# MORPHOSYNTACTIC STRUCTURE OF LUTACHONI VERB PHRASE BY MASINDE, ESTHER, B.ED, Arts (Hons) Kenyatta University.

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF PHILOSOPHY IN LINGUISTICS, DEPARTMENT OF LINGUISTICS AND FOREIGN LANGUAGES, SCHOOL OF ARTS AND SOCIAL SCIENCES.

MOI UNIVERSITY
PO BOX 3900,
ELDORET, KENYA
MAY, 2016

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| Supervisors.                  |                   |                |                      |
| DR. JUSTINE SIKUKU            |                   |                |                      |
|                               | SIGN              | D              | ATE                  |
| The Chairperson, Departmen    | at of Linguistics | and Foreign L  | anguages,            |
| Moi University                |                   |                |                      |
|                               |                   |                |                      |
| DR. MARY LONYANGAPU           | JO                |                |                      |
|                               | SIGN              |                | DATE                 |
| Senior Lecturer, Department   | of Linguistics a  | nd Foreign La  | nguages,             |
| Moi University                |                   |                |                      |

#### **ABSTRACT**

This study describes the morphosyntactic structure of the Lutachoni verb phrase (VP). It investigates the morphosyntactic behaviour of both inflectional and derivational morphemes which are internal features of the VP. It describes their morphological forms and resultant variations of the elements within the VP. The study also establishes the patterning of these elements and their effect on morphosyntax of Lutachoni VP. The nature of the verb determines its constituents. The study adopts Chomsky's Principles and Parameters (PP) theoretical framework as an analytical tool to predict and account for the morphosyntactic structure of the Lutachoni VP. It tests the applicability of PP in the description of other natural languages apart from English and Romance languages. Modules applied in the study include government, X-bar theory, theta theory, case theory and Feature checking theory. The study seeks to answer the following research questions: Which constituents form the VP in Lutachoni syntax? What are the forms of elements affixed on the verb root? How are the elements within the VP licensed? What are the cooccurrence restrictions? What is the role play of morphemes affixed on the verb on Lutachoni VP syntax? Furthermore, how does the PP theoretical framework account for the Lutachoni VP structure? Data analysed was generated by the researcher who is a native speaker. The generated data was then verified by a sample of adult Lutachoni native speakers to avoid subjectivity and to make it authentic and more reliable. Morphological listings of the VP were done and conventional tree diagrams were used to analyze data. From the analysis, it was established that the affixation process in Lutachoni is very productive. Elements which are internal features of the complex verb are realized in a variety of forms based on their function and syntactic environment. Ordering of affixes is also unique. Morphemes are affixed either to the left or right of the verb head. Morphemes marking negation, subject agreement, future, distant past tense, object pronominal morphemes and reflexive are prefixed on the verb. Derivational morphemes marking reciprocal, passive, causative, applicative, causative-reciprocal and applicative-passive are conjugated to the right of the verb head. The derivational morphemes are valence adjusting affixes that affect the Lutachoni VP syntax by decreasing or increasing the number of arguments. Causative and applicative morphemes transitivise the verb while reciprocal, reflexive and passive detransitivise the verb. The elements to be patterned in the VP are dependent on the syntagmatic and paradigmatic restrictions. The Principles and Parameters sub-theories can account for language universal principles and parametric features such as verb arguments and the morphemes embedded in the verb that affects the VP structure.

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Nevertheless, my highest hope is that this work on the morphosyntax of the Lutachoni VP, which though only briefly sketched will in some small measure serve as the basis for much of the discussion on morphology and syntax of Lutachoni.

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#### **DEFINITION OF TERMS**

The following definitions are used in this research:

**Affix:** A bound morpheme that is attached to a base form of a word.

**Agglutinating Language**: A language in which words are composed by combining prefixes, bases and suffixes.

**Argument structure:**set of arguments selected by the verb.

**Case:** Marking that indicates the grammatical function of an argument

**Competence:** The idealized linguistic knowledge of a native speaker.

**Complement:** The sister of the head

**Detransitivisation**: Reduction of an argument in an argument structure.

**Government**: The determination of the sphere of influence of a verb with respect to adjacent categories.

**Morphosyntactic structure**: Grammatical categories or linguistic units having both morphological and syntactic properties in a sentence structure.

**Negation:** A process or a construction in which whole propositions is said to be false.

**Parameters**: language specific characteristic that make such a language unique.

**Phi-features:** A morphosyntactic or semantic feature that indicates person, number, gender and case.

**Prefix**: An affix that is attached to the beginning of a word.

**Sisters:** Constituents immediately dominated by the same node.

**Suffix:** An affix that is attached to the end of a word.

**Tense**: Temporal status of the event Vis-a- vis the moment of speaking.

**Theta Role**: The syntactic representation of the semantic role of an argument **Transitivisation: Aprocess** where an argument is added in an A -structure.

**Transitivisation: Aprocess** where an argument is added in an Argument structure.

**Verb Phrase**: A grammatical unit headed by a verb.

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#### ABBREVIATIONS AND SYMBOLS USED IN THIS STUDY

ACC Accusative

AgrSP Agreement subject phrase

AgrOP Agreement object phrase

Appl Applicative

Asp Aspect

CAUS Causative

DS Deep Structure

Comp Complementiser

FUT Future

GB Government and Binding

Iff if and only if

INFL Inflection

IP Inflectional phrase

LF Logical form

NP Noun phrase

NOM nominative

OM Object marker

PASS passive

PF Phonological form

PL Plural

PP Principles and Paremeters

PRES Present

PST past

REC Reciprocal

SG Singular

SM Subject marker

SS Surface Structure

TP Tense phrase

VP Verb phrase

UG Universal Grammar

1SG 1<sup>st</sup> person singular

1PL 1<sup>st</sup> person plural

2SG 2<sup>nd</sup> person singular

2PL 2<sup>nd</sup> person plural

3SG 3<sup>rd</sup> person singular

3PL 3<sup>rd</sup> person plural

→ Rewrite

 $\theta$  Theta

 $\alpha \hspace{1cm} Alpha$ 

/ High pitch (tone)

Low pitch (tone)

#### CHAPTER ONE

#### INTRODUCTION AND BACKGROUND TO THE STUDY

#### 1.1 Introduction

The central focus of this study is specifically a linguistic one. It concerns the description of the morphological and syntactic structure of Lutachoni verb phrase. Section 1.2 presents a brief historical background of the Tachoni people and Lutachoni their language since this research investigates the morphosyntax of the verb phrase in Lutachoni. Sections 1.3 and 1.4 highlight language characteristics of this language that are essential to this study. Section 1.5 describes the statement of the problem of the research. Aim and objectives of the study are also captured in section 1.6 this chapter. Other sections of this chapter present the research questions designed to help achieve the objectives of the study, the rationale of the study and finally the scope and limitations are also outlined.

#### 1.2 Background to the Study

Lutachoni is an E.31 Bantu language spoken in Western Kenya. Native speakers occupy areas between Kakamega and Bungoma counties and areas along R. Nzoia. The 2009 National population report states that the Luyia are 5,338,666 in total. This population constitutes the second largest single tribe in Kenya. The population of Tachoni as par 2009 census is estimated to be 118000. Just like other Bantu languages, Lutachoni is agglutinative in nature.

Whiteley (1974) who researched on Kenyan languages classified them into four major groups: the Bantu language, the Nilotic, Para Nilotic and the Cushitic language. He cited

Bryan (1959) who classified the Bantu language of Kenya in five main categories as indicated below.

**Table1.1: The Bantu Language Groups of Kenya** 

| Kikuyu Group | Gusii Group | Taita Group | Luyia Group            | Swahili Group |
|--------------|-------------|-------------|------------------------|---------------|
| Kikuyu       | Gusii       | Dabida      | Bukusu                 | Swahili       |
| Embu         | Kuria       | Mbololo     | Tachoni                | Mvita         |
| Mbeere       | Logoli      | Werugha     | Wanga                  | Jomvu         |
| Meru         |             | Mbale       | Shisha                 | Ngare         |
| Mwimbi       |             | Chawia      | Nyote                  | Chigundi      |
| Chuka        |             | Bura        | Marama                 | Vumba         |
| Tharaka      |             | Mwanda      | Isukha                 | Amu           |
| Kamba        |             | Kasigau     | Marachi                | Bajuni        |
|              |             | Saghala     | Idakho                 | Tikuu         |
|              |             | Dambi       | Tsotso                 | Pate          |
|              |             | Mugange     | Kabras                 | Siu           |
|              |             | Teri        | Nyala north (kakelewa) | Mijikenda     |
|              |             | Kichamba    | Khayo                  | Giriama       |
|              |             | Gimba       | Tiriki                 | Duruma        |
|              |             | Taveta      | Samia                  | Kauma         |
|              |             |             | Nyala (lake)           | Chonyi        |
|              |             |             | Gwe                    | Ribe          |
|              |             |             |                        | Kambe         |
|              |             |             |                        | Rabai         |
|              |             |             |                        | Jibana        |
|              |             |             |                        | Digo          |
|              |             |             |                        | Pokomo        |

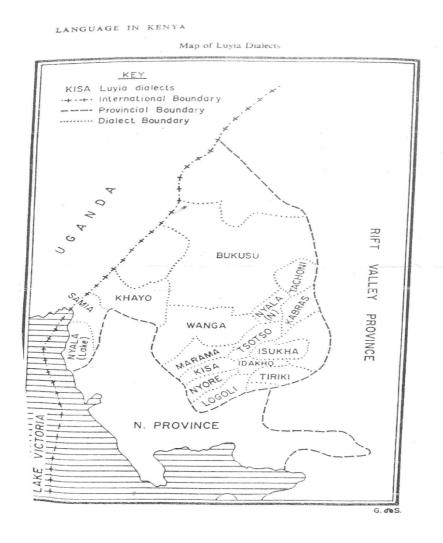
Source: Bryan, in Whiteley (1974:21)

According to this classification, Lutachoni belongs to the Luyia group of Bantu languages. In addition, it is equally important to note that a historical study of Abatachoni shows that Tachoni is an Elgon Kalenjin group which has since been assimilated into Luyia community.

#### Were (1967:61) states:

The earliest of the Kalenjin immigrants who had already settled in the Elgon district of western Kenya, some of them like Bongomek, Bok and Kony still retain their original language and culture. On the other hand, many others as the present Abatachoni of Ndivisi.... and Kabras areas became bantuised and lost their original identity.

Map 1.1: Luyia languages in Kenya



Source: Whiteley (1974:88)

Luyia speakers are bordered to the North by Saboat speakers, Kalenjin speakers to the East and Dholuo speakers to the South. Due to proximity and social interaction the Tachoni who neighbour the Kabras to the south speak Lutachoni with Kabras dialect while those close to Lubukusu speakers experience language interference and tend to speak Lutachoni with Lubukusu dialect.

As evident in the map on the preceding page, there are several Luyia languages hence a comparative study would reveal remarkable linguistic variations in lexical, phonology and semantics. These variations deserve an independent analysis. However, close linguistic analysis will reveal that most Luyia languages are mutually intelligible. In support of this, Ochwaya (1992) cites Punya Sloyka Ray (1963:81) who observes:

we may have a set of people who identify themselves as the groups of users of a language yet who do not use the same forms of the same meaning. This situation is usually described as the existence of dialects. All languages are fragmented into dialects but not to an equal degree.

In this study, Lutachoni is considered a Luyia language worth its own linguistic study. Therefore, it is the researcher's hope that its description will shed light on the grammar of other Luyia languages.

#### 1.3 Lutachoni Phonology

Lutachoni has a five –vowel system: a e i o u

Table 1.2: Lutachoni vowel chart

| Position of the tongue | Front     | Central   | Back    |
|------------------------|-----------|-----------|---------|
| Shape of lips          | Unrounded | Unrounded | rounded |
| High                   | i         |           | u       |
| Mid                    | e         |           | 0       |
| Low                    |           | a         |         |

**Table 1.3: Consonants of Lutachoni** 

|                                 | Place of articulation |                  |          |         |                      |        |
|---------------------------------|-----------------------|------------------|----------|---------|----------------------|--------|
| Manner of articulation          | Bilabial              | Labio-<br>dental | Alveolar | Palatal | Palatal-<br>alveolar | Velar  |
| Stops –(Voiceless)<br>+(Voiced) | p<br>b                |                  | t<br>d   |         |                      | k<br>g |
| Fricative-<br>+                 | β                     | f                | s<br>z   |         |                      | X      |
| Affricative-                    |                       |                  |          |         | t∫<br>dʒ             |        |
| Nasals                          | m                     |                  | n        |         |                      | n      |
| Laterals                        |                       |                  | 1        |         |                      |        |
| Glide                           |                       |                  |          |         | r                    |        |
| Approximant                     | W                     |                  |          | j       |                      |        |

Note: orthographic 'b' is pronounced as /b/ only when preceded by bilabial nasal /m/. However, in all other contexts it is pronounced as / $\beta$ / voiced bilabial fricative. Secondly, orthographic 'kh' in Lutachoni represents /x/ voiceless velar fricative and orthographic 'ch' represents / tʃ/ voiceless palatal-alveolar affricate while, orthographic 'j' represents / dʒ / the voiced palatal-alveolar affricate.

Apart from phonemes, Lutachoni makes lexical distinctions using suprasegmental features. Lexemes with identical syllables pronounced with different pitch patterns (tone) bring out different meanings. For example:

| Mala      | 'finish'  | málá         | 'smear'       |
|-----------|-----------|--------------|---------------|
| Nyola     | 'pluck'   | nyola        | 'find'        |
| `<br>Inda | 'stomach' | / /<br>inda  | 'louse'       |
| Eliru     | 'ear'     | / /<br>eliru | 'banana leaf' |

#### 1.4 Morphosyntax of Lutachoni

Lutachoni is an agglutinative language in which words are composed of the combination of morphemes which include prefixes, bases and suffixes. The structuring of these meaningful units of linguistic expression is governed by rules whose characteristics are both morphologically and syntactically defined. The nature of the verb determines the morphemes to be affixed in different insertion sites on the verb and complements to be selected as constituents in the VP structure. The type of action or state expressed by the verb determines whether the Lutachoni VP structure is intransitive, transitive or ditransitive. Consider the following illustration:

(1) A-ba—ndu sa-ba-la-mu-lang-a ta
C2-2-People NEG- 2SM-FUT-1OM-call-fv Neg
'People will not call him.'

In example (1), we observe the verb root'langa' has morphemes marking negation, tense, subject and object pronominals affixed on it.

The syntactic configuration of the Lutachoni sentence is subject, verb and object [SVO].

The following is an illustration of the phenomena:

(2) Khasandi a-la-kham-a chi-n-g'ombe NOM 1SM-FUT-Milk-fv10-10cow/ACC 'Khasandi will milk the cows.'

Like other Bantu languages, Lutachoni has a rich agreement system. Not only do the lexical categories such as nouns, verbs and adjectives bear agreement affixes but also functional categories. For example, complementisers have agreement markers in singular and plural forms affixed. The following sentences illustrate agreement in Lutachoni.

(3)(a) A-ba-somi a-*ba*-khulundu *ba*-kha-som-e e-bi-tabu e-*bi*-khale

2-2 student2-2-adult 2SM/3pl-FUT-read-fv 8-8-book 8-8-old 'The adult students will read old books.'

- (b) Abe-buli *ba*-a-sung-il-e *ba*-li a-ba-ana *ba*-a-samba i-n ju2- Parent 3PL-PST-say-PST-fv 2-comp 2-2-child 3PL-PST-burnt 9-9-house'The parents said that the children burnt the house.
- (c) Chi-ng'ombe *chi*-taru *chi*-la-kham-w-a

  10-cow 10-three 10SM-FUT-milk-PASS-fv

  'The three cows will be milked.'
  - (4)(a) O-ku-ana ku-la- lil- ang- a

    19-19-child 19-TNS- Cry ASP/PROG-Fv

    'The big child is crying.'
    - (b) A-*ba*-khana *ba*-la-lil-anga

      2-2-girl 3PL-TNS- cry- Asp/PROG- fv

      'Girls are crying.'

The italicized affixes in examples (3) mark agreement. Agreement is controlled by the noun that precedes the verb, complementiser or adjective.

#### 1.4.1 Lutachoni Noun classes

The morphological structure of the Lutachoni noun is as follows:

Pre- prefix + prefix + stem

For example; a -ba- ndu

Pre-prefix c2 stem/ people

It is important to highlight the noun classes in Lutachoni because the subject agreement marker is a verbal prefix which is a concordial morpheme agglutinated on the verb. The noun prefix is the indicator of the class to which the noun belongs and it determines the subject agreement marker. Lutachoni has about 20 noun classes which are summarized below.

**Table 1.4: Lutachoni noun classes** 

| Plural                  |                                                                                                    |
|-------------------------|----------------------------------------------------------------------------------------------------|
| Prefix system (example) | 'Gloss'                                                                                            |
| a-ba- kholi             | 'workers'                                                                                          |
| c2-2                    |                                                                                                    |
| e-mi-sala               | 'trees'                                                                                            |
| c4-4                    |                                                                                                    |
|                         |                                                                                                    |
|                         | 'bananas'                                                                                          |
|                         |                                                                                                    |
|                         | ' calves'                                                                                          |
|                         |                                                                                                    |
|                         | 'cows'                                                                                             |
| c10-                    |                                                                                                    |
| Chi-sala                |                                                                                                    |
|                         |                                                                                                    |
| 'sticks'                |                                                                                                    |
|                         |                                                                                                    |
| e-bi-ana                |                                                                                                    |
|                         |                                                                                                    |
| 'small'                 |                                                                                                    |
| c13                     |                                                                                                    |
|                         |                                                                                                    |
| 'children'              |                                                                                                    |
|                         |                                                                                                    |
|                         |                                                                                                    |
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|                         |                                                                                                    |
|                         |                                                                                                    |
|                         | a-ba- kholi c2-2 e-mi-sala c4-4 a-ma- tore c6-6 e-bi-mosi c8-8 chi-ng'ombe c10- Chi-sala  'sticks' |

Classes 1-2 consist of personal nouns e.g man,woman,boy, person e.t.c. Classes 3-4 refer to names of trees, plants and other inanimate things such as cars, rivers and mattresses. Then, classes 5-6 refer to some animate objects and some fruits. While classes 7-8 refer to names of utensils and some pieces of furniture. Classes 9-10 consist of names of some animals and some inanimate objects. Next, class 11 includes attenuatives such as fingers, sticks and some abstract things. The plural form of some of the objects is same as class 10. Classes 12-13 consist of diminutives. Class 14 includes plural class, for example the

brain and it also includes nouns of abstract things. Class 15 is the class prefix for verbal infinitives. Classes 16, 17 and 18 consist of locatives 'at','on', and 'in' respectively. Class 19 is a class of names used to refer to big things; person and other inanimate things.

Gender in Lutachoni just like in most Bantu languages is realized in its sets of noun classes numbered in consecutive pairings. Odd numbers represent singular while even numbers represent plurals. Number and gender are described together for example noun classes 1& 2 belong to animate gender.

Diercks (2010) cites Carstens (1991) who identifies Bantu genders for classes 1-10

Gender A stems for classes ½

Gender B stems for classes 34

Gender C stems for classes 5/6

Gender D stems for classes 7/8

Gender E stems for classes 9/10

Lutachoni applies the head first principle in phrasal constructions. The structure of a noun phrase in Lutachoni is as follows:

(i) 
$$NP \rightarrow ND$$

(ii) 
$$NP \rightarrow NA$$

The first rule indicates the NP structure to be a noun as the head followed by a determiner. For example:

(5)(a) E-bi-mosi bi-osi

8-calf 8-all

'all calves'

The second phrasal rule highlights the NP structure to be a noun followed by an adjective. For example:

(b) a-ba-khasi ba-taru

2-woman 2-three

'three women'

The last rule refers to the NP structure being a noun followed by an adjective then a determiner. For example:

(c) *chi*-ngubo *chi*-che *chi*-osi

10-cloth 10-his/her all

'all his/her clothes'

Considering the illustrations in example (5a-c) it is evident that noun class of a noun preceding a determiner or adjective determines the agreement markers to be affixed on a determiner and adjective following the noun.

A verb phrase constituent is the most complex constituent of the Lutachoni sentence (clause). This phrase has morphemes affixed in various syntactic positions in its structure to mark grammatical concepts. Other constituents of the VP include adjuncts, noun phrase complements and sentential complements.

Example:

(6)(a) Nanjekho sa-y-a-tekh-il-ang-a kuka ama-pwoni ta

Nanjekho NEG-1SG-PST-cook-APL-ASP-fv 6-sweet potatoes neg

"Nanjekho did not cook sweet potatoes for grandfather."

Example (6a), illustrates a Lutachoni VP structure comprising a complex verb with morphemes marking negation, subject agreement, past tense, applicative and aspect affixed on the verb root. Other elements of the VP are two noun phrases functioning as complements and a free morpheme 'ta' indicating negation. There is a strong link between the form of a morpheme and its grammatical function and syntactic patterning in a linguistic structure. Morphemes agglutinated in the Lutachoni VP have grammatical functions and their affixation on the verb root to form the verb phrase is syntactically determined as shown in the examples.

(6) (b) Khaoya y- a- rum- *il*- ang- a khayumbi chisendi

NOM 3SG-PST-send-APPL-ASP-fv DAT ACC

'Khaoya used to send money to Khayumbi.'

Specifically, considering the morphology and syntax of the Lutachoni VP which is our research area, it is possible to observe that morphological affixation process in formation of the complex VP is a very productive operation. Syntactic patterning is unique and hence somewhat unique. Example 6(b) illustrates a complex verb that selects two NP complements. Morphemes affixed on the verb root '-rum-' include the prefix '-y-' which is a subject agreement pronominal marker. This morpheme is determined by the NP agent. It agrees with the NP agent in person, number and noun class. The following morpheme is a past tense marker '-a-. The suffix immediately after the verb root is an applicative marker '-il-' this marker signifies that the verb requires two NP objects for the structure to be grammatical and meaningful. While, the morpheme '-ang-' which is a suffix occupying the position before the final vowel is an aspectual marker. This marker in this context means that the action was habitual. In fact, the patterning of these morphemes affixed on the verb head is syntactically defined.

Lutachoni native speakers have intuitions about the constituents of Lutachoni VP based on syntagmatic and paradigmatic restrictions. This implies that for grammaticality and well-formedness of linguistics structures, Lutachoni morphemes, in particular those forming the VP have to be inserted in their right syntactic positions to form the VP constituent. This means that linguistic structuring of morphemes involves both a morphological and syntactic process. Native speakers' intuition gives insights on how morphemes are structured into constituents and phrasal categories to which the structural units belong. There is a vowel deletion at the morphemic boundary in word pronunciation when same vowels co-occur. One of the vowels is deleted.

This study adopts Radford's (1988) definition of a phrase. He states that a phrase is a set of elements which form a constituent without having restrictions on the number of elements that the set may or must contain. According to this definition, in the current study the VP is considered as a group of words or morphemes whose head or nucleus is the verb. The verb phrase is uniquely and richly composed of morphemes which are meaningless while in isolation but acquire meaning when affixed on the verb head in specific insertion sites. These morphemes (satellite elements) on the verb head include not only morphological features marking negation, person and number, tense, aspect, voice and semantic valence but also morphemes that refer to participants in the event specified by the verb. Thus, the internal features in the form of morphemes affixed on the verb root affect the argument structure of the particular verb involved and as a result its structure. The morphemes affixed on the verb root, the noun phrase complements and embedded clauses that are constituents of the VP affect the morphological and syntactic structure of the Lutachoni verb phrase.

#### 1.4.2 The Lutachoni Verb Phrase

Many African languages including Lutachoni are agglutinative in nature. The agglutinative nature of this VP is a complex linguistic system, different morphemes (affixes) are affixed to the verb root; each of these morphemes expresses specific meaning. These morphemes embedded on the verb root are the internal morphosyntactic features of the VP. A verb can have between two to ten morphemes affixed on the verb root. This study examines the affixation operations on the verb root. Adger (2003) observes that morphosyntactic features are the basic building blocks of syntax. Thus, this study is concerned with identifying and describing the elements that constitute the VP in Lutachoni syntax. A verb can select one NP complement, two NPs, NP followed by a PP, a sentential complement or zero complement depending on its subcategorisation properties.

Examples of Lutachoni VP structures:

(7)(a) Ba-la-khin-isi-an-ang-a

2SM/3PL-TM-dance-CAUS-REC-ASP-fv

'They are making each other to dance.'

(b)Li-noni li-a-purukh-a

5-bird 5SM-PST-fly-fv

'The bird flew.'

(8) Ruth a-la-mich-a chi-nuni

NOM 3SG/1SM-FUT-sow-fv 10-simsim

'Ruth will sow simsim.'

(9)(a) Ruth y-a-mich-il-a koko chi-nuni

NOM 1SM/3SG-PST-sow-APPL-fv grandmother 10-simsim

'Ruth sowed simsim for grandmother.'

Example (7a) illustrates an intransitive VP structure displaying morphemes marking subject agreement, tense, causative-reciprocal co-occurrence and aspect affixed on the

verb root. It is an intransitive VP structure because of causative-reciprocal morphemes {- isi-an-} suffixed on the verb

Example (7b) illustrates an intransitive verb being head of a VP structure does not select a complement. Example (8) a transitive verb selects one NP complement. While example (9a) has an applicative morpheme '-il' suffixed on the verb root necessitating the verb to select two noun phrases to function as complements. Verbs such as *send*, *give* and *put* have the ability to select overt (free) complements.

Consinder the following examples:

(9b) O-mu-khana VP [V a-la-wa] NP [Naba-ana] NP [N a-ma-tore]]]

1-1-girl 3SG/1SM-FUT-give 2-child 6-6-banana 'The girl will give the children bananas.'

(c) A-ba-kholi VP [V *b-a-ra*] NP [NP [Ne-bi-kono]PP [PP a-mulyango]]] 2-2-worker 2SM-PST—put 8-8-basket 16- door

'The workers put the baskets at the door.

Depending on the nature of the verb, the head verb can select a clause to function as its complement. The clause selected is embedded on the main clause. The verb either selects a finite complement or non finite complement clause. Finite complements are like independent clauses. They are tensed and the subject reference not restricted to that of the matrix clause. The embedded sentence is introduced by a complementizer. The complementizer must agree with the noun class of the subject NP of the main clause. Typical matrix verb for finite complements are verbs of utterance and cognition. The verbs express components such as *know*, *think*, *remember*, *believe* and those of utterance such as *speak*, *ask*, *shout* and answer are some of the examples.

(10) Omu-sasiVP [V a-*para* [COMP a-li [S Nekesa a-la- bira li-kela]]]

1-parent 1SM-think 1SM/3SG-COMP Nekesa1SM –FUT –pass 5-exam

'The parent thinks that Nekesa will pass the exam.'

(11)Nekesa nende Wekesa *ba*-par-a *ba*-li *ba*-kha-ba-lang-e

Nekesa conj Wekesa 2SM-think-fv 2SM-comp 2SM-FUT-OM-call-fv

'Nekesa and Wekesa think that they will call them.'

Example (11), illustrates an example of verbs which subcategorise for sentential complements. The verb *para* 'think' selects an overt complement in form of a clause. The constituents of the VP include the verb and clausal complement introduced by a complementiser. The verb has both [+AGR] and [+Tense] features.

In example (10), the exceptional case marking subject 'Nekesa' bears a case relationship to the root verb *apara*'thinks' which is similar to the case relationship between verbs and their direct objects. The subject of the embedded clause 'Nekesa' is assigned the accusative case by the matrix verb of the root clause. The accusative case is assigned under the structural condition of government. The matrix verb governs its embedded clausal complement and it also governs the subject in the embedded clause. Subjects of the embedded clauses function as subjects in X-bar theory and theta theory. The subject 'Nekesa' is assigned the 'agent' theta role.

Different structural forms of Lutachoni verb phrase serve different grammatical functions. In the formation of the VP linguistic structures, paradigmatic and syntagmatic restrictions are at play. The morphological features in form of morphemes affixed on the verb can't have double realizations. This is so because the morphemes are supposed to belong to different paradigms for grammaticality and acceptability of the structure

#### 1.5 Statement of the Problem

Research has been done on morphosyntax of different phrases in many world languages. In particular, it has been carried out in other Bantu languages related to Lutachoni, Diercks and Sikuku(2013), Lonyangapuo (2010), Mchombo (2006), Elwell (2005), Ngesimo (2000), Mwaniki (1999), Sikuku (1998), Payne (1997), Baker (1985) and many others. However, there exists a knowledge gap in the area of linguistic analysis because

to the best of my knowledge few systematic studies have been done on the morphosyntax of the verb phrase despite the VP being an obligatory constituent and most complex linguistic unit of a sentence in Lutachoni just like in many other world languages. This study investigates morphosyntactic behaviour of both inflectional and derivational morphemes and their effect on morphosyntactic structure of Lutachoni VP. This study attempts to elaborate further on affixation operations on the verb and the role played by inclusion of affixes on morphosyntax of the verb phrase using Lutachoni which is an understudied language. This study intends to perhaps make generalizations on the the morphosyntactic structure of Lutachoni verb phrase which have gone unnoticed.

The nature of the Lutachoni lexical verb is quite complex. Morphological operations on the verb phrase involve a complex interplay of syntax, semantics and the lexicon. The lexicon interacts with the syntactic component through lexical insertion processes. The form and distribution of morphemes within the VP depend on the meaning that the verb must express in a given linguistic structure. The verb phrase displays a typologically interesting form of verb morphology and syntactic ordering of VP elements. Morphemes (affixes) embedded on the verb root to mark grammatical distinctions of negation, subject agreement, object marker; reflexive, distant past and future tense are morphologically realized as prefixes. Whereas, aspect and valence adjusting morphemes such as applicatives, causatives, passive, reciprocal and their co-occurrences affixed are morphologically manifested as suffixes on the verb root. These morphosyntactic features are the basic building blocks of syntax in any language including Lutachoni. The following examples illustrate some of the features in Lutachoni VP:

(12)(a)A-ba-lesi sa-ba-la-chekh-isi-a aba-keni ta

2-2-househelp/NOM NEG-2SM/3PL-FUT-laugh-CAUS-fv2-2visitor/ACC 'Househelps will not make the visitors to laugh.'

Example (12a) illustrates a negative construction. Negation is marked by a bound morpheme {sa} affixed on the verb and free morpheme 'ta', subject agreement morpheme {-ba-} marks 3<sup>rd</sup> person plural and future tense morpheme are prefixed while a causative morpheme {-isi-} suffixed on an intransitive verb. The causative affix transitivises the verb head necessitating it to subcategorise for a noun phrase complement *abakeni* 'visitors.' The affixation of a causative morpheme to the verb root increases verb arguments to two. Affixation of verbal extensions such as causative morphemes affects the morphosyntactic structure of Lutachoni VP.

(b)E-bi-ana VP [V bi – la – chekh – isi – an-ang-a]

13-13-child/NOM 13-TNS-laugh-CAUS-REC-ASP-fv

'Small children are making each other to laugh'

Example (12b) illustrates a complex verb in Lutachoni. Morphemes affixed on the verb root include {bi-} a subject marker for group 13<sup>th</sup> noun class, tense marker {-la-}, causative-reciprocal marker {-isi-an-} and aspect marker {-ang-}. It highlights complimentary co-occurrence syntactic relationships that exist in valence adjusting operations. The affixation of causative-reciprocal morphemes {-isi-an-} to the verb reduces verb arguments to one resulting to an intransitive VP structure. The subject NP ebiana 'small children' is theta marked agent and patient. It is assigned nominative case. The double theta roles and case is as a result of reciprocity marked on the verb.

(c)O-mu-khana VP [V a-la-mu-kul-il-a ] [NP i-n-gubo i-n-dai ]]]

1-1-girl/NOM 1SM/3SG-FUT-1OM/3SG-buy-Appl-fv9-9-dress/ACC 9-9-good 'The girl will buy her/him a good dress.'

Example (12c) is an applicative construction that subcategorises for two NP complements. The applicative morpheme {-*il*-} is a valence adjusting morpheme that necessitates the verb to increase the number of arguments selected from two to three hence affecting the syntactic structure. The subject NP *omukhana* 'girl' is given theta role

of agent, the object marker is an infix {-mu-} the object NP *ingubo* 'dress' is allocated the patient theta role. Consequently, the subject NP *omukhana* 'girl' is assigned nominative case, the object NP *ingubo* 'dress' is assigned accusative case. Applicative constructions are ditransitive VP structures.

From the examples, it is evident that morphemes are affixed on the verb root. The morphemes manifest in different forms to mark a variety of grammatical features in Lutachoni. Morphemes are licenced to occupy specific sites in the VP. The syntactic ordering of these morphemes is a paremetric feature and makes affixation operations in Lutachoni unique from affixation of other languages like English and needs investigation. The valence adjusting morphemes such as reciprocal, passive, applicative, causative and their co-occurrences embedded on the verb determine the arguments to be selected by the verb. They can decrease, increase or retain the number of arguments in a sentence. These morphological operations on the verb also affect the lexical property of the verb in terms of assignment of theta roles and case marking on verb arguments involved. This study also tests the adequacy of the Principles and Paremeters theory and provides new data on which theories of grammar can be tested.

#### 1.6 Aim and Objectives

The study aims at describing the morphosyntactic structure of the Lutachoni VP.The specific objectives of the study include:

- (i) to describe the morphological forms and resultant variations of elements within the verb phrase based on syntax
- (ii) to explain affix ordering and co-occurrence possibilities of elements within the verb phrase
- (iii) to establish the role played by morphemes affixed to the verb on morphosyntax
- (iv) to test the adequacy of the Principles and Paremeters Theory

#### 1.7 The Research Questions

The study is guided by the following research questions:

- (i) Which internal features are constituents of the VP in Lutachoni syntax?
- (ii) How are elements within the VP licensed?
- (iii) What are the co-occurrence restrictions?
- (iv) How does affixation change the morphological and syntactic structure of Lutachoni VP?
- (v) How does the Principles and Paremeters theory account for the morphosyntactic structure of Lutachoni VP?

#### 1.8 Justification of the Study

This study describes the morphosyntactic structure of Lutachoni VP. It focuses on the description of the VP elements; their morphological forms and syntactic distribution and effect on the argument structure. The study investigates the selection of overt complements based on verb subcategorization features. As a result, this study purposes to make a linguistic contribution by highlighting some morphosyntactic properties of Lutachoni which is a Bantu language. The researcher was motivated by remarks made by Mwaniki (1999).

Mwaniki (1999:153) observes:

if there is an area which can present possibilities of more linguistic research findings is the verb phrase and especially in agglutinative languages. Considering that most linguistic analyses have been done in Romance and European languages; this study provides new data on which the modules of the Principles and Paremeters theory are applied to account for and explain the morphological and syntactic structure in agglutinative African languages. This study investigates the explanatory adequacy of PP in accounting for the knowledge of a little researched Bantu language like Lutachoni. The study tests the PP theory. It seeks to highlight the universal characteristics and the language paremetric features that provide opportunities for further theoretical linguistic research in complex verb languages. Hence this study advances the linguistic theory by using new data.

Theories can only be verified or and modified when applied in the analysis of world languages to determine their adequacy. Radford (2004:3) argues that:

A theory of UG must provide us with tools needed to provide a descriptively adequate grammar for any and every human l-language. A theory of UG would be of little interest if it enabled us to describe the grammar of English and French, but not that of Swahili or Chinese.

The mandate to delve into linguistic analysis of Lutachoni is as a result of an argument based on Payne (1997) observation.

Payne (1997:1) notes:

About 2000 out of 6000 languages of the earth have received close attention by linguisticresearchers. The other 4000 have sporadically been described by linguists and many have not been recorded in written form for future generations.

He further, cites Kraus (1992) who estimates that 3000 out of the 6000 of languages spoken at present will become extinct in the next century. Consequently, such remarks made on the status of our languages create curiosity in potential researchers to do a description of these languages being optimistic that it could result to a documentation of some of them. Furthermore, the researcher was inspired is motivated by the observation made by Carstairs McCarthy (1992).

McCarthy (1992:3) observes:

The revival of morphology and syntax as a subject of study by theoretical linguists has been announced more than once in recent years.

As a result, this study will benefit native speakers and other linguists interested in

Western Bantu Luyia languages and in particular Lutachoni.

This study is equally significant for it contributes to further development of theoretical linguistics in the fields of morphology and syntax. Earlier works include; Sikuku (1998), Mwaniki (1999), Lonyangapuo (2010) and others.

## 1.9 Scope and Limitations

This study focuses on the affixation operations within Lutachoni verb phrase. It identifies internal features agglutinated in the complex verb and desribes their morphological realizations, syntactic patterning, grammatical functions and effect on the morphosyntactic structure of Lutachoni VP. The verb head in the VP is dominant in determining the combinatorial potential of the whole VP. Depending on the nature of the verb, the Lutachoni VP can be intransitive, transitive or ditransitive.

The internal features of the verb to be considered are grammatical markers of negation, subject agreement, tense, object pronominals, aspect and verbal extensions that determine argument structure. Hence this study is interested in the nature of the Lutachoni verb which is quite complex.

The VP domain is limited to the verb head, its embedded morphemes and the verb complements. This study leaves out adjuncts and modals which are also constituents of the Lutachoni VP. Modals are not inclusive because morphemes that mark modality are not agglutinated in the Lutachoni verb while the study is interested in internal features embedded in the main verb.

The study concentrates on verb morphology. But, reference to noun phrase is made in cases where the morpheme(s) affixed on the verb head changes verb valence

necessitating the addition of an NP complement or detransitivising the VP structure. The noun phrase preceding the verb is relevant in this study because the subject agreement marker affixed on the verb root is determined by its properties. The linguistic structures considered are those clauses displaying the relevant VP structures. Besides, PP theory is used in the linguistic analysis of the specific VP structures and in the interpretation of data. This theory comprises sub-theories that can handle the various aspects in the analysis of data. It explains the universality of grammar of languages and the parametric features characterising grammar of specific languages. Hence, it is a theory that can attain explanatory adequacy. The government concept is dominant in the discussion of this particular study.

The study faced the following limitations:

This research lacked previous research in fields of morphology and syntax on Lutachoni to make reference to and advance on. However, this problem was solved by reviewing various related studies done on languages with SVO sentence structure, Bantu verb morphology and Bantu verb phrase.

Data collection was a handicap. The use of native speakers' intuitions by the researcher to generate data could lead to subjectivity which is a limitation. To curb this, a sample of adult Lutachoni native speakers as respondents were involved to verify the data generated. The sample verified generated data by ticking the correct structures and correcting the structures which were not well-formed on verificational list provided by the researcher. This was done to ensure that only correct verb phrase structures were used in data analysis and also to make the generated data objective and more representative.

### **CHAPTER TWO**

### THEORETICAL FRAMEWORK AND LITERATURE REVIEW

### 2.1 Introduction

This chapter focuses on the theoretical framework adopted in this study and literature review. We review the morphosyntax of the VP in general. We focus on how different linguists have described and illustrated the concept. A review of linguistic work on the VP in generative grammar is presented. Then, linguistic works on the verbal morphology and syntax of Bantu languages are examined. Such a review is important if we have to comprehend the morphosyntax of the Lutachoni VP which the present study focuses on.

The study and analysis of a complex linguistic entity such as the verb phrase structure in Bantu presents unique challenges to the linguist. It demands the linguist to employ an approach and theory which accounts for the morphological and syntactic paremetric features of the structures of the linguistic form under study. This study applied the Principles and Paremeters (henceforth PP) approach which is a recent development of Chomsky's Generative Grammar. Generative grammar is concerned with a theory of grammar that is postulated to be the innate component of the human mind/brain, a faculty which all humans share as part of their genetic identity. PP approach establishes the relationship among all human languages. It has evolved through a number of phases from Chomsky's (1951) Transformational Generative Grammar model (TGG) to Chomsky's (1992) Minimalist Program (MP).

### Haegeman (1995:18) observes:

When we look at the development of generative syntax in the last twenty five years, one important tendency that can be isolated is a marked return to the comparative approaches. The goal of comparative approach in the generative tradition is psychological i.e that of accountability for the knowledge of language.

In line with the comparative approach, this study applies the Principles and Paremeters theoretical framework propounded by Chomsky (1981). The PP attempts to account for the universal nature of human language. Feature checking theory on structural relations is applied in the licencing of case and selection of complements by the verb head. The Split IP and Split VP hypotheses in X-bar are applied in schematic representation.

#### 2.2 THEORETICAL FRAMEWORK

The Principles and Parameters theory is a comprehensive generative grammar approach which comprises the Government and Binding modules and the Minimalist Program. It was formulated and advanced by Chomsky and Lasnik (1981). It is a framework within Generative linguistics in which the syntax of a language is described in accordance to a finite set of fundamental general principles that are common to all languages and specific parameters that determine syntactic variability amongst languages. It is composed of modules that can analyze and account for a wide range of linguistic phenomena adequately. It employs syntactization and configuration methodology in trying to offer explanations for the structure of a grammar of a language.

Sikuku (1998) in his description of the morphosyntactic structure of Lubukusu Anaphoric relations using the Government and Binding approach cites Horrocks (1987).

Horrocks (1987:92-93) states:

It is clearly preferable to have a theory which envisages grammars as comprising sets of interacting sub-components, each restrictively defined in terms of form of its elements, than to have apparently simple theory which treats a wide range of phenomena in uniform version...

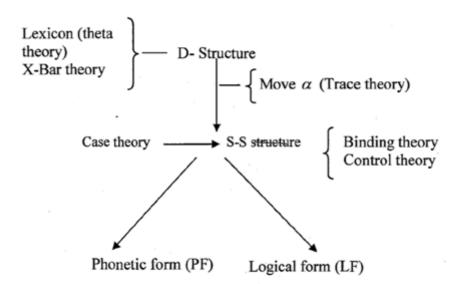
Each module of PP is simplified and generalized to deal with wide spread phenomena and also language specific features. Its modules are also interactive in nature, and being a theory of UG,

it is adequate for this study.

The Principles and Paremeters framework is based on principles which are true for a wide range of data from different languages of the world. Consequently, it accounts for language universals through a set of principles. A grammar provides structural descriptions of expressions in the language which serve as the basis of correlating the sound and meaning of its expression.

Within the Principles and Parameters theory we discuss the core concepts of GB and Minimalist Program relevant in this study.

Napoli (1993:566) refers to the illustration below as a map through GB



levels of syntactic representation (Napoli 1993:566 a map through GB)

Figure 2.1: Shows the relationship between the various levels of syntactic representation.

In figure 2.1, the levels of syntactic representation are the base (lexicon), the Deep structure (DS), Surface structure (SS), logical form (LF) and the phonological form (PF). The DS and SS levels are concerned with syntax while the LF and PF levels are

interpretation component. The organization of grammar shown indicates that each component is discrete. In addition, we cannot reverse the direction. As a result no syntactic rules will be sandwiched between lexical rules.

The lexicon is a mentalistic dictionary which specifies the inherent properties of lexical items. This includes the phonological, morphological, sub-categorization features and contextual features. It also determines the theta roles that are assigned to the categories subcategorized for by lexical items that serve as head of the linguistic construction. Argument positions that are assigned theta roles are lexically filled at the deep structure level. In the Lutachoni VP, the following specific arguments selected by the verb and their roles may be identified.

(13) Khasandi a- la- rak-a e-mi-kachi

NOM 3SG-FUT-plant-fv 4- 4-sugarcane/ACC

'Khasandi will plant sugarcane.'

The NP 'Khasandi' bears the grammatical function subject while the VP *emikachi* 'sugarcane' bears the grammatical function object, which is subcategorized for an object NP. The VP is specified in the lexicon as assigning the patient roles to its object position. Verbs do not subcategorise for subject NP and hence assign  $\theta$ -roles to subjects only indirectly.

Lexical items are combined at the deep structure level (DS). This level provides a structural description of lexical strings in accordance with phrase structure rules and rules of lexical insertion. DS structures are free of syntactic dislocations as those found in surface structures. There are no traces. Grammatical functions such as subject, object, and complement are configurationally defined at DS level.

(14)(a)Chetambe VP [V y-a-ruk-ang-a][NP a-ba-tachoni]]

Chetambe/Nom 3SG-PST-rule-Asp/imp—2-2-tachoni/Acc 'Chetambe was ruling the Tachoni.'

The transformational component maps DS to surface structure by the rule move  $\alpha$  (alpha). Alpha is some category whose value is determined in every language. This rule allows any category to move anywhere in the structure. Surface structure level is

characterized with traces which are as a result of movement.

(b) Aba-tachoni b-a-ruk-ang-w-a nende chetambe 2-Tachoni 3PL-PST-rule-ASP-PASS-fv prep Chetambe

'Tachoni were being ruled by Chetambe.'

In example (14b) the passivisation rule has been applied. The logical subject 'Chetambe' and the logical object 'Abatachoni' at the DS swap positions after the application of the passivisation rule. The logical object 'Abatachoni' occupies the grammatical subject syntactic position while Chetambe 'the logical subject occupies the grammatical object

The levels of representation are restricted by several sub-theories (modules) of grammar as indicated in figure (2.1). The theories of grammar include X-bar theory, Theta theory, Trace theory, Case theory, Binding theory and Control theory.

The following is a brief description of the Principles and Paremeters sub- theories (modules) applied to this study:

(i) Government theory

syntactic position at SS level.

- (ii) X-bar theory
- (iii) Theta theory
- (iv) Case theory
- (v) Feature checking

## 2.2.1 Government Theory

The notion of government is taken as a sisterhood relation. The head verb constituent commands (C-commands) the elements that exist in its domain. It is important to observe that the concepts of dominance and precedence are crucial in the discussion of the government theory and especially in linguistic explanations involving tree diagrams.

A node immediately dominates another node if there is no node that intervenes between them. It occurs higher up in the tree diagramand is connected by an unbroken line to the first node. A node is said to precede another if it occurs to the left of that node in phrase markers.

Hence, the notion of government can be defined as:

A governs B if and only if (iff)

- (i) B is contained within the maximal projection of A (A C-commands B)
- (ii) Every maximal projection dominating B also dominates A.

C –command is defined as:

A C-commands B iff:

- (i) A does not dominate B and
- (ii) A first branching node (XP) that dominates A also dominates B

Government is the concept of the Principles and Parameters theory scaffolding this study. The government theory is significant in the discussion of other sub-theories of PP. For example, the verb governs its arguments and case is assigned under government. In PP, the primary relation is configurational in nature. A certain constituent in the phrase or sentence structure governs other elements within it. In this study, the verb head governs the VP constituents.

Consider the following example:

(15) A-ba-khasi ba-la-kesa obule 2-2-woman/NOM 3PL-FUT-harvest fingermillet/ACC 'Women will harvest fingermillet.'
The agglutinated verb is a transitive verb that requires two arguments: internal argument *obule* 'fingermillet' and external argument *abakhasi* 'women'.

The following is an example to illustrate how the notion of government operates within the Lutachoni argument structure:

Diagram for example (15) Abakhasi balakesa obule (The women will harvest fingermillet)

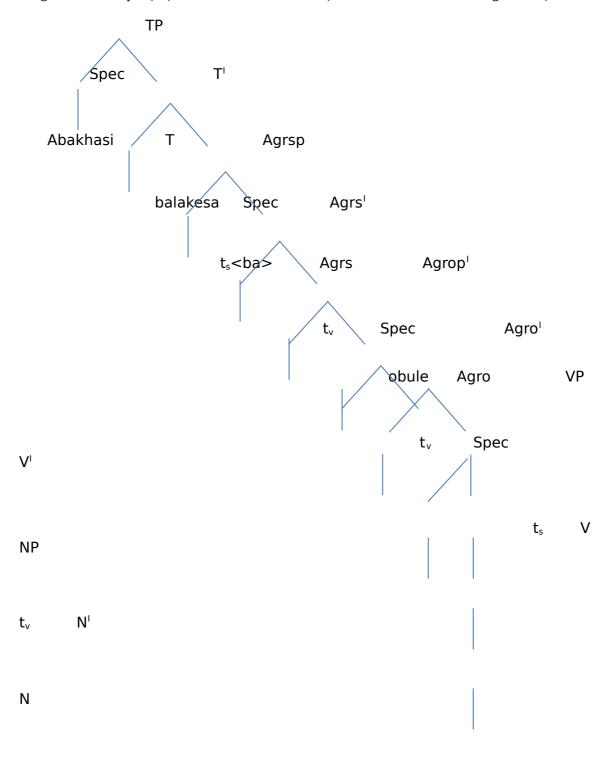


Figure 2.2: The Government notion in Lutachoni verb phrase

In this diagram, the verb *kesa*'harvest' governs the NP object (complement) *obule* 'fingermillet'. The two are contained within the maximal projection of the TP. In

addition, they are in a sisterhood relationship. The verb *kesa* C- commands the NP object *obule*.

Government determines the occurrence of lexical phrases. The verb, as the governor, determines its complements in internal argument positions. Usually the verb could dictate one argument position as in the case of intransitive, two argument positions as required in monotransitive structures or three arguments positions as in ditransitive structures. Some Lutachoni VPs are morphologically marked for argument structure. For example, the reciprocal, applicatives, causatives, passive constructions. The following is an illustration of an applicative construction:

(16) O-mu-ai VP [V a-la-kham-*il*-a][NP koko] [NP chi-ng'ombe]]]

1-1-Herds boy 3SG-FUT-milk-Appl-for grandmother 10-cows

'The herdsboy will milk the cows for grandmother.'

The morpheme {-il} suffixed on the transitive verb increases the number of verb arguments to three. It necessitates the verb to select two NP complements: *koko* 'grandmother' and *ching'ombe* 'cows'. The affixation of an applicative morpheme to Lutachoni verb root results to a ditransitive VP structure.

### 2.2.2 X –Bar theory (X<sup>1</sup>)

X-Bar theory replaced the Phrase structure (PS) rules in Transformation Generative Grammar (TGG). It took on the role of constraint on actual structures rather than on rules responsible for the syntactic structures. It captures generalities across languages and language specific traits.

Culicover (2009:105) observes that:

The apparent similarity between the structures of sentences and noun phrases has led syntacticians to formulate a theory of phrase structure in which uniformity of the structures is the rule rather than the exception. This view is called X theory. X theory takes the structure of any phrase to be a set of projections, all of which are based on the category of the head.

X-bar module is a theory of phrase structure headed by lexical elements. It defines what constitutes possible phrases in natural languages. Each node in the X-bar schema represents a different phrase either dominating or preceding a given node. It can also account for the intermediate categories between lexical and phrasal structures. Consequently, it can handle morphemes embedded in the VP representing the various semantic notions. This is the reason why it is preferred to explain the complex nature of the agglutinative Lutachoni VP.

The lexicon determines the specific features of a phrase. For example, elements to be combined to form a verb phrase in Lutachoni. The categorial properties of a structure are projected from the lexicon. It interacts with the syntactic components through the lexical insertion process. The verb head selects verbal elements to co-occur with from the lexicon to form a phrase structure. This is based on the native speaker's intuitions. For example:

(17)(a) A-la-*wa* omu-khana li-uwa
3SG-FUT-give 1-girl 5-flower
'He/She will give a girl a flower.'
(b) Ba-la-tekh-*il*-a aba-keni i-ng'eni
3PL-FUT-cook-APPL-fv 9-fish

'They will cook fish for the visitors.'

Morphemes and lexemes which sum up a native speakers vocabulary of their language are stored in the lexicon. In example (17a) a subject marker and tense marker morphemes are affixed before the verb root -wa- 'give' in their appropriate insertion sites. The verb is ditransitive and it subcategorises for two overt NP complements: *omukhana* 'girl' and *liuwa* 'flower.' The speaker has competence about the subcategorisation properties of the verb and the nature of complements to be selected to form a phrase. Example (17b) is a verb with an applicative morpheme  $\{-il-\}$  suffixed on the verb root *tekh*-'cook.' In

Lutachoni, the affixation of an applicative morpheme makes the verb to subcategorise for two NP complements.

Elements from the lexicon of appropriate category are attached on terminal nodes through the notion of projection principle. This principle states that a syntactic structure is projected on the basis of its subcategorisation properties of lexical items. Representations at each syntactic level, that is, DS, SS and LF are projected from the lexicon. The agglutinative nature of Lutachoni VP presents paremetric features. The VP comprises morphemes which are grammatical markers of the various morphosyntactic concepts being projected on the basis of their semantic features. How do we account for the morphemes marking negation, subject agreement, tense and aspect affixed on the verb root? Which terminal nodes are they projected from since they represent semantic notions embedded in the verb? The X-bar theory can adequately account for the projection of these intermediate categories of the verb phrase.

It handles these parametric features by creating intermediate phrasal nodes for the morphemes. The notion of government then applies in trying to explain the embedded morphemes and projection of elements. The morphemes expressing different grammatical functions are affixed on the verb head due to head theta government.

Other relevant principles under X-bar theory include the Extended Projection Principle (EPP), split inflectional hypothesis and the VP-internal subject hypothesis. The EPP requires a sentence to have a subject. EPP demands that Spec-TP position must be overty filled. This is a syntactic requirement. It proposes that the thematic position of the subject is the VP-internal and that in a transitive linguistic structure the direct object is generated as a sister of verb. The subject NP moves to Spec- AgrSP to be assigned nominative case then to Spec-TP.

Anagnostopoulou (1998) suggests that the EPP and agreement paremeter are satisfied via verb raising to the T node. EPP checks nominal feature of agreement. In Lutachoni, this is achieved by moving the VP across to the tense (T) node since the verb has features to be discharged before spell-out to avoid it from crashing. The object moves from the verb core to AgrOP to be assigned accusative case.

The Split INFL hypothesis suggests that the IP consists of tense (T) and agreement (AGR) phrasal positions. This study also applies the VP-internal subject hypothesis which assumes that the subject is base generated in [Spec- VP] and that in a transitive sentence construction the direct object is generated as a sister of the verb. The subject is raised from Spec-VP to Spec-AgrSP leaving a trace in the Spec-VP. While the object moves from Spec-VP to Spec-AgrOP, leaving a trace.

Consider the following:

(18) A-ba-soleli ba-samb-ile chi-nju

2-2 boy 3PL-PSTburn PST-fv 10-house 'The boys burnt the houses.'

# Diagram for example (18) Abasoleli basambile chinju

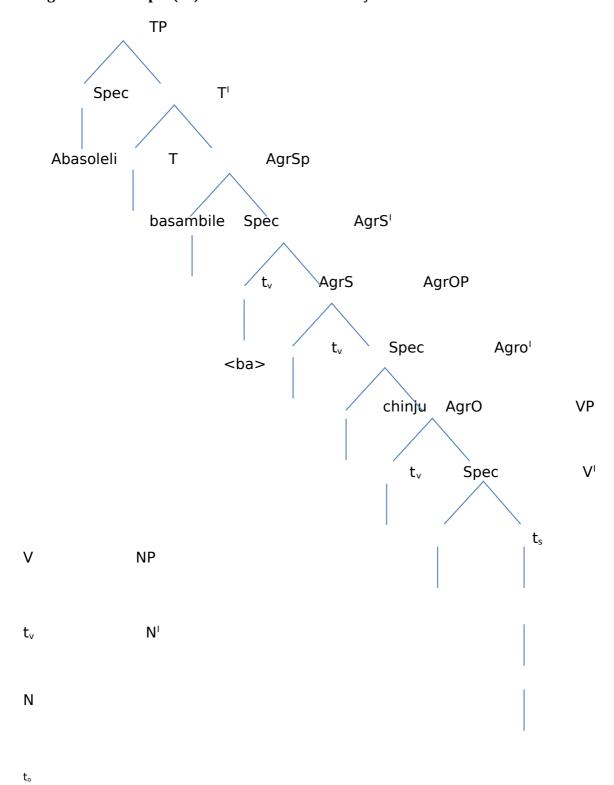


Figure 2.3: The X-bar Theory

In figure 2.3, T dominates *basambile* 'they have burnt'while AgrSP dominates *abasoleli* 'boys' whereas AgrOP dominates *chinju* 'houses'. The NP subject *abasoleli* 'boys' is

base-generated in the Spec-VP. The subject NP moves from Spec-VP through Spec-AgrSP to Spec-TP checking its agreement and case features to be assigned nominative case as the external argument. The verb *samba* 'burn' is raised from VP toT to be checked its phi-features (tense, person and number) by adjoining the verb to T. The NP object *Chinju* 'houses' moves from Spec-VP to Spec-AgrOP to check its agreement features and to receive accusative case

# 2.2.3 Theta theory (θ- theory)

This is a theory of grammar dealing with the assignment of theta roles such as agent, theme, experiencer, goal, patient, benefactive and instrumental to arguments which are sentential constituents. Theta (thematic) roles are assigned under government relationship.

Culicover (2009) posits that  $\theta$ -roles are assigned by a lexical item forming part of the lexical entry of that item in the lexicon.  $\theta$  -theory applies directly to the linguistic structures at D-S level.

Θ-roles assigned to NP constituents within the VP are referred to as internal roles. The object is the internal argument, for it is closer to the verb both semantically and structurally. Then, the subject is assigned an external role. An intransitive verb has one theta-role, agent, assigned to the external argument NP. A transitive verb has two theta-roles, agent assigned to the external argument NP and theme/patient role assigned to the internal argument. A ditransitive verb is assigned three theta roles: agent role assigned to the external argument NP and two internal theta-roles assigned to an NP and PP or an NP and anNP. The two principles that govern theta role assignment are sisterhood condition and theta criterion.

The sisterhood condition states that  $\theta$ - roles are assigned to sisters of the assigner element. In this case, the assigner is the verb. The notion of government and C-command are applicable. In Lutachoni, internal  $\theta$ - roles are assigned directly from the agglutinated VP head to its NP complements. But, external-  $\theta$  roles are assigned by the INFL via X-bar to its sister the specifier.

The sisterhood condition together with restrictions asserted by X- bar theory plays an important role in the definition of a well formed D-structure. It involves inserting the relevant arguments as determined by the verb in to their appropriate syntactic positions. The sisterhood condition is one of the principles of  $\theta$ - theory that applies directly to the D- structure.

The theta criterion ( $\theta$ - criterion) is a principle of UG under the  $\theta$ -theory which regulates how  $\theta$ -roles are assigned. The principle emphasizes that an argument cannot be inserted into clausal structure without having a legitimate  $\theta$ - role. An argument bears one and only one  $\theta$ - role. If this rule is neglected then the resultant structure will be ungrammatical.

The notion of theta government can be expressed as;

A theta governs B iff:

- i. A governs B, and
- ii. A assigns a theta role to B

To illustrate the notion of theta government within the Lutachoni VP, the concept of argument has to be incorporated in this discussion. In a sentence, the verb, as the head, sub-categorises for the lexical items to be inserted in the syntactic positions. The verb selects the arguments involved in the activity. The syntactic positions of the subject NP and object NP are their arguments positions. The relationship between the verb and its

arguments is referred to in terms of thematic roles or theta roles, hence the verb as the head, theta marks its argument.

It is equally important to observe that in valence adjusting operations, suffixation has an effect on the verb sub-category. Verbal extensions affixed on the verb head either detransitivises or transitivises the Lutachoni VP structures.

This study attempts to show the thematic roles either increased or decreased after the affixation of a suffix to a verb.

Consider the following illustruations:

nominative case.

(19) (a) Wangusi a-la-chekh-a

Wangusi/NOM 3sg-FUT-laugh

'Wangusi will laugh.'

(b)Tunai a-la-chekh-isi-a Wangusi

Tunai/NOM 3SG-FUT-laugh-CAUS-fv Wangusi/ACC

'Tunai will make Wangusi to laugh.'

Example (19a) contains an intransitive verb *chekha* 'laugh'. The sentence has one argument *Wangusi* given an agent role. The embedment of a causative suffix changes the intransitive to transitive. It necessitates the sentence to increase the arguments to two. The nominative *Wangusi* having the agent role in (19a) becomes the accusative allocated a 'patient' theta role and an agent, *Tunai*, is introduced in (19b) which takes the

# Diagram for example (19b) Tunai alachekhisia Wangusi

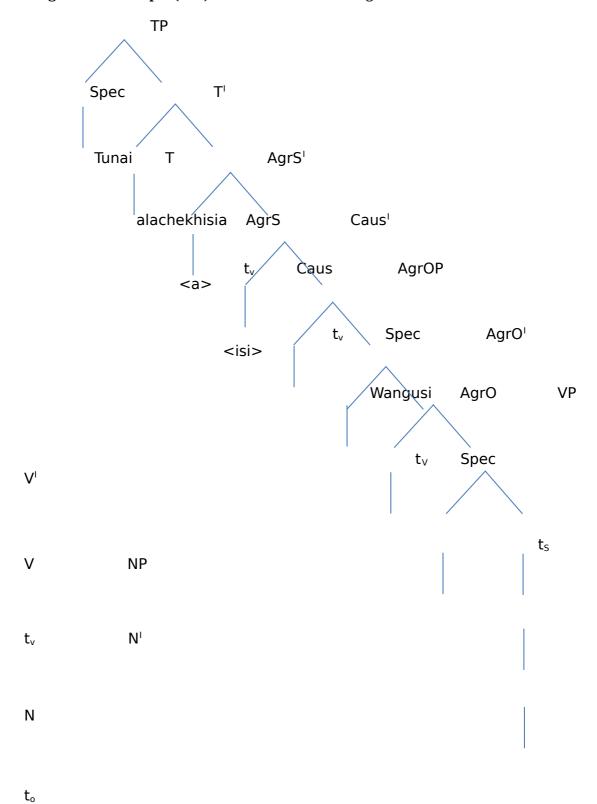


Figure 2.4: Theta roles in Lutachoni

The projection principle requires the  $\theta$ -criterion principle to be satisfied at each syntactic level, that is, D-structure and logical form (LF) levels. The projection principle states that categorical structure reflects thematic structure at all syntactic levels. This means that arguments are supposed to be inserted into D-structure configurations only in  $\theta$ -positions. It is through the native speakers' intuitions that a one-to-one match is made between the number of syntactic arguments and the number of semantic arguments of a verb. Figure 2.4 highlights the assignment of theta roles. Theta roles are assigned in the base-generated positions in the VP- internal at D-Structure level. The arguments are covert. The empty position labeled  $t_s$  is given an 'agent' role while  $t_o$  is given 'a patient' theta role.

## 2.2.4 Case theory

It is a surface structure(S-S) module of grammar which determines the distribution of NPs through a requirement that all NPs must be in case positions at the S-S level. One of the main principles of case theory is the case filter principle which dictates that all overt NPs must occupy positions to which case is assigned.

Lutachoni clauses are tensed (finite). Nominative case is assigned to the NP before the verb while the accusative case is assigned to NP occupying the syntactic position after the verb. Structural case is assigned under the government notion. The nominative case and accusative (objective) case is assigned by case assigners governing the particular positions to which case is assigned.

Black (1994) notes that sentential element under T assigns nominative case to the NP specifier that it governs. Then, V assigns accusative case to the NP that it governs. Therefore, nominative case is assigned to the NP before the verb while the accusative

case is assigned to NP occupying the syntactic position after the verb. Consider the following examples:

(20)(a) Sitati y-a-rer-a li-uwa
Sitati/NOM 3SG- PST-bring-fv 5-flowerl/Acc
'Sitati brought a flower.'
(b)Sitati y-a-rer-il-a Nekesa li-uwa
Sitati/NOM 3sg-PST-bring-APPL-fv Nekesa/DAT 5-flower/ACC
'He/she brought Nekesa a flower.'

In example (20a), the verb head *rera* 'bring' subcategorises for one overt NP complement *liuwa* 'flower' which is assigned accusative case while the subject NP Sitati which is an external argument and also an agent is assigned nominative case. Example (20b) has two object noun phrases to the right of the verb. Inherently and structurally, 'Nekesa' is assigned dative case while the object *liuwa* 'flower' is assigned accusative case by the verb *yarerila* 'brought for' the head of VP. Sitati is a subject NP assigned nominative case by T.

## 2.2.5 Feature checking theory

An elaborate analysis of the morphosyntax of the complex Lutachoni VP requires a comprehensive theory to account for its features. It demands that the features of the verb be described. This study also applies the feature checking theory.

In Minimalism, Chomsky (1992) proposes that a linguistic structure links two levels of representation: logic form and phonetic form. The linguistic system generates abstract features which receive an overt form and have to be spelt out. The abstract structures replace the D-S and S-S levels in GB. Spell out results to phonological form (PF) representations. The following diagram highlights levels of syntactic representation:

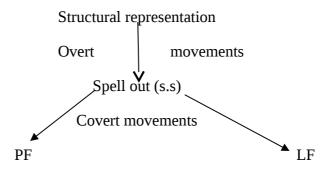


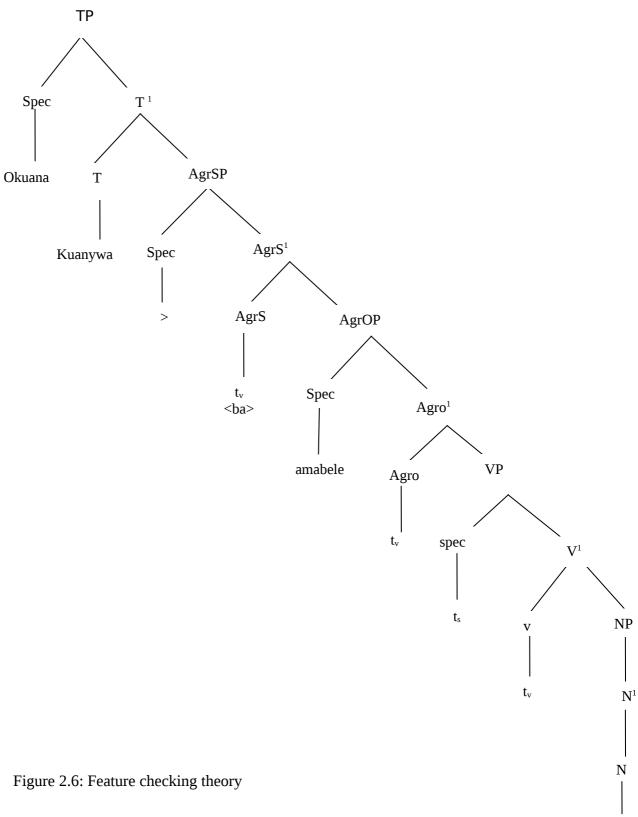
Figure 2.5: Minimalist Program: Levels of Syntactic Representation

Chomsky (1992), while discussing the MP schematic representations adopts the split INFL hypothesis. He observes that clauses are extended projections of VP. The thematic material of the clause (the subject, object and the predicate) is contained in the VP projection. The thematic position of the subject is the VP-internal and it moves from Spec-VP to Spec –IP or Spec-AgrSP to check the agreement features and nominative case features. It leaves a trace in the VP –internal position. The VP is dominated by functional categories Tense phrase (TP) and Agreement Subject phrase (AgSP). He also proposes that verbs are base-generated with their inflectional endings and AgrP and TP nodes dominate bundles of abstract features. The verb morphology has to be checked by the abstract features. The traces in the positions left behind as the subject, verb and object, move to check features have the same syntactic and semantic properties as their antecedents.

The Feature checking theory was developed by Chomsky (1995) to ensure the compatibility of grammatical features of words that constitute a sentence. Morphological properties of words can be characterized in terms of sets of grammatical features which must be checked for well-formedness of linguistic structures. Verbs have both interpretable and uninterpretable features which must be checked during morphological operations. The phonological features are readable at PF level while semantic features are readable at LF level. Therefore; some features have to be eliminated before spell-out at the LF level to ensure the grammaticality of the structure. The checking operation licensed by movement eliminates [-interpretable] features.

Consider the following example:

(21) Oku-ana ku-a-nyw-a amabele 19-child 19-PST-drink milk 'The big child drank milk.' Diagram for example (21) Okuana kuanywa amabele



In figure 2.6, the T node dominates *kuanywa* 'drunk'while AgrSP and AgrOP nodes dominate *okuana* 'the big child' and *amabele* 'milk' respectively. As observed, the clause

to

thematic material is base generated in the VP and there is head to head movement to check features. The subject NP *okuana* is raised from Spec-VP position to Spec-AgrSP to check the agreement and nominative case features. The inflected verb *kuanywa* moves from VP internal position through AgrO and AgrS to check agreement features (person and number) and then to the Spec-TP projection to check tense features. Then the object NP moves from VP to Spec-AgrOP to check agreement and accusative case features. The movement to check features is motivated by the attraction of the tense and agreement functional heads which bears features that must be checked. Basically an agglutinated verb is base generated with these inflections and it has to move for checking of appropriate features adjoined to it. NPs (DPs) move to case marked positions at S-structure level because they cannot receive case in their D-structure positions.

This study relies on both Split INFL and Split VP hypothesis for diagrammatical representations. The Split INFL states that the IP consists of tense (T) and agreement (Agr) phrasal positions. While the Split VP hypothesis states that the subject is base generated in [Spec-VP] and that in a transitive sentence construction the direct object is generated as a sister of the verb. Both the Split INFL and Split VP hypothesis were used because it made it possible to indicate the various syntactic positions of elements in the linguistic structure. The assumption is that verb phrases have a complex internal structure whose constituents include: Tense Phrase (TP), Agreement subject phrase (AgrSP), Agreement object phrase (AgrOP), Applicative phrase (APPL¹), Causative phrase, Aspectual phrase (ASP¹) projections e.t.c and an inner VP core headed by a lexical verb.

From the discussion on sub-theories in the PP theory relevant to this study, we can make the assertion that the sub-theories are interrelated and they make restrictions on syntactic levels of structures in the Lutachoni VP.

#### LITERATURE REVIEW

### 2.3.1 The Morphosyntax of the VP in General

A comprehensive scientific analysis of the structure of language can be traced back to Chomsky (1957, 1965) works. Phrasal structure rules which were finite were observed to generate infinite structures. These generative rules brought about the universal grammar (UG) concept. Within Universal Grammar as presented by Chomsky (1965) all languages share syntactic universal traits. Later, arguments by Chomsky (1981, 1982) propose that although languages share many syntactic characteristics, structures vary due to unique parametric features characteristic to the specific language in question. This is also supported by Stockwell (1992) proposition that all languages share many substantive syntactic characteristics (syntactic universal), but the details of constituent structure, that is, which words cluster together and in what order are certainly not among them.

Lutachoni displays both syntactic traits and language parametric features that form part of a universal grammar features. For instance, the subject, verb, object syntactic word order is paremetric while the head first principle in phrasal constructions is a universal feature. However, paremetric features do exist in the VP in Lutachoni where simple meaningless morphemes that acquire meaning when affixed to the verb root are uniquely patterned on the verb head. For example:

(22) Sa-khu-la khesi-an-a ta

NEG-1PL-FUT-greet-REC-fv neg

'We will not greet each other.'

Example (22) displays morphemes marking negation, first person plural, future tense and reciprocity affixed on the verb. These morphemes are inserted in specific sites in the complex verb.

Gussenhoven and Jacobs (1997) assert that the morphosyntactic structure of a language can be realised in the meaning of the syntactic units of any linguistic expression. The two linguists make a distinction between a morphological structure and syntactic structure. They observe that in a morphological structure the smallest morphosyntactic unit is a morpheme. The current study is concerned with affixation operations on the verb root and other constituents of the verb phrase including NP complements and sentential complements. A distinction is made between derivational morphology, which results to the creation of new words that have an effect on the verb argument structure and inflectional morphology, which leads to the creation of new forms of words. In Lutachoni just like most languages, syntactically, morphemes or lexical items are not inserted directly into sentence structures but both the phrasal level and the clausal structural levels of a sentence are involved.

In this study, the major phrasal category is the VP. The lexical item which is the head verb conjugates various morphemes in the form of affixes to form the complex agglutinated verb. Subsequently, the embedding of morphemes in the VP has an effect on the morphosyntactic structure of the Lutachoni VP.

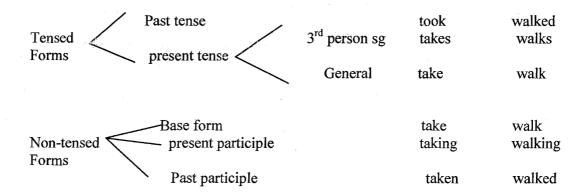
Culicover (2009) observes that syntax is a relation that governs the relationship between form and meaning in a language. Special attention will be given to linguistic works on the morphosyntax of agglutinating African languages. The verb phrase as a sentential constituent will be examined, described and explanations given.

Adger (2003) discusses the morphosyntactic features that are relevant to the core syntax of English. The grammatical features of tense, number and person are considered. In developing a theory of syntax, a set of features are used to explain the morphological, syntactic, and semantic behaviour of words in sentences. For example, the past tense feature which is a verbal feature is associated with the addition of a suffix '-(e) d' or sometimes '-t' to the verb stem.

For example: Tom walk-ed to the market.

We observe morphological changes in the addition of the morpheme marking past tense being attached to the verb head, the syntactic structure and meaning are also affected. Subject verb agreement in English also leads to change of the word. For example to mark 3rd person, the verb root is inflected with the suffix '-s' in singular. From Adger's (2003) discussion, we note that morphological processes lead to syntactic and semantic changes This study examines the effect of morphosyntactic features marking negation, person and number, tense aspect and valence and valence adjusting morphemes on the morphosyntactic structure of Lutachonii VP.

Huddleston (1988:38-40) contributes to the debate in morphology. He notes that most verb lexemes have the six-term inflectional paradigm.



He observes that the base form is in all cases identical to the lexical item. General present tense form is synchronized with the base form; only for 'be' are the present tense forms distinct from the base. 3rd person singular present is normally formed by adding a suffix to the lexical stem. Then, to form past tense in regular verb, a suffix - (e) d is added to the lexical stem of a verb. While the present participle is formed by adding to the lexical stem the suffix '-ing'. Past participle forms for regular and majority of irregular verbs are similar to past tense forms. Where there is a difference, the suffix '-n' is added to the lexical stem. Negative forms are formed by adding 'not' to the corresponding positive when following a consonant.

Huddleston (1988) further, states that inflectional categories include tense, person, number and polarity. He states that the use of present and past tense is to locate present and past time, the state, action, processes described in the clause. However, the relationship between tense and time isn't easy to grasp. Most verbs have two present tense forms to mark third person singular and plural to indicate subject verb agreement. The categories of person and number are primarily nominal. However, they also apply to VP structures of agglutinative languages as in Lutachoni. Polarity is a dimension contrasting positive and negative linguistic structures. The system applies not only to the verb but the clause.

This study is similar to Huddleston's (1988) description of the English verb. For it examines the morphemes affixed on the verb and the various grammatical features they mark and the syntactic sites in which they are licensed in the verb phrase in Lutachoni. The study highlights the variant forms of the VP internal features and morpheme paradigm. It also describes the VP structure based on subcategorisation properties of the verb and also based on valence adjusting morphological operations on the verb.

Payne (1997) notes that morphosyntactic properties of verbs are grouped into two:

distributional (configurationally) and structural. He argues that the morphosyntactic

operations are formal linguistic operations as morphologically realized by features

marking negation, person, number, tense, aspect, passivity, applicative, causative,

reciprocity and a co-occurrence of the these morphological operations. As observed by

Payne (ibid) these morphosyntactic operations are morphologically marked by a prefix,

suffix, or a combination of the two morphemes. The morphological realization of the

various morphemes affixed before the verb head or after has an effect on the

morphological and syntactic structure of the VP.

Payne (ibid) further explains that syntactic valence refers to the number of arguments

present in a given clause. The notion of syntactic valence and in turn semantic valence is

related to traditional ideas of verb transitivity. VP structures can either be intransitive,

transitive or ditransitive depending on the nature of the verb. In light of this, this study

describes the VP satellitic elements of an agglutinating language including Valence

decreasing and increasing verbal operations. The researcher delves into inflectional

morphology, derivational morphology, and verb argument structure specifically verb

subcategorisation frames.

Verb suffixation is a very productive morphological process in Lutachoni. Verb valence is

a derivational process which involve the affixation of a morpheme resulting to change in

the argument structure of the verb. Valence decreasing devices such as reciprocal

morphemes when suffixed to the inflected verb necessitate the merging of the controlling

and affected participants. In short, the agent and theme are merged.

Consider the following examples:

(23) (a) Wekesa [VP [V a-la-yet-a][NP Malang'ang'a]]

NOM 1SM/3SG-FUT-help- fv ACC

'Wekesa will help Malang'ang'a.'

(b) Wekesa nende Malang'ang'a [VP [V ba-la-yet-an-a]]

NOM

2SM/3PL-FUT-help-REC-fv

'Wekesa and Malang'ang'a will help each other.'

In example (23a) the verb selects a noun phrase complement 'Malang'ang'a' and 'Wekesa' is an external argument given an agent theta role. Malang'ang'a is an internal argument allocated a goal theta role. While example (23b) illustrates a reciprocal morpheme {-an-} suffixed on the verb. It decreases verb arguments to be one. The agent and goal of an action is merged to be the subject. The derived verb does not select a noun phrase complement. But, valence increasing verbal extensions, for instance, causative and applicative morphemes lead to an increase in the number of NP participants.

Sidnell (1998), while reviewing the work of Payne (1997) observes that morphemes, allomorphs and morphophonemic operations such as inflectional and derivational morphemes play a crucial role in determining verbal complexity. He states that distributional properties of verbs refers to verbs functioning as heads or predicates in phrases or clauses. While structural properties refer to internal structure of the verb. That is, its capacity to agglutinate markers of agreement, tense, aspect, etcetera. The present study investigates the internal structure of the complex verb which is agglutinative in nature and the effect of the morphemes embedded in the VP on argumenthood, in particular, the morpho- syntactic structure of the VP.

Culicover (2009) states that morphosyntax is concerned with the relationship between the form of a word and its function and distribution in a phrase or sentence. The present study categorises the VP structure depending on the morphemes embedded in the verb. The morphemes, in particular verbal suffixes have an effect of detranstivising or transitivising the VP structure. In essence, VP structures whose verbal morphology comprise, reciprocal morphemes are intransitive structures whereas those with causative

and applicative morphemes are transitive and ditransitive VP structures. The following are illustrations to display the occurrence:

(24)(a) Simiyu nende simuli [VP [V sa-ba-la-bey-*isi-an-*a ta]]

NOM

NEG-3PL-FUT-marry-CAUS-REC-fv-not
Simiyu and simuli will not marry each other.'

(b) Mayi [VP [V a-la-sim-*isi-*a][ NP omulilo]]

Mother shall 3SG-FUT-extinguish-CAUS-fv fire

'Mother shall extinguish the fire.'

Example (24a) the valence of the verb has been decreased due to the suffixation of a causative-reciprocal morpheme to a transitive verb *beya* 'marry' which makes the derived verb not toselect a complement. This process results to an intransitive VP structure. While in example (23b) the affixation of a causative morpheme to an intransitive verb leads to an increase to number of arguments resulting to a transitive VP structure.

This study examines the internal structure of the verbal morphology, that is, the elements agglutinated on the verb root which results to its verbal linguistic system. Furthermore, how the elements embedded in the VP in form of morphemes affect the morphosyntactic structure of the VP. More so, the focus of the study is to investigate the productivity of verbal suffixation process. The effect of verbal extensions on verb subcategorisation frames. The study highlights the verb subcategorisation frames for overt arguments in Lutachoni.

Harder (1995) in his discussion comments that: the role of the verb in sentential meaning and its grammatical categories continue to inspire linguists. The verb, being the nuclei of the VP, attracts satellite elements around it. These verbal elements which are satellite include morphemes marking negation, person and number, tense, aspect, passivity, reciprocity, applicative, causative or co-occurrences of some of the verbal affixation

operations. This study investigates the unique features of the complex VP. The internal features morphologically realized in the agglutinated verb are both morphological and semantic features and have an effect on Lutachoni VP syntax. The study describes the verb affixation process and its effect on the structure of the VP.

#### 2.3.3 The VP in Generative Grammar

In the Phrase Structure Grammar, the VP is a phrase headed by a verb. Ouhalla (1994) highlights the phrase structure rules put forward by Chomsky to generate VP structures. The VP phrase structure rules are as follows:

(I) 
$$VP \rightarrow V(NP)$$

(II) 
$$VP \rightarrow V (PP) N+ PP$$

(III) 
$$VP \rightarrow V NP PP$$

(IV) 
$$VP \rightarrow VS'$$

The first rule incorporates the claim that the VP consists of the main verb alone or it could consist of a main verb followed by NP complement. Consider the following as examples:

Then, the second rule highlights a VP composed of main verb and a prepositional phrase.

The following illustrates the occurrence:

In example (c) the internal structure of PP is a preposition followed by NP complement.

The next rewrite rule refers to VP whose constituents include verb followed by NP complement, then preposition phrase.

For example:

Lastly, the  $VP \rightarrow VS$ ' rule refers to a structure composed of main verb followed by an embedded clause. For example:

(e) The boy [VP [V said] (comp) that [S she would give a necklace to the girl]]

Ouhalla (1994) while discussing the verb phrase states that the rule that generates the VP can be modified to accommodate VPs with different constituencies. The constituent of the VP is to a large extent determined by the type of verb head it includes. What Ouhalla (1994) asserts also applies to Lutachoni in selection of complements of the VP. The nature of the verb determines the complements to be selected to form a verb phrase

On the basis of this observation, the present study examines the internal structure of the complex verb which is agglutinative. It considers the effect of embedment of morpheme in the VP and the effect it has on the morphological and syntactic structure of the VP. Thus, it investigates the effect of the incorporation of morphemes in the verb on the morphology and syntax of the VP. The constituent of the VP depends on the properties of the verb through affixation operations such as whether it is passive, causative, applicative, and reciprocal and co-occurrences of morphemes or overt arguments. Complements of the verb are in a sisterhood relationship.

## 2.3.4 The VP in Bantu and Related Languages

Ouhalla (1994) discusses the structure of the verb phrase in Chichewa, a language of the Bantu family in Malawi. The Chichewa verb is agglutinative in nature as the VP in this study. For example:

- (a) Msikanana ana-chit-its-a kuti mstouku u-gwe
  Girl AGR-do-CAUS-ASP that waterpot AGR-fall-ASP
  'The girl made the waterpot fall.'
- (b) Mphunzitsi a-na-wa-lemb-ets-a-ana
  Teacher sp-PST-ops write –CAUS-ASP children
  'The teacher made the children write.'
- (c)Ana a-na-lemb- ets-endw-a ndi mphunzitsi Children sp- PST- write –CAUS-PASS- ASP by teacher

"The children were made to write by the teacher"
Considering examples (a-c), Ouhalla (ibid) discusses the Chichewa verbal structure which is agglutinated and complex in structure. We can observe from the illustrations that he highlights the incorporation of subject agreement morpheme, tense marker, object agreement, causatives and passive morphemes in the agglutinative verb. The subject agreement morpheme and object morpheme denote person and number and have to be in agreement with the subject NP and object NP. These morphological manifestations do exist in Lutachoni verb which is also agglutinative in nature. Similarly, in Lutachoni, the subject agreement morpheme and object agreement morpheme embedded in the verb has to be in agreement with the subject NP and NP complements referred to.

Furthermore, he points out that Chichewa has two distinct morphological causatives (its) and (-ets) verbal suffixes which transitivise the intransitive VP structure. This is
similar to Lutachoni in which the causative morpheme [-isi-] which is a verbal suffix,
when morphologically incorporated in the complex verb; it transitivises the intransitive

VP structure by necessitating the introduction of NP complement. In addition, causativepassive co-occurrence linguistic constructions are possible.

Kroeger (2005) discusses valence changing morphology. He states that the valence of a verb is the number of arguments it subcategorises for. Intransitive verbs have only the subject hence their valence is one while ditransitive verbs have a valence of three. He highlights morphological processes which apply to verbs and either increase or decrease the number of arguments such as passivity.

Baker (1985) while describing affix ordering in Chimbemba argues for minor principles where syntactic derivations determine suffix ordering. Chimbemba displays CAUS-PASS- co-occurrence just like Chichewa. He states that the morphological manifestations of the morpheme in the verb affect the verb argument structuure. He observes that in causative construction, a new subject is introduced and the logical subject is demoted to object position. Similarly, this shift in the NP subject to be the NP object exists in Lutachoni clauses when a causee (agent) of an action is introduced in a causative construction. Whereas, in the passivisation process, the agent is either demoted or omitted.

Payne (1997) observes that Yagua transitive verbs that have applicative suffix morpheme have all the properties of the three argument verbs such as those meaning 'give' or 'send' referred to by Culicover (2009). Payne cites an example from Kimenyi (1980). Kimenyi (1980) illustrates verbal applicativity using Kinyarwanda a Bantu language of Rwanda.

For example:

(e)Umugabo a-ra-andik-iis- a I'k'a'r'a'mu I'b'a'r'u'wa'

Man 3sg – PRES -write – APPL –ASP pen letter

'The man is writing a letter with a pen.'

This is a three-verb argument clause. The verb selects three arguments as a result of the applicative morpheme morphologically incorporated in the agglutinated verb.

The aspectual marker occupies the final position immediately after the verbal suffix that is an applicative verb valence morpheme that results to an increase in number of NP complements hence having an effect on the morphosyntactic structure of the VP. The syntactic positioning of morphemes holds for the verbal morphological listing of the complex Lutachoni verb. Lutachoni verb is morphologically marked for applicative using the morpheme (-il-) which is a verbal suffix. The incorporation of the applicative morpheme in the agglutinated verb necessitates the verb to select three arguments for well formedness and for meaning comprehension. In Lutachoni, the aspectual markers that indicate imperfect states in both habitual and progressive constructions occupy the final position after all other morphological affixation operations. The current study describes the affixation operations of suc valence adjusting morphemes among others to the verb head and its effect on the morphosytactic structure of the VP. It also investigates the overt arguments of the VP.

Ngesimo's (2000) linguistic work on African languages is relevant to this study. He discusses the internal structure of the verb. He cites works done by Meesussen. Meesussen (1967) discusses Bantu reconstructions. In this linguistic work, Meesussen (1967) identifies the eleven elements of Bantu verbal form which are morphemes that are constituents of the complex verb. He highlights the following affixes:

- (i) The pre- initial negative particle
- (ii) Initial (verbal prefix)
- (iii) Post initial negative morpheme
- (iv) Formative (tense marker)
- (v) Post formative or limitative (aspectual marker)
- (vi) Object infix
- (vii) Radical (verbal base)
- (viii) Suffix (extention)

- (ix) Prefinal –repetitive- habitual
- (x) Final
- (xi) Post final

This earlier study is similar to the present study which investigates the morphology and syntax of the complex verb which is agglutinative in nature. The present study focuses on the verbal affixation operations. It concentrates on the VP internal structure and further examines how the embedment of a morpheme in the verb affects the morphosyntactic structure of the VP.

To illustrate the syntactic patterning of the verbal elements, Meesussen (1967) highlights the internal structure of the Kiswahili verbal morphology using a complex verb which is agglutinative in nature.

The example illustrates the phenomenon:

```
(f) Tu - na- kul- ish - ana- a
SM- TM- RT- CAUS- REC- FV
'We are making each other to eat.''
```

From the illustration, we observe that the agreement markers in particular subject agreement morpheme and tense morpheme as constituents form an integral part of the verb. Another observation from the works reviewed is that majority of African languages the verb has verbal extensions that are valence decreasing or increasing. Aspect is marked by a verbal suffix to express the manner in which an action is experienced.

Furthermore, he outlines the VP structure as being intransitive and transitive. For example:

(i)Intransitive

(a) Watu walicheka

The clause is grammatical and meaningful. The verb 'walicheka' does not select an NP complement

(ii) transitive structure: Juma alimbusu Halima.

The sentence has an NP agent 'Juma' and theme 'Halima'. In this example the verb selects two arguments. The present study investigated subcategorisation properties and categorized verb phrases into three types.

Apart from using Kiswahili to illustrate the verbal morphology and syntax of African languages in particular East African Bantu languages, Meeussen (1967) also uses grass field languages to illustrate the morphological and syntactical structural complexity of the verb. The linguist considers the various morphological features marking tense, aspect, mode, person and number, and verbal extensions marking passivity, applicative, causative are grammaticalised. This is similar to the current study which describes the structure of elements within the Lutachoni VP. However, this study goes further to investigate the variant forms of the verbal elements, their syntactic patterning and co-occurrence possibilities and the effect of morphological operations on the argument structure. This study goes further to describe the free arguments of the verb based on its subcategorization properties and the different types of VP structure. The PP theory is applied in the analysis of data. Modules such as Government theory, X-bar, Theta theory, Case theory and Feature checking are observed to be interrelated.

Mellish in Asher (1994:713) observes:

a sentence of a natural language is not just a sequence of words but that this sequence also has a structure generally called the constituent structure of a sentence.

Mellish proposes that constituents in language can occur within other constituents and proposes a hierarchical analysis of constituent structure. Mellish discusses the notion of 'tree' in the analysis of constituent structure. A tree is a sequence of nodes that represent constituent structure, each node has a label such as NP,VP,AP etc.A node (A) dominates a node (B) if there is a downward sequence of lines connecting (A) to (B).

According to Mellish, the motivation for constituent structure hinges on distributional facts. The constituent structure of any sentence is a by-product of the rule system. A

sequence X forms a constituent in some sentence according to some grammar if the rules of the grammar provide an analysis of that sentence according to which X is an expression of some grammatical category. In this study, the different types of morphosyntactic structures of the Lutachoni VP are motivated by the nature of the verb head.

Diercks and Sikuku (2013) discuss object clitics in Bantu languages. They specifically describe pronominal incorporation in Lubukusu a western Bantu language. They observe that object marking on verbs in Bantu languages is realized by a prefix morphologically inserted adjacent to the verb root. Lutachoni object marking shares many similarities in form and distribution with Lubukusu object marking. Object markers are pronominal arguments incorporated into the verbal structure in the position before the verb root. The object marker affixed on the verb must be in grammatical agreement with the object noun phrase of the verb. The object noun phrase is not overt the sentence. The affixation of the object marker increases the elements in the verb morphology. It affects the VP syntax because the object NP is not overt in the sentence.

Mahoo (2007) discusses linear ordering of tense, aspect, mood (TAM) and negation markers in Bantu language. He describes the morphsyntactic behavior of tense, mood and negation morphemes. He states that by comparing verb morphological templates from a wide range of Bantu languages, it is possible to make generalizations which are unknown. This study offers a detailed morphological template applicable to all Bantu language including Lutachoni. It also offers explanation on related diachronic issues. The data used is derived from published works on Bantu languages. Structural data analysed is inflected verb from finite verbs marked for tense, aspect, mood and negation. This work helps in identifying the cognancy of morphological markers affixed on the verb. It also serves as a tool in disentangling complex diachronic processes that affect the

morphology of the Bantu verb by making it easier to take into account morphsyntactic behaviour of inflectional morphology.

Dierks (2011) discusses lubukusu locative clitic. The locative clitic is dinstinct from the object marker. It is lincensed to occupy the post final syntactic environment in the complex verb. In this discussion the syntax of the verb is highlighted. A general Bantu pattern of affix ordering schema is presented. This study is relevant for it provides vital information to relate to and advance on the current study.

Khumalo (2014) presents an analysis of reciprocal verbal extension in the Ndebele language in Zimbabwe. Ndebele is a Bantu language. He observes that the verbal constructions in Ndebele capture the agglutinative features of Bantu languages in Kenya. Just like Lutachoni verb, the Ndebele verb moprphology typically comprise a verb root to which morpemes marking causative, passive, reciprocal and applicative are suffixed. In Ndebele, morphemes that encode subject marker, object marker, negation morpheme and aspect are prefixed. The reciprocal morpheme in Ndebele just like in other Bantu languages such as Lutachoni is marked by a verbal suffix (-an-). The reciprocal marked denotes action perfomerd by someone or something upon one another and vise versa. The reciprocal morpheme detransitives the VP structure by decreasing verb valence. The sentence with a reciprocal morpheme requires only subject NP.

In Ndebele prefixed morphemes differ from verbal extension in both form, distribution and function .This is similar to Lutachoni inflectional and derivational morphology.

### **CHAPTER THREE**

#### RESEARCH METHODOLOGY

### 3.1 Introduction

This chapter discusses research methodology used in this study. A theoretical research of this nature requires back-up data to make the findings valid and reliable. The researcher generated Lutachoni linguistic structures specifically a variety of verb phrase structures. The generated data was then subjected to a sample of adult Lutachoni native speakers for verification. This was done to guard against any bias and hence to make the study objective to ensure the data used is authentic and valid.

Exploratory research design was applied. The design entails systematically exploring the VP linguistic structures and categorizing them. This design was preferred for it it gives the researcher freedom to follow and utilize the rearcher's own ingenuity to obtain the required data. The methodology focused on the following aspects:

- (i) Site of the study
- (ii) Target population and sampling technique
- (iii) Methods of data collection
- (iv) Procedures of data collection
- (v) Procedures of data analysis

# 3.2 Site of the Study

The study was carried out at Mihuu primary and Mihuu secondary schools in Bungoma County. Mihuu area is predominantly occupied by Abatachoni. It was easier to get a sample of respondents to check the well-formedness of the data generated. The adult native speakers in the specified regions are educated and as a result, verification of data generated was easier since it required reading, speaking and writing. This site was preferred due to its authenticity and validity of data.

### 3.3 Sample for the study

The study targeted adult Lutachoni native speakers. The respondents sampled were adult Abatachoni native speakers working at the institutions. This population was perceived to be competent in the language and most likely display explicitly the linguistic behaviour under investigation. A sample frame of fifteen competent adult Lutachoni native speakers were sampled from the accessible target population using random sampling technique. The sample was used to check the authenticity of the linguistic structures generated by the reseacher and to verify the data. This sample size was considered

manageable and effective. It made it possible for the researcher to thoroughly check the verification lists worked on by the sampled respondents. Data generated by the researcher was given to the respondents for verification. Indeed, this is supported by Sikuku (1999) who cites Crystal and Davy (1960) who observes that the use of native speakers to check data generated is essential for it provides suggestions on the internal organization of language which might have been ignored or overlooked if one relied solely on researcher's introspection. The respondents were literate and hence verification of data generated was easier.

#### 3.4 Methods of data collection

Language is the mental linguistic faculty that is built in the human mind. The principles and parameters framework views much of the knowledge of a language as an intrinsic part of the human mind. In light of this view, the mental capacity comprises the internal linguistic knowledge: the competence. The language user uses native speakers' intuitions to pass judgement on the acceptability of utterances. Chomsky emphasises on the significance of native speaker's competence in the generation of approapriate data.

This study used two methods of data collection. The data collection method adopted was introspection. The reseacher used the native speakers' competence to generate approapriate data displaying Lutachoni VP structures with the Morphosyntactic features being investigated and different types of verbs. This method of data collection helped to guard against unwanted data. As a result, time was saved. However, the data generated may be subjective. Hence, to make it to be representative of the whole speech community, the researcher incorporated other competent adult Lutachoni native speakers in the second phase.

Verificational checklists with researcher's intuitive data were given to a sample of respondents for verification. Competent adult Lutachoni native speakers as informants were used to verify the data generated. Respondents had to be involved in this study to guard against any subjectivity in this study. This is based on the observation made by Sharma (1989). He remarks that objectivity is the heart of any meaningful social enquiry. He asserts that extensive field studies would not be required if one has to theorise one's subjective experience. Therefore, reality has to be explained based on the native speakers' intuitions of the entire speech community.

The use of the native speakers' intuition as a data collection tool is motivated by Chomsky. He emphasizes on the importance of the the researcher using the native speakers' competence in generation of the appropriate data. This assertion is captured in Horrocks (1987).

Horrocks (1987:11) observes:

... it is simply absurd to wait for native speakers to produce utterances which would allow linguists to infer whether some language has particular grammmatical characteristics when it is perfectly possible for the linguist as a native speaker to ask all the important questions and answer them himself. More importantly, there are many phenomena which all native speakers are aware of but which would never become known to the linguist no matter how many utterances he collected.

Performance data cannot display all the features required in a study and it is time consuming.

#### 3.5 Procedure for Data Collection

Lass (1984), observes that theories have hidden consequences which emerge only through confrontation with data and the consequences may force us into revision or rethinking of some principles. Most linguistic theories have been applied in the analyses of European and Romance languages. It is through collection and analytic examination

of data that we can determine the adequacy of the PP theory in the linguistic description of morphosyntax of Lutachoni VP. The study required data from Lutachoni displaying affixation operations on the verb and overt complements of the verb. Data collection was done in two phases. In the first stage, before going to the field, the researcher used the native speakers' intuitions or introspection to generate appropriate linguistic structures displaying a variety of Lutachoni VP morphological features and syntactic features under study. The linguistic structures generated were those highlighting affixes marking negation, person and number, tense, aspect and verbal extentions which are valence adjusting morphemes such as passive, reciprocity, causative, applicative, applicative-passive and causative-reciprocal. Overt arguments of the Lutachoni VP were also generated. Hence, depending on the subcategorization properties of the Lutachoni verb, the intransitive, transitive and ditransitive VP structures were dispayed in the data.

In the second phase, the data generated by the researcher was further verified by the fifteen adult Lutachoni native speakers at Mihuu Primary and Mihuu Secondary school. The sample of informants was supplied with checklists each with instructions to tick well formed Lutachoni linguistic structures and to offer alternatives or corrections where they did not agree with the generated structures. This was done to to ensure that linguistic structures used in the analysis were correct and to guard against subjectivity.

### 3.5 Procedure for Data Analysis

Data alone is incomplete and irrelevant without a guided and systematic analysis. Acceptable Lutachoni VP structures used were those displaying morphological features of negation, person and number, tense aspect and valence adjusting morphemes. Affixes were analysed based on their morphological forms, syntactic patterning of the VP

elements and their effect on morphosyntactic structure of Lutacconi VP. The Lutachoni verb can select overt complements depending on its subcategorisation properties.

The verb characteristics displayed were discussed and analysed based on the principles and parameters framework. The Government theory was used to highlight how the head verb C-Commands the elements within its domain. The verb determines its complements in internal argument positions. It is a sisterhood relationship. Theta roles and case assignment are done under a government relationship. The verb as a case assigner assigns accusative case to the NP complement that it governs. The X-Bar theory defined the constituents of a phrase. It displayed a variety of Lutachoni VP structures based on the nature of the verb. The notion of government, assignment of theta roles and case to verb arguments was highlighted using tree diagrams.

Tree diagram representation made it possible to explicitly highlight the syntactic environments in which the notions of dominance, precedence, theta roles, case assignment and government operate in the Lutachoni VP structures. It was possible to display morphological features of negation, person and number, tense, aspect and verbal extentions which are valence adjusting. In addition, tables were also used to show a summary of the features under study. After the identification of the morphological and syntactic characteristics of morphemes agglutinated on the verb, it was possible to make generalizations about their nature based on the Principles and Parameters theoretical framework. That is, that the morphosyntactic features morphogically manifested in the complex verb and the nature of the verb determine the morphosyntactic structure of the Lutachoni VP.

#### CHAPTER FOUR

### DATA PRESENTATION AND ANALYSIS

#### 4.1 Introduction

In this section, we describe the structure of elements within the complex Lutachoni verb phrase. In particular, we identify the elements and highlight their morphological forms, discuss the syntactic patterning of VP elements and their co-occurrence possibilities. Then, establish the role played by the morphemes affixed on the verb on morphosyntactic structure of Lutachoni VP. The arrangement of meaningful units of any linguistic expression is governed by rules whose properties are definable by morphological and syntactic criteria. Words have a categorical membership. Even affixes are subcategorized for a category membership so that they only attach to bases that are members of a particular category. The Lutachoni verbal morphology is complex. Affixes marking various grammatical functions are either prefixed or suffixed on the verb. Affixation operations depend on the nature of the verb in use.

Elements embedded on the verb in Lutachoni are morphologically realized in variant forms depending on their syntactic environment and type of clause. Just like lexical items, the VP internal features are phi features stored in the native speakers lexicon and are inserted in the right syntactic position of the agglutinated verb depending on paradigmantic and syntagmantic restrictions.

## Everret (1996:8) states:

The lexicon contains both words and a list of inflectional categories (phi-features and certain grammatically active inherent features) of the language in question.

The lexicon contains the lexical items, morphemes marking a list of tenses, case, aspect, grammmatical number and person (agreement) and suffixes to be affixed to various

syntactic categories that a language such as Lutachoni makes use of in its grammar.

Morphology and syntax can not be rigidly discussed separently. The two linguistic fields are interrelated.

### Mc Carthy (1992:12) observes:

The lexicon interacts with the syntactic component through lexical insertion, which is the process where the terminal nodes of the phrase markers come to be filled by lexical items of the appropriate selectional features. This process takes place at deep structure after the operation of phrase structure rules but before any transformations have applied.

The lexical insertion process referred to is a morphosyntactic process. The affixation operation of morphemes on the verb, the selection and insertion of complements in various syntactic contexts in which the VP elements are licensed to occupy is based on syntagmantic and paradigmantic restrictions. The native speakers have internal knowledge (competence) on the subcategorisation properties of verbs that determine the type of the VP structure.

The manipulation and association of structural units that form the VP constituent operates within the process of government. This study has adopted Principles and Parameters theoretical framework in its attempt to account for the morphosyntactic structure of the Lutachoni VP.

The morphemes affixed on the head verb affect the morphosyntactic structure of the Lutachoni VP. Payne (1997) notes that inflectional operations are required by the syntactic environment in which the root appears and that these operations specify when the event or situation took place, who or what were the participants or possessors and sometimes where, how or whether an event or situation took place. He cites the inflectional operations to include: person and number, gender, time, aspect and mode. Furthermore, he observes that 90% of languages investigated by Bybee (1985) have morphological manifestations of valence marked on the verb. Just like other Bantu

languages, Lutachoni has morphological processes which apply to verbs and these change their valence either increasing or reducing the number of arguments. As a result, an affixation operation on the verb alters the morphosyntactic structure of the Lutachoni VP. Therefore, the Lutachoni VP structure is a complex linguistic system. The ordering of the morphemes on the head verb is governed by morphological and syntactic rules for well-formedness.

### 4.2 The Inflectional Morphology of the Lutachoni VP

Verb inflectional operations do not change the basic meaning of the term expressed but rather specify the concept expressed by the verb. For example, an inflection may express the time an event or situation happened and who or what were the participants involved in the action. In this regard, inflectional operations tend to occur in sets of forms in which one form must be selected in certain syntactic environments (paradigms). Inflectional operations are grammatically required in specific syntactic environments of the Lutachoni verb. They include morphemes embedded on the verb to mark: Negation, subject marker, object marker, tense and aspect.

### 4.2.1 Negative Morpheme

Negation is morphologically marked in the Lutachoni VP. A negative clause is a linguistic structure which asserts that some event, situation or state of affairs isn't true. Thus, morphemes marking negation are satellitic elements of the verb head. Negation is bipartite in Lutachoni. There are two morphemes that mark negation: bound morpheme {sa-} or {s-} whose morphological form is dependent on the subject agreement marker within its syntactic environment and the negative particle 'ta', which is a free morpheme. The bound morpheme is an internal feature of the verb; it is a verbal prefix inserted

before the subject agreement morpheme while the free morpheme denoting negation occupies the last syntactic position of the Lutachoni VP structure or clause.

The following is an illustration of the occurrence:

(25)(a) Li-noni sa-li-a-purukh-a ta 5- bird NEG-5SM- PST-fly-fv not 'A bird did not fly.' (b)S- e-nda-cha ta NEG-1SG-FUT-go not

'Iwill not go.'

(c) Omu-toka sa-ku-a-kul-w-a ta

3-car NEG -3SG-PST-buy-PASS-fv not

'A car was not bought.'

(d) S-a-som-isi-ang-a aba-ana ta NEG-3SG-teach-CAUS-ASP-fv 2-child not

'He/She does not teach children.'

From the above illustrations, we observe that morphemes that mark negation are constituents of the VP. The bound morpheme {sa-} is inserted in the verb initial position preceeding the subject marker while the free morpheme 'ta' is inserted in the sentence final position. The occurrence of the two morphemes marking negation being morphologically realized in the VP affects the morphsyntactic structure of the VP by increasing elements in the verbal morphology. In schematic representation, the functional projection NegP is introduced in the structure to check negation features as the verb is raised to the TP node checking its tense and agreement features. Feature checking involves matching of features. It is done by adjoining the inflected verb to the relevant functional heads.

# 4.3.2 Subject Agreement pronominal

Subject agreement is morphologically marked in the Lutachoni VP. A subject and a verb have to be in agreement. The subject marker is morphologically realized in the verb's initial position as a prefix but in negative constructions, it is preceded by a negation marker. Its morphological realization is determined by the noun class of the subject NP

of the sentence in which the verb phrase is located. This morpheme is an obligatory element in the VP structure.

### For example:

(26)(a)*O-mu*-ndu *a*-la-ch-a

1-1-person 1SM-FUT-go-fv

'A person will go.'

(b) *A-ba-*ndu *ba-*la-ch-a

2-person 2SM-FUT-go-fv

'People will go.'

(c) E-si-mosi si-a-tib-a

7-7-calf 7SM-PST-lose-fv

'A calf got lost.'

(d)*Chi*-ng'ombe *chi*-lakham-w-a

10-cow 10SM-FUT-milk-PASS-fv

'Cows will be milked.'

In examples (26a-d) the italicized morphemes affixed to the verbs are subject agreement markers.

Lutachoni VP like other Bantu languages, for example, Kiswahili morphologically expresses three person distinctions: 1<sup>st</sup> 2<sup>nd</sup> and 3<sup>rd</sup>. The morpheme affixed on the verb, marking person, also marks grammatical distinction of number: singular and plural. The paradigm below illustrates morphemes that mark 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> persons in noun classes 1&2.

### **Subjective pronominal morphemes (Subject agreement paradigm)**

| Person          | singular (gloss) plural (gloss) |                         |
|-----------------|---------------------------------|-------------------------|
| 1 <sup>st</sup> | n- a- lila l cried              | khu-a-lila we cried     |
|                 | e - nda-lila I will cry         | khu-la-lila we will cry |
| $2^{\text{nd}}$ | w-a-lila you cried              | mu-a-lila you cried     |

|              | o-la-lila you will cry            | mu-la-lila you will cry            |  |
|--------------|-----------------------------------|------------------------------------|--|
| $3^{\rm rd}$ | y-a- lila he/ she cried           | ba-a- lila they cried              |  |
|              | a-la-lila he/ she will cry        | ba-la-lila they will cry           |  |
|              | <i>u-lil-ile</i> he/she has cried | <i>ba</i> -lil-ile they have cried |  |

The prefixes italicized in the illustrations mark subject agreement in the VP. The prefixes highlight the three person distinctions in Lutachoni. In addition, there are language specific characteristics in that sometimes, tense can determine the morphological manifestation of the subject agreement marker. The morphemes {e-}, (o-}, and {a-} co-occur with the morpheme marking future tense. The variant morphological forms when marking agreement in singular number, subjective forms depend on the tense and aspect marked within their syntactic environment.

## 4.3.3 Object Pronominal morpheme

The object pronominal morpheme is an infix syntactically inserted between the tense marker and verb root. The morphological form varies depending on noun class of the object. It is mostly realized when the sentence grammatically requires a nominal object but it is omitted. The following is data illustrating object pronominal marker as a VP internal feature.

- (27)(a) O-mu-ai a-la-*i*-kham-a

  1-1-herdsboy 1-FUT-9OM-milk-fv

  'A herdsboy will milk it.'

  (b) O-mu-ai a-la-*chi*-kham-a

  1-1-herdsboy 1-FUT-10OM-milk-fv

  'A herdsboy will milk them.'
  - (c) Maria a-la-kha-til-a

Maria 3SG-FUT-12OM-catch-fv

'Maria will catch him/her.'

(d) Maria a-la-bi-til-a

Maria 3SG-FUT-13OM-catch-fv

'Maria will catch them.'

(28) (a) Chetambe y- a - ba – khupil-ang-a omulusi

NP/NOM 3SG/NOM-PST – 3PL/ACC –whistle-ASP - fv

'Chetambe was whistling to them.'

(b)Kiseremi a-kha-mu-kul-il-e omu-to

NOM 3SG-FUT-3SG/ACC-buy-APPL-fv 3-mattress

'Kiseremi will buy him/her a mattress.'

(c) Khu-la-*mu*-lang-a

1PL/NOM-FUT-3SG/ACC-call-fv

'We will call him/her.'

The object pronominal marker can be morphologically realized in first, second and third persons in noun classes 1&2.

The paradigm below indicates object pronominals in Lutachoni in noun classes 1&2:

Person number

|        | Singular         | Plural    |
|--------|------------------|-----------|
| First  | {�}              | { -khu -} |
| Second | { -khu -}        | {-ba-}    |
| Third  | { − <i>mu</i> −} | { -ba -}  |

We notice that 1<sup>st</sup> person object pronominal is not morphologically marked in the agglutinated verb. It is a null category. The form of objective pronominal morpheme is determined by the noun class of the object. If the objective pronominal morpheme is

embedded in the verb to mark the NP complement, its morphological realization affects the patterning of the grammatical elements in the VP structure. It increases verb morphology.

Diagram for example (28c) Khulamulanga

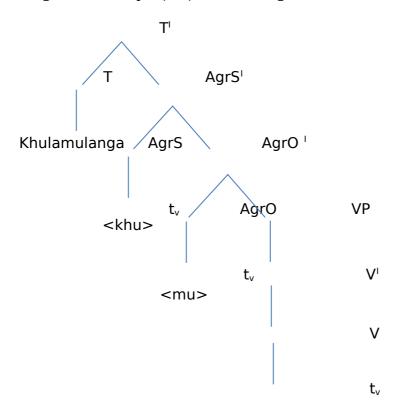


Figure 4.1: subjective and objective pronominal morphemes

The diagram given above in Figure 4.1 for example (28c), displays unique features of Lutachoni VP in relation to subject and object markers. The morphological manifestations of the subject and object pronominals in the VP facilitates the agglutinative nature of the verbal morphology and affect the morphsyntactic structure of the VP by introducing the subject agreement terminal node (AgrSP) and object agreement phrasal node (AgrOP). In the diagram, it is evident that as the verb moves from VP with all its features to T, checking takes place in the AgrS and AgrO nodes for agreement features within the verbal morphology.

#### **4.2.3 Tense**

Tense is a morphosyntactic feature which is a constituent of the Lutachoni VP structure. It is morphologically marked. Tense is concerned with time relations. The tense morpheme indicates the time of the action verb. Thus, tense is grammaticalised in Lutachoni. Various tenses are marked by different morphemes. Generally present tense morpheme is a suffix after the verb head while morphemes marking past and future are affixed before the verb head but after the subject marker. In Lutachoni, tense is morphologically realized in the verb by a bound morpheme which constitutes an integral part of the verb morphology unless it is an imperative. Lutachoni VP marks five tense distinctions: the point of reference being the present time. The following are the tenses morphologically realized in the VP:

- (i) Remote past
- (ii) Recent past
- (iii) Present tense
- (iv) Recent future tense
- (v) Distant future tense

The morphological manifestations of the above tenses in the VP structure are illustrated under the sub-titles past, present, and future.

#### **4.2.3.1 Past tense**

Lutachoni VP is unique in that it morphologically marks two tenses in the past: the remote (distant) past and the recent (immediate) past this is unlike tense marking in English which does not make a distinction in recent and distant time of an event. Remote

past refers to something that happened or occurred several weeks, months or years ago.

The impact of the event or situation not very much felt at present.

Consider the following examples to illustrate the occurrence:

(29)(a) N- *a*-rak-a ama-kanda
ISG-PST- plant-fv 6-bean
'I planted beans.'

- (b)Khu-*a*-rak-a emi-kachi
  1PL-PST-plant-fv 4-sugarcane
  'We planted sugarcane.'
- (c) Omu-sakhulu y-*a*-bukul-a chi-ng'ombe ch-osi 1-Oldman 3SG-PST-take-fv 10-cow 10-all 'The old man took all the animals.'
- (d) Mu-*a*-bukul-a esi-mosi 2SG-PST-take-fv 7-calf 'You took the calf.

Remote past is morphologically marked by the morpheme (-a-) syntactically inserted after the subject marker but before the verb root.

Recent past refers to events or situations that occurred yesterday, few days ago or few weeks ago from the time of speaking.

(30)(a) Khu-*a*-rak-*il*-e a-ma-kanda

1PL-TNS-plant-PST-6-6-bean

'We planted beans.'

(b) Ebi-mosi bi-*a*-ch-*il*-e mu-maindi

8-8-calf 8SM-TNS-go-PST-fv 18-maize

'The calves went in the maize.'

(c) Chi-twaya chi-a-kholiokh-*il*-e

10-cock/NOM 10SM-TNS-crow-PST-fv

'The cocks crowed.'

Recent past is marked by the discontinuous morpheme {-a-...il-}. The first morpheme {-a-} is prefixed while {-il-} is suffixed as illustrated in examples (30a, b,c).

#### 4.2.3.2 Present Tense

It refers to events or situations happening in the present time. Consider the following examples:

(31) (a) Ba-mich-*e* obule

3PL-sow-PRES 14-fingermillet

'They sow fingermillet'.

(b) Khu-ch-*e* ingo

1PL-go-PRES home

'We go home.'

(c)O-rak-*e* ama-indi

2SG-plant-PRES6-maize

'You plant maize.'

In Lutachoni, the present tense is morphologically realized by the morpheme {-e} affixed as the verb final vowel. The morpheme is a final vowel inserted after the verb root. The morpheme marking present tense is suffixed as opposed to morphemes marking past tense and future tense.

### 4.2.3.3 Future Tense

This refers to events or situations that will happen sometime in the future with reference to the time of speaking. Future time is morphologically marked in Lutachoni. Tense is an obligatory morphological feature of the Lutachoni VP. If the tense morpheme is omitted, the sentence will be ungrammatical unless when it is an imperative one.. Morphemes marking various temporal relations are agglutinated in the verb.

The morpheme  $\{-la-\}$  marks time in the near future with  $1^{st}$  person plural,  $2^{nd}$  person singular and plural and  $3^{rd}$  person singular and plural. The morpheme  $\{-nda-\}$  is affixed

before the verb head to mark immediate future time in 1<sup>st</sup> person singular verbs.

Contrary, the morpheme {-kha-} marks time in the distant future in all persons.

### (i)Near (immediate) future

```
(32) (a) E-nda-lang-a a-ba-sasi

ISG-FUT- call 2-2parent

'I will call parents'

(b)O-la-kesa obule

2SG-FUT-harvest fingermillet
```

(c)Wekesa a-*la* –yeta Malang'ang'a

'You will plant fingermillet.'

Wekesa 3SG-FUT-help Malang'ang'a

'Wekesa will help Malang'ng'a.'

The morpheme '-nda-' is used to mark immediate future tense when the first person pronominal singular subject morpheme 'e-' is used.

### (ii)Distant future

Morphologically marked by the morpheme {-kha-} after the subject marker. The final vowel morphologically realized as {-e}

```
(33)(a) E-kha-rak-e ch-e

1SG-FUT-plant-fv vegetables

'I will plant vegetables.'

(b)Ba – kha-ch-e

3PL-FUT-fv

'They will go.'
```

Future tense morpheme is a constituent of the morphosyntactic structure of the Lutachoni VP. It is affixed before the verb head and immediately after agreement marker. It is realized through the use of the morpheme {-la-}, {-nda-} or {-kha-}.

Diagram for example (30a) Khuarakile amakanda

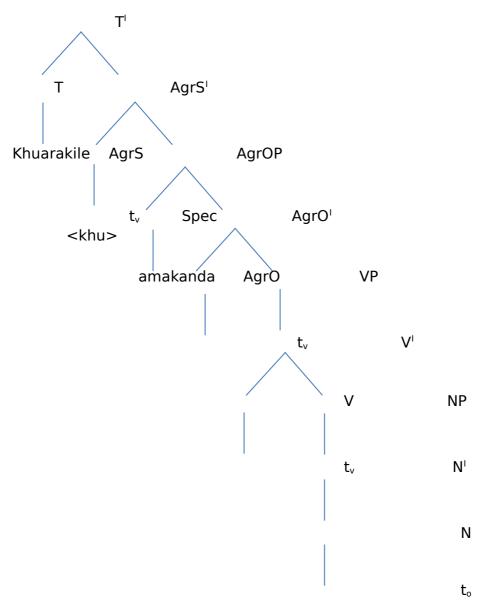


Figure 4.2: Inflected verb affixed subject and tense morphemes

In the examples given tense marking affects the structure of the verb by increasing the elements in its morphology. Figure 4.2, subject marker is realised on the complex verb *khuarakile* 'we planted' by the morpheme {khu-} which refers to the first person plural 'we' prefixed on the verb while the object NP *amakanda* 'beans' moves from its VP-

internal position to Spec-AgrOP to check its agreement and case features and to be assigned the accusative case. The verb moves through agreement projections such as AgrS checking its agreement features to T. Tense is marked by {-a...il-} morphemes. Tense features are checked at T projection node. The verb and object are in a sisterhood relationship. A 'patient' theta role is allocated the object NP in its base-generated position in the VP-internal.

The morpheme marking tense find its insertion site to be the 'T' terminal node. The verb is base generated in the VP. It is raised from the lexical head VP node to T node to check its tense feature. As the verb moves, it also checks its agreement features.

### **4.2.4 Aspect**

Aspect is not a valence adjusting morpheme but usually the last morphosyntactic feature to be suffixed. Payne (1997) cites Bybee (1985) who observed that 74% of languages she had researched on had morphological manifestation of aspect. Aspect deals with the manner in which a verbal action is experienced in terms of progression and completion. Aspect is a morphological feature that is grammatically marked in the verb. Morphemes marking aspect are realized in form of suffixes. In this study, we discuss two types of aspect: the perfective and the imperfective.

### (i)Perfective aspect

A VP structure marking present perfect indicates that a situation and event began in the past to the present but as par the time of speaking it is complete thus it includes explicit reference to the present as well as to the past. In Lutachoni, perfective aspect is marked by {-il-} morpheme inserted before the final vowel. Then, the final vowel is morphologically manifested as {-e}. The verbal suffix expresses the notion of

completion. It indicates that the action has come to an end at the moment of speaking. It indicates that the past situation is very recent.

The following are illustrations:

(34)(a) Khu-tekh-*il-e* 1PL-cook-PERF-fv

'We have cooked.'

(b)Nekesa 1SM/u-rak-*il-e* ama-tore Nekesa 3SG-plant-PERF-fv 6-banana 'Nekesa has planted bananas.'

(c) Esi-mosi si-nun-il-e 7- calf 7SM-suck-PERF-fv

'The calf has suckled.'

In perfective aspect, the morpheme {-u-} morphologically marks third person singular. Past perfective is marked by a modal auxiliary. The morpheme {-il-} morphologically realized in the Lutachoni verb marks present perfect. The morpheme is suffixed on the verb head. The final vowel of the verb marking present perfect is realized as {-e} as indicated in the morphological structure above. However, the morpheme marking 3<sup>rd</sup> person singular subject agreement is morphologically realized as a verb prefix {u-} whereas, in imperfective aspect it is marked by {a-} morpheme.

# (ii) Imperfective aspect

Imperfective aspect is concerned with actions or situations which form habits or are in progress. In Lutachoni, imperfective aspect is marked by a morpheme affixed on the verb root.

#### (a) Habitual

It is marked by the morpheme {-ang-}, inserted before the final vowel. It marks the action inherent in the relevant verb as having been on for sometime.

(35)(a) A- som– *ang* – a

3SG -study-ASP/imp – fv

'She studies.'

(b)I-ng'ombe i-un-ang-a a-ba-ana

9-cow 9SM-knock-ASP/imp 2-2-child

'The cow knocks children.'

#### (b) Progressive aspect

It expresses an action in progress. The following are examples to illustrate both the present and past progressive aspect.

(36)(a) Ebi-ana bi-la-khin-ang-a
13-child13SM-PRES-dance-ASP/IMP-fv
'Small children are dancing.'
(b)Ebi-ana bi-khin-il-eng-e
13-people 13SM-dance-PST-ASP/IMP-v
'Small children were dancing.'
(37)(a) Ba-la-sok-ang-a
2SM/3PL-PRES-swim-ASP/IMP-fv
'They are swimming.'
(b)Ba-sok-il-eng-e
2SM/3PL-swim-PST-ASP/IMP-fv
'They were swimming.'

From the data on morphological listings, we observe that present progressive aspect is marked by the discontinuous morpheme {-la-}, inserted before the verb head and verbal suffix {-ang-} before the final vowel {-a}. Whereas, past progressive aspect is marked by a co-occurrence of morphemes {-il-...-eng-} morphologically realized in the Lutachoni complex verb before the final vowel {-e}. Examples (36a, 37a) illustrate present progressive aspect while examples (36b, 37b) display past progressive aspect. The aspectual markers are suffixed to the inflected verb.

Diagram for example (37a) Balasokanga (They are swimming)

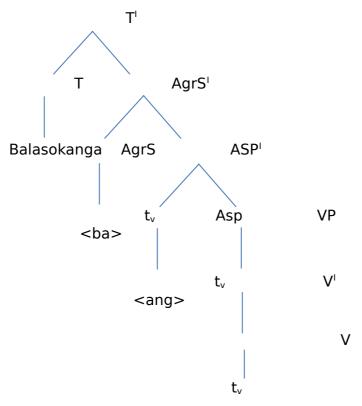


Figure 4.3: Aspectual projection

Figure 4.3 dispays a VP structure. The morpheme {ba-} is a subject agreement marker. The verb moves from its VP-internal to T to checking aspect, agreement and tense features. The affixation of an aspectual marker in the verb affects the syntactic structure of VP by introducing the aspectual projection (ASP) node. This projection checks the aspectual features within the VP.

### 4.3 Derivational Morphology

Derivational operations consist of morphological operations on the verb which change the verb valence. Payne (1997), remarks that 90% of languages studied by Bybee (1985) had morphological manifestations of valence marked on the verb. Lutachoni enrich the structure of the verb by affixing morphemes on the right of the verb head. The insertion of these morphemes in syntactic sites after the verb head either transitivises or detransitivises the VP. The verbal extensions to be considered in the current study are as follows: morphemes marking: passivity, applicative, causative, reciprocal, reflexives and co-occurrences such as applicative- passive. In the discussion on valence adjusting morphemes, we consider the view that the selection of different morphemes to fill the syntactic insertion sites after the verb head to morphologically realize the different structural forms of the VP is dependent on the syntagmantic and paradigmantic restrictions. The grammaticality of the structures is facilitated by the native speakers' intuitions. These are morphemes suffixed on the verb root /head resulting to a new verb stem. The incorporation of a verbal extension on the verb head has an effect on argument hood. It can change the verb valence necessitating either the addition of a complement or reduction of complements.

### 4.3.1 Applicative morpheme

The applicative verbal suffix is highly productive in Lutachoni. It has a valence-increasing effect on verb subcategorisation. The suffixation of an applicative morpheme on the verb head necessitates the introduction of a noun phrase which is logically the beneficiary of the action.

Culicover (2009) observes that an applicative construction is one in which a CS argument that is canonically an oblique argument is expressed instead as direct object argument.

In Lutachoni, when the sentence requires a benefactive, instrumental or a means to serve as a noun phrase complement the verb morphology changes. The derived verb is marked for the semantic role of an additional argument. The two NP complements are flexibly inserted after the verb that governs them. An applicative morpheme is a grammatical element realized as a verbal suffix that increases the number of arguments

to three. The verb subcategorises for two NP complements. This affixation results to a ditransitive VP structure. Mutaka (2000), in his study of languages posits that an applicative is a verb-valence increasing extension.

The following linguistic structures highlight the morphological form and syntactic position of the applicative marker in the Lutachoni VP:

- (38) (a) Omulesi VP [V a-la-pas-a][NP chi-ngubo]]
  househelp/NOM 3SG-FUT-iron-fv 10-cloth
  'The househelp will iron clothes.'
  - (b) OmulesiVP [V a-la-pas-il-a][NP abana][NP chi-ngubo]]]

    Househelp/NOM 3SG-FUT-iron-APPL-fv children/DAT clothes/ACC

    'The house help will iron clothes for children.'
- (39)(a)Wangusi VP [V y-a-kul-a][NP i-nju]]
  Wangusi/NOM 3SG-PST-buy-fv 9-house
  'Wangusi bought a house.'
  - (b) Wangusi VP [V y-a-kul-il-a][ NP wangwe ][NP i-nju]]]
    Wangusi/NOM3SG-PST-buy-APPL-fvWangwe/DAT 9-house/ACC
    'Wangusi bought a house for wangwe.'
- (40)(a) A-ba-ana ba-la-lim-a emi-kunda

  2- 2-child 2SM/3PL-FUT-dig-fv 4-farm

  'The children will dig the farms.'
  - (b) A-ba-na ba-la-*ba*-lim-*il*-a emi-kunda

    2-2-Child 2SM/3PL-FUT-2OM/DAT-dig-APPL-fv c4-farm/ACC

    'The children will dig the farms for them.'
  - (41)(a) Mayi a-la-tekh-a ama-tore
    mother 1SM-FUT-cook-fv 6-banana
    'Mother will cook bananas.'
    - (b)Mayi a-la-tekh-*el*-a aba-keni ama-tore mother 1SM-FUT-cook-APPL-FV 2-visitor 6-banana

'Mother will cook bananas for the visitors.'

In the above illustrations, examples (38b, 39b, 40b, 41b) display applicative constructions. We observe that the applicative is marked by a morpheme suffixed on the verb morphologically realized as {-il-}. Sometimes the morpheme is realized as {-el-} depending on the verb. The applicative morpheme is inserted in the space immediately after the verbal head. An applicative morpheme embedded on the verb necessitates it to select two NP complements for the sentence to be complete in sense. The same morpheme marks benefactive/dative, instrumental and means. In example (40b) the the object NP is marked by an infix {-ba-} inserted after the tense marker but preceding the verb root. The data used in this particular discussion displays ditransitiveVP structures.

The affixation of an applicative morpheme on the verb necessitates the verb to subcategorise for two NP complements. An indirect object either precedes or comes after a direct object syntactically.

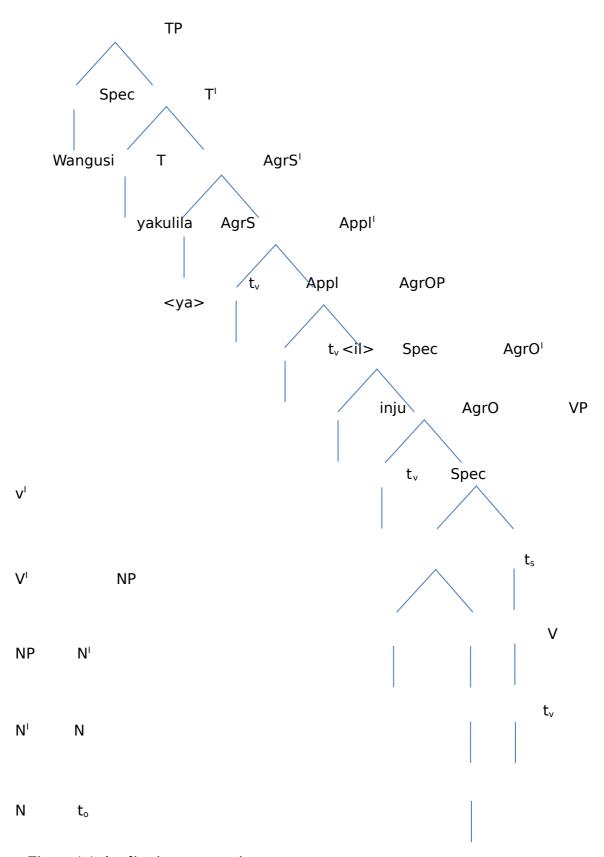


Figure 4.4: Applicative construction  $t_{\circ} \label{eq:total_policy}$ 

Figure 4.4 highlights the applicative marker, a unique internal feature which has a valence increasing effect on the Lutachoni VP structure. The incorporation of an applicative marker on the verb has an effect of changing a two-verb argument to a three-verb argument.

It necessitates the introduction of a functional applicative phrase (APPL) node and also the two NP complements are selected by the verb head for grammaticality and well-formedness. The applicative projection checks the applicative features within the Lutachoni VP as the verb moves to T node to check tense features. AgrO and AgrIO projections are created to check the direct object NP and indirect object NP features as the two object noun phrases base generated in the VP move to check agreement features and to acquire case. The direct object *inju* 'house' is assigned the accusative case while the indirect object 'Wangwe' is assigned dative case under the structural relationship of sisterhood with the verb involved. The object NP *inju* 'house' is given a patient role while indirect object NP 'Wangwe' is given the benefactive theta role.

### 4.3.2 Causative

The causative affixation process is a valence increasing operation. A causative verb in Lutachoni denotes a single event involving a causer (agent/ subject) and theme. The embedment of a causative morpheme on the verb increases the elements in verb morphology and affects syntactic structure of Lutachoni VP. A causative morpheme changes monovalent (intransitive) verbs to bivalent (two-verb arguments) structure. The derived causative verb subcategorises for a complement to co-occur with as presented in the examples below.

The following data displays causative constructions:

(42) (a)Khakasa a-la-khin-a

NOM 1SM/3SG-FUT-dance-fv

'Khakasa will dance.'

(b)Lusaka VP [V a-la-khin-isi-a] [NP Khakasa]

NOM 1SM/3SG-FUT-dance-CAUS-fv ACC

'Lusaka will make Khakasa to dance.'

(43)(a) Aba-ndu VP [Vba-la-chekh-ang-a]

2-person 2SM/3PL-TNS-laugh-ASP-fv

'People are laughing.'

(b) Koko VP [V a-la-chekh-isi-anga][NP aba-ndu]]

Grandmother/NOM 1SM/3SG-TNS-laugh-CAUS-ASP/imp-fv 2- people/ACC

'Grandmother is making people laugh.'

(44)(a)O-mu-sala VP [V ku-a-kwa]

3- 3-tree 3SM-PST-fell

'The tree fell.'

(b) Omu-sacha VP [V y-a-kw-isi-a] [NPomu-sala]

1-Man/NOM 3SG-PST-fall-CAUS-fv 3- tree/ACC

'The man made the tree fall.'

Examples (42b, 43b, 44b) illustrate causative verb constructions; we observe that a causative marker is a verb internal feature suffixed on the verb head. It occupies the position immediately after the verb head and before the aspectual marker if present. The morpheme marking causative is morphologically realized as {-isi-} as highlighted in the morphological listings. It changes the sentential meaning. The causative morpheme necessitates the inclusion of a subject which functions as an agent while the inherent subject becomes the object as shown in examples (a) and (b) above.

# Diagram for example (42b) Lusaka alakhinisia Khakasa

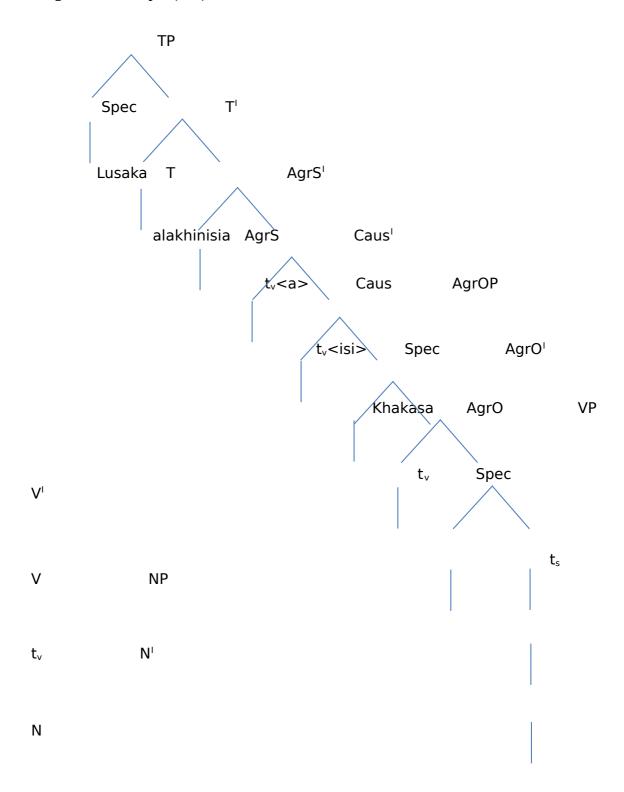


Figure 4.5: Causative construction

As is evident in Figure 4.5, the affixation of a causative morpheme in the verb affects the morphological and syntactic structure of the Lutachoni VP. It requires the introduction of the causative phrasal node. The tree diagram in Figure 4.5 above shows the causative being part of the complex Lutachoni VP structure. The Causative functional node checks its feature carried by the verb in the Causative projection as the verb moves to the T node. The subject NP 'Lusaka' and the object NP 'Khakasa' move from their VP — internal positions leaving traces to Spec-TP and Spec-AgrOP to check their agreement and case features and to be assigned nominative and accusative case respectively. 'Lusaka' is assigned 'the agent' theta role while 'Khakasa' is assigned 'the patient' theta role in their base-generated positions in the VP-internal.

#### 4.3.3 Passivity

Passive voice is an area of interest in this study. A passive morpheme affixed on the verb brings both morphological and syntactic change. Moreover, it results to change in meaning of the linguistic structure. Payne (1997) while discussing passive clauses cites Shibatani (1985) who stated that morphosyntactically, a passive sentence is semantically transitive, that is, a two-participant clause. However, commonly, it is a valence decreasing morphological operation in Lutachoni VP. It leads to a reduction in the number of verb arguments from two (transitive) to one (intransitive structure).

In Lutachoni verbal morphology, the morpheme marking passive voice is a verbal extension. Passivity is marked by a verbal suffix {-w-} suffixed on the verb stem. The passive morpheme modifies the meaning of the verb as well as verb valence. It indicates

that the grammatical (illogical) subject is the recipient or goal of the action marked by the passive verb; while the active voice attributes the action of the verb to the thing or person which it logically precedes, that is, the logical subject. In the language under study, passivisation operations involve movement of the subject and object noun phrases. The grammatical subject which is the logical subject (agent) becomes the grammatical object moving to the right of the verb whereas the logical object moves to the left of the passivised verb to be the grammatical subject. Furthermore, the logical subject NP which grammatical functions as the object become optional. Therefore, the transitive VP structure is reduced to intransitive. We consider the following examples to demonstrate how the passive morpheme is morphologically realized in the complex verb and its impact on the VP structure.

(45)(a) Aba-kholi VP [V ba-a-busa [NP omu-kunda]]

2-worker 2SM/3PL-PST-plough 3-farm

'The workers ploughed the farm.'

(b) Omu-kunda VP [V ku-a-bus-w-a]

3-farm 3SM-PST-plough-PASS-fv

'The farm was ploughed.'

(46)(a) Omu-ai VP [V a-la-kham-a [NP i-ng'ombe]]

1-herdboy 1SM-FUT-milk-fv 9-cow

'The herdboy will milk the cow.'

(b) I-ng'ombe VP [V i-la-kham-w-a]

9-Cow 9SM-FUT-milk-PASS-fv

'The Cow will be milked.

(47)(a) Aba-soleli-ba-a-samb-a chi-nju

2-boy 2SM-PST-burn-fv 10-house

'The boys burnt the houses.'

(b)Chi-nju ch-a-samb-w-a

10-house/NOM 10SM-PST-burn-PASS-fv

'The houses were burnt.'

The passivized constructions in examples (45b, 46b, 47b) illustrate that the morphological process is a valence decreasing operation. The verb changes from two-verb arguments to a one-verb argument resulting to an intransitive VP structure. Therefore, it affects the VP structure.

Diagram for example (47b) Chinju chasambwa

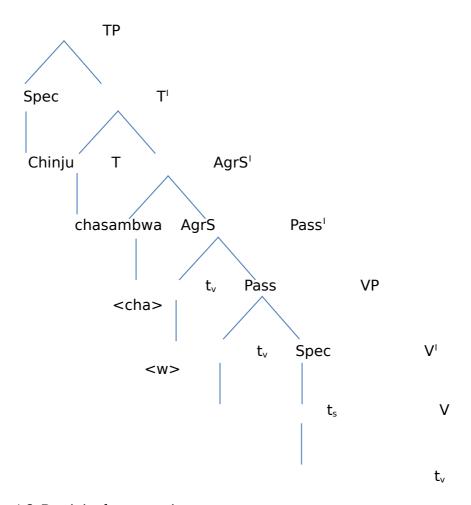


Figure 4.6: Passivised construction

The occurrence of the passive marker within the Lutachoni verb affects the structure of the VP by introducing the passive phrasal node. The passive projection is meant to check the passive feature within the Lutachoni VP structure. The subject NP *Chinju'houses'* is assigned nominative case due to its syntactic position. However, it is allocated 'the patient' theta role because it is affected by the action of the verb.

#### 4.3.4 Reciprocity

Reciprocal affixation process is a valence decreasing operation. A reciprocal morpheme {-an-} affixed on the verb head modifies the verb's meaning by indicating that the action is done to one another. When suffixed to the verb head, it indicates that the action inherent in the agglutinated verb is received by more than one element. The verb subcategorises for one argument: the subject.

The following data illustrates the morphological manifestation:

(48)(a) Chaonwa y-a-lol-a Kiveu Chaonwa/NOM 3SG-PST-see-fv Kiveu/ACC

'Chaonwa saw Kiveu.'

(b) Burundi nende Chaonwa b-a-lol-an-a NPconj. NP (NOM) 2SM/3PL-PST-talk-REC-fv 'Burundi and Chaonwa saw each other.'

(49)(a) N-a-mu-sim-a

1SG/NOM-PST-1OM/ACC-love-fv

'I loved him/her.'

(b) Khu-a-sim-an-a

IPL/NOM- PST-love- REC- fv

'We loved each other.'

(50)(a) Omu-ikisi a-la-khesi-a aba-somi

1-teacher/NOM 1SM-FUT-greet-fv 2-student/ACC

'The teacher will greet the students.'

(b) Omu-ikisi nende aba-somi ba-la-khesi-an-a

1-teacher conj 2-student/NOM 2SM-FUT-greet-REC-fv

'The teacher and students will greet each other.'

The examples in (a) illustrate basic constructions while those in (b) display reciprocal morphological operations in which the morpheme {-an-} is suffixed on the verb root. The subject becomes plural as the two participants in the action are the agent of their own action and goal/recipient of the other's action. The suffixation of a reciprocal morpheme {-an-} on a transitive verb modifies the meaning of the verb by adding the

idea of reciprocity. The noun phrases functions as the agent and goal of the same action. The morpheme affects the argument structure by decreasing the number of verb arguments from two to one. The VP structure is made to be intransitive.

Diagram for example (48b) Burundi nende Chaonwa balolana

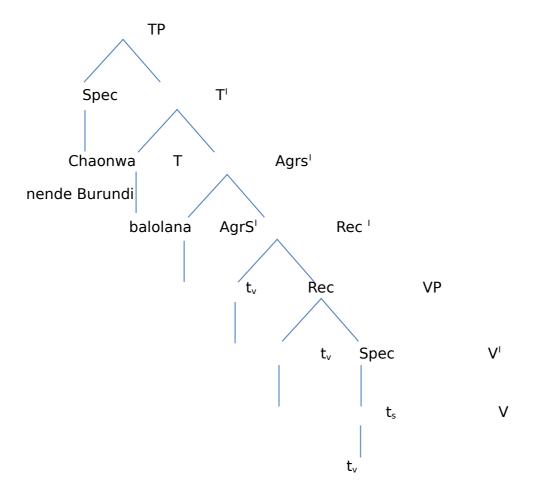


Figure 4.7: Reciprocity

Figure 4.7 displays the reciprocal morpheme being part of the Lutachoni VP constituent structure. The reciprocal verb requires only one NP argument: the subject. The plural subject NP 'Chaonwa and Burundi' is allocated both the 'experiencer/theme' theta role at the D-Structure level in which it is base generated. At the D-Sructure position the noun phrase is covert and it is indicated by a trace (t<sub>s</sub>). The noun phrases move from Spec–VP to Spec-TP to check its agreement features and be assigned nominative case. The

embedment of a reciprocal marker on the verb reduces the number of arguments thus affecting thus affecting the syntactic structure of the Lutachoni VP. In schematic representation, it necessitates the introduction of the reciprocal phrasal node. The Rec projection checks the reciprocal feature which appears within the VP as the verb moves to T. There is an interaction of the principles of the various modules.

#### 4.3.5 Reflexives

Reflexive is a morphological valence decreasing operation in Lutachoni. Reflexive operations decrease the semantic valence of a transitive clause by specifying that the subject and object are the same entity. It is marked in the VP by the affix {-e-} or {-i-}. An infix {-e-} is realized in declarative sentences and is inserted after a morpheme that marks future in sentences expressing future time while after the subject pronominal in other tenses because the past tense marker is not morphologically realized due to vowel deletion at morphemic boundary of {-a-} and {-e-}. The reflexive marker {-i-} is morphologically realized in imperative sentences. It is syntactically inserted before the verb root. The affixation of a reflexive marker on the transitive verb makes the VP structure to be intransitive. The following are examples:

(51)(a) Paulo VP [V y-a-samb-a] [NPJuma]]
Paul/NOM 1SM/3SG-PST-burn-fv Juma/ACC
'Paul burnt Juma.'

(b)Juma VP [V y-e-samb-a]

Juma/NOM 1SM/3SG-REFL-burn-fv

'Juma burnt himself.'

(52)(a) Samuel VP [V a-la-bek-a][NP Samson]]

Samuel/NOM 1SM/3SG-FUT-shave-fv Samson/ACC

'Samuel will shave Samson.'

(b) Samson VP [V a-l-e-bek-a]
Samson/NOM 1SM/3SG-FUT-REFL-shave-fv
'Samson will shave himself."

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(53)(a) Omu-lesi a-la-sing-a omu-an-a

1-househelp 1SM/3SG-FUT-bathe-fv 1-child

'The househelp will bathe the child.'

(b)I-sing-a

REFL-bathe-fv

'Bathe yourself.'

(54)(a)Maria a-la-mu-suk-a

NOM 1SM/3SG-FUT-OM/2PL-braid-fv

'Maria will braid you.'

(b)Mu-i-suk-e

2PL-REFL-braid-fv

'Braid yourselves.'
```

Examples (51b, 52b, 53b, 54b) illustrate reflexive constructions. The affixation of {-e} or {-i-} on Lutachoni verb to mark reflexivity detranstivises the VP structure. The verb only requires one external argument to function as subject. The verb does not select any complement resulting to an intransitive VP structure.

#### 4.3.6 Applicative-Passive

Applicative-passive affixation operations exist in the complex linguistic system of the Lutachoni VP. A co-occurrence of the morphemes {-il -w-} marking applicative- passive syntactic relationship are suffixed on the inflected verb. These verbal extensions affixed on the verb have an effect on morphology and syntax of the VP structure. It indicates that the action is done on behalf of someone. The agent (logical subject) of the action is omitted and it is not an obligatory constituent of the sentence. The number of participants is reduced from three arguments to two and as a result, the VP structure is transitive with one NP complement for the sentence to be well-formed. Therefore, applicative-passive affixation process is a verb valence decreasing morphological operation. It changes the applicative construction which is three-verb argument (ditransitive) to a two-verb

argument. Moreover, there is swapping of noun phrases: an indirect object occupies the syntactic position of the logical subject and the direct object comes after the verb.

The following are illustrations to display the properties of an applicative-passive construction:

- (55)(a)O-mu-soleli VP [V a-la- siak-il-ang-a][NP koko][NPchi-khwi]]]

  1-1-boy 1SM-TNS-split-APPL-fv grandmother 10-firewood

  'The boy is splitting firewood for grandmother.'
  - (b) koko VP [V a-la-siak-*il-w*-ang-a] [NP chi-khwi]]
    Grandmother 1SM/3SG-PRES-split-APPL-PASS-ASP/imp-fv 10-firewood
    'Firewood is being split for grandmother.'
- (56)(a) A-ba-kholi VP [V b-a-lim-*il*-a] [NP aba-sasi] [NP omu-kunda]]]

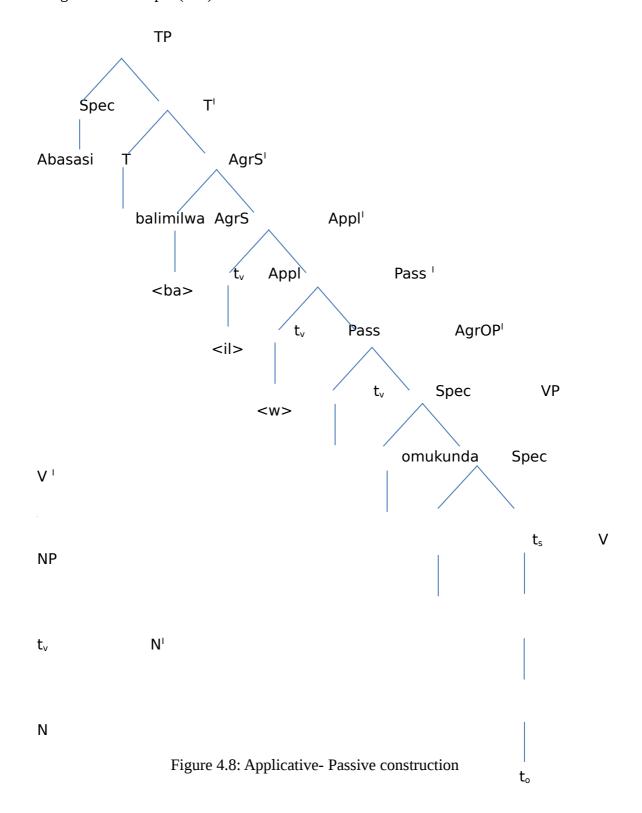
  2-2-worker 2SM -PST-plough-APPL-fv 2-parent-3-farm

  'The workers ploughed the farm for the parents.'
  - (b) A-ba-sasiVP [V b-a-lim-*il-w-a*] [NP omukunda]]

    2-2-Parent 2SM-PST-plough-APPL-PASS-fv farm
    'A farm was ploughed for parents.'

Examples (55a, 56a) are applicative constructions. The verb selects two noun phrase complements. Examples (55b, 56b) display the applicative-passive co-occurences. The verb subcategorises for one NP complement.

Diagram for example (56b) Abasasi balimilwa omukunda



The structure for example (56b), shows the applicative-passive {-il-w-}co-occurrence markers suffixed on the verb. The grammatical subject NP *abasasi* 'parents' move from Spec –VP to Spec-TP to check its agreement features and to be assigned nominative case. While the grammatical object NP *omukunda* 'farm'moves to Spec-AgrOP to check its agreement features and be assigned accusative case. However, the subject NP *abasasi* 'parents 'is given a benefactive theta role and the object NP is allocated a patient theta role at the D-Structure at the positions in which they are base generated. The affixation of these applicative-passive markers on the verb head affects the structure of the Lutachoni VP by necessitating the introduction of the applicative and passive projections. These projections check the applicative and passive features within the Lutachoni VP as the verb moves from the VP-internal to the T node to check tense.

#### 4.3.7 Causative-Reciprocal

Causative-reciprocal morphological process does exist in the complex Lutachoni VP. It is a suffixation operation. The morphemes {-isi-an-} co-occur on the verb to indicate that the participants who are compound subjects functioning as agents of the same action are making each other to do something. The addition of this verbal extension has the effect of decreasing verb valence. Therefore, the affixation of the causative-reciprocal marker on the transitive verb detransitivises the Lutachoni VP structure. As a result, the derived verb subcategorises for one argument, namely a plural subject. This morphological operation results to an intransitive VP structure. This morphological operation is possible on verbs which are used both transitively and intransitively. The following are examples to illustrate the morphological causative-reciprocal morpheme realizations in the verb:

(57)(a) A-la- mu- l-isi-ang-a
3SG/NOM-TNS-1OM/3SG/ACC-eat-CAUS-ASP-fv
'He/she is feeding him/her.'

- (b)Ba-la-l-isi-an-ang-a
  - 3PL-TNS-eat-CAUS-REC-ASP/IMP-fv
  - 'They are making each other to eat.'
- (58)(a) Timona VP [V y-a-bey-isi-a][NP Naomi]]

Timona/NOM-1SM/3SG-PST-marry-CAUS-fv Naomi/ACC

- 'Timona married Naomi.'
- (b)Timona nende NaomiVP [V b-a-bey-isi-an-a]

Agent/NOM2SM/3PL-PST-marry-CAUS-REC-fv

'Timona and Naomi married each other.'

(59)(a) KukaVP [V a-la-chekh-isi-ang-a][NP aba-ana]]

Grandfather 1SM/3SG-TNS-laugh-CAUS-ASP-fv

'Grandfather is making the children to laugh.'

(b) Kuka nende Aba-ana VP [Vba-la-chekh-isi-an-ang-a]

Grandfather and the children 2SM/3PL-TNS-laugh-CAUS-REC-ASP/IMP-fv

'Grandfather and the children are making each other to laugh.'

Examples (57b, 58b, 59b) illustrate causative-reciprocal constructions in Lutachoni. The morphemes {-isi-an} suffixed on Lutachoni verb increases the number of elements affixed on the verb root hence increasing verb morphology. A co-occurrence of causative-reciprocal morphological operations on a transitive verb reduces the number of arguments to one compound subject NP. Therefore, the derived verb does not subcategorise for any complement. This results to an intransitive VP structure as evident in Figure 4.9.

Diagram for example (58b) Timona nende Naomi babeyisiana (Timona and Naomi married each other)

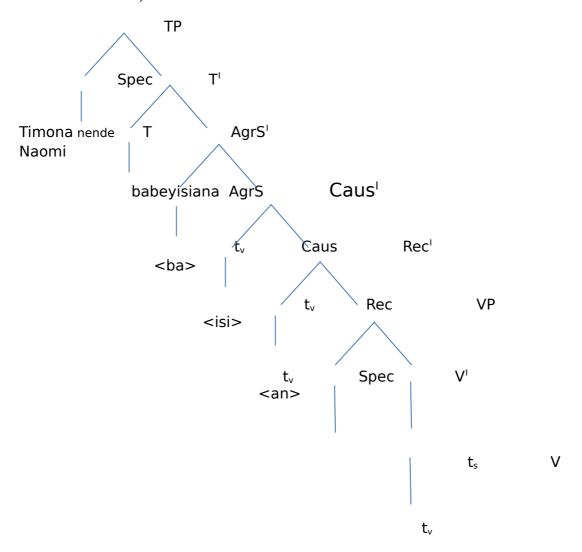


Figure 4.9: Causative-Reciprocal construction

The occurrence of the causative and reciprocal markers within the complex Lutachoni verb as evident in Figure 4.9 above affects the structure of the VP by introducing the causative and reciprocal phrasal nodes. The causative and reciprocal projections check the causative and reciprocal features which appear within the Lutachoni VP. Checking takes place as the verb is raised from the VP internal position leaving a trace to the T

node. Both the 'agent and patient' theta roles are allocated to the compound NP subject: 'Timona' and 'Naomi'. The nominative case is assigned to the same plural subject NP which moves from Spec-VP to Spec-TP to check its agreement and case features

#### 4.4 Conclusion

The discussion in this chapter allows us to conclude that the affixation of morphemes on the verb root increases the verbal elements resulting to a complex verb. Morphemes marking negation, subject pronominals, and object pronominals, reflexive, distant past, future tense are prefixed on the verb root. Recent past, aspect and most valence adjusting morphemes are suffixed. Forms of inflectional morphemes vary depending on their grammatical function and syntactic environment. Morphemes are affixed in specific sites on the verb. Co-occurrence of valence adjusting morphemes is possible. Affix ordering of co-occurrence morphemes is fixed.

From the analyses it is also evident that the affixation of these morphemes on the verb root has an effect on the morphosyntactic structure of Lutachoni VP. The affixation of morphemes marking passive, reciprocal, reflexive and causative-reciprocal co-occurrences on the verb detransitivises the VP structure. Morphemes in the verb morphology are increased but the derived verb does not subcategorise for any complement. The verb requires only one argument to function as a subject. While the affixation of morphemes marking causative and applicative-passive co-occurrence on the verb root affects the morphosyntactic structure of the VP. The verb subcategorises for one NP complement resulting to a transitive VP structure. An applicative morpheme suffixed on Lutachoni verb necessitates the verb to select two NP complements resulting to ditransitive VP structure. The affixation of valence adjusting morphemes also affects the assignment of theta roles and case.

Tree diagrams were used to represent the linguistic notion of subcategorisation in this study. The X-bar theory, Government theory, Case theory, Theta theory and Feature checking theory are interrelated. During movement of NP<sub>S</sub> the modular aspect of these theories emerged. The movement of determiner phrases (DPs) commonly referred to as noun phrases (NPs) is motivated by case. NPs are allocated theta roles in the Deep structure but not case. Therefore, they move to their Spec-head positions to be case marked. Movement makes it possible to have a close connection between the X-bar structure and argument structure of lexical categories for case assignment. In addition, the government notion is also demonstrated. Feature checking takes place as the VP constituents move from their base-generated positions in the VP at D-S level to Spec-Head positions at S-Structure level. In the examples represented diagrammatically, the moved subject NP and object NP are overt (visible). The subject NP is assigned nominative case while the object NP is assigned accusative case. The S-S position is case marked. However, the position in which they are base-generated it is covert. The D-S position which encodes the base positions of moved constituents is indicated by traces (t<sub>o</sub>). It is the position to which theta roles are allocated to noun phrases. The moved constituent is an antecedent of the trace.

#### **CHAPTER FIVE**

#### FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presents findings of the research based on the aim and objectives of this study and draws conclusions on the data collected, analysed and represented on the morphosyntactic structure of Lutachoni verb phrase. It also presents the manner in which morphosyntactic analysis and diagrammatic representations have been handled within the modules of the Principles and Paremeters theoretical framework. Finally, the discussion in this section also makes recommendations on some pertinent issues that emerged from this study and which need further research.

#### 5.2 Findings of the Study

The study aimed at describing the morphosyntactic structure of Lutachoni VP. It investigated the morphological affixation operations on the verb and their effect on the syntactic structure of the verb phrase. This study established the following:

(1) Morphemes marking negation are morphological features that are constituents of the VP in Lutachoni syntax. Negation is marked by a bound morpheme morphologically realized as {s-} or {sa-} morpheme depending on the subject agreement morpheme denoting person and number that immediately occupies the syntactic position after it. The free morpheme morphologically manifests as 'ta'occupies the final position in the VP structure. Thus in the Lutachoni VP ontological order, the bound morpheme is inserted in the initial prefix position while free morpheme occupies the final syntactic position in a clause. To express contradiction in sentence meaning, the two morphemes must be constituents of the

particular linguistic unit. As a result, they affect the surface realization of the morphosyntactic structure of the Lutachoni VP by increasing the elements within the VP and introducing NegP the structural representation.

(2) Lutachoni marks agreement in the verb morphology. The form of the subject and object pronominal morpheme depends on the noun class of the involved noun phrase. Singularity and plurality in number is distinguished. Three person distinctions are realized in subjective and objective forms for noun classes 1 & 2. The following are the subject markers for noun classes 1 & 2 morphologically realized in Lutachoni VP syntax.

Subjective pronominal paradigm for noun classes 1&2

| Person | number         |        |
|--------|----------------|--------|
|        | Singular       | Plural |
| First  | -n- / -e-      | -khu-  |
| Second | -w- / -0-      | -mu-   |
| Third  | -v- / -a- /-u- | -ba-   |

The selection of the morpheme to be agglutinated in the verb is dependent on the noun class of the NP subject preceding the verb. For noun classes 1 & 2 tense marked on the verb also determines the morphological form. If negation is marked, the morpheme marking subject agreement is graphically inserted immediately after the bound morpheme and before the tense marker. Subject pronominal markers are verb internal features which are obligatory constituents even if lexical subjects are realized in the sentence structure. The morphological marking of agreement has an effect on the morphosyntactic structure of the Lutachoni VP. It increases the number of elements in the verb morphology and necessitates the inclusion of subject agreement (AgrS) phrasal node in the hierarchical VP structural representation.

- (3) Object pronominal morpheme is an optional element of Lutachoni VP syntax. The morphological form of the object marker is determined by the object NP. If the object is morphologically marked on the verb, then it occurs as an infix morpheme inserted immediately after the tense marker for past and future but before the verb root morpheme. The 1<sup>st</sup> person object pronominal is not morphologically marked in the agglutinated verb; it is a null category. The selection of morphemes to indicate objective is not dependent on tense. If the pronominal morpheme is embedded in the verb to mark the NP complement, it increases the elements embedded on the verb and its morphological realization affects the patterning of the grammatical elements in the VP structure. In addition, it necessitates the introduction of the AgrOP terminal node. This projection checks the accusative features within the VP structure.
- (4) Tense is another morphological feature marked in the agglutinated verb. Lutachoni makes five tense distinctions: distant past, recent past, present, recent future and distant future. The point of reference in demarcation of time is the present. The {-a-} morpheme is an infix syntactically inserted immediately after the subject agreement morpheme to mark distant past tense. Recent past time is marked by discontinuous morpheme {-a...il-}. {-a-} is inserted immediately after the subject agreement marker, whereas {-il-} inserted immediately after the verb head. Present tense is indicated by the inflectional morpheme morphologically manifested as {-e} inserted in the final position in the agglutinated verb. While near future is morphologically marked by two morphemes depending on the subject agreement marker denoting person and number. First person singular {-e-} morpheme co-occurs with the tense morpheme {-nda-} inserted before the verb head. Whereas, the other persons and number, marks using the morpheme {-la-} affixed in the same syntactic site. Distant future is grammatically marked by the morpheme {-

kha-} which occupies the same syntactic position as near future tense marker. The same morpheme is used for the three persons. Morphemes marking tense are obligatory internal features in the Lutachoni verbal morphology. As a result, they affect the morphsyntactic structure of the VP due to the presence of the tense morpheme which results to the introduction of the tense terminal node.

(5) An aspectual marker is an internal feature of the VP structure. Hence the agglutination of the aspectual marker affects the morphosyntactic structure of the Lutachoni VP. The selection of the morphemes to mark aspect depends on time and whether the action is in progress (imperfective) or a complete (perfective) state. Present perfect is marked by the suffix {-il-} preceding the final vowel morphologically realized as {-e-}. The third person singular subject morpheme is realized as {-u-} and not {-a-}. Present perfect continuous is morphologically marked by {-kha...-ang-} the first morpheme {-kha-} is affixed before the verb head while {-ang-} is suffixed. The final vowel is morphologically realized as {-a}. Past progressive is marked by the discontinuous morpheme {-il...-eng-}. The first morpheme is a tense formative marker indicating continuous action, while the second morpheme imperfective aspectual marker in past time and the final vowel is realized as {-e}. Then, present progressive aspect is marked by the discontinuous morpheme {-la...-ang-}. The {-la-} morpheme is affixed immediately after the subject agreement pronominal marker whereas {-ang-} is suffixed to the verb head in the site just before the final vowel. Habitual actions which are also imperfective are grammatically marked by {-ang-} a verbal suffix inserted in the position before the final vowel {-a}. Considering aspect marked by the discontinuous morphemes; the first morpheme is a tense formative marker whereas the second morpheme is aspectual marker suffixed in the same syntactic position, immediately preceding the final vowel

- (6) Reciprocity is morphologically marked by {-an-} morpheme suffixed to the verb head. The affixation of a reciprocal morpheme on a verb in Lutachoni to a sentence with a plural subject NP. Reciprocal is a valence decreasing morpheme hence it detransitivises the VP structure if syntactically realized in the verb morphology.
- (7) Passivity is morphologically marked by the {-w-} morpheme suffixed to the verb.

  The affixation of the passive morpheme alters the constituency of the sentence structure. It indicates a swap in syntactic positions of logical NP subject and logical NP object. Moreover, in passive linguistic constructions, the logical subject could be omitted and as a result it detransitivises the VP structure. Syntactically, if the applicative morpheme is agglutinated in the verb, the passive morpheme is inserted after it.
- (8) Causative construction is marked by the morpheme {-isi-} suffixed to the verb. The embedment of this verbal extension on the verb transitivises the VP structure. The intransitive VP becomes a transitive VP structure.
- (9) Applicative is marked by {-il-} morpheme suffixed to the verb. In applicative constructions, a thematic role that would correspond to an oblique object is expressed as a direct object. Applicative is systematic and morphologically marked in the Lutachoni verb as presented in the corpus. The applicative morpheme is suffixed on transitive verbs. It is a valence increasing operation in that the agglutinated verb selects two NP complements for well-formedness. This results to a ditransitive VP structure.
- (10) Applicative- passive linguistic constructions are morphologically realized by {- il-} and {-w-} morpheme which co-occur in the complex verb. The morphemes are affixed after the verb root. These morphemes when affixed to a verb that usually

- subcategorizes for two NP complements it has the effect of making the derived verb to select only one NP complement resulting to a transitive VP structure.
- (11) Causative-reciprocal constructions are possible in the language under study. The verbal affixation is marked by the co-occurrence of {-isi-} and {-an-} morphemes suffixed to the verb head. The morphemes are affixed on intransitive verbs. It has the effect of making the derived verb not to select a complement. The affixation of these morphemes results to an intransitive VP structure.
- (12) In Lutachoni, valence increasing and decreasing morphemes have no morphological paradigms. Most valence adjusting morphemes such as reciprocal, passive and causative are morphologically realized as single entities. In addition, the verbal suffixes indicate morphologically defined grammatical relationships between syntactic categories.
- (13) Considering the patterning of elements, it was observed that affixes are either conjugated to the left or right of the verb root. The ordering of elements in the VP is fixed and it also conforms to certain templates. Complimentary co-occurrence syntactic relationships do exist in valence adjusting operations. For example, applicative-passive and causative—reciprocals are possible. However, causative—applicative and passive-applicative co-occurrences are mutually exclusive. The syntactic patterning of these morphemes is a paremetric feature and makes affixation operations in Lutachoni unique from affixation of other languages like English.
- (14) Another observation is that there are paradigmatic and syntagmatic co-occurrence restrictions within the Lutachoni VP. There can never be double realizations of morphemes marking person and number, tense and aspect. Hence morphological paradigms exist for these morphological features. The paradigmatic and

- syntagmatic co-occurrences depend on the nature of the verb head. Therefore;
- structural forms of the Lutachoni VP do depend on the properties of the verb head. (15) Due to the agglutinative nature of the language, the morphological features are
  - headed by their own functional projections: Negp, AgrSP, TP, AgrOP, Appl', Pass',
  - Caus', and Rec' and Asp' in their hierarchical diagrammatic representations.
- (16) Feature Checking theory was adequate in offering explanations during the head to head movement of NP<sub>s</sub> (DP<sub>s</sub>) and verbs from their base generated positions in the VP-internal at the DS level to Spec-TP, Spec-AgrOP and T node at the SS level to check specific features and to be assigned case. Features such as negation, agreement, tense, aspect, reciprocal, causative among others are checked to avoid crashing. The theory was also relevant in checking of features during the selection
- (17) Theta roles are assigned to verb arguments. A one-to-one mapping between theta roles and noun phrases as syntactic elements was observed. In valence adjusting operations where arguments had to be decreased or increased depending on the type of morpheme suffixed, it operated within the the requirements of theta theory. Noun phrases movement and verb movement was operational within the case filter principle in which all overt noun phrases must be assigned case. The verb as the case assigner allocated its internal arguments case. The NP object was assigned accusative case in a sisterhood relationship under government.

#### 5.3 Conclusion

of complements by the verb.

Considering the findings of this study, we are in a position to conclude that the affixation process of word formation in Lutachoni VP is a very productive and rich area. The affixation of morphemes on the verb root increases the verbal elements resulting to a complex verb. Morphemes marking negation, subject pronominals, and object pronominals, reflexive, distant past, future tense are prefixed on the verb root. Recent

past, aspect and valence adjusting morphemes are suffixed. Some morphological features are universal, whereas others are unique and parametric traits to the language. The parametric features include verbal extensions whose affixation to the verbal head leads to the adjustment of the argument structure for a given VP. Therefore, the embedment of a verbal suffix either transitivises or distransitivises the VP structure. It was established that applicative and causative morphemes transitivise the verb phrase structure; whereas passive, reciprocal and causative-reciprocal morphemes are valence decreasing operations and they detransitivise the VP structure.

Phi-features, which are both morphological and syntactic agglutinated on the verb, could be obligatory or optional constituents of the Lutachoni VP. Subject agreement morphemes marking person and number and tense morphological features are obligatory constituents. However, those marking object pronominal, negation, passivity, applicative, causative, reciprocity or co-occurrence such as applicative-passive, causative-reciprocity causative-passive are optional elements dependant on the nature of the verb and the paradigmantic and syntagmatic restrictions.

Surface realizations of the VP structure are determined in the deep structure by the various morphosyntactic features that are operational within the Lutachoni VP. The native speakers have competence of these features and use their intuitions to determine the grammaticality and well-formedness of the linguistic structures.

The application of the Principles and Parameters theoretical framework modules to account for the morphosyntactic structure of the VP was adequate. Due to the agglutinative nature of the verb; the Split-inflectional and the Split VP hypotheses were incorporated in the X-bar theory to adequately cater for abstract features in diagrammatic representations. Negation, agreement, tense, aspect, causative, passive, applicative and reciprocal features were projected from their functional projections. Hence, the

schematic representations included Negp, Agrsp, TP, AgrOP, PASSP, APPL' CAUS' REC and co-occurences of verbal extentions.

The Feature checking Theory was adequate in accounting for features during morphological operations. It was applied during the movement of NP<sub>s</sub> and verbs from their base-generated positions in the VP- internal to surface structure to check features and in the selection of verb complements. The verb argument structure in Lutachoni is derived as a process of feature checking. The noun phrases move from their base generated position, which is VP internal to Spec-AGR positions at S-Structure level for feature checking. The subject checks its nominative features while the object checks its accusative features considering agreement. Theta roles are assigned to noun phrases at D-Sructure level before movement of elements.

#### 5.4 Recommendations

Considering the scope covered in the analysis of Lutachoni verb phrase, we are optimistic that this study could provide background knowledge for further research in the analysis of Lutachoni linguistic units.

In light of the above statement, we make the following recommendations as areas of further research related to the present study but beyond the defined scope:

- (i) This study identified morphological features embedded in the verb and how they are syntactically structured. However, more research needs to be done in lexical morphology to determine what happens at morphemic boundaries and in particular the vowel deletion process.
- (ii) This study focused on morphological affixation which is just one type of morphological processes in the language. Hence, there is

- need for a study of other morphological processes such as reduplication in the language.
- (iii) The present study examined internal features agglutinated in the verb: their insertion positions, grammatical functions and effect on syntax of the VP. Consequently, there is need to identify morphemic boundaries (junctures) to establish word formation rules which have consequences on verbal morphology and phonology interface.
- (iv)This study suggests that research be done to highlight the usage of tone in making distinctions in present and past tense.
- (v) Lastly, the present study applied the Principles and Parameters modules in the analysis of data. This study applied the GB modules and feature checking theory which is a sub—theory in MP. However, the Minimalist Program being the recent phase in the development of Chomsky's UG in syntactic analysis, the study recommends the use of its other sub-theories to test its validity as a theory of universal grammar.

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#### APPENDIX I

#### RESEARCHER'S INTUITIVE DATA

balalila

## (1)Person and Number Subjective Pronominals

Past/presentFutureNalilaendalilaKhualilakhulalilaWalilaolalilaMualilamulalilaYalilaalalila

Ulilile

Balila

Ebiana bilachekhisiananga

Linoni siliapurukha ta

Ching'ombe chitaru chilakhamwa

Ebimosi biachile mumaindi

Omusala kuakwa

Okuana kuanywa amabele

#### **Objective Pronominals**

Yakhulanga alakhulanga

Yamulanga alamulanga

Yabalanga alabalanga

Omuai alaikhama

Omuai alachikhama

Maria alakhatila

Maria alabitila

Kiseremi akhamukulile omuto

#### (2)TENSE

#### (i)Past Tense

#### (a)Recent Past

Narakile amakanda

Khuarakile amakanda

Omukhasi yarerile abana

Abasomi bachile ingo

Abasoleli basambile chinju

#### (b)Remote (distant) past

Naraka amakanda

Khuaraka emikachi

Chetambe yaruka abatachoni

Omusakhulu yabukula ching'ombe chosi

Muabukula esimosi

#### (ii)Present Tense

Khuche ingo

Orake amaindi

Alere chisendi

Bamiche obule

#### (iii) Future Tense

#### (a)Recent Future

Ekharake chifwa

Okhakese obule

Bakhache

Wekesa akhayete Malang'ang'a

Kiseremi akhamukulile papa omuto

Abasomi abakhulundu bakhasome ebitabu ebikhale

#### (b)Distant future

Endalanga abasasi

Olakesa obule

Wekesa alayeta Malang'ang'a

Khasandi alakhama ching'ombe

Omukhana salacha ta

Balatekhila omukeni ing'eni

#### (3)ASPECT

#### (i)Imperfective Aspect

#### **Present Progressive**

Ebiana bilakhinanga

Abana balakonanga

Ching'ombe chilayanga

Balasokanga

Abasomi balabayanga

Abakholi balalimanga

#### **Past Progressive**

Ebiana bikhinilenge

Abana bakonilenge

Ching'ombe chayilenge

Basokilenge

Abana bakonilenge

Abasomi babayilenge

#### Habitual

Asomanga

Yandikanga ebitabu

Khusomanga

Asomianga

Akhupanga omukhasi

Asokotanga injaka

#### (ii)Perfective Aspect

Khutekhile

Khasandi usingile chingubo

Nekesa urakile amakanda

Balile

Abasomi babayile

Banyolile abana

#### (4)Reflexive

Juma yesamba

Samson alebeka

Abana balesinga

Omuai aletekhila

Omukhana alesuka

Isinga

Muisuke

#### (5)Passive

Omukunda kuabuswa

Obule buakeswa

Chinju chasambwa

Ching'ombe chilakhamwa

Ebimosi bitaru biakulwa

Omusala kuakwa

#### (6)Causative

Omusacha yakwisia omusala

Olatibisia omukeni

Koko alachekhisianga abandu

Lusaka yakhinisia khakasa

Alamulisianga

Tunai alachekhisia Wangusi

#### (7)Applicatives

Omulesi alapasila abana chingubo

Wangusi yakulila wangwe inju

Abana balamulimila emikunda

Bakhalakila esindu omubano

Sitati yarerila Nekesa liuwa

Ruth yamichila koko chinuni

Mayi alatekhela abakeni ingokho

#### (8) Reciprocity

Kakai nende sifuma basimana

Burundi nende Chaonwa balolana

Omuikisi nende abasomi balakhesiana

Khuasimana

Wekesa nende Malang'ang'a balayetana

Sabalasungana ta

#### (9) Applicative – Passive

Koko alasikilwanga chikhwi

Abasasi balimilwa omukunda

Kuka sayakulilwa omurungeti ta

#### (10)Causative - Reciprocal

Balalisiananga

Kuka nende abana balachekhisiananga

Mulakhinisiana

Joseph nende Ruth babeyisiana

Omuikisi nende abasomi balakhesiana

Balakhinisiananga

#### (11)Negation

Sendachata

Simiyu nende simuli sabalabeyisiana ta

Sabakhamurumilenge chisendi ta

Omutoka sakuakulwa ta

Sasomisianga abana ta

Abandu sabamulanga ta

Nanjekho sayatekhelanga kuka amapwoni ta

#### **APPENDIX II**

#### **VERIFICATIONAL CHECKLIST**

For each of the structures below:

(a)Tick if it is an acceptable Lutachoni linguistic structure.

(b)Put 'x'in the bracket and provide an alternative structure in the space provided if the structure is not acceptable.

# (1)Person and number Subjective Pronominals

| Past/present               | Future      |     |
|----------------------------|-------------|-----|
| Nalila                     | endalila    | []  |
| Khualila                   | khulalila   | []  |
| Walila                     | olalila     | []  |
| Mualila                    | mulalila    | []  |
| Yalila                     | alalila     | []  |
| Balila                     | balalila    | []  |
| Ulilile                    |             | []  |
| Objective Pronominals      |             |     |
| Yakhulanga                 | alakhulanga | []  |
| Yamulanga                  | alamulanga  | []  |
| Yabalanga                  | alabalanga  | []  |
|                            |             |     |
| (2)TENSE (i)Past Tense     |             |     |
| (a)Recent Past             |             | f.1 |
| Narakile amakanda          |             | []  |
| Khuarakile amakanda        |             | []  |
| Omukhasi yarerile abana    |             | []  |
| Abasomi bachile ingo       |             | []  |
| Abasoleli basambile chinju |             | []  |

### (b)Remote (distant) past

| Naraka amakanda                                |    |
|------------------------------------------------|----|
| Khuaraka emikachi                              | [] |
| Chetambe yarukanga Abatachoni                  | [] |
| Omusakhulu yabukula ching'ombe chosi           | [] |
| Muabukula esimosi                              | [] |
|                                                |    |
|                                                |    |
| (ii)Present Tense                              |    |
| Khuche ingo                                    | [] |
| Orake amaindi                                  | [] |
|                                                |    |
| Alere chisendi                                 | [] |
| Bamiche obule                                  | [] |
| Danielle Goule                                 | LJ |
| (iii) Future Tense                             |    |
| (a)Recent Future                               |    |
| (u)recent I dedic                              |    |
| Ekharake chifwa                                | [] |
|                                                |    |
| Okhakese obule                                 | [] |
| Bakhache                                       | [] |
|                                                |    |
| Wekesa akhayete Malang'ang'a                   | [] |
| Kiseremi akhamukulile papa omuto               | [] |
| 103Crcmi akilamakame papa omato                | ĹĴ |
| Abasomi abakhulundu bakhasome ebitabu ebikhale | [] |
| (b)Distant future                              |    |
| (b)Distant future                              |    |
| Endalanga abasasi                              | [] |
|                                                |    |
| Olakesa obule                                  | [] |
| Wekesa alayeta Malang'ang'a                    | [] |
|                                                | LJ |
| Khasandi alakhama ching'ombe                   | [] |
| Omukhana salacha ta                            | [] |
| Omaniana salacha ta                            | ΓĴ |
| Balatekhila omukeni ing'eni                    | [] |

# (3)ASPECT (i)Imperfective Aspect

### Present Progressive

| Ebiana bilakhinanga        | [] |
|----------------------------|----|
| Abana balakonanga          | [] |
| Ching'ombe chilayanga      | [] |
| Balasokanga                | [] |
| Abasomi balabayanga        | [] |
| Abakholi balalimanga       | [] |
| Past Progressive           |    |
| Ebiana bikhinilenge        | [] |
| Abana bakonilenge          | [] |
| Ching'ombe chayilenge      | [] |
| Basokilenge                | [] |
| Abana bakonilenge          | [] |
| Abasomi babayilenge        | [] |
| Habitual                   |    |
| Asomanga                   | [] |
| Yandikanga ebitabu         | [] |
| Khusomanga                 | [] |
| Asomianga                  | [] |
| Akhupanga omukhasi         | [] |
| Asokotanga injaka          | [] |
| (ii)Perfective Aspect      |    |
| Khutekhile                 | [] |
| Khasandi usingile chingubo | [] |
| Nekesa urakile amakanda    | [] |
| Balile                     | [] |
| Abasomi babayile           | [] |
| Banyolile abana            | [] |
| (4)Reflexive               |    |

| Juma yesamba                     | [] |
|----------------------------------|----|
| Samson alebeka                   | [] |
| Abana balesinga                  | [] |
| Omuai aletekhila                 | [] |
| Omukhana alesuka                 | [] |
| (5)Passive                       |    |
| Omukunda kuabuswa                | [] |
| Obule buakeswa                   | [] |
| Chinju chasambwa                 | [] |
| Ching'ombe chilakhamwa           | [] |
| Ebimosi bitaru biakulwa          | [] |
| Omusala kuakwa                   | [] |
| (6)Causative                     |    |
| Omusacha yakwisia omusala        | [] |
| Olatibisia omukeni               | [] |
| Koko alachekhisianga abandu      | [] |
| Lusaka yakhinisia khakasa        | [] |
| Alamulisianga                    | [] |
| Tunai alachekhisia Wangusi       | [] |
| (7)Applicatives                  |    |
| Omulesi alapasila abana chingubo | [] |
| Wangusi yakulila wangwe inju     | [] |
| Abana balamulimila emikunda      | [] |
| Bakhalakila esindu omubano       | [] |
| Sitati yarerila Nekesa liuwa     | [] |
| Ruth yamichila koko chinuni      | [] |
| (8)Reciprocity                   |    |
| Kakai nende sifuma basimana      | [] |
| Burundi nende Chaonwa balolana   | [] |

| Omuikisi nende abasomi balakhesiana                    | [] |
|--------------------------------------------------------|----|
| Khuasimana                                             | [] |
| Wekesa nende Malang'ang'a balayetana                   | [] |
| Sabalasungana ta                                       | [] |
| (9)Applicative - Passive<br>Koko alasikilwanga chikhwi | [] |
|                                                        |    |
| Abasasi balimilwa omukunda                             | [] |
| Kuka sayakulilwa omurungeti ta                         | [] |
| (10)Causative - Reciprocal Balalisiananga              | [] |
|                                                        |    |
| Kuka nende abana balachekhisiananga                    | [] |
| Mulakhinisiana                                         | [] |
| Joseph nende Ruth babeyisiana                          | [] |
| Omuikisi nende abasomi balakhesiana                    | [] |
| Balakhinisiananga                                      | [] |
| (11)Negation                                           |    |
| Sendacha ta                                            | [] |
| Simiyu nende simuli sabalabeyisiana ta                 | [] |
| Sabakhamurumilenge chisendi ta                         | [] |
| Omutoka sakuakulwa ta                                  | [] |
| Sasomisianga abana ta                                  | [] |
| Abandu sabamulanga ta                                  | [] |
| Nanjekho sayatekhilanga kuka amapwoni ta               | [] |