LUNDA GRAMMAR: A MORPHOSYNTACTIC

AND SEMANTIC ANALYSIS

by

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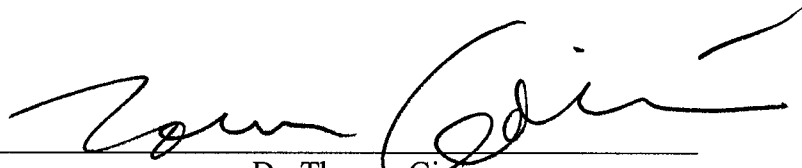   Dr. Philip Young
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Title: LUNDA GRAMMAR: A MORPHOSYNTACTIC AND SEMANTIC ANALYSIS

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This dissertation intends to provide a comprehensive description of the phonological, morphological, and syntactical features of Lunda, a language spoken in the northwest of Zambia. It offers an elaborate study of the Lunda segmental phonology as well as tonal phonology and demonstrates that the language has two underlying tones, high tone and low tone/toneless. The study shows that a word generally keeps its underlying lexical tone pattern on the surface when it is surrounded by other morphemes, irrespective of their tones, in continuous speech. Additionally, it indicates that the Lunda language does not permit high tones to appear on the final syllable of word. With regard to the morphology of the noun, the work demonstrates that there are animate subdivisions in many of the noun classes. These subclasses take the agreement prefixes of classes 1 and 2 rather than those of the classes to which they formally belong. In addition, they are marked with double prefixes in their plural form. The dissertation also looks into the morphology of the verb, including the various types of verbal extensions as well as tense, aspect and

modality marking. It also examines relevant syntactic issues such as argument structure, transitivity, grammatical relations, detransitivization, and complex clauses that include complement clauses, relativization, and adverbial clauses. It further looks into the coding of non-declarative speech acts including question formations.

The study further demonstrates that the Lunda language makes use of word order, pronominalization, and case-marking to define and identify grammatical relations of subject, direct object and indirect/second object. At the same time, it indicates that a new passive construction has evolved to take over the old Bantu passive coded by a suffix. The new construction exhibits split properties that conform to both canonical and non-promotional passives despite its impersonal character. Finally, the work shows that in Lunda relative clauses fall under three different types with distinct syntactic structures.

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DEDICATION

To the memory of my father

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CHAPTER I

INTRODUCTION

This dissertation is intended to describe and analyze the phonology, morphology and syntax of Lunda[1], a Bantu language spoken in the northwestern corner of Zambia, and adjacent northeast areas of Angola and southwest areas of D. R. Congo. Languages most closely related with Lunda are Ruund, Luvale, Luchazi, Lwimbi, Mbunda, Chokwe, Nkangala and Salampasu.

1.1 Bantu Languages

The Bantu languages, a branch of the Niger-Congo family, cover a very wide area of Sub-Saharan Africa below a line demarcated by the southern boundaries of Nigeria, Central African Republic, Chad, Sudan, Ethiopia and Somalia. They are spoken in the entire sub-equatorial region, except for scattered pockets of Nilotic in East Africa and Khoisan in Southern Africa around the Kalahari Desert extending from Angola to South Africa. Pioneering work on several individual Bantu languages and attempts to classify them began in the early twentieth century. It was Bleek who first used the name <u>Bantu</u> to refer to the South African Bantu languages. He arranged nouns into eighteen noun classes. The work of Meinhof (1899, 1906, 1910) employed a comparative method to

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[1] Fisher (1989) describes the language as Lunda-Ndembu because he had worked and lived among the Ndembu people. On the other hand, Turner (1999:1) wrote that the colonial government referred to Chief Kanongesha's Lunda as Ndembu and the Koza group as Lunda in official publications. Doke (1945) uses *Lunda* or *Ndembu* interchangeably

study Bantu languages which resulted in the first attempt at reconstruction proto-Bantu. Later, Doke (1945:1) tentatively classified Bantu languages into seven major geographic zones and four subsidiary zones according to 'uniform or similar linguistic characteristics': North-western, Northern, Congo, Central, Eastern, North-eastern, and East-central, South-eastern and South-central, and Western and West-central. The zones are further subdivided into groups consisting of languages that share common phonetic and grammatical features and have a certain degree of mutual intelligiblity. Lunda has been placed in the West-central zone that covers languages spoken over a wide area of Eastern Angola, the southwest of the Democratic Republic of Congo (DR Congo) and northwest Zambia.

In the 1940's Guthrie embarked upon a comparative study of a number of Bantu languages and came up with his classification and reconstruction published in his Comparative Bantu (1968, 1971). He divided Bantu languages into two broad groups, Western and Eastern, which are further subdivided into fifteen zones. The Western group has three subgroups, namely, North-western, Central-western and South-western. The Eastern is equally made up of three subgroups consisting of North-eastern, South eastern and Central-eastern. According to this classification, Lunda[2] belongs to Zone L of the Bantu languages, a group that includes Luba-Kasai, Luba-Katanga, Kikaonde, Sanga,

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[2] Guthrie (1967, 1971) has listed Lunda as belonging to zone L 52 of Bantu languages consisting of Luba, Sanga, Kikaonde, etc., while Doke (1945) and White (1944) have placed it together with Chokwe, Luchazi and Luvale under West Central Bantu zone. Having lived in Zambia and having a knowledge of Kikaonde and Luvale, I agree with Doke that Lunda is genetically related to Luvale rather than to Kikaonde.

Ruund, etc. Guthrie's classification has generated controversies among some linguists. It is far from being universally accepted for various reasons. Some languages have clearly been grouped incorrectly, while the names of other languages are not what the speakers use. Despite the cited reaction, this work marked the beginning of current comparative work on Bantu. After this period, several scholars have done studies too numerous to mention on various aspects of Bantu languages.

Bantu languages possess common characteristics that distinguish them from other language families. The noun class system is one of the most salient features of Bantu languages. Nouns are divided into noun classes and numbered into singular/plural pairs following the convention devised by Bleek (1862) and Meinhof (1899). The number of classes varies from language to language 'with the average language having 6 to 7 paired classes and 5 to 6 non-paired classes (Hinnebusch 1989:466).

The nouns govern grammatical agreement also known as concord, that is, adjectives, possessives, demonstratives, numerals, quantifiers, and relative clauses agree in person, number and noun class with their head nouns. Likewise, verbs agree with their subject nouns in person, number and noun class.

The morphology of the verb is another distinctive characteristic of Bantu languages. The verb in these languages consists of a root plus extensions and the final vowel. Many of the extensions can either change the argument structure of the verb root to which they are adjoined, or modify the basic lexical meaning of the verb root, or both. Applicative, causative, passive, and reciprocal are some of the verbal extensions.

The verb stem can be preceded by inflectional affixes that are prefixes or suffixes such as subject/agreement marker, negative markers, tense/aspect markers, relative clause markers, object pronominalization/markers, and locative pronominalization. The final vowel may mark tense, aspect and modality.

Almost all Bantu languages, with the exception of a few such as Swahili and Makua, have contrastive tones. The tonological features are, however, not common to all Bantu languages. Some languages are tonal, while others are accentual (Clements and Goldsmiths 1984).

Lunda shares with other Bantu languages most of the morphological characteristics, nominal, verbal, tonological, and syntactic. It possesses, however, a few salient features that distinguish it from other Bantu languages. Some of these distinctive characteristics are: a peculiar behavior regarding nouns denoting animates, object relative clauses with third person subjects, second object pronominalization, the passive construction, and reciprocity.

1.2. Lunda Dialects

Lunda has a number of distinct dialects of which the major ones are Koza, Ndembu, and Lunda of Ishindi. The variant Koza is spoken by the Akoza people in the eastern part of Mwinilunga district of Zambia; the Ndembu form of Lunda is used in the west of the district, and the Lunda of Ishindi is spoken in the east of Zambezi and in Kabompo districts. Each of the dialects exhibits some differences largely in terms of vocabulary and phonology. The palatalization process features quite prominently among

the former, while some stop sounds in Ndembu and Lunda of Ishindi tend to be more of a

dental nature. Speakers of the Lunda of Ishindi dialect have daily contact with speakers

of Chokwe, Luchazi and Luvale for they live in close proximity in the same geographical

location. Due to language contact, the Lunda of Ishindi has been greatly affected in the

area of vocabulary. A considerable number of Luvale words and expressions have crept

into the language. The Lunda language must not be confused with the Ruund of Mwanta

Iyanvwa spoken in D. R. Congo. The two languages are not mutually intelligible though

they are genetically related and belong to the same linguistic zone.[3]

The Lunda language described in this dissertation is the one spoken in

Mwinilunga district, though most of the data employed comes from Lunda-speakers of

the variant spoken in the eastern part the district on the west of the Lunga river.

Data about the actual number of people who speak the Lunda language is not

readily available due to the fact that the language is also spoken in two other countries

which have two different languages of administration and media of instruction.

Population figures obtained from censuses, when available, may not be accurate or

reliable because they focus on the areas where the language is a lingua franca, leaving out

other areas where there may be people who speak Lunda either as a first or second

language. It is, however, estimated that in Zambia alone there are slightly over

half a million Lunda-speaking people. The majority are concentrated in the northwestern

region of the country, particularly in Mwinilunga, Zambezi, and Kabompo districts.

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[3] In his Bantu language classification Guthrie (1948) uses the name Lunda for the language that includes
Koza and Ndembu and *Luwunda* for Ruund and put them together in L. 52. However, Lunda and Ruund are
genetically closely related to the group K languages.

Several Lunda speakers also live among speakers of other Zambian Bantu languages in major cosmopolitan cities of the country such as Lusaka, Ndola, Kitwe, Livingstone, etc.

Lunda is one of seven national languages officially designated by the Zambian government to be taught in primary and secondary schools in areas where it is a lingua franca. It also serves as the medium of instruction during the first four years of primary education in some parts of the northwestern province of Zambia. In addition, the language is used for official purposes such as literacy campaigns, dissemination of government information both in electronic and print media; it is the language of the church in areas where it is widely spoken and is one of the seven languages used on television and radio broadcasting.

1.3 Previous Works

Although the language has been reduced to writing and used for many years, it still remains one of the least documented languages in the field of Bantu languages. This work represents the first in-depth study of the Lunda language. Very little linguistic study has been carried out in Lunda and not much work has been published on the grammar of language. Thus, the language remains virtually an unexplored field that needs further linguistic work. The first and only descriptive material available for Lunda is a handbook published by Fisher (1919), one of the missionaries of the Evangelical Protestants known as the Plymouth Brethren, commonly referred to in Zambia as the Christian Mission in Many Lands (CMML) who settled in Chief Kanongesha's area in the western part of Mwinilunga district and founded Kaleni Hills Mission in1906. The manuscript has

undergone several revisions and expansions (Fisher and Fisher 1940, 1963; Fisher 1984). The first three editions of the handbook are written in a disjunctive method, while the fourth edition is written following Doke's conjunctive method. Fisher (1951) also produced a smaller manuscript designed for teaching people, especially missionaries beginning to learn the language.

However, the writers had no (Bantu) linguistic training; their description of grammar is quite elementary and the aim of writing the book was only to serve as teaching material for learners of Lunda as a second or foreign language. By and large, the book covers basic aspects of Lunda grammar which are presented in a series of lessons which the authors considered a "good way of teaching the language" to non-native speakers, especially missionaries who ventured into the Lunda speaking territory. Each chapter of the handbook is organized in a similar manner. It begins with a wordlist in both Lunda and English followed by a very brief bilingual grammar or grammatical descriptions of the language, and concludes with translation exercises consisting of short sentences in both Lunda and English.

The section of the handbook devoted to phonology consists of only six pages that cover both segmental and tonal phonology out of more than two hundred pages. No attention is paid to specific details such as syllable, vowel/consonant, phonological processes, etc. In fact, tones are hardly analyzed and the subject is presented in less than half a page of the book. Furthermore, the authors have claimed that Lunda has four tones consisting of level, rising, falling and swinging (Fisher 1984:7). This is, however, not

acceptable because Lunda, like most of the Bantu languages, has two surface tones, consisting of high and low/toneless. In actual fact, what have been referred to as swinging tones are either falling or rising contour tones on bimoraic syllables, which mostly fall on the penultimate syllable of nouns and verbs.

The handbook deals mainly with the lexical and morphological aspects of the language, giving very little attention to syntax; it does not provide adequate description of the syntactic rules/processes such as grammatical functions, etc. In addition, the authors did not follow the traditional Bantu system of placing different nouns into different numbered noun classes (Bleek 1862). They have described Lunda as having only ten noun classes instead of eighteen and the concord system is not adequately treated in the handbook. The descriptions of subject concords is very confusing, analyzing adjectival, possessive, locative, and numeral agreement prefixes in terms of F1 and F2, and making reference to concords according whether they take morphemes a-, u- or i-.[4] They did not make a clear distinction between the various types of concords, whether nominal or pronominal.

Though Fisher's book has some limitations in the treatment of the morphosyntax of Lunda, it nonetheless remains the only useful material that Lunda speakers have at their disposal at the moment. The basic treatment of tense/aspect proves to be very satisfactory and the book shows clearly the various divisions and the uses of past tenses as well as future tenses and their usage.

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[4] Fisher (1984:11) calls F1 a subject marker or an agreement marker that is directly attached to a verb or modifier without either a tense marker or the possessive linking morpheme -a, whereas F2 describes a subject marker or an agreement marker linked to the morpheme -a.

Beside the Lunda handbook, other published linguistic materials on the language include wordlists in Lunda-English and English-Lunda (Fisher 1919), Lunda-English (White 1943, 1957) and an abridged English-Lunda/Lunda-English dictionary (Fisher 1970). The latter has undergone several revisions and expansions.

Apart from the Fishers' works, White (1944, 1947), who was a British colonial administrator, published three articles in English on four genetically related neighboring languages spoken in Zambezi district (formerly known as Balovale) bordering Angola, northwest region of Zambia: Chokwe, Luchazi, Lunda and Luvale. The articles are comparative studies that deal with the morphology, of the noun classes and agreement prefixes, as well the morphology of verb forms including tense, aspect, and modality in all the four Zambian languages.

There are also non-linguistic works, namely, the Old and New Testaments have been translated into Lunda. Moreover, several anthropological studies have been carried out on Lunda (McCulloth 1951; Turner 1964, 1967, 1968, 1969; Pritchett 2001). These studies mostly focus on the Ndembu speakers.

More recent studies on the language (Kawasha 1999, 2001) mark the beginning of linguistic exploration of the language by native speakers.

Since Lunda is spoken in three different countries with three distinct languages of administration (official), it is possible that works on the language may have been published in French in the D. R. Congo or in Portuguese in Angola. Nevertheless, no books, articles or materials have been found on Lunda in either French or Portuguese during research for the present study.

1.4 Linguistic Theoretical Approach and Methodology

This dissertation is descriptive in nature and follows the functional-typological approach (Givón 1984, and others), as well as the conceptions of grammaticalization (Heine et al. 1991a; Hopper and Traugott 1993). The use of the functional approach in this work, paying particular attention to the interface between phonology and morphology, morphology and syntax, and between semantics and syntax, is purely for the purpose of describing the Lunda language rather than for supporting or refuting any particular theoretical approach of linguistics.

The functional approach to the study of the language attempts to give an explanation of phonological processes, nominal and verbal morphology, and syntactic functions in terms of their communicative function in the context of language and focuses on the investigation of how language is used rather than on its forms. It aims at trying to find out "the purposes that language serves" for people, and "how people are able to achieve these purposes" through speaking and listening, reading and writing (Halliday 1994:viii). Dik (1978:1-2) points out that "a language is conceived of in the first place as an instrument of social interaction between human beings, used with the primary aim of establishing communicative relations between speakers and addressees". He places an emphasis on the functional explanation of language by trying to "explain the rules in terms of their functionality with respect to the ways they are used and to the ultimate purposes of these uses". Therefore, there exists a correlation, or isomorphism, between form and function. Bolinger (1977:x) states that "the natural condition of language is to

preserve one form for one meaning and one meaning for one form". In other words, the functional approach assigns as much importance to pragmatic and semantic functions as well as syntactic functions. Dik (1989:7) states that "syntax is there for people to be able to form complex expressions for conveying complex meanings, and such meanings are there for people to be able to communicate in subtle and differentiated ways".

The function of some specific linguistic forms cannot be explained and understood synchronically without due consideration of their history. It is, therefore, important to look at the function of some specific linguistic forms from a historical perspective. Thus, the incorporation of the grammaticalization approach to the analysis of Lunda influences in part this work especially in the chapters on tense-aspect and interclausal relations where some lexical items perform grammatical functions.

1.5 Data and Method

The data used in this work come from various sources that include texts, novels, naturally occurring conversations between the author, who is a native speaker of the language, and several Lunda speakers. Other data were obtained from Zambia through various means such as email messages, telephone conversations, prerecorded songs, recorded radio programs, interviews, letters and the author's own intuition and knowledge of the language.

With the exception of the chapter on phonology, most of the examples given in this dissertation are presented in four lines of which the first one is a phonemic transcription. The second line presents the underlying or the base forms of the

morphemes appearing in the first line, while the third line provides glosses for every

morpheme. The last line constitutes a free translation of the first line.

1.6 Orthography

This dissertation is written following the Lunda conventional orthography which

was standardized, adopted and approved by the Zambian Ministry of Education (1977).

The symbols sh and zh which represent the voiceless (alveo)palatal fricative and its

voiced counterpart respectively, ch and j stand for the voiceless and voiced (alveo)palatal

affricates, while ñ symbolizes the velar nasal.

Contrastive semantic between short and long vowels are only represented by

double vowels where it is deemed necessary. Additionally non contrastive and

phonologically conditioned long vowels, especially penultimate vowel lengthening,

except in the section dealing with phonology, are sparsely marked in this dissertation.

The high tone is transcribed with an acute accent whereas the low/toneless is not

represented at all. The examples given in this dissertation consist of the surface forms,

underlying representations, gloss, and translations into English.

1.7 Structure of the Dissertation

Following the introduction that includes a brief background of the language,

orthography and the linguistic theoretical approach presented in this chapter, I can now

give an outline of this dissertation. Chapter 2 provides a description of segmental

phonology as well as tonal phonology detailing the various phonological processes

that affect vowels and consonants. It provides an in-depth analysis of nominal as well as verbal tones in isolation as well as in continuous speech.

Chapter 3 looks into the morphology of the noun, how nouns are assigned to the various noun classes and how they control agreement prefixes of their modifiers. In addition to describing the noun class system, this chapter outlines the morpho-syntactic structures of noun modifiers such as adjectives, possessives, pronouns, numerals, quantifiers, and demonstratives. It also looks at anaphoric pronouns that include subject pronominal prefixes and object pronominal affixes.

Chapter 4 discusses the structure of the verb and deals with all the various types of verbal extensions both derivational and non-derivational. These verbal extensions either modify the inherent semantics of the verb root or increase the argument structure of the verb root. It shows that some of the verbal extensions are productive while others are less productive and still others are frozen in present day Lunda.

Chapter 5 examines the tense, aspect and modality system of the Lunda language paying special attention to the morphosemantic properties of the verb stem. It presents a general description of the tense, aspect and modality markers and shows that lexical semantic properties of some of the verbs play a crucial role in encoding tense and aspect in the language.

Chapter 6 examines the argument structure of simple sentences, transitivity and grammatical relations such as subject, direct object, and indirect object and outlines the

properties of grammatical relations in Lunda. It also details the various kinds of copular constructions as well as the types of verbs, and discusses the semantic roles assigned to the arguments that verbs take.

Chapter 7 discusses the different types of verbs that take complement clauses and provides a detailed semantic and syntactic description of the various kinds of complement clauses in Lunda. It examines the morphosyntax of the infinitive and subjunctive complement clauses and shows that the two types of dependent clauses are used interchangeably with some verbs without any change in meaning at all. The chapter also presents the different kinds of complementizers and demonstrates that psych, cognition, and saying verbs take complementizers that are formally related to personal pronouns and agree with the subject of the main clause.

Chapter 8 looks at the syntactic structures of the various detransitivizing processes of the language that include reflexives, reciprocals, passives and stative or neuter-passive. The chapter also shows that reflexives and reciprocals are not distinct; they are coded in a similar fashion. It also shows that the passive and the neuter-passive are functionally similar despite having different syntactic structures.

Chapter 9 provides a detailed analysis of all the different kinds of restrictive relative clauses found in Lunda as well as the different sorts of ways in which they are marked, their structure, and their position and shows that a relative head noun can also have several syntactic functions such as subject, object, etc. It also examines the syntactic properties of headless relative clauses and cleft constructions.

Chapter 10 covers non-declarative speech acts that include interrogatives, imperatives and subjunctives in Lunda. It also describes the formal and functional properties of all the different types of questions plus their word order. This chapter further examines and discusses imperatives and subjunctives from their functional perspective.

Chapter 11 discusses the different kinds of adverbial clauses, their syntactic structure, and the way they are marked. It shows the Lunda adverbial clauses can be classified into two major categories-- those which are syntactically similar to relative constructions and those which are linked to the main clause by connectives. The chapter further deals with the formal and syntactic properties of the various types of coordinated chained-clauses or coordination in Lunda.

The last chapter, but not the least, provides a brief summary of the contents covered in the dissertation.

CHAPTER II

PHONOLOGY

This chapter provides a description of the segmental phonology and tonal phonology of Lunda. It deals with the phonological processes that affect both consonants and vowels at word level and across word boundaries. It further provides an analysis of noun and verb tonal patterns as well as the major tonal phenomena and rules at both word and phrasal level of the language.

2.1 Segmental Phonology

This section looks at the Lunda vowel and consonant inventory, their distribution and major phonological processes that affect them.

2.1.1 Vowel Inventory

Lunda has a system of five-vowel phonemes, namely, two high vowels /i/ and /u/, one low /a/ and two mid vowels /e/ and /o/. These vowels, which may be either short or long, can be divided into two groups /i/, /u/, /a/ and /e/ according to vowel harmony.

TABLE 1. Lunda Vowels

High	i			u
Mid		e	o	
Low			a	

Since there are very few cases of contrastive vowel length, long vowels are Written using double vowels only in this chapter for the purpose of phonological analysis. Otherwise, vowel length is not indicated in subsequent chapters.

2.1.1.1 Vowel Length

Lunda has short and long vowels both underlyingly and in phonetic form. Long vowels fall into two classes, namely, those that are inherently long and the ones that derive their length from various phonological processes. The language has phonemic distinction of vowel length, as illustrated by the following minimal pairs that contrast verb roots of the shape CVC and those of the shape CVVC[1].

(1) Short   Long
     /a/   kama   'mould'   káama   'sleep'
            kana   'promise'   káana   'refuse'

     /u/   vula   'be many'   vúula   'undress'
            túka   'insult, revile' túuka   'fly'
            túta   'carry something tuuta   'be cool, fresh'
                    from one place to
                    another'

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[1] See appendix for the abbreviations used in this dissertation.

/i/	chidilu	'mourning'	chidíilu	'right hand'
	shika	'arrive'	shiika	'promise'
	kudila	'to cry'	kudíila	'to enjoy'

/e/	hela	'hate'	heela	'or, however'
	pepela	'be light in weight'	peepela	'dry over'
	sela	'rise'	seela	'weed grass, scuffle'

/o/	nóka	'rain'	nooka	'rest, take a holiday'
	toka	'rot/be rotten'	tóoka	'be clean, be white'

A considerable number of words have inherent non-contrastive long vowels

which can occur in any position of a word, though mostly in the penultimate position.

(2) meleela   'evening'
     kabuubu   'insect'
     kusheeta   'to be drunk'
     mukooku   'sheep'
     isaaña   'bush'

For many words, vowel length is predictable. Long vowels occur in the

penultimate syllable and carry rising or falling contour tones. Below are some examples

of words with contour tones:

(3) kamáama   'dumb person'
     maáma   'mother'
     mwáana   'child'
     mwaána   'sunlight, daylight'
     ncháawa   'firewood'
     isaáña   'egg'
     iteéta   'egg'
     itéelu   'ear'
     mutéena   'sun, sunlight'
     chíina   'run away, fear, flee'
     swíina   'move oneself a little'
     shíiya   'abandon, leave behind'
     halóoshi   'yesterday;
     kamboólu   'wood dove'
     nshóona   'orphan'
     túula   'put down a load'

A vowel lengthens word-internally when it precedes a cluster of nasal plus a consonant. A vowel is equally long word-internally when it is preceded by a sequence of consonant plus the labial glide /w/. For illustrations, long vowels are represented by two identical vowels.

(4)   a.   kataanda   'cucumber'
            mpeembi   'goat'
            kakóombu   'broom'
            mpiinji   'time'
            kawúumbu   'ant-hill'
            mutóondu   'tree, stick'

       b.   mwaazhi   'crack'
            dikwiílu   'hunger'
            ipwaapwa   'lung'
            kakweezhi   'moon, month'
            mukweesamu   'father-in-law'
            mfweetu   'payment'

The velar nasal behaves like a cluster of a nasal plus a consonant due to the fact that vowels that precede it are long[2]. Consider the following examples in (5):

(5)   isaaña   'wooded country'
        kuleeña   'to create, draw'
        muzhiiñwa   'intestine'
        itúuña   'country'
        kunúuña   'fix together, fit together'
        musooñu   'disease, sickness'

2.1.1.2 Vowel Distribution

Word-final vowels are always short in Lunda and there is no morpheme or word that ends in mid vowels, except for ideophones. A morpheme or noun may also end in

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[2] The cluster /ŋ/ + /g/ is limited in its distribution and appears mainly in ideophones and borrowed words.

mid vowels for only emphasis purpose, while a verb can end in a mid front vowel when it

is repeated or when it follows the verb <u>kwila</u> 'to do' for emphasis. The high front vowel

/i/ is found after most of the consonants except after the fricatives /f/ and /v/. The vowel

/a/ does not occur after the two bilabial fricatives /f/ and /v/. The mid vowel /o/ is never

found after the voiced palatal fricative /ʒ/. The high round back vowel /u/ does not

follow the voiceless palatal fricative /ʃ/.

(6) ngéé   'ideophone for bright red'
     ndwéé   'ideophone for throbbing, aching'
     ngó   'ideophone that denotes failure to find/get/be able to do'
     Wakéña kéñee.   'He kept looking for and looked for.'
     Wazáta zátee   'He worked continuously.
     Ela hanjikee.   'They chatted and chatted.'

2.1.1.3 Syllable Structure

The basic syllable structure of Lunda is CV, where C may be a single consonant,

a glide, a cluster consisting of consonant-glide-vowel (CGV), nasal-consonant-vowel

(NCV), nasal-glide-vowel (NGV), nasal-glide-vowel (NGV), and nasal-consonant-glide-

vowel (NCGV). The language has only open syllables, which may be short (V) or long

(VV), and as such it disallows consonants to occur without a vocalic nucleus. That is,

consonants always appear as onsets of the syllables. They may occur word-initially,

word-medially and word-finally. Vowels can stand on their own as syllables only word-

initially. With the exception of the final position where the syllable is always short, the

syllable may be short or long. Further, all the four nasals are not syllabic in this language.

(7) a. V(V)   a.la   'spread out things'
                   i.tá.la   'house'
                   ee.yi   'you'
                   o.lo.la   'straighten'
                   ú.ka   'treat a person'

     b. CV   mú.tu   'head'
                   te.lé.ka   'cook'
                   tá.la   'look'
                   i.zhi.ya   'pool, lake'
                   to.ka   'rot'

     c. CVV   taá.ta   'father'
                   too.ka   'be white'
                   mee.lee.la   'later part of the afternoon'
                   ka.buu.bu   'insect'

     d. CGV(V)   twá   'pound'
                   swii.na   'move'
                   fwee.ta   'pay'
                   hwi.sha   'finish'
                   i.pwá.ka   'gap from extracted tooth'
                   ma.fwí.zhi   'shoulders'
                   mu.kwa.kwa   'road'

     e. NCV(V)   nsú.ki   'hair'
                   ntaá.mba   'sweet potato'
                   ku.lu.mbu.lu.la   'to explain'
                   mpee.mbi   'goat'

     f. NGV   nwá   'drink'
                   i.yaá.nwa   'pumpkin'
                   mwi.di.ma   'darkness'
                   ñwa.di   'francolin partridge'
                   ñwe.ne.ni   'mosquito'

     g. NCGV   nkwá.ha   'armpit'
                   mbwé.chi   'walking stick'
                   mpwií.la   'thirst'
                   yi.mpwée.mbu   'cold in the head'
                   nswá.ha   'calabash'
                   ntwáa.mbi   'liar'

2.1.2 Consonant Inventory

Lunda has 22 consonants in its phonetic inventory that consist of six stops /p, b, t, d, k, g/, seven fricatives /f, v, s, z, ʃ, ʒ, h/, two affricates /tʃ/ and /dʒ/, one lateral /l/, four nasals /m, n, ɲ, ŋ/ and two glides /w, y/.

TABLE 2. The Consonantal Phonemes of Lunda

Manner of articulation	Place of articulation					
	Bilabial	Labiodental	Alveolar	Palatal	Velar	Glottal
Stops voiceless: voiced:	p b		t d		k g	
Fricative voiceless: voiced:		f v	s z	ʃ ʒ		h
Affricates voiceless: voiced:				tʃ dʒ		
Lateral			l			
Nasals	m		n	ɲ	ŋ	
Glides	w			y		

The examples in this dissertation are not in phonemic representations. They are written in the conventional Lunda orthography approved by the Zambian Ministry of Education (1977). The voiceless and voiced palatal affricates are represented by ch and j, the symbol ng represents the sequence of the velar nasal and the voiced velar stop, sh and zh stand for the voiceless and voiced palatal fricatives and ny and ñ stand for the palatal and velar nasal, respectively.

(8) ngéngu   'ideophone for bright red'
     ngonga   'pouch, purse, leather bag'
     kangwanda   'spiny cat-fish'
     mungomu   'bucket'
     nguja   'ball'
     nginga   'orphan'

2.1.2.1 Nasals

The four nasal consonants /m/, /n/, /ɲ/, and /ŋ/ are phonemically distinctive in the language. They may occur word initially and in intervocalic positions. As an illustration, consider the minimal pairs that are given below:

(9) a. /m/-/n/   maáma   'mother'
                        maána   'intelligence, wisdom'

     b. /n/-/ŋ/   nana   'swell, be swollen'
                        ñána   'thus, in this way, in that manner'
                        mwáana   'child'
                        mwáaña   'spill'

     c. /ɲ/-/n/   nyúña   'sieve'
                        núña   'join'

     d. /ɲ/-/ŋ/-/m/   kanyama   'animal'
                        kanaña   'so and so, such and such'
                        kañanya   'be unsuccessful'

In Lunda, as in most Bantu languages, all the obstruents frequently occur prenasalized. The sequence nasal plus obstruents are the only clusters in Lunda. The nasal in these NC consonant clusters is homorganic to the following consonant. The nasal in such sequences is non-syllabic and can hardly be detected. A considerable number of class 9 agentive nouns and cognate objects derived from verbs have nasal consonants that

assimilate to the point of articulation of the following consonant. Similarly, this

assimilatory phonological feature occurs frequently with the first person singular

object pronominal prefix. Thus, prenazalized consonants in Lunda are sequences of nasal

consonants and obstruents rather than separate phonemes or units.

(10)   a.   <u>Nouns</u>

témesha	'send'	→	ntémesha	'messenger'
dima	'cultivate'	→	ndimi	'farmer'
lela	'take care'	→	nleli	'nurse'
séma	'give birth'	→	nsémi	'parent
fwízha	'spit'	→	nfwízhi	'cobra'
kwásha	'help'	→	nkwashi	'helper'
hema	'take care'	→	nhembi	'guardian'
vwáala	'give birth'	→	nvwáali	'parent'
kísula	'bless'	→	nkísu	'blessing'
táña	'teacher'	→	ntáñishi	'teacher'
sesa	'chip'	→	nsesu	'adze'
cháya	'cut firewood'→		ncháwa	'firewood'
chata	'tattoo'	→	nchatu	'tattoo'

b.   1st person singular object prefix:

ku-m-búta	'to cover me'
ku-n-shetesha	'to intoxicate me'
ku-n-zhikwila	'to uncover for me'
ku-n-kéña [ku-ŋ-kéña]	'to like me'

<u>2.1.2.2 The Semi-vowels /w/ and /y/</u>

The semi-vowels /w/ and /y/ are consonants in Lunda since they do form

syllable margins just like any other consonant.

(11)

wátu	'canoe/boat'
wedi	'first born child'
káwa	'dog'
mutáyi	'branch'
yaáya	'elder brother or sister'

The semi-vowel /w/ occurs with most of the obstruents and nasals as a second or third member of consonant clusters. The only exception applies to the palatal obstruents /ʃ/, /ʒ/, /dʒ/, /tʃ/ and the palatal nasal /ɲ/.

(12)	a.	/p/	ipwáka	'gap from extracted tooth'
	b.	/b/	bwakata	'boil'
	c.	/t/	twamina	'lead way'
			ntwée	'ideophone for tearing'
	d.	/d/	ndwí	'ideophone for vanishing from sight'
	e.	/k/	kwita	'rub on'
			nkwáha	'armpit'
	f.	/g/	ngwá	'ideophone for cutting in half'
	g.	/f/	fweta	'pay'
	h.	/v/	vwáala	'wear'
	i.	/s/	swína	'move'
	j.	/z/	wuzweñi	'state of poverty'
	k.	/h/	kuhwelela	'trust'
	l.	/l/	lwa	'struggle'
	m.	/m/	ámwa	'suck'
	n.	/n/	nwá	'drink'
	o.	/ŋ/	ñweneni	'mosquito'

2.1.2.3 The Labiodental Fricatives /f/ and /v/

The labio-dental fricatives /f/ and /v/, unlike most of the consonants, are very restricted in their distribution. They only occur before the two back round vowels /o/ and /u/ and the bilabial glide /w/. In addition, they are not in complementary distribution with other fricatives.

(13)	a.	fúma	'go out, depart, leave'
		fooma	'snore'
		fweta	'pay'
	b.	vúula	'undress'
		vwáala	'dress, wear'

2.1.3 Vowel Processes

This section provides a description of the various phonological processes that involve vowels in Lunda when affixes are adjoined to roots. The language disallows sequences of identical as well as dissimilar vowels to occur as two single vowels pronounced as two syllables when two or more vowels are brought together, and in order to resolve the hiatus several operative processes take place and result in a single long vowel pronounced as a single syllable or syllable with two moras.

2.1.3.1. Vowel Elision

Lunda uses vowel elision as one of the phonological processes or rules to resolve the hiatus. This takes place lexically when two vowels, identical or dissimilar, follow each other in a sequence in the same word as a result of affixation. The left most vowel (s) in the sequence deletes, leaving the remaining vowel to fill up the gap left by the deleted vowel. This phonological process results in compensatory lengthening of the vowel (Clements 1986). Even when three vowels are involved, the result is a bimoraic vowel as opposed to a vowel with three moras. Vowel elision applies both word-internally and across words. It should be noted that there are no sequences of identical mid vowels across morphemes in Lunda, since no morpheme or word ends in a mid vowel.

This process applies word internally through morphological or syntactic rules when prefixes are attached to vowel initial noun stems and verb stems.

(14) Identical vowels[3]

    a.   a + a → aa

/ma-ána/	maána	'wisdom'
/ka-ánsi/	káansi	'child'
/ma-ánzhi/	maánzhi	'fat, oil'
/ka-anu/	kaanu	'fable'
/wu-a-al-a kadidi/	wala kadidi	'he made the bed'
/a-a-al-a kadidi/	aala kadidi	'they made the bed'
/ni-a-al-a kadidi/	náála kadidi	'I made the bed'

    b.   i + i→ ii

/di-isu/	díisu	'eye'
/chi-iminu/	chiiminu	'stature, height'
/hi-itala/	hiitála	'it's a house'
/ki-ink-i/	kiinki hána	'put it there'
/ni-il-i-di/	niilidi?	'what shall I do?
/wu-yi-idishi/	wúyidíishi	'take them outside'

    c.   u + u → uu

/mu-uñwa/	muuñwa	'salt'
/wu-uwa/	wuuwa	'mushroom'
/mu-udi/	muudi	'a tree: diplorrhynchus'
/wu-úmi/	wúumi	'life'
/chi-ku-um-a/	chikúuma	'it will be dry'
/a-ku-ku-uk-a/	akukúuka	'you will be cured'

(15) Different vowels

    a.   a + o → oo

/wu-a-ona/[4]	woona	'he snored'
/ni-a-ota ka-ési/	noota keési	'I warmed myself by the fire'
/chi-a-olok-a/	chooloka	'it is straight'
/wu-a-okol-a/	wookola	'he plucked fire'
/ha-osi/	hoósi	'there is nothing'
/yi-a-onsu/	yoonsu	'everything'

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[3] There are no sequences of identical vowels across morphemes in Lunda, since no morpheme or words ends in a mid vowel.

[4] The back high vowels becomes a glide and ultimately deletes because the language does not allow a w+w cluster.

b.   a + e → ee

/ka-ési/	keési	'fire'
/wu-a-em-a wáalwa/	weema waálwa	'he brewed beer.'
/wu-a-em-a wáalwa/	twééleka mwáana	'we carried the child'
/mu-a-enzel-a/	mwéenzela	'you opened'

c.   i + a → aa

/chi-adi/	chaádi	'hen'
/ka-yi-anyik-i/	kayanyiki	'go and spread out to dry'
/di-amba/	daamba	'hemp'
/chi-awizha/	chaawizha	'social gathering'

d.   i + e → ee

/yi-et-i/	yééti	'hit them'
/ku-yi-endel-a/	kuyeendela	'to visit you/them'
/ku-di-eta/	kudééta	'to hit oneself/each other'

e.   i + o → oo

/wu-yi-o-chi/	wuyóochi	'burn them'
/chi-olol-i/	choololi	'stretch it'
/ni-okoli ka-esi/	nookoli keési	'can I pluck from fire'
/chi-o-chi-eni-ochi-u/	choochenoochu	'that way'

f.   i + u → u/uu

/yi-uma/	yúuma	'things'
/chi-úla/	chuúla	'bark of a tree'
/mu-inki-chi-u/	mwinkichu[5]	'give it to him'
/a-a-yi-uka/	aayuuka	'they were treated'

Vowel elision across word boundaries at phrase level occurs generally with nominal modifiers such as demonstratives, and possessive personal pronouns in fast speech. It also takes place in existential constructions when the copular verb di 'be', tumbi 'be' or ikala 'be, exist, become' precedes a noun beginning with a vowel. The vowel of the copula deletes, as shown by the example in (16):

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[5] The pronominal enclitics in (21e) and (21f) have short vowels due to the long vowel constraints word-finally.

(16)   muhéla ami   [muhélaami]   'my sister'

(16)	muhéla ami	[muhélaami]	'my sister'
	mwána ami	[mwánaami]	'my child'
	ñombi iwu	[ŋombiiwu]	'this cow'
	kwéna oku	[kweenooku]	'right there'
	yúma iyi	[yuumiiyi]	'these things'
	muhéla indi	[muhéliindi]	'his sister'
	mwána ami	[mwaanaami]	'my child'
	mwaníki eyi	[mwaanikeeyi]	'your young sister/brother'
	musónyi etu	[musonyeetu]	'our cousin'

(17)	kúdi akwáwu	[kudaakwawu]	'to his/her friends'
	kúdi antu	[kudaantu]	'there are people.
	hadi anyána	[hadaanyaana]	'there are children'

The vowel elision rule always operates on the first vowel in a sequence:

$$V \rightarrow \varnothing \,/ \text{—} V$$

2.1.3.2 Vowel Epenthesis

Another phonological process involves the addition of a vowel. Monosyllabic

words belonging to the nasal class 9 acquire the vowel /i/ when uttered in isolation or

when they start a sentence. This is meant to meet the disyllabic requirement of word

formation. The vowel deletes when the noun stem is affixed to the comitative marker na-

or to an agreement prefix or across word boundary. Vowel lengthening that follows is

predictable; it occurs when a vowel precedes a cluster of a nasal plus a consonant.

(18)	/wudi na-i-nvu/	wudi naanvu	'he has gray hair'
	/walanda i-nshi/	walandaanshi	'she bought fish'
	/mukíla wa-i-mfwa/	mukíla waamfwa	'the tail of a rat'
	/nyiña ya-i-nshi/	nyíña yaanshi	'fish bones'
	/chúma chi-i-ha/.	chúma chiha	'a new thing'

2.1.3.3 Vowel Coalescence

Coalescence is another phonological process that is very operative in Lunda and leads to derived vowel length. It takes place word-internally, across morphemes, when the first vowel in a sequence is low and the second vowel is high. The resulting vowel, whose quality is different from the two non-identical vowels, is a single long vowel which agrees in frontness and lip rounding with the second vowel in a sequence. Thus, the sequence /a + i/ yields a single mid long front vowel /ee/, while the sequence /a + u/ results into a back mid long back vowel /oo/. Vowel initial stems coalesce with some vowel initial noun prefixes, possessive prefixes, class 16 locative prefix ha-, tense markers a-, na-, ka- and the comitative marker na- 'with, and'.

(19) a. a + i → ee

/a-ini/	eeni	'owners'
/ma-ísu/	méésu	'eyes'
/ma-inzhi/	meezhi	'water'
/mukáchi ka-itala/	mukáchi keetala	'in the middle of the house'
/ha-izhíku/	heezhíku	'on the cooking fire'
/ha-itála/	heetála	'at home'
/na-ikúmi/	neekúmi	'with ten'
/na-ibwambu/	neebwambu	'with a friend'
/neetémwa/	na-itémwa	'with a hoe'
/wu-a-idish-a yuma/	weedisha yúuma	'he took out things'
/wu-a-il-a/	weela	'you did.'
/a-ka-ink-a/	akéenka	'they will give'

b. a + u → oo

/chi-na-um-i/	chinóomi	'it has dried up'
/ni-a-umba/	nóómba	'I threw away'
/atunyama a-ma-um-i/	átunyama amóómi	'animals which are alive'
/ni-a-uka kawa/	nooki kawa	'he has treated a dog'
/chi-ka-úma/	chikóóma	'it will be dry'

Vowel coalescence does not, however, apply to the third person singular pronominal stem <u>indi</u> 'her, him' when it prefixes the comitative marker <u>na-</u> 'and/with'

(20)   /na-indi/   niindi   'with her/him'

Other instances of vowel coalescence occur with some verbs that end in -<u>al</u>, -<u>an</u>, and -<u>any</u>. These verbs delete the lateral or nasal when they suffix the remote past tense marker -<u>il-i</u>, the applicative extension -<u>il</u> and the causative affix -<u>ish</u> and in the process the verb root vowel /a/ and the suffixal vowel /i/ coalesce into a long vowel /ee/.

(21)   a + i → ee
        /wu-a-twal-il-i/   watwééli   's/he took'
        /mu-a-kañany-il-i/   mwakañeenyi   'you failed'
        /chi-a-mwekan-il-i/   chamwékeeni   'it appeared'
        /wu-a-babal-ish-a/   wababeesha   's/he punished'
        /wu-a-mwekan-ish-a/   wamwekeesha   's/he revealed'
        /zhimbal-ish-a/   zhimbeesha   'lose, mislay'
        /kañany-ish-a/   kañeesha   'prevent'

Vowel coalescence in this environment of the verb also involves the mid back vowel /o/ before the high front vowel. It is triggered by the remote past marker, causative suffix and applicative suffix when they come after certain verb roots ending in -<u>ol</u>/-<u>on</u>. The suffixation leads to the deletion of the lateral or nasal of the verb root and the suffixal vowel fuses with the verb vowel to yield /wee/. That is the vowel /o/ becomes a glide resulting in compensatory lengthening of the remaining vowel, as shown below:

(22)   o + i → wee
        /wu-a-món-il-i/   wamwééni   's/he saw'
        /mon-esh-a malwa/   mwéesha malwa   'cause to experience hardship'
        /mu-a-lokol-il-i/   mwalókweeli   'you pierced'
        /lokol-il-a/   lókweela   'pierce for/on/at'
        /wu-a-kotol-il-i/   wakótweeli   's/he broke'
        /kotol-il-a/   kótw-eel-a   'break for'

This is not, however, a productive and regular phonological rule in that it has nothing to do with the fact that -l or -n have to precede the vowel /i/. It fails to apply to many verbs ending in -al and -an. Consider the following:

(23) tála   'see'   /tal-il-i/   talili   'saw'
      pala   'scale fish' /pal-il-i/   palili   'scaled fish'
      bóla   'bark'   /bol-el-i/   bolili   'barked'
      nóna   'pick up'   /non-el-i/   nonili   'picked up'

2.1.3.4 Gliding

There is a general gliding rule that is responsible for the gliding of the high back[6] /u/ in Lunda. This change takes place when the high back vowel is followed by a non-round vowel and this leads to the disyllabification of the word as well as compensatory lengthening of the following vowel. This phonological process occurs both word internally and across word boundaries. Word internally gliding mostly affects noun class prefixes, agreement markers (concords), direct object prefixes, subject prefixes, locative markers, the infinitive marker ku-, and relativization markers.

(24) mwáka   /mu-aka/   'year'
      mwitu   /mu-itu/   'in the forest'
      atwánsi   /atu-ansi/   'children'
      twési   /tu-esi/   'fires'
      lwamuhéla   /lu-a-muhela/   'my sister's'
      kwakulehi   /ku-a-ku-lehi/ 'far'
      kwímba   /ku-imba/   'to sing'
      kwitála   /ku-itala/   'to the house'

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[6] Unlike most of the Bantu languages (Ngunga 2000) where gliding involves both high vowels, gliding only affects the back high vowel in Lunda.

Gliding also applies across word boundaries when a word that ends in a high back vowel precedes another word beginning with a vowel other than /u/, as shown by the examples below:

(25) mesu awu   [meeswaawu]   'their eyes'
      antu ana   [antwaana]   'those people'
      kabubu inyi   [kabubwiinyi]   'which type of insect'
      ifúku inyi   [úkwiinyi]   'which day'
      mwizukulu ami   izukulwaam]   'your grand child'

Glide formation is not only confined to the environments mentioned above. It take places verb-internally with certain verbs ending in -ul/-un followed by the causative extension -ish, the applicative extension -il, the and remote past morpheme -il-i. The suffixation triggers the deletion of the lateral /l/ or nasal /n/ from the verb root and consequently the suffixal vowel fuses with the front back vowel of the verb root into /wii/. Consider the following verb forms to illustrate the process:

(26) huñununa   'pour out liquid'   huñunwiina   /huñunun-in-a/'pour out for'
      kétula   'cut'   kétwiila   /ketul-il-a/   'cut for'
      témuka   'run away'   témwiisha   /temun-ish-a/ 'cause to run'
      táambula   'receive'   tambwiisha   /tambul-ish-a/ 'infect with
                                                                    disease'

The suffixation of the morphemes -in, -il, and -ish to the verb stem in the second set of the words in (26) causes the vowel /u/ to turn into a glide.

Glide formation also occurs with the mid back vowel only in this phonological environment. The mid back vowel glides before the front high vowel through suffixation. This is described in subsection 2.1.2.2 on vowel coalescence (cf. example 16).

(27) kótola   'break'   kótweeli   /koto-il-i/   'broke'
      lókola   'pierce' lókweeli   /loko-il-i/   'pierced'
      móna   'see'   mwéeni   /mo-in-i/   'saw'
      hólola   'drop'   hólweeli   /holo-il-i/   'dropped'

The two sets of words differ in that the second set involves the gliding of the vowel /o/

conditioned by affixation of the perfective remote past suffix -il to the verb stem.

When the high vowel /u/ is followed by a mid back vowel /o/, the resulting glide

may optionally delete, as shown in the following examples:

(28) koósi   /ku-osi/   'there is nothing'
      koocha   /ku-ocha/   'to burn, roast'
      mooma   /mu-oma/   'beehive'
      moolu   /mu-olu/   'sweet potato slip for planting'
      wóoma   /wu-oma/   'fear'
      loota   /lu-ota/   'fungus skin disease'

This gliding phonological process may be formalized by using the following rule:

$$/u/ \rightarrow [w] / \text{---} V$$

The table below gives a summary of the types of fusion that happens when two vowels

come into contact within a word.

Table 3: Vowel Alternations.

Vowel 2	i	e	a	o	u
Vowel 1					
i	ii	ee	aa	oo	uu
e	-	-	-	-	-
a	ee	ee	aa	oo	oo
o	ee	-	-	-	-
u	wii	wee	waa	(w)oo	(w)uu

2.1.3.5 Vowel Harmony

In Lunda, the process of vowel harmony operates between the verb root and the the verbal extension both derivational and inflectional. It applies to the initial vowel of the applicative suffix -il/-in and -el/-en, causative suffix -ish/-esh, stative suffix -ik/-ek, and the remote past tense marker -ili/-eni and eli/-eni which harmonizes in height with the preceding vowel of the verb root. If the last vowel of the root is a mid vowel /e/ or /o/, the suffix also carries a mid vowel /e/. Otherwise, it is realized as a front high /i/ when the preceding vowel of the verb root is /i/, /u/ or /a/. The affixation of the verbal extension suffix to monosyllabic verb roots results in the lengthening of the vowel. Consider the following examples in (29):

(29)	a.	dá	'eat'	díila	'enjoy, eat at/for/on'
		nwá	'drink'	nwíina	'drink for/at'
		landa	'buy'	land-il-a	'buy for
				land-ish-a	'cause to buy/sell'
				land-ik-a	'get sold"
				land-il-i	'bought'
	b.	fumpa	'break'	fump-il-a	'break for'
				fump-ik-a	'be broken'
				fump-ish-a	'cause to smash'
				fump-il-i	'broke'
	c.	hít-a	'pass'	hít-il-a	'pass at'
				hít-ik-a	'pass to, take to'
				hít-ish-a	'cause to pass'
				hít-il-i	'passed'
(30)	a.	senda	'carry'	send-el-a	'carry for'
				send-esh-a	'help to carry'
				send-el-i	'carried'

b.	loña	'put in order'	loñ-el-a	'pour into'
			loñ-esh-a	'cause to put in order'
			loñ-el-i	'put in order'
			loñ-ek-a	'be put in order'

The derived verbs in (29) have suffixes with a high front vowel in initial position, while those in (30) display suffixes with a mid back vowel in initial position. In other words, the verbal suffixes have two allomorphs, one with a high front vowel and the other one with a mid front vowel. The shape of the initial vowel of the suffix is determined by the height of the last vowel of the verb root.

The following formal rule may be formulated to account for the front height harmony:

(31) i → e/ {e,o} C —

→ i/ elsewhere

Besides vowel height harmony, Lunda has another type of vowel harmony triggered by the reversive suffixes -ul(ul), -un(un), -uk and -ol(ol), and by the repetitive suffixes -ulul, -unun and -olol. Unlike the verb extensions that harmonize in height only, that is have a front vowel in initial position, the second type of vowel harmony harmonize not only in backness but also in frontness. If the last vowel of the verb root is high, low or mid front, the initial vowel of the verb extension is high back /u/. If the last vowel of the verb root consists of the mid back, the initial vowel of the suffix is also mid back. In other words, the suffixal vowel /u/ lowers to mid back vowel /o/ when the preceding vowel of the verb root is /o/. This process takes place across morphemes when a verb suffixes the reversive and repetitive extensions.

(32)	a.	anyika	'spread out to dry'	an-un-a	'take out what was spread'
		landa	'buy'	land-ulul-a	'resell'
		shinka	'close'	shink-ul-a	'open'
		shinka	'close'	shink-uk-a	'be open'
		teeta	'cut'	teet-ulul-a	'cut off into smaller pieces'
		séma	'give birth'	sém-unun-a	'bear many children'
		túna	'build'	túñ-ulul-a	'rebuild, remake'
		nyúuña	'sift'	nyún-unun-a	'resift'
		tumba	'plant'	tumb-ulul-a	'transplant
	b.	kósa	'wash'	kós-olol-a	'rinse'
		loña	'pack'	loñ-olol-a	'unpack'
		tota	'crack open'	tot-olol-a	'make wider as crack'
		sota	'plaster'	sot-olol-a	'replaster'
		kóomba	'sweep'	kómb-olol-a	'sweep clear'

The derived verbs in (32a) has verbs with suffixes beginning with an initial high back vowel, while those in (32b) have suffixes beginning with a mid back vowel.

The phonological process of vowel harmony that involves the mid back vowel against the other four vowels may be accounted for using the following rule:

(33)   u → o/ oC —

          → u/ elsewhere

2.1.3.6 Vowel Devoicing

In addition to the processes seen in the previous subsections, the language has another phonological operation whereby some vowels become voiceless and muted in continuous speech. This phenomenon occurs when the last syllable of a word consists of the semi-vowels /w/ and /y/, the glottal consonant /h/ and the nasal /m/ followed by the high vowel /i/.

(34) dehi   [deh]   'already'
      néhi   [neh]   'no'
      wányi   [wany]   'no'
      nawu   [naw]   'they say'
      néyi   [ney]   'like'
      mwani   [mwan]   'please'
      chiwáhi   [chiwah]   'well, good'

2.1.4 Consonant Processes

This section discusses all the phonological processes that involve consonants and are operative in Lunda. These include nasal consonant harmony, glide insertion, consonant nasal assimilation, and palatalization.

2.1.4.1 Nasal Harmony

Nasal consonant harmony is one of the phonological processes that is regular in Lunda. It is triggered by the affixation of the applicative -il/-el and the remote past tense marker -il-i/-el-i to a verb root whose last consonant is a nasal /m/ or /n/. The lateral /l/ of the verbal extension turns into an alveolar nasal [n], that is, the nasal feature of the verb root spreads from a [+nasal] across a vowel into a suffixal /l/. The rule does not, however, apply when the velar nasal /ñ/or the palatal /ny/precedes the verbal extension. Consider the following examples that illustrate this process:

(35) a.   dim-a   'cultivate'   →   dim-in-a   /dim-il-a/   'cultivate for'
           chin-a   'fear'   →   chin-in-a   /chin-il-a/   'run for'
           súm-a   'bite'   →   súm-in-i   /súm-il-i/   'bit'
           món-a   'see'   →   mw-én-i   /mw-él-i/   'saw'
           sém-a   'give birth'   →   sém-en-a   /sém-el-a/   'give birth at'

b.	túña	'build'	→	túñ-il-a	'build for'
	zhíña	'be absent'	→	zhíñ-il-a	'be absent for'
	mwáña	'pour'	→	mwáñ-il-a	'pour at'
	kéñ-a	'look for'	→	kéñ-el-a	'look for at'
	soñ-a	'carve'	→	soñ-el-a	'carve for'

c.	kañany-a	'fail'	→	kañ-eny-i	'failed'

2.1.4.2 Glide Insertion

Glide insertion is also one of the phonological features that are operational in Lunda. The bilabial glide /y/ is inserted in four distinct contexts. It is placed between the negative marker hi- and the third person class 2 subject prefix a-. One may be tempted to conclude that the vowel of the prefixal negative marker becomes a glide when it is followed by a vowel. This is not, however, the case because its vowel elides when it precedes the third person class 1 subject prefix a-.

(36) a. híyakuyáku
    hi-y-a-ku-ya-ku
    NEG-epent-3pl-INF-go-NEG
    'They are not going.'

   b. hákuyáku
    hí-a-ku-ya-ku
    NEG-3sg-INF-go-NEG
    'He is not going'

The morpheme hi- has apparently several functions in Lunda. Besides the two roles mentioned above, it performs the function of an immediate future marker. When it precedes a noun beginning with a vowel, the same phonological operation we have discussed occurs. The glide is interposed between the morpheme hi- and class 2 subject prefix a-.

(37) a. Antu hi-y-a-ku-ya.
              people FUT-epent-3pl-INF-go
              'People are just leaving.'

      b. Ambanda hi-y-a-ku-twa kabáka.
              women   FUT-epent-3pl-INF-pound corn
              'The women are about to pound corn.'

2.1.4.3 Nasal Assimilation

As observed in 2.1.1.6, a nasal assimilates to the place of articulation of an immediately following consonant. This process affects the first person class 1 singular object pronoun which has three distinct allomorphs whose distribution is quite regular. The bilabial nasal [m] takes place before labials /p/ and /b/, the velar nasal, orthographically represented by ṉ̃, occurs before velar consonants /k/ and /g/ and vowels, while the nasal [n] is found before other consonants.

(38) a.   mpal-il-a-ku   inshi
              1sg.obj-1SG-APPL-fv-IMP fish
              'scale fish for me'

      b.   nchay-il-a-ku
              1sg.obj -cut firewood-fv-IMP
              'cut firewood for me'

      c.   ñinka-ku-chu
              1sg.obj-give-IMP-PRO
              'give it to me'

      d.   nkwasha-ku   /ñ-kwasha-ku/
              1sg.obj-help-IMP
              'help me'

      e.   nhembela-ku
              1sg.obj-wait for-IMP
              'wait for me'

f. n-lond-ela-ku
  1sg.OBJ-follow-APPL-IMP
  'follow after me'

2.1.4.4 Palatalization

Palatalization as a phonological process is not highly productive for it affects very few verb roots in Lunda. The alveolar stops and the voiced alveolar fricative /z/ of some few verb roots palatalize across morphemes before the front high vowel. The voiceless stop turns into /ch/, the voiced stop into /j/ and the alveolar fricative becomes /zh/[7].

(39) a. z → zh
   inza   'come'   inzh-il-i   /inz-il-i/   'came'

   b. t → ch
   kwáta 'catch, hold'   kwach-ik-a 'be caught'
   data   'tread on, step on' dach-ik-a   'be trodden'
            dach-il-a   'tread carefully'
   túta   'pass'   túch-ik-a   'pass in numbers'
   záta   'work'   zách-ik-a   'be worked'

   c. d → j
   kundama 'approach'   kunj-ik-a   'put in a leaning position'
   lunda   'pile on'   lunj-ik-a   'heap up, put on top'
   punda   'dig'   punj-ik-a   'be dug out'
   sand   'raze, scatter' sanj-ik-a   'be scattered, be razed'
   shinda   'press'   shinj-ik-a   'push'
   wunda   'be quiet'   wunj-ik-a   'quieten'

---

[7] This is the only verb in which the voiced alveolar fricative palatalizes:
  inza inzhili   'came'
     inzhila   'come for'

2.2 Tonal Phonology

This section provides a description of lexical and grammatical tonology of Lunda.

It focuses on the structure of nouns and verbs and gives major tonal processes that

involve both nouns and verbs. Lunda, like most other Bantu languages, has two

phonemic tones, though it has been claimed that it has four tones, namely, level,

rising, falling and swinging (Fisher 1984). The tones consist of H(igh) and Low (∅),

which can fall either on short syllables or long syllables. They can be analyzed as

underlying H versus blank (∅), toneless. The H tone seems to be the only underlying

representation that plays an active role in the language, while the surface L tone features

may be viewed as merely being part of the phonetic interpretation because it does not

contribute any tone on the vowel that precedes or follows it. That is, it does not play any

major part in the language tonology and there is no evidence that the phonology proper

refers to L in any distributional statement or tone rule.

Both noun roots and verb roots may have H and L (∅) tonal contrast in Lunda, as

illustrated by the following miminal pairs:

(40) a.   Nouns with monomoraic vowels:

L-L-(L)		H-L-(L)	
munu	'finger'	múnu	'in here'
mukotu	'piles'	mukótu	'stalk of pumpkin'
nkopi	'pubic hair'	nkópi	'lazy person'
nkuku	'crumbs'	nkúku	'wrist'

b.   Nouns with bimoraic vowels:

LL-L		HL-L	
nduuñu	'slave'	ndúuñu	'hot pepper'
isaaña	'bush'	isááña	'egg'
mukaanda	'circumcision'	mukáanda	'letter'

c.   Verbs

L-L-L		L-H-L	
ku-kosa	'to be thin'	ku-kósa	'to wash'
ku-fula	'to dig'	ku-fúla	'to forge'
ku-lowa	'to bewitch'	ku-lówa	'to catch fish'
ku-shiika	'to fill in a hole'	ku-shíika	'to promise, assure'

2.2.1 Noun Tones

In Lunda, most of the nouns consist of two morphemes, the prefix and the noun stem (cf. 3.1.1.). Noun stems can be divided into two distinct tonal groups, those that are underlyingly high-toned and those that are devoid of underlying high tones. All the noun prefixes are underlyingly toneless in the language, and generally appear toneless on the surface. The only exception applies to prefixes of high toned monosyllabic noun roots which bear high on the surface. Monosyllabic noun stems present tonal patterns, namely, noun stems with H tone and those devoid of underlying high tone. Consider the following words in (41):

(41)   a.   L noun prefix + L noun:

mu-nu	'finger'
mu-ntu	'person'
ka-nwa	'mouth'
wu-wa	'mushroom'
ma-zhi	'teeth'
mu-zhi	'root'
ma-su	'urine'
i-vu	'cloud'
i-zhi	'tooth'
(i)-mfwa	'rat'
(i)-ncha	'fruit of mucha tree'
wu-ña	'flour'

b.   L noun prefix + H noun:

mú-tu	'head'
í-fu	'leaf'
ká-wa	'dog'
ká-da	'bird'
ká-swa	'flying termite'
wú-ta	'gun, bow'
má-shi	'blood'
lú-fu	'death'
tú-zhi	'excrement'
chí-fwa	'meanness'

In (41a), both the noun prefix and the noun stem are toneless, while the nouns in (41b) have a H tone linked to the vowel of the prefix. The high tone that surfaces on the prefix derives from the noun stem; it is not inherent. This is due to the fact that Lunda does not permit high tones to occur word finally.

Nouns with bisyllabic stems of the shape CVCV also show two tonal patterns, those with H on the first mora of the stem and those which are underlyingly toneless. Interestingly, the H does not surface on the noun prefix with bisyllabic noun stems. This further indicates that noun prefixes are underlyingly toneless. Furthermore, the language lacks the H-H tone pattern and this may explain the reason why the H tone does not appear the final vowel of monosyllabic noun stems. Nouns with CV-shaped prefixes have three syllables, while those with C-shaped prefixes, nasal class 9, have two syllables.

(42)   a.   L noun prefix + L-L noun stem:

mu-chidi	'kind'	i-zewu	'tooth
ma-zewu	'teeth'	chi-dilu	'mourning ceremony'
ma-kudi	'lies'	chi-lapu	'paddle'
lu-bavu	'rib'	n-dimi	'farmer'
ka-didi	'bed'		

b. L noun prefix + H-L noun stem:

mu-kéki	'baby'	mu-kúdi	'debt'
i-dími	'tongue'	ma-tála	'houses'
chi-shíka	'cold'	n-yíma	'back'
lu-pása	'cup'	ka-báka	'corn, maize
budídi	'morning'	mu-túpa	'lion'

Besides the two types of tonal patterns, Lunda has also bisyllabic noun stems with

the shape CVVCV or CVNCV, which is realized as CVVNCV with vowel-lengthening in

penultimate or antepenultimate position. These bisyllabic noun stems with a long vowel

in the penultimate position exhibit three distinct tonal patterns, LL-L, HL-L and LH-L. In

other words, the first syllable of the noun stem may have either bimoraic level tones

(LL), both bimoraic HL falling and LH rising contour tones. The examples in (43)

illustrate bisyllabic noun stems with bimoraic vowels in the penultimate position:

(43) a. L noun prefix + LL-L noun stem:

i-yaanda	'mortar'
i-koondi	'banana'
chi-suumpa	'leopard'
ka-suumbi	'chicken'
mu-mbaanda	'woman'
mpeembi	'goat'
mpoombi	'monkey'
nduunu	'slave'
ñoombi	'cow'
ñiinza	'boundary'

b.

i-zhaamu	'grave'
ma-zeeñi	'saliva'
mu-kwaatu	'belt'
mu-kwaakwa	'road'
mu-kooku	'sheep'
ka-teela	'turtle dove'

In terms of tones, bisyllabic noun stems with HL falling contour tones in

the penultimate position can be analyzed as corresponding to the monoramaic bisyllabic

noun stems with the HL tone pattern. That is, the surface H tone is linked to the first mora

of the root. Consider the examples in (44):

(44)   L noun prefix + HL-L noun stem:
    a.   CVVNCV
          ma-kúundi   'beans'
          ka-kóombu   'drum'
          i-kóombi   'thief'
          mu-tóondu   'tree'

    b.   CVVCV
          chi-twáamu   'chair'
          ka-máama   'dumb person'
          ndúunu   'hot pepper'
          mu-zhíiñwa   'intestine'
          i-téelu   'ear'
          mu-kwéetu   'my fellow friend'
          ndúunu   'hot pepper'
          nswáana   'heir'

Bisyllabic noun stems with LH rising contours constitute an additional group to

bisyllabic noun stems in that the tonal pattern LH does not occur in monomoraic

bisyllabic noun stems.

(45)   L noun prefix + LH-L noun stem:
    a.   CVVNCV
          ka-zeémba   'axe'
          ka-mboólu   'dove'
          chi-luúmbu   'enemy'

b.	CVVCV

i-loóla	'stone, rock'
i-teéta	'egg'
i-yeéli	'breast'
i-saáña	'egg'
wu-saáña	'bead'
leélu	'today'
mbaála	'bushback'
maáma	'mother'
taáta	'father'
yaáya	'elder brother/sister'

As seen in the examples (43), (44) and (45), some of the noun stems such as ndúunu 'hot pepper', nswáana 'heir', nvwáali 'parent' in (44b) and mpoombi 'monkey', nduunu 'slave', ñoombi 'cow', ñiinza 'boundary' in (43a) have a non-syllabic nasal for prefixes, maáma 'mother', taáta 'father' and yaáya 'elder brother/sister' in (45b) are devoid of noun prefixes.

Initial-vowel bisyllabic noun stems display a different behavior from other bisyllabic noun stems beginning with consonants. Vowel deletion or vowel coalescence takes when the prefix attaches a noun stem resulting in the noun having two syllables, and the first syllable has two moras. If the initial vowel of the noun stem is high-toned, the high tone is associated with either the first mora or the second one in the penultimate position. Such bisyllabic nouns exhibit three tone patterns: LL-L, HL-L and LH-L, as shown by the following examples in (46):

(46)	a.	LL-L

nyaazhi	/nyi-azhi/	'cracks'
meenzhi	/ma-inzhi/	'water'
chiimbu	/chi-imbu/	'hyaena'
mooma	/mu-oma/	'bee hive'
daamba	/di-amba/	'hemp'
muumbu	/mu-umbu/	'jackal'

b. HL-L
káansi	/ka-ánsi/	'child'
méesu	/ma-ísu/	'eyes'
díisu	/di-ísu/	'eye'
chóota	/chi-óta/	'open palaver hut'
yúuma	/yi-úma/	'things'

c. LH-L
chaáka	/chi-áka/	'year, time'
keési	/ka-ési/	'fire'
waátu	/wu-átu/	'boat'
wiína	/wu-ína/	'hole'
chuúla	/chi-úla/	'frog'

Trisyllabic noun stems and longer noun stems, which are fewer than bisyllabic noun stems, fall under two major tone groups. Some are either underlyingly toneless or carry a H tone on the first vowel of the noun stem, while others have a H linked to the penultimate vowel. Unlike disyllabic noun stems, which have either the HL or LH tone pattern in the penultimate, it is very rare to have noun stems of more than two syllables displaying the two types of contour tones, as illustrated by the examples below:

(47) a. L prefix + L noun stem:
chi-kalaña	'fowl cage'
chi-mbalañazhi	'spider'
ka-buluku	'blue duiker'
ka-luñalwizhi	'sea, ocean'
ka-nzhenkeneni	'small black ant'
i-loñolu	'chameleon'
i-bobela	'blister'
i-sakashi	'first stomach of a ruminant'
mu-mpeneni	'millipede'
mw-izhikulu	'grand child'
lu-kaañalu	'royal bracelet'
meeleela	'evening'
maaweenu	'mother-in-law'
yi-nkokozhola	'disputes'
taatakanzhi	'aunt'

b.   L prefix + H noun stem:
        ntémesha   'envoy'
        nsálafu   'red ant'
        mbáñala   'palm'
        ka-lémesha   'respectfulness'
        ka-shínakazhi   'old person'
        chi-kombóla   'brick mould'
        mu-kalankáata   'blue-headed lizard'
        nteteména   'morning'
        wu-sékulúla   'sand'
        nyakayankáta   'mantis'

2.2.2 Nominal Tone Rules

This subsection is concerned with the analysis of Lunda tonological rules of

nouns at word level and across word level. These rules are tonal island, final high tone

delinking and contour leveling.

2.2.2.1 Tonal Island

Words in Lunda may be described as being 'tonal islands'[8], that is, they do

preserve their underlying tones at phrase level when surrounded by other sounds with

other tones. Unlike many other Bantu languages, the word-level tonal outputs remain

stable at the phrase level (Hyman, Katamba and Walusimbi 1987; Creissels 1998; Hyman

and Mathangwane 1998). The inherent lexical tones of words do not change in connected

and continuous speech when they are preceded and followed across a word boundary by

other tones, or when placed in different syntactic environments.

---

[8] I am indebted to Larry Hyman for suggesting the term 'tonal islands' when I worked with him on this
language.

| (48) | a. | mukíla | 'tail' |
| | b. | mukíla wankáyi | 'tail of a duiker' |

| (49) | a. | káda | 'bird' |
| | b. | káda kána | 'that bird' |

In (48b) and (49b) the inherent H tone of the noun stem still remains unchanged even when it is followed by a demonstrative, possessive or numeral.

2.2.2.2 Final High Tone Delinking

One rule that has been alluded to from the analysis of all the nouns in the preceding section concerns the delinking of the H tone from the final vowel or mora. The underlying high tone of monosyllabic noun stems surfaces on the next visible mora leftward of its underlying position. In the following examples, disyllabic nouns have a surface H tone linked to the first mora of the noun, while those with nouns with three syllables have a H tone on the second mora. The vowel of the noun prefix bears a surface H tone in disyllabic nouns because it is the only one visible mora for monosyllabic noun stem. At word level, the surface H tone on the prefixes of monosyllabic nouns derive from the noun stem and can directly be attributed to a regular rule which retracts it from the final syllable of either a verb or noun. When this phenomenon applies to disyllabic nouns, it creates a LH rising contour in the penultimate syllable (cf. example 45). Final H tone retraction has also been noted in monosyllabic verbs in other languages such as Luganda (Hyman and Katamba 1990).

(50) a. Bisyllabic nouns:
          mútu   'head'
          lúfu   'death'
          máfu   'leaves'
          ítu   'ear'
          káwa   'dog'

      b. Polysyllabic nouns:
          mutáyi   'branch'
          lukádi   'suffering'
          matála   'houses'
          ihína   'clothe'
          kadidi   'bed'

The nominal prefixes of monosyllabic noun stems in (50a) bear surface H tone, whereas

those in (50b) are toneless. Since noun prefixes have the same underlyingly toneless, it

can be concluded that the high tone linked to the nominal prefixes in (50a) derives from

the final vowel of a word. They are not inherent. This phenomenon will be noticed again

with verbs in the next section. Thus, a word-final high tone constraint may be accounted

for by the application of this rule:

(51)   H

                    /   ‡

          V   (V)   C   V#
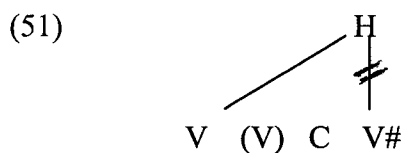
where the H tone linked to the final vowel detaches and moves leftward onto the next

visible vowel.

However, exceptions to this rule occur with some numerals, adjectives of color,

ideophones and some monosyllabic verb stems in the subjunctive where the high tone

may surface on the final vowel of a word. The following examples illustrate instances in

which a H tone appears word finally:

(52)   a.   Noun + modifier:
            wúta wúmú   'one gun'
            antu ayedí   'two people'
            antu amú   'some people'
            wuwa wutooká   'white mushrooms'

       b.   Subjunctive:
            niyí   'should I go?'
            tuyí   'let's go'

       c.   Ideophones:
            ngé   'denotes red'
            bwí   'denotes darkness'
            tóó   'denotes clear view'

2.2.2.3 Contour Leveling

Nouns with surface HL falling and LH rising contour tones are, however, an

exception to the 'tonal island' process. The first type of tonal contour is restricted only in

the penultimate position of a noun, while the second type can appear in both penultimate

and antepenultimate position of a word. Both kinds of contours are subject to

simplification or leveling when a noun is followed by modifiers such as possessives,

demonstratives, numerals, etc. In some cases, a modifier, which can be counted as being

in the same phonological phrase as the noun, causes vowel shortening. When words with

contour tones are followed by other words contour simplification may result in the

syllable having either HH level tone or LL level tone in the antepenultimate position.

This tonal phenomenon has also been noticed in other Bantu languages (Odden, 1998).

Consider contour simplification of the nominal forms of both kinds of contours on

bimoraic syllables in (53b):

(53)	a.	mutóondu	'tree'
		ntaámba	'potatoes'
		mwaána	'child'
		nkáanza	'hot period of the year'
	b.	mutóóndu wúnu	'this tree'
		ntáámba yaámi	'my potatoes'
		mwáánaámi	'my child'
		nkáánza munéni	'September'

The forms in (53a) have either HL falling or rising tonal contours on the penultimate syllable, whereas those in (53b) a shortened vowel with a H linked to it or or a LL level tone on a bimoraic syllable.

2.2.3 Verb Tones

The Lunda verb, with the exception of defective verbs, consists of the infinitive prefix ku-; the root and what is generally known as the final vowel -a. The infinitive prefix is underlyingly toneless in Lunda. For an illustration, the verb kulanda 'to buy' can be broken into three morphemes consisting of the infinitive prefix ku-, the verb stem land and the final vowel -a. The verb stem may further be expanded through inflectional affixes such as negative markers, tense and aspect markers, object markers and derivational affixes such as causativization, applicative, reversive, etc. The affixes are exemplified by the following verb structure:

(54) hí-y-a-a-mu-lánd-íl-il-eña-chú-ku   'they did not buy it for him'

where hí- is a negative marker, a- third person class 2 subject prefix, the tense marker -a-, class 1 object pronoun mu-, the verb root land-, the applicative extension suffix -il, the perfective remote past tense marker -ili, the habitual aspectual marker -aña, class 7 object

prefix -chú, and the post-verbal negative -kú. Some of these affixes may contribute tones to the verbal formation.

2.2.3.1 Verb Tone Patterns

Like nouns, verbs may be divided into two broad categories: those verbs whose roots have an underlying high tone and those which are underlyingly toneless. High-toned verb roots are realized with a high tone on the first mora of the root. Like the noun prefixes of noun classes, the infinitive prefix ku- is underlyingly toneless as it does not contribute any tone to either the preceding or the following vowel. Monosyllabic verb roots show the same tone patterns exhibited by monosyllabic nouns in (cf.2.2.1.). These verbs have only a consonant or a combination of a consonant and a glide. For verbs with high tone roots, the underlying high tone delinks from the final vowel and shifts leftward to the preceding infinitive marker vowel due to the word final high tone constraint, as illustrated by the example in (55b):

(55) a. Toneless monosyllabic verb stems:
          ku-ya   'to go'
          ku-vwa   'to leak'
          ku-wa   'to fall'
          ku-lwa   'to fight'
          ku-ha   'to be ripe, to be cooked, to be burned'

      b. H-toned monosyllabic verb stems:
          kú-da   'to eat'
          kú-twa   'to pound'
          kú-nwa   'to drink
          kú-cha   'to dawn'
          kú-fwa   'to die'
          kú-sha   'to put'
          kú-ta   'to set a trap, to cacth fish, to tell a story'

The verbs in (55a) are toneless on the surface, whereas those in (55b) surface with a high

tone on the verb prefix. Since the infinitive prefix is underlyingly toneless, the source of

the surface high tone linked to its vowel can be the verb root.

Unlike bisyllabic noun stems that have five tone patterns, bisyllabic verb stems

fall under four distinct tone patterns, namely, L-L, H-L, LL-L and HL-L. Nevertheless,

there is a noticeable absence of the tone pattern LH-L. The H tone is always linked to the

first vowel of the verb root, and it never occurs on the prefix, as shown by the examples

in (56):

(56)   a.   L prefix + L-L verb stems
                ku-nana   'to swell/be swollen'
                ku-dila   'to cry'
                ku-seha   'to laugh'
                ku-zowa   'to be wet'
                ku-lula   'to be bitter'

        b.   L prefix + LL-L verb root
                ku-zaala   'to shiver, tremble'
                ku-zhiika   'to bury, cover over'
                ku-leezha   'to tell'
                ku-toota   'to cut out, chop out, jab, peck, hatch (eggs)'
                ku-yuula   'to rule'

        c.   L prefix + H-L verb root
                ku-tála   'to look'
                ku-téma   'to cut down trees'
                ku-móna   'see'
                ku-chíka   'to crush, smash, grind, mash'
                ku-túta   'to carry from place to place'

d.　　L prefix + HL-L verb stem
　　　　ku-twáamba　　　　'to tell lies'
　　　　ku-shíika　　　　　'to promise'
　　　　ku-kéeha　　　　　'to be little'
　　　　ku-nóona　　　　　'to pick up'
　　　　ku-túuña　　　　　'to build'
　　　　ku-kwáata　　　　'to hold, seize, arrest'

Like bisyllabic verb stems, longer verb stems also display three tonal patterns.

They either have one high tone which is attached to the first vowel of the verb root, or are

devoid of any underlying tone. Furthermore, bimoraic syllables of most of the verbs

occur in the antepenultimate position of the verb.

(57)　a.　　Verbs with L trisyllabic verb stems:
　　　　　　ku-kolola　　　　'scrape out'
　　　　　　ku-balula　　　　'split'
　　　　　　ku-sulula　　　　'cause to descend'
　　　　　　ku-shakama　　　'sit'
　　　　　　ku-buluma　　　　'roar'
　　　　　　ku-belama　　　　'lie in wait for'
　　　　　　ku-luumbama　　'be heaped up'
　　　　　　ku-shiinshika　　'to look closely at'

　　　b.　　Verbs with H trisyllabic verb stems:
　　　　　　ku-kíluka　　　　'jump'
　　　　　　ku-téhuna　　　　'draw water'
　　　　　　ku-sémuka　　　　'be born'
　　　　　　ku-kétula　　　　'cut'
　　　　　　ku-lókola　　　　'pierce'
　　　　　　ku-méneka　　　　'set out early'
　　　　　　ku-bídika　　　　'call out loudly'
　　　　　　ku-shíimbula　　'to last'
　　　　　　ku-zhíímbala　　'to forget, be lost'

Longer verb forms also fall into two classes, with high tone verbs bearing a

lexical high tone on the first vowel of the verb stem. Consider the following examples in

(58a) and (58b):

(58) a. Quadrisyllabic Verb stems with L tone:
ku-fofomoka   'splutter of water'
ku-kunkulula   'assemble'
ku-balumuna   'turn'
ku-konkozhola   'to disagree'
ku-balakata   'to limp'

b. Quadrisyllabic Verb stems with H tone:
ku-kálumuna   'change'
ku-kákachila   'cling to'
ku-búkamana   'crouch'
ku-nyéñumuka   'turn around'

The verbal extensions are all underlyingly toneless as they do not seem to assign

or contribute any high tone to the preceding vowel in Lunda, as illustrated by the

applicative -il, the causative -ish, the transitive reversive -ul, the intransitive reversive

-uk, and the stative -ik/-uk below:

(59) a. Applicative -il
land-il-a   'buy for'
témuk-il-a   'run toward'

b. Causative -ish
kwáát-ish-a   'cause to arrest'
end-esh-a   'cause to move'

c. Transitive reversive -ul
shink-ul-a   'open'
zhil-ul-a   'free from taboo'

d. Intransitive reversive -uk
shink-uk-a   'be open'
zhil-uk-a   'be freed from taboo'

e. Stative -ik/-uk
chík-ik-a   'be crushed
sém-uk-a   'be born'

With the exception of class 1 object prefix (marker) <u>mu</u>-, object prefixes are underlyingly high-toned.

(60)   wu-ku-mu-móma   'you will see him'
        wu-ku-yí-mona   'you will see them'
        wu-ku-dí-mona   'you will see it'
        wu-ku-zhí-mona   'you will see them'
        wu-ku-chí-mona   'you will see it'

2.2.4 Verb Tone Rules

This subsection provides an analysis of the tonal functions, processes and patterning that take place in verb forms. In Lunda, like in most Bantu languages, the inflectional verbal affixes can either be underlyingly toneless, or have an underlying high tone. A verb root may contribute a high tone, and an inflectional affix such as a tense-aspect marker, the habitual aspectual marker -<u>áña</u>, the post-verbal negative marker -<u>kú</u>, and the indirect object pronouns can assign a high tone to certain verb stems.

Moreover, there is a tonal contrast between first and second person singular and plural subject prefixes and third person subject prefixes in most of the tenses with the exception of the remote past. The former have inherent high tones while the latter are inherently toneless. Tones have grammatical functions in two domains, namely, in the verbal system where they provide semantic contrasts between near past and perfect/stative present, and between subject prefixes. In most tenses, second person singular and third person singular have the identical morphological forms. But, they are only differentiated by tone contrast. Tones also contrast first person singular and third person singular in the present perfect as well as in the present progressive.

(61) a.   Wúkuya lelu.
                 wu- ku-   y -a lelu
                 2sg- FUT- go -fv today
                 'You will leave today.'

      b.   Wukuya lelu.
                 wu- ku-   y -a lelu
                 3sg- FUT- go -fv today
                 'S/he will leave today.'

(62) a.   Nákuya kwibúlu.
                 na-   ku- ya ku- ibúlu
                 1sg.PROG- INF- go LOC- playing field
                 'I am going to the playing field.'

      b.   Nakuya kwibúlu.
                 na-   ku- ya ku- ibúlu
                 1sg.PROG- INF- go LOC- playing field
                 'S/he is going to the playing field.'

Except for tone, the second person singular subject prefix wú- (61a) and the third person

singular subject prefix (class 1) wu- in (61b) are morphologically identical. The same is

observed with the first person singular subject prefix ná- (62a) and the third person

singular (class 1) na- (62b).

The recent, remote and very remote future tenses do not assign a grammatical

high tone to the verb root. In other words, if the verb stem has a H-L tone pattern, it keeps

its H-L underlying infinitive tonal pattern in context and connected speech despite the

addition of subject prefixes and tense markers which have other tones in isolation.

Examples of such tonal phenomena are given in (63b):

(63) a.   Verbs in infinitive form:
                 kú-twa   'to pound'
                 ku-témuka   'to run'
                 ku-móna   'to see'
                 ku-seenda   'to carry'

b. Verbs in the very distant future tense:
    w-aambá kú-twa kabáka   'she will pound the corn'
    ní-ku-témuka   'I will run'
    a-ambá kú-twa kabáka   'they will pound the corn'
    w-áka-móna   'you will see'

The verb forms in the very distant future tense in (63b) have exactly the same tone

patterns as those in the infinitive form in (63a). The H tone on the verb root remains

unchanged despite the presence of the preceding H tone assigned by the tense-aspect

inflectional morphology. It does not spread neither float.

All the verbs irrespective of their underlying tones have the same tone pattern in

the near past tense. They bear low tones on the surface in the near past, as illustrated by

the examples with the verb kusesa 'to chip' in (64a) and kutéma 'to cut down' in (64b)

which are low-toned and high-toned respectively:

(64) a. wasesa muhínyi.   'He chipped a handle of a hoe.'
      b. watema mutóndu.   'He cut down a tree.'

2.2.4.1 Tonal Island

There is a common phenomenon that operates in Lunda where the underlying

inherent tone remains stable when the verb root is followed by a complement irrespective

of its inherent tone. This has been described as 'tonal island' process (cf. 2.2.3.). The

inflectional affixes adjoined to the verbs in the infinitive forms do not at all alter the

underlying tone of the verb root. This is contrary to what has been described in the

literature for Bantu languages such as Chichewa (Mtenje 1900), Kinande (Mutaka 1994),

and Chiyao (Ngunga 2000). Consider the following examples illustrating the tonal island

phenomenon:

(65) a.   kú-twa   'to pound'
            ku-kótola   'to break'

      b.   kú-twa ndúuñu   'to pound hot pepper'
            ku-kótola mutáyi   'to break a branch'

The high tone of the verb roots in the examples in (65a) remains unaffected in (65b)

despite the presence of the direct object noun phrases.

Further evidence of this tonal island behavior is provided by the present

progressive in which finite verbs maintain their underlying infinitival tones when various

morphemes are affixed to them. The addition of either the copular di 'be', the perfect

marker ná- or the reflexive/reciprocal marker di have no effect on the tonal behavior of

the verbs, as shown in the following examples (66b):

(66) a.   Infinitive:
            ku-ya   'to go'
            kú-twa   'to pound'
            ku-kétula   'to cut'

      b.   Present Progressive:
            ní-dí na-ku-ya   'I am going'
            ní-dí na-kú-twa   'I am pounding'
            wu-di na-ku-kétula mbizhi 'he is cutting meat'

2.2.4.2 High Tone Spread

While the 'tonal island' phenomenon features quite prominently in the phonology

of the language, it does not at all affect verb roots with both HL falling and LH rising

contours. Instead the H tone of a tonal contour may spread rightward onto the next vowel

of the antepenultimate syllable. Thus, High Tone Spreading (HTS) is another feature of

the tonal system of Lunda and occurs under certain specific circumstances. It applies

when a derivational causative or applicative extension is attached to the verb resulting in

the simplification of the HL/LH contour. It must be noted that the general rule of high

tone spreading can only spread the underlying H tone to the antepenultimate mora or

syllable of a word, but not to the penultimate mora or syllable of a word. When the rule

operates, the tonal contour on a bimoraic (CVV) become HH instead of either falling or

rising, as shown in the following examples:

(67)   a.   ku-kwáat-a   'to hold, catch, seize, arrest'
            ku-wáah-a   'be good, nice'
            ku-táañ-a   'to read'

       b.   ku-kwáát-il-a   'to hold for/at'
            ku- wáah-ish-a   'to make good, put in order'
            ku-tááñ-ish-a   'to teach'

Example (67b) indicates that when the derivational causative extension -ish is added to

verb root, the HTS rule applies and the antepenultimate gets a CVV syllable with a H

tone linked to both moras instead of HL.

A further addition of an affix yields vowel shortening of the verb root in the pre-

antepenultimate position.

(68) ku-kwát-íl-il-a 'to brace self, to make effort'
   ku- wáh-ish-il-a 'to make good for'
   ku-táñ-ish-il-a 'to teach at'

In (68), the applicative extension -il is adjoined to the same verb root which results in the

shortening of the vowel of the syllable preceding the antepenultimate position

accompanied by high tone spread.

In addition, the verb or word tones change and contour simplification also apply

across a word boundary when it is followed by other tones. That is to say, a modifier can

count as being in the same small phonological phrase causing simplification when vowel

shortening takes place. Its presence results in the elimination of HL falling tone.

(69) a. ku-kwáata 'to hold'
     twáaya   'come'

   b. ku-kwááta kúnu 'to hold here'
     twááya kúnu 'come here'

In Lunda, a high tone will spread rightward once onto the vowel of the next

syllable, unless this vowel appears in the penultimate or final vowel of a word. This can

be accounted for by the formalization of this general rule:

(70) HTS:

$$
\begin{array}{c}
\text{CV} \;\; \text{CV} \;\; \text{CV} \;\; \text{CV}... \\
\big| \!\!\diagup \\
\text{H}
\end{array}
$$

HTS does not apply: CVCV   CVVCV CVCV(V)CV

        H   H   H

Another instance of HTS takes place when a high tone object prefix/marker is

attached to an underlying toneless verb root. The H tone associated with the object

marker spreads once rightward onto the following verb vowel. It does not, however,

spread to the second mora in verbs with bimoraic vowels in the penultimate position or to

the final vowel of the verb, as illustrated in the following examples in (71):

(71) a.   ku-sweek-a   'to hide'
            ku-fuump-a   'to break in pieces'
            ku-balul-a   'to split, to break open'
            ku-shiinkul-a   'to open'

      b.   ku-dí-swéek-a   'to hide it'
            ku-yí-fúump-a   'to break them into pieces'
            ku-chí-bálul-a   'to break it open, to split it'
            ku-chí-shíinkul-a   'to open it'

As seen in (71b), the H tone of the object prefix spreads rightward and surfaces on the

first toneless mora or vowel of the verb root. It does not, however, spread onto the second

mora if a verb has two moras in the first syllable of the stem.

With respect to the tense-aspect, HTS affects only the present perfect and the

perfective remote past. Both the present perfect and the perfective remote past exhibit

almost the same tonal behavior as regard verb stems of more than two syllables. The

present perfect is marked by the morpheme na- which co-occurs with the final vowel -i,

while the perfective remote past tense is expressed by a combination of the prefix a-

within the verb and the suffix -ili. When attached to the verb root, the two tense-aspect

markers give rise to a high tone on the first syllable of the verb stem, irrespective of its

underlying tones.

In the perfective remote past, the surface high tone on the first syllable of the verb

stem spreads once rightward onto the following syllable for verb stems of more than two

syllables. This high tone spread (HTS) is, however, restricted to the antepenultimate mora

or syllable of the verb. Thus, the difference between high-toned verb stems and toneless

verb stems is neutralized. Furthermore, all the subject prefixes bear low tones on the surface in the remote perfective past, as illustrated by the examples in (72b):

(72) a.   Infinitive:

ku-dima	'to cultivate'
ku-balula	'to split'
ku-sweeka	'to hide'
ku-táambika	'to call'
ku-sóneka	'to write'

      b.   Perfective remote past:

wu-a-dím-in-i	'he cultivated'
wu-a-bálw-íil-i	'he split'
wu-a-swéék-el-i	'he/she hid'
wu-a-támbík-il-i	's/he called'
wu-a-sónék-el-i	'he wrote'

The examples in (72a) consist of verbs in the infinitive forms which are either underlyingly toneless or underlyingly high-toned. In (72b), the high tone is linked to the first vowel of the verb stem in the perfective remote past.

For monosyllabic verbs in the perfective remote past, the high tone emanating from the perfective remote past tense marker results in the formation of a HL rising contour tone with the high tone linked to the first mora as long as it is in the antepenultimate position. This is exemplified by (73b) with both high toned and toneless verb stems.

(73) a.

ku-ya	'to go'
ku-vwa	'to leak'
kú-da	'to eat'
kú-cha	'to dawn'

      b.

wu-a-y-íil-i	'he went'
chi-a-vw-íil-i	'it leaked'
wu-a-d-íil-i	'he ate'
ku-a-ch-íil-i	'it dawned'

When inflected with the present perfect aspectual marker <u>na</u>-, the verb surfaces with a high tone on the first vowel. This tonal phenomenon applies to both types of verb stems, as shown by the disyllabic verb stems in the examples that follow:

(74) a. Infinitive:

ku-zuwa	'to be angry'
ku-zowa	'to be wet'
ku-zéya	'to be tired'
ku-híta	'to pass'

b. Present Perfect:

a-na-zúw-i	'they are annoyed'
a-na-zów-i	'they are wet'
a-na-zéy-i	'they are tired'
a-na-hít-i	'they have passed'

For verbs of more than two syllables, the tone assigned to them by the present perfect inflectional morphology spreads onto the following syllable. Consider the following verb forms in (75):

(75) a-na-tádík-i   'they have disputed'
      a-na-bálúl-i   'they have split'

The third person class 1 singular with an applicative verbal extension in the present perfect is similar to the first person singular perfective remote past without an applicative affix. The verbal form and tonal patterns of the two are identical, but the difference between the two constructions is only possible syntactically in the context of discourse. The examples below show the morphology as well as the surface tones of the two tense-aspects using the same verb <u>sóneka</u> 'write':

(76) a. Present Perfect:

| n-a-sónék-i mukáanda | 'he has written a letter' |
| n-a-sónék-el-i mukweetu mukáanda | 'he has written my friend a letter' |

b.   Perfective Remote Past:
      n-a-sónék-el-i mukáanda   'I wrote a letter'
      n-a-sónék-el-el-i mukweetu mukáanda   'I wrote my friend a letter'

The second example in (76a) and the first example in (76b) have the same morphological extension and same tonal behavior except for the post-verbal arguments. While the verb in the present perfect takes two post-verbal arguments, that in the perfective remote past has only the direct object. For the verb in the perfective remote past to take two postverbal arguments, it must have two suffixes namely a derivational applicative affix and an inflectional tense marker. The H tone linked to the first vowel of the verb root in (76) spreads onto the antepenultimate mora of the verb; but fails to continue onto the penultimate mora.

2.2.4.3 Final High Tone Retraction

The final H tone retraction rule observed in the analysis of nouns also applies to the verbs. The high tone associated with the final vowel of monosyllabic verbs shifts leftward onto the next visible mora or vowel. This tonal phenomenon takes place with those monosyllabic verb roots which are underlyingly H toned. Since the infinitive prefix is underlyingly toneless, the only obvious source of the high tone that surfaces on ku- is no other than the final vowel of the verb root, as shown by the verb forms in (77).

(77) kú-twa   'to pound/pounding'
       kú-da   'to eat/eating/food'
       kú-sha   'to put/putting'

More evidence for final vowel retraction comes from the affixation of inherent toneless object prefixes between the infinitive prefix and the high-toned verb stem.

The high tone is linked to the vowel of the object prefix leaving the infinitive prefix

toneless. This is so because the vowel of the object prefix is the next most visible tone

bearing unit, as illustrated in the following examples:

(78) ku-wú-twa   'to pound it'
      ku-díi-da   'to eat it'
      ku-mú-sha   'to put him'

Another illustration of the high tone retraction is provided by the near future and

the remote future tense markers ku- and (a)ka- respectively. These morphemes are

underlyingly toneless and as such do not contribute any high tone to the following vowel,

but they are linked with a surface high tone when they occur with monosyllabic high-

toned verb stems. This takes place after the application of the final vowel high tone

delinking and retraction rule. Consider the future tenses in the following examples:

(79) hí-ní-kúda   'I am about to eat'
      wu-kú-nwa   'he will drink'
      nkinga yaká-fwa 'the bicycle will break down'

The rule also applies when the verb suffixes the post-verbal negative marker -kú,

or an indirect/second object suffixed pronouns or relative clause suffixes, a high tone

surfaces on the penultimate syllable of the verb. This suggests that the negative marker is

high toned, but this high tone delinks from the vowel of the negative marker and shifts

leftward onto the preceding visible vowel as a result of a lexical constraint in Lunda that

does not allow the final vowel to bear a high tone.

(80) a. Affirmative:
          ní-di na-kú-twa   'I am pounding'
          wu-a-ya   'he went'
          enzhíili   'they came'

b.   Negative:
hí-ní-di-na-kú-twá-ku   'I am not pounding'
hi-á-yá-ku   'he did not go'
híy-eenzhíilí-ku   'they did not come'

The examples given in (81) show that the rule applies to (81b) with a suffixed second object pronoun and not to (81b) with the verb followed by a lexical second object.

(81)   a.   Mwínki chúuma.   'Give him the thing.'
         b.   Mwínkíchu   'Give it to him.'

The final high tone retraction process triggers a falling contour tone in the penultimate syllable. This involves the imperative markings -kú/-añá, -enu and the habitual aspect affix -añá, which are both underlyingly high toned, when they are suffixed to the verb. The delinked high tone automatically moves leftward and links to the first mora of the penultimate syllable. Examples in the imperative forms in (81a-b) show the application of the final high tone retraction.

(82)   Imperatives:
         a.   Second person singular
                y-akú   →   yáaku   'go'
                y-añá   →   yáaña   'go'
                sweek-akú   →   swéékáaku   'hide'
                balul-akú   →   baluláaku   'split'

         b.   Second person plural
                tál-enu   →   táléenu   'look'
                shik-enu   →   shikéenu   'welcome'
                léet-enu   →   léetéenu   'bring'

Below are other examples of the final high tone retraction with verbs in the habitual present:

(83) Habitual Present:

ní-a-d-añá	→	nádáaña	'I eat'
wu-a-y-añá	→	wayáaña	'he goes'
a-a-zát-añá	→	azátá-aña	'they work'

A rule may be formulated to account for the HL contour tone created by delinking the H of the verbal extension and linking it to the verb stem mora. The rule only applies word-internally, not across word boundary:

(84)

```
        H                    /H
        |                   / |
V  V  C  V    →    V  V  C  V
```

Examples in the imperative forms in (83a-b) and in the habitual present in (84) show the application of the final high tone retraction.

The rule also applies when a high tone object marker is followed by a monosyllabic verb with an underlying high tone. As already stated in the preceding discussion (subsection 2.2.4.2), the language does not allow a high tone to fall on the last syllable of a word. If an underlying monosyllabic high tone verb follows a high tone object marker, the high tone of the verb retracts to the preceding syllable and vowel lengthening with a high-low falling tone occurs in the penultimate environment. This is exemplified in examples with high tone verbs and object prefixes from different noun classes below:

(85)

kú-ta	→	ku-chíi-ta	'to set it'
kú-sha	→	ku-kíi-sha	'to put it'
kú-da	→	ku-chíi-da	'to eat it'
kú-twa	→	ku-yíi-twa	'to pound it'
kú-nwa	→	ku-yíi-nwa	'to drink it'

2.2.4.4 High Tone Deletion

Though not very productive, high tone deletion is one of the established processes

in Lunda. It is confined to a very limited number of high-toned verb stems. This tonal

phenomenon deletes the high tone of a verb when it is preceded by an inherently high

toned object prefix. This rule is equivalent to Meeussen's Rule (Goldsmith 1984), an

accentual formulation.

(86)   H → ∅ / H —

The examples that follow illustrate how the rule operates:

(87)   a.   wu-ka-mu-móna   'she will see him'
       b.   wu-ka-yíí-mona   'she will see them'

(88)   a.   ni-aambá ka-mu-táámbika   'I will call him'
       b.   ni-aambá ka-yíí-taambika   'I will call you'

The verb móna 'see' and táámbika 'call' in (87a) and (88a) maintain their underlying

tones when they are preceded by the toneless object prefixes mu-. In (87b) and (88b),

however, the high tone of the verb deletes because of the high of the object prefix yí-. It

is, therefore obvious, that it is the high toned that brings out the deletion of the high tone.

2.3 Summary

This chapter has described the phonemic inventory of Lunda and the phonological processes that affect consonants as well as vowels. It has also dealt with the tone system of the language and the major tonal processes.

It has been demonstrated that the verb extension consonant /l/ harmonizes with the nasal of the verb root. Besides nasal harmony, the vowel /i/ palatalizes the alveolar consonants /d/, /t/, and /z/ they come after. Gliding is equally one of the processes in which consonants are involved.

As regards vowels, it has been shown that vowel length is contrastive, opposing underlying short and long vowels. In addition, vowel length derives from processes such as coalescence, gliding, and elision.

In addition to vowel length, the study has also looked into vowel harmony which is determined by the height of the root vowels. This occurs between the vowel of the verb root and the vowel of the verb extension.

It has been pointed out that words can be divided into two groups according to their underlying tones. Some are H toned, while others are underlyingly toneless. The following tonal processes have been observed- tonal island, high tone spread and final H tone retraction. However, there are constraints regarding H tone. It cannot occur word-finally and neither spread onto the penultimate position of a word.

CHAPTER III

MORPHOLOGY OF THE NOUN PHRASE

This chapter describes the morphology of the noun system of Lunda and examines

the agreement affixes of all types of nominal modifiers such as adjectives, possessives,

numerals, quantifiers, pronouns, demonstratives as well as subject and object prefixes,

object suffixes and locative affixes. It further provides an analysis of the

morphosyntactic properties of nouns by means of the various pronominal agreement

markers also known as concords in the Bantu literature.

3.1 Noun Classes

A noun in Lunda, as in all Bantu languages, consists of two morphemes, a noun

prefix and a noun stem. A noun class is made up of words that have similar prefixes and

behave in a similar fashion in respect to verbal and non-verbal agreement such as

possessives, adjectives, numerals, quantifiers, demonstratives, and pronouns (Bleek 1862;

Guthrie 1956 and 67; Welmers 1973; Bokamba 1976). Two nouns with identical stems

and meanings are paired into singular nouns and plural nouns and this pairing is known

as genders (Givón 1972). A gender[1] consists of two classes which are assigned numbers

---

[1] Some linguists use noun classes and genders interchangeably (Gregersen 1967:15).

and the numbering of noun classes follows the tradition used in Bantu studies for

comparative purposes (Bleek 1862; Meinhof 1910, 1915). With the exception of classes

12 and 13, classes with odd numbers are singular while those with even numbers are

plural. Classes 1 and 2 are paired together, the rest are class 3/4, 5/6, 7/8, and 9/10.

Nouns that belong to the same class exhibit identical prefixes and govern similar

agreement prefixes or concords at both phrase and sentence level. That is, the head noun

determines the choice of concord affixes that must be marked on adjectives, possessives,

quantifiers, pronouns, and verbs.

Lunda nouns are divided into eighteen classes, including three locative classes.

The assignment of nouns in various classes cannot be attributed to their semantics

though some classes tend to have nouns with the same semantic features in Lunda. Class

membership is by and large arbitrary because nouns bearing the same semantic features

are found in more than one class.

In addition, a noticeable feature of the Lunda noun class system is that animate

nouns that used to belong to the various noun classes in old Lunda are now class 1 and 2

nouns.[2] They display the same grammatical behavior by employing class 1 and 2

agreement or concord prefixes. Singular nouns have retained the noun prefixes of their

former classes, while plural nouns have acquired the class 2 noun prefix a- in addition to

old noun prefixes. That is, nouns denoting animates carry double prefixes in the plural

form with class 2 noun prefix preceding the inherent class prefix, as illustrated in (1b).

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[2] This peculiar feature of noun classes is not only confined to Lunda, but it is also found in its genetically related neighboring laguages such as Chokwe, Luchazi, and Luvale (White 1943).

(1)	a.	1/2	muntu	'person'	antu	'person, people'
		3/4	mutóndu	'tree'	nyitóndu	'trees'
		5/6	itála	'house'	matála	'houses'
		7/8	chidika	'trap'	yidika	'traps'
		12/13	kadidi	'bed'	tudidi	'beds'

	b.	1/2	kánsi	'child'	(cl. 12 ka-)
			atwánsi	'children'	(cl. 2 a- and cl. 13 tu-)
		1/2	mwána	'child'	(cl. 3 mu-)
			anyána	'children'	(cl. 2 a- and cl. 4 nyi-)
		1/2	nzovu	'elephant'	(cl. 9 n-)
			anzovu	'elephants'	(cl. 2 a- and cl. 10 n-)
		1/2	ibwámbu	'friend'	(cl. 5 i-)
			amabwámbu	'friends'	(cl. 2 a- and cl. 6 ma-)
		1/2	chibínda	'hunter'	(cl. 7 chi-)
			ayibínda	'hunters'	(cl. 2 a- and cl. 8 yi-)

Classes 1/2

The nominal prefixes for classes 1 and 2 are mu- and a- respectively. Class 2 noun prefix is also used to show respect when referring to one person. The noun prefix mu- becomes mw- when prefixed to a noun beginning with a vowel. Nouns belonging to these classes are invariably human beings. However, they do not cover all nouns that denote people because some are also found in other classes.

(2)	muntu	'person'	antu	'persons, people'
	mukúluumpi	'elder person, senior'	akúluumpi	'elder persons'
	muhéla	'sister'	ahéla	'sisters'
	musónyi	'cousin'	asónyi	'cousins'
	mulunda	'friend'	alunda	'friends'
	mukwénzi	'youth'	akwénzi	'youths'
	mwíha	'nephew, niece'	éhwa	'nephews, nieces'

Although the animate nouns are listed in the various classes in this dissertation,

their grammatical behavior indicates that they synchronically belong to classes 1 and 2. They govern classes 1 and 2 agreement when they occur as subject or head nouns, that is, they control the agreement prefixes marked on the verbs or modifiers with which they occur. They have not, however, completely shifted from their original classes because they still display some characteristics of their old classes to nouns from the other classes (see section 3.3.2 and 3.3.3).

Classes 1a/2a

Nouns belonging to class 1a are characterized by the absence of nominal prefix, while their plural counterparts use class 2 noun prefix a-. They are considered subclasses of classes 1 and 2 because they use the same agreement prefixes and display identical grammatical behavior as classes 1 and 2. Membership to these two classes is, thus, determined by various pronominal agreement prefixes either verbal or non-verbal. Like classes 1 and 2, all nouns in these classes are human beings only.

(3)   táta   'father'   atáta   'fathers'
       máma 'mother'   amáma 'mothers'
       mandúmi   'uncle'   amandúmi   'uncles'
       mána   'brother'   ána   'brothers'
       máwenu   'mother-in-law'   amáwenu   'mothers-in-law'
       tatankázhi   'father's sister'   atatankázhi   'father's sisters'
       yaáya   'elder brother/sister'   ayaáya   'elder sisters'

Classes 3/4

The prefix for class 3 is mu-, which is homophonous with class 1 nominal prefix mu-, while class 4 uses the prefix nyi-. The prefix mu- turns into mw- when it is attached to a nominal stem beginning with a vowel. The noun prefix nyi- occurs as such before all

consonant initial noun stems and before noun stems beginning with the vowel i̠. But with

any other vowel the prefixal vowel merges with it resulting into a long vowel that has the

quality of the stem initial vowel. The two classes are further subdivided into two groups,

one for inanimates and the other for animates.

(4) | | | | |
|---|---|---|---|
| mutóndu | 'tree' | nyitóndu | 'trees' |
| mulóndu | 'bottle, jar' | nyilóndu | 'bottles' |
| munu | 'finger' | nyinu | 'fingers' |
| muloña | 'case, crime, lawsuit' | nyiloña | 'cases, crimes' |
| mukánda | 'letter' | nyikánda | 'letters' |
| muchíma | 'heart' | nyichíma | 'hearts' |
| mwendu | 'leg'   /mu-endu/ | nyendu 'legs' /nyi-endu/ | |
| mwiku | 'stick for stirring' | nyiku | 'sticks for stirring' |
| mwéñi | 'corn stalk'/mu-éñi/ | nyéñi | 'corn stalks' /nyi-éñi/ |

Nouns denoting animates take their plural form through a combination of class 2

and 4 noun prefixes a̠- and nyi- respectively. In other words, animates make use of class 2

prefixes instead of the corresponding plural noun class 4. Singular nouns denoting

animates have the same prefix as inanimates.

(5) Classes 3/2 animates

mwána	'child'	anyána	'children'
mwánta	'chief'	anyánta	'chiefs'
mutúpa	'lion'	anyitúpa	'lions'
mukoku	'sheep'	anyikoku	'sheep'
musámvu	'monitor lizard'	anyisámvu	'monitor lizards'
mukambi	'waterbuck'	anyikambi	'water bucks'
mumpeneni	'millipede'	anyimpeneni	'millipedes'

<u>Classes 5/6</u>

Classes 5 and 6 nominal prefixes are <u>i</u>- and <u>ma</u>- respectively. Very few class 5

nouns carry the <u>di</u>- instead of <u>i</u>-. When the diminutive prefix <u>ka</u>- is marked on a class 5

initial vowel noun, the prefix <u>i</u>- is replaced by <u>di</u>- on the surface. The combination of the

prefixal vowel /a/ and the initial vowel /i/ of the stem yields a long /ee/ due to the process

of coalescence or merger. Noun class 6 prefix <u>ma</u>- also serves a plural marker for some

countable nouns from class 14 and few class11 nouns.

(6)   Classes 5/6 inanimates
        a.   ifúku   'day'   mafúku   'days'
              ihína   'cloth'   mahína   'clothes'
              ivunda   'woodland forest'   mavunda   'woodland forests'
              ikábi   'trouble, toil'   makábi   'difficulties
              ífu   'leaf'   máfu   'leaves'
              izhi   'tooth'   mazhi   'teeth'
              izhína   'name'   mazhína   'names'
              ichíma   'jealousy'
              iyéna   'heat'

        b.   dísu   (<di-isu)'eye'   mésu   (<ma-isu) 'eyes'
              dikendi   'loaf'   makendi   'loaves'
              dikwilu   'hunger'

Class 6 also includes collective and abstract or mass nouns which have no corresponding singular noun stems in class 5.

(7)
makasu	'deceit'
makudi	'deceit, lies'
malówa	'mud, mire'
maána	'wisdom, intelligence, common sense'
matúka	'abusive language, insult'
malwa	'distress'
mánzhi	'fat, oil'
máshi	'blood'
mashína	'pus'
masu	'urine'
masulwila	'sweat, perspiration'
mazeñi	'spittle'
mayéli	'milk'
menzhi (ma-inzhi)	'water'

As with the preceding classes, animates exist side by side with inanimates in class 5. However, animate nouns use double prefixation for their plural marking, with the morpheme a- prefixed to class 6 prefix ma-.

(8)   Classes 5/2 animates
ibwámbu	'friend	amabwámbu	'friends'
ikoku	'large boring beetle'	amakoku	'boring beetles'
ikómbi	'thief'	amakómbi	'thieves'
ikuñu	'milky fish eagle'	amakuñu	'fish eagles'
ipupula	'butterfly'	amapupula	'butterflies'
isháku	'sister/brother-in-law'	amasháku	'sister in laws'
iyála	'male'	amayála	'males'
iyanvu	'wasp'	amayanvu	'wasps'

Classes 7/8

The prefixes are chi- for class 7, nouns denoting both animates and inanimates, and yi- and ayi- for class 8 inanimate and animate nouns respectively. The latter prefix is

a combination of prefixes for two classes 2 and 8. The phonological rules that apply to the prefix nyi- also apply to chi- and yi- when attached to vowel initial stems.

Very few class 7 nouns have their plural counterpart in class 6 instead of class 8. They take the nominal prefix ma- and follow the agreement pattern pertaining that class. Some inanimate nouns that belong to classes 7/8, mainly those denoting instruments, are derived from verbs (cf. see 3.1 Noun Classes).

(9) Classes 7/8 inanimates

a.

chana	'grassy plain'	yana	'plains'
cháwu 'bridge' (< awuka 'cross a river')		yáwu	'bridges'
chibálu	'chunk' (< balula 'split, divide')	yibálu	'chunks'
chikúmu	'river bank, shore'	yikúmu	'shores'
chilapu	'paddle, oar'	yilapu	'paddles'
chishími	'pole for building houses'	yishími	'poles'
chisakulu	'comb' (< sakula 'comb hair')	chisakulu	'combs'
chilóota	'dream' (< lóota 'dream')	yilóotu	'dreams'

b.

chifwízhi	'shoulder'	mafwízhi	'shoulders'
chikása	'hand'	makása	'hands'
chipéha	'shoulder blade'	mapéha	'shoulder blades'
chishíka	'cold'	mashíka	'fever, malaria'

Animate nouns in class 7/8 take two plural prefixes, class 2 prefix a- followed by class 8 prefix yi-. Some deverbative nouns are also found in these classes.

(10)

chibaba	'bead coronet'	ayibaba	'bead coronets'
chiheñi	'warthog'	ayiheñi	'warthogs'
chikololu	'crow'	ayikololu	'crows'
chilañwa	'rhinoceros'	ayilañwa	'rhinoceroses'
chileya	'fool'	ayileya	'fools'
chilolu	'chief'	ayilolu	'chiefs'
chisumpa	'leopard'	ayisumpa	'leopards'
chisúpi	'fool' (< supa 'be stupid')	ayisúpi	'fools'
chombu	'pig'	ayombu	'pigs'
chihewu	'fool' (< hewuka 'be foolish')	ayihewu	'foolish people'

Classes 9/10

Classes 9/10 use the same prefix N-, a homorganic nasal, for both singular and plural. It assimilates to the place of articulation of the following consonant of the noun stem. The assimilatory nasal is the only non-syllabic noun class prefix in the language. It defines the nasal group, which is the largest nominal group of the language. The singular of the nouns shows no variation between animates and inanimates, but the animates take the agreement prefixes characteristics of animate subclasses. However, singular nouns and plural ones are distinguished by virtue of the agreement prefixes rather than by the noun prefixes.

A very small number of monosyllabic noun stems belonging to class 9 take an additional prefix, the vowel /i/ when they are pronounced in isolation.

(11)   Classes 9/10 inanimates

a.	mpaku	'hole in a tree'	mpaku	'holes in a tree'
	nchatu	'tatoo'	nchatu	'tatoos'
	ndalu	'ladder'	ndalu	'ladders'
	nfúñu	'wild plum'	nfúñu	'wild plums'
	ngonga	'purse'	ngonga	'purses'
	njéki	'bag'	njéki	'bags'
	nzhíta	'war'	nzhíta	'wars'
	ntámba	'sweet potato'	ntámba	'sweet potatoes'
	nvúla	'rain'	nvúla	
	ñovu	'strength'		
	invu	'gray hair'		
	nzala	'hunger'		
	nkúnyi	'hatred'		
	mbízhi	'meat'		
	nsónyi	'shame, modesty, humility'		
b.	i-nvu	'gray hair'		
	i-nfwa	'rat'		
	í-nshi	'fish		

Animates in class 9, like in most of the other singular classes, are marked with

class 2 prefix to turn into plural nouns in addition to their prenasal consonant. This class

also contains a lot of agentive deverbal nouns which display class 9 nasal prefix and class

2 noun prefix a- for singular and plural respectively plus the final vowel -i (see chap III

section 3.1).

(12)　Classes 9/2 animates

(i)nfwa	'rat'	anfwa	'rats'
(i)nshi	'fish'	anshi	'fishes'
(i)ñoda	'wife'	añodi	'wives'
mbála	'bushbuck'	ambála	'bushbucks'
mpembi	'goat'	ampembi	'goats'
nchila	'puku'	anchila	'pukus'
ndimi	'farmer' (< dima 'cultivate')	andimi	'farmers'
ndowa	'lover'	andowa	'lovers'
nfumu	'husband'	anfumu	'husbands'
nhembi	'helper' (< hemba 'take care')	anhémbi	'helpers'
nkakulula	'ancestor'	ankakulula	'ancestors'
nlombóli	'guide' (< lombola 'lead, guide')	anlombóli	'guides'
ñúvu	'hippopotamus'	añúvu	'hippotamuses'
nzhinzhi	'fly'	anzhizhi	'flies'
nséfu	'eland'	anséfu	'elands'
ntaña	'relative, dependent'	antaña	'relatives'
ntáñishi	'teacher' (< tañisha 'teach')	antáñishi	'teachers'
mvudi	'situtunga'	amvudi	'situtungas'
nvwáli	'parent' (< vwáala 'bear a child')	anvwáli	'parents'
ñweneni	'mosquito'	añweneni	'mosquitoes'
nzámbi	'God'		

Classes 11

This is a very small class with a limited number of words. The class prefix is lu-changing to lw- before vowel-initial noun stems. Class 11 nouns have quite irregular plural counterparts. Some nouns take class 6 noun prefix ma-, while others take class 10 prefix zhi- or class 9 nasal prefix.

(13)
lubavu	'rib'	mbavu, zhimbavu	'ribs'
lucháwa	'firewood'	ncháwa	'firewood'
lushimbi	'law'	nshimbi	'laws'
lusúki	'hair'	nsúki	'hair'
lusañu	'piece of news'	nsañu, zhinsañu	'pieces of news'
lwembi	'razor'	zhilwembi	'razors'
lupuula	'wing of bird'	mapuula	'wings of a bird'
luduñu	'heart'	maluduñu	'hearts'
lwalu	'winnowing basket'	malwalu	'winnowing baskets'
lwendu	'journey'		
lukádi	'great trouble, suffering'		
lunkúñu	'dust'		
lubánzhi	'beauty'		
lufuchi	'speed'		
luchatu	'tattoing'		
lúya	'hot air from fire'		
lúwi	'mercy, kind treatment'		
lwísu	'covetousness'		

Classes 12/13

Class 12 prefix is ka-[3] for nouns denoting both animates and inanimates, while class 13 prefixes are tu- for inanimates and a-tu- for animates. The same phonological rules that affect prefixes ma-/a- and mu-/lu- also apply to ka- and tu-.

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[3] Unlike other Bantu languages where the prefixes ka- and tu- denote diminutive and augmentative, the two prefixes are actually noun classes 11 and 13 with their inherent nouns though they can have a diminutive or augmentative force when affixed to nouns from other classes.

(14)

kadidi	'bed'	tudidi	'beds'
kalóña	'river'	tulóña	'rivers'
kanonoshi	'star'	tunonoshi	'stars'
kamína	'song, hymn'	tumína	'songs'
kahéka	'story'	tuhéka	'stories'
kasulu	'source of stream'	tusulu	'sources of streams'
kaleñi	'fishing net'	tuleñi	'fishing nets'
kalémbwila	'sweet potato leaves'		
kadíwu	'inattention, disregard'		
kakóhu	'cough'		
kalémesha	'respect'		
kalépa	'paralysis'		

Like other classes, classes 12 and 13 contain animate nouns. The singular nouns

bear prefixes with the same morphological shape as the nouns for their inanimate

counterparts the plural nouns bear double noun prefixes, class 2 noun prefix a- followed

by class 13 noun prefix tu-. In addition, class 12 noun prefix ka- occurs with certain

nouns of some ethnic groups, whereas the plural is a single class 2 noun prefix a- instead

of combined class class 1 and 13 prefixes a- and tu-.

(15)   Classes 12/2 animates

a.

kabazhi	'reedbuck'	atubazhi	'reedbucks'
kankáña	'young girl'	atunkáña	'young girls'
kamáma	'dumb person'	atumáma	'dumb persons'
kambólu	'dove'	atumbólu	'doves'
kañáanda	'messenger'	atuñáanda	'mesengers'
kanyama	'animal'	atunyama	'animals'
kasháli'	'orphan'	atusháli	'orphans'
kawuloñuu	'relation'	awuloñu	'relations'
kazhíla	'bird'	atuzhíla	'birds'
kasumbi	'chicken'	atusumbi	'chickens'.

b.

Kalunda	'a Lunda person'	alunda	'Lunda people'
Kaluvale	'a Luvale person'	aluvale	'Luvale people'
Kachoku	'a Chokwe person'	achoku	'Chokwe people'
Kaluchazi	'a Luchazi person	aluchazi	'Luchazi people'

Class 14

Class 14 nominal prefix is <u>wu</u>-. This is an exclusively inanimate class and does not have nouns that denote human beings and other animates. Most of the members in this class are abstract and mass nouns.

(16) a. Abstract nouns:

wínyi	'boredom'
wóma	'fear'
wudi	'boredom'
wulelu	'shady place'
wuseya	'price, cost'
wúmi	'life'
wuvumbi	'sexual desire'
wuvu	'destitution, lack of cloth to wear'

b. Mass nouns:

wumi	'dew'
wíshi	'smoke'
wúña	'flour'
wanza	'dirt under foreskin'
wúchi	'honey'
wúshi	'rich or fertile soil'

Plural forms of some of the mass nouns do occur with a slight modification in their core semantics. In this case, they do retain their singular noun <u>wu</u>- in addition to taking class 6 noun prefix <u>ma</u>-, and thus means 'different kinds' or 'varieties' of the entity denoted by the noun.

(17)
wálwa	'beer'	>	mawálwa (cl. 6+14)	'different types of beer'
wuwa	'mushroom'	>	mawuwa (cl. 6+14)	'kinds of mushrooms'
waña	'magic, witchcraft'	>	mawaña (cl. 6+14)	
wanda	'cotton, thread'	>	mawanda (cl. 6+14)	

The class contains, however, some count mass nouns that employ class 6 noun prefix ma- for plurality. Some of them drop their singular class prefix wu-, while others add to it the new plural prefix.

(18)
wúta	'gun'	máta	'guns'
wufúku	'night'	mafúku	'nights'
wína	'hole'	ména (< ma-ina)	'holes'
wúti	'ash'	mawúti (cl. 6/14)	'ashes'
wévu	'beard'	mawévu (cl. 6 ma-/cl.14 wu-) 'beards'	
wátu	'boat'	mátu/mawátu	'boats'

Countable nouns that belong to other classes may be derived into abstract nouns by replacing the noun class prefix with that of class 14. That is, a noun stem may acquire new meanings by moving from one noun class to another. This derivational process is very productive in Lunda. For instance, ka-ánsi 'child', a class 1 countable noun, becomes wu-ánsi 'childhood', a class 14 noun:

(19)
wumbanda	'art of healing'	(< chimbanda	'healer')
wubinda	'art of hunting'	(< chibinda	'hunter')
wuleya	'foolishness'	(< chileya	'simpleton, fool')
wuvumbi	'sexual desire'	(< chivumbi	'adulterer')
wanta	'chieftainship'	(< mwanta	'chief')
wansi	'childhood'	(< kansi	'child')
wukwenzi	'state of being young'	(< mukwenzi	'youth')
wushinakazhi	'old age'	(< kashinakazhi	'old person)
wuzweñi	'poverty'	(< kazweñi	'poor person')
wuzhíla	'adultery'	(< kazhíla	'concubine')
wuntu	'humanity'	(< muntu	'person')
wushona	'compassion'	(< nshona	'desolate person')
wulozhi	'witchcraft'	(< mulozhi	'witch')
wukámbi	'theft'	(< ikómbi	'thief')
wuyála	'manhood, penis'	(< iyála	'man, male')
wuzhiki	'state of being unmarried'	(< muzhiki	'one who is unmarried')

Class 14 nouns can also be derived from verbs. Such nouns take the prefix wu-
and the suffix u- as illustrated below:

(20)	wuzhimu	'without light'	(< zhíma 'extinguish')
	wusamu	'tastelessness'	(< samúka 'be insipid')
	wufwetu	'payment, salary'	(< fweta 'pay')
	wusúpi	'foolishness'	(< kusupa 'be foolish, be stupid')

Class 15

This is called the infinitive class because all the nouns it contains are verbal nouns
which are marked with the infinitive prefix ku-, realized as kw- before vowel-initial
stems. In other words, infinitives are used as nouns and display nominal features to fulfill
some syntactic functions that are applicable to nouns. They can function as grammatical
subject or object; and they can also occur as head nouns and be modified by possessives,
quantifiers, adjectives, relative clauses and be followed by demonstratives. Although in
Lunda the infinitive class consists only of verbal nouns, this class has a few nouns that
refer to some body parts in some Bantu languages such as Luchazi (Fleisch 2000) and
Bemba. Below are some Lunda words belonging to the infinitive class:

(21)	kúfwa	'death'
	kukeña	'liking, love'
	kusémuka	'birth'
	kutama	'badness'
	kuwáha	'beauty'
	kwímba	'singing'
	kuvwála	'dressing'

3.1.1 Locative Classes (16, 17, 18)

The locative nouns can be derived from nouns from other noun classes through the addition of locative prefixes class 16 ha- 'on, on, off at', class 17 ku- 'to, from, at', and class 18 mu- 'in, into, out of' to complete nouns which already have their own inherent noun class prefixes. The vowel of the locative prefix ha- undergoes the same phonological process as other nominal prefixes such as ma-, a-, etc. when it comes into contact with a vowel-initial noun stem. The locative prefixes ku- and mu- are realized as kw- and mw- respectively when they are prefixed to vowel-initial noun stems. All the three locative prefixes can refer to static locations or to directions towards or away from the reference point and the difference in meaning is dependent on the inherent semantic of the verb. Moreover, the locative prefixes may be used for both location and time meanings.

(22)   ha-mu-kála   (cl. 16-cl. 3 'village')   'to/from/at the village'
       ku-ka-lóña   (cl. 17-cl. 12 'river')   'to/from the river'
       mu-ma-vunda (cl. 18-cl. 6 woodland')   'in the woodland'

When used with terms or names of people, the locative prefixes are attached to the copular verb di 'be' followed by a nominal constituent or pronoun.

(23)   a.   hádi wena   'on them'
       b.   múdi eyi   'in you'
       c.   kúdi táta   'to/from my father'

The locative prefixes are considered prefixes like any other noun prefixes rather than case-markers or prepositions. Their inclusion as one of the noun classes is based on the grammatical behavior in regard to nominal as well as verbal agreement. The nouns to

which they are attached can be subjects of clauses and govern agreement on the verbs

with which they occur. Locative subject-verb agreement has been noted in the Bantu

literature (Welmers 1973; Mufwene 1976; Kamwangamalu 1985). Such nouns can also

occur as head nouns of phrases or clauses and control agreement of some the modifiers

such as demonstratives, adjectives, and relative clauses by means of the locative affixes

instead of the noun affixes. In other words, the verb or the modifier that occurs with the

locative noun has a locative prefix.

(24)   a.   muchota múnu
               mu-   chi- ota   mu-   nú
               LOC18- 7-   open palaver hut LOC18- DEM
               'in this open palaver hut'

       b.   Mwitála mwatáma.
               mu-   i- tála mu-   a-   tama
               LOC18- 5- house LOC18- TNS- be bad
               'The inside of the house is bad.'

A number of complex locatives that express specific spatial and temporal

relationships can be formed using locatives prefixes. These include the following:

(25)   hánzhi   'outside'   (< cl.16 ha-nzhi)
       heshínadi   'to the opposite side, other side'   (< cl.16/5 ha-i-shinadi)
       heshina   'at the bottom'   (< cl.16+5 ha-i-shina)
       heséki   'on the ground'   (< cl.16+5 ha-i-séki)
       hamaséki   'on the ground'   (< cl.16+6 ha-ma-séki)
       mwishína   'underneath'   (< cl.18+5 mu-i-shina)
       hewulu   'above, in the air'   (< cl.16+5 ha-i-wulu)
       kumbádi   'to the side'   (< cl.17+9 ku-mbádi)
       kunsa   'to the edge'   (< cl.17+9 ku-nsa)
       kumbídi   'in future'   (< cl.17+9 ku-mbídi)
       hambidi   'before, in front'   (< cl.16+9 ha-mbídi)
       kunyíma   'behind, to the back' (< cl.17+9 ku-nyíma)
       hanyíma   'at the back, after'   (< cl.17+9 ku-nyíma)

Certain nouns cannot stand independently as they obligatorily require to be

marked by one of the locative prefixes.

(26) hakáchi   'in the middle'
      mukáchi   'inside'
      hakamwíhi   'near'

3.1.2 Double Noun Class Prefixes

In Lunda nouns denoting animates in the various noun classes take double

prefixes in the plural form, that is a combination of the normal noun class take prefix and

the class two plural prefix a̱- which occupies the first slot on the left. This morphological

shape for plural marking serves to distinguish animate from inanimate nouns.

(27) atúwa   'dogs   (< a-tu-wa cl. 2+13)
      ampombu   'monkeys'   (<a-mpombu cl. 2+10)
      amabwambu   'friends'   (< a-ma-bwambu cl. 2+6)
      ayisúpi   'fools'   (< a-yi-supi cl. 2+7)
      anyánta   'chiefs'   (< a-nyi-anta cl. 2+4)
      amandumi   'uncles'   (< a-∅-mandumi cl. 2+1a)

3.1.3. Secondary Use of Class 1/2 Prefixes

The prefixation of classes 1/2 noun prefixes mu̱-/a̱- to other nouns and pronouns

may have a derivational force in character. This affects the noun stem or independent

pronoun by modifying its basic semantics in that the lexical item acquires completely

new meanings. In short, new lexical items can be derived from other nouns and

independent pronouns through prefixation.

The class 1 <u>mwini-</u> 'owner' and its plural counterpart class 2 <u>eni-</u> 'owners' do not

stand alone. They are always preprefixed to other nouns or independent pronouns to

express the idea of ownership, and always occupy the initial position in such a compound

noun. Nouns derived from this derivational morphology acquire different meanings such

as the idea of 'belongingness', 'ownership', 'possession', and a host of others depending

on the context. The prefix <u>mwini-</u> can be used with nouns and plural independent

pronouns, while <u>eni-</u> only occurs attached to nouns.

(28) a. Prefix + personal pronoun
    mwinetu 'my (our) neighbor' (< etu 2sg personal pronoun)
    mwinenu 'your friend' (< enu 1pl personal pronoun)
    mwinawu 'their neighbor' (< awu 3sg personal pronoun)

  b. Prefix + noun
    mwiniluña 'landlord' (< iluña 'open space')
    eniitála   'householder' (< itála 'house')
    mwinimumbanda 'husband' (< mumbanda 'woman')

Other prefixes used in noun formation are <u>mukwa-</u> and <u>akwa-</u>. They are

composite prefixes consisting of classes 1/2 prefixes <u>mu-</u>/<u>a-</u> followed by class 17 prefix

<u>ku-</u> plus the possessive morpheme <u>a-</u>. The prefixes denote 'possession' and 'agentive'

when they are attached to independent pronouns or nouns to derive new nouns.

(29) a. Prefix + pronoun:
    mukwétu   'my/our friend' (< etu 1pl pronoun)
    akwétu   'my/our friends' (< etu 1pl pronoun)
    mukwénu   'your friend' (< enu 2pl pronoun)
    mukwáwu   'his friend/their friend'(< awu 3pl pronoun)
    mukwamana 'intelligent person' (< mana 'wisdom, intelligent'

  b. Prefix + noun:
    akwáshikola 'students'   (< shikóla 'school')
    akwamudimu 'workers'   (< mudimu 'work')
    mukwantádi 'quarrelsome people' (< ntadi 'argument')

c.   Prefix + infinitive
       mukwakwitiya   'believer'   (< kwitiya 'to believe')
       mukwakuzuwa   'the short-tempered one' (< kuzuwa 'be angry')

3.1.4 Diminutive

Class 12/13 prefixes ka- and tu- add diminutive and augmentative derivational

force when they occur as preprefixes with nouns from other classes. They may also give

referents appreciative and pejorative (depreciative) connotations. Before class 5 with a

vowel-initial noun stem, the addition of the prefix ka- triggers the change from i to -di.

The prefix tu- is also used with mass nouns to indicate a small amount of

something.

(30) a.   kamwána   'small child/beautiful child' (< mwána   'child')
             kapembi   'small goat'   (< mpembi 'goat')
             kaditála   'small house/nice house'   (< itála   'house')

      b.   tuyantu   'small men'   (< antu   'men')
             tumpembi   'small goats'   (< ampembi 'goats')
             tumatála   'small houses/nice houses' (< matála 'houses')

      c.   tumuñwa   'a little salt'   (< muñwa 'salt')
             tumenzhi   'a little water'   (< menzhi 'water')
             tuwúña   'a little flour'   (< wúña   'flour')

3.1.5 Augmentative

Classes 6, 7, and 11 noun prefixes ma-, chi- and lu-respectively may also be used

derivationally with nouns from other classes to denote augmentative or derogation and

command concords instead of the inherent noun class prefix. Augmentatives are much

less used than diminutives. The prefix lu- replaces the original class prefix of noun to

express enormity or large quantity, class 7 prefix chi- and class 6 prefix ma- can be

attached to a plural noun and the latter retains the prefix of its original class to serve the

same function.

(31) a.   luntu   'a lot of people/a giant' (< muntu   'person')
             luñombi   (cl. 11/9)   'a big ox'   (< ñombi   'cow')

       b.   manyitóndu (cl. 6/4)   'many big trees'   (< nyitóndu 'trees')
             mandombu (cl. 6/9)   'too much quarelling'   (< ndómbu   'quarrelling')

       c.   chimenzhi   (cl. 7/6) 'too much water'   (< menzhi   'water')
             chiyúma (cl. 7/4)   'a lot of things'   (< yúma   'things')

3.1.6 Other Prefixes

There are two other prefixes which can be attached to proper names, especially

names of children, and common nouns expressing circumstances. They are the feminine

prefix nya- 'mother of' and the masculine sa- 'father of'.

(32)   nyampása   'mother of twins'   (< mpasa   'twin')
       sampása   'father of twins'   (< mpasa   'twin')
       sakanaña   'Mr so and so'   (< kanaña   'so and so')
       sakampanda   'Mr so and so'   (< kampanda 'so and so')

When class 7 prefix chi- and 18 locative prefix mwa- are attached to the nouns

kampanda and kanaña; and the derived nouns denote such and such' and 'in such and

such a way'.

(33)   mwakampanda   'in such and such a way'
       chikanaña   'such and such a thing'

3.1.7 Deverbative Derivation

Several nouns that are widely distributed in the various noun classes derive

from verb stems. Such deverbative nouns can be divided into three distinct categories

according to their morphology. Some deverbative derivations are very productive, while

others are not. One way of deriving nouns from verbs is by simply adjoining noun class

prefixes to verb stems. However, this derivational process is not very productive in

Lunda. Some examples are given in (34):

(34)	Verb		Noun	
	loota	'dream'	chiloota	'dream'
	zhila	'forbid'	chizhila	'taboo'
	didima	'thunder'	chididima	'thunder'
	toñozhota	'think'	yitoñozhota	'thought'
	sekesha	'disrespect'	kasekesha	'disrespect'
	túka	'insult'	matúka	'insult'
	heta	'possess'	maheta	'wealth'
	tékela	'urinate'	matékela	'semen'

Other nouns that derive from verbs are formed through the addition of noun

prefixes to the verb stem and the replacement of the final vowel -a of the verb stem by -i

for agentive nouns, the subject who carries out the action, or the vowel -u for non-

agentive nouns.

(35)	a.	Agentive nouns:			
		Verb		Noun	
		diza	'learn'	kadizi	'learner'
		dima	'cultivate'	ndimi	'farmer'
		vwála	'sear'	nvwáli	'parent'
		kwásha	'help'	nkwáshi	'helper'
		lowa	'bewitch'	mulozhi	'witch'
		súma	'bite'	chisúmi	'that bites'

b. Non-agentive nouns:

Verb		Noun	
fwá	'die'	lúfu	'death'
fwá	'die'	múfu	'dead person'
zañalala	'rejoice'	muzañalalu	'joy'
kómba	'sweep'	kakómbu	'broom'
enda	'walk, travel'	lwendu	'journey'
kála	'suffer'	lukádi	'suffering'
dila	'cry'	madilu	'tears'
dila	'cry'	chidilu	'funeral'
yula	'rule'	chiyulu	'government'
kaba	'suffer'	makabi	'suffering'
ímana	'stand'	wímenu	'in a standing position'
tíyañana	'to agree one another'	chitíyañanu	'agreement'

A number of nouns are formed through a combination of prefixation of class prefixes and suffixation of the morpheme -ilu, or its variant -inu to a verb root and the final vowel /-a/ in some of the verbs changes to /e/ when the preceding vowel of the verb stem is /o/ as a result of vowel harmony.

(36)

Verb		Noun	
da	'eat'	chidiilu	'right hand'
pompa	'assemble'	chipompelu	'assembly'
handa	'be in good health'	chihándilu	'lifestyle'
sompa	'try a legal case'	sompeshelu	'court'
hósha	'speak'	nhóshelu	'way of speaking'
shakama	'sit, be placed'	wushakaminu	'in a sitting position'
ímana	'stand, halt'	chíiminu	'height, stature'
ímana	'stand, halt'	wímenu	'in a standing position'
káma	'sleep'	nkáminu	'sleeping place'

A few nominal derivatives are a result of a combination of noun class prefixation to a verb stem and the deletion of the last syllable of the verb stem. Some nouns formed out of this derivational process have -u for final vowel instead of -a.

(37)   a.   <u>Verb</u>   <u>Noun</u>
            lumbama   'heap'   mulumba   'heap'
            lambula   'pay tribute'   mulambu   'tribute'
            katála   'be lazy'   mukata   'lazy person'
            súmuka   'be insipid'   wusamu   'insipidness'

       b.   awuka 'cross a river'   chawu   'bridge'
            balula 'split off'   chibalu   'a piece of'
            shímuna   'relate'   chishímu   'a tale'
            kohóla 'cough'   kakóhu   'cough'

A few nouns denoting food that belong to classes 7 and 8 are derived from

possessive constructions consisting of a head noun and an infinitival modifier. The head

noun deletes on the surface leaving only the modifier functioning as a noun.

(38)   <u>Noun</u>   <u>Derivation</u>
       chúma chakúda   'a thing to eat'   chakúda   'food'
       chúma chakúnwa   'a thing to drink' chakúnwa   'drink'
       chúma chakuvwala   'a thing to wear'   chakuvwála   'cloth'

Table 4. Noun Class Prefixes

Class	Noun Prefix	Examples	Gloss
1	mu-	mu-ntu	person/man
2	a-	a-ntu	persons/people
1a	∅	∅-taata	father
2a	a-	a-taata	fathers
3	mu-	mu-tondu	tree
4	nyi-	nyi-tondu	trees
5	i-	i-tala	house
5	di-	di-isu	eye
6	ma-	ma-tala	houses
6	ma-	ma-isu[4]	eyes
7	chi-	chi-twamu	chair
8	yi-	yi-twamu	chairs
9	N-	m-buma	mango
10	N-	m-buma	mangoes
11	lu-	lu-bavu	rib
10	N-	m-bavu	ribs
12	ka-	ka-didi	bed
13	tu-	tu-didi	beds
14	wu-	wu-ta	gun
6	ma-	ma-ta	guns
15	ku-	ku-keña	love
16	ha-	ha-itala	at the house
17	ku-	kw-itala	to the house
18	mu-	mw-itala	in the house

---

[4] ma-isu is realized as meesu on the surface due to the process of vowel assimilation.

3.2 Personal Pronouns

Lunda has pronouns and pronominal stems for first, second and third person singular as well as plural. They can be divided into independent pronouns and pronominal affixes. Pronominal affixes fall into two categories, namely, pronominal prefixes and pronominal suffixes.

3.2.1 Independent Pronouns

Lunda has independent personal pronouns only for first, second person singular and plural, third person class 1 (singular) and its plural counterpart class 2. Independent pronouns have several uses in Lunda. They can be used as clausal topics, subjects and objects for emphasis. They are more frequently used in the main clause with verbs that take complementizers introducing both direct and reported speeches as well as in answers to questions (chap VII, subsection 7.2.1). Independent pronouns are also used when addressing a person. Consider the following examples in (39):

(39) a. Object
Ami, táta yéyi wanlezheli.
ami táta yi- a-   eyi wu- a-   n-   lezh -a
1sg father 1- POSS- 2sg 3sg- PAST- 1sg.OBJ tell -fv
'Your father told me.'

b. Subject
Yena, kánsi wenza halóshi.
yena ka- ánsi wu- a-   inz   -a halóshi
3sg 12- child 3sg- PAST- come -fv yesterday
'The child came yesterday.'

c.   Pronouns + complementizers:
kutíya wena náwu
ku- tíya wena náwu
INF- hear 3pl   COMP.3pl
'and they replied that'

d.   Address:
eyi, mwána
2sg child
'you, child'

In addition to the uses mentioned above, independent pronouns may also be used as anaphoric pronouns following the locative markers hádi 'on, at', kúdi 'to, at', and múdi 'in, within'. They can be attached to the conjunctive ni- with the meaning of 'also, too, as well' following a noun. An independent personal pronoun is also used with intensifiers built around the root eni 'self'. Furthermore, first and second person singular and plural independent pronouns can co-occur with the focus predicative independent pronouns for emphatic purpose. The various uses of the independent pronouns are illustrated by the examples in (40).

(40) a.   Locative phrases:
Wenza kúdi ami.
wu- a-   inz -a kúdi ami
3sg- PAST- come -fv to   1sg
'He came to me.'

b.   Emphatic pronouns:
yena yomwéni
3sg himself
'he himself'

c. Predicative Pronouns:
    Eyi, yéyi wáhosha.
    eyi yi-eyi   wu- a-   hósh -a
    2sg COP-2sg 2sg- PAST speak -fv
    'It is you who spoke.'

d. Ni- + pronouns:
    Nineyi wákenzi.
    ni-   eyi wu- aka-   inz -i
    CON- 2sg 2sg- FUT- come -SUBJ
    'You too should come.'

Class 1 third person singular independent personal pronoun consists of the

prefix yi- and the stem ena, while the class 2 third person plural independent personal

pronoun is made up of the prefix wu- and the stem ena. First and second person

independent personal pronouns are devoid of prefixes (see Table 5 of independent

personal pronouns).

The independent pronouns more frequently precede the locative pronoun whose

function is to reintroduce a contrastive topic of conversation. The locative pronoun,

which is used idiomatically, consists of a locative prefix attached pronominal stem.

(41) a. Etu kwétu chochenichi.
          etu ku- etu   chochenichi
          2sg LOC- 2sg like this
          'As for us, it is just like this.'

      b. Yena kwindi wakéña kuhema.
          yena ku-   indi wu- a-   keña ku- hema
          3sg LOC- 3sg 3sg- PAST- like INF- play
          'As for him, he likes playing.'

Table 5: Independent Personal Pronouns

1st person singular:	ami	'I, me'
1st person plural:	etu	'we, us'
2nd person singular:	eyi	'you'
2nd person plural:	enu	'you'
3rd person singular:	yena	's/he, her, him'
3rd person plural:	wena	'they, them'

3.2.2 Agreement Affixes

Lunda has a variety of agreement affixes, also known as concords in Bantu, that serve different functions. These affixes are marked on verbs, possessives, adjectives, numerals, quantifiers, demonstratives, etc. to bring them in agreement with the noun they follow. In other words, affixes agree in number person and noun class with noun phrase. There are two types of agreement affixes: 1) nominal/possessive agreement affixes and 2) verbal agreement affixes. Both types of agreement are largely dependent on the noun class of the noun phrase.

3.2.2.1 Nominal/Possessive Agreement Affixes

Modifiers are marked with nominal agreement prefixes and agree with the noun class of the noun they modify. They display variable forms whose features are governed by the noun class of the head noun. All modifiers generally follow the head noun that they modify. With the exception of possessives, modifiers that follow nouns denoting animates, irrespective of their classes, take class 1 and 2 agreement affixes.

(42)   wúta wamukwénzi
       wu-ta   wu-a-   mukwénzi
       3- gun 3-POSS-young man
       'the young man's gun/ the gun of the young man'

In (42) the possessor mukwénzi 'young man' agrees with the head noun wuta 'gun' in

number and noun class through the use of a class 3 agreement prefix wa- marked on it.

3.2.2.2 Verbal Agreement Affixes

A finite verb in Lunda, like in other Bantu languages, is obligatorily marked with

a subject prefix that agrees with a noun class of the constituent functioning as a subject of

that verb. Any noun that serves as a subject of the verb has a unique subject agreement

prefix whose morphological properties are determined by the noun class to which it

person singular and plural. In short, a verb must agree in number, noun class and person

with its subject. On the other hand, direct object agreement prefixes, unlike subject

prefixes, are optional and occur just before the verb stem and may also co-occur with the

post nominal direct object. This, however, does not apply when the postverbal direct

object is inanimate. Only animate nouns can govern grammatical object-verb agreement.

(43)   a.   Subject Agreement Prefix:
              mutóndu waholoka
              mu-tondu wu-a-   holok -a
              3- tree   3- PAST- fall   -fv
              'The tree fell.'

       b.   Direct Object Agreement Prefix:
              Mumbanda wamutambika kánsi.
              mu-mbanda wu-a-   mu- tambik -a ka-ánsi
              1- woman 1- PAST- OM1-call   -fv 1-child
              'The woman called the child.'

c.   *Nachilandi chisalu
       na-   chi- land -i chi- salu
       3sg.PERF- OBJ- buy -fv 7-   mat
       'S/he has bought the mat.'

In (43a) the verb contains a class 3 prefix wu- agreeing with the subject of a class 3 noun

phrase mutóndu 'tree' and in (43b) the verb is marked with a subject agreement prefix

wu- and a direct object prefix mu- agreeing with the subject noun mumbanda 'woman'

and nominal object noun kánsi 'child' respectively.

Locative agreement affixes also exist in Lunda. These are enclitics that are

suffixed to the verb. In addition, indirect objects can also be expressed as enclitics and

occupy the same post-verbal slot as locatives.

(44)   a.   Hachitwámu wadatáhu.
          ha-   chitwámu wu- a-   dat -a -hu
          LOC- chair   3sg- PAST- step -fv -LOC
          'S/he stepped on the chair.'

    b.   Mwitála wakombámu.
          mu- i- tála wu- a-   komb -a -mu
          LOC- 5- house 3sg- PAST- sweep -fv -LOC
          'He swept the inside of the house.'

Table 6. Noun Class Agreement/Pronominal Affixes

Class	Noun Prefix	Subj Prefix	Num Prefix	Adj Prefix	Poss Prefix	Obj Prefix	Enclitics
1	mu-	wu-/a-	wu-	wa-	wa-	mu-	-yi
2	a-	a-	a-	a-	zha-	yi-	-wu
3	wu-	wu-	wu-	wa-	wa-	wu-	-wu
4	yi-	yi-	yi-	ya-	ya-	yi-	-yu
5	di-	di-	di-	di-	di-	di-	-du
6	ma-	a-	a-	a-	a-	yi-	-yu
7	chi-	chi-	chi-	cha-	cha-	chi-	-chu
8	yi-	yi-	yi-	ya-	ya-	yi-	-yu
9	yi-	yi-	yi-	ya-	ya-	yi-	-yu
10	zhi-	zhi-	zhi-	zha-	zha-	zhi-	-zhu
11	lu-	lu-	lu-	lwa-	lwa-	lu-	-lu
12	ka-	ka-	ka-	ka-	ka-	ki-	-ku
13	tu-	tu-	tu-	twa-	twa-	tu-	-tu
14	wu-	wu-	wu-	wa-	wa-	yi-	-wu
15	ku-	ku-	ku-	kwa-	kwa-	ku-	-ku
16	ha-	ha-	ha-	ha-	ha-	-	-hu
17	ku-	ku-	ku-	kwa-	kwa-	-	-ku
18	mu-	mu-	mu-	mwa-	mwa-	-	-mu

3.3 Possessive Constructions

Lunda employs possessive constructions in which a noun is modified by another noun, numeral, quantifier, a pronoun, a demonstrative, an infinitive or a 'wh- question' morpheme. The two constituents enter into an associative relationship using agreement prefixes, commonly known as pronominal concord in Bantu studies, which are formally identical to noun prefixes. The noun preceding the modifier controls agreement, that is, the nominal modifier agrees with the noun class of the noun it modifies through the use of an agreement prefix also known as the associative marker, connexive (Maganga and Schadeberg 1992: 89-91) or associative (Kuperus and Mpunga wa Ilunga 1990: 14). The agreement prefix, whose shape is Ca- or Cwa-, consists of two elements-- a prefix which has the same form as a noun prefix, except for classes 1, 6, 9 and 10 whose forms are identical to a subject prefix, and the morpheme -a (see table 6 under adjective prefixes and possessive prefixes). The possessive construction has multiple meanings and functions, which are determined by the semantic of the two constituents that enter into possessive relationship. It may express the idea of ownership (genitive), source, quality, contents, usage or purpose/content, temporal, etc. The surface forms of the possessive agreement prefixes of all the noun classes are tabulated below:

Table 7: Possessive Agreement Prefixes.

Class	Prefix	Class	Prefix
1	wa	2	a
3	wa	4	ya
5	da	6	a
7	cha	8	ya
9	ya	10	zha
11	lwa	-	
12	ka	13	twa
14	wa	-	
15	kwa	-	
16	ha	-	
17	kwa	-	
18	mwa	-	

3.3.1 Possessive Constructions with Adjectival Meaning

Possessive constructions with adjectival meaning, also known as descriptive possessives (Poulos 1990:136) or possessive complexes (Carter 1971:18), do not really express physical possession in the strict sense of the term. They simply refer to, denote or describe the possession of qualities, features or attributes other than ownership, physical possession of an item by the possessor. The construction is formed by linking two nouns of which the possessor follows the noun it modifies. The second noun takes an agreement prefix governed by the noun class of the noun it follows, that is, it agrees in number and noun class with the preceding. In addition, semantics play a crucial role in distinguishing true possessives from possessive constructions with adjectival meanings.

(45) a.   mwána wamumbanda
             mu-ána wu-a-   mu-mbanda
             3- child 1- POSS- 1- female
             'a girl child'

      b.   muntu wañovu
             mu-ntu   wu-a-   ñovu
             1- person 1- POSS- 9.strength
             (lit: 'a man of strength')
             'a strong man'

      c.   muntu wamaána
             mu-ntu   wu-a-   ma-ána
             1- person 1- POSS- 6- wisdom
             (lit: 'man of wisdom'
             'a wise man'

      d.   mukwenzi wandombu
             mu-kwenzi wu-a-   ndoombu
             1- youth   1- POSS- 9.quarrel
             'a quarrelsome youth'

The construction may also be interpreted in terms of purpose or function. That is,

the item whose purpose/function is to accomplish something else.

(46) a.   menzhi akunwa
             ma-inzhi a- a-   ku-nwa
             6- water 6- POSS15-drink
             'drinking water'

      b.   itála dakuwelela
             i- tala   di- a-   ku- wel -ela
             5-house 5- POSS-15- bath -APPL
             'bathroom' (a house in which to take a bath)

It may also be interpreted as location (something belonging to a specific location), origin,

source (the item from which something is obtained), time, etc.

(47) a.   ñombi wamwisaña
             ñombi wu-a-   mu- i-saña
             9.cow 1- POSS- LOC-5- bush
             (lit: 'cow of the bush')
             'a buffalo'

      a.   antu akumukála
             a-ntu   a- a-   ku- mu-kála
             2-people 2- POSS- LOC-3- village
             'people from the village'

      b.   yúma yamwitála
             yi-úma yi- a-   mu- i-tala
             4- thing 4- POSS- LOC-5-house
             'household property'

      e.   kanyama wamwisaña
             ka-nyama wu- a-   mu- i-saña
             12-animal 1-   POSS-LOC- 5-bush
             'a wild animal'

      f.   nkwabilu zhachitémbi
             nkwabilu zhi- a-   chi-témbi
             10.shoes 10- POSS-7- leather
             'leather shoes'

      g.   wufúku waleélu
             wu-fúku wu-a-   leelu
             14-night 14- POSS-today
             'last night'

If the head noun is a locative noun phrase, agreement is between the modifier and

the inherent noun, and not with the locative noun. In other words, the form of the

possessive prefix is determined by the noun class of the noun to which the locative

prefix is attached instead of the locative prefix. This is illustrated by the examples below

in which the agreement prefixes attached to the modifier are not formally identical with

the locative prefixes of the head noun.

(48) a. hakáchi kawufúku
          ha- ka-achi ka- a-   wu-fuku
          LOC-12-middle 12- POSS-14- night
          'midnight'

      b. kumbádi yanzhila
          ku- mbádi yi- a-   nzhila
          LOC-9.side   9- POSS-9.road
          'beside the road'

3.3.2 Nominal Possessives

Nominal possessive constructions are structurally similar to possessive

constructions with adjectival meaning as outlined in 3.3. The possessor noun comes after

the possessed head noun (possessed) and takes an agreement prefix controlled by the

head noun. In other words, the possessor agrees with the head noun in person, number,

and noun class by means of the prefix plus the linking morpheme a-. The only difference

between the two lies in the fact that possessives denote some sort of possession,

ownership, or belonging.

(49) a. kasumbi katáta
          ka-sumbi ka- a-   táta
          12-fowl   12- POSS- father
          'the fowl of my father'

      b. muzhazhi wamutóndu
          mu-zhazhi wu- a-   mu-tándu
          3- root   3- POSS-3-tree
          'the tree's root'

      c. itála damwánta
          i- tala   di- a-   mu-ánta
          5-house 5- POSS-1-chief
          'the chief's house'

d.   watu wamukwétu
           wu-atu   wu-a-   mukwétu
           14- boat 14- POSS-friend
           'my friend's boat'

e.   kusémuka kwamwána
           ku-semuka ku-a-   mu-ána
           15-birth   15- POSS-1- child
           'the birth of the child'

In the singular noun classes there is no distinction in the possessive prefixes between animate nouns and inanimate nouns, except for classes 1a, 12 and 13. All of them take possessive agreement prefixes according to the classes of their head nouns, though there is a tendency among some speakers to use class 1 concord <u>wa</u>- for all animates belonging to other noun classes. However, the distinction between animate nouns and inanimate nouns occurs with the plural noun classes in that animates, with the exception of class 13, make use of the same possessive agreement prefix <u>zha</u>-. In this regard, Lunda is different from most of the Bantu languages which do not distinguish between animates and inanimates regarding possessive markers.

(50) a.   mukoku wamáma
              mu-koku wu- a-   máma
              3- sheep 3- POSS-mother
              'my mother's sheep'

       b.   tata ya mukwétu
              tata   yi- a-   mu-kwétu
              father 1- POSS- 1- friend
              'my/our friend's father'

       c.   atata   zhawakwétu
              a-tata   zhi- a-   a-kwétu
              2-father 2- POSS- 2-friend
              'our friends' fathers'

When the possessor is a location, possession is expressed by affixing class 17

locative prefix ku- plus the possessive linking morpheme -a to mean 'the place belongs to

a person or persons' (to/at the house or place of/ from the place of'). The locative

agreement prefix comes before to a person or a personal pronoun.

(51)   a.   kwatáta yíndi
               ku-a   tata   yi-a-   indi
               LOC-POSS father 1- POSS-3sg
               'to/at his father's house'

        b.   kwantáñishi
               ku- a-   ntañishi
               LOC-POSS- teacher
               'to the teacher's place'

Where the possessed item is a locative noun phrase, agreement is only between

the possessor and the inherent nominal class of the head noun and not with the locative

prefix. In other words, the noun prefix of the inherent noun determines the form of the

possessive agreement prefix. In some Bantu languages such as Bemba (Givón 1972),

Luba (Kuperus and Mpunga wa Ilunga 1990) and Shona (Brauner 1995) the modifier

following a locative noun phrase may agree either with the original noun class or the

locative.

(52)   a.   kwitála datáta
               ku-i- tála di-a-   táta
               LOC-5-house 5-POSS-father
               'to father's house'

        b.   hakáchi kamukála
               ha-ka-achi   ka-a-   mukála
               LOC-12-middle 12-POSS-village
               'in the middle of the village'

c.   mwishína dakadidi
     mu- i-shina di-a-   ka-didi
     LOC-5-under 5-POSS- 12- bed
     'under the bed'

3.3.3 Possessive Pronouns

Possessive pronouns are formed exactly like nominal possessive constructions
except that the second constituent consists of a pronominal stem which agrees with the
head noun through the use of a possessive concord. That is, possessive pronouns are
compounds containing the possessive agreement prefix plus linking morpheme -á-
attached to a pronominal stem. The linking morpheme assimilates to the immediate
following initial vowel of the pronominal stem to which it is attached. Moreover, class 1
first and second person singular and plural pronominal stems have the same morphology
as absolute independent pronouns. Possessive pronouns may function as genitive
possessor without an overt head noun.

(53) a.   káwa kámi
          ka-wa   ka-a-ámi
          12-dog 12-POSS.1sg
          'my dog'

     b.   kadidi kéyi
          ka-didi ka-a-eyi
          12- bed 12-POSS.2sg
          'your bed'

     c.   yúma yíndi
          yi-úma yi-a-indi
          8- thing 8- POSS.3sg
          'his/her things'

d.   mwizukulu wíndi
       mu-izukulu   wu-a-indi
       1- grand child 1- POSS.3sg
       'his/her grand child'

e.   mpóku yéyi
       mpóku yi-a-eyi
       9.knife 9- POSS.2sg
       'your knife'

Possessive pronouns for inanimate noun classes are pronominal suffixes

according to the noun class of the antecedent plus the morpheme -ų (see enclitics in table

7 above) and are attached to the possessive agreement prefixes which agree with the head

nouns.

(54)   a.   máfu amutóndu
           ma-fu   a-a-   mu-tóndu
           6- leaf 6-POSS-3- tree
           'the leaves of the tree'

     b.   máfu awu
           ma-fu   a-a-wu
           6- leaf 6- POSS.3
           'its leaves'

(55)   a.   muhínyi wetémwa
           mu-hinyi   wu-a-   i-temwa
           3- handle 3- POSS-5-hoe
           'the handle of a hoe'

     b.   muhínyi wádu
           mu- hinyi   wu- a-du
           3- handle 3- POSS.5
           'its handle'

The locative noun phrase requires the agreement prefix attached to the possessive

pronominal stem and controlled by the noun class of the inherent noun, and not that of

the locative noun phrase. This is exemplified by the examples in (56):

(56) a.   muchitwámu chíndi
             mu-   chi-twamu chi- a-indi
             LOC- 7- chair   7-   POSS.3sg
             'in his chair'

      b.   * muchitwámu mwíndi
             mu-   chi-twamu mu   a-indi
             LOC- 7- chair   LOC- POSS.3sg
             'in his chair'

      c.   hakáchi káwu
             ha-   ka-achi   ka- a-awu
             LOC-12- middle 12- POSS.3pl
             'in their midst'

      d.   hakáchi háwu
             ha-   ka-achi   ha-   a-awu
             LOC-12- middle LOC- POSS.3pl
             'in their midst'

Table 8: Possessive Pronominal Stems

1st person singular:	ami
1st person plural:	etu
2nd person singular:	eyi
2nd person plural:	enu
Class 1:	indi
Class 2:	awu

Several nouns that refer to relationships present some irregularity regarding

possessive agreement (concords). They do not take possessive agreement prefixes;

instead they directly suffix the possessive pronominal stems.

(57) a.   mwánami
             mu-ána- ami
             3- child- POSS.1sg
             'my child'

b.   muhélindi
       mu-hela   indi
       1- sister POSS.1sg
       'his sister'

A few nouns do not stand alone in the singular form; they always appear

obligatorily joined to possessive personal pronominal stems. However, they do have

possessive concords in the plural form.

(58)   a.   nfumwíndi
              nfumu-indi
              9.husband-POSS.3sg
              'her husband'

       b.   anfumu zháwu
              a-nfumu   zhi-a-awu
              2-husband 10-POSS.3pl
              'their husbands'

       c.   ñódindi
              ñodi indi
              wife POSS.3sg
              'his wife'

       d.   añódi zháwu
              a-nodi zhi-awu
              2-wife 2- POSS.3pl
              'their wives'

       e.   mwanyikámi
              mu-anyi   ka-ámi
              1-young brother/sister POSS.1sg
              'my young brother/sister'

       f.   anyíki zhámi
              a-anyiki   zhi-ami
              2-young brother/sister 2-POSS.1sg
              'my young brothers/sisters'

Other nouns do not determine the agreement prefixes attached to the pronominal stems. That is, the possessive pronouns do not agree with the noun class of the head nouns they modify. Instead they take agreement prefixes such as <u>wu</u>-, <u>ku</u>-, as illustrated in (59a) through (59d):

(59) a. kawusoki wíndi
    ka-wu-soki wu-a-indi
    12-14- relative 14- POSS.3sg
    'his relative'

   b. awusoku wawu
    a-wu-soki wu-awu
    2-14-relative 14-POSS.3pl
    'his relatives'

   c. mána kwíndi
    brother ku-a-indi
    brother 17-POSS.3sg
    'his/her brother'

   d. ána kwíndi
    brothers ku-a-indi
    brothers 17-POSS.3sg
    'his/her brothers'

   e. ána kwáwu
    brother ku-awu
    brother 17-POSS.3pl
    'their brothers'

A very small number of nouns denoting relationships require the use of the comitative morpheme <u>na</u>- 'and, with' prefixed to the pronominal stem instead of the agreement prefixes to express possession.

(60) a. mulunda níndi
    mu-lunda na- indi
    1- friend with-POSS.3sg
    'his/her friend'

b.   alunda nawu
       a-lunda na- awu
       a-friend with-POSS.3pl
       'their friends'

c.   muhádi níndi
       mu-hádi   na- indi
       1- co-wife with-POSS.3sg
       'her co-wife'

b.   asensi nétu
       a-sensi   na- etu
       2-joking relatives with-POSS.1pl
       'our joking relatives'

3.3.4. Adjectives

Lunda has a very limited number of adjectives which can be divided into three distinct categories according to their behavior in respect with agreement prefixes. Some adjectival roots take pronominal agreement prefixes formally identical to subject prefixes, others take possessive construction agreement prefixes, while the rest display compound agreement prefixes. Adjectives, like other modifiers, consist of two parts, an agreement prefix and a stem. An adjective follows the head noun it modifies and agrees with it in person, number and noun class.

3.3.4.1 Simple Adjectives

A few adjective roots take single agreement prefixes which are formally identical with the subject agreement prefixes in both their attributive and predicative functions. The pronominal agreement prefixes, with the exception of classes 2, 7, 8, 12,13, and 14,

are morphologically distinct from the noun class prefixes. Simple adjectives agree in

number, person and noun of the head noun they follow. These adjectives in this group

denote mostly colors and temperature and also exist as verbs.

(61) a.   iyañwa dichínana
            i-yañwa   di-chínana
            5-pumpkin 5-red
            'a red pumpkin'

      b.   mayáñwa achínana
            ma-yañwa   a-chinana
            6- pumpkin 6-red
            'red pumpkins'

      c.   mukánda wuchínana
            mu-kánda wu-chinana
            3- book 3- red
            'a red book'

      d.   nyikánda yichínana
            nyi-kánda yi-chinana
            4- book 4-red
            'red books'

Generally, adjectives can stand alone and function as an anaphoric pronoun

without the head noun when the modified head noun and the context are very clear.

Consider the second part of the example (62) in which the adjective chíyila 'the black

one' occurs without the head:

(62)   Chéña chichínana chenéni, chiyila chanyanya
         chi-éña   chi-chínana chi-a-   inéni chiyila chi-a-   nyanya
         7- plate 7- red   7- POSS- big   black 7- POSS-small
         'the red plate is big, the black (one) is small.'

Adjectival stems that make up this group are listed below:

(63)   chínana   'red'
          tóoka   'white'
          íliya   'black'
          tontola   'cold, cool'
          menzhi a matamba   'green'
          tuta   'fresh, cool, green'

These adjectives can also be used as verbs and be coded with morphological markers for tense, aspect and modality.

3.3.4.2 Adjectives with Possessive Agreement Prefixes

Certain adjectives take the possessive-based single agreement prefixes. That is, they agree with the head noun they follow through the use of the possessive prefix consisting of a prefix and the linking morpheme -a-. These adjectives may stand alone and be used as independent pronouns without changing their morphology. This group consists of more adjectives than the previous one. Although most of roots used with possessive agreement prefixes are true adjectives, some verb roots are also found in this category.

(64) chéñi   'different'
     cháshi   'open'
     ntesha   'few, little'
     nti   'little'
     nyanya   'small'
     táchi   'first'
     lala   'true, real, genuine, correct, right'
     néni   'big'
     wenyi   'complete, whole'
     mukunkulwayi   'worthless'
     tama   'be bad'
     lema   'be heavy, important, worthy'
     peela   'be light in weight, easy, slight in bulk'

The adjectives are joined to the head noun by means of the possessive linking morpheme,

as illustrated by the following examples:

(65) a.   mwána wanyanya
            mu- ana   wu- a-   nyanya
            1- child 1- POSS- small
            'a small child'

      b.   yúma yantéesha
            yi- uma yi- a-   ntéesha
            4- thing 4- POSS- few
            'few things'

      c.   iyáñwa denéni
            i- yáñwa   di- a-   inéni
            5- pumpkin 5- POSS-big
            'a big pumpkin'

      d.   mayáñwa anyanya
            ma- yáñwa   a- a-   nyanya
            6- pumpkin 6- POSS- small
            'small pumpkins'

3.3.4.3 Adjectives with Double Agreement Prefixes

In Lunda, other adjectives are marked with double agreement prefixes the first of which is a possessive particle consisting of a prefix plus the morpheme -a followed by another agreement prefix[5]. The two prefixes involved have the shape of subject prefixes. The adjectives may also stand alone and be used independently as nouns without any lexical head noun to agree with. Below is a list of adjectives that take double agreement prefixes:

(66) ashi   'open'   éni   'self, the very self'
      ha   'new'   vúlu   'many, much'
      ihi   'short, near'   úmi   'alive'
      leéhi   'long, far, long, tall'   ovu   'soft, tender, yielding'
      kúlu   'old, ancient, long ago'
      wáahi   'good, nice, pleasant, right'
      isu   'green, fresh, unripe, raw, uncooked'

The examples below illustrate this type of adjectival construction:

(67) a.   muntu wamuwáhi
            mu-ntu   wu-a-   mu-wáhi
            1- person 1- POSS-1- nice
            'a nice person'

      b.   wamuwáhi
            wu-a-   mu-wáhi
            1- POSS-1- good
            'the nice one'

(68) matála   amavúlu
      ma-tála   a-a-   ma-vúlu
      6- house 5-POSS- 6- many
      'many houses'

---

[5] Adjectives with double prefixation is not peculiar to Lunda alone, it is also found in other languages among them Luvale (Horton: 1949), and Luchazi (Fleisch: 2000).

(69)   mbúma yayísu
        mbúma yi-a-   yi-ísu
        9.mango 9- POSS-9- raw
        'a raw mango'

The following table is a list of the adjectival agreement prefixes of the different classes:

Table 9: Adjectival Double Prefixes.

Class	Prefix	Class	Prefix
1	wamu-	2	ama-
3	wawu-	4	yayi-
5	dadi-	6	ama-
7	chachi-	8	yayi-
9	yayi-	10	zhazhi-
11	lwalu-	6	ama-
12	kaka-	13	twatu-
14	wawu-		
15	kwaku-		
16	haha-		
17	kwaku-		
18	mwamu-		

Unlike possessives and other modifiers, adjectival agreement is with the locative class itself instead of the inherent noun class when the head noun is a locative expression. Locative nouns do control locative concords when adjectives are involved, as illustrated by the examples in (70).

(70)   a.   mwitála mwamuwáhi
              mu- i-tála   mu-a- mu-wáhi
              LOC-5-house LOC- POSS-LOC- good
              'in the good house/the inside of the house is good '

        b.   kumukála kwakuléhi
              ku- mu-kála ku-a-   ku-leehi
              LOC-3- village LOC-POSS-LOC-far
              'the village is far/to the far village'

The adjectival stem <u>éni</u> (see chap III section 3.2.6) can also be used as an

adjective to mean 'actual, self, the very' and takes double prefixes which agree with the

noun class of the head noun with the first agreement prefix linked to the associative

morpheme -<u>a</u>.

(71)   hezalelu dadéni
        ha-   i- zalelu   di-a-   di-eni
        LOC-5-rubbish heap 5- POSS-5- actual
        'on the actual rubbish heap'

There is only one adjectival stem that uses the noun class 1 subject prefix <u>mu-</u> for

adjectival agreement as well. This is '<u>kwáwu</u> 'another/other, additional, different'.

(72)   muntu mukwáwu
        mu-ntu   mu-kwáwu
        1- person 1- another
        'another person'

3.3.5. Cardinal Numerals

Cardinal numerals follow the pattern of simple adjectives. Numeral stems are

marked with agreement prefixes whose morphological shapes are determined by the

modified noun. The agreement prefixes, except for classes 1, 3 and 6, are identical to the

noun class prefixes. Classes 1 and 3 take the prefix <u>wu</u>- and class 6 makes use of <u>a</u>-. The

singular prefix is attached to 'one' and the plural to the numbers greater than 'one'. The

basic cardinal numeral stems in Lunda range from 'one' through 'five'. In other words,

numerals are based on groups of 'five' in Lunda. The numerals from 'five' to 'nine' are

compounds which consist of an addition of 'five' and the smaller numbers 'one' to 'four'.

Table 10: The Cardinal Numeral Stems.

mú	'one'
iyedi	'two'
satú	'three'
waná	'four'
tanú	'five'

Below are examples of numeral stem mú 'one' used with singular nouns from some of

the noun classes.

(73)   a.   muntu wumú
               mu-ntu   wu-mú
               1- person 1- one
               'one person'

        b.   itála dimú
               i-tala   di-mú
               5-house 5-one
               'one house'

        c.   chitwámu chimú
               chi-twámu chi-mú
               7- chair   7- one
               'one chair'

Other numeral stems are only used in the plural forms or classes, as illustrated by

examples from various noun where the modifier agreement prefixes are almost copies of

the noun prefixes of the head nouns which precede them:

(74)   a.   antu ayedí
               a-ntu   a-yedí
               2- people 2-two
               'two people'

        b.   matála asatú
               ma-tala   a-satú
               5- house 5-three
               'three houses'

c.   njéki zhiwaná
      njéki   zhi-waná
      10.bag 10- four
      'four bags'

d.   tuhébi tutanú
      tu-hébi   tu-tanú
      13-basket 13-five
      'five baskets'

For general counting purposes, the language makes use of classes 7 and 8 numeral agreement prefixes, while the numeral stems 'one' to 'five' take agreement prefixes that are identical to their head noun classes.

(75)   chimú   'one'
        yiyedí   'two'
        yisatú   'three'
        yiwaná   'four'
        yitanú   'five'

The numbers 'six' to 'nine' are arrived at through the addition of 'five' and any respective number. This additive construction consists of the number 'five' followed by a comitative morpheme na- 'and' prefixed to the corresponding number. Both the first number and the second number that form the construction agree with the corresponding referent in number, person and noun class. For instance, for the number 'six' the first part, which is 'five' must have plural marking and the second constituent 'one' singular agreement prefix.

(76)   a.   antu atanú nawumú
           a-ntu   a-tanú na- wu-mú
           2- people 2-five and-1- one
           'six people'

b. yéña yitanú nayiyedí
  yi-éña yi-tanú na- yi-yedí
  8- plates 8- five and-8- two
  'seven plates'

c. swáha zhitánu nazhisatú
  nswáha zhi-tánu na- zhi-satú
  9.calabashes 10-five and- 10- three
  'eight calabashes'

d. tudidi tutánu natuwaná
  tu-didi tu-tánu na- tu-waná
  13-beds 13-five and- 13-four
  'nine beds'

For the numeral 'ten', Lunda employs a class 5 noun <u>ikúmi</u> which is used in apposition to a preceding noun without taking an agreement prefix according to the noun class of the head noun. That is, it does not agree in number, person and noun class with the referent. To express numbers ranging from 'eleven' to 'nineteen', small numbers are added to 'ten'. They are preceded by the comitative morpheme <u>na-</u> and agreement with the head noun applies, as is the case with 'six' through 'nine'.

(77) a. ikúmi
    i- kúmi
    5- ten
    'ten'

   b. nyikánda ikúmi nawumú
    nyi- kánda i- kúmi na- wu- mú
    4- book 5- ten and-3- one
    'eleven books'

   c. nyikanda ikúmi nayiyedí
    nyi- kánda i- kúmi na- yi- yedí
    4- book 5- ten and- 4- two
    'twelve books'

d.   nyikanda ikúmi nayisatú
        nyi- kánda i- kúmi na- yi- satú
        4- book 5- ten and- 4- three
        'thirteen books'

As for multiples of 'ten', that is 'twenty', 'thirty' etc., the noun stem kúmi takes

class 6 noun prefix ma- numbers and the following lower number takes the agreement

prefix a-.

(78)   a.   makúmi ayedí
          ma- kúmi a- yedí
          6- ten 6- two
          'twenty'

       b.   makúmi asatú
          ma- kúmi a- satú
          6- ten 6- three
          'thirty'

The numeral 'hundred' and 'thousand' are also class 5 lexical nouns inkulakazhi

and ikombakazhi respectively. Their plural counterparts are class 6 nouns makulakazhi

and makombakazhi. They are used in a similar fashion as ten and its multiples and are

expressed by a construction involving the comitative morpheme na-.

(79)   a.   makulakazhi asatú
          ma- kulakazhi a- satú
          6- hundred 6- three
          'three hundred'

       b.   makulakazhi asatú naatanú
          ma- kulakazhi a- sátu na- a- tanú
          6- hundred 6- three and- 5- five
          'three hundred and five'

       c.   makombakazhi
          ma- kombakazhi a- waná
          6- thousand 6- four
          'four thousand'

3.3.6 Ordinal Numerals

Ordinal numerals are nominal postmodifiers and agree with the head noun by

means of complex prefixes consisting of the possessive agreement prefix according to the

noun class of the head, the locative prefix mu-, and the prefix chi- and the numeral stem.

Some ordinal numerals such as táchi 'first' and kukúmina 'last' derive from verbs

kutáchika 'to start' and kukúmina 'to end'. The numeral stem táchi 'first' may drop off

some prefixes.

(80) a.   muntu watáchi
               mu- ntu   wu- a-   táchi
               1- person 1- POSS- first
               'the first person'

      b.   muntu wamuchisatú
               mu- ntu   wu- a-   mu- chi- satú
               1- person 1- POSS-18- 7- three
               'the fourth person'

      c.   kakwézhi kamuchiyedí
               ka- kwézhi ka- a-   mu- chi- yedí
               12- month 12- POSS-18- 7- two
               'the second month'

Ordinal numbers over five are compounds joined by the connective na-. The second

part of the compound has only one agreement prefix whose shape is determined by the

noun class of the head noun.

(81) a.   chúma chamuchitanu nachimú
               chi-úma chi-a-   mu-chi-tanu na- chi-mú
               7- thing 7- POSS- 18- 7- five and- 7- one
               'the sixth thing'

b.   kakwézhi kamuchitanu nachiwaná
ka- kwezhi ka- a-   mu- chi- tanu na- chi- waná
12- month 12- POSS-18- 7-   five and- 7-   four
'the ninth month'

The same type of construction applies to the days of the week with the locative

prefix ha- 'on' attached to the noun ifúku 'day'. The numeral, which follows the temporal

expression, is in agreement with the class of the inherent noun, and not with the locative

noun.

(82)   hefúku damuchisatú   'on the third day'
         hefúku damuchiwaná   'on the fourth day'

When the day of the week is used without the preceding noun, it occurs with the

locative prefix ha- and the prefix chi- leaving out the locative prefix mu-. The presence of

the locative prefix shows that the numeral agrees with an abstract temporal noun, as

shown below:

(83)   hachiwaná   'on Thursday'
         hachitanú   'on Friday'

For time frequency, Lunda makes use of a possessive construction consisting of

the noun ipampa/mapampa 'occasion, incidence' followed by a cardinal number which

takes the agreement prefix ka- instead of di-/a- according to noun class 5 and 6.

(84)   a.   ipampa kamú
           i- pampa ka- mú
           5-time   5- one
           'once'

     b.   mapampa kayedí
           ma- pampa ka- yedí
           6- times 12- two
           'twice'

c.   mapampa kasatú
       ma- pampa ka- satú
       6-   times 12- three
       'three times'

The noun ipampa may be left out and the prefix ka- is simply affixed to the

numeral stem to serve as multiplicatives in order to express 'once', 'twice', etc.

(85)   kamú   'once'
        kayedí   'twice'
        kasatú   'three times'
        kakavúlu 'several times'

3.3.7 Quantifiers

Quantifiers follow the nouns they modify and are brought into agreement with

them by means of the possessive-based single agreement prefixes. Plural and singular

semantics of quantifiers derive from noun classes (see subsection 3.3.4.2).

(86)   a   muntu wézhima[6]
           mu- ntu   wu- ézhima
           1- person 1- every
           'every person'

     b.   antu ézhima
           a- ntu   a- ézhima
           2- person 2- all
           'all the people'

     c.   ituña dézhima
           i- tuña   di- ézhima
           5- country 5- every
           'the entire country'

---

[6] The vowel of the pronominal prefix fuses with the vowel of the quantifier stem and takes on the quality of the latter.

d.   matuña ézhima
       ma- tuña   a- ézhima
       6-   country 6- all
       'all the countries'

The quantifier stems mostly used in the language are given in the table below:

Table 11: Quantifiers.

kwáwu[7]	'some, a certain, other, additional'
ézhima	'every, all, every, whole'
ónsu	'every, all, every, entire, whole'
nka	'alone, by oneself'
ena	'self'
éni	'only, self, by itself, the very one'

With a locative a noun, that is a noun with an inherent nominal prefix plus the

locative prefix, the modifier stands in agreement with the noun class of the head noun and

not with the locative class.

(87) a.   hamukála wézhima
              ha-   mu- kála   wu- ézhima
              LOC- 3-   village 3-   whole
              '(at) the whole village'

      b.   hanyikála yézhima
             ha-   nyi- kála   yi- ézhima
             LOC- 4-   villages 4- all
             'at all the villages'

A plural personal pronoun stem may follow a quantifier. Both the quantifier and

the pronominal stem prefixes the agreement prefix wu-.

(88) 1st person plural: wézhima wetu   'all of us'
      2nd person plural: wézhima wenu   'all of you'
      3rd person plural: wézhima wawu   'all of them'

---

[7] Class 1 and 2 agreement prefixes for this stem are mu- and ama- respectively.

A quantifier can be preceded by an independent pronoun or followed by a pronominal

stem.

(89) 1st person plural: etu ézhima   'all of us'
      2nd person plural: enu ézhima   'all of you, you all'
      3rd person plural: wena ézhima   'all of them'

A quantifier can also be expressed by affixing the locative morpheme <u>mu</u>- to the

possessive linking morpheme -á̱- followed both by the appropriate numeral stem.

Consider the following examples:

(90)   mwayedí wétu   'both of us'
      mwasatú wénu   'all three of you'
      mwatanú wáwu   'all five of them'

Indefiniteness is expressed by the numeral stem -<u>mú</u>- 'a, some'. When the prefix

is a locative marker, it may mean 'same, together, some' or 'perhaps'. This stem takes the

agreement prefix similar to the cardinal numerals.

(91)   wumú   'a certain, one'
      antu amú   'some/certain people'
      hamú   'together, perhaps'
      kumú   'to, at some place'
      mumú   'in some place'

The agreement prefix may be reduplicated to give emphatic meaning 'the very

one, the same' to the stem. The initial prefix is associated to the morpheme -<u>o</u>, as

illustrated by the examples in (92):

(92)   a.   kawúmbu kokamú
          ka- wumbu ko- ka- mú
          12- ant hill 12- 12- one
          'the same ant hill'

b.   mutóndu wowumú
        mu- tondu wo- wu- mu
        3- tree   3- 3- same
        'the same tree' or 'the very tree'

The quantifier 'alone/by oneself' is formed by means of the morpheme nka-
prefixed to the personal pronoun consisting of class 1 agreement prefix wu- and the
possessive pronominal stem.

(93)   1st person singular: nkawámi   /nka-wu-ami/   'I alone'
         2nd person singular: nkawéyi   /nka-wu-eyi/   'you alone'
         3rd person singular: nkawíndi   /nka-wu-indi/   'he/she alone'
         1st person plural: nkawétu   /nka-wu-etu/   'we alone'
         2nd person plural: nkawénu   /nka-wu-enu/   'you all alone'
         3rd person plural: nkawáwu   /nka-wu-awu/   'they alone'

The inclusive quantifier with the meaning 'also' is the word náwa or the prefix ni-
.The latter is usually prefixed to a personal pronoun and may co-occur with the word
náwa. The exclusive quantifier is expressed by the morpheme chíña 'except' which also
functions as a deontic particle to introduce a clause.

(94)   a.   ninámi   'me also'
        b.   yena náwa   'he also'

3.3.8 Emphatic Modifiers

The emphatic modifier with the emphatic function of 'self, the very self, own' in
Lunda is built around the pronominal stem -éni 'actual, self, oneself' attached to the
double prefix a- and wu-. For first and second person singular and plural the construction
consists of an independent pronoun followed by the pronoun awéni. This order can be
inverted, that is, the emphatic modifier can precede the independent pronoun. Class 1

morphology is somewhat different from the rest in that it consists of the prefixes yi- and

mu- instead of a- and wu-. As for class 2, the pronominal stem precedes the possessive

pronominal stem awu 'their'. Emphatic modifier can either follow a coreferential

noun or an independent pronoun. Classes 3 to 18 make use of reduplicated pronominal

prefixes consisting of possessive prefix and an agreement prefix attached to the

pronominal stem -éni.

(95) a. 1sg ami awéni   /ami a-wu-éni/   'myself'
          2sg eyi awéni   /eyi a-wu-éni/   'yourself'
          1pl etu awéni   /etu a-wu-éni/   'ourselves'
          2pl enu awéni   /enu a-wu-éni/   'yourselves'
          3sg yomwéni   /yi-o-mu-éni/   'himself'
          3pl awenáwu   /a-wu-eni-áwu/   'themselves'
          3pl antu awéni   /antu a-wu-éni/   'people themselves'

      b. cl. 3 wawéni   /wu-a-wu-éni/   'itself'
          cl. 4 yayéni   /yi-a-yi-éni/   'themselves'
          cl. 5 dadéni   /di-a-di-éni/   'itself'
          cl. 6 ayéni   /a-a-yi-éni/   'themselves'
          cl. 7 chachéni   /chi-a-chi-éni/   'itself'
          cl. 8 yayéni   /yi-a-yi-éni/   'themselves'
          cl. 9 yayéni   /yi-a-yi-éni/   'itself'
          cl. 10 zhazhéni   /zhi-a-zhi-éni/   'themselves'
          cl. 11 lwalwéni   /lu-a-lu-éni/   'itself'
          cl. 12 kakéni   /ka-a-ka-éni/   'itself'
          cl. 13 twatwéni   /tu-a-tu-éni/   'themselves'
          cl. 15 kwakwéni   /ku-a-ku-éni/   'itself'
          cl. 16 hahéni   /ha-a-ha-éni/   'itself'
          cl. 17 kwakwéni   /ku-a-ku-éni/   'itself'
          cl. 18 mwamwéni   /mu-a-mu-éni/   'itself'

Table 12: Agreement Prefixes

Class	Num Pref	Poss Pref	Adj Pref
1sg			wa-(mu-)/mu-
2sg			wa-(mu-)/mu-
1pl			a-(ma-)
2pl			a-(ma-)
1	wu-	ya-	wa-(mu-)/mu-
1a	wu-	ya-	wa-(mu-)
2	a-	zha-	a-(ma-)
2a	a-	zha-	a-(ma-)
3	wu-	wa-	wa-(wu-)
4	yi-	ya-	ya-(yi-)
5	di-	da-	da-(di-)
6	a-	zha-	a-(ma-)
7	chi-	cha-	cha-(chi-)
8	yi-	ya-	ya-(yi-)
9	yi-	ya-	ya-(yi-)
10	zhi-	zha-	zha-(zhi-)
11	lu-	lwa-	lwa-(lu-)
10	zhi-	zha-	zha-(zhi-)
12	ka-	ka-	ka-(ka-)
13	tu-	twa-	twa-(tu-)
14	wu-	wa-	wa-
6	a-	a-	a- a-(ma-)
15	ku-	kwa-	kwa-(ku-)
16	ha-	ha-	ha-(ha-)
17	ku-	kwa-	kwa-(ku-)
18	mu-	mwa-	mwa-(mu-)

3.4 Demonstratives

Demonstratives are deictic in nature in that they refer to a nominal entity which is specified with regard to relative degree of distance. In Lunda, demonstratives are the only class of modifiers that can either precede or follow the nominal head. They may be used in apposition to nouns as modifiers agree in number and noun class with the nouns they either refer to or replace. That is, demonstrative roots are inflected with a noun class pronominal agreement. In other words, demonstratives exhibit morphological shapes that vary according to the noun class of the referents.

3.4.1 Simple Demonstratives

Lunda has four sets of demonstratives for each noun according to the degree of relative distance and position of the object with regard to the speaker and the addressee. The first set consists of the pronominal concord (agreement prefix) attached to the demonstrative stem -nú. It is used to indicate that the referent is in close contact with the speaker. The second set consists of the demonstrative root i- and a pronominal suffix that agrees with the noun class of referent. Classes 2, 6 and 12 have a- for demonstrative root instead of i-. This vowel is identical to the vowel of the pronominal agreement affixes of these three. These demonstratives are used when the referent is in the proximity of both the speaker and the addressee. Set three contains the root o- that suffixes a pronominal affix agreeing with the noun class of the head noun or referent and the final morpheme -u. It is used to denote distance from the speaker and proximity to the addressee. In

addition, both set 2 and set 3 can also denote close proximity in a somewhat general

sense. The last set of demonstratives consists of the root ná and expresses relatively non-

proximity to both the speaker and the addressee. It also refers to objects, things, persons,

and events in the past. The first and fourth sets of demonstratives are constructed in a

similar fashion in that they both have a pronominal agreement affix prefixed to the

demonstrative root.

<div align="center">Table 13. Morphology of Demonstratives</div>

1.	agreement prefix + nú
2.	i + pronominal affix
3.	o + pronominal affix + -u
4.	pronominal affix + ná

The following noun phrases with demonstratives are some of the examples that

illustrate agreement in noun class with the head noun:

(96)   a.   mwána iwu
               mu- ána i   -wu
               3-   child DEM -1
               'this child'

         b.   chúma ochu
               chi- úma o   -chu
               7-   thing DEM- -7
               'that thing'

         c.   hánu heséki
               há- nu   ha- i- séki
               16- DEM 16- 5- earth
               'here on earth'

In Lunda, all demonstratives following locative expressions agree only with the noun to which the locative prefix is attached and not with the locative head at all. That is, demonstratives take the affixes determined by the noun class of the noun. Consider the following examples in (97):

(97) a. mwitúña dínu
    mu- i- túña di- nú
    LOC- 5- country 5- DEM
    'in this country'

   b. hachitwámu ichi
    ha- chi- twámu i -chi
    LOC- 7- chair DEM -7
    'on this chair'

Table 14. Locative Demonstrative Pronouns

Class 16	Set 1	hánu		'here, now'
	Set 2	aha		'on here/sometimes'
	Set 3	ohu	(o-ha + u)	'there'
	Set 4	hána		'on there, then'
Class 17	Set 1	kúnu		'here'
	Set 2	iku		'this way/ this area'
	Set 3	oku	(o-ka + u)	'there/that way'
	Set 4	kúna		'there, from there, out there'
Class 18	Set 1	múnu		'in here'
	Set 2	imu		'in here/ in this place, area
	Set 3	omu	(o-mu + u)	'in there, inside'
	Set 4	múna		'in there, out there'

Table 15: Demonstratives.

Classes	Set 1	Set 2	Set 3	Set 4
1	onu	iwu	owu	ona
2	ánu	awa	owu	ána
3	wúnu	iwu	owu	wúna
4	yínu	iyi	oyu	yína
5	dínu	idi	odu	dína
6	ánu	awa	owu	ána
7	chínu	ichi	ochu	chína
8	yínu	iyi	oyu	yína
9	yínu	iyi	oyu	yína
10	zhinu	izhi	ozhu	zhína
11	lúnu	ilu	olu	lúna
10	zhínu	izhi	ozhu	zhína
12	kánu	aka	oku	kána
13	túnu	itu	otu	túna
14	wúnu	iwu	owu	wúna
6	ánu	awa	owu	ána
15	kúnu	iku	oku	kúna
16	hánu	aha	ohu	hána
17	kúnu	iku	oku	kúna
18	múnu	imu	omu	múna

3.4.2 Emphatic Demonstratives

Intensified forms of all four sets of demonstratives are morphologically formed by

prefixing to them the concords plus the adjective stem -ena. Concords for classes 1, 2 and

6 are yi-, wu-, and wu- which are formally similar to pronominal enclitics. First and

second person singular emphatic demonstratives are built by prefixing the pronominal

affix yi- to the independent pronoun plus the morpheme -o- followed by a simple

demonstrative. First and second person plural have the morpheme -a- instead of -o-.

Table 16: Morphology of Emphatic Demonstratives.

| Sets 1 and 4: concord -ena- affix- demonstrative |
| Sets 2 and 3: concord -ena- demonstrative -affix |

Illustrations of emphatic demonstratives for some of the noun classes are given, as

follows:

(98) a. Class 3-set 1 emphatic demonstrative:
    mutóndu wenawúnu
    mu- tóndu wu- ena- wu- nú
    3- tree 3- EMP- 3- DEM
    'this very tree'

    b. Class 3-set 2 emphatic demonstrative:
    mutóndu weniwu
    mu- tondu wu- ena- i -wu
    3- tree 3- EMP DEM -3
    'this very tree'

Prefixing to the already emphatic demonstratives the concord plus the morpheme

-o can further compound emphatic demonstratives. In other words, the emphatic concord

is reduplicated for more emphasis.

Table 17: Morphology of Compounded Emphatic Demonstratives.

| concord -o- concord -ena- affix- demonstrative |
| concord -o- concord -ena- demonstrative -affix |

The following are noun phrases illustrating emphatic demonstratives and

agreement with a class 3 noun:

(99) a. Class 3-set 1 emphatic demonstrative:
    mutóndu wowenawúnu
    mu- tondu wu- o- wu- ena- wu- nú
    3- tree 3- o- 3- EMP- 3- DEM
    'this very tree'

b.   Class 3-set 2 emphatic demonstrative:
mutóndu woweníwu
mu- tóndu wu- o- wu- ena- i   -wu
3-   tree   3- o- 3-   EMP DEM -3
'this very tree'

There are also demonstratives for the locative classes which include the three

different forms consisting of simple and the two types of emphatic demonstratives

described above. The following provide examples of locative demonstratives.

(100) a.   henáha
ha-   ena a   -ha
LOC- EMP DEM -LOC
'right (on) here'

b.   hohenáha
ha-   o- ha-   ena- a   -ha
LOC- o- LOC- EMP DEM.-LOC
'right (on) here'

Table 18: Emphatic Demonstratives

Class	Set 1	Set 2	Set 3	Set 4
1	yenónu	yeniwu	yenowu	yenóna
2	wenánu	wenawa	wenowu	wenána
3	wenawúnu	weniwu	wenowu	wenawúna
4	yenayínu	yeniyi	yenoyu	yenayína
5	denadínu	denidi	denodu	denadina
6	wenánu	wenawa	wenowu	wenána
7	chenachínu	chenichi	chenochu	chenachína
8	yenayínu	yeniyi	yenoyu	yenayína
9	yenayínu	yeniyi	yenoyu	yenayína
10	zhenazhínu	zhenizhi	zhenozhu	zhenazhína
11	lwenalúnu	lwenilu	lwenolu	lwenalúna
10	zhenazhínu	zhenizhi	zhenozhu	zhenazhína
12	kenakánu	kenaka	kenoku	kenakána
13	twenatúnu	twenitu	twenotu	twenatúna
14	wenawúnu	weniwu	wenowu	wenawúna
6	wenánu	wenawa	wenowu	wenána
15	kwenakúnu	kweniku	kwenoku	kwenakúna
16	henahánu	henaha	henohu	henahána
17	kwenakúnu	kweniku	kwenoku	kwenakúna
18	mwenamúnu	mwenimu	mwenomu	mwenamúna

Table 19: Emphatic Demonstratives with Reduplicated Prefixes

Class	Set 1	Set 2	Set 3	Set 4
1	yoyenónu	yoyeniwu	yoyenowu	yoyenóna
2	wowenánu	wowenawa	wowenowu	wowenána
3	wowenawúnu	woweniwu	wowenowu	wowenawúna
4	yoyenayínu	yoyeniyi	yoyenoyu	yoyenayína
5	dodenadinu	dodenidi	dodenodu	dodenadína
6	wowenánu	wowenawa	wowenowu	wowenána
7	chochenachínu	chochenichi	chochenochu	chochenachína
8	yoyenayínu	yoyeniyi	yoyenoyu	yoyenayína
9	yoyenayínu	yoyeniyi	yoyenoyu	yoyenayína
10	zhenazhínu	zhenizhi	zhenozhu	zhenazhína
11	lwolwenalúnu	lwolwenilu	lwolwenolu	lwolwenalúna
10	zhozhenazhínu	zhozhenizhi	zhozhenozhu	zhozhenazhína
12	kokenakánu	kokenaka	kokenoku	kokenakána
13	twotwenatúnu	twotwenitu	twotwenotu	twotwenatúna
14	wowenawúnu	woweniwu	wowenowu	wowenawúna
6	wowenánu	wowenawa	wowenowu	wowowenána
15	kwokwenakúnu	kweniku	kwenoku	kwenakúna
16	hohenahánu	hohenaha	hohenohu	hohenahána
17	kwokwenakúnu	kwokweniku	kwokwenoku	kwokwenakúna
18	mwomwenamúnu	mwomwenimu	mwomwenomu	mwomwenamúna

3.4.3 Uses of the Demonstratives

As already mentioned, demonstratives are spatial deictic elements. They function

as determiners to indicate relative degree of distance of definite reference. Besides their

deictic function, the four sets of demonstratives have several other uses. They are also

used as deictic demonstrative pronouns in place of a lexical noun. This is illustrated in the

examples (101a) and (101b) with a simple and emphatic demonstrative respectively:

(101) a.   Hinyí óna?
           hi-   -nyí o- -ná
           COP- -Q 3sg- -DEM
           'Who is that (one)?'

     b.   Wakasumbula yenóna.
           wu- aka- sumbul -a yi- ena o- -ná
           3sg- FUT- marry -fv 1- EMP 3sg- -DEM
           'He will marry that very one.'

Demonstratives can co-occur with the head of a relative clause. As pronouns, they

can also used as heads of relative clauses. Compare (102) and (103):

(102) chitwámu ichi chidi hánu
       chi- twámu i-   -chi chi- di ha- -nú
       7-   chair   DEM- -7   REL- be LOC- -DEM
       'The chair which is here'

(103) ichi chidi hánu
       i-   -chi chi- di ha- -ná
       DEM- -7   REL- be LOC- -DEM
       'This one which is here.'

Demonstratives can have anaphoric reference in Lunda. They can be used

anaphorically in apposition with a noun or as a pronoun to refer to people or things

already mentioned in discourse irrespective of an actual distance in terms of space and

are presumed to be recoverable or to be known to both the speaker and the addressee. An

example of an anaphoric use of demonstratives is given in (104):

(104) Óna muntu nayilezhaña nindi wukwinza.
       o- -ná   muntu ni- a-   yi-   lezh -aña nindi   wu- ku- inza
       3sg- -DEM person 1sg- TNS- 2pl.OBJ- tell -IMPF COMP.3sg 3sg- FUT- come
       'That person I have been telling you said that he would come.'

It is worthwhile to note that these functions of the demonstrative also apply to the

locative demonstratives. The latter can refer to a place one is pointing at or to a place

which has been mentioned, as illustrated by the examples in (105):

(105) a.   hánu hanzhila túnemani
            ha- -nú   ha-   nzhila tú- na-   iman -i
            LOC- -DEM LOC- road 1pl- PERF- stand -fv
            'here on the road where we are standing'

      b.   oku kukalóña
            o-   -ku   ku-   ku- kalóña
            DEM- -LOC LOC- 5- river
            'there at the river'

Locative demonstratives appear with a locative prefix in addition to the suffix

when they follow the copular verbs di 'be', tumbi 'be,' and ikala 'be' in locational

constructions.[8]

(106) a.   Wudi kwoku.
            wu- di ku- o-   -ku
            3sg- be LOC- DEM- -LOC
            'S/he is there.'

      b.   Nyikánda yidi hohu.
            nyi- kánda yi- di ha- o-   -hu
            8-   book 8- be LOC- DEM- -LOC
            'The books are (on it) there.'

      c.   Adi mwomu.
            a- di mu- o-   -mu
            3pl- be LOC- DEM- -LOC
            'They are in there.'

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[8] In ChiBemba and Kikaonde, languages spoken in Zambia, the locative (demonstrative) occurs sentence
initially in such types of locational constructions.

Demonstratives can be used in presentative or identificational clauses in combination with pronominal predicates which appear as the first constituent. They indicate the presence or the appearance of a person. This applies only to human beings.

(107)   1st person singular: yami onu   'here I am'
        1st person plural: yetu awa   'here we are'
        2nd person singular: yeyi awa   'here you are'
        2nd person plural: yeyi owu   'there you are'
        2nd person plural: yenu awa   'here you are'
        2nd person plural: yenu owu   'there you are'
        3rd person singular: yenona   'there s/he is'
        3rd person singular: yenona   'there s/he is'
        3rd person plural: wenana   'there they are'
        3rd person plural: yenowu   'there they are'

In addition to their deictic function, some locative demonstratives have also temporal function. Compare the examples in (107) and (108):

(108) a.   Locative:
           hánu   'here'
           aha   'here'
           hána   'there'
           hohenohu   'right there'
           hohenaha   'right here'
           iku   'here'

       b.   Temporal:
           hánu   'now'
           aha   'sometimes'
           hána   'then, when, since'
           hohenohu   'right then'
           hohenaha   'right now'
           iku   'while'

Some class 1 demonstratives are used as adverbs of manner. Consider the following demonstratives given in (109):

(109) ochu, chochínu   'like this'
        chochichi, chochenichi   'like this, in this manner, thus'
        chochína, chochochu   'like that, thus'

3.5 Pronominal Affixes

Pronominal affixes may be used as subject anaphoric pronouns, subject agreement prefixes, object pronouns as well as object marking. Lunda has both indirect and indirect object pronouns which occur in different slots of the verb root.

3.5.1 Subject Pronouns

Subject pronouns are expressed by prefixes also known as subject makers which are obligatorily marked on finite verbs.[9] Third person subject pronominal prefixes must agree in noun class, number and person with the nominal subject of the verb whether present or not in a clause. Animates, irrespective of the classes they belong to, use classes 1/2 subject agreement prefixes wu- and a- for singular and plural respectively in most of the tenses. Third person singular class 1 also uses a- as subject prefix in the subjunctive mood, in object relative clauses with third person singular subjects, certain adverbial clauses, in the imminent future, and in negative constructions marked by the particle hi-.

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[9] The subject prefix is not overtly expressed in the first person singular and third person singular class 1 in the present perfect. Additionally, first and third person singular subject prefixes may also be left out in the present continuous aspect.

The subject prefix a- or yo- occurs after the auxiliary verb enda 'walk' attached to a verb

without any tense aspect marking and in the narrative tense which is unmarked.

(110) a.   nídi mwitémpa
              ni- di mu- i- témpa
              1sg- be LOC- 5- field
              'I am in the field'

        b.   wudi mwitála
              wu- di mu- i- tála
              3sg- be LOC- 5- house
              's/he is in the house.'

        c.   nenzhi.
              na-   inz -i
              3sg.PERF- come -fv
              's/he has come.'

3.5.1.1 Conjoined Subjects

More than one noun may appear before the verb and when this occurs, the two

NPs are connected by the comitative morpheme na- 'and'. When the conjoined nouns

involved are humans from different classes, class 2 subject prefix a- is generally

irrespective of the classes to which the nouns belong. In addition, as already stated in the

preceding paragraph other animates, irrespective of their classes, use class one subject

prefixes wu- and class 2 subject prefix a- for singular and plural respectively.

(111) a.   Mumbanda ni iyála adi mwitála.
              mumbanda ni iyála a- di mu-i-tála
              1-woman and 1-man 3pl- be LOC-5-house
              'The woman and the man are in the house.'

b. Ntáñishi ni kánsi adi mwitémpa.
ntáñishi ni ka-ánsi a- di mu- i-témpa.
1.teacher and 12-child 3pl- be LOC-5-field
'The teacher and the child are in the field'

When the conjoined nouns involved are inanimates from different noun classes,

the neutral class 8 subject agreement prefix yi- is generally used.

(112) a. chéña nimukánda yidi heséki.
cheña ni- mukanda yi- di ha- i-seki
7-plate and- 3-book 8- be LOC-5-ground
'the plate and the book are on the ground.'

b. Nswáha nikazemba yidi hanzhi.
nswaha ni- ka- zemba yi- di ha- nzhi
9.calabash and-12- axe 8- be LOC- outside
'A calabash and an axe are outside.'

c. Mafúku niyáka yidinakuhimpa.
ma-fuku ni- yaka yi- na- ku- himpa
6-day and- 8-year 8- PROG- INF- change
'Days and years are changing.'

In Lunda, the use of conjoined subjects involving humans and non-humans is not

possible. In this case, only one noun must appear as a subject, while the other noun

occurs after the verb attached to the comitative/instrumental morpheme. This restriction

has also been observed in other Bantu languages such as Sesotho (Poulos and

Louwrens1994), ChiBemba (Givón 1972), and Luganda (Walusimbi1990). Below are

examples to illustrate conjoined subjects in Lunda:

(113) Iyála waya ni káwa kindi
iyála wu- a- y -a ni káwa ka- aindi
5-man 3sg- PAST- go -fv and 12-dog 12- POSS.3sg
'The man went with his dog.'

3.5.2 Direct Object Pronouns

Direct object pronouns are expressed by pronominal prefixes marked in the verb stem. First person singular object prefix is a homorganic nasal which assimilates the features of the following consonant. It is realized as a velar nasal /ñ/ when followed by verb stems with initial vowels /a/, /e/, /o/ and /u/ and may surface either as /ñ/ or /ny/ before verbs beginning with the front high vowel /i/.

(114) a. ntaláku (< tala 'look at')   'look at me'
           mbutáku (< buta 'cover')   'cover me'
           nhembeláku (< hembela 'wait for')   'wait for me'
           kumbonda   (< bonda 'deprive')   'to deprive me'

       b. kuñeta (< eta 'beat')   'to beat me up'
           añika/anyika (< inka 'give')   'to give me'
           kuñochela (< ochela 'roast for')   'to roast for me'

Third person singular and plural object markers, which precede the verb, have varying morphology according to the noun class of the nouns they refer to. Most of the direct object prefixes, except for classes 1, 2, 6 and 12 are formally identical to subject prefixes. Only a few of them, however, have the same form as the noun class prefixes. Like subjects, all animates irrespective of their noun classes take class 1 and class 2 object pronominal prefixes. Consider the examples with postverbal direct object in (108):

(115) a. Natámbiki mukwénzi.
           na-   tambik -i   mu- kwénzi
           3sg.PERF- call   -fv 1-   youth
           'S/he has called the youth.'

       b. Nalándi chisalu.
           na-   land -i chi- salu
           3sg.PERF- buy -fv 7-   mat
           'S/he has bought the mat.'

Their corresponding counterparts with direct object pronouns are given below:

(116) a.   Namutámbiki.
        na-   mu-   tambik -i
        3sg.PERF- 3sg.OBJ- call   -fv
        'S/he has called him.'

    b.   Nachilándi
        na-   chi- land -i
        3sg..PERF- OBJ- buy -fv
        'S/he has bought it.'

3.5.2.1 Conjoined Direct Objects

More than one object may appear after the verb, and when this occurs, the objects are joined by the comitative/instrumental na- 'and'. If the conjoined nouns involved are humans or other animates, class 2 object pronominal prefix yi- is used generally irrespective of the classes to which the conjoined nouns belong. Class 8 object pronominal prefix yi-, which is homophonous with class 2 object prefix, is generally used if the conjoined nouns involve things irrespective of the classes to which the nouns belong.

(117) a.   Námona mubanda ni iyála mwitémpa.
        ni- a-   mon -a mubanda ni   iyála mwitémpa.
        1sg- PAST- see -fv 1-woman and 1-man 18-5-field
        'I saw a woman and a man in the field.'

    b.   Náyimona mwitémpa.
        ni- a-   yi-   mon -a mu-i-tempa
        1sg- PAST- 3pl.OBJ- see -fv 18-5-field
        'I saw them in the field.'

(118) a.   Watenteka cheña ni mukánda hamatáhu.
             wu- a-   tentek -a cheña   ni   mu-kánda ha-   ma-táhu
             3sg- PAST- put   -fv 7-plate and 3- book LOC-6-grass
             'She put the plate and the book on the grass.'

       b.   Wayitenteka hamatáhu.
             wu- a-   yi-   tentek -a ha-ma-táhu
             3sg- PAST- OBJ- put   -fv LOC-6-grass
             'He put them on the grass.'

Unlike subjects, the use of conjoined objects involving persons and animals are

possible. However, only the noun denoting a human can be represented as a pronoun in

the verb phrase, while the other noun appears as a nominal object.

(119) a.   Wamona iyala ni káwa kindi
             wu- a-   mon -a iyala ni   ka-wa ka- indi
             3sg- PAST- see -fv 1-man and 12-dog 12- POSS.3sg
             'She saw the man with his dog.'

       b.   Wamumóna ni káwa kíndi
             wu- a-   mu-   mon -a ni   ká-wa ka- indi
             3sg- PAST- 3sg.OBJ- see -fv and 12-dog 12- POSS.3sg
             'She saw him with his dog.'

3.5.3 Indirect Object Pronouns

Indirect object nouns and locatives can be expressed as pronouns within the verb

in Lunda. When pronominalized, indirect objects occur as pronominal enclitics suffixed

to the verb. This form of marking indirect objects is also found in other Bantu languages

such as Luvale (Horton 1949:191), Kaonde (Wright 1977:132), Luba-Kasai (Kuperus and

Mpunga wa Ilunga1990: 34), Luchazi (Fleisch 2000:74), etc. While enclitics for most of

the classes have some resemblance with object prefixes, this is not so with classes 1, 2,

and 6 affixes yi-, wu- and wu- respectively. Class 1 yi- does not contain the final vowel

-u̱ and classes 2 and 5 prefixes cannot be said to be made up of y̱i, which is the

morphology of their direct object counterparts, and -u̱. The same forms are used in the

formation of demonstratives for these three classes.

(120) a.   Indirect Object:
           muntambikiliiyi
           wu- n-   tambik -il   -i   -yi
           2sg- 1sg.OBJ- call   -APPL -SUBJ -3sg
           'call him for me'

(121) b.   Locatives:
           kusháhu   'to put on it'   (< kusha-ha-u)
           kutaláku   'to look there'   (< kutala-ku-u)
           kuholokelámu 'to fall into it'   (< kuholokela-mu-u)
           hínikuya kwoku 'I will not go there' (< hi-ni-ku-ya ku-o-ku)

The same enclitics can also be used to mark instrumental in pronominal form

when attached to the comitative/instrumental marker ṉa̱-.

(123)   Waketula náchu mbízhi
         wu- a-   ketul -a na- -chu mbízhi
         3sg- PAST cut up -fv with- -7   meat
         'S/he cut meat with it.'

Comitatives pronominalize through the use of personal pronominal stems attached

to the same prefix ṉa̱-.

(124)   Twaya náwu
         tu- a-   y -a na- -awu
         1pl- PAST- go -fv and -3pl
         'We went with them'

CHAPTER IV

VERB STRUCTURE

This chapter intends to analyze the Lunda verb structure. The verb can be expanded by means of affixes in different slots that include the preverbal slots as well as the post-verbal slots.[1] Thus, Lunda has two categories of morphological elements that can be attached to the verb root. Inflectional elements occupy the slots both before and after the verb root, while derivational elements only occur after the verb root. The prefixes include the negative markers, subject prefixes, TA markers, and object prefixes, while the post-verbal affixes comprise derivational extensions, TA markers, the final vowel, object suffixes, relative clause markers, and the second negative marker. Table 20 below provides the order of affixes in the verb stem:

Table 20. Order of Affixes in the Verb Stem

NEG	SM	TAM	OM	Vroot	Ext	TAM	PRO/LOC/REL	NEG

4.1 Verb Root

Like in other Bantu languages, the verb root in Lunda is the minimum lexical unit that carries or conveys the core meaning of the verb. It can be expanded by means of

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[1] The verbal extensions have been described for many Bantu languages (Guthrie 1962; Hyman 1993; Ngunga 2000).

inflectional and derivational affixes. The structure of the verb root can be of several

morphological shapes and patterns such as CVC, CVNC, CGVC, VNC, C, VC, NG,

or longer where C stands for consonant, V for vowel, N for nasal, and G for glides). The

following examples illustrate the various types of verb roots:

(1)   a.   seh   'laugh'

(1)	a.	seh	'laugh'
		kat	'be sick'
		lot	'dream'
		kis	'destroy'
		tút	'move, carry from one place to another'
	b.	land	'buy'
		send	'carry'
		himp	'exchange'
		pomp	'assemble'
		fump	'smash, break in pieces'
	c.	and	'gather leaves, musshrooms'
		end	'walk, move, travel'
		bomb	'mix, mingle'
		inz	'come'
		umb	'throw, throw away'
	d.	d	'eat'
		y	'go'
		h	'be cooked, be ripe'
		t	'set a trap, tell a story'
		sh	'put'
		ch	'dawn'
	e.	ab	'groan'
		il	'do'
		et	'beat, hit'
		och	'roast'
		uk	'administer mmedecine, treat sick person'
	f.	swam	'hide, be in hiding'
		fwet	'pay'
		kwit	'rub on, paint, daub'
		bwotakana	'tilt over as in collapsing sideways'

g.   nw   'drink'
     tw   'pound'
     fw   'die'
     lw   'fight'
     vw   'leak'

<u>4.2 Verb Stem</u>

The stem consists of the verb root and suffixes, both derivational and inflectional,

plus the final vowel -a̱ which occurs in the infinitive and in most of the tenses

except for the present perfect, remote past, subjunctive and in most of the defective verbs

where it is -i̱. . Thus, the stem can broadly be divided into three types, namely, simple

stem and derivational stem, and inflectional stem.

(2)   a.   Simple Stem:
           sal-a   'swim'
           men-a   'sprout, grow'
           shik -a   'arrive'
           ton-a   'open eyes, be awake'
           vul-a   'be many'

      b.   Derivational Stem:
           kas-unun-a   'untie'   >   kás   'tie, bind, arrest'
           end-esh-a   'hurry'   >   end   'walk, travel'
           chin-ish-a   'frighten'   >   chiin 'fear, run away'
           loñ-ek-a   'be put in order'>   loñ   'put in order'
           vul-ish-a   'increase'   >   vul   'be many'

      c.   Inflectional Stem:
           dim-in-i   'cultivated'   >   dim   'cultivate'
           nyamuk-il-i 'left'   >   nyamuka   'leave'

4.3 Verbal Extensions

Morphologically, the language has several verbal extensions which either change the argument structure of the verb root they are adjoined to, or modify the basic lexical meaning of the verb root, or both. The applicative and the causative verbal extensions are the two most productive derivational verbal suffixes in the language. Some of the verbal extensions are only confined to certain types of few verb roots, while others such as passive and reciprocal extensions, which are still very productive in most of the Bantu languages, have been replaced by new forms (cf. chapter 8). Passive and reciprocal verbal extensions are synchronically residuals in the language. There are presently several polysyllabic verbs which have the same derivational extension of the same morphological shape; their verb roots clearly indicate that they share some underlying semantic properties. These are, however, fossilized and cannot be broken into smaller constituent parts consisting of the basic verb root and the affix. The verbal extensions are described below according to their relative productivity.

4.3.1 Applicative Extension

The applicative verbal extension follows the verb and is one of the most productive derivational processes in Lunda. It takes the form -il/-in or -el/-en depending on the preceding vowel and/ or consonant of the verb root. This is discussed in chapter 2 under the phonological process of vowel harmony (cf. 2.1.4.1) and nasal harmony (cf. 2.1.2.1). Basic verbs as well as derived applied verb stems are given in (3):

(3)		Basic Verbs Stem		Derived Verb Stem	
	a.	zát-a	'work'	zát-il-a	'work for'
		témuk-a	'run'	témuk-il-a	'run towards'
		fwizh-a	'spit'	fwizh-il-a	'spit into'
	b.	hósh-a	'speak'	hósh-el-a	'speak for'
		let-a	'bring'	let-el-a	'bring for'
		holok-a	'fall'	holok-el-a	'fall on/in'
	c.	chím-a	'sew'	chím-in-a	'sew for'
		dim-a	'cultivate'	dim-in-a	'cultivate for'
		tem-a	'cut down tree'	tem-en-a	'cut down tree for'

The applicative extension performs several functions of which the main one is to broaden the argument structure of the verb, both intransitive and transitive, by adding another argument. Depending on the semantic property of the verb root, the newly introduced argument may have various semantic roles such as benefactive/malefactive, motive(reason), and locative. The affixation of the applicative extension to a transitive verb may introduce an argument with the beneficiary or maleficiary semantic role by turning the verb into a ditransitive one. Syntactically, this is fully analyzed in chapter VI on grammatical relations, sections 6.4 and 6.5.

(4)	a.	Intransitive		Transitive	
		zát-a	'work'	zát-il-a	'work for'
		zuw-a	'be angry'	zuw-il-a	'be angry at'
		hólok-a	'fall'	hólok-el-a	'fall on/in'
		fwizh-a	'spit'	fwizh-il-a	'spit into'
		hil-a	'be angry'	hil-il-a	'be angry at'
	b.	Transitive		Ditransitive	
		iy-a	'steal'	iy-il-a	'steal from'
		land-a	'buy'	land-il-a	'buy for'

The applicative extension can be affixed to both intransitive and transitive verb root to introduce an argument with the motive/reason semantic role. Usually, most of the nouns that form the basis of the reason are infinitival nouns.

(5)   Motive/reason
            Basic Verb   Derived Verb
    a.   d-a   'eat'   d-il-a nzala   'eat because of hunger'
            inz-a   'come'   inzh-il-a   'come for'

    b.   keñ-a   'like'   ku-mu-keñ-el-a kuwaha kwindi 'to like
                                    him/her because of his/her   kindness'

The affixation of the applicative extension to an intransitive verb can be interpreted as having semantic roles such as location, goal and source. In this case, the post-verbal argument must be marked by one of the locative prefixes class 16 ha-, class 17 ku- and class 18 mu-. The applicative extension may be used optionally in combination with a locative noun phrase without changing the semantic role of the locative. That is, a verb without the applicative extension followed by a locative and a verb with an applicative suffix plus a locative may have identical meanings. The only difference between the types of verbs lies in the fact that the applicativized verb places an emphasis on the location/setting of the event or state, as illustrated by the following examples:

(6)   a.   Verb + Locative:
                tañish -a ku-   Ndola
                teach -fv LOC- Ndola
                'teach in Ndola'

        b.   Verb + Applicative + Locative:
                tañish -il   -a ku- Ndola
                teach -APPL -fv LOC- Ndola
                'teach in Ndola'

(7)   a.   Verb + Locative:
zuñ -a mu- itála
fight -fv LOC- house
'fight in the house'

       b.   Verb + Applicative + Locative:
zuñ -il   -a mu- itála
fight -APPL -fv LOC- house
'fight in the house'

Examples (6) and (7) illustrate that basic verbs followed by locatives have the same

meanings as verbs with applicative suffixes plus locatives.

For some verbs, the affixation of the applicative suffix combined with a locative

expression assigned the semantic role of goal or source to the latter. It indicates

directionality as opposed to location (position).

(8)   a.   Verb + Locative:
hólol-a mu- kalóña
drop -fv LOC-river
'drop in the river'

       b.   Verb + Applicative + Locative:
hólw- el   -a mu- kalóña
drop- APPL -fv LOC-river
'drop into water'

In (8a), the event encoded by the verb without the applicative hólola 'drop' takes

place when both the subject and the object are in the river, while in (8b) the verb with

the applicative extension indicates the movement of the object into the river.

The applicative suffix in combination with a locative may change the semantic

of the verb root it is attached to. That is, a basic verb followed by a locative noun phrase

simply denotes the location of an event or state. But, a verb with the applicative affix

plus a locative noun phrase indicates the goal (to, towards) of an event.

(9) a.   Verb + Locative:
          hañ -a ku- kalóña
          chase -fv LOC- river
          'chase from the river'

     b.   Verb + Applicative + Locative:
          hañ -il   -a ku- kalóña
          chase -APPL -fv LOC- river
          'chase toward the river'

(10) a.   hólok -a ku- mutóndu   '
          fall   -fv LOC-tree
          'fall from a tree'

     b.   hólok -el   -a ku- mutóndu
          fall   -APPL -fv LOC-tree
          'fall onto a tree'

In (9b) and (10b), the applicative suffix before the locative noun phrases indicate the

goal, that is, movement toward or onto.

The applied extension performs locative and instrumental functions in

possessive constructions which consist of a noun and a verb. The head of the possessive

construction serves as a location as illustrated in (11a) or an instrument whose purpose

is expressed by the verb that modifies it as in (11b-c):

(11) a.   Location:
          itála dakuwelela
          i-tála di-a-   ku- wel -el   -a
          5-room 5-POSS- INF- bath -APPL -fv
          'bathroom'

          Instrument:
     b.   cheña chakudilahu
          chi-eña chi-a- ku- d -il   -a -hu
          7-plate 7-POSS- INF- eat -APPL -fv -16
          'a place to eat from'

c.   lupása lwakunwináku
      lu-pasa lu-a-   ku- nw-   -in   -a -ku
      11-cup 11-POSS- INF- drink -APPL -fv -17
      'a cup to drink with'

The applicative extension is also used as a morphosyntactic device in the

formulation of questions. It occurs in association with some question morphemes. This

is analyzed in chapter X section 10.3.2.3 on non declarative sentences. This function is

somewhat related to the major function of the applied extension in that it triggers the

verbal extension can be regarded as an argument.

The applied extension may be reduplicated to yield the suffixes -ilil/-elel and

their variants -inin/-enin, for verb roots whose last letter is either nasal n or m, to

express a situation that has been carried out to its full completion (perfectivity). This

type of verbal extension is restricted to a very small number of verbs. In addition, the

suffix may induce a change in the semantic of the verb other than completion.

(12) <u>Basic Verb Stem</u>   <u>Derived Verb Stem</u>
      úm-a   'dry'   úm-inin-a   'be dried up completely'
      kúm-a   'end'   kúm-inin-a   'be the very end'
      wah-a   'be good'   wah-ilil-a   'rejoice'
      kwát-a   'hold'   kwát-ilil-a 'make effort, brace'
      zhík-a   'stop up'   zhik-ilil-a 'cut off by obstructing'
      zhím-a   'extinguish'   zhím-inin-a 'be completely submerged'
      tíy-a   'hear'   tíy-ilil-a   'listen carefully'
      shíik-a   'fill in hole'   shik-ilil-a 'bank up earth'

<div align="center">4.3.2 Causative Extensions</div>

Lunda has two distinct types of causative verbal suffixes, -ish/-esh and -izh/-ezh. The causative allomorphs are discussed in chapter II section 2.1.4.1.

4.3.2.1. The Causative -ish/-esh

The causative extension -ish/-esh is the most productive causative suffix in Lunda. It modifies the argument structure of the verb by adding another argument with agentive semantic role, the causee. The newly introduced argument is an agent which causes an action or undergoes a process. This subsection deals only with the morphology of the causative; its morphosyntax is fully discussed in chapter 6 on grammatical relations.

(13)

Basic Verb Stem		Derived Verb Stem	
land-a	'buy'	land-ish-a	'sell'
w-a	'fall'	w-ish-a	'throw down'
nw-a	'drink'	nw-ish-a	'cause to drink'
man-a	'be finish'	man-ish-a	'finish'
kandam-a	'go up'	kandam-ish-a	'take up'
láb-a	'be late'	láb-ish-a	'cause to be late'
íluk-a	'know'	íluk-ish-a	'inform, cause to know'
idik-a	'go out'	id-ish-a	'put out, take out'
zhiy-a	'drown'	zhiy-ish-a	'cause to drown'
zuw-a	'be angry'	zuw-ish-a	'make angry'
fúm-a	'go away'	fúm-ish-a	'take away'
ton-a	'be awake'	ton-esh-a	'awaken'
end-a	'walk'	end-esh-a	'cause to move'
zéy-a	'be tired'	zéy-esh-a	'make tired'
zow-a	'be wet'	zow-esh-a	'drench, soak'
kwat-a	'hold'	kwat-ish-a	'hold tightly'

4.3.2.2. The Causative -izh/-ezh

There is another causative verbal extension -izh with its variant -ezh for verb

roots whose vowel preceding the extension is /e/ or /o/. This type of causative

extension is less productive than the causative suffix just described. Most of the verb

roots that host this type of extension end in either -al or -am/-an which deletes when the

extension is attached to it, and the process results in the lengthening of the remaining

suffixal vowel. Consider the following examples:

(14) Basic Verb Stem   Derived Verb Stem
      esekan-a   'be equal'   esek-ezh-a   'compare with'
      iñil-a   'enter'   iñ-izh-a   'insert, put in, bring in'
      kok-a   'pull'   kók-ezh-a   'persuade'
      ladik-a   'put to sleep'   ladik-izh-a   'cause to sleep'
      loñ-a   'be in order'   loñ-ezh-a   'pack'
      shik-a   'arrive'   shik-izh-a   'welcome someone'
      swek-a   'hide'   swek-ezh-a   'cause to hide'
      swín-a   'move'   sw-ízh-a   'make move'
      tah-a   'draw water'   tah-ezh-a   'water'
      tówal-a   'be sweet'   tów-ezh-a   'sweeten'

The causative extension has also an instrumental usage. A noun and a verb enter

into a type of relationship to achieve the instrumental use of causative extension. This is

mainly used in relative clause constructions when the head noun is an instrument. The

construction indicates that the instrument is the cause in producing action expressed by

the verb.

(15) máfu akudisha náchu losu
      mafu   a- ku- d -ish   -a na- -chu losu
      6-vegetable 6- 15- eat -CAUS -fv with- -7   rice
      'vegetables to accompany rice' (lit: vegetables to eat rice with)

Furthermore, the causative verbal suffix may denote the idea of assistance; that

is, the subject of the verb helps someone to perform an activity that is expressed by the verb root. The same suffix has an intensive meaning when attached to some verbs.

(16) kwát-a   'hold'   kwát-ish-a   'help, give a hand'
      íluk-a   'know'   íluk-ish-a   'know thoroughly'

There are, however, instances where the semantic of the causative suffix is not crystal clear. For some verbs, the affixation of the causative extension does not indicate that the subject is the causer of the action. The verb has instead a different interpretation.

(17) fw-a   'die'   fw-ish-a   'lose a relative by death, prove
                                          wrong, prove guilty'
      ch-a   'be dawn'   ch-ish-a   'spend the night doing something'
      babal-a 'be cunning'   bab-esh-a   'punish, teach a lesson'

4.3.3 Reversive Extensions

There are two types of reversive extensions, transitive (dynamic) and intransitive (stative). Both of them serve to indicate that the action expressed by the verb root to which the reversive extension is attached is reversed, or undone. That is, the reversive extension modifies the basic meaning of the verb and denotes the opposite meaning of the basic verb root it attached to.

The transitive reversive extensions are -ul(ul), -ol(ol), and their allomorphs -un(un) and -on (on) which are subjected to the rules of vowel harmony and consonant nasal harmony. It is mainly semantic because it simply changes the meaning of the verb without affecting the semantic roles of the nominal arguments assigned by the verb. The verb still remains transitive with an agent and a patient.

(18)

Basic Verb		Derived Verb	
kás-a	'tie'	kás-unun-a	'untie'
shink-a	'close'	shink-ul-a	'open'
zhil-a	'become taboo	zhil-ul-a	'free from taboo'
vwál-a	'put on clothes'	v-úl-a	'undress'
lumbul-a	'confuse'	lumbul-ul-a	'explain, clarify'
twik-a	'put load on head'	tu-ul-a	'put down load'
but-a	'cover'	but-unun-a	'uncover'
nyet-a	'screw'	nyet-ulul-a	'unscrew'
kol-a	'scrape'	kol-ol-a	'scrape out'
loñ-a	'pack'	loñ-olol-a	'unpack'
kok-a	'pull, drag'	kok-olol-a	'slacken'

The transitive reversive can be replaced by the corresponding intransitive reversive extension suffixes -uk/-ok. Unlike the transitive reversive, the intransitive reversive extension deletes the agent and allows only the patient. In other words, a transitive and dynamic reversive verb turns into an intransitive verb. The object of the transitive reversive becomes the subject of the intransitive reversive and its subject deletes all together. The intransitive reversive verb is, however, not passive because it does not take an agent. By disallowing the agent, a conclusion can be drawn that the intransitive reversive is not different from the neuter-passive (cf. chap VIII section 5.7), as shown by the following examples:

(19)

Transitive		Intransitive	
kas-unun-a	'untie'	kas-unuk-a	'become untied'
zhil-a	'become taboo'	zhil-uk-a	'be freed from taboo'
enz-ulul-a	'open'	enz-uluk-a	'be open'
lumb-ulul-a	'make clear'	lumb-uluk-a	'be clear, plain'
shink-ul-a	'open'	shink-uk-a	'be open'
vuñ-ulul-a	'unwrap'	vuñ-uluk-a	'be unwrapped'
vumb-ul-a	'unbury, unearth'	vumb-uk-a	'be unearthed, emerge'
zok-ol-a	'extract'	zok-ok-a	'be extracted'
som-on-a	'draw out'	som-ok-a	'slip out of place'

4.3.4 Repetitive Extensions

The repetitive extension is expressed by the verbal extensions -ul, -ol, and -un, which are reduplicated with some verb roots, and changes the basic meaning of the verb. A verb to which such an extension is affixed denotes that an action is repeated or redone. The repetitive extension is formally identical to the reversive extension seen in 5.3. This suggests that the two types of extensions may be semantically related.

(20)

Basic Verb Stem		Derived Verb Stem	
land-a	'buy'	land-ulul-a	'resell'
lahul-a	'scrape aside'	lahul-ul-a	'scrape aside again'
tumb-a	'plant'	tumb-ulul-a	'transplant'
sal-a	'sift'	sal-ulul-a	'resift'
hít-a	'pass'	hít-uluk-a	'tell again'
sém-a	'bear offspring'	sem-unun-a	'multiply'
tuñ-a	'build, make'	tuñ-unun-a	'rebuild, remake'
sewul-a	'hoe clear of grass'	sew-ulul-a	'reclear grass'
kundul-a	'hem'	kund-ulul-a	'rehem'
wumb-	'mold or shape'	wumb-ulul-a	'remold'
kómb-a	'sweep'	kómb-olol-a	'sweep clear'
sot-a	'plaster'	sot-olol-a	'replaster'
totol-a	'crack open'	totol-ol-a	'make wider as crack'

4.3.5 Impositive Extension

Lunda has the impositive extension extensions -ik/-ek which have somewhat an agentive force. The alternation between the two extension vowels /i/ and /e/ are due to vowel harmony. The impositive extension has been labeled 'causative' (Horton 1949, Fisher 1980), 'agentive' (Fleisch 2000) because it expresses a kind of direct causativization when attached to a verb root. It is, thus, similar to the causative extension except that it is only hosted by intransitive verb roots. The derived verb stem

has the meaning that may be described as that of making the patient undergo a situation.

The impositive extension is not very productive in the language and is restricted to a

small number of verbs, mostly those that denote position and end in -am (cf. 5.8). The

suffix -am is replaced by the impositive extension that indicates that the agent makes

the patient change the posture or position.

(21) im-ik-a   'make to stand, put upright, stop'
      < iman-a   'stand up, stop'
      kam-ik-a   'place in lying position, put to sleep'
      < kam-a   'sleep'
      zhim-ik-a   'immerse, put under water'
      < zhim-a   'dive, go under'
      lumb-ik-a   'pile up'
      < lumbam-a   'be piled up'
      banj-ik-a   'cause to stoop'
      < bandam-a   'stoop'
      zandam-ik-a   'place on a high place'
      < zandam-a   'be tall, stand high'
      shakam-ik-a   'make sit down'
      < shakam-a   'sit down'
      fulam-ik-a   'cause to lie face downwards'
      < fulam-a   'bend with buttocks projecting'
      tent-ek-a   'put or place on ground or stable position'
      < tentam-a   'lie on ground'
      vw-ik-a   'clothe, dress'
      < vw-al-a   'wear'

Other examples of verbs that may affix the impositive extension -ik/-ek are

listed below:

(22) Basic Verb   Derived Verb
      swan-a   'succeed'   swan-ik-a   'install a chief'
      zhil-a   'be forbidden'   zhil-ik-a   'forbid'
      leman-a   'be wounded'   lem-ek-a   'injure, wound'
      wund-a   'be quiet'   wund-ik-a   'quieten'
      lamat-a   'adhere, stick to'   lam-ik-a   'stick on'

4.3.6 Intensive Extension

In Lunda, the intensive extension is identical to the causative verbal extension -ish/-esh. While the causative extension modifies the argument structure of the verb root, the intensive extension does not change the number of arguments taken by the verb root. Instead, it adds the information about the intensity with which an action is carried out by the subject of the verb. That is, it modifies the semantics of the verb root to which it is affixed.

(23)
Basic Verb		Derived Verb	
end-a	'walk'	end-esh-a	'walk quickly, hurry'
kwát-a	'hold'	kwátish-a	'hold tightly'
kás-a	'tie'	kás-ish-a	'tie securely'
iluk-a	'know'	iluk-ish-a	'know very well, thoroughly'
tal-a	'look'	tal-ish-a	'stare at'
tiy-a	'listen'	tiy-ish-a	'listen attentively'

4.3.7 Neuter-Passive

In Lunda, the neuter-passive or stative has two distinct sets of allomorphs -ik/-ek, and -uk/-ok. The extension changes the argument structure of the verb root it is attached to, as illustrated by the following examples:

(24)
	Basic Verb		Derived Verb	
a.	fump-a	'smash'	fump-ik-a	'be smashed'
	kok-a	'pull'	kok-ek-a	'shrink,be shrunken'
b.	tab-ul-a	'rip, tear'	tab-uk-a	'be ripped, be torn'
	kót-ol-a	'break'	kót-ok-a	'be broken'

The extension -ik/-ek can be attached to the verb root, the stative extension is -uk which alternates with the transitive verbal extension -ul/-un and ol/-on. In other

words, the second type of the stative extension replaces the suffix -ul/-un and ol/-on.

Both types of extensions can be attached to basic transitive verb roots and have a detransitivizing function; they reduce by one the number of arguments of the verb when attached to a transitive verb root. The latter becomes an intransitive stative. The neuter-passive, thus, behaves like a passive construction. However, unlike the passive, the neuter lacks the optional argument with the semantic role of agent and simply denotes a state or condition the subject undergoes or experiences. The syntactic property of the neuter-passive is discussed in chapter VIII (cf. section 7.3).

(25)

	Basic Verb		Derived Verb	
a.	kás-a	'tie'	kás-ik-a	'be tied up'
	fump-a	'smash'	fump-ik-a	'be smashed'
	bus-a	'burst open'	bus-ik-a	'be burst'
	kis-a	'destroy'	kís-ik-a	'be destroyed'
	nuñ-a	'join together'	nuñ-ik-a	'be joined together'
	sand-a	'scatter'	sanj-ik-a	'be scattered'
	chik-a	'crush'	chik-ik-a	'be crushed'
	vwal-a	'bear a child'	vwal-ik-a	'be born'
	kok-a	'pull'	kok-ek-a	'shrink'
	bool-a	'flatten'	bool-ek-a	'be flattened'
b.	kásun-un-a	'untie'	kás-unuk-a	'be untied'
	balum-un-a	'turn'	bálum-uk-a	'be turned'
	húm-un-a	'knock down'	húm-uk-a	'be collapse'
	két-ul-a	'cut'	két-uk-a	'be cut'
	sumb-ul-a	'marry a woman'	sumb-uk-a	'be married to a man'
	tab-ul-a	'rip, tear'	tab-uk-a	'be ripped, be torn'
	lók-ol-a	'pierce'	lók-ok-a	'be pierced'
	kót-ol-a	'break'	kót-ok-a	'be broken'
	tot-a	'hatch out'	tot-ok-a	'crack on hatching'
	soñ-olol-a	'sharpen'	soñ-olok-a	'be sharpened'
	hól-ol-a	'drop'	hól-ok-a	'fall'
	bóf-ol-a	'dent'	bóf-ok-a	'be dented'

4.3.8 Reciprocal Extension

The reciprocal verbal extension -añan shows mutual relationship when attached to transitive verbs. In other words, the verb root to which it is suffixed expresses an action involving more than one person each of each undergoes the action of the other. Besides the reciprocal meaning, the extension also has associative meaning 'do things together'. It may express a situation in which a group of people are involved. The reciprocal extension may be attached to both basic transitive verbs and intransitive verbs. Unlike in most of the Bantu languages, the reciprocal verbal extension is not very productive in Lunda. It has been replaced by the invariant reflexive morpheme, prefixed in the verb root, which now marks both reflexivity and reciprocity. This is syntactically analyzed in chapter VIII on detransitive constructions (see chap 8, section 8.1.2).

(26)

Basic Verb		Derived Verb	
tíy-a	'understand'	tíy-añan-a	'understand each other'
keñ-a	'like, love'	keñ-añan-a	'love each other'
kund-a	'be fond of'	kund-añan-a	'like each other'
tal-a	'look'	tál-añan-a	'look at each other'
lala	'die in numbers'	lal- añan-a	'kill one another'
d-á	'eat'	d-áñan-a	'eat together'
nuñ-a	'join'	nuñ-añan-a	'be joined together'
húm-a	'bump into'	húm-añan-a	'meet together'
anza	'economize'	anz-añan-a	'share out'

The extensions -ashan and -akan also have the associative meaning. They denote that two or more entities are associated in expressing a state of affairs. That is, more participants take part in an action or event.

(27)   Basic Verb   Derived Verb
       bomb-a   'mix, add'   bomb-ashan-a   'be mixed together'
       tíy-a   'hear'   tíy-ashan-a   'confer'
       lond-a   'follow'   lond-ashan-a   'follow one another'
       yamb-a   'be uncertain'   yamb-ashan-a   'be confused'
       tal-a   'look'   tal-ashan-a   'stand facing each other'
       sel-a   'interlace'   sel-ashan-a   'pass without seeing
                                                              each other'

       kuñ-a   'gather'   kuñ-akan-a   'assemble together'
       lam-a   'keep close to   lam-akan-a   'keep close together
                                           bulakan-a   'meet face to face'
                                           samakan-a   'meet'

4.3.9 Positional Extension

A good number of intransitive verbs ending in -am(an)/ am(en) are all stative.

They all share a common semantic property by the fact that they indicate the body

posture of the subject. The verb endings alternate with the causative verbal extension

-ik/-ek discussed in section 5.2.1. The positional verbal extension is, nonetheless, not

synchronically frozen in the language.

(28)   a.   fúkama   'kneel'
             bándama   'lean forward'
             kambama   'lie on'
             shakama   'sit'
             fúlama   'bend'
             búkama   'sit on heel'
             konkama   'lie awake'
             belama   'lie in wait'
             noñama   'stop, bow head'
             nanama   'stand on tiptoe'
             lelama   'lie hidden'

b. búlamana   'lie on stomach'
    kankamana   'come to a standstill'
    zonkamana   'squat'
    bukamana   'be of crouching position'
    butwamana   'crouch like a frog in concealment'
    talamana   'stand with legs apart'

Besides the positional meaning, the verbal extension -am also denotes the state

of a subject with some verbs. Verbs with such an ending take only one argument, the

subject, and are all intransitive stative. They describe the state or condition of

the single argument.

(29) lumbama   'be heaped'
      dundama   'be humped'
      vumbama   'be buried' (< vumba 'be covered over')
      kúnama   'be deep'   (< kuna 'sow close together')
      fúmbama   'be bent'
      pama   'be mature'
      bazhama   'be naughty'
      suñama   'be straight, direct, upward'
      kósama   'be foolish'
      batama   'hide, conceal'
      belama   'lurk, lie in vait'
      swama   'be in hiding'
      háyama   'be surprised'
      teñama   'be balanced'
      hátama   'be wedged in tight place' (< hata 'be near')
      kúnama   'be deep' (kuna 'sow close together')
      lema   'be heavy'

4.3.10 Persistive Extension

The persistive verbal extensions -azhal, -azham, -azhol, -ek, -ok, and -ol encode

a state of affairs which takes place repeatedly (intensive). They do not alter the

argument structure of the verb to which they are attached. Instead, they provide

additional information to the verb about the persistent actions or events. That is, the actions that occur repeatedly on the same occasion, or on different occasions. If there are more than two syllables, the last syllable of the root deletes. The occurrence of action is continuous. This derivational process is not as productive as the applicative; it is only confined to a restricted number of verb roots. Examples of derived verbs with the suffix azhal are given in (30):

(30)

Basic Verb		Derived Verb	
kám-a	'sleep'	kam-azhal-a	'sleep from place to place'
nón-a	'pick up'	non-azhal-a	'pick up here and there'
papat-a	'grope with hands'	pap-azhal-a	'go about searching'
zhimbala	'lose, be lost'	zhim-azhal-a	'wander'
láb-a	'delay, be late'	láb-azhal-a	'linger, loiter'
kandama	'climb up'	kand -azham-a	'climb about'
shakam-a	'sit'	shak-azhal-a	'move about from seat to seat'
bátam-a	'hide oneself'	bat-azhal-a	'go hiding from place to place'

The following are some of the verbs that take the suffix azhol:

(31)

end-a	'walk'	end-ozhol-a	'walk about continually'
toñ-a	'think'	toñ-ozhok-a	'reflect'
kám-a	'lie down'	kám-azhok-a	'lie tossing about'
íhul-a	'ask'	íhu-zhol-a	'ask repeatedly'
lab-a	'be late'	lab-azhol-a	'loiter, be late'
tut-a	'take to and fro'	tut-uzhol-a	'carry bit by bit'
		tut-uzhok-a	'move about recklessly'
asam-a	'open mouth'	as-azhol-a	'go about with mouth open'

A few verbs take the intensive suffixes -ol and -ok to express the division of an object into smaller pieces and the intensity of the action or state.

(32) Basic Verb   Derived Verb
      balul-a   'split'   bal-ol-a   'split into several pieces'
      dat-a   'step on'   dat-ol-a   'step on repeatedly'
      habul-a   'cut carcass in half'   hab-ol-a   'cut up into joints'
      káluk-a   'cry out'   kál-ok-a   'cry out intensively'
      kétul-a   'cut'   két-ol-a   'cut up in small pieces'
      sumpuk-a   'overflow'   sump-ok-a   'keep on overflowing'

A very small number of verbs have their suffix -ik changed into -ek to express

intensity.

(33) hánj-ik-a   'converse'   hánj-ek-a   'keep on chatting'
      shinj-ik-a   'shove, push'   shinj-ek-a   'keep pushing'

4.3.11 Movement Extension

A small number of verbs end with the suffix -ñil which describes one's

manner of walking or moving. This morphological process not only derives new

intransitive verbs from existing intransitive verbs, but also derive verbs from

ideophones. Synchronically, it is, however, not highly productive in Lunda.

(34) peda-ñil-a   'walk in a drunken or wobbling fashion (< ideo. peda 'totter,
                                                                    wobble')
      bata-ñil-a   'walk with flat foot' (< batama 'hide self')
      zeba-ñil-a   'keep traveling from place to place'
      bwanka-ñil-a   'be tossed as on waves, sway as a tree'
      puwa-ñil-a   'be restless'
      pukwa-ñil-a   'walk disconsolately' (< pukwa 'shame-faced disconsolate')
      banda-ñil-a   'walk in stooping position' (< bandama 'stoop, bend down')
      chichi-ñil-a   'walk energetically'

4.3.12 Contactive Extension

The contactive derivation rarely occurs in the language. It is only found with a couple of verbs which are frozen or with non-derived verbs whose meaning cannot be linked to the non-derived verb roots. Verbs with the extension -at seem to share regular semantic properties, they all indicate that an action enters into contact with some other entity. Consider the following:

(35)   lamata   'adhere, stick to' (< lama 'keep, guard')
        shímata   'be firmly rooted, stand firm'
        kumbata   'embrace'
        dimbata   'be sticky, adhesive'
        fumbata   'carry clutched to one's breast'
        pakata   'carry under arm'
        fúbata   'catch with both hands something in motion, falling or trying to escape' (< fuba 'ideophone denoting catching with both hands')

4.3.13 Potential Extension

A very limited number of transitive verb roots become intransitive when they suffix the potential extension -an. The verb takes an agentive subject and disallows the patient. The main function of the potential is to express what the agent can possibly do, or what it does frequently. Some of the verbs are given below:

(36)

Basic Verb		Derived Verb	
fw-a	'die'	fw-an-a	'be deadly, be dangerous'
dimb-a	'deceive'	dimb-an-a	'be false, deceitful'
sum-a	'bite'	sum-an-a	'be biting, likely to bite'
tuk-a	'insult'	tuk-an-a	'be insulting'
shiñ-a	'curse'	shiñ-an-a	'be one who curses'
zuw-a	'be angry'	zuwa-ñan-a	'be quarrelsome'
shet-a	'be drunk'	shet-an-a	'be intoxicating'

To add to the list is a limited number of verbs, most of them perceptive verbs such as

'see', 'hear', 'feel', and 'taste' to have the English interpretation '-ible'. This suffix is

limited to a very small number of verbs.

(37) <u>Basic Verb</u>   <u>Derived Verb</u>
tíy-a   'hear'   tíy-akan-a   'be audible, be famous'
mwek-a   'appear'   mwek-an-a   'appear, be visible'
tumb-a   'name'   tumb-akan-a   'be famous'
món-a   'see'   món-ek-a   'be visible'
twésh-a   'be able to'   twésh-ek-a   'be possible'

<u>4.3.14 Reduplication</u>

In Lunda reduplication involves the repetition of the entire verb root to the right

to intensify the effect of the action encoded by the verb. Monosyllabic verb roots are

repeated two times, while verb roots constituting more than two syllables can only be

repeated once. Reduplication indicates that the action or event expressed by the verb

root is repeatedly or frequently carried out.

(38) <u>Basic Verb</u>   <u>Reduplication</u>
da   'eat'   da da da   'keep eating'
inza   'come'   inza inza   'keep coming'
kasa   'tie'   kasa kasa   'keep tying'
neña   'grumble'   neña neña   'keep grumbling'
keña   'look for'   keña keña   'search, look everywhere'
tala   'look'   tala tala   'look about'
dimbuka   'fall down'   dimboka dimboka   'keep falling down'
tambika   'call'   tambika tambika   'keep calling'
kala   'be hard'   kala kala   'work hard'
landa   'buy'   landa landa   'keep buying'

The action of the verb can be intensified by repeating the verb root. The final

vowel -a̲ changes into a lengthened vowel -e̲e̲. More often, the first part of the verb is

replaced by the verb kwila 'to do' followed by the main verb.

(39)   a.   watambika tambikee
                   wu- a-   tambik -a tambikee
                   3sg- PAST- call   -fv call
                   'S/he called and called.'

        b.   weseka esekee
                   wu- a-   esek -a esekee
                   3sg- PAST- try   -fv try
                   'S/he tried and tried.'

        c.   Wela hemee
                   wu- a-   il -a hemee
                   3sg- PAST- do -fv play
                   'S/he played and played.'

        c.   Eyala namumbanda elili hanjikee.
                   a- i- yala na-   mu- mbanda a- il -il -i hanjikee
                   2- 6- man CON- 1-   woman 3pl- do -RP -fv chat
                   'The man and the woman kept on chatting.'

4.3.15 Combination of Extensions

The verb extensions, both inflectional and derivational, may co-occur within the

same verb root. That is, more than one extension can appear in a verbal form to derive

new verbs and the order and the order of their occurrence is fixed. Though various verb

extensions do combine, this is not very complex in Lunda in that a verb root can only

take a maximum of two such suffixes. There are restrictions as to which suffixes can co-

occur and their order of appearance. The applicative extension is by and large the only

suffix that freely combines with most of the suffixes and comes after them. With the exception of the remote past marker and the imperfective marker, the applicative extension follows several verbal extensions such the causative, stative, reversive, contactive, movement and position. Consider the following verbal forms:

(40) a. Causative-applicative:
          keheshela   (< keh-esh-el-a)   'make it small for'

      b. Reversive-applicative:
          enzulwila   (< enzel-ul-il-a)   'open for'

      c. Stative-applicative:
          fumpikila   (< fump-ik-il-a)   'crushed on'
          mwekena   (< mwe-kan-in-a)   'be seen from'

      d. Contact-applicative:
          datila   (< dat-il-a)   'tread on carefully'

      e. Position-applicative:
          imena   (< iman-in-a)   'stand on'

      f. Movement:
          imazhalila   (< iman-zhal-il-a)   'stand about for'

Unlike the applicative, the causative co-occurs only the stative and position verbal extensions in a verb root, as shown below:

(41) a. Stative-causative:
          tiyakesha   (< tiy-akan-ish-a)   'make known'

      b. Position-causative:
          kundamisha   (< kund-am-ish-a)   'cause to come near'

The stative can only co-occur with the causative, which comes before, in a verb.

(42) Causative-stative:
      loñezheka   (< loñ-ezh-ik-a)   'be packed'

CHAPTER V

TENSE, ASPECT AND MODALITY

This chapter describes the tense, aspect and modality system of Lunda. Tense, aspect, and mood are expressed and realized both by means of verbal affixes and by periphrastic constructions through auxiliary verbs. The tense-aspect and mood formatives occupy two slots of the verb root.

5.1 Tense

Tense has been defined as a category that 'relates to time of the situation referred to some other time, usually the moment of speaking' which is normally the speech time (Comrie 1985:2, Bybee et al.1994, Givón 2001). Thus, two types of tenses are distinguished, namely absolute tenses and relative tenses. With absolute tense forms, the reference point from which the semantic interpretations are based, is the coding time. The tenses fall into three main divisions according to the temporal distance from the time of speech in terms of anteriority, simultaneity and posterity. These are referred to as past for events prior to the coding time (present moment), present for events coinciding with coding time, and future for events after coding time.

In addition to the three tense divisions, Lunda has tense distinctions in both the

past and the future. The past is subdivided into two degrees of past reference, namely,

the near past and the remote past. The future tenses are more diversified than the past

tenses; there are five subdivisions of future tenses: immediate future, imminent future,

near future, remote future, and very remote future. Some tenses are expressed

morphologically by means of the prestem morphemes and suffixes, while others are

marked periphrastically. The Lunda tense divisions and subdivisions can be

schematically represented as follows:

(1)

Past tenses	Present	Future tenses
P2	P1 ↑ Present F3 ↓ F2 F1	F5 F4
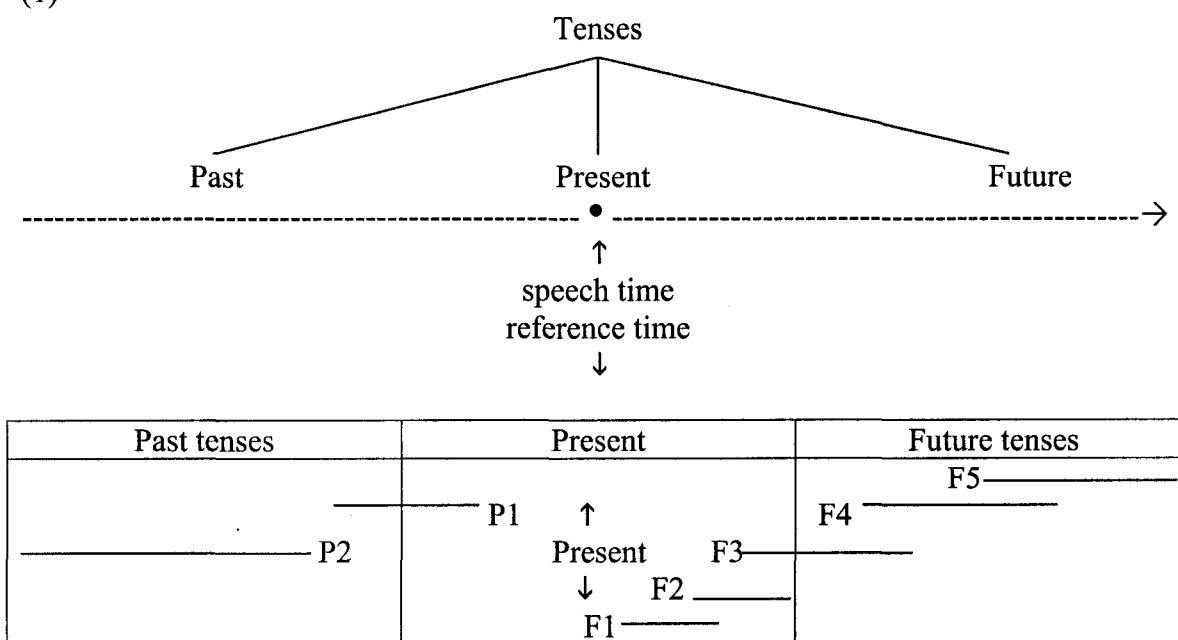
Where P1 stands for near past, P2 for remote past, F1 for immediate future, F2 for

imminent future, F3 for near future, F4 for remote future and F5 for very distant future.

5.1.1 Past Tenses

Lunda has two degrees of past tenses according to the temporal distance in relation to the moment of speech. These are- the near past and the remote past.

5.1.1.1 Near Past

The near past is marked by the morpheme a- between the subject concord and the verb plus the final vowel -a. The tense marker is underlyingly toneless and all verbs, irrespective of their underlying tones, do not bear any high tone on the surface. That is, there is no distinction between high-toned verb roots and toneless verb roots in the near past. First and second person singular and plural subject prefixes have high tones, while third person both singular and plural bear low tones. Furthermore, the second and third person singular subject prefixes are formally identical except for the high tone on the former. The following example with the verb záta 'work' illustrates the near past tense:

(2)   Wazata halóshi.
        wu- a-   zát -a halóshi
        3sg- PAST- work -fv yesterday
        'S/he worked yesterday.'

The near past is used to denote completed events/actions which took place earlier today and yesterday.

(3)	názata	'I worked'
	wázata	'you worked'
	wazata	's/he worked'
	twázata	'we worked'
	mwázata	'you worked'
	azata	'they worked'

5.1.1.2 Remote Past

The remote past tense is marked in the preverbal root by á- and the suffix -ili/-eli

and its variant -in/-en. All the subject markers in this tense, irrespective of their

underlying tones, bear low tones on the surface and the underlying high tone of the tense

marker shifts to the first syllable of the verb stem. Monosyllabic and disyllabic verb roots

irrespective of their underlying tones bear a high tone on the penultimate syllable,

whereas verbs of more than three syllables carry high tones on the first and second

syllables. Consider the following example of the remote past using the verb sanda

'demolish, dig down, scratch as hen' in (4):

(4)   Wasándili itála.
      wu- á-   sand   -ili itála
      3sg- PAST- demolish -RP house
      'S/he demolished the house.'

The remote past is used to indicate completed actions/events prior to yesterday. In

addition to this function, it serves to provide absolute temporal reference as a background

in narratives where other verb forms are in either the immediate future or the unmarked

aspect (chap XI, section 11.2.4).

(5) nazátili   'I worked'
     wazátili   'you worked'
     wazátili   's/he worked'
     twazátili   'we worked'
     mwazátili   'you worked'
     azátili   'they worked'

5.1.2 Present

The present tense has been described as a situation which 'is temporally located

as simultaneous with the moment of speaking' (Comrie 1976:2). It has also been

defined in terms of something that exists at the present moment, has existed in the

past and may well exist for an indefinite long period in the future (Quirk et al 1990:47).

In Lunda, the present tense is periphrastically expressed through the use of the copular di

'be' used as an auxiliary followed by the comitative marker na- 'and, with' attached to

the main verb in the infinitive form. The same copular verb 'be' and the comitative

marker expresses possession. The subject prefix is simply adjoined to the copular verb

without any overt tense/aspect marking. First and second person subject prefixes are

high-toned, whereas third person subject prefixes are toneless.

(6) nídi nakwendozhola   'I am walking about'
     wúdi nakwendozhola   'you are walking about'
     wudi nakwendozhola   's/he is walking about'
     túdi nakwendozhola   'we are walking about'
     múdi nakwendozhola   'you are walking about'
     adi nakwendozhola   'they are walking about'

There is yet an alternative present tense form in the language which is formed by

the use of the defective verb túmbi 'be' as an auxiliary verb instead of the copular di.

(7) nítúmbi nakwendozhola   'I am walking about'
     wútúmbi nakwendozhola   'you are walking about'
     wutúmbi nakwendozhola   's/he is walking about'
     tútúmbi nakwendozhola   'we are walking about'
     mútúmbi nakwendozhola   'you are walking about'
     atúmbi nakwendozhola   'they are walking about'

A variant present form exists in Lunda in which the copular di or tumbi 'be'

deletes and the morpheme na- is placed between the subject prefix and the verb in the

infinitive form. Generally, there is a tendency among speakers to omit the first person

singular and third person class subject prefixes in this type of verbal formation. Thus, the

two persons do not have overt subject concords and are only distinguished by a surface

high tone on the morpheme na- in the first person singular.

(8) (ní)nákwendozhola   'I am walking about'
     wúnakwendozhola   'you are walking about'
     (wu)nakwendozhola   's/he is walking about'
     túnakwendozhola   'we are walking about'
     múnakwendozhola   'you are walking about'
     anakwendozhola   'they are walking about'

Beside these two functions, this form of the present tense may also code an

immediate future when the verb is followed by a temporal adverb referring to a time at

the moment of speech.

5.1.3 Future Tenses

Future tenses encode situations that take place after the moment of speech.

Lunda has also subdivisions of the future tense according to the temporal distance from

the reference time. The future tenses comprise the immediate future, imminent future,

near future, remote future and very remote future.

5.1.3.1 Immediate Future

The immediate future tense is constructed by means of the morpheme hí- attached

to the subject prefix followed by the verb in the infinitive form. The third person singular

class 1 subject prefix used in this tense is a- instead of wu- that occurs in most of the

indicative tenses. It fuses with the tense marker. This is, however, not the case in the third

person plural whereby the particle -y- is inserted between the tense marker and the

subject prefix. This future tense can be used to express an immediate intention; that is, an

event or state of affairs that is just about to occur or is set into motion just after the time

of speech. It also serves as a narrative tense in combination with the remote past or near

past which provide the temporal reference point as a background. It is frequently used in

narratives to describe and report past events, actions and situations vividly, dramatically,

and dynamically.

(9) híníkunyámuka   'I am setting out'
     híwúkunyámuka   'you are setting out'
     hákunyámuka   's/he is setting out'
     hítúkunyámuka   'we are setting out'
     hímúkunyámuka   'you are setting out'
     híyakunyámuka   'they are setting out'

5.1.3.2 Imminent Future

The imminent future is expressed by a periphrastic construction using the verb stem <u>kéña</u> 'want', 'intend', as an auxiliary without a subject prefix followed by the main lexical verb in the subjunctive form.[1] The subject prefix is marked on the main verb instead. Like the immediate future, the third person singular subject makes use of the subject concord -<u>a</u>- instead of <u>wu</u>-. This future construction denotes future events that will take place very soon and the emphasis is rather placed on imminence.

(10)	kéña níshiki	'I will soon be arriving'
	kéña wúshiki	'you will soon be arriving'
	kéña ashiki	's/he will soon be arriving'
	kéña túshiki	'we will soon be arriving'
	kéña múshiki	'you will soon be arriving'
	kéña ashiki	'they will soon be arriving'

5.1.3.3 Near Future

This tense is used to denote future events on the same day or earlier tomorrow. It is marked morphologically by <u>ku</u>-, which is homophonous with the infinitive marker, placed between the subject marker and the verb root plus the final vowel -<u>a</u>. The second person singular and class 1 third person singular subject prefixes are formally identical, but they are distinguished by virtue of the high tone on the first syllable of the latter. Furthermore, verbs in the near future maintain their underlying tones on the surface. In addition, the first and second person subject prefixes, both singular and plural, carry high tones.

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[1] White (1947:9) has described this type of future tense as an 'intermediate near future'.

(11) níkuzáta   'I will work'
      wúkuzáta   'you will work'
      wukuzáta   's/he will work'
      túkuzáta   'we will work'
      múkuzáta   'you will work'
      akuzáta   'they will work'

While the near future expresses future events on the same day or earlier

tomorrow, it may also be expressed in terms of weeks (this week as opposed to next

week) or years (this year vs. next year). For instance, if an event will take place this year,

the speaker may use near future to contrast with next year, which is remote future.

(12) Wukusanda itála chínu cháka.
      wu- ku- sand   -a itála chinu chaka
      3sg- FUT- demolish -fv house this   year
      'S/he will demolish the house this year.'

5.1.3.4 Remote Future

The remote future tense codes future events of tomorrow and beyond. Futurity is

expressed morphologically by means of the morpheme ka- or (a)ka- in the pre-radical

tense-aspect slot between the subject prefix and the verb root. The tone patterns of verbs

in the remote future are the same as those of the near future above.

(13) nákazáta   'I will work'
      wákazáta   'you will work'
      wakazáta   's/he will work'
      twákazáta   'we will work'
      mwákazáta   'you will work'
      akazáta   'they will work'

5.1.3.5 Very Distant Future

This tense locates very remote events in Lunda and somewhat involves a sense of certainty to show the eventual occurrence of an action/event. It is marked periphrastically by means of the auxiliary ambá 'speak, say'[2] followed by the future tense marker ku- or ka- prefixed to the main verb root and the choice between the two is a matter of the degree of remoteness in the future.

(14) nambá kaya   'I will go'
      wambá kaya   'you will go'
      wambá kaya   's/he will go'
      twambá kaya   'we will go'
      mwambá kaya   'you will go'
      ambá kaya   'they will go'

5.2 Aspect

Aspect has been defined as 'different ways of viewing the internal temporal constituency of a situation' (Comrie 1976; 1985). It does not express the temporal relationship between the time of the situation and reference time'. In other words, an aspect indicates whether an event or state encoded by the verb is completed or in progress. It is concerned with the duration of an action or an event. Languages do have perfective/imperfective aspectual distinction. The perfective aspect has been described as an aspect that expresses an event or state 'as a single whole without distinction of the various separate phases that make up that situation', while the imperfective aspect refers to the 'internal structure' of an event or state' instead of expressing it as a single whole

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[2] The verb amba is found in one expression amba nsañu 'tell news.'

(Comrie 1976). In addition, languages may also have the perfect aspect or anterior to indicate current relevance, at the moment of utterance, of a previous situation. It expresses a relationship between an event or a state that occurred prior to it.

Lunda has perfective/imperfective aspectual distinction interacting and co-occurring with the past and the future situations in addition to the tense degrees of remoteness to the moment of speech. That is, the point of reference associated with the tenses can be moved either before or after the coding time. Aspects are expressed by both bound morphemes and periphrastically. The past tenses present more imperfective distinctions than the future tenses because they make reference to events already completed and regarded as real. Further, Lunda has two types of perfect aspect verbal forms. Their actual interpretation of the tenses of the marked perfect depends on the semantic features of the verbs. In other words, some verbs have anterior readings, while others have present meanings despite being marked with the same morphological shape.

5.2.1 The Imperfective Aspect

In Lunda, the imperfective aspect can be subdivided into habitual, continuous and progressive aspects which can be added to the three tense divisions. The habitual aspect encodes 'situations that are customary or usual, and repeated on different occasions' (Bybee, Perkins and Pagliuca 1994). It refers to a situation that is characteristic of an extended period of time. The continuous aspect, which includes the progressive aspect, expresses a continuing situation over a period of time.

The Lunda habitual aspect can be combined with all the three tense divisions to indicate that a state of affairs occurs regularly or customary. It is morphologically marked by the verbal suffix -áña and its variant -éña added to the verb stem.

5.2.1.1 Habitual Past

The habitual past is formed by marking a verb in the perfective remote past with the imperfective aspectual suffix -éña. It is used to express repeated activities in the past and may also be used for ongoing actions and continuous situations in the remote past. Consider the examples involving the interaction of the tense markers and the habitual aspectual marker below:

(15)	nadíminéña	'I used to cultivate'
	wadíminéña	'you used to cultivate'
	wadíminéña	's/he used to cultivate'
	twadíminéña	'we used to cultivate'
	mwadíminéña	'you used to cultivate'
	adíminéña	'they used to cultivate'

5.2.1.2 Near Past Continuous/Progressive

The past continuous aspect is expressed periphrastically by means of the auxiliary di 'be' suffixing the aspectual morpheme -ña followed by the main verb in the infinitive form attached to the comitative marker na- 'and, with'. It indicates that an event in progress at the time of speaking as well as a continuous event maintained over a period of time at the time of utterance.

(16) nádiña nakudima   'I was cultivating'
     wádiña nakudima   'you were cultivating'
     wadiña nakudima   's/he was cultivating'
     twádiña nakudima   'we were cultivating'
     mwádiña nakudima   'you were cultivating'
     adiña nakudima   'they were cultivating'

5.2.1.3 Remote Past Continuous/Progressive

The remote past progressive is a periphrastic construction consisting of the

auxiliary di 'be' that suffixes the morpheme -ñi plus the comitative marker na- and the

main verb in the infinitive form.

(17) nadíñi nakudima   'I was cultivating'
     wadíñi nakudima   'you were cultivating'
     wadíñi nakudima   's/he was cultivating'
     twadíñi nakudima   'we were cultivating'
     mwadíñi nakudima   'you were cultivating'
     adíñi nakudima   'they were cultivating'

The remote past progressive is used for ongoing actions when another action or

event occurs. It is also used for customary or repeated situations of longer stretch of time

in the past. Furthermore, it is also extended to some stative verbs in the remote past to

indicate longer duration. However, there is a slight difference between the construction

involving actions verbs and stative verbs in that the latter requires both the copular and

the main verb to be marked with subject prefixes. for this is expressed by two finite verbs

each marked with the same subject. Additionally, the comitative marker na- is left out.

This is in contrast with some other languages where stative verbs cannot be marked with

the continuous/progressive aspect (Comrie 1976; Givón 2001).

(18) a.   Wadíñi wéluka
            wu- a-   di -íñi wu- a-   iluka
            3sg- PAST- be -RP 1SG- TNS- know
            'He knew'

      b.   Wadíñi nakukata hawansi.
            wu- a-   di -íñi na- ku- kata ha-   wansi
            3sg- PAST- be -RP with- INF- be sick LOC- childhood
            'He was sick during his childhood.'

5.2.1.4 Past Continuous/Progressive with chi

The remote past may co-occur with the persistive aspectual marker chi- 'still' in the preverbal tense aspect slot to encode progressive actions that persist.[3] It represents a situation which started in the past and was ongoing at the reference time in the remote past. Progressiveness in the remote past is expressed periphrastically by repeating the copular di 'be'. The first copula is marked in the remote past tense while the second verb in the sequence is in the present progressive is marked with the morpheme chi-. That is, the subject prefix and the copular are repeated in this construction and each verb in the construction is marked with a subject referring to the same entity.

(19)   nadíñi níchidi nakuzáta   'I was still working'
        wadíñi wúchidi nakuzáta   'you were still working'
        wadíñi wuchidi nakuzáta   's/he was still working'
        twadíñi túchidi nakuzáta   'we were still working'
        mwadíñi múchidi nakuzáta   'you were still working'
        adíñi achidi nakuzáta   'they still working'

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[3] Some linguists label this aspectual form 'persistive'.

5.2.1.5 Habitual Present

The habitual present expresses and codes habitual and customary actions in the

present. It is also used to refer to general and timeless truths or gnomic utterances. It is

expressed through the suffixation of the habitual morpheme -aña attached to the verb tem.

(20) nádímáña   'I cultivate'
     wádímáña   'you cultivate'
     wadímáña   's/he cultivates'
     twádímáña   'we cultivate'
     mwádímáña   'you cultivate'
     adímáña   'they cultivate'

5.2.1.6 Present Progressive

The present progressive is formed periphrastically by means of the copular di 'be'

or túmbi 'be' as an auxiliary verb followed by na- 'and, with' plus the main verb in the

infinitive form.

(21) nídí nakuzáta   'I am working'
     wúdí nakuzáta   'you are working'
     wudi nakuzáta   's/he is working'
     túdí nakuzáta   'we are working'
     múdí nakuzáta   'you are working'
     adi nakuzáta   'they are working'

The present progressive/continuous has an alternative construction in which the

copular verb di or tumbi , 'be' is left out. In this case, the subject prefix is simply

affixed to the verb which is attached to the comitative marker na- 'and, with'[4]. Generally,

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[4] This is similar to the Kaonde present continuous which is formed by means of bena plus the verb in the
infinitive form (Wright 1977:135).

the first person singular and the third person singular subject markers are omitted in this type of present progressive construction and the two are distinguished by virtue of the high tone on the marker in the first person singular. Below is a paradigm of the present progressive:

(22) nínakuzáta/nákuzáta   'I am working'
       wúnakuzáta   'you are working'
       wunakuzáta/nakuzáta   's/he is working'
       túnakuzáta   'we are working'
       múnakuzáta   'you are working'
       anakuzáta   'they are working'

In addition to the continuous aspectual function, this form can also code an immediate future when the verb is followed by a temporal adverb referring to a time at the moment of speech.

5.2.1.7. Present Progressive with chi

The present progressive can also be used with the persistence marker -chi- 'still' to denote a durative event or state that started at some point in the past prior to the reference time and is still going on at the specified time. The present tense is not overtly marked on the verb, but it is indicated by the lack of the post verbal extension on the part of the auxiliary as is the case with past tenses.

(23) níchidi nakuzáta   'I am still working'
       wúchidi nakuzáta   'you are still working'
       wuchidi nakuzáta   's/he is still working'
       túchidi nakuzáta   'we are still working'
       múchidi nakuzáta   'you are still working'
       achidi nakuzáta   'they are still working'

When used with stative verbs, the imperfective progressive marker <u>na</u>- is left out and the main verb is marked with a subject prefix.

(24)   wuchidi wakata.   's/he is still sick'

5.2.1.8. Imperfective Future

The habitual aspectual marker -<u>añá</u> can be combined with the remote and very distant future tense markers to indicate habitual, regular or customary state of affairs in the future. In addition, the habitual marker is also used to express ongoing actions and continuous situations in remote future and very distant future.

(25)   Remote future:
        nákazátáña   'I will be working'
        wákazátáña   'you will be working'
        wakazátáña   's/he will be working'
        twákazátáña   'we will be working'
        mwákazátáña   'you will be working'
        akazátáña   'you will be working'

The paradigm of the imperfective very distant remote future is given in (26) below:

(26)   nambá kayáña   'I will be going'
        wambá kayáña   'you will be going'
        wambá kayáña   's/he will be going'
        twambá kayáña   'we will be going'
        mwambá kayáña   'you will be going'
        ambá kayáña   'they will be going'

5.2.2 The Perfect Aspect

Lunda has two perfect aspectual forms with distinct uses. They can be described as the present perfect or anterior and the general/unmarked perfect or perfect II.

5.2.2.1 Present Perfect

In Lunda, the present perfect is morphologically marked by the morpheme ná- placed between the subject marker and the verb root plus the final vowel -i. The first person singular subject marker/prefix and the third person singular class 1 subject prefix are not overtly expressed in independent and main clauses. They are distinguished only by virtue of the high tone on the aspectual marker in the first person singular.

(27) názáti   'I have worked'
      wúnazáti   'you have worked'
      nazáti   's/he has worked'
      túnazáti   'we have worked'
      múnazáti   'you have worked'
      anazáti   'they have worked'

However, in some subordinate clauses such as relative clauses and adverbial clauses the third person singular subject prefix used is a- instead of the usual wu- employed in independent clauses. In addition, the same subject prefix is used in the subjunctive mood. This na- tense/aspect form has been described in some other languages such as Luvale (Horton: 1949), Mbukushu (Fisch: 1998) and Luchazi (Fleisch: 2000)[5].

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[5] Fisch describes this tense as current day past. But, looking at her English translations, one discovers that she has given several temporal interpretations ranging from present to past.

The example in (29) is an adverbial clause of time in which the verb has two prefixes

consisting of a temporal prefix chi- and a third person class subject prefix a-:

(28)   chanashíki mwána
        chi- a-   na-   shik -i mwána
        when 3sg- PERF- arrive -fv child
        'when the child has arrived'

The morpheme -ka- can be placed within the verb to show that the event took

place at a distance. There means that there is movement away from the speaker and this

morpheme is also used in the subjunctive for distal situations (cf. subsection 5.5.4).

(29)   Nakatémi neyi muna.
        na-   ka- tem   -i neyi mu- na
        3sg.PERF- DIR- cut down tree -fv like LOC- DEM
        'He has cut down the trees like over there.'

Depending on the type and semantics of the verbs used in discourse, the present

perfect tense-aspect serves several functions and is widely used in Lunda. It may refer to

either the past or the present. With the majority of verbs of action and processes, that is

verbs whose subjects have agentive semantic role, the present perfect is used to express

a state of affairs which have recently taken place and completed prior to the reference

time and have present/current relevance. Consider the following example:

(30)   Natémi mutóndu.
        na-   tem   -i mutóndu
        3sg.PERF- cut down -fv tree
        'S/he has cut down a tree.'

It should be noted, however, that not all action verbs semantically follow this

behavioral pattern. Exceptions are some dynamic verbs that display semantic properties

totally distinct from other verbs belonging to that group. Despite having an agent, they

have a present reading or interpretation and make reference to ongoing situations or current state in progress at the time of speaking when used with the present perfect inflectional morphology. In other words, the present perfect is used as a present tense with such verbs. Some of these verbs end in the morpheme -ata. The focus is not placed on the completed state of affairs that marks the beginning of the situation, rather on the ongoing or present state.

(31)   Mwána napákati itépa.
          mu- ána na-   pakat   -i itépa
          1- child 3sg.PERF- carry under arm -fv hat
          'The child is carrying a hat under his arm'

In example (31), the use of the perfect means that the action of holding the hat has taken place and is going on or continues at the moment of speaking.

Examples of some the verbs that behave in this fashion are given in the following list:

(32)   kwáta   'hold'
          kúmbata   'embrace'
          pakata   'carry under arm'
          fúmbata   'carry clutched to one's breast'
          senda   'carry'
          vwála   'wear, put on clothes, dress'

In Lunda, the present perfect acquires the present time reference and usage to indicate the present state or situation when used with stative verbs of perception, cognition, and mental faculties (psych) despite its anterior morphology and completive character. The subjects of such verbs are animates with the thematic/semantic role of experiencers. Since these are stative verbs, the use of the anterior morphology does not mark completion of an action, but rather the focus is placed upon the consequences that linger at the time of speech. It expresses a continuing present state relevant at the time of

speaking. The behavior pertaining to these verbs has also been noted in other Bantu

languages closely related to Lunda (Fleisch 2000). The examples that follow illustrate the

use of the present perfect with present reading despite the completive feature of the verbs

in Lunda.

(33) a. Námóni muntu.
          ná-   mon -i muntu
          1sg.PERF- see -fv person
          (Lit. 'I have seen a person')
          'I see a person.'

      b. Nátíyi mashíka.
          ná-   tiy -i mashika
          1sg.PERF- feel -fv cold
          (Lit. 'I have felt cold.')
          'I feel cold.'

Some of the verbs that belong to this group are given in the following list:

(34) | móna | 'see' | kéña | 'want, love, like' |
      | tíya | 'feel, hear, understand' | hela | 'hate' |
      | hila | 'become annoyed' | inzhilila | 'get used to' |
      | iluka | 'know' | toñozhoka | 'think' |
      | anuka | 'remember' | hewuka | 'be foolish' |
      | bábala | 'be alert, be clever' | supa | 'be stupid' |
      | zaluka | 'be mad' | kata | 'be sick' |
      | hálwa | 'be unlucky, unfortunate' | zhimbala | 'forget' |
      | káana | 'refuse, deny' | mwena | 'become quiet' |
      | háyama | 'be amazed, surprised' | bázhama | 'be naughty' |
      | koleka | 'be fortunate, be lucky, | heeta | 'possess, own' |
      | zúwa | 'be angry' | sákila | 'thank' |

The present is also used with a considerable number of stative verbs denoting

the acquisition of qualities, physical properties and state to mark present time or meaning.

It indicates that the action is completed and the beginning of the new state is complete;

but the resultant state or condition continues and persists at the reference time. In other

words, the present perfect expresses a change of state that occurs either at the time of

utterance or prior to the moment of speech and the resultant state, which is associated

with it, goes on at the moment of speech. In addition, the relationship that exists between

the situation change and the resultant state is much more evident. These verbs are without

agent and have the inchoative meaning such as 'to be(come) satisfied', 'to be happy',

'be(come) beautiful', etc to describe an action which leads to a state. Furthermore, a lot

of verbs that acquire stative meaning through derivation by suffixing -ik/ek and -uk/ok

with an unexpressed agent fall under this class of verbs(chap VIII, section 8.3).

(35)   a.   Anazéyi
              a- na- zéy   -i
              3pl- PERF- be tired -fv
              (Lit: 'They have become tired')
              'They are tired.'

       b.   Kalóña kanómi.
              ka- lóña ka- na-   úm   -i
              12- river 3sg- PERF- be dry -fv
              (Lit: 'The river has become dry')
              'The river is dry.'

       c.   Mutáyi wunakótóki
              mutáyi wu- ná-   kotok   -i
              branch 3sg- PERF- be broken -fv
              (Lit: 'the branch has become broken')
              'The branch is broken.'

Some of the stative verbs that are used in the present perfect with the present meaning are

given in the list that follows:

(36)

tówala	'be sweet'	lula	'be bitter'
sámuka	'be insipid'	futa	'putrefy, go rotten'
iliya	'be dark'	tooka	'be white'
chá	'dawn'	toka	'go rotten, putrefy'
há	'be cooked, be ripe'	toha	'be fat'
kosa	'be thin'	sukuma	'be burned, scorched'
leha	'be long, tall'	íhiha	'be short'
lába	'to get late'	sheta	'be drunk'
kúla	'grow, be old'	zéya	'be tired'
zowa	'be wet'	vwala	'get dressed'
vula	'be abundant'	kéha	'be small'
chínana	'be red'	wáha	'be beautiful'
shínakazha	'grow old'	tuuta	'be cool, moist, damp'
ínzala	'be full'	úma	'be dry'
díta	'be thick'	kola	'be strong'
fúwa	'half-cooked'	vumba	'overgrown, be covered'
nana	'swell, be swollen'	kata	'feel pain'
sumbula	'marry (of a man)'		
sumbuka	'get married (of a woman)'		
íkuta	'be satisfied, replete with food'		

In Lunda, the present perfect takes over the uses of the present tense with a

a good number of verbs of state denoting positions (see chap IV, section 4.8) despite its

completive feature. These verbs may fall under the category of intransitive stative verbs

which are either totally stative or inceptive stative and most of them end in -ama/-ana.

The use of the perfect morphology with these verbs indicates that a situation has taken

place and brings about a present position or state at the moment of speech. That is, it

refers to the action such as sitting down, standing, kneeling down, bending, bowing

down, lying down, etc which has resulted in a state. The verbs denoting positions

are functionally and pragmatically closely related to the verbs of perception and mental

faculty discussed above. Below are two examples to illustrate the present interpretation of

the present perfect with stative verbs denoting positions, but bearing the present perfect

verbal morphology:

(37) a. Némani.
          ná-   iman -i
          3sg.PERF- stand -fv
          (Lit. 'he has stood')
          'He is standing.'

      b. Múnashákámi.
          mu- ná-   shakam -i
          2pl- PERF-sit   -fv
          (Lit. 'you have sat down')
          'You are sitting'

The following is a list of some the positional verbs in Lunda.

(38) bandama   'stoop, bend down'
      batáma   'conceal self, hide'
      fukáma   'kneel'
      fuláma   'bend, stoop with buttocks projecting'
      ímana   'stand, stop, come to a standstill'
      káama   'lie down, sleep'
      shakama   'sit, be placed'
      swáama   'hide, be in hiding'
      vumbáma   'overgrown, be covered'
      zonkama   'squat, be on heels'
      tandama   'stand in line'

5.2.2.2. The Perfect II

Lunda has yet another perfect aspectual form morphologically and tonally marked

by the morpheme -á- placed between the subject prefix and the verb plus the verbal suffix

-a. The morphology of this aspectual form and that of the perfective near past is virtually

identical except that the former bears a surface high tone on the first syllable of the verb

root. Furthermore, all the subject prefixes in this type of perfect aspect, irrespective of

their underlying tones, bear low tones on the surface. A paradigm of this kind of perfect

aspect is given below:

(39)	navúlamena	'I have forgotten'
	wavúlamena	'you have forgotten'
	wavúlamena	's/he has forgotten'
	twavúlamena	'we have forgotten'
	mwavúlamena	'you have forgotten'
	avúlamena	'They have forgotten'

Functionally, the perfect II differs from the present perfect in several respects.

Unlike the present perfect, the perfect II codes completed situations that occurred in

the past not so relatively close to the moment of speech with long lasting and enduring

effects at the time of speaking and beyond. That is, the effect resulting from the situation

can be long lasting or permanent. This phenomenon has been noticed in other Bantu

languages such as Luvale (Horton 1949); Mbukushu (Fisch 1998) and Lucazi (Fleisch

2000) which are genetically related to Lunda. Its use is somewhat restricted in that only a

limited number of dynamic verbs are used with this perfect aspectual form.

(40) a.   Watémuka.
            wu- a-   témuk   -a
            3sg- PERF- run away -fv
            'He ran away' (he's still gone)

      b.   Waháña mwána.
            wu- a-   hañ   -a
            3sg- PERF- chase -fv
            'S/he has chased the child.'

The perfect II also makes reference to the present state of the subject when used with stative verbs[6] that denote physical, cognition and mental properties or non-dynamic circumstances. In other words, the perfect II marks present time when it occurs with stative verbs that have little or no change over a period of time. The verbs describe situations that held, hold and will continue to hold. This ambivalent function of the perfect has also been noted with the present perfect. Many verbs acquire stative meaning through derivation by suffixing the stative extension -ik/ek and -uk/ok that deletes the agent (see chap VIII, section 8.3 for details).

(41)   welúka
        wu- a-   iluk   -a
        3sg- PERF- know -fv
        'S/he knows'

Another function of the perfect II aspectual type is that of experiential. It expresses an experience that has held at least once prior to the time mentioned. Comrie (1976) states that the experiential perfect[7] "indicates that a given situation has held at least once during some time in the past leading up to the present". This is especially so in Lunda even if the action occurred a long time ago. In some instances, the verb may suffix the locative suffix class 16 -hu, class 17 -ku, and class 18 mu- and the experiential meaning is often reinforced by the adverb déhi 'already'.[8]

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[6] This aspectual form of the perfect has been described as 'stative present' (Fisher 1989:59) and (White 1947:4) because of its use with stative verbs.

[7] Leech (1971:32) associates experiential with what he terms 'indefinite past'. By indefinite past here are meant two things: first the number of the events is unspecified – it may be one or more than one, secondly the time is also left unspecified. Therefore to put it more carefully, the meaning of the Present Perfect here is 'at-least-once-before-now'.

[8] The locative morpheme ha- is realized as -hu due to the phonological process that obtains in the language. The vowel /a/ deletes when it comes into contact with another of a different quality.

(42) Wamónahu déhi mutúpa.
      wu- a-   món -a -hu dehi   mutúpa
      3sg- PERF- see -fv -16 already lion
      'S/he has already seen a lion.'

Below is a list of some of the stative verbs used in the perfect II to convey the

present state.

(43) zéya   'be tired, be weak'
      hela   'hate'
      kéña   'live, desire, love'
      esekana   'be equal'
      iluka   'know'
      kósama   'be foolish, be stupid'
      shinshika   'be reliable, be trustworthy'
      vumba   'be overgrown as of grass'
      heña   'be crooked, not straight'
      zaluka   'be mad'
      supa   'be stupid'
      luwa   'be naughty, be wrong'
      kata   'be ill'
      fwána   'resemble, look like'
      fwaana   'be deadly, be poisonous'
      díta   'be thick'
      zhíkwa   'be disobedient'
      seha   'be cheerful, be happy'
      mwéna   'be quiet'
      kátala   'be lazy, have no energy'
      zuwa   'be angry, be bad-tempered'

5.2.2.3 Remote Past Perfect

The remote past perfect is based on the remote past verb form suffixing the

imperfective marker -áña and the locative suffix -hu at the same time followed by the

adverb dehi'already'. This gives the meaning of 'beforehand', as the example below

illustrates:

(44)   Amuswáníshelíñáhu déhi henohu kánda anyámuki.[9]
      a- á-   mu-   swanish   -il -áña -hu   dehi   henohu kanda
      3pl- PAST- 3sg.OBJ- install in office -RP -IMP -LOC already before not yet

      a-   nyamuk -i
      3sg- start out -SUBJ
      'They had already installed him in office before he started out on a journey.'

5.2.2.4. Future Perfect

Like the remote past, the near future, remote future and very distant future may

occur in the perfect. This is carried out by suffixing both the imperfective aspectual

marker and the postverbal locative affix to the verb in the appropriate tense followed by

the adverb déhi 'already.'

(45)   Akayañáhu déhi
      a- a-   y -áña -hu   dehi
      3pl- FUT- go -IMP -LOC already
      'They will have already gone.'

5.2.2.5 Present Perfect Progressive

The present perfect progressive is based on the present perfect aspectual

construction plus the imperfective aspectual marker -áña/-éña suffixed to the verb. This

construction is used to refer to a situation which occurred prior to the moment of speech

and was continuing at the reference time of speech while something else happened. The

emphasis is placed upon the duration of the action, but not on its completion. First and

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[9] This sentence is extracted from an interview conducted on a Lunda program on Zambia National Broadcasting Corporation.

third person singular lack an overt subject prefix in the present perfect progressive and

the two are distinguished by a high tone on the first person singular.

(46) náheméña   'I have been playing'
      wúnáheméña   'you have been playing'
      naheméña   's/he has been playing'
      túnáheméña   'we have been playing'
      wúnáheméña   'you have been playing'
      anaheméña   'they have been playing'

5.3. The Unmarked Tense/Aspect

The unmarked tense/aspect consists of the simple form of the verb stem attached

to the subject prefix without any overt tense marker. Class 1 third person subject prefix is

either a- or yo- rather than wu-. The verb in the unmarked form cannot stand alone, but

depends on other elements such as conjunctions, auxiliary verb, tense, etc. for its

interpretation. It may may be repeated in the infinitive form or a noun, an adjective or an

ideophone may follow it. This verbal construction has various functions depending on the

mood. It is used in narratives to express a strictly consecutive order of actions or

processes that occurred in the past. This function is fully described in chapter XI.

(47) níshakama   'I sat down'
      wúshakama   'you sat down'
      ashakama, yoshakama 's/he sat down'
      túshakama   'we sat down'
      múshakama   'you sat down'
      ashakama   'they sat down'

The unmarked verb construction form is also used with the auxiliary kwenda

'to walk, move, travel' to express habitual and continuous events in dependent clauses.

The subject prefix is simply attached to the auxiliary verb without any tense marking and

repeated on the main verb which is also uninflected for tense-aspect. The unmarked

verbal form also occurs in constructions introduced by the expression chiña 'must'.

The paradigm of the unmarked verb form is given in (48):

(48)   nénda nihósha   'I keep talking'
        wénda wúhósha   'you keep talking'
        enda ahósha, yohósha   's/he keeps talking'
        twénda túhósha   'we keep talking'
        mwénda múhósha   'you keep talking'
        enda ahósha   'they keep talking'

5.4 Modality

Modality indicates the speaker's attitude towards his or her own utterance,

proposition and situation, including the speaker's beliefs in its reality or likelihood

(Bybee et al.1994; Givón 2000). The speaker may indicate that a certain proposition is

true, possible, desirable, necessary, or unlikely. This section describes Lunda non-

indicative or declarative moods that include imperative, subjunctive and conditional.

5.4.1 Irrealis

In Lunda, there exists what may be described as an irrealis verbal form which is

formed by using the tense aspect morpheme a- attached to the verb di 'be' in the

subjunctive form followed by the infinitive of the main verb. It is used as a suggestion,

mild obligation or recommendation in the sense of 'ought, should, could, might'. It also

that are not likely to occur. The irrealis verb form is also used in the subordinate clause

in counterfactual conditional constructions (see chap. XI).

(49) a. Wádi kuya.
          wu- a-   di ku- ya
          3sg- TNS- be INF- go
          'S/he should/could have gone'

      b. Wádi kuya kuchipatela.
          a- a-   di ku- ya ku- chipatela
          2sg- TNS- be INF- go LOC-hospital
          'You ought to go to the hospital.'

5.4.2 Imperative

The imperative exists in two forms in Lunda, a second person singular and a

second person plural form. The singular form simply consists of the verb stem and the

final vowel -a. In the plural form the verb stem suffixes the morpheme -enu instead of the

final vowel -a. The functions and coding of the imperative are discussed in chapter X.

(50) léta!   'bring!' (second person singular)
      létenu!   'bring!' (second person plural)

In most cases, with the second person singular the verb stem suffixes the locative

enclitics -ku which results in the lengthening of the preceding imperative vowel.[10]

Monosyllabic verb stems obligatorily suffix either the locative enclitic or the morpheme

-añá.

(51) yáku!   [yáaku]   'go!' (second person singular)
      yáña!   [yáaña]   'go!' (second person singular)
      yénuña!   [yéenuuña] 'go!' (second person plural)

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[10] The locative enclitic used in the imperative forms does not seem to have any locative semantics at all. It is fossilized in the second person singular.

The locative enclitic -ku has lost its locative meaning when suffixed to verbs in the imperative form. Verbs must have an additional locative enclitic in order to denote location in the second person singular.

(52) shákuhu!   'put (it) there!'
     talákuku!   'look there!'
     ichilákumu!   'pour it in!'

When an object prefix, the reflective/reciprocal prefix di-, the spatial marker ka-, or a combination of any of these linguistic items, is prefixed to an imperative verb form the final vowel a- for the second person singular changes to i-. The plural form suffixes the pronominal stem -enu whose initial vowel fuses with i.

(53) a.   dáña!   kádi!   'go and eat!'
           dénu!   kádénu!   'go and eat!'

     b.   tála!   mutáli!   'loot at him!'
           tálénu!   mutálénu!   'look at him!'
           shakúmu!   wushímu!   'put in it!'

     c.   séháku!   diséhi!   'laugh at yourself'

By prefixing the first person plural subject prefix tu- to the second person plural imperative verb form the speaker is part and parcel of the imperative .

(54) tuyénu!
     tu- y -enu
     1pl- go -2pl.IMP
     'Let us go.

The verb inza 'come' has no corresponding imperative form at all. The language uses an irregular form which even occurs in an abbreviated form when followed by another verb. In addition, there exists another irregular imperative form whose verb form cannot be traced.

(55)   a.   twáya! (second person singular)   <   inza 'come'
              twáyénu! (second person singular)

        b.   twa túyénu!   'come on, let us go!'

        c.   twokwa! (second person singular)   'lead the way!'
              twokwénu (plural)   'lead the way!'

<div align="center">5.4.3 Subjunctive</div>

Lunda has two forms of subjunctive, a simple one and a remote (complex) one. The simple type of the subjunctive indicates temporal and spatial proximity as opposed to the complex one which refers to distal and future application. It is formed by means of the subject prefix and the verb stem which ends with the vowel -i̱. The third person singular class 1 subject prefix is a̱- instead of the usual w̱u̱- employed in most of the tenses in independent declarative sentences. The same subject prefix is employed in the third person plural. If an object prefix is marked on the verb, it immediately precedes the verb stem following the subject prefix. The functions of the subjunctive are examined in detail in chapter X, section 10.2.2. The paradigm for the simple subjunctive is given below:

(56)   nímóni   'I may/should see'
        wúmóni   'you may/should see'
        amóni   's/he may/should see'
        túmóni   'we may/should see'
        múmóni   'you may/should see'
        amóni   'they may/should see'

The remote subjunctive form is expressed by the affixation of the future/distal marker (a)ka- between the subject prefix and the verb ending in the final vowel -i. The distal marker is used to refer to temporal and spatial distance (motion). That is, the remote subjunctive may express an action or a movement away from the speaker, or a situation to be fulfilled in the future.

(57)

1st person singular	níkamóni	'(that) I may see'
2nd person singular	wúkamóni	'(that) you may see'
3rd second person	akamóni	'(that) s/he may see'
1st person plural	túkamóni	'(that) we may see'
2nd person plural	múkamóni	'(that) you may see'
3rd person plural	akamóni	'(that) they may see'

Both the simple and the future (complex) subjunctive forms may suffix the imperfective marker -eña to denote continuous or progressiveness in the present and future tenses, habitual or customary events.

(58) a. Imperfective:
Aheméña
a-   hem -i   -aña
3pl- play -SUBJ -IMPF
'Let them keep playing'

b. Imperfective Future:
Akaheméña
a-   hem -i   -aña
3pl- play -SUBJ -IMPF
'Let them keep playing'

5.4.4. Conditionals

Lunda has no special verbal or modal forms at its disposal to indicate conditionality. Conditional clauses are introduced by the subordinator néyi 'if, like, as if, when' and various tenses in the indicative mood may be used. In other words, there is no restriction on tense in the conditional clause. Thus, the conditional construction is not modal in character, but temporal.

5.4.4.1 Potential

The potential is introduced by the subordinator néyi followed by the verb formation in the subjunctive. It expresses a simple condition without any implied possibility that the condition will materialize. Furthermore, it does not make reference to the time of the condition and consequence.

(59) néyi níshíki   'should I arrive'
      néyi wúshíki   'should you arrive'
      néyi ashíki   'should s/he arrive'
      néyi túshíki   'should we arrive'
      néyi múshíki   'should you arrive'
      néyi ashíki   'should they arrive'

5.4.4.2 Present Progressive Conditional

The present progressive conditional is expressed by means of the subordinator néyi 'if, whether, when' followed by the verb formation in the present progressive. It has the present progressive meaning in that the condition might be realized after the moment of speech.

(60)	néyi nídi nakuhema	'if I am playing'
	néyi wúdi nakuhema	'if you are playing'
	néyi wudi nakuhema	'if s/he is playing'
	néyi túdi nakuhema	'if we are playing'
	néyi múdi nakuhema	'if you are playing'
	néyi adi nakuhema	'if they are playing'

5.4.4.3 Present Perfect Conditional

The present perfect is used in the conditional clause to express the present possibility. This is frequently used in the language for conditions that may materialize after the moment of speech. The condition must precede the consequence and does not refer to the actual time in relation to the time of speech. Due to the ambivalent functions of the present perfect, the present perfect conditional does not make reference to the actual time in relation to the moment of speech. It depends on the type of verbs it is connected with.

(61)	néyi náshíki	'if I arrive'
	néyi wúnáshíki	'if you arrive'
	néyi nashíki	'if s/he arrives'
	néyi túnáshíki	'if we arrive'
	néyi múnáshíki	'if you arrive'
	néyi anashíki	'if they arrive'

5.4.4.4 Perfect Conditional

The perfect conditional is only used with stative verbs. It includes habitual or generic conditionals, as shown by the example in (62):

(62)   néyi nakéña   'if I like'
        néyi wakéña   'if you like'
        néyi wakéña   'if s/he likes'
        néyi twakéña   'if we like'
        néyi mwakéña   'if you like'
        néyi akéña   'if they like'

5.4.4.5 Near Future Conditional

The conditional construction relating to the near future is formed using the same conjunction with the verb marked in the near future. It is used for near future conditions or possibility and the verb in the main clause must also be coded in the near future.

(63)   néyi níkuya   'if I will go'
        néyi wúkuya   'if you will go'
        néyi wukuya   'if s/he will goes'
        néyi túkuya   'if we will go'
        néyi múkuya   'if you will go'
        néyi akuya   'if they will go'

5.4.4.6 Remote Future Conditional

The remote future conditional construction is functionally like the near future conditional except that the conditional relation is likely to begin and be fulfilled in the remote future.

(64)   néyi nákaya   'if I will go'
        néyi wákaya   'if you will go'
        néyi wakaya   'if s/he will go'
        néyi twákaya   'if we will go'
        néyi mwákaya   'if you will go'
        néyi akaya   'if they will go'

5.4.4.7 Very Distant Future Conditional

The very distant future conditional is constructed by means of the subordinator néyi preceding the verb form inflected in the very distant future. The tone of the verb does not change despite being preceded by a high-toned morpheme.

(65) néyi nambá kaya   'if I will go'
   néyi wambá kaya   'if you will go'
   néyi wambá kaya   'if s/he will go'
   néyi twambá kaya   'if we will go'
   néyi mwambá kaya   'if you will go'
   néyi ambá kaya   'if they will go'

5.4.4.8 Near Past Conditional

The near past conditional has a near past tense usage. It indicates that the condition is prior the moment of speech. The near past tonal rule also applies here. All the verb stems, irrespective of their underlying tones, are low toned on the surface.

(66) Near Past:
   néyi néluka   'if I knew'
   néyi wéluka   'if you knew'
   néyi weluka   'if s/he knew'
   néyi twéluka   'if we knew'
   néyi mwéluka   'if you knew'
   néyi eluka   'if they knew'

5.4.4.9 Remote Past Conditional

The remote past is used in the conditional clause to indicate the unfulfilled condition in the remote past. Both high tone verbs and low tone verbs have the same surface tone pattern.

(67)　Remote Past:

néyi nelúkili	'if I had known'
néyi welúkili	'if you had known'
néyi welúkili	'if s/he had known'
néyi twelúkili	'if we had known'
néyi mwelúkili	'if you had known'
néyi elúkili	'if they had known'

5.5 Negation

Lunda has several ways of turning affirmative statements into negative ones

depending on the mood. A non-finite verb is negated by simply placing the negation

word nehi 'no' immediately after the verb. This type of negation often occurs with a

pronominal prefix in the verb.

(68)　Kumukéña nehi.
　　　ku- mu-　　keeñ -a　nehi
　　　15- 3sg.OBJ- like　-fv　no
　　　'You do not like him.'

The affirmative finite verbs of most of the tenses in the indicative mood can be

negated by means of two markers in the same sentence, namely, the prefix hí- and the

suffix -ku. The marker hí- appears preverbally prefixed to the subject marker and the

negative morpheme -kú is suffixed to the last constituent in a sentence. The tone patterns

follow the corresponding affirmative tenses. The verb roots maintain their inherent

underlying tones even when affirmative sentences are turned into negative ones. The

third person singular class 1 subject prefix is a- instead of wu- found in positive

independent sentences. The same subject prefix is employed with third person singular in

relative clauses, adverbial clauses and in the subjunctive. The vowel of the preverbal

negative marker fuses with the subject prefix a- and results into há-. As for third person

plural, the morpheme -y- is inserted between the negative marker and class 2 subject

prefix a-. Examples of negative clauses are given in (69a) and (69b):

(69) a.   Hádi nakuzátáku
           hí-   a- di na-   ku- záta -kú
           NEG- 3sg- be PROG- INF- work -NEG
           'S/he is not working.'

     b.   Híyadi nakuzátáku
           hí- y- a- di na-   ku- záta -kú
           NEG- epent 3pl- be PROG- INF- work -NEG
           'They are not working.'

Lunda has another negative construction which is formed by simply placing

the negative word wányi 'not, not at all' immediately after the verb, as illustrated.

(70) Nahosháña wányi Lunda.
     ni- a-   hosh -aña wanyi Lunda
     1sg- TNS- speak -HAB NEG Lunda
     'I do not speak Lunda.'

It should, however, be noted that not all the affirmative tense-aspects have

negative counterparts. The immediate future, imminent future, all the constructions using

the persistive aspectual marker -chi- 'still' and the timeless tense do not have their

corresponding negative counterparts. All verbs in the conditional mood can also be

negated in the same way as verbs in the indicative mood.

Furthermore, the subjunctive and the imperative moods have special forms of

negatives (see chap 10, subsection 10.2.2.7 and 10.2.2.8).

5.5.1 Near Past

The affirmative near past can be negated by means of the preverbal negative

particle hí- preceding the subject prefix followed by the verb inflected in the near past

plus the postverbal negative particle -kú. It should be noted the postverbal negative

marker must be attached to any constituent which occurs clause finally.

(71) hínázatáku   'I did not work'
      híwázatáku   'you did not work'
      háwazatáku   's/he did not work'
      hítwázatáku   'we did not work'
      hímwázatáku   'you did not work'
      híyazatáku   'they did not work'

The other negative form of the near past is constructed with the postverbal

negative word wányi 'not, not so, not at all' which follows the verb immediately. There is

no functional and semantic difference between the two types of negative forms.

(72) názata wányi   'I did not work'
      wázata wányi   'you did not work'
      wazata wányi   's/he did not work'
      twázata wányi   'we did not work'
      mwázata wányi   'you did not work'
      azata wányi   'they did not work'

5.5.2 Remote Past

The negative remote past form is constructed with the preverbal negative marker

hí- prefixed to the subject marker followed by the tense marker á- and the verb stem

ending in the perfective remote past marker -ili that suffixes kú. The tone patterns parallel

those of their affirmative counterpart.

(73)	hínazátílíku	'I did not work'
	híwazátílíku	'you did not work'
	házátílíku	's/he did not work'
	hítwazátílíku	'we did not work'
	hímwazátílíku	'you did not work'
	híyazátílíku	'they did not work'

5.5.3 Present

The negative from of the present tense is carried out through the affixation of the preverbal negative marker hí- to the subject marker followed by the copular verb di 'be', which is an auxiliary verb, plus the comitative marker na- preceding the main verb in the infinitive form. The postverbal negative marker -kú is suffixed to the main verb. The tone patterns are identical with those of the corresponding affirmative statements.

(74)	hínídi nakuzátáku	'I am not working'
	híwúdi nakuzátáku	'you are not working'
	híwudi nakuzátáku	's/he is not working'
	hítúdi nakuzátáku	'we are not working'
	hímúdi nakuzátáku	'you are not working'
	híyadi nakuzátáku	'they are not working'

5.5.4 Near Future

The near future negative refers to a situation that will not occur today and tomorrow. With the exception of the negative markers, the verb has the same form and the same tonal pattern as the corresponding affirmative near future. This is illustrated by the paradigm of the verb kuzáta 'to work' in (75):

(75)   híníkuzátáku   'I will not work'
         híwúkuzátáku   'you will not work'
         hákuzátáku   's/he will not work'
         hítúkuzátáku   'we will not work'
         hímúkuzátáku   'you will not work'
         híyakuzátáku   'they will not work'

5.5.5 Remote Future

The remote future negative is used to denote a situation that will not occur after the day after tomorrow and beyond. Remote future negative are morphologically formed by adding the two negative markers to the affirmative constructions. It has the same tonal pattern as the near future, but the only difference lies in the vowel of the tense marker.

(76)   hínákazátáku   'I will not work'
         híwákazátáku   'you will not work'
         hákazátáku   's/he will not work'
         hítákazátáku   'we will not work'
         hímákazátáku   'you will not work'
         híyakazátáku   'they will not work'

5.5.6 Very Distant Future

The very distant future is negated in the usual manner as the two other future tenses by means of the marker hí- before the auxiliary verb ambá 'talk, say', and the marker -kú suffixed to the last item in the clause. A negative very distant future is used to denote a situation that will never occur, as shown below:

(77) hínámbá kayáku   'I will never go'
      híwámbá kayáku   'you will never go'
      hámbá kayáku   's/he will never go'
      hítwámbá kayáku   'we will never go'
      hímwámbá kayáku   'you will never go'
      híyámbá kayáku   'they will never go'

5.5.7 Near Past Progressive

The negative form of the near past progressive is based on the affirmative near past progressive with the addition of the negative markers hí- and -kú with the latter being suffixed to the verb if it is the last constituent in a clause. It is used to express a situation that was not going on at a certain moment in the past.

(78) hínádiña nakudimáku   'I was not cultivating'
      híwádiña nakudimáku   'you were not cultivating'
      hádiña nakudimáku   's/he was not cultivating'
      hítwádiña nakudimáku   'we was not cultivating'
      híyamwádiña nakudimáku 'you were not cultivating'
      híyadiña nakudimáku   'they were not cultivating'

5.5.8 Remote Past Progressive

The remote past can also appear in the negative form in the same manner as the near past by means of the negative markers hí- and -kú described above. The preverbal negative marker is affixed to the subject marker, while the postverbal negative marker is suffixed to the last constituent in the clause.

(79)   hínadíñi nakudimáku   'I was not cultivating'
       híwadíñi nakudimáku   'you were not cultivating'
       háwadíñi nakudimáku   's/he were cultivating'
       hítwadíñi nakudimáku   'we were cultivating'
       hímwadíñi nakudimáku   'you were not cultivating'
       híyadíñi nakudimáku   'they were cultivating'

5.5.9 Habitual Remote Past

The habitual remote past negative is formed by the usual process of affixation of

negative markers hí- and -kú to the verb formation in the remote past inflected with the

imperfective aspectual marker -áña. The first vowel of the aspectual marker surfaces as

/e/ and no phonological explanation can be provided.

(80)   hínadíminéñáku   'I did not use to cultivate'
       híwadíminéñáku   'you did not use to cultivate'
       háadíminéñáku   's/he did not use to cultivate'
       hítwadíminéñáku   'we did use to cultivate'
       hímwadíminéñáku   'you did not use to cultivate'
       híyadíminéñáku   'they did not use to cultivate'

5.5.10 Habitual Present

The preverbal negative marker hí- precedes the subject prefix which is followed

by the tense marker a- and the verb stem inflected with the imperfective aspectual marker

-áña plus the postverbal negative marker -ku. Both the penultimate and the

antepenultimate vowels have high tones on the surface. The high tone that is linked to the

penultimate vowel derives from the postverbal negative marker as a result of final vowel

constraint.

(81)	hínádimáñáku	'I do not cultivate'
	híwádimáñáku	'you do not cultivate'
	hádimáñáku	's/he does not cultivates'
	hítwádimáñáku	'we do not cultivate'
	hímwádimáñáku	'you do not cultivate'
	híyadimáñáku	'they do not cultivate'

5.5.11 Present Progressive

Negation of the present progressive is carried out according to the process described above. There is no distinct negative conjugation beside the negative affixes hí- and -kú. The negative present progressive denotes an event that is not ongoing at the time of speech.

(84)	hínínakuzáta/nákuzátáku	'I am not working'
	híwúnakuzátákáku	'you are not working'
	hánakuzáta/nakuzátáku	's/he is not working'
	hítúnakuzátáku	'we are not working'
	hímúnakuzátáku	'you are not working'
	híyanakuzátáku	'they are not working'

5.5.12 Habitual Remote Future

The negative form of the remote future consists of the two negative markers, the prefix hí- and the suffix -ku, as shown by the following paradigm.

(85)	hínákazátáñáku	'I will not be working'
	híwákazátáñáku	'you will not be working'
	hákazátáñáku	's/he will not be working'
	hítwákazátáñáku	'we will not be working'
	hímwákazátáñáku	'you will not be working'
	híyakazátáñáku	'they will not be working'

5.5.13 Present Perfect

Negation of the present perfect follows a similar fashion as described above with the marker hí- prefixed to the subject marker and the other marker -kú suffixed to the last item in the clause.

(86)	hínázátíku	'I have not worked'
	híwúnázátíku	'you have not worked'
	hánazátíku	's/he has not worked'
	hítúnázátíku	'we have not worked'
	hímúnázátíku	'you have not worked'
	híyanazátíku	'they have not worked'

The negative form of the perfect that expresses an experience is morphologically distinct from its affirmative counterpart. It is periphrastically constructed using the conjunction kánda 'not yet, before' followed by the verb morphology consisting of the subject marker which is directly prefixed to the verb stem that ends in the vowel -i. The same conjunction is used in 'not yet' construction.

(87)	kánda nímóníhu	'I have never seen'
	kánda nímóníhu	'you have never seen'
	kánda nímóníhu	's/he has never seen'
	kánda nímóníhu	'we have never seen'
	kánda nímóníhu	'you have never seen'
	kánda nímóníhu	'they have never seen'

5.5.14 Conditionals

There is no distinct way of negating conditionals in Lunda. All types of the conditionals may be negated in a similar fashion by simply placing the conditional subordinator néyi before a negative verb in the indicative mood. All the tone properties

that apply to the indicative also applies to the negative conditionals. This is illustrated by

negative present perfect in (88), negative remote future conditional in (89) and negative

near past conditional (90):

(88)   Present perfect Conditional:
         néyi hínáshíkíku   'if I do not arrive'
         néyi híwúnáshíkíku   'if you do not arrive'
         néyi nashíkíku   'if s/he do not arrives'
         néyi hítúnáshíkíku   'if we do not arrive'
         néyi hímúnáshíkíku   'if you do not arrive'
         néyi híyanashíkíku   'if they do not arrive'

(89)   Remote Future Conditional:
         néyi hínákazátáku   'if I will not work'
         néyi híwákazátáku   'if you will not work'
         néyi hákazátáku   'if s/he will not work'
         néyi hítúkazátáku   'if we will not work'
         néyi hímwákazátáku   'if you will not work'
         néyi híyakuzátáku   'if they will not work'

(90)   Near Past Conditional:
         néyi hínélukáku   'if I did not know'
         néyi híwélukáku   'if you did not know'
         néyi hélukáku   'if s/he did not know'
         néyi hítwélukáku   'if we did not know'
         néyi hímwélukáku   'if you did not know'
         néyi híyelukáku   'if they did not know'

Table 21. Tense, Aspect, and Modality Morphology

Tense and Aspect	Structure
Near Past	SM-a-Vroot-a
Remote Past	SM-a-Vroot-il-i
Present	SM-di na-Vroot-a
Immediate Future	hí- SM-ku-Root-a
Imminent Future	Kéña SM-Vroot-i
Near Future	SM-ku-Vroot-a
Remote Future	SM-ka-Vroot-a
Very Distant Future	SM-amba ka-Vroot-a
Present Perfect	SM-na-Vroot-i
Near Past Progressive	SM-di na-Vroot-áña
Habitual Remote Past	SM-a-Vroot-éña
Remote Past Progressive	SM-di-iñi na-Vroot-a
Remote Past Progressive with persistive chi-	SM-di-iñi SM-chi-di na-ku-Vroot-a
Present Progressive	SM-di na-Vroot-a
Present Progressive with persistive chi-	SM-di-chi na-Vroot-a
Habitual Present	SM-a-Vroot-áña
Near Future Progressive	SM-ku-Vroot- áña
Habitual Remote Future	SM-ka-Vroot- áña
Habitual Very Distant Future	SM-ambá ka-Vroot- áña
Present Perfect	SM-na-Vroot-i
Present Perfect Progressive	SM-na-Vroot-éña
Unmarked Perfect	SM-a-Vroot-a
Subjunctive	SM-Vroot-i
Imperative (2sg)	Root-a/-áña/-ku
Imperative (2pl)	Root-enu
	SM-Root-i/-enu

CHAPTER VI

ARGUMENT STRUCTURE

AND TRANSITIVITY

This chapter describes the argument structure of verbs, transitivity and grammatical relations in Lunda. It looks at the various types of verbs and the relationship that the arguments bear with them in simple active clauses. Thus, the main purpose of this chapter is to define the clauses and verb classes in terms of the interface between semantic roles and grammatical relations of their participants. In other words, verbs are described by matching the semantic roles of the arguments they take and the grammatical relations their constituents assume within simple active clauses. The chapter is organized as follows: section 1 analyzes impersonal constructions and copular constructions, section 2 is concerned with transitivity, and section 3 deals with the properties of grammatical relations.

An argument is identified as being a grammatical relation such as subject, direct object or indirect/secondary object if it meets the two grammatical properties: 'coding properties and behavioral properties', and to some extent semantic properties. The overt or formal coding properties that indicate grammatical relations are constituent word order, case marking and pronominal agreement (Keenan 1976). Coding properties usually distinguish between the arguments that the verb requires from those that are not required.

The behavioral properties or syntactic controls define the role of the NP in grammatical constructions and can be broadly grouped into two types, namely, those that control coreferential deletion such as relativization, equi-deletion in complementation, clefting, and zero anaphora in chained clauses, and those that change the relation of an argument to the verb such as passivization, inverse, promotion to direct object, raising, and antipassive.

It is, however, important to note that not all of the properties are relevant to grammatical relations in Lunda. This chapter is only concerned with overt coding properties. The behavioral properties will be referred to in subsequent chapters dealing with other topics such as complementation, reciprocity, reflexivity, passivization, relativization, etc.

Grammatical relations or functions are signaled in Lunda mainly by three properties that include constituent or word order, pronominalization and case marking. The basic constituent order in Lunda is Subject-Verb-Object, that is, the subject occurs in clause initial position followed by the verb which precedes the object in independent clauses. Each of the three properties of grammatical relations is illustrated by the examples in (1) through (5) in simple clauses with different verb types.

(1)   a.   Chibinda wahila.
             chibinda wu- a-   hil   -a
             1-hunter 3sg- PAST- get angry -fv
             'The hunter got angry.'

       b.   Wahila.
             wu- a-   hil   -a
             3sg- PAST- get angry -fv
             'He got angry.'

(2)   a.   Chibínda waya kukalóña.
               chibínda wu- a-   y -a ku- kalóña
               hunter   3sg- PAST- go -fv LOC- river
               'The hunter went to the river.'

        b.   Wayáku.
               wu- a-   y -a -ku
               3sg- PAST- go -fv -LOC
               'He went there.'

In (1a) and (2a), chibinda 'hunter' is the subject; it occupies a pre-verbal position in the clause and governs agreement on the verb through the subject prefix wu- in wahila 'he got angry' and waya 'he went' which shows that the subject is a class 1 noun.

The prefix wu- marked on the verb in (1b) and (2b) bears the syntactic function of an anaphoric subject prefix class 1 third person and agrees in number, person and noun class with the coreferent class 1 noun chibinda 'hunter'. The noun kaloña 'river' in (2b) is not the subject of the sentence; it is a locative indirect object since it follows the verb and is marked by the locative prefix ku-. In addition, it pronominalizes as a locative suffix -ku in the verb in the sentence (2b).

The noun nswáha 'calabash' in (3a) is the direct object[1] of the sentence because it comes immediately after the verb and appears as an object prefix yi- in the verb in (3b).

(3)   a.   Mumbanda wafumpa nswáha.
               mumbanda wu- a-   fump -a nswáha
               1-woman   3sg- PAST- smash -fv 9-calabash
               'The woman smashed the calabash.'

(3). b.   Wayifumpa.
               wu- a-   yi-   fump -a
               3sg- PAST- OBJ- smash -fv
               'She smashed it.'

---

[1] The indirect object and second object are synonymous and are used interchangeably in this study.

On the basis of word order it is clear that the nouns <u>mumbanda</u> 'woman' and <u>kabáka</u>

'corn' in the sentence (4a) are the subject and the direct object of the verb <u>inka</u> 'put',

whereas <u>ihébi</u> 'basket' is a locative indirect object marked by the locative prefix <u>mu-</u>. The

latter follows the direct object and occurs in an oblique position. As pronouns, the

subject is expressed as prefix <u>wu-</u> on the verb in (4b) through (4d), and the direct object

is expressed by the object prefix <u>ki-</u> between the subject prefix and the verb in (4b) and

(4d), while the locative indirect object occurs as an object suffix <u>-mu</u> in the verb in (4c)

and (4d).

(4)   a.   Mumbanda wenka kabáka mwihébi.
               mumbanda wu- a-   ink -a kabáka mu- i- hebi
               1-woman   3sg- PAST- put -fv 12-corn LOC- 5-basket
               'The woman put the corn in the basket.'

       b.   Wakiinka mumuvuwa.
               wu- a-   ki- ink -a mu- i- hebi
               3sg- PAST- OBJ- put -fv LOC- 5-basket
               'She put it in the basket.'

       c.   Wenkámu kabáka.
               wu- a-   ink -a -mu ka- báka
               3sg- PAST- put -fv -LOC 12- corn
               'She put the corn in there.'

       d.   Wakiinkámu.
               wu- a-   ki- ink -a -mu
               3sg- PAST- OBJ- put -fv -LOC
               'She put it in there.'

In (5a) <u>mumbanda</u> 'woman', <u>kánsi</u> 'child', and <u>mukánda</u> 'book' are subject, direct object,

and indirect object respectively of the verb <u>inka</u> 'give'. This word order is paralleled by

pronouns in that the verb in (5b) bears a third person class 1 subject prefix <u>wu-</u>, an object

prefix <u>mu-</u> and and an indirect object pronominal form suffixed to the verb.

(5)   a   Mumbanda wenka kánsi mukánda.
mumbanda wu- a-   ink -a kánsi mukánda
1-woman   3sg- PAST- give -fv child book
'The woman gave the child a book.'

b.   Wamwinkáwu.
wu- a-   mu-   ink -a -wu
3sg- PAST- 3sg.OBJ- give -fv -3
'She gave it to her/him.'

6.1 Impersonal and Copular Constructions

This section describes the structure of impersonal and copular constructions.

These include clauses with expletive subjects and those that allow copular particles and

verbs. The section begins dealing with expletive subjects followed thereafter by copular

constructions.

6.1.1. Expletive Subjects

A number of constructions require the use of semantically empty expletive

impersonal subject prefixes to fill the syntactic subject slot in a clause. The expletive or

dummy subject does not refer to any nominal constituent and merely present in some

constructions only to fill the otherwise empty syntactic subject position. In Lunda,

locative prefixes ha-, ku-, and mu- as well as the prefix chi- can function as expletive

subject prefixes.

The locative prefixes are used impersonally to function as subjects in

existential constructions involving the three copular verbs di 'be', tumbi 'be' and ikala

'be, exist, live, stay'. The locative prefix is attached to the copular verb followed by a

nominal predicate or adjectives. Some examples illustrating the use of the locative <u>ku</u>- as

an expletive subject are given in (6):

(6)   a.   Kudi mwidima.
               ku-di mwidima
               LOC- be darkness
               (Lit.: 'there is darkness')
               'It is dark.'

        b.   Kutumbi mashíka.
               ku-   tumbi mashíka
               LOC-be   cold weather
               'It is cold.'

        c.   Kwadíñi chawizha hamukála.
               ku- a-   di -ñi chawizha ha-   mukala
               LOC- PAST- be -RP party   LOC- village
               'There was a party at the village.'

        d.   Kukekala chiwáhi.
               ku- ka-   ikala chiwahi
               LOC- FUT- be   nice
               'It will be nice.'

The same locative prefixes serve as expletive subjects with the negative defective

verb <u>osi</u> 'be none/nothing/nobody/nowhere' which takes the place of the copular verb <u>di</u>

'be' or <u>túmbi</u> 'be' in negative existential constructions.

(7)   a.   Negative:
               Kwosi antu.
               ku- osi   antu
               LOC- be.NEG people
               'There are no people.'

        b.   Mwosi menzhi mumulóndu.
               mu- osi   menzhi mu- mulóndu
               LOC- be.NEG water   LOC- bottle
               'There is not any water in the bottle.'

c. Hosi mukánda hakadidi.
ha- osi mukanda ha- kadidi
LOC- be.NEG book LOC- bed
'There is not any book on the bed.'

The locative prefixes are also employed as expletive or dummy subjects with stative intransitive verbs in constructions that mostly describe times of the day or weather as well as with stative intransitive verbs such as kushala 'to remain', kuhíta 'to pass', kwídika 'to happen, to occur, to proclaim', kuha 'to finish, end' and kumana 'to finish, end' to indicate that something exists, or happens. Consider the following examples:

(8) a. Kunáchi.
ku- na- ch -i
LOC- PERF- be dawn -fv
'It is dawn.'

b. Kuneli wufúku.
ku- na- il -i wufuku
LOC- PERF- be -fv night
'It is night.'

c. Kunamáni.
ku- na- man -i
LOC- PERF- be finished -fv
'It is finished.'

d. Kunáhu.
ku- na- h -u
LOC- PERF- end -fv
'It is over/ it's finished/ that's all, that's it.'

e. Kunasháli mafúku ayedí.
ku- na- shal -i ma-fuku a-yedí
LOC- PERF- remain -fv 6-days 6-two
'There are two days left.'

f.   Hanahíti mafáku ayedí.
ha- na-   hit -i ma-fuku a-yedí
LOC- PERF- pass -fv 6-days 6-two
(Lit: 'Two days have passed.')
'two days ago'

Two other negative defective verbs that employ locative prefixes as subjects are,

izhi 'do not know/perhaps' and onti 'refuse'. The verb onti is always followed by a

personal pronoun attached to a locative prefix. The two verbs do not take or use any tense

marker at all.

(9)   a.   kwonti kwami
ku-   onti   kw-ami
LOC- refuse 17-1SG
'I do not want.'

b.   kwizhi
ku- izhi
LOC-do not know/perhaps
'I do not know'

The prefix chi- serves as an expletive subject prefix with stative intransitive

evaluative verbs such as tama 'be bad', wáha 'be good', kala 'be difficult', etc. to denote

a general state. It is also used with certain stative verbs such as tíyakana 'be heard',

mwékana 'be visible, appear', and fwána 'be like', twesheka 'can, be possible', tela

'ought to, be important, be worthy' as sentential subject of the main clause followed by

the complement clause. It is semantically empty and simply occupies the syntactic

position of subject in a sentence, as illustrated by the examples in (10) :

(10) a.   Chinatámi.
chi-na-   tam   -i
7- PERF- be bad -fv
(Lit: 'it has become bad.')
'it is bad.'

b.   Chatéla kushala hetála.
      chi- a-   tela   ku- shala hetála
      7-   PAST- be important INF- remain 17-house
      'it is important to remain at home.'

Nouns that denote time or weather condition may also be expressed as an

impersonal expletive subject.

(11)   a.   Nvúla yinakunóka.
           nvúla yi- na-   ku- noka
           9.rain 9- PROG-INF- rain
           'it is raining'

    b.   Mpepela yinakuhíta.
           mpepela yi- na-   ku- hita
           9.wind   9- PROG- INF- pass
           (Lit. the wind is passing)
           'It is windy.'

6.1.2 Copular Constructions

A copula may be defined as 'a linking verb or particle which cannot stand alone

in the predicate; it must be followed by a subject complement' (Crystal 1997:93; Quirk

et al 1991:343). Its major function is to link a predicate nominal to a subject. Thus, a

predicate phrase refers to the same entity as the subject noun phrase. Lunda has three

verbs which can be classified as copular verbs- di 'be' and tumbi 'be' and ikala 'be,

become, stay, live, exist'. In addition to their main function of linking a predicate

nominal to a subject, the copular verbs have other uses.

The copular verb -di 'be' appears only in the present and past tenses, and does

not make reference to future time, and is also used in attributive, existential, locative,

and possessive constructions. It does not inflect for tense in the present tense. When used

as an auxiliary verb and in possessive constructions, the copular verb is followed by the comitative morpheme na- plus an infinitive verb. In the present tense the copular di occurs only with the first and second persons both singular and plural when it links two nominals, that is, the syntactic structure is of the NP di NP type. It is, however, used with third persons in the present tense only when the predicate is a locative expression, an adjective or when it is followed by the comitative marker na- 'and, with' and the conjunction néyi 'as if, like'.

(12) a.   Nídi muntu.
            ni- di muntu
            1sg- be person
            'I am a person.'

      b.   Ndéhu yidi hezhíku.
            ndéhu   yi- di ha-   i- zhíku
            9.cooking pot 9- be LOC- 5- cooking fire
            'The cooking pot is on the cooking fire.'

      c.   Wadiñi mwánta.
            wu- a-   di -ñi mwánta
            3sg- PAST- be -RP chief
            'He was a chief'

Like the copular verb di, the copular verb tumbi occurs in attributive, existential, locational, and possessive constructions (see 6.2.31). It is, however, only used in the present tense, and never occurs in the past and future tenses. In addition, this copular verb serves as an auxiliary verb in the formation of the present progressive aspect. Being used only in the present tense, the copular verb does not inflect for tense, aspect and modality. It simply prefixes the subject marker without any formal tense marker. It must be pointed out that the copular verb is becoming less common in present day Lunda.

(13) a. Wutúmbi nkawindi.
     wu- tumbi nka- wu- a-indi
     3sg- be alone-1- POSS-3sg
     'S/he is alone.'

   b. Wutúmbi nakuwela
     wu- tumbi na- ku- wela
     3sg- be COM- INF- bathe
     'She is bathing'

   c. Wutúmbi mwitála
     wu- tumbi mu- itála
     3sg- be LOC- house
     'She is in the house.'

The copula ikala 'be, become' is used in the present, and future tenses. Unlike

the other two copular verbs, it is never used as an auxiliary. It can be employed as a

verb of possession when it is followed by the morpheme na- plus a predicate nominal.

(14) a. Ona mumbanda wekala chiwáhi.
     ona mu- mbanda wu- a- ikala chiwáhi
     DEM1 1- woman 3sg- PERF- be good
     'That woman is good.'

   b. Wakekala ntáñishi.
     wu- aka- ikala ntáñishi
     3sg- FUT- be teacher
     'He will be/become a teacher.'

In the third person singular and plural in the present tense the language makes

use of an invariable non-verbal linking morpheme hí- whose function is to relate the

subject and a nominal predicate (complement) or an independent pronoun in a clause.

This simply involves the prefixation of the copular particle to the following constituent.

The copular particle hí- can come after a nominal subject or act as an impersonal

subject prefix when the nominal subject is not present in a clause. In the third person

plural, the morpheme y is inserted between the particle and a predicate nominal, as

illustrated by the example in (15c).

(15) a.   Muntu iwu híchilolu.
          muntu i   -wu hi-   chilolu
          1-person DEM -3sg- COP- headman
          'This person is a headman.'

      b.   Hichitwamu.
          hí-   chitwamu
          COP- chair
          'it is a chair'

      c.   Hiyantu.
          hí-   yi- antu
          COP- 2- people
          'They are people.'

The copular verbs di, tumbi, and ikala may be deleted in copular constructions

in the present tense which results in an equative clause. The zero-predicated sentences

are formed by simply prefixing the personal subject prefix to the nominal predicate or

adjectival predicate.

(16) a.   1st pers.   Nídimuntu → nimuntu   'I am a person'
                      Túdi antu   → tuyantu   'we are people'

      b.   2nd pers.   Wúdi muntu wumuntu   'you are a person'
                      Múdi antu   muyantu   'you are people'

(17) a.   Iwu mwána wekála chiwahi.
          iwu   mwána wu- a-   ikala chiwahi
          DEM1 1-child 3sg- PERF- be   good
          'This child is good.'

      b.   Iwu mwána wamuwáhi.
          iwu   mwána wu-a-mu-wahi
          DEM1 1-child 1-POSS-1-good
          'This child is good.'

6.1.3 Pronominal Copular Constructions

Pronominal copular constructions are distinct from the simple copular

constructions described above in that they make use of personal pronouns. First and

second person singular and plural are personal pronouns which are used predicatively.

They are formed by means of the prefix yi- attached to personal pronominal stems. The

copular construction can optionally be preceded by an independent personal pronoun.

They have no other constituents and can be used as presentative/identificational clauses

or can function as main clauses in relative constructions.

(18)   a.   Yámi
                yi-   ami
                COP- 1sg
                'It is me.'

        b.   Eyi yéyi ibwambu dami
                eyi yi-   éyi i- bwambu di-a-ami
                2sg COP- 2sg 5- friend   5-POSS-1sg
                'It is you my friend/you are my friend'

        c.   Ami yámi nálaba
                ami yi-   ámi ni- a-   laba
                1sg COP-1sg 1sg- PAST- be late
                'It is I who was late'

Third person emphatic copular constructions are distinct from first and second

person ones in that they are formed by means of the copular verb di 'be' that suffixes a

pronominal affix agreeing in number, person and class with the noun it refers to.

(19)   a.   diyi
                di   -yi
                COP -1sg
                'it is s/he/him/her'

b.   diwu
    di   -wu
    COP -3pl
    'it's they/.them'

c.   diku
    di   -ku
    COP -LOC
    'that's where'

Table 22. Pronominal Copular Constructions

1st person singular:	yámi		'It is I'
1st person plural:	yétu		'it is we'
2nd person singular:	yéyi		'it is you'
2nd person plural:	yénu		'it is you'

3rd person: class 1	diyi	2	diwu
3	diwu	4	diyu
5	didu	6	diwu
7	dichu	8	diyu
9	diyi	10	dizhu
11	dilu	10	dizhu
12	diku	13	ditu
14	diwu	10	diwu
15	diku		

Locative classes: 16	dihu	'that is where, that is when'
17	diku	'that is where'
18	dimu	'it is in there, that is so'

6.2 Transitivity

In this section various types of verbal constructions or clauses, the argument structures that verbs combine with in syntactic structures, and transitivity will be examined. Transitivity refers to clauses in respect of the relationship between the verb and the arguments it takes. Verbs can be divided into two broad categories consisting of

transitive and intransitive verbs. A verb is transitive if it is able to take a direct object or two syntactic arguments, whereas an intransitive verb requires one argument.

6.2.1 Intransitive Constructions

An intransitive construction is one which has a verb that does not take a direct object. An intransitive verb is, thus, a verb that describes a situation and takes only one core argument, the subject, to which it may assign the semantic role of agent, patient, or experiencer. It may optionally take an oblique post-verbal argument with varying semantics such as locatives, comitatives, instrumentals, or manners, and temporal. Intransitive verbs may further be divided into two distinct groups, namely verbs that do not take any post-verbal argument and those that allow optional post-verbal arguments.

<u>6.2.1.1 One-Argument Constructions</u>

A one-argument construction contains a verb which obligatorily takes a core single argument which may have diverse semantic roles such as agent, patient or experiencer. The single preverbal argument, which may be animate or inanimate, is the grammatical subject of the verb, as illustrated by the following examples in (20a) through (20c):

(20)   a.   Nsápi yinazhimbali.
                nsápi yi- na-   zhimbal -i
                9.key 9- PERF- be lost -fv
                'The key is lost.'

b. Mwána wakáta.
    mu-ána wu- a-   kata
    1-child SM TNS- be sick
    'The child is sick.'

c. Kési kazhima.
    ka-ési ka- a-   zhima
    12-fire 12- PAST- extinguish
    'The fire got extinguished'

In Lunda not all states are encoded by adjectives; a lot of one-argument stative

intransitive verbs can function attributively as adjectives to express states. In some

instances, the same stative verb may denote both state and change of state properties

(resultative state) depending on the tense/aspect used in discourse (cf. chap V

subsection 5.3.2.1). Below are examples of some of the verbs of states:

(21) Permanent (long duration) states:
      a. wakáta   's/he is sick'
      b. wazúwa   's/he is angry'
      c. wazéya   's/he is weak.'
      d. wamwéna   's/he is quiet'

(22) Resultative states:
      a. nakáti   's/he is sick' (right at the time of speaking)
      b. nazúwi   's/he is angry'
      c. nazéyi   's/he is tired'
      d. namwéni   's/he has become quiet'

6.2.1.2 One-Argument Constructions with Locative Objects

Beside the core argument, a number of active intransitive verbs may optionally

take locative noun phrases marked by one of the three locative prefixes ku- 'to, at, from',

mu- 'in, into, out of' and ha- 'on, off, at, onto'.[2] The preverbal noun phrase is a subject

with an agentive or patientive semantic role, while the post-verbal constituent which is in

an oblique position is a location with the thematic role of goal or source.

(23)   Locative noun:

a.   Anyána aneñili mwitála.
       a-nyi-ana   a- na-   iñil   -i mu-i-tála
       2-4-children 3pl- PERF- go into -fv 18-5-house
       'The children have gone into the house.'

b.   Anyána afuma kumukála.
       a-nyi-ana   a- a-   fuma ku-   mu-kála
       2-4-children 3pl- PAST- come LOC- 3- village
       'The children came from the village.'

c.   Yúma yidi hampása.
       yi-uma yi- di ha-   mpása
       4-things 4- be LOC-mat
       'Things are on the mat.'

When the locative noun phrase is animate, the locative markers kúdi, múdi, and

hádi are employed instead of the prefixes ku-, mu-, and ha-. The word order is the same

as that of locative involving non-human locative noun phrases. An example of an

animate locative marked with kúdi is given below:

---

[2] The locative prefixes can be semantically empty and as such the inherent meaning of the verb can explicitly indicate the location.

(24) Waya kúdi mándumi.
    wu- a-   y -a kúdi mándumi
    3sg- PAST- go -fv to   uncle
    'He went to my uncle.'

If the location denotes possession 'to/at the house of/place of', the locative

prefix consisting of the prefix ku- or ha- suffixes the possessive linking morpheme -a,

also known as connective. This is reminiscent of the French preposition 'chez' before a

human noun. Consider the example that follows:

(25) Waya kwa ndimi.
    wu- a-   y -a ku-a   ndimi
    3sg- PAST- go -fv LOC-POSS farmer
    'S/he went to the farmer's house/place'.

6.2.1.3 Intransitive Constructions with Comitatives

Some intransitive constructions have intransitive verbs that may take an agent and

a post-verbal nominal phrase with the semantic role of 'co-agent' or 'co-participant' of a

reciprocal event (Givón 1984, 2000) marked by the comitative morpheme na- 'and,

with'. The agent precedes the verb and functions as the subject of the clause. Though the

clause has more than one agent, the subject of the verb does not include all of them.

(26)   a.   Wahosha na ntañishi.
                wu- a-   hosh -a na-   ntañishi
                3sg- PAST- talk -fv COM- teacher
                'He spoke with the teacher.'

        b.   Wazuña na mumbanda.
                wu- a-   zuñ -a na-   mu-mbanda
                3sg- PAST- talk -fv COM- 1- woman
                'He fought with a woman.'

c.   Wadi nakuhanjika nebwambu dindi
       wu- a-   di   na-   ku- hanjika na- i-bwambu di-a-   indi
       3sg- PAST- COP PROG- INF- chat   COM- 5-friend 5-POSS-3sg
       'He was chatting with his friend.'

d.   Wabulakana namwanta.
       wu- a-   bulakan -a na-   mu-anta
       3sg- PAST- meet   -fv COM- 1- chief
       'S/he met with the chief.'

The same intransitive verbs may have two conjoined participants as subject-

agents. In other words, they are inherent lexical reciprocal verbs, as shown in (2):

(27) a.   Azuña.
           a- a-   zuñ -a
           3pl- PAST- fight -fv
           'They fought.'

      b.   Adi nakuhanjika.
           a- a-   di   na-   ku- hanjika
           3pl- PAST- COP PROG- INF- chat
           'They were chatting.'

6.2.1.4 Intransitive Constructions with Complex Locatives

Complex locative markers consist of locative prefixes attached to either noun

stems or adjectival stems and function in the same way as simple locative prefixes. They

precede noun phrases marked with either the possessive agreement prefix controlled by

the noun that forms a compound with a locative prefix or the comitative morpheme na-.

Moreover, a complex locative can stand independently of a head noun. The complex

locatives, which were dealt with in chapter III (cf. section 3.2), are given in (28):

(28)   heshinádi   'to the opposite side, other side'

heshinádi	'to the opposite side, other side'
heshína	'at the bottom, below'
mwishina/kwishina	'under, underneath'
hewulu	'on to, above'
kwiwulu	'to the top'
kumbádi	'to the side'
kunsa	'to the edge, to the side'
kumbídi	'in front, before'
hambídi	'in front, before'
kunyíma	'behind'
mukáchi	'inside'
kwakuléhi	'far'
kwakwíhi	'near'

The following examples illustrate the use of some of the complex locative expressions:

(29)   a.   Wakandama kwiwulu damuntóndu.

            wu- a-   kandama ku- i- wulu di-a-   mu-tondu

            3sg- PAST- climb   LOC- 5- top 5-POSS- 3- tree

            'S/he climbed up the tree.'

      b.   Wudi kunyíma yetála.

            wu- di ku- nyima yi-a-   i-tala

            3sg- be LOC- back 9-POSS- 5-house

            'S/he is behind the house.'

      c.   Nashiki hakamwíhi namukála.

            na-   shik -i ha- ka- mu- ihi na-   mu-kála

            3sg.PERF- arrive -fv LOC- 12- LOC- short COM- 3-village

            'S/he arrived near the village.'

6.2.2 Transitive Constructions

Transitive constructions have transitive verbs that take two required or core syntactic arguments which have fixed positions in the clause, with the subject occupying the preverbal position and the direct object the immediate post-verbal position. Transitive verbs may be dynamic or states. Depending on the semantics of the verb, the subject may

have the semantic role of agent, recipient/goal, experiencer or patient and the direct

object that of patient or theme which may or may not be affected by the action, as

illustrated in (30a) through (30d).

(30) a.   Agent subject:
          Mumbanda watéleka mbízhi.
          mu-mbanda wu- a-   telek -a mbízhi
          1-woman   3sg- PAST- cook -fv 9.meat
          'The woman cooked meat.'

      b.   Recipient subject:
          Mumbanda watambula mali.
          wu- a-   tambul -a mali
          3sg- PAST- receive -fv 6.money
          'The woman received money.'

      c.   Experiencer subject:
          Mumbanda wamona mutúpa.
          wu- a-   mon -a mu-túpa
          3sg- PAST- see -fv 1-lion
          'The woman saw a lion.'

      d.   Patient subject:
          Mumbanda watemuka káwa.
          wu- a-   témuk   -a ká-wa
          3sg- PAST- run away -fv 12-dog
          'The woman ran away from the dog.'

6.2.3 Constructions with Verbs of Possession

Lunda has three types of verbs of possession that include the copular verbs di

'be' and tumbi 'be', the intransitive verb ikala 'be, exist, live, stay', and the defective

transitive verbs kweti 'have, possess' and heta 'possess, own'.

6.2.3.1 Intransitive Verbs of Possession

Lunda employs the copular verbs di 'be' and tumbi 'be', and the verb ikala 'be, become, exist, live, stay' in conjunction with the comitative marker na- 'and, with' attached to a noun phrase to express predicative possessions. The possessor is encoded as the subject and the possessed object is an oblique participant in constructions involving these verbs. Further, the copular verb di- is used in the present and past tenses for this purpose, while the verb kwikala only occurs in the present and the future tenses.

(31)   a.   Nídi namali.[3]
                ni- di na- mali
                1sg- be with- 6.money
                'I have a money.'

        b.   Wekala nakazemba.
                wu- a- ikala na- ka-zémba
                2sg- TNS- be with- 12-axe
                'S/he has an axe.'

        c.   Wutumbi namali
                wu- tumbi na- mali
                3sg- be with- 6.money
                'S/he has money.'

When used as the verb of possession, the copular verb di is negated by means of a special verb form dána 'lack, be without', and is used in the present and past tenses. However, it is used in a compound form following the verb di 'be' as an auxiliary in the past tense.

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[3] Unlike Swahili which omits the copula in the present tense (Heine 1997:81), Lunda retains it in both present and past tenses.

(32)   a.   Present:
              wudána mali
              wu- dána   mali
              3sg- be without money
              'he has no money'

       b.   Past:
              wadíñi wudána mali
              wu- a-   di -ñi wu- dána   mali
              3sg- PAST- be -RP 3sg- be without money
              'He had no money'

6.2.3.2 Transitive Verbs of Possession

The second type of predicative possession is a possessive sentence in which the possessor is the subject of the verb and possessed the direct object of the verb. It is expressed by either the transitive defective verb kweti 'have, possess, own' which is only found in the present tense with a present perfect morphology, or the verb heta 'possess, own'. The verb kweti does not inflect for tense-aspect; it only appears in the present tense and denotes possession. The subject prefix is attached directly to the verb root without the intermediary of a tense marker. Lunda makes use of the copular verb di plus the comitative morpheme na- 'and, with', and the verb ikala 'be, live, become' to express possession in the past and future respective as discussed above. The noun phrase that comes after the defective verb cannot, however, appear in a pronominal form. Examples of the possessive verbs are shown in the sentences in (33):

(33)   a.   Níkweti itála.
              ni- kweti i-tála
              1sg- have 5-house
              'I have a house'

b.   Akweti itémpa.
        a- kweti i-tempa
        3pl- have 5-garden
        'They have a garden'

c.   Wahéta nkinga.
        wu- a-   heta nkinga
        3sg- TNS- own 9.bicycle
        'S/he owns money'

6.2.4 Constructions with External Possessors

A few intransitive verbs take the possessor as a core argument and a body part as

an external possessor. In clauses with such verbs, the possessor is assigned the

grammatical role of subject and the semantic role of patient of state. In transitive

constructions involving inalienable possession, the possessor comes adjacent to the verb

and the body part follows the verb without being formally marked in any way. Thus, the

external possessor assumes the syntactic function of direct object and the body part that

of indirect object.

(34)   Intransitive construction:
        Kánsi wakotoka mwendu.
        ka-ánsi wu- a-   kotok -a mu-endu
        1-child 3sg- PAST- break -fv 3- leg
        'The child broke his leg.'

(35)   Transitive construction:
        Mukwenzi wakotola kánsi mwendu.
        mukwenzi wu- a-   kotol -a ka-ánsi mu-endu
        young man 3sg- PAST- break -fv 1-child 3-leg
        'The young man broke the child's leg.'

Note that in (34), the intransitive verb kótoka 'be broken' has only one argument kánsi

'child', a patient-object, followed by an unmarked possessed nominal mwendu 'leg'. In

example (35), the transitive verb <u>kótola</u> 'break' has two arguments, an agent and a

patient, plus the affected body part.

<div align="center">6.2.5 Ditransitive Constructions</div>

Ditransitive verbs have three core or obligatory syntactic arguments consisting of

the subject and two objects which may both have no overt marking or one of them can be

formally marked. The semantic role of the subject in a clause with a ditransitive verb is

that of an agent, while the direct object and the indirect object may have diverse semantic

roles depending on the semantics of the verb stem.

<u>6.2.5.1 Construction with Benefactive/Recipient</u>

Lunda has constructions that obligatorily take three core arguments, one of which

occurs in the preverbal position and has the semantic role of agent. The other two

arguments occupy the post-verbal position without any formal marking. Generally, the

first of the two post-verbal nominal arguments in the series is an animate noun whose

semantic role may be that of benefactive/recipient, while the other noun is coded as a

patient. The semantic of these constructions is that of caused transfer. In such types of

three-argument constructions, the agent has the syntactic relation of subject, the recipient

assumes the function of direct object and the patient that of indirect object or second

object. The semantic roles of these constructions is that of caused transfer. Consider the

following examples in (36a) and (36b):

(36) a.   Nenka kánsi mukánda.
         ni- a-   ink -a ka-ánsi mu-kánda
         1sg- PAST- give -fv 12-child 3- book
         'I gave the child a book.'

      b.   Watambula kánsi mali.
         wu- a-   tambul -a ka-ánsi mali
         3sg- PAST- take from -fv 12-child 6.money
         'S/he took money from the child.'

Below are some of the verbs that take three core arguments are listed below:

(37)   kwínka   'to give'
        kulezha   'to tell, show, advise, explain'
        kulómba   'to ask, to beg'
        kufweta   'to pay'
        kutámbula   'to take from'
        kukwita/waya   'to rub'

6.2.5.2 Construction with Inanimate Locatives

The argument structure of ditransitive verbs such as kuleeta, 'to bring', and

kwínka/kutenteka 'to put', consists of an agent, a patient, and a locative noun phrase. The

agent fills the preverbal position, while the patient occurs unmarked in the post-verbal

position adjacent to the verb followed by the location, goal or source marked with the

locative prefix class 16 ha-, class 17 ku-, or class 18 mu-. In three-argument constructions

with such ditransitive verbs, the agent is assigned the grammatical relation of subject, the

patient that of a direct object, and the locative source or goal an oblique object. As an

illustration, consider the examples in (38):

(38) a.   Nswana watemesha mali kumukála.
         Nswana wu- a-   temesha mali   ku-   mu-kála
         Nswana 3sg- PAST- send   6.money LOC7-3-village
         'Nswana sent money to the village.'

b.   Wahuñununa menzhi munswáha.
        wu- a-   huñununa ma-enzhi mu- nswáha
        3sg- PAST- pour   6-water LOC- 9.calabash
        'S/he poured water in the calabash.'

c.   Washa nuñu hezhíku.
        wu- a-   sha nuñu   ha- i-zhíku
        3sg- PAST- put 9.cooking pot LOC- 5-stove
        'He put a cooking pot on the stove.'

6.2.5.3 Constructions with Animate Goal/Source

Other three-argument constructions with ditransitive transfer verbs such as kutémesha 'to send', kusenda 'take from, carry' kutwala 'to take', kutámbula 'to receive', kusóneka 'to write', etc. can also take three participants, namely an agent, a patient and a goal/source case-marked with kúdi 'to, from'. The patient is normally viewed as changing location to or from. The agent and the patient function as subject and direct object respectively, while the goal/source has an oblique role. It must be noted that the locative marker kúdi appears only before noun phrases with animate semantic features or animate goals/source.

(39) a.   Nswana watemesha mali kúdi Womba.
            Nswana wu- a-   temesh -a mali   kúdi Womba
            teachers 3sg- PAST- send   -fv 6-money to   Womba
            'Nswana sent money to Womba.'

      b.   Watambula mali kúdi ntáñishi
            wu- a-   tambul -a mali   kúdi ntañishi
            3sg- PAST- receive -fv 6-money from 1.teacher
            'S/he received money from the teacher.'

6.2.5.4 Constructions with Two Locative Nouns

Some of the ditransitive transfer verbs can take both inanimate and animate

locative noun phrases in addition to the patient. This is shown in (40) below:

(40)   Mukwénzi watemesha mali kumukála kúdi mukwáwu.
      mu- kwenzi wu- a-   temesh -a mali   ku- mu- kála   kúdi mukwawu
      1- youth 3sg- PAST- send -fv money LOC- 3- village to   friend
      (Lit.: 'The youth sent money to his friend to the village.')
      'The youth sent money to his friend to the village.'

6.2.6 Non-Core Participants

This subsection describes post-verbal nominals that verbs may optionally take in

addition to their core arguments. These are non-core participants that do not have any

relation with the verb. The term 'non-core or oblique' here generally refers to an optional

participant or constituent; it does not mean an argument of the verb. It may have the

semantic role of manner, instrument, comitative/associative, temporal, means and

locative. Lunda employs the prefix na- to indicate instruments, comitative/associative,

manner, and some of the expressions of time.

6.2.6.1 Comitatives/Associatives

The comitative or associative participants are post-verbal noun phrases expressed

through the comitative marker na- 'and, with' to give the sense of 'accompanied

by/together with'. The same morpheme is used to code instrumentals and some manners

in Lunda. Constructions with comitative participants have a subject which may be an

agent/co-agent, a patient or a recipient.

(41)   Kamfunti wenzhili namwána.
        Kamfunti wu- a-   inzh -il -i na-   mwána
        Kamfunti 3sg- PAST- come -RP -fv COM- 1-child
        'Kamfunti came with a child.'

In addition to encoding comitatives, the morpheme <u>na</u>- is used to mark inanimate

noun phrases which are not co-participants in Lunda. They have the accompaniment

meaning, as shown in (42).

(42)   Wada losu nambízhi.
        wu- a-   d -a losu   na-   mbízhi
        3sg- PAST- eat -fv 11-rice COM- 9.meat
        'S/he ate rice (with meat)

6.2.6.2 Instrumentals

Like comitatives, instrumental noun phrases are post-verbal participants coded by

the instrumental morpheme <u>na</u>- 'with' in Lunda. Instrumentality is expressed in a number

of senses such as tool or instrument used, material used, and means of transport.

Instrumentals are oblique arguments for they lack a grammatical relation to the verb. The

instrumental noun phrase comes immediately after the verb in intransitive constructions

and follows the direct object in transitive constructions.

(43)   a.   Anakudima namatémwa.
                a- na-   ku dim   -a na-   i-témwa
                3pl- PROG- INF- cultivate -fv INST- 5-hoes
                'They are cultivating with hoes.'

b.   Enza nandéki.
a- a-   inz -a na-   ndéki
3pl- PAST- come -fv INST- plane
'They came by plane.'

c.   Wasoña iyanda nansesu.
wu- a-   soñ -a iyanda   na-   nsesu
3sg- PAST- carve -fv pounding mortar INST- 9-adze
'He carved the pounding mortar with an adze.'

d.   Wenzesha mulóndu na mánzhi.
wu- a-   inzal -ish   -a mulondu na-   ma-anzhi
3sg- PAST- fill   -CAUS -fv bottle   INST- 6-oil
'S/he filled the bottle with oil.'

6.2.6.3 Manners

In Lunda, manners may occur after the verb as optional participants in three different ways. Some manners appear with no overt marking and others are noun phrases introduced by either the comitative marker na-, 'and, with', or the conjunction néyi 'like, if, as if'. Compare the following examples of manners in the sentences in (44):

(44) a.   Wazataña namaana.
wu- a-   zat -aña na-   ma-ana
3sg- TNS- work -HAB INST- 6-wisdom
(Lit. he works with wisdom)
'S/he works wisely.'

b.   Etezheli na munzañalu.
a- a-   itezh -el -i na-   mu-nzañalu
3pl- PAST- accept -RP -fv MAN- 3-joy
'They joyfully accepted.'

c.   Nakudila neyi mukéki.
na-   ku- dila neyi mu-keki
3sg.PROG- INF- cry like 1-baby
'S/he is crying like a baby.'

d.   Watemuka lufuchi
      wu- a-   temuk -a lufuchi
      3sg- PAST- run   -fv quickly
      'He ran quickly.'

6.2.6.4 Temporal Expressions

Temporal nominals optionally appear after the verb in a clause parallel to manners. Expressions of time referring to parts of the day are oblique phrases marked with the prefix na-, while other expressions of time such as ifúku 'day', halóshi 'yesterday', kumádiki 'tomorrow', kakwézhi 'month', cháka/mwáka 'year' follow the verb without being marked at all. Examples of temporal expressions are shown below:

(45)   a.   Wazata nawufúku.
          wu- a-   zát   -a na- wu-fúku
          3sg- PAST- work -fv at   3-night
          'S/he worked at night.'

     b.   Watambika kansi nabudidi.
          wu- a-   tambik -a na- budidi
          3sg- PAST- call   -fv in   morning
          'S/he called the child in the morning.'

     c.   Washika halóshi.
          wu- a-   shik -a   halóshi
          3sg- PAST- run   -fv yesterday
          'S/he arrived yesterday.'

6.2.6.5 Locatives

A clause that generally consists of a subject and a verb may also have a locative nominal in an oblique position. The locative arguments are marked with one of the locative prefixes ha-, ku-, mu-.

(46)　Washakama hachitwámu.
　　　wu- a-　　shakam -a ha-chi-twamu
　　　3sg- PAST- sit　　-fv LOC-7-chair
　　　'S/he sat on the chair.'

<div align="center">6.2.7 Derived Verbs</div>

The previous subsections looked at various types of verbs and their participants.

This subsection is concerned with two kinds of derived verbs, namely, applicative and

causative verbs both intransitive and transitive. As described in chapter IV,

Lunda has a very productive process of verb-to-verb derivation which is realized through

the suffixation of the applicative and causative extensions to the verb root. From a

functional perspective, verbs derived by applicative and causative processes serve to

modify their information content and argument structure by introducing additional post-

verbal participants which may have various semantic roles such as recipient, benefactive

or malefactive, motive/reason and locative depending on the semantic of the verb roots.

In short, the applicative and causative processes may lead to a change in either lexical

semantics or grammatical relation assignments of the verb root.

6.2.7.1 Applied Intransitive Verbs

The suffixation of the applicative verbal extension -il/el to an intransitive verb

root does not always result in a change of the argument structure of a verb. Intransitive

motion verbs such as témuka 'run', nata 'throw', fúma 'go away, leave', hóloka 'fall,

fall down' etc, which are normally followed by locative nominals, can be inflected with

the applicative extension without increasing the verb valence and thus be able to alter

the meaning of the verb to indicate direction or motion toward a target. That is, no

additional argument is introduced in a clause. A basic verb, without an applicative

morpheme, followed by a locative noun phrase simply denotes the location of an event

or state. But, a verb with the applicative affix plus a locative noun indicates the goal (to,

towards) or the source of an event. Compare the examples in (47) and (48):

(47)   Non-derived verb:
   a.   Watémuka kushikola.
        wu- a-   témuk -a ku- shikola
        3sg- PAST- run   -fv LOC- school
        'He ran at school.'

   b.   Wahóloka mukaloña.
        wu- a-   hólok   -a mu- kaloña
        3sg- PAST- fall down -fv LOC- river
        'He fell down in the river.'

(48)   Derived verb:
   a.   Watémukila kushikola.
        wu- a-   témuk -il   -a ku- shikola
        3sg- PAST- run   -APPL -fv LOC- school
        'He ran towards school.'

   b.   Wahólokela mukalóña.
        wu- a-   hólok   -el   -a mu- ka-lóña
        3sg- PAST- fall down -APPL -fv LOC- 12-river
        'He fell into the river.'

In (47a) and (47b), the verbs témuka 'run' and hóloka 'fall down' are followed by noun

phrases, while in (48a) and (48b) the verbs are coded with the applicative extension -il

and -el without affecting the original argument structure. The difference between the two

sets of examples is that in (47) the action of running and falling takes place at school and

in the river, whereas in (48) the school and the river are the goal.

6.2.7.2 Applied Transitive Verbs

The suffixation of the applicative extension to an intransitive verb root or one-place predicate may derive a transitive verb or two-place predicate and takes two arguments- a subject and a direct object. The subject is generally assigned the semantic role of agent, while the direct object may have diverse semantic roles such as benefactive, reason/motive or goal depending on the semantic of the verb root. Compare the examples in (49) and (50) illustrating each of the semantic roles:

(49)   Intransitive verb:
     a.   Wemba.
            wu- a-   imb -a
            3sg- PAST- sing -fv
            'He sang.'

     b.   Wenza.
            wu- a-   inz   -a
            3sg- PAST- come -fv
            'He came.'

     c.   Watemuka.
            wu- a-   temuk -a
            3sg- PAST- run   -fv
            'He ran.'

(50)   Applied transitive verb:
     a.   Wembila mwána.
            wu- a-   imb -il   -a mwana.
            3sg- PAST-sing -APPL -fv child
            'He sang for the child.'

     b.   Wenzhila ncháwa.
            wu- a-   inz -il   -a ncháwa
            3sg- PAST- come -APPL -fv 9.firewood
            'He came for firewood.'

c.   Watemukila nguja.
        wu- a-   témuk -il   -a nguja
        3sg- PAST- run   -APPL -fv 9.ball
        'He ran for the ball.'

The examples in (50) show that when the applicative extension is attached to an

inherently simple intransitive verb root, the resulting verb has an additional argument

which is a direct object with different semantic roles such as a benefactive mwána 'child'

in (50a), a motive ncháwa 'firewood' in (50b) and goal nguja 'ball' in (50c).

6.2.7.3 Causative Transitive Verbs

In Lunda, like in other Bantu languages, the suffixation of the causative

extension -ish/-esh turns an intransitive verb root into a transitive one with a subject as

well as an unmarked post-verbal argument whose grammatical relation is that of a direct

object. The subject of an intransitive verb becomes the direct object (causee) in a

construction with such a derived verb. This causativization process has a transitivizing

effect on the verb for it does increase the number of arguments that the verb can take.

(51)   Non-derived verb:
     a.   Mwána wadimbuka.
         mu-ána wu- a-   dimbuka
         1-child 3sg- PAST- fall down
         'The child fell down.'

     b.   Anyána anazówi.
         a-nyi-ana   a- na-   zow -i
         2-4-children 3pl- PERF- be wet -fv
         'The children are wet.'

c.   Atwánsi atiya wóma.
     a-tw-ánsi   a- a-   tiya wóma
     2-13-children 3pl- PAST- be afraid
     'The children were afraid.'

(52)   Causative verb:
a.   Wadimbwisha mwána
     wu- a-   dimbuk -ish   -a mu-ána
     3sg- PAST- fall down -CAUS -fv 1-child
     'He made the child fall down.'

b.   Nazóweshi mwána.
     na-   zow   -esh   -i mu- ána
     3sg.PERF- be wet -CAUS -fv 1- child
     'S/he has made the child wet.'

c.   Mukwenzi watiyisha twánsi wóma.
     mukwenzi wu- a-   tiy   -ish   -a atwansi wóma
     1-youth   3sg- PAST- feel/be -CAUS -fv children afraid
     'The youth scared the children.'

The subjects of the simple intransitive verb in (51) assume the grammatical function of an object in their corresponding counterparts in (52). For instance, mwána 'child', anyána 'children', and atwánsi 'children' are the subjects in (51a) through (51c). The same noun phrases with the same semantic roles are objects in (52a), (52b) and (52c).

6.2.7.4 Applied Ditransitive Verbs

In Lunda, the applicative suffix has the ability to derive a ditransitive verb from an inherently transitive verb that normally takes one unmarked post-verbal argument. The derived ditransitive verb can thus take three core arguments, namely, a subject, a direct object and an indirect object. The additional argument becomes obligatorily a direct object. In such applicative constructions, the two objects can be

either the benefactive or recipient and the patient. The benefactive or recipient of a

derived ditransitive verb behaves in a fashion similar to that of a patient of a transitive

verb in that it comes immediately after the verb and the patient follows it.

(53) a.   Nswana wateleka kabáka.
            Nswana wu- a-   teleka ka-baka
            Nswana 3sg- PAST- cook 5-corn
            'Nswana cooked corn.'

     b.   Nswana watelekela kánsi kabáka.
            Nswana wu- a-   télek -el   -a ka-ánsi ka-baka
            Nswana 3sg- PAST- cook -APPL -fv 12-child 12-corn
            'Nswana cooked corn for the child.'

The transitive verb téleka in (53a) has two arguments, the subject Nswana and the object

kabáka, while in (53b) the verb appears in its derived form coded with an applicative

affix -el and introduces a new postverbal argument kánsi which takes on the function of

direct object of the verb. The other postverbal argument kabáka 'corn', the direct object

of the non-derived transitive verb becomes an indirect object.

Derived ditransitive verbs with the applicative extension can also introduce a

post-verbal argument with the semantic role of motive/reason in addition to the patient.

Thus, such verbs take a subject, a direct object and an indirect object. However, the

motive behaves differently from the benefactive in that it does not claim the direct object

slot adjacent to the verb. Instead, the patient still remains adjacent to the verb and retains

its grammatical role of direct object and the motive takes on the role of indirect object.

Both the direct object and the indirect object noun phrases are subject to

pronominalization and can co-occur in pronominal forms. An example of an applicative

verb with a motive argument as an in direct object is given sentence in (55):

(54) Transitive construction:
Mumbanda watambika mwána.
mumbanda wu- a-   tambik -a mu-ána
1-woman   3sg- PAST- call   -fv child
'The woman called the child.'

(55) Ditransitive construction:
Mumbanda watambikila mwána mali.
mu-mbanda wu- a-   tambik -il   -a mu-ána   mali
1-woman   3sg- PAST- call   -APPL -fv 3- child money
'The woman called the child for money.'

The noun phrase mwána 'child' in (54) is a direct object and it is still a direct object in

(55) as shown by its position adjacent to the verb. The additional argument mali 'money'

can only assume the function of an indirect object.

In Lunda, possessors are expressed externally with transitive verbs, that is, an

inherently transitive verb may take an object as a core argument, and an optionally post-

modifying possessor marked by a possessive agreement prefix.

(56) Mumbanda nakósi njéki yamwána indi
mu-mbanda na-   kós -i njeki yi- a-   mu-ána indi
1-woman   3sg.PERF- wash -fv 9.bag 9- POSS- 3-child 3sg
'The woman has washed her child's bag.'

The language has an alternative construction where the possessor advances to

direct object position by occupying the slot immediately following the verb as a core

argument through the same applicativization process described above. Thus, a transitive

clause with an applied verb has three arguments consisting of a subject, direct object and

an indirect direct. The example given in (57) is an alternative pattern of (56) above.

(57) Mumbanda nakosili mwána indi njeki.
mumbanda na-   kos -il   -i mu-ána indi njeki
1-woman   3sg.PERF- wash -APPL -fv 3-child 3sg 9.bag
'The woman has washed her child's bag.'

Ditransitive verbs that permit a recipient/goal noun phrase with human semantic features marked by the locative marker <u>kúdi</u> 'to' (cf.6.8) can have corresponding applied ditransitive verbs which take two bare nominal objects just like basic ditransitive verbs. Like possessors, the participant with the recipient or goal semantic role can be expressed either as an oblique constituent marked by <u>kúdi</u> or as a direct object without any overt marking. It is treated as a syntactic direct object when the verb is coded with the applicative marker -<u>il</u> and occurs immediately after the verb followed by the patient, an indirect object. This behavioral pattern is reminiscent of the English dative shift.

Compare the two versions of the constructions in (58a) and (58b) involving the recipient:

(58) a.   Nswana watemesha mali kúdi Womba.
             Nswana wu- a-   témesh -a mali   kúdi Womba
             Nswana 3sg- PAST- send   -fv 6-money to   Womba
             'Nswana sent money to Womba.'

      b.   Nswana watemeshela Womba mali.
             Nswana wu- a-   témesh -el   -a Womba mali
             Nswana 3sg- PAST- send   -APPL -fv Womba 6-money
             'Nswana sent Womba money.'

The verb <u>témesha</u> 'send' in (58a) has two core arguments, the agent <u>Nswana</u> and the patient <u>mali</u> plus a locative goal <u>Womba</u> marked with <u>kúdi</u>. The agent is the subject of the verb, the patient a direct object, and the locative goal is an oblique participant. In (58b), the goal is now adjacent to the verb and takes on the function of direct object of a ditransitive verb through the applicative process, while the patient is an indirect object.

There are other applied ditransitive verbs that take a subject, direct object and a locative noun phrase morphologically marked by a locative prefix. As with the other post verbal noun phrases, the direct object as well as the locative object can appear as pronouns.

(59)   a.   Wanwa menzhi.
              wu- a-   nw -a ma-enzhi
              3sg- PAST- drink -fv 6-water
              'He drank water'

       b.   Wanwina menzhi mulupása.
              wu- a-   nw -in   -a ma-enzhi mu-lupása
              3sg- PAST- drink -APPL -fv 6-water   LOC-cup
              'He drank water from a cup.'

The use of an applicative extension in combination with the locative expression does not always increase the number of arguments of the verb. The other role of the extension is to indicate direction or action towards a location (goal) as opposed to position. The emphasis is therefore placed on the locative noun phrase.

(60)   a.   Wanata ilóla mwitála.
              wu- a-   nat   -a i-lóla   mu-i-tála
              3sg- PAST- throw -fv 5-stone LOC-5-house
              'He threw a stone in the house.'

       b.   Wanatila ilóla mwitála.
              wu- a-   nat   -il   -a i-lóla   mu-i-tála
              3sg- PAST- throw -APPL -fv 5-stone LOC-5-house
              'He threw a stone into the house.'

6.2.7.5 Causative Ditransitive Verbs

A certain number of transitive verbs may be causativized to produce derived

ditransitive causative verbs. Constructions with such types of verbs take three arguments-

the agent, the causee, and the patient. The causee is the direct object of the clause, that is,

it immediately follows the verb preceding the indirect object/patient.

(61)   a.   Kánsi nádi kabáka.
            ka-ánsi na-   d -i ka-báka
            12-child 3sg.PERF- eat -fv 12-maize
            'The child has eaten some maize.'

        b.   Mumbanda nadíshi kánsi kabáka.
            mu-mbanda na-   d -ish   -i ka-ánsi ka-báka
            1-woman   3sg.PERF- eat -CAUS -fv 12-child 12-maize
            'The woman has fed the child some maize.'

Kánsi 'child' is the subject of the basic transitive verb da 'eat' in (61a) becomes the direct

object of the derived ditransitive verb dísha 'feed' in (61b) followed by an indirect object

kabáka 'corn'.

However, the subject/agent of a prototypical transitive verb deletes from the

clause when the verb is causativized leaving only the direct object/patient. The agent of

such types of causative verbs is implicit or left overtly unexpressed on the surface. This is

illustrated by the example (62b).

(62)   a.   Ndimi nakutúña itála.
            ndimi   na-   ku- nakutuña i-tála
            1.farmer 3sg.PROG- INF- build   5-house
            'The farmer is building the house.'

b.   Mukwénzi nakutúñisha itála.
        mu-kwenzi na-   ku- tuñ -ish   i-tála
        1-youth   3sg.PROG- INF- build -CAUS 5-house
        'The youth is having a house built.'

Other causative verbs introduce arguments functioning as direct objects in addition to locative noun phrases. The additional participant has the semantic role of patient and the oblique object can be either a location, goal or source. Examples of non-derived verbs plus by locative noun phrases are given in (63a) and (63b) while their counterparts with causative verbs are given in (64a) and (64b).

(63)   Non-Derived Verb:
       a.   Mwána weñila mwitála.
            mu-ána wu- a-   iñil -a mu-i-tála
            1-child 3sg- PAST- enter -fv LOC-5-house
            'The child entered (in) the house.'

       b.   Nswáha yafuma kumukála.
            9.nswaha yi- a-   fum -a ku-mu-kala
            calabash 9- PAST- come -fv LOC-3-village
            'The calabash came from the village.'

(64)   Derived Causative Verb:
       a.   Weñizha mwána mwitála.
            wu- a-   iñil -izh   -a mu-ána mu-i-tála
            3sg- PAST- enter -CAUS -fv 1-child LOC-5-house
            'S/he made the child enter (in) the house.'

       b.   Wafumisha nswáha kumukála.
            wu- a-   fum -ish   -a nswáha   ku-mu-kala
            3sg- PAST- come -CAUS- -fv 9-calabash LOC-5-house
            'S/he brought the calabash from the village.'

6.2.8 Complement Taking Verbs

In Lunda, verbs that take complement clauses can be grouped into three types according to Givón's classification (1990: 518), namely, modality verbs, manipulative verbs, and perception, cognition and utterance verbs.

6.2.8.1 Modality Verbs

Modality verbs take one argument, a subject, and a sentential or complement clause. These are fully described in chapter VII. The following are examples of modality verbs and their sentential complements.

(65) a. Walékeli kúnwa walwa.
           wu- a-   lek -el -i ku- nwá walwa
           3sg- PAST- stop -RP -fv INF- drink beer
           'He wanted drinking beer.'

      b. Nakéñi kuya.
           na-   keñ -i ku- ya
           3sg.PERF- want -fv INF- go
           'S/he wants to go.'

Some of the modality verbs are listed below:

(66) kukéña   'to want, like'
      kutáchika   'to start'
      kuleka   'to stop'
      kukána   'to refuse'
      kuchína   'to avoid'

6.2.8.2 Manipulative Verbs

Manipulative verbs such as <u>kukwásha</u> 'help', <u>kulekesha</u> 'forbid', <u>kwítezha</u> 'allow', <u>kulómba</u> 'ask, request', <u>kukánjikizha</u> 'force' take the subject and the direct object followed by the complement clause in the infinitive form. The subject of the main clause is an agent manipulating the other argument. The direct object is co-referential to the implied (understood) subject of the complement clause.

(67)   a.   Kadamaseki walezheli kansi kuhaña añombi.
                Kadamaseki wu- a-   lezh -el -i ka-ánsi ku-   haña a-ñombi
                Kadamaseki 3sg- PAST- tell -RP -fv 12-child INF- chase 2-cows
                'Kadamaseki told the child to chase the cows.'

       b.   Namukanishi kuya.
                na-   mu-   kan -ish   -i ku- ya
                3sg.PERF- 3sg.OBJ- refuse -CAUS -fv INF- go
                'He has forbidden him/her to go.'

6.2.8.3 Verbs of Perception, Cognition, and Utterance

The verbs of perception, cognition, and utterance permit an overt subject in the complement clause; that is, the co-referential argument of the complement clause is explicitly expressed. The complement clause occurs either after the verb, or after the direct object of the main clause.

(68)   a.   Twéla nétu: 'túkwinza nakuhanjika.'
                tu- ela netu   tú- ku- inza na-   ku-   hanjika
                1pl- say QUOT.1pl 1pl- FUT- come COM- INF- chat
                'We said that we would come and chat with you.'

b. Watóñózhokeli nindi nenzi nakumusumbula.
  wu- a- toñozhok -el nindi na-   inz -i na-
  3sg- PAST- think -RP COMP.3sg 3sg.PERF- come -fv PURP-

  ku- mu- sumbula
  INF- 3sg.OBJ marry
  'She thought that he had come to marry her.'

6.2.9 Nominal-Verbal Subject

Clauses may take infinitives as nominal subjects in that the latter controls subject-verb agreement in the same way as that of any noun class. However, unlike English, Lunda does not allow the use of participial or complement clauses as subjects. Infinitives may also appear in object position.

(69) a. Kwiya kwatáma.
   ku- iya ku- a- tama
   INF- steal 16- TNS- be bad
   (Lit. 'to steal is bad')
   'Stealing is bad.'

  b. chatama kwiya.
   chi- a- tama ku- iya
   7- TNS- be bad INF- steal
   'It is bad to steal.

6.3 Properties of Grammatical Relations

The purpose of this subsection is to describe the grammatical relations in Lunda. As mentioned in the introductory part of this chapter, a cluster of syntactic and morphological properties are used to define, determine, and establish grammatical relations in Lunda. These are word order, case marking, and pronominalization.

6.3.1 Word Order

Word order is one the most relevant criteria for determining, establishing, and distinguishing grammatical relations such as subject, direct object and indirect object in Lunda. The basic word order in a simple active clause is as follows: the subject occupies the initial position of a clause followed by the verb plus the direct object.

6.3.1.1 Subject

There are two formal properties that are characteristic of a subject in Lunda. In independent sentences, an argument is identified as the subject through constituent order and agreement prefix. First, a nominal subject always precedes the verb and second it controls subject-verb agreement. That is, the subject obligatorily triggers a subject agreement prefix on the verb. The prefix indicates that the verb agrees in person, number and noun class with the subject.

(70)   Intransitive Verbs:

        a.   Chitwámu chinahóloki.
               chi- twámu chi- na-   holok -i
               7- chair   7- PERF- drop -fv
               'The chair has dropped.'

        b.   Anyána azuwa.
               a-nyi-ána   a- a-   zuw   -a
               2-4- children 3pl- PAST- be angry -fv
               'The children were angry.'

The nouns chitwámu 'chair' and anyána 'children' are subjects of the sentences (70a) and (70b) respectively because of their preverbal position. In addition, the verbs holóka 'fall' and zuwa 'be angry' are marked with the agreement prefixes chi- and a- which indicate that the subjects are class 7 and 2 nouns.

6.3.1.2 Nominal Objects

Nominal direct and indirect/second objects[4] appear in the post-verbal position without any formal marking, but are distinguished from each other and other participants by word order. The direct object appears adjacent to the verb followed by the indirect and this order is irreversible. An agreement marker may optionally occur with an animate direct object. In addition, the adverbs déhi 'already', túhu 'only', chéñi 'again' and the intrumental pronoun náchu 'with it' may come between the verb and the direct object.

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[4] Horton (1949:190-191) describes direct and indirect objects as principal and subsidiary objects respectively.

(71) a.   Mwána wafumpa mulóndu.
           mu- ána wu- a-   fump -a mulóndu
           1-   child 3sg- PAST- break -fv bottle
           'The child broke the bottle.'

      b.   Ndimi watambula mali.
           ndimi   wu- a-   tambul -a mali
           1-farmer 3sg- PAST- receive -fv money
           'The farmer received some money.'

The noun phrases <u>mulóndu</u> 'bottle' and <u>mali</u> 'money' are direct objects in the sentences

(71a) and (71b).

The nominal indirect object always follows the direct object without any

overt morphological marking in ditransitive sentences. It cannot precede the direct

object nor does it agree optionally with the verb through a pronominal marking. Consider

the following examples:

(72) a.   Nénka kánsi mukánda.
           ni- a-   ink -a ka-ánsi mu- kánda
           1sg- PAST- give -fv 1- child 3-   book
           'I gave the child a book.'

      b.   * Nenka mukanda kansi.
           ni- a-   ink -a mu- kánda ka-ánsi
           1sg- PAST- give -fv 3-   book 12-child
           *(I gave the book a child)

As seen in (72a) <u>mukánda</u> 'book' is an indirect object. It appears postverbally following

the direct object <u>kánsi</u> 'child'. Both postverbal noun phrases, direct object and indirect

object, are unmarked.

This syntactic behavior also applies to three-argument constructions or double

object constructions with derived ditransitive verbs to include a benefactive, a recipient, a

causative role, etc. Examples (73a)-(73d) illustrate the order of constituents:

(73)   a.   Applicative-Benefactive:
Nswana watelekela kánsi kabáka.
Nswana wu- a-   telek -el   -a ka-ánsi ka-báka
Nswana 3sg- PAST- cook -APPL -fv 12-child 12-corn
'Nswana cooked corn for the child.'

        b.   Applicative-Motive:
Mumbanda watambikila mwána mali.
mu-mbanda wu- a-   tambik -il   -a mu-ána mali
1-woman   3sg- PAST- call   -APPL -fv 3-child 6.money
'The woman called the child for money.'

        c.   Applicative-Recipient:
Nswana watemeshela Womba mali.
Nswana wu- a-   témesh -el   -a Womba mali
Nswana 3sg- PAST- send   -APPL -fv Womba 6.money
'Nswana sent Womba money.'

        d.   Applicative-Possessor:
Mumbanda nakósili mwána indi njeki.
mu-mbanda na-   kos -il   -i mu-ána indi njeki
1-woman   3sg.PERF- wash -APPL -fv 1-child 3sg 9-bag
'The woman has washed her child's bag.'

Sentences (73a) through (73d) show that in addition to the recipient/goal, the direct object

of a ditransitive verb can have various semantic roles such as benefactive, patient and

possessor.

6.3.2 Case Marking

As it has been pointed out in subsection 6.2.6, some postverbal participants such

as goal or source, locatives, comitatives and instrumentals do occur case-marked as

obliques. This subsection is concerned with overt markings that are encoded on obliques

to signal the semantic relationship they bear with the verb.

6.3.2.1 Locatives

Locative noun phrases denoting inanimates come after the verb in an oblique

position marked with one of the locative prefixes ha-, ku- and mu-. This is illustrated in

(74) by a a locative noun phrase máha 'fields'coded by the locative prefix ku-:

(74)   Waya kumáha.
        wu- a-   y -a ku- ma- há
        3sg- PAST- go -fv to 6-   fields
        'S/he went to the fields.'

The locative noun phrase must appear after the direct object in a construction

involving two post-verbal noun phrases. This word order cannot be reversed without

rendering the sentence ungrammatical.

(75)   a.   Watenteka yúma hachisalu.
               wu- a-   tentek -a yi-úma ha-chisalu
               3sg- PAST- put   -fv 8-thing LOC-mat
               'S/he put the things on the mat.'

      b.   *Watenteka hachisalu yúma.
               wu- a-   tentek -a ha-chisalu yi-úma
               3sg- PAST- put   -fv LOC-mat 8- thing
               'S/he put the on the mat the things.'

Locative noun phrases or goal with human semantic features follow the same

pattern as the one described above. They appear postverbally in oblique relationship with

the verb introduced by one of the locative markers hádi, kúdi, and múdi whose meanings

are determined by the inherent semantics of the verb.

(76)   a.   Waya kúdi Nswana.
               wu- a-   y -a kúdi Nswana
               3sg- PAST- go -fv to   Nswana
               'S/he went to Nswana.'

b.   Nswana watemesha mali kúdi Womba.
        Nswana wu- a-   témesh -a money kúdi Womba
        Nswana 3sg- PAST- send -fv mali to   Womba
        'Nswana sent money to Womba.'

In (76a) the goal Nswana follows an intransitive verb ya 'go' and is coded by

kúdi 'to, from'. The noun phrase Womba in (76b) is also a goal because it comes after the

direct object temesha 'send' and is case marked by kúdi.

6.3.2.2 Comitatives

Comitative noun phrases have the same syntactic structure as locative noun

phrases. They may appear after intransitive verbs in an oblique position introduced by the

comitative marker na- 'with, and'. Thus, comitatives are generally optional in clauses.

(77) a.   Wukwinza namwánindi.
          wu- ku-   inz -a na-   mu-ána indi
          3sg- FUT- come -fv COM- 3-child 3sg
          'S/he will come with her daughter.'

     b.   Wenza nachúma.
          wu- a-   inz -a na-   chi-úma
          3sg- PAST- come -fv COM- 7-thing
          'S/he came with a thing.'

6.3.2.3 Instrumentals

Like comitatives, nominal instrumentals are signaled by the morpheme na- 'and,

with'. In intransitive constructions, they come after the verb, while in transitive

constructions they follow objects. Consider the following examples in (78):

(78) a. Ndimi nakusañula netémwa.
          ndimi na-   ku- sañul -a na-   i- témwa
          farmer 3sg.PROG- INF- weed -fv INST- 5- hoe
          'The farmer is weeding with a hoe.'

      b. Wasoña iyanda nansesu.
          wu- a-   soñ -a i- yanda   na-   nsesu
          3sg- PAST- carve -fv 5-pounding mortar INSTR- 9.adze
          'He carved the pounding mortar with an adze.'

6.3.3 Pronominalization

Besides constituent order, grammatical relations can also be identifiable through pronominalization in Lunda. As one of the formal properties, it parallels word order and the order of pronouns in a sentence is Subject-Direct Object-Verb-Indirect Object. To illustrate how various relations are expressed in terms of pronouns, only third person pronouns are given in all the examples that follow.

6.3.3.1 Subject Pronoun

The subject (agreement) prefix itself, marked on the verb, functions as an anaphoric subject pronoun when the nominal subject is absent in a clause. It agrees in noun class, person and number with the nominal noun phrase it replaces and, thus, refers to an entity whether in discourse or in the real world. This is exemplified by the following sentences with subjects drawn from various noun classes:

(79) a. Kánsi waholoka
          ka- ánsi wu- a-   holok   -a
          12- child 3sg- PAST- fall down -fv
          'The child fell down.'

b.   Waholoka
       wu- a-   holok   -a
       3sg- PAST- fall down -fv
       'S/he fell down.'

(80)   a.   Chitwámu chakotoka.
           chi- twámu chi- a-   kótok -a
           7- chair 7- PAST- break -fv
           'The chair broke.'

      b.   Chakotoka.
           chi- a-   kótok -a
           7- PAST- break -fv
           'It broke.'

In (79b) and (80b), the third person subject is expressed by means of subject pronominal

prefixes such as wu-, and chi- which refer to the subject nouns kansi 'child' and

chitwamu 'chair' in (79a) and (80b) respectively. This preverbal subject pronoun

correlates with the word order of a nominal subject.

6.3.3.2 Object Pronouns

Both the direct object and the indirect object can be expressed as anaphoric

pronouns[5] in the verb simultaneously and their pronominal slots are fixed in Lunda.

Direct object pronouns occur in the preverbal pronominal slot as object prefixes, while

indirect object pronouns appear as suffixes attached to the verb. Both types of pronouns

agree in noun class with the noun phrases they refer to. With predicates that take two

arguments, the direct object pronoun always occurs in the preverbal object prefix.

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[5] This has also been noted in other neighboring Bantu languages spoken in northwest Zambia such as Kaonde (Wright 1977). Luchazi (Fleisch 2000), and Luvale (Horton 1949).

(81) Wamuzatila.
      wu- a-   mu-   zát -il   -a
      3sg- PAST- 3sg.OBJ work -APPL -fv
      'S/he worked for her/him.'

In addition, with the exception of class 3, 13 and 14, indirect object pronominal

forms are distinct from direct object pronominal forms (cf. chap III, subsection 3.2.2.2).

However, unlike the direct object, the indirect object can occur as a pronoun only if the

direct object also appears as an object pronoun or a lexical direct object co-occuring with

an agreement prefix in the verb.

(82) a.   Mumbanda wenka kánsi mukánda.
             mu-mbanda wu- a-   ink -a ka- ánsi mu- kánda
             1-woman   3sg- PAST- give -fv 12- child 3- book
             'The woman gave the child a book.'

      b.   Wamwinka mukánda.
             wu- a-   mu-   ink -a mu- kánda
             3sg- PAST- 3sg.OBJ- give -fv 3-   book
             'She gave her/him a book.'

      c.   Wamwinkáwu.
             wu- a-   mu-   ink -a -wu
             3sg- PAST- 3sg.OBJ- give -fv -3
             'She gave it to her/him.'

      d.   * Wenkawu kánsi.
             wu- a-   ink -a -wu   kánsi
             3sg- PAST- give -fv -OBJ child
             'She gave it to the child.'

      e.   *Wawinka kánsi.
             wu- a-   wu- ink -a kánsi
             3sg- PAST- OBJ- give -fv child
             'She gave it to the child.'

In (82c) the direct object is represented by the object prefix mu- and the indirect object is

expressed by the pronominal suffix -wu. (82d) yields ungrammaticality because the direct

object appears as a lexical noun when the indirect object is in pronominal form. (82e) is

also ungrammatical due to the fact that the indirect object is expressed by means of an

object prefix pronoun.

6.3.3.3 Locatives

Locative noun phrases pronominalize in the verb in the same fashion as indirect

objects. They always occur as verb suffixes (enclitics) according to the locative classes

class 16 -hu, class 17 -ku and class 18 -mu. Even with intransitive verbs, locative

pronouns cannot occupy the preverbal slot because they are not direct objects. Based on

this syntactic similarity between indirect objects and locatives, it may be assumed that

locatives are functionally similar to indirect objects.

(83)   a.   Washakama hachitwámu.
            wu a-   shakam -a ha-   chi- twámu
            3sg- PAST- sit   -fv LOC- 7- chair
            'S/he sat on the chair.'

        b.   Washakamáhu.
            wu a-   shakam -a -hu
            3sg- PAST- sit   -fv -LOC
            'S/he sat there.'

(84)   a.   Weñila mwitálamu.
            wu a-   iñil -a mu- i- tála
            3sg- PAST- go in -fv LOC- 5- house
            'S/he went in the house.'

        b.   Weñilámu.
            wu a-   iñil -a -mu
            3sg- PAST- go in -fv -LOC
            'S/he went in there.'

However, unlike indirect objects which pronominalize only when the direct object

also appears as an object pronoun or object agreement, locative pronouns are not

affected by this constraint when they follow direct objects in constructions with

ditransitive verbs.

(85)   a.   Wahuñunwina menzhi munswáha.
               wu- a-   huñunun -in   -a ma- inzhi mu- swáha
               3sg- PAST- pour   -APPL -fv 6- water LOC- 9.calabash
               'S/he poured water into the calabash.'

        b.   Wahuñunwinámu menzhi.
               wu- a-   huñunun -in   -a -mu ma- inzhi
               3sg- PAST- pour   -APPL -fv -LOC 6- water
               'S/he poured water in it.'

        c.   Wayihuñunwinámu.
               wu- a-   yi- huñunun -in   -a -mu
               3sg- PAST- OBJ- pour   -APPL -fv -LOC
               'S/he poured it in.'

In a construction with three postverbal noun phrases comprising a direct object,

an indirect object, and a locative object, all of them can be expressed by means of

pronominal affixes/clitics. However, since there is only one pronominal slot for both

indirect object and locative object, only one of them can appear as a pronominal clitic

suffixed to the verb alongside the direct object at a time. Compare the following

examples:

(86)   a.   Watentekela kánsi nyikánda hachisalu.
               wu- a-   tentek -el   -a ka-ánsi nyikanda ha- chi-salu
               3sg- PAST- put   -APPL -fv 12-child 4-books LOC-7-mat
               'S/he put the books for the child on the mat.'

b. Wamutentekeláyu hachisalu.
    wu- a-   mu-   tentek -el   -a -yu ha-   chi-salu
    3sg- PAST- 3sg.OBJ- put   -APPL -fv -OBJ LOC- 7-mat
    'S/he put them for her/him on the mat.'

c. Wamutentekeláhu nyikánda.
    wu- a-   mu-   tentek -el   -a -hu   nyi- kánda
    3sg- PAST- 3sg.OBJ- put   -APPL -fv -LOC 4- books
    'S/he put the books for her/him on it.'

In (86b) the postverbal pronominal clitic -yu is an indirect object corresponding to the

nominal indirect object nyikánda 'books' in (86a), whereas -hu in (86c) is locative object

corresponding to the locative expression hachisalu 'on the mat' in (86a).

The locative goal marked by kúdi, a locative noun phrase with human semantic

features, can be replaced by an independent pronoun instead of a pronominal affix. This

clearly indicates that it is an oblique object because it cannot occur as an object prefix in

the verb.

(87) a. Waya kúdi Nswana.
          wu- a-   y -a kúdi Nswana
          3sg- PAST- go -fv LOC Nswana
          'S/he went to Nswana.'

      b. Waya kúdi yena.
          wu- a-   y -a kúdi yena
          3sg- PAST- go -fv LOC 3sg
          'S/he went to him.'

(87) a. Nswana watemesha mali kúdi Womba.
          Nswana wu- a-   témesh -a mali   kúdi Womba
          Nswana 3sg - PAST- send   -fv money LOC Womba
          'Nswana sent money to Womba.'

      b. Nswana wayitemesha kúdi yena.
          Nswana wu- a-   yi- temesh -a kudi yena
          Nswana 3sg- PAST- OBJ- send   -fv LOC 3sg
          'Nswana sent it to him.'

The independent pronoun yena 'him' in (86b) and (87b) refers to the human locative

expressions Nswana and Womba in (86a) and (87a) respectively.

6.3.3.4 Comitatives

Comitatives may also be expressed in pronominal forms after the verb attached to

the prefix na-. There is, however, a tendency to replace third person ananimate nouns,

irrespective of their noun classes, with class 7 pronoun -chu.

(88) a.   Wukwinza namukwáwu.
        wu- ku-   inz -a na-   mukwáwu
        3sg- FUT- come -fv COM- friend
        'S/he will come with her friend.'

     b.   Wukwinza nindi.
        wu- ku-   inz -a na-   indi
        3sg- FUT- come -fv COM- 3sg
        'S/he will come with her.'

(89) a.   Wenza nachúma.
        wu- a-   inz -a na-   chi- úma
        3sg- PAST- come -fv COM- 7-   thing
        'S/he came with a thing.'

     b.   Wenza náchu.
        wu- a-   inz -a na-   -chu
        3sg- PAST- come -fv COM- -PRO7
        'S/he came with it.'

The pronoun indi in (88b) and the clitic -chu in (89b) that refer to the nominal comitative

mukwawu 'her friend' in (88a) and accompaniment chúma 'thing' in (89a) respectively.

6.3.3.5 Instrumentals

Being oblique participants, instrumental noun phrases are pronominalized in the same fashion as comitative noun phrases. They appear in pronominal forms in their normal postverbal position attached to the instrumental marker <u>na</u>- 'and, with'.

(90) a.   Ndimi nakusañula netémwa.
           ndimi na-   ku- sañul -a na-   i- témwa
           farmer 3sg.PROG- INF- weed -fv INST- 5-hoe
           'The farmer is weeding with a hoe.'

       b.   Ndimi nakusañula náchu.
           ndimi na-   ku- sañul -a na- -chu
           farmer 3sg.PROG- INF- weed -fv INST -7
           'The farmer is weeding with it.'

The pronominal clitic -<u>chu</u> in (90a) is the instrumental object that refers to the instrument <u>itémwa</u> 'hoe' in (90a).

Lunda does not permit an instrument object to be expressed as an object prefix in the verb even if the direct object is a nominal. For illustration consider the following examples:

(91) a.   Wasoña iyanda nansesu.
           wu- a-   soñ -a i- yanda   na- nsesu
           3sg- PAST- carve -fv 5- pounding mortar INST- 9.adze
           'He carved the pounding mortar with an adze.'

       b.   Wasoña náchu iyanda.
           wu- a-   soñ -a na- -chu i- yanda
           3sg- PAST- carve -fv INST- -PRO7 5- pounding mortar
           'He carved the pounding mortar with it.'

       c.   Wadisoña náchu.
           wu- a-   di- soñ -a na- -chu
           3sg- PAST- OBJ- carve -fv INST- -7
           'He carved it with it.'

The example in (91b) shows that being the instrument, -chu can only occur as a

pronominal clitic marked by the morpheme na- though it precedes the nominal direct

object iyanda 'pounding mortar'.

6.4 Summary

This chapter has analyzed copular constructions, the various types of verbs and

their arguments semantically and syntactically. It has shown that while the language has

inherent transitive and ditransitive verbs, others can be derived through the applicative

and causative valence-increasing extensions. Whether inherent or derived, the two types

of verbs have the same syntactic behavior. It has been noted that there are two patterns of

ditransitive clauses involving the recipicient/goal that has human semantic features; the

latter can either be an indirect object introduced by the locative marker kudi 'to' or a

direct object via the applicativization process.

The chapter has shown that Lunda has grammatical relations such as subject,

direct object and indirect object. The language makes use of word order,

pronominalization and to some extent case-marking to distinguish between the various

types of grammatical relations. Regarding word order, the subject noun occurs in the

preverbal position while the direct object noun appears unmarked postverbally.

While the subject may have different semantic roles depending on the semantic of

the verb root, the direct object is always a patient in transitive constructions. Pronominal

forms further support the difference between the two relations. As pronouns, the subject

can be expressed by the various subject prefixes that agree in class, person and number

with the noun they refer to. The direct object can be replaced by an object pronoun prefix on the verb. The same syntactic aspect has been noted in constructions with ditransitive verbs that allow two unmarked post-verbal noun phrases. In terms of word order, the nominal adjacent to the verb is a direct object and the one following an indirect object which is equally unmarked except when it has the recipient semantic role. When the two post-verbal appear as pronouns, the direct object claims the prefixal object slot in the verb and the indirect object is expressed in a pronominal form suffixed onto the verb.

CHAPTER VII

COMPLEMENT CLAUSES

This chapter describes complement clauses, their semantic and their syntactic structures, as well as the types of complement taking verbs in Lunda. It also examines the various types of complement clause constructions. Complement clauses can be defined as dependent clauses which assume a sentence function of a noun phrase object of the verb of the main clause. Givón (1990:515) refers to verbal complements as 'clauses that function as subject or object arguments of other clauses'. The language has two main types of complement clauses that some verbs of the main clause may take. The two main types of complement clauses are infinitive clauses and finite complement clauses introduced by complementizers. The complements are further subdivided into categories according to the type and behavior of the verb in the main clause.

7.1 Complement-Taking Verbs

According to Givón (1990:516, 2000:40-41), complement-taking verbs can be divided into three different types based on the "systematic isomorphism between the semantic and the syntactic dimensions of complementation". He proposes the following; 'modality verbs', 'manipulation verbs', and 'perception, cognition and utterance verbs'. Depending on the semantic of verbs, complement-taking verbs can be grouped into two

broad types in Lunda. These are verbs that can take non-finite or infinitive complement clauses and subjunctive complement clauses, and those that require the use of complementizers to introduce dependent complement clauses. The first category of complement taking verbs may further be subdivided into two subcategories: verbs that take one argument, subject, in the main clause plus a complement and those that take two arguments, the subject and the direct object in the main clause followed by a complement clause.

7.1.1 Modality Verbs

Modality verbs express achievements, desire, intention, attempt, fear, avoidance, failure, obligation, success, ability, possibility, etc. and can take infinitival complement clauses in Lunda. Some of the modality verbs allow both infinitival complement clauses and subjunctive complement clauses.

Semantically, the verb of the main clause codes an action, state, or attitude of its subject toward the event or state denoted in the complement clause. The subject of the main clause is co-referent with the subject of the complement clause. In terms of syntactic function, the subject of the verb of the main clause is at the same time the subject of the complement clause.

7.1.1.1 Infinitival Complement Clauses

The syntactic subject of the infinitival (non-finite) complement clause is the same as the subject of the verb of the main clause. The non-finite verb of the dependent clause

has no overt subject, that is, the subject remains unexpressed in the clause since it is implied or understood. In Lunda, verbs of dependent complement clauses are non-finite marked by the infinitive prefix ku-. It is the matrix verb, which is an equi-verb, that carries the subject prefix. In short, the complement verb is in the infinitive form.

(1)   a.   Walómbeli kuya nakunooka kumukála.
              wu- a-   lomb -el -i ku- ya na-   ku- nooka   ku- mukála
              3sg- PAST- ask   -RP -fv INF- go PURP- INF- take a break LOC- village
              'He had asked to take a break and go to the village.'

        b.   Nakani kuzata.
              na-   kan -i
              3sg.PERF- refuse -fv
              'S/he has refused to work.'

The subjects of the infinitive verbs kunooka 'to rest' and kukana 'to refuse' in (1a) and (1b) are left unspecified in the complement clauses. This is so because the subjects of the main clauses are also the subjects of the complement clauses. This syntactic behavior indicates that the subject of the main clause is also the subject of the complement clause. This is one of the 'behavioral properties' of subjects following Keenan's (1976) criteria.

Syntactically, what can be interpreted as the English equivalent of 'how to complement clauses' have identical structures as infinitival complement clauses in Lunda. In other words, there is no formal and syntactic distinction between dependent infinitival complement clauses 'how to' complement clauses, as exemplified by the verb kwiluka 'to know'.

(2)   a.   Welúka kutúña matála.
           wu- a-   iluka ku- tuña ma- tála
           3sg- TNS- know INF- build 6-   houses
           'S/he knows how to build houses.'

b. Wakáñényi kudíza kutáña.
    wu- a-   kañany -in -i ku- diza ku- chima
    3sg- PAST- fail   -RP -fv INF- learn INF- sew
    'S/he failed to learn how to sew.'

In (2a) and (2b), the main clause verb iluka 'know, know how' and kañanya 'fail' are

immediately followed by complement clauses whose verbs are in the infinitive form.

Further, the infinitival complement clause kudiza in (2b) precedes a 'how-to' complement

clause. Some of the modality verbs that take infinitive complement clauses are given in the

following list:

(3) kwanuka   'to remember'
     kuchiina   'to fear, to avoid'
     kuchiñezha   'to hope'
     kweseka   'to try, attempt'
     kuhela   'to hate'
     kwiluka   'to know, know how'
     kwinzhilila   'to be used to, accustomed to'
     kwitézha   'to accept, agree, beg'
     kukaana   'to refuse'
     kukabila   'to try persistently, toil, take much trouble'
     kukáñanya   'to fail'
     kukákezha   'to urge, persuade'
     kukéña   'to wish, want, desire, love, like'
     kuzhímbala   'to forget'
     kuleka   'to stop'
     kulémba   'to beseech'
     kulomba   'to ask, request'
     kumanisha   'to finish'
     kufuukula   'to plan, ponder, make up one's mind'
     kunyakala   'to hurry, be quick, make haste'
     kushinzhila   'to coax, urge, persuade'
     kutáchika   'to begin'
     kusambila   'to start, begin'
     kutela   'be necessary, be fit, be suitable'
     kutóña   'to think about'
     kutónda   'to choose'
     kutwésha   'to be able to, be capable of, succeed'
     kuvúlamena   'to forget'

Verbs and impersonal constructions or expressions of necessity, obligation,

prohibition, and advisability share the same syntactic properties as modality verbs; they

take infinitival complement clauses. The main clause of most of these constructions consist

of the impersonal subject prefix , class 7 noun prefix/agreement marker chi-, plus the verb.

These verbs and expressions have meanings that are inclusive of all the persons both

singular and plural such as for 'I', 'you', 's/he', 'we', 'you', and 'they'.

(4)   a.   Chachiwáhi kunyámuka lélu.
             chachi- wáhi ku- nyámuka lélu
             7-   good INF- leave   today
             'It is better for you to leave today.'

       b.   Chatéla kufunta swayi.
             chi- a-   tela ku-   funta   swayi
             7-   TNS- be necessary come back quickly
             'It is necessary to come back quickly.'

       c.   Chatáma kuzuña.
             chi- a-   tama   ku- zuña
             7-   TNS- be bad INF- fight
             'It is bad to fight.'

       d.   Chakála kuhósha.
             chi- a-   kala   ku- hósha
             7-   TNS- be hard INF- say
             'It is hard to say.'

Verbs and other expressions that take dependent infinitival complement clauses
are listed below:

(5)   kufwanina   'to be fitting, be necessary, be appropriate'
           kuwáha   'to be good'
           kutama   'to be bad'
           kutela   'to be worthy of, fit for, suitable to'
           kukala   'to be difficult'
           kulema   'to be heavy, important, worthy'
           kuswézha   'exceed, be much, be numerous'
           kubádika   'excel, exceed, go beyond'
           chinzhila   'it is forbidden, not to be allowed, not to do'
           chaswayi   'it is easy'
           chasónyi   'it is shameful'

7.1.1.2 Subjunctive Complement Clauses

In Lunda, some modality verbs and impersonal expressions which take infinitival complement clauses may also take subjunctive complement clauses without having any difference in meaning at all. The verb of the subjunctive complement clause has a subject, either nominal or pronominal though the two events in the main clause and the complement clause are integrated. Despite the presence of an overtly expressed subject in the complement clause, the coreference constraint that applies to infinitival complement clauses of modality verbs also holds for subjunctive complement clauses. Since the same verbs can take both infinitive complement clause and subjunctive complement clause, we can conclude that the two types of complement clauses are semantically similar. Syntactically, the complement clause follows the main clause either asyndetically, or optionally introduced by a complementizer that agrees in number and person with the subject. The verb keña 'want, like, love, wish to' is the most frequently used.

(6)   Infinitive Complement Clause:
Nákéñi kwikala nkoñi yenu[1].
na-   keñ -i   ku-   ikala nkoñi yi- a-   enu
1sg.PERF- want -fv INF- be   worker 9- POSS 2pl
'I want to be your worker.'

(7)   Subjunctive Complement Clauses:
a.   Nákéñi námi nikali nkoñi yenu.
na-   keñ   -i nami   ni-   ikal -i   nkoñi yi- a-   enu
1sg.PERF- want -fv COMP1sg 1SG- be -SUBJ worker 9- POSS 2pl
(Lit. 'I wish that I be your worker')
'I wish to be your worker.'

b.   Nákéñi nikáli nkoñi yenu.
na-   keñ -i ni- ikal -i   nkoñi yi- a-   enu
1sg.PERF- want -fv 1sg- be -SUBJ worker 9- POSS 2pl
(Lit. 'I wish that I be your worker')
'I wish to be your worker.'

c.   Hachítézheli nindi endi.
hi-   a-   a-   chi-   itezh -el -i nindi   a-   end -i
NEG- 3sg- PAST- OBJ7- accept -RP -fv COMP.3sg 3sg- walk -SUBJ
(Lit. 'He did not accept that he walk.')
'S/he did not accept to walk.'

d.   Wazhinoka mumuchima windi nindi niyidímbi.
wu- a-   zhinok -a mu-   muchima wu- a-   indi nindi   ni-
3sg- PAST- plan   -fv LOC- heart   3-   POSS 3sg COMP.3sg 1sg-

yi-   dimb   -i
3pl.OBJ- deceive -SUBJ
(Lit. 'He had planned in his heart that he should deceive them.')
'He had planned to deceive them.'

The verb of the complement clause ikala 'be, become' in (6) is in the infinitive form,

while (7a) through (7d) are subjunctive complement clauses. The examples above are

sentences with the same subject in both main clause and complement clauses.

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[1] First person singular and class 1 subject prefix is not overtly expressed in the present perfect. The difference between the two lies in the tone which is high on the marker na- in the first person singular.

A few verbal expressions that take complement clauses display exactly the same

syntactic behavior as the verb <u>kukeña</u> 'to want, to like' and other verbs with identical

properties. They can take both types of dependent complement clauses, as shown by the

examples in (8):

(8)   a.   Infinitive Complement:
            Chatelela Matewu kuya.
            chi- a-   telela   Matewu ku- ya
            7-   TNS- be necessary Matewu INF- go
            'It is necessary for Matewu to go.'

      b.   Subjunctive Complement:
            Chatelela Matewu ayi.
            chi- a-   telela   Matewu a-   y -i
            8-   TNS- be necessary Matewu 3sg- go -SUBJ
            'It is necessary that Matewu go.'

7.1.2 Manipulative Verbs

In Lunda, manipulative verbs are two-place predicates that appear in the main

clause. They can further be subdivided into two distinct subgroups, basic non-derived

manipulative verbs and derived causative manipulative verbs. The latter have negative

causative semantics supplied by the derivational causative suffix -<u>ish</u>. Semantically,

manipulative verbs have an agent and a patient. The agent exerts some control on the

patient or makes the patient undergo a situation. The patient of the main clause verb is

coreferential with the agent of the verb of the complement clause. The complement clause

codes the activity, event or situation to be performed by the patient also known as

'manipulee' (Givón 1990, 2000). Syntactically, the agent is the subject of the main clause,

while the patient is the direct object of the main clause.

7.1.2.1 Infinitival Complement Clauses

The syntactic subject of the infinitival complement clause of manipulative verbs is not overtly expressed because it is also the direct object of the verb of the main clause. Consider the following examples that illustrate dependent complement clauses occurring after manipulative verbs.

(9)   a.   Kawumba walétésheli Nswana kuleka mudimu.
              Kawumba wu- a-   let   -esh   -el -i Nswana ku- leka mudimu
              Kawumba 3sg- PAST- bring -CAUS -RP -fv Nswana INF- quit job
              'Kawumba caused Nswana to quit his job.'

        b.   Nakanishi atwansi kuya.
              na-   kanish -i atwansi ku- ya
              3sg.PERF- forbid -fv 2-children INF- go
              'He has forbidden the children to go.'

        c.   Walombeli chilolu kwimana.
              wu- a-   lomb -el -i chilolu ku- iman   -a
              3sg- PAST- ask -RP -fv leader INF- stand up -fv
              'He had asked the leader to stand up.'

The subjects of the non-finite complement clause verbs kuleka 'to quit' in (9a), kuya 'to go' in (9b), and kwimana 'to stand up' in (9c) are not overtly expressed because they are the same as the direct objects/patient of the main clauses atwánsi 'children' in (9a-b), and chilolu 'leader' in (9c) of the main clauses.

When the object of the verb of the main clause is expressed as a pronoun, it appears in the preverbal direct object slot of the main clause and not before the verb of the complement clause. This syntactic behavior indicates that the verb of the main clause is a transitive verb with an agent and a patient, as shown in the following examples:

(10)   a.   Kawumba wamulétésheli kuleka mudimu.
Kawumba wu- a-   mu-   let   -esh   -el -i ku-   leka mudimu
Kawumba 3sg- PAST- 3sg.OBJ- bring -CAUS -RP -fv INF- quit job
'Kawumba caused him to quit his job.'

   b.   Namukanishi kuya.
na-   yi-   kanish -i ku- ya
3sg.PERF- 3pl.OBJ- forbid -fv INF- go
'He has forbidden them to go.'

The direct object pronominal prefixes mu- and yi- attached to the verb létesha 'cause' in

(10a) and kánisha in (10b) refer to the direct object NPs Nswana and atwánsi 'children' in

(10a) and (10b) respectively.

Some of the verbs belonging to this group are given in the list below:

(11)   a.   Derived Causative Verbs:
kukánisha   'to forbid, ban, prohibit, stop'
kwánukisha   'to remind'
kulembezheka   'to coax'
kukañesha   'to prevent, frustrate, hinder'
kulekesha   'to forbid, prohibit, make stop, prevent'
kulétesha   'to cause to'

   b.   Basic Verbs:
kuzhilika   'to forbid, to prohibit'
kukanjikizha   'to compel, force, coerce, persuade'
kukwasha   'to help'
kulezha   'tell, advise, warn'
kulémba   'to beg, to request'
kulómba   'to ask, request, beg'
kutónda   'to choose'
kukákezha   'to urge, to persuade'
kwítezha   'to let, allow, agree'

7.1.2.2 Subjunctive Complement Clauses

Like modality verbs, some manipulative verbs can also take both infinitival complement clauses and subjunctive complement clauses without any change or difference in meaning at all. Such verbs express wish, desire, consent, request, command and advise. Syntactically, the dependent complement clause follows the main clause either asyndetically, or is introduced by an optional complementizer. The subject of the subjunctive complement clause is overtly expressed and controls the usual subject-verb agreement via the subject agreement (concord) prefixed onto the verb despite the fact that the two events in the main clause and the complement clause are integrated. Since the object of the main clause is coreferential with the subject of subjunctive complement clause, the constraint that applies to infinitival complement clauses also holds here. Consider the following sentences with the verb kukeña 'to want, to like, to desire' in the main clause followed by an infinitival complement clause in (12a-b) and a subjunctive complement clause in (13a-b):

(12)   Infinitive Complement Clause:
      a.   Nákéñi kánsi kuhema.
            na-   keñ -i kansi ku- hema
            3sg.PERF- want -fv 1-child INF- play
            'I want the child to play.'

      b.   Nákéñi eyi kwinza kúnu.
            na-   keñ -i eyi ku- inza kunu
            3sg.PERF- want -fv 2sg INF- come here
            'I want you to come here.'

(13)   Subjunctive Complement Clause:
    a.   Nákéñi kánsi ahémi.
            na-   keñ -i kansi a- hem -i
            1sg.PERF- want -fv 1-child 3sg- play -SUBJ
            (Lit. 'I want that the child play')
            'I want the child to play.'

    b.   Nákéñi eyi winzi kúnu.
            na-   keñ -i eyi wu- inz -i   kunu
            1sg.PERF- want -fv 2sg- 2sg- come -SUBJ here
            (Lit. 'I want that you come here')
            'I want you to come here.'

As seen in (13a) and (13b), the agent kánsi 'child' and eyi 'you' are overtly expressed in

the complement clauses.

In Lunda, the inherent semantic property of the verb kukéña 'to want, to like, to

desire, to love' does not, however, permit an agreement object prefix or direct object

pronoun to occur in the direct object slot before the verb of the main clause. In other words,

the direct object of this verb does not pronominalize in such constructions, as illustrated by

the ungrammaticality in (14c) and (14d).

(14)   a.   Nákéñi kánsi ahémi.
            na-   keñ -i kansi a- hem -i
            1sg.PERF- want -fv 1-child 3sg- play -SUBJ
            (Lit. 'I want that the child play')
            'I want the child to play.'

    b.   Nákéñi ahémi.
            na-   keñ -i a- hem -i
            1sg.PERF- want -fv 3sg- play -SUBJ
            (Lit. 'I want that s/he play')
            'I want her/him to play.'

c.   *Námukéñi kánsi ahémi.

      na-   mu-   keñ -i   kansi a-   hem -i
      1sg.PERF- 3sg.OBJ- want -fv 1-child 3sg- play -SUBJ
      (Lit. 'I want that the child play')
      'I want the child to play.'

d.   *Námukeñi ahémi.

      na-   mu-   keñ -i a-   hem -i
      1sg.PERF- 3sg.OBJ- want -fv 3sg- play -SUBJ
      (Lit. 'I want that s/he child play')
      'I want her/him to play.'

The direct object pronominalization and object agreement restriction does not in any way affect other manipulative verbs. The verb of the main clause can be marked with either an object agreement prefix or a direct object pronoun co-referential to the overt subject of the complement clause. In other words, the NP that comes after modality verbs is a constituent of the complement clause, while the NP that follows manipulative verbs a direct object of the main clause.

(15)   a.   Nálombi kánsi asháli hetála.

          na-   lomb -i kánsi a- shal -i   ha-   i- tála
          1sg.PERF- ask   -fv 1-child 3sg- stay -SUBJ LOC- 5- house
          (Lit. 'I have asked the child that s/he stay home')
          'I have asked the child to stay home.'

    b.   Námulómbi asháli hetála.

          na-   mu-   lomb -i a- shal -i   ha-   i- tála
          1sg.PERF- 3sg.OBJ- askl   -fv 3sg- stay -SUBJ LOC- 5- house
          (Lit. 'I have asked her/him that s/he stay home')
          'I have asked her/him to stay home.'

    c.   *Nálóombi asháli hetála.

          na-   lomb -i a- shal -i   ha-   i- tála
          1sg.PERF- tell   -fv 3sg- stay -SUBJ LOC- 5- house
          (Lit. 'I have asked that s/he stay home')
          *'I have asked to stay home.'

The ungrammaticality of (15c) is due to the fact that the sentence lacks a direct object co-referential to the subject of the complement clause.

Another example of a manipulation verb that can take both infinitival complement clauses subjunctive complement clause is given in the following examples:

(16)   Wamukanjikizha kutémuka.
        wu- a-   mu-   kanjikizha ku- temuk -a
        3sg- PAST- 3sg.OBJ- force   INF- run   -fv
        'S/he forced her/him to run.'

(17)   Wamukanjikizha níndi atemuki.
        wu- a-   mu-   kanjikizha nindi   a-   temuk -i
        3sg- PAST- 3sg.OBJ- force   COMP.3sg 3sg- run   -SUBJ
        'S/he forced her/him to run.'

The complement clause verb can be combined with the deontic conjunction chiña 'should, must, ought to, be necessary that' to express the presence of a strong obligation on the part of the manipulee. This only occurs when the verb of the complement clause is in the affirmative. The same conjunction introduces verbs in the affirmative commands (see chapter 6 on mood) and in independent sentences to express a strong obligation.

(18) a)   Twáyilezha netu chiña ayi.
            tu- a-   yi-   lezh netu   a- y -i
            1pl- PAST- 3pl.OBJ- tell   COMP.1pl 3sg- go -SUBJ
            'We told them that they should come.'

      b)   Amwílili nawu chiña witézhi.
            a- a-   mu-   il nawu   chiña wu- itezh -i
            3pl- PAST- 3sg.OBJ- tell COMP.3pl should 2sg- agree -SUBJ
            (Lit. 'They told him that you should accept.')
            'They told him that s/he should agree.'

7.1.3. Perception, Utterance and Cognition Verbs

Semantically, perception, utterance and thought verbs in the main clause refer to utterance, perception, mental state, cognition or thought. The subject assumes the semantic role of either a dative or an agent. The situation expressed in the complement clause is analogous to the patient of the main clause verb.

In addition, the verb of the complement clause is in the finite form, that is, it is inflected with tense, aspect and mood. Further, unlike infinitival complement-taking verbs, the subject of the complement clause is always overtly expressed, that is, the subject of the complement clause does not delete through equi. In other words, the embedded dependent complement clause is like an independent sentence except that it is introduced by a complementizer. While the complementizers may be left out in subjunctive complement clauses, this is not possible with perception, utterance and thought verbs. Such verbs quite often take complement clauses whose verbs are in the indicative mood.

(19)   a.   Ashimuna náwu akwinza namelela.
              a- a-   shimun -a nawu   a- ku- inza na- melela
              3pl- PAST- say   -fv COMP.3pl 3pl- FUT- come in- evening
              'They said that they would come in the evening.'

        b.   Atáñózhokeli níndi nenzi nakutuña itála.
              a- a-   toñozhok -el -i nindi   na-   inz -i na-
              3pl - PAST- think   -RP -fv COMP.3sg-3sg.PERF- come -fv PURP-

              ku- tuña itála
              INF- build house
              'They thought that he had come to build a house.'

In (19a), the complement clause is an embedded sentence introduced by a class 2 complementizer náwu, while in (19b) it is introduced by a class 1 complementizer níndi.

In Lunda, verbs of perception, utterance and thought that are used deontically to express 'fear', 'hope', 'suppose', and 'wish' take dependent complement clauses with the verb in the indicative future tenses in combination with the sentence adverbs hadaha/hamwaha/hekwawu 'perhaps, may be, possibly'. The event or state coded by the complement clause verb may be or may not be possible. They are used as preference verbs when they occur in the main clause to code irrealis.

(20)   a.   Wáfuukula neyi hadaha wukuñanakena.
           wu- a-   fuukul -a neyi   hadaha wu- ku- ñ-
           2sg- PAST- suppose -fv COMP.2sg- perhaps 3sg- FUT- 1sg.OBJ-

           anaken -a
           forgive -fv
           (Lit: 'you supposed that he would forgive me')
           'You supposed that he would forgive me.'

       b.   Wakuhweleli nindi hamwaha Matewu wamba kamusumbula.
           wu- a   kuhwelel -el -i   nindi   hamwaha Matewu
           3sg- PAST- hope   -RP -fv COMP.3sg- perhaps   Matewu

           wu- amba ka-   mu-   sumbul -a
           3sg- AUX FUT- 3sg.OBJ- marry -fv
           'She hoped that Matewu would marry her.'

Two verbs of perception verbs, móna 'see', tíya 'hear' and other verbs such as wana 'find', shiya 'leave behind', and bulakana 'meet' can also take complement clauses without any explicit formal marking. The subject of the complement clause is overtly expressed and is coreferential with the direct object of the main clause. Furthermore, the complement clauses have verbs in the indicative with either the perfect tense-aspect for completed events prior to those encoded by the verb of the main clause or the progressive aspect for ongoing events and states.

(21) a.   Aweni mukwénzi nayi déhi.
            a- a-   wan -in -i mu- kwenzi na-   y -i dehi
            3pl- PAST- find -RP -fv 1-   youth   3sg.PERF- go -fv already
            'They found that the youth had already gone.'

      b.   Námona atwansi anakuya kukaloña.
            ni- a-   mon -a a- tu- ansi a- na-   ku- ya ku-   kaloña
            1sg- PAST- see -fv 2-13- child 3pl- PROG- INF- go LOC- river
            'I saw the children going to the river.'

This type of complement clause construction is more frequently used in narratives

and may also consist of an adverbial clause of time, as illustrated by the examples in (22)

and (23) with verbs in the perfect tense-aspect and progressive respectively:

(22)   Chinafuntíli, naweni mukánda wedika déhi, anakuwuzatisha.
          chi-   ni- a-   funt   -il -i ni- a-   wan -in -i mu- kánda wu-
          when- 1sg- PAST- go back -RP -fv 1sg- PAST- find -RP -fv 3-   book   3sg-

          a-   idik -a déhi a- na-   ku- wu-   zat -ish   -a
          PERF- come -fv already 3pl- PROG- INF- it/OBJ- work -CAUS -fv
          (Lit: 'When I went back, I found the book had already come out, it is being used.')
          'When I went back, I found that the book had already com out and was being
            used.' (Kakoma 1988:iv)

(23)   Chashíkilíyi kwitála, Sayitamba wawéni ñodindi wudi muchinsambu nakwota
          kesi.
          chi- a- a-   shik -il -i -yi ku- itala Sayitamba wu- a-   wan
          when- 3sg- PAST- arrive -RP -fv -3sg LOC- house Sayitamba 3sg- PAST- find

          -in -i ñod indi wu- di mu-   chinsambu na-   ku- ota   kesi
          -RP -fv wife 3sg 3sg- be LOC- kitchen   3sg.PROG- INF- warm herself fire
          (Lit: When he arrived home, Sayitamba found his wife is the kitchen warming
           herself by the fire side.')
          'When he arrived home, Sayitamba found his wife in the kitchen warming herself
           by the fire side.' (Matoka 1995:63)

Below is a list of examples of some of the complement-taking verbs of perception,

utterance and thought:

(24) kumóna   'see'
      kwakula   'answer, reply'
      kukéña   'like, want'
      kutíya   'hear, feel'
      kwítiya   'agree, assent'
      kudímba   'to deceive'
      kufuukula   'to suppose, reckon,
      kukanjikizha   'to force, coerce'
      kwítezha   ⌣   'to accept, admit, concede'
      kusakila   'to thank'
      kushímuna   'to tell, report'
      kwanuka   'to remember'
      kudíkala   'to deny'
      kulémba   'to beg pardon, beseech'
      kwanukisha   'to remind'
      kushíika   'to promise'
      kukuhwelela   'to trust, believe'
      kuhósha   'to say'
      kwíhula   'to ask'
      kushawuta   'to whisper'
      kulezha   'to tell'
      kutoñozhoka   'to think'
      kwiluka   'to know'
      kwánukisha   'to remind'
      kushíika   'to promise'
      kukuhwelela   'to trust, believe'

7.2 Complementizers

Lunda has complementizers which can be divided into three categories depending on the type of the governing verb or predicate they are associated with. These are personal pronoun-based complementizers, <u>neyi</u> 'whether, if' for embedded 'yes-no' complement clauses and class 7 prefix <u>chi</u>- for evaluative verbs.

7.2.1 Personal Pronoun-Based Complementizers

Embedded dependent complement clauses are introduced by personal pronoun complementizers which agree in number with the subject of the verb of the main clause. The complementizers consist of the morpheme <u>na</u>-, homophonous to the comitative marker, and the personal pronominal stems. In other words, the subject of the main clause determines the morphology of the complementizers and the information coded in the complement clause is perceived from the point of view of the subject of the main clause. This distinct phenomenon of complementizers has also been observed in other genetically related languages such as Luvale (Horton 1949:181) and Luchazi (Fleisch 2000:101)[2]. It should be noted that in Lunda, unlike some of the Bantu languages such as Bemba (Givón 1972), and Kaonde[3]. The Lunda complementizers do not derive from the verb 'say' nor are they a 'grammaticalized form' of the same verb. The examples in (25) illustrate the variable complementizers according to the subject of the main clause.

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[2] According to Fleisch (2000:101) and Horton (1949:410), Luchazi and Luvale make use of the prefix <u>ngu</u>- affixed to the possessive pronominal stems to introduce complement clauses.

[3] Kaonde, a Bantu language spoken in Zambia, uses <u>mba</u> for complementizer. It derives from the verb <u>kwamba</u> 'to say'.

(25) a.   Class 1:
Mukwénzi wela níndi watamisha.

mukwénzi	wu-	a-		il	-a	nindi	wu-	a-		tam	-ish	-a
youth		3sg-	PAST-	say	-fv	COMP.3sg	3sg-	PAST-	wrong	-CAUS	-fv

'The youth said that he did wrong.'

      b.   1st person plural:
Twatóñózhokeli nétu Nswana nenzi nakumwóta.

tu-	a-		toñozhok	-eli	netu		Nswana	na-		inzh	-i
1pl-	PAST-	think		-RP	COMP.1pl	Nswana	3sg.PERF-	come	-fv

na-	ku-	mu-	ota
PURP-	INF-	OM1-	ask for marriage

'We thought that Nswana had come to ask her for marriage.'

      c.   Class 2:
Ela náwu akenza kumádiki.

a-	a-		il	-a	nawu		a-	aka-	inza	kumadiki
3pl-	PAST-	say	-fv	COMP.3pl-	3pl-	FUT-	come	tomorrow

'They said that they would come tomorrow.'

The third person pronominal stem <u>índi</u>, which is part of the complementizers, in (21a)

refers to the subject of the main clause <u>mukwénzi</u> 'youth', a third person class 1 , while the

complementizer <u>nétu</u> in (25b) and <u>náwu</u> in (25c) are in agreement with the first person

plural subject prefix <u>tu</u>- 'we' and class 2 subject prefix <u>a</u>- 'they' of the main clause. Note

that the complementizers in the examples (25a-c) vary in person and number according to

the subject of the verb of the main clause. That is, it depends on the referent noun or

pronoun in the main clause.

Syntactically even when the verb of the main clause is in the imperative form, a

complementizer agrees with the addressee as exemplified by the following sentences:

(26) a.   Itezháku néyi wáluwañesha yúma.

itezh	-a	-ku		neyi	wu-	a-		luwañesha	yi-	úma
accept	-fv	-IMP.2sg	COMP.2sg	2sg-	PAST-	disturb	8-	thing

'Accept that you disturbed things.'

b.   Itezénu nénu mwáluwañesha yúma.
itezh -enu   nenu   mú- a-   luwañesha yi- úma
accept -IMP.2pl COMP.2pl 2pl- PAST- disturb   8- thing
'Accept that you disturbed things.'

c.   Twítezhi nétu twáluwañesha yúma.
tu- itezh -i   netu   tú- a-   luwañesha yi- úma
1pl- accept -SUBJ COMP.1pl 1pl- PAST- disturb   8- thing
'Let us accept that we disturbed things.'

The complementizers néyi in (26a), nénu in (26b), and nétu in (26c) are all dependent on

the referent subjects in the main clauses whose verbs are the imperative mood.

Table 23: Personal Pronoun-Based Complementizers

1sg:	námi
1pl:	nétu
2sg:	néyi
2pl:	nénu
3sg class 1:	níndi
3pl class 2:	náwu

7.2.2 Direct and Indirect Quote

Syntactically, there is no difference between direct quote and indirect quote in

Lunda. The two types of speech share the same morphology and are introduced by the

same complementizers. The actual words or utterances of a person are reported in the same

tense in which they were spoken; that is, there is no difference in the tense choice between

indirect and direct speeches. The only difference between the two types of speeches

clauses lies in the intonation: there is usually a pause coupled with a high tone on the first

vowel of the complementizers in direct quotes. In addition, the use of direct speeches is

more frequent than that of indirect speeches in Lunda.

(27)   a.   Direct speech:
            Námulezha námi: 'akamwinzhila.'
            ni- a-   mu-   lezh -a nami   a- aka- mu-   inzh -ila
            1sg- PAST- 3sg.OBJ- tell -fv COMP.1sg 3pl- FUT- 3sg.OBJ- come -APPL
            'I told him: 'They will come for him.''

       b.   Reported speech:
            Námulezha námi akamwinzhila.
            ni- a-   mu-   lezh -a nami   a- aka- mu-   inzh -ila
            1sg- PAST- 3sg.OBJ- tell -fv COMP.1sg 3pl- FUT- 3sg.OBJ- come -APPL
            'I told him that they will come for him.'

The use of pronoun-based complementizers in direct speech extends to verbs such

as tumba 'name', tambika 'call', and téna 'call, name, mention, term'.

(28)   Amutúmbili izhína nawu: 'Chidumbu'
       a- mu-   tumb -il -i izhína nawu   Chidumbu
       3pl- 3sg.OBJ- name -RP -fv name COMP.3pl Chidumbu
       'He was named Chidumbu.'

(29)   Nkinga yindi ayiteneneña nawu: "baloo"
       nkinga yi- a- indi a- yi-   ten -en -eña nawu   baloo
       bicycle 9- POSS-1 3pl- it/OBJ- call -RP -HAB COMP.3pl baloo
       'His bicycle was called baloo.'

Personal pronoun-based complementizers are somewhat grammaticalized in

Lunda; they may stand on their own without a verb if the understood subject is first person

or they can follow a subject noun, pronoun without a verb and function as non-verbal

predicates in the same way as the verb 'say[4]. In other words, the verb of the main clause

can be left out. This occurs quite often in speeches with the understood or implied

interpretation of the verbs 'say', 'think', and 'intend', etc. Consider the following

examples in which complement clauses are either introduced by a complementizer alone or

a complementizer following a noun.

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[4] This phenomenon has also been noted in Luvale (Horton 1949: 182). According to Horton, the
complementizer is used in a copular sense without a verbal antecedent.

(30) Níndi Nswana nénzi nakumwóta.
nindi   Nswana na-   inzhi na-   ku-   mu-   sumbula
COMP.3sg Nswana 3sg.PERF- come PURP- INF- 3sg.OBJ- marry
'He (thought) that Nswana had come to marry her.'

(31) Kabuchi níndi: 'Enu anvwali zhami, bayi mútoñozhoka nenu nakuhósha mázu akasawuntu.'
Kabuchi nindi   enu a- nvwali zhi- a- ami bayi   mú- toñozhoka nenu
Kabuchi COMP.3sg 2pl 1-parent 1-POSS 1sg CONJ 1pl- think   COMP.2pl

na-   ku- hosha ma- zu   a- kasawuntu
1sg.PROG- INF- talk   6-   word 6-disrespectful
Kabuchi said: 'My parents, do not think that I am saying disrespectful words.'

(32) Nétu hímukwinzáku.
netu   hi-   mú- ku- inz -a -ku
COMP.1pl NEG- 2pl- FUT- come -fv -NEG
'We (thought) that you will not come.'

The complement clauses in (30) and (32) are simply introduced by 3 person singular (class 10 and first person plural complementizer respectively without being preceded by any verb at all. In example (31) the complementizers is preceded by a third person class 1 noun. In addition, the same example contains two complementizers, a direct quote níndi referring to the subject noun phrase of the main clause Kabuchi, and an indirect quote nenu in agreement with the first person plural addressee.

Alternatively, the main clause can consist of a verb in the infinitive form, usually utterance and perception verbs, and a referent subject plus a complementizer that introduces a dependent complement clause.

(33)   Kuchinka Noliya nindi, 'Ami awéni néluki ochu chi nídi nakwila.'
kuchinka Noliya nindi   ami aweni na-   iluk -i
answering Noliya COMP.3sg 1sg self   1sg.PERF- know -fv

ochu   chi ni-   di   na-   ku- ila
DEM3 REL 1SG- COP PROG- INF- do
'Noliya answered saying, 'I, myself, know what I am doing.'

(34)   Kutiya wena nawu: 'túyidímbi.'
ku-   tiya wena nawu   tú- yi-   dimb -i
INF- hear 3pl   COMP.3pl 1pl- 3pl.OBJ- trick -SUBJ
'And they said: Let us trick them.'

The complementizer following a verbal expression can have an implicit meaning

which is different from that expressed by the verb of the main clause. The meaning may

refer to an utterance or thought, as illustrated in (35):

(35)   Amandumi zhindi chiyamumwéníwu atíyili kuwáha nawu nayilételi yakuvwála.
a-mandumi zhi- a-indi chi- ya- a-   mu-   mon -eni -wu a- a-
2-uncle   2-POSS-3sg when- 3pl- PAST- 3sg.OBJ- see -RP -3pl 3pl- PAST-

tiy -il -i kuwaha nawu   na-   yi-   let   -el -i yi-a-kuvwala
feel -RP -fv please COMP.3pl 3sg.PERF- 3pl.OBJ- bring -RP -fv 8-POSS-clothes
'His uncles felt pleased (thinking) that he had brought them clothes.'

Besides the function of introducing complement clauses, whether direct speech

or indirect speech, pronominalized possessive complementizers are also used in a

general sense after some verbs in a discourse.

(36) a.   Wamutambikáña nindi yáya.
wu- a-   mu-   tambik -ana nindi   yaya
3sg- TNS- 3sg.OBJ- call   -HAB COMP.3sg elder brother
'She calls him elder brother.'

b.   Chélili nindi atáli hanyíma wamwéni mutúpa.
chi a-   a-   il -il -i a-   tal -i ha-nyima
when 3sg- PAST- do -RP -fv 3sg- look -fv LOC-back

wu- a-   mon -en -i mu- tupa
3sg- PAST- see -RP -fv 1-   lion
'When he looked behind, he saw a lion.'

7.2.3 Complementizer 'néyi'

The complementizer néyi 'if, whether' appears in sentences to introduce embedded

interrogative complement clauses. The syntactic structure of complement clauses

introduced by néyi is basically the same as the structure of complement clauses introduced

personal pronoun-based complementizers, except that the morphology of the

complementizer does not vary according to the subject in the main clause. Some of the

verbs that take such type of dependent complement clauses in Lunda are kwiluka 'to

know', kwíhula 'to ask, to inquire', kuzhinoka 'to doubt, to consider, to ponder' and the

defective verb that expresses doubt kwizhi 'to wonder, to doubt'.

(37) a.   Kadamaseki wéhwíli múku windi neyi akufunta tahindi.
Kadamaseki wu- a   ihul -il -i muku   wu- a-   indi neyi
Kadamaseki 3sg- PAST- ask -RP -fv father-in law 1-POSS- 3sg COMPL

a- ku- funt   -a tahindi
3pl- FUT- go back -fv or not
'Kadamaseki asked his father-in law whether or not they would return.'

b.   Hélukíli néyi kwizhi nakulota indi kwizhi nakutíya mwalala.
hi- a-   a-   iluk -il -i neyi   kwizhi na-   ku- lota
NEG- 3sg- PAST- know -RP -fv whether may be 3sg.PROG- INF- dream

indi kwizhi na-   ku- tiya mwalala
or may be 3sg.PROG- INF- listen really
'He did not know whether s/he was dreaming or he was really listening.'

c.   Kwizhi néyi akuya lélu[5].
    kwizhi neyi   a- ku- ya lelu
    I wonder COMP 3pl- FUT- go today
    'I wonder whether they will go today.'

7.2.4 Complementizer chi

Lunda uses a class 7 pronominal agreement chi- as a complementizer to introduce yet another category of complement clauses. These embedded dependent clauses follow a limited number of evaluative verbs such as kutama 'to be bad' and kuwáha 'to be good, to be happy', etc that occur in impersonal constructions. These verbs may take an impersonal subject prefix class 7 chi- 'it' when they occur in the main clause. In other words, the subject prefix is used impersonally in the main clause and at the same time serves as a complementizer to introduce complement clauses.

(38)   a.   Chinawáhi nánkashi chiwúnénzi.
            chi- na-   wah   -i nankashi chi- wu- na-   inz -i
            7-   PERF- be good -fv very   7-   2sg- PERF- come -fv
            'It is very good that you have come.'

       b.   Nátíyi kuwáha chiwúnénzi.
            na-   tiy -i ku- waha   chi- wu- na-   inz -i
            3sg.PERF- feel -fv INF-be happy 7-   2sg- PERF- come -fv
            'I am happy that you have come.'

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[5] The defective verb izhi does stand alone; it always occurs with the infinitive marker ku- and has diverse interpretations such as 'perhaps, doubt, wonder, may be' or just to express uncertainty.

CHAPTER VIII

DETRANSITIVE VOICE

This chapter describes the various types of detransitivizing processes that typically reduce the valence of the clause by removing or suppressing an argument of a transitive verb from certain constructions in Lunda. These constructions are: reflexives, reciprocals, passive, and the stative construction. The chapter is organized as follows: section 1 deals with the syntax and semantics of reflexive and reciprocal constructions, section 2 looks at the general characteristics of the passive voice and section 3 analyzes the morphology, syntax and semantics of the stative construction/neuter-passive.

8.1 Reflexives and Reciprocals

In Lunda, there is no formal difference between reflexive and reciprocal constructions. Both of them are marked in a similar fashion and have the same morphosyntactic properties.

8.1.1 Reflexives

Reflexive constructions indicate reflexive actions to show that a participant, the subject, performs an action or state inherent in the verb on himself or herself. In other words, the subject and the direct object of the verb refer to the same participant rather than to two different ones. The subject acts upon itself as object. Such constructions require the direct object to be coreferential to the subject, that is, the subject of the verb and the direct object occupy a single function of the same verb at the same time. Givón (1990:628) defines true reflexives as constructions in which the subject is co-referent with the object and thus acts upon itself.

In Lunda, reflexive constructions are marked with the invariant prefix <u>di</u>- in the preverbal direct object pronominal/agreement slot. The verb is marked as having a reflexive object, becomes intransitive and the reflexive morpheme takes as its antecedent the grammatical subject. In addition, the emphatic pronoun may come after the verb.

(1)   a.   Mwána wadikatisha.
                 mu-ána wu- a-   di-   kat -ish   -a
                 1-child 3sg- PAST- REFL- hurt -CAUS -fv
                 'The child hurt herself/himself.'

        b.   Mwána wadikatisha yomwéni.
                 mu-ána wu- a-   di-   kat -ish   -a yomweni
                 1-child 3sg- PAST- REFL- hurt -CAUS -fv himself
                 'The child hurt herself/himself.'

The reflexive prefix <u>di</u>- in (1) is attached to the verb <u>katisha</u> 'hurt'in the direct object pronominal slot, and is coreferential with the subject noun phrase <u>mwána</u> 'child'.

Though coreferential with or referentially dependent on the grammatical subject,

the reflexive direct object prefix is not in agreement with the subject. It thus shares this

syntactic property with direct object pronouns and functions as the direct object of the

verb. The reflexive prefix can only occur with transitive verbs and its syntactic behavior

in imperative clauses is analogous to that of direct object pronouns. Consider the

following examples in (2a) and (2b):

(2)   a.   Indicative:
                Waditwika mutóña.
                wu- a-   di-   twik   -a mu- toña
                3sg- PAST- REFL- put on head -fv 3-   long basket
                'He put the long basket on your head himself.'

        b.   Imperative:
                Dítwiki mutoña eyi aweni.
                di-   twik   -i   mu- toña   eyi aweni
                REFL- put on head -SUBJ 3-   long basket yourserf
                'Put the long basket on your head yourself.'

In Lunda, the coreferential arguments (subject-object) of a reflexive construction

can be either animate or inanimate, as shown in (3a-b) and (4a-b):

(3)   Animate:
        a.   Kánsi nakudíkwanya.
                kánsi na-   ku- di-   kwanya
                child 3sg.PROG- INF- REFL- scratch
                'The child is scratching herself/himself.'

        b.   Kánsi nadiwundiki anu mafúku.
                kánsi na-   di-   wundik -i anu   ma- fuku
                child 3sg.PERF- REFL- quieten -fv 6-DEM 6-   day
                'The child is quiet these days."

(4)   Inanimate:
  a.   Mánzhi anadikwati.
        ma- nzhi a- na-   di-   kwat -i
        6-   fat 6- PERF- REFL- hold -fv
        (Lit: the fat holds itself)
        'The fat has congealed.'

  b.   Mónzhi wadikasa.
        mu- onzhi wu- a-   di-   kas -a
        3-   rope 3- PAST- REFL- tie -fv
        (Lit: 'The rope tied itself.)
        'The rope got entangled.'

The English translations in (3b), (4a) and (4b), clauses in which the subject-direct object

are inanimates, do not indicate that the constructions are reflexives. The syntactic

structures, however, show that they are true reflexive constructions in Lunda.

Reflexivization can be analyzed in terms of grammatical relations in Lunda. The

direct object that is coreferential to the subject that controls reflexivization can have

diverse semantic roles, that is, it can be coreferential with the patient, goal, benefactive,

and experiencer in reflexive constructions. As already observed in chap VI, the nominal

direct object always precedes the indirect object in constructions with three-place

predicates also known as double object constructions. When pronominalized, the direct

object occurs as an object prefix in the verb and the indirect object appears as a suffix

attached to the verb. Consider the following examples illustrating the contrast between

the transitive non-reflexive constructions in (5)and their reflexive counterparts in (6):

(5)   a.   Patient:
             Maseka watwika mumbanda mutóña.
             Maseka wu- a-   twik   -a mu- mbanda mu- toña
             Maseka 3sg- PAST- put on head -fv 1- woman 3-   long basket
             'Maseka put the long basket on the woman's head.'

b. Goal:
    Kansi natémésheli mumbanda mukánda.
    kansi na-   temesh -el   -i   mu- mbanda mu- kanda
    child 3sg.PERF- send   -APPL -fv 1-   woman 3- letter
    'The child has sent a letter to the woman.'

c. Benefactive:
    Maseka wazátiláña mumbanda.
    Maseka wu- a-   zat   -il   -aná mu- mbanda
    Maseka 3sg- TNS- work -APPL -HAB 1-   woman
    'Maseka works for the woman.'

d. Experiencer:
    Maseka walemesha mumbanda.
    Maseka wu- a-   lem   -esh   -a mu- mbanda
    Maseka 3sg- PAST- be important -CAUS -fv 1-   woman
    'Maseka glorified the woman.'

The examples in (6a) through (6d) show that the direct object can have different thematic

roles such as patient, goal, benefactive and experiencer.

(6)   a.   Patient:
           Maseka waditwika mutóña.
           Maseka wu- a-   di-   twik   -a mu- toña
           Maseka 3sg- PAST- REFL- put on head -fv 3-   long basket
           'Maseka put the long basket on your head himself.'

      b.   Goal:
           Kánsi naditémésheli mukánda.
           kánsi na-   di-   temesh -el   -i mu- kanda
           child 3sg.PERF- REFL- send   -APPL -fv 3-   letter
           'The child has sent herself/himself a letter.'

      c.   Benefactive:
           Maseka wadizatilaña.
           Maseka wu- a-   di-   zat   -il   -aña
           Maseka 3sg- TNS- REFL- work -BEN -HAB
           'Maseka works for himself.'

d.   Experiencer:
     Maseka wadilémesha.
     Maseka wu- a-   di-   lem   -esh -a
     Maseka 3sg- PAST- REFL- be important -CAUS -fv
     'Maseka glorified himself.'

The direct object only can occur as a pronoun in the preverbal slot bound to the

subject, that is, reflexives apply only to the direct object (cf. chap VI for details about

direct object and indirect object). An indirect object cannot occur in the preverbal slot as

a pronoun. This further demonstrates that the Lunda reflexive is a syntactic object of the

verb, as illustrated by (7b), a double object construction, consisting of the benefactive and

patient objects.

(7)   a.   Wateleka yakúda.
           wu- a-   telek -a yakuda
           3sg- PAST- cook -fv 8-food
           'S/he cooked food.'

      b.   Wadítelekela yakúda yowmweni.
           wu- a-   di-   telek -el   -a yakuda yomweni
           3sg- PAST- REFL- cook -APPL -fv 8-food himself
           'He prepared food for himself.'

      b.   * Wayitelekeladi yowmweni.
           wu- a-   yi-   telek -el   -a -di   yomweni
           3sg- PAST- REFL- cook -APPL -fv -3sg.OBJ himself
           'He prepared it for him himself.'

The co-referents subject and direct object (7b) di- has the semantic role of benefactive.

In terms of behavior and control properties, the subject and the direct object,

irrespective of its semantic roles, govern reflexivization. In Lunda indirect objects do not

reflexivize at all.

Complement clauses of modality verbs further demonstrate that reflexivization is

a property of a direct object; the subject of the complement clause is the same as the

subject of the main clause and is coreferential with the reflexive direct object pronoun.

(8)   Maseka wakéñeli kudízhaha.
        Maseka wu- a-   keñ -el -i ku- di-   zhaha
        Maseka 3sg- PAST- want -RP -fv INF- REFL- kill
        'Maseka wanted/was about to kill himself.'

The reflexive pronoun di- is frequently used in conjunction with the applicative

verbal extension -il to indicate that the action performed by the subject is carried out

intentionally, volitionally, purposelessly or without any specific reason or cause. Usually,

the use of the reflexive pronoun in this sense in a clause is accompanied by the adverb

hohu 'only, merely' or the pronominal construction built around the locative prefix ku-

and the pronominal stems (see Table 8, chap III).

(9)   a.   Nakudísehela hohu.
           a-   ku- di-   seh -el   -a hohu
           3sg.PROG- INF- REFL- laugh -APPL -fv only
           'S/he is only laughing.'

    b.   Wadíyila kwindi.
           wu- a-   di-   y -il   -a ku- indi
           3sg- PAST- REFL- go -APPL -fv 16- PRO1
           'He merely left.

8.1.2 Reciprocals

Active verbs can indicate reciprocal actions to show that two or more participants

perform the action of the verb on each other or on the others. The two participants act on

each other. The first of the two participants acts on the second participant, and vice versa.

Thus, syntactically, the reciprocal construction requires a plural subject or a conjoined

subject/object noun phrase as its subject. In Lunda, reciprocity involves a reduction

in the number of syntactic arguments and can be described in terms of grammatical

relations though the latter does not apply in some cases. The language has different ways

of coding reciprocity either morphologically or lexically.

8.1.2.1. Reciprocalization with di-

The same invariant prefix di- that is used to code reflexivization is also used to

express reciprocals. It occurs in the preverbal direct object pronominal slot. In other

words, reflexive and reciprocality are marked identically, as illustrated in (10b) below:

(10)   a.   Active:
             Mukwatu wákéña Sawana.
             Mukwatu wu- a-   keña Sawana
             Mukwatu 3sg- TNS- love Sawana
             Mukwatu loves Sawana.'

       b.   Reciprocal:
             Mukwatu na Sawana adikéña.
             Mukwatu na Sawana a- a-   di-   keña
             Mukwatu and Sawana 3pl- TNS- REC- love
             'Mukwatu and Sawana love each other.'

The reciprocal pronoun di- 'in (10b) is coreferential to the conjoined subjects Mukwatu

and Sawana. This is shown by a class 2 subject agreement prefix a- (third person plural).

Like reflexivization, reciprocity is a syntactic function, and not a semantic

function. That is, reciprocal clauses are semantically intransitive and syntactically

transitive. The reciprocal morpheme, which functions syntactically as a direct object, is

anaphoric in nature and depends on the subject. Thus, reciprocals apply to the direct

object only, that is, only the direct object can be reciprocalized. Like in reflexive clauses,

the subject-direct object can have various semantic roles in reciprocal constructions, as

shown by the following examples in (11a) through (11d).

(11)   a.   Patient:
              Akwénzi adetela mumbanda.
              akwenzi a- a-   di- et -ela -a mu-mbanda
              2-youth 3pl- PAST- REC- hit -APPL -fv 1-woman
              'The young people hit each other for the woman.'

        b.   Benefactive:
              Anakudítelekela mbízhi.
              a- na-   ku- di-   telek -el   -a mbízhi
              3pl- PROG- INF- REC- cook -APPL -fv 9.meat
              'They are cooking meat for each other.'

        c.   Experiencer:
              Akwenzi adímona.
              akwenzi a- a-   di- mon -a
              2-youth 3pl- PAST- REC- see -fv
              'The youths saw each other.'

        d.   Recipient:
              Adítémesheláña nyikánda
              a- di-   temesh -el   -aña nyi-kánda
              3pl- REC- send- -APPL -HAB 4- letters
              'They do send letters to each other.'

Like reflexives, reciprocals can occur in the imperative form. In this instance,

the verb suffixes the second person plural pronominal stem -enu to go hand in hand with

the reciprocal marking.

(12)   Dímushénu.
        di-   imush -i   -enu
        REC- greet -SUBJ -2pl
        'Greet each other.'

A few transitive verbs require a comitative/associative noun phrase in addition to the preverbal reflexive/reciprocal prefix. The noun phrase is attached to the comitative morpheme ña- 'with, and' which follows immediately the verb. The subject does not necessarily need to be in the plural form because the co-participant is not at all suppressed in this reciprocal construction type.

(13)   a.   Nadíbulakana nindi.
             ni- a-   di-   bulakan -a na- indi
             1sg- PAST- REC- meet   -fv with 3sg
             'I met with her/him or we met.'

       b.   Adímona nindi.
             a- a-   di-   mon -a na- indi
             3pl- PAST- REC- meet -fv with 3sg
             'They met with her/him or they met.'

       c.   Wádíkunda nanóna mukwénzi.
             wu- a-   di-   kund   -a na- o- -na   mu- kwenzhi
             3sg- TNS- REC- be fond of -fv with- 3sg -DEM 1-   youth
             (Lit. 's/he is very friendly with that youth')
             'S/he and that youth are fond of each other.'

8.1.2.2. Reciprocalization with -añan

The other type of reciprocals is coded by the suffix -añan 'each other/one another' marked on the verb. The verbal suffix alters the argument structure of the verb by removing the direct object, and thus, derives reciprocal verbs. Such verbs are rendered syntactically intransitive and take only one argument. The reciprocal suffix is however, synchronically residual, or a vestigial morpheme of what used to be productive reciprocal in Lunda, as is the case with most of the Bantu languages (see chap IV, section 4.8). The extension is only traceable in very restricted verb roots and its semantics is very

inconsistent. The reflexive morpheme di- has extended its functions to include that of

reciprocality, as illustrated in the following sentence.

(14)   Atíyáñeni mwáka wádi.
         a- tiy -añan -il -i mu- aka wu- a-   di
         3pl- hear -REC -RP -fv 3-   year 3- PAST- be
         'They agreed with one another last year.'

A very small number of verbs may use either the preverbal reciprocal morpheme

or the post-verbal reciprocal morpheme suffixed to the verb without any change in

meaning. A typical case is the verb kéña 'love' which permits both types of reciprocal

constructions which show no contrast at all.

(15)   a.   Anyána ádikéña.
               a- nyi- ana   a-   di-   keñ -a
               2-4-   children 3pl- REC- love -fv
               'The child love one another.'

         b.   Anyána ákeñañana.
               a- nyi- ana   a-   keñ -añan -a
               2-4-   children 3pl- love -REC -fv
               'The children love one another.'

In (15a) the reciprocal construction has the morpheme di- prefixed onto the verb, while in

(15b) it is absent and the verb is marked with the suffix -añan.

The reciprocal morpheme is lexicalized or fossilized with a few verbs in that it

has lost its reciprocal meaning. Thus, the two reciprocal morphemes co-occur in the same

sentence with such verbs. Normally, when a reciprocal morpheme appears on a transitive

verb, the direct object must be deleted:

(16)   a.   Wahumañana akwénzi.
               wu- a-   humañan -a a- kwénzi
               3sg- PAST- meet   -fv 2- youth
               'S/he met the youth.'

b.   Antu adihumañana halóshi.
        antu   a- a-   di-   hum -añan -a haloshi
        2-person 3pl- PAST REC- meet -REC -fv yesterday
        'People met together yesterday.'

The occurrence of the preverbal reciprocal morpheme di- affixed to the verb root in (16b)

indicates that the post-verbal reciprocal morpheme -añan is frozen.

8.1.2.3. Lexical Reciprocalization

There are a few intransitive verbs that are inherently reciprocal; they do have the

reciprocal meaning without being marked with the reciprocal morpheme. These are

lexical reciprocal verbs and do not coexist with the reciprocal prefix di-. The reciprocal

meaning is an inherent property of the verb. The construction consists of a single

argument, the subject, which is in the third person plural.

(17)   a.   Anakuhánjika.
                a- na-   ku- hanjika.
                3pl- PROG- INF- chat
                'They are chatting with each other.'

        b.   Anakuzúña.
                a- na-   ku- zuña
                3pl- PROG- INF- quarrel
                'They are quarrelling.'

8.2 Passive Constructions

The passive voice is pragmatically defined as a construction in which the agent is detopicalized, demoted or suppressed and a non-agent is topicalized. In other words, the direct object is promoted to subject with a resultant demotion of the subject either to an oblique position or its total removal. Lunda has two passive constructions, a 'promotional' passive and a 'non-promotional' type of passive also known as 'pseudo-passives' in some linguistic circles.

8.2.1. Promotional Passive

The Lunda promotional passive is formed by morphologically marking the verb with the suffix -w which reduces the valency of the verb. Unlike many Bantu languages, passivization encoded by the suffix -w is no longer very productive in Lunda; it is only confined to a very restricted number of verbs and is not frequently used in contemporary Lunda. Further, it rarely occurs with most of the tenses and its role has been taken over by a 'non-promotional' passive type of construction, also known as pesudo-passive. In some cases, the promotional passive behaves exactly like an adjectival type construction.

(18)   a.   Active:
              Kapela nasúmi kasumbi.
              kapela na-   sum -i   ka-sumbi
              snake 3sg.PERF-bite -fv 12-domestic fowl
              'A snake has bitten a domestic fowl.'

b.   Passive:
Kasumbi nasúmewi.
kasumbi   na-   sum -ew -i
12-domestic fowl 3sg- PERF- bite -PASS -fv
'A domestic fowl has been bitten.'

In example (18b), the suffix -iw marked on the verb súm 'bite' encodes the passive

clause. The NPs kapela 'snake' and kasumbi 'domestic fowl' in (18a) are subject and

patient object respectively of the active clause. The syntactic status of the two arguments

changes in (18b) where the patient occupies an initial position and assumes the

grammatical function of subject in the passive clause. The agent of the passive clause is

generally left unspecified or deleted, as illustrated in (19b) below:

(19)   a.   Active:
Ikómbi watapa kánsi
i-kombi wu- a-   tap -a ka- ánsi
5-thief 3sg- PAST- stab -fv 12- child
'The thief stabbed the boy.'

b.   Passive:
Kánsi watapewa
ka- ánsi wu- a-   tap -iw   -a
12-child 3sg- PAST- stab -PASS -fv
'The child was stabbed.'

8.2.2 Non-Promotional Passive

Besides the promotional passive also known as the canonical passive encoded by

the verbal morphology -w, Lunda has another passive construction that is most frequently

in use. The construction is structurally a non-promotional passive type in that the verb

still retains its active voice form features without displaying any passive morphology.

The non-promotional passive voice has been described in other Bantu languages

spoken in Zambia such as Kikaonde (Wright 1977:149), Luchazi (Fleisch 2000:121), and

Luvale (Horton 1949:206; White 1949:59).[1]

8.2.2.1 Characteristics of the Non-Promotional Passive

The Lunda passive does not promote the direct object of a corresponding active

clause construction to subjecthood. It is formed by employing an impersonal third person

plural human subject prefix a̱- 'they' and the non-agent noun phrase becomes the topic of

the clause while retaining its grammatical function. It does not govern subject verb

agreement whenever it is used as a topic of a passive construction. The demoted agent

(subject) argument may occur as an oblique in a non-promotional passive construction

marked with ku̱di 'by', a characteristic of a promotional passive. Thus, the passive

interpretation of this construction largely hinges on its semantic and pragmatic function

rather than structural properties. In addition, it should be noted that the Lunda passive is

not only confined to transitive verbs; it also allows certain intransitive verbs that involve

locative noun phrases (see subsection 8.2.2.5 below). Illustrations of the non-promotional

passive are given in (20) and (21):

```
(20)   a.    Active:
             Chibínda watambika kánsi.
             chi-binda wu- a-       tambik -a   ka- ánsi
             7-hunter  3sg- PAST- call   -fv  12- child
             'The hunter called the child.'
```

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[1] According to Fleisch (2000:121), the promotional passive, which is very productive in most of the Bantu languages, has completely disappeared in Luchazi.

b.   Passive:
        Atambika kánsi kúdi chibínda.[2]
        a- a-   tambik -a ka- ánsi kúdi chi-binda
        3pl- PAST- call   -fv 12- child by   7-hunter
        'The child was called by the hunter.'

(21) a.   Active:
        Antu ada makóndi.
        a- ntu a- a-   d -a ma- kóndi
        2- man 3pl- PAST- eat -fv 6- banana
        'The men ate the bananas.'

     b.   Makóndi ayida kúdi antu.
        ma- kondi a- a-   yi- d -a kúdi antu
        6-   banana 3pl- PAST- OM- eat -fv by   men
        'The bananas were eaten by the men.'

The noun phrases <u>kánsi</u> 'child' and <u>makóndi</u> 'bananas' are direct objects in the active

clauses (21a) and (22b) and passive clauses (21b) and (22b) alternation. They follow the

verb and do not control subject-verb agreement.

8.2.2.2 Passivization of Monotransitive Clauses

      Passivization of the direct object of a monotransitive verb comes in two distinct

ways. The object may remain in its normal post-verbal position in a clause retaining its

syntactic function and a pronominal agreement may optionally occur in the preverbal

slot. The subject position of the passive clause is taken by the third person plural class 2

subject prefix <u>a</u>- 'they'. The following examples illustrate an active clause and its

corresponding passive clause:

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[2] Though Dubinsky and Nzwanga (1995:64) describe this type of passive construction as an "impersonal transitive" in their analysis of Lingala, it is indeed a passive construction.

(22) a.   Atambika kánsi kúdi chibínda.
           a- a-   tambik -a ka-ánsi kúdi chibinda
           3pl- PAST- call   -fv 12-child by   hunter
           'The child was called by the hunter.'

      b.   Amutambika kánsi kúdi chibínda.
           a- a-   mu-   tambik -a ka-ánsi kúdi chi-binda
           3pl- PAST- 3sg.OM- call   -fv 12-child by   7- hunter
           'The child was called by the hunter.'

In (22a), the subject of the clause is expressed by an impersonal third person plural subject a- 'they' marked on the verb támbika 'call' and the direct object is the noun kánsi 'child'. The presence of the pronominal agreement mu- 'her/him' in (22b) indicates that the object is coreferenced on the verb.

Alternatively, the non-agent of a passive clause can also occupy the preverbal initial position without assuming the grammatical function of subject.[3] When it gets preposed or topicalizes, the passive construction requires the obligatory presence of a pronominal agreement coreferential with the topicalized non-agent marked on the verb. The subject prefix is a third person plural class 2 a- 'they'. That is, the verb takes an object marker agreeing with the topic noun phrase. Below is an example to further illustrate the non-promotional passive with a fronted topic and a pronominal agreement within the verb:

(23) a.   Active Transitive:
           Atwánsi anata nyikábu.
           a-tu-ánsi   a- a-   nat   -a nyi-kabu
           2-13-children 3pl- PAST- throw -fv 4-fruit
           'The children threw the fruits.'

---

[3] The topicalization of the lexical object has been attested in a promotional passive in Sesotho (Demuth 1987:96).

b. Passive:
   Nyikabu ayínata kúdi atwánsi.
   nyi-kabu a- yi- nat -a kúdi a-tu-ánsi
   4-fruit 3pl- OM4- throw -fv by 2-13-children
   'The fruits were thrown by the children.'

c. * Nyikabu anata kúdi atwánsi.
   nyi-kabu a- nat -a kúdi a-tu-ánsi
   4-fruit 3pl- throw -fv by 2-13-children
   'The fruits were thrown by the children.'

Functionally, the noun phrase nyikábu 'fruits', a syntactic object of an active transitive

clause in (23a), undergoes topicalization in the corresponding passive clause in (23b).

The agent atwánsi 'children' appears as an oblique constituent phrase marked by kúdi

'by'. The topic is followed by a verb marked by the impersonal third person plural

subject prefix a-, instead of class 1 subject prefix wu-. Furthermore, it controls direct

object agreement via a pronominal object prefix yi- on the verb. Sentence (23c) is

ungrammatical due to the fact that it lacks the direct object pronominal agreement prefix

in the verb. Further, since the topicalized noun phrase nyikabu 'fruits' is the subject of

the clause, there is no grammatical between it and the subject prefix a-.

In Lunda, passive clauses are confined to instances where the agent is a third

person, either singular or plural. Passive clauses with first and second person agent sound

rather awkward and are avoided.

The nominal topic, which is placed initially, can be omitted leaving only the

direct object pronoun in the preverbal pronominal slot, and the clause may occur with or

without an agent phrase, as shown by (24).

(24) a. Kánsi amutambika kúdi chibínda.
         ka- ánsi a- a-   mu-   tambik -a kúdi chi-binda
         12- child 3pl- PAST- 3sg.OBJ- call   -fv by 1-hunter
         'The child was called by the hunter.'

     b. Amutambika.
         a- a-   mu-   tambik -a
         3pl- PAST- 3sg.OBJ- call   -fv
         'The child was called.'

The same behavior is seen in (25b) where the fronted nominal object is left out

and the clause still maintains its detransitive meaning by the presence of the third person

object pronoun mu- 'him/her' marked on the verb:

(25) a. Active:
         Antu áluwa amudimba.
         a-ntu   a-luwa   a- a-   mu-   dimba
         2-people 2-wicked 3pl- PAST- 3sg.OBJ- deceive
         'The wicked people have deceived him.'

     b. Passive:
         Amudimba kúdi antu áluwa.
         a- a-   mu-   dimba kudi a-ntu   a-luwa
         3pl- PAST- 3sg.OBJ- deceive by   2-people 2-wicked
         'He was deceived by the wicked people.'

8.2.2.3 Passivization of Ditransitive Clauses

Normally, it is only the direct/first object rather than the indirect/second object

that appears as the topic of the passive clause in double object constructions in Lunda.

This is shown in the following examples where the topic of the passive clause has

different semantic roles.

(26) a.   Recipient:
            Kánsi amwinka mali kúdi Nswana.
            ka-ánsi a- a-   mu-   ink mali   kúdi Nswana
            12-child 3pl- PAST- 3sg.OBJ- give money by   Nswana
            'The child was given money by Nswana.'

      b.   Benefactive:
            Kansi amulandila kaputula kúdi Nswana.
            ka-ánsi a- a-   mu-   land -il   -a kaputula   kúdi Nswana
            1-child 3pl- PAST- 3sg.OBJ- buy -APPL -fv pair of shorts by   Nswana
            'The child was bought a pair of shorts by Nswana.'

      c.   Causee:
            Mukwenzi amulandisha itala kúdi Nswana.
            mu-kwenzi a- a-   mu-   land -ish   -a i-tála   kúdi Nswana
            1-youth   3pl- PAST- 3sg.OBJ- buy -CAUS -fv 5-house by   Nswana
            'The youth was sold a house by Nswana.'

      d.   Amulandishádu kúdi Nswana.
            a- a-   mu-   land -ish   -a -du   kúdi Nswana
            3pl- PAST- 3sg.OBJ- buy -CAUS -fv –it/OBJ by   Nswana
            'It was sold to him by Nswana.'

In (26d) with two object pronouns, the object pronoun <u>mu</u>- 'him' stands for the direct

object, while the object suffix -<u>du</u> 'it' represents the indirect object <u>itála</u> 'house'.

Only the patient of ditransitive verbs with goal/source can be made the topic of

passive sentences, not the goal or source.

(27) a.   Muvúwa awutwala kukalóña kúdi mukwénzi.
            mu-vúwa a- a-   wu- twal -a ku-   kalóña kúdi mu-kwénzi
            3-fish trap 3pl- PAST- OBJ- take -fv LOC- river   by 1-youth
            'The fish trap was taken to the river by the youth.'

      b.   Awutwaláku kúdi mukwénzi.
            a- a-   wu- twal -a -ku   kúdi mu-kwénzi
            3pl- PAST- OBJ- take -fv -LOC by   1-youth
            'It was taken there by the youth.'

8.2.2.4 Passivization of Clauses with 1st and 2nd Person Objects

Passive clauses involving first and second person singular and plural simply are

signaled by object pronominal prefix in the verb. The non-referring third person plural

subject object pronoun and the object pronouns are just sufficient to convey the passive

meaning. The object retains its syntactic function and the verb is not inflected in any

way. Usually, clauses with first and second person objects do not display any overt

noun phrases before the verb as exemplified in (28a) and (28b) below:

(28)   a.   Active:
                Antu alúwa andimba.
                a-ntu   a-a-   lúwa   a- a-   n-   dimb -a
                2-people 2-POSS-wicked 3pl- PAST- 1sg.OBJ- deceive -fv
                'Wicked people deceived me.

        b.   Passive:
                Andimba kúdi antu alúwa.
                a- a-   n-   dimba kudi a-ntu   a-a-   lúwa
                3pl- PAST- 1sg.OBJ- deceive by   2-people 2-POSS- wicked
                'I was deceived by wicked people.'

        c.   * Adimba kúdi antu alúwa.
                a- a-   dimba kudi a-ntu   a-a-   luwa
                3pl- PAST- deceive by   2-people 2-POSS- wicked
                *'They deceived by wicked people.'

The clause in (28b) includes the impersonal subject pronoun a- followed by a first person

singular subject pronoun n- 'me' marked on the verb that precedes the agent expressed by

the oblique phrase antu alúwa 'wicked people'.

8.2.2.5 Passivization of Locatives

In Lunda, passivization is not restricted to only inherently active transitive verbs. Locative nominals in both intransitive and transitive clauses are also involved in passive construction and maintain their syntactic functions. However, unlike direct objects, the locative pronominal affix must appear as a verbal suffix agreeing with the locative phrase which occupies the initial position in a sentence. The suffixation of the locative pronominal agreement shows that the fronted noun phrase is syntactically an oblique, and not a direct object. Furthermore, the failure of the locative nouns to syntactically govern subject-verb agreement when they are used in sentence initial position indicates that the locative is not a grammatical subject in the clause. Thus, passivization does not serve as a test for objecthood in Lunda and this is contrary to what has been concluded about passivization.[4]

(29)   a.   Active:
Mumbanda wakomba mwitála.
mu-mbanda wu- a-   komb -a mu- itála
1-woman   3sg- PAST- sweep -fv LOC- house
'The woman swept in the house.'

    b.   Passive:
Akomba mwitála kúdi mumbanda.
a- a-   komb -a mu- i-tála   kúdi mu-mbanda
3pl- PAST- sweep -fv LOC-5-house by   1-woman
'The house was swept by the woman.'

---

[4] Some linguists have claimed that passivization is one of the tests for transitivity and direct objects and have also argued that passivization can be considered an example of intransitivization (Siewierska 1984:10, Herslund 1988:27 and Duchateau 1998:118).

c. Passive with fronted NP:
   Mwitála akombámu kúdi mumbanda
   mu- i-tála a- a-   komb -a -mu kúdi mu-mbanda
   LOC- 5-house 3pl- PAST- sweep -fv -LOC by   1-woman
   (Lit: 'In the house was swept by a woman.')
   'The inside of the house was swept by a woman.'

The locative itála 'house' does not show the locative-subject alternation in the active

example (29a) and passive one (29b). It comes after the verb komba 'sweep' in both

sentences. In (29c) a passive construction with a topicalized NP mwitála 'in the house',

the coreferential locative enclitic -mu is suffixed to the verb. The subject of passive

constructions is the noun class 2-subject marker a- 'they' prefixed onto the verb.

Locatives of transitive verbs can passivize like those of intransitive verbs. This is

illustrated by the example (30b).

(30) a. Active:
        Nswana wenka menzhi munúñu.
        Nswana wu- a-   ink -a menzhi mu-   nuñu
        Nswana 3sg- PAST- put -fv water   LOC- pot
        'Nswana put water in the pot.'

     b. Passive:
        Munúñu enkáamu menzhi kúdi Nswana.
        mu-   nuñu a- a-   ink -a -mu   menzhi kúdi Nswana
        LOC- pot   3pl- PAST- put -fv -LOC water   by   Nswana
        (Lit: 'In the pot was put water by Nswana.')
        'Water was put in the pot by Nswana.'

8.2.2.6 Passivization of Complement Clauses

The subject of the verb of the infinitival passive complement clause is deleted when it refers to the same entity as the subject of the main clause. That is, the subject of the infinitive complement clause remains unexpressed when it is identical to the subject of the main clause. Further, the direct object pronoun or pronominal agreement that encodes passivization appears between the infinitive prefix and the verb stem of the complement clause. Thus, in terms of behavior and control, the subject of the main clause governs passivization.

(30)   a.   Kánsi netézhi kumutúma kúdi muhéla índi.
              ka- ánsi na-   itezh -i ku- mu-   túma kúdi muhéla índi
              12-child 3sg.PERF- agree -fv INF- 3sg.OBJ- send by   1-sister POSS1
              'The child has agreed to be sent by his sister.'

          b.   Nákana kunkwáta.
              ni- a-   kan -a ku- n-   kwata
              1sg- PAST- refuse -fv INF- 1sg.OBJ. touch
              'I refused to be touched.'

The direct object pronoun mu- 'her/him' in (30a) and n- 'me' in (30b) prefixed to the verb stem of the complement clauses are coreferential to the subject kansi 'child' and ni- 'I' of the main clauses (30a) and (30b) respectively.

The verb of complement clause is inflected in the subjunctive mood in the passive voice when it takes a different subject from the subject in the main clause. In this case, the verb of the complement clause takes a non-referential impersonal third person plural subject prefix a- 'they'. Further, the object prefix coreferential to the subject of the main clause must be prefixed onto the verb of the passive complement clause.

(31)   Nákéñi ampími.
        na-   keñ -i a- m-   pim   -i
        1sg.PERF- want -fv 3pl- 1sg.OBJ examine -SUBJ
        'I want to be examined.'

8.2.2.7 Passivization of Relative Clauses

The morphosyntax of Lunda passive relative clauses is distinct from that of

passive simple clauses in two respects. First, in addition to the impersonal third person

plural class 2 subject prefix a-, the verb of the relative clause suffixes a coreferential class

2 enclitic -wu[5]. Second, unlike the topic of a simple and independent passive clause,

which occupies the direct object pronominal slot in the verb, the relative prefix takes the

preinitial prefix position in the verb characteristic of the active object relative clause

constructions. That is, the verb agrees with the head noun via the relative pronominal

prefix followed by the rest of the relative clause.

(32)   Namwéni itála datuñilíwu kúdi ndimi.
        ni- a-   mon -in -i i- tála di- a- a-   tuñ -il - i -wu
        1sg- PAST- see -RP -fv 5-house REL- 3pl- PAST- build -RP -fv -3pl

        kudi ndimi
        by farmer
        'I saw the house that was built by the farmer.'

The passive relative clause in (32) is encoded by both the impersonal third person plural

class 2 subject prefix a- 'they' and the coreferential class 2 pronominal affix -wu in the

verb. The topic itala 'house' takes the relative prefix class 5 di- in the preinitial position

in the verb form just like the active object relative clause.

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[5] The pronoun is morphologically identical to indirect object pronouns.

In passive clauses with double object constructions, both the direct object and the indirect object, irrespective of their semantic roles, can be relativized.

(33) a.   Passive Simple Clause:
        Kánsi amutemeshela mukánda kúdi Nswana.
        ka-ánsi a-   a-   mu-   temesh -il -a mu-kanda kudi Nswana
        1-child 3pl- PAST- 3sg.OBJ- send   -RP -fv 3- letter by   Nswana
        'The child was sent a letter by Nswana.'

      b.   Passive Relative Clause (Recipient):
        Kánsi atemwesheláwu mukánda kúdi Nswana...
        ka-ánsi a-   a- a-   temesh -il -a -wu mu-kanda kudi Nswana
        12-child REL- 3pl- PAST- send   -RP -fv -3pl 3-letter   by   Nswana
        'the child who was sent a letter by Nswana...'

      c.   Passive Relative Clause (Patient):
        Mukánda watemesheláwu kánsi kúdi Nswana...
        mu-kánda wu- a- a-   temesh -il -a -wu   kánsi kúdi Nswana
        3-letter   REL- 3pl- PAST- send   -RP -fv -3pl child by   Nswana
        'the letter which was sent to the child by Nswana...'

8.2.2.8 Syntactic Function of the Lunda Passive

Though the Lunda passive appears to have the morphosyntactic features of an impersonal passive and involves transitive verbs and objecthood, its topic exhibits a mixture of some subject properties and some direct object or locative properties depending on the grammatical function. The direct object or locative properties of the topic consist of the pronominal agreement on the verb and the relativization pattern of the construction. The pronominal agreement affix indicates the syntactic role of the topicalized non-agent noun phrase.

The subject properties of the topic include the position and topicality of the non-agent. With regard to position, the topic of the passive construction occupies the initial

position of the sentence without assuming the grammatical role of subject. In addition, the control and behavioral properties show that the subject of the main clause governs passivization of the complement clause. Lastly, the language does not allow reflexive passives.

Generally, the Lunda passive construction exhibits a combination of syntactic properties belonging to both promotional and non-promotional passives. All the subject properties of the Lunda passive mentioned above are characteristic of a promotional passive, while those of the direct object or locative conform to the non-promotional passive. In addition, another feature of a promotional passive resides in the presence of the agent in an oblique position in such a passive construction.

8.3 The Stative Construction/Neuter-Passive

Lunda, like most of the Bantu languages, has what is traditionally known as stative constructions which are realized through two sets of detransitivizers -ik/-ek and -uk/-ok respectively. Functionally, the detransitivizers remove the cause part of the event structure by reducing the number of arguments of transitive verbs to which they are attached. A transitive verb marked with the suffixes -ik/-uk turns into an intransitive one by obligatorily deleting the referential agent from the clause leaving only a single argument with a patient semantic role and the latter undergoes a state initiated by an invisible or implicit agent or force.

Syntactically, the direct object of the basic transitive verb appears as the grammatical subject of the derived stative intransitive verb. Unlike the passive voice, the

stative construction does not have an optional overt oblique agent though the two types of constructions closely resemble each other. Example (34a) is a clause with a transitive verb and two arguments with agentive and patientive semantic roles, while (34b) has an intransitive verb whose subject is a patient.

(34)   a.   Active Transitive:
                Kánsi wafumpa nswáha.
                ka-ánsi wu- a-   fump -a nswaha
                12-child 3sg- PAST- smash -fv 9.calabash
                'The child smashed a calabash.'

        b.   Stative Construction:
                Nswáha wafumpika.
                nswaha yi- a-   fump -ik   -a
                9.calabash 9- PAST- smash -STAT -fv
                'The calabash broke.'

The clause in (34a) has a transitive verb fumpa 'smash' which takes two arguments an a subject (agent) kánsi 'child' and a direct object nswáha 'calabash'. On the contrary, the verb fumpa in (34b) is marked with a suffix -ik which makes it have one argument only, the subject (patient) nswaha 'calabash' which undergoes an action without indicating the agent.

Some examples of the transitive verbs to which the stative extensions may be affixed and consequently turn into intransitive verbs given in (35):

(35)   Transitive   Stative

Transitive		Stative	
búsa	'burst out open'	búsika	'be burst out open'
chíka	'crush'	chíkika	'be crushed'
fumpa	'break, smash'	fumpika	'be broken/smashed'
kéña	'need'	kéñeka	'be needed'
kisa	'damage'	kisika	'be damaged'
koka	'pull'	kokeka	'be shrunk'
séma	'give birth'	sémuka	'be born'
vwála	'give birth'	vwálika	'be born'

Some active transitive verbs ending in -ul/un/ol become intransitive (stative) by

simply replacing the suffixes with uk/ok to indicate stativity. This results in the

suppression of the agent in clauses with such verbs and the patient assumes the syntactic

function of subject. There is no existence of the initiator of the state undergone by the

patient. The following examples illustrate the contrast between dynamic and static verbs

by means of suffix alternations.

(36)   a.   Active Transitive Construction:
             Nakótóli mutáyi.
             na-   kotol -i mutayi
             3sg.PERF- break -fv 3-branch
             'S/he has broken a branch.'

        b.   Stative Construction:
             Mutáyi wunakótóki.
             mu-tayi wu- na-   kotok   -i
             3-branch 3sg- PERF- be broken -fv
             'The branch is broken.'

(37)   a.   Active Transitive Construction:
             Natábúli ihína.
             na-   tabul -i ihina
             3sg.PERF- tear -fv cloth
             'S/he has torn a piece of cloth.'

        b.   Stative Construction:
             Ihína dinatábúki.
             i-hína di- na-   tabuk -i
             5-cloth 5- PERF- be torn -fv
             'A piece of cloth is torn.'

The intransitive reversive is semantically and syntactically related to the stative

extension in that it affects the argument structure by making a basic transitive verb root

intransitive. The object of a basic transitive verb assumes the grammatical function of

subject of an intransitive reversive verb by deleting the agent. Thus, stative reversive,

which contrasts the agentive reversive, uses the suffix -uk without the initiator of the

state.

(38)   a.   Active Transitive:
               Nakásúnuni chiteli.
               na-   kas -unun -i chiteli
               3sg.PERF- tie -REV-fv load
               'S/he has untied a load.'

         b.   Stative Construction;
               Chiteli chinakásúnuki.
               chiteli chi- na-   kas -unuk -i
               7-load 7-   PERF- tie -REV -fv
               'The load is untied.'

The detransitivizing verbal extension -kan/-ik is used with a limited number of

verbs, most of them perception and cognition verbs such as 'see', 'hear', 'feel', 'listen'

'understand' and 'taste' to express the state of the patient, which is the syntactic subject

of the clause. It modifies the semantic of the verb root and reduces the valence of the

verb, as illustrated by the example in (39b):

(39)   a.   Antu anatiyi mazu.
               antu   a- na-   tiy   -i ma-zu
               2-people 3pl- PERF- undestand -fv 6-message
               'People understand the messages.'

         b.   Mazu anatiyakani.
               ma-zu   a- na-   tiy   -akan -i
               6- message 6- PERF- understand -STAT -fv
               'The messages are understood.'

Below is a list of basic verbs and their corresponding derived stative verbs:

(40) <u>Basic Verb</u>   <u>Derived Stative Verb</u>

      tíya   'hear, understand'   tíyakana   'be audible, be heard'

      mwéka   'appear'   mwékana   'be visible, appear'

      tumba   'name'   tumbakana 'be famous'

      móna   'see'   móneka   'be visible'

      twésha   'be able to'   twésheka   'become possible'

8.4 Summary

From the preceding discussion the following can be deduced. Reflexives and reciprocals are coded in a similar fashion by the same morpheme and are properties of direct objects. Both the reciprocal and the reflexive share with the direct object one property: they are syntactic arguments bearing the syntactic function of the object. In other words, they are grammatical objects of a transitive verb.

Regarding the passive voice, Lunda has a non-promotional passive or a pseudo-passive where the syntactic topic still retains its grammatical function and does not assume the grammatical role of subject, though it occupies the subject position in the clause. The subject of the clause is a third person plural class 2 subject prefix <u>a</u>- 'they' and the agent may optionally appear in a passive clause.

It has also shown the existence of the stative construction or neuter passive in Lunda. In that construction a transitive verb becomes stative and the patient of a corresponding active clause assumes the syntactic function of subject. Further, the agent is completely removed from the argument structure.

CHAPTER IX

RELATIVE CLAUSES

This chapter is concerned with the description and analysis of the syntactic structures of the different kinds of relative clauses that are found in Lunda as well as the different ways in which they are marked. It also looks at the syntactic roles that can be accessible to relativization and the strategy employed.

9.1 A Functional Definition of Relative Clauses

Relative clauses are embedded clauses that refer to the head noun in the main clause and are morphologically marked to show agreement with the nominal element. They code states or events one of whose participants is coreferent with the head noun modified by the clause (Givón 1990 and 2001; Crowley et al 1999). That is, the head noun takes part in the situation expressed by the relative clause.

Generally, relative clauses convey backgrounded information. They can ground new head nouns or referents furnishing their initial description that is relevant to the discourse in question and facilitates subsequent referent. They can also help identity an already given but not so easily accessible head referent (Fox 1987: 859-62: Fox and Thompson 1990: 301-3; Givón 1990 and 2001).

9.2 Structure of Relative Clauses in Lunda

In Lunda the relative clause comes after the nominal it modifies. Further, a relative clause begins with a relative prefix agreeing in person, number and class with the head noun. In other words, the shape of the relative prefix[1] varies according to the noun class of the head noun (chap III, subsection 3.2.2). Relative prefixes act as the relative subordinator morphemes marking the boundary of the relative clause and also mark as the case role of the missing coreferent head noun clause as a means of coding the function of the missing coreferential argument (Givón 2001). Embedded relative clauses, in Lunda, come into three types, subject relative clauses whose morphology is identical to that of simple clauses, object relative clauses with first and second subjects and object relative clauses with third person subjects. Most of the syntactic functions or roles can be relativized in Lunda; that is, the head noun can be subjects, direct objects, indirect objects and other oblique arguments such as locatives, comitatives, and instrumentals. In other words, relativization shows differences between the various grammatical relations.

9.3 Subject Relativization

In Lunda, subject relative clauses are not distinct from simple clauses in that they display the same surface syntactic structures as simple sentences. The first element in

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[1] Relative prefixes have the same form as verbal and nominal agreement markers.

such constructions is the variable subject relative prefix followed by the rest of the

embedded relative clause. The subject prefix agrees in number, person and noun class

with the coreferential head noun, that is, it varies according to the noun class of the

subject grammatical relation. The only difference between non-relative clauses and

relative clauses lies in the slight high tone on the first syllable of the verb formation of

the relative clause, as shown by the examples (1b) and (2b):

(1)   a.   Simple clause:
              Muntu wafunta halóshi.
              muntu   wu- a-   funt   -a halóshi
              1-person 3sg- PAST come back -fv yesterday
              'The person came back yesterday.'

        b.   Relative clause:
              Muntu wayíli kuLusaka wafunta halóshi.
              muntu wu- á-   y -il -i ku-   Lusaka wu- a-   funt
              1-person REL- PAST- go -RP -fv LOC- Lusaka 3sg- PAST- come back

              -a halóshi
              -fv yesterday
              'The person who went to Lusaka came back yesterday.'

(2)   a.   Simple clause:
              Itémwa dazhímbeli.
              itémwa di- a-   zhimbal -il -i
              5-hoe   5- PAST- be lost -RP -fv
              'The hoe was lost.'

        b.   Relative clause:
              Twáwana itémwa dázhímbeli.
              tu- a-   wan -a i- témwa di-   a-   zhimbal -il -i
              1pl- PAST- find -fv 5- hoe   REL- PAST- be lost -RP -fv
              'We found the hoe that was lost.'

The head noun <u>muntu</u> 'person' in (1b) is the grammatical subject of the verb of main

clause <u>funta</u> 'come back', and the relative prefix <u>wu-</u>, referring to the head noun,

functions as the subject of the relative clause verb <u>ya</u> 'go'. In (2b), the head noun <u>itémwa</u>

'hoe' is the direct object of the verb of the main clause <u>wana</u> 'find', while the relative

prefix <u>di</u>-, coreferential with the head noun, is the grammatical subject of the verb in the

relative clause. The subject relative prefixes in (1b) and (2b) are not formally distinct

from the subject prefixes of the simple sentences in (1a) and (2a). There is, however, a

tonal difference between the two types of clauses in that the verb of the relative clause

has a surface high tone associated with the tense marker as opposed to the low tone on

the simple clause verb.

The relative prefix can be reduplicated and the vowel /o/ is inserted between the

two portions to give an emphasis to the subject of the relative clause. Both parts of the

prefix agree in number, person and noun class with the head noun.

(3)   Kaléya kokadi kuñanda kakola nákanshi.
        kaléya   koka a-   di ku- ñanda   ka- kola   nákanshi
        12-prison REL- TNS- be LOC- chief's palace 12- be strong very
        'The very prison which is at the chief's palace is very strong.'

As seen in (3), the relative pronoun <u>koka</u> consists of two prefixes <u>ka</u>- and <u>ka</u>- joined

together by the morpheme <u>o</u>. It agrees in number and noun class with the head noun

<u>kaléya</u> 'prison' which is the subject of the embedded relative clause.

A relative clause can also modify a demonstrative pronoun, as the following

example in (4) illustrates.

(4) Owu wáyíli ku Lusaka wafunta halóshi.
    o   -wu wu- a-   y -ili ku-   Lusaka wu- a-   funt
    DEM -3sg REL- PAST- go -RP LOC- Lusaka 3sg- PAST- come back

-a   halóshi
-fv   yesterday
'The one who went to Lusaka came back yesterday.'

9.4 Object Relativization

In Lunda object relative clauses exhibit two patterns, one with first and second person subjects and the other with third person subjects. Both types of object relativization involves fronting of the head noun followed by the relative clause that contains a relative pronoun/prefix agreeing with the head noun in person, number and noun class.

9.4.1 Object Relativization with 1st and 2nd Person Subjects

Object relative clauses with first and second person subjects are characterized by the presence of an optional object relative prefix as the first element of the embedded relative clause. The relative prefix precedes the subject prefix of the relative clause, and agrees with the head noun in person, number and noun class. Unlike the direct object of simple clauses, the direct object of a relative clause cannot occur as a pronominal agreement in the verb. The examples that follow illustrate relativization on the object:

(5)   a.   Simple clause:
               Nalanda chitwámu.
               ni- a-   land -a chi- twámu
               1sg- PAST- buy -fv 7- chair
               'I bought a chair.'

        b.   Relative clause:
               Chitwámu chinálanda chidi hanzhi
               chi- twámu chí- ni- a-   land -a chi- di hanzhi
               7- chair   REL-1sg- PAST- buy -fv 7- be outside
               'The chair that I bought is outside.'

In (5b), the head noun chitwámu 'chair' is the subject of the copular verb di 'be' in the

main clause, whereas the coreferential object relative prefix chi- is the object of the

relative clause verb kulanda 'to buy'. The object relative chi-, agreeing in number and

noun class with the head noun, is the first element of the relative clause followed by the

first person singular subject prefix ni- 'I'. The relative prefixes ki- in (6b) and di- in (7b)

connect the relative clauses with the head nouns kabáka 'corn' and itála 'house', whereas

the prefixes wu- and tu- are subjects of the relative clauses respectively.

(6)   a.   Simple clause:
               Wanátili kabáka hána.
               wu- a-   nat   -il -i   kabáka hána
               2sg- PAST- throw -RP -fv maize there
               'You had thrown some maize there.'

        b.   Relative clause:
               Kabáka   kiwanátili hána kanaméni.
               ka- báka kí- wu- a-   nat   -il -i hána ka- na-   men -i
               12- maize REL-2sg- PAST- throw -RP -fv there 12- PERF- sprout -fv
               'The maize that you had thrown there has sprouted.'

(7)   a.   Simple clause:
               Twálandisha itála.
               tu- a-   landish -a i- tála
               1pl- PAST- sell   -fv 5-house
               'We sold the house.'

b. Relative clause:
Twálandisha itála ditwatúñíli
tu- a- landish -a i- tála di- tu- a- tuñ -il -i
1pl- PAST- sell -fv 5-house REL-1pl- PAST- build -RP -fv
'We sold the house that we had built.'

9.4.2 Object Relativization with 3rd Person Subjects

Object relative clauses with third person subjects have syntactic structures which

are slightly different from those with first and second person subjects. First, nominal

subjects of the embedded relative clauses occur postverbally rather than before the verb.

Second, relative clauses with third person singular subjects make use of the prefix a- as a

subject prefix or grammatical agreement as opposed to the prefix wu- employed in

independent clauses. Phonologically, the vowel of the relative prefix fuses with that of

the relative prefix. In most cases, the morpheme yi- is inserted between the relative prefix

and the subject marker if the subject is in the third person plural. In addition, since the

object relative prefixes occupy the initial preverbal slot in a relative clause, the verb of

the embedded relative clause may optionally suffix pronominal affixes -yi and -wu for

third person singular and plural respectively in order to avoid ambiguity between the

subject and the object in relative constructions. This type of object relativization with

postverbal nominal subjects has also been noted in studies of other Bantu languages such

as Dzamba (Bokamba 1976), Luchazi (Fleisch 2000), Lega (Meussen 1978: Nsuka 1992),

Luba-Katanga (Nkiko 1975 and Nsuka 1992), and Kaonde (Wright 1977)[2]. The verbs in

these languages do not, however, suffix pronominal agreements. The example in (8c)

illustrates an embedded relative clause with a third person grammatical subject:

(8)   a.   Simple clause:
                Womba waténtékeli wúta hakadidi.
                Womba wu- a-   tentek -el -i wúta   ha-   kadidi
                Womba 3sg- PAST- put   -RP -fv 14-gun LOC- bed
                'Womba had put the gun on the bed.'

        b.   Simple clause:
                wúta wudi hanzhi.
                wúta   wu- di hanzhi
                14-gun 14- be outside
                'The gun is outside.'

        c.   Relative clause:
                Wúta waténtékelíyi Womba hakadidi wudi hanzhi.
                wúta   wu- a- a-   tentek -el -i -yi Womba wu-di ha-
                14-gun REL- 3sg- PAST- put   -RP -fv -3sg Womba 14- be LOC-

                kadidi
                bed
                'The gun that Womba had put on the bed is outside.'

In (8c), the head noun <u>wúta</u> 'gun' is followed by a coreferential direct object relative

prefix <u>wu-</u> plus the subject prefix <u>a-</u> which fuses with the tense marker. The noun

phrase <u>Womba</u> is the subject of the relative clause and cooccurs with the subject enclitic

-<u>yi</u> suffixed to the relative clause verb.

(9)   a.   Simple clause:
                Antu azátíshili kazémba.
                antu   a- a-   zat   -ish   -il -i ka-zémba
                2-people 3pl- PAST- work -CAUS -RP -fv 12-axe
                'People used an axe.'

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[2] Unlike Lunda, the verb of the relative clause does not suffix a pronominal clitic coreferential to the to the
subject in these languages.

b. Simple clause:
Kazémba kanazhímbali.
ka-zémba ka- na-   zhimbal -i
12-axe   12- PERF- lose   -fv
'The axe is lost.'

c. Relative clause:
Kazémba kazátíshilíwu antu kanazhímbali.
ka-zémba ki- a-   zat -ish -il -i -wu a-ntu   ka- na-
12-axe   REL- PAST- work -CAUS -RP -fv -3pl 2-people 12- PERF-

zhimbal -i
miss   -fv
'The axe that the people used is lost.'

In (9c), the nominal subject <u>antu</u> 'people' of the relative comes immediately after the

verb <u>zatisha</u> 'use' which suffixes a coreferential third person plural subject enclitic -<u>wu</u>.

9.4.3 Relativization on Objects of Ditransitive Verbs

Both nominal objects, direct and indirect, of ditransitive verbs can relativize

following the same relativization strategy on objects of monotransitive verbs. The two

grammatical relations exhibit the same syntactic properties of direct objects in respect of

relativization. The following examples illustrate relative clauses headed by either direct

or indirect object with first person singular subjects.

(10) a. Simple clause:
Nénkeli mukwénzi kazémba.
ni- a-   ink -el -i mu-kwénzi ka-zémba
1sg- PAST- give -RP -fv 1-youth   5-axe
'I gave the youth an axe.'

b.   Relativization of dative/recipient:

Mukwénzi inénkeli kazémba nakuya lélu.

mu-kwénzi i-	ni-	a-	ink	-el	-i	ka-zémba	na-	ku-
1-youth	REL-	1sg-	PAST- give	-RP	-fv	12-axe	3sg.PROG-	INF-

nyamuka lélu
leave   today
'The youth to whom I gave an axe is leaving today.'

c.   Relativization of patient:

Kazémba kinénkeli mukwénzi kadiñi kashíma.

ka-zémba ki-	ni-	a-	ink	-el	-i	mu-kwénzi	ka-	a-	shima
12-axe	REL-	1sg-	PAST- give	-RP	-fv	1-youth	12-	TNS-	be blunt

'The axe that I gave the youth is blunt.'

The same behavior can be observed when the subjects of the relative clauses are

third person pronouns both singular and plural. In addition, the verb of the relative clause

suffixes third person coreferential subject pronominal enclitics -yi and -wu for singular

and plural respectively.

(11)   a.   Relativization of recipient:

Kamfunti wénkelíyi kazémba wanyamuka halóshi.

Kamfunti wu-	a-	a-	ink	-el	-i	-yi	ka-zémba	wu-	a-
Kanfunti	REL-	3sg-	PAST- give	-RP	-fv	-3sg	12-axe	3sg-	PAST-

nyamuk -a haloshi
leave   -fv yesterday
'Kamfunti whom s/he gave an axe left yesterday.'

b.   Relativivization of patient:

Kazémba kénkelíyi Kamfunti kashíma.

kazémba ki-	a-	a-	ink	-el	-i	-yi	Kamfunti	ka-	a-
12-axe	REL-	3sg-	PAST- give	-RP	-fv	-3sg	Kamfunti	12-	TNS-

shima
be blunt
'The axe that s/he gave Kamfunti is blunt.'

The subject noun phrase of an embedded relative clause occupies the position

adjacent to the verb followed immediately by the nominal object and both objects are

accessible to relativization using similar strategies to those of direct objects of two-

argument verbs.

(12) a. Nswana anénkíyi Sawana itémwa wudi mwitála.
Nswana a- a- na- inki -yi Sawana i- témwa wu- di mu- itála
Nswana REL- 3sg- PERF- give -3sg Sawana 5- hoe 3sg- be LOC- house
'Nswana whom Sawana has given a hoe is in the house.'

b. Itémwa danénkíyi Sawana Nswana dashíma.
i-témwa di- a- na- inki -yi Sawana Nswana di- a- shima
5-hoe REL- 3sg- PERF- give -3sg Sawana Nswana 5- TNS- be blunt
'The hoe that Sawana has given Nswana is blunt.'

However, the occurrence of relative clauses that involve two postverbal noun

phrases, especially when both are animates, is rare in the language. This is generally

avoided by moving the nominal subject of the relative clause to the preverbal position

following the head noun which requires a mandatory presence of a demonstrative to

follow it. Consider the following examples in (13):

(13) a. Nswana owu Sawana anénkíyi itémwa wudi mwitála.
Nswana o -wu Sawana a- na- inki -yi i-témwa wu- di
Nswana DEM -3sg Sawana 3sg- PERF- give -3sg 5-hoe 3sg- be

mu- itála
LOC- house
'Nswana whom Sawana has given a hoe is in the house.'

b. Itémwa odu Sawana anénkíyi Nswana dashíma.
i-témwa o -du Sawana a- na- inki -yi Nswana di- a-
5-hoe DEM -5 Sawana 3sg- PERF- give -3sg Nswana 5- TNS-

shima
be blunt
'The hoe that Sawana has given Nswana is blunt.'

Quite frequently the passive voice is employed in order to avoid the occurrence of

two noun phrases consisting of the subject and the object after the verb instead of the

structures in (12) and (13) in relative clauses with double nominal objects (see chapter 8

subsection 8.2.2.7). The use of the passive form is very common in relative clauses.

(14)   a.   Nswana anénkíwu itémwa kúdi Sawana wudi mwitála.
              Nswana a-   a-   na-   inki -wu i-témwa kúdi Sawana wu- di mu-
              Nswana REL– 3sg- PERF- give -3pl 5-hoe   by   Sawana 3pl- be LOC-

              i-tála
              5-house
              'Nswana who has been given a hoe by Sawana is in the house.'

        b.   Itémwa danénkíwu Nswana kúdi Sawana dashíma.
              i-témwa di-   a-   na-   inki -wu Nswana kúdi Sawana di a-
              5-hoe   REL- 3sg- PERF- give -3pl Nswana by   Sawana be TNS- be

              shima
              be blunt
              'The hoe that has been given to Nswana by Sawana is blunt.'

9.4.4 Relativization on Recipients

The goal noun phrase case-marked by kúdi 'to' is not accessible to relativization

and cannot be fronted. The language has, however, a variant construction to this form; it

uses the applicative verbal extension by means of suffix -il as noticed in chapter VI. In

this construction, the recipient is thus accessible to relativization. In other words,

relativization of the goal is only possible through applicativization, as illustrated in (15b).

(15)   a.   Simple clause:
              Ndimi watwala wúta kúdi chibinda.
              ndimi wu- a-   twal -a wu-tá   kúdi chi-binda
              farmer 3sg- PAST- take -fv 14-gun to   7-hunter
              (Lit: 'The hunter took a gun to where the farmer is.')
              'The farmer took a gun to the hunter.'

b.   Relative clause:
*kúdi chibinda kwatwala ndimi wúta.
kúdi chi-binda ku- a-   twal -a ndimi wu-tá
to   7-hunter REL- PAST- take -fv farmer 14-gun
*'to the hunter where the farmer took a gun.'

(16)   a.   Simple clause:
Ndimi watwalila chibinda wúta.
ndimi wu- a-   twal -il   -a chi-binda wu-tá
farmer 3sg- PAST- take -APPL -fv 7-hunter 14-gun
'The farmer took a gun to the hunter.'

b.   Relative clause:
Chibinda atwaliláyi ndimi wúta nayi mwisaña
chi-binda a-   a-   twal -il   -a -yi ndimi wu-tá
hunter   REL- PAST- take -APPL -fv -3sg farmer 14-gun

na-   y -i mu- isaña
3sg.PERF- go -fv 18- bush
'The hunter to whom the farmer took the gun, has gone into the forest.'

9.5 Relativization on Possessors

Relativization of the possessor is syntactically distinct from that of other types of grammatical relations or functions. The possessor is relativized by involving two distinct verbs in the embedded relative clause, the first of which is the defective verb <u>kweti</u> 'possess, have, own' which takes the possessor as the subject and the possessed object. The latter is at the same time the subject of the second verb, as illustrated by the example (17b) below:

(17) a. Iyála wukweti mwána wenza lelu, washakamáña ku Ndola.
i-yala wu- kweti mu-ana wu- a- inz -a lelu wu- a-
5-man REL- possess 1-child REL- PAST- come -fv today 3sg- TNS-

shakam -a -ña ku Ndola
live -fv -HAB LOC- Ndola
'The man whose child came today, lives in Lusaka.'

b. Muntu wukweti nkínga yéyilíwu wahita hánu.
mu-ntu wu- kweti nkinga yi- a- a- iy -il -i -wu
1-person REL- possess 9.bicycle REL- 3pl- PAST- steal -RP -fv -3pl

wu- a- hit -a ha- nú
3sg- PAST- pass -fv LOC- DEM
'The person whose bicycle they stole passed here.'

9.6 Relativization on Expressions of Time

Relative clauses also function as temporal adverbial clauses by means of the same syntactic rules that apply to object relative clauses. The clauses are introduced by relative prefixes that agree in noun class with the head nouns which are expressions of time such as hána 'when', mpinji 'time', ifúku 'day', mulungu 'week' cháka 'year', as illustrated by examples in (18):

(18) a. Namumwíni hána hénzhilíyi.
ni- a- mu- mon -en -i hana hi- a- a- inz -ili -yi
1sg- PAST- 3sg.OBJ- see -RP -fv when REL- 3sg- PAST- come -RP -3sg
'I saw her/him when he had come.'

b. Nvúla yanókeli ifúku dináshíkili.
nvúla yi- a- nok -el -i i-fuku di- ni a- shik -il -i
9.rain 9- PAST- rain -RP -fv 5-day REL- 1sg- PAST- arrive -RP -fv

ku- nú
LOC- DEM
'It rained the day that I arrived here.'

c.   Mpinji yakénzáyi anyána akazáñalala.
     mpinji yi-   a-   aka - inz   -a -yi a-nyi-ána   a-   aka- záñalala
     time   REL- 3sg- FUT- come -fv -3sg 2-4-children 3pl- FUT- rejoice
     (Lit: 'The time that s/he will come, the children will rejoice')
     'The children will rejoice when he comes.'

d.   Wavúlámeni cháka chalándílíyi itála.
     wu- a-   vulamen -en -i chi-aka chi-   a-   land -il -i -yi   itála
     3sg- PAST- forget   -RP -fv 7-year REL- PAST- buy -RP -fv -3sg house
     (Lit: 'S/he forgot the year that s/he bought the house')
     'S/he forgot when s/he bought the house.'

As seen in (18a) through (18d), the prefixes ha- and di-, yi- and chi- are in agreement in

noun class with the coreferential head nouns hána 'when' and ifúku 'day', mpiji 'time',

and cháka 'year'. Additionally, they link the fronted head nouns to relative clauses.

Table 20 Temporal Head Nouns

ifúku	'day'
mpinji	'time'
kakwézhi	'month'
cháka	'year'
hána	'when, since, there'.

<u>9.7 Relativization on Obliques</u>

Optional participants and constituents of the verb of a relative clause are

accessible to relativization. These constituents which include locatives, instrumentals,

and comitatives are case-marked (cf. chap VI, subsection 6.3.3).

9.7.1 Relativization on Locatives

Locative noun phrases are also relativized in a similar fashion to the direct object

applying the same syntactic strategy. The relative clause is introduced by one of the

locative prefixes classes 16 <u>hi</u>-, 17 <u>ku</u>-, and 18 <u>mu</u>-, which serve as relative prefixes,

marked on the verb of the embedded clause. The relative prefix links the relative clause

to the preceding locative head noun it modifies. Further, all the overt coding properties

involving direct object relativization with either first and second person subjects or third

person subjects also apply here. The following examples show the head nouns marked by

class 16, 17 and 18 locative prefixes followed by the locative relative prefixes that

occupy the initial slot of the relative clauses.

(19)   Washákámini hañowa hadíñi mpóku.
        wu- a-   shakam -in -i ha- ñowa hi- a-   di   -ñi mpóku
        3sg- PAST- sit-   -RP -fv LOC- log 16- PAST- COP -RP knife
        'S/he sat on a log where a knife was.'

(20)   Sayitamba nakéñi kufunta kuLusaka kwafámíniyi.
        Sayitamba na-   kéñ -i ku- funta   ku- Lusaka ku- a- a-
        Sayitamba 3sg.PERF- want -fv INF- go back LOC- Lusaka REL- 3sg- PAST-

        fum   -in -yi
        come from -RP -3sg
        'Sayitamba wants to go back to Lusaka where he came from.'

(21)   Túkusañúla nyitóndu muchána mutúkudima itémpa.
         tu- ku- sañúl -a nyi-tóndu mu-chána mu- tu- ku- dima   itémpa
         1pl- FUT- uproot -fv tree   LOC-plain REL- 1pl- FUT- cultivate garden
         'We will uproot trees in the plain where we will cultivate our garden.'

In (19) through (21) the locative head nouns are marked by the locative prefixes ha-, ku-,

and mu- followed by relative clauses introduced by locative prefixes which are formally

identical to the locative prefixes of the preceding head nouns.

When the locative prefix is separated from the head noun and appears as an

anaphoric pronoun suffixed to the verb of the relative clause, the relative clause prefix is

morphologically determined by the fronted head noun.

(22)   a.   Itála ditúkwíñilámu, dadiwáhi.
              i- tála di-   tu- ku- iñila -mu di-a-di-   wáhi
              5-house REL- 1pl- FUT- go in -LOC- 5-POSS-5 good
              'The house which we will go into is good.'

        b.   Nsáñu yimwáhosháhu, yaléma nánkashi.
              nsáñu   yi- mu- a-   hósh -a -hu, yi- a-   lema
              9.information REL- 2pl- PAST- talk -fv -LOC 9- TNS- be important
              'The information that you talked about is important.'

9.7.2 Relativization on Instrumentals

A clause with an intrumental noun phrase can be relativized to modify the head

noun. Instrumentals require the use of resumptive pronouns attached to the instrumental

marker na- 'with' in addition to the relative prefix (pronoun) when relativized. The

resumptive pronoun occupies the trace left behind in the postverbal position within the

relative clause by the missing instrumental noun phrase which is coreferential with the

head noun. Furthermore, the resumptive pronoun for third person singular, irrespective of

class, is an invariant class 7 suffix -chu.[3]

(23) Mpóku yaketuláyi náchu mbízhi yidi muchisweki.
       mpóku yi-   a-   ketul -a -yi   na- -chu mbízhi yi- di mu-
       9.knife REL- PAST- cut up -fv -3sg with -7   9.meat 9- be LOC-

       chi-sweki
       7-cupboard
       'The knife that she cut up the meat with is in the cupboard.'

9.7.3 Relativization on Comitatives

Comitatives/associatives follow the same relativization pattern of instrumentals,

with the resumptive pronoun occupying the slot left behind by the head noun. The

resumptive pronoun is formed through the use of the comitative marker na- and a

personal pronominal stem or enclitics according to the noun class of the pronominalized

item. Consider the following examples:

(24) a.   Twámona óna mukwénzu imwénzhili nindi dína ifúku.
             tu- a-   món -a o- ná   mukwénzi i-   mu- a-   inz -il -i
             1pl- PAST see -fv 3sg- DEM youth   REL- 2pl- PAST- come -RP -fv

             di- ná   i-fúku
             5- DEM 5-day
             'I saw the youth that you came with that day.'

---

[3] The instrumental resumptive pronoun for third person singular has grammaticalized to an invariant -chu irrespective of noun classes.

b.　Kaleti mbízhi oyu yénzáyi nayu óna mumbanda.
ka-　let　-i　　mbízhi o　　-yu yi-　a-　a-　　inz　-a -yi
DIST- bring -SUBJ 9.meat　DEM -9　REL- 3sg- PAST- come -fv -3sg

na　-yu o-　ná　　mu-mbanda
with -9　3sg- DEM 1-woman
'Go bring that meat that the woman came with.'

Like subject relativization, the relative prefix can be reduplicated for emphasis

with the first part consisting of a noun class prefix plus the morpheme -o-. The relative

prefix agrees in noun class and number with the head noun which is the object of the

relative clause, as illustrated by the examples below:

(25)　a.　Object relative clauses:
Wuwa wowalándilíyi
wuwa　　wowu- a-　a-　　land -il　-i -yi
mushrooms REL- 3sg- PAST- buy　-RP-fv -3sg
'The very mushrooms that she bought'

b.　Híyanatumiku nyikánda yoya sónékelíyi muhéla.
hi-　a-　na-　　tumi -ku　nyikanda yoyi- a-　a-　　sónek -eli -yi
NEG-3pl- PERF- send -NEG book　　REL- 3sg- PAST- write -RP -3sg

muhela
sister
'They have not sent those letters which my sister wrote.'

The relative prefixes wowa- in (23a) and yoya- in (23b) consist of double prefixes linked

together by the morpheme -o- to give an emphatic force to the known referent in the

main clause.

9.8 Headless Relative Clauses

Headless relative clauses lack overt head nouns to modify. In Lunda, these

types of relative clauses are simply expressed by the use of a relative prefix without

overt head nouns. The head noun is deleted leaving the relative prefix which functions

as an anaphoric pronoun referring to the implicit head noun which is recoverable from its

features on the verb. Headless relative clauses can be either referring or non-referring in

Lunda. The following examples show embedded relative clauses in which the head noun

remains unexpressed:

(26)   Headed relative clauses:
 a.   Antu   ayíli kumukála anafúnti.
        antu   á- a-   y -il -i ku- mukála a-   na-   funt   -i
        2-people REL- PAST- go -RP -fv 17- village 3pl- PERF- come back -fv
        'The people who had gone to the village have come back.'

 b.   Nkaka yamumbanda wádiñi ñodindi wakánini kwinza.
        nkaka   yi-a-   mu-mbanda wu- á-   di -ñi ñoda indi
        grand parent 9-POSS- 1-woman   REL- PAST- be -RP wife 3sg

        wu- a-   kan   -in -i ku- inza
        3sg- PAST- refuse -RP -fv INF- come
        'the grand parent of the woman who was his wife had refused to come'

(27)   Headless relative clauses:
 a.   Áyíli kumukála anafúnti.
        á- a-   y -il -i ku- mukála a-   na-   funt   -i
        REL- PAST- go -RP -fv 17- village 3pl- PERF- come back -fv
        'The ones who had gone to the village have come back.'

b.   Nkaka yawádiñi ñodindi wakánini kwinza.
       nkaka   yi-a-   wú- a-   di -ñi ñoda-indi   wu- a-
       grand parent 9-POSS- REL- PAST- be -RP wife-POSS3sg- 3sg- PAST-

       kan   -in -i ku- inza
       refuse -RP -fv INF- come
       'The grand parent of the one who was his wife, had refused to come.'

The words antu 'people' and mumbanda 'woman' are head nouns and determine the

shape of the relative prefixes á- and wu- on the verb of the subject relative clauses (24a)

and (26b) respectively. (27a) and (27b) are headless relative clauses in which the relative

prefixes á- and wú- are used anaphorically to refer to the unexpressed head nouns and the

relative clauses function as noun phrases by themselves and act as direct arguments of

the main clause.

    Other syntactic positions such as direct objects, locatives etc., can occur as

headless relative clauses. The head noun may be deleted leaving only the relative prefix

itself to act anaphorically. Class 7 relative prefix chi-, class 8 yi- and class 10 zhi- are

frequently used in headless object relative clauses. The relative prefixes chi- and yi- refer

to the unexpressed head nouns chúma 'thing' and yúma 'things' respectively.

(28)   Object relative clauses :
    a.   Chélili mumbanda chakuháyamisha.
       chi- a- a-   il -il -i mu-mbanda chi- a-   ku- háyam
       REL- 3sg- PAST do -RP -fv 1-woman   7- TNS- INF- surprise

       -ish   -a
       -CAUS -fv
       'What the woman did was very surprising.'

b.   Nayíli mumpáta nami nákamóni zheláña akwétu.

ni- a-   y -il -i mu- mpata nami   ni- ka- mon -i
1sg- PAST- go -RP -fv LOC- bush   COMPL.1sg 1sg- FUT- see -SUBJ

zhi- a- a-   il -aña akwetu
REL- 3pl- TNS- do -HAB fellow friends
'I went in the bush that I could see what my fellow friends do.'

Locative expressions, as head nouns, are generally omitted in relative clauses

leaving only locative prefixes class 16 hi-, class 17 ku- and class 18 mu- (see chap XI,

Section 11.1.1)

(29)   Maseka watálili hinashákámini.

Maseka wu- a-   tal -il -i hi- ni- a-   shakam -in -i
Maseka 3sg- PAST- look -RP -fv LOC- 1sg- PAST- sit   -RP -fv
'Maseka looked where I was sitting.'

Relative clauses can modify demonstrative pronouns which function themselves

as pronouns more frequently in Lunda. In other words, demonstratives may occur as head

nouns with leaving out the nouns they modify, as exemplified in (30a) and (30b).

(30) a.   Owu áyíli kumukála anafúnti.

owu á- a-   y -il -i ku- mukála a- na- funt   -i
DEM REL- PAST- go -RP -fv LOC- village 3pl- PERF- come back -fv
'Those/the ones who had gone to the village have come back.'

b.	Owu ashélili, hela adiñi akuma munyíma yanowu akwátilíwu,
	híyakumuzhaha óna mwána kamutúpa.[4]
	owu a-	a-	shal	-il	-i	hela	a-	a-	di	-ñi
	DEM REL- PAST- remain -RP -fv even though 3pl- PAST- be -RP

	a-	kuma	mu-	nyima yan- owu a-	a-	kwat -il	-i
	3pl- come to end LOC- back 9-	DEM REL- PAST- catch -RP -fv

	-wu hi-	a-	ku- mu-	zhaha ona	mutupa
	-3pl NARR 3pl- INF- 3sg.OBJ- kill	DEM lion
	'Those who remained, even though they were behind the one who was
	caught, killed that lion.'

9.9 Multiple Relative Clauses

Relativization can be recursive in Lunda and does occur quite frequently. That is, it

is possible to have relative clauses with more than two clauses. A relative clause itself

can in turn be the main clause of another relative clause, as exemplified by the

following sentence:

(31)	Watámbwíli yikobelu yamulétéleli mulunda nindi wuyadiñi nakufukishiláwu kúdi
	antu.
	wu- a-	tambul -il	-i	yi-kobelu yi-	a-	a-	mu-	let	-el
	3sg- PAST- receive -RP -fv 7-shirts	REL- 3sg- PAST- 3sg.OBJ- bring -APPL

	-el -el	-i mulunda na-	indi wu-	a-	-a	di -ñi na-	ku-
	-RP -RP -fv friend	COM- 3sg REL- 3pl- -PAST be -RP PROG- INF-

	fukish	-il -a -wu kúdi antu
	make fun of -RP -fv -3pl by	people
	(Lit: 'He received the shirts that his friend had brought him who was made
	people made fun of by the people.')
	'He received the shirts that his friend had brought him whom the people
	made fun of.'

---

[4] This sentence is drawn from the story entitled Mwana kamutupa 'the lion's child' (Fisher 1984: 258).

9.10 Negative Relative Clauses

Negative relative clause constructions present distinct syntactic structures from those of their positive counterparts. They are formed through the periphrastic use of the verb kubúla 'to lack, fail, omit' or kuleka 'to stop' as auxiliaries preceding the main verb which is in the infinitive form.

(32) Subject relative clause:
Wadíñi mumbanda wabúla kudivwímba.
wu- a-   di -ñi mumbanda wu- a-   bul -a ku- divwimba
3sg- PAST- be -RP woman   3sg- PAST- omit -fv INF- be arrogant
'She was a woman who was not arrogant.'

This structure also applies to negative object relative clauses:

(33) a.   Object relative clause:
Nswana waséndeli kakombu kinabúlili kumwínka.
Nswana wu- a-   send -el -i ka-kombu ki- ni- a-   bul
Nswana 3sg- PAST- take -RP -fv 12-broom REL- 3sg- PAST- omit

-il -i ku- mu-   inka
-RP -fv INF- 3sg.OBJ- give
'Nswana took away the broom that I did not give him.'

b.   Anakumukanjikizha kwitezha yuma ya-   búlili kwiláyi.
a- na-   ku- mu-   kanjikizha ku- itezha yi-uma yi-
3pl- PROG- INF- 3sg.OBJ- force   INF- accept 8-things REL-

a- a-   bul -il -a ku- ila -yi
3sg- PAST- omit -RP -fv INF- do -3sg
'He is being forced to accept things that he did not do.'

c.   Elúka kwakúnwa zhiyabúláña kudimáku.
a- a-   iluk -a kwa- ku- da zhi- a- a-   búl -aña ku-
3pl- TNS- know -fv only- INF- eat REL- 3pl- TNS- lack -HAB INF-

dima   -ku
cultivate -NEG
'They only know how to eat what they do not cultivate.'

<u>9.11 Cleft Constructions</u>

In Lunda, a cleft construction consists of a clause which is divided into two separate parts, each with its own verb. One part contains the clefted or focused constituent and the other a dependent clause whose morphosyntax is similar to that of a relative clause. That is, there is a syntactic parallel between relative clauses and cleft constructions. In the third person, the noun phrase is brought into focus by fronting it followed by the verb formation consisting of the copula <u>di</u> 'be' and a pronominal affix or a demonstrative pronoun agreeing in number, person and noun class with the preposed coreferential noun phrase plus the rest of the clause. Syntactic functions such as subjects, direct objects, indirect objects, and elements that occur in oblique positions can be focused in cleft constructions. Cleft constructions fall into two major categories: 1) cleft constructions with focused first and second person participants and 2) cleft constructions involving fronted third person participants.

9.11.1 Cleft Constructions with 1st and 2nd Participants

In Lunda, predicative independent pronouns are focused and placed in initial positions followed by a relative clause whose relativized noun phrase is coreferential to the fronted constituent in cleft constructions with first and second person participants. The focus, which is formed by means of the prefix <u>yi</u>- and a pronominal stem, can be a subject or a direct object. The following examples demonstrate first and second person cleft constructions:

(34) a. Yámi náfumpa nswáha.
yi- ámi ni- a- fump -a nswaha
COP-1sg 1sg PAST- smash -fv calabash
'It is I who smashed the calabash.'

b. Yéyi wáfumpa nswáha.
yi- eyi wú- a- fump -a nswáha
COP-2sg 2sg- PAST- smash -fv calabash
'It is you who smashed the calabash.'

c. Yétu wámona.
yi- étu wú- a- mon -a
COP- 1pl 2sg- PAST- see -fv
'It is we whom you saw.'

d. Yénu mwáfumpa nswáha.
yi- enu mú- a- fump -a nswáha
COP-2pl 2pl - PAST- smash -fv calabash
'It is you who smashed the calabash.'

Moreover, an optional independent pronoun can be used in combination with the

predicative independent pronoun for emphasis.

(35) a. Ami yámi náfumpa nswáha.
ami yi- ámi ni- a- fump -a nswaha
1sg COP-1sg 1sg PAST- smash -fv calabash
'It's really I who smashed the calabash.'

b. Enu yénu mwáfumpa nswáha.
enu yi- enu mú- a- fump -a nswáha
2pl COP-2pl 2pl - PAST- smash -fv calabash
'It is you who smashed the calabash.'

<center>9.11.2 Cleft Constructions with 3rd Person Participants</center>

A cleft construction with a third person participant begins with a fronted

constituent followed by the copular verb <u>di</u> 'to be' that suffixes an enclitic pronoun or a

demonstrative pronoun agreeing in number and noun class with the coreferent fronted or

focused item, plus a relative. The following examples in (36) illustrate an example of a

cleft construction:

(36)   a.   Sakuwaha díyi nasendi mpembi.
               Sakuwaha di   -yi na-   send -i mpembi
               Sakuwaha COP -3sg 3sg.PERF- carry -fv goat
               'It is Sakuwaha who has carried a goat.'

       b.   Owu kánsi watémukíli díyeniwu nafúnti.
               owu kansi wu- a-   temuk -il -i di   yeniwu   na-
               DEM child 3sg- PAST- run   -RP -fv COP DEM.3sg 3sg.PERF-

               funt   -i
               return -fv
               'The child that ran away is this very one who has returned.'

In (36a) the fronted noun <u>Sakuwaha</u> precedes the copula <u>di</u> 'be' with a class 1 enclitic -<u>yi</u>

suffixed to it. The latter agrees in number, person and noun class with the coreferential

fronted class 1 noun phrase. In (36b) the noun phrase <u>kánsi</u> 'child' is focused and the

copula <u>di</u> suffixes a class 1 demonstrative pronoun <u>yeniwu</u> 'this one'crossreferencing

the fronted item.

The fronted or topicalized constituent can be a noun phrase, a demonstrative

pronoun (both simple and emphatic), an independent pronoun, or a relative clause

(headed or headless). Consider the following examples in (37a) through (37c):

(37) a. Noun phrase:
          Chúma ochu díchu nákukéña.
          chúma o   -chu di -chu ná-   ku- keña
          thing DEM -7 COP -7   1sg.PROG- INF- want
          'That is the thing that I want.'

      b. Independent pronoun:
          Wéna díwu adíñi nawuswa.
          wena di   -wu a-   di -ñi na-   wuswa
          3pl COP -3pl 3pl- COP -RP COM- strength
          'It is they who had strength.'

      c. Relative clause:
          Itála datúñilíyi dídu dasukuma halóshi.
          i-tála di- a- a-   tuñ -il -i -yi di -du di- a-
          5-house REL- 3sg- PAST- build -RP -fv -3sg be -5 REL PAST-

          sukum   -a halóshi
          be burned -fv yesterday
          'It is the house that he built that got burnt yesterday.'

The copular verb formation may not be followed by a relative clause when the

clefted element is a relative clause. Consider the following sentences (38a) and (38b) in

which the copula is attached to demonstratives:

(38) a. Chuma chinakéñeli dichenichi.
          chi-uma chi- ni- a-   keñ -el -i di   chenichi
          7-thing REL- 1sg- PAST- want -RP -fv COP DEM7
          'It is this thing that I wanted.'

      b. Antu achitúñili díwenawa.
          a-ntu   a- chi- tuñ -il -i di   wenawa
          2-people REL- OBJ- build -RP -fv COP DEM.3pl
          'It is these people who built it.'

Syntactic functions such as subjects, direct objects, indirect objects, and obliques

can be clefted in Lunda. The following examples illustrate the various types of syntactic

functions that may occur as clefted constituent.

(39) a.   Subject:

Sakuwaha díyi naséndi mpembi.

Sakuwaha di -yi na-   send -i mpembi

Sakuwaha COP -3sg 3sg.PERF- carry -fv goat

'It is Sakuwaha who has carried a goat.

       b.   Object:

Chúma ochu díchu nakukéñáyi kánsi.

chúma ochu di -chu na-   ku- keña -yi kansi

thing DEM7 COP -7 3sg.PROG- INF- want -3sg child

'That is the thing that the child wants.'

       c.   Locative:

Kunikwikala ami díku mwákekala ninénu.[5]

ku- ni- ku- ikala ami di   -ku   mu- aka- ikala ni-n-enu

17- 1sg- FUT- live 1sg COP -LOC 2pl- FUT- live CON-2pl

(Lit: 'where I will live is where you will also live')

'The place where I will live is where you will also live.'

Cleft constructions involving instrumentals and comitatives follow the syntactic

pattern analogous to other syntactic roles such as object, subject and locatives. In

addition, like relative clauses, cleft constructions with instrumentals as clefted elements

require resumptive pronouns in the trace left by the focused constituent, as illustrated in

(40):

(40)   Kazémba aka díku nabálwíli náchu ncháwa.

ka-zémba a-ka   di -ku ni- a-   balul -il -i na -chu ncháwa

12-axe   DEM-12 COP -12 1sg- PAST- split -RP -fv with -7   firewood

'It is the axe which I split the firewood with.'

Generally, the fronted item can be given more emphasis by employing a

coreferential general term or a common noun after the copular verb. In this case, the

suffixation of the post-verbal pronoun agreeing with the fronted noun may be omitted.

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[5] The future tense marker final vowel a turns into e due to coalescence with the following vowel i of the verb ikala 'sit'.

(41) a.   Mazembi ni ñombi dí yúma yalándilíyi ndimi

mazembi ni ñombi di   yi-uma yi-   a-   a-   land -il -i -yi

tractor   and cows COP 8-thing REL- 3sg- PAST- buy -RP -fv -3sg

ndimi

farmer

'A tractor and cows are the things that the farmer had bought.'

b.   Makondi ni lósu díyu yakúda yatumbáwu eni Mwinilunga.

ma-kondi   ni losu   di   -yu yakuda yi-   a-   a-   tumba -wu

6-pineapples and 11-rice COP -8   8-food REL- 3pl- TNS- grow -3pl

eni   Mwinilunga

owner Mwinilunga

'Pineapples and rice are what Mwinilunga people grow.'

c.   Yeniwu di muntu wadíñi nlomboli wachipompélu.

yeniwu   di   muntu wu- a-   di   -ñi nlomboli wu-a-

DEM.3sg COP person REL- PAST- COP -RP leader   1- POSS-

chipompelu

party

'It is this person who was the leader of the party.'

An emphatic demonstrative may occur after a relative clause in a cleft

construction when the first or second person independent pronoun occupies the initial

position preceding the copula.

(42)   Etu dimázu itwatíili wenowu

etu di   mazu i-   tu- a-   tiy -il -i wenowu

1pl COP words REL-1pl- PAST- hear -RP -fv DEM6

'These are the words that we have heard'

9.12 Negative Cleft Constructions

Negation of the clefted element can carried out by using one of the three

negativization processes. Like negative relative clauses, negative cleft constructions

involve the use of the verb <u>kubúla</u> 'to lack, omit' act as an auxiliary preceding the

infinitive of the main verb.

(43) a.   Yami anabáli kukéñáyi.
              yami a- na-   bul -i ku- keña -yi
              1sg 3sg- PERF- lack -fv INF- like -3sg
              'It's I whom s/he does not like.'

      b.   Iyi di mpinji kwabúlaña nvúla.
              i   -yi di   mpinji ku- a-   bula   -ña nvula
              DEM-8 COP time   REL- TNS- be without -HAB rain
              'This is the time when there is no rain.'

Cleft constructions can also be negated morphologically through the use of the

normal preverbal marker <u>hi</u>- cooccurring with the postverbal marker -<u>ku</u> or it is carried

out by simply placing the negation particle <u>wányi</u> after the verb.

(44)   Hídíwu afúmpili nswáháku.
          hi-   di   -wu a- a-   fump -il -i nswáha -ku
          NEG- COP -3pl REL PAST- smash -RP -fv calabash -NEG
          'It is not they who smashed the calabash.'

CHAPTER X

NON DECLARATIVES

This chapter analyzes non-declarative speech acts including interrogatives in Lunda. It describes the function and coding of non-declarative acts such as imperative, prohibitive and subjunctive as well as both the formal and functional properties of interrogatives.

10.1 Interrogatives

In Lunda, all question forms are derived from the corresponding statement forms either through intonation or by adding the question morphemes. Yes-no questions and constituent questions may be preceded or followed by one of the three particles indi, ntáhi and komana[1]. The particles co-occur with the question morphemes in constituent questions. In addition, indi may co-occur with ntáhi or komána[2] in a single question.

10.1.1 'Yes/no' Questions

'Yes/no' questions are those questions whose expected answers could be either affirmation 'yes' or negation 'no', with or without further details. In Lunda, 'yes/no'

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[1] A study of yes-no and constituent questions I have carried out in three different texts indicates that 51% of the questions are accompanied by one of the three particles.

[2] The words indí, ntáhi and komána also exist in Luvale, a genetically-related language, as nyí, táhi and kumana respectively and serve the same function in interrogative sentences (Horton 1949:200).

questions retain the same basic word order as those of their corresponding declarative

sentences; they are not marked segmentally but rather expressed through the use of

intonation. The rising intonational pattern which reaches its peak towards the end of a

sentence, is the only indication that it is indeed a question. In other words, no subject-

verb inversion occurs, no morpheme is inserted in the sentence or other modifications and

word order.

(1) a. Declarative:
    Nakufunta ku Lusaka.
    na- ku- funta ku- Lusaka
    3sg.PROG- INF- go back LOC- Lusaka
    'S/he is going back to Lusaka.'

  b. Interrogative:
    Nakufunta ku Lusaka?
    na- ku- funta ku- Lusaka
    3sg.PROG- INF- go back LOC- Lusaka
    'Is s/he going back to Lusaka?'

An affirmative answer to a negative yes-no question indicates that the person

answering the question is in total agreement with the actual form of the question, whereas

a negative answer to a negative yes-no question shows the addressee's disagreement with

the actual form of the question. This is exactly in opposition of what obtains in English.

(2) a. Question:
    Tata yeyi kanda afunti?
    tata yi-a-eyi kanda a- funt -i
    father 1-POSS-2sg not yet 3sg- come back -SUBJ
    'Has your father not come yet?'

b.   Eña.   'Yes' (he has not)[3]
       Nehi   'No'   (he has)

10.1.2 Tag Questions

In Lunda, tag questions are expressed by an invariant interrogative word <u>nétu</u>

placed at the end of a declarative form of the sentence. The linear order of the question is

the same as that of a declarative statement and the question morpheme. Generally, when a

tag is added at the end of sentence the speaker expects the addressee to agree with him or

her in Lunda . In other words, tag questions call for affirmative responses.

(2)   a.   Anayi kuLusaka, nétu?
           a- na-   y -i ku-   Lusaka netu
           3pl- PERF- go -fv LOC- Lusaka Q
           'They have gone to Lusaka, haven't they?'

     b.   Hiyanayi kuLusakaku, netu?
           hi- a- na-   y -i ku-   Lusaka -ku   nétu
           NEG- 3pl- PERF- go -fv LOC- Lusaka -NEG Q
           'They have not gone to Lusaka, have they?'

10.1.3 Alternative Questions

Alternative questions refer to those questions that offer a choice of answers. In

Lunda, alternative choice questions are formed by means of the use of the question word

<u>tahindi</u> 'or, or not' which links two nouns, phrases or clauses.

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[3] Bolinger (1978b) claims that affirmative yes-no questions involve a systematic bias toward the negative response; while the negative yes-no questions involve a systematic bias toward the affirmative response. This may not apply to Lunda as evidenced from the negative yes-no question example in (2) where the positive answer signifies that the addressee agrees with the speaker's actual form of the question. Further, when the answer to negative yes-no questions is uncertain, the addressee responds by using the defective verb <u>kwizhi</u> 'perhaps, may be, I don't'

(3)   a.   Wukuda ntamba tahindi mayañwa?
              wu- ku- da ntamba   tahindi ma-yañwa
              3sg- FUT- eat 10-sweet potatoes or   6-pumpkins
              'Is s/he going to eat sweet potatoes or pumpkins?'

       b.   Múdi hakúnu tahindi?
              mu- di ha- ku- nu   tahindi
              1pl- be LOC- LOC- DEM or not
              'Are you from here or not?'

       c.   Waya kumáha tahindi nehi?
              wu- a-   y -a ku-   maha tahindi nehi
              3sg- PAST- go -fv LOC- field or   not
              'Did s/he go to the field or not?'

Another way of forming alternative questions is through the use of the question

particle <u>indi</u>, may optionally be followed by the word <u>nehi</u> 'no', or <u>kwizhi</u> 'perhaps, may

be, I don't know' placed at the end of the sentence.

(4)   a.   Múnakukeña chuma indi yiyedí?
              mú- na-   ku- keña chi- uma chi- mu indi yi- yedi
              2pl- PROG- INF- want 7-   thing 7- one Q   8- two
              'Do you want one thing or two?'

       b.   Komana diyi iñodeyi indi?
              komana di -yi iño di- a-   eyi   indi
              Q   be -3sg wife 5- POSS- 2sg Q
              'Is this one your wife or not?' (Kakoma 1988: 29)

10.1.4 WH-Questions

WH-questions (also known as 'information questions, 'WH-questions', and

constituent questions) involve the use of question words or affixes to question

participants or constituents in any grammatical role such as subject, direct object, indirect

object, possessive, location, instrument, comparison, etc. They are employed when the

speaker seeks some specific or new information or more from the listener about the identity of some entity in the sentence.

In Lunda, information questions are formed by using question words or verb affixes, that is, the word order in information questions is not different from that of declarative statements. The question word or affix occurs in the normal syntactic position that the questioned syntactic function would appear; there is neither movement of the question morpheme nor verb-subject inversion. Furthermore, no special intonation is supplied to the information question. The presence of a question word is enough to indicate that a particular construction is a question. Information questions may be combined with the interrogative particles indi, ntahi, and kómana.

Table 24 lists the constituent question morphemes that are available in Lunda.

Table 24. Constituent Question Morphemes

-nyí	'who, whom, which, what, whose, when'
ika	'what, which'
-di	'what, why'
-hi	'where'
-nka	'what'
ñahi	'how, in what manner'
-ñahí	'how much, how many'

10.1.4.1 Subject Questions

Subject questions are formulated by means of the question affix -nyí 'which, what'. When the questioned constituent is a third person human subject both singular and plural, the question morpheme is suffixed to the copular particle hi- 'it is' used in

predicative constructions (chap VI, section 6.1.2). The question morpheme prefixes class

2 subject prefix a̱- for questioned third person plural subjects in addition to the copular

particle resulting in the insertion of the morpheme yi̱- between hi- and a̱-.

(5)   a.   Declarative:
Kánsi waleta matémwa awa.
ka-ánsi wu- a-   let   -a ma- témwa a- wa
12-child 3sg- PAST- bring -fv 6-   hoe   6- DEM
'The child brought these hoes.'

      b.   Interrogative:
Waleta matémwa awa hinyí?
wu- a-   let   -a a- wa   hi-   -nyí
3sg- PAST- bring -fv 6- DEM COP- -Q
'Who brought these hoes?'

(6)   a.   Declarative
Amayala adi nakuhañana.
a- ma-yala a- di na-   ku- hañana
2-6-   men 3pl- be PROG- INF- dance
'The men are dancing.'

      b.   Adi nakuhañana hiyanyí?
a- di na-   ku- hañana hi-   a- -nyí
3pl- be PROG- INF- dance COP- 3pl- -Q
'Who are dancing?'

For questions involving first and second person singular subjects, the question

morpheme is suffixed to the copular pronominal predicate consisting of yi̱- plus an

independent pronoun.

(7)   First person singular: yaminyí? (yi- ami -nyí)   'Who am I?'
      Second person singular: yeyinyí? (yi- eyi -nyí)   'Who are you?'

The question morpheme takes class 2 (plural) subject prefix a̱- when the

questioned constituent is a first or second person plural subject.

(8)   First person plural: yetu anyí?   (yi- etu a- -nyí) 'Who are we?'
        Second person plural: yenu anyí?   (yi- enu a- -nyí) 'Who are you?'
        Third person plural: wenanyí?   (wena a- -nyí) 'Who are they?'

An alternative word order pattern of subject questions is also possible in Lunda.

The question involves a cleft construction in which the copular question morpheme is

placed at the beginning of the sentence followed by a relative clause. Note the following

examples (9a) and (9b) equivalent to (5b) and (6b) respectively:

(9)   a.   Hinyí waleta matemwa awa?
            hi- -nyí wu- a-   let -a a- wa
            COP- -Q 3sg- PAST- bring -fv 6- DEM
            (Lit: 'Who is it who brought these hoes?')
            'Who brought these hoes?'

        b.   Hiyanyí adi nakuhañana?
            hi-   a- -nyí a- di na-   ku- hañana
            COP- 3pl- -Q 3pl- be PROG- INF- dance
            (Lit: 'Who are they who are dancing?')
            'Who are dancing?'

A non-personal subject is questioned through the use of the generic noun chúma

'thing' for singular or yúma 'things' for plural suffixing the question morpheme. This is

illustrated by the examples below:

(10)   Yúmanyí yidi hanzi?
        yi- uma -nyí yi- di ha-   nzi
        8- thing -Q- 8- be LOC- outside
        (Lit: 'What things are outside?'
        'What is outside?'

The question morpheme -nyí can be suffixed to a subject noun or noun phrase and

functions as a definite question morpheme or determiner when the information sought

about a subject involves a specific and definite choice of known answers to be made

between more items. Thus, the questioned subject has the meaning 'which one, which

ones'. Singular words ending in the vowel /u/ triggers an insertion of the vowel /i/ which

results in the glide formation of the preceding of the vowel /u/.

(11) a.   Muntwinyí wenza?
            muntu   -nyí wu- a-   inz   -a
            1-person -Q 3sg- PAST- come -fv
            'Which person came?'

      b.   Antwányí enza?
            antu   a- -nyí a- a-   inz -a
            2-person 2- -Q 3pl- PAST- come -fv
            'Which people came?'

When the choice of answers to be made involving two items, the language

employs the copular verb di 'be' preceded by the cardinal number mú 'one. In addition,

both the copular verb and cardinal number are marked with the prefix agreeing in number

and noun class with the preceding noun or noun phrase.

(12) Chitayi chafumpika chimu chidihi?
      chi-tayi   chi- a-   fump -ik   -a chi- mu chi- di   -hi
      7-calabash 7-   PAST- break -STAT -fv 7- one 7- COP -Q
      'Which one of the calabashes got broken?'

For non-referring subject questions, the information question morpheme is

suffixed to the noun muchidi 'kind, type' which comes immediately after the head noun it

agrees with in number and noun class.

(13) a.   Mutondu wamuchidinyí waholoka?
            mu-tondu wu-a-   muchidi -nyí wu- a-   holok -a
            3-tree   3-POSS- 3-kind -Q 3- PAST- fall -fv
            'What kind of a tree fell?'

      b.   Muntu wamuchidinyí wenza?
            mu- ntu   wu- a-   muchidi -nyí wu- a-   inz   -a
            1- person 1- POSS- kind   -Q 3sg- PAST- come -fv
            'What kind of person came?'

10.1.4.2 Direct Object Questions

When the direct object is questioned, the interrogative morpheme -nyi occupies

the normal syntactic position of the questioned direct object suffixed to the verb rather

than being moved or placed at the beginning of the sentence.

(14) a.   Declarative:
          Mukwatu watambika mwana.
          Mukwatu wu- a-   tambik -a mwana
          Mukwatu 3sg- TNS- call   -fv child
          'Mukwatu called the child.'

      b.   Interrogative:
          Mukwatu watambikanyí?
          Mukwatu wu- a-   tambik -a -nyí
          Mukwatu 3sg- TNS- call   -fv -Q
          'Whom did Mukwatu call?'

As in the case of subject questions seen above, the question affix -nyi can be

suffixed to a direct object noun or noun phrase to seek a very specific known answer

between a choice of answers. It has the English equivalent meaning of 'which one, which

ones'.

(15)   Mukwatu watambika mwananyí?
        Mukwatu wu- a-   tambik -a   mwana -nyí
        Mukwatu 3sg- TNS- call   -fv child   -Q
        'Which child did Mukwatu call?'

The forms of questions involving the choice of answers to be made involving two

items are the same as those for subjects seen above.

(16)   Mukwatu watambika mwana wumu yodihi?
        Mukwatu wu- a-   tambik -a   mwana wu- mu yo-   di   -hi
        Mukwatu 3sg- TNS- call   -fv child   1- one 3sg- COP -Q
        'Which one of the children did Mukwatu call?'

The questioned direct object noun may appear in sentence initial position. In this case, the question is expressed through the use of a relative construction.

(17) Mwána atambikáyi Mukwatu wumu yodihi?
      mwana a-   a-   a-   tambik -a -yi Mukwatu wu- mu yo- di   -hi
      child REL- 3sg- PAST- call   -fv -1 Mukwatu 1- one 3sg- COP -Q
      'Which one of the children did Mukwatu call?'

Lunda has two question morphemes for direct object questions referring to non-animates. The first one is the morpheme -nyi which is suffixed to the generic word chuma 'thing' for singular or yuma 'things' for plural. The generic word occupies the post-verbal position of the questioned direct object constituent.

(18) a.   Declarative:
           Womba nakukéña cheña.
           Womba na-   ku- keña cheña
           Womba 1sg.PROG- INF- want plate
           'Womba wants a plate.'

      b.   Interrogative:
           Womba nakukeña chúmanyí?
           Womba na-   ku- keña chúma -nyí
           Womba 1sg.PROG- INF- want thing -Q
           (Lit: 'Womba wants what thing?')
           'What does Womba want?'

When the object question word formation occurs sentence-initially, a cleft is used followed by a relative construction, as illustrated by the example in (19b) below:

(19) a.   Declarative:
           Mumbanda naséndi chúma.
           mumbanda na-   send -i chúma
           woman   3sg.PERF- carry -fv thing
           'The woman has carried a thing.'

b.   Interrogative:
        Hichúmanyí chanasendíyi mumbanda.
        hi-   chúma -nyí chi- a-   na-   send -i -yi   mumbanda
        COP- thing   -Q REL- 3sg- PERF- carry -fv -3sg woman
        (Lit: 'what thing is it that the woman has carried?')
        'What has the woman carried?'

The second question morpheme used for constituents not referring to person is the

affix -di 'what'. It is suffixed to the verb to seek information about the missing argument.

(20)   a.   Declarative:
                Mumbanda nakutéleka makundi.
                mumbanda na-   ku- téleka makundi
                woman   3sg.PROG- INF- cook   beans
                'The woman is cooking beans.'

        b.   Interrogative:
                Mumbanda nakutélekadi.
                mumbanda na-   ku- téleka -di
                woman   3sg.PROG- INF- cook   -Q
                'What is the woman cooking?'

The same object question morpheme -di occurs in questions involving

complement clauses introduced by complementizers that come after verbs of utterances

such as kuhósha 'to say', kutambika 'to call' kulezha 'to tell, advise' etc, and verbs of

thought such as tóñozhoka 'think'. The question morpheme is suffixed to the

complementizer, when the content of the complement clause is questioned. In addition,

the verb of the main clause may be omitted leaving the complementizer either standing

alone or following the clausal subject .

(21)   a.   Declarative:
                Kabwita nalezhi mwána nindi ayi.
                Kabwita na-   lezh -i mu-ána nindi   a-   y -i
                Kabwita 3sg.PERF- tell   -fv 1-child COMP3sg- 3sg- go -SUBJ
                'Kabwita has told the child that he should go.'

b. Interrogative:
Kabwita nalezhi mwána nindidí?
Kabwita na- lezh -i mwana nindi -di
Kabwita 3sg.PERF- tell -fv child COMP.3sg -Q
'What has Kabwita told the child?'

(22) a. Declarative:
Kabwita nahóshi nindi wukwinza.
Kabwita na- hosh -i nindi wu- ku inz -a
Kabwita 3sg.PERF- say -fv COMP3sg- 3sg. FUT- come -fv
'Kabwita has said that he will come tomorrow.'

c. Interrogative:
Kabwita nahóshi nindidí?
Kabwita nindi -di
Kabwita COMP3sg- -Q
'What has Kabwita said ?'

10.1.4.3 Dative/Goal Questions

The question morpheme -nyi occurs suffixed to the verb followed by the indirect object when the missing piece of information concerns the direct object in ditransitive constructions involving unmarked benefactive/recipient and patient.

(23) a. Declarative:
Kachiza wenka mumbanda chitáyi.
Kachiza wu- a- ink -a mumbanda chitáyi
Kachiza 3sg- PAST- give -fv woman calabash
'Kachiza gave the woman a calabash.'

d. Interrogative:
Kachiza wenkanyí chitáyi?
Kachiza wu- a- ink -a -nyí chitáyi
Kachiza 3sg- PAST- give -fv -Q calabash
'Whom did Kachiza give a calabash?'

When the dative/goal is case-marked by the locative marker <u>kudi</u> 'to', the

question morpheme is suffixed to the marker occupying the same postverbal position a

goal noun phrase would normally appear following the patient.

(24)   a.   Declarative:
Mukwatu watemesha mukánda kúdi Nswana.
Mukwatu wu- a-   temesh -a mukánda kúdi Nswana
Mukwatu 3sg - PAST- send -fv letter   to   Nswana
'Mukwatu sent a letter to Nswana.'

        b.   Interrogative:
Mukwatu watemesha mukánda kúdinyí?
Mukwatu wu- a-   temesh -a mukánda kúdi -nyí
Mukwatu 3sg - PAST- send -fv letter   to   -Q
'Whom did Mukwatu send a letter to?'

10.1.4.4 Locative Questions

Locative questions are formed through the suffixation of the question affix -<u>hi</u> to

the locative markers class 16 <u>hadi</u> 'at, to, from (nearby)', class 17 <u>kudi</u> 'at, to (relatively

distant)' and class18 <u>mudi</u> 'in, out from, through' according to the expected answer. The

question morpheme appears in the slot where a locative expression, whether simple or

complex, would occur marked by the locative marker.

(25)   a.   Declarative:
Chimbinda nayi mwisaña.
chimbinda na-   y -i mu-   isaña
hunter   3sg.PERF- go -fv LOC- forest
'The hunter has gone in the bush.'

        b.   Interrogative:
Chimbinda nayi múdihi?
chimbinda na-   y -i mudi -hi
hunter   3sg.PERF- go -fv LOC - Q
'Where has the hunter has gone to?'

(26)   a.   Declarative:
              Chimbinda wudi hamukála.
              chimbinda wu- di ha-   mukála
              hunter   3sg - be LOC- village
              'The house is at the village.'

      b.   Interrogative:
              Chimbinda wudi hádihi?
              chimbinda wu- di   hadi -hi
              hunter   3sg - be LOC -Q
              'Where is the hunter?'

The locative marker may be left out of the sentence and the question morpheme is

simply attached to the verb of the sentence.

(27)   Chimbinda nayihi?
        chimbinda na-   y -i -hi
        hunter   3sg.PERF- go -fv - Q
        'Where has the hunter gone to?'

Another way of forming a locative question is through the affixation of the

question morpheme nka 'what, which' to one of the locative prefixes ha-, ku- and mu- to

seek information about a location.

(28)   Wenka mukánda hanká?
        wu- a-   ink -a mukánda ha- -nká
        3sg - PAST- put -fv letter   16- -Q
        'What did s/he put the letter on?'

<u>10.1.4.5 Instrumental Questions</u>

Instrumental questions are formed by means of the same question affix -nká.

Syntactically, the question morpheme occupies the slot of the questioned instrument noun

phrase attached to the comitative/instrumental morpheme na- in the same syntactic

position of the questioned instrumental noun phrase following the verb.

(29) a.   Declarative:
Wazhaha kabazhi nawúta?
wu- a-   zhah -a kabazhi na- wúta
3sg - PAST- kill -fv reedbuck with- gun
'S/he killed a reedbuck with a gun.'

      b.   Interrogative:
Wazhaha kabazhi nanká?
wu- a-   zhah -a kabazhi na- -nká
3sg - PAST- kill -fv reedbuck with- -Q
'What did s/he kill a reedbuck with?

10.1.4.6 Comitative Questions

Comitative questions are formed through the use of the same question affix -nyi

attached to the comitative marker na- 'and, with' . The word order pattern follows that of

instrumental WH-questions. The same word order of a declarative statement is observed

in questions.

(30) a.   Declarative:
Wenza namáma yindi.
wu- a-   inz -a na- máma yi-a-indi
3sg - PAST- come -fv with- mother 1-POSS-3sg
'S/he came with her/his mother.'

      b.   Interrogative:
Wenza nanyí?
wu- a-   inz -a na- -nyí
3sg - PAST- come -fv with- -Q
'Whom did s/he come with?'

(31) a.   Declarative:
Wúnakuhósha namama yindi
wu- na-   ku- hosha na- máma yi-a-eyi
2sg- PROG- INF- talk   with- mother 1-POSS-2sg
'You are talking with your mother.'

b. Interrogative:
Wúnakuhósha nanyí?
wu- na-　　ku- hosha na-　-nyí
2sg- PROG- INF- talk　　with- -Q
'Whom are you talking with?'

When the accompaniment and means question refers to a non-personal constituent,

Lunda employs the question affix -nka suffixed to the comitative marker na- 'with'

instead of -nyí.

(32)　a.　Declarative:
Wenza nankinga.
wu- a-　　inz　-a na-　　nkinga
3sg - PAST- come -fv INST- bicycle
'He came on a bicycle.'

b.　Interrogative:
Wenza nanká?
wu- a-　　inz　-a na-　　-nká
3sg - PAST- come -fv COM- -Q
(Lit. 'What did s/he come with?')
'How did s/he come?'

10.1.4.7 Comparison Questions

The comparison question is expressed by the affix -nyí suffixed to the conjunction

neyi 'like' in place of the questioned comparison following the conjunction comparison.

(33)　a.　Declarative:
Wudi néyi Nswana.
wu- di néyiNswana
3sg - be like Nswana
'S/he is like Nswana.'

b.   Interrogative:
        Wudi neyinyí?
        wu- di neyi -nyí
        3sg - be like -Q
        'Whom is s/he like?'

10.1.5.8 Reason/Motive Questions

Lunda has two ways of expressing reason questions. The first type of reason

question is formed through the suffixation of the affix -nyi or -di to the polysemous

word muloña 'case, crime, fault, affair transgression' or the generic word chuma 'thing'.

The word muloña is also used as a conjunction to introduce the reason adverbial clause

with the meaning 'because'.

(34)   a.   Azuñilaña yumanyí?
                a- zuñ -il   -aña yuma -nyí
                3pl- fight -APPL -HAB thing -Q
                "What do they fight for?'

        b.   Muloñádi himwátulezháku?
                muloña -di hi-   mu- a-   tu-   lezh -a -ku
                because -Q NEG- 2pl- PAST 1pl.OBJ- tell -fv -NEG
                'Why didn't you tell us?'

When the question word occupies the initial position of the sentence, the question

alternative pattern of reason displays the syntactic structures analogous of a direct object

relative construction (cf. chap IX on relativization).

(35)   a.   Muloñanyí chanabulúwu kumwinka mali?
                muloña -nyí chi- a- na-   bul -i -wu ku- mu-   inka mali
                because -Q   7- 3pl- PERF- omit -fv -3pl INF- 3sg.OBJ- give money
                'Why have they not given him money?'

b.   Chúmanyí chamwetelíwu.
        chuma -nyí chi- a- a-   mu-   et -el   -a -wu
        thing -Q REL- 3sg- PAST- 3sg.OBJ- beat -APPL -fv -3pl
        (Lit: 'what thing did they beat him for?')
        'Why did they beat him?'

The other type of question is formed by suffixing the question morpheme -di to

the verb and this affixation triggers the applicative verbal extension. In this case, the

interrogative morpheme acts as an argument broadening the base of the verb root.

(36)   a.   Declarative:
             Anyána azuñaña.
             anyána a- a-   zuñ -a -ña
             children 3pl- TNS- fight -fv -HAB
             'The children fight.'

       b.   Interrogative:
             Anyána azuñilañádi?
             anyána a- a-   zuñ -il -a -ña   -di
             children 3pl- TNS- fight -fv -fv -HAB -Q
             'Why do the children fight?'

10.1.4.9 Purpose Questions

When the question morpheme -nká is used as a modifier of an explicit head noun

which precedes it, it functions as a purpose question morpheme. Thus, it agrees with the

head noun in noun class via an agreement prefix plus the possessive linking morpheme -a.

(37)   a.   Chúma chanká?
             chi-úma chi- a- -nka
             7-thing 7-   POSS- -Q
             'What is the thing for?'

       b   Itémwa danká?
             itémwa di- a-   -nká
             5-hoe   5SM- POSS- -Q
             'What is the hoe for?'

10.1.4.10 Manner Questions

Manner questions are formed by the use of the question word <u>ñáhi</u> 'how, in what

manner'. The question word comes immediately after the verb in the position the

questioned constituent would normally occur.

(38)   a.   Declarative:
                Anyána adi chiwáhi.
                anyána a-   di chiwáhi
                2-child 3pl- be fine
                'The children are fine.'

        b.   Interrogative:
                Anyána adi ñáhi?
                anyána a-   di ñáhi
                2-child 3pl- be how
                'How are the children?'

10.1.4.11 Quantifier Questions

Quantifier questions are formed through the use of the morpheme -<u>ñahí</u> 'how

much, how many'. It is attached to the constituent or noun phrase whose quantification is

sought and agrees with the latter in number and noun class. That is, it occupies the

position where a numeral modifier would normally occur. In addition, the head noun is

usually in the plural form and as such the agreement prefix must also be in the plural

form.

(39)   a.   Declarative (Subject)
                Kwenza anyána atanu.
                ku-   a-   inz -a a- nyána a- tanu
                LOC- PAST- come -fv 2- child   2- five
                'Five children came.'

b.   Interrogative:
Kwenza anyána añahí?
ku- a-   inz -a a- nyána a- -ñahí
LOC- PAST- come -fv 2- child 2- -Q
'How many children came?'

Questions of frequency 'how often, how many times' are expressed by adjoining

class 12 pronominal agreement prefix ka- to the question affix -ñahí. The question form

does not require the third person plural prefix a-.

(40)   Nikulezhi kañahí?
ni- ku-   lezh -i   ka- -ñahí
1sg- 2g.OBJ- tell -SUBJ 12- -Q
'How many times should I tell you?'

10.1.4.12 Temporal Questions

Temporal adjuncts are questioned through suffixation of the question affix -nyí to

expressions of time such as mpiji 'time', ifúku 'day', mulungu 'week', kakwézhi 'month',

cháka 'season', mwáka 'year', etc. There is neither displacement of the question

morpheme nor subject-verb inversion occurs. The questioned expression of time remains

in its usual postverbal position.

(41)   a.   Himpijinyí?
hi   mpiji -nyí
COP time -Q
'What time is it?'

b.   Wakenza ifúkwinyí?
wu- aka- inz   -a ifúku -nyí
3sg- FUT- come -fv day -Q
(Lit. 'which day will s/he come')
'When will s/he come?'

c.   Wasémúkili mwákanyí?
wu- a-   semuk -ili mu- áka -nyí
3sg- past- be born -RP 3-   year -Q
(Lit. 'Which year was s/he is born?)
'When was s/he born?'

10.1.4.13 Genitive Questions

When the genitive is questioned, the question morpheme -nyí is attached to the

possessive agreement prefix in the normal syntactic position of the questioned lexical

possessor following the possessed, and agrees in number and noun class with the head

noun it follows.

(42)   a.   Declarative:
Idi itála datata.
idi   i-tála   di- a-   tata
DEM5 5-house 5- POSS- father
'This is my father's house.'

b.   Interrogative:
idi itála danyí?
idi   i-tála   di- a-   -nyí
DEM5 5-house 5- POSS- -Q
'Whose house is this?'

(43)   a.   Declarative (locative):
Wáya kwamáma yindi.
wu- a-   y -a ku- a-   máma yi- a- eyi
2sg- PAST- go -fv 17- POSS- mother 1- POSS- 2sg
'You went to your mother's place.'

b.   Interrogative (locative):
Wáya kwanyí?
wu- a-   y -a ku- a-   -nyí
2sg- PAST- go -fv 17- POSS- -Q
'To whose place did you go?'

A relative construction of a genitive question is also possible in Lunda, as

illustrated by the sentence in (44) taken from Matoka's novel entitled <u>Sayitamba</u>:

(44) Hela neyi yedika mukaleya, mukála wanyí handa kashikenáyi kutuña?
hela neyi a- idika   mu- kaleya mukála wu-a-nyí ha- a- anda ka-
even if 3sg- come out LOC- prison village 3-POSS-Q LOC- 3sg- AUX FUT-

shaken -a -yi ku- tuña
arrive -fv -3sg INF- build
'Even if he comes out of prison, whose village will he arrive at in order to build?'
(Matoka 1995:132)

10.1.4.14 Questions in the Passive Construction

The same question morpheme -<u>nyi</u> can also occur in passive forms when the

information is sought about the agent. The question word comes as an oblique marked

<u>kudi</u> 'by' in the syntactic position of an agent, as illustrated by the example in (45b).

(45)   a.   Declarative:
             Amutambika kúdi ntáñishi.
             a- a-   mu-   tambik -a kúdi ntáñishi
             3pl- PAST- 3sg.OBJ- call   -fv by   teacher
             'S/he was called by the teacher'.

       b.   Interrogative:
             Amutambika kúdinyí?
             a- a-   mu-   tambik -a kúdi -nyí
             3pl- PAST- 3sg.OBJ- call   -fv by -Q
             'S/he was called by who?'

10.1.4.15 General Questions

Lunda employs the question word <u>iká</u> for general and indefinite questions. It

stands alone without a sentence and has several interpretations depending on the context.

(46)   iká?   'what, what is the matter, what is this thing, what do you want?'

Another type of general question is expressed by the morpheme -<u>di</u> 'what' which

is simply suffixed to the verb.[4]

(47)   a.   Declarative:
                Mukwénzi nakuhema.
                mukwénzi na-   ku- hema nguja
                young man 3sg.PROG- INF- play soccer
                'The young man is playing soccer.'

        b.   Interrogative:
                Mukwénzi nakwiládi?
                mukwenzi na-   ku- ila -di
                young man 3sg.PROG - INF- do -Q
                'What is the young man doing?'

10.1.5 Embedded Questions

<u>10.1.5.1 Yes/no Embedded Questions</u>

A number of complement-taking verbs of cognition and perception such as <u>ihula</u>

'ask', <u>toñozhoka</u> 'think', <u>kwizhi</u> 'wonder', etc., allow 'wh-question' complements or

indirect questions (embedded wh-questions) in Lunda. The language has, however, no

special interrogative morphemes or words for such types of questions; instead it employs

the subordinator <u>neyi</u> 'if, whether, that, when'. The word order of the interrogative

embedded clause is identical to that of an independent interrogative clause.

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[4] Givón (2001:301) describes this type of question as <u>verb wh-questions</u>.

(48) a. Kwizhi néyi akwinza.[5]
          ku - izhi   néyi a-   ku- inza
          INF- do not know whether 3pl- FUT- come
          'I do not know whether he will come.'

      b. Nákeñi kwiluka néyi wamanisha mudimu.
          na-   keñ -a ku- iluka néyi   wu- a-   manish -a mudimu
          1sg.PERF- want -fv INF- know whether 3sg- PAST- finish -fv job
          'I want to know whether s/he finished the job.'

      c. Himuneluki néyi kuleta káwa mushikola chinzhiláku
          hi-   mu- na-   iluk -i néyi ku- leta   káwa mu- shikola
          NEG- 2PL- PERF- know -fv that INF- bring dog LOC- class

          chi- nzhila   -ku
          7-   be forbidden -NEG
          'You do not know that it is forbidden to bring a dog in class.'

<u>10.1.5.2 WH-Embedded Questions</u>

Other types of embedded interrogatives have the syntactic properties of object

relative clauses either headed or headless when the main clause has certain verbs of

cognition, perception and information. They share common syntactic and semantic

characteristics with relative clauses. For details about relativization, see (cf. chap IX).

(49) a. Wúneluki wányi muntu akéñáyí Nswana.
          wu- na-   iluk -i wányi muntu a-   a- keña -yí Nswana
          2sg- PERF- know -fv NEG   person REL- 3sg- like -3sg Nswana
          'You do not know the person whom Nswana likes.'

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[5] The defective verb <u>kwizhi</u> has several interpretations depending on the context. It may mean 'I don't
know, maybe, I wonder who knows'

b.   Múneluki wányi chaka chénzhilíyi Nswana.

mu- na-   iluk -i wanyi chaka chi- a- a-   inz -il -i -yi
1pl- PERF- know -fv NEG year REL- 3sg PAST- come -RP -fv -3sg

Nswana
Nswana
'You do not know the year when Nswana came.'

c.   Amwíhwíli mukwénzi chúmanyí chatémúkilíyi.

a- mu-   ihul -il -i mu- kwénzi chúma -nyí chi- a- témuk -il
3pl- 3sg.OBJ ask -RP -fv 1- youth thing -Q REL- 3sg- PAST -RP
-i -yi
-fv -3sg
'They asked him the reason why he ran away.'

Indirect questions in examples (49a) through (49c) are in fact relative clauses which are embedded in the main clauses. They are postposed and begin with a relative prefix class 1 a-, class 7 chi-, and class 9 yi- agreeing with the fronted head noun muntu 'person', chaka 'year' and chuma 'thing' in (49a), (49b), and (49c) respectively.

The prefix of the embedded question may agree with a demonstrative pronoun when the head noun is omitted in the sentence. Thus, the demonstrative could modify an underlying head noun chuma/yuma 'thing/things' which is used in non-embedded wh-questions, as shown by the example in (50) below:

(50)   a.   Nákutíya wányi oyu wúnakuhósha.

ni- na-   ku- tíya   wanyi o-   -yu wu- na-   ku- hósha
1sg- PROG- INF- understand NEG DEM -7 2sg- PROG- INF- talk
'I do not understand what you are talking about.'

Some indirect questions are similar to embedded headless relative clauses which are simply expressed by the relative prefixes class 7 chi- and class 10 zhi- which act as anaphoric pronouns for singular and plural respectively. The prefix chi- derives from the generic word chúma 'thing' used in non-embedded reason wh-questions.

(51) a.   Mwíhuli chanakukéñáyi.
              mu-   ihul -i   chi- a-   na-   ku- keñ -a -yi
              3sg.OBJ- ask -IMP REL- 3sg- PERF- INF- want -fv -3sg
              'Ask her/him what s/he wants.'

      b.   Hitúneluki zhidinakumwekana.
              hi-   tu- na-   iluk -i zhi- di- na-   ku- mwekana
              NEG- 1pl- PERF- know -fv REL- be PROG- INF- go on
              'We do not know what is going on.'

      c.   Wamwíhwíli chafúmíníyi hamukála.
              wu- a-   mu-   ihul -il -i chi- a- a-   fum -in -yi ha-
              3sg- PAST- 3sg.OBJ- ask -RP -fv REL- 3sg- PAST- leave -RP -3sg LOC-

              mukala
              village
              'He asked him the reason why he had left the village.'

The embedded questions in (51a) through (51c) are similar to headless relative clauses

which are simply expressed by the relative prefix chi-.

Embedded locative questions are expressed by means of the same syntactic

structures as those of relative clauses. Consider the following examples:

(52) a.   Hinélukiku kwashamañáyi.
              hi-   na-   iluk -i -ku   ku- a- a-   shakam -aña -yi
              NEG- 1sg.PERF- know -fv -NEG- LOC- 3sg- TNS- live   -HAB -3sg
              'I do not know where s/he lives.'

      b.   Namulezha kwayíliyi.
              ni- a-   mu-   lezh -a ku- a- a-   y -il -i -yi
              1sg- PAST- 3sg.OBJ- tell -fv LOC- 3sg- TNS- go -RP -fv –3sg
              'I told him where he had gone.'

Lunda has a variant embedded WH-question construction whereby the

complement clause precedes the main clause whose verb is in the infinitive form. That is,

the negative particle néhi 'no' occurs in the main clause rather a finite clause. In (53a)

through (53c) the postposed embedded WH-questions precedes the main clause:

(53)   a.   Oyu wúnakuhósha, ami kutíya néhi.
             o-   -yu wu- na-   ku- hosha ami- ku-   tiya   néhi
             DEM -7   2sg- PROG- INF- talk   1sg- INF- understand NEG
             'I do not understand what you are talking about.'

          b.   Kwashamañáyi, ami kwíluka néhi.
             ku-   a-   a-   shakam -aña   -yi ami ku-   iluka néhi
             LOC- 3sg- TNS- live   -HAB -3sg 1sg- INF- know NEG
             'I do not know where s/he lives.'

          c.   Chelayi, ami kwíluka néhi.
             chi- a-   a-   il -a -yi   ami- ku-   iluka néhi
             how 3sg- PAST- do -fv -3sg 1sg- INF- know NEG
             'I do not know how s/he did it.'

Embedded questions in the infinitive forms are formed by simply affixing the

infinitive verb to the prefix, as illustrated by the following examples in (53a) and (53b):

(54)   a.   Néluki wányi kwakuya.
             na-   iluk   -i   wányi ku-a- ku-   ya
             1sg.PERF- know -fv NEG LOC- INF- go
             'I do not know where to go.'

          b.   Nadízili mwakuhemena
             ni- a-   diz   -il   -i   mu-a- ku- hem -en   -a
             1sg- PAST- learn -RP -fv REL- INF- play -APP -fv
             'I learned how to play.'

<div align="center">10.2 Manipulatives</div>

<div align="center">10.2.1 Imperative</div>

The imperative verb form that serves to express orders, commands and

instructions occurs only in combination with 'the second person singular and plural'

(Comrie 1976:307). Thus, the function of the imperative is to elicit an action (Givón

2001:318). In Lunda, the main use of the imperative verb form is a command or an

appeal, as illustrated by the following examples in (55):

(55) a.   Declarative:
              Wúdi nakutála kúnu
              wu- di na-   ku- tála ku- nú
              2sg- be PROG- INF- look LOC- DEM
              'You are looking here.'

      b.   Imperative:
              Taláku kúnu!
              tál -a ku- nú
              look -fv LOC- DEM
              'Look here!'

(56) a.   Declarative:
              Múdi nakutála kúnu
              mu- di na-   ku- tala ku- nú
              2pl- be PROG- INF- look LOC- DEM
              'You are looking here.'

      b.   Talénu kúnu!
              tál -enu   ku- nú
              look -IMP.2pl LOC- DEM
              'Look here!'

The imperative is not only used in commands and orders in Lunda, it also serves

to express greetings, welcoming and bidding farewell. Consider the following examples:

(57) a.   2nd singular: kóláku!   'how are you?' (< kola 'be strong')
              2nd plural: kólenu!   'how are you?'

      b.   2nd singular: shíkáku!   'Welcome!'   (< shika 'arrive')
              2nd plural: shíkénu!   'Welcome!'
              2nd plural: endañáhu!   'Have a nice trip'

      c.   2nd singular: shálakúhu!   'Good-bye!'   (< shála 'remain')
              2nd plural: shálenúhu!   'Good-bye!'
              2nd plural: endenuñáhu!   'Have a nice trip'

The verb in the imperative form may be used with the auxiliary verb <u>kwenda</u> 'to walk, move, travel' to express a continuing action:

(58)　Mwenda múzáta.
　　　mu- enda mu- záta
　　　2pl- AUX 2pl work
　　　'You must keep working.'

10.2.2 Subjunctive

The subjunctive verb form is very common and has several uses in Lunda. It may be used in independent sentences to express a polite command, a wish, a desire either stated or interrogated, a request, etc. It also occurs in dependent clauses to refer the future, that is, to the events or state of affairs which are posterior by logical implication. These include complement clauses after some modality (subject control) verbs and manipulative (object control), subordinate clauses of purpose, etc.

10.2.2.1 Polite Form of the Imperative

Most frequently, it is used as a more polite alternative to the imperative form in the second person singular and plural subject as well as the third person plural. A third person plural class 2 subject marker <u>a-</u> 'they' can be used to show respect to a superior or an elder. This subjunctive usage applies to both simple subjunctive and future/distal subjunctive. In most cases, this may be combined with the word <u>mwani</u> 'please' if desired.

(59)　a.　　Mwíñíli mwitála.
　　　　　　wu- iñil -i　　mu- itála
　　　　　　2pl- come -SUBJ LOC- house
　　　　　　'You may come in the house.'

b.   Eñíli mwani.
        a- iñil   -i   mwani
        3pl- come in -SUBJ please
        'Could/may you come in please.'

10.2.2.2 Two or More Orders

The subjunctive can also be used in imperative constructions as a consecutive

form to indicate purpose or an indirect command. When two more orders are expressed,

only the first verb in the sentence is coded in the imperative form and all the following

verbs in a sequence are in the subjunctive form. The sentence consists of a sequence of

commands, requests or orders with a purpose.

(60)   a.   Twaya wúmoni
            twaya wu- mon -i
            come 2sg- see -SUBJ
            'Come and see'

      b.   Yáña wutambíki mwána enzhi kúnu.
            y -aña wu- tamb -i   mwana a-   inzh -i ku- nú
            go -IMP 2sg- bring -SUBJ child   3sg- come -fv LOC- DEM
            'Go and call the child in order that s/he comes here.'

10.2.2.3 Request, Permission and Suggestion

The subjunctive is also employed to ask for permission and to express request,

and suggestion with first, second and third person singular and plural subjects. More

often, the use of the subjunctive includes asking for permission, respecting the wishes of

other people, and asking for advice.

(61)   a.   Asking for permission:
Nímutámbiki?
ni-   mu-   tambik -i
1sg- 3sg.OBJ- call   -SUBJ
'Should/may/can/must I call him?'

        b.   Suggestion:
Twílidi mwani?
tu- il -i   -di
1pl- do -SUBJ -INT
'What should we do?'

        c.   Nítáli mwani!
ni- tal -i mwani
1sg- look -SUBJ please
'Let me look please!'

10.2.2.4 Exhortative Use of the Subjunctive

The subjunctive is used as an exhortative form whereby the speaker exhorts the

addressee(s) to participate in realizing the event along with the speaker. The verb prefixes

the first person plural subject prefix tu- 'we' and suffixes the vowel -i when addressed to

one person. When the speaker addresses more than one person, the verb suffixes the

plural affix -enu which is formally identical to the independent pronoun enu 'we, us'.

Note the following examples in (62a) and (62b):

(62)   a.   Tuyí!   'Let us go!'
                 Túdi!   'Let us eat!'
                 Túnwi!   'Let us drink!'

        b.   Túyénu!   'Let us go!'
                 Túdénu!   'Let us eat!'
                 Túnwénu!   'Let us drink!' <   nwa   'drink'

The subjunctive may also follow the exhortative form when the speaker exhorts

the addressee(s) to go with, as illustrated by the following examples:

(63) Túyénu túkakami.
tu- y -enu   tu- ka- kam -i
1pl- go -IMP.2pl 1pl- FUT- sleep -SUBJ
'Let us go and sleep.'

The subjunctive is frequently used exhortatively with the verb kuya 'to go'

following the defective verbs twaya 'come' shortened to twa and twoka 'let's go', which

are only found in the imperative form.

(64) a.   Twa túyí!   'Come, let's go!'
           Twa túyénu!   'Come, let's go!'

    b.   Tokwa túyí!   'Let's keep going!'.

10.2.2.5 Hortative

Likewise, the subjunctive verb form is used as the hortative form in the third

person singular and plural.

(65) Amaníshi mudimu.
a- man -ish -i   mudimu
3sg- finish -CAUS -SUBJ work
'Let him/her finish the work.'

10.2.2.6 Subjunctive after chiña

The deontic modality particle denoting obligation or necessity chiña 'must, might,

should, ought to' requires the verb to be in the subjunctive form in clauses it introduces.

Sentences used with all of this expression points to the future and as such is irrealis.

(66) a.   Chiña wúchileti.
             chiña wu- chi- let -i
             CONJ 2sg- OBJ- bring -SUBJ
             'You should bring it.'

       b.   Akwénzhi chiña amaníshi mudimu lelu.
             a- kwenzhi chiña a- man -ish -i   mudimu lelu
             2- youth   CONJ 3pl- finish -CAUS -SUBJ work   today
             'The youth should finish the work today.'

10.2.2.7 Subjunctive after kánda

The verb following the expression kánda 'not yet' occurs in the subjunctive and

suffixes the negative marker -ku to code situations that have not yet taken place.

(67)   Akwénzi kanda amaníshi mudimúku.
         a- kwenzhi kanda a- man -ish -i   mudimu -ku
         2- youth   not yet 3pl- finish -CAUS -SUBJ work   -NEG
         'The youth have not yet finished the work.'

Kanda can also be used with the meaning of 'never'. In this case, the verb suffixes

the locative ha- plus the morpheme -u, as illustrated by the example in (68).

(68)   Kanda amónihu mutúpa.
         kanda a- mon -i   -hu   mutúpa
         not yet 3sg- see -SUBJ -LOC lion
         'S/he has never seen a lion.'

10.2.2.8 Prohibitives

Negative imperatives or prohibitives, both simple and polite, are distinct from

negative declarative sentences in Lunda. The construction requires the use of the word

báyi meaning 'do not' in preverbal position plus the verb in the subjunctive form and the

postverbal negative marker -ku suffixed to the verb.

(69) Báyi wúyikokúku
      báyi wu- y -i   -koku -ku
      CONJ 2sg- go -SUBJ -17   -NEG
      'Do not go there!'

10.2.2.9 Negative Subjunctive

In Lunda, a negative subjunctive is expressed periphrastically by means of the

verb <u>búla</u> 'lack, want, be without; fail, omit' in the subjunctive form as an auxiliary

followed by an infinitive complement clause. Consider the following example:

(70) Mwéleki mwána kulonda abúli kudila.
      mu-   elek -i   mwána kulonda abúl -i   ku- dila
      3sg.OBJ- carry -SUBJ child   PURP   lack -SUBJ INF- cry
      (Lit: Carry the child so that he/she may omit to cry)
      'Carry the child so that s/he may/should not cry.'

CHAPTER XI

INTERCLAUSAL RELATIONS

This chapter describes and analyzes the different types of interclausal relations that exist in Lunda. They can be divided into two broad categories, adverbial clauses and chained coordinate clauses, depending on the nature of the structural relationship between their constituent clauses. It further deals with the syntactic structures as well as the semantic properties of the clauses that are linked. The chapter is organized as follows: section 1 provides a detailed analysis of the various the types of adverbial clauses, while section 2 describes chained clauses.

11.1 Adverbial Clauses

In Lunda, adverbial clauses can be grouped into two major classes, namely, those that display the same surface syntactic structures as headless relative clauses and are marked by prefixes (see chap IX section 9.8), and those that are linked to the main clause by means of independent subordinators or connectives. The first category consists of time, place and manner adverbial clauses, whereas the other group is made up of conditional, concessive, purpose and reason adverbial clauses.[1]

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[1] This parallels the two major classes of adverbial clauses postulated by Thompson and Longacre (1985:178-179).

11.1.1 Place

In Lunda, adverbial clauses of place have exactly the same syntactic structures as object relative clauses without heads in that they begin with one of the locative prefixes hi-, ku- and mu- attached to the verb. The locative prefixes on their own implicitly supply the meaning. Furthermore, adverbial clauses of place display all the syntactic properties and rules applicable to object relative clauses involving both first and second person subjects, and third person subjects. Third person nominal subjects occur after the verb like third person nominal subjects of relative clauses. Since the preverbal third person human subject prefix a- is overshadowed by the locative prefix, it is repeated as a clitic pronoun on the adverbial clause verb, as can be illustrated by (1b) below:

(1)   a.   Wayíli kwasháka̱mi̱néña Muke.
              wu- a-   y -il -i ku- a- a-   shakam -in -a -eña Muke
              3sg- PAST- go -RP -fv LOC- 3sg- TNS- live   -RP -fv -HAB Muke
              'S/he went to where Muke lived.'

    b.   Wudi hashíyilíyi mpása.
              wu- di ha- a- a-   shiy -il -i -yi mpása
              3sg- be LOC- 3sg- PAST- leave -RP -fv -1 9.mat
              'S/he is where s/he had left a mat.'

    c.   Munéñila munazówi.
              mu- ni- a-   iñil -a mu- na- zow -i
              LOC- 1sg- PAST- enter -fv LOC- PERF- be wet -fv
              'Where I entered is wet.'

Like relative clauses, a locative demonstrative pronoun, which can further be reduplicated for emphatic purpose, may also be used in conjunction with the prefix referring to place.

(2) a.   Oku kutúnakuya kuchidi kwakulehi.
            o   -ku   ku-   tu- na-   ku-   y -a ku-   chi- di kwaku- lehi
            DEM -LOC REL- 1pl- PROG- INF- go -fv LOC- still be LOC-   far
            'Where we are going is still far.'

      b.   Koku kutúnakuya kuchidi kwakulehi.
            ku- o   -ku   ku-   tu- na-   ku-   y -a chi- di kwaku- lehi
            LOC- DEM -LOC REL- 1pl- PROG- INF- go -fv still- be LOC-   far
            'Where we will go is far.'

<center>11.1.2 Time</center>

Adverbial clause of time constructions in Lunda can be divided into two major

types, 1) some adverbial clauses of time have all the surface characteristics of relative

clauses in that they display the same syntactic structures and properties as object

relative clauses and 2) others are introduced by various kinds of connectives and affixes

or a combination of both.

<u>11.1.2.1 Time Clauses with Relative Construction Features</u>

Adverbial clauses of time with relative construction features are introduced by

the prefix chi- or the locative demonstrative hána used as a conjunction meaning 'when'

plus the relative prefix hi- attached to the verb of the adverbial clause. The

demonstrative may be omitted leaving only the prefix to mark the clause of time. First

and second person subject prefixes occupy the preverbal slot following the relative

prefix, whereas third person subject nouns occur post-verbally. However, when the

subject of the adverbial clause is a third person class1 or class 2 noun, the verb suffixes

-yi and -wu respectively. Consider the following examples of adverbial clauses of time:

(3)   a.   Chakenzáyi anyána akazañalala.
             chi- a- aka- inz -a -yi a-nyi-ana a- aka- zañalala
             REL- 3sg- FUT- come -fv -3sg- 2-4-children 3pl- FUT- rejoice
             (Lit: 'the children will rejoice when he will come.'
             'The children will rejoice when he comes.'

       b.   Namumona hána hinadíña nakuya kukalóña.
             ni- a- mu- mon -a hana hi- ni- a- di -ña
             1sg- PAST- 3sg.OBJ- see -fv when REL- 1sg- PAST- be -IMPF

             na- ku- ya ku- kaloña
             PROG- INF- go LOC- river
             'I saw him as I was going to the river.'

The following construction (4) is an example of an adverbial clause in which the

expression of time <u>hána</u> is omitted:

(4)   Namumona hínadiña nakuya kukalóña.
        ni- a- mu- mon -a hi- ni- a- di -ña na-
        1sg- PAST- 3sg.OBJ- see -fv when- 1sg- PAST- be -IMPF PROG-

        ku- ya ku- kalóña
        INF- go LOC- river
        'I saw him as I was going to the river.'

There is a slight difference between adverbial clauses of time with inanimate

subjects and those with animate subjects. The difference lies in the fact that the former

employs the same subject prefixes in both independent clauses and adverbial clauses, as

illustrated in (5):

(5)   a.   chichakótókeli chitwámu
          chi- chi- a- kotok -el -i chitwamu
          when- 7- PAST-break -RP -fv tree
          'when the chair broke'

     b.   chiweméni wátu
          chi- wu- a- iman -en -i wátu
          when- 14- PAST- stop -RP -fv boat
          'when the boat stopped'

The prefixes chi- used in (5a), and wu- in (5b) are subject markers agreeing with the

postverbal subject nouns chitwámu 'chair' and wátu 'boat' respectively.

More frequently, the verb kwila[2] 'to do, make' is used to function as an auxiliary

followed by the main verb in the perfect aspectual form in adverbial clauses of time

introduced by the prefix chi- to denote an action immediately preceding that of the main

clause in the past or future tense. It has the meaning of 'when' or 'after'. The use of this

verb as an auxiliary in adverbial clauses of time is given in (6):

(6)   Chiyélilíwu anawuki dehi kukalóña, emeni nakuhanjika.
        chi- a- a-   il -il -i -wu a- na-   wuk -i dehi ku- kalóña
        when- 3pl- PAST- do -RP -fv -3pl 3pl- PERF- cross -fv already LOC- river

        a- a-   iman -in -i na-   ku- hanjika
        3pl- PAST- stand -RP -fv CON- INF- chat
        'When they had crossed the river, they stood and chatted.'

Time adverbial clauses encoding the beginning of a period of time or the

temporal point of origin to which the main clause applies with the meaning 'from the

time, since' also exhibit the syntactic structures of relative constructions, and are

expressed by the infinitive kufúma 'to go out, come from' or kutáchika 'to begin'

functioning as prepositions. The first element of such constructions is the prefix

attached to the verb and agrees with the head noun, an expression of time such as ifúku

'day' mwáka or cháka 'year', hána 'when, since', kakwézhi 'month', etc. Beside

marking the starting point of a durative event or state, the infinitive can also encode the

location. The clause in (7) shows the use of the infinitive in a temporal adverbial clause:

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[2] The use of the verb 'to do' as an auxiliary in adverbial clauses of time has been observed and attested in Luvale which is genetically related to Lunda (Horton 1949:132-133).

(7)   Kufúma hána hayílíyi kanda túmumoníku.

kufuma hana hi-   a-   a-   y -il -i -yi kanda tu- mu-
from   when REL- 3sg- PAST- go -RP -fv -3sg not yet 1pl- 3sg.OBJ-

mon -i   -ku
see -SUBJ -NEG
'We have not seen him since he went.'

The temporal prefix h̲i̲- alone is generally used in such adverbial constructions

when the expression of time is left out. Note the following example in (8).[3]

(8)   Nyawiza wanatíli mavumu ayedi kufúma hasúmbúkilíyi.

Nyawiza wu- a-   nat -il -i ma- vumu   a- yedí ku- fuma
Nyawiza 3sg- PAST- throw -RP -fv 6-   pregnancy 6- two INF- come

hi-   a- sumbul   -il -i -yi
REL- 3sg- get married -RP -fv -3sg
(Lit: 'Nyawiza threw away two pregnancies from the time she got married.')
'Nyawiza had two miscarriages from the time she got married.'

There is another construction to mark the beginning of a durative/continuing

event or state. It is introduced by the conjunction saña 'since, ever since, still', as

exemplified by the following sentence in (9):

(9)   Musonyeyi saña alékelíyi kwenda mumátu, wakumináña dakukimboka.[4]

musonyi eyi saña a- a-   lek -ili -yi ku- enda mu- ma- tu
cousin   2sg since 3sg- PAST- stop -RP -3sg INF- travel LOC- 6-   boat

wu- a-   kum -in   -a da- ku-   kimbwoka
3sg- PERF- end -APPL -fv 5- INF- wander
(Lit: 'Your cousin ever since he stopped traveling in boats, he ends up
wandering.')
'Ever since your cousin stopped traveling in boats, he just wanders.'

For the adverbial clauses of time which indicate a terminal point for a durative

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[3] The example in (8) is a modified version of a sentence drawn from Matoka (1995:15).
[4] This sentence is drawn from Chilayi (1969:14), but I have changed the verb k̲i̲m̲b̲w̲o̲k̲a̲ with p̲e̲k̲w̲a̲ñ̲i̲l̲a̲.

or iterative point, that is, the clause encodes ongoing events or state up to a certain

termination point, Lunda makes use of the disyllabic prefix <u>nichi</u>- 'till, until'

attached to the verb of the dependent clause. The prefix might have derived from the

demonstrative <u>ichi</u> 'this'. The connective <u>sampu</u>, 'till, until' is also used to introduce an

adverbial clause of time, but the constructions in which it is involved do not exhibit

relative construction syntactic features.

(9)   a.   Wazátíshili munzhila yamasaña hohu nichashíkilíyi ku Yambezhi.
        wu- a-   zat -ish -il -i nzhila yi-a-   ma- saña hohu nichi-
        3sg- PAST- work -ish -RP -fv 9.path 9-POSS- 6-   bush only REL-

        a- a-   shik -il -i -yi ku- Yambezhi
        3sg- PAST- arrive -RP -fv -3sg LOC- Zambezi
        'He used a bush path until he reached Zambezi.'

    b.   Túnalémbi netu túshakámi kúnu sampu yena nenzi.
        tu- na-   lemb -i netu   tu- shakam -i   ku- nú
        1PL- PERF- ask -fv COMP 1PL- stay   -SUBJ 17- DEM

        sampu yena na-   inz -i
        till   3sg   PERF- come -fv
        'We ask that we stay here till he comes.'

11.1.2.2 Other Types of Adverbial Clauses of Time

The independent connective <u>néyi</u> 'when, if, whether' which is used to introduce

conditional adverbial clauses also serves as a temporal marker in adverbial clauses of

time. The verb of the adverbial clause is usually either in the present perfect to encode

general truths in the present or in the past to express an habitual occurrence. The sharing

of the same grammatical marking by conditionals and adverbial clauses of time is

commonplace in many languages (Givón 2001:332).

(10)   a.   Wahosháña nánkashi néyi nashéti.
               wu- a-   hosh -aña nankashi neyi na-   shet   -i
               3sg- TNS- talk -HAB a lot   when 3sg.PERF- be drunk -fv
               'S/he talks a lot when s/he is drunk.'

        b.   Hakéñaña kumutambikúku neyi nakuzáta.
               hi- a- a-   keñ -aña ku- mu-   tambika -ku   neyi
               NEG- 3sg- TNS- like -HAB INF- 3sgOBJ- call   -NEG when

               na-   ku- zata
               3sg.PERF-INF- work
               'S/he does not like being called when s/he is working.'

The type of adverbial clause of time that indicates simultaneity is introduced by the locative demonstrative iku 'here, while', used as a temporal connector, with the meaning 'while'. The verb of the adverbial clause is either coded in the present progressive aspect, present perfect aspect for stative verbs or has no tense-aspect marking to encode a durative event or state. In the latter case, the verb must be preceded by the grammaticalized auxiliary enda 'walk, move, travel' and the tense is indicated by the verb of the main clause, as illustrated in (11).

(11)   a.   Antu atáchíkili kumwañala iku anakunyíkumuna kunyítu.
               antu   a- tachik -il -i ku- mwañala iku a- na-   ku-
               2-people 3pl- start   -RP -fv INF- disperse while 3pl- PROG- INF-

               nyíkumuna nyi- tú
               shake   4- head
               'People started to disperse while shaking their heads.'

        b.   Atwánsi adíñi nakuhema iku enda emba.
               a- tu-ánsi a- di -ñi na-   ku- hema iku a-   enda a-   imba
               2- 13-child 3pl- be -RP PROG- INF- play while 3pl- AUX 3pl- sing
               'The children were playing while singing.'

The locative demonstrative that signals simultaneity can also be used in combination with the continuative conjunction saña 'still, ever since' or the temporal

disyllabic prefix <u>chochi-</u> 'still, since, ever since, the time that' followed by a relative

clause whose verb is in the tense-aspect. In addition, the verb of the relative may be

marked with the applicative verbal extension to denote continuing situations and events,

as the examples (12a) and (12b) indicate:

(12) a. Awamayála atáchíkili kudihuzhola iku saña chemenáwu mwiluña dimu.
    a- ma- yala a- a- tachik -il -i ku- di- ihul -zhol -a iku
    2- 6- man 3pl- PAST- begin -RP -fv INF- REC- ask -CONT -fv while

    saña chi- a- a- iman -in -a -wu mu- i- luña
    PERS REL- 3pl- PERF- stand -APPL -fv -3pl LOC- 5- open space

    di- mú
    5- one
    'The men began asking each other repeatedly while they were standing
    in an open space.' (Matoka 1995:32)

  b. Iku chochashakamáyi helola, mukwénzi watwésheli kumóna mpáta
    chiwahi.
    iku chochi- a- a- shakam -a -yi ha- ilola mukwánzi
    while PERS- 3sg- PERF- sit back -fv -3sg- LOC- rock youth

    wu- a- twesh -il -i ku- móna mpáta chiwahi
    3sg- PAST- be able -RP -fv INF- see dry land properly
    'While he was sitting on a rock, the youth was able to see the dry land
    properly.'

Adverbial clauses of time that encode persistent events or states, but not

duration, are expressed by means of the demonstrative pronoun <u>henohu</u> 'when, while,

as' in conjunction with the persistive marker <u>chi-</u> 'still' prefixed to the copular verb <u>di</u>

'be' followed by the main verb in the progressive aspect. In other words, the main

clause describes an event which takes place while the activity or state described by the

adverbial clause is ongoing. Such kinds of adverbial clause of time constructions differ

syntactically from the ones described above in that they have no relative clause verb

forms. Consider the following examples in (13):

(13) a. Walékeli mudimu henohu wuchidi kuLusaka.
wu- a-   lek -el -i mudimu   henohu wu- chi- di ku- Lusaka
3sg- PAST- stop -RP -fv employment while 3sg- still- be LOC- Lusaka
'He quit employment while he was still in Lusaka.'

b. Namumwéni henohu wuchidi kuzáta.
ni- a-   mu-   mon -en -i henohu wu- chi- di ku- záta
3sg- PAST- 3sg.OBJ- see -RP -fv while 3sg- still- COP INF- work
'I saw him while he was still working'

Constructions in which the event encoded by the verb in the main clause

chronologically precedes the situation coded by the verb in the dependent adverbial

clause, Lunda employs the same demonstrative pronoun henohu 'while, when'

combined with the conjunction kanda 'before, not yet' followed by the verb in the

subjunctive form.[5] This type of 'before' adverbial clauses of time, which has been

described as "conceptually negative from the point of view of the event in the main

clause" (Thompson and Longacre 1985:182), is not peculiar to Lunda only.

(14) a. Twádíña twaya déhi henohu kánda ashíki.
tu- a-   di -ña   tu- a-   y -a dehi   henohu kanda a-
1pl- PAST- be -IMPF 1pl- PAST- go -fv already when   not yet 3sg-

shik   -i
arrive -SUBJ
'Before he arrived, we had already gone home.'

---

[5] The use of the conjunction kánda 'not yet, before', an imperative negative word, in clauses supports
Thompson and Longacre's (1985: 182) view that such clauses are 'conceptually negative from the point of
view of the main clause.'

    b.   Henohu kánda amwákuli, Matewu wahúndíkili nakutoñozhoka.
              henohu kanda a-   mu-   akul -i   Matewu wu- a-
              when   not yet 3sg- 3sg.OBJ- reply -SUBJ Matewu 3sg- PAST-

              hundik   -il -i   na- ku-   toñozhoka
              remain silent -RP -fv and- INF- think
              'Before he replied, Matewu remained silent thinking.'

Adverbial clauses of time that code events that have occurred prior to those expressed by the main clause are introduced by the locative noun hanyíma 'back, behind,' used as connective to mean 'after' followed by the verb in the infinitive form prefixing the possessive agreement prefix ya- which agrees with the noun class of the word nyíma 'back'. The temporal relation of the adverbial clause to the main clause is that of subsequence (Givón 2001:330). The subjects of such adverbial clauses are the same as those of the main clauses. An example of such a construction is given in the following example in (15):

(15)   Wafúntili kumukála hanyíma yakukuzuñisha mukwáwu.
        wu- a-   funt   -il -i ku-   mukála ha-   nyíma yi- a-   ku- zuñ
        3sg- PAST- go back -RP -fv LOC- village LOC- back   8-   POSS- INF- fight

        -ish   -a mukwawu
        -CAUS -fv friend
        'S/he went back to the village after having fought his friend.'

Other adverbial clauses of time are introduced by infinitives attached to the locative prefix ha- which indicates time.[6] They encode events or states that are simultaneous with the main clause. The subjects of such adverbial clauses are the same as those of the main clauses (Givón 2001:338). Furthermore, being non-finite the

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[6] This is translated as the equivalent of the English present participial.

verbs of the dependent clause do not agree with their subjects as is the case with finite

verbs. Consider the following examples in (16) and (17):

(16)   Mukwénzi hakushika kúna, wawéni mukwáwu nashákami.
        mu- kwenzi ha-   ku- shika ku- ná   wu- a-   wan -ini
        1-   youth   LOC- INF- arrive LOC- DEM 3sg- PAST- find -RP

        mu- kwawu na-   shakam -i
        1-   friend 3sg.PERF- sit down -fv
        'Upon arriving there, the youth found his friend had sat down.'

(17)   Kabuchi watíyili kuwáha nánkashi hakumóna akwáwu ashíyiliyi adi
        nakumusambilila.
        Kabuchi wu- a-   tiy -il -i   kuwaha nankashi ha-   ku-   mona
        Kabuchi 3sg- PAST- feel -RP -fv good   very much LOC- INF- see

        a- kwawu a-   a- a-   shiy   -il -i -yi a- di
        2- friend   REL- 3sg- PAST- leave behind -RP -fv -3sg 3pl- be

        na-   ku- mu-   sambilila
        PROG- INF- 3sg.OBJ- welcome
        (Lit: 'Kabuchi was very happy seeing his friends he had left behind are
            welcoming him.')
        'Kabuchi was very happy when he saw his friends he had left behind welcome
         him.' (Chilayi 1989:31)

The verb <u>kumóna</u> 'to see' tends to occur more frequently than any other verb in

adverbial clauses of time whose verbs are in the infinitive form. The verb may also be

combined with complementizer <u>néyi</u> 'that'.

(18)   Mukwénzi hakumóna néyi mukwáwu nenzi dehi, wanzañaleli.
        mu- kwenzi ha-   ku- móna néyi   mu-kwáwu na-   inz -i dehi
        1-   youth   LOC- INF- see   COMP 1-   friend 3sg.PERF- come -fv already

        wu- a-   zañalal -ili
        3sg- PAST- rejoice -RP
        'Seeing that his friend had already come, the youth rejoiced.'

11.1.3 Manner

Lunda has two types of adverbial clause of manner constructions. The first type of

adverbial clauses of manner are structurally similar to headless object relative clause

constructions and are marked by the presence of the relative prefix chi- or mu- attached

to the verb. Like headless relative clauses and adverbial clauses of time, adverbial clauses

of manner with animate third person both singular and plural subjects employ the same

subject prefix a- with a coreferential pronominal suffix marked on the verb. Quite often,

the prefix chi- may co-occur with the conjunction néyi 'like, as, as if, like' .[7] Consider the

following examples in (19) and (20) that show adverbial clauses of manner with either of

the two prefixes:

(19)   Clauses marked by the prefix chi-:
    a.   Ilaku néyi chinákulezhi
          ila -ku   neyi chi- na-   ku-   lezh -i
          do -IMP2sg like how- 1sg.PERF- 2sg.OBJ- tell -fv
          'Do as I have told you.'

    b.   Wúnamóni mpáta chiyinakukálumuka.
          wu- na-   mon -i mpata chi- yi- na-   ku- kalumuka
          2SG- PERF- see -fv country REL- SM9- PROG- INF- change
          'You see how (the way) the country is changing.'

(20)   Clauses marked by the prefix mu-:
    a.   Wayilézheli mwamulézhelíyi nfumwindi.
          wu- a-   yi-   lezh -el -i mu- a- a-   mu-   lezh -el
          3sg- PAST- 3pl.OBJ- tell -RP -fv LOC- 3sg- PAST- 3sg.OBJ- tell -RP

          -i   -yi nfumu indi
          -fv -3sg husband 3sg
          'She told them as her husband had told her.'

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[7] The use of the conjunction co-occurring with the prefix has also been described in Luvale (Horton 1949:203).

b.   Tiyaku mwanahoshilíyi.
      tiya -ku mu- a- na- hosh -i -yi
      listen -IMP LOC- 3sg- PERF- say -fv -3sg
      'Listen how he has said it.'

The conjunction néyi may be followed by the adverb of manner chochi 'thus, like

the way' or chochína 'thus, like the way that' which derive from demonstratives.

(21)   Wela néyi chochi náhosha.
        wu- a-   il -a neyi chochina ni- a-   hosh -a
        3sg- PAST- do -fv as   thus   1sg- PAST- say   -fv
        'He did as I said.'

Moreover, even passivized adverbial clauses of manner have the syntactic

features similar to those of headless object relative clauses. This is illustrated by the

following example in (22):

(22)   Wayilúmbúlwili chasoñañáwu nkishi.
        wu- a-   yi-   lumbulul -il -i chi- a- a-   soñ -a -ña -wu
        3sg- PAST- 3pl.OBJ- explain   -RP -fv 7- 3pl- TNS- carve -fv -HAB -3pl

        nkishi
        statue
        'He explained to them how statues are carved.'

In addition to the two prefixes that signal adverbial clauses of manner, Lunda also

employs the conjunction néyi 'like, as, as if' to indicate manner. In this case, the

adverbial clause has the structure of an independent clause, as shown by the following

examples in (23) and (24):

(23)   Nakumwekana neyi amusuma kudi mayanvu.
        na-   ku- mwekan -a neyi a- a-   mu-   sum -a kudi mayanvu
        3sg-PROG- INF- appear   -fv like 3pl- PAST- 3sg.OBJ- sting -fv by   wasps
        'He appeared as if he was stung by wasps.'

(24) Chamwékeni néyi twákakányaña.
      chi- a-   mwekan -en -i neyi tu- aka- kanyañ -a
      7- PAST- appear   -RP -fv as if 1pl- FUT- fail   -fv
      'It appeared as if we would fail.'

11.1.4 Conditionals

Conditional constructions denote a direct condition in that the situation in the

main clause is directly contingent upon the situation in the conditional clause. In Lunda

conditional clauses are introduced by the subordinator néyi 'if, whether, when', and use

the same tenses as the indicative mood. Normally, conditional clauses occur in sentence

initial position preceding the main clause, though the reverse order is also found.

(25) Néyi túnashíki twákayisónekela.
      néyi tu- na-   shik -i tu- aka- yi-   sonek -el   -a
      if   1plL- PERF- arrive -fv 1pl- FUT- 3pl.OBJ- write -APPL -fv
      'If we arrive, we will write to you.'

Lunda has two major types of conditionals, namely, simple conditionals and

counterfactual conditionals.

11.1.4.1 Simple Conditionals

Simple conditionals[8] refer to future events which may be certain or very likely to

occur if the condition of the main clause is realized, that is, the truth of the condition is

dependent upon the associated main clause being true. In Lunda, simple conditionals

are introduced by the connective néyi 'if, whether, when, whenever' and include the

two types of conditional sentences that Bybee, Perkins and Pagliuca (1994: 322)

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[8] Thompson and Longacre (1985:191) describe the simple conditional as 'predictive conditional'.

describe as 'reality condition' and 'hypothetical condition'.[9] The verb of the simple

conditional clause can be marked in the habitual, present progressive, present perfect,

future tenses or in the narrative tense, while that of the main clause can be inflected

with future tenses such as near, remote and eventual or in the imperative mood. This

type of conditional has been described as irrealis (Givón 1990:829, 2000:331).[10]

(26)   a.   Néyi nenzi, mulezhi anlondeli.
              néyi na-   inz -i mu-   lezh -i   a- n-   londel
              if   3sg.PERF- come -fv 3sg.OBJ- tell -SUBJ- 3sg- 1sg.OBJ- follow

              -i
              -SUBJ
              'If he comes, tell him to follow me.'

          b.   Néyi nachitiyi, wukwinza.
              néyi na-   chi- tiy -i wu- ku- inz -a
              if   3sg.PERF- OBJ- hear -fv 3sg- FUT- come -fv
              If he hears about it, he will come.'

          c.   Néyi wukuchitiya, wukwinza.
              néyi wu- ku-   chi- tiy -a wu- ku- inz -a
              if   3sg- FUT- OBJ- hear -fv 3sg- FUT- come -fv
              If he hears about it, he will come.'

          d.   Nákayilezha néyi nákamumóna.
              ni- aka- yi-   lezh -a néyi ni- aka- mu-   mon -a
              3sg- FUT- 2pl.OBJ- tell -fv if   1sg- FUT- 3sg.OBJ- see -fv
              'I will tell you if I see him.'

The conditional subordinator <u>néyi</u> is also used to introduce an adverbial clause

of time and normally requires the verb to be marked in the present perfect to express a

general truth or a frequent occurrence.

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[9] Bybee et al define a 'reality condition' as a conditional relation between two propositions referring to the so-called real world, while 'hypothetical condition' involves an unreal situation, but one that could be true.

[10] According to Givón (2000:331), 'irrealis conditionals have an implied futurity, with the main clause itself marked by either future, modal or some other irrealis operator'.

(27)   a.   Mukéki wadiláña néyi natíyi nzala.
               mukeki wu- a-   dil -aña néyi na-   tiy -i nzala
               1-baby 3sg- TNS- cry -HAB if   3sg.PERF- feel -fv hungry
               'The baby cries when s/he feels hungry.'

       b.   Néyi nasheti wahoshaña nákanshi.
               néyi na-   shet   -i wu- a-   hosh -aña nakanshi
               if   3sg.PERF- be drunk -fv 3sg- TNS- talk -HAB a lot
               'When s/he is drunk, s/he talks a lot.'

11.1.4.2 Counterfactual Conditionals

The counterfactual conditional 'involves propositions that could have been true

but were not true' (Bybee, Perkins and Pagliuca 1994; Givón 2000; Thompson and

Longacre 1985). In Lunda, when the condition was not fulfilled or realized, the

conditional clause is introduced by the connectives néyi 'if' with the verb in either the

near past or remote past tense according to the temporal degree in relation to the time of

speech. The verb formation in the main clause may consist of the copular verb di 'to be'

inflected in the subjunctive mood followed by the main verb in the infinitive form.

(28)   Nadi kuháyama néyi wákana.
        ni- a-   di   ku- hayáma   néyi wu- a-   kan   -a
        1sg- PAST- COP INF- be surprised if   2sg- PAST- refuse -fv
        'I would have been surprised if you had refused.'

Depending on the dialect, the main clause may also be introduced by one of the

conjunctions muténowu 'if', chíña 'if, if only', or ási 'if' to co-occur with the

connective in the dependent clause. The verb of the main clause may be inflected in the

subjunctive form, simple past or remote past. The grammaticalized conjunction

muténowu may have derived from the combination of the noun muténa 'sun, time' and

the distal demonstrative <u>owu</u> 'this'. The conjunction <u>chíña</u> is also used in imperative

constructions with the meaning 'ought to, must' (cf. see chap X, section 10.2.2).

(29) a.   Néyi náyisompela, chíña mwádi kuntwambila.
                 néyi ni- a-   yi-   somp -el   -a chiña mu- a-
                 if   1sg- PAST- 2pl.OBJ- try a case -APPL -fv CONJ 2pl- PAST-

                 di ku- n-   twamb -il   -a
                 COP INF- 1sg.OBJ- slander -APPL -fv
                 'If I had tried the case for you, you would have slandered me.'

      b.   Néyi twámwihula, muténowu wadi kutulezha chiwáhi.
                 néyi tu- a-   mu-   ihul -a mutenowu wu- a-   di ku-
                 if   1PL- PAST- 3sg.OBJ- ask -fv COND   3sg- PAST- be INF-

                 tu-   lezha chiwahi
                 1pl.OBJ- tell nicely
                 'If we had asked him, he would have explained to us nicely.'

The verb of the main clause does not necessarily need to be in the subjunctive

form; it may also be in the indicative mood. Examples of the main clauses with verbs

coded in the present progressive and remote past are given in (30a) and (30b)

respectively:

(30) a.   Néyi watáñili ási wúnákukóña mudimu wawuwáhi.
                 néyi wu- a-   tañ -il -i asi   wu- na-   kukoña mu-dimu
                 if   2sg- PAST- study -RP -fv CONJ 2sg- PROG- work   3- job

                 wu-a-wu-wáhi
                 3- POSS-3-good
                 'If you had studied, you would have been performing a good job.'

      b.   Néyi amulézheli mutenowu watóñózhokelíhu nzhila yikwawu.
                 néyi a-   a-   mu-   lezh -eli mutenowu wu- a-   toñozhok
                 if   3pl- PAST- 3sg.OBJ- tell -RP CONJ   3sg- PAST- think

                 -ili -hu   nzhila yi- kwawu
                 -RP -LOC way 9- another
                 'If they had told him, he would have thought about another.'

Lunda employs the negative verb <u>búla</u> 'lack, want, be without; fail, omit' in

conditional clauses to serve as a negative marker to express situations that would have

happened had something been done or taken place in the past. Such clauses have no overt

morphology to code the hypothetical condition, the special use of the negative verb

supplies an implied conditionality. Consider the following example in (31):

(31)   Etu twábula kumwíhula, mutenowu wadi kutulezha chiwáhi.
        Etu tu- a-   bul -a ku- mu-   ihula mutenowu wu- a-   di ku-
        1pl 1pl- TNS- fail -fv INF- 3sg.OBJ ask   CONJ   3sg- TNS- be INF-

        tu-   lezha   chiwahi
        1pl.OBJ- explain fully
        'We did not ask him (If we did), he would have explained to us fully.'

<h2 style="text-align:center">11.1.5 Purpose</h2>

Adverbial clauses of purpose indicate that an action is done with the intent of

realizing another state of affairs, that is, it indicates the purpose of an action of the main

clause. Lunda has several adverbial clauses of purpose constructions. The first type

is an infinitival clause attached to the prefix <u>na</u>- which appears after the main clause.

This type of purpose clause usually comes after a verb of motion in the main clause.

From a syntactic perspective, the subject of the purpose clause is omitted under equi-

deletion since it is the same as the subject of the main clause. However, the presence of

the prefix attached to the infinitive verb differentiates an adverbial clause of purpose

from a complement clause.

(32) a.   Anayi mwisaña nakuzhaha anyama.
            a- na-   y -i mu-i-saña na-   ku- zhaha a-nyi-ama
            3pl- PERF- go -fv 18-5-bush PURP- INF- kill   2-4-animals
            'They have gone in the bush to kill animals.'

      b.   Nénzhi nakuyimusha.
            na-   inz -i na-   ku- yi-   imusha
            1sg.PERF- come -fv PURP- INF- 2pl.OBJ- greet
            'I have come to greet you.'

The second type of purpose clause construction also appears after the main

clause introduced by the conjunction <u>kulonda</u> 'so that, in order that', which derives from

the verb <u>kulonda</u> 'to follow'. The verb of the subordinate purpose clause is generally

inflected in the subjunctive mood, but it may also be in the infinitive form with respect to

the main clause.

(33) a.   Akenzi kulonda kuhánjika.
            a- aka- inz -i   kulonda ku- hanjika
            3pl- FUT- come -SUBJ PURP   INF- chat
            'Let them come to chat.'

      b.   Mwinkénu chitwámu kulonda ashakámi.
            mu-   ink -enu   chi-twamu kulonda a-   shakam -i
            3sg.OBJ- give –IMP.2pl 7-chair   PURP 3sg- sit down -SUBJ
            'Give him a chair so that he sits down.'

      c.   Walondeli kumwinka mali.
            wu- a-   lond -el -i ku- mu-   inka mali
            3sg- PAST- want -RP -fv INF- 3sg.OBJ- give money
            'He wants to be given money.'

The conjunction that introduces adverbial clauses of purpose can be left out

without affecting the semantics of the clause.

(34)   Mwinkénu chitwámu ashakámi.
          mu-   ink -enu   chi-twamu a- shakam -i
          3sg.OBJ- give -IMP2pl 7-chair   3sg- sit down -SUBJ
          'Give him a chair so that he sits down.'

Adverbial clauses of purpose are also introduced by the morpheme <u>mwáka</u> which

occurs when the main clause is in the interrogative form. The verb of the embedded

clause is coded in the subjunctive form.

(35) Yaminyí mwaka antíyi?
      yi-   ami -nyí mwaka a- n-   tiy -i
      COP- 1sg -Q PURP 3sg- 1sg.OBJ- listen -SUBJ
      'Who am I that s/he may listen to me?'

11.1.6 Negative Purpose

The adverbial clauses of negative purpose 'lest' require the use of the verb

<u>kuchina</u> 'to flee, avoid' as a conjunction in the sense of 'lest' followed by the auxiliary

<u>anda/enda/inza</u> used in the formation of future tenses plus the main verb attached to the

future <u>ku-</u> or <u>ka-</u> depending on the remoteness of the situation.[11] The auxiliary also

appears coded with the future tense marker. Consider the following examples in (36a)

and (36b) that illustrate this type of an adverbial clause.

(36) a.   Waswámini kuchína akanda kamuwana.
             wu- a-   swam -in -i ku-chína a- ka- anda ka- mu-   wana
             3sg- PAST- hide -RP -fv INF- fear 3pl- FUT- AUX FUT- 3sg.OBJ- find
             'He hid himself lest he will be found.'

      b.   Mukwenzi walezheleli atwansi kunyamuka kuchina akanda kazhiña
             kushikola.
             mukwenzi wu- a-   lezh -el -i a-tu-ánsi ku- nyamuka ku- china
             youth   3sg- PAST- tell -RP -fv 2-13-child INF- get up   INF- fear

             a- ka- anda ka-   zhiñ -a ku-   shikola
             3pl- FUT-AUX FUT- miss -fv LOC- class
             'The youth told the children to get up lest they miss classes.'

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[11] Horton (1949:161) and White (1949:65) have also described a similar construction introduced by the same connective with the same meaning and function in Luvale.

11.1.7 Reason

Lunda possesses diverse adverbial clause of reason constructions which generally appear after the main clause introduced by the connectives to give explanations for the events described by the main clause verb. The language has two grammaticalized polysemous nouns muloña 'affair, case, crime, offence, fault' and ñsanu 'affair, news, information' which are used as conjunctions with the meaning 'because' to signal adverbial clauses of reason.

(37)   a.   Amukwata muloña wazhaha nzovu.
              a- a-   mu-   kwat -a muloña wu- a-   zhah -a nzovu
              3pl- PAST- 3sg.OBJ- arrest -fv because 3sg- PAST- kill -fv elephant
              'They arrested him because he killed an elephant.'

        b.   Amukwata ñsanu wazhaha nzovu.
              a- a-   mu-   kwat -a ñsanu   wu- a-   zhah -a nzovu
              3pl- PAST- 3sg.OBJ- arrest -fv because 3sg- PAST- kill -fv elephant
              'They arrested him because he killed an elephant.'

The alternative adverbial clause of reason construction has a syntactic structure relative clauses marked by the morpheme nanochu and its variants nanichi, nachína 'because, on account of, for the reason that' followed by the verb whose first constituent is the prefix chi-. The morphemes derive from the combination of na- and the class 7 demonstratives ichi 'this', ochu 'that' and chína 'that'.

(38)   a.   Amufukezha nanochu chatandáyi akwawu
              a- a-   mu-   fukezh -a nanochu chi- a-   a-   tand -a -yi
              3pl- PAST- 3sg.OBJ- betray -fv because 7- 3sg- PAST- blame -fv -3sg

              akwawu
              others
              'They betrayed him because he blamed others.'

b.   Atíyili kuwáha nakumusakilila nachina chadihémbéliliyi chiwáhi.
    a- a-   tíy -ili ku- wáha na- ku- mu-   sakilila nachina
    3pl- PAST- feel -RP INF- be nice CONJ INF- 3sg.OBJ- thank   because

    chi- a- a-   di-   hemb -el   -ili -yi chiwáhi
    7- 3sg- PAST- REFL- take care -APPL -RP -3sg good
    'They felt happy and thanked him because he took care of himself.'

Occasionally, muloña may occur in combination with nanochu to introduce a single adverbial clause of reason without changing the meaning of the construction.

(39)   Wamulezheli kudiloñesha muloña nanochu wayíléña mwisaña.
    wu- a-   mu-   ezh -el -i ku- di- loñesh -a muloña nanochu wu-
    3sg- PAST- 3sg.OBJ- tell -RP -fv INF- REF- prepare -fv because   3sg-

    a-   y -il -ena mu- isaña
    PAST- go -RP -IMP LOC- bush
    'He told him to prepare himself because he was going in the bush.'

Certain adverbial clauses of reason are introduced by a participial construction formed by means of the locative prefix ha- attached to the infinitive kumóna 'see' followed by the connective neyi plus the verb.

(40)   Hakumóna neyi amwitezheli kuya watiyili kuwaha.
    ha- ku- móna neyi a- a-   mu-   itezh -eli ku- ya wu- a-   tiy
    LOC- INF- see   that 3pl- PAST- 3sg.OBJ- allow -RP INF- go 3sg- PAST feel

    -ili ku- waha
    -RP INF- be pleased
    'Seeing that he was allowed to go, he was very pleased.'

Another type of adverbial clause of reason construction is expressed by means of the defective verb of possession kweti 'have, possess' prefixing an impersonal subject prefix chi-. The verb is followed by a noun or an independent pronoun plus a complement clause or relative clause. The complement clause is always preceded by the word mwáka and its verb must be encoded in the imperfective subjunctive mood. Compare the

following sentences (41a) and (41b) in which the reason clause precedes a complement

clause and a relative clause respectively:

(41)   a.   Chikweti yena mwaka akwawu elukeña.
            chi- kweti yena mwaka   a-kwawu a- iluk -i   -aña
            7- possess 3sg REASON 2-friend 3pl- know -SUBJ -IMPF
            'It's because of him that his friends know.'

        b.   Anukili nawu…hela adisumbuleña…, chikweti wena ayivweleli.
            a- a-   anuk   -ili nawu   …hela a- di-   sumbul -i
            3pl- PAST- remember -RP COMP.3pl   even if 3pl- REC- marry -SUBJ

            -eña…, chi- kweti wena a- a-   yi-   vwal   -il   -ili
            -IMPF 7-   possess 3pl   REL- PAST 3pl.OBJ- give birth to -APPL -RP
            (Lit: 'They remembered that…even if they are getting married, it is
            because of them who had given birth to them.')
            'They remembered that…even if they were getting married, it was because
            of they who had given birth to them.' (Kakoma 1988:37)

11.1.8 Concession

Thompson and Longacre (1985:198) define a concessive clause as one "which

makes a concession against which the proposition in the main clause is contrasted". In

Lunda, concessive adverbial clauses are introduced by the polysemous concessive

conjunction hela 'although, though, even though, whether, even if, or' to provide

contrasts between the two clauses in a sentence. The conjunction is generally used in

combination with the adverb túhu 'only, simply, just, merely' or a demonstrative pronoun.

Examples of concessive clauses are given in (42a) and (42b).

(42)   a.   Dinu itála dadiwahi, hela túhu danyanya.
            di- nu   itala   di-a-   di- wahi hela di-a-   nyanya
            5- DEM 5-house 5.POSS- 5- nice though 5.POSS- small
            'This house is nice, though it is small.'

b.   Kalulu hela washakamáña mwisaña, hazhaháña anyamáku.

        Kalulu hela   wu- a-   shakam -a -ña   mu-isaña hi-   a- a-

        Kalulu though 3sg- TNS- live   -fv -HAB LOC-bush NEG- 3sg- TNS-

        zhah -a -ña   a-nyi-ama -ku

        kill -fv -HAB 2-4-animals -NEG

        'Though Kalulu lives in the bush, he does not kill animals.'

More frequently, the concessive conjunction is used in conjunction with an

adverb of manner such as chochu 'so, like this, thus', ochu 'thus, like that', etc., as

illustrated in the following example:

(43)   Namukeña háma, hela chochu wanseña.

        ni- a-   mu-   keñ -a háma   hela chochu wu- a-   n-

        3sg- TNS- 3sg.OBJ- love -fv very much even thus   3sg- PAST- 1sg.OBJ-

        señ   -a

        divorce -fv

        'I love her very much, but even so she divorced me.'

The concessive connective can be followed by a verb in the subjunctive mood to

give the equivalent to the English 'no matter what, whatever'. In addition, the verb must

be accompanied by the adverb of manner ñáhi 'how'.

(44)   Hela eli ñáhi, hakutwesha kumanishaku.

        hela a- il -i   ñahi hi-   a- ku- twesh -a ku- manisha -ku

        though 3sg- do -SUBJ how NEG- 3sg- INF- be able -fv INF- finish   -NEG

        'No matter how he does, he will not be able to finish.'

For alternative concessive clauses, the conjunction hela occurs in both the main

and dependent clauses, as illustrated by the example in (45):

(45)   Hela wudili hela wubuli kudila hinikwakamaku.

        hela   wu- dil -i   hela bul   -i   ku- dila hi- ni- ku- akama -ku

        whether 2sg- cry -SUBJ or   omit/fail -SUBJ INF- cry NEG- 1sg worry -NEG

        'Whether you cry or you do not cry, I will not worry.'

It may also involve the combination of the concessive conjunction <u>hela</u> 'though' and the conditional conjunction <u>néyi</u> 'if' without any change in concessive meaning. This is also known as a concessive conditional (Givón 2001:334; Thompson and Longacre 985:197).

(46)   Hela néyi wúkunshimwina, hinikwakamáku.
      hela   wu- ku-   n-   shimun -in   -a hi-   ni-   ku-   akama -ku
      even if 2sg- FUT- 1sg.OBJ- report   -APPL -fv NEG- 1sg- FUT- worry -NEG
      'Even if you report me, I will not worry.'

The connective <u>hela</u> may introduce a concessive adverbial clause, whereas the adversative particle <u>ilaña</u> 'but' introduces the main clause. In this case, both the subordinator and the adversative particle contribute to the concessive meaning of the construction.

(47)   Hela watóñózhokeli chochenichi ilaña hichadíñi chuma chaswayi kwila.
      hela   wu- a-   toñozhok -el -i chochenichi ilaña hi-   chi- a-
      though 3sg- PAST- think   -RP -fv thus   but   NEG- 7-   TNS-

      di -   -ñi chi-uma chi-a-   swayi ku- ila
      COP- -RP 7-thing 7-POSS- easy INF- do
      'Though he thought like this, it was not an easy thing to do.'

11.2 Coordinate Chained Clauses

Coordination indicates the linkage between two or more clauses of equal status by

means of affixes or independent morphemes. This section discusses coordinate chained

clauses that include conjunctive, alternative, adversative and consecutive clauses.

11.2.1 Conjunctive

Lunda uses one of the conjunctive prefixes na- and ni- 'and, with' to conjoin

words, noun phrases and clauses. The conjunctive cannot, however, be prefixed to a

finite verb or verb phrase when two or more verbs are joined together. In constructions

where conjoined verbs share the same subjects, the first clause must be finite while the

other clauses can either be finite or non-finite whose verbs appear with an infinitive

prefix ku-. The verb in the infinitive form which follows a tensed verb is attached to the

conjunctive na-, as shown by the examples in (48):

(48) a. Antu anóneli zhimañu zhawu nakuya muchota.
          a- ntu a- non -el -i zhi- mañu zhi-a-wu   na- ku- ya mu-
          2- man 3pl- pick up -RP -fv 10- stool 10-POSS.3pl CON- INF- go LOC-

          chota
          palaver hut
          'The men picked up their stools and went into the palaver hut.'

      b. Anakwati mwána kamutúpa mumuhetu nakumukása nanyónzhi.
          a- na-   kwat -i mu-ána ka-   mutupa mu- mu-hetu
          3pl- PERF- catch -fv 1-child 1.POSS- lion   LOC-3-trap

          na-   ku- mu-   kasa na-   nyonzhi
          CON- INF- 3sg.OBJ- tie with- 9.rope
          'They have caught a lion cub in a trap and tied it with ropes.'

The conjunctive na- is attached to the second verb in the infinitive form kuya 'to go'

kukása 'to tie' in (48a) and (48b) respectively.

When the verbs of the co-coordinated clauses are finite and have coreferential

subject, the conjunctive must be prefixed to the last constituent of the sentence. If a verb

in the sequence happens to be the last element in the sentence, it is repeated in the

infinitive form attached to the conjunctive.

(49)   a.   Amakómbi asíli káwa malóla, eyíli nimukoku.
           a-ma-kombi a-   a-   as   -il -i káwa malola a-   a-
           2-6- thief 3pl- PAST- stone -RP -fv dog 6-stones 3pl- PAST-

           iy   -il -i ni-   mu-koku
           steal -RP -fv CON- 1-sheep
           'The thieves stoned the dog, and they also stole a sheep.'

      b.   Neñila mwitála, nashakama nihatwitwámu.
           ni- a-   iñil -a mu- itala ni- a-   shakam -a
           1sg- PAST- enter-fv LOC- house 1sg- PAST- sit   -fv

           ni-   ha- chitwámu
           CON- LOC- chair
           'I entered the house and sat on a chair.'

In (49a) and (49b), the conjunction ni- 'and' prefixes the noun mukoku 'sheep' and

the locative hachitwámu 'on the chair' respectively.

When two clauses with different subjects are in coordination, the conjunctive is

prefixed to the subject of the second clause. Usually, the conjunctive appears frequently

after the second subject connected to an independent pronoun coreferential to the second

subject instead of the initial position. This has the meaning of 'also'. Compare the slot in

which the conjunctive occurs in the following sentences:

(50) Ayibinda ayíli mwisaña, niyandimi afumíni hamukála.
a-yi-binda a- a- y -il -i mu- isaña a- ni- ndimi
2-4-hunter 3pl- PAST- go -RP -fv LOC- bush 2- CONJ- farmer

a- a- fum -in -i ha- mu- kala
3pl- PAST- leave -RP -fv LOC- 3- village
'The hunters went in the bush and the farmers left the village.'

(51) Ayibinda ayíli mwisaña, andimi niwena afumíni hamukála.
a-yi-binda a- a- y -il -i mu- isaña a- ndimi ni- wena
2-4-hunter 3pl- PAST- go -RP -fv LOC- bush 2- farmer CONJ- 3pl

a- a- fum -in -i ha- mu- kála
3pl- PAST- leave -RP -fv LOC- 3- village
'The hunters went in the bush and the farmers also left the village.'

11.2.2 Disjunctive

Lunda employs the disjunctive <u>hela</u> 'or, nor, either …or, neither…nor, even, not even' to signal two or more possible alternate relations. The disjunctive appears in initial position of the second clause and is sequentially placed in relation to the previous clause. When the subjects of the verbs are identical, only the first one is finite and rest in the sequence are in the infinitive form preceded by the conjunction. The same conjunction is used to introduce concessive dependent clauses 'even if, even though, though, and although' (see section 11.1.7). Below are examples of sentences that illustrate the use of the alternative conjunction:

(51) Antu alekeli kudimusha, hela kudihosesha.
antu a- a- lek -el -i ku- di- imusha hela ku- di- hosesha
2-people 3pl- PAST- stop -RP -fv INF- REC- greet or INF- REC- speak
'People stopped greeting each other, or talking to each other.'

Negatives with this disjunctive follow the same pattern as the conjunctive

counterpart na-/ni-. The second verb may be either fully finite or an infinitive.

(52)   a.   Wafukama wányi, hela kubandama.
             wu- a-   fukam -a wanyi hela ku- bandama
             3sg- PAST- kneel -fv NEG or   INF- bend
             'S/he did not kneel or bend.'

       b.   Adiñi matála awantu ayíli nakuzomba hela antu atémúkili.
             a- di -ñi matala a-w-antu a- y -il -i na-   ku- zomba hela
             6- be -RP houses 6-people 3pl- go -RP -fv COM- INF- hunt or

             antu   a-   temuk -il -i
             people 2SM- run away -RP -fv
             'They were the houses of the people who had gone hunting or the people
             who had run away.'

11.2.3 Adversative

In Lunda, a semantic contrast between two events in conjoined chained clauses is

marked by the adversative coordinator iláña 'but, however'. The coordinatorword always

occurs in the initial position of the clause it introduces. Consider the following examples

in (53):

(53)   a.   Temáku mutóndu, iláña bayi wúchañula chishinzhíku.
             tema -ku   mu-tondu ilaña bayi   wu- chañula chishinzhi -ku
             fell -IMP2sg 3- tree   but PROH 2sg- uproot stump   -NEG
             'Fell the tree, but do not uproot the stump.'

       b.   Twesékeli esekee, iláña twakañenyi.
             tu- a-   esek -el -i   esekee ilaña tu- a-   kañany -in -i
             1pl- PAST- try -RP -fv try   but 1pl- PAST- fail   -RP -fv
             'We tried and tried, but we failed.'

11.2.4 Consecutive

There are ways of structurally linking clauses in Lunda to describe a sequence of situations or events in narratives. More often, the initial verb in the series of the clause provides the appropriate tense of the actions and events, while the other following verbs appear either in the unmarked form of the verb, the perfect, or the progressive aspect depending on the type of construction.

One of the constructions is more frequently used in narratives in Lunda to give a vivid description of past situations. Generally only the verb of the first clause in the sequence occurs fully inflected with the past tense, the verbs of the subsequent clauses are not marked for tense/aspect though they have overt subject prefixes (chap V, section 5.3). The events coded by the subsequent verbs immediately follow the event or actions expressed by the first verb in the series. Thus, the tense-aspect marking on the verb of the initial clause has scope over all the following verbs. When the last constituent of the sentence is a verb, it is repeated in the infinitive form attached to the connector ni-. The example that follows is an illustration of an unmarked tense in a narrative:

(54) Nayíli nakwánda wuwa nawakwetu. Nawéni tuzhíla twami, akwetu atiya
niichíma, anona nimutóndu, anzhaha nikunzhaha.
ni- a-   y -il -i na-   ku- anda wu-wa   na- a-kwetu
1sg- PAST- go -RP -fv PURP- INF- gather 14-mushroom with- 2-friend

ni- a-   wan -in -i ni-   tu-tu-zhila   tu-a-ami
1sg- PAST- find -RP -fv CON- DIM-13-bird 13-POSS-1sg

akwetu a-   tiy -a ni-   ichíma a-   n-   zhah -a
2-friend 3pl- feel -fv CON- jealousy 3pl- 1sg.OBJ- kill -fv

ni- ku- n-   zhaha
CON- INF- 1sg.OBJ- kill
'I went with my friends to gather mushrooms. I found some birds. My friends felt
jealousy, picked up a stick and killed me.' (Fisher 1989:259)

The verb <u>wana</u> 'find' in the second clause is inflected in the remote past followed by

two verbs <u>tíya</u> 'feel' and <u>zhaha</u> 'kill' which have the subject prefix <u>a-</u> 'they' attached to

the verb in the narrative form. In addition, the clauses are strung together by means of the

co-ordinating morpheme <u>ni-</u> attached to the noun <u>ichíma</u> 'jealousy' and the infinitive of

the repeated verb <u>kuzhaha</u> 'to kill'.

Another way of describing a sequence of past actions in narratives is expressed

through a verbal construction similar to the immediate future marked by the prefix <u>hí-</u>.[12]

The verb of the initial clause is inflected with the past tense, while the following verbs in

the sequence are in the infinitive form attached to both <u>hí-</u> and the subject prefix to

denote. This construction is best regarded as a vivid form of the construction, in which

the speaker or narrator is recapitulating the entire sequence of actions, and each

successive act is visualized as being future to the last one.

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[12] The use of sequence markers has also been described in other African languages such as Sùpyìré
(Carlson 1987:1) and Swahili (Givón 1990:880 and 2000:369). In a present context the use of the
morpheme <u>hi-</u> indicates an immediate intention 'about to, on the point of'.

(55) a. Mumbanda wanóneli nswáha yíndi,
mu- mbanda wu- a- non -el -i nswaha yi- a- indi
1-woman 3sg- PAST- pick up -RP -fv calabash 1- POSS- 3sg
'A woman picked up her calabash.'

    b. hákuya nikumenzhi.
ku- ya ni- ku- menzhi
INF- go CON- LOC- water
and went to draw water

    c. Mutúpa hákumukwáta.
mu- tupa hi- a- ku- mu- kwata
1- lion NARR-3sg- INF- 3sg.OBJ- catch
The lion caught her.

    d. Chanamuzhahíyi,
chi- a- na- mu- zhah -i -yi
when- 3sg- PERF- 3sg.OBJ- kill -fv -3sg
When he had killed her,

    e. hákumwinkáyi Kachinchi nindi:
hi- a- ku- mu- ink -a -yi Kachinchi nindi:
NARR- 3sg- INF- 3sg.OBJ- give -fv -3sg Kachinchi COMPL.3sg
'he gave her to Rabbit saying:

    f. 'Nhembéli muntu iwu.'
n- hemb -el -i mu- ntu i- -wu
1sg.OBJ- take care -APPL -SUBJ 1- person DEM- -3sg
'Look after this person for me.' (Fisher 1989:257)

The verb nona 'pick up' in (25a) is in the remote past tense which is the tense of

the event. The following verbs kuya 'to go' in (55b) and kukwáta 'to catch' in (55c) are

in the infinitive form marked with the consecutive prefix hi- without any overt tense

marking. The same is seen with the verb kwinka 'to give' in (25e).

CHAPTER XII

CONCLUSION

This dissertation has shown that in the domain of tonology, lexical morphemes may be described as being 'tonal islands' because they do preserve their underlying lexical tones at phrase level in continuous speech when they are preceded and followed by other sounds, irrespective of their tones. The high tone associated with a particular morpheme does not spread nor does it float.

Lunda also presents another tonal difference from other Bantu languages. Since the language forbids high tones to be linked with the final syllable of a morpheme, there is a rule that delinks the high tone associated with the final vowel or mora of a noun/verb root. The delinked high tone surfaces on the next visible mora leftward of its underlying position.

The analysis of the Lunda noun class system reveals that the animate nouns that previously belonged to the various noun classes have shifted to classes 1 and 2 although they still maintain the singular noun prefixes of their old noun classes. The plural animate noun stems display two different prefixes, with the class 2 prefix a-occupying the left most slot. These govern classes 1 and 2 grammatical agreement when they occur as head nouns of subjects of phrases or sentences.

Tense, aspect, and modality are expressed through morphological markings and

periphrastic constructions in Lunda. The language has two past tense distinctions as well future tense distinctions. Furthermore, tense and aspect markers can be combined in the same verb. Negativity can be expressed either by two markers attached to the verb and to whatever happens to be the last constituent of a clause or by placing the morpheme <u>wanyi</u> 'not' immediately after the verb.

Lunda makes use of word order, case marking, and pronominalization to define, determine, and establish grammatical relations. In independent clauses, a nominal subject always precedes the verb and controls subject-verb agreement. The nominal direct and indirect/second objects appear in the post-verbal position without any overt morphological marking, but are distinguished from each other and other participants by word order. The direct object appears adjacent to the verb followed by the indirect object and this order is immutable. While an agreement marker/prefix may optionally occur with an animate direct object, this is not possible with an indirect object. Peripheral roles such as instrumental, locative, etc. are case-marked and follow the indirect object.

One fundamental difference between Lunda and most other Bantu languages lies in the pronominalization of objects. Both the direct and the indirect objects can be expressed in pronominal forms in the verb simultaneously; but their pronominal slots are fixed. The former occur as pronominal prefixes immediately before the verb stem, while the latter appear as suffixes attached to the verb.

The study describes four methods of complementation in Lunda. Depending on the type of verb used, a complement clause may be an infinitive clause, subjunctive clause, or it can be introduced by a complementizer. A subjunctive complement clause

can be optionally introduced by a complementizer. It has also been noted that Lunda has

at its disposal the type of complementizers that agree in person and number with the

subject of the main clause. This phenomenon is not very common in Bantu languages.

The fourth type of complementation consists of clauses that come after the verbs <u>móna</u>

'see', <u>tíya</u> 'hear', <u>wana</u> 'find', <u>shiya</u> 'leave behind', and <u>bulakana</u> 'meet' without any

explicit formal marking. The subject of these clauses is overtly expressed and is

coreferential to the direct object of the main clause. Another feature of the complement

clause is that the verb is either in the perfect-aspect for completed events prior to those

encoded by the verb of the main clause or in the progressive aspect for ongoing events

and states.

The examination of the detransitive voice brings out some striking features of

reflexive, reciprocal and passive constructions. Lunda seems to have lost the reciprocal

construction marked by the suffix -<u>aña</u>. The suffix is residual, or a vestigial of what used

to be a very productive reciprocal suffix. Instead, it is coded using the reflexive prefix <u>di</u>-

in the direct object pronominal slot in the verb. Additionally, both affixes may co-occur

on the same verb in the same construction.

Similarly, the Bantu conventional passive morphologically formed by marking the

verb with the suffix -<u>w</u> is no longer very productive in Lunda; it is confined to a very

restricted number of verbs and is not frequently used. A new passive construction

has evolved to take the function of the unproductive passive. It is structurally an

impersonal passive type in that the verb still retains its active voice features without

displaying the passive verbal morphology. The agent is demoted to an oblique

position which is a characteristic of conventional passive. The non-agent does remain in

its post-verbal position without assuming the grammatical role of subject. It does not

govern subject-verb agreement on the verb. Instead, the subject slot is occupied by the

class 2 third person plural subject prefix a- 'they'. Locative noun phrases can also be

involved in passive constructions and maintain their syntactic functions.

When the non-agent is moved into the preverbal position as a topic, the

construction requires the obligatorily presence of a pronominal agreement coreferential

with the topicalized non-agent marked on the verb. The locative pronominal agreement

must, however, appear as a verbal suffix agreeing with the preverbal locative phrase.

In Lunda, there are three types of relative clauses, namely, subject relative

clauses, object relative clauses with first and second person participants and object

relative clauses with third person subjects. Subject relative clauses are not distinct from

simple clauses in that they display the same surface syntactic structures as simple

sentences. The only difference between non-relative clauses and relative clauses lies in a

slight high tone on the first syllable of the verb formation of the relative clause.

Object relative clauses occur after the modified noun phrases and begin with a

relative prefix/marker attached to the verb of the relative clause. The prefix, which

replaces the relative noun phrase, agrees in number and noun class with the preceding

head noun the clause modifies. The nominal subject of a relative clause appears after the

verb in the position of the extracted object or locative expression which now occupies

the preverbal position. The subject agreement prefix used for third person singular is a-

instead of wu- employed in independent clauses. Furthermore, the verb of the relative

clause suffixes the third person coreferential subject pronouns class 1 -yi and class 2 -wu for singular and plural respectively. Grammatical functions such as subject, direct object, indirect object, locatives, possessive, instrumental, and comitative are accessible to relativization in Lunda.

In Lunda, passive relative clauses have the features of object clauses. The grammatical subject of such constructions is the impersonal third person plural class 2 subject prefix a- which occurs between the relative prefix and the tense marker in the preverbal position. Like active relative clauses, the verb of the passive relative clause is marked with the class 2 enclitic -wu.

All question forms are derived from the corresponding declarative forms either through intonation or by adding the question morphemes. Information questions are formed by using question words or verb affixes and the word order in this type of question is not different from that of declarative statements. The question word or affix occurs in the normal syntactic position that the questioned syntactic function would appear; there is neither movement of the question morpheme nor verb-subject inversion.

There are several ways in which clauses can be syntactically or morphologically linked within sentences. Certain adverbial clauses display the same syntactic structures as headless relative clauses in that they are simply marked by relative prefixes. Some are linked to the main clause by means of independent subordinators or connectives, while others are participial clauses. Adverbial clauses of purpose, both positive and negative, are introduced by infinitives which function as subordinators. The language also has an infinitive clause of purpose marked by the morpheme na-.

Adversative coordination and disjunctive coordination involve free morphemes between the linked clauses, while the conjunctive coordination is marked by a bound morpheme. When the subjects of the conjoined clauses are coreferential, the morpheme is attached to either the verb of the second clause if it is in the infinitive form, or to the last constituent of the sentence. If the subjects of the two conjoined clauses are different, the morpheme is attached to the subject of the second clause. Lunda has two main kinds of consecutive constructions. The first one makes use of the morpheme hi-, while the other kind is unmarked. The verb of the first clause in the sequence fully marked for tense-aspect, whereas the verbs of the subsequent clauses are unmarked for tense in both constructions.

APPENDIX

ABBREVIATIONS AND SYMBOLS

ADJ	adjective
APPL	applicative
AUX	auxiliary
BEN	benefactive
C	consonant
CAUS	causative
cl	noun class
COM	comitative
COMP	complementizer
CON	connector
CONT	continuative
COP	copula
DEM	demonstrative
DIM	diminutive
epent	epenthesis
FUT	future
fv	final vowel
G	glide
H	high tone
HAB	habitual
IMFUT	immediate future
IMP	imperative
IMPF	imperfective
INF	infinitive
INST	instrument
INT	intensifier
L	low tone
LOC	locative prefix
N	nasal
NEG	negative
NP	noun phrase
OM	object marker
OBJ	object prefix
PASS	passive

PAST	past tense
PERF	perfect
PERS	persistence
POSS	possessive
PRO	pronoun
PROG	progressive
PURP	purpose
Q	interrogative
QUOT	quotative
REC	reciprocal
REF	reflexive
REL	relative clause
REV	reversive
RP	remote past
SM	subject marker/prefix
STAT	stative
SUBJ	subjunctive
TAG	tag question
TNS	tense
V	vowel
1sg	first person singular
1pl	first person plural
2sg	second person singular
2pl	second person plural
3sg	third person singular
3pl	third person plural
Ø	toneless
Number	denotes noun class prefix and agreement affixes
´	High tone symbol
→	become
\	in the environment of
—	after

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