

**ANALYSIS OF A SESOTHO VERB PHRASE**

**BY**

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## DECLARATION

I, Tšeliso Emmanuel Lepheana, declare that **ANALYSIS OF A SESOTHO VERB PHRASE** is my own work and that all the sources that I have used or cited have been indicated and acknowledged by means of complete references.

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Signed

\_\_\_\_\_  
Date

## RECOMMENDATION

Approved and recommended for acceptance in fulfillment of requirements of M.A. degree.

### SUPERVISOR(S)' RECOMMENDATION

Supervisor(s)

Date

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## ABSTRACT

This qualitative study employs the mixture of the X-bar and RTM theories to analyse a Sesotho VP. The previous academics concentrated on different linguistic features and dimensions, in various languages. Their studies are also limited to the syntactic rule representation of a VP. This study has discovered that the concept of VP is ambiguous to Sesotho learners, teachers, and linguists studying Sesotho language. The study also discovers that the Sesotho VP's unclear structure, which consists of multiple components, is a cause of this ambiguity. This study, therefore, aims to uncover the Sesotho VP syntactic structure, the constituents it carries, its grammatical functions, as well as the resolutions to its syntactic ambiguity in sentences. The findings of this study disclosed various Sesotho VP syntactic structures, such as V, V + AdvP + QualP, V + NP, V + PP, V + AdvP + AdvP, V + NP + QualP + QualP + AdvP, and V + AdvP. The grammatical functions of the Sesotho VP were revealed as; functioning as the predicate of the sentence, as the complement of a VP, and as the complement of the qualificative, which includes the AdjQual, RelQual, InterQual, as well as POSSQual. Furthermore, disambiguation mechanisms such as the principle of modification, the use of punctuation (formal signal), and the change of word order principles, were identified as the strategies used to resolve the Sesotho VP syntactic ambiguity.

**Key Words:** X-bar, auxiliary verb, predicate, complement, and qualificative.

## LIST OF ABBREVIATIONS

Adj	-	Adjective
AdjP	-	Adjectival Phrase
AdjQual	-	Adjectival Qualificative
AdjQualP	-	Adjectival Qualificative Phrase
Adv	-	Adverb
AdvP	-	Adverbial Phrase
AdvQual	-	Adverbial Qualificative
Agr	-	Agreement
Aux	-	Aux
CMT	-	Comparison Method Theory
Conj	-	Conjunction
CG	-	Constituency Grammar
CA	-	Contrastive Analysis
DM	-	Descriptive Method
DO	-	Direct Object
DS	-	Descriptive Statistics
Dur-Past	-	Durative Past
Dur-Pres	-	Durative Present
EAT	-	Error Analysis Theory
EST	-	Extended Standard Theory
EXP PERF	-	Experiential Perfect
Fut	-	Future
GGT	-	Generative Grammars Theory
HM	-	Habitual Maker
Habit-PERFECT-	-	Habitual Perfect
IND	-	Indicative Mood
IO	-	Indirect Object
IMP	-	Imperative

INFL	-	Inflectional
InterQualificative-		Interrogative Qualificative
InterQualP	-	Interrogative Qualificative Phrase
LIT	-	Literal
M.A.	-	Master of Arts
N	-	Noun
Neg	-	Negation
NP	-	Noun Phrase
P	-	Preposition
POSS	-	Possessive
POSSQual	-	Possessive Qualificative
POSSQualP	-	Possessive Qualificative Phrase
Pred	-	Predicate
PP	-	Prepositional Phrase
Qual	-	Qualificative
QualP	-	Qualificative Phrase
Quant	-	Quantitative
QuantP	-	Quantitative Phrase
QuantQual	-	Quantitative Qualificative
Rel	-	Relative
RelQual	-	Relative Qualificative
SC	-	Subject Concord
ST	-	Standard Theory
SA	-	Structural Analysis
TGT	-	Transformational Grammar Theory
Tns	-	Tense
V	-	Verb
VS	-	Verb Stem
VU	-	Verb Union

WFT - Word-Formation Theory

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## CHAPTER ONE

### 1.0 Introduction

This study aims to investigate the concept of Sesotho verb phrase (VP). This phenomenon is a syntactic aspect of grammar that merits analysis to develop a comprehensive knowledge in the target language. With the exception of Sesotho, numerous researchers, including Tsahe (2017), look into the VP from a variety of perspectives and in several languages. Subsequently, this thesis focuses on the investigation of the structure of the Sesotho VP and the constituents it carries, its grammatical functions in a sentence, as well as to determine the solution to the syntactic ambiguity of the Sesotho VP.

This chapter provides background information to the study and its contextualisation. It explains the study's aim and objectives. It also presents the problem of the study and the reviewed literature which is related to the content of this study. Additionally, it discusses methodology for data collection as well as the approach and relevant theories to be employed in the analysis of data. Finally, it describes the study's significance, scope and organisation.

### 1.1 Background and Contextualisation of the Study

This research is contextualised within the Syntactic field of Sesotho, as the language of focus. Sesotho, commonly known as Southern Sotho, is an indigenous African Language, according to the National African Languages Resource Centre NALRC-(n.d.). According to this centre, Sesotho is the national language and second official language in Lesotho alongside English. The centre further indicates that in South Africa, Sesotho is one of eleven official languages, since 1996. Additionally, NALRC-(n.d.) classifies Sesotho as one of the three

languages that make up the Sotho sub-group; the other two being Sepedi, primarily spoken in South Africa's Limpopo province and Setswana, spoken in Botswana and South Africa (NALRC-n.d.). Sesotho's inclusion in the South Eastern Bantu language family is further confirmed by Nhlapo (2021).

Sesotho like any other Bantu languages has its grammar that includes components such as; phonetics, phonology, morphology, semantics and syntax. The syntactic component of Sesotho grammar is the focus of this study. According to Mu'in (2019), syntax is the grammatical arrangement of words and phrases used to produce coherent sentences. Adewusi (2020) adds that syntax in linguistics, pertains to the set of rules, principles and procedures that regulate how words are put together to form clauses, phrases, and sentences. This could be the reason Kusumawardhani and Rakhmanita (2022) acknowledge that the concept "syntax" is derived from the Ancient Greek word, *s'yntaxis*, a verbal noun which literally means arranging or laying forth together. This implies that in linguistics, the term syntax relates to the systematic and meaningful arrangement of words, phrases, clauses, and sentences.

In the study of syntax, as stated by Machobane (2010), there are phrases that include noun phrase (NP), adjectival phrase (AdjP), adverbial phrase (AdvP), prepositional phrase (PP), and verb phrase (VP). Rahman (2017) defines a phrase as a group of two or more words that operate together in a sentence to carry out a single grammatical purpose. In addition, Thetso (2018) explains that a phrase consists of one or more words with a head as the most important member. This suggests that the concept "phrase" is a single word or a collection of words that functions as a cohesive unit in a sentence. The primary focus of this study is therefore, on the syntactic analysis of a Sesotho VP. Anggraeni (2019) puts forth that the concept 'verb' derives from 'were,' a

proto-Indo-European term which signifies “word”, and enters English via the Latin word *verbum* and the ancient French word, *verbe*. Anggraeni (*ibid*), further stipulates that a verb primarily alludes to an activity; events and process such as **give**, **happen** and **become**. In support, Saviour (2021) points out that verbs are words that convey an action or state of being. This implies that a verb is a term that expresses an action, occurrence or a condition of affairs.

According to Tuahta (2017), grammarians examine deep and surface structures as well as syntactic structure at the syntactic unit level. For him, there are three components to syntactic structure in Chomskian grammar: transformational component, morphemic (semantic) component, and phrase structure. Tuahta further states that a verb phrase (VP) is a verbal group having a verb as the head word. This could be the cause of the assertion made by Ekasani, Artawa, Yadnya and Indrawati (2018) that, a VP is a collection of words in which the primary verb and its auxiliary words serve as the main idea or head. This suggests that grammar involves deep structure, surface structure and syntactic structure at the syntactic unit level. According to the Chomskian, the three components of syntactic structure are transformational component, morphemic component, and phrase structure. Furthermore, phrase structure is studied in terms of the surface structure. It is further inferred that a verb phrase is a component of a sentence that either has a major verb alone, or a main verb plus any other helping verbs as the central element or head.

The linguistic area at hand appears not to have received the desired attention from the previous academics. Doke and Mofokeng (1967), Guma (1972), *Lekhotla la puo ea Sesotho* (1976; 1995), Machobane (2010) and Thetso (2018) examine the Sesotho verb phrase from various linguistic perspectives. However, there is a gap in their research about the structural analysis of the Sesotho verb phrase and the elements it carries, its grammatical functions in

sentences, as well as how to resolve its syntactic ambiguity. As such, the purpose of this study is to fill that gap by investigating the afore-mentioned linguistic barrier. According to Kevinbinz (2017), there are four types of phrase elements in the X-bar theory of phrase structures; the head, specifier, complement and adjunct. Umer (2023) embraces Kevinbinz (*ibid*) that the specifier, head, and complement constituents make up the X-bar's structure. This suggests that the specifier, head, complement, and adjunct constitute the structure of phrases in accordance with the X-bar theory. Therefore, it is expected that Sesotho, like all others languages, adheres to the X-bar theory, and syntactic representations, as illustrated below:

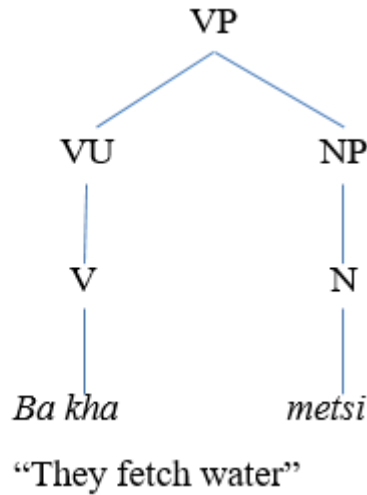
1. *Ba kha metsi*  
 2-Agr fetch-IND 6-water  
 LIT-They fetch water  
 "They fetch water"

The VP in 1 above can also be governed by the syntactic rule as follows:

2.  $VP \rightarrow V + NP$   
 $V \rightarrow VU + V$   
 $NP \rightarrow N$

This syntactic rule states that a VP is made up of the V and a NP, while the V is made up of the VU and V, and that the NP is made up of a N. The VP under consideration can alternatively be represented in a tree diagram as in 3 below:

3.



The syntactic representations of the VP in 1, 2, and 3 above, serve as an example of how this study analyses the research questions, which are yet to be stated in this chapter.

## 1.2 Statement of the Problem

Scholarly research has been undertaken on VP in various linguistic contexts and dimensions. For instance, Machobane (2010) examines how the grammar-related X-bar Theory establishes the structure of different phrases, such as VPs. Brinton (2010), Ekasani, *et al* (2018), and Ngoupayou (2023), also conduct studies on the VP from various aspects, in different languages such as Shupamem and English. Learners, educators and linguists in the field of African languages in Sesotho are confused by the idea of VP. This is due to the fact that Sesotho VP has an ambiguous structure that carries various components. It is also unclear how it functions in a sentence, and what approach might be taken to overcome its syntactic ambiguity. This presents an academic obstacle for those studying Sesotho grammar, hence unsatisfactory learners' results in the subject in question. Additionally, there is limited literature on the Sesotho topic at hand, which has a detrimental academic influence. As a result, the purpose of this study is to bridge that linguistic gap by revealing the syntactic structure of the Sesotho VP, including the units it

contains. It also intends to establish its grammatical functions in a Sentence, as well as the strategies that may be employed to address its syntactic ambiguity.

### 1.2.1 Aim of the Study

This study aims to examine the structure of the Sesotho VP and its constituents. It further aims to disclose its grammatical functions in a sentence, as well as to uncover a thorough approach that may be used to resolve the syntactic ambiguity of the Sesotho VP.

### 1.2.2 Objectives of the Study

The objectives of this study are to:

1. Identify the syntactic structure of the Sesotho VP and the elements it carries.
2. Reveal the grammatical functions of the Sesotho VP in a sentence.
3. Determine the solutions to the syntactic ambiguity of the Sesotho VP.

### 1.2.3 Research Questions

In order to achieve the aim and objectives of this study, the following questions will be addressed:

1. What is the syntactic structure of the Sesotho VP, and what elements does it contain?
2. What are the grammatical functions of Sesotho VP in a sentence?
3. What strategies could be employed in order to resolve the syntactic ambiguity of the Sesotho VP?

### 1.2.4 Hypotheses

According to McLeod (2021), hypothesis is a specific, testable declaration of what the researcher(s) anticipate will be the study's outcome that is given at the outset of the investigation. Cherry (2022) adds that a hypothesis is a

statement regarding the relationship between two or more variables. For Cherry (*ibid*), it hypothesis is a precise, verifiable forecast regarding the outcomes the researcher hopes to achieve during the investigation. This suggests that hypothesis relates to the prediction about the relationship between the independent and dependent variables that is made by the researcher. The results of the investigation might therefore, confirm whether or not this prediction was accurate. Based on the research questions stated above, the study sets to test the following hypotheses:

1. With regard to the syntactic structure of the Sesotho VP, the study predicts that there are various syntactic structures such as V, V + adverbial phrase (AdvP), V + prepositional phrase (PP), V + AdvP + PP. V + AdvP + AdvP, V + noun phrase (NP), and V + NP + Adjectival Phrase (AdjP). Pertaining to the constituents carried in the Sesotho VP, the study assumes that there are numerous units such as subject concord (SC) + Clitic + verb (V), SC + V + adverb (Adv), SC + V + preposition (P) + noun (N), SC + future marker (Fut) + V, negation morpheme (Neg) + Clitic + V, SC + auxiliary (Aux) + SC + V + N, SC + Fut + habitual marker (HM) + SC + V + N, and SC + Aux/ duration past (Dur-Past) + Clitic + V + indirect object (IO) +direct object (DO).

2. Concerning the grammatical functions of the Sesotho VP, it is anticipated that it functions as the predicate (Pred) of the sentence, as the VP complement, as the qualificative complement (adjective qualificative (AdjQual) complement, as the relative qualificative (RelQual) complement, and as the interrogative qualificative (InterQual) and possessive qualificative (POSSQual)).

3. To resolve the syntactic ambiguity of the Sesotho VP, this study assumes that the possible approaches could be: by applying the principle of

modification and or / binary principle, by using punctuation (formal signal), and by applying the change of word order principle.

### 1.3 Rationale of the Study

As previously stated in the study's background and contextualisation, the concept of the Sesotho VP does not seem to have been sufficiently investigated. Consequently, academics seem to be less interested in the topic at hand because there is insufficient literature on it. Learners in this subject of study subsequently perform below expectations. As a result, the Sesotho syntax is typically compromised.

With the attainment of the intended outcomes, the current study seeks to, in light of this academic shift; restore the essence of the Sesotho syntactic studies. The study results regarding the syntactic structure and elements of Sesotho VP, as well as its grammatical functions within sentences and the resolution of its syntactic ambiguity should also add significantly to the valuable literature in this field of study.

### 1.4 Literature Review

This section of the study presents the reviewed literature that is contextually relevant to the current study. The examined literature in this study is arranged thematically since the themes drawn from the research questions of this study serve as the organising principle, rather than the chronological order.

#### 1.4.1 The Syntactic Structure and Constituents of the VP

Rahman (2017) examines syntactic errors of the VP, on persuasive writings produced by English department fifth semester students in Makassar Muhammadiyah University. Rahman's (*ibid*) study applies Error Analysis Theory (EAT) for data analysis, with the purpose of identifying and describing

different kinds of English VP syntactic faults that fifth semester students commonly make in their persuasive essays. The results show that seventeen erroneous VPs including omission, misformation, and ordering problems; contributed to the erroneous VP that the students employed in their persuasive compositions. This implies that persuasive essays usually contain syntactic VP mistakes. Rahman's (*ibid*) study differs from the current study as it dwells on English VPs syntactic mistakes on persuasive writings, and employs EAT for data analysis; whereas this study focuses on the Sesotho VP constituents, its grammatical functions, as well as the resolution to its structural ambiguity. The present study also adopts the X-bar theory, as well as the Referential Theory of Meaning (RTM) to analyse the data. However, the current study is influenced by Rahman's (*ibid*) study in terms of the verb, phrase, and VP descriptions, as well as the way in which the VP is constructed.

Tuahta (2017) analyses VPs in English and Karonese, based on Transformational Grammar Theory (TGT), and applies Contrastive Analysis (CA) for data analysis. Tuahta aims to compare and contrast the VPs in both languages and to determine their implications in teaching English to non-native speakers. Tuahta's (*ibid*) study focuses on the syntactic construction, the functions and the meaning of the VP in both languages. Tuahta's (2017) findings highlight that there are some VP aspects that are different in both languages, which contribute to the field of language training; particularly for those whose mother tongue is Karonese. This suggests that there are certain common VP features in both English and Karonese, which are useful especially to Karonese speaker in the process of language training. The current study focuses on the syntactic exploration of the Sesotho VP and adopts the X-bar theory and the RTM as its analytical tools; as opposed to Tuahta's (2017) study that analyses VPs in English and Karonese, and uses the TGT and CA to analyse data. In spite of these differences, the current study is informed by

Tauhta's (*ibid*) study with regard to the structure of the VP as one of the elements under investigation.

Ekasani *et al* (2018), examine the variations of English VP in English cookbook entitled, "The Essential Book of Sauces and Dressings". They use a Word-Formation Theory (WFT), with the aim of analysing different forms of English VP in the same book. The outcomes of their study reveal seventeen variations, which imply that an English VP can manifest in numerous forms. Their study differs from the current study since it focuses on English VP, and concentrates primarily on the variations of English VPs; whilst the current study investigates the structure of the Sesotho VP and the units it contains, its functions in a sentence, as well as the resolutions to its constructional ambiguity. Nevertheless, Ekasani, *et al's* (*ibid*) study forms the basis of the current study with regard to the nature and syntactic structure of a VP.

#### 1.4.2 The Research of Grammatical Functions of the VP in Sentences

Ningsih (2016) conducts a translation analysis of a VP from Lois Lowry's novel "The Giver". Ningsih (*ibid*), looks into the translation of English VP into Indonesian, utilising the Comparison Method Theory (CMT) to analyse the data. Ningsih's (2016) study aims to detect and describe the English-Indonesian translation variations and acceptability of the VP present in the above-mentioned novel. The outcomes of the study disclose fourteen different forms of VP translations from English into Indonesian. This suggests that there are different VP structures in English and Indonesian. Ningsih's (*ibid*) study however, differs from the current study as this study concentrates on the Sesotho VP structure and the constituents it contains, its syntactic functions in a sentence, and the resolution to its syntactic ambiguity. Nonetheless, Ningsih's (2016) study serves as a basis for the current investigation in terms of the grammatical functions of the VP in a sentence.

Hutabarat and Gorat (2021) investigate the syntactic functions of VP in the lyrics of Westlife's songs. For the analysis of data, they employ Descriptive Method (DM), with the aim of determining the functions of the VP in these songs. Their findings reveal that the VPs syntactically function as predicates, NP modifiers, adjectival phrase complements, and VP complements. This implies that an English VP has various syntactic functions in a sentence, such as to serve as the predicate of a sentence. Hutabarat and Gorat (*ibid*) study differs from the current one since it focuses on the syntactic roles of the VP in the lyrics of Westlife's songs and applies the DM for data analysis; whereas the current study focuses on the VP structure and units, its syntactic functions, as well as the resolution to the syntactic ambiguity of the Sesotho VP. This study also employs the X-bar theory as well as the RTM to analyse data. However, the present study is informed by their study with regard to the various grammatical functions of the VP in a sentence.

#### 1.4.3 The Resolutions to the Syntactic Ambiguity of the VP

Kurniasari's (2017) study focuses on the structural ambiguity in English. In order to present and evaluate data, Kurniasari (*ibid*) makes use of Structural Analysis (SA). Kurniasari's (2017) study aims to find out how structural ambiguity can be noticed, illustrated by using five sentences, and how it can be resolved. The results of Kurniasari's (*ibid*) study reveal only five examples of structural ambiguity which include; Gerund + VP, NP + Adj. Clause, VP + NP + PP, VP + NP + more... than + NP, and VP + NP + PP1 + PP2. These findings further disclose that formal cues can be used to disambiguate a phrase and make it easier for the listener or reader to understand the sentence structure. According to Kurniasari (2017), such formal signals include function words, inflections, affixes, stress, juncture, and punctuation. This implies that an English VP has various syntactic structures, and the use of formal signals like

punctuation may help resolve syntactic ambiguity. As stated earlier, Kurniasari (*ibid*) focuses on identifying English structural ambiguity and providing possible solutions; while the current study examines the components of the Sesotho VP structure, how it grammatically functions in sentences, and how to resolve its syntactic ambiguity. Furthermore, Kurniasari's (2017) study uses SA to analyse data; conversely, the data analysis in this study is based on the X-bar Theory and RTM. Despite these differences, the present study draws upon Kurniasari's (2017) study in terms of ambiguity, its kinds, and the strategies to resolve syntactic ambiguity.

Demir (2020) examines the lexical and structural ambiguity in students' writings with an emphasis on outcome assessment and evaluation. Descriptive Statistics (DS) is used for data analysis in Demir's (*ibid*) study, with the purpose to investigate the frequency of lexical or syntactical ambiguities in students' essays; and to propose some instructional strategies for higher education on how to disambiguate expressions. The findings of Demir's study reveal that the English VP structural ambiguity could be resolved through the implementation of word order change. In addition, they disclose that, as compared to syntactic ambiguities, students' writings contain more lexical ambiguities, and this tendency is more frequent in verbs than in other grammatical units. This suggests that the movement of the confusing words or phrases may help resolve the English VP structural ambiguity. Furthermore, in contrast to structural ambiguity, lexical ambiguity is more common in students' essays, with specific reference to verbs than of other grammatical elements. While the current study focuses on the Sesotho VP syntactic structure and the units it carries, its grammatical functions in a sentence, as well as the resolution to its syntactic ambiguity, Demir's (2020) study concentrates on the analysis of lexical and grammatical ambiguity in students' writings and techniques that could be used to help disambiguate expressions.

Nonetheless, the current study is enlightened by Demir's (*ibid*) study with regard to the resolutions of the VP's syntactic ambiguity.

The scholars reviewed above examine the VP from various linguistic domains. However, it seems that the topic in question has not been subjected to investigation in the Sesotho language, before. As a result, there is still a linguistic gap in the analysis of the Sesotho VP. Consequently, this study intends to fill that gap by examining the Sesotho VP, with regard to its structure, grammatical functions in a sentence, as well as the resolutions to its syntactic ambiguity.

### 1.5 Theoretical Framework

The previous section looked into the literature that is pertinent to the subject of this study. The current part presents the theory employed in the analysis of data. Adom, Hussein and Agyem (2018) define theoretical framework as a researcher's blueprint or guide that is based on an established theory in an area of study; that is relevant to and/ or represents the study's hypothesis. George (2022) adds that a theoretical framework explains important subjects in the research study, offers connections between them, and examines pertinent theories based on the literature review. Additionally, George (*ibid*), maintains that a strong theoretical framework gives a researcher direction, and allows him or her to effectively understand, explain, and generalise from the results, as well as demonstrate the study's importance in his or her profession.

According to Lederman and Ledeman (2015), a theoretical framework is essential for any investigation regardless of whether it uses quantitative, qualitative or mixed approaches. They go on to clarify that a sound theoretical framework explains the importance and worth of the study. Based on these justifications, the researcher believes that a theoretical framework, regardless

of the research methodology utilised in the study; is an analytical instrument for defining concepts and analysing and assessing their relationships. In addition, despite the research methodology used, a theoretical framework gives rationale for the study and its applicability in the subject of study. Subsequently, this section is subcategorised into 1.5.1, which discusses the X-bar theory, and 1.5.2, which discusses a Referential Theory of Meaning RTM. For the analysis of the syntactic structure of the Sesotho VP, and its grammatical functions in sentences, the X-bar theory will be used. The RTM will be employed to assess the syntactic ambiguity of the Sesotho VP, strengthening the X-bar theory for effective analysis of the gathered data.

#### 1.5.1 The X-bar Theory

In this study, the X-bar theory of phrases is employed for the analysis of data. Lovato (2016) and the Society For Neuroscience (SFN) (2023), agree that the X-bar theory is a syntactic category formation theory that was first proposed by Noam Chomsky in 1970, by reformulating the ideas of Zellig Harris (1951). According to the SFN (*ibid*), the X-bar theory was developed by Ray Jackendoff (1977a, 1977b, 1974, 2009), following the theory of Generative Grammars (GGT) put forth by Chomsky in the 1950s. Lovato (2023) indicates that the X-bar theory makes the assumption that there are structural commonalities among all human languages, such as an underlying syntactic structure called the “X-bar”. Lovato (*ibid*) further indicates that the X-bar is a particular application of constituency grammar, which is a sentence analysis approach, and that it separates a sentence into major parts, which are then divided into smaller portions. The process is repeated until irreducible constituents (elements) are encountered, and a typical phrase can be split down into the head, specifier, complement and adjunct (Lovato, *ibid*). In support, Lasnik and Lohndal (2017) also state that phrase structure grammars were developed in the 1960s into what is known as the Standard Theory (ST), which

evolved into the Extended Standard Theory (EST) and the X-bar theory in the 1970s.

Catherine (2018) points out that the X-bar theory has various principles as it claims that every phrase in every sentence in the mental grammar of every human language is arranged in the same manner. For Catherine (*ibid*), the heading principle states that every phrase has a head, and each phrase might contain other phrases in the complement or specifier position. Catherine (*ibid*) further states that according to the X-bar theory, every phrase (XP) has a head (X or X°), which is the phrase's terminal node. Catherine (2018) further states that the head is a node with no daughters, and it specifies the phrase category. This implies that according to the X-bar theory, every phrase is arranged in the same manner in every mental grammar of every human language. This also denotes that the X-bar theory assumes that all languages have the same underlying- syntactic structure, or X-bar. Additionally, this suggests that the X-bar is a specific use of the constituency grammar (CM), and a method employed for analysing sentences and phrases. Furthermore, it follows that according to this theory, sentences and phrases are broken down into smaller components. On the same note, the study assumes that the head determines the category of the phrase, and it is a non-branching node, with no daughters.

Catherine, (*ibid*) also emphasises that the bottom-most (zero) level of this structure is termed the head level, and the top level is called the phrase level; while the middle (intermediate or mid-sized) level of a phrase structure is called the bar level (X'). For Catherine (2018), this is how the theory gets its name: X-bar theory. This implies that the structure of a phrase is divided into three levels: the phrase level, which is the top-most level, the bar-level (X'), after which the X-bar theory is named, the middle (mid-sized or intermediate) level, and the head level, which is the bottom-most level, often known as the

zero level of the phrase structure. Furthermore, Catherine (2018) indicates that the X-bar theory suggests that a phrase may optionally contain another phrase inside it in a position that is sister to the head and daughter to the bar level. Additionally, that optional phrase in the complementary position is then termed the complement (Catherine. *ibid*). For Catherine (2018), according to the X-bar theory, a phrase may also have a specifier, which is:

a phrase that is sister to the bar-level and daughter to the phrase level.

The most typical role of specifiers is to function as the subject of sentences (Catherine, 2018).

The X-bar theory principles, as outlined by Catherine (2018), are expounded by Catherine (2022) and illustrate that the head (X) is always closely related to its complement. Additionally, for Catherine's (*ibid*) study, every phrase (XP) must have a bar-level of the same category (X') within it, optionally preceded by another phrase (YP). Catherine (2022), also states that every bar-level (X') must have a head of the same category within it, optionally followed by another phrase (ZP). This suggests that according to the X-bar theory, a phrase may optionally have a complement, which is a phrase that is a daughter, dominated by the bar-level (X') and sister to the head (X), as it occurs on its right side. This definition further denotes that a phrase can have a specifier, which is a phrase that is a daughter to the top-most level, the phrase level, and a sister to the middle level, the bar-level (X'). This study further assumes that the most frequent use of a specifier is to serve as the sentence's subject. This definition also denotes that each phrase (XP) includes a bar-level (X') of the same type, which may or may not be preceded by another phrase (YP). This study further suggests that every X-bar (X') needs a head (X) of the same type, which may or may not be followed by another phrase (ZP). Lastly, Catherine's (*ibid*) definition implies that the head (X) is always intimately related to the complement.

Catherine (2022) further stipulates that the positions occupied by YP and ZP are argument positions, with special names. For Catherine (*ibid*), the structural relations in the tree diagrams are adapted from family relationships: Complement, which is the sibling of the head (X), (child of X'). Catherine (2022), further states that another phrase (XP) is the specifier, which is the daughter of the XP, sister of the X-bar (X'). Catherine's (*ibid*) study also stipulates that the principle of modification can be applied in order to decide how to draw syntactically ambiguous phrases or sentences. This implies that the phrases that assume the argument positions are those that come before the head (YP), and those that come after it (ZP). Catherine (2022)'s definition also suggests that the tree diagram structural relations are named after family relations, of which the complement is the daughter of the X-bar (X'), and a sister to the head (X). This study further makes the assumption that syntactic ambiguity in phrases and sentences may be identified and resolved using the concept of modification. According to Catherine (*ibid*), the X-bar emphasises that each phrase has a head (X) as its main part, and one or more than one (pre- or post-) modifier. For Catherine (2022), the modifiers can either be specifier, complement or adjunct.

In addition, the SFN (2023) explains that the heading principle underlines that each phrase has a heading and the dichotomous principle asserts that each node branches into two separate nodes. Moreover, the SFN (*ibid*) states that projection and ambiguity require the binary principle. According to Marc (2023), in linguistics, the X-bar theory is a model of sentence construction that aims to determine the smallest syntactic elements (known as "constituents") and to describe how they are arranged according to phrase structure rules. This implies that the heading and dichotomous principles of the X-bar theory are basically used to determine the syntactic structure of phrases (XPs). On the

same note, it is denoted that the syntactic or structural ambiguity of phrases is resolved by applying the projection and binary principles. This further suggests that the X-bar theory is a tool that determines the smallest syntactic constituents of sentences and phrases.

Based on the descriptions made by the scholars above, the X-bar theory appears to be the most practical and effective tool to be employed for data analysis in this study. The X-bar theory will be useful in answering research questions regarding the syntactic structure and the units included by the Sesotho VP, its grammatical functions in a sentence, and resolutions to its syntactic ambiguity. The grammatical principles of this theory such as the heading, modification, as well as the projection and binary principles, should help the researcher present the sentences with VPs, discuss them and achieve the desired outcomes pertaining to the Sesotho VP structure, and the constituents it carries, its grammatical functions in a sentence, as well as the resolutions to its syntactic ambiguity.

### 1.5.2 A Referential Theory of Meaning

A referential theory of meaning (RTM), also known as the referential realism, or direct reference theory, was proposed by Saul Kripke and Bertrand Russell. According to Griffin (2020), this theory was proposed in the middle of the 20<sup>th</sup> century. For Griffin (*ibid*), the RTM denotes that an expression's meaning depends on the object it refers to. Yan (2020) acknowledges that, according to the RTM, words have meaning since they reflect amongst others, individuals, things, or locations. This suggests that the RTM holds that the meaning of an expression is determined by the referent, or the real object it refers to. As a result, the principle of this theory should assist in presenting and analysing the data regarding the ambiguity in Sesotho VP and its resolution.

## 1.6 Methodology

The main topic in the preceding section centred on the theoretical framework to be used in this study's data analysis. This section dwells on the process for data gathering and analysis of this study. According to Bhasker and Manjuladevi (2016), research methodology covers the procedures required in a research process, such as identifying the research problem, formulating aims and objectives, and calculating sample size. Similar to Bhasker and Manjuladevi (*ibid*), Patel (2019) believes that, methodology in research is a systematic approach to solving the research problem. Patel's (*ibid*) study further states that it comprises of terms such as paradigm, theoretical model, and quantitative or qualitative techniques. Based on these definitions, research methodology refers to the explicit systematic procedures and tools used for gathering, presenting, assessing, and analysing study data. This section is organised into six subsections, which are: research paradigm, research design, population, sample and sampling techniques, data collection, and data analysis.

### 1.6.1 Research Paradigm

According to Kivunja and Kuyini (2017), research paradigm is the worldview, perspective way of thinking, school of thought, or collection of common beliefs, that guides the interpretation or meaning of research results. Ebohon, Ajayi and Ganiyu (2021) add that a research paradigm is a collection of common views and opinions shared amongst specialists in a field, regarding how issues need to be perceived and handled. Abbadia (2022) agrees with the preceding academics that a research paradigm is a set of concepts, assumptions, or understandings that underpins theories and practices that are useful. Abbadia (*ibid*) further states that ontology, epistemology and methodology are the three pillars of a research paradigm, and that most methodologies derive from positivism or interpretivism. These definitions imply that a research paradigm is a belief system for comprehending the reality of the world or a particular

phenomenon. This worldview is founded on epistemology, ontology and methodology; and it includes positivism, interpretivist approaches, and critical theory.

Rogers (2020) believes that interpretivism opposes positivism, and maintains that reality is subjective, socially formed, and composes of several viewpoints. From this perspective, Rogers (*ibid*) argues that research is fundamentally moulded by the researcher, who contributes his or her own subjective perspective of observed events drawn from their own experiences. Similarly, Hepler and Cloud (2022) acknowledge that interpretivism is a sociological study methodology that analyses an action or event according to the values, norms, and beliefs of the society in which it occurs. In sociology, it is a qualitative technique used to analyse data on human behaviour (Hepler and Cloud, *ibid*). This suggests that interpretivism refers to the sociological approach to research, that supports subjective assumptions or analyses reality (events, behaviour or phenomena). It is also denoted that interpretivism is commonly associated with qualitative data collection and analysis methods. As a result, the interpretivism paradigm is applied in this study since it is qualitative in nature, and data will be collected and interpreted in words and expressions, in order to obtain the study's findings.

### 1.6.2 Research Design

McCombes (2021) defines a research design as a technique for utilising empirical data to address the study questions. McCombes's (*ibid*) study further indicates that choosing a research design entails deciding on the overall research objectives and methodology of the study. This entails whether the researcher will conduct primary or secondary research, sampling and data collection strategies McCombes (*ibid*). In addition, Jain (2022) states that a research design is a blueprint for scientific studies that comprises of

instruments, strategies, and research approaches that are employed to carry out the investigation. Jain (*ibid*) further states that a research design is beneficial to recognise and resolve any issues that may come up while conducting research and analysis. According to Singh (2023), research design is the structure or plan that guides the conduct of a research project. It entails describing the general strategy and procedures that will be followed to gather and examine data in order to find answers to research questions or validate hypotheses (Singh, *ibid*). This suggests that a research design refers to an overall approach, structure or plan used to carry out a research study. These definitions also imply that a research design defines a clear and meaningful approach employed to gather, examine, and interpret data in order to address the research questions. They further denote that it helps ensure the study's validity consistency, and dependability. Almalki (2016), categorises methodology in research into quantitative, qualitative and mixed approaches.

#### 1.6.2.1 A Qualitative Research Design

Busetto, Wick, and Gumbinger (2020), define qualitative research as the study of the nature of concepts which are particularly suitable for responding to questions of “why” something is (not) observed. They further state that it evaluates complex multi-component interventions, and focuses on improving them. Mcleod (2023) adds that qualitative research collects non-numerical data such as words, images and sounds. It also aims to provide new ideas and interpretations by developing a detailed and comprehensive description of the topic under investigation (Mcleod 2023). For this reason, Ugwu, Chinyere and Eze (2023) acknowledge that qualitative research involves collecting and evaluating non-numerical data, such as audio, video, or text, in order to understand the nature of concepts. This suggests that qualitative research aims to gain a thorough understanding of a subject under study, collects non-numerical data, and describes a phenomenon using words, images, and sound.

### 1.6.2.2 A Quantitative Research Design

Quantitative research as per Bhandari (2023) is the process of gathering and examining numerical data. For Bhandari (*ibid*), it can be used to identify trends and averages, formulate hypotheses, investigate causal relationships, and generalise findings to larger populations. Bhandari (2023) further indicates that quantitative research is the opposite of qualitative research which entails gathering and assessing non-numerical data. Streefkerk (2023) agrees with Bhandari (2023) that quantitative research is concerned with numbers and figures, as against qualitative research which deals with words and meanings. Similar to Bhandari (2023) and Streefkerk (2023), Ugwu, Chinyere and Eze (2023) believe that quantitative research involves collecting and processing numerical data for statistical analysis. This denotes that quantitative research is a type of study design in which numerical data is collected and analysed using statistical techniques. Subsequently, quantitative research is the opposite of qualitative research, which gathers and analyses non-numerical data. Since quantitative research involves quantifying the collection and analysis of data, it is not appropriate for the current study. As such, the present study employs qualitative research design. This research approach is useful in this study for comprehending the topic at hand. Most importantly, the findings of this study will be discussed and interpreted through the use of words and meanings.

### 1.6.3 Population

According to Thacker (2019), population in research is a whole group of individuals with particular traits. The target population and accessible population are the two types of population Thacker (*ibid*) outlines. Bhandari (2020) adds that the population is the entire set of components from which the researcher hopes to draw conclusions. Therefore, Thomas (2023) acknowledges population as the total group or collection of people, things, or

events that have particular qualities and are relevant to the researcher. According to Thomas (*ibid*), the population is the larger group from which a sample is taken. This suggests that in research, the term ‘population’ refers to the total set of persons or elements, with certain features, about whom the sample must be drawn.

The population from which the sample for this study is taken is based on the researcher’s desired characteristics and attributes. The primary data for this study is gathered from students and teachers from Lithabaneng High School in Maseru. The selection of the target population from this school is due to its close vicinity to Ha Bosofo in Maseru, where the researcher resides. Learners pursuing M.A. in African Languages and Literature, together with their respective lecturers from the National University of Lesotho (NUL), in the same department are also examined. These participants are in the same department with the researcher. Hence, the researcher believes that they are knowledgeable about the linguistic aspect of VP that they dealt with in their undergraduate level. The researcher also assumes that the high school participants understand the subject matter under investigation since they are taught about sentence structure. Ordinary Basotho citizens of Ha Bosofo are also investigated in order to gather data that is believed not to have been impacted by any educational background. Secondary data is collected from a selection of documents including dissertations, library material, and journal articles. The researcher also reviews the selected Sesotho books of grammar.

#### 1.6.4 Sample and Sampling Techniques

This section provides the sample that is examined as well as the sampling strategies that is used to select the sample from the stated population. Gumpili and Das (2022) define sample as the subset of the population selected to

accurately reflect the same population as studying the complete population is not practical. This impracticable studying of the whole population draws from Taherdoost (2016) who believes that it is critical for the researcher to choose the sample since it is impossible to collect data from every case. Taherdoost (*ibid*) further explains that in order to save time and costs, the researcher may use a sampling technique rather than analysing the complete population. This implies that a sample is a controllable subset of the population that is used in a study to represent the whole population. Contrarily, Elfil and Negida (2016) define sampling as the process of choosing the research sample from the target population. This suggests that the term ‘sampling’ pertains to the process of selecting a specific subset of the study participants from the target population. This part of the study presents the sample that is investigated, as well as the sampling strategies employed to select that sample.

The current study employs both non-probability and probability sampling methods, with purposive and simple random sampling techniques, respectively. As stated by Elfil and Negida (2017), judgemental or purposive sampling, involves the researcher selecting the subjects based on presuming certain qualities for the sample and determining that the sample is appropriate for reflecting the population. Likewise, Nikolopoulou (2022), states that purposive sampling refers to a collection of non-probability sampling strategies in which units are chosen based on attributes that the researcher requires in his or her sample. Nikolopoulou (*ibid*) further asserts that judgemental sampling is frequently used in mixed-methods and qualitative research. This suggests that purposive sampling relates to the technique of selecting a specific set of individuals or components with the qualities the researcher requires in his or her sample. It is also denoted that purposive sampling is mostly used in qualitative research and mixed methods research.

Simple random sampling according to Showkat and Parveen (2017), is a fully random technique of sample selection in which every component of the population, as well as any combination of elements has an equal opportunity of being chosen for the sample. Similar to Showkat and Parveen (*ibid*), Singh (2018) believes that simple random sampling implies that every element has an equal chance of being selected to be a part of the sample. It follows that in simple random sampling, each member of the target population has an equal chance of being selected to be included in the sample. Given that purposive strategy is mostly associated with qualitative research method, this study is justified to use it, due to its qualitative nature and suitability for this study. Within the target population, the researcher selects the participants unsystematically, hence the use of the simple random sampling technique in the current study.

In order to acquire primary data regarding the Sesotho VP, the researcher investigates thirty (30) Basotho people. The participants in this sample include; five (5) educators and ten (10) students from Lithabaneng High School in Maseru. In this instance, five (5) learners are selected from grade eight (8), while the other five (5) are chosen from grade eleven (11). This choice is based on the two different levels or bands of the high school education. The participants further include ten (10) linguistic learners from National University of Lesotho, pursuing Master's degree in African Languages and Literature, and five (5) Basotho citizens of Ha Bosofo in Maseru. The researcher believes that the selected sample is the accurate representative of the target population in this study, since they are native speakers of Sesotho. Additionally, they represent a range of educational backgrounds within the target population, hence impartial and fair outcomes.

For secondary data collection, the researcher reviews the following selected Sesotho grammar books: *Textbook of Southern Sotho Grammar* by Doke and Mofokeng (1967), *An Outline Structure of Southern Sotho* by Guma (1972), *Sebopeho-puo sa Sesotho 1 and 2* by Lekhotla la Puo ea Sesotho (1976; 1995), and *Thuto-Polelo ea Sesotho (Sesotho Syntax)* by Machobane (2010). The aforementioned text books are selected due to the researcher's hope that they contain relevant information with regard to the Sesotho VP.

#### 1.6.5 Data Collection

In order to find solutions to the research questions and objectives, pertaining to the Sesotho VP structure, the constituents it contains, its grammatical functions in a sentence, as well as the resolution of its syntactic ambiguity; qualitative data is collected. Haaker (2020) defines qualitative data as information that cannot be quantified, such as detailed interview transcripts and diaries. Similarly, Surendran (2023) characterises qualitative data as being of a non-numerical nature and that it can be categorised according to a phenomenon's characteristics. This suggests that qualitative data is the information that cannot be quantified, counted, or readily stated using numbers. Additionally, this data, which is narrative in nature, is gathered in this study, using questionnaires, interviews, and/ or observations.

All the selected participants are assigned tasks in order to collect data. The high school learners are required to construct sentences using intransitive and transitive verbs, as well as auxiliary verbs. They are advised to use the present tense, past tense, perfect tense and past continuous tense in their sentences. They are then asked to underline the VPs in such sentences. With the same three verb forms that the students utilise, the teachers are tasked to construct sentences in the mentioned tenses and to highlight the VPs. They are also requested to illustrate the various structures of such VPs. The M.A. linguistic

learners are given the sentences constructed by the high school learners to identify different units that are contained in the VPs. In addition, they are asked to mention the different functions of such VPs in the sentences. Lecturers in the field of African Languages and Literature are asked to suggest strategies for disambiguating such VPs. This task assists the researcher to determine strategies that may be used to disambiguate VPs. The ordinary Basotho are probed to orally identify the parts of collected sentences which are the VPs. The collected data is recorded in a researcher's notebook, and is kept for the analysis of the Sesotho VP structure, the elements it carries, its grammatical functions in a sentence and how syntactic ambiguity is resolved.

#### 1.6.6 Data Analysis

Calzon (2023) defines data analysis as the procedure for gathering, modelling, and evaluating data, utilising a range of logical and statistical approaches. Both qualitative and quantitative research designs form the foundation of all these different techniques (Calzon, *ibid*). This could be the reason why Stevens (2023) acknowledges data analysis as the process of examining unprocessed data in order to extract valuable insights. Stevens (*ibid*) further argues that such patterns are then used to choose the best course of action. Similar to Stevens (*ibid*) and Calzon (2023), Chilman, Whiting and Chapel (2023) believe that data analysis in research is the systematic process of examining facts and figures using a variety of approaches in order to draw conclusions about a certain question or topic. These suggest that data analysis is the systematic process of using logical or statistical methods, to evaluate and process unprocessed data in order to obtain useful information which can be utilised to decide on a topic under investigation. According to Rautenbach (2020) and Calzon (2023), there are various qualitative data analysis methods which include content, narrative, discourse, thematic, grounded theory, as well as interpretive phenomenological analyses.

On the basis of its nature, the present study uses qualitative data analysis method, and adheres to the content analysis through the use of the X-bar theory principles. Kelly (2023) claims that instead of using statistics, the qualitative data analysis approach obtains data through words, symbols, pictures, and observations. This proves that the method of analysing qualitative data is non-numerical. It also verifies that qualitative data analysis involves collection and production of data through the use of expressions, images, symbols, and observations from sources including focus groups, questionnaires, and interviews.

Calzon (2023), states that content analysis examines the frequency and occurrence of specific words, ideas, and topics in various content types, such as text, images, audio, or video. This is accomplished by categorising, and presenting text data in a way that offers insightful information (Calzon, *ibid*). That is, content data analysis is an effective research tool for identifying the presence of particular words, themes, and concepts in a given set of qualitative data. It further denotes that the data in question can be extracted from texts, images, audio files, or videos, and is determined by coding the text and presenting it in an all-inclusive way.

In this study, the principles of the previously described research tools are useful in coding, presenting and evaluating the gathered data. It is intended that these instruments should help achieve the purpose of this study by revealing the Sesotho VP syntactic structure and the constituents that make it up, as well as its grammatical functions in a sentence, and how its syntactic ambiguity can be resolved.

## 1.7 Ethical Considerations

This study adheres to an African-centered research methodology since it is subjected to ethical considerations. According to Bhandari (2021), ethical considerations in research are a collection of guidelines that direct the designs and procedures of the study. Bhandari (*ibid*) further states that when gathering data from individuals; scientists and researchers must always abide by a set of ethical standards. These factors support the rights of study participants, improve the validity of the research, and uphold academic or scientific integrity (Bhandari (2021). Furthermore, Enago Academy (EA) (2023), puts forth that research ethics safeguard participants' rights and welfare, maintain the validity of study findings, and enhance the beneficial effects of research on people and society. This suggests that ethical considerations serve as guidance when developing ethical research methods involving human subject investigation. It is also denoted that ethical issues guarantee the validity, credibility, and respectful conduct of the study for all parties involved.

The participants in this study were post primary learners, in grades eight (8) and eleven (11). The two educational levels at post-primary schools served as the basis for this choice. The respondents also included high school teachers, M.A. learners, African Language lecturers, and ordinary Basotho. A selection of the participants in question was made in consideration of their varying educational background in order to avoid bias in the findings. The consent forms were provided to the respondents, and the researcher explained and clarified ethical considerations using Sesotho. Since high school learners were minors, the principal acted as their guardian. The questionnaires were open for discussion amongst the respondents so that they could better comprehend them and adjust their responses. As such, they were given a week to return them together with the consent forms.

## 1.8 Delimitation of the Study

This study is limited to the Sesotho VP structure and the units it contains, its grammatical functions in a sentence, as well as how to resolve its syntactic ambiguity. Other elements that are related to the topic of this study, such as the comparisons and contrasts between the Sesotho VPs and other languages like English are not investigated because they are beyond the focus of the study.

## 1.9 Significance of the Study

The idea of a VP is expanded upon in the process of identifying the Sesotho VP structure and the constituents it carries, its grammatical functions in a sentence, as well as the resolutions of its syntactic ambiguity. As such, this study is expected to be beneficial to both lecturers and linguistic students in the field of African Language. It is anticipated that supervisors will use this study as a guiding tool to assist potential syntactic learners. It is therefore expected that instructors and linguistic students studying syntax may use this study as a teaching and learning resource. Furthermore, because of its importance to the study of the VP, this study is meant to function as a reference work for subsequent syntax-related research. This suggests that the problem of scarcity of reference material will be somewhat mitigated, especially in the context of the Sesotho VP studies. It is also anticipated that the findings of this study may satisfy the researcher's need for knowledge about the Sesotho VP structure and the components it includes, its grammatical functions in a sentence, and how to resolve syntactic ambiguity in such sentences. Finally, it is believed that the results would achieve the rationale of this study, which is to provide a clear image and comprehension of the Sesotho VP to syntactic learners. As such, it is anticipated that this study may produce acceptable outcomes in the area under consideration and to spark interest in syntactic studies and research.

## 1.10 Organisation of the Study

This study, which analyses a Sesotho VP, is basically organised into five chapters. The first chapter serves as an introduction and includes the background and contextualisation of the study problem, the purpose and the objectives of the study. It also highlights the review of related literature, the methodology to be used for data collection and the theoretical framework to be applied in the analysis of the collected data. This chapter also outlines the delimitation and significance, as well as the organisation of the study. The second chapter presents and examines the Sesotho VP structure and constituents, while its grammatical functions in a sentence are identified and evaluated in the third chapter. The strategies for the resolution to the syntactic ambiguity of the Sesotho VP are discussed in the fourth chapter. Chapter five, which is the last chapter, serves as the conclusion to the study, with the researcher's summary and recommendations about the findings of this study.

### **Conclusion**

The aim of this chapter was to introduce the study's topic matter. It emphasised the background and contextualisation of the study. Furthermore, it provided the problem statement, the aim, objectives and research questions that guide the discussion of this study. It also presented the reviewed literature, the methods to be employed in gathering data and the theory to be applied in the data analysis. Additionally, the chapter provided the significance, the delimitation and the organisation of the study. The next chapter presents and examines the data regarding the Sesotho VP syntactic structure and the units it carries.

## CHAPTER TWO

### Data Presentation on the Sesotho VP Syntactic Structure

#### 2.0 Introduction

The previous chapter covered the study's background and context, problem of the study, its aim and objectives. It also presented the reviewed literature, data gathering techniques, and theoretical framework for data analysis. As a result, the first research question, highlighted in the first chapter, is the main focus of this chapter, which is to find out the syntactic structure and constituent parts of the Sesotho VP. This chapter is organised into four (4) sections: section 2.1 is the discussion of the Sesotho VP; section 2.2 presents and analyses the Sesotho intransitive VP; section 2.3 presents and analyses the Sesotho transitive VP; while section 2.4 presents and analyses the Sesotho auxiliary VP. For the analysis of the gathered data, the X-bar theory is employed.

#### 2.1 A Sesotho VP

Tuahta (2017) states that, in accordance with the GG, a VP is a syntactic unit that compounds to the predicate. Similarly, Fitriani (2019) embraces VP as a collection of words led by a verb that functions as the primary sentence since, it depicts an action or event of the subject. For this reason, Hutabarat and Gorat (2021) support Tuahta (*ibid*) and Fitriani (*ibid*), that a VP is made up of one or more auxiliaries in addition to the main verb. As to their assertion, there are two categories of a VP; a simple VP (that comprises of a principal verb that indicates the kind of clause, such as imperative or declarative), and a complex VP (that contains one modal verb or more helping verbs that occur before the main verb).

Furthermore, Patterson and Mamet (2021) define a VP as a verb and an additional word that emphasises the verb's action, tense, and tone. Deloitte

(2024) adds to Patterson and Mamet (*ibid*) that a VP is a collection of words that functions as the verb of a sentence and includes the primary verb as well as any other linking verbs or modifiers. This suggests that a VP is a syntactic element that the GG classifies as a predicate. It is also denoted that a VP is a group of words headed by a verb that denotes the kind of a sentence such as a request or command, and may consist of the main verb alone or with the principal verb and one or more auxiliary verbs. Furthermore, it is implied that a VP can be classified into a simple VP and complex VP.

As such, the collected data for this chapter is presented and discussed through the use of the X-bar theory. In order to analyse the collected data, the researcher adopts thematic analysis framework in that, the topics with similar characteristics are addressed independently. As such, the organisation of the syntactic structure of the Sesotho VP follows Machobane's (2010) classification of the Sesotho verbs.

## 2.2 A Sesotho Intransitive VP Syntactic Structure

This chapter's evaluation of the Sesotho VP syntactic structure begins with the assessment of the usage of intransitive verbs. Chomsky (2010), states that the system described in syntactic structures is also "transformational," meaning that it adjusts a phrasal structure throughout its production, to account for the syntactic and semantic characteristics of sentences. Additionally, Chomsky (*ibid*), notes that the three components of the TGG are the phrase-structure component, the transformational component, and the morphophonemic component. Each of these components is made up of a set of regulations that work with a certain "input" to produce a specific "output" (Chomsky, 2010). This suggests that, as specified in the syntactic structure, the TGG is composed of three categories, which are the morphophonemic component, the transformational component, and the phrase-structure component, which are

all subject to a set of rules; and such rules are employed in the analysis of VPs in this chapter.

According to Tsahta (2017), verb classes include copular or linking verbs, transitive verbs (which is classified into both monotransitive and ditransitive verbs), and intransitive verbs. Tsahta (*ibid*) explains that an intransitive verb is a verbal word, which is the only element included in the VP. Gu (2018) and Anggraeni (2019) agree with Tsahta (*ibid*) that an intransitive verb is a main verb which makes an absolute meaning on its own, and does not need additional elements (object or complement) to complete it. It follows from this definition that a VP is equivalent to the predicate in the GG and falls within the syntactic category. Furthermore, it is implied that, based on various circumstances in which it appears, an English VP can be formed through verb classes, including among others, auxiliary verbs, transitive verbs, and intransitive verbs. This study also understands that an intransitive verb is a doing word that can express a complete meaning on its own, without the need for an object.

### 2.2.1 An Intransitive V Structure

For the participants, the examples of the Sesotho intransitive VP syntactic structure and its constituents are illustrated below:

4. *Tsamaea!* “Go!”

Go-IMP

LIT-Leave

“Go!”

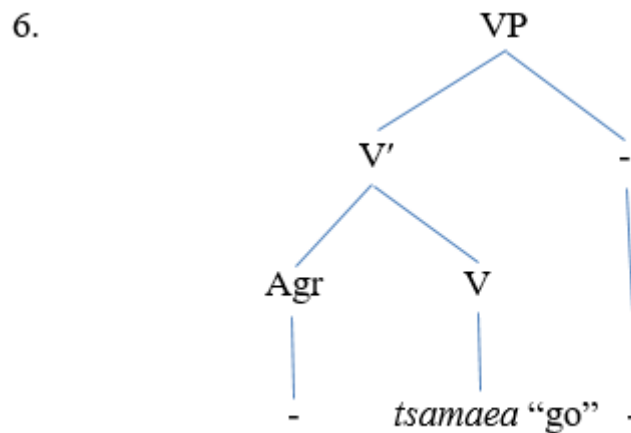
The verb *tsamaea* “go”, is intransitive in nature because it does not need to be complemented by an object in a sentence. The syntactic rule governing this phrase reads as follows:

5.  $VP \rightarrow V$ :

$V \rightarrow V$

*Tsamaea!* “Go!”

This syntactic rule states that this VP is made up of only a verb that does not subcategorise for an object NP. This V can also be represented in a tree diagram as in 6 below:



The illustrations above, depict that the VP *tsamaea!* “go!”, is composed solely of an intransitive verb constituent or verbal unit, that serves as the head of the phrase (X) (Catherine, 2018). As such, the identified syntactic structure in this phrase is the V, which according to Guma (1972), is an imperative. This Sesotho VP syntactic structure is in accordance with Ekasani, *et al* (2018), and Hutabarat and Gorat (2021) who assert that a simple VP, consists of only a

principal verb that denotes the category of a sentence such as a command or request.

### 2.2.2 An Intransitive V + AdvP Structure

According to the participants, in a sentence, an intransitive verb can be used with an adverbial complement, as shown in example 7 below:

7. *O tsamaea habohloko*

1-Agr walk-IND uncomfortable-AdvP

LIT- He walk uncomfortable.

“He walks uncomfortably”

In this example, the intransitive verb *tsamaea* “walks”, has been complemented by an adverb *habohloko* “uncomfortably”, denoting the manner in which the action takes place. The phrase in example 7 above, is governed by the syntactic rule as thus:

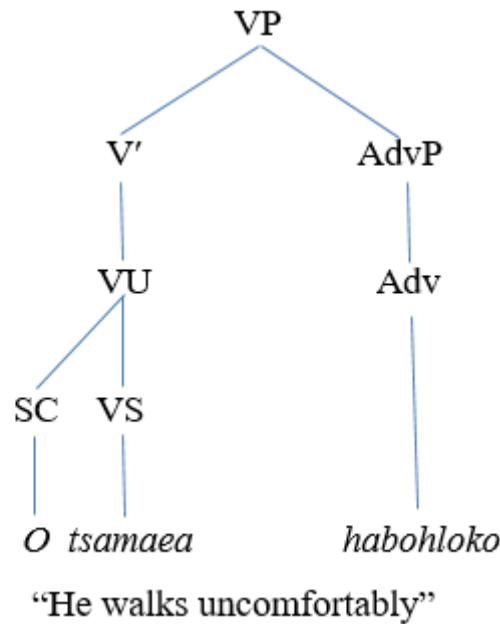
8.  $VP \rightarrow V + AdvP$

$V \rightarrow VU + V$

$AdvP \rightarrow Adv$

The interpretation of the above syntactic rule is that, it is made up of a V + AdvP, and that the V consists of the SC + an intransitive verb, while the AdvP is made up an Adv. A tree diagram representation of this phrase is shown in the illustration (9) that follows.

9.



In excerpt 7 above, the Sesotho VP *o tsamaea habohlolo* “he walks uncomfortably”, depicts a V + AdvP syntactic structure. The intransitive verb *tsamaea* “walk”, is the head lexeme of the phrase in question, and a daughter of the bar-level V'. The projected AdvP *habohlolo* “uncomfortably”, is the daughter of the phrase level VP at maximal projection. As such, it is a sister of the bar level V at intermediate projection. This AdvP serves as an adjunct, since it is rather optional. In this instance, the constituents carried in this phrase are the subject concord (SC) *o* “he”, an intransitive verb *tsamaea* “walk”, and an Adv *habohlolo* “uncomfortably”. This Sesotho VP syntactic structure accords with Souali’s (2020) assertion that, in addition to a lexical verb, a VP may have one or more adjuncts such as an adverb of place, time or manner. According to Catherine (2022), the X-bar theory highlights that each phrase has a head X, as its main part, and one or more than one (pre- or post-) modifier. For Catherine (*ibid*), the modifiers can either be a specifier, complement or adjunct which is an AdvP *habohlolo* “uncomfortably” in this example.

### 2.2.3 An Intransitive V + AdvP + QualP

The respondents revealed that, in a complex sentence, a VP may take an AdvP which is complemented by a qualificative phrase (QualP) as in example 10 below:

10. *Ba tla tsamaea mobung o motšo*

2-Agr will-Fut walk-IND soil-AdvQual AdjQual

LIT- They will walk soil black

“They will walk on black soil”

In the complex sentence, *ba tla tsamaea mobung o motšo* “they will walk on black soil” above, the intransitive verb *tsamaea* “walk”, is complemented by an adverb *mobung* “on the soil”, which projects to an adjectival qualificative phrase (AdjQualP) *o motšo* “black”, which describes the colour of the AdvP in question. The above complex VP is governed by the syntactic rule as in 11 below:

11.  $VP \rightarrow V + AdvP + QualP$

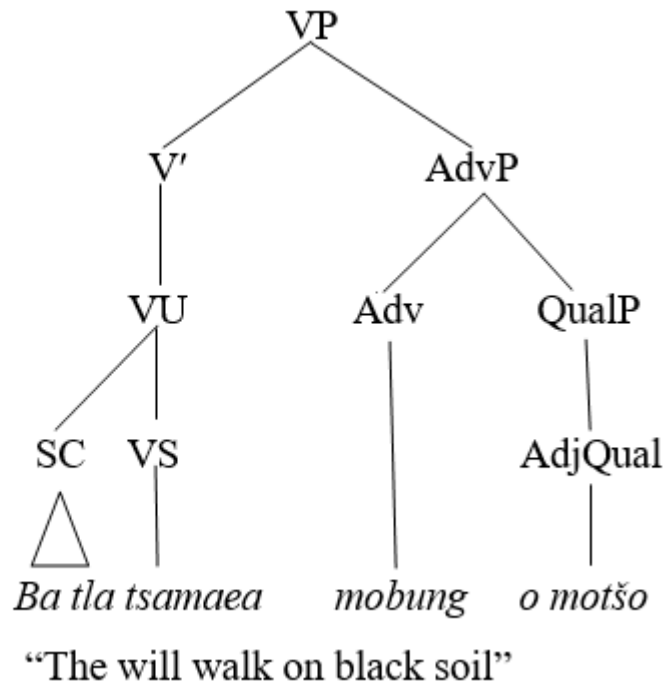
$V \rightarrow VU + V$

$AdvP \rightarrow Adv + QualP$

$QualP \rightarrow Adj$

The syntactic rule in 11 above denotes that this VP consists of the V, which is made up of the VU (that has the SC and future marker); the AdvP that consists of an Adv and QualP, and the same QualP is made up of the Adj element. This complex sentence may also be represented on a tree diagram as follows:

12.



In examples 10, 11, and 12 above, the syntactic structure of the VP *ba tla tsamaea mobung o motšo* “they will walk on black soil”, is revealed as the V + AdvP + AdjP. As a result, the bar-level V' and the projected AdvP merge, since they are sisters, as well as the daughters of the same VP at phrase level. The Adv lexeme *mobung* “on the soil” also projects into the AdjQual *o motšo* “black”. Consequently, both the lexical Adv *mobung* “on the soil”, and the AdjQual *o motšo* “black” are rather optional, hence serve as adjuncts. The syntactic structure of this Sesotho VP is consistent with Marc’s (2023) assertion that each bar-level X' contains a head of the same category, followed by another phrase at ZP. As a result, the elements carried in the VP in this example include the SC *ba* “they”, the future marker (Fut) *tla* “will”, the intransitive verb *tsamaea* “walk”, an Adv *mobung* “on the soil”, and the AdjQual *o motšo* “black”. Hence, it is a complex VP.

#### 2.2.4 An Intransitive V + AdvP + AdvP Structure

As gathered from the secondary sources, the study observes that a complex intransitive VP may also take two adverbs as its complements, as presented below:

13. *Li ile tsa matha hantle hoseng.*

9-Agr run-Tns well-AdvP morning-AdvP

LIT-They run well morning

“They ran well in the morning”

The syntactic rule that governs this Sesotho complex intransitive VP is as thus:

14.  $VP \rightarrow V + AdvP + AdvP$

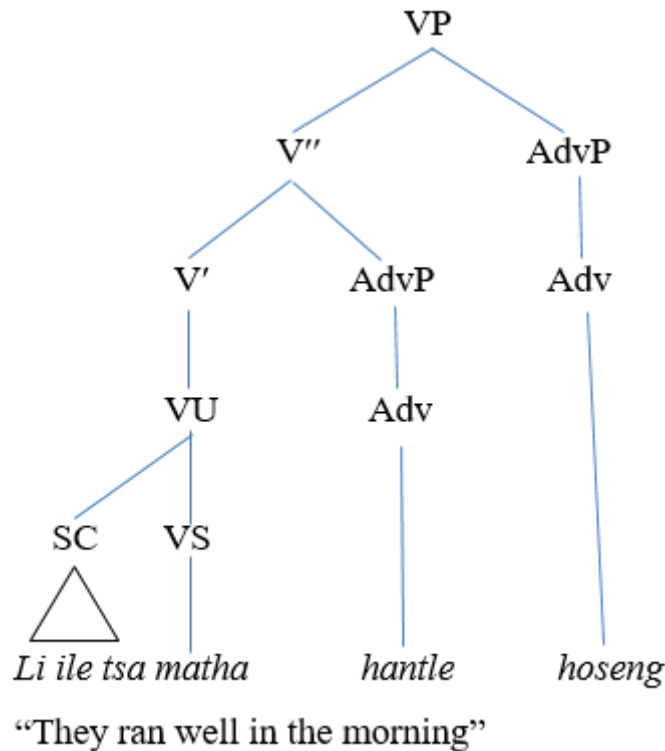
$V \rightarrow VU + V$

$AdvP \rightarrow Adv + AdvP$

$AdvP \rightarrow Adv$

This syntactic rule in 14 above implies that the complex intransitive VP comprises of the V that is made up of the VU and an intransitive V, the AdvP that consists of an Adv and AdvP, which is made up of an Adv. Alternatively, this Sesotho complex intransitive VP in 13 above, can be represented in a tree diagram as shown in 15 below:

15.



It is observed that, the Sesotho VP *li ile tsa matha hantle hoseng* “they ran well in the morning,” in sentence 13 above, has the syntactic structure V + AdvP + AdvP. In terms of the heading principle of the X-bar theory, Catherine (2018) states that each phrase (XP), which is the maximal projection, contains a head word (X or X°), which is the terminal node of the phrase. Catherine (*ibid*) further argues that the head designates the category of the phrase and it is a node without daughters. As such, the head word of the phrase in example 14 is the principal verb *matha* “run”. With respect to its constituents, the AdvP *hantle* “well” serves as the first adjunct, which merges with the lower bar-level V’ as its sister, both of which are daughters of the upper bar-level V’, at zero projection. The Adv *hoseng* “in the morning”, is the second adjunct which merges with the upper bar-level V’ since it is its sister, and they are both daughters of the phrase level VP at maximal projection. Consequently, the components of this Sesotho transitive VP are the SC *li* “they”, the past tense marker (Tns) *ile* “did”, the clitic *tsa*, and an intransitive verb *matha* “run”. In addition, the word *hantle* “well” is an adverb of manner, while the lexeme

*hoseng* “in the morning”, is an adverb of time. The syntactic structure for Sesotho intransitive VP that has been discovered in this phrase is consistent with the assertion made by Lovato (2023) that, a normal phrase may be broken down into its head, specifier, complement and an adjunct.

### 2.3 A Sesotho Transitive VP Syntactic Structure

As mentioned earlier, Tuahta (2017) considers the construction of English VP as composed of six verb classes, each specified by the context in which its constituents occur. Tuahta (*ibid*), further indicates that these verb classes consist of, among others, copular or linking verbs, transitive verbs (such as monotransitive and ditransitive verbs), and intransitive verbs. According to Anggraeni (2019), a transitive verb is an action verb kind that connects the sentential subject and object, which is the part that gets the action. Anggraeni (*ibid*) further argues that, acting as an action verb and conveying an activity, as well as using a direct object that gets an action, are the two main characteristics of a transitive verb. This implies that a transitive verb relates to an action word that takes an object, which receives an action in a sentence. Excerpts of a Sesotho VP syntactic structure and its elements formed by transitive verbs are shown below:

#### 2.3.1 A Transitive V + NP Structure

The data gathered from the respondents reflects a Sesotho transitive VP of V + NP, as analysed in excerpt 16 below:

16. *O hlatsoa liphahlo*

2-Agr wash-IND 10-clothes

LIT-He wash clothes

“He washes the clothes”

The syntactic rule governing this phrase is as follows:

17.  $VP \rightarrow V + NP$ :

$V \rightarrow VU, V$

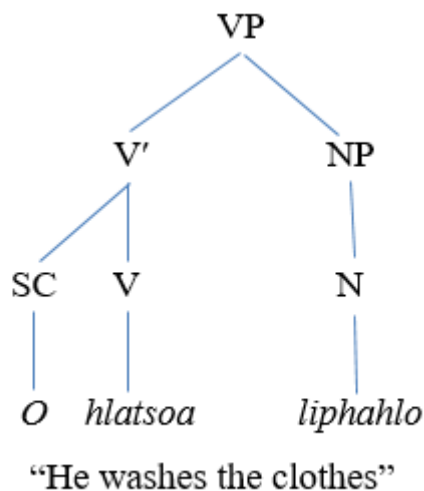
$NP \rightarrow N$

*O hlatsoa liphahlo*

“He washes the clothes”

The interpretation of the VP syntactic rule above is that, it is composed of the V element, which consists of the VU and transitive V, and the NP that is made up of the N component. This phrase can also be syntactically examined through a tree structure representation as in 18 below:

18.



In excerpt 16 above, the Sesotho VP *o hlatsoa liphahlo* “he washes the clothes” reveals the syntactic structure of the Sesotho transitive VP. In this instance, the head of the phrase is the lexical verb *hlatsoa* “washes”. Since the NP complement *liphahlo* “clothes” is the sister to the head word, it merges with it to constitute a VP which is a larger phrase structure. Both the lexical head verb and the direct object NP complement are daughters of the phrase level VP. This

syntactic structure complies with Djedou’s (2019) assertion that a complement is an expression that immediately combines with the head word, making them sisters and projecting the head into a bigger structure of roughly the same kind. Subsequently, the SC *o* “he”, the full transitive verb *hlatsoa* “washes”, and the object NP *liphahlo* “clothes”, are the units carried in this Sesotho transitive VP structure. This identified Sesotho transitive VP syntactic structure aligns with Saviour’s (2021) view, that a complex VP is made up of a primary verb along with all the complementary units such as auxiliaries, complements, and modifier elements which include AdjP, NP, and AdvP as illustrated in the above phrase.

### 2.3.2 A Transitive V + NP + AdvP + PP Structure

The participants also revealed that a Sesotho transitive VP can follow the structure of a V + NP + AdvP + PP, as presented in 19 below:

19. *Ba ruleitse ntlo hantle ka joang*

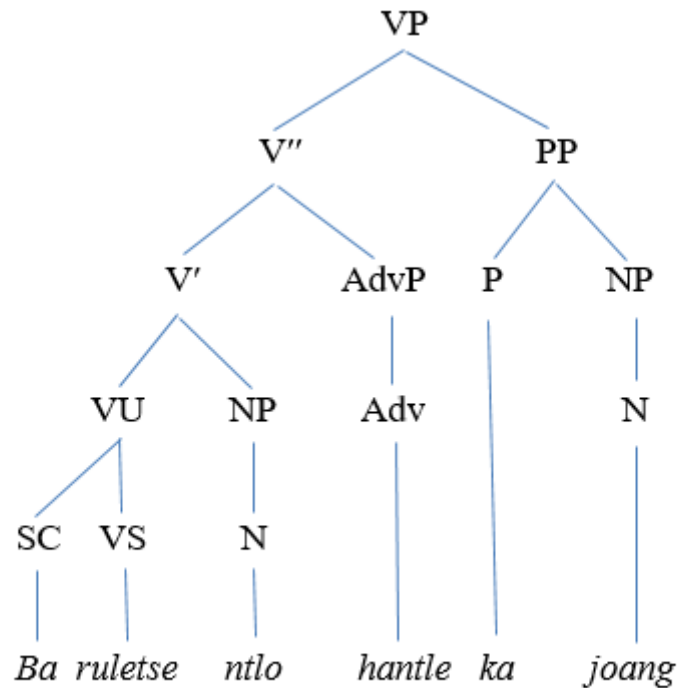
2-AGR thatch-Tns 9-house well-Adv with-P14-thatching grass

LIT-They thatch house well with grass

“They thatched the house well with thatching grass”

The VP under study may as well be assessed through a tree diagram as illustrated in 20 below:

20.



“They thatched the house well with thatching grass”

The Sesotho transitive VP syntactic structure of V + NP + AdvP + PP is illustrated in the above sentence<sup>19</sup> above, *ba ruleitse ntlo hantle ka joang* “they thatched the house well with thatching grass”. The head lexeme *ruleitse* “thatched” is a transitive verb, which accords with Wilson’s (2016) view that; syntactic structures originate directly from lexical characteristics themselves. Hence, the direct object NP complement *ntlo* “house”, is merged to the head verb *ruleitse* “thatched”, at the zero or head level projection. As sisters, both the head verb and the object NP complement are daughters of the lower bar-level V'. The first adjunct in this instance is the AdvP *hantle* “well”, which is the daughter of the maximal bar-level V'', and sister to the lower bar-level V'. The second adjunct is the PP *ka joang* “with thatching grass”. In this instance, the PP in question is a daughter of the phrase level VP, which merges with the maximal bar-level V'' as its sister. This Sesotho transitive VP syntactic structure aligns with the X-bar theory which, according to Catherine (2018), highlights that, in addition to the head X, a phrase may optionally contain a complement in a place that is sister to the head X and daughter to the bar-level

X'. In this phrase, the SC *ba* “they”, the lexical transitive verb *ruleitse* “thatched”, an Adv *hantle* “well”, the P *ka* “with”, and the object NP *joang* “thatching grass”, are thus the units of this Sesotho transitive VP. This Sesotho transitive VP syntactic structure conforms to Gunner (2016), who states that VPs, like other phrases, represent a concept and can sometimes function as entire phrases by adding modifiers, complements, and direct or indirect objects, as illustrated in the above example. This could be the reason why Souali (2020) defines the VP in the X-bar theory as the syntactic constituent headed by a full verb, that contains the complement(s) of the verb, such as the direct object or indirect object, one or more adjuncts, such as an adverb of time, adverb of manner and adverb of place, and the specifier, namely the subject at deep structure.

### 2.3.3 A Transitive V + NP + PP + QualP Structure

The participants also revealed the syntactic VP structure of a Sesotho transitive verb as V + NP + PP + QualP.

21. *Re ne re kapa sefate ka selepe se bohale*

1-Agr chop-Tns 7-tree 7-axe-PP sharp-RelQual

LIT-Are chop tree with axe sharp

“We were chopping the tree with a sharp axe.”

The above phrase is alternatively represented in a syntactic rule, as in 22 below:

22. VP → V + NP + PP + QualP

V → VU + V

NP → N + PP

PP → P + N + QualP

QualP → RelQual

The syntactic rule in 22 above indicates that the complex Sesotho transitive VP comprises of the V, which consists of the VU and transitive V, the NP, which contains the N element and the PP. The same PP, which is made up of the P and the N, also contains the QualP, which is made up of the RelQual.

In excerpt 21 above, the Sesotho transitive VP *re ne re kapa sefate ka selepe se bohale* “we were chopping the tree with a sharp axe,” reveals the syntactic structure of V + NP + PP + QualP. In this instance, the head verb *X kapa* “chop” and the object NP complement *sefate* “the tree” are daughters of the bar-level V'. Both constituents are sisters hence, they merge. The bar-level V' at hand and the PP category are daughters of the major node VP at maximal projection. Consequently, the components in question merge since they are sisters. In this instance, the bar-level V' at hand projects into the PP *ka selepe* “with an axe”, which further projects into the RelQual *se bohale* “sharp”. As a result, both the PP *ka selepe* “with an axe” and the RelQual *se bohale* “sharp”, are rather optional, hence serve as adjuncts. The revealed Sesotho transitive VP structure in this example is consistent with Kevinbinz’s (2017) argument that the X-bar theory of phrase structure has the head X that carries the central idea of the phrase.

For Kevinbinz (*ibid*), on one hand, the complement typically feels closely connected to the head of the phrase, as is the case with the head lexeme *kapa* “chop”, and the object NP complement *sefate* “tree”, in the Sesotho transitive VP in question. Kevinbinz (2017) further states that adjuncts, on the other hand, typically feel more optional, as experienced with the aforementioned PP *ka selepe* “with an axe”, and the RelQual *se bohale* “sharp”. Subsequently, the

elements carried in this Sesotho transitive VP syntactic structure include the SC *re* “we”, the Dur-Past *ne* “were”, the SC *re* “we”, the lexical head X *kapa* “chop”, the direct object NP *sefate* “tree”, the P *ka* “with”, the NP *selepe* “axe”, and the RelQual *se bohale* “sharp”. The syntactic structure of this Sesotho transitive VP accords with the Society For Neuroscience (SFN)’s (2023) assertion that, according to the projection principle, each and every component of the syntactic structure belongs to a certain category such as the noun or verb category.

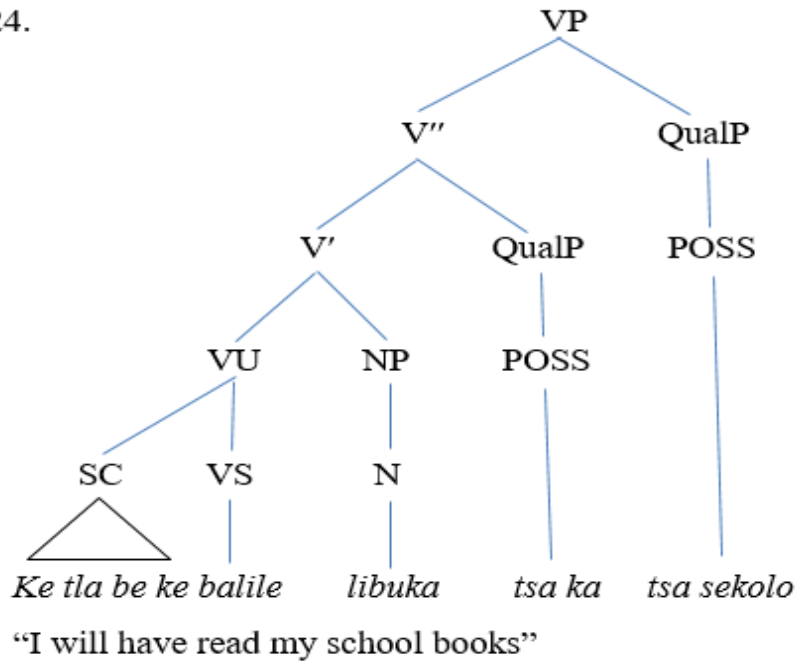
#### 2.3.4 A Transitive V + NP + POSSQualP + POSSQualP

Another Sesotho transitive VP structure was revealed by the participants as V + NP + POSSQualP + POSSQualP as illustrated in 23 below:

23. *Ke tla be ke balile libuka tsa ka tsa sekolo*  
 1-Agr read-Tns 10-books me-POSS of school- POSS  
 LIT-I read books me of school  
 “I will have read my school books”

This Sesotho transitive VP can be represented in a tree diagram as demonstrated in 24 below:

24.



In sentence 23 above, the Sesotho transitive VP *ke tla be ke balile libuka tsa ka tsa sekolo* “I will have read my school books”, portrays the V + NP + QualP + QualP, syntactic structure. As stipulated by the SFN (2023) that the head X determines the shape and character of the entire phrase, the transitive verb *balile* “read” serves as the head X of this phrase. As a result, it merges with the object NP complement *libuka* “books”, as its sister. Furthermore, these elements are both daughters of the lower bar-level V’ at zero level projection. As such, the lower bar-level V’ in question projects to the QualP *tsa ka* “my”, which serves as the first adjunct. Consequently, the QualP *tsa ka* “my” and the lower bar-level V’, merge as they are sisters and daughters of the maximal bar-level V”. In this instance, the maximal bar-level V” is the sister to the second QualP, which merges with it to extent the phrase further. These components are daughters of the major node at phrase level VP. As such, the top bar-level at hand, projects to the POSSQual *tsa sekolo* “of school”, as the second QualP adjunct. This projection thus, results in a larger Sesotho transitive VP structure.

As a result, the units contained in this VP include the SC *ke* “I”, the Fut *tle* “will”, the habitual marker (Habit) *be* “have”, and the SC or clitic *ke* “I”. Additionally, this VP carries the transitive verb *balile* “read”, the POSSQual *tsa ka* “mine”, and the POSSQual *tsa sekolo* “of school”. This identified Sesotho transitive VP syntactic structure is in accordance with the principles of the X-bar theory, as stated by Catherine (2022) that, every phrase XP must contain a bar-level X' of the same category within it, optionally preceded by another phrase YP. In addition, Catherine (*ibid*) indicates that each X' needs to contain a head X belonging to the same category, which may or may not be followed by another phrase ZP.

### 2.3.5 A Neg + V + NP + PP Structure

The respondents further disclosed a Sesotho transitive VP syntactic structure of Neg + V + NP + PP, as illustrated in 25 below:

25. *Ha a hlabe nku ka thipa.*

Neg Dur-Pres-does slaughter-IND 9-sheep with-P 9-knife

LIT- Not he slaughter sheep knife

“He does not slaughter a sheep with a knife.”

The Sesotho transitive VP *ha a hlabe nku ka thipa* “he does not slaughter a sheep with a knife” in 25 above, is analysed through the syntactic governing rule in 26 below:

26. VP → V + NP + PP:

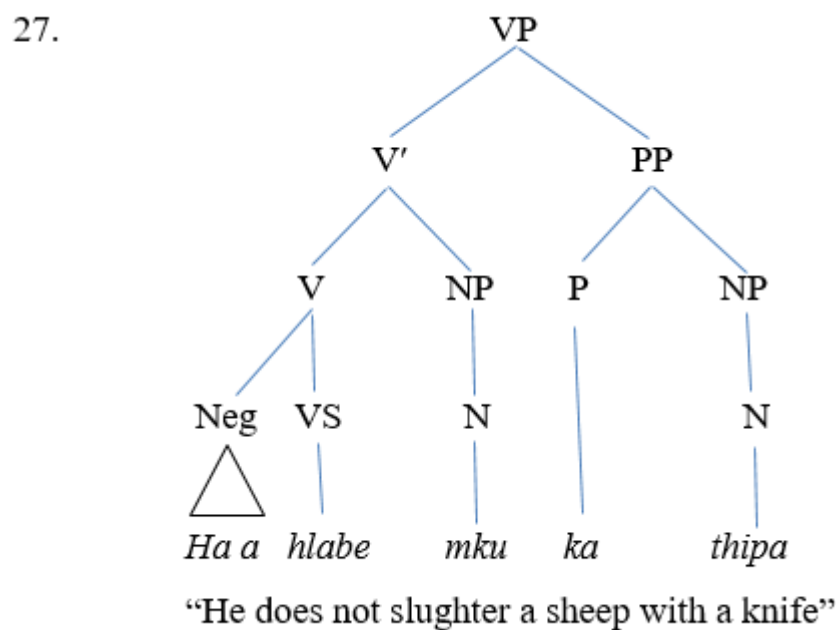
V → VU + V

NP → N

PP → P + N

The presentation of the syntactic rule in 26 above, reflects the VP syntactic structure of the V, which carries the VU and transitive verb. This VP also contains the NP, which is made up of an object N, and the PP, which consists of the P and the object N.

The VP under investigation can as well be represented in a tree diagram as thus:



In sentence 25 above, the Sesotho VP *ha a hlabe nku ka thipa* “he does not slaughter a sheep with a knife,” demonstrates the Neg + V + NP + PP syntactic construction. As a result, the object NP *nku* “sheep” is the complement and sister to the head verb *hlabe* “slaughter”, which Catherine (2018) argues as the terminal node of the phrase. The transitive negative head verb *hlabe* “slaughter” and the object NP *nku* “sheep” under consideration are both daughters of the bar-level *V'* of the same phrase category. As such, the bar-level *V'* in question, projects to the PP *ka thipa* “with a knife”, which is rather optional, and thus, serves as an adjunct. Consequently, both constituents merge since they are daughters of the major node VP. Subsequently, the units that

make up this Sesotho transitive VP syntactic structure include the negation *ha* “not”, the Dur-Pres *a* “does”, the transitive negative verb *hlabe* “slaughter”. In addition, these elements include the NP *nku* “sheep”, the P *ka* “with”, and the object NP *thipa* knife” as the complement of the P. While the discovered Sesotho VP syntactic structure does not have the specifier, it accords with Lovato (2023) who states that a typical phrase consists of the specifier, head, complement and adjunct.

### 2.3.6 A Transitive V + NP + AdvP Structure

The Sesotho transitive VP of V + NP + AdvP was also revealed by the participants as presented in 28 below:

28. *Ba ile ba pheha nama maobane*

2-Agr cook-Tns 9-meat yesterday-Adv

LIT- Are cook meat yesterday

“They cooked meat yesterday”

The Sesotho transitive VP *ba ile ba pheha nama maobane* “they cooked meat yesterday”, can also be represented according to the syntactic governing rule as follows:

29.  $VP \rightarrow V + NP + AdvP$ :

$V \rightarrow VU + V$

$NP \rightarrow N$

$AdvP \rightarrow Adv$

The syntactic rule in 29 above, depicts the VP syntactic structure of the V, which is made up of the VU and transitive verb, the NP, formed by the object N, and the AdvP, which is made up of an Adv.

This Sesotho transitive VP has the V + NP + AdvP syntactic structure. As such, the head X of this VP syntactic structure is the transitive verb *pheha* “cooked”. The same lexical verb is merged with the object NP complement *nama* “meat”, since both elements are sisters, and daughters of the same bar-level V’. As a result, the bar-level V’ at hand projects to the AdvP *maobane* “yesterday”, which serves as an adjunct. Consequently, the AdvP in question is the sister to the bar-level V’, and thus, merges with it as they are both daughters of the VP at maximal projection. In this case, the constituents carried in this VP are the SC *ba* “they”, the Tns morpheme *ile* “did”, the clitic *ba* “they”, the head verb *pheha* “cooked”, the object NP *nama* “meat”, and an Adv of time *maobane* “yesterday”. This identified Sesotho transitive VP syntactic structure is in accordance with Kevinbinz’s (2017) classification of the phrase constituents which include the head, the complement and an adjunct.

### 2.3.7 A Transitive V + NP + QualP + NP Structure

The respondents disclosed that another syntactic structure for the Sesotho transitive VP is V + NP + QualP + NP, which is syntactically represented in excerpt 30 below:

30. *O ne a fepa likhoho tsa hae poone*

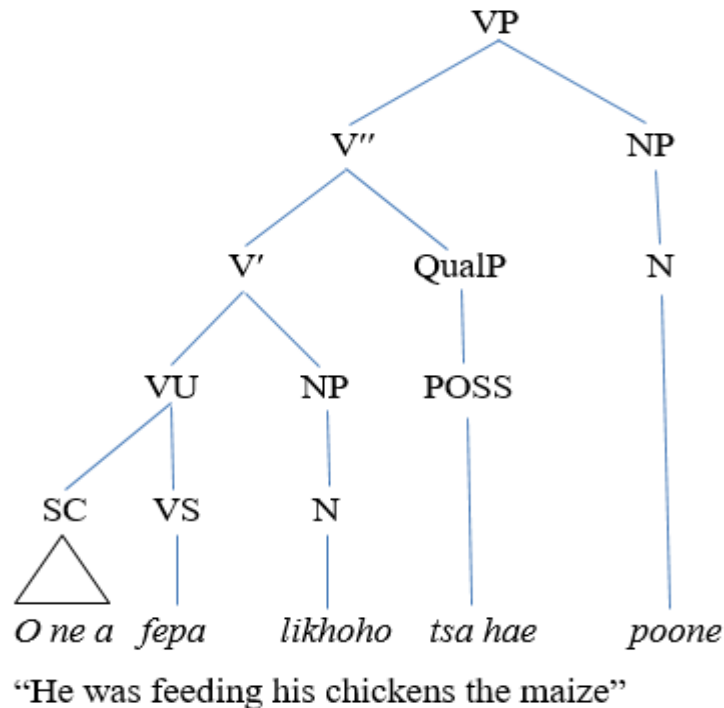
1-Agr feed-Tns 10-chicken him-POSS 9-maize

LIT-Is feed chicken him maize

“He was feeding his chicken the maize”

The Sesotho transitive VP in example 30 above can also be represented in a tree diagram as thus:

31.



In the above example 30, the syntactic structure of the Sesotho transitive VP *o ne a fepa likhoho tsa hae poone* “he was feeding his chickens the maize”, is V + NP + QualP + NP. In this case, the transitive verb *fepa* “feed” represents the head X of the VP in question. The object NP *likhoho* “chickens”, is the complement, and sister to the head word, both of which are daughters of the lower bar-level V', at zero level projection. In this instance, the lower bar-level V' projects to the QualP *tsa hae* “his”, which projects further to the subsequent object NP *poone* “maize”, to make a larger phrase. As a result, the projected POSSQual *tsa hae* “his”, is optional, hence serves as an adjunct; while the NP *poone* “maize” is an indirect object NP. Consequently, the SC *o* “he”, the Dur-Past *ne* “was-doing”, the clitic *a* “was”, and the transitive verb *fepa* “feed”, are the constituents contained in the Sesotho transitive VP in excerpt 30 above. Furthermore, this VP contains a direct object NP *likhoho* “chickens”, the possessive concord POSSConc *tsa* “of”, the possessive qualificative stem POSSQualS, *hae* “his”, resulting in POSSQual *tsa hae* “his”, and an indirect object NP *poone* “maize”. This disclosed Sesotho transitive VP syntactic

structure accords with Umer’s (2023) opinion that the X-bar theory is the grammatical construction of a sentence that can be represented by a tree diagram, in which the head of a phrase is represented by an X-bar, and the dependents of the head are represented by nodes attached to the X-bar.

### 2.3.8 A Transitive V + NP + QualP + QualP + AdvP Structure

The complex Sesotho transitive VP syntactic structure of V + NP + QualP + QualP + AdvP, was revealed by the participants as presented in 32 below:

32. *Re tla lokisa likoloi tsa bona tse shoeleng hampe*

1-Agr repair-Tns 10-cars them-POSS break-RelQual bad-Adv

LIT-Are repair cars them break bad

“We shall repair their cars that are badly broken”

In excerpt 32 above, the Sesotho transitive VP *re tla be re lokisa likoloi tsa bona tse shoeleng hampe* “we shall be repairing their cars that are badly broken”, has the V + NP + QualP + QualP + AdvP syntactic structure. As a result, the structure of this Sesotho VP aligns with the X-bar theory since the transitive head verb *X lokisa* “repair”, represents the main element of the VP, and therefore, merges with the object NP complement *likoloi* “cars”, as its sister. The relationship between the head lexeme and the NP complement adheres to Umer’s (2023) assertion that the head is the primary part of the phrase, and it is represented by the X-bar itself; while the complement is a node that appears to the right of the X-bar and offers more details about the head. In this instance, the lower bar-level V’, projects to the QualP *tsa bona* “their”.

As a result, these components merge since they are sisters, and daughters of the middle bar-level V’. The middle bar-level V’ in question also projects to

the RelQualP *tse shoeleng* “that are broken”. The middle bar-level V’ and the QualP under consideration are daughters of the maximal bar-level V”, and therefore, merge since they are sisters. The same upper bar-level V” projects further into the AdvP *hampe* “badly”, the two of which, are daughters of the major node VP. As such, this projection results into the complex Sesotho transitive VP syntactic structure. The constituents carried in this VP include the subject agreement (Agr) *re* “we”, the Fut *tla* “shall”, the Aux *be* “be-occupied-in-doing”, the clitic *re* “we”, and the verb head *lokisa* “repair”. In addition, this VP contains the direct object NP *likoloi* “cars”, the POSSQual *tša bona* “their”, the RelQual *tse shoeleng* “the broken”, and the manner AdvP *hampe* “badly”. This reveals that Sesotho transitive VP syntactic structure conforms to Kevinbinz’s (2017) idea that in the X-bar theory of phrase structure, there are four different types of phrase constituents; the specifier, the head, the complement and adjuncts.

#### 2.4 A Sesotho Auxiliary VP Syntactic Structure

In Ellis’s (2022) view, auxiliary verbs, often referred to as helper verbs or helping verbs, are subordinate verbs that assist the main verb of the sentence in order to convey intricate grammatical ideas or characteristics of modality or time. Ryan (2023) adds to Ellis (*ibid*) that auxiliary verbs are used in conjunction with the primary verbs to convey voice, mood, and tense. Similarly, Karthik (2024) acknowledges both Ellis (*ibid*) and Ryan’s (*ibid*) view by asserting that auxiliary verbs are verbs that are added to the primary verbs in a sentence to assist it become more meaningful. According to Karthik (*ibid*), an auxiliary verb is also employed to change the sentence’s voice, mood, or tense. This implies that an auxiliary verb is a verb that follows a main verb to enhance the sentence’s functional or grammatical meaning, such as tense, mood, aspect, or voice.

Rahman (2017) postulates that, a VP can be produced by two or more verbs that express a single action; and one or two of which are auxiliaries that occur before the principal verb. Depending on the tense of the action reflected by the verb, the auxiliary can take the form of a modal, an auxiliary verb “have,” or a connecting verb, “to be” (Rahman, *ibid*). Furthermore, Ekasani, *et al* (2018), and Hutabarat and Gorat (2021) agree that a simple VP only has one primary verb; whereas a complex VP can have one modal verb, one or more auxiliary verbs preceding the main verb, the complement and modifiers. This suggests that a simple VP is formed by just the principal verb; while a complex VP is made up of one or more auxiliary verbs that come before the head verb and may be followed by a complement or adjuncts. The structures that follow are illustrations of the Sesotho VPs with auxiliary verbs, as revealed by the participants:

#### 2.4.1 An Aux V + V Structure

The respondents disclosed the Sesotho auxiliary VP of an Aux V + V syntactic structure as presented in illustration 33 below:

33. *Re ee re fihle.*

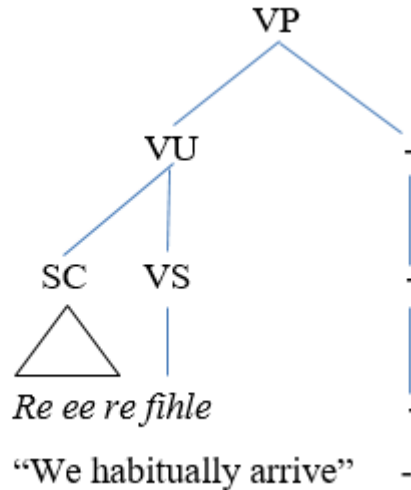
1-Agr Aux Clitic arrive-Tns

LIT-Are habitually arrive

“We habitually arrive”

The tree diagram in 34 below is the representation of the auxiliary VP under consideration.

34.



The Sesotho Aux VP *re ee re fihle* “we habitually arrive”, in sentence 33 above, has the Aux V syntactic structure, which represents the head X of the same phrase category. As such, the SC *re* “we”, the habitual aspect marker (Habit) *ee* “habitually do”, the clitic *re* “we”, and the head verb *fihle* “arrive”, are the units that make up this phrase. This disclosed Sesotho auxiliary VP syntactic structure is consistent with the X-bar theory as alluded by Catherine (2018), that each XP phrase has a head word, which is the phrase’s terminal node. Moreover, the head is the node with no daughters (Catherine, *ibid*).

#### 2.4.2 An Aux V + INFL Structure

The respondents further revealed the Sesotho auxiliary VP that contains an INFL as illustrated in 35 below:

35. *Re batla ho tsamaea.*

1-Agr want-Aux to-INFL go-IND

LIT-Are want to go

“We want to go.”

The Sesotho auxiliary VP *re batla ho tsamaea* “we want to go”, is analysed through the syntactic governing rule as follows:

36. VP → Aux V + V (INFL)

V → V, INFL

INFL → V

The syntactic rule in example 36 above denotes the VP syntactic structure of an Aux V plus an INFL.

In excerpt 35 above, the Sesotho auxiliary VP *re batla ho tsamaea* “we want to go,” reveals the Aux + INF syntactic structure. The lexical head *tsamaea* “go” serves as the head X of the VP. The elements carried in this VP in question include the SC *re* “we”, the auxiliary verb *batla* “want”, the infinitive verb INF *ho tsamaea* “to go”. The Society For Neuroscience (SFN) (2023) stipulates that, according to the heading principle in the X-bar theory, each phrase has a head. As such, the Sesotho auxiliary VP, in this case is in consistence with the above academics, since it is made up of the auxiliary verb *batla* “want” and the head word *tsamaea* “go”, which is preceded by the INFL morpheme *ho* “to” before the main verb.

#### 2.4.3 A SC + Aux V + V + AdvP Structure

The Sesotho auxiliary VP *o kile a kula hampe* “he happened to be badly ill”, as revealed by the participants, reflects the syntactic structure of Aux V + V + AdvP, as illustrated in 37 below:

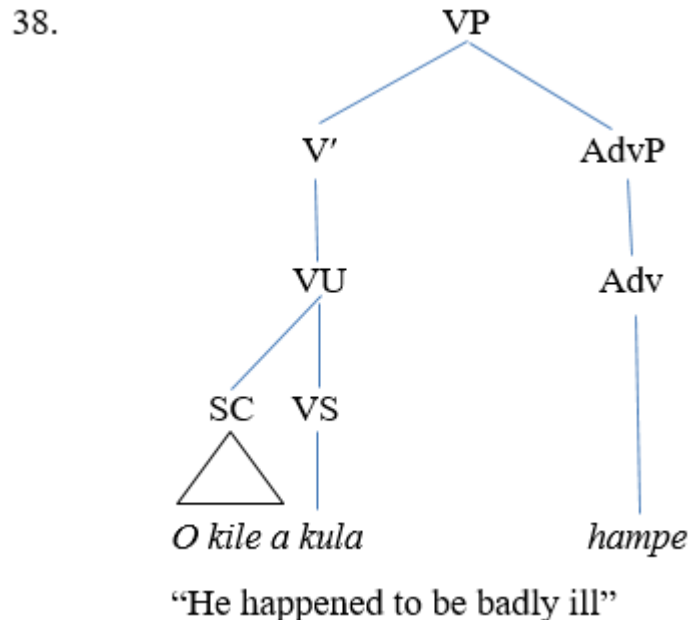
37. *O kile a kula hampe.*

1-Agr Aux-happen clitic sick-IND bad-Adv

LIT-Is happen sick bad

“He happened to be badly ill.”

The tree diagram representation of this VP is demonstrated in 38 below.



In example 37 above, the Sesotho auxiliary VP *o kile a kula hampe* “he happened to be badly ill”, reveals the syntactic structure of the Aux V + V + AdvP. In this instance, the experiential perfect (EXP PERF) auxiliary V *kile* “had been”, and the clitic *a* “was”, assist the main, or transitive head verb *kula* “got ill”, to become more meaningful. Furthermore, the bar-level V' projects to the AdvP *hampe* “badly”, which is rather optional, and thus, serves as an adjunct. The bar-level V' and the AdvP at hand are sisters and they therefore, merge since they are both daughters of the VP at maximal projection. As a result, the elements contained in this VP include the SC *o* “he”, the experiential perfect (EXP PERF) or auxiliary *kile* “had been”, the clitic *a* “was”, the lexical verb *kula* “got ill”, and an Adv *hampe* “badly”. This Sesotho auxiliary VP syntactic structure aligns with Souali’s (2020) view in defining a VP as a syntactic constituent, headed by a complete verb that may also contain the verb’s complement, such as the direct object or indirect object, one or more VP

adjuncts such as adverbs of manner, time and place, and the specifier, namely the subject at deep structure.

#### 2.4.4 A V + PP Structure

The Sesotho auxiliary VP, as disclosed by the participants, might also take the structure of a V + PP. Let us examine the following example:

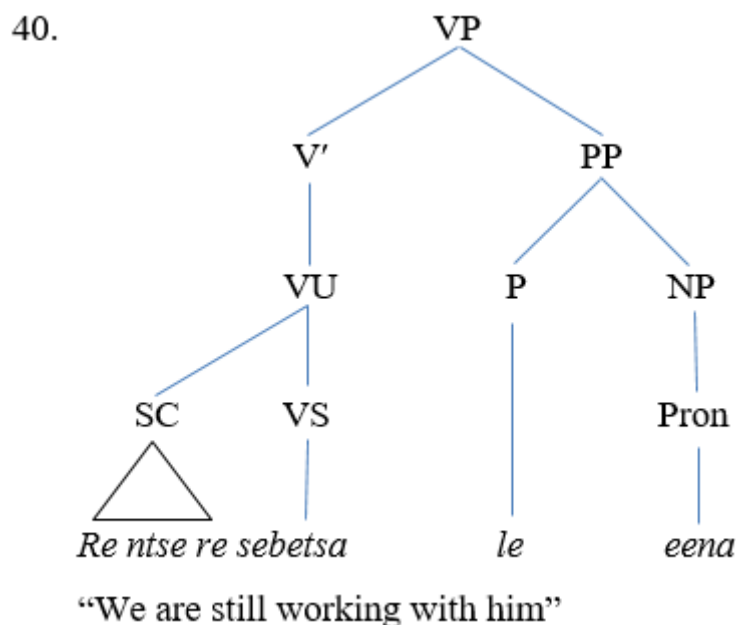
39. *Re ntse re sebetsa le eena.*

1-Agr work-IND with-P 1-him

LIT-Are work with him.

“We are still working with him.”

The above Aux VP can also be represented in a tree diagram as illustrated in 40 below:



The Sesotho VP *re ntse re sebetsa le eena* “we are still working with him”, in example 40 above, illustrates the V + PP syntactic structure. The Aux V *ntse* “still”, accompanies the head verb *sebetsa* “work”, to convey the functional or

grammatical ideas of modality and time of this phrase. As such, the head verb *sebetsa* “work” is asserted by the X-bar as what makes up the head X of the VP in question. The PP *le eena* “with him” is an adjunct, which projects from the bar-level V'. The elements in question thus merge, since they are sisters and daughters of the major node VP. In this instance, the PP *le eena* “with him” is an adjunct. As such, this identified Sesotho auxiliary VP syntactic structure is in consistent with Catherine’s (2022) argument that the X-bar syntax highlights that every phrase has a head X, which is the major component, and one or more (pre- or post-) modifiers, which can be the specifier, complement, or adjunct. As a result, the SC *re* “we”, the habitual perstitive (Habit-PERST) or auxiliary *ntse* “still”, the head verb *sebetsa* “work”, the P *le* “with”, and the P complement *eena* “him”, are the constituents carried by the Sesotho auxiliary VP at hand. According to Saviour (2021), a VP can have one or more verbs, and if it has more than one verb, the phrase is made up by a head verb that is preceded by one or more auxiliary verbs. Saviour’s (*ibid*) afore-mentioned assertion accords with the Sesotho auxiliary VP under consideration, since the head word *sebetsa* “work” is preceded by an auxiliary verb *ntse* “still” to make up its entire syntactic structure.

## **Conclusion**

The aim of this chapter was to address the first research question. It focused on the analysis of the syntactic structure and constituents of the Sesotho VP. The collected data was analysed through the use of the X-bar theory. As such, the researcher was able to identify various syntactic structures and the elements they carry. As hypothesised earlier in this study, the revealed Sesotho VP syntactic structures include the V, V + AdvP, V + QualP + QualP, V + AdvP + AdvP, V + NP, V + NP + AdvP + PP and V + NP + PP + QualP.

This study further discovered that the head X of the Sesotho VP mostly merges with the object NP complement, as its sister. In this instance, the object NP appears in a form of either a direct or an indirect object. The other phrases such as the AdvP, PP, or AdjP that occur after the head word ZP merge with the bar-level X', which is a V' in this instance. This occurs whether the head word is followed by only one or more than one phrase ZP.

## CHAPTER THREE

### The Grammatical Functions of the Sesotho VP.

#### 3.0 Introduction

In the preceding chapter, the analysed data revealed various Sesotho VP syntactic structures and elements contained in them. As such, the objective of the current chapter is to determine and evaluate the grammatical functions of the Sesotho VP in a sentence. According to Hutabarat and Gorat (2021) and Heather (2023), the English verb phrases serve different grammatical purposes in sentences: they function as the predicate of a sentence, the NP modifier, the AdjP complement, and the VP complement. Heather (*ibid*) asserts that they also serve as the NP complement, adjunct adverbial, disjunct adverbial, and conjunct adverbial. This suggests that the English VP has several grammatical functions in a sentence, which includes being the predicate of a sentence, the VP complement, and the NP complement, amongst others. In this chapter, the X-bar theory is used to present and examine the grammatical functions of the Sesotho VP in a sentence. As a result, this chapter is confined to the analysis of the Sesotho VP grammatical functions as the predicate of a sentence, the VP complement, the qualificative (Qual) complement (as the adjectival qualificative (AdjQual) complement, the relative qualificative (RelQual) complement, and as the complement of interrogative qualificative (InterQual), as well as possessive qualificative (POSSQual)).

#### 3.1 The Sesotho VP as the Predicate of a Sentence

According to Nordquist (2019), in English grammar, a predicate refers to one of the two primary components of a sentence or clause that modifies the subject and includes the verb, objects, or phrases governed by the verb. Ellis (2022) adds that a predicate relates to all the words in a sentence or clause, other than the subject and words that alter it, that describe what the subject does.

Similarly, Hall, Bonn and Glapion (2023) share similar sentiment with Ellis (2022) that considers a predicate as the portion of a clause or a sentence that informs the reader about the nature and action of the subject. These indicate that a predicate is part of a sentence or clause that expresses what is said about the subject, and often consists of either a verb alone or in combination with the complement or an adjunct.

The participants revealed the Sesotho VP grammatical function as the predicate of the sentence. This fact is illustrated in example 41 below:

41 (a) *Mpho o bapala bolo*

1-Mpho 1-Agr play-IND 9-ball

LIT-Mpho is play ball.

“Mpho plays the ball”

(b) *Nkhono o fepile likhoho*

1-Grandmother 1-Agr feed-Tns 9-chickens

LIT-Grandmother is feed chickens

“The grandmother fed the chickens”

(c) *Eena o tla tsamaea hoseng*

1-Agr go-IND morning-Adv

LIT-Is go morning

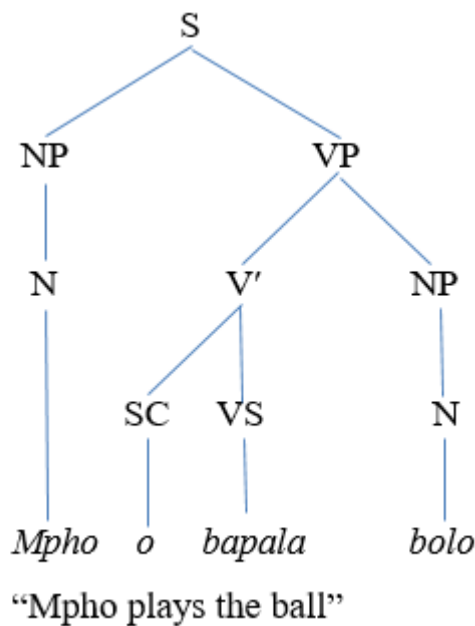
“He will go in the morning”

In excerpt 41 (a) above, the VP *o bapala bolo* “plays the ball”, functions as the predicate of the sentence *Mpho o bapala bolo* “Mpho plays the ball.” In this instance, *Mpho* serves as the subject of the sentence, performing the action of playing. On that note, the head word X *bapala* “plays”, serves as the basis for the predicate of the entire clause. In addition, the lexeme *bolo* “ball” is the object NP complement of the head word *bapala* “plays”. The revealed grammatical function of the Sesotho VP is consistent with Hutabarat and Gorat (2021) and Heather (2023), who argue that one of the VP’s grammatical roles is to serve as the sentence predicate. Furthermore, the disclosed Sesotho VP grammatical function agrees with Catherine’s (2018) argument that the X-bar phrase structure includes the VP, which serves as the head word of a sentence. According to Catherine (*ibid*), the X-bar phrase structure contains the head and the complement in addition to the specifier.

In the sentence *nkhono o fepile likhoho* “the grandmother fed the chickens”, in excerpt 41 (b) above, the VP *o fepile likhoho* “fed the chickens”, functions as the predicate of the sentence in question. Based on the heading principle as stated by the SFN (2023), that each phrase contains a head word, the lexical verb *fepile* “fed” is the head verb X that depicts the action performed by the subject *nkhono* “grandmother” at the position of the subject. As such, the predicate, which is equal to the VP, begins from the SC *o* “she”, and continues up to the end of this clause. In this instance, the VP in question functions as the predicate of the sentence under investigation. Consequently, the identified grammatical function of this Sesotho VP is accommodated in the binary tree diagram of the X-bar theory as stipulated by Lovato (2023). According to Lovato (*ibid*), a normal phrase can be split into the head, specifier, complement and adjunct. In this instance, the VP *o fepile likhoho* “fed the chicken”, expresses the action of the subject *nkhono* “grandmother”.

The grammatical function of the VP *o tla tsamaea hoseng* “will go in the morning” in example 41 (c) above, *eena o tla tsamaea hoseng* “he will go in the morning”, is to serve as the sentence predicate. The information about the subject *eena* “he” is thus, highlighted by the predicate at hand. Ningsih (2016) asserts that a VP may serve as the predicate of a sentence, which is consistent with this Sesotho VP’s defined grammatical function. Catherine’s (2022) argues that the head word X projects (appears within) a phrase of the same category XP. In the sentence at hand, the head verb *tsamaea* “go”, serves as both the main component of the previously indicated VP, and the focal point of the entire clause. Additionally, the SFN (2023) states that in accordance with the dichotomous principle, each node branches into two distinct nodes. This is the case with the tree diagram of the sentence under consideration, as both the NP (subject) *eena* “he” and the VP category are sisters and daughters of the major node at sentence level or maximal projection. As a result, the predicate under discussion fulfils its function of expressing what the subject *eena* “he” does or is claimed about it. The tree diagram below is a representation of the previously stated sentences:

42.



### 3.2 The Sesotho VP as the VP Complement

Hutabarat and Gorat (2021) and Heather (2023) define a VP complement as a statement that completes the meaning of a VP. This could be the reason Najafi and Calderwood (2023) states that, a VP complement is a word or set of words supplied to a sentence in order to complete the meaning of the verb and the sentence. According to Najafi and Calderwood (*ibid*), a VP complement comes after the verb in the sentence. This denotes that a VP complement is a word, phrase, or clause that completes the meaning of a verb or VP. In this study, the grammatical function of the Sesotho VP complement in a sentence has been discovered from the collected data as appearing in a form of an infinitive. The participants disclosed the grammatical function of the infinitive INF VP as the complement of the VP, as illustrated below:

43 (a) *Lisebo o rera ho tsamaea*

1-Lisebo 1-Agr intend-IND to-INFL go-IND

LIT-Lisebo is intend to go

“Lisebo intends to go”

(b) *Bana ba rata ho sebetsa*

1-children 1-Agr love-IND to-INFL work-IND

LIT-Children are love to work

“Children love to work”

(c) *Bona ba ithuta ho hlatsoa*

2-They 2-Agr learn-IND to-INFL wash-IND

LIT-They are learn to wash

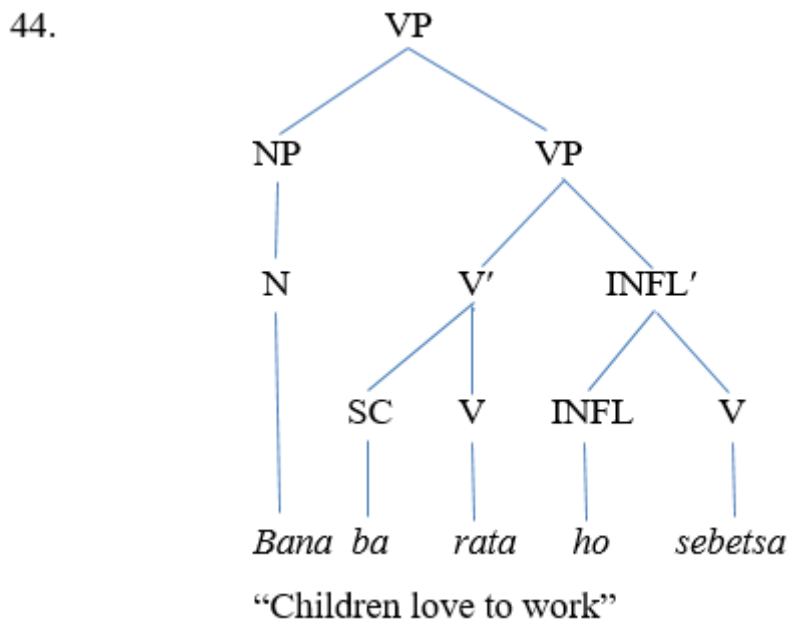
“They learn to wash”

In sentence 43 (a) above, *Lisebo o rera ho tsamaea* “Lisebo intends to go”, the second VP, *ho tsamaea* “to go” which is in a form of an infinitive (INF) *ho* “to” plus the basic verb *tsamaea* “go”, functions as the complement of the initial VP *o rera* “she intends’. In this instance, the lexical verb *rera* “intends”, projects to the larger syntactic component at the zero level projection. As a result, the head word X *rera* “intends” and the new element *ho tsamaea* “to go”, merge, since they are sisters. Consequently, the projected VP *ho tsamaea* “to go’ complements the VP *o rera* “she intends”, hence, functions as the VP complement. The revealed grammatical function of the Sesotho VP as the VP complement is in accordance with Lovato’s (2023) classification of the bar-level. According to Lovato (*ibid*), there are three levels of projection: the maximal, intermediate, and zero level projections.

Similarly, in the sentence *bana ba rata ho sebetsa* “children love to work”, the INFL V *ho sebetsa* “to work” serves as the VP complement of the initial VP *ba rata* “they love” in excerpt 43 (b) above. Thus, the head verb X *rata* “love” projects its properties to the INFL V in question. This occurs due to the fact that in this sentence, the VP *ba rata* “love”, requires another phrase to fully convey its meaning; hence, the VP complement *ho sebetsa* “to work”. Since both syntactic components are daughters of the same VP node, they are sisters, and thus, merge. The disclosed Sesotho VP that function as the VP complement is in consistence with Thetso’s (2018) assertion that when the head word projects, the resultant object takes on the characteristics of the head as its own identity.

The initial and main VP *ba ithuta* “learn” in example 43 (c) above, is completed by the complementing INFL V *ho hlatsoa* “to wash”. In this instance, the

meaning of the head word X, *ithuta* “learn”, cannot be fully expressed without an additional grammatical component. It thus projects to the INFL V complement *ho hlatsoa* “to wash”, which inherits its (head word) features. Since the lexical head and the INFL V complement are sisters, the resulting projection happens at word or head level. This shows that Sesotho VP grammatical function accords with the SFN’s (2023) assertion that the head word is the zero bar level category (X<sup>0</sup>), or alternatively the zero level projection, which is the same case with the head word *ithuta* “learn” in this sentence. The tree diagram representing the VP under discussion is as follows:



### 3.3 The Sesotho VP as a Qualificative Complement

Thetso (2018), states that a qualificative is one of the six essential components of speech in Bantu languages. According to Thetso (*ibid*), a qualificative word is one that qualifies a noun or pronoun, or modifies its reference. Hence, Guma (1972) asserts that qualificatives usually appear after substantives in order to qualify them. This implies that the term qualificative refers to a word that qualifies or modifies a substantive. It is also denoted that one of the most important six parts of speech is the qualificative, which mainly serves to

qualify the antecedent substantive. As a result, this study serves to examine the Sesotho VP functioning as the qualificative complement.

### 3.3.1 The Sesotho VP as the AdjQual Complement

According to Doke and Mofokeng (1967) and *Lekhotla la puo ea Sesotho* (1976) an adjective is a term that characterises a noun or pronoun, and is brought into concordial agreement with it by the adjectival concord. This could be the reason why Ryan (2022) defines it as a word that describes a substantive. Ryan (*ibid*) further indicates that adjectives can be employed to characterise the qualities of an object or person's attributes either on their own or in relation to another object. This signifies that an adjective is a word that functions to characterise a noun or pronoun. According to Hutabarat and Gorat (2021), AdjP complements refer to words and sentences that finish the meaning of an AdjP. This could be the reason White (2021) acknowledges AdjP as a useful component of a sentence that completes the meaning of an adjective or AdjP. It follows that an AdjP complement is a phrase or clause that completes the meaning of an adjective or adjectival phrase in a sentence. The following sentences illustrate the Sesotho VP functioning as AdjQual complement:

45 (a) *Ke itse banana ba balelele ba bapale.*

1-Agr say-Tns 2-girls tall-Adj 2-Agr play-SUBJ

LIT-I say girls tall play

“I said tall girls should play”

(b) *Ho fihlile ngoanana e molelele a lla.*

INFL-arrive 1-girl tall-Adj clitic cry-IND

LIT-Is arrive girl tall cry

“A tall girl arrived crying”

(c) *Ke bone lifate tse peli li oela*

1-Agr see-Tns 8-trees two-Adj Clitic fall-IND

LIT-I see trees two are fall

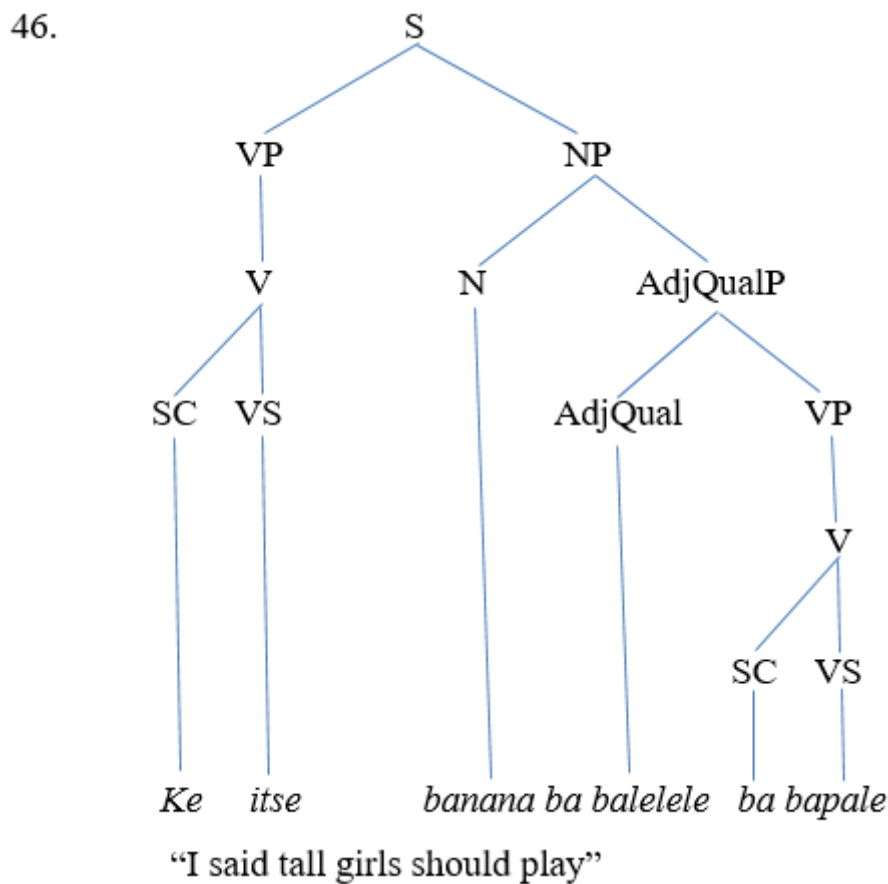
“I saw two trees falling”

In excerpt 45 (a) above, the VP *ba bapale* “they should play”, serves as the complement of the AdjQual *ba balelele* “tall” that complements the NP *banana*, in the sentence *ke itse banana ba balelele ba bapale* “I said tall girls should play”. In this sentence, the initial VP *ke itse* “I said”, projects to the NP *banana* “girls”, and thus, merges with it, since they are sisters and daughters of the mother node S. The same NP projects to the AdjQual *ba balelele* “tall”, which projects further to the VP *ba bapale* “should play”, in order to complete its meaning. This discloses that Sesotho VP syntactic function is consistent with Lovato’s (2023) assertion that the binary branching permits any element of the tree diagram to split into two nodes, one of which is the head word.

In example 45 (b) above, the VP *a lla* “crying”, in the sentence *ho fihlile ngoanana e molelele a lla* “there arrived a tall girl crying”, functions as the AdjQual complement of *e molelele* “tall”. In this instance, the INFL VP *ho fihlile* “there arrived”, is the sister node of the NP *ngoanana* “girl”, both of which are daughters of the mother node S. The projected AdjQual *e molelele* “tall”, describes and complements the NP at hand. As such, the same AdjQual *e molelele* “tall”, projects to the subordinate VP *a lla* “crying”, which helps complete its meaning. Since the VP X<sup>11</sup> *a lla* “crying” occurs at maximal projection, it aligns with Catherine’s (2018) view that the lexical head X is the terminal node of the phrase, which does not have daughters.

In the sentence *ke bone lifate tse peli li oela* “I saw two trees falling”, in 45 (c) above, the VP *li oela* “falling”, functions as the complement of the AdjQual *tse peli* “two”. In this sentence, the initial VP *ke bone* “I saw”, projects to the object NP *lifate* “trees”. These constituents merge since they are sisters and daughters of the major node S. The object NP in question further projects to the AdjQual *tse peli* “two”, which further projects to the VP complement *li oela* “falling”; therefore, it serves as an AdjQual complement. Although this revealed Sesotho VP grammatical function does not have the specifier, it accords with Umer’s (2023) assertion that the X-bar comprises of the specifier, the head and the complement.

The tree diagram in 46 below, serves as a representation of the above sentences in 45 (a), (b), and (c).



### 3.3.2 The Sesotho VP as the RelQual Complement

According to Murray and Anna (n.d.), a relative is a word that modifies a substantive and is introduced by a relative pronoun (**who, whom, whose, which, or that**) or less frequently a relative adverb (typically **when, where, or why**). Murray and Anna (*ibid*) further indicate that relative clauses cannot operate as complete sentences because they serve as dependent clauses. This suggests that a RelQual modifies a noun or pronoun in a sentence. It is also denoted that due to its structural subordination, it is unable to stand alone as a complete sentence. As a result, the researcher concludes that relative complement is a phrase or clause that completes the meaning of a RelQual in a sentence. The instances below exemplify the Sesotho VP grammatical function as a RelQual complement:

47 (a) *Ke rata ngoana ea batlang ho pasa*

1-Agr like-IND 1-child want-RelQual pass-INFL

LIT-I like child want pass

“I like a child who wants to pass”

(b) *Basali ba mathelang ho hlola ba fihlile*

2-Women run-RelQual win-INFL 2-Agr arrive-Tns

LIT-Women run win are arrive

“The women who run for winning have arrived”

(c) *Banana ba ithutelang ho tseba ba tla feta*

2-Girls learn-RelQual know-INFL 2-Agr Proceed-Tns

LIT-Girls learn knowing proceed

“The girls who learn for knowing will proceed”

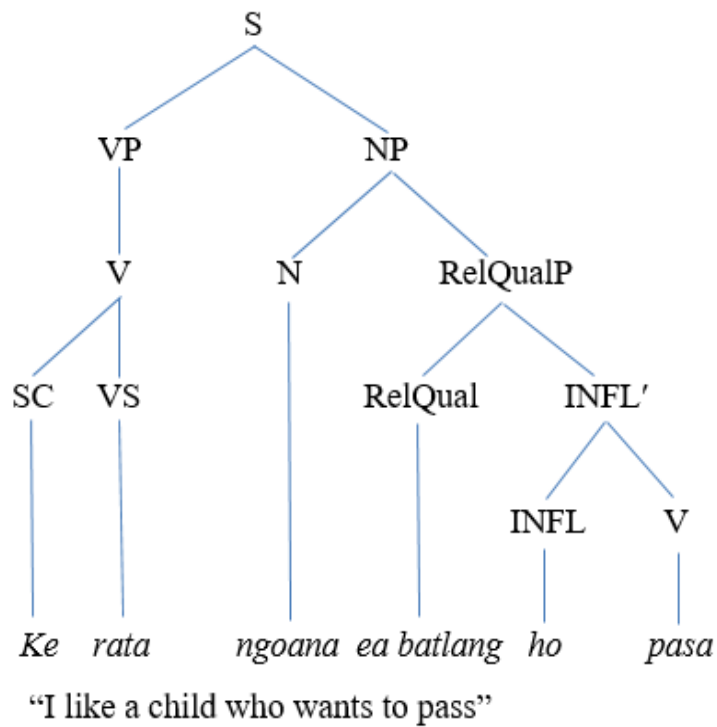
In excerpt 47 (a) above, the VP *ho pasa* “to pass”, in the sentence *ke rata ngoana ea batlang ho pasa* “I like a child who wants to pass”, functions as the complement of the RelQual *ea batlang* “who wants”. In this sentence, the main VP *ke rata* “I like”, projects to the object NP *ngoana* “a child”, hence merges with it, as its sister. These two components are daughters of the S mother node, in accordance with the binary branching principle, which states that each segment of the tree diagram splits into two nodes with a single head word and single constituent. In addition, the object NP *ngoana* “a child”, projects to the RelQualP *ea batlang* “who wants”, as its sister, which projects further to the VP (INFL') *ho pasa* “for passing”. For this reason, it functions as the complement of the RelQualP *ea batlang* “who wants”. This is an indication that Sesotho VP grammatical function is in consistence with Burk and Edward’s (2016) assertion that a phrase X consists of at least one bar-level X’ projection.

In the sentence, *basali ba mathelang ho hlola ba fihlile* “the women who run for winning have arrived”, in 47 (b) above, the INFL VP *ho hlola* “for winning”, serves to complement the RelQual *ba mathelang* “who run for”. In this case, the subject NP *basali* “the women”, projects to the RelQual *ba mathelang* “who run”, these elements are daughters of the mother node S, and thus, merge since they are sisters. As a result, the QualP *ba mathelang* “who run for”, projects to the VP *ho hlola* “for winning”, which helps complete its meaning. This disclosed Sesotho VP grammatical function accords with Lovato’s (2023) view that projections are often binary, and that the binary branching permits any element of the tree diagram to diverge into two nodes, one of which is the head word.

The VP *ho tseba* “for knowing”, in the sentence *banana ba ithutelang ho tseba ba tla feta* “the girls who learn for knowing will proceed”, in excerpt 47 (c), is the complement of the RelQual *ba ithutelang* “who learn for”. In accordance with the projection and binary branching principle, the NP *banana* “the girls”, projects to the RelQual *ba ithutelang* “who learn for”, both of which are the daughters of the S mother node. As such, these two constituents are sisters, and therefore, merge into a larger phrase. The RelQual *ba ithutelang* “who learn for”, also projects to the VP *ho tseba* “for knowing”, which functions as its complement. In order to produce a complex sentence, the same INFL VP *ho tseba* “for knowing”, projects further to the main VP *ba tla feta* “they will proceed”. This reveals that Sesotho grammatical function as the RelQual complement is consistent with Djedou’s (2019) assertion that, the quantity and kind of complements a sentence contains, determines its pattern. Djedou (*ibid*), further asserts that a sentence can have no complement, or one or two complements, as is the case with this Sesotho verb phrase.

The tree diagram in 48 below, serves as an example of the sentences in 47 (a), (b), and (c) above

48.



### 3.3.3 The Sesotho VP as the Complement of Interrogative Qualificative (InterQual) and POSSQual

According to the participants, the Sesotho VP can as well function as the InterQual and POSSQual complement, as presented in 49 below:

49 (a) *U batla ngoana ofe a ngole?*

1-Agr want-IND 1-child-InterQual Clitic write-SUBJ

LIT-Is want child is write?

“Which child do you want him/her to write?”

(b) *Ba hloka nkho ea letsopa ho tšela lebese*

2-Agr need-IND pot-POSSQual pour-INFL 6-milk

LIT-Are need pot to pour milk

“They need a clay water pot for pouring milk”

(c) *U batla kolo eaka e shoe?*

1-Agr want-IND 9-car-POSS Clitic break-SUBJ

LIT-You want car is break

“Do you want my car to break?”

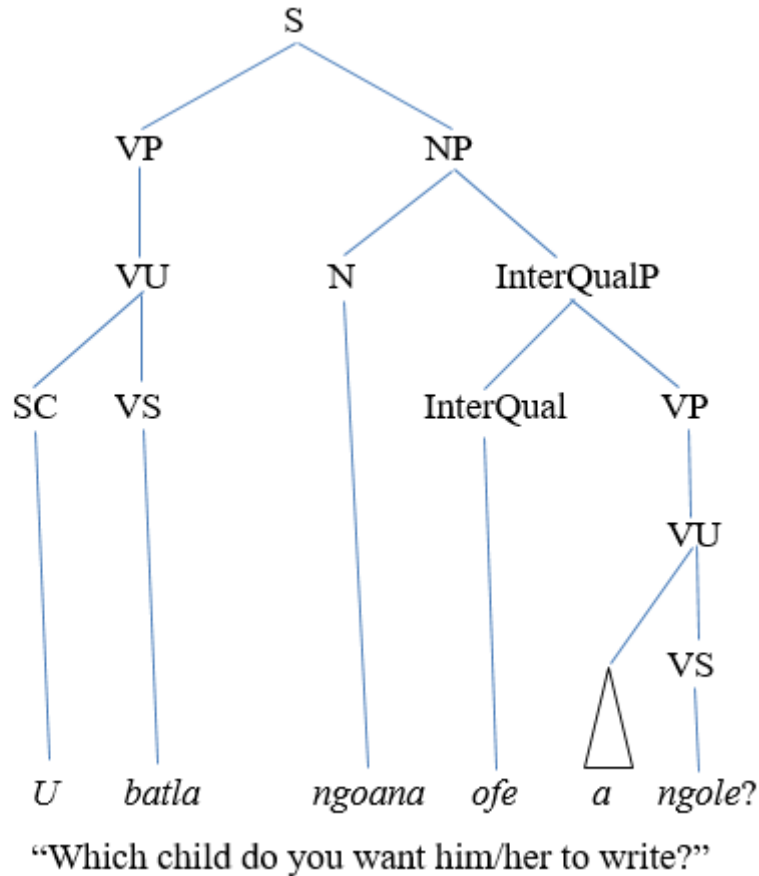
In the sentence *u batla ngoana ofe a ngole?* “which child do you want her/ him to write?”, in 49 (a) above, the VP *a ngole* “to write”, functions as the complement of the InterQual *ofe* “which”. In this sentence, the VP *u batla* “you want”, projects to the object NP *ngoana* “a child”, the two of which merge, since they are sisters and daughters of the mother node S. The same object NP *ngoana* “a child”, projects to and merges with the InterQualP *ofe?* “which?”, as its sister. As Catherine (2018) argues, a phrase may optionally include a complement inside it, in a place that it is a sister to the head word, and a daughter to the bar-level, the head InterQual X *ofe* “which”, projects to the VP *a ngole* “to write”, which serves as its sister, and its complement. Additionally, both constituents are thus, daughters of the bar-level InterQualP.

The INFL V *ho tšela* “for pouring”, in the sentence *ba hloka nkho ea letsopa ho tšela lebese* “they need a clay water pot for pouring milk”, in 49 (b) above, functions as the complement of the POSSQual *ea letsopa* “of clay”, both the main VP *ba hloka* “they need”, and the object NP *nkho* “pot”, merge as they are sisters and daughters of the mother node S. As such, the same object NP *nkho* “pot”, projects to the POSSQual *ea letsopa* “of clay”. In order to convey its complete meaning, this head POSSQual X projects to the INFL V *ho tšela* “for pouring”, as its sister. Hence, it functions as the complement of the POSSQual. Lastly, this INFL V *ho tšela* “for pouring”, projects to a NP *lebese*

“milk”, this revealed grammatical function of the Sesotho VP accords with Marc’s (2023) assertion that in the X-bar theory, the complement should occur as a sister to the head word.

The VP *e shoe* “to break”, in excerpt 49 (c) above, *u batla koloji eaka e shoe?* “do you want my car to break?”, serves as the complement of the POSSQual *eaka* “my”. In this sentence, the main VP *u batla* “do you want”, projects to the object NP *koloji* “car”, hence, merges with it into *u batla koloji* “do you want a car”, since both elements are sisters and daughters of the mother node S. The object NP in question also projects to the POSSQual to form a larger phrase *u batla koloji eaka* “do you want my car”. Kevinbinz (2017) asserts that the complement and phrase head word often feel closely related. As such, the POSSQual head word X *eaka* “my”, projects further to the subjunctive VP complement *e shoe?* “to break?”. The two constituents thus, merge into a complete sentence *u batla koloji eaka e shoe?* “do you want my car to break?”, since they are sisters. The tree diagram in 50 below, represents the above sentences in 49 (a), (b), and (c).

50.



### Conclusion

The current chapter sought to investigate the grammatical functions of a Sesotho VP. The X-bar theory, with the projection principle was employed to analyse data. It has been argued that, the Sesotho VP serves various grammatical functions in sentences. According to the analysis of the collected data, the Sesotho VP functions as the predicate of a sentence. Typically, the VP begins with the SC, which is preceded by the subject of the sentence. The basic verb, in command statements, or the negation morpheme *ha* “not”, in ordinary VP, are the other elements that commence the phrase. In this regard, the basic verb serves as the head word X in any VP. As a result, the first lexeme of the VP marks the beginning of the predicate, which covers the rest of the sentence. As such, the VP functions as the predicate of a sentence, expressing what the subject does, or what is said about it.

Furthermore, the researcher discovered that the Sesotho VP grammatically functions as the complement of the VP in a sentence. In this instance, the infinitive INF *ho* “to” plus a basic verb constitutes the VP complement of the preceding VP. In this regard, the initial VP alone is insufficient to convey a complete meaning. As a result, the additional VP, which is in a form of an INFL V is thus, necessary to complete the meaning of the antecedent VP, hence, the VP complement.

Additionally, the data in this chapter disclosed that the Sesotho VP serves as the complement of a qualificative in a sentence. It has been discovered that, the AdjQualP alone does not express a complete meaning; consequently, the VP helps complete its meaning. The other qualificative that is complemented by the Sesotho VP, is the RelQual. In order to express a complete meaning, the RelQual projects to the INFL V, which helps complete its meaning. Based on the scope of this chapter, the last two qualificatives that have been evaluated to be complemented by the Sesotho VP are InterQual and the POSSQual. On their own, these qualificatives may not convey a full meaning. The VP is therefore, used to help them express a complete meaning.

## CHAPTER FOUR

### The Ambiguities in Sesotho VP and their Resolutions

#### 4.0 Introduction

The researcher presented, examined, and disclosed different grammatical functions of the Sesotho VP in sentences in the previous chapter. The current chapter employs the RTM and the X-bar theories to evaluate the ambiguities in Sesotho VP, with the purpose to uncover the potential solutions for such ambiguities. This chapter is subdivided into three sections: section 4.1 discusses syntactic ambiguity, section 4.1.1 discusses ambiguity in Sesotho VP, while section 4.2 unveils the potential disambiguation strategies to resolve the syntactic ambiguities of such VP.

#### 4.1 Syntactic Ambiguity

According to Catherine (2018), ambiguity denotes that a statement's meaning is imprecise or indefinite, in addition to referring to the situation when a word, phrase, or clause has several meanings. Hence, Demir (2020) explains that ambiguity is characterised by language expressions that do not convey a clear message. From these definitions, the study understands that, ambiguity occurs when a word, phrase or sentence is unclear because it has more than one possible interpretation.

According to Demir (*ibid*) ambiguities are inherent to languages and can be broadly classified as either lexical or syntactic ambiguities. Demir (2020) further indicates that syntactic ambiguity, also known as structural or grammatical ambiguity, arises when a reader is able to infer various interpretations from a phrase or clause within a sentence. This could be the reason why Tarigan (2022) stipulates that syntactic or constructional ambiguity happens when a phrase or sentence has several underlying structures. It can be

understood from these justifications that, syntactic ambiguity arises when a phrase or sentence structure allows for more than one interpretation.

#### 4.1.1 Ambiguity in Sesotho VP

On the basis of the collected data, the observation is that, similar to other languages, the Sesotho VP is subject to ambiguities, which are discussed in this section. The following examples reflect the ambiguity in Sesotho VP:

51 (a) *Ke bone monna ka ferekekere*

1-Agr see-Tns 1-man telescope-PP

LIT-I see man telescope

“I saw a man with a telescope”

(b) *O nyantša ngoana a tsotse*

1-Agr breast feed-IND naked-SUBJ

LIT-Is breast feed child naked

“She breast feeds a child naked”

(c) *Tau e bolaile phokojoe e khathetse*

9-Lion 1-Agr kill-Tns 9-jackal Clitic tired-IND

LIT- Lion is kill jackal tired

“The lion killed a jackal tired”

(d) *O mo lumelisitse a tatile*

1-Agr 1-Agr greet-Tns Clitic hurry-Tns

LIT-Is him greet hurry

“He greeted him in a hurry”

(e) *Li anyesa likonyana li tutubetse*

2-Agr suckle-IND 10-lambs Clitic with closed eyes-

Tns

LIT-Are breast feed lambs eyes closed

“They suckle the lambs with their eyes closed”

(f) *Ntja e ja lijo le malinyane*

9-Dog 1-Agr eat-IND 10- food and-Conj 6-puppies

LIT-Dog is eat food with puppies

“The dog eats the food with the puppies”

(g) *Ba tšoere lesholu ka sethunya*

2-Agr catch-Tns 5-thief with-PP 7-gun

LIT-Are catch thief with gun

“They arrested a thief with a gun”

(h) *Ba koetetse koloi ea tšireletso le  
balebeli*

2-Agr hijack-Tns 10-carsecurity-POSSQual and-Conj

2-guards

LIT-Are hijack car security and guards

“They hijacked the security car with the guards”

(i) *Ntja e loanne le tšoene ea e bolaea*

9-Dog fight-Tns and-Conj 9-monkey kill-Tns

LIT-Dog fight and monkey kill

“A dog fought with a monkey and killed it”

(j) *Ba kuta bana le basali*

2-Agr hair-cut-Tns 2-children and-Conj 2-women

LIT- Are hair-cut children and women

“They hair-cut the children and women”

According to the participants, the above sentences are ambiguous. The VP structure in 51 (a) is ambiguous because it can be interpreted either to mean that a telescope was used to spot a man, or that the man was carrying a telescope when he was seen. That is, it is not clear as to what the PP *ka ferekekere* “with a telescope” refers to or denotes. The VP *o nyantša ngoana a tsotse* “she breast feeds a child naked”, in example 51 (b) above, has two possible meanings. It could indicate that the mother is naked when she breast feeds her/ him, or that the child is undressed when the mother breast feeds her or him.

The participants also revealed that the excerpt in 51 (c) above, the VP *tau e bolaile phokojoe e khathetse* “the lion killed the jackal tired”, is ambiguous. It may imply that the subject NP *tau* “the “lion”, was tired when it killed the jackal, or that the object NP *phokojoe* “jackal”, was tired when the lion killed it. That is, it is unclear what the component or referent the VP complement *e*

*khathetse* “tired”, modifies or refers to, between the subject NP *tau* “the lion”, and the object NP *phokojoe* “jackal”, and hence it is ambiguous. This syntactic or structural ambiguity, as stated by Tarigan (2022) happens when a lexeme modifies one or more words.

As Tarigan (2022) states that syntactic ambiguity occurs when a phrase or sentence has various underlying structures, the excerpts in 51 (d), (e), (f), (g), (h), (i), and (j) above, are ambiguous. For instance, the participants claimed that the VP *o mo lumelisitse a tatile* “he greeted him/ her in a hurry”, in 51 (d) above, could mean that the subject was in a hurry when he greeted him/ her. They stated that it may also mean that the person who was greeted was in a hurry. In 51 (e) above, the VP *li anyesa likonyana li tutubetse* “they suckle the lambs with their eyes closed”, might mean that the awes’s eyes are closed as they suckle the lambs. The alternative interpretation could be that the lambs suckle with their eyes closed. The sentence *ntja e ja lijo le malinyane* “the dog eats the food with the puppies”, in 51 (f) above, was interpreted by the respondents as meaning that the dog eats both the food and the puppies. It could also denote that both the dog and the puppies eat their food. Similarly, the VP *ba tšoere lesholu ka sethunya* “they arrested a thief with a gun”, in 51 (g) above, was interpreted as the thief was apprehended at gunpoint. Alternatively, some participants interpreted it as the thief was caught in possession of a gun. Hence, the researcher perceives that these VPs are ambiguous because they do not have specific reference, as against the proposal by the RTM.

According to the participants, the above sentences are ambiguous, as they can be interpreted in more than one way. For instance, the VP *ba koetetse kolo ea tšireletso le balebeli* “they hijacked the security car with the guards” in 51 (h) is ambiguous. They interpreted it as the security car, as well as the guards were hijacked, while some took it as denoting that the hijackers, together with the

guards, seized the security car. Similarly, the participants explained that the excerpt in 51 (i) above, the VP *ntja e loanne le tšoene ea e bolaea* “a dog fought with a monkey and killed it”, is also ambiguous, as they interpreted it as meaning that the dog died on account of fighting with the monkey. The other participants claimed that the interpretation could be that the monkey died due to its fight with the dog. On the same note, the VP *ba kuta bana le basali* “they hair-cut the children and women” in 51 (j), was also considered ambiguous by the participants. They explained that it might mean that the subject hair-cuts both the children and the women, while alternatively, it may denote that both the subject and the women, hair-cut the children.

## 4.2 The Strategies for Resolving Syntactic Ambiguity in a Sesotho VP

A number of academics, such as Kurniasari (2017), offer various strategies that may be used to disambiguate phrases and sentences in different languages. Consequently, the current chapter examines some of the approaches that could be used to resolve the Sesotho VP syntactic ambiguity: the principle of modification, the principle of punctuation or terminal juncture (formal signals), and the change of word order principle.

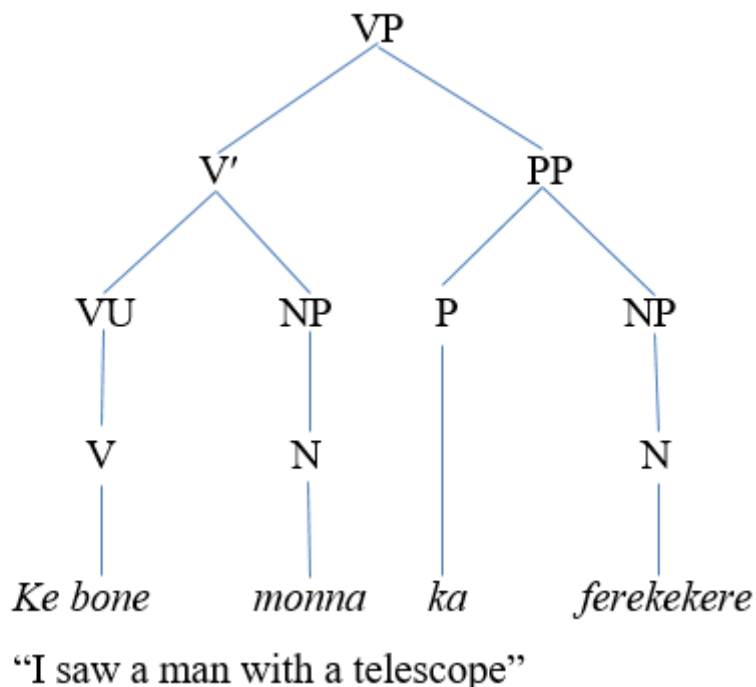
### 4.2.1 The Application of Modification Principle on Sesotho VP

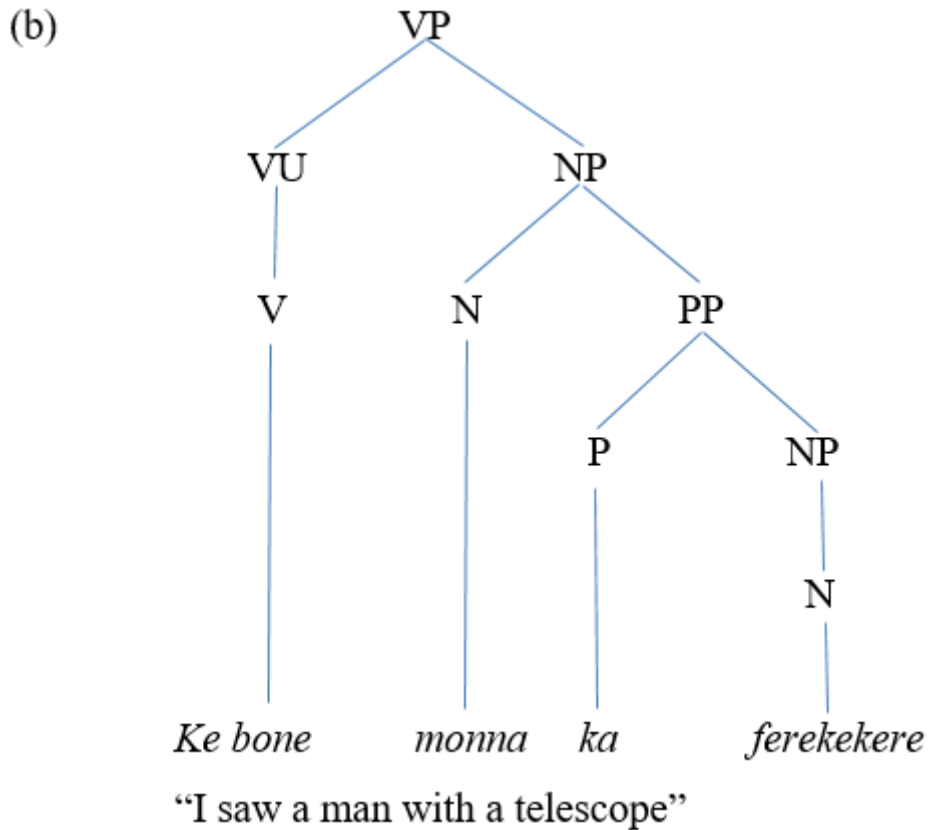
According to Bücking (2018), a semantic operation that involves combinatorial operations between a modifiee and a modifier is called modification. Nordquist (2020) adds on Bücking (*ibid*) that modification is a syntactic structure that occurs when a grammatical component such as an adjective accompanies or modifies another unit such as a noun. Nordquist (*ibid*), further argues that the grammatical constituent is known as the head or head word, whereas the accompanying component is referred to as a modifier, which has been called a complement in the previous chapters. This may be the basis for Catherine’s

(2022) assertion that the principle of modification guides the construction of structurally confusing sentences. This suggests that modification is the grammatical connection that a certain phrase or syntactic element has with its corresponding constituents. The secondary data reveals that the application of the principle of modification is the resolution to the Sesotho VP syntactic ambiguity. As such, the technique of modification used to resolve the Sesotho VP syntactic ambiguity is illustrated in the following instances, as gathered from the secondary material:

From the collected data, the researcher observes that the use of the principle of modification can serve as the resolution to the syntactic ambiguity of this Sesotho VP. For instance, the sentence *ke bone monna ka ferekekere* “I saw a man with a telescope” can be disambiguated through the application of this principle, as represented in the tree diagrams 52 (a) and (b) below:

52 (a)





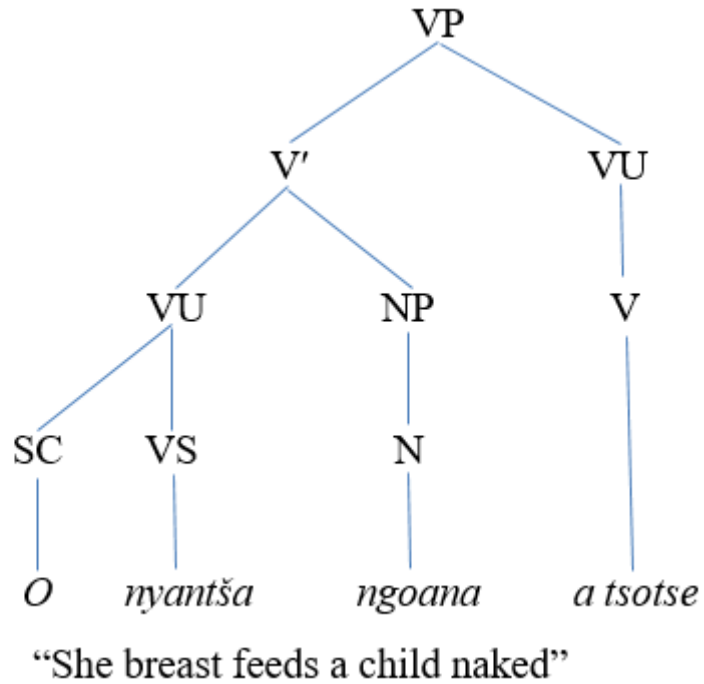
The tree diagram in 52 (a) above depicts that the PP *ka ferekekere* “with a telescope” modifies the head verb *bone* “saw”, while in the tree diagram 52 (b) above, the PP *ka ferekekere* “with a telescope” modifies the object NP *monna* “man”.

The principle of modification is used to disambiguate this VP as illustrated in 52 (b) above. Consequently, the PP in question is a sister to the V', which is the mother node to the head word *bone* “saw”, and thus, merges with it. As put forth by the X-bar theory, the syntactic relationship between the constituents in question allows the PP *ka ferekekere* “with a telescope” to modify the lexical verb *bone* “saw”. Similarly, the Referential Theory of Meaning (RTM) is useful in identifying the referent (element), NP *monna* “man”, which the confusing components the PP *ka ferekekere* “with a telescope”, refers to. As a result, the interpretation is that the telescope was used to see the man.

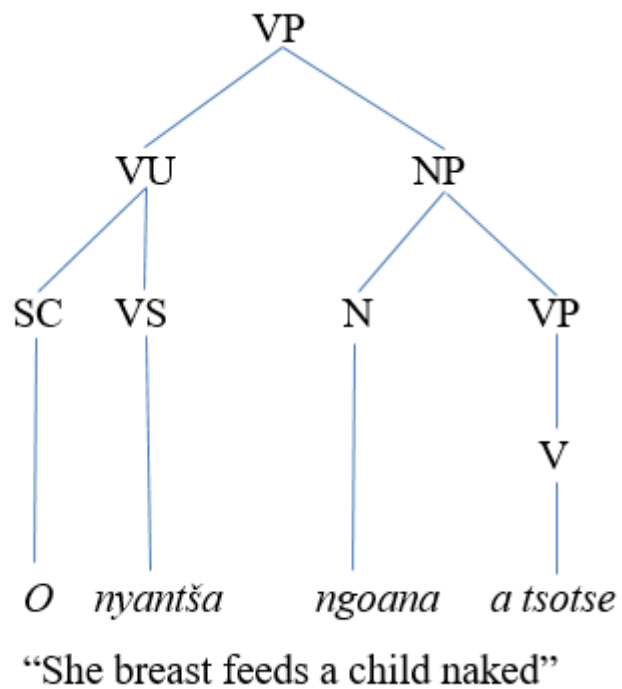
The tree diagram in 52 (b) above, depicts the second interpretation that the man had a telescope when he was spotted. This occurs since both the object NP *monna* “man” and the PP *ka ferekekere* “with a telescope”, are daughters of the same NP node. As such, they merge as they are sisters. In this instance, the PP in question modifies the NP *monna* “man”. Hence, the interpretation is that, the man possessed a telescope when he was seen. In this regard, the use of the principle of modification to resolve an ambiguous Sesotho VP complies with Catherine’s (2022) assertion that this principle can be applied to determine how to construct phrases or clauses that are grammatically ambiguous. As stated by Sher, Mallik, Leeuw and Guo (2019), the RTM reflects how we understand the relation between words and the reality, hence, the VP in 52 (b) above, denotes that the man carried the telescope when he was seen.

It is observed that the principle of modification within the X-bar theory can be applied to resolve the syntactic ambiguity of the Sesotho VP, in which the referents are easily recognised in relation to RTM. According to the secondary data, the application of this modification principle can also assist in disambiguating the VP *o nyantša ngoana a tsoitse* “she breast feeds a child naked”, as illustrated in 53 (a) and (b) below:

53. (a)



(b)



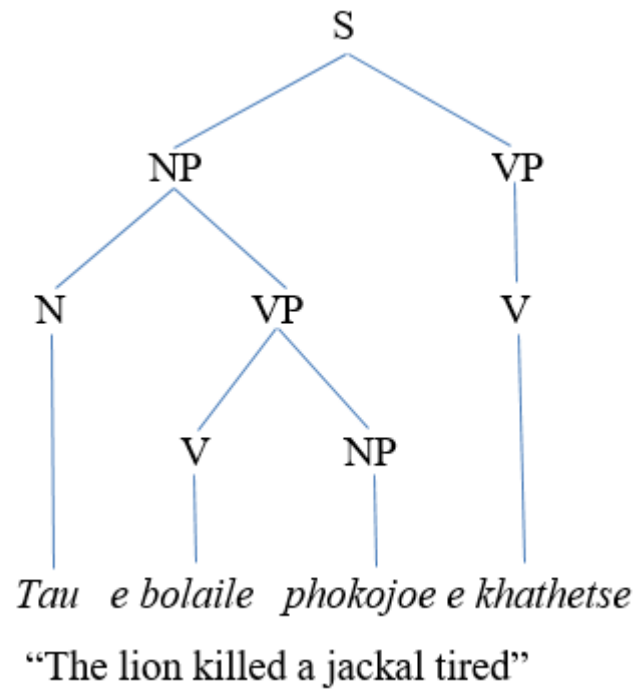
The tree diagram 53 (a) above, illustrates the VP complement *a tsotse* “naked”, as the modifier of the the head verb *nyantša* “breast feed”, whereas the tree diagram in 53 (b) above shows the VP element *a tsotse* “naked”, as the modifier

of the NP *ngoana* “child”. In this instance, the modification principle is employed in order to disambiguate this VP *o nyantša ngoana a tsotse* “she breast feeds a child naked”. This situation in 53 (a) occurs due to the fact that the same VP complement *a tsotse* “naked”, and the bar-level V´ merge since they are sisters and daughters of the same mother node VP. In the same way, according to the RTM, the VP constituent *a tsotse* “naked”, determines the referent of V *nyantša* “breast feed”. Subsequently, the VP in question is disambiguated. In this case, it follows that the mother is naked when she breast feeds the child.

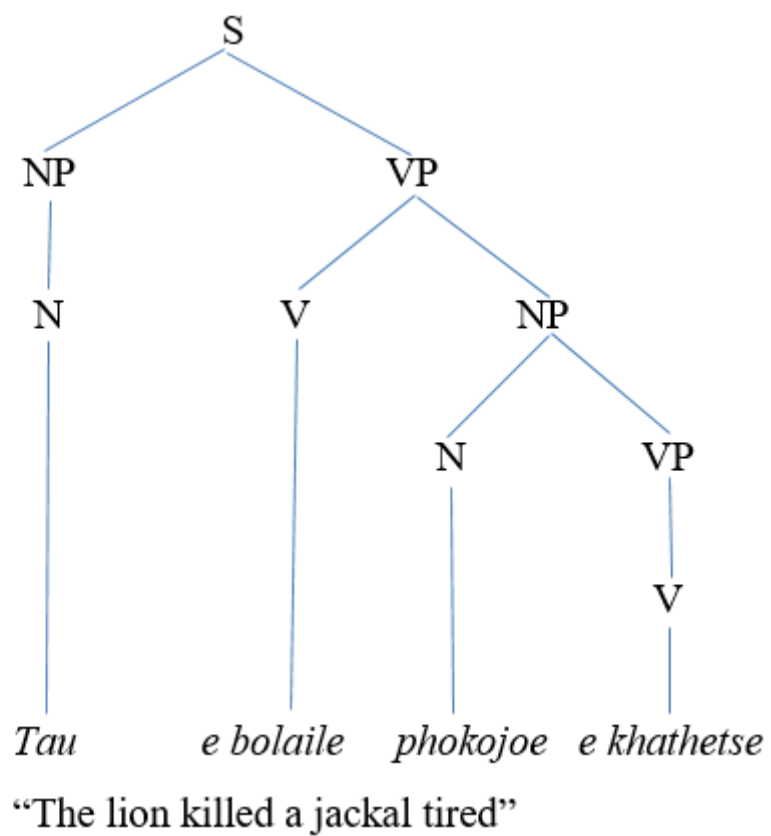
Similarly, in the tree diagram in 53 (b) above, the VP complement *a tsotse* “naked” and the object NP *ngoana* “child”, are sisters which merge, as they are daughters of the same NP node. In this instance, this complement modifies the same object NP *ngoana* “child”. Consequently, through the use of the principle of modification, the VP under consideration is disambiguated as the RTM determines the referent of the Adv complement *a tsotse* “naked”. The expression imposed by the VP entity *a tsotse* “naked”, picks out the referent NP *ngoana* “child”. Subsequently, the interpretation is that, the child is naked by the time he or she is breast fed by the mother.

It has been observed that the VP in the sentence 51 (c) above, repeated here as 54, for ease of reference *tau e bolaile phokojoe e khathetse* “the lion killed the jackal tired”, can be disambiguated through the application of the principle of modification, as illustrated in the tree diagrams 54 (a) and (b) below:

54. (a)



(b)



In the tree diagram 54 (a) above, the VP complement *e khathetse* “tired”, modifies the NP *tau* “lion”, while the tree diagram in 54 (b) above, is the illustration of the VP complement *e khathetse* “tired”, modifying the NP *phokojoe* “jackal”.

In order to disambiguate the Sesotho VP, *tau e bolahile phokojoe e khathetse* “the lion killed a jackal tired”, the afore-illustrated tree diagram 54 (a) applies the principle of modification. Since the subject NP *tau* “the “lion”, and the VP complement *e khathetse* “tired” are sisters, they merge as daughters of the same mother node S. The same VP *e khathetse* “tired”, modifies the NP *tau* “lion” which serves as the first referent, according to RTM. As a result, the interpretation is that the subject NP *tau* “the lion” was tired when it killed the jackal. This is in accordance with Catherine’s (2022) concept of modification which states that, if an XP modifies a head Y, the XP must be Y’ sister, and XP must be the daughter of YP.

In the tree diagram 54 (b) above, the object NP *phokojoe* “jackal”, serves as the second referent which the VP complement *e khathetse* “tired” denotes or refers to. This occurs since both the constituents in question merge as they are sisters and daughters of the object NP node. Consequently, the observed meaning is that the jackal was tired when it got killed by the lion. The identified resolution to this Sesotho VP is in accordance with Mahmoudi, Bahareh, Nezhad, Alireza, Tayebi, Sajid and Hadi’s (2022) assertion that a word is the language representation of its real-world referent, hence, the compliance to RTM.

#### 4.2.2 The VP Ambiguity Resolution through Punctuation and Clear Reference and Context

According to Kurniasari (2017), a phrase can be disambiguated by being used in a sentence that has a formal signal, which makes the sentence structure easier for the listener or reader to understand. Some of such signals include function words, inflections, affixes, stress, juncture or punctuation (Kurniasari, *ibid*). Tarigan (2022) embraces Kurniasari (*ibid*) that, by putting a terminal juncture between the first and the second modifier, the ambiguity of a sentence with two modifiers can be resolved. This suggests that a punctuation or terminal juncture is useful in resolving the structural ambiguity. In this section, the punctuation strategy is used to resolve the Sesotho VP syntactic ambiguity. According to Bousquet, Swaab, Long, and Debra (2020), people employ both syntactic and semantic information in order to resolve syntactic ambiguity. This implies that syntactic ambiguity can be resolved through syntactic and semantic context. The illustration of the application of the punctuation mark, clear reference and context to resolve the Sesotho VP syntactic ambiguity, is represented in 55 below:

55 (a) *O mo lumelisitse, Lineo a tatile*

1-Agr 1-Agr greet-Tns 1-Lineo Clitic hurry-Tns

LIT-Is him greet, Lineo hurry

“He greeted him/ her, Lineo in a hurry”

(b) *Li anyesa likonyana, likonyana li tutubetse*

2-Agr suckle-IND 10-lambs 10-lambs Clitic closed eyes-Tns

LIT-Are suckle lambs, lambs close eyes

“They suckle the lambs, the lambs with their eyes closed”

(c) *Ntja e ja lijo, e ja le*

*malinyane*

9-Dog 1-Agr eat-IND 10- food 1-Agr eat-IND and-Conj

6-puppies

LIT-Dog is eat food, is eat with puppies

“The dog eats the food, it eats with the puppies”

(d) *Ba tšoere lesholu, lesholu le nkile sethunya*

2-Agr catch-Tns 5-thief 5-thief Clitic take-Tns 7-gun

LIT-Are catch thief thief with gun

“They arrested a thief, the thief carried a gun”

The observation is that these sentences in 55 have been disambiguated through proper punctuation, and providence of a clear reference and context. For instance, the VP *o mo lumelisitse, Lineo a tatile* “he greeted him/ her, Lineo in a hurry”, denotes that Lineo was in a hurry when she was greeted. The placement of the punctuation, as well as the addition of a clear referent, Lineo, results into the afore-mentioned meaning. This interpretation is in accordance with the RTM that, the expression of the greeting finds the referent, which is Lineo. This suggests that without punctuation and a definite referent, as in the original phrase, *o mo lumelisitse a tatile* “he greeted him or her in a hurry”, the referent is the subject. That is, the one who offered the greeting was in a hurry. Similarly, in the VP *li anyesa likonyana, li tutubetse* “they suckle the lambs, with their eyes closed”, the referent is the implied subject *linku* “the awes”, picked out by the expression or Adv *li tutubetse* “with their eyes closed”. It is

thus, implied that, the awes's eyes are closed as they suckle the lambs. Nevertheless, in the VP *li anyesa likonyana, likonyana li tutubetse* “they suckle the lambs, the lambs with their eyes closed”, the referent is the object NP *likonyana* “the lambs”, referred to, by the Adv *li tutubetse* “with their eyes closed”. In this instance, it is denoted that the lambs' eyes are closed, as they suckle. In excerpt 55 (c) above, *ntja e ja lijo, e ja le malinyane* “The dog eats the food, it eats with the puppies”, the provision of the punctuation and context, helps disambiguate this sentence. In this case, it is denoted that the dog and the puppies eat together. In example 55 (d) *ba tšoere lesholu, lesholu le nkile sethunya* “they arrested a thief, the thief carried a gun”, the NP *sethunya* “the gun”, refers to the referent *lesholu* “a thief”. Subsequently, the interpretation is that the thief was apprehended in possession of a gun.

The revealed ambiguity resolution to the Sesotho VP syntactic ambiguity through punctuation is consistent with Kurniasari's (2017) assertion that a phrase can be disambiguated by being used in a sentence that has a formal signal, that makes the sentence structure easier for the listener or reader to understand. The same identified resolution to the Sesotho VP syntactic ambiguity aligns with the RTM, as Yan's (2020) view that, words have meaning because they represent people, objects, locations, or ideas.

#### 4.2.3 The Change of Word Order to Resolve the Sesotho VP Syntactic Ambiguity

Nordquist (2018), defines word order as the typical placement of words within a phrase, clause, or sentence. This view is shared by Karthik (2024) who asserts that the phrase “word order” describes the arrangement of words in a sentence. This implies that word order is the grammatical organisation of words in a phrase, clause or sentence. As a result, Sesotho like other Bantu languages, has a typical way in which words are arranged in a VP. However, at times, the arrangement of

words within a phrase or sentence leads to structural ambiguity. According to Chaicharoen (2015), ambiguities can be resolved by rearranging the sentence’s components in accordance with the idea that modifiers are positioned closest to their heads. This could be the cause for Demir (2020) to claim that the resolution to grammatical ambiguity involves a shift or movement of the ambiguous word or phrase. This denotes that reordering the elements of a phrase, clause or sentence can help resolve syntactic ambiguity. The following are the illustrations of the change of word order used to resolve the Sesotho VP syntactic ambiguity:

56 (a) *Ba koetetse koloji ea tšireletso le*

*balebeli*

2-Agr hijack-Tns 10-car security-POSSQual with-PP

2-guards

LIT-Are hijack car security with guards

“They hijacked the security car with the guards”

(b) *Ba koetetse balebeli le koloji*

*ea tšireletso*

2-Agr hijack-Tns 2-guards and-Conj 10-car

security-POSSQual

LIT-Are hijack guards and car security

“They hijacked the guards and a security car”

(c) *Bona le balebeli ba koetetse koloji*

*ea tšireletso*

2-Them and-Conj 2-guards 2-Agr hijack-Tns 10-car

security-POSSQual

LIT-Them and guards hijack car security

“Together with the guards, they hijacked the security car”

57 (a) *Ntja e loanne le tšoene ea e bolaea*

9-Dog 1-Agr fight-Tns and-Conj 9-monkey kill-Tns

LIT-Dog fight and monkey kill

“A dog fought with a monkey and killed it”

(b) *Ntja e bolaile tšoene li loana*

9-Dog 1-Agr kill-Tns 9-monkey Clitic fight-IND

LIT-Dog is kill monkey is fight

“The dog killed a monkey in their fight”

(c) *Tšoene e bolaile ntja li loana*

9-monkey 1-Agr kill-Tns 9-dog Clitic fight-IND

LIT-Monkey is kill is dog fight

“The monkey killed a dog in their fight”

58 (a) *Ba kuta bana le basali*

2-Agr hair-cut-Tns 2-children and-Conj 2-women

LIT- Are hair-cut children and women

“They hair-cut the children and women”

(b) *Bana le basali ba kutoa*

2-children and-Conj 2-women 2-Agr hair-cut-IND

LIT-Children and women hair-cut

“The children and women are hair-cut”

(c) *Bona le basali ba kuta bana*

2-Pron and 2-women 2-Agr hair-cut-IND 2-children

LIT-They, and women are hair-cut children

“Together with the women, they hair-cut the children”

According to the participants, the sentences in 55 (a), 56 (a), and 57 (a), are ambiguous. For instance, the VP *ba koetetse kolo ea tšireletso le balebeli* “they hijacked the security car with the guards” in 55 (a) above, could mean that the security car, as well as the guards were hijacked. It might also denote that the hijackers, together with the guards, seized the security car. On the contrary, the same sentences have been disambiguated in 56 (b) and (c), in which the words have been rearranged. The referents *balebeli* “guards”, and the conjunctive *le* “and”, have shifted from their original positions. As a result, in 56 (b), the VP *ba koetetse* “they hijacked” refers to both NPs *balebeli le kolo ea tšireletso* “the guards and the security car”, as its referents.

As a result, the interpretation is that both the guards and the security car were seized. In 56 (c), the VP *ba koetetse kolo ea tšireletso* “they hijacked the security car”, refers to both the implied subject and the NP *balebeli* “the guards”, as its referents. In this instance, it is denoted that both the implied

subject, as well as the guards seized the security car. Hence, a disambiguated VP.

It has also been observed that in excerpt 57 (b) and (c) above, the shift of words serves as the strategy employed to disambiguate the sentence in 57 (a). For instance, in 57 (b), the constituents *e loanne le* “it fought with”, and *ea e bolaea* “killed it”, exchange the positions. Consequently, the referent of the expression *e bolaille* “it killed”, is the monkey, which denotes that the monkey was killed by the dog in their fight. In example 57 (c) above, the words which have changed their order are the conjunction *le* “and” the NP *balebeli* “guards”. As a result, the expression, *tšoene e bolaille* “the monkey killed”, picks out the dog as the referent of the action. Subsequently, the interpretation is that the dog died on account of fighting with the monkey. As a result, the VP has been disambiguated.

In excerpt 58 (b) and (c) above, the change of word order is employed to disambiguate the sentence in 58 (a) above. The components *bana le basali* “the children and the women”, in 58 (b) have changed the places to precede the VP *ba kutoa* “they are hair-cut”. As such, the same NPs *bana le basali* “the children and the women”, serve as the referents and object NPs of the action of hair-cutting. Therefore, the conveyed meaning is that, the children and the women are hair-cut. In 58 (c), the NP *basali* “the women” has changed its position to occupy the place of the subject. As such, the NP *bana* “children” is the object NP referent of the action of hair-cutting, performed by the implied subject, which appears in a form of the pronoun, *bona* “they”, and the NP *basali* “the women”.

The above interpretations are consistent with the RTM, as stipulated by Griffin (2020) that, the meaning of the expression is the object it refers to. Hence, the

identified resolution in the above Sesotho VPs, is in accordance with Chaicharoen's (2015) assertion that ambiguities can be resolved by rearranging the elements of a sentence, according to the fact that modifiers are placed nearer to their heads. Consequently, it has been observed that the application of the change of word order principle, together with the RTM, may help disambiguate the above sentences.

## **Conclusion**

The evaluation of the resolutions to the Sesotho VP syntactic ambiguity was the main focus of the current chapter. Through the use of the RTM and X-bar theory principle, the researcher identified the strategies that can help resolve the Sesotho VP syntactic ambiguity. The principle of modification was discovered as one of the resolutions to the ambiguous Sesotho VP syntactic structures. The researcher discovered that the constituent that causes syntactic ambiguity such as the PP or AdvP modifies the head verb X. Thus, this resolves the syntactic ambiguity of the Sesotho VP under investigation and leads to the first interpretation. A different interpretation arises when an ambiguous unit, such as, the AdvP, or PP modifies another element such as the NP, AdvP, or PP, within the same VP category.

In addition, this study discovered that the use of punctuation (formal signal) is one of the techniques that can resolve the Sesotho VP syntactic ambiguity. In this case, the Sesotho VP may contain three (sub-) phrases, in addition to the head verb that usually occurs at phrase initial. It was argued that, normally, the middle phrase, which is the second phrase, is the one that causes syntactic ambiguity of the VP under study. In order to convey the initial meaning of such Sesotho VP, the punctuation mark (the comma) is positioned in between the second and the third phrases. In this instance, the second phrase modifies the antecedent phrase or constituent, hence, the first interpretation. The alternative

meaning is deduced by placing the punctuation mark in between the first phrase, and the second phrase, so that the second phrase modifies the phrase that follows it, which is the third phrase. Therefore, the other interpretation which is not ambiguous is generated.

Furthermore, the examined data revealed that the change of word order principle, within the X-bar theory, is a useful tool for resolving the Sesotho VP syntactic ambiguity. It was discovered that the constituent that causes ambiguity occurs either at phrase middle or end. In this instance, the understanding is that the element in question, modifies only the component that immediately precedes it. In order to generate a different meaning and avoid syntactic ambiguity, the confusing unit shifts to the different position, following another constituent that it modifies. The alternative view is thus, created.

## CHAPTER FIVE

### Conclusion and Recommendations

#### 5.0 Introduction

This chapter presents the study's findings in the form of a summary, and offers the conclusion of the previous chapters, as well as the recommendations by the researcher.

#### 5.1 Summary of the Study

This study focused on identifying and evaluating the syntactic structure of the Sesotho VP. With the employment of the X-bar theory, it analysed the VP grammatical functions, while it employed the RTM to justify and analyse the syntactic ambiguity in the Sesotho VP in sentences. Chapter one of this study introduced the study and highlighted the study's background. It contextualised the statement of the problem, the aim, objectives, research questions that guided the study's discussions, as well as the rationale for the study. The literature related to this study, the techniques and tools used for data collection, as well as the theories relevant for data analysis, were also provided in this chapter. The chapter also presented the significance, the delimitation and the organisation of the study.

Chapter two employed the X-bar theory to analyse the syntactic structure and constituents of the Sesotho VP. The findings of this chapter revealed different Sesotho VP syntactic structures that include V, V + PP, V + NP + QualP + QualP + AdvP, V + AdvP, V + NP + QualP + NP, and V + AdvP + AdvP. It was also discovered in chapter two that the Sesotho VP's head X primarily merges with the object NP complement, functioning as its sister. The object NP in this case manifests as either a direct or an indirect object. The bar-level X', in this instance is a V', which merges with the other phrases such as the

PP, AdvP, or AdjP, which follow the head verb at ZP. Additionally, it was disclosed that the Sesotho VP's head verb primarily appears as the VU's daughter at head level, a phenomenon referred to as zero projection level. Similarly, the VU normally starts with SC. Finally, the researcher discovered that, in addition to the SC, the VU includes several auxiliary verbs such as the Fut, Dur-Past, and Habit.

Chapter three aimed to disclose various grammatical functions of the Sesotho VP in sentences. Such were identified as its function as the predicate of a sentence, conveying what the subject does or is said about it. It argued that, in this case, the other constituents that commence the Sesotho VP are the primary verbs in command statements or the negation morpheme *ha* “not” in regular VP. Accordingly, the head word X in any VP is the basic verb. It was also argued, in this chapter, that the Sesotho VP may serve as another VP's complement, which is the INFL V. In this sense, a full meaning cannot be expressed by the first VP alone, but needs an INFL V in order to complete the meaning of the preceding VP, hence, a need for the VP complement. Chapter three further revealed that the Sesotho VP may function as the complement of qualificatives, such as an AdjQual, RelQual, InterQual and POSSQual in a sentence, as these qualificatives cannot convey a full meaning on their own. As such, the VP contributes to the overall meaning of such qualificatives.

The discussions in chapter four employed the RTM and the X-bar theory to justify the Sesotho VP ambiguities, and to unveil various resolutions to such syntactic ambiguities. The chapter argued and demonstrated that the ambiguous syntactic structure of the Sesotho VP can be resolved by applying the principle of modification, in which the initial interpretation is reached when the unambiguous component such as the AdvP or PP modifies the head verb X. It was also unveiled, in this chapter, that the VP syntactic ambiguity can be

resolved through the use of punctuation, which is a formal signal, in which the Sesotho VP may have other (sub-) phrases, as the syntactic ambiguity in the VP usually arises from the middle phrase. Therefore, the punctuation mark (comma) is placed between the second and the third phrases in order to disambiguate the VP in question. Additionally, the use of the change of word order principle was identified as one of the disambiguation mechanisms. It was observed that the ambiguous component usually appears at the end, or at the middle of the phrase. This mechanism helps realise that the constituent in question modifies only the antecedent unit. For the different interpretation to be produced, the same ambiguous element shifts to a different place, to occur after the component it modifies. As a result, the Sesotho VP syntactic ambiguity is avoided.

## 5.2 Contributions of the Study

The previous scholars studied the concept of VP in various domains and languages. The present study was set to close the syntactic gap identified in the reviewed literature, as stipulated in both the statement of the problem, as well as the literature review sections. It focused on the analysis of the Sesotho VP syntactic structure and its constituents, its grammatical functions in sentences, as well as the resolutions to its syntactic ambiguity, which are deemed vital for future use by linguistic researchers. Subsequently, the study sparks interest in the study of syntax, and further research that seem to have been compromised.

## 5.3 Limitations of the Study

The scope of the current study precluded the investigation of the Sesotho VP limited only to syntactical aspect, grammatical functions and the resolutions to the Sesotho VP syntactic ambiguities. Other syntactic aspects such as tense and aspect were not investigated as they did not form part of this study.

However, the financial constraints and the researcher's ill health contributed to the delay in completing this study.

#### 5.4 Recommendations

It is recommended that Sesotho linguists may investigate further on this VP beyond the scope of the current study, in order to recognise and resolve the Sesotho VP syntactic ambiguity. Lastly, the Sesotho VP does not appear to have been the focus of comparison research with other languages, including English or other Bantu languages. This study is left open for the linguists interested in the subject matter of this study, to undertake further research on the Sesotho VP in order to criticise it for its development.

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