reflex the high vowel /i/ and the PB high-mid vowel */o/ has as reflex the back high vowel /u/.

2. Stop-spirantisation induced by *i/u

Generally, there is only one difference between stops and spirants (fricatives). Stops are [- continuant] while fricatives are [+ continuant]. The feature continuant is used to describe sounds produced with continuous flow of air. The following are the only sounds with [- cont] feature: stops, nasals, laterals (/l/sound). The rule sates that before */i,u / a stop reflects as a fricative.

*[-cont, - nas, - voc] ⟶ [+ cont]

Note that [+ cons] is redundant because all [- cont] sounds are [+ cons].

3. *p-spirantisation in Nkore

*[-cont, + ant, - cor, -vce] ⟶ [+ cont, - ant, + back]

The rule says that */p/ has reflected /h/ in Nkore. /h/ is [+ cons, + cont, - ant, + back, -vce]

The set features minimally describe the phonemes such that the feature [+ cons] for /p/ is redundant while feature [+ back] is necessary because there are sounds that [+ cont, -ant, - back]. Therefore, [+ back] will distinguish /h/ from /ʃ/. Can you think of any other sound apart from /ʃ/?

4. Nasal assimilation

*[-cons, + ant, + cor, + vce, - nas] ⟶ [+ nas, + voc, - cons]

The rule states that */d/ has reflected /n/ after the sequence Nasal plus Vowel as in *-mid- => -min- ‘to swallow’. I hope you still remember that all and only vowels are [+ voc, - cons].

Activity 6.1

1. In many of the Bantu languages, the PB 7-vowel system has reflected to a 5-vowel system. Discuss with examples this phenomenon.
2. In a few Bantu languages, a word final vowel in PB has been deleted. Exemplify.

3. With examples, account for spirantisation, lateralisation and nasal assimilation of PB consonants in Bantu.
4. Explain the reflection of the PB semi-vowel in Bantu.
5. Write in words the following feature rule: */d/ => [n]/ nasal vowel ___

Summary

In this unit, a discussion of the diachronic phonological rules has been done. We have looked at reflexes that are important for the study of Bantu languages; vowels, semi-vowels and consonants. The diachronic rules account for the regular correspondences between some PB phonemes and some phonemes in some of the Bantu languages in terms of reflection. The rules that have been discussed are *y-deletion, *i/u-induced spirantisation,*p-spirantisation, lateralisation and nasal assimilation.

UNIT 7

SOME SYNCHRONIC PHONOLOGICAL RULES IN BANTU

5.0 Introduction

The previous unit devoted to some Bantu diachronic (historical) rules). Although these rules are referred to as 'diachronic' rules, or 'historical', rules, they are hypothetical. What do you think we should say they are hypothetical? Well, Proto-Bantu (PB), being merely a reconstructed language, is hypothetical. They are diachronic, or historical, only to the extent to which PB has been reconstructed scientifically.

The present unit deals with some phonological rules in the present-day Bantu languages. It is important to note that all these rules are allophonic rules. This means that they all account for how certain phonemes are realized in certain phonemic contexts before breaking down words into morphemes. Phonological rules that are concerned with phonological changes occurring when Morphemes are combined to form words or at word-boundaries are termed morphophonological rules. These will be dealt with in the unit dealing morphology.

In the rules, the following conventions will be used:

- V= [+voc, -cons], that is vowel,
- C= [+cons, -voc], that is consonant,
- σ + [syllable].

Learning Outcomes

By the end of the unit, you are expected to;

- account for a variety of allophonic rules in Bantu.
- explain what 'downstep' is and give instances of downstep in present Bantu.

7.1 Vowel lengthening

Vowel lengthening before a nasal complex

V → [+long] / -] +nas] C

Condition: word –internally.

The rule states that before a nasal complex, i.e. a prenasalized consonant (mp, mb,nt, nd etc), a vowel is always long unless it is word-final.

This rule is found in a good number of languages, e.g. Bemba, Mambwe, Namwanga, Luba-Kantanga, Luba-Kasai, Sanga, Kaonde, Luba, Ruund, Rwanda, Rundi, Nkore.

Vowel length in phonetic transcriptions is indicated according to the International Phonetic Alphabet, i.e. by a colon after the vowel symbol.

Example from Bemba:

(1) /ukusalangana/ [ukusala:ngana] 'to scatter'
(2) /ukusenda/ [ukuse:nda] 'to carry'

Penultimate Vowel Lengthening

In some Bantu languages, most of which seem to be in Southern Africa, before a pause, e.g. sentence-finally, the penultimate (2nd from last) syllable is lengthened. This can be formalized as follows:

V→[+long] /— σ ##, where ## means pause.

An example from Nyanja is given below:

(3) a. /kulima/→[kuli:ma] 'to cultivate'
b. /kulimira/→ [kulimi:ra] 'to cultivate for'
c. /kulima munda → [kulimamu:nda] 'to cultivate a field'

7.2 Stress (in some Bantu languages)

Stress in Swahili

In Swahili, no suprasegmental is distinctive. In a word pronounced in isolation and in a word ending certain phrases, the penultimate syllable is stressed. Therefore, isolated words and certain phrases in Swahili constitute stress groups. A stress group in Swahili is either an isolated word or a group of words with a single stress. The stress is always on the penultimate syllable of a stress group. In the following examples the stressed syllables are underlined.

(1) a. /habari/ [habari] 'story/tale? how are you?'
b. /habari gani/ [habarigani] 'what/which story/tale?, how are you?

The rule may be formalised as follows:

V→ [+stressed] /— σ ## ##, where ## means ‘end of stress group’.

7.3 Stopping

When a segment that is not a stop becomes a stop, in this course the process or result is called ‘stopping’. for instance, the phonemes /l/ and /r/ are usually realized by [d] when prenasalised (i.e in /nl/). Likewise, /β/ (fricative β) is realised as [b] when prenasalised (i.e. in, /β/). These rules may be referred to as I-stopping, r-stopping and β-stopping, respectively.

L-stopping in found in, among many other languages, Bemba, Mambwe, Lozi, Luvale, Sanga, Luba-Kasai, Luba-Katanga. Languages with r-stopping include, among others, Nkore, Rwanda, Rundi. The β-stopping rule is found in Bemba, Kaonde, Mambwe, Namwanga, Sanga, Lozi, Luvale, Nkore, Rwanda, Rundi, etc.

Example:

1. Bemba: a. / ukulanla/ [ukula:nda] ‘to speak’ (in current orthography)
   b. /ukuβomβa/ [okuβo:mba] ‘to work’ or ‘to be soaked/ wet’ depending on the tone (in current orthography: ukubomba)
2. Lozi: /liβumbu/ [liβumbu] ‘cluster of trees
3. Nkore: a. / okuβumβa/ [okuβu:mba] ‘to mould/create’
   b./okukonroora/ [okuko:ndo:ra] => okukondoora ‘to hang over’ (transitive)

7.4 Palatalisation

The term ‘palatalisation’ denotes a phonological process by which consonants acquire secondary palatal articulation or shift their primary place to, or close to, the palatal region. This usually happens under the influence of an adjacent front vowel and/or a palatal glide. Palatalization also refers to the process of sound change in which a non-palatal consonant, like ‘k’, changes to a palatal consonant, like ‘ch’ or ‘sh’; e.g., French chaîne (pronounced with an initial ‘sh’ sound) developed from Latin catena (pronounced with an initial /k/ sound). (https://www.britannica.com/topic/palatalization)

In some languages, before /i/ or /y/ the phonemes /s/ and /z/ are respectively realized by/ʃ/ (this is the sound written ‘sh’ in English and (= the sound represented by s in English pleasure). It

is noteworthy that after the operation of the rule, the /y/ is deleted. Example of such languages are Bemba (but Bemba has no /z/), Kaonde, Lunda, Luvale, Sanga.

Examples from Kaonde:

a. /kulasisya/ [kuraʃiʃa] (current orthography: kulashisha) ‘to make vomit’ , cf. /kurasa/ [kurasa] (current orthography: kulasa) ‘to vomit’
b. /kuyuzisya/ kuyuzhiʃa] (current orthography: kuyuzhisha) ‘to fill’ , cf. /kuyuza/ [kuyuza] ‘to be/become full
c. /muzya/ [muʒa]:slave (current orthography: muzha).

7.5 Palatalisation with affrication

In some other languages, /t/ is realized by [tʃ] (unvoiced postalveolar affricate: the sound written *ch* in English) before /i/. Likewise, in some other languages, /r/, or /l/, is realized by [dʒ], the sound represented by *j* in English *j*am (voiced postalveolar affricate) before /i/ or /y/ (after which the /y/ is deleted).

Note that /t/, an alveolar, becomes /tʃ/, a postalveolar affricate (palatalization + affrication). Similarly, if /l/ and /r/, which are alveolars, are replaced with [d], which is a postalveolar, there is palatalization + affrication).

Example from Kaonde:

(1) a. /kupitisya/ [kupitʃiʃa] (current orthography: kupicisha] ‘to make pass’ , cf. /kupita/ [kupita] ‘to pass’
b. /kulila/ [kulila] (current orthography: kujila) ‘to cry’
c. /kulilila/ [kujijila] (current orthography: kujijila) ‘to cry for’

7.6 Nasal assimilation/ dissimilation (Meinhof’s law)

This is a phonological rule accounting for nasal compound dissimilation and assimilation. It was found first in Ganda by Carl Meinhof who called it ‘Ganda law’. Later it was found in other languages, mostly in East Africa, including Bemba. Its operation is language-specific, but in all cases it involves some assimilation in nasal complexes made of prenasalized voiced consonants. Based on the Ganda cases, Clement Doke (1935:144) explains it as follows:

When two successive syllables both begin with a nasal plus following plosive, the plosive of the first syllable is lost. In Ganda, n +g > ŋg, n + > nd, n + b > mb, but when the Ganda law applies, we find ɳ for ŋg, n for nd, m for mb.

We can use example from Bemba:

(4) u-ku-bomb-a > ukubomba 'to work' , but u-ku-n-bomb-il-a > ukummombela (*ukumbombela) 'to work for me'

(6) u-ku-lanl-a > ukulanda 'to speak', but u-ku-n-lanl-il-a > ukunnandila (*ukundandila) 'to speak for me '

As shown in (6) above, in Bemba, the result is a geminate (double) nasal. Note that in (6) above, the following two things happen;

a) /n/ is assimilated by/ b/, a labial, replacing it with a bilabial m.
b) the /b/ is in turn assimilated by this m, a nasal replacing it with a nasal m.

7.7 Dahl's Law

Dahl's law is a regressive voice dissimilation rule which renders voiceless stop consonants (t.k) voiced thus becoming (d, g) respectivelybefore word stems which start with voiceless consonants (http://www.kimenyi.com/Another_look_at_Dahl_%27s_Law.pdf). This rule is found in some East African languages such as Nyamwezi, Gikuyu, Rwanda, Rundi and Kinyarwanda). The rule was discovered first in Nyamwezi by a missionary by the name of Dahl, hence the name Dahl's law. This rule states that if a syllable beginning with a unvoiced plosive is immediately followed in the same word by a syllable beginning with a voiced consonant (but not necessarily a plosive), it is the voiced counterpart, viz. p > b, t > d, k > g. Dahl's Law affects mostly class marker prefixes, tense – aspect - modality morphemes and objects pronouns, the law also takes place in the suffix position as well. It applies with verbs only because they are the ones which allow suffixation (Kamenyi, 2002).

Doke gives the following examples from Rwanda:

(8) a. i-ki-rar-o > ikiraro 'sleeping place', but I-ki-koko > igikoko 'wild animals'

b. a-ka-goma > akagoma 'small drum', but a-ka-kwi > agakwi 'small piece of firewood'

c. u-ku-oko > ukuoko ‘arm’(part of body), but u-ku-twi > ugutwi ‘ear’

(Chanda, 2006)

7.8 Downdrift

Downdrift may be simply defined as the lowering of a H tone after a L tone so that it is lower than a H tone in utterance-initial position. The effort of the phenomenon on an utterance as a whole is that when H tone downdrift, there is an overall gradual descent of H tone throughout an intonation unit. Carter (2001:17) indicates that, “Each successive L in a sentences is lower in pitch than the L before it, whether or not there is an intervening H or succession of Hs.”

In many tone languages, after low tone (L) or a series of low tones (L^n) a higher tone (H) or a series of high tone (H^n) is realised by a high tone or a series of high tones lower than the high tone preceding the (series of) low tones (S) but higher than the (series of) low tone (s). To simplify the phenomenon, let us say that the (series of) high tone (s) is realised by a (series of) mid tone (s) (M) after a low tone or a series of low tones.

The tonal phenomenon, called ‘downdrift’, can be formalized as follows:

$H^n \rightarrow M^n / H^n \ L^n \ \_\_$ (i.e. $H^nL^nH^n > H^nL^nM^n$)

Example in Bemba /ukuβeepa/ ‘to cheat, to tell a lie’, the syllables βeepa are pronounced as if they were mid-toned, that is, their tone are less high than the initial ù but higher than the kú.

You can get to this link for more information on synchronic and diachronic rules in Bantu; http://www.africamuseum.be/publication_docs/Bostoen%202008%20Diachronica.pdf.

Summary

This unit has helped you understand some of the synchronic rules operating in Bantu languages. You are advised to try each of the rules to see if they do operate in your own language, beginning with rules dealing with vowel lengthening, stressing, stopping, palatisation, nasal assimilation and downdrift.

UNIT 8

BANTU SYLLABLE STRUCTURE

8.0 Introduction

This unit deals with the combination of segmental phonemes in Bantu into syllables. The way phonemes, especially segmental phonemes, stand relative to one another is called phonotactics. The term 'phonotactics' is also used to refer to the study of the way phonemes, especially segmental phonemes, stand relative to one another. Syllable structure is part of phonotactics.

Learning Outcomes
By the end of the unit, you are expected to;

- explain and exemplify the constituent of a syllable.
- explain and exemplify a syllabic nasal.
- present the syllabic structure of a word in a tree diagram.

8.1 Syllable Structure in Bantu

Let us begin by acquainting ourselves with what a syllable is. What is a syllable? How do you identify syllables of a local language which taught at your school?

Well, a syllable is "a phonological unit consisting of a vowel or other unit that can be produced in isolation…", (Matthews; 1997). In discussing syllable structure, the following symbols and abbreviations may be used:

symbol	represention	symbol	representation
W	Word	Cd	coda
σ	syllable	N	nasal
On	onset	C	consonant (including nasal)
Rh	rhyme	V	vowel
Nu	nucleus	S	semi-vowel

Each syllable comprises a nucleus (Nu). The nucleus of a syllable is the most prominent segment in the sense that it is the most sonorous segment in a syllable. In general, the Nu is a

V, each V is a Nu and in general in a word of any utterance there are as many syllables as there are vowels. The Nu is, therefore, the central element in a syllable. Within the same syllable, whatever precedes the Nu is the On and whatever follows it is the Cd. The set of the Nu + Cd is called the Rh, though a Rh may not have a Cd.

The study of syllable structure in Bantu languages will be dealt with reference to English syllable structure so that you provide the difference between Bantu and English syllables.

In languages like English, where a syllable may be closed, i.e may have a Coda, the syllable may be accounted using the following pair of rules:

(1) a. σ → (On) Rh

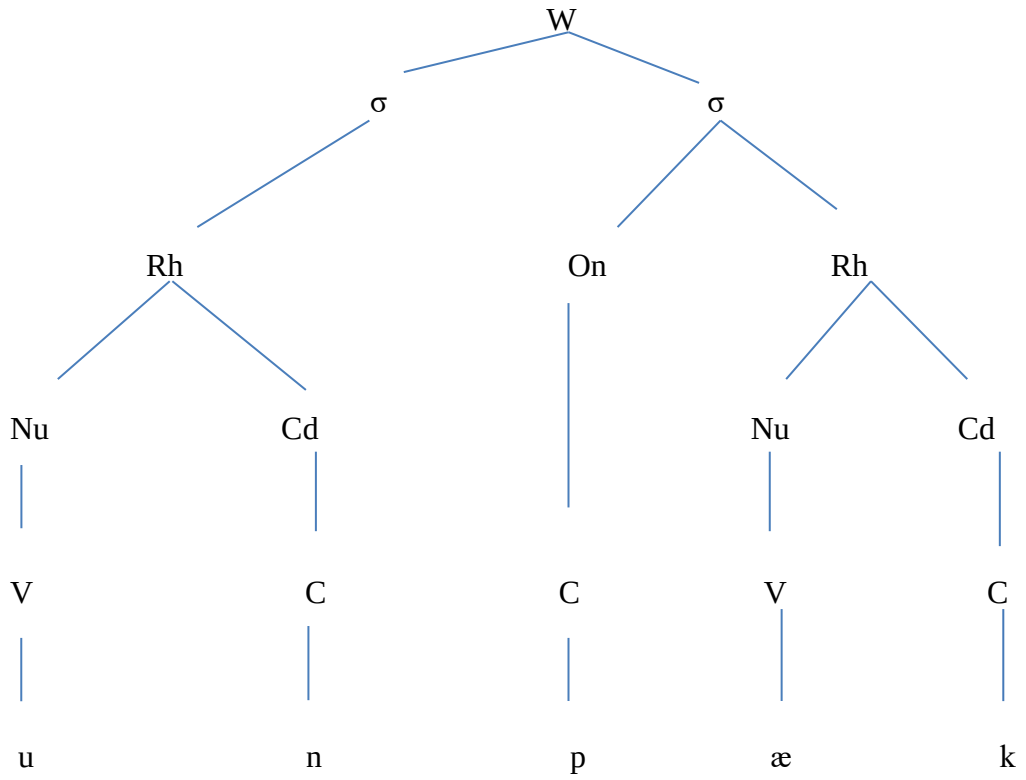
b. Rh → Nu (Cd)

The pair of rules in (1) specifically states that each syllable must have at least a nucleus (Nu). In English an Nu is a V (vowel). Hence:

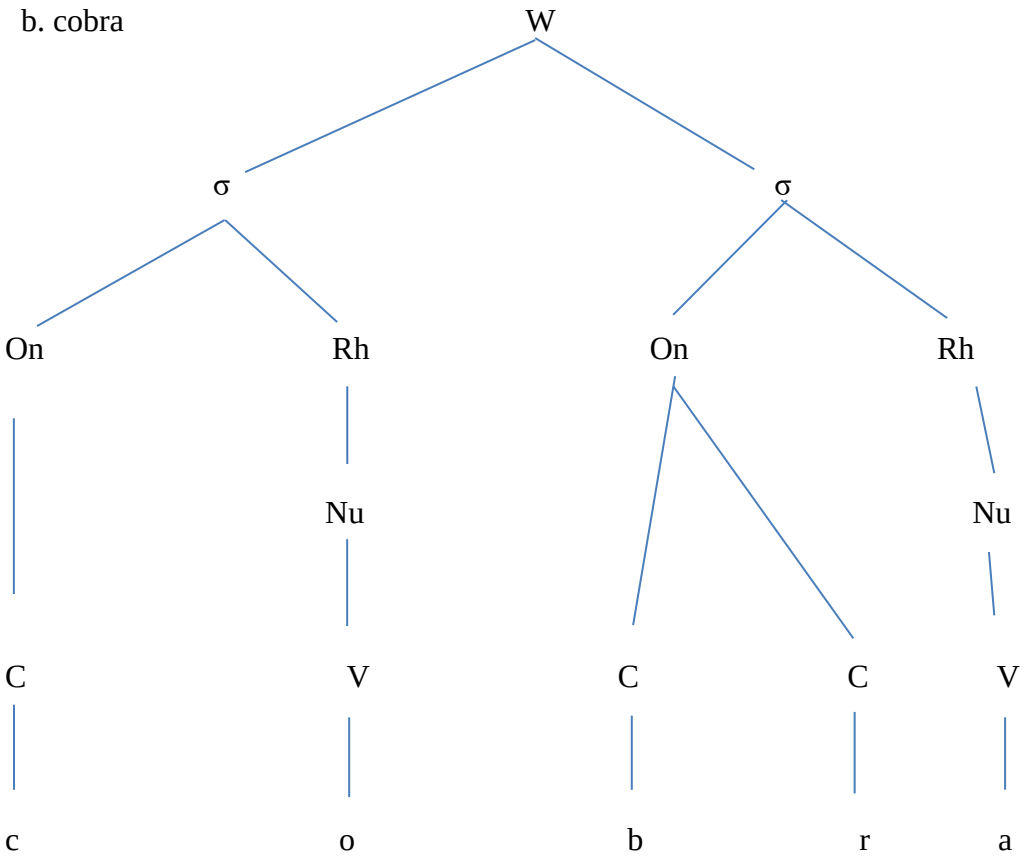
(2) Nu → V

We will look at the English examples before we look at those of the Bantu languages.

(3) a. unpack [ʌnpæk]



b. cobra



In most Bantu languages, all syllables are open (= they end in Nu). Consequently, except (of course) in the case of syllabic consonants, so that the concept of 'rhyme' to be ignored in such languages so that the following rule would suffice:

(4) σ ⟶ (On) Nu

For all Zambian languages , as is the case for those Bantu languages which (a) do not allow closed syllables, (b) allow only two - consonant sequences and (c) allow syllabic nasals , we may summarise the situation as follows: W = word; σ = syllable, On = onset ; Nu = nucleus; C = consonant; S = semi-vowel; vowel ; N = syllabic nasal. The slot for Rh, therefore, is redundant.

(5) Syllable rules in Zambian languages;

a. W ⟶ σ^n

b. σ ⟶ (On) Nu

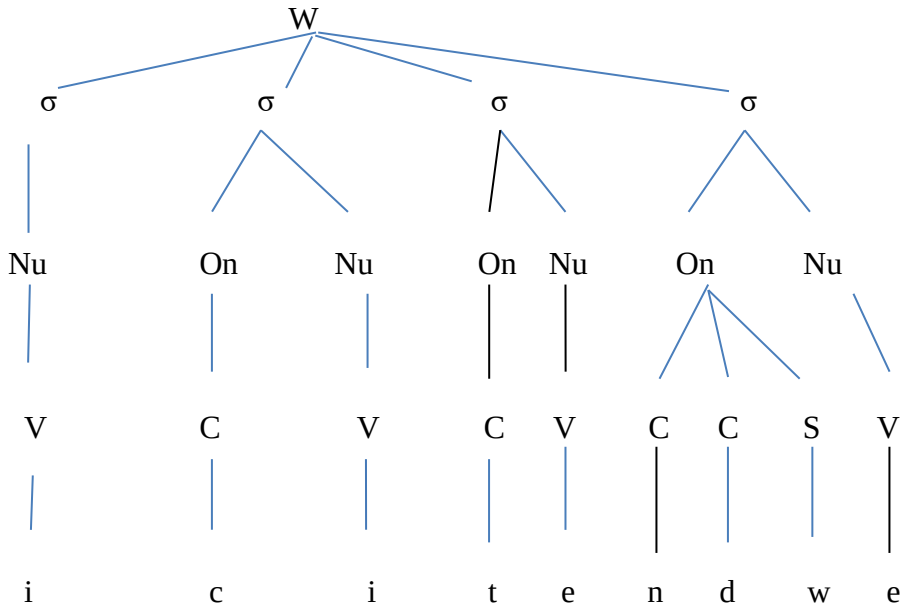
c. On ⟶ (C_1) (C_2) (S)

d. Nu ⟶ (V, N)

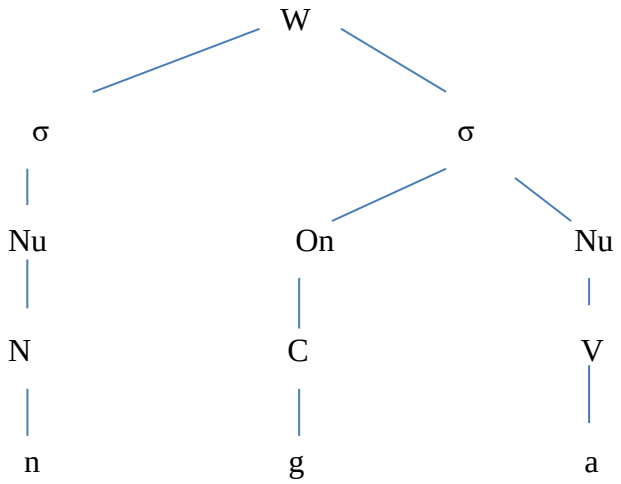
Note that in the sequence, C_1C_2, C_1 is always a nasal. Some Bantuists regard mp, mb, nt, nd etc as single consonants and call them 'prenasalised consonants' (prenasalised p, b, t, d etc.). In whichever case, we will still consider them consonant clusters or nasal complexes.

Let us consider examples from Zambian languages;

(6) a. Bemba: icitendwe 'weariness'

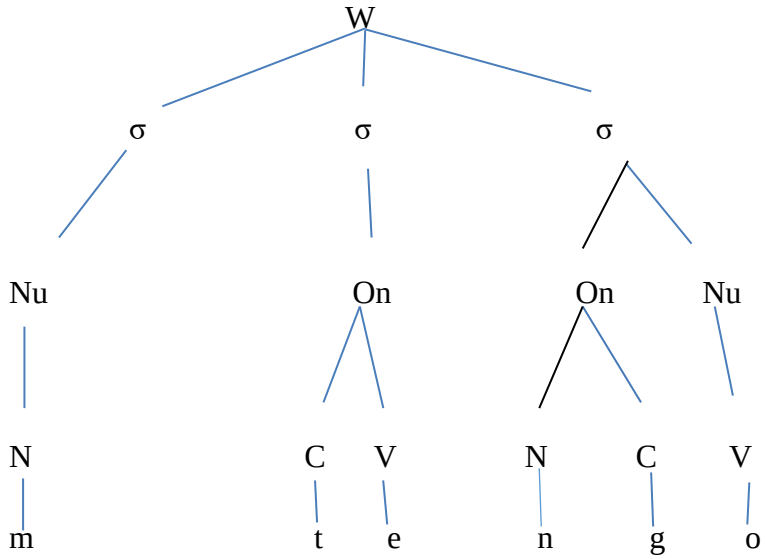


b. nga 'if' and nga 'what about …? '



In [ng] the 'n' is actually ŋ.

c. mtengo ‘tree/ price’

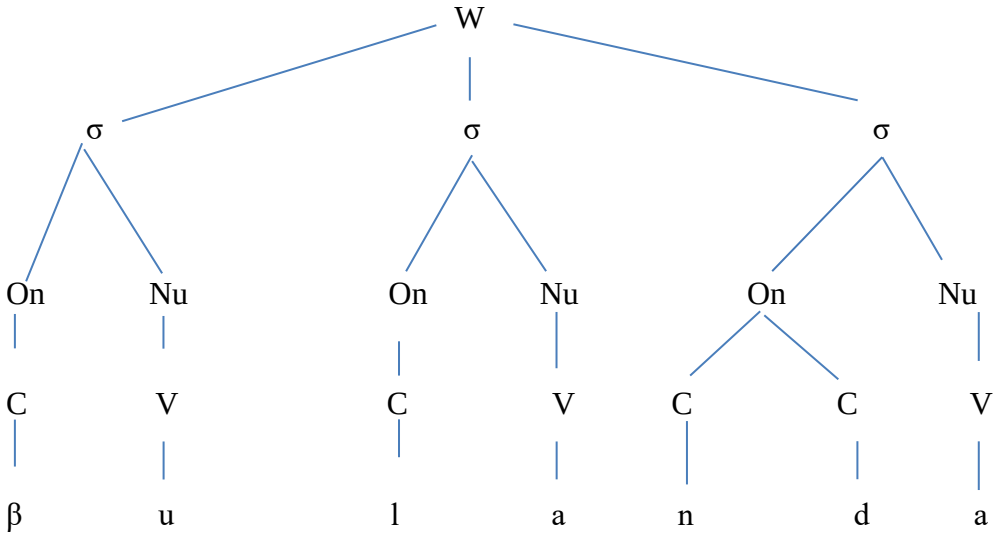


Note: In both *nga* ‘if’ and *nga* ‘what about …?’ there are two syllables, *n-ga*; in *nga* ‘if’, both syllables are low-tones while *nga* ‘what about …?’ *n* is high-toned and *ga* low-toned.

In Zambia languages a syllabic nasal always bears a tone (only high or low, not a contour tone).

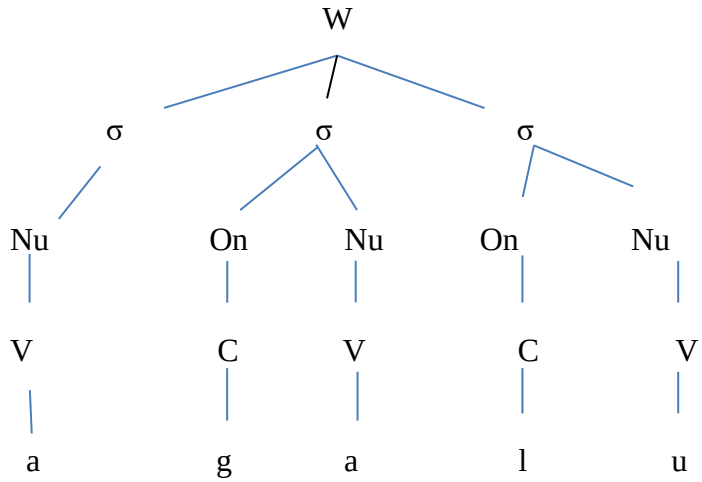
Only a word-initial nasal preceding a consonant (as in mb, mt, mk) in Nyanja is syllabic. You can list ten of such words. If you are not a familiar with Nyanja, you can enquire from the native speakers. Do you have syllabic nasals in your language? Provide examples.

(7) Kaonde: bulanda ‘ poverty’

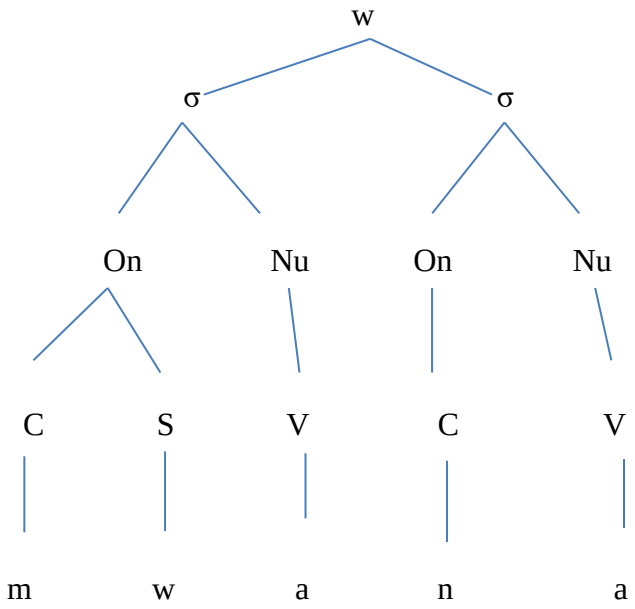


(8) Nyanja:

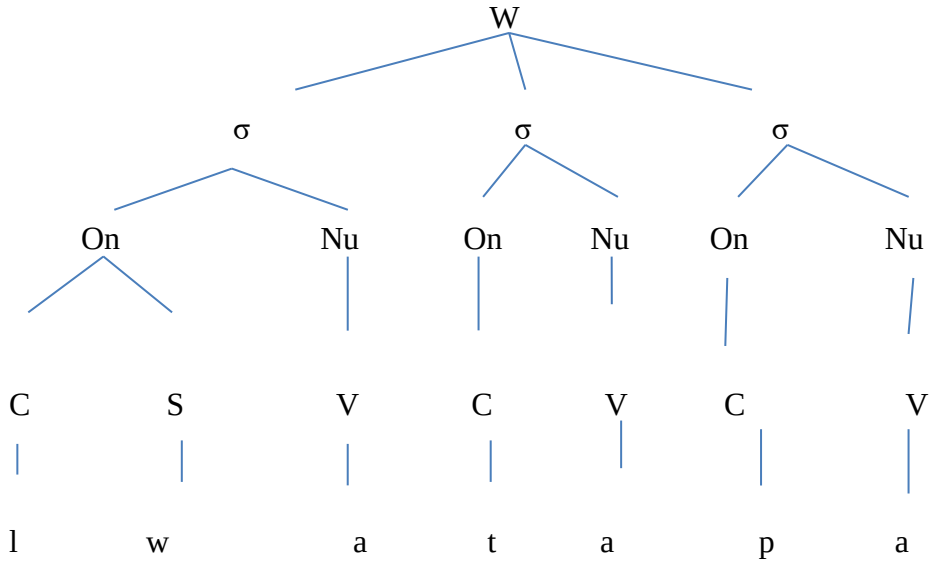
a. agalu ‘dogs’



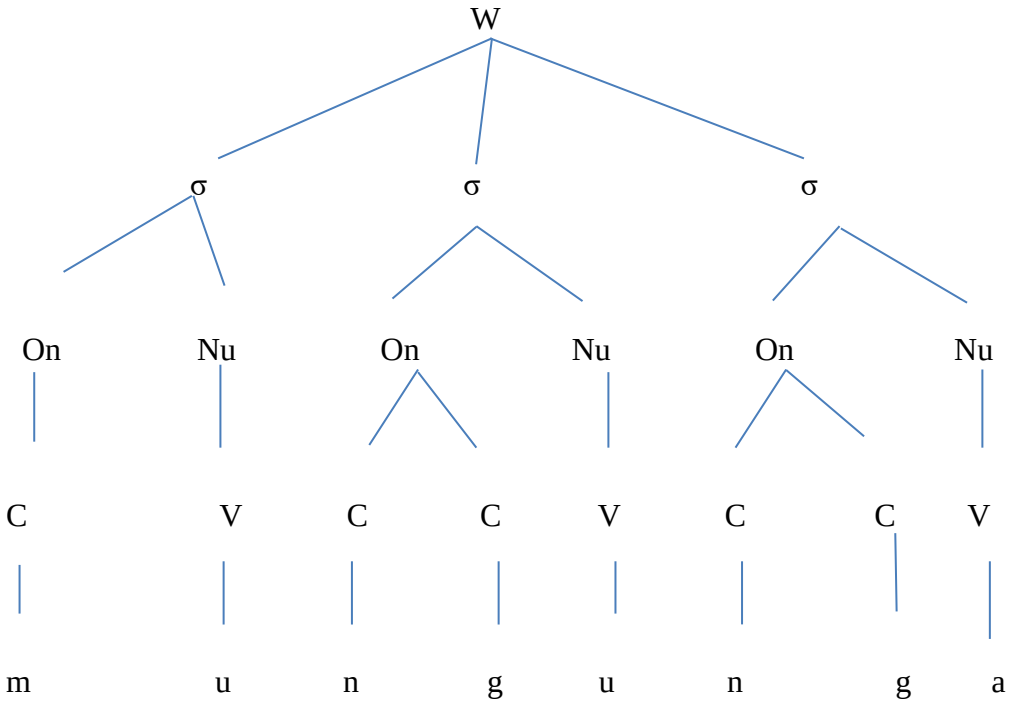
b. mwana ‘child’



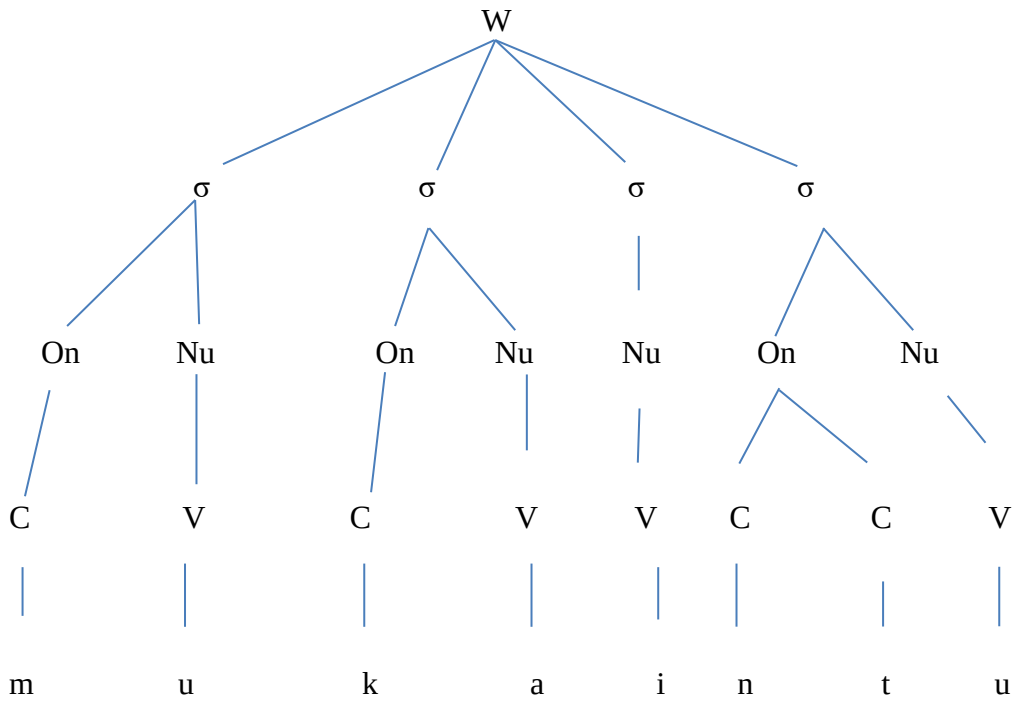
(9) Lozi: Lwatapa ‘we are bathing ’



(10) Tonga: mungunga ‘ yolk’

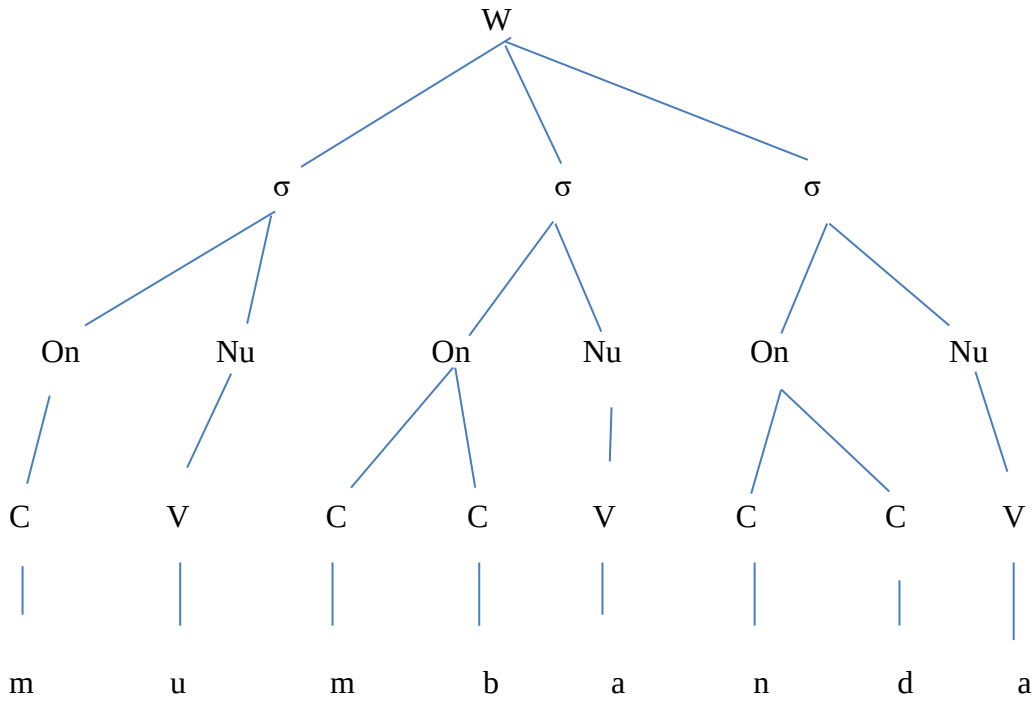


(11)Tonga: mukaintu ‘woman’

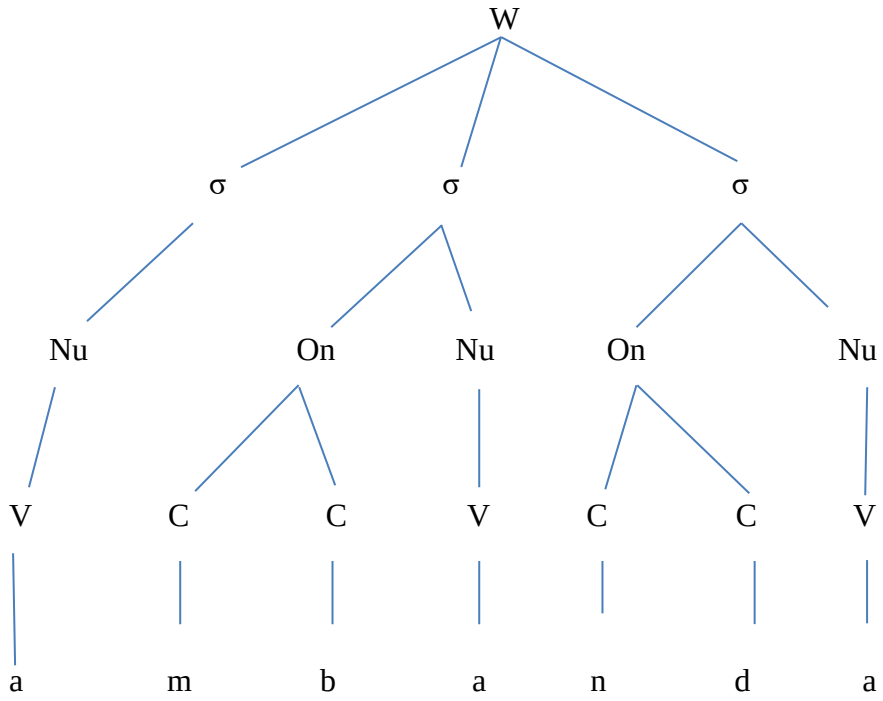


Lunda:

a. mumbanda ‘woman’

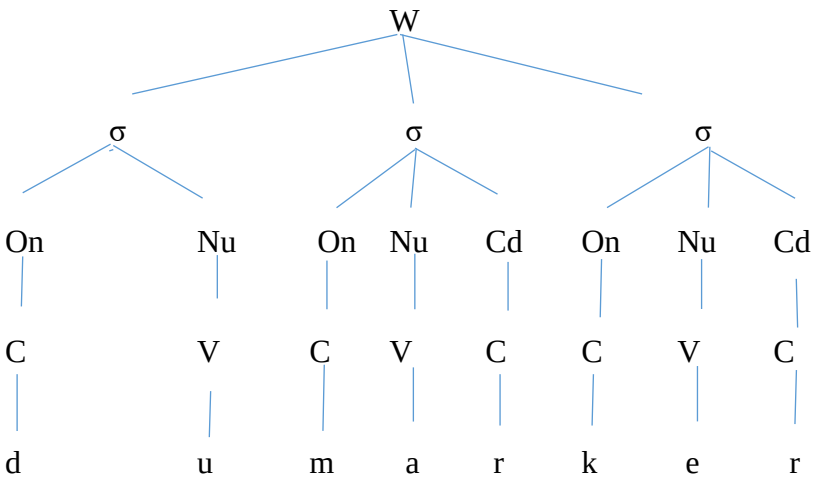


b. ambanda ‘woman’



Wongo (C85) in northern Congo DR) is one of the few Bantu languages in which a syllable may be closed. Let us take for instance the following:

Wongo: dumarker ‘I did’ (recent past).



In Ruund, a language related to Lunda, only word final syllables may be closed, eg. mband ‘woman’.

At any rate, in those Bantu languages that permit closed syllables, the types of closed syllables are fewer than in English.

In many languages, a syllable may be made of a consonant only. Such a nasal is called a syllabic nasal, (LAL 211 notes).

8.2 Markedness and syllable structure

The term 'markedness' has many senses and in linguistics, it is understood differently depending on the aspect dealt with. Under syllable structure, a marked syllable type refers to a syllable which is not most frequent. The most frequent or usual type is unmarked.

Many syllables in Bantu (including many languages in the world) are of the CV structure. Such a type is unmarked. The type of nucleus which is normal and frequent is the V type. This is also unmarked. The other types of syllable structure and the nucleus such as the syllabic nasal is marked. Similarly, since the Bantu rhyme does not have a coda, the form Rh => Nu is marked while Rh => Nu+ Cd is marked.

Activity 8.1

1. Giving examples in a Bantu language, explain the following:
    i. onset
    ii. rhyme
    iii. nucleus
    iv. coda.
2. Using good examples, distinguish Bantu syllable structure from that of English.
3. In Bantu linguistics, nasal complexes are also called nasal compounds or single consonants. Explain each of these.
4. Segment the following Nyanja words into syllables:
    i. mtengo 'tree/price'
    ii. banja 'family'
    iii. adzibambo 'the men'
5. Explain the concept of markedness in respect of syllable structure.

Summary

In this unit, we have discussed the structure of the syllable in Bantu. In most Bantu languages, a syllable ends in a nucleus. Very few languages have closed syllables. What we have also seen is that where there are two consonant clusters, the first consonant will be a nasal the second, a

consonant proper or a semi-vowel. If there is a sequence of three consonants, the first is a nasal, the second a consonant proper and the third a semi-vowel. There is also an instance of a syllabic nasal among the Bantu languages. Syllable structure was also presented in tree diagrams.

UNIT 9

BANTU WORD CLASSES

9.0 Introduction

This unit basically deals with Bantu word classes and their morphological structure.

Learning Outcomes
By the end of this unit, you are expected to;

- define with examples the Bantu word classes.
- distinguish between variable and invariable forms.

Reflection

Can you reflect on what you covered in LBL 1201? What are word classes? Discuss your answer with one of the students on this course. Have you ever realised that all the words that you use in speech can be fitted in their respective classes? Construct any meaningful sentence and try to fit-in all the words into respective classes. Discuss your classification with your colleague.

In modern linguistics, what was called parts of speech are called word classes. As a starting point on this topic, we are going to look at a list of some of the word classes that exist in Bantu languages. Note that some word classes are universal, in that they are found in all human natural languages while others are language specific. Universal parts of speech include nouns, verbs, adjectives, adverbs, pronouns, conjunctions and interjections and those that are not universal include, among others, articles and idiophones. As you work through this section, you will be required to provide examples in your language.

In this course the following list has been adopted for Bantu;-

1. noun
2. adjective
3. personal pronoun
4. demonstrative
5. numeral
6. genitive pronoun
7. possessive

8. indefinite pronoun
9. relative pronoun
10. question word
11. preposition
12. conjunction
13. adverb
14. interjection
15. onomatopoeia
16. idiophone
17. verb
18. particle

The above word classes can be categorised into two types:

(a) those that are morphologically variable termed variable forms and;
(b) those that are morphologically invariable termed invariable forms.

Before you proceed, can you explain what variable and invariable forms are? Get back to the list above and categorise the 18 word classes into the two categories.

9.1 Variable Forms

In Bantu, variable forms comprise nouns, adjectives, personal pronouns, demonstratives, numerals, genitive pronouns, possessives, some indefinite pronouns, relative pronouns and verbs. They are termed variable because they can be inflected. For instance, nouns inflect for number while verbs inflect for tense.

9.2 Invariable Forms

Words that cannot be inflected at all are called 'invariable' forms. The invariable group comprises prepositions, conjunctions, interjections, onomatopoeias, idiophones and particles. Can you briefly explain each of these using meaning category?

Here are some examples of Bantu word classes:

1. Nouns

   Tonga: muntu 'person' bantu 'people'

   mwana 'child' bana 'children'

2. Adjectives

Tonga: mubotu ‘good’ (e.g. muntu mubotu ‘good person’)

babotu ‘good’ (e.g. bantu babotu ‘good people’)

3. Personal pronoun

Lozi: na ‘I / me’

bona ‘them’

4. Demonstration

Bemba: aba ‘these’ (e.g. aba abantu ‘these people’)

5. Numeral

Tonga: omwe ‘one’ (e.g. muntu omwe ‘one person’)

comwe ‘one’ (e.g. cintu comwe ‘one thing’)

botatwe ‘three’ (e.g. bantu botatwe ‘three people’)

zyotatwe ‘three’ (e.g. zyintu zyotatwe ‘three things’)

6. Genitive Pronoun

Tonga: lya ‘of’ (e.g. bbuku lya mwana ‘the book of the child’)

wa ‘of’ (e.g. munzi wa mwana ‘the village of the child’)

7. Possessive pronoun

Tonga: wabo ‘their’ (e.g. munzi wabo ‘their village’)

lyangu ‘my’ (e.g. bbuku lyangu ‘my book’)

8. Indefinite pronoun

Bemba: cila ‘each / every’ (e.g. cila muntu ‘each/every person

9. Relative pronoun

Tonga: ngu ‘who / which’ (e.g. muntu ngu tuyanda ‘the person whom we want’)

mbo ‘who / which’ (e.g. bantu mbo tuyanda ‘the people whom we want’)

10. Question word (e.g. words for ‘Who?’, ‘What?’ ‘ Where?’)

Tonga: -ni, -nzi, -li

11. Preposition

Bemba: na ‘with’ (e.g. ali na Peter ‘he is with Peter’)

12. Conjunction

Bemba: na ‘and’ (e.g. John na Peter ‘John and Peter’)

nga ‘if’ (e.g. nga baaisa ‘if they come’)

13. Adverb

Lunda: nankashi ‘very much’

14. Interjection

Tonga: acuu! (expressing pain)

15. Onomatopoeia - a word imitating a natural sound but which is not a noun in Bantu)

Bemba: pa (e.g. aamuuma na pa ‘he hit him making the noise pa)

16. Idiophone - word to emphasize some idea such as quality)

Tonga: bu ‘idiophone of whiteness’

17. Verb

Luvale: Tunakwiza ‘we are coming’

18. Particle

Some words, whose syllable structure is characterized by the fact that they are all monosyllabic, do not fall, both structurally and functionally in any of the above word classes. The term ‘particle’ is used in this course. Particles include enclitics, words for ‘it is’ and ‘it is not’ in some languages, etc, e.g. ni ‘it is’ and tee ‘it is not’ in Bemba, ki ‘it is’ in Lozi, ndi ‘it is’ in Nyanja and ngu ‘it is’ in Tonga.

Activity 9.1

1. Name and exemplify all word classes in Bantu.
2. Distinguish between variable and invariable forms.

3. What are the functions of various particles in your language?

Summary

This unit has dealt with Bantu word classes. You have been advised to define each of the word classes giving examples in your local language. You should also be aware that word classes are categorised as either variable (forms that can be inflected) or invariable (forms that cannot be inflected.

UNIT 10

MORPHOLOGICAL TERMS USED IN BANTU LINGUISTICS

10.0 Introduction

This section will deal with Bantu Linguistics morphological terms used in Guthrie's Comparative Bantu. Guthrie supplies a list of definitions of a number of grammatical categories that he uses in his study. These grammatical terms are used in the description of Bantu languages and have been used by many linguists working on Bantu languages. It is imperative for you to get acquitted to these terms because they will be used in morphology. Apart from the definitions given by Guthrie, slight modification and examples have been provided so as to ease up understanding of the concepts.

Learning Outcomes

By the end of the unit, you are expected to;

- explain the terms used in Guthrie's 'Comparative Bantu'.
- give examples of the morphological terms in Present Bantu.

10.1 Concord Prefix

You are aware of what concord in language is. A concord prefix (often termed 'prefix') is any prefixed element that serves to operate the system of grammatical agreement that is characteristic of every Bantu language. When any particular prefix is quoted, it is always followed by a hyphen. Can you think of any of the prefix in your language or a language you know very well that you can qualify as a concord prefix? Yes, all the nominal or noun prefixes are concord prefixes because they serve to operate the system of grammatical agreement. Let us exemplify using a few of the Zambian languages:

Nyanja: **a**nthu abwera 'people have come'

Lozi: **ba**tu batile 'people have come'

Tonga: **ba**ntu banji balya kale 'people many eaten already'

The a- in the Nyanja example and ba- in the Lozi and Tonga examples are concord prefixes.

10.2 Class

Each distinct type of agreement is termed a class. The number of classes varies from language, but is rarely fewer than ten or more that eighteen. A generalised class prefix is quoted without a hyphen. So we say, 'Class 1 prefix mu and the mu- in munthu.

10.3 Dependent Prefix

When a series of items differentiated only by an alternation in the concord prefix, and this series can contain an item from each of the classes, then the prefix in such items are termed 'dependent.' An element that is that is this way throughout a regular type of series is termed 'commutable'. For instance, the ba- in batile in 10.1 above is dependent on the prefix of batu.

10.4 Independent Prefix

When a series of items with commutable prefixes cannot contain an item from each of the classes, but includes a limited number of classes only, then the prefixes in such items are termed 'independent.' In most languages there is only one type of independent prefix, but several types of dependent prefix. For example (Bemba), a**ba**ntu abashila pwisha incite bakaya mailo nga bapwisha ifyo bafwiile ukucita. 'The people that have not finished work will go tomorrow when they finish what they are supposed to do'. The ba- in abantu is an independent prefix. It controls the agreement of the constituents with the dependent prefix in the predicate.

10.5 Independent Nominal

Any item with an independent prefix is called an 'independent nominal', and such items cannot be quoted without the relevant prefix or prefixes. Although this device enables an independent nominal to be identified, it does so without attempting a definition of 'nominal'. This is satisfactory only within the strictly limited purpose of this study. A substantive noun is an independent nominal. For example (Kaonde), bantu babiji 'two people'; bantu is an independent nominal. It bears an independent prefix.

10.6 Dependent nominal

Any item with a dependent prefix that has a grammatical behaviour comparable to that of an independent nominal is called a 'dependent nominal.' Since such items can occur in any class, they are suitably quoted without any concord prefix. An adjective, a numeral, demonstrative, to mention a few, are dependent nominals. The numeral '-biji' in the Kaonde example in 10.5 in a dependent nominal. The prefix depends on the independent nominal or prefix.

10.7 Stem

That part of a nominal that remains after the removal of any concord prefix is termed the 'stem.' This means that the dependent nominal is the stem which is quoted, and thus in common with

other stems. Such a stem is always preceded by a hyphen. A stem can also be defined as the common feature in a series of nominal with commutable prefixes.

10.8 Augment

Any element other than a concord prefix that stands before a stem is termed an 'augment.' The o- in omuntu'person' in Ganda is an augment.

10.9 Verbal

It is purported that the verbal category is not easy to define in a way universally applicable to any Bantu language. In general, verbals may be defined as items with a dependent prefix which are distinguished by the presence of several other recognisable types of element such as dealt with in 10, 11 and 13. The constituent; akondana 'they like each other' in Nyanja is a verbal. A full definition of verbals will be dealt with later in Chapter 21.

10.10 Radical

All verbals have an irreducible core called a 'radical.' When a radical is quoted, it is both preceded and followed by a hyphen. For instance, -kond- carrying the notion of like/ love in Nyanja.

10.11 Extended Radical/ Extension

Radicals are of many different sizes, and some of the longer ones fall into regular types of series characterised by an alternation of elements at the end of the radical. Radicals containing such elements are said to be 'extended,' and the elements themselves are termed 'extensions,' Radical of the general pattern CVC are termed 'simplex' while those longer radicals that cannot be analysed into a simplex radical and an extensions are termed 'complex.' As many complex radicals are very similar in their form to extended simplex radicals, that part of a complex radical that corresponds to the simplex part of an extended radical is termed the 'radical element,' and the rest is termed an 'extension element.'In the Nyanja example given in 10.9, -kond- is the radical element while -an- is the extension element.

10.12 Tense sign, Suffix

Commutable series of elements occurring jointly before and after the radical, or simply in the latter position, are termed 'tense signs.' The part of a tense sign that occurs finally is known as a 'suffix.' This definition means that among the tense signs will be found elements characteristic of forms known as 'conditional' or 'subjunctive' in conventional grammatical description. The term 'tense' therefore, is not limited to a reference to time.

10.13 Base

A radical, whether extended or not, together with a suffix is termed a base. It is the fact that a verbal base contains a commutable suffix that distinguishes it from a nominal stem in most cases. In the case of languages that have no suffixes, base and radical are coextensive and both are quoted with an initial hyphen only, (Guthrie, 1967: 13 – 14).

Note also the following:

a. In general linguistics, what is called a 'radical' by Guthrie is also called a 'root.'
b. Following general linguistics, some Bantuists use the term 'suffix' to refer to any affix following a root/ radical.
c. What is called a 'suffix' by Guthrie is generally called an 'ending'.

Activity 10.2

1. Explain with examples in any Bantu Language the following terms used in Bantu linguistics:
   a) Concord prefix
   b) Class
   c) Dependent prefix
   d) Independent prefix
   e) Independent nominal
   f) Dependent nominal
   g) Stem
   h) Augment
   i) Verbal
   j) Radical
   k) Extended radical and extension
   l) Tense sign and suffix
   m) Base.

Summary

What you have dealt with here are some terms used in Bantu morphology. These terms have been accepted by most Bantu linguists although the terms have been first used by Guthrie in

his ‘Comparative Bantu’. I hope you have gained good understanding of these concepts and would be able to relate to them in the course of study.

UNIT 11

MORPHOLOGICAL STRUCTURE OF BANTU NOUNS

11.0 Introduction

This is the longest unit in this module. However, it should not bore you. You are advised to take time on each of the aspects so that you clearly familiarise yourself with the structure of the word class. Can you think of the form of nouns in English? Compare these with the form of nouns in your local language.

Learning Outcome

By the end of this unit, you are expected to;

- give the morphological structure of Bantu nouns.
- identify augments, prefixes and stem in Bantu languages.
- discuss the semantics of the prefixes of Bantu languages.
- account for the formation of derived and compound nouns.

11.1 Augment and augmentless languages

The augment, also called the pre-prefix or just initial vowel, is a morpheme that is prefixed to the noun class prefix of nouns in certain Bantu languages. The augment originates in the Proto-Bantu pronominal prefix, which is usually identical to the subject prefix of verbs. In some contemporary languages, such as Masaba, this shape has remained more or less unaltered. In others, the augment has been reduced to a simple vowel, often the vowel of the following noun class prefix (e.g. in Zulu umu-, ama-), or a lowered variety (Luganda omu-). Where the noun class prefix normally has a low tone, the augment has a high tone. The morphological structure of augment languages nouns is Augment + Prefix + Stem.

The following table gives an overview of the shape of the augment in various languages.

Table 11.1: Shapes of the Augment in some Bantu Languages

	Masaba	**Luganda**	**Zulu**	**Bemba**
Class 1	umu-	omu-	umu-	umu-
Class 2	baba-	aba-	aba-	aba-
Class 3	gumu-	omu-	umu-	umu-
Class 4	gimi-	emi-	imi-	imi-
Class 5	lisi-	eli-	i(li)-	ili-
Class 6	gama-	ama-	ama-	ama-
Class 7	kiki-	eki-	isi-	ici-
Class 8	bibi-	ebi-	izi-	ifi-
Class 9	in-	en-	in-	in-
Class 10	zin-	en-	izin-	in-
Class 11	lulu-	olu-	u(lu)-	ulu-
Class 12	kaka-	aka-	—	aka-
Class 13	—	otu-	—	utu-
Class 14	bubu-	obu-	ubu-	ubu-
Class 15	kuku-	oku-	uku-	uku-

The Tekela Nguni languages have the augment only in some noun classes, but with a relatively predictable distribution:

- Swazi has the augment when the noun class prefix begins with a nasal consonant (class 1/3 umu-, 4 imi-, 6 ema-, 9 in-).
- Phuthi has the augment where the vowel of the noun class prefix is a (class 2 eba-, 6 ema-).
- Lala has an unusual distribution which depends on the structure of the noun stem itself:
    - In class 1 and 3, the augment is present when the noun has the shape CV (munu ‘person’, but derived diminutive unwana).
    - In class 2, it is present with any noun beginning with a consonant (abanu ‘people’, but boni ‘sinners’).
    - In class 9, it is present on all nouns.

11.2 Semantics of augments in Bantu

The augment appears to have neither only one function in the languages that have it or even the same function in all languages. In Ganda, the augment may indicate definiteness, specificity or focus, but its presence or absence may also depend on syntactic factors. It is present in simple declarative sentences:

omulimi	omunene	omukaddomu		agenda
farmer	fat	old	one	goes

One old, fat farmer is going.

But it is absent when a noun follows a negative verb:

tetulaba	mulimi	munene
we don't see	farmer	fat

We don't see a fat farmer.

In Zulu, the augment is normally present, but it is dropped in cases like the following:

- In vocatives.
- After demonstratives.
- After a negative verb, with an indefinite meaning ("any" as opposed to "the").

(https://en.wikipedia.org/wiki/Augment_(Bantu_languages)

Augmentless languages include, among others:

(1)

Kaonde	Kongo
Lozi	Kimbundu
Lunda	Shona
Luvale	Swahili
Nyanja	Tetela
Luba-Lulua	Tswana
Luba-Katanga	

There are two different Mbundu languages, both spoken in Angola: Kimbundu and Umbundu.

Kimbundu, spoken in Luanda is an Augmentless language while Umbundu, spoken in central Angola is an augment language.

Augment languages include, among others:

1. Bemba Rwanda
   Taabwa Rundi
   Mambwe Nkore
   Namwanga Ganda

Examples from Augmentless Languages; 'person'

Language	**Singular**	**Plural**
Tonga / Kaonde	mu-ntu	ba-ntu
Lozi	mu-tu	ba-tu
Luvale	mu- thu	va –thu
Nyanja	mu-nthu	a-nthu
Swahili	m-tu	wa-tu
Lingala	mo-to	ba-to

In these examples, the first element (mu - , m- and mo-) is a prefix and the second element (-nthu, -tu, -nthu and -to) is the stem. Therefore, the structure of the augmentless languages nouns is Stem + Prefix.

Examples from Augment Languages; Person

Language	**Singular**	**Plural**
Bemba	u- mu-ntu	a- ba- ntu
Mambwe	u- mu- ntu	a- ba- ntu
Rwanda	u- mu- ntu	a- ba- ntu
Rund	u- mu- ntu	a- ba- ntu
Ganda	o- mu- ntu	a- ba- ntu
Nkore	o- mu- ntu	a- ba- ntu

In these examples, the first element is the augment, the second element is the prefix and the third is the stem.

It is important to note that some nouns in both groups of languages have no overt prefix, i.e. they have zero prefix. In many augment-languages, when the prefix is zero, the augment is also zero. Thus **ndate** 'my father' in Lozi and **taata** 'my father' in Bemba have no overt prefix and augment. In many augment languages, proper names are augmentless.

11.3 The Shapes of Augments

The segmental structure of augments has two major types: augments made of a vowel (v) and augments made of a consonant plus a (CV). We have already seen V-type augments in (4) above. Below are examples of CV-type augment.

(5) Gisu (E31a; a Bantu language in Zone E, group 3 and is the first language)

(a) ba-ba-ndi 'people'
(b) gu-mu-hato 'knife'
(c) gi-mi-hato knives'

In some languages, the augment is invariable. For example in Tonga the augment is always i-, it does not vary or change shape, e.g.

(6**)** Tonga (M64)

a) i-mu-ntu 'person'

b) i- ba- ntu 'people'

c) i-mu-nzi 'village'

d) i-mi-nzi 'villages'

In many languages, the vowel of the augment depends on the vowel of the prefix. We can look at two cases:

(a) Bemba - languages behaving like Bemba include Mambwe, Rwanda and Rund and

(b) Nkore - languages behaving like Nkore include, among others, Ganda and Umbundu.

In Bemba, the augment belongs to the V-type, i.e. the augment is a vowel. This vowel is one of the following: a, u i. The rule is that the augment copies the vowel of the prefix. This is presented in Table 11.2. In Tonga the augment is optional in the sense that it is only used for emphasis. This is always i-.

Table 11.2: Augment in Bemba

Prefix Vowel	**Augment**	**Example**
a	a	a-ba-ntu ‘people’
u	u	u-mu-ntu ‘person’
i	i	i-ci-ntu ‘thing’

Note that:

- Before the prefix -n- (class 9 or 10), which has no vowel, the augment is i- as if it was followed by the vowel ‘i’,
  e.g. Bemba: i-n-koko ‘chicken(s)’;
- The augment is zero (i.e. there is no augment) if the prefix is zero (i.e. if there is no (overt) prefix). e.g. Bemba: **taata** ‘my father’, and
- in the plural of nouns with zero prefix in the singular form, e.g. Bemba: **baa - taata** ‘my father’, (the baa- however does not denote plural but honorific).
- Proper names of people never take augments because they have zero prefix in the singular form.

In Nkore, a Ugandan language, the augment is also of the V-type. The augment in Nkore also depends on the vowel of the prefix. However, while in Bemba and in Bemba-like languages (e.g. Mambwe, Rwanda and Rundi) the augment is generally obtained through a ‘copy rule’ (in the sense that, in general, the augment is the same as the prefix vowel), in Nkore and Nkore-like languages, although the form of the augment is predictable, it is not obtained through a copy rule

The general rule is shown in Table 11.3 below:

Table 11.3: Augment in Nkore

Prefix Vowel	**Augment**	**Example**
I	e	e-ki-ntu ‘thing’
U	o	o-mu-ntu ‘person’
	a	a-ba-ntu ‘people’
ø (zero, i.e. nil)	e	e-n-koko ‘chicken(s)’

Consider the chart of Nkore vowels in the following table:

Table 11.4: Chart of Nkore Vowels

	Front	**Back**
High	i	u
Mid	e	o
Low		a

Compare Tables 2 and 3. What can you notice?

We notice that when the augment vowel is **o** or **e**, it is one degree lower than the prefix vowel, i.e. if the prefix vowel is High Front **‘i’** the augment is Mid Front ‘**e’**, and if the prefix vowel is High Back ‘**u’** the augment prefix is Mid Back **‘o’**. We also notice that in classes 9 and 10, where the prefix is simply **-n-** without a vowel, the augment is e as if it was followed by ‘i’ (c.f. Bemba, above).

When the prefix vowel is Low Back ‘**a**’ the augment vowel is also Low Back ‘**a’**. This is because there is no lower vowel than ‘**a’.**

11.4 The occurrence of augments

As for the occurrence of augments (in augment languages), the following points should be noted:

(a) Augments are meaningless in the present-day Bantu languages. However, in some languages, e.g. Tonga, augments are used for emphasis purposes only.

(b) In some grammatical contexts the augment is deleted. For example, in Bemba the augment is always deleted after a genitive pronoun (a word meaning ‘of ‘).

(c) In most augment languages, proper names never take augments.

Activity 11.1

1. Discuss in general terms, making the necessary distinctions, in the morphological structure of nouns in Bantu.
2. In respect of augments, Bantu languages are divided into augment languages and augmentless languages. This is true of Zambian Languages, being Bantu. Discuss and exemplify from two of such Zambian languages.
3. Not all nouns in augment languages have an augment. Elaborate and exemplify.
4. The phonological shapes of augments are predictable. Discuss and exemplify. In this regard, what is the difference between (a) Tonga and Tonga-like languages, and (b) Bemba and Bemba-like languages?

11.5 Nominal Classes and Prefixes

A noun class is said to be “a grammatical system that some languages use to overtly categorize nouns”. (www.ziath .virginia.edu.swahili/swahili.2007, 29/08). Bantu languages are characterised by a class system. Nouns belong to various classes; the sign of a class being a prefix and the type of concord prefixes a given noun governs. In addition, there is a regular association of classes in pairs to indicate the dichotomy singular/plural.

11.5.1 Shapes of Nominal Prefixes

Most Bantu linguists have accepted the PB nominal prefixes indicated in the table below:

Table 11.5 Proto Bantu nominal prefixes

Class	Prefix
1	*mo
1a	*Ø
2	*ba
3	*mo
4	*mi
5	*i
6	*ma
7	*ke
8	*bi
9	*n
10	*n
11	*do
12	*ka
13	*to
14	*bo
15	*ko
16	*pa
17	*ko
18	*mo
19	*pi

Analyse the phonemes used in the prefixes in this table with those of your local language. Can you recall the dianchronic changes that have taken place?

There is no consensus on the shapes of PB prefixes of classes 5, 9 and 10. For example, while Guthrie has reconstructed *ye and *ny for classes 5 and 9/10, respectively. Meusseen has proposed *i and *n for classes 5and 9/10 respectively, (LAL 211 notes). Examine these in your local language.

In the above table, **class 1a** is said to be a **subclass** of class 1, class 1 being **a main class**. A main class and its sub-class (es) always have the same concord prefixes, as illustrated in the following example from Tonga:

(1) Tonga: cl. 1 muntu ‘person’, => muntu mubotu ‘good person’

(Literally: ‘person good’)

cl.1a silweendo ‘traveller’, => silweendo mubotu ‘good traveller’

(Literally: ‘traveller good’)

What do we call the si- in silweendo ‘traveller’? Is it a prefix or augment? We know that while Tonga is an augment language, the one and only augment used is ‘i’. The si-in silweendo is a **formative**. It is an element used in the formation of some nouns. Do you have such elements in your language? What are the shapes of such elements?

In Table 11. 2 below, the nominal prefixes of the seven Zambian regional official languages are given. In this table, two subclasses; 1a and 9a, are given for all languages and one; 2a, for Bemba and Lozi. Note that this list of subclasses is not exhaustive. You can explore further and establish more in a language that is taught at your school.

Table 11.2: Nominal prefixes of some Bantu Languages

Swahili is included to provide a comparison (typical of Proto-Bantu).

(ø = ‘zero’, i.e. ‘nill’)

Class	Bemba	Kaonde	Lozi	Lunda	Luvale	Nyanja	Tonga	Swahili
1	mu	mu	mu	mu	mu	mu	mu	*mo
1a	ø	ø	ø	ø	ø	ø	ø	*ø
2	βa	βa	βa	a	βa	a	βa	ba
2a	βaa	βaa	βo	a	βa	a	βa	?
3	mu	mu	mu	mu	mu	mu	mu	*mo
4	mi	mi	mi	mi	mi	mi	mi	*mi
5	li/i	ji	si	di/i	li	li/dzi	li/i	*i
6	ma	ma	ma	ma	ma	ma	ma	*ma
7	ci	ki	si	ci	ci	ci	ci	*ke
8	fi	vi	li	yi	vi	zi	zi	*bi
9	n	n	n	n	n	n	n	*n
10	n	n	li/n	zhi/n	zhi/n	n	n	*n
10a	ø	ø	li	zhi	zhi	ø	ø	?
11	lu	lu	lu	lu	lu		lu	*do
12	ka	ka	ka	ka	ka	ka	ka	*ka
13	tu	tu	tu	tu	tu	ti	tu	*to
14	βu	βu	βu	wu	u	u	βu	*bo
15	ku	ku	ku	ku	ku	ku	ku	*ko
16	pa	pa	fa	ha	pa	pa	a	*pa
17	ku	ku	kwa	ku	ku	ku	ku	*ko
18	mu	mu	mwa	mu	mu	mu	mu	*mo
19			si					*pi
20			βi					

Note the following:

- Where there is nothing in a slot, it means that the class does not exist in the language. This is different from {ø}. This symbol means that the class exists but, while the concord prefixes have a phonological shape, the nominal prefix has no phonological shape. (This is to say, there is no nominal prefix).
- Of all languages in the table, only Lozi has a class of 20 prefixes.

- Nyanja has no class 11. If you are a Nyanja speaker or one who knows the language very well, you can try to establish nouns that belong to class 11. How many have you established? Definitely, none. If you think it is, trace its origin. You may discover that it is a borrowed noun.
- In a good number of languages, locative nominal prefixes are of two types: shorter prefixes, given in Table 11.2 above, and longer locative nominal prefixes (class 16: pali, ali, hadi, etc. ; class 17: kuli, etc; class 18: muli, etc.). The longer prefixes are typically used with class 1a nouns. (Try to give examples of such uses in your language or in a language used at your school.)
- Bemba has more classes than those listed in the table above. The full list of Bemba classes is as follows (classes not in table 11.2, above, are in bold):

Table 11.6 Full List of Classes in Bemba (M 42)

Class	**Prefix**	**Example**
1	Mu	umuntu 'person'
1a	Ø	kolwe 'monkey'
2	ßa	abantu 'persons'
3	mu	umushi 'village'
4	mi	imishi 'villages'
5	li / i	ilini(i-li-ni) 'egg', lisabi(i-li-sabi) 'fish'
5a	**Lii**	**liibanda 'banda' huge Banda**
6	ma	amapili 'mountains / hills'
7	Ci	icisote 'hat'
7a	**cii**	**ciikolwe 'huge monkey, 'ugly monkey, 'evil monkey**
8	Fi	ifisote 'hats'
8a	**Fii**	**fiikolwe 'huge monkeys, ' ugly monkeys 'evil monkeys**
9	N	inkoko 'chicken'
10	N	inkoko 'chickens'
11	Lu	ulukasa 'foot'
12	Ka	akakoko 'chick'
12a	**kaa**	**kaakolwe small monkey'**
13	Tu	utukoko 'chicks'
13a	**Tuu**	**tuukolwe '' small monkeys'**
14	ßu	ubusuma ' beauty/goodness'
14a	**ßuu**	**buukafundisha 'teaching profession'**
15	Ku	ukuseka 'laugh'
16	pa / pali	pamutenge 'on the roof', palikafundisha 'on the teacher'
17	ku / kuli	kumushi 'at/to the vilage'; kulikafundisha 'to the teacher'
18	mu / muli	mumunshi 'in(to) the village

(Adopted from LAL 211 study material)

In the above table, we notice that some prefixes belonging to different classes are identical, e.g. 1and 3 and 15 and 17 except in lozi. In this case, how do we identify the class? There are two main criteria, namely:

(a) **agreement** (or **concord**); and

(b) **meaning**. Meaning is used as a criterion where two classes have all their prefixes identical. This is the case in those languages in which the nominal and concordial prefixes in class 15 (ku) and 17 (ku) are identical: class 17 has a locative meaning (‘at/to) while class 15 is used for infinitives (and, for some languages, e.g. Bemba, in about four nouns only, as in ukuboko ‘arm’). Note that locative prefixes are added to full nouns. Therefore the locative morpheme is a preprefix.

Classes 1 and 3 (prefixes mu-) are distinguished not only on the basis of meaning but also on the basis of agreement. Thus in Nyanja both munthu ‘person’ (class 1) and mudzi ‘village’(class 3) both have the prefix **mu-** but when they are used as subjects, the verbal prefix is **a-** for munthu but **u-** for mudzi as shown in example (2) below:

(2) a. munthu **a**li kutali ‘the person is far away’
b. mudzi **u**li kutali ‘ the village is far away’

It is important to note that classes 5, 9 and 10 are problematic in some languages. For instance, class 5 has in many languages variants which may be conditioned by the context. In Tonga, for example, there are three variants; **li**- (liso ‘eye’), **i**- (iji ‘egg’) and **Ø** (bbwe ‘stone’. Lunda also has two variants for class 5; di- used before a vowel, eg. di-isu ‘eye’ and i- elsewhere, eg. i-dimi ‘tongue’.

Bemba also has two variants; li- mainly used before a vowel and i- used when the following segment is not a vowel (except when the stem is monosyllabic). Can you try to provide examples for these in Bemba (Find someone who is Bemba if you do not know the language. Does this exist in your language as well? Provide such examples.

Another irregularity in class 5 is that in some languages, there is no explicit prefix but one has to posit some form of floating feature whose effect can be seen when one compares the form in class 5 and it’s plural in class 6 as illustrated from Tonga and Nyanja below:

	Tonga		Nyanja	
Class 5	Sika	sickle	phiri	hill
Class 6	masika	sickles	mapili	hills

This variant is an instance of what is called ‘zero prefix’ in linguistics. Most borrowed nouns enter Cl. 5a for singular and Cl. 6 for plural.

11.6 The Function of Noun Prefixes

As we have already indicated earlier, Bantu languages are class languages. They depend on the noun class system in the construction of nominals and formation of agreement in syntactic expressions.

There are primary and secondary functions of noun classes. The primary prefixes are used for normal size specimen of the nouns in the classes they belong to while the secondary prefixes perform different roles from the primary ones, although they may use the same prefix in some circumstances (analyse the classes indicated with ‘a’, eg 7a – for instance, when a noun in class 1 is used with a prefix in class 7). Secondary prefixes are a sub-class of the primary prefixes. In this course, you need to have understanding of the meanings of both primary and secondary prefixes. For instance, the class 1 prefix denotes singular human being in all languages and some large animals and birds in some languages. The class 2 prefix is for plural form of class 1. Some classes are for inanimate things, infinitives, diminutives, abstract things, and locative. Since these functions are not exhaustive and specified here, can you deal with each of them comprehensively?

11.7 Noun class pairings

The Bantu languages are fairly closely related and have a unique feature in the harmonic concord. Indo-European languages (and others too) usually show gender differences, singular/plural, and agreement by means of suffixes. Bantu languages use prefixes and the harmonic concord. The nominal classes, apart from the locatives (classes 16, 17 and 18), exist in pairs. Classes 11, 14 and 15, however, are peculiar. Some nouns in these classes form their plural with other categories while class 14 has no plural in many Bantu languages.Can you analyse the following data from the web below:

Classes 2, 4, 6, 8, 10, and 13 are generally accepted as being the plural forms of noun classes in Proto-Bantu. Classes 14 onward do not have a plural form defined as concretely as classes 1-13 do. (Comment on Class 11).

Meeussen proposed pairings of 1/2, 3/4, 5/6, 7/8, 9/10, 11/10, 12/13, 14/6, 15/6, and 'probably' 19/13.

Guthrie proposed pairings of 1/2, 1a/2, 3/4, 5/6, 7/8, 9/10, 11/10, 12/13, 14, 14/6. (http://smu-acweb.smu.ca/~wmills/course316/4Bantu_languages.html)

After the analysis, critic the three propositions. Are you able to indicate the prefixes of these classes without referring to the table on nominal prefixes? Test yourself and see how many you would get right.

11.8 The Dichotomy of Noun Classes

As already stated, a number of noun classes exit in pairs. These pairs are in dichotomy of singular and plural. Undoubtedly, you are able to establish the noun class system of your language or the one taught at your school.

There are some obvious pairing of these nouns from class 1 to 10, including 12 and 13. However, other nouns in some classes may be paired with another class of a different kind. The following are the established pairs of noun classes in Tonga:

Class 1 / 2— muzovwu/ bazovwu 'elephant/ elephants'

Class 1a / 2a— taata/bataata 'father'/ (honoured) father'

Class 1a/ 2a —sokwe/basokwe 'monkey/monkeys'

Class 3/4 — mutwe/ mitwe 'head/ heads'

Class 5/6 — pobwe/ mapobwe 'feast/ feasts'

Class 5a/6a —/gutwe / matwe 'big head/ big heads'

Class 7/8 — cibiya / zibiya 'clay pot / clay pots'

Class 7a/8a — citwe/zitwe 'bad head/ bad heads'

Class 9/10 — nkuku/ nkuku 'chicken /chickens

Class 12/13— kasuumbwa / tusuumbwa ‘anthill/anthills’

Class 15/6 — kuboko / maboko ‘hand / hands’

Class 5/2 — cibize / bacibize ‘zebra/zebras’

Class 7a/6a — cipemo / mapemo ‘bad nose / bad noses’(or abnormally large nose)

Class 11/6 — lugwalo/ magwalo ‘letter /letters’

Class 11/10—lubalo/mbalo ‘rafter/rafters’

Now that we have gone through this journey, pair up with a colleague who is on this course who knows a Zambian language other than Tonga and see if that language operates in a similar manner as the one described above. What is your conclusion?

Activity 11.2

1. With examples, give a full list of nominal classes in any regional official Zambian language other than the one discussed above.
2. With examples, discuss the semantics of nominal classes of a Zambian language of your choice.

11.9 Nominal Stems

Are you able to remember the term stem? How are stems distinguished from roots or radicals? In linguistics, a stem is that part of a nominal that remains when all affixes are removed. For instance, if the prefix mu- is removed from the Tonga adjective, mubotu ‘good’ (as referred to a cl. 1), we will remain with -botu. The form -botu therefore, is a stem. The radical or root is that part of a verbal constituent that remains when all affixes are removed. Think of any verb and remove all the prefixes and suffixes. What remains is a root or radical. A morpheme or affix is a prefix if it occurs before a root or stem and termed suffix if it occurs after the root or stem.

Affixes that are used to express some grammatical function such as number (singular/ plural), tense, etc. are termed inflectional affixes. Affixes used to derive words from other words are derivational affixes. Can you give an example of a radicle to distinguish it from a stem? You can verify your answer with your course mate or tutor.

Let us now look at nominal stems in Bantu with a bias to our local languages. A nominal stem may be simplex, complex, compound or reduplicated. It is:

- **simplex** if it is made of one morpheme, eg. lozi: -tu in mutu 'person'.
- **complex**, if it is made of a root with at least one derivational affix, eg. Nyanja: -lengi in mulengi 'creator' where –leng- is the root and –i is a suffix. In this case, root = stem.
- **compound**, if it comprises two or more roots, eg. Tonga: simwaambabboola ' one who talks of coming early' where –amb- is one root with the meaning 'say' and –bool- is another root with the meaning of 'come'; and
- **reduplicated**, if the root or part of the root is repeated, eg. Bemba: ubulale-lale 'prostitution' (Literary: sleeping any how).

The formation of complex stems is called derivation while the formation of compound stems is called compounding. If your language has not been given as an example here, please provide some in that language.

Activity 11.3

1. With examples from Bantu, discuss the following:
   i. Root,
   ii. Stem.
   iii. Affix,
   iv. Inflectional affix,
   v. Derivational affix,
   vi. Simplex, complex, reduplicated and compound nominal stems,
   vii. Derivation and compounding.

11.10 Morphophonology

What do you remember about phonology and morphology? What does morphophonology deal with? Are you aware that when morphemes are combined to form words in certain contexts, certain phonemes are not realised by the corresponding sounds. Try to sound the following:

- muana (mu- cl. 1+ -ana 'child') => mwana
- baana (ba- 'cl.2 + -ana 'child') => bana
- maino (ma- 'cl.6+ -ino'tooth') => meno

These are morphophonological processes. They can occur in nominals as well as in verbals.

11.10.1 Morphophonological processes in nominals

According to Matthews (1997: 232), the term morphological process refers to "any of the formal processes or operations by which the forms of words are derived from stems or roots." Morphophonological processes deal with the phonological change or operation that take place in the structure of words. There are a few of such processes in the formation of nouns in Bantu languages. Here, we are going to look at gliding (semi-vocalisation), deletion (loss, reduction or truncation) and coalescence (fusion).

A. Gliding

This is a process by which a vowel changes in the environment of another vowel. In Tonga, a back vowel [u] becomes a semi- vowel [w] when it occurs before a high vowel. This can be theoretically presented in the following notation:

[u] → [w] /− [i.e.]

Can you read the notation? Yes. [u] becomes [w] when it occurs before a high vowel [i] or [e].

This process derives nouns such as the ones in Tonga below;

mu + enzu → mweenzu (cl.1) 'visitors',

ku + enda → kweenda (cl.15) 'to talk',

mu + ini →mwiini (cl.3) 'handle (of a hole/axe)',

In a similar way, some nouns are formed by gliding [i] as it appears before any vowel other than [i] itself as in;

zi + ano → zyaano (cl. 8) 'stories',

zi + elo → zyeelo (cl. 8) 'ghosts',

mi +oyo → myoyo (cl. 4) 'hearts',

B. Deletion

Deletion is a process by which one element is deleted in the word formation process. The alternative terms for deletion are; reduction, truncation, elision, loss. Consider the Bemba example below:

aba + ana → bana (cl. 2) ‘children’

The vowel in the prefix is deleted.

ili – iso → liso (cl. 5) ‘eyes’

The vowel in the prefix ***li***- is similarly deleted.

C. Coalescence (fusion or merger)

This process involves bringing together elements of the word to be realized as one. We exemplify using Tonga:

ma + iso → meso (cl.6) ‘eyes’
e

[a] + [i] fuse or coalesce into [e].

bu + ofu → boofwu [bo:fwu] (cl. 14) ‘blindness’.
oo

Ci + uno → cuuno [cu: no] (cl. 7) ‘chair’
uu

Activity 11.4

1. With an example, explain what a morphophonological change is.
2. With four examples (different from the ones discussed above), explain the following:
   (a) Gliding’
   (b) Deletion
   (c) coalescence

Summary

The unit has discussed the general morphological structure of nouns in Bantu. Bantu languages are either augment or augmentless languages. The augment does not carry any meaning in some languages while in others, it is used for emphasis. The augment can be deleted in some grammatical contexts as we have seen for Bemba.

Nouns belong to various classes existing in pairs of singular/ plural. The prefix is the determiner of the class although there are situations where the prefix may be a zero morpheme.

Such a noun is termed to have a floating feature. There are between 17 to 20 nominal classes in Zambian languages, normally consisting three locatives. The functions of the classes have been discussed in detail

A stem is simplex if it is monomorphemic, complex, if it comprises at least one derivational affix, and compound if it has more than one root.

Combining some phonemes result in morphophological changes. The rules accounting for such changes are called morphophonological rules. These rules apply in many of the Bantu languages.

UNIT 12

DERIVED AND COMPOUND NOUNS

12.0 Introduction

Nouns can be formed in various ways. In this unit we will partially review some morphological terms dealt with in the previous course. Morphology, the study of the internal structure of words, from a semantic and grammatical point of view, is divided into inflectional morphology and lexical morphology (word formation). Inflectional morphology deals with the various grammatical forms (grammatical number, that is, singular and plural; tense; etc) of the same word.

Lexical morphology or word formation deals with the formation of new words. Lexical morphology is divided into derivation, which is concerned with the formation of a word from another word, (e.g. Tonga: sololela 'lead' > musololi 'leader') and compounding (composition), which deals with the formation of a word from two or more words (usually two), e.g. Tonga: mulyakubinda 'one who eats hurriedly'.

This unit focuses on nominal lexical morphology in Bantu of which Zambian languages are part.

Learning Outcomes

By the end of the unit, you are expected to;

- explain the formation of derived nouns in Bantu.
- explain the formation of compound nouns in Bantu.

12.1 Nominal derivation

This is a process of deriving nouns from other word classes (including the nouns themselves).

12.1.1 Types of derived nouns

There are four major types of derived nouns in Bantu:

i. denominal nouns (nouns derived for other nouns)'
ii. deverbal nouns (nouns derived from verbs)'
iii. de-adjectival nouns (nouns derived from adjectives and
iv. de-onomatopoeic nouns (nouns derived from onomatopoeias).

Let us deal with one type at a time.

12.1.2 Denominal nouns

Nouns derived from other nouns include:

a) Augementative / Pejorative nouns

These are formed by using a prefix. In general the prefix is of class 7 for the singular and class 8 for the plural, eg. Bemba: ici/ifi (for instance, umuntu 'person' > icimuntu/ ifibantu 'ugly or huge person(s) and in some cases class 10a for plural e.g. Lunda: mutoondu 'tree'> cimutoondu/ zhimutoondu 'huge trees'.

b) Diminutive nouns

These generally use the nominal prefixes of class 12 and 13 for singular and plural respectively, e.g. Nyanja: mwana 'child' > kamwana 'small child' / tiana small children'.

c) Abstract Nouns

Depending on the meaning of the noun, it is possible to form an abstract noun using class 11 and 14 prefixes, e.g. Bemba: kafundisha 'teacher' > buukafundisha 'the teacher's profession'.

For the above nominal derivation processes discussed above, the following terms will be used for the formation of augmentative/ pejorative nouns, augmentativisation/ pejorativisation; for the formation of diminutive nouns, diminutivisation and for the formation of abstract nouns, abstractivisation.

Nouns can also be derived by inserting an infix between a noun prefix and the stem or between two noun prefixes, eg. Tonga: mu**ka**mwiiyi 'wife of a teacher'.

In some Bantu languages, nouns may be formed by reduplicating the stem of an existing word or a full word,

e.g Nyanja: kudya 'to eat' > kudyakudya 'eating anyhow'
Lozi: linaha 'countries' > linahanaha 'many countries'.

12.1.2 De-adjectival Nouns

Begin by thinking of nouns that are derived from adjectives. Are they so many in your languages? Adjectives can be nominalised either in classes 1 and 2, to refer to people or classes 7 and 8 to refer to things,

eg. Mambwe: -kalamba 'big/ elder' > umukalamba/ abakalamba 'elder(s)' (Cl. 1/2); icikalamba/ ifikalamba 'big thing(s)' (Cl. 7/8).

Such forms are usually not qualified as derived nouns as they are interpreted as cases of optional deletion of underlying head nouns for the classes 1/2 and 7/8.

Most nouns are usually not counted among derived nouns in class 14, which are formed in the same way as abstract nouns in class 14.

Eg. Tonga: -botu 'good' > bubotu 'goodness/ beauty'

12.1.3 Deverbal Nouns

Recall what deverbal nouns are. Deverbal nouns have various forms and we will begin by considering the following:

- The derivational suffixes used;
- The nominal class(es) in which a given deverbal noun is;
- The meaning of the deverbal noun and
- The productivity of the derivational device used.

a) Deverbal Nouns with the Suffix –i

Classes; generally 1 and 2

Productivity: poor

Meaning: generally human agents. Nouns denoting agents ('he who…') are called 'agentive nouns')

Note that such nouns may be referred to as the **agentive nouns** and the suffix may be referred to as the **agentive suffix**

Examples:

(9) a. Lozi: -lut- 'to teach' > (1/2) muluti/ baluti 'teacher(s)'

b. Tonga: -panuk- 'to be clever/ cunning' > (1/2) mupanusi/ bapanusi 'cunning or clever person(s)

c. Bemba: -bomb- 'to work' > (1/2) umubomfi/ ababomfi 'worker(s)'

d. Kaonde: -lim- ‘to cultivate’> (1a + 9/2 + 9) njimi/ banjimi ‘farmers’

e. Luvale: -lim- ‘to cultivate’> (1a + 9/2 + 9) njimi/ banjimi ‘farmers’

f. Luvale: -ib- ‘to steal’ > (1/2) mwizhi/ bezhi ‘thief/ thieves’

In many languages, before the agentive suffix –i or –i there is a sound shift in many cases (see examples above).

b) Deverbal nouns with the suffix -a

Classes: miscellaneous

Productivity: high

Meaning; miscellaneous (agents, actions, results, etc)

Examples:

(10) a. Bemba: -lemb- ‘to write’ > (1a/2a) kalemba/baakalemba ‘writer(s)’

b. Kaonde: -sop- ‘to guard’ > (1a) kasopa ‘a guard’

c. Lozi:-lut-iw-‘to be taught’>(1/2) mulutiwa/balutiwa student(s), disciple(s)’

c) Deverbal nouns with the suffix -u

Classes: miscellaneous

Productivity: poor

Meaning: miscellaneous

Examples

(11) a. Tonga: -fu- (…-fu-u ‘to die’ > (1/2) mufu/bafu)‘dead person (s)’

d) Deverbal nouns with the suffix –o (or –O)

(i) Root plus –o (or –O)

Classes: miscellaneous

Productivity: high

Meaning: miscellaneous, including agents, actions, results.

Examples:

(12) a. Bemba: -end-‘to walk’> (11) ulwendo or (14) ubulendo ‘journey’

b. Lozi: -kwal-‘to close’> (7/8) sikwalo/ likwalo ‘door(s)’

d. Nyanja: -cit- ‘to do’ > (9/10) ncito ‘work’

e. Tonga: -iot- ‘to dream ‘> (7/8) ciloto/zyiloto

d. Kaonde: -pulush- ‘to save’ > (1) mupulusho ‘a saviour’

(ii) Root plus applied extension plus –o

Classes: mostly 5/6 and 7/8

Productivity: fairly high

Meaning: mostly tools and places where actions take place

a. Bemba: (i) -bomb- to work' > (7/8) icilembelo/ifilembelo 'tools(s)'

(ii) -lemb- 'to write' > (7/8) icilembelo,ifilembelo 'pencil, pen (for writing),

(iii) -lapil- 'to regret, to repent' >, (7/8) icilapilo/ ifilapilo 'confessional(s).

e) Deverbal nouns with the suffix –e

(i) Root plus –e

Classes: miscellaneous

Productivity: poor

Meaning: miscellaneous, including, actions, results, agents

Examples:

(15) Kaonde: -pa- 'to give' > (14) bupe 'gift(s)'

Bemba: a.. –pa- to give' > (14) ubupe 'gift(s)'

b. –kot- to become old' > (1/2) umukote/abakote 'old person(s)'

Nyanja: -pel- 'to grind' > (7) cipele 'smashed cooked beans'

(ii) Root plus -e/ -e plus reduplication

Classes: generally 7

Productivity: almost with every verb in those languages with kind of derivation.

Meaning: anyhow or/and anything.

Examples

(19) a. Bemba: -land- 'to speak'> (7) icilandelande 'speaking anyhow

b. Kaonde: -laal- 'to sleep' > (7) kilaalelaale 'sleeping anyhow'

c. Luvale: -seh- 'to laugh'> (7) cisehesehe 'laughing anyhow'

Note that such deverbatives are used as either nouns or adverbs of manner, for example:

(20) Luvale:

a. (noun) kangwazanga ciseheshe ‘I done like laughing anyhow’

b. (adverb) kuseha ciseheshe ‘to laugh anyhow’

f) Deverbal nouns of manner in –ile, -ire, elo, idwe, etc.-

Classes: generally 3, 4, 9 or 9a

Productivity: almost with every verb

Meaning: manner of doing the derivates may be referred to as manner-of-going nouns’

Examples:

(22) Bemba: (suffix –ile)

a. -il- ‘to eat’ > imilile ‘manner of eating’

b. -bomb- ‘to work’ > imibombele ‘ manner of working, method’

(23) Mambwe: (Suffix – ile): -lemb- ‘to write > (4) imilembele ‘manner of writing’

(24) Luvale: (Suffix – iso): -handik- ‘ to speak’ > (9a/10) handikiso/ zhihandikiso ‘manner of speaking’

(25) Kaonde: (suffix – ilo): -laal- ‘to sleep’ > (9) ndaajilo ‘manner of sleeping’

(26) Lozi (suffix –elo):

a. -lim- ‘to cultivate’ > 93) mulimelo ‘manner of cultivating’

b. -sebez- ‘to work’ > (3) musebezezo ‘manner of working’,

N.B. -ez –elo > ezo (in lozi)

12.1.4 Some morphophonological Phenomena

In deverbal nouns, some derivational suffixes are subject to morphophonological changes in some languages. The morphophonological rules that are in play are:

- spirantisation
- vowel harmony
- nasal assimilation

Do you still remember what was discussed concerning these synchronic rules? You will discuss these as rules being induced by the derivational suffixes.

A. Spirantisation induced by the agentive suffix i-

In some languages, a stop is realised by a spirant, eg.

Bemba: ukubomba ‘to work’ > umubombi > umubomfi ‘worker’

Tonga: kubeleka ‘to work’ > mubeleki > mubelesi ‘worker’

B. Vowel harmony affecting the manner of doing suffix

In some languages where the vowel i- of the manner of doing suffix is realised by e, if the last vowel of the root is a mid vowel (eor o), the mid vowel causes a non-mid vowel to de realised by a mid vowel. The assimilation is progressive (something that is on the right is assimilated by something on the left, eg.

Bemba: imilembile > imilembele ‘manner of writing’

C. Nasal assimilation affecting the manner of doing suffix

Here, the consonant l of the manner of doing suffix is realised by a n if what precedesthe suffix is a nasal (n or m). eg.

Bemba: ukumena ‘to swallow’ > imimenile > imimenene ‘way of swallowing’

Activity 12.1

1. With examples, explain the dichotomy inflectional morphology/ lexical morphology.
2. With examples, write short notes on; (a) denominal nouns, (b) de-adjective nouns and (c) deverbal nouns.
3. With examples, write an account of the morphology of manner-of- doing nouns.
4. With examples, write an account of the morphophonology of agentive nouns and manner -of-doing nouns.

12.2 Compound Nouns

The notion of compounding is not new to you. The number of compound nouns in Bantu is very high. In some cases words occur with some special segmental or/and tonal variants when they are part of compound nouns. One characteristic of compound nouns is how the actual meanings are related to the corresponding literal meanings. For instance, the Tonga compound noun **cisuntaboya** ‘kind of hairy caterpillar’ is so called because it ‘shakes’ (-sunt-) its ‘fur’ (boya).

There are several types of compound nouns including the following:

(a) Noun plus Noun

Example:

(1) Luvale: ngangamukanda ‘medicine-man specialized in circumcisions’, from nganga (medicine man’ and mukanda circumcision camp/ceremony

(b) Noun plus adjective

Example:

(2) Bemba: nokokulu your-sg ‘grandmother’ (from nook ‘your-sg mother’ and -kulu ‘big’)

(c) Noun plus possessive

Example

(3) Lunda: mwanaami ‘my child’ (from mwaana ‘child’ and waami ‘my’

(d) Verb plus noun

Most compound nouns belong to this type

Examples:

(4) a. Bemba: kafwabufi ‘sort of insect which pretends to be dead when touched’ (from- fu- ‘to die’ and ubufi ‘lie’

b. Tonga: cisuntaboya ‘sort of hair caterpiller’ (from –sunt- ‘to shake’ and boya ‘fur’)

c. Kaonde: Kitumbafumu ‘deputy chief’ (from – tumb ‘to name’ and mfumu ‘chief’

e. Luvale: Cicava-khunyi ‘baby boy’ (from –cav- ‘to fetch (firewood) and -khunyi ‘firewood’)

Activity 12.2

1. With examples, explain the difference between derivation and compounding.
2. With examples, write an account of the formation of compound nouns in Bantu, paying particular attention to;
   a) the syntax of compound nouns (e.g. noun + noun) and
   b) their semantics (distinction between internal meaning and actual meaning).

Summary

Morphology is usually divided into inflectional morphology and lexical morphology (also called word-formation morphology). In inflectional morphology, you one is concerned with the various shapes of words to express some grammatical notions (e.g. plurality, tense); in lexical morphology, the concern is with the formation of new words from existing ones. In turn, lexical morphology is divided into derivation and compounding (also called composition). The unit dealt with the lexical morphology of nouns in Bantu. The following were considered:

- Derived nouns

a) Denominal nouns: augmenmtatives/ pejoratives, diminutives abstract nouns; derived nouns with infixes; nouns with reduplication;

b) De-adjectival nouns;

c) Deverbal nouns. These classified according to the shapes of the derivational suffixes used;

It was pointed out that there are several types of compound nouns identified on the basis of the types of speech used to form new words; noun + noun, noun + adjective, verb + noun, etc.

We have also seen how the actual meanings of compound nouns are related to the corresponding literal meanings for instance, the Tonga compound noun *cisuntaboya* ‘kind of hairy caterpillar’ is so called because it ‘shakes’ (-sunta) its ‘fur’ (boya).

UNIT 13

MORPHOLOGICAL STRUCTURE OF ADJECTIVES

13.0 Introduction

This unit deals with the structure of adjectives. Before devoting yourself to the morphological structure of adjectives, you will be required to familiarise yourself with what an adjective is and be able to identify an adjective both in English and Bantu language(s). The unit will advance by analysing the morphological structure of what we may call 'primitive' adjectives and then look at derived and compound adjectives. You will realise that there are so many categories of adjectives in English than there are in Bantu languages. Note also that what we have termed primitive adjectives here are viewed by some authors as primitive adjectives.

Learning Outcomes

By the end of this unit, you are expected to;

- identify and explain the type of words referred to as adjectives in contemporary linguistics.
- distinguish between primitive, derived and compound adjectives.
- account for the morphological structure of adjectives in Bantu.

13.1 Defining Adjectives

Traditionally, an adjective has been defined as "a word that describes or clarifies a noun. Adjectives describe nouns by giving some information about an object's size, shape, age, colour, origin or material," (https://grammar.yourdictionary.com/parts-of-speech/adjectives/what-is-an-adjective.html). Matthews, 1997: 8 has defined an adjective as "a class whose most characteristic role is as the modifier of a noun." It is a describing word, the main syntactic role of which is to qualify a noun or nominal element, giving more information about the object signified. From the ELE 1200, you were introduced to the terms 'signifier' and 'the signified'. Can you recall what these are? How do you relate the concepts to the statement above? Adjectives are used typically with nouns, to provide more information about the things referred to. An adjective is used either as a subordinate member of a noun phrase as in 'the **small** book'or predicatively as in 'the book is **small**'. This is the same as in most Bantu languages.

Definitions based on meaning, however, are insufficient as we have already seen. A more satisfactory definition should perhaps be both notional and formal (referring to some grammatical (e.g. morphological) property or properties. For instance, in English, adjectives are generally characterised by the potential of taking a comparative form (e.g. big > bigger) and superlative form (e.g. big > biggest). Is there a characteristic or feature that you may use to determine an adjective in Bantu? Essentially and using the functional criterion, an adjectivemodifies a noun or pronoun by providing descriptive or specific detail. In many Bantu languages, adjectives agree with the element they modify.Universally, adjectives answer the following questions: What kind? How many?, or Which ones? This is why the notion of 'modifier' is more appropriate than 'qualifier' in the traditional definition of an adjective.

13.2 Morphological Structure of adjectives

Let us begin by looking at the structure of a Noun Phrase (NP) with a lexical head.Such a head is generally a noun. In Bantu, it is not difficult to identify a noun: a noun is in a certain class or pair of classes (singular and plural) while all the other items with class prefixes in an NP can be any class prefix depending on the class of noun, that is in class agreement with the noun although the noun and the adjective may have different prefixes in the same class. Adjectives in Bantu are a category of dependents of the noun (in an NP) as in *icimuti icitali*, although they may be used predicatively as well, as in Bemba; *ici cimuti ciitali* 'this treeis tall'. Do you still remember the morphological term by Guthrie, 'dependent prefix' and 'dependent nominal'? The adjective in Bantu would use the dependent prefix to form an adjective which is essentially a dependent nominal.

There is no universality in the structure of adjectives. Even among languages of the same typology, there are a lot of differences in the morphological structure of adjectives. This section devotes itself to the morphological structure of adjectives, with a bias towards Zambian languages.

Morphologically, there are three types of adjectives in Bantu, namely;

- Primitive adjectives (underived and non-compound adjectives);
- Derived adjectives, and
- Compound adjectives.

13.2.1 The Morphological Structure of Primitive Adjectives

Although it is difficult to find primitive adjectives, the adjectives that are going to be discussed here are termed primitive because they are presented as nominals (having one notion).There are three major types of morphological structure of primitive (underived and non-compound) adjectives in Bantu, and these are as follows:

a. Prefix + Stem
b. Augment + Prefix + Stem
c. $Prefix_1$ + V + $Prefix_2$ + Stem (V = vowel).

Are you able to provide examples for each of these? If not all, you can provide for your language. It is important to note that the adjective structure in (b) is only found in those languages in which the basic morphological structure of nouns is also Augment + Prefix + Stem.

As shown in (1), (2) and (3), below, Tonga and Kaonde have the morphological structure of primitive as the one in (a), typical of that of the nouns in these languages, while in Bemba it is the one in (b), like nouns (in general) in the language.

1) Tonga: muntu **mubotu (mu-botu)** (Prefix + Stem) 'good person'
   N Adj
   'person' 'good'
2) Kaonde: kintu **kikatampe (ki-katampe)** (Prefix + Stem) 'big thing'
   N Adj
   'thing' 'big'
3) Bemba: i-ci-ntu **i-ci-kalamba** (Augment + Prefix + Stem) 'big thing'
   N Adj
   'thing' 'big'

Concerning the structure $Prefix_1$ + V + $Prefix_2$ + Stem, two points are to be stated. First, the two prefixes may be different. Second, in respect to the nature of V, there are two types of languages. In one type, V is invariable (i.e. V is the same throughout the class system). In the other type, V varies but its nature is predictable. In Luvale for instance, the invariable V is always **-a-,** e.g.

4) Luvale: **pi** 'bad'
   a. (class 1) muthu **wamupi** (u-**a**-mu-pi) 'bad person'
   b. (class 2) vathu **vavapi** (va-**a**-va-pi) 'bad person'

c. (class 3) mutondo **waupi (**u-**a**-u-pi) ‘bad tree’

In **u-a-mu-pi,** for instance, u- is Prefix$_1$, -a- is **V,** mu- is Prefix$_2$, -pi is stem.

Note that in class 1 the prefixes are different. It is worth to note that in a language like Luvale, the sequence Prefix + V is segmentally identical with a genitive pronoun, an item which corresponds to the English preposition ‘of’ as will be seen later in Section 15.1.

As pointed out, there are languages with the adjectival structure Prefix$_1$ + V + Prefix$_2$ + Stem where V is variable and the choice of the right vowel is rule-governed and, consequently predictable. Lozi is one such language, as illustrated in (5), below.

5) Lozi: -nde ‘good/beautiful’

Cl. 1 mutu yomunde (yu-**o**-mu-nde) ‘good person’

2 batu babande (ba-**a**-ba-nde) ‘good people’

3 munzi omunde (u-**o**-mu-nde) ‘good village’

4 minzi yeminde (i-**e**-mi-nde) ‘good villages’

5 libizo lelinde (li-**e**-li-nde) ‘good name’

6 mabizo amande (a-**a**-ma-nde) ‘good names’

7 sika sesinde (si-**e**-si-nde) ‘good thing’

12 katungu kakande (ka-**a**-ka-nde) ‘good small folktale’

13 tutanga totunde (tu-**o-tu**-nde) ‘good small folktales’

14 bupi bobunde (bu-o-bu-nde) ‘good mealie-meal’, (See (Fortune, 1977:30) as well).

The adjectival forms are shown in tabular below:

Class	**Deep Structure**				**Surface Structure**
	Pref$_1$	**V**	**Pref$_2$**	**Stem**	
1	u	o	mu	nde	yomunde
2	ba	a	ba	nde	babande
3	u	o	mu	nde	omunde
4	i	e	mi	nde	yeminde
5	li	e	li	nde	lelinde
6	a	a	ma	nde	amande
7	si	e	si	nde	sesinde

12	ka	a	ka	nde	kakande
13	tu	o	tu	nde	totunde

The deep structure is the underlying structure while the surface structure is what is said if it were an utterance or what is seen written if it were writing. I hope you are well versed with what happens to the deep structure for us to yield the surface structure of adjectives in Lozi. We notice that in Lozi, in the adjectival structure $Prefix_1$ + V + $Prefix_2$ + Stem, V is one of {o, e, a}. There is a rule accounting for the choice of the vowel from the set {o. e, a} and such a rule is a kind of morphological rule: the nature of V depends on the nature of the vowel of $Prefix_1$. To see this, let us look at the Lozi vowel system:

6) Lozi vowel system

	Front	**Back**
(High) 3 high	i	u
(Mid) 2 high	e	o
(Low) 1 high		a

The vowels in (6) are classified according to two parameters:

(a) place of articulation (Front, Back) and

(b) tongue-height (1 high, 2 high, 3 high).

The data in (6) show two things:

a) V has the same place of articulation as the vowel of $Prefix_1$ (o/u; Back, e/i; Front, a/a; Back; and

b) V (e or o) is one degree lower than the vowel of $Prefix_1$ (e/i 2 High/ 3High; o/u; 2 High/ 3 High, o/u; 2 High/ 3 High, except, of course, in the case of the vowel of $Prefix_1$ being 'a' in which case we have a/a (1 High/1High) simply because no vowel is lower than 'a'.

Let us note that in Lozi $Prefix_2$ is the same as that of the noun in the main class (i.e. in a class other than a **subclass:** zero prefix) (e.g. in classes 1 and 3; mu) and in class 4 mi. However, we have an exception in class 8, 9 and 10. In these classes $Prefix_2$ is zero prefix: there is no overt (visible) prefix, as shown in (7), below (ø stands for 'zero'or nil):

7) Lozi:

a. (class 8) lika zende (zi-e- ø -nde) > 'good things'

b. (class 9) komu yende (i-e- ø -nde > yende) 'good cow'

c. (class 10) likomu zende (zi-e- ø -nde) > zende 'good cows'

Activity 13.1

1. Discuss the concept of adjective.
2. Primitive adjectives fall into three structural types. Explain and exemplify.
3. Give any two examples of primitive adjectives in any one of the following languages
   a) Tonga.
   b) Bemba.
   c) Lozi.
   d) Luvale
   e) Nyanja
4. With examples, discuss the scheme $Prefix_1 + V + Prefix_2 + Stem$.

13.3 Derived and Compound Adjectives

Primitive adjectives are very few in most Bantu languages. Most adjectives are derived from other parts of speech or are compound words. We will look at each of these successively.

13.3.1 Derived adjectives

Many derived adjectives are deverbal (derived from verbs). Here are some examples of deverbal adjectival stem.

Bemba: -kulu 'big' from - kul- 'to become old/ to grow'

In some languages, certain adjectives are 'relativized verb forms' (verb forms used in relative clauses) which are perceived by native speakers as adjectives. Such verbs seem to be only state verbs. For instance, Bemba has verbs that mean 'to be red', to be black' and to be white: (ukukashika ukufiita and ukubuuta).

For instance, to translate 'red cloth', 'black cloth' and white cloth', Bemba speakers will say, respectively:

Bemba**:**

a. Insalu iyakashika 'red cloth'
b. Insalu iyafiita 'black cloth'
c. Insalu iyabuuta 'white cloth'

Which literally mean ‘cloth which is red’, cloth which is black and ‘cloth which is white’, respectively.

13.3.2 Compound Adjectives

The most frequent types of compound adjectives in Bantu are as follows:

a. Genitive pronoun + noun
b. Genitive pronoun + adverb

A genitive pronounin Bantu is uasually made of a Prefix plus a stem (e.g. u-a > wa) and renders the English preposition ‘**of’** (we have stated this several times now)**.** An example of the structure (a) below is when the English adjective ‘**strong’** is translated by a phrase which literally means ‘of strength’, e.g.

a. Nyanja: munthu wa mphamvu ‘strong person’ (Lit. ‘person of strength’)
b. Bemba: umuntu uwaa maka ‘strong person’ (Lit. ‘person of strength’)

Since such constructions are perceived as adjectives by native speakers, they should be entered as such in dictionaries, i.e., e.g., -a mphamvu (adj) strong,-aa maka (adj) strong.

Activity 13.2

1. Give examples of derived adjectives in Bantu.
2. With examples, discuss the problem of compound adjectives in our local languages.

Summary

There is no universal morphological forms for adjectives. In traditional Grammar, the term is defined as a word used to qualify a noun. However, like other notional or functional definitions in grammar, this definition is unsatisfactory as not all words that ‘qualify’ nouns are adjectives. A more satisfactory definition of ‘adjective’ should be notional (or functional) and structural (referring to the internal structure).

Morphologically, there are three major types of adjectives in Bantu, namely

- primitive adjectives (underived and non-compound adjectives),
- derived adjectives, and
- compound adjectives.

There are three major types of morphological structure of primitive (underived and non-compound) adjectives in Bantu, namely:

- Prefix + Stem
- Augment + Prefix + Stem
- $Prefix_1$ + V + $Prefix_2$ + Stem

It is important to note that the adjective structure Augment + Prefix + Stem is only found in those languages in which the basic morphological structure of nouns is also Augment + Prefix + Stem.

In the structure $Prefix_1$ + V + $Prefix_2$ + Stem (V = vowel), the two prefixes may be different and, depending on the languages, V is either invariable or variable. In the latter case, the choice of the V is governed and, hence, predictable.

Primitive adjectives are very few (very few languages have more than 20). Most adjectives are derived from other parts of speech or are compound words.

The most frequent types of compound adjectives in Bantu are as follows:

- Genitive pronoun + noun
- Genitive pronoun + adverb

UNIT 14

MORPHOLOGICAL STRUCTURE OF PERSONAL PRONOUNS

14.0 Introduction

Recall how pronouns have been defined in Unit 10. Personal pronouns are pronouns that are associated primarily with a particular grammatical person – first person, second person, or third person. Personal pronouns may also take different forms depending on number, grammatical gender, and natural gender, case, and formality in some languages of the world. As used in this learning material, the term 'personal pronouns' refers to both personal pronouns and impersonal pronouns.

Learning Outcomes

By the end of the unit, you are expected to;

- compare and contrast in generally terms personal pronouns in English and Bantu.
- distinguish between non-class personal pronouns and class personal pronouns.

Let us begin by looking at personal pronouns in English. In English, personal pronouns are analysed as having six forms: subjective, objective, possessive, possessive adjective and reflexive/ emphasising (Note that we are talking of form and reflexive and emphasising pronouns have the same form). The five forms are presented as follows:

(1) English personal pronouns

I-type	**me-type**	**mine-type**	**my-type**	**myself-type**
I	me	mine	my	myself
he	him	his	his	himself
she	her	hers	her	herself
we	us	ours	our	ourselves
they	them	theirs	their	themselves
you	you	yours	your	yourself/yourselves
it	it	its	its	itself

The **my-type** pronouns the possessive adjectives, while **mine-type** pronouns are called the (purely) possessive pronouns. In this unit we shall use the term **personal pronouns** to refer to the Bantu equivalents of the English **i-type** and **me-type of pronouns.** Theseare further distinguished as subjective and objective personal pronouns.We shall see, later, in this unit, the difference between English and Bantu.

(2) **I** want to buy this book.

(3) a. **She** wants **me** to buy this book.

b. **They** have given **him** a good vote.

As we have already seen above, pronouns in Bantu have various categories. Consequently, these pronouns have different morphological structures.

14.1 The Morphological Structure of Personal Pronouns

Personal pronouns in Bantu languages have two basic structures:

a) The structure for 1st and 2nd person pronouns;
   i. Preprefix + prefix + stem
      Nyanja: 1st pers.sg. i-n-e => ine 'I'
      2nd pers.sg. i-u-e => iwe 'you'
      1st pers.pl. i-s-e => ise 'we'
      2nd pers.pl. i- mu- e => imwe 'you'

b) The structure for 3rd person pronouns;
   ii. Prefix + stem
      Tonga: cl. 1 u-alo => walo 'her/ him'
      cl. 2 ba- alo => balo 'they'
      cl. 4 i- alo => yalo 'they'
      cl. 6 ci-alo => calo 'it'

Note that some languages have the same structure for both class and non-class personal pronouns, eg. Lozi.

As you can see, the Nyanja personal pronouns are expressed by morphemes incorporated in the verbal constituent. Where an independent personal pronoun is used, an emphatic effect is intended. Emphasis may be on the subject or object of the sentence.

Consider the following:

Nyanja: a) ndidzakumenya ‘I will beat you’.

b) ine ndidzakumenya ‘Me I will beat you’

c) ndidzakumenya ine ‘I will beat you me’

d) ndidzakumenya iwe ‘I will beat you you’

e) iwe ndidzakumenya ‘you, I will beat you’

What we can see is that there is no emphasis in (a) above when (b) to (e) carry some emphasis; (b) and (c) place some emphasis on the subject while in (d) and (e), the emphasis is on the object. Further, the pronouns preceding the verbal are more emphatic than those that follow the verbal.

In Bantu, the structure of personal pronouns depends on whether the pronoun refers to non-class or class personal pronouns. In many languages, personal pronouns are made of ‘Prefix + stem’

Activity 14.1

1. Compare and contrast in general terms personal pronoun in English with those of Bantu.
2. With examples, explain why it is important, in Bantu linguistics, to distinguish between non-class personal pronouns and class personal pronouns.
3. Exemplify special variants of personal pronouns in some grammatical contexts of some Bantu languages.

Summary

We have discussed in this unit the types of personal pronouns in English and have compared them with those of English. While English has independent elements (as an isolating language), Bantu (a group of highly agglutinative languages) have independent morphemes as well as bound morphemes. Under normal usage, the bound ones are utilised. Independent ones yield an emphatic effect. Two morphological structures have been discussed as:

a. **Preprefix +prefix + stem** for 1st and 2nd person pronouns,
b. **Prefix + stem** for 3rd person pronouns.

UNIT 15

GENITIVE PRONOUNS AND POSSESSIVE PRONOUNS

15.0 Introduction

This unit deals with genitive and possessive pronouns because morphologically, possessive pronouns are often combinations of genitive pronouns and personal pronouns. The genitive pronoun in Bantu underlyingly indicates possession.

Learning Outcomes
By the end of the unit, you are expected to;

- demonstrate knowledge of the morphological structure of genitive pronouns possessive pronouns.
- list all the genitive pronouns and possessive pronouns according to classes.
- explain and exemplify special variants of possessive and genitive pronouns.

15.1 Genitive pronouns

The genitive pronoun in most Bantu languages translates for the English preposition 'of'. In general the morphological structure of genitive pronouns is as follows:

Prefix + stem

Look at the examples below:

Bemba: ci-a > ca, eg. icitabo **ca** mwana 'the book of a child' (child's book), in class 7.

Tonga: u-a > wa, eg. munzi **wa** mwana 'the village of the child' (child's village) cl. 1.

Lozi: li-a > la, eg. limota **lya** mueteleli 'president'

Luvale: u-a > wa, eg. mumbeta wa ngezhi 'the bed of the visitor'

Some authors such as Mann (1999) refers the genitive pronoun as a possessive preprefix. In some languages, genitive pronouns take a suffix -kwa is used especially with proper nouns, rather nouns without prefixes, (Mann, 1999), eg.

Bemba: ci-a-kwa > cakwa; icitabo cakwa Mulenga 'the book of Mulenga'

Tonga: li-a-kwa > lyakwa; bbuku lyakwa (lyokwa) Maanya. ‘the book of Maanya’

The prefix is a pronominal prefix and the stem is always -a in all respects. The noun before the genitive pronoun is the possessee while the one following it is the possessor. The shape of the genitive pronoun depends on the class to which the possessee noun phrase belongs. There is also class agreement between them and this is why they are called pronouns and not prepositions since prepositions are invariable forms.

15.2 Possessive Pronouns

As already stated, possessive pronouns are structurally made of genitive pronouns and personal pronouns. The morphological structure is prefix + stem

Tonga: ci-a-bo > cabo; cisamu cabo ‘their tree’

u-a-bo > wabo; mwana wabo ‘their child’

ci-a-ko > cako; cisamu cako ‘your tree’

u-a-ko > wako; mwana wako ‘your child’

Bemba: ci-a-ndi > candi; icimuti candi ‘my tree’

u-a-bo > wabo; umwana wabo ‘their child’

ci-o-be > cobe; icimuti cobe ‘your tree’

u-o-be > wobe; umwana wobe ‘your chid’

The personal pronouns occur with special variants.

Activity 15.1

1. With examples, show why it is important in Bantu to know the class of the possessee noun and that of the possessor when dealing with possessive constructions.
2. Explain the composition of the structure of possessive pronouns in Bantu.
3. From the data gathered, distinguish genitive pronouns from possessive pronouns.

Summary

In this unit, you learnt about genitive and possessive pronouns. We have stated that genitive pronouns translate for the English preposition ‘of’. In most Bantu languages, the general structure for genitives is Prefix + Stem. Possessives were interpreted as combinations of

genitive pronouns and personal pronouns. In the genitive part, the prefix refers to the possessee while the second part refers to the possessor.

UNIT 16

THE MORPHOLOGICAL STRUCTURE OF DEMONSTRATIVES

16.0 Introduction

This unit deals with the uses, meaning and morphological structure of demonstratives. A difference is seen between English demonstratives and those of Bantu languages. What can you remember about demonstratives as discussed in Unit 9?

Learning Outcomes

By the end of this unit, you are expected to;

1. State the uses of demonstratives in Bantu.
2. Demonstrate knowledge of the morphological structure of demonstratives.
3. Explain the various meanings of demonstratives.
4. Compare Bantu demonstratives with those of English.

16.1 Uses of Demonstratives

Demonstratives are "words which indicate where an object is in time, space or thought in relation to the person referring to it", (Wright, 2007: 25). They are used to locate in space either from the speaker or from the listener. There is also anaphoric and cataphoric use of demonstratives. Demonstratives used to locate near the speaker are called proximal demonstratives while those used to locate far from the speaker are called distal demonstratives.

Most Bantu languages have the following meanings of demonstratives:

i. Near the speaker
ii. Near the listener
iii. Near the speaker but far from the listener
iv. Far from the speaker and the listener. (See (Collins, 1962: 82) as well).

Demonstratives in (i) and (iii) above are proximal while those in (ii, and iv) are distal. Let us consider the following demonstratives in Nyanja:

Class	Near speaker	Near listener	Near speaker, far from listener	Far from speaker/ listener
1	uyu	uyo	uno	uja
2	awa	awo	ano	aja
3	uwu	uwo	uno	uja
4	iyi	iyo	ino	ija
5	ili	ilo	lino	lija
6	awo	awo	ano	aja
7	ici	ico	cino	cija
8	izi	izo	zino	zija
9	iyi	iyo	Ino	ija
10	izi	izo	zino	zija
11				
12	aka	ako	kano	kaja
13	iti	ito	tino	tija
14	uwu	uwo	uno	uja
15	uku	uko	kuno	kuja
16	apa	apo	pano	paja
17	uku	uko	kuno	kuja
18	umu	umo	muno	muja

I hope you still remember that class 11 in Nyanja does not exist. To indicate that a person or thing is distal, there is a raised pitch level and extra length on the last syllable. In some Bantu languages like Nyanja, demonstratives can be bound to the noun they modify; they have or show no initial vowel and are suffixed, eg. *mwanayu* (*mwana- -yu*) 'this child', (Lehmann, 2002:23).

16. 2 Morphological Structure of Demonstratives

Demonstratives in Bantu mostly have two of the following morphological structures:

a. Preprefix + prefix + stem eg. Tonga: a-ba-no > abano 'these' (cl. 2 distant from listener).
b. Prefix + stem eg. Lozi: fa-le > fale 'there' (cl. 16 = distant from speaker and listener).

Activity 16.1

1. With examples, discuss the morphological structure of demonstrative nouns in a Bantu language.
2. With examples in a Bantu language, explain the meanings of various forms of demonstratives.
3. Explain the difference between the type ‘Near speaker’ and the ‘Near speaker but far from the listener.

Summary

This unit has indicated that demonstratives locate in space and time. They can also refer to what has been said (anaphoric reference) and to what is about to be said (cataphoric reference). The unit has also dealt with the various deictic references (encompassing proximal and distal references). The two major morphological structures are:

a. Preprefix +prefix + stem
b. Prefix + stem

The forms are also dependent on the nominal prefixes.

UNIT 17

NUMERALS

17.0 Introduction

How is counting done in your language? Can you count from 1 to 9, as well as count in tens from 10 to 100? What is the word for 1,000 and 1, 000, 000 in your language?

The Bantu counting system is a decimal system. Like in other natural languages, a distinction should be made between cardinal and ordinal numbers. You will soon see that the numeral system of Bantu is a very complex one. This is not only because of the distinction to be made between cardinal numbers and ordinal numbers, but also to the fact that, to express most numbers, a system of addition and multiplication is used. Check the term for 20, 30, 40... You will realise that most numeral expressions are compound words built on a system of addition and multiplication. The simplest examples of the concord system can be seen in the noun phrases which have a numeral modifying the head noun.

Learning Outcomes

By the end of this unit, you are expected to;

- describe the morphological structure of numerals in Bantu in general and in a variety of Bantu languages.
- distinguish between cardinals, ordinals and other numerical expressions.
- count any given number in your language.

17.1 Cardinal numbers

Structurally, cardinals are usually of two types, namely:

i. **Simple cardinals**, made of single words generally composed of a prefix plus a stem, and
ii. **Compound cardinals**, made of two or more words generally through a system of addition or/and multiplication.

Simple cardinals are of three types, namely:

- Numerals, usually names of cardinals from 1 to 5 (to six in some languages), which agree in class with a headnoun (the noun for the item being counted, e.g.

Nyanja: munthu mmodzi (m-modzi) ‘one person’,
cinthu cimodzi (ci-modzi) ‘one thing’;

- Numerals which are nouns so that they have a singular form and a plural from. These are nouns from 10, 100, 1,000 (in those languages that have word for 1,000) and 1,000,000; and
- Numerals, usually nouns for some cardinals between 5 to 10, which are invariables (no agreement, no plural form)

17.1.1 Variable cardinals

The words expressing cardinals from 1 to 5 (and 6 in some local languages) take dependant prefixes, that is, they agree in class with the head noun. For this reason they are often referred to as numeral pronouns. Can you give an example of such cardinals?

The stems of cardinals from 1 to 5 in seven Zambian languages are given below:

(1)

	1	2	3	4	5
Bemba	-mo	-bili	-itatu	-ne	-saano
Kaonde	-mo	-biji	-satu	-na	-taanu
Lozi	-ñwi	-beli	-lalu	-ne	-katalizoho
Lunda	-mu	-yedi	-satu	-wana	-taanu
Luvale	-mwe	-vali	-tatu	-wana	-tanu
Nyanja	-modzi	-wiri	-tatu	-nai	-sano
Tonga	(a) -mwe	-bile	-tatwe	-ne	-sanwe
	(b) –mwi	-bili	-tatu	-ne	- sanu

There are two main types of morphological structure for numeral pronouns (cardinals 1 to 5 (to six in some languages). These are:

- Prefix + Stem, e.g.
  Bemba: **icintu cimo (ci-mo)** ‘one thing’**, umuntu umo (u-mo)** ‘one person’
- $Prefix_1$ + V +$Prefix_2$ + Stem

In the latter structure, where **V** stands for ‘vowel’ (to be regarded as an infix), the two prefixes may be different. For instance, in Lozi when **$Prefix_1$** is **zi-** (classes 8 and 10), $Prefix_2$ is zero (i.e. nil). In Lozi, V varies as follows: it is ‘a’ after ‘**a’, ‘o’** after ‘**u’** and ‘**e’** after ‘i', e.g.

(2) Lozi

a. **batu ba-a –ba-ne (babane)** ‘four people’ (class 2)
b. lika zi-e-Ø-ne (> zene) ‘four things’ (class 8)
c. **tu-o-tu-ne (totune) ‘four small things’** (class13)

Stem-initial **b** and stem-initial **l** in Lozi–**beli** ‘2’ and **–lalu** ‘3’ are realized by **p** and **t,** respectively, after **Ø prefix** (I.e. when **Prefix2** is nil), e.g.

(3). Lozi

a. **lika zepeli (< zi-e-Ø-beli)** ‘2 things’and not lika zezibeli.

b. lika zetalu (< zi-e-Ø-lalu) ‘3 things’; not zezilalu.

Note that for the word ‘five’ in Lozi, the structure is Prefix + V + Stem (instead of $Prefix_1$ + V + $Prefix_2$ + Stem), e.g. **batu baketalizoho (< ba-a-ketalizoho)** ‘five people’, **lika zekatalizoho (zi-e-ketalizoho)** ‘five things’.

Note that the term ketalizoho is a compound stem literally meaning ‘finish the hand’ based on finger counting; (-ket- ‘finish’, lizoho ‘hand’), (Mwisiya, 1989:148). A hand has five fingers.

17.1.2 Invariable cardinals

Invariable cardinals are in two categories; invariable cardinals that account for numerals from 6 to 9 and those that count in 10, 100, 1 000, 1 000 000. Do you have such numerals in your language? Write them on a piece of paper before your proceed.

Cardinals from 6 to 9

In several languages cardinals from 6 to 9 are formed by adding to 5 appropriate numbers as shown in (3), the literal meaning ‘5 and 1’, ‘5 and 2’etc. In others, invariable words (which may be derived or compound words) are used.

(4) Luvale: Vathu ‘person’

a. vathu vatanu na umwe ‘6 people’ (Lit. ‘persons 5 and 1’)
b. vathu vatanu na vavali ‘7 people’
c. vathu vatanu na vatatu ‘8 people’
d. vathu vatanu na vawana ‘9 people’

In languages where the system of addition is not used to express cardinals from 6 to 9, different systems are used, such as numeral pronouns (i.e. numerals with dependant prefixes) for 6 or 6 and 7 (e.g. in Rwanda) nouns, etc.

In many languages the structures for cardinals from 6 to 9 reflect finger counting. Consider, for example, the words for 6, 7, 8 and 9 in Bemba.

(5) Bemba

a. cine lubali = 7

b. cine konsekonse '8'

c. paabula

The words cine lubali, which literally means '4 on one side', actually means '4 fingers from one side and 3 fingers from the other'. Similarly, cine konsekonse (lit. '4 on each side') which actually means '4 fingers from each hand'. The word paabula literally means 'something is missing' and this means 'one finger is missing to have both hands closed' (in Bemba finger counting, five is shown by closing one hand and 10 is by closing both hands).

Cardinals 10, 100, 1000, 1000000 and the other cardinals

There are nouns to express 10 and 100. Some languages have also a noun to express 1,000. Multiples of 10 (expect 100 and multiples of 100) are obtained by multiplying 10 by the appropriate digits. For example:

(5) Rwanda: abantu amakumi abiri '20 people' (lit. 'people tens 2')

Similarly, multiples of 100 (except thousands in languages which have a word for 1000) are formed by multiplying 100 by appropriate numbers, as in;

(6) Tonga: bantu myaanda yobilo '200 people' (lit. 'people hundreds two')

In the same way, in languages which have a word for 1000, multiples 1,000 by appropriate numbers.

A few languages have a word for 1,000,000 but this is probably a development that came later as numbers in Bantu were used for counting only and 1,000,000 is a big number to be included in the counting system of the then illiterate communities.

The following example shows how multiplication and addition are used to express numbers:

(7) Luvale: Vathu makambakazhi atatu na makulukazhi avili na makumi atanu na avali na (vathu) vatanu na vatatu ‘3, 278 people’

Lit. ‘people thousands three and hundreds two and tens five and two, and (people) five and three’, that is: (1,000 x 3) + (100 x 2) + (10 x (5 + 2) + (5+3) (people).

You can see how complex this kind of counting is. Can you present the same number in your local language? Is there any difference with counting in Luvale?

17.1.3 Some idiosyncrasies

There are some peculiarities in the presentation of numerals;

1. There are languages where cardinals are preceded by the relativized copula be (= used in a relative clause) in the present simple indicative positive.

(8) Tonga: Bantu bali kumi ’10 people’

Lit. ‘people who are ten’

2. In some languages, non-class (1st or 2nd person) non-possessive personal pronouns and those of classes 1 and 2 combine with numeral pronouns from 2 to 5, where personal pronouns occur with special variants.

Examples:

(9) Tonga:	a. tobile	(tu-obile)	‘the two of us’
	b. totatwe	(tu-otatwe)	‘the three of us’
	c. nyobile	(ni-obile)	‘the two of you’
	c. nyotatwe	(ni-otatwe)	‘the three of you’
	d. tone	(tu-one)	‘the four of us’
	f. nyone	(ni-one)	‘the four of you’

17.1.4 Abstract counting

When unspecified items are counted, numeral pronouns in many languages occur in fixed classes. For example, Bemba uses cl. 7 for one and cl. 8 for the other pronouns while Lunda and Tonga uses cl. 12 for one and cl. 13 for the other pronouns:

(10)	**Bemba**	**Lunda**	**Tonga**
1.	cimo	kamu	kamwe
2.	fibili	tuyedi	tobilo
3.	fitatu	tusatu	tiitatwe
4.	fine	tuwaana	tone
5.	fisaana	tutaanu	tosanwe

In some languages, including Nyanja and Umbundu(a language spoken in Angola), pronouns take no prefixes:

(11)	**Nyanja**	**Umbundu**
one	modzi	mosi
two	wiri	bali
three	tatu	tatu
four	nai	kwala
five	sanu	talo

17.1.5 Distributives

Distributives are expressed by reduplicating numerals. The two numerals may display different tones. For example:

(12) Tonga: Bakaunka bobile bobile

'They went two by two' (they went in twos)

(13) Nkore: Bako ra babiri babiri

'They work two by two' (they work in twos)

17.1.6 Words derived from cardinals

Some words are derived from numeral pronouns by absolute use of 16 of certain classes. These words include, among others:

a. Week days from Monday to Friday, for example:

(14) Bemba: pali cimo 'on Monday' (from –mo 'one')

pali cibili ‘on Tuesday’ (from –bili ‘two’)

pali citatu ‘on Wednesday’ (from –tatu ‘three’)

pali cisano ‘on Friday’ (from –saano ‘five’)

b. The word for ‘together’, for example:

(15) Nyanja: Pamodzi ‘together’ (from –modzi ‘one’, meaning ‘as one’)

c. Words expressing the number of times in some languages for numbers expressed by numeral pronouns (usually from 1 to 5), for example:

(16) Bemba: limo ‘once’

libili ‘twice’

litatu ‘thrice’

line ‘four times’

lisaano ‘five times’

(d) The word for ‘sometimes’, for example:

Bemba: limolimo (Literary: one one’

Tonga: muziindi zimwi (Literary: ‘in times of one’)

Activity 17. 1

1. What is, in general terms, the difference between the morphological structure of cardinals and that of ordinals in Bantu? Exemplify.
2. Explain why it is convenient to categorize cardinals in Bantu as follows:
   i. 1, 2, 3, 4, 5 (and 6 in some languages);
   ii. 6, 7, 8, 9 (7 to 9 in some languages);
   iii. 10, 100, 1000000.
3. Show how the mathematical concepts of addition and multiplication are used in Bantu to form certain numbers.
4. Describe the structure of cardinals in a Bantu language of your choice.
5. Describe the structure of ordinals in a Bantu language of your choice
6. The words for ‘first’ and ‘last’ are special in Bantu. Explain and exemplify.

7. How is ‘abstract counting’ performed in Bantu? Exemplify
8. Give any two words derived from numerals.
9. Comment on the concept of borrowing. Relating to numerals, how much has your language borrowed from other languages?
10. Are the cardinals discussed above adequately and appropriately used by the present generation?

17.2 Ordinal Numbers

What is an ordinal numeral? How do you distinguish ordinals from cardinals? Generally, ordinals (except ‘first’ and ‘last’) are rendered by expressions composed of a genitive pronoun, which agrees in class with the head noun of the noun phrase which is determined, plus the appropriate cardinal.

A. **Where the corresponding cardinal is a pronoun** (words expressing numbers from 1 to 5 or to 6 as we have seen in the preceding section.

In expressions rendering ordinals, numeral pronouns occur in fixed classes (generally classes 7, 12 and 14) in most languages.

Examples:

(17) Bemba:
a. Umuntu waa cibili (cardinal -bili in cl. 7) ‘second people’
Lit. ‘person of two’
b. Icitabo caa cibili (cardinal -bili in cl. 7) ‘second book’,
Lit. ‘book of two’
c. Ifitabo fyaa cisaano (cardinal -saano in cl. 7) ‘fifth book’,
Lit. ‘book of five’
d. Ifitabo fyaa cisaano (cardinal – saano in cl. 7) ‘fifth book’,
Lit. ‘books of five’

(18) Tumbuka: Munthu wa chitatu (cardinal – tatu in cl. 7) ‘third person’
Lit. ‘person of three’

(19) Rwanda: Umuntu waa kabiri (cardinal – biri in cl. 12) ‘second person’

Lit. ‘person of two’

(20) Kaonde Muntu waa bubiji (the cardinal – biji in cl. 14) ‘Second person’
Lit. ‘person of two’

Compare (21) below with the above examples:

(21) Tonga: a. Muntu wabili (the cardinal – bili occurs without prefix, that is, with the stem only) ‘Second person’
Lit. ‘person of two’

b. Muntu wa ne (the cardinal – ne occurs without prefix i.e. with the stem only) ‘fourth person’
Lit. ‘person of four’

B. Where the corresponding cardinal is not a pronoun and not a compound word

When the corresponding cardinal is neither a pronoun nor a compound word, in some languages, the cardinal is unchanged. While in others the prefix of the fixed class is attached to the entire cardinal. The fixed class is the same as the fixed class used for numeral pronouns. For example, in (22) and (23) below, the cardinal is unchanged while in (24) and (25) a prefix is attached to the entire cardinal:

(22) Nyika: umuntu umiishumi (genitive pronoun waa, preceded by an ‘initial vowel ‘ u, plus the cardinal iishumi ‘10’).‘Tenth person’
Lit. ‘person of ten’

(23) Nsenga: muntu wa kumi (genitive pronoun wa plus the kumi) ‘tenth person’ Lit. ‘person of ten’

(24) Tumbuka: munthu wa chikhumi (genitive pronoun wa plus the cardinal khumi to which the prefix of cl. 7 is prefixed). ‘tenth person’
Lit. ‘person of ten’

(25) Kaonde: muntu waa bujiikumi (genitive pronoun waa plus the cardinal jikumi to which the prefix of cl. 14 is attached.) ‘tenth person’
Lit. ‘person of ten’.

C. Where the genitive pronoun is followed by a compound cardinal

For ordinals corresponding to compound cardinals the following phenomena have been observed:

(a) The multiplier does not change as we can see in example (26) below:

(26) Kaonde: muntu waa bujiikumi (jimo) ‘tenth person’

You can compare with: bantu jiikumi jimo ‘ten people’ (The multiplier *jimo* does not change to *bujimo*.)

(a) In languages where ordinals corresponding to numeral pronouns are composed of a genitive pronoun plus the stem of the appropriate numeral pronoun, in ordinals corresponding to compound cardinals in which the first is not a pronoun, which is generally the case, the whole cardinal is unchanged. Let us look at the Tonga example below:

(27) Tonga: muntu wa makumi osanwe ‘fiftieth person’

You can also compare this with: bantu bali makumi osanwe’ fifty people’

Consider also: muntu wa kumi ‘the tenth person’ (kumi is a ten).

(b) In languages where prefixes of fixed classes are attached to single cardinals (non-compound cardinals) used to form ordinals, the first cardinal after the genitive pronoun takes the prefix of the same fixed class used to form ordinals corresponding to single cardinals. If the first cardinal of the compound cardinal used to form an ordinal is not a pronoun, the prefix is attached to the entire cardinal. Any numeral pronoun other than one which does not immediately follow the genitive pronoun agrees in class with the head-noun determined, while ‘one’ agrees in class with the singular of the head-noun determined. For example:

(28) Tumbuka: munthu wa chinkondi na babili ‘twelfth person’

Where the prefix of cl. 7 chi- is attached to the pronominal stem -nkondi ‘ten’ while -bili ‘two’ agrees in class with the plural of -nthu ‘person’.

(29) Kaonde: bantu ba bujiikumi na umo ‘eleventh people’

Where the prefix of cl. 14 bu- is attached to the entire noun jiikumi ‘ten’ while -mo agrees in class with the singular of -ntu ‘person’.

D. Expressing ‘first’ and ‘last’

There are two main ways in which ‘first’ is expressed in Bantu:

(a) By a genitive pronoun plus a word meaning ‘before’ or ‘front part’, for example:

(30) Bemba: umuntu waa ntaanshi ‘first person’

Lit. person of front

(31) Tonga: muntu mutaanzi

(b) By a genitive pronoun plus a verb meaning ‘to begin’ either in the infinitive positive or in the relativized positive form of the appropriate tense, for example:

(32) Tonga: muntu wa kutaangana (or: muntu wa kusaangana) ‘first person’

Lit. ‘person of to begin’

Note that in some languages, including Bemba, the inifinitive is preceded by the locative prefix of cl. 16:

(33) Bemba: umuntu waa pakubala ‘first person’ Lit. ‘person of on to begin’

3.2 ‘Last’

Similarly, ‘last is rendered in two main ways:

(a) By a genitive pronoun plus a noun meaning ‘end’, for example:

(34) Swahili: mtu wa mwisho ‘Last person’ Lit. ‘person of the end’

(b) By a genitive pronoun plus a verd/meaning ‘to be the last’ to either in the infinitive positive or in the relativized (used in a relative clause) positive form of the appropriate tense, (Wright, 2007; Mwisiya, 1999; Lehmann, 2002 and LAL 211 Batch 2).

(35) Bemba: umuntu waa kulekelesha ‘last person’ Lit. ‘person of to be the last one’

Activity 17.2

1. Write brief, but comprehensive, notes on the morphological structure of ordinals other than those meaning ‘first’ and ‘last’
2. With example, give an account of how ‘first’ and ‘last’ are rendered in Bantu.

Summary

Functionally, and morphologically, a distinction is made between cardinal numbers and ordinal numbers. The former are used for counting and the latter for ranking (first, second, etc.).

Cardinals:

Morphologically, cardinals in Bantu are generally, divided into 4 categories, namely:

- Numbers from 1 to 5 (to 6) in some languages. Names for these numbers have been called numeral pronouns in this unit because they agree in class with the noun for the items being counted;
- Numbers from 6 (7 in some languages) to 9. These are expressed either by ‘5 and 1. ‘5 and 2’, etc. or by invariable words (which might be derived or compound words;
- 10, 100, 1000 and 1000000 (but few languages have a word for 1000 and some lack a ward for 1000). These are nouns with a singular form and a plural form, so that, e.g. 20 will be said ‘two tens’, 200 two hundred’; and
- All the other numbers. These are compound words expressed by a system of multiplication and addition.

Distributives (e.g. ‘2 by 2’) are reduplication of the appropriate cardinals, e.g. TONGA bakaunka bobile bolile ‘they arrived two by two’.

Abstract counting. In some Bantu languages, numeral pronoun are used specific classes; usually two, one ‘1’ and the other for 2 to 5 (6 in some languages), for example class 12 for ‘1’ and class 13 for the other numeral pronouns. In other languages (e.g. Nyanja) only the stem is used.

Derivation. Some words, mainly adverds, are derived from numerals, e.g**. Bemba limo** ‘once’.

Ordinals:

As a general rule, ordinals, except ‘first’ and ‘last’, are rendered by expressions composed of a genitive pronoun, which agree in class with the headnoun of the noun phrase which is determined, plus the appropriate cardinal.

There are two main ways in which ‘first’ is expressed in Bantu:

- By a genitive pronoun plus a word meaning ‘before’ or ‘front part’, for example: (Bemba) umuntu waa ntanshi ‘first person’ (Lit. ‘person of the part’);

By a genitive pronoun plus a verd meaning ‘to begin’ either in the infinitive positive or in the relativized positive form of the appropriate tense, for example (Tonga) muntu wa kutaangana (or: muntu wa kusaangana) ‘first person’ (Lit. ‘person of to begin’).

Similarly, ‘last’ is rendered in two main ways:

(i) By a genitive pronoun plus a noun meaning ‘end’, for example: (Swahili): mtu wa mwisho ‘last person’ (Lit. ‘person of the end’);

(ii) By a genitive pronoun plus a verb/meaning ‘to be the last’ to either in the infinitive positive or in the relativized (= used in a relative clause) positive form of the appropriate tense, for example (Bemba) umuntu waa kulekelesha ‘last person’ (Lit. ‘person of to be the last one’).

UNIT 18

QUESTION WORDS

18.0 Introduction

All languages have a way of asking questions. It has become customary to group questions into *yes-no* questions and *wh-questions.* The former are so called because they anticipate 'yes' or 'no', as the answer. The latter, which cannot be answered **by 'yes' or 'no'**, termed wh-questions because they contain interrogative words beginning in English with **wh (e.g. who, what, which, when),** except how. The so-called tag-questions are but a peculiar type of yes-no questions.

Learning Outcomes

By the end of this unit, you are expected to;

- explain what a question operator is.
- discuss the morphological structure of various question words in Bantu.
- compare and contrast the use of question tags in English and in Bantu.
- establish variable and invariable question words.

18.1 Question operator

Let us begin by looking at what a question operator is. Do you have any idea? Discuss this with a group member on this course or colleague at your school.

Besides the interrogative intonation and interrogative words in Wh-questions, questions in Bantu begin or end in a word whose function is to signal questions. Words of this type are referred to in this course as question operators. In some languages, question operators are always sentence-initial, some are always sentence-final while in others, they are either. In some languages, question operators occurring sentence-initial are different from sentence-final one.

Study the following table and analyse the phenomena.

Language	Sentence-Initial	Sentence-Final
Bemba	bushe	
Nyanja	kodi	
Kaonde		nyi
Tonga	sena/ hena	sena/ hena (also *na*)
Lozi	kana / kuli	nji
Lunda		nyi
Luvale		?

(Adopted from LAL 211 Course material).

Follow these examples from these Zambian Languages.

(1) Lozi: (a) mwan' amina wiingile buka 'your child has taken the book'

(b) Kana mwan'amina wiingile buka?'has your child taken the book?'

(c) mwan' amina wiingile buka nji? 'has your child taken the book?'

Question operators are more frequent in yes/no questions than in Wh-questions. In Wh-questions, they add emphasis.

Activity 18.1

1. How do the yes/no questions operate in the language taught at your school?
2. Compare the function of the question operators in English with those of Bantu.

18.2 Question word in WH- Questions

1. Who

Let us begin with the Wh-question equivalent to Who…? How do you express this kind of operator in your language? Generally, the word for 'who' is morphologically, a noun in classes 1/2or in their subclasses, depending on the language, and is generally used in cleft or pseudo-cleft constructions. Cleft sentences are sentences that have the form 'it is…who…'. A pseudo cleft sentence is a sentence of the form 'the one who…is…'

(3) Tonga:

(a) **Cleft**

Nguni wakaunka kumunzi

Lit. ‘it is who-sg who has gone to the village?

‘Who has gone to the village?

(b) **Pseudo-cleft**

wakaunka kumunzi nguni?

Lit. ’the one who has gone to the village is who?’

‘Who has gone to the village?’

2. What …? (pronoun)

Some languages, including Lunda, have no pronoun ‘what’. This is rendered by ‘what thing’ or ‘what things’. In many languages, the English pronoun ‘what’ is expressed by a word which is morphologically a noun in classes 7 and 8. However, some languages have no plural form while other languages have two words;

i. an independent word which is a noun, and
ii. an enclitic suffixed to a verb.(an enclitic is a short word suffixed to, or felt to be part of the preceding word.

The independent form is normally used in cleft and pseudo-cleft manner. The following table exemplifies the phenomena:

Language	**Independent word**		**Enclitic**
	Singular	**Plural**	
Bemba (cl. 7,8,9)	cinshi (cl.7), ninshi (cl. 9)	finshi (cl. 8)	-nshi
Kaonde (cl. 7,8)	Kika	bika	
Lunda (cl. 9)	ñahi		-di
Luvale (cl. 7,8)	Ika	vika	-nyi/-hi
Tonga (cl. 7,8, 9)	cinzi (cl.7), ninzi (cl. 9)	zyinzi	-nzi

Enclitics are suffixed to the verbs and are exclusively used as complements of verbs.

Examples of the independent and enclitic form:

(4) Bemba: a. cinshi (ico) muleefwaya: ‘what do you want?

Lit. ‘What which you-pl-want’

a. Cleft: Ni cinshi (ico) muleeefwaya? ‘what do you want?

Lit. ‘it is what which you want?’

c. Pseudo-cleft: Ico muleefwaya cinshi? ‘What do you want?

Lit. ‘What do you want?’

d. Enclitic: muleefwaya**nshi**? ‘what do you-pl want?

Lit. ‘You-pl want what?’

3. What (determiner) and Which

In most Bantu languages the determiner ‘What’ and the determiner ‘Which’ are expressed by the same words. For example, phrases like what book? And which book? will normally be rendered in the same way. However, ‘What’ meaning ‘what kind of’ may be rendered by expressions which literally mean ‘of what kind’.

There are three types of words that express the determiners ‘What’ and 'Which’ namely: (i) enclitics, (ii) pronouns and (iii) invariable independent words. However, in languages with both an enclitic and pronoun, the former seems to mean either ‘what’ or ‘which’, depending on the context of communication, while pronouns seem to mean exclusively ‘which’.

Examples of forms meaning ‘what’ or/and ‘which’ have been dealt with in the table below:

Language	Enclitic	Pronoun	Independent Invariable Word
Bemba	-nshi, eg. muntu**nshi**? 'what/which person?'	-isa, eg. icimuti ciisa 'which tree?'	
Lunda	-inyi, eg. mutondw**inyi**?'which tree?'	-dihi, eg mutondu udihi? 'which tree?'	
Luvale			muka, eg. muthu muka 'which person?'
Lozi		-fi, eg.mutu ufi'which person?'	mañi, eg. mutu mañi 'what/which person?'
Nyanja		-ti, eg. munzi uti 'which village?'	
Tonga	-nzi, eg. muntu nzi? 'what/ which person?'	-li, eg. munzi uli 'which village?'	

4. How many (…)?

What is the term for 'how many' in your language? As a general rule, '**how many'** is rendered by a pronoun (agreeing in class with the head noun). Note that in Bantu, unlike in English, the singular, 'how much', does not exist.

Below are some stems meaning 'how much:

(7) Bemba: -nga

Kaonde: -nga

Lozi: -kai

Lunda: -ñahi (written as in the 1977 Orthography)

Mambwe: -nga

Luvale: -ngahi

Nyanja: -ngati

Tonga: -ngaye

5. How…?

In some languages, the word for 'how' clearly derives from the word for 'what' or ' which'.

(8) Bemba: shaani

Kaonde: byeepi

Lozi: cwani

Lunda: ñahi (Note that –ñahi means 'How many?'

Mambwe: uli

Luvale: ngachilihi

Nsenga: tyani

Nyanja: bwanji

Tonga: buti

6. Where (…)?

In many languages with locative classes, 'where' is made of a locative prefix (in the appropriate class) plus a stem. The stem is often the same as the stem for 'which'. The table below exemplifies the forms in the seven regional Zambian languages.

(9)

Language	**Stem**	**Class 16**	**Class 17**	**Class 18**
Bemba	-i(isa)	pi/ peesa	kwi/ kwiisa	mwi/mwiisa
Kaonde	-epi	pepi	kwepi	mwepi
Lozi	-ai	kai/ kakai	kai/ kakai	kai/ kakai
Lunda	-dihi	hadihi	kudihi	mudihi
Luvale	-li	hali	kuli	muli
Nyanja	-ti	pati	kuti	muti

Tonga	-li	ali	kuli	muli

Note the perculiarity in the Lozi locatives. All the classes are using the same element which does not seem to be derived from any of the locative prefixes established for Lozi. The data poses a problem for generalisation.

7. When…?

In many languages, 'when' is morphologically a pronoun made of a prefix (of cl. 5 in a number of languages) plus a stem (in some languages the stem is the same as the stem of the pronoun 'which'). This evident in the way the word for 'when' can agree in class with some words which accompany it as determiners, as shown in the following example:

(10) Bemba: a. liilali 'when'
b. nililali ukeesa? 'when will you come?'

In (10b), the relative pronoun agrees in class with what precedes; *ilyo* in class 5 because liilali is in class 5.

Examples of words for 'when' are given for a few languages below:

(11) Bemba: liilali
Lozi: liili
Nyanja: liti
Tonga: lili

It is worthy noting that in some languages, including Kaonde, there is no single word for 'when'. In such languages, 'when' is expressed by 'what day', what time', 'what year' etc, depending on what is meant by 'when'.

(12) Namukenza juba muka? 'Which day are you coming?'

8. Why…?

There are two main ways in which 'Why' is expressed in Bantu;

- by translating the expression 'what cause a cleft or pseudo cleft sentence with the 'applied' extension; and
- By using the word for 'What- sg' in a cleft and pseudo cleft sentence.

In both cases the verb is in the 'applied' form (i.e it makes the applied suffix).

For example:

(13) Bemba**:** a. What reasons plus Cleft:

Muulandushi waamuumina?

'Why have you beaten him/her?'

Lit. 'It is (for) what case (that) you- sg- have- beaten- him/her?

b. **What – sg plus pseudo-cleft**

Ico waamuumina cinshi?

'Why have you beaten him/her?

Lit. 'What you have beaten him/her for is what?'

c. (ni) cinshi (ico) waamuunyina?

Why have you beaten him/her?

Lit. 'Is it what you have beaten him/her for?'

9. Whether…..or

'Whether' and 'or…'are single invariable words. Do you still remember of invariable forms? You should also be aware that cleft and pseudo cleft sentences are not possible with **whether.** The following are examples of words for **whether** and **or:**

(14)

	Whether	**Or**
Bemba	Nga	nangu, aatemwa
Kaonde	Inga	nangwa
Lozi	haiba, kana	Kappa
Lunda	Neeyi	tahiindi, eela
Luvale	Nge	Nyi
Tonga	Na	Na

Example of sentences:

(15) Kaonde: Nkeba kuyuuka **inge** baaipaile muloolo **nangwa** bookwe

'I want to know **whether** they killed a snake **or** a lion'

10. Whose (…)?

Whose combination of genitive pronoun is a plus **who.**

For example:

(16) Nyanja: **(Ndi)** mwana wandani uyu

'Whose child is this?'

Lit. 'It is the /a child of whom this?

In this language, just as in many other Bantu languages, the structure for this word is affixed to other constituents such as subject marker (or subject prefix).

11. What about …?

Many Bantu languages have a word meaning 'what/how about …?' in utterances like 'I like fish. What about you?' Examples of words for 'What/how about…?'are given below.

(17)

Bemba:	nga
Kaonde:	anga
Lozi:	bo
Lunda:	ndi
Luvale:	inyi
Nsenga:	nga
Nyanja:	nanga
Tonga:	ino

Examples of sentence:

(17) Lunda: Naakeeng'a inshi. Ndi Womba?

'I like fish. What about Womba?

12. Tags

Reflection

Reflect on how you have been using question tags in English. Had it been easy for you to learn question tags? Why?

In English, question tags take a systematic form of concord and rules. If you still have a challenge with the use of question tags in English, then your mother tongue has influenced you heavily. We do hear a number of people using the tag 'isn't it?' for all constructions. Discuss with your colleague why this is not acceptable.

In Bantu question tags (do you? don't you? etc.) are expressed either

(a) by a clause meaning 'isn't it (like) that? or

(b) by an invariable word. For example:

Bemba: a. Uleefwaya iisabi, **tee fyo?**

'You want fish, don't you?

Lit. 'You want fish, isn't it like that?

b. Tauleefwaya iisabi, tee fyo? ;

you don't want fish, do you?'

Lit. you-sg don't want fish, isn't it like that?'

c. Uleefwaya isabi, ai? 'You want want fish, don't you?

d. Tauleefwaya iisabi, ai? 'You don't want fish, do you?'

In the construction above, *ai* is an invariable form. Below is a list of invariables:

(18)

Bemba :	ai
Nyanja:	ai
Lozi:	esi
Lunda:	neetu
Luvale:	nyi
Tonga	ede, te

Activity 18.2

1. Explain the distinction between yes/no-questions and wh-questions. Exemplify.

2. What is the use of what is called a 'question operator' in this unit? Exemplify.

3. With reference to questions in Bantu, explain 'cleft sentences' and pseudo-cleft sentences'.

4. With examples in a Bantu language of your choice, discuss the morphological structures of the word(s) for 'Who'

5. With examples, discuss the morphological structure of the question word(s) for:

i. the interrogative pronoun 'What'.
ii. 'What/Which' (determiners)
iii. 'How'.

iv. ‘Where’.

v. ‘When’

vi. ‘Why’.

vii. ‘Whether…Or’

viii. ‘Whose’

14. With examples, discuss question tags in Bantu.

15. Compare tag questions in Bantu with those of English.

Summary

In this unit, we have generally discussed two categories of questions; **yes/no-question**; and **Wh-questions.** Yes/no- questions are those that can be answered by ‘yes’ or ‘no’.Wh-questions are those that cannot be answered by ‘yes’ or ‘no’; they are so called because in English they contain a question word beginning with wh-, except how.

A question, especially yes /no- questions, may begin (or, sometimes, end with a word whose only function is to indicate that the utterance is a questions. However, wh – questions with such a word, called Question operator, are emphatic. The findings on questions words used in wh-questions are summarized in the following table:

Table 18.1: Summary of the features of the uses of the wh-questions

English Gloss	**Features in Bantu**
Who	Pronoun morphologically a noun
What (Pronoun)	1) Independent word morphologically a noun 2) enclitic
What/ Which	1) enclitic 2) pronoun, agreeing with the headnoun 3) invariable independent word in some languages
How many	Pronoun, agreeing with the headnoun ‘how many’ does not exist.
How	In some languages ,the word is derived from the pronoun meaning ‘what/ which’
Where	In some languages with locative classes, the word often derived from the noun a pronoun mean ‘ What/ which’
When	In some languages, the word in morphological pronoun.
Why	‘Why’ is mainly rendered in the following two ways

	1) ‘What cause’ and the very takes a suffix called ‘applied extension’ 2) ‘What’ and the very takes a suffix called ‘ applied extension’
Whether…or	‘Whether’ and ‘or’ in ‘whether…or’are invariable words
Whose	Genitive pronoun + ‘who’
What/ how about	Usually a single invariable word
Tags	1) Phrase meaning literally ‘isnt it?’ 2) Invariable word

UNIT 19

RELATIVE PRONOUNS

19.0 Introduction

This unit is concerned with relative pronouns. However, since it practically impossible to deal with relative pronouns without reference to relative clauses, these will be explained before anything else.

Learning Outcomes

By the end of the unit, you are expected to;

- discuss in general terms relative clauses.
- demonstrate that relative clauses do not always contain relative pronouns.
- show awareness of the importance of tone in distinguishing relative clauses and non – relative clauses; pronouns.
- analyse the morphology of relative pronouns.

19.1 The notion of relavitisation

Can you make a list of relative pronouns in a language you know very well. What is the difference with relative pronouns in English?

Consider the following examples from English:

(1) a. **The soldier** was arrested by the military police. **The soldier** was drunk
b. **The thief** escaped. The police had arrested **the thief.**
c. **The woman** was interrogated by the officer. **The woman's** husband had escaped.
d. **The room** was locked. She was in **the room.**

First of all, notice that (1a), (1b), (1c), (1d) each contains two sentences and in each pair of sentences the second sentence repeats a noun phrase (NP) contained in the first sentence. The NPs concerned are the boldfaced phrases (The soldier/ The soldier, for example).

Assuming that in each pair of sentences the two NPs are co-referential (ie. they refer to the soldier, the thief, the same woman, the same room), the sentences in (1) can be combined into single complex sentence to yield (2a), (2b), (2c) and (2d), respectively:

(2) a. The soldier ***who*** *was drunk* was arrested by the military police
b. The soldier ***whom*** *the military police had arrested* escaped.

c. The women ***whose*** *husband had escaped* was interrogated by the officer.

d. The room in ***which*** *she was* was locked.

The boldfaced words in (2) are termed **relative pronouns** and the italicised clauses are termed **relative clauses**. In each case in (2) the relative pronoun has replaced the second NP of the co-referential NPs in a pair of sentence in (1) and has retained its grammatical function thereof:

a. the second NP (1a) is a subject and so is who in (2a):
b. the second is in (1b) NP a direct subject and so is whom in (2a):
c. the second NP(1c) is an possessor and so is whose in (2c).
d. the second NP (1d) is an adverbial of place and so is which in (2d).

The fact of who, whom, whose and which each replaces an NP is the proof that they are pronouns because, by definition, a pronoun is a word which can replace and NO (whether overt or empty (= not expressed). A relative pronoun which replaces a subject NP (as in 2a) we shall call a subjective, or nominative, relative pronoun and a relative pronoun which replaces a object NP we shall call objective relative pronoun and we shall use the expression oblique relative pronoun to refer to all (types of) non-subjective relative pronouns, including objective relative pronouns.

There are two major reasons why it is necessary in English to distinguish between subject relative clauses (relative clauses with a subject relative pronoun) and oblique relative clauses (relative clauses with an oblique, i.e. non-subjective, relative pronoun). First, 'whom' cannot be used as subject:

(3) a. The author who published this textbook

b. *The author whom published this textbook

Second, relative pronouns can be deleted in oblique relative clause but not in subject relative clauses, e.g.:

(4) Oblique a. -the man whom she wanted to marry

-the man she wanted to marry

b. -the man upon whom she was relying

-the man she was relying upon

(5) Subject -the man who wanted to marry her

-*the man wanted to marry her

Activity19.1

1. With reference to English, discuss the phenomenon of 'Relativisation' in the formation of relative clauses.
2. Discuss and exemplify the concept of 'co-referentiality' with reference to relative clauses.
3. With examples. Explain the dichotomy *subject relative clauses/ oblique relative clauses*.

19.2 Relative Clauses and Relative Pronouns in Bantu

A number of Bantu languages have no relative pronouns at least in certain types of relative clauses, especially subject relative clauses and object relative clauses. In this case, relative clauses are identified by the context or/and through certain linguistic features. In most case, features that may characterize relative clauses in Bantu, whether or not there is a relative pronoun, are tones and special segmental morphemes in the verb of the relative clauses. Using the term relativized verb form to refer to the verb form of the relative clauses, the following cases have been documented in Bantu:

a. The relative clause is only characterized by the presence of a relative clause (like in English);
b. The relative clause has a relative pronoun and the relativized verb form has a special tonal pattern;
c. The relative clause has a relative pronoun and the relativized verb form has a special segmental morpheme;
d. The relative clause has a relative pronoun and the relativized verb form has a special tonal pattern and a special segmental morpheme;
e. The relative clause has no relative pronoun and the relativized verb form has a special tonal pattern
f. The relative clause has no relative pronoun and the relativized verb form has a special segmental morpheme;
g. The relative clause has no relative pronoun and the relativized verb form has a special tonal pattern and a special segmental morpheme; and
h. The relative clause is characterized by nothing, i.e no relative clause, no special tonal pattern or segmental morpheme.

It is to be noted, however, that (h) is rare.

The presence/absence of a relative pronoun may depend on whether the relative clause is a subject relative clause or oblique relative clause. For example, Kaonde does not use any subject relative pronoun while object relative clause usually certain relative pronouns. Compare, for instance, the utterances in (6) and (7) below:

(5) Kaonde: a. babeena kujima bujimi
bantu babeena kujima bujimi
'(They) people are cultivating a field'

(6) Kaonde: a. bujimi *bóó* babeena kujima 'the fuield that they are cultivating'
b. bantu babeena kujima 'The people who are cultivating a field'

The boldfaced elements are verb forms (babeena/babeenâ = auxiliary, kujima/kujimâ = main verb). The italicised form in (7a) (*bóó)* is an object relative pronoun of class 14 in agreement with the 'antecedent' (bujimi 'field'). We notice the following:

- The tonal pattern if the verb is different in (6) and (7): relativized verbs (=verbs used in relative clauses), in (7), bear a falling tone on the final vowel;
- This difference in tone is the only feature distinguishing the non-relative clause, in (6b), and the subject relative clause, in (7b);
- In the object relative clause in (7a), in addition to the difference in tone there is a relative pronoun (bóó).

The full list of relative pronouns in Kaonde, used in oblique relative clauses, is given in the table below:

Table 19.1 Kaonde Relative Pronouns

Class	Relative Pronoun
1	yéé (í-éé)
2	bóó (bá-óó)
3	yéé (í-éé)
4	yóó (í-óó)
5	jóó (jí-óó)
6	óó (á-óó)
7	kyóó (kí-óó)
8	byóó (bí-óó)
9	yéé (í-éé)
10	yóó (í-óó)
11	lóó (lú-óó)
12	kóó (ká-óó)
13	tóó (tú-óó)
14	bóó (bú-óó)
15	kóó (kú-óó)
16	póó (pá-óó)
17	kóó (kú-óó)
18	móó(mú-óó)

In the examples in (6) and (7), above, there is no subject noun. If there is a subject noun, usually the subject relative pronoun is not used; instead the verb takes a prefix in agreement with the antecedent and the subject follows the verb, as shown in (8b):

(7) a. Mukwemba waabika bintu mukyola
'Mukwemba has pit (the) things in the bag'
b. bintú byabiika Mukwemba mukyola
'(the) things that Mukwemba has put in the bag'

The verb in (8b) is in class agreement with the antecedent, **bintu** (class 8). Note that (8b) is ambiguous: It can also mean '(the) things that have put Mukwemba in the bag'! There are other Bantu languages that behave like Kaonde.

In some languages, relative pronouns resemble some demonstratives, for example:

(8) Mambwe: a. abantu bano ‘these persons’

b. abantu bano nkulonda ‘The persons whom I am looking for’

There are languages where the occurrence of subject relatives, pronouns or objective pronouns replacing object NPs is optional, for example:

(10) Nyanja: Mzimayi (amene) apika nyama ndi mkazi wanga

‘The women who is cooking the meat is my wife’

Swahili is an example of languges in which subject relative pronouns are clitics insterted in verbs, for example:

(11) Swahili: a. mwalimu anasoma ‘The teacher is reading’

b. mwalimu anayesoma ‘the teacher who is reading’

c. nyundo ilipiga ‘the hammer hit’

d. nyundo iliyupiga ‘the hammer which hit’

In many languages, the tonal patterns of verbs in non-relative clauses are different from the use of verbs in relative clauses (see Kaonde above). Furthermore, in some languages the morphological structure is also different, as shown in the following example from Bemba:

(12) Bemba: a. abá baaícé bálábómbá na amáká (ba-la-bomb-a)

‘these children work hard’

b. abá baaícé ábabómba na amáká… (a-ba-bomb-a)

‘these children who work hard..’

(LAL 211 Course Material).

Activity 19.1

1. With at least one example, show the role of tone in distinguishing a relative clause from a non-relative clause.
2. What do you know about the following languages regarding relative clause?
   (a) Kaonde
   (b) Swahili
   (c) Mambwe

(d) Nyanja

(e) Bemba

3. Write a short, but comprehensive, account of relative clauses in one Bantu language of your choice.
4. Describe the morphological structure of relative pronouns in a Bantu language of your choice.

Summary

There are various forms that are used to express relativisation depending on whether it is used as a subject or object relative pronoun. However, many Bantu languageshave no relative clauses. Relativisation in such languages is realised through context and/or certain linguistic features.

UNIT 20

INDEFINITE PRONOUNS AND DETERMINERS

20.0 Introduction

Let us begin by reminding ourselves on pronouns and determiners. Give examples in both English and Bantu. A pronoun is a word which can stand for a noun phrase (NP) but the term is also applied by extension to words which refer to the first person (e.g. I/ we; mine/ours) or the second person (e.g. you; yours). A determiner is a word or (sometimes) phrase which determines what kind of reference a noun phrase has

Indefinite pronouns and determiners are those pronouns and determiners which lack the definiteness element which is found in the personal, reflexive (eg each other, one another), possessive, and demonstrative pronouns and determiners, and to some extent also in the wh-pronouns and determiners.

English indefinite pronouns and determiners are given in Table 20.1 below:

Table 20.1 Some English Indefinite Pronouns and determiners

Indefinite Pronouns	**Indefinite Determiners**
Everyone, everybody	
Everything	
All (as in *all is fine/all are fine)*	All (as in *all the thieves were arrested)*
Both (as in *both are okey)*	Both (as in *both books are fine)*
Someone, somebody	
Some (as in *some are rotten)*	Some (as in *some oranges are rotten*
Anyone, anybody	
Any (as in *any will do)*	Any (as in *any amount will do)*
Anything	
None	
	No (as in *no amount of threat will do)*
Nothing	
Each (as in *each of us or I gave them K20 each*	Each (as in *in each district of the province)*
	Every (as in *every person)*

In Bantu, the major indefinite pronouns and determiners include the words for ‘all’, ‘each’, ‘much’, ‘many’, ‘few’, ‘some’, ‘other’, and ‘alone’.

Learning Outcomes

By the end of the unit, you are expected to;

1. Explain and exemplify what indefinite pronouns and determiners are.

2. Give an account of the morphology of a variety of indefinite pronouns and determiners in Bantu.

20.1 Words for ‘All’, ‘Each’. ‘Few’ and ‘Much/ Many’

Let us begin by looking at the Bantu word for ‘All’. Compare the forms in the following table:

Examples of ‘all’ in Bemba, Lozi and Tonga

Class	**Gloss**	**Bemba**	**Lozi**	**Tonga**
2	‘all people’	abantu bonse	batu kaufela	bantu boonse
8	‘all things’	ifintu fyonse	lika kaufela	zyintu zyoonse

(Adapted from LAL 211 Batch 2)

What can you notice in the expressions of all in the table above? What is the difference between the Lozi term for ‘all’ and those of Bemba and Tonga? You might have noticed the following:

(a) The similarity between Bemba and Tonga; and
(b) The forms for ‘all’ in Bemba and Tonga are variables (they agree with the head-noun while ***kaufela*** in Lozi is an invariable.

According to the data in the above table for Bemba and Tonga, the morphological structure of the word for ‘all’ is Prefix + Stem, the stems being as follows:

Bemba: - onse

Tonga: - oonse

However, some writers have analysed the word for ‘all’ or implied the analysis of this word as follows: Prefix-V-Stem, in which V = vowel (o/oo in the above examples), the stems in the above examples being **-nse** (Bemba/Tonga). The vowel should be an ‘infix’.

While the structure Prefix + Stem is acceptable for languages like Bemba, Shona and Tonga, because in these languages the vowel is always **o/oo**, only the structure **Prefix –V- Stem** is acceptable for other languages where the shape of the vowel according to the shape of the prefixing vowel. This is the case for Nyanja, where the vowel is **e** after **i** and **o** elsewhere, as shown in the table below:

Examples of 'all' in Nyanja

Class/ Person	**'all'**
1st sg.	(ine) ndense. 'I totally'
2nd p. sg.	(iwe) wense 'you-sg totally'
1st p. Pl	(ife) tonse 'all of us'
Class 4, class 9	yense
Class 7	conse
Class 8	zonse

Each

What is the word for each in your local language? What morphological structure has it? It seems that no general rule has been identified for 'each' in Bantu. However, the following (among others) have been observed:

(a) The use of an invariable, e.g. Rwanda: *buri* mugabo 'each man' (Class 1). buri nka 'each cow' (Class 9); Bemba: *cila* muntu 'each person'
(b) The use of the word 'all', eg. Lozi: kaufela bona 'all of them'
(c) The use of the reduplicated form of the word for 'one' e.g Tonga: aumwi muntu 'each person'

Few

In some languages, the word for 'few' is the same as the word for 'little'/ small'. Can you discuss in a linguistic heterogeneous group the word for 'few' in the various Bantu languages?

Much/ Many

This is generally expressed by a word whose structure is the same as that of adjectives. Can you do activity 20.1 individually? The exercise has to be presented in class. As an individual student, you can make an inquiry from different native language speakers.

Activity 20.1

1. Investigate the equivalents in any Bantu language of the English words:
   (a) all
   (b) each
   (c) few
   (d) much/ how many
2. If the words in (1) agree with the noun they refer to, give the full lists according to classes.

20.2 The words for 'Some', 'Other', 'How Many', 'Alone'

Some

The English indefinite pronoun/ determiner 'some' is polysemous; it has more than one meaning. In Bantu, it generally depends on the meaning in which it is used. In some meanings, the English word 'some' may even not be translated. One of the words for 'some' used with a plural count noun (as in some people *say that…*) is the same as the word for 'one'

Other

As a general rule, the morphological structure of the word for 'other' is the same as that of adjectives. Compare, foe example, in the Ganda data below, (1a) ('other') with (1b) (adjective) (1c) (adjective):

(1) Ganda
   a. omukazi omulala (< o-mu-lala) 'another women' (Lit.women other')
   b. omukazi omukambwe (< o-mu-kambwe) 'fierce woman' (Lit. 'women fierce'
   c. omukazi munafu (< o-mu-nafu) 'weak women' (Lit. 'women weak'

How many

It is important to note that one cannot ask for the amount of a non-countable noun, as in how much water? Therefore, there is no word for 'how much' in Bantu.

In many languages the interrogative pronoun/ determiner ‘how much/ how many’ is made Prefix + Stem and the prefixes are generally the same as those of adjectives, as illustrated bu the data in (2) from Nkore, a Ugandan language:

(2) Nkore:

a. (class 2) abantu bangahi (< ba-nhahi) ‘how many people’

b. (class 10) ente zingahi (<zi-ngahi) ‘how many cows?’

Alone

In some languages, the stems for, alone, one, two, three, four and fivemay combine with 1st and 2nd person prefixes, as illustrated in the Nkore data in (3). It has been reported than in some languages, these terms may also take class prefixes (i.e. prefixes referring to the 3rd person.

(3) Nkore (E13):

	Only	All	All three
1st sing	Nyenka ‘I alone		
2nd sing	Wenka ‘you-sg. alone		
1st plural	Twenka ‘we/us/alone’	Twena ‘all of us	Twenshatu ‘all three of us’
2nd plural	Mwenka ‘you-pl. alone’	Mwena ‘all of us’	Mwenshatu ‘all three of you’

(Adopted from LAL 211 lecture notes).

Activity 20.2

1. With examples, discuss the translation in Bantu of the English word ‘some’.
2. With examples, discuss the translation in Bantu of the English word ‘other’.
3. With example, discuss the translation in Bantu of the English word ‘how many’. Do Bantu languages have a word for ‘how much’ as in “How much water do you want?”

4. In some languages the stems for ‘alone, one, two, three, four’ and ‘five’, may combine with 1st and 2nd person prefixes. Exemplify and, if you can, also give examples for the 3rd person.

Summary

This unit has tried to provide the equivalents of the words that are used as the definite and indefinite pronouns in English words. You are advised to provide full lists for those elements that agree with the nominal classes in your language.

UNIT 21

VERB FORMS

21.0 Introduction

The verb in Bantu, as already seen, is the most complex word class. The unit will discuss the morphemes that make up a complex verbal in Bantu. Generally, the verbal system of a Bantu language is more complex than that of English because Bantu languages are agglutinative. In this typology, a number of morphemes are glued together in such a way that one verbal constituent can express a syntactic thought (where English uses three or six words, for instance, only one word can be used in Bantu).

Learning Outcomes

By the end of the unit you are expected to;

- identify a verb form by identifying the mood, the aspect, the tense, polarity, etc.
- analyse the morphological structure of a Bantu verb form.
- account for the morphophonological rules applying to verb forms.

21.1 Verbal grammatical categories in Bantu

Some educationists have endeavoured to make equivalents of grammatical categories of one language to those of the other. It is important to note that the number of constituents of the categories of mood, aspect and tense is language-specific. For instance, the number of tenses in English cannot be matched with that of a Zambian language. In this section, we are going to look at:

a) Nomino-verbal form

b) Mood

c) Aspect

d) Tense

e) Polarity

We shall now discuss these in turn;

Nomino-verbal form is a verbal that behaves both like nouns and verbs syntactically and morphologically. Syntactically, nomino-verbs can take an object-like verb, eg.

Nyanja: kutapa madzi ‘to fetch water’

Like nouns, they can function as subjects, objects, etc. eg.

Tonga:

a. kulima nkubotu. ‘farming is good’

b. ndilayanda kwiiya ‘I like learning’

In (a) above the infinitive is the subject while in (b), it is the object of the sentence.

Morphologically, infinitives take a nominal prefix, attached to the verbal morphemes.

Mood is grammatical category of verb inflection distinguishing modality such as indicative and subjunctive, (Matthews, 1997). All Bantu languages have at least the three moods as illustrated in Nyanja below;

a. Indicative: nilima ‘I am cultivating’

b. Subjunctive: nilime ‘should I cultivate’

c. Imperative: lima! ‘cultivate!’

Aspect refers to verbal categories that distinguish the status of events, etc.in relation to specific periods of timeas opposed totheir location in the present past or future. These include the progressive aspect (eg. Tonga: tulalya ‘we are eating’), habitual/ progressive (eg. Bemba: tulabamona ‘we see them’), persistive eg Lozi: lusabeleka ‘we are still working’) and perfective (eg. Tonga: twaboola ‘we have come’).

Not all aspects are marked by a morpheme. They are syntactically marked, eg. Kaonde: mbeena kujima ‘I am cultivating’. (-been- is an auxiliary verb).

Tense is the inflectional category whose basic role is to indicate thetime of an event. In many Bantu languages, the past is divided between the past of today and the past before today. Similarly, in many languages, the future is divided into recent future and remote future. Further division of these is possible in some languages.

Study the Lunda examples below:

a. ninakutema ‘I am cutting’ (pres. prog.)

b. nukutema ‘I will cut’ (today)

c. nakatema ‘I will cut’ (after today)

d. ninaatemi ‘I cut’ (today)

e. naatemi ‘I cut’ (before today, recently)

f. naatemeni ‘ cut’ (before today, in the remote past)

Polarity refers to whether a verb form is in the negative form (negative polarity) or in the positive form (positive polarity). The positive is the unmarked form. The negative may be marked by a morpheme, a word(s) or an auxiliary.
Example:

Bemba: a. baleebomba ‘they are working’

b. tabaleebomba ‘they are not working’

c. abashibomba ‘those who do not work’

d. ukukaana bomba ‘(the state of) not working’

Some languages use a word (free standing) in sentence initial and a bound negative morpheme, eg. Luvale. Others use discontinuous morphemes, eg. Tonga. For more information on mood, tense, aspect and polarity, you can see Sikota (2017).

Activity 21.1

1. With examples, explain what the following are:

   a) Nomino-verbal forms,

   b) Moods

   c) Aspects

   d) Tenses and

   e) Polarity.

2. Explain the complexity of past and future tenses.

21.2 Verbal Morphemes

We have indeed stated that verbals in Bantu are the most complex of all the word classes. Verbals are made of various morphemes. The following are the major types of verb morphemes in Bantu (appearing in that order):

a. Preprefix

b. Prefix (subject marker/ concord prefix)

c. Post prefix

d. Tense sign (tense marker)

e. Post tense sign

f. Infix (object marker)

g. Radical (root)

h. Extension

i. Pre-ending

j. Ending (suffix)

k. Post ending.

Some linguists use the terms in brackets. We should note that:

a) No verb form contains all the above morphemes;

b) Some of the above morphemes do not occur in certain languages; and

c) Some of the morphemes function differently in different languages.

Now, look at each of the verb morphemes and provide an example in your own language.

a. Prefix

The prefix in the verbal constituent is the subject marker. It basically refers to the subject. However, there are cases where the prefix does not refer to the subject. Let us consider the following examples from Tonga:

Tonga: a) basika ‘they have arrived’ (cl.2)

b) zyasika ‘they have arrived’ (cl.8/9)

c) muminzi muli bantu ‘in the village, there are people’

In examples (a) and (b), the prefixes ba- and zi- (zi-a > zya) refer to the subject while mu- in (c) refers to the locative, hence the prefix does not refer to the subject. Compare also the Bemba expression: ukulima kwalyafya ‘farming is difficult’

b. Preprefix and post prefix

The term preprefix is anything preceding the prefix in the verb form. In many languages, the preprefix denote negation. In some languages, the prefix carries some mood and aspect in the verb. The genitive pronoun is also a preprefix as discussed already in Unit 15. The post prefix is a morpheme that immediately follows the prefix. It may denote negation in some languages or tense and aspect.

Tonga: a. tababali ‘they do not read’

b. nobatabali... ‘when they do not read...’

In (a) above, the preprefix is ta- (denoting negation) while in (b), the preprefix is no- (expressing a temporal mood). Note also that the negative morpheme ta- in (b) is a post prefix.

c. Tense-sign, ending and post ending

The tense-sign morphemes are cumulative morphemes denoting not only tense but also other grammatical categories such as mood and aspect. There is also a view among some Bantuists that tense-signs and **verb endings** go together.

Tonga: a) balabala ‘they are reading’

b) tababali ‘they do not read’

c) babale ‘they should read’

In (a), -la- carries tense; present, and aspect; progressive) and the ending is –a (indicating the indicative mood). In (b), the morpheme ta- and –i denote negation (because the ta- and the –i are set apart by the verb root, this kind of morpheme is termed a ***discontinuous morpheme***. In (c), the ending –e denotes the subjunctive mood. Morphemes that express more than one grammatical notion are called ***cumulative morphemes***.

The post ending is a verbal morpheme that comes after a verb ending.

Nyanja: abweranso 'he/she has come again'

In the Nyanja example above, the morpheme -nso is a post ending.

d. Post tense sign

The post tense sign is a morpheme that follows the tense sign; denoting aspect.

Bemba: a) tukalemba 'we will write'

b) tukalaalemba 'we will be writing'

(-ka- is a future tense-sign while -laa- is a morpheme denoting the progressive aspect)

e. Infix

An infix is a morpheme that is inserted in another form. In most Bantu languages, the infix is inserted between the subject prefix and the verb root. The other terms used are: object infix, object prefix, object marker; and refer to direct or indirect object.

Luvale: banamumoono 'they have seen him/ her' (-mu- is the object marker, so it is an infix; cl.1).

e. Radical and Extension

We hope that by now you have already known what a radical and radical extension is. Just to remind you, the radical which also called the root is the core element in a verbal constituent. It is the only morpheme that is present in all the word-forms of the verb. It is an irreducible element of a verbal. The verb extension is that part of the verb that adds extra meaning. It is usually infixed between the verb root and the verb ending.

Activity 21.2

1. With examples, discuss the various verbal morphemes in a Zambian language taught at your school.

21.3 Types of verb radical

We are going to discuss five types; the simple, adoptive, derived, reduplicated and extended radical. Which among these can you illustrate? You can attempt all. They are self-explanatory.

Simple radical is one which consists of a single morpheme.

Tonga: -li- 'eat'

-pal- 'scratch'

Adoptive radicals are those that are adopted from other languages. They are radicals that are borrowed from other languages, e.g. Lozi: ku – tolok – a 'to interpret' from Africaans→tolk

Derived radicals are radicals that are formed from constituents of a different word class or word classes. I am sure you can recall the topic on derived nouns.

Tonga: -pyang- 'sweep'.

Reduplicated radicals is a type which uses two identical radicals to form one shape

Nyanja: kudyaka-dyaka 'stepping everywhere'.

Extended radicals consist of the simple, adopted or derived radical as the first constituent followed by a modifier or combination of modifier constituents. The modifying elements are called extensions, (Fortune, 2001).

Kaonde: ku- -fw- -ijil- -a 'to die completely. -ijil- is the extension morpheme.

21.4 Verbal Extensions

Though verbal extensions are generally treated as a unitary phenomenon in the descriptive literature on Bantu languages (e.g. Guthrie 1967-71 and Alexandre 1981,), several important differences concerning function, productivity, combinatory possibilities and mutual exclusion patterns can be observed.

Table: Verbal extensions in Tshiluba

Tshiluba extensions	**Definitions**	**Proto-Bantu Reconstructions**
-il- / -el- / -in- / -en-	applicative	* -id-
-ish- / -esh- / -ij- / -ej-	causative	* -i- / * -ici-
-angan-	reciprocal	* -an-
-ibu- / -ebu-	passive	* -u- / * -ibu-
-ik- / -ek-	neutro-passive	* -ik-
-ik- / -ek-	neutro-active	* -ik-
-am-	stative	* -am-
-ul- / -ol- / -un- / -on-	reversive	* -ud-
-ulul-/ -olol-/ -unun-/ -onon-	repetitive	* -udud-
-akan-	extensive	?
-at-	contactive	* -at-

Adopted from (http://www.diacronia.ro/ro/indexing/details/A22688/pdf) downloaded on 23.08.18

Bantu verbal forms are composed of several parts, as indicated in the examples above. A simple radical or verb root can have suffix elements attached to them. These modify the verb in various ways. There are a lot of such extensions in Zambian languages. The whole construction is a verbal extension. The radical is an extended radical and the morpheme that causes the extension is an extension morpheme.

A. Applied /Benefactive/ Applicative extension

This is the morpheme attached to the verb root to convey the meaning of an activity denoted by the verb 'being done for' or on behalf of somebody else. It also indicates the location of an activity.

Tonga: kulimina →ku- -lim- -in- -a 'cultivate for'.
[**ku-** is infinitive (INF), **-lim-** is a verb root (VR), **-in-** is applied extension (AEx) and **-a** is verb ending (End).

Chewa: nyem- **-el-** -a 'to break for'

Lozi: kulimela → ku - -lim- -**el**- - a ‘to cultivate for’

INF VR AEx. End

Tshiluba: mukaji u-sumb-il-a mfumu tshimuma *Applicative*

woman 1-buy-APPL chief fruit

‘the woman buys fruit for the chief’

It is called benefactive because an activity is carried out for someone else (the beneficiary).

B. Passive extension

This denotes an action being done by someone or something to someone or something.

Bemba: ukumwa→ u- -ku- -um- -w- -a ‘to be beaten’

aug. Inf VR PEx end

C. Causative extension

The extension morpheme here modifies the verb to mean ‘to cause somebody or making somebody / something to do something.

Nyanja: kumulimitsa →ku- -mu- -lim- -its- -a ’to make him/ her cultivate’

D. Reversive extension

This refers to an action reversed or re-done. Occurs in two types:

Reversive active- the verb has a direct object and somebody is involved in the reverse action.

Tonga: kwaanga ‘to tie’→ kwaang<u>ulul</u>a ‘to untie’

Reversive stative – the action denoted by the verb takes place by itself. There is no action by somebody.

Bemba: ukufimba ‘to swell’→ kufimbuluka ‘to unswell’.

ku- -fimb- -<u>uluk</u>- -a

E. Reciprocative extension

This is where the action denoted by the verb is done to each other. It occurs with animate subjects and objects only.

Lozi: kuotana →ku-ot-an-a ‘to plait each other’

Tshiluba:	baledi	ba-nang-	angan-a
	parents	2-love-	REC
	‘parents love each other’		

F. Repetitive extension

This denotes an action that is done or is repeated over and over, again and again.

Kaonde: kunembanemba ‘to write over and over’.

G. Intensive extension

This extension expresses the intensity or quickness of an action

Bemba: ukwenda ‘to walk’→ ukwendesha ‘to walk quickly’

ukwishiba ‘to know → ukwishibisha ‘to know very much’

H. Perfective extension

This indicates an action that has been completely done or done thoroughly.

Kaonde: kuyumijila ‘to dry completely’.

kufwijijila ‘to die completely’.

I. Extensive extension

The extension denotes the action of the verb which is extended in time or space or is repeated extensively.

Bemba: ukutobaula ‘to break into many pieces (of glass)’.

J. Stative extension –ik-

This extension indicates state in which an individual is.

Nyanja: ona ‘look’; mwezi waon-**ek**-a ‘the moon is seen’

(Lehmann, 2002; Fortune, 2001 and Carter, 2002)

Activity 21.3

1. Explain and exemplify the various verbal extensions in Bantu.
2. State the meanings of each of the extensions.

21.5 Some morphological rules in verbals

Do you remember the morphological rules that we have discussed already? You can list them and try to exemplify each of them. Have you come up with spirantisation, vowel harmony, and nasal assimilation? Remember, we were dealing with deverbal nouns where some of these rules were introduced. Such rules do apply to some verbal extensions as well in some Bantu languages. The extentions include the applied, reversive, neuter and causative (except the causative -i). Now that you have discussed verbal extensions, examine the morphological rules and apply them.

Summary

In this unit, you have seen that verbals in Bantu languages are so complex that one word can express the same thought that the English construction would use as many words as six. This single constituent can still be analysed into various morphemes (the radical to which the subject marker, tense marker, object marker, extension and many otherscan be attached).

You have also looked at the various types of radicals and verbal extensions. Each of the extensions have meanings. You need to understand each of the extensions discussed and be able to search for others that have not been discussed here.

UNIT 22

SYNTACTIC STRUCTURE IN BANTU

22.0 Introduction

From unit 9 of this module, it is evident that we have been dealing with constituents at morphology level. We now turn to a syntactic level, specifically dealing with word order in Bantu. The term word order is "used widely of the order of elements within the sentence, whether words or, more commonly, phrases...," (Matthews 1997: 406). Some languages, such as English highly depend on word order in expressing grammatical relationships within constructions. In some languages such as Latin, however, word order is more flexible because grammatical relations are signalled by inflections. Such languages heavily depend on case. These are called non-configurational languages, while those that are like English are configurational languages.

Learning Outcomes

By the end of the unit, you are expected to;

- Explain with examples some of the general rules of word order in terms of subject, verb and object,
- Explain and exemplify word order in the Bantu Noun Phrase and,
- Explain and exemplify word order in the Verb Phrase of Bantu.

22.1 The Clause

The basic sentence structure in Bantu is Subject-Verb-Object (SVO). This means that in a simple sentence or clause, the subject precedes all the structural constituents, followed by the verb, then the object if there is one. However, some sentences may not have a verb; they are verbless.

Tonga: aaba mbantu 'these are people'.

The verb with a locative does precede the subject. Word order may change when one wants to emphasise on something. Consider the effect of the following word orders in Lozi:

a. Simbilingani wile mwamushitu 'Simbilingani has gone in the bush' (SVO)

b. Wile mwamushitu Simbilingani '*He has gone in the bush Simbilingani' (VOS)

c. Mwamushitu, Simbilingani wile '*In the bush, Simbilingani has gone' (OSV)

Which of these do you think is a normal expression in Lozi? What effect do the others have?

You can try these structures in your own language.

22. 2 Word order in the Noun Phrase (NP)

In Bantu, determiners and modifiers follow the head-noun. The general rule therefore is that the word order in the NP is head first, that is the head-noun should come first. However, in many Bantu languages, demonstratives often precede the head-noun. Where there are multiple determiners or (and) modifiers, Bantu languages do not have strict rules for order. This all depends on the sense to be communicated. How would you interpret the two examples below?

Bemba: a. abantu batatu abasuma 'people three good'

b. abantu abasuma batatu 'people good three'.

In an NP with multiple determiners or modifiers, the possessive determiner generally comes immediately after the noun.

22. 3 Word order in the Verb Phrase (VP)

The first rule for VPs in Bantu is 'verb first' and this is an absolute rule. For other verbal constituents (DO, IO, ADV, ...), there is no general rule but all depends on what the speaker or writer may want to state first although IOs seem to precede DOs frequently. Fortune (2001) has indicated that the VP is characterised by optional object prefix, complements and adjuncts that relate to an obligatory constituent, the radical. These constituents areattached to the core element as discussed in the previous chapter.

Activity 22. 1

1. Explain with examples some of the general rules of word order in terms of subject, verb and object,
2. Explain and exemplify word order in the Bantu Noun Phrase and,
3. Explain and exemplify word order in the Verb Phrase of Bantu.

Summary

This unit has made an introduction to syntax, with focus on word order in Bantu. It has looked at the structure of a clause, NP and VP. Although the general word order is SVO, other word orders are possible with particular effect or focus.

The structure in the NP is head-initial. The order in the VP is verb first and the other verbal constituents depend on what the speaker or writer intend to say first. Nevertheless, we can generalise that indirect objects usually precede direct objects.

I HOPE YOU HAVE ENJOYED THE COURSE

GOOD LUCK!

REFERENCES

Blench, R.M. & Williamson, K. (1987) "A new classification of Bantoid languages", Paper for the 17th Leiden colloquium on African languages.

Blench, Roger. New Developments in the Classification of Bantu Languages and their Historical Implications (https://www.britannica.com/art/Bantu-languages)

Carter, H. (2001:17). *An Introduction of Chitonga Grammar. Lusaka*: Bookworld Publishers

Chanda, V. M. (2006) LAL 211: *The Structure of Bantu Languages*. Bacth 1 and 2. University of Zambia Course Material.

Collins, S. J. (1962) *Tonga Grammar*. Lusaka: NECZAM

Fortune, G. (2001). *An Outline of Silozi Grammar*. Lusaka: Bookworld Publisher.

Guthrie, Malcolm. (1967-71). *Comparative Bantu*. Farnborough: Gregg International Publishers Ltd.

http://horizon.documentation.ird.fr/exl-doc/pleins_textes/pleins_textes_6/colloques2/38088.pdf).

http://smu-acweb.smu.ca/~wmills/course316/4Bantu_languages.html

http://www.africamuseum.be/publication_docs/Bostoen%202008%20Diachronica.pdf.

http://www.diacronia.ro/ro/indexing/details/A22688/pdf

http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199935345.001.0001/oxfordhb-9780199935345-e-59)

https://en.wikipedia.org/wiki/Augment_(Bantu_languages

https://msu.edu/~hanson54/conlanging/phonological-processes.pdf

https://www.cs.mcgill.ca/~rwest/wikispeedia/wpcd/wp/b/Bantu.htm

https://www.google.co.zm/imgres?imgurl=https://upload.wikimedia.org/wikipedia/commons/thumb/3/35/African_language_families.png/300px-African_language_families.png&imgrefurl)

https://www.google.com/search?client=firefox-b&ei=9ivXW8b1HMOasAeb1piIAw&q=characteristics+of+niger+congo+language+family)

Kimenyi, Alexandre (2002) *Another look at Dahl's Law*. Sacramento: California State University

Lehmann, D. (2002) *An Outline of Cinyanja Grammar*. Lusaka: Bookworld Publishers

Maho, Jouni .The Bantu area: (towards clearing up) a mess. Department of Oriental and African Languages. Göteborg University (https://www.pol.gu.se/digitalAssets/1324/1324035_the-bantu-area.pdf)

Mann, M. (1999). *An Outline of Icibemba Grammar*. Lusaka: Bookworld Publisher.

Matthews, P. H. (1997) *Oxford Concise Dictionary of Linguistics*. Oxford: Oxford University Press

Mwisiya, M. W. (1977) *Introduction to Silozi Grammar*. Lusaka: Kenneth Kaunda Foundation

https://pdfs.semanticscholar.org/1afa/1e6d5c72f62f91af91dfa8d94927673ef90e.pdf)

Wright, J. L. (2007) An Outline of Kikaonde Grammar. Lusaka: Bookworld Publishers and UNZA Press