MORPHOSYNTACTIC VERB INFLECTIONS FOR TENSE AND ASPECT IN KIMBEERE

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE DEGREE OF MASTER OF ART (M.A.) OF THE UNIVERSITY OF

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BY

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DECLARATION

This research project is my original work and has not been presented for examination in any other university.

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DEDICATION

To You; Almighty God,

For Your abundant blessings and love.

To late Mom and Dad,

You always wished the best for me.

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ABSTRACT

This research project examines Kimbeere verbal inflections for tense and aspect within the theoretical framework of Minimalist Program. In this endeavour, the study seeks to provide a detailed and critical analysis of the distribution and interaction of tense and aspect verbal expressions in the language. The study will also evaluate the adequacy of the Minimalist Program in the analysis of tense and aspect systems of Kimbeere. As a recent outgrowth of the theory of Generative Grammar, the study establishes the Minimalist Program's ability to account for the morphsyntactic nature of the verbal systems in Kimbeere.

Chapter one gives the general background information on Kimbeere, a detailed description of the research problem and objectives of the study. It also gives the main tenets of Minimalist Program on which the analyses of this study are based. Literature review which is of benefit to this study as well as the methodology used to carry out the field research is discussed.

Chapter two introduces basic language features in Kimbeere and the general inflectional verb constituents. Phonemic inventory is discussed in terms of vowel and consonant systems so as to understand the way the sounds of this language are patterned. The chapter also looks at the inflectional nature of the verb which consists of a root and affixes either prefixed of suffixed to the root. The verb root, the final vowel, focus marker, subject marker and object marker are discussed. The role of tone and vowel length in the verb phrase is also discussed.

Chapter three bears the core of this study. It examines the Kimbeere tense system in the past, present and future, establishing the marking of tense by affixation, suprafixation of grammatical tone and by distinctive vowel length. The chapter also explores the co-occurrence of tense and aspect in the verbal system. Movement for feature checking for tense as proposed in Minimalist Program is also demonstrated.

Chapter four identifies the inflectional forms for aspect and establishes how they are distributed in the verb phrase. The interaction of tense and aspect in the verb phrase is investigated. Lastly, verb movement for feature checking of aspect within the feature checking theory of the Minimalist Program is demonstrated.

Finally, chapter five provides a summary of the research findings and conclusions by revisiting the research problem, objectives and hypotheses in the light of the observations made in the body of the research project.

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LIST OF SYMBOLS AND ABBREVIATIONS

1PP	First person plural
1PS	First person singular
2PP	Second person plural
2PS	Second person singular
3PP	Third person plural
3PS	Third person singular
FOC	Focus
FOCP	Focus phrase
AGR	Agreement
AGR P	Agreement phrase
AGR _s P	Agreement subject phrase
ASP	Aspect
С	Consonant
DF	Distant future
DS	Deep structure
FUT	Future tense
FV	Final vowel
GB	Government and Binding
Н	High tone
HAB	Habitual
IF	Immediate future
IMF	Imperfective
INFL	Inflection

IP	Immediate past
L	Low tone
LF	Logical form
MP	Minimalist Program
NEG	Negation
NEG P	Negation phrase
AGRO	Object agreement
Obj.	Object
Р	Plural
0	Zero morpheme
PE	Principle of Economy
PPA	Present progressive aspect
PF	Perfect
PF	Phonetic form
PFI	Principle of Full Interpretation
PFV	Perfective
PT	Present tense
PST	Past tense
RCP	Recent past
REP	Repetitive
RP	Remote past
S	Singular
SPEC	Specifier

SS	Surface structure
Subj.	Subject
TNS P	Tense phrase
TNS	Tense
TON	Tone
ts	Trace subject
tv	Trace verb
UG	Universal Grammar
V	Verb
V	Vowel
VP	Verb phrase
VR	Verb root
Vrr	Verb root reduplication

CHAPTER ONE

INTRODUCTION

1.0.0 Background to the study

This study aims to investigate tense and aspect verbal inflectional properties in Kimbeere. Kimbeere is a language spoken by the Ambeere people of Mbeere North and Mbeere South districts of Embu County in Kenya. Mbeere territory is located in the South-eastern part of Embu County. The language is classified by Heine and Mohling (1980) as belonging to the central Kenya Bantu.

Ambeere are a relatively small group of people and earlier literature referred to them as Aembu who are distinct but culturally close neighbours. Other studies have described them as a subgroup of the Kikuyu. Kimbeere has been studied by Guthrie (1970) together with Embu while Mutahi (1977) studied Kimbeere as one of the Southern dialects of Kikuyu. Mutahi (1977) has divided the dialects of this region in to Kiembu, Kimbeere, Kindia, Kigichugu and Kimathira and his classification was based on sound change and phonological processes. The current research studies Kimbeere as a language and not a dialect.

The 2009 Kenya Population and Housing Census classified Kimbeere as a separate language from Kikuyu and Kiembu and put the total population of Ambeere at 168,155. Languages that border and are related to Kimbeere include Kikamba to the south and east, Kiembu to the north and west and Kitharaka to the north-east. Njuki (2012:2) notes that Kimbeere has three varieties which are mutually intelligible: Kinthawa spoken in Siakago Division of Mbeere North, Kimavuria spoken in Mbeere South and Ki-Evurori spoken in lower Eastern side of Mbeere North.

1.1.0 Statement of Research Problem

This study is intended to examine morphological realizations of tense and aspect in the Kimbeere verb phrase. The study will identify the inflectional forms for tense and aspect and determine their distributional patterns as well as their interaction in the verb phrase. The study will also seek to investigate the role of tone and vowel length in past tense marking. Finally, this study will determine whether tense and aspect morphological forms can be checked for correct derivation using the Feature Checking Theory of Minimalist Program.

The concepts of tense and aspect are very crucial in describing and explaining the grammar of a language. Saeed (1997:114) observes that aspect and tense systems are sometimes difficult to disentangle. This is because they both "allow speakers to relate situations to time", but they also offer different slants on time. Tense gives a representation of the time that contains the event. Aspect gives different representations of time within the event. The two categories are viewed as interdependent but deeply intertwined. Maringah, (1987) undertook a comparative study of the morphophonology of Kiswahili and Kimbeere verbal extensions and identified tense as one of the verbal extensions. She however did not identify the inflectional morpheme that marks aspect and thus does not answer a fundamental question: whether Kimbeere has the grammatical category of aspect. This study will attempt to answer that question by analysing the Kimbeere verb phrase. In addition, Maringah, (1987:77) noted that the Kimbeere verb consists of affixes and a root. The affixes are either prefixed or suffixed to the verb root and they occur systematically. This means that the functional categories of tense and aspect have a systematic pattern of affixation to the verb root. The current study therefore, seeks to identify the morphemes that mark tense and aspect in Kimbeere verb phrase. It also seeks to determine their distribution as well as their interaction in the verb phrase.

Njuki (2012:80) asserts that contrastive tone is used to distinguish between immediate past and remote past in Kimbeere. The language marks past tense using a zero morpheme which co-occurs with the perfective aspect morpheme [–ir]; however, there is change in the tone of the last morpheme [– \Box] depending on whether the past is immediate or remote. While I agree that tone distinguishes between immediate and remote past, there is also vowel length contrasts on the morpheme that marks for person as can be observed in the examples below:

1. $/n\acute{e} - m\grave{a} - O - m\grave{a}m - \acute{r} - /$ FOC - 3PP - IP - sleep - PFV - FV

'They slept'

2. $/né - maa = O - mam - ir - \equiv /$ FOC - 3PP - RP - sleep - PFV - FV

This study uses data drawn from Kimbeere to investigate the role played by tone and vowel length in past tense marking. In order to achieve the objectives of this study, the researcher sets out to answer the following questions:

- 1. What are the inflectional forms for tense and aspect in Kimbeere?
- 2. What is the distribution and interaction of tense and aspect in Kimbeere verb phrase?
- 3. Does vowel length play any role in past tense marking?
- 4. Can the Feature Checking Theory of Minimalist Program adequately analyse tense and aspect morphological forms in Kimbeere?

1.2.0 Research Objectives

The objectives of this study are:

1. To identify the inflectional forms for tense and aspect in Kimbeere verb phrase.

^{&#}x27;They slept'.

- 2. To establish the distribution and interaction of tense and aspect in Kimbeere verb phrase.
- 3. To investigate the role of tone and vowel length in past tense marking.
- 4. To determine whether tense and aspect morphological forms can be described by the feature checking theory of the Minimalist Program.

1.3.0 Hypotheses

The hypotheses to be tested in this study are:

- 1. Kimbeere verbal inflection for tense and aspect is realised morphologically.
- 2. Tense and aspect inflectional morphemes are either prefixed or suffixed to the verb root and they can or not co-occur in the same verb phrase.
- 3. Tone and vowel length contrasts distinguish between immediate and remote past tense.
- The principle of Feature Checking of the Minimalist Program is adequate to analyse Kimbeere tense and aspect morphological forms.

1.4.0 Scope and Limitation of the Study

This study focuses on the analysis of verbal inflectional properties for tense and aspect in Kimbeere. The study seeks to identify tense and aspect inflectional forms in the verb phrase. The study will establish the distribution and interaction of tense and aspect grammatical categories in the Kimbeere verb phrase. The study will also seek to determine the role played by tone and vowel length in past tense marking. Finally, the study will seek to establish the adequacy of the Minimalist Program to account for Kimbeere tense and aspect inflections.

On tense, the study analyses the past, present and future. The past tense is further subdivided into immediate immediate past, recent past and remote past. The future tense is also subdivided into immediate future and distant future. On aspectual categories, the study looks at the perfective, perfect, imperfective and repetitive aspects. Progressive and habitual categories will be analysed under imperfective aspect. The study will analyse Kimbeere basic language features such as phonemic inventory, the verb root, subject and object markers, focus marker as well as the role of tone and vowel length in past tense marking.

The study is limited to analysing tense and aspect inflections using the Checking Theory of MP. Other verbal inflections like mood and negation will not be analysed. The study will also leave out the morphological process of derivation.

1.5.0 Theoretical Framework

This study adopts the Minimalist Program as propounded by Chomsky for the analysis of morphological forms of tense and aspect in Kimbeere. Minimalist Program provides an adequate relation between morphology and syntactic categories of a language and thus I find it most appropriate to analyse morphosyntactic categories of tense and aspect in Kimbeere. Moreover, Kimbeere has SVO basic sentence structure which can be adequately described using the Minimalist Program. General over view of the program and its relevance to this study are given below:

1.5.1 The Minimalist Program

The Minimalist Program is the most recent (programmatic) outgrowth of the theory of generative grammar originally developed in Chomsky (1957, 1965). The immediate predecessor of

Minimalist Program was Government and Binding Theory (Chomsky 1981, 1982, 1986a, b) (Werner et al 1996:4).

The Minimalist Program proposes that a linguistic structure links two levels of representation: LF (abstract representation of meaning) and PF (abstract representation of sound). The levels of D-structure and S-structure as well as the logical (LF) and phonetic (PF) forms which were realized in Government and Binding Theory are combined into two levels; the LF and PF referred to as interface levels. In order to link these two representations appropriately, there must be some internal structure to grammar. According to Haegeman, (1994:615) the linguistic system generates abstract structures which will at some point receive an overt form, that is, they will be spelt out. Every syntactic derivation starts with a numeration where words to be used for the derivation are selected directly from the lexicon. The spell out level leads to PF and LF representation.

Under the Minimalist Program, the structure of grammar is represented in the figure below: Structural representation

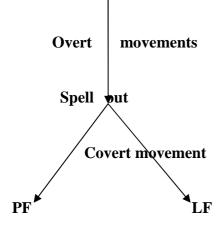


Figure 1: Organization of grammar in Minimalist Program. Adapted from Haegeman, (1994:616)

The main components of MP that will be important in the description of tense and aspect in this study include:

- i. The lexicon and the computational process.
- ii. Feature-checking through movement to functional categories.
- iii. Spell-out process.
- iv. The place of morphology in MP.

The components are discussed below in detail:

1.5.2 The Lexicon and the Computational Process

The lexicon is component of grammar expressing what we know when we know the words of a given language. Each lexical entry is assumed to contain a semantic feature set, a phonological feature set and a syntactical feature set (Werner et al (Eds.) 1996:8). The Minimalist approach accounts for the interface between morphology and syntax. The structure building process involves the computational component which selects lexical items from the lexicon to come up with a structural description. The lexicon contains all the lexical and morph-syntactic information about nouns and verbs. The process of movement from lexicon to interface is described below:

A set of morph-syntactic and lexical items is taken from the lexicon in a process called numeration. These elements are combined into projections and partial trees in a process called merge. Merge is part of the structure-building process that takes place to transport information from lexicon to interface level. In the Minimalist Program, the projection principle which states that lexical information is syntactically represented used in Government and Binding Theory is done away with. The lexical items from the lexicon are transformed into specifier-head and head-complement relationships as seen in the following figure:

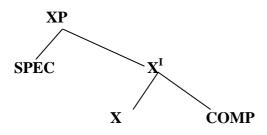


Figure 2: The specifier-head or head complement relationship.

The structure building process is driven by necessity. Structures are built only if they are licensed by the morph-syntactical or lexical information of the lexicon in a particular language. Thus, language can produce partial trees with a head and no complement if there is no need for caseassignment under the specifier-head relationship (Schroeder, 2008:23).

1.5.3 Feature Checking Theory in Minimalist Program

In the Minimalist Program, lexical heads are fully inflected forms (stem plus inflectional affixes). These forms carry a feature associated with the inflectional affix. The functional heads likewise consist of features associated with inflectional morphology. The features associated with inflectional morphology of lexical categories have to match the features represented in the functional heads. Therefore, the requirement that morphological features match triggers movements of lexical elements to positions in the functional domain, and checking whether the features associated with the inflection match the features represented in the functional heads (Werner et al (Eds.) 1996:12-14).

The checking process ensures that lexical items which are represented in the sentence structure carry appropriate features. Grammatical and inflectional features are checked for their correctness against the syntactic positions in the structure building process. The necessity for checking creates positions in the structure building process. Positions like SPEC are created for the purpose of case checking.

In the Minimalist Program, the Split INFL structure is adopted. According to split-INFLhypothesis, Tense (TNS) and Agreement (AGR) have two distinct functions. INFL no longer exists Pallock (1989), but is separated into TNS, agreement subject (AGRs) and agreement object (AGRo) projections. This means that one is able to get all the sentence information in the verb phrase. As already noted Kimbeere is highly agglutinative and a verb phrase can be a complete sentence. The functional heads AGR and TNS are bundles of abstract features. Movements to AGRs, TNS and AGRo are feature-checking processes that eliminate the abstract features so that they are not visible at PF.

Haegeman (1994:681) explains that the Minimalist Program approach assumes that the verbal AGR may be weak or strong. Strong AGR is visible at PF and weak AGR is not. Chomsky proposes that because strong features are visible at PF, they have to be eliminated by overt movement before PF to avoid a derivational crash or ungrammaticality. In other words, the feature-checking by adjoining V to AGR must take place before spell-out. According to Schroeder, (2008:27), languages with strong AGR force verb movement to eliminate the abstract feature bundles before spell-out into PF, while languages with weak AGR do not force verb movement, as no features have to be checked. Thus, the verb appears right away at PF and LF.

1.5.4 Spell-Out Process

After the structure building process, the computational process spells out the information of the lexicon on to LF and PF. Spell out leads to the PF representations. Syntactic structures are also

interpreted, i.e. they are assigned a semantic representation, corresponding to the level of LF. (Haegeman1994:615). The spell-out and the levels at which grammar connects with PF and LF representations are computed separately to avoid crashing and deriving ungrammatical structures. This is done to meet the requirement of Full Interpretation (FI) where only relevant elements that can be expressed by the LF and PF representations are included. PF and LF are important because they sort out the phonological and semantic information for structural descriptions. Phonological information is not allowed at LF, neither is logical information allowed at PF. During spell-out, the principle of Procrastinate guides movement of features by delaying movement as much as possible since covert movement is taken to be economical the overt movement. The principle of Full Interpretation constraints the structure building process so that no superfluous element appears at interface level, that is, any element that is not licensed, either lexically or morphologically does not appear at interface level. Thus, the principle of Full Interpretation helps in making judgements on constructions that are well formed and those that are not. The principle of Economy requires that only what is relevant is included in a syntactic structure.

1.5.5 The Place of Morphology in MP

Application of the Minimalist Program mainly relies on the nature of the morphology of the language. Movement in structure building process depends on how rich or weak the morphology of a language is. The morph-syntactic nature of MP assumes that the inflectional properties are given to the verbs and nouns in the lexicon, and the already inflected verbs and nouns with their case morphology are base generated in the VP under their respective heads. In other words, the lexicon is no longer a collection roots and stems for verbs and nouns but it also contains all the relevant inflectional morphology of these categories (Schroeder, 2008:26)

The basic sentence structure under the Minimalist Program is captured in figure 3 below:

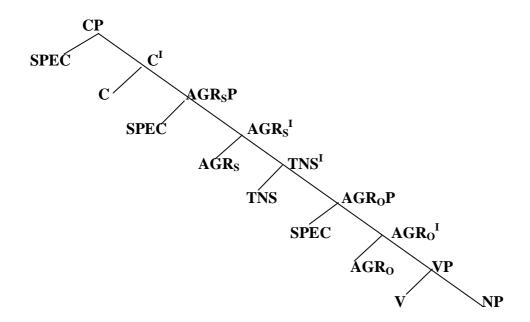


Figure 3: Chomsky's derivation tree. (Adapted from Schroeder, H. 2008:28)

Borsley R.D. (1996:238) explains that the basic core of the sentence is the VP. This is embedded below a number of so called functional categories. The subject must move to the specifier position of AgrSP and the object to the specifier position of the AgrOP for licensing or 'checking' of case features. Languages differ in whether these movements take place overtly or in logical form (LF). Minimalist Program can be summarized as syntactic representation that minimizes levels of representation and adopts a justified structure.

1.6.0 Literature Review

The literature review is divided into three sections: review of theoretical literature, literature on tense and aspect and literature review of Kimbeere.

1.6.1 Review of Theoretical Literature

The Minimalist Program as posited by Chomsky is used as the theoretical orientation in this study. Haegeman (1994:615) notes that the Minimalist Program is an approach to generative syntax which is referred to as the Principles and Parameters framework. The principles and parameters framework postulate that the syntax of natural languages is described in accordance with general principles and specific parameters. This means that there is something common to all human speech with regard to syntax and there are also cross-linguistic variations expressed by parameters. For instance, inflectional properties in a language are parametric variety. In the Minimalist Program, the structure building process is driven by necessity. Structures are built only if they are licensed by the morph-syntactical or lexical information of the lexicon in a particular language. Thus, language can produce partial trees with a head and no complement if there is no need for case-assignment under the specifier-head relationship. Kimbeere has a SVO word order and the verb carries all the elements of a basic sentence. Feature checking in Minimalist Program is used to analyse such syntactic structures as the tree diagram is built gradually as the morphology of a language dictates.

Chomsky (1992) as cited in Haegeman, (1994:615), proposes that in Minimalist Program, linguistic structures links two levels of representation, Logical Form (LF) and Phonological Form (PF). Linguistic structure mediates between LF and PF. The linguistic system generates abstract structures which will at some point receive an overt form.

Smith (2004:84-85), notes that there must in addition be some internal structure to the grammar, as the two kinds of representation, LF and PF, have to be appropriately linked. This is accomplished by positing a common derivation up to a stage called "spell-out" which marks the

point where a syntactic object is sent off for phonetic interpretation in one direction and logical interpretation in another.

The Minimalist Program has a computational process which is used to derive the syntactic representation of sentences from the lexicon. According to Smith (2004: 88-89), the computational component has three sub-parts: Merge, Agree and Move. Merge constructs larger lexical items; Agree establishes relations between a lexical item and some other feature in its domain to yield traditional agreement and case checking. Finally move identifies part of a tree that has already been formed by Merge, makes a copy of that part, and then merges it with another part of the tree, giving rise to larger and larger constituents.

The importance of feature checking in Minimalist Program is explained in Zwicky, M. & Spencer, A. (Ed.). (1998:176): Chomsky adopts a linear model of word formation, assuming that the output of some word formation component consists of fully formed words with a set of properties which may be syntactically relevant, but with an opaque internal structure. These outputs of the word formation component must move through the syntactic tree, checking their inflectional features through succession of functional projections marked inflectionally. The heads dominate abstract semantic features, such as tense, number etc, to be matched with properties of the word as a whole. Therefore, the checking takes place to guarantee syntactic appropriateness of words.

1.6.2 Literature on Tense and Aspect

Nurse, D. & Philppson, G. (Ed.) (2003:92) note that most tense and aspect encoding in Bantu languages involves a combination of three main components: inflection of the verb, tone and the use of verbs additional to and preceding, the main verb. Kimbeere is a Bantu language and the

verb inflects for tense and aspect among other grammatical categories. Tone contrasts are also used to distinguish between the recent past and remote past. This study aims to analyse verbal inflections for tense and aspect.

Saeed (1997:114) observes that aspect and tense systems are sometimes difficult to disentangle. This is because they both "allow speakers to relate situations to time", but they also offer different slants on time. Tense gives a representation of the time that contains the event. Aspect gives different representations of time within the event. This study will analyse data from Kimbeere in an attempt to show that tense and aspect are distinct grammatical categories but they also interact.

According to Trask (1999:207), tense is a grammatical category that relates to time. Every language is capable of expressing limitless distinctions of time. If a language builds these time distinctions in its grammar; then it has the category of tense. Kimbeere has the category of tense which is marked in its morphology. The tense system has three basic tenses; past, present and future.

Quirk & Greenbaum (1973:40) refer to tense as the correspondence between the form of the verb and our concept of time and aspect as "the manner in which a verbal action is experienced or regarded (for example as completed or in progress)."

Aspect has further been described with the following words:

Aspect is a grammatical category representing distinctions in the temporal structure of an event. Quite independently of its location in time, an event may be viewed as having any number of different temporal organizations: it may be seen as having internal structure or as consisting of an unanalysable whole; it may be seen as extending over a period of time or as occurring in a single moment; it may be seen as a single occurrence or a series of repeated occurrences; it may be seen as beginning, continuing or ending. All these and others are types of aspects (Trask 1999:15-16)

In Kimbeere, an event can be described as either being complete or incomplete. Complete events are expressed using the perfective and perfect aspects and incomplete events are expressed using the imperfective aspect. This study will analyse these aspectual categories in Kimbeere.

Tense has been defined as "grammaticalised expression of location in time." (Bennet 2002:78) Bantu languages are known for their multiplicity of past and non past tense contrasts. This study analyses the past, present and future tense. The past tense is further subdivided into immediate past, recent past and remote past.

Comrie (1976:3) explains that "aspects are different ways of viewing the internal temporal constituency of a situation." This study will examine perfective, perfect, imperfective, and repetitive aspectual categories in Kimbeere.

1.6.3 Review Kimbeere Literature

Guthrie (1970) classifies Kimbeere in Zone E, group 50, language 2, thus, E52. Heine & Mohling (1980) mention Kimbeere in their classification of Bantu languages and they classify it under Central Kenya Group. These studies relate to some extent to the current study in that they identify the linguistic position of Kimbeere as belonging to the Central Kenya Group.

Mutahi (1977) studied Kimbeere as a Southern Mount Kenya dialect of Kikuyu. In his work titled *Sound Change and the Classification of the Dialects of Southern Mount Kenya*, he classified the dialects based on sound change and phonological processes. This study compared different dialectical forms and changes in order to establish the distance between given sets of dialects. His was a phonological study whereas the current study is on morph-syntactic

categories of tense and aspect. In addition, while his study focused on Kimbeere as a dialect, this study considers Kimbeere a language.

Maringah (1987) studied the morphophonology of Kiswahili and Kimbeere verbal extensions under the Natural Generative Grammar orientation. Her work is a comparative study which investigates the various sound changes that take place in the extensions due to juxtaposition of various sounds. The study also compares the morphological and phonological aspects of Kiswahili and Kimbeere. Although this study differs from the current study in terms of theoretical orientation and scope, it is relevant to the current study as it provides data derived from Kimbeere and identifies various morphemes of the verbal extensions which include among others, tense. The study does not discuss aspect which is largely discussed in the current study. The study also indicates the functions of the identified morphemes in Kimbeere.

Njuki (2012) has focused on Kimbeere in his study of contrastive tone patterns and their functions. The study identifies tone patterns of verbs and nouns in isolation and also investigates the lexical and grammatical functions of tone in Kimbeere. This study is fundamentally different from the study we undertake in terms of subject matter but there is some data which may be found relevant. For instance, Njuki (2012) has noted that contrastive tone on the verb functions to indicate grammatical category of tense. While I agree that tone has a grammatical function, I also intend to show that vowel length contrasts in particular morphemes in the verb phrase indicate tense contrasts.

1.7.0 Significance of the Study

Booij (2007:133) notes that there are three important categories of inherent inflection for verbs: tense, aspect and mood. Many languages have overt marking for these categories, and in

language descriptions one usually finds a description of Tense-Aspect-Mood or TAM for short. Kimbeere has a complex agglutinative system composed of slots occupied by different inflectional affixes. The inflectional elements include, among others, tense and aspect. The concepts of tense and aspect are very crucial in explaining the grammar of a language. Few studies have been done on Kimbeere language and no study so far has been carried out to provide a description of the inflectional forms for tense and aspect. Therefore, this study aims to provide a descriptive analysis of verbal inflections for tense and aspect in Kimbeere as an attempt to generate new linguistic knowledge and contribute to the existing knowledge of Bantu inflectional morphology.

Schroeder (2002:163) asserts that the typological differences between languages lie first and foremost in the degree of their morphology, a tenet which will have to be tested against the background of a variety of other languages. Gachomo (2004) investigates tense, aspect and mood morpho-syntactic verb inflections in Kikuyu, Nzioka (2007) researches on a Minimalist Analysis of Kikamba tense and aspect, Odero (2008) investigates tense and aspect in Ekegusii within the Minimalist Program; these are Bantu languages studies and they confirm that tense and aspect categories are distinct grammatical categories marked by specific inflectional morphemes in the verb phrase. This study is important because it identifies the tense and aspect inflectional features and establishes whether they are distinct grammatical categories as asserted by studies of other Bantu languages.

Njuki (2012:80) asserts that contrastive tone is used to distinguish between immediate past and remote past in Kimbeere. The language marks past tense using a zero morpheme which cooccurs with the perfective aspect; however, there is change in the tone of the last morpheme depending on whether the past is immediate or remote. In addition to tone contrasts, there is also vowel length contrasts on the morpheme that marks for person. This study uses data drawn from Kimbeere to investigate the role played not only by tone but also vowel length in past tense marking and thus highlighting the concept of vowel length as a distinctive feature in the language.

The Minimalist Program developed by Chomsky will be used in this study to analyze Kimbeere verb inflections. A description of the Kimbeere verb phrase using Minimalist Program has not been studied. The completion of this study is therefore, a contribution to the existing knowledge of central Kenya Bantu inflectional morphology using the Minimalist Program.

1.8.0 Research Methodology

1.8.1 Data Collection Methods

This study uses both secondary data sources and primary data sources. The primary data was got through two data-collection techniques namely, elicitation and naturalistic observation. The researcher takes the advantage of the native speaker's competence to generate relevant data for the study. The native speakers' intuition is a reliable method of data collection. Haegeman (1994:7) notes that the native speaker's grammar is a reflex of his competence. The grammar is a representation of the speaker's internal linguistic knowledge.

Through elicitation technique, the researcher carried out interviews with native speakers of Kimbeere. The interviewer sought to know the verbs in the language by asking the informants to utter them. The information elicited was recorded on note books. The naturalistic observation technique involved listening to the native speakers in their daily conversations. The researcher observed language in its natural use and noted down the utterances during these conversations.

The researcher also noted down verbs that had contrastive tone patterns and vowel length. Secondary data was got from existing literature on Kimbeere language.

1.8.2 Data Analysis

Data analysis involved fragmenting the complex Kimbeere verb using hyphens. The hyphens were used to separate the morphemes from the verb root. A coding system was used to identify the morphemes that mark different grammatical categories. The analysis also used tabulation method to show the different tenses and aspects in the language. Diacritic marks were used to indicate high and low tone in selected verbs.

Chomsky's derivational tree in the Minimalist Program was modified slightly to represent the inflected verb structure. Kimbeere has a SVO word order and the verb carries all the elements of a basic sentence. Feature checking in MP is used to analyse such syntactic structures as the tree diagram is built gradually as the morphology of a language dictates.

1.9.0 Summary

This chapter has formed a basis to the analysis of Kimbeere inflectional properties for tense and aspect. It has been clearly indicated that this study is basically of tense and aspect verbal inflections in Kimbeere. Kimbeere is a Bantu language and like many other Bantu languages, tense and aspect categories are encoded in the verb. The study attempts to investigate the distribution of tense and aspect morphemes and their interaction in the verb phrase.

The chapter has showed that the study is carried out within the framework of Minimalist Program as proposed by Chomsky. The chapter has also offered literature review of the theoretical framework, a review of tense and aspect as well as literature on Kimbeere.

CHAPTER TWO

KIMBEERE BASIC LANGUAGE FEATURES AND THE STRUCTURE OF THE VERB

2.0.0 Introduction

This chapter introduces basic language features in Kimbeere and the general inflectional verb constituents. Phonemic inventory is discussed in terms of vowel and consonant systems so as to understand the way the sounds of this language are patterned. The chapter also looks at the inflectional nature of the verb which consists of a root and affixes which are either prefixed or suffixed to the root. The verb root, the final vowel, focus marker, negative marker, subject marker and object marker are discussed. The role of tone and vowel length in the verb phrase is also discussed.

2.1.0 Basic Language Features

2.1.1 The Vowel System

Kimbeere has seven short vowels and seven long vowels. Vowel length is a distinctive feature in Kimbeere. Difference in vowel length brings about differences in meaning of the same word. Consider the following minimal pairs:

Short vowel	Gloss	Long vowel	Gloss
/v at a/	need	/v a: ta/	sweep
/kora/	to be lost	/k o: ra/	to uproot
/tora/	pierce	/ to: ra/	live
/t u ra/	smith	/t u: ra/	is painful

Table1: Distinctive Vowel Length

From the examples in table (1), it can be observed that words which are similar in all other segments except one vowel which differ only in length bring about change in the meaning of a word.

The following table provides the Kimbeere orthography for both long and short vowel sounds, the IPA symbols and vowel description based on tongue-body features. Example of a word in which the vowel sounds are used and the gloss is also given:

Orthography	IPA	Vowel	Example	Transcription	Gloss
	Symbol	description			
I,i	/ i /	Short high front	kira	/ kira /	keep quite
		vowel			
II,ii	/ i: /	Long high front	tiira	/ ti:ra /	support
		vowel			
Ĩ,Ĩ	/ e /	Short mid-high	ĩta	/ eta /	pour
		front vowel			
ĨĨ,ĩĩ	/ e: /	Long mid-high	tîîra	/te:ra /	be absent
		front vowel			
E,e	/ 🗆 /	Short mid-low	eria	/ □ria /	wash
		front vowel			
EE,ee	/ 🗆 : /	Long mid-low	eene	/ □:n□ /	owners
		front vowel			
A,a	/ a /	Short low front	aka	/ aka /	build
		vowel			
		Long low front			
AA,aa	/ a: /	vowel	kaana	/ ka:na /	deny
U,u	/ u /	Short high back	una	/ una /	break
		vowel			
UU,uu	/ u: /	Long high back	kuuga	/ku:□a /	to say
		vowel			

Ũ,ũ	/ 0 /	Short mid-high	ũka	/ oka /	come
		back vowel			
ŨŨ,ũũ	/ 0: /	Long mid-high	kũũra	/ko:ra /	uproot
		back vowel			
0,0	/ 🗆 /	Short mid-low	ona	/ 🗆 na /	see
		back vowel			
00,00	/ 🗆: /	Long mid-low	oona	/ 🗆 :na /	has seen
		back vowel			

Table 2: Description of Kimbeere vowels

2.1.2 The Consonant System

The consonant system in Kimbeere consists of eighteen sounds. Among them are two glides and five pre-nasalised sounds. Mberia (1993:49) notes that glides are formed in a phonological process that changes vowels into semi-vowels. Semi-vowels are also known as glides. The rule is that a high vowel is realised as a nonsyllabic glide if it appears followed by another vowel; it is delinked from a V slot and re-associated with a C slot (Katamba, 1989:171). In Kimbeere, for instance, a glide /w/ is formed when a short mid-high back vowel /o/ is followed by front vowels. A glide /j/ is formed when a short mid-high front vowel /e/ is followed by a short vowel.

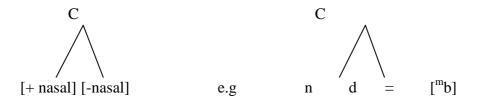
See examples in table (3) below:

Input	Output	Gloss
/mo-aki/	/mw-aki/	a builder
/mo-ini/	/ mw-ini/	a singer
/mo-□ri/	/ mw-□ri/	month
/mo-er□/	/mw-er□/	body
/ri-oa/	/rj-oa/	sun
/ri-oka/	/rj-oka/	resurrect

Table 3: Glide Formation

Pre-nasalised consonants are phonetic sequences of a nasal and an obstruent that behave phonologically like single consonants. According to Katamba (1989:171) prenasalised consonants are complex segments that show sequential organization of features at the sub segmental level. There is simultaneous association of a single consonant slot with two segmental distinctive feature matrices. An example of a prenasalised consonant is the sound $[^mb]$ as in the word $[^mba]$ 'give me'.

A prenasalised consonant can be presented as follows:



In addition, prenasalised consonants are considered to be single consonants rather than clusters because of the duration of articulation. For example, the nasal in the pre-nasalised sound $/^{m}ba/$ 'give me' is much shorter than the nasal in a word like /mami/ 'mother'.

The following table provides the Kimbeere orthography of the consonant sounds, the IPA symbols and a description based on tongue-body features, example of a word in which the consonant sounds are used and the gloss is also given:

Orthography	IPA	Consonant	Example	Transcription	Gloss	
	Symbol	description				
T,t	/ t /	Voiceless alveolar stop	tara	/ tara /	count	
K,k	/ k /	Voiceless velar stop	kama	/ kama /	to milk	
M,m	/ m /	Voiced bilabial nasal	meria	/m□ria/	swallow	
N,n	/ n/	Voiced alveolar nasal	nene	/ n 🗆 n 🗆 /	big	
NY,ny	/ 🗆 /	Voiced palatal nasal	nyenje		coakroach	
NG',ng'	/ ŋ /	Voiced velar nasal	ng'ombe	/ ŋ□ ^m b□ /	cow	
R,r	/ r /	Voiced alveolar trill	rete	/ r□t□/	bring	
V,v	/ v /	Voiced labio- dental fricative	vava	/ vava/	father	
TH,th	/ð/	Voiced interdental fricative	thoma	/ð□ma/	read	

C,c G,g	/ □ /	Voiceless palatal- alveolar fricative Voiced velar	ũcũrũ wega	/o□oro/ /w□□a/	porridge good
MB,mb	/ ^m b /	fricative Voiced Pre-	mbembe	/ ^m b□ ^m b□ /	maize
		nasalised bilabial stop		(D x y - (
NTH,nth	/ ⁿ ð /	Voiced pre- nasalised interdental fricative	nthimo	/ ⁿ ðim□ /	proverb
ND,nd	/ ⁿ d /	Voiced pre- nasalised alveolar stop	ndaĩ	/ ⁿ da□ /	riddle
NJ,nj	/ ⁿ [] /	Voiced pre- nasalised palatal stop	njũkĩ	/ ⁿ □ oke /	bee
NG,ng	/ ⁿ _/	Voiced pre- nasalised velar stop	ngari	/ ⁿ □ari /	car
W,w	/ w /	Voiced labiovelar glide	wana	/ wana/	childish
Y,y	/ 🗆 /	Voiced palatal glide	yura	/ □ũra /	famine

Table 4: Description of Kimbeere consonants

2.2.0 Structure of the Verb

As mentioned earlier in this study, Bantu languages are highly agglutinative; the verb can have several morphemes which carry different functional categories. Kimbeere is a Bantu language and the verbal forms are highly inflected with the verb consisting of affixes and a root. The affixes are either prefixed or suffixed to the verb root. Maringah, (1987:77) asserts that the

prefixes have a fixed order but the suffixes are not arranged in any order and may change positions depending on their co-occurrence. Nurse, D. & Philppson, G. (Eds.) (2003:8) describe Bantu languages as 'verby' because the verb is pivotal in the sentence; it incorporates much information, and may stand alone in a sentence. It is possible to have a one word sentence in Kimbeere, made up of only a verb with various affixes.

Maringah (1987:77) notes that the Kimbeere verb consists of the following slots:

- i. Negative
- ii. Subject pronoun
- iii. Tense
- iv. Indirect object pronoun
- v. Root
- vi. Suffixes (causative, applicative, stative, reversive, passive and reciprocal)
- vii. Mood

She however does not mention the aspect slot which is very prominent in Kimbeere as this study will demonstrate in detail in chapter 4.

Consider the following example:

- 3. $/né tó mò O rùg ir \Box \Box /$
 - FOC 1PP (Subj) 2PP (Obj) TNS cook ASP FV
 - 'We cooked for you'

This sentence carries many affixes representing various morpho-syntactic elements such person, number, agreement, aspect and tense. The morph-syntactic nature of Minimalist Program assumes that the inflectional properties are given to the verbs and nouns in the lexicon, and the

already inflected verbs and nouns with their case morphology are base generated in the verb phrase under their respective heads. In other words, the lexicon is not a collection roots and stems for verbs and nouns but it also contains all the relevant inflectional morphology of these categories (Schroeder, 2008:26).

2.2.1 The Verb Root

According to Warriner (1982:641-642), a root is the core of a word- the part to which the prefixes and suffixes are added. To find the root, you have only to remove any affix there may be. Roots have more specific and definite meanings than either prefixes or suffixes. Katamba (1993:41) further explains that a root is the irreducible core of a word, with absolutely nothing else attached to it.

The nucleus of the verbal morphology in Kimbeere is the verb root which supports a number of prefixes and suffixes. Infinitive verbs terminate with a vowel /a/ called the 'final vowel'. This is illustrated in the following examples:

- 4. /tar a/ VR - FV 'Count'
- 5. /ak a/

VR – FV

'Build'

6. /rem – a/

VR- FV

'Cultivate'

7. $/\Box ngi - a/$

VR - FV

'Suckle'

Kimbeere has one infinitive verb that does not terminate with the vowel /a/; instead it terminates with the vowel /e/.

8.
$$/\Delta i - e/$$

VR - FV
'Go'

The final vowel /a/ and /e/ are replaced by vowel / \Box /when the verbs take the perfective suffix

[– ir].

This is shown in the following examples:

- 9. /a ⁿdek a/ VR – FV 'Write'
- 10. /ne- ma O ndek ir \Box / FOC - 3PP - TNS - write - ASP - FV 'They wrote' 11. / Δi - e/ VR - FV 'Cut' 12. /ne - to- O - thi - ir - \Box / FOC - 1PP - TNS - go -ASP - FV 'We went'

The verbs in examples (9) and (11) take the perfective aspect suffix [-ir] in sentences (10) and

(12) and the final vowel /a/ and /e/ is replaced by $/\Box/$.

The final vowel /a/ is also replaced by /u/ when the verb takes a suffix marking subjunctive mood. Mood is a grammatical category that shows the attitude of the speaker towards an action or an event. The subjunctive mood is used in to express a condition contrary to the fact.

Consider the following examples:

The verb in example (13) drops the final vowel /a/ and takes a suffix /u/ to mark subjunctive mood as seen in example (14). While in (13) the verb means 'arrive', sentence (14) means that the speaker is not certain that they have arrived.

2.2.2 Focus Marker

The focus marker is the morpheme which occurs in all positive statements before the subject marker in a Kimbeere verb phrase. It represents a greater certainty on the part of the speaker about the validity of what is being said.

For example,

15.
$$/ne - to - O - ru \otimes - a \otimes - a /$$

FOC - 1PP - TNS - cook - ASP - FV
'We cook'

The presence of the focus marker /ne/ in the above sentence means that it is a fact that 'we cook'. The focus marker appears in all indicative and declarative sentences. It is replaced by the negative marker in negative sentences. Negation is marked by the morpheme /te/ which comes immediately after the subject prefix as shown in the following examples:

- 16. $/to te O ru \otimes a \otimes a/$ 1PP - NEG - TNS - cook - ASP - FV 'We don't cook.'
- 17. $/ma te ka va^n d a/$ 3PP - NEG - TNS - plant - FV

'They will not plant.'

As can be observed from the above examples, unlike the focus marker which is followed by the subject pronouns, the negative marker appears after the subject markers. The negative form is different in singular constructions. The morpheme [te-] is preceded by the /n/ of the pronominal prefix to get the surface forms[nde-] for the first person, [ndo-] for the second person and [nda-] for the third person.

Consider the following examples:

18. $/^{n}$ de – ru \otimes – a \otimes – a/ NEG – cook – ASP – FV

'I don't cook'

19. $/^{n}$ do - ru \otimes - a \otimes - a/ NEG - cook - ASP - FV

'You don't cook.'

20. $/^{n}da - ru \otimes - a \otimes - a/$ NEG - cook - ASP - FV

'He/she does not cook'

The change of these forms is a phonological one which takes place because of juxtaposition of sounds. The nasal /n/ affects the consonant /t/ and changes it to a voiced stop /d/ for ease of articulation.

2.2.3 Subject and Object Markers

Ogrady, W. & Dobrovolsky, M. (Eds.) (1997:149) note that a widely attested type of verbal inflection in human language involves person; a category that typically distinguishes among the first person (the speaker), the second person (the addressee) and the third person (anyone else). Kimbeere marks for both person and number (singular and plural) of the subject in the verb. It is important to note that one cannot discuss the subject or object markers in Kimbeere without making reference to the noun classes. This is because the classification is shown by prefixes and it is based on the concordial agreement in the verb phrase.

Consider the following sentences:

21. /Arimo - ne - ma - ga - tum - a/

Subj – FOC – 3PP - TNS – build - FV

'Teachers will build'

22. /Mwarimo – ne – \mathbf{o} – ga – tum – a/

Subj – FOC – 3PS – TNS – build – FV

'A teacher will build'

In the sentence above, the prefix **[ma]** and **[o]** which marks person (3PP) and (3PS) respectively, agree both in class and number of the noun *arimũ* 'teachers' and *mwarimũ* 'teacher' respectively.

The following table shows a summary of subject markers in Kimbeere:

Person	Subject Marker		
	Singular	Plural	
First Person	[ne]	[to]	
Second Person	[0]	[mo]	
Third Person	[0]	[ma]	

Table 5: Subject markers

The constructions below show some examples of subject markers in the verb phrase:

23. /to - te - ra - kam - a/ 1PP - NEG - TNS - milk - FV

'We are not milking'

24. /ne – ma– ra – kam – a/ FOC – 3PP – TNS – milk – FV

'They are milking'

In the previous examples, the subject markers in (23) and (24) are **[to]** (**1PP**) and **[ma]** (**3PP**) respectively.

The object markers in Kimbeere are shown in the table below:

Person	Object Markers			
	Singular	Plural		
First Person	[□]	[m□]		
Second Person	[ko] /[⊗o]	[mo]		
Third Person	[mo]	[ma]		

Table 6: Object markers

The second person singular (object) morpheme has two allomorphs: [ko-] and $[\otimes o]$.

Look at the following examples:

25. $/ne - ne - ra - ko - rem - er - \Box/$ FOC - 1PS (Subj) - TNS - 2PS (Obj) - cultivate - ASP - FV
'I cultivated for you'
26. /ne – ne – ra - ⊗o – kim – er – □/ FOC – 1PS (Subj) – TNS – 2PS (Obj) – pound – ASP – FV

'I pounded for you'

Note that, the morpheme [ko-] appears when it is followed by a morpheme which starts with a voiced consonant /n/; the morpheme [\otimes o-] appears when it is followed by a morpheme which starts with a voiceless consonant /k/. The above process is dissimilation where a consonant in a prefix disagree in voicing with the first consonant of the root to which it is attached. This rule is known as Dahl's Law, after the scholar who first described it.

2.3.0 Tone

Crystal (1997:389) describes tone as a term used in phonology to refer to the distinctive pitch level of a syllable. He further observes that languages where word meaning or grammatical categories such as tense are dependent on pitch levels are known as tonal languages. Katamba (1989:186) argue that many of the world's languages are tone languages. They have morphemes realised in part by pitch modulation which is used phonemically to convey different word meaning or grammatical distinctions. This means that tone serves lexical and grammatical functions in tone languages.

Kimbeere is a tonal language since tone is used to differentiate lexical items and even grammatical categories. A word can have two meanings depending on the tonal pattern. Tone is realised on the vowel and thus, a vowel is the tone bearing unit (TBU). For example, *má* means an oath and *mà* means truth. The word *màmà* is a noun meaning 'uncle' and *mámá* is a verb meaning 'sleep'.

Kimbeere exhibits both register and contour types of tone. Register tone requires the syllable to reach a certain pitch height, that is, High (H) or Low (L). For example ngi 'house fly' has a high (H) tone and ndu 'knees' has a low (L) tone. Contour tone requires a syllable to be said with pitch movement, that is, high to low or low to high also referred to falling and rising respectively. For example, ng'ômbe 'cow' has a falling tone on the first syllable and máugá 'flowers' has a rising tone on the second syllable.

Tone contrasts have a grammatical function in Kimbeere. As can be observed from table (5), subject markers for second person singular and third person singular are identical. The speakers of Kimbeere are able to distinguish between the persons by considering tone contrasts.

Consider the following examples:

27. $/t\acute{e} - \acute{o} - r\acute{e} - \acute{a}/$ irio. NEG - 2PS - eat - FV food.

'You will not eat food.'

28. $/té - \acute{o} - ré - \grave{a}/irio.$ NEG - 3PS - eat - FV food.

'He/ she will not eat food.'

When referring to the second person singular as in example (27), there is a low tone on the morpheme marking person. On the other hand, the morpheme marking third person singular is uttered in a high tone as in (28) above.

Similarly, the object markers for second person plural and third person singular are identical and are distinguishable by tone.

Consider the examples below:

```
29. /né – ò – kò – mò – k□ □th□ □r – à/
FOC – 3PS (Subj) – TNS – 2PP (Obj) – harvest – FV
'He/she will harvest for you.'
30. /né – ò – kò – mó – k□ □th□ □r – à/
FOC – 3PS (Subj) – TNS – 3PS (Obj) – harvest – FV
'He/she will harvest for her/him.'
```

When referring to the second person plural as in example (29), there is a low tone on that morpheme. The morpheme marking third person singular is uttered in a high tone as in (30) above.

Contrastive tone is used to distinguish between immediate past tense and remote past tense. The language marks past tense using a zero morpheme which co-occurs with the perfective aspect

morpheme [-ir]; however, there is change in the tone of the last syllable $[-\Box]$ depending on whether the past is immediate or remote.

Consider the following sentences:

31. /né - mà - O - túm - ír - / FOC - 3PP - IP - sleep - PFV - FV
'They built'
32. /né - màà- O - túm - ír - ≅/ FOC - 3PP - RP - sleep - PFV - FV

'They built'

As can be seen from the examples above, the immediate past is marked by a low tone on the last syllable while the remote past is marked by a high tone on the same syllable. Thus, tone is a distinctive feature in Kimbeere.

2.4.0 Vowel Length

As already noted, there are seven short vowels and seven long vowels in Kimbeere. Vowel length is a distinctive feature in Kimbeere. Difference in vowel length brings about differences in meaning of the same word. For example, *vata* means 'need' and *vaata* means 'to sweep', *kana* means 'or' and *kaana* means 'child'.

Vowel length contrasts combines with tone contrasts to distinguish between immediate and remote past tenses. The morpheme that marks for person has a short vowel in immediate past while in remote past the same morpheme has a long vowel.

See in the following examples:

33. $/né - ma - O - vák - ír - \Box \Box /$ FOC - 3PP - IP - apply - PFV- FV

'They applied'

34. /né – m**àà** – O – vák – ír – $\Box \cong$ / FOC – 3PP – RP – apply– PFV – FV

'They applied'

In marking immediate past as in (33), the morpheme marking third person singular has a short vowel /a/, while the same morpheme in remote past has a long vowel /a:/ as in (34) thus vowel length is a distinctive feature in Kimbeere which plays a role in distinguishing between immediate past tense and remote past tense.

2.5.0 Summary

This chapter highlights the basic language features and the structure of the verb in Kimbeere. The role of tone and vowel length in marking tense has also been looked at. It has been demonstrated that Kimbeere has seven short vowels and seven short vowels. The language has eighteen consonants. Among the eighteen consonants are two glides and five pre-nasalised consonants. It has also been observed that the verbal forms are highly inflected with the verb consisting of affixes and a root. The nucleus of the verb phrase is the verb root which supports a number of prefixes and suffixes. Infinitive verbs terminate with a suffix [– a] called the 'final vowel' except in one infinitive verb $/\Delta i -e/$ 'go' which terminates with a suffix [–e]. The affirmative, subject and object markers are some of the affixes that are attached to the verb root.

It has also been noted that tone and vowel length are distinctive features in Kimbeere. Tone is used to distinguish between similar lexical items and even grammatical categories. A word can have two meanings depending on the tonal pattern. Difference in vowel length brings about differences in meaning of the same word. Finally, it has been observed that contrastive tone combines with contrastive vowel length to distinguish between immediate past and remote past.

CHAPTER THREE

TENSE

3.0.0 Introduction

This chapter investigates morphological realization of tense in the Kimbeere verb phrase. As already noted, Maringah (1987:77) asserts that the Kimbeere verb consists of affixes and a root. The affixes are either prefixed or suffixed to the verb root and they occur systematically. The prefixes have a fixed order but the suffixes are not arranged in any order and may change positions depending on their co-occurrence. This chapter identifies the inflectional forms for tense and establishes how the forms are distributed in the verb phrase. The interaction of tense and aspect in the verb is also investigated.

The role of tone and vowel length in distinguishing between immediate and remote past tense is also studied in this chapter. Finally, verb movement for feature checking of tense within the feature checking theory of the Minimalist Program will be demonstrated.

3.1.0 General overview of Tense

According to Trask (1999:207), every language is capable of expressing limitless distinctions of time. If a language builds these time distinctions in its grammar; then it has the category of tense. Tense is therefore grammaticalization of time. An important aspect of tense is that it relates the time of the action, the event or state of affairs to the time of utterance: the time of utterance being now. Tense is therefore a deictic category. That is, it relates to the point from where one decides that the system works.

Tense distinction varies cross linguistically; some languages have two distinctions; past and nonpast while others have more than two; past, present and future. Comrie (1985:2) gives a time line as a diagrammatic representation of time to account for tense in human languages. This is shown in the following diagram:

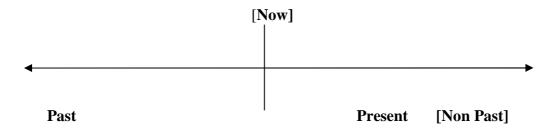


Fig. 4: Representation of time. Adapted from Comrie (1985:2)

There are certain languages which have far more complicated tense distinctions in that they grammaticalize the measurement of distance from the temporal reference point. Such languages are said to have metrical tense.

Nurse, D. & Philppson, G. (Ed.) (2003:92) note that most tense and aspect encoding in Bantu languages involves a combination of three main components; inflection of the verb, tone and the use of verbs additional to, and preceding, the main verb. Tense is also marked by use of adverbials such as yesterday, tomorrow, today, next year and so on.

3.2.0 Tense in Kimbeere

Like most Bantu languages, Kimbeere tense encoding involves the combination of three main components: inflection of verbs, tone and optional use of temporal adverbials with respect to discourse of conversation. The language has a tense system of three basic tenses: past, present and future. The language further subdivides its time line according to its understanding of the time frame. This results in five more tenses. The past is subdivided into three distinct past tenses: immediate, recent and remote tenses. The future tense is subdivided into two distinct tenses: immediate and distant future tenses.

The table below shows time frames in relation to the tenses:

Tense	Time Frame
Immediate past	A few moments ago or earlier in the same day.
Recent past	The day before today (yesterday).
Remote past	Sometimes in the past earlier than yesterday.
Present	Now.
Immediate future	Immediately after the present moment.
Distant future	From the day after today (tomorrow) and afterwards.

Table7: Kimbeere tenses and their corresponding time frames.

3.3.0 The Past Tense

Comrie (1985:36) defines past tense as the "... location of the situation prior to the present moment." Tense is a category that encodes the time of an event to the moment of speaking. Thus, the past tense is used with verbs denoting an event that occurs prior to the moment of speaking. Kimbeere places the past tense in three locations. An action in the past may be seen as having taken place in the **immediate**, **recent or remote** past depending on when the action took place and how long ago it was from the time of speaking.

3.3.1 Immediate Past

Immediate past tense shows an action that took place some moments before the time of utterance or earlier in the same day.

Consider the following example:

The immediate past tense is marked by a zero morpheme which co-occurs with the perfective aspect morpheme [– ir] suffixed to the verb root. There is also a distinctive low tone on the last syllable of the verb. Under the Minimalist Program, the morpho-syntactic realization of aspect by the suffixation of morpheme [– ir] necessitates movement to the aspect (ASP) head for feature checking, therefore an ASP head to which the verb will be moved to feature check for appropriate aspect in the structure building process is created to enable the derivation of correct and acceptable sentences. The Principle of Full Interpretation (PFI) under the Minimalist Program demands that heads are built only for overtly marked morphemes to provide them with room for feature checking. Tone is a feature that occurs after spell out in the PF domain. During spell-out, the principle of Procrastinate guides movement of features by delaying movement as much as possible since covert movement is taken to be economical the overt movement. Tone feature is checked covertly during spell-out and thus a tone head is not created. Consequently, the verb in example (35) above has morphemes that mark focus and subject agreement and heads will be created to enable feature checking for these features.

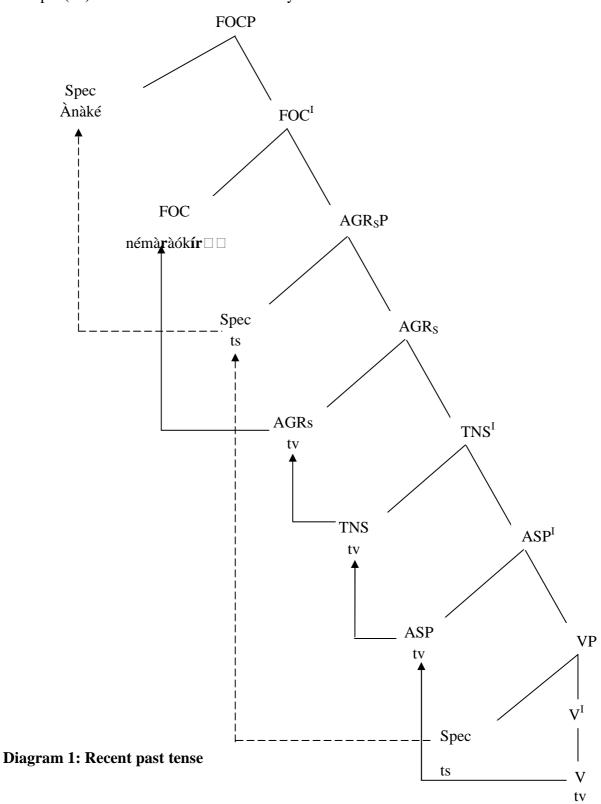
3.3.2 Recent Past

Recent past tense locates an action that took place the day before today (yesterday).

For example,

The recent past tense is marked by the morpheme [ra–] which co-occurs with perfective aspect suffix [– ir]. Under the Minimalist Program, the morpho-syntactic realization of aspect by the morpheme [–ir], necessitates movement to the aspect (ASP) head for feature checking. ASP head to which the verb will be moved to feature check for appropriate aspect in the structure building process is created to enable the derivation of correct and acceptable sentences. The presence of the morpheme [ra–] which marks for tense necessitates movement to the TNS head for feature checking and so a TNS head will be created. The verb also has morphemes that mark focus and subject agreement and heads will be created to enable feature checking for these features.

The movement of the verb is illustrated in the following tree diagram:



Example (36) /Ànàké némà**r**àók**ír** \Box / 'Boys came'

From diagram (1), it can be observed that the verb /némàràókír \Box / 'come' undergoes several movements. First, it is moved from its base position in the VP to (ASP) head to feature check for appropriate aspect (perfective), then the (TNS) head to feature check for appropriate tense (recent past) and to the AGRs head to feature check for agreement with the subject *anake* 'boys' and lastly to the FOC head. The subject *anake* 'boys' is moved from the specifier head in the VP to the specifier head of the AGRsP to case check for nominative case and finally lands at the specifier position of the FOCP.

3.3.3 Remote Past

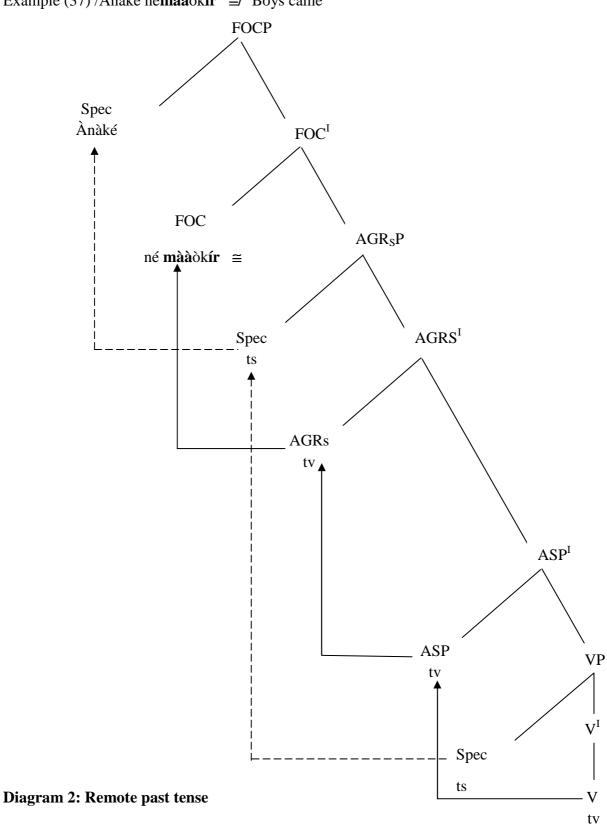
Remote past tense locates an action that took place sometimes earlier than yesterday. For example,

The remote past tense is marked by a zero morpheme which co-occurs with perfective aspect morpheme [– ir] suffixed to the verb root. The distinction between immediate and remote past tenses is solely marked by contrasts of tone and vowel length as can be seen in examples (35) and (37). While immediate past tense is marked by a low tone on the last syllable and a short vowel on the morpheme marking person, remote past tense is marked by a high tone on the last syllable and a long vowel on the morpheme marking person.

In the Minimalist Program, the morpho-syntactic realization of aspect by the suffixation of morpheme [– ir] necessitates movement to the aspect (ASP) head for feature checking. As already mentioned, distinction between the immediate past tense and remote past tense is marked by tone; tone is a feature that occurs after spell out in the PF domain. This feature is checked

covertly and thus a tone head is not created in line with the Principle of Full Interpretation (PFI) which demands that heads are built only for overtly marked morphemes to provide them with room for feature checking. The verb has morphemes that mark focus and subject agreement and heads will be created to enable feature checking for these features.

Example (37) can be represented by the following tree diagram:



Example (37) /Ànàké né**màà**òk**ír ≅/** 'Boys came'

The previous diagram shows that the verb /né**màà**òkír \cong / 'come' undergoes three movements; First, it is moved from its base position in the VP to tense ASP head to feature check for appropriate aspect (perfective), then to AGRs head to feature check for agreement with the subject *anake* 'boys' and lastly to the FOC head which it its final landing site. The subject *anake* 'boys' is moved from the specifier head in the VP to the specifier position of the AGRsP to case check for nominative case and finally lands at the specifier position of the FOCP.

3.4.0 The Present Tense

The present tense locates an event at the present moment. Comrie (1985:36) defines the present tense as "... coincidence of the time of the situation and the present moment." In Kimbeere the expression of present tense is marked by the prefix [–ra] as can be seen from the examples below:

38. /Àciàrí – mà – té – rà – Δ□ □ m – à / Subj – 3PP – NEG – PT– read – FV
'The parents are not reading.'
39. /Àciàrí – né – mà – rà – Δ□ □ m – à / Subj – FOC – 3PP – PT – sing – FV

'Parents are reading.'

As can be observed from example (38) and (39), the present tense in Kimbeere is marked by the morpheme [-ra]. In understanding the present tense, context of the situation and use of the time adverbial *riu* 'now' plays a role in indicating that the time referred to by the event is present.

The Minimalist Program only allows the creation of heads for feature checking by overt morphemes, thus the creation for tense head will be necessitated for examples (38) and (39) since

tense is overtly marked. The presence of the morpheme [ra–] which marks for tense necessitates movement to the TNS head for feature checking and so a TNS head will be created.

A tree diagram representation of example (38) is as follows:

Example (38) /Àciàrí màté**rà\Delta** \Box \Box mà / 'Parents are not reading'

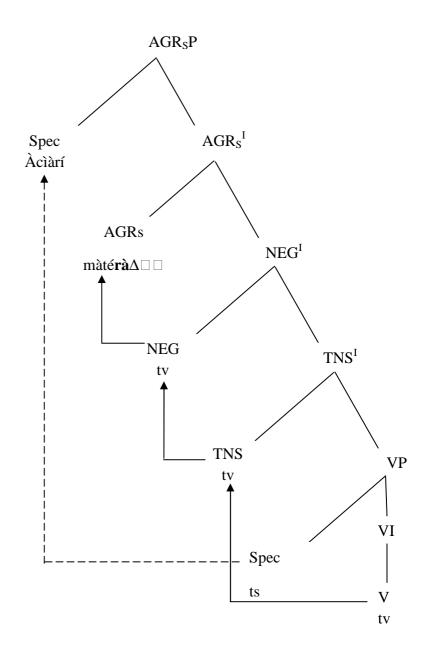


Diagram 3: Present tense

The verb /màté $\dot{r}a\Delta \Box \Box m\dot{a}$ / 'read' moves to the TNS head to feature check for appropriate tense (present) and to the NEG head to feature check for negation. Then it moves to the AGRs head to feature check for agreement with the subject *aciari* 'parents'. The subject *aciari* 'parents' is moved from the specifier head of the VP to the specifier position of the AGRsP where it case checks for the nominative case.

3.5.0 The Future Tense

The future tense is a verb form that marks an event or an action described by the verb as not having happened yet, but expected to happen in the time to come. Comrie (1985:36) defines the future tense "... location of the situation after the present moment."The future tense in Kimbeere is divided into two: immediate and distant future.

3.5.1 Immediate future

Immediate future locates an action or an event that takes place immediately after the present moment.

Look at the following examples:

40. /Stefan - ne - o - ⊗o - tar - a/ Subj - FOC - 3PS - IF - count - FV 'Stefan will count.'
41. /Stefan - ne - o - ko - riv - a/ Subj - FOC - 3PS - IF - beat - FV

'Stefan will beat.'

As can be observed from examples (40) and (41), the immediate future is marked by morphemes $[\otimes o-]$ and [ko-] which are prefixed to the verb root. Dahl's Law (discussed in chapter one,

section 2.2.3) applies in future tense markers whereby a consonant in a prefix disagree in voicing with the first consonant of the root to which it is attached.

3.5.2 Distant future

Distant future locates an action or an event that takes place from the day after today (tomorrow) and after.

Consider the examples below:

- 42. /Stefan ne o $\otimes \mathbf{a}$ tar a/ Subj – FOC – 3PS – **DF** – count - FV 'Stefan will count.'
- 43. /Stefan ne o ka riv a/
 Subj FOC 3PS DF beat FV
 'Stefan will beat.'

The distant future is marked by the morphemes $[\otimes a-]$ and [ka-] which are prefixed to the verb root. The morpho-syntactic realization of future tense by the affixation of the morpheme $[\otimes a-]$ and [ka-] necessitates movement to the TNS head for feature checking. A TNS head to which the verb will be moved to feature check for appropriate tense in the structure building process is created.

Sentence (43) is represented by the following tree diagram:

Example (43) /Stefan neokariva/ 'Stefan will beat'

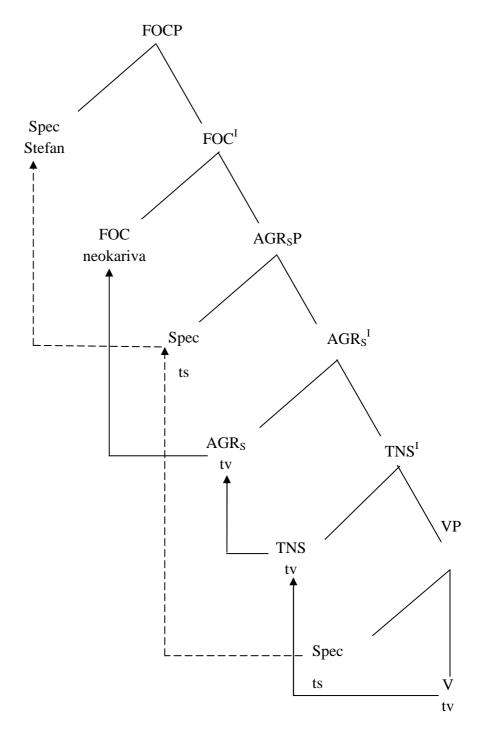


Diagram 4: Distant future tense

The verb /neokariva/ 'beat' is moved from its base position in the VP to the TNS head to feature check for appropriate tense (distant future), then to the AGRs head to feature check for agreement with the subject Stefan and lastly to the FOC head where it feature checks for affirmative. The subject Stefan is moved from the specifier head in the VP to the specifier position of the AGRsP to case check for nominative case and finally lands at the specifier position of the FOCP.

The morphological realization of tense in the Kimbeere verb phrase can be summarized as shown in table (8) below:

Tense	Division	Co- occurrence	Tense morpheme	Example	Gloss
Past	Immediate	Perfective aspect and tone	[O–]	né– mà – O – ók – ír – / FOC – 3PP – IP – come – PFV – FV	They came
	Recent	Perfective aspect	[ra–]	/ne-ma - ra -ok - ir - \Box / FOC - 3PP - RCP -come - PFV - FV	They came
	Remote	Perfective aspect and tone	[O-]	né – màà – O – δk – ír – \cong / FOC – 3PP – RP – come – PFV – FV	They came
Present			[ra –]	/ne – ma – ra – th \Box m – a/ FOC – 3PP – PT – sing – FV	They are reading
Future	Immediate		[⊗o–] and [ko–]	/ne - o - $\bigotimes o$ - tar - a/ FOC- 3PS - IF - count - FV /ne - o - \mathbf{ko} - riv - a/ FOC - 3PS - IF - beat -	He will count He will beat
	Distant		[⊗a–] and [ka–]	FV /ne - o - $\bigotimes \mathbf{a}$ - tar - a/ FOC - 3PS - DF - count - FV /ne - o - \mathbf{ka} - riv - a/ FOC - 3PS - DF - beat - FV	

Table 8: Tense Markers

Table (8) shows that tense markers are prefixed to the verb root and they occur as zero morphemes in immediate and remote past tenses. This finding contrasts with Maringah(1987:82) who argued that past tense is marked by the suffix $[-ir\Box]$ which is found in all levels of the past tense. The morpheme [-ir] is an aspect marker rather than a tense marker and $[\Box]$ is the final vowel.

3.6.0 Summary

This chapter has investigated tense in Kimbeere and its morphological realization in the verb phrase. From the data analyzed, it has been observed that Kimbeere has a tense system of three basic tenses: past, present and future. The language further subdivides its time line according to its understanding of the time frame. This results in five more tenses. The past is further subdivided into three distinct past tenses: immediate, recent and remote past tenses. The future tense is subdivided into two distinct tenses: immediate and distant future tenses. Kimbeere marks its tense morphologically and by suprafixation of grammatical tone. Distinctive vowel length also plays a role in distinguishing between immediate and remote past tenses.

Immediate past tense is marked by a zero morpheme which co-occurs with the perfective aspect morpheme [-ir] suffixed to the verb root. Recent past tense is marked by the morpheme [ra–] which co-occurs with perfective aspect marked by the suffix [-ir]. Remote past tense is marked by a zero morpheme which co-occurs with the perfective aspect morpheme [-ir] suffixed to the verb root. The distinction between immediate and remote past tenses is solely marked by tone and vowel length contrasts. Immediate past tense is marked by a low tone on the last syllable of the verb while remote past tense is marked by a high tone on the same morpheme and a notable distinctive vowel length on the morpheme marking person. Present tense is by the prefix [ra–]

alongside context of the situation and the use of time adverbial *riu* 'now'. The immediate future tense is marked by prefixation of the morpheme $[\otimes o-]$ which has an allomorph [ko-]. The distant future tense is marked by prefixation of the morpheme $[\otimes a-]$ which has an allomorph [ka-]. It has also been noted that Dahl's Law apply in future tense marking.

Finally, it has been demonstrated that morphological realizations of tense marking morphemes necessitate the creation of relevant heads. The verb is moved to the heads created for feature checking in the structure building process and subjects are raised to the specifier positions of agreement subject phrase for case checking.

CHAPTER FOUR

ASPECT

4.0.0 Introduction

This chapter will discuss the realization of aspect in Kimbeere verb phrase. Although both tense and aspect are concerned with time, they are concerned with time in different ways. Aspect deals with different representations of time within an event while tense deals with the representations of the time that contains the event. Trask (1999:16) concludes that aspect and tense can be distinguished by carefully studying the morphology of a language. This chapter will investigate independent occurrences of aspect without tense as well as co-occurrences of tense and aspect within the same verb phrase. Various distinctions of aspect will be analysed within the Feature Checking theory of Minimalist Program.

4.1.0 General Overview of Aspect

According to Lyons, (1977:705) "... whereas tense is a deictic category which involves explicit or implicit reference to the time of utterance, aspect is non-deictic." Aspect is not concerned with location of an event, action or state of affairs in time therefore it is not relative to the time of utterance. Aspect differs with tense in the sense that it concerns situation – internal time while tense involves situation – external time.

Comrie (1976:3) gives the definition of aspect as "...different ways of viewing the internal temporal constituency of a situation." Aspect deals with the internal temporal shape of events or states. The internal temporal constituency of a situation can be viewed as either complete or incomplete.

Thus, Comrie suggests the following aspectual oppositions:

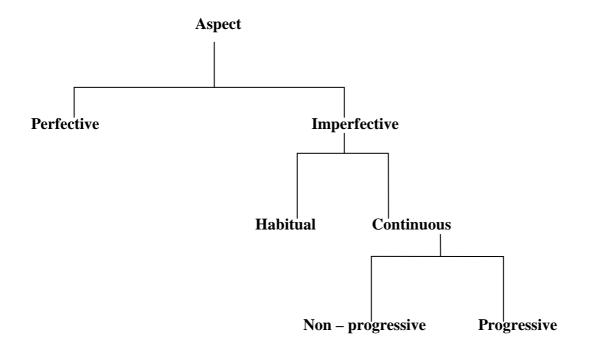


Figure 5: Classification of Aspectual Categories. Adapted from Comrie (1976:25)

Aspect can therefore be considered as the manner in which a verbal action is experienced or regarded (for example as completed or in progress). The perfective aspect describes events which are complete at the time of speaking while the imperfective aspect describes events which are in progress and not complete at the time of speaking. Imperfective aspect is the cover term for both continuous and habitual aspects.

4.2.0 Aspect in Kimbeere

Tense and aspect are so closely related that the difference between them is difficult to establish. Aspect is sometimes discussed under tense which is a more familiar term. Indeed, Maringah (1987) undertook a comparative study of the morphophonology of Kiswahili and Kimbeere verbal extensions and discusses the tense category without the mention of aspect as one of the verbal extensions in Kimbeere. This study will demonstrate that aspect is a more prominent category in Kimbeere as compared to tense. In Kimbeere, an event can be described as either being complete or incomplete. The aspectual system is divided in to four major classes: the perfective aspect, the perfect aspect, the imperfective aspect and the repetitive aspect. Complete events are expressed using the perfective and perfect aspects and incomplete events are expressed using the imperfective aspect. The imperfective aspect is further subdivided into progressive and habitual aspects. Repetitive aspect is used to indicate both complete and incomplete events.

These aspects can be represented as shown in figure 6 below:

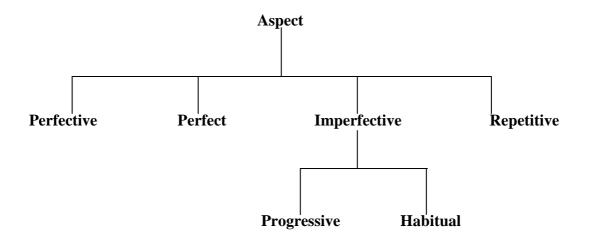


Figure 6: Kimbeere Aspectual Categories

4.3.0 Perfective Aspect

The perfective aspect is used to contrast with imperfective aspect and also to represent a situation as a single bounded whole, without regard to its constituent phases. Comrie (1976:18) argues that in the perfective aspect, the situation is viewed in its entirety. A frequent characterization of perfectivity is that it indicates a completed action. An event in perfective aspect is viewed as terminated or completed at the time of speaking. This means that the perfective aspect has the implicit meaning of past tense.

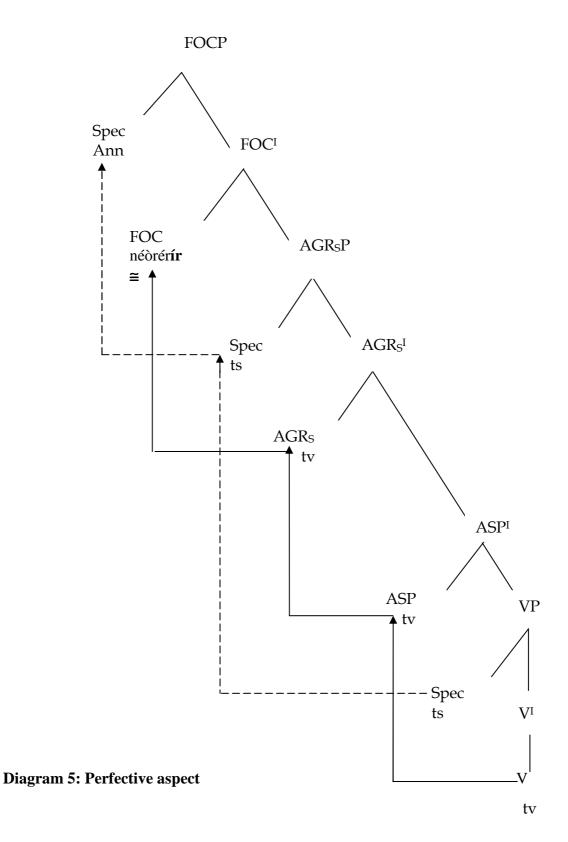
Kimbeere marks the perfective aspect with the morpheme [–ir] suffixed to the verb root and it co-occurs with past tense. Consider the following examples:

44. /Ann - né - ô - O - rér - ír - /Subj - FOC - 3PS - IP - cry - PFV - FV 'Ann cried' 45. $/Ann - né - wàà - O - rér - ír - \cong /$ Subj - FOC - 3PS - RP - cry - PFV - FV 'Ann cried'

As can be observed from the examples above, the perfective aspect is marked by the morpheme [-ir] which co-occurs with the immediate past tense as in example (44) and remote past tense as in example (45). The two tenses are distinguished by tone contrasts in the last syllable and distinctive vowel length on the morpheme marking person. It is should also be noted that the morpheme marking third person singular has been affected by a phonological process of glide formation (refer to chapter 2 section 2.1.2). The morpheme for third person singular /o/ has turned into a glide /w/ and has taken the long vowel /a: / to mark remote past tense.

In the Minimalist Program, the occurrence of an aspect marking morpheme will necessitate the creation of an aspect (ASP) head in which the appropriate aspectual features will be checked for correct derivation of the verb phrase in the structure building process. As it has already been noted, the perfective aspect implies that the event is in the past tense. Therefore, even if there is a zero morph for tense, the verbs are understood to be in the immediate or remote past. The distinction between the two tenses is made by tone contrasts on the last morpheme. Example (44) is represented in the following tree diagram:

Example (44): /Ann néòrérír ≅/ 'Ann cried'



The previous diagram shows that the verb /néòrérír / 'cried' undergoes three movements. First, it is moved from its base position in the VP to tense ASP head to feature check for appropriate aspect (perfective), then to AGRs head to feature check for agreement with the subject Ann and lastly to the FOC head which it its final landing site. The subject Ann is moved from the specifier head in the VP to the specifier position of the AGRsP to case check for nominative case and finally lands at the specifier position of the FOCP.

4.4.0 The Perfect Aspect

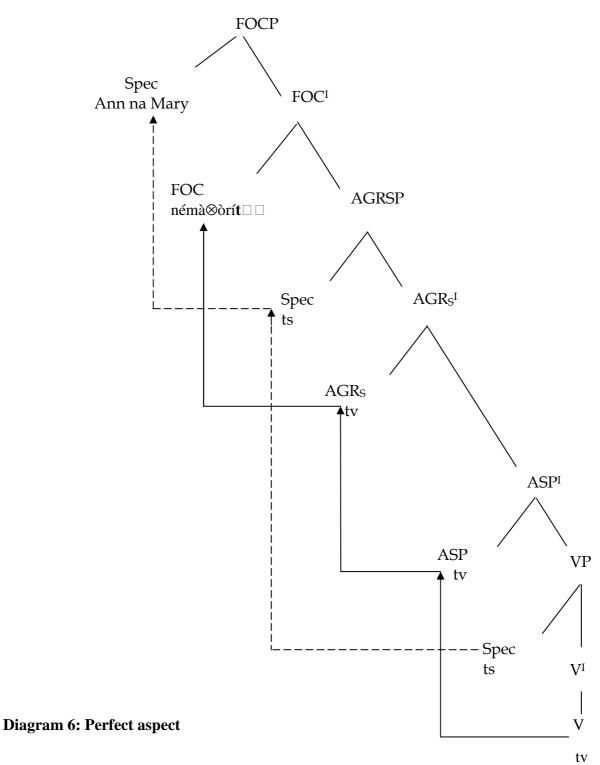
The perfect aspect is also referred to the anterior aspect. It refers to a past situation where the event is seen as having some present relevance or consequence (for dynamic verbs) or to a situation which started in the past and continues into the present (for stative verbs). The perfect aspect combines with tense to bring out the speakers meaning.

In Kimbeere, the perfect aspect is marked by the suffixation the morpheme [-it] to the verb root and it co-occurs with the past tense.

Consider the following example:

46. /Ann na Mary – né – mà – O – ⊗òr – ít – □□/
Subj – FOC – 3PP – IP – bought – PF – FV
'Ann and Mary have bought'

The Minimalist Program only allows the creation of heads for feature checking by overt morphemes, thus the creation for tense head will not be necessitated for example (46) since tense is not overtly marked. The presence of the morpheme [–it] which marks for aspect necessitates movement to the ASP head for feature checking and so an ASP head will be created. A tree diagram representation of example (46) is as follows.



Example (46) /Ann na Mary némà \otimes òrít $\Box \Box$ / 'Ann and Mary have bought'

The verb /nema \otimes orit \Box / 'bought' undergoes three movements. First, it is moved from its base position in the VP to tense ASP head to feature check for appropriate aspect (perfect), then it moves to AGRs head to feature check for agreement with the subjects Ann and Mary and lastly to the FOC head to feature check focus. The subjects Ann and Mary are moved from the specifier head in the VP to the specifier positin of the AGRsP to case check for nominative case and finally lands at the specifier position of the FOCP.

4.5.0 Imperfective Aspect

The imperfective aspect denotes the internal constituency of events and represents the middle phase of events with the beginning and the end left unspecified. Comrie (1976:24) explains imperfectivity as "...explicit reference to the internal temporal structure of a situation, viewing the situation from within. Imperfective aspect contrasts with perfective aspect in that a situation is regarded as incomplete at the time of speaking.

Kimbeere marks for the imperfective aspect with the morpheme $[-a\otimes]$ which is suffixed to the verb root. The imperfective aspect co-occurs with tense to denote different time references. The language classifies the imperfective aspect in to two divisions: the progressive and the habitual and the aspects.

4.5.1 The Progressive Aspect

The progressive aspect is used when a speaker wishes to express a past, present of a future event or situation that is viewed as ongoing and it is associated with dynamic verbs rather than stative verbs. In Kimbeere, the progressive aspect co-occurs with various tenses to bring out the speakers meaning. It can therefore be sub-divided in to three: past, present and future progressive aspects.

4.5.1.0 The Past Progressive Aspect

The past progressive aspect refers to events that were going on in the past at the time of reference. The past progressive aspect is marked by co-occurrence of the past tense morpheme [ko-] with the imperfective aspect morpheme $[-a\otimes]$.

Consider the example below:

```
47. /ne – to – \mathbf{ko} – rut – \mathbf{a}\otimes – a/
FOC – 1PP – IF – remove – IMF – FV
'We were removing'
```

In (47) above, the prefix [ko-] co-occurs with the suffix $[-a\otimes]$ to bring the meaning of past progressive aspect.

4.5.1.1 The Present Progressive Aspect

The present progressive aspect denotes an action that is in progress at the time of speaking. It is marked by the morpheme [-ra] which is prefixed to the verb root.

See the example below:

```
48. /ne – to – ra – rut – a/
FOC – 1PP – PPA – remove – FV
'We are removing'
```

As already noted in chapter three section (3.4.0), present tense is also marked by the morpheme [-ra]. Thus, the verbal structures for present tense and present progressive aspect are orthographically written the same. Context and use of time adverbials play a role in

disambiguating tense and aspect marked by the same morpheme. For instance, one would say /netoraruta/ *riu* 'we are removing now' to indicate the time referred to is present. While /netoraruta/ *rucio* 'we are removing tomorrow' or /netoraruta/ *ivyai* 'we are removing in the evening' indicates that the event being referred to is in the progressive aspect. In the absence of time adverbials, context of the situation plays a major role in making the difference between the two.

4.5.1.2 The Future Progressive Aspect

The future progressive aspect refers to an event that will be taking place in the future and will continue for some time. In Kimbeere, the future progressive aspect is marked by the imperfective morpheme $[-a\otimes]$ which co-occurs with the distance future morpheme [ka-] or its allomorph $[-\otimes a]$.

See the example below:

49. /Ann na Mary – ne – ma – ka – rut – a⊗ – a/
Subj – FOC – 3PP – DF – remove – IMF – FV
'Ann and Mary will be removing'

In example (49), the prefix [ka–] co-occurs with the suffix $[-a\otimes]$ to bring the meaning of future progressive aspect.

In the Minimalist Program, example (49) has a morphological realization of aspect by the suffixation of morpheme $[-a\otimes]$ thereby necessitating the creation of aspect (ASP) head for feature checking. There is also a realization of future tense by the affixation of the morpheme [ka-] which necessitates movement to the TNS head for feature checking. A TNS head to which the verb will be moved to feature check for appropriate tense in the structure building process is created.

The tree diagram for (49) is as follows:

Example (49) /Ann na Mary nemakaruta⊗a/ 'Ann and Mary will be removing.'

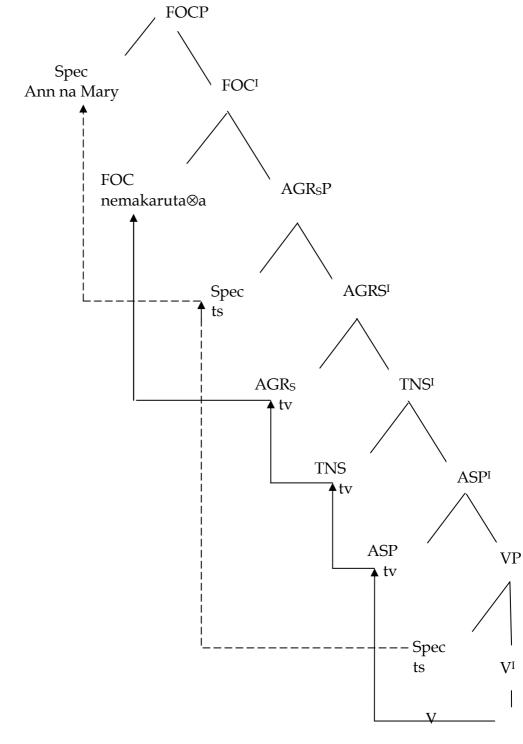


Diagram 7: Future progressive aspect

The verb /nema**ka**ruta⊗a/ 'remove' from the example (49) moves to the ASP head to feature check for appropriate aspect (imperfective) and to the TNS head to feature check for correct tense (distant future). Then it moves to the AGRs head to feature check for agreement with the subjects Ann and Mary. The subjects Ann and Mary are moved from the specifier head of the VP to the specifier position of the AGRsP where they case check for the nominative case and lastly lands on the focus position.

4.5.2 Habitual Aspect

Habitual aspect expresses an event that happens at regular intervals from time to time though it may not necessarily be taking place now. This aspect describes an action that is done as a habit or on regular basis. It is also called 'timeless habitual'. Comrie (1976:27- 8) observes that habitual aspect describes a situation which is characteristic of an extended period of time, so extended that the situation referred to is viewed not as an incidental property of a moment, but, precisely, as a characteristic feature of a whole period. Habitual aspect therefore, refers to an event that occurs usually, normally or always.

Kimbeere marks the habitual aspect by the imperfective aspect suffix $[-a\otimes]$ which co-occurs with either past, present or the future tenses.

4.5.2.0 The Past Habitual Aspect

Past habitual aspect refers to an event that used to happen in the past at regular intervals or as a habit. The beginning and the end of the event in past habitual aspect is not explicit.

See the example below:

50. /Peter - ne - waa - O - twar - a \otimes - a/

Subj - FOC - 3PS - RP - drive - IMF - FV

'Peter used to drive.'

In example (50), the past habitual aspect is marked by co-occurrence of remote past tense with the imperfective aspect. The past tense is marked by a zero morpheme while the imperfective aspect is marked by the suffix $[-a\otimes]$.

4.5.2.1 The Present Habitual Aspect

Present habitual aspect describes events that are happening in the present at regular intervals and their beginning and end is not explicit.

51. /Peter – ne – o – O– twar –
$$a\otimes$$
 – a/
Subj – FOC – 3PS – PT – drive – IMF – FV
'Peter drives'

The present habitual aspect is marked by co-occurrence of the present tense marked by a zero morpheme with the imperfective aspect morpheme $[-a\otimes]$.

4.5.2.2 The Future Habitual Aspect

Future habitual aspect refers to an event that will happen in the future at regular intervals or as a habit. The beginning and the end of the event in future habitual aspect is not explicit. In Kimbeere, the future habitual aspect is marked by the imperfective morpheme $[-a\otimes]$ which co-occurs with the distance future morpheme [ka-] or $[-\otimes a]$.

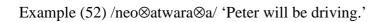
See the following example:

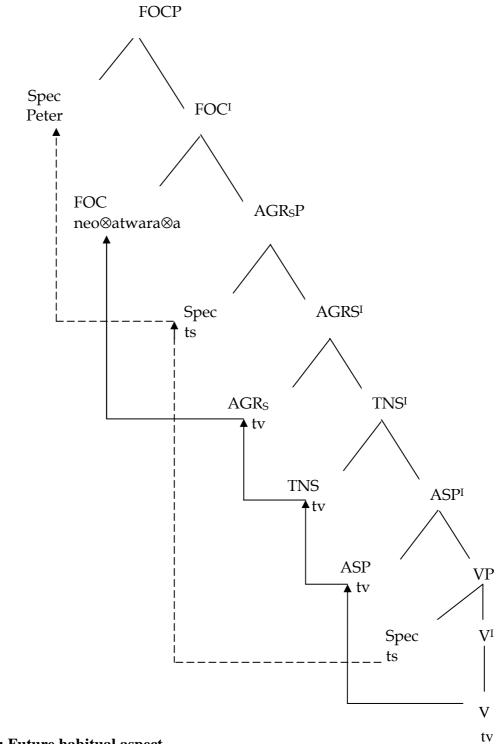
52. /Peter – ne – o –
$$\otimes$$
a – twar – a \otimes – a/
Subj – FOC – 3PS – DF – drive – IMF – FV

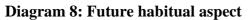
'Peter will be driving'

In the Minimalist Program, example (52) has a morphological realization of aspect by the suffixation of morpheme $[-a\otimes]$ thereby necessitating the creation of aspect (ASP) head for feature checking. There is also a realization of future tense by the affixation of the morpheme $[\otimes a-]$ which necessitates movement to the TNS head for feature checking. A TNS head to which the verb will be moved to feature check for appropriate tense in the structure building process is created.

The tree diagram for (52) is as follows:







The verb /neo⊗atwara⊗a/ 'drive' from the example (52) moves to the ASP head to feature check for appropriate aspect (imperfective) and to the TNS head to feature check for correct tense (distant future). Then it moves to the AGRs head to feature check for agreement with the subject. The subject is moved from the specifier head of the VP to the specifier position of the AGRsP where it case checks for the nominative case and lastly lands on the focus position.

4.6.0 Repetitive Aspect

Repetitive aspect is closely related to the habitual aspect in that it denotes an action that is done on and off. The action is seen as a series of repeated events or occurrences. According to Crystal (1997:325), reduplication is a process of repetition whereby the form of a prefix or suffix reflects certain phonological characteristics of the root. Repetitive aspect is also referred to as iterative or frequentative aspect.

In Kimbeere, repetitive aspect is marked by complete reduplication of the verb stem or the verb root. Reduplication is a morphological process that involves addition of material just like affixation, but the material added is determined by the stem or root. This aspect is realised in the past, present and future tenses and it co-occurs with other aspects like perfective, perfect and imperfective aspects.

4.6.1 The Past Repetitive Aspect

Past repetitive aspect co-occurs with perfective aspect to show an action that was repeatedly done in the past and it was complete at the time of speaking. See the example below:

53. /Nancy – ne – waa– O – sora – sor – ir – □/
Subj – FOC– 3PS – RP – Vrr – PFV – FV
'Nancy had drawn repeatedly'

From example (53) above, the verb stem /sora/ 'draw' is repeated in the verb phrase to bring out the repetitive aspect. There is also occurrence of tense marked by a zero morpheme and the perfective aspect morpheme [-ir].

4.6.2 The Present Repetitive Aspect

Present repetitive is used to show an action that is being done repeatedly at the time of speaking. The present tense co-occurs with verb reduplication to express the action that is repeated.

See the following example:

54. / Nancy – ne – o – ra – sora – sora/
Subj – FOC – 3PS – PT – Vrr.
'Nancy is drawing repeatedly.'

4.6.3 The Future Repetitive Aspect

Future repetitive aspect co-occurs with the imperfective aspect to show an action that will be done repeatedly in the future and the beginning and the end of the action is not explicit.

See the example below:

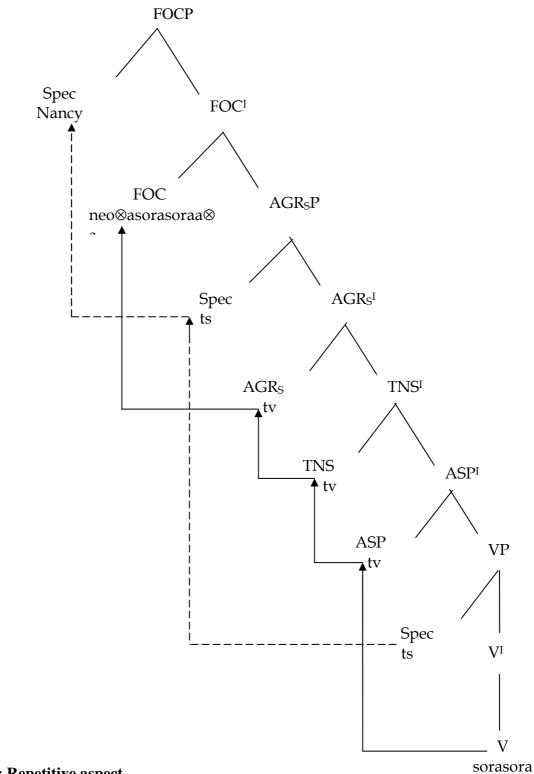
55. /Nancy – ne – o– \otimes a – sora – sora – a \otimes – a/ Subj - FOC – 3PS – DF – Vrr – ASP – FV 'She will draw repeatedly'

From example (55) above, the verb stem /sora/ 'draw' is repeated in the verb phrase to bring out the repetitive aspect. There is also occurrence of distant future tense marked by the morpheme $[-\otimes a]$ and the imperfective aspect morpheme $[-a\otimes]$.

In the Minimalist Program, example (55) has a morphological realization of aspect by the suffixation of morpheme $[-a\otimes]$ thereby necessitating the creation of aspect (ASP) head for

feature checking. The reduplicated stem does not realize a head because lexical properties of a stem do not motivate verb movement and are assumed to remain in the verb position of the VP. There is also a realization of future tense by the affixation of the morpheme [\otimes a–] which necessitates movement to the TNS head for feature checking. A TNS head to which the verb will be moved to feature check for appropriate tense in the structure building process is created.

The tree diagram for (55) is as follows:



Example (55) / Nancy neo@asorasoraa@a/ 'Nancy will be drawing repeatedly.'



The verb/neo⊗asorasora⊗a/'draw' from the example (55) moves to the ASP head to feature check for appropriate aspect (imperfective) and to the TNS head to feature check for correct tense (distant future). Then it moves to the AGRs head to feature check for agreement with the subject. The subjectNancy is moved from the specifier head of the VP to the specifier position of the AGRsP where they case check for the nominative case and lastly lands on focus positon. The morphological realization of aspect in the Kimbeere verb phrase can be summarized as

shown in table (9) below:

Aspect	Division	Sub- division	Co- occurrence	Aspect morpheme	Example	Gloss
Perfective			Past tense	[-ir]	/netorutir□/	we removed
Perfect			Past tense	[-it]	/netorutit□/	we have removed
Imperfecti ve	Progressive	Past progressive	Past tense	[-a⊗]	/netokoruta⊗a/	we were removing
		Present progressive		[ra-]	/netoraruta/	we are removing
		Future progressive	Future tense	[-a⊗]	/netokaruta⊗a/	we will be removing
	Habitual	Past habitual	Past tense	[-a⊗]	/netwa:ruta⊗a/	we were removing
		Present habitual	Present tense	[-a⊗]	/netoruta⊗a/	we remove
		Future habitual	Future tense	[-a⊗]	/netokaruta⊗a/	we will be removing
Repetitive			Past tense	[rutaruta]	/netw:arutaruta ⊗a/	we were removing repeatedly

Table 9: Aspect Markers

4.7.0 Summary

This chapter has investigated aspect in Kimbeere and its morphological realization in the verb phrase. From the data analyzed, it has been observed that Kimbeere has an aspect system of four basic aspects: perfective, perfect, imperfective and repetitive aspects. An event in perfective and perfect aspects is viewed as terminated or completed at the time of speaking. This means that these two aspects have an implicit meaning of past tense and therefore co-occur with the past tense. Imperfective aspect contrasts with perfective aspect in that a situation is regarded as incomplete at the time of utterance. This aspect is further subdivided into two aspects: progressive and habitual and aspects. The progressive aspect is used when a speaker wishes to express a past, present of a future event or situation that is viewed as ongoing and it is associated with dynamic verbs rather than stative verbs. Habitual aspect expresses an event that happens at regular intervals from time to time though it may not necessarily be taking place now. This aspect describes an action that is done as a habit or on regular basis. These three imperfective aspect is closely related to the habitual aspect in that it denotes an action that is done on and off. The action is seen as a series of repeated events or occurrences.

Perfective aspect is marked by the suffix [-ir] which co-occurs with the past tense zero morpheme. Perfect aspect is marked by the suffix [-it] which co-occurs with the past tense zero morpheme. Imperfective aspect is marked by the suffix [-a \otimes]. Progressive aspect is marked by the suffix [-a \otimes] and it co-occurs with different tenses to indicate different time references. Habitual aspect is marked by the suffix [-a \otimes] and it co-occurs with different tenses to indicate different tenses.

the verb root and co- occurs with different tenses and aspects to indicate different time references.

The study has also demonstrated the co-occurrence of two different aspects in the same verb which are grammatically licensed by the language and realise a head for feature checking.

Finally, it has been noted that Kimbeere licences the aspect category and morphological realizations of aspect marking morphemes necessitate the creation of relevant heads. The morpho-syntax aspect of the language justifies the analysis of aspect within the Minimalist Program. The verb is moved to the heads created to feature check interpretable aspectual features for correct grammatical sentence derivation. Other features besides aspectual features necessitate verb movement for feature checking.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Summary

The main purpose of this study is to analyse morphosyntactic realizations of tense and aspect in the Kimbeere verb phrase. Kimbeere, like many other Bantu languages is agglutinative. The verb inflects by adding meaningful morphemes to the root which may be either prefixes or suffixes. The inflections carry various grammatical categories such as number, person, mood, negation, focus, tense and aspect. The Kimbeere verb phrase has morphological inflections for both tense and aspect. The two categories are viewed as interdependent but deeply intertwined. This study establishes that Kimbeere is a tonal language since tone is used to differentiate lexical items and even grammatical categories. Vowel length is also a distinctive feature in Kimbeere. Vowel length contrasts combines with tone contrasts to distinguish between immediate and remote past tenses. The analyses and representation of the Kimbeere tense and aspect inflectional properties is based on the Feature Checking theory of the Minimalist Program.

Chapter one establishes the problem that is addressed by this study. Although the concepts of tense and aspect are very crucial in explaining the grammar of a language, no study so far has been carried out to provide a description of the inflectional forms for tense and aspect in Kimbeere using the Minimalist Program orientation. Therefore, has provided a descriptive analysis of verbal inflections for tense and aspect in Kimbeere as an attempt to generate new linguistic knowledge and contribute to the existing knowledge of Bantu inflectional morphology.

Chapter two highlights the basic language features and the structure of the verb in Kimbeere. This chapter demonstrates that Kimbeere has seven short vowels and seven short vowels. The language has eighteen consonants. Among the eighteen consonants are two glides and five prenasalised consonants. It has also been observed that the verbal forms are highly inflected with the verb consisting of affixes and a root. The verb phrase incorporates a lot of information, and may stand alone in a sentence. Among these affixes are tense and aspect morphemes. The role of tone and vowel length in marking tense has also been looked at.

Chapter three investigates tense in Kimbeere and its morphological realization in the verb phrase. Kimbeere has a tense system of three basic tenses: past, present and future. The language further subdivides its time line according to its understanding of the time frame. This results in five more tenses. The past is further subdivided into three distinct past tenses: immediate, recent and remote past tenses. The future tense is subdivided into two distinct tenses: immediate and distant future tenses. Kimbeere marks its tense morphologically and by suprafixation of grammatical tone. Distinctive vowel length also plays a role in distinguishing between immediate and remote past tenses.

Chapter four investigates aspect in Kimbeere and its morphological realization in the verb phrase. Kimbeere has an aspect system of four basic aspects: perfective, perfect, imperfective and repetitive aspects. An event in perfective and perfect aspects is viewed as terminated or completed at the time of speaking. This means that these two aspects have an implicit meaning of past tense and therefore co-occur with the past tense. The imperfective aspect views the situation from inside as an ongoing process. It is subdivided into two: progressive and habitual and aspects. These two imperfective aspects co-occur with different tenses to indicate different time references. Repetitive aspect is used to indicate both complete and incomplete events. Finally, both chapter three and four have demonstrated that Kimbeere licences tense and aspect categories and their morphological realizations on the verb phrase necessitate the creation of relevant heads. The morphosyntactic nature of the language justifies the analysis of tense and aspect within the Minimalist Program. The verb is moved to the heads created to feature check interpretable tense and aspectual features for correct grammatical sentence derivation. Other features besides tense and aspectual features necessitate verb movement for feature checking.

5.1 Conclusion and Findings

This study set to examine morphosyntactic realizations of tense and aspect in the Kimbeere verb phrase by answering the following research questions:

- 1. What are the inflectional forms for tense and aspect in Kimbeere?
- 2. What is the distribution and interaction of tense and aspect in Kimbeere verb phrase?
- 3. Does vowel length play any role in past tense marking?
- 4. Can the Feature Checking Theory of the Minimalist Program adequately analyse tense and aspect morphological forms in Kimbeere?

The study has successfully answered the research questions by identifying the inflectional forms for tense and aspect, their distribution and interaction in the verb phrase. Kimbeere's verbal inflections for tense and aspect are realised morphologically. These two categories have a systematic pattern of affixation to the verb root. Tense morphemes are prefixed to the verb root and they always appear after the subject morpheme in a linear order. The aspect morphemes are suffixed to the verb root with an exception of the present progressive morpheme which is a prefix. The study has established that tense and aspect categories interact largely by co-occurring in the same verb phrase. Indeed, it is difficult to study one category without referring to the other. The perfective, perfect and imperfective aspects are all expressed by co-occurrence of various tenses to indicate different time references. However, tense and aspect categories are distinct as evidenced by the present and the future tenses which do not necessarily co-occur with aspectual categories. Also, the present progressive aspect does not co-occur with any tense distinctions. The study has also successfully established that tone contrasts and distinctive vowel length play a role in past tense marking.

Finally, the study has used the Feature Checking theory of the Minimalist Program to adequately analyse Kimbeere tense and aspect morphological forms. Kimbeere licences tense and aspect categories and their morphological realizations on the verb phrase necessitate the creation of relevant heads. The morphosyntactic nature of the language justifies the analysis of tense and aspect within the Minimalist Program. The verb is moved to the heads created to feature check interpretable tense and aspectual features for correct grammatical sentence derivation. Minimalist Program provides an adequate relation between morphology and syntactic categories of a language and thus it has adequately analysed morphosyntactic categories of tense and aspect in Kimbeere.

5.2 Recommendations

This study focused on the analysis of verbal inflectional properties for tense and aspect in Kimbeere using the Checking Theory of Minimalist Program. The study leaves out the morphological process of derivation and thus further research on this area would be valuable. This study has also noted that context of the situation is used in interpretation of tense and aspect marked by the same morpheme. This study has looked at the interface between syntax and morphology using a verb phrase leaving out the component of pragmatics which deals with sentence interpretation. A lot of progress has been made in describing languages under the components of phonology, syntax and morphology. Thus I would recommend further research on the component of pragmatics on the Kimbeere verb phrase to determine how derived sentences are interpreted.

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