

**A SEMANTIC ANALYSIS OF KIKAMBA SPATIAL EXPRESSIONS USING THE
COGNITIVE SEMANTICS THEORY**

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DECLARATION

This project is my original work and has not been submitted for a degree or any other award in any other university.

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LIST OF ABBREVIATIONS

BP	–	body part
DEM	–	demonstrative
FoR	-	Frame of Reference
PERF	–	perfect tense
PGR	–	progressive tense
PL	–	plural
PPT	–	past participle tense
PREP	–	preposition
SGL	–	singular
SPT	–	simple present tense

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DEDICATION

I dedicate this work first of all to my dear and loving mother Isabella Mbui Kilonzo whose sacrifice to take me to school gave me a lifelong insurance against ignorance. In a very special way I also dedicate this work to my beloved late husband Elisha Nyalando Achacha – we will meet in another life. I dedicate this work too to my dear children Cynthia Akinyi and Peter Carey. Let this work be a Motivation to them to pursuing higher learning.

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ABSTRACT

The primary concern of this study is the semantic meanings of Kikamba spatial expressions. The main focus of this study is the semantic analysis of Kikamba spatial demonstratives and prepositions within the framework of the cognitive semantics approach. The main sources of the data used in this study were a Kikamba authentic text on the cultural practices of the Kamba people by Kimilu and a dictionary by Mwau . In addition, the researcher obtained relevant data from interactions with other native speakers of Kikamba. Data collection involved getting words from the said texts in form of demonstratives and prepositions as well as checking their validity from the Kikamba dictionary. Their spatial orientation is analysed. Special interest is given to the underlying co ordinates of the analysed Kikamba spatial prepositions in the intrinsic frame of reference. More data in Kikamba spatial prepositions is further analysed in relation to body sidedness and absolute frames of reference. All the data is given a semantics analysis using the concept of frames of reference. Later, this analysis of the data is followed by a summary of findings, conclusion, recommendations and suggestions for further research in related areas. In the findings of this study Kikamba is a mixed system in respect to the concept of the frames of reference. Kikamba uses object sidedness (intrinsic frames of reference) as in “Mwaitū e ng’oko wa kīima” (*mother is over the hill*). The figure – mwaitu - takes orientation from an object in this case *the hill*. Kikamba also uses bodily sidedness as in “Wavika musyi muunda wi kwokoni kwa aka” (*when you get home the garden is to the left hand side*). Here the point of view uses a body part, the left hand, to assign co ordinates to the figure – mūūnda. Kikamba also uses absolute frames as in “Malondu meekekela ũthũilonĩ wa sua” (*The sheep are headed west*). In this case the projection of the figure and ground are external and determined by fixed co ordinates abstracted from the solar system.

CHAPTER ONE

1.1 Introduction

This study intends to investigate spatial expressions in Kikamba using Frames of Reference, a concept in the Cognitive Semantics Theory. The spatial expressions examined in this research are demonstratives and spatial prepositions.

1.2 Background to the study

Kikamba is a Kenyan Bantu language as listed by Benji (1975:278), Guthrie (1967) and Heine & Mohlig (1980) among other scholars. Kikamba is listed under language group code E50 and specifically Kikamba is given code E55 (Guthrie, 1964). According to Greenberg's classification, Kikamba is grouped among the Niger-Congo family as Cited in (Whiteley, 1974: 13). The speakers of the Kikamba language are known as the Kamba.

According to the '2009 Kenya population and Housing census' the Kamba number some 3,893,157 persons. The Kamba mainly inhabit the counties of Makueni, Machakos and Kitui 'The Constitution of Kenya (2010).' This area is largely known as Ukambani. The Kamba also live in Mbeere, Kirinyaga, Kwale and Taita Taveta counties with a sizeable Kamba diaspora community in Tanzania, the Democratic Republic of Congo and other parts of the world. They are also the leading integrationists with communities such as the Mbeere, Embu, Taveta and Tharaka being largely Kamba by blood Joshua (2011). Today, the Kamba community has intermingled with other communities within and outside Ukambani such as those in Mwea region in Embu, Shimba Hills in Kwale District, parts of Taita Taveta and Mombasa region due to social economic and political factors (Maundu, 1980; Mathooko, 2004).

Historically the Kamba migrated into Kenya in the 14th Century and settled in the Taveta area before migrating northwards to the Nzau Hills in the present day Makueni County. A dispersal of the community occurred in the 17th Century, with some moving to Mbooni and others to Kitui, Mwingi and the fringes of Central province. The Mbooni group later moved to present day Machakos and Kangundo counties (KNBS, 2009).

Literature recognizes two main dialects of Kikamba: the Thaisu dialect and the Masaku dialect (Lindblom 1926, Mwove 1987). Maundu (1980) distinguishes four distinct varieties similar to Kioko (2005). These are the Machakos dialect, the Makueni dialect, the Kitui dialect and the Mwingi dialect. Maundu (1986), however, classifies Kikamba into five major dialects, three dialects spoken in Kitui and two dialects spoken in Machakos and Makueni. These are Kitui - North (spoken in Mwingi), the Central Kitui variety (spoken in Central Kitui), Eastern and Central Kitui varieties, Kilungu and Makueni varieties and the Machakos dialect (also known as the Masaku dialect).

My main concern in this study is the Masaku dialect/variety of which the researcher is a native speaker. The data used in this research is drawn from this variety. The Masaku dialect is considered as the standard Kikamba used in the media. Also, most of the important written works like the Kikamba dictionaries, the Kikamba Bible, Kikamba instructional materials in schools for lower classes, and storybooks such as Ngotho (1963, 1989) and Mwikali and Coughlin (1990) among others are written in this dialect.

Kikamba is a subject Verb Object (S V O) language. Prepositions in Kikamba, like in many other languages, have numerous uses Stafford (1967:35). They may act as adverbs and conjunctions as well.

1.3 Statement of the problem

Scholars in Kikamba have studied other areas for example; Maundu (1980) and Kaviti (1992) looked at the phonological, morphological and lexical variations that occur in the main dialects of Kikamba. Kaviti (2004) did a morphosyntactic approach to Kikamba while Mutiga (2002) handled tonal aspects in Kikamba which is phonological. Munyao (2006) analysed verb valency in Kikamba. Sila (2011) studied reflexivity. Nzioka (2007) dealt with tense and aspect in Kikamba morphosyntax.

Spatial expressions in Kikamba are a linguistic area that has not been studied in respect to the cognitive semantics approach. This study is going to attempt to bridge this gap by using what

Levinson (2003: xvii) calls co ordinate systems or frames of reference, a concept in cognitive semantics, to analyze spatial expressions in Kikamba.

This study intends to give a semantic analysis of the various locative and translocative expressions known as spatial prepositions and demonstratives. By doing this, this study will attempt to analyze the underlying cognitive coordinate systems in Kikamba spatial expressions and their various meanings. It will use the cognitive semantics approach and apply the concept of frames of reference to look at what co ordinate systems the native Kikamba speaker uses to convey spatial information.

Frames of Reference have received considerable attention and that while almost all authors acknowledge its importance, no two authors define it the same way. In this study we will go by that of Levinson. Levinson (2003:24-56) observes that the co ordinate systems that underlie spatial meaning and classification are like:

Sidedness of objects

Bodily co ordinates

Absolute frames

This study intends to find out what the co ordinate orientation of Kikamba is and how this co ordinate orientation is expressed.

Kikamba has both simple and complex prepositions as in example 1;

1. *Mwandiki wa ñvuku* (writer **of** a book)

Wa translates to a simple preposition **of**.

Kikamba also has complex prepositions for example; *ĩũũ wa-* is a combination of a prepositional entity *ĩũũ* and a case marker *wa-*. This preposition may mean *upon, above, about, on top of, on*. In this sense *wa-* presents a polysemous network. In the words of Levinson (2003:1) spatial thinking is crucial to almost every aspect of our lives. Spatial competence involves many different abilities, from shape recognition to a sense of where the parts of our body are with respect to one another, from navigation to control of the arm in reaching for something, and so on.

Using the cognitive semantics approach and particularly the concept of coordinate systems, I will also show the non spatial relationships of Kikamba spatial expressions using metaphorical extensions where appropriate. Take for example the Kikamba preposition *-la* which translates to *through* as in the following examples;

2. *esĩ -la vau* (he has come through there)
3. *avĩĩ -la vau* (he has passed through there)
4. *aumĩĩ -la vaya* (he has appeared/emerged through there)
5. *akĩĩ -la vaa* (he has gone/jumped through here)

The preposition *-la* is used in the above phrases to express space. Here *-la* can be classified as having a sense of interiority. *-la* in examples 2 – 5 designates the direction of a movement or course or as being one which proceeds along the length or breadth, or both. It can be said to depict dimensions of space, or an area, often (but not always) from one end or side to the other. The viewer here uses a relative frame of reference.

It is interesting to know that *-la* acquires other meanings in another scene like in example 6 when a native speaker says;

6. *Niwakĩla* meaning *He has jumped* which may be accompanied by gesticulation. The cognitive interpretation of this sentence is that it communicates the ‘he’ has escaped or left without permission. Here the encyclopedic entry of jump is radiated to project action that does not necessarily involve the act of jumping (*kĩla*) but involves leaving without permission. The act of leaving without permission is compared to the act of jumping.

1.4 Research questions

1. What lexical forms encode Kikamba spatial expressions?
2. Does a Kikamba native speaker use bodily co ordinates to convey spatial information?
3. Does a Kikamba native speaker use sidedness of objects to convey spatial information?
4. Does a Kikamba native speaker use absolute frames to convey spatial meaning?

1.5 Objectives

1. To identify spatial meaning in Kikamba prepositions, demonstratives and spatial metaphors.
2. To establish the co ordinates Kikamba uses and see if it applies the bodily co ordinates.
3. To establish the co ordinates Kikamba uses and see if it applies the sidedness of objects spatial prepositions.
4. To establish the co ordinates Kikamba uses and see if it applies the absolute frames.

1.6 Rationale of the study

Like in any other language, prepositions in Kikamba play a very important role in discourse. Part of this role is that of effecting cohesion and coherence in discourse. So far and to the best of my knowledge from the various studies that have been done by the renowned Kikamba scholars including non-native speakers, there has never been any study done in the area of semantic analysis of Kikamba spatial expressions using the cognitive semantics theory.

A study in this area using cognitive semantics theory will give critical insight into the semantic understanding of Kikamba spatial expressions

1.7 Scope and limitations

In this study I will focus on the semantic identification and analysis of Kikamba spatial prepositions within The Cognitive Semantics Theory. This study explores the relationship between language, mental representation and human experience. This is because it will investigate the coordinate system(s) the native Kamba speaker employs to convey spatial information and the non spatial senses in these spatial expressions.

Kikamba has several prepositions both simple and complex. These prepositions perform various linguistic functions in the language. This study will deal with both simple and complex Kikamba spatial prepositions which constitute spatial senses. Some of the prepositions I will deal with include *-ni, -la, kuma* (simple prepositions) and *iulu wa-, mbee wa-, nthini wa-, itina wa-, itheo wa-*(complex prepositions). This study will include Kikamba demonstratives as spatial and

locative expressions. There are other speech categories like verbs that convey spatial information but this study will not do spatial analysis of such lexical entities. This is area for further research.

1.8 Literature review

Literature review of this research is divided in two sections: literature on Kikamba and Literature on spatial prepositions.

1.8.1 Literature on Kikamba

Literature on Kikamba dates way back to the early missionaries. The missionaries prepared the initial grammars for their use in literacy work and outstanding aspects of the language. Lindblom (1926) provided a detailed groundwork on the Akamba, their dialects and key features of Kikamba grammar.

Farnsworth (1952, 1957) did an introduction of the Kikamba language and explanations of the major areas of the Kikamba grammar. Whitely and Muli (1962) dealt with the major areas of Kikamba grammar. This study looked at morphology, nominal categories, word order and verbal categories. These works are very important in the study of Kikamba grammar but they do not touch on spatial prepositions at all.

Hinnebusch (1974) and Maundu (1985) studied the historical loss of consonants and its meaning for the synchronic grammar of Kikamba.

Maundu (1980) and Kitavi (1992) established the phonological, morphological and lexical variations that occur between the main varieties of Kikamba. These works provide insights into Kikamba dialectology.

Mutiga (2002) discussed tonal aspects in Kikamba which is phonological. Kivuko (2005) did a phonological study of Kikamba . These studies are relevant in relation to dialectical variations and the tonal systems in the Kikamba language, but they do not mention spatial prepositions in Kikamba.

Kaviti (2004) did a morphosyntactic study of Kikamba using the minimalist approach. This study concentrates on the inflectional categories of the verb like tense, agreement and negation.

This study shows how these universal categories are realized in Kikamba. This study gives an in depth analysis of verbal derivations, the syntax of Kikamba, gender marking in the language, and lexical and functional categories.

Roberts – Kohno (2005) studied Kikamba reflexives in relation to empty categories analysis and vowel coalescence. Munyao (2006) analysed verb valency in Kikamba. This study looks at the anaphoric relationship between the reflexive and the subject NP.

Nzioka (2007) dealt with the Tense and Aspect in Kikamba Morphosyntax. This study concentrates on the interaction between morphology and syntax in relation to tense and aspect. There is no mention of spatial prepositions in this study.

1.8.2 Literature on spatial prepositions

Spatial prepositions are a widely researched area in Linguistics. It has been an area of major concern for both linguists and psychologists. These have over time studied the importance of space and spatial experience in human language and thought. Some Linguists who have studied spatial prepositions include Claude Vandeloise (1991) who studied spatial prepositions in French. She presented experimental approaches to describing spatial relations in French. This study uses what is referred to as geometry and logic. In geometry the study employed dimensions like straight line, angles and measurements which are said to be independent of the speaker and the viewer. These prove to have their limitations. Geometry and logic emphasize the complexity of the distribution of spatial prepositions rather than explaining their description.

Finally a more satisfying approach to analyzing spatial relations is recommended thus the study moves from geometrical direction in the analysis of spatial prepositions to a more complex concept called orientation. This study is very important because the aspect of *orientation* in the analysis of spatial prepositions is the area of interest in this current study.

Lackoff (1980) studied the source of complexity associated with conceptual representation using the image schema theory. He found out that it was as a result of the correlation between the kind of concepts human beings are able to formulate and the nature of their bodies. This is relevant in

so far as it is concerned with the conception of space in language. This current study will, however, not be concerned with image schemas.

Coventry (1994) in his study of spatial relations argues that whether or not a spatial preposition like *in* is appropriate depends on the mental model adopted in the specific situation, where a mental model is defined as a temporary structure in working memory which serves as an interface between language and the world. This current study seeks to establish the senses communicated by Kikamba spatial prepositions and thus Coventry's study is relevant.

Gadula (1988) deals with the principles of Intrinsic, Deixis, and Extrinsic in spatial Prepositions. He uses the terms intrinsic, deictic and extrinsic to determine frames of reference. This study is very relevant to the current study because it will be seeking to determine frames of reference in Kikamba language.

Quoted in Diessel (2014), linguists like Levinson have questioned the hypothesis that there is a universal preference for egocentric, body oriented representations of space in language and cognition. Levinson and colleagues found a difference in the way languages represent space. In particular they found out that while speakers of English usually describe spatial relations from an egocentric, body oriented perspective, speakers of other languages make common use of an absolute frame of reference involving fixed co ordinates based on geographical landmarks like uphill and downhill. This study will be interested in the co ordinate system used by a Kikamba native speaker so Diessel's will be a very relevant contribution to my research.

Pederson et al (1998) have found out conspicuous differences in the way rotations in space are interpreted by speakers of Dutch, in which spatial descriptions usually involve a relative, egocentric frame of reference, and speakers of Tzeltal, in which the absolute frame of reference is very common. This approach to the analysis of space in relation to language is very relevant to this current study because this study seeks to find out if Kikamba uses absolute frames of reference.

This leads to scholars like Levinson in his book '*Space in Language and Cognition*' (2003) about the relation between language and spatial cognition, and is more precisely concerned with the

frames of reference commonly used in spatial language and thinking. This current study will rely a lot on Levinson's approach to spatial cognition. This study will use Levinson's classification of Frames of References of sidedness of objects, bodily coordinates and absolute frames to analyse the coordinates Kikamba uses to express spatial relations.

Adhiambo (2011) analysed spatial prepositions in Dholuo using the theory of image schema in cognitive semantics. Although this current study will not use the image schema theory, it draws a lot of relevance from this study in the use of cognitive semantics and the analysis of the spatial senses in prepositions.

1.9 Theoretical framework

This section presents an explanation of the cognitive theory that the researcher will apply in the analysis of data.

1.9.1 Cognitive Semantics Theory

Cognitive semantics is part of the field of cognitive linguistics. This is described by Talmy (2004:4) as the conceptual content and its organization in language. It is a model of the mind and as well as a linguistic model of learning. It is the study of the relationship between experience, embodied cognition and language. According to Allwood et al (1999:20) cognitive semantics identifies meanings of expressions with mental entities. The core of cognitive semantics is that meanings of expressions are mental. A semantics is seen as a mapping from the linguistic expressions to cognitive structures. Language itself is seen as a part of the cognitive structure, and not an entity of independent standing. Within cognitive semantics the emphasis is on lexical meaning. Meaning is not necessarily reference to the entity or relation in some real or possible world. Instead, meaning corresponds with a concept held in the mind based on personal understanding.

Some renowned scholars in the area of cognitive semantics such as Johnson (1987) and Langacker (1987) make the following claims which I agree with in this research;

The nature of conceptual organization arises from our bodily experiences. This may be taken to mean that we human beings have a species specific unique view of the world due to the unique

nature of our bodies. The way we view the real world is likely to be influenced to a great extent by the nature of our bodies.

The semantic structure is the conceptual structure. This implies that meaning is in the mind of the speaker.

Semantic structure is encyclopedic in nature. Thought is not exactly language. Words do not represent neatly packaged bundles of meaning as we may be able to read from the dictionary, but serve as points of access to vast repositories of knowledge relating to a particular concept or conceptual domain, Langacker (1987:159).

Meaning construction is conceptualization. This means that words and other linguistic units serve as prompts for the construction of meaning, conceptual operations and the recruitment of background information.

The main tenets of cognitive semantics are;

That grammar is a way of expressing the speaker's concept of the world.

That knowledge of language is acquired and contextual.

That the ability to use language draws upon general cognitive resources and not a special language module (Landman & Jackendoff, 1984).

Allwood et al (1999:25) submit that the appropriate framework for the cognitive structure is a conceptual space. Cognitive semantics holds that language is part of a general human cognitive ability, and can therefore only describe the world as it is organized within people's conceptual spaces. Implicitly there is a difference between this conceptual world and the real world. This agrees with Levinson (2003:2) that thought cannot precisely be captured in language. According to Levinson, there is a metric precision and visual detail in our thoughts that is not present in language.

1.9.2 Frames of reference

Frames of reference were coined by Gestalt Theories of Perception in the 1920s. A frame of reference in linguistic description is an aspect of spatial cognition. It highlights the speaker's notion of location.

Frames of references are the differences in the way in which we can construe spatial relations Levinson (2003: xvii).

Following Levinson (2003:32), Carlson-Radvansky et al (1993:224) identify three distinct classes of frames of reference that exist for representing the spatial relationships among objects in the world:

Viewer-centred frames

Object-centred frames

Environment-centred frames

These three are respectively renamed by Levinson (2003:32):

The relative frames

The intrinsic frames

The absolute frames

I adopt this Levinson's classification and description of the three frames of reference and, therefore, I am going to heavily rely on them in my analysis in this thesis.

A relative frame of reference (*bodily co ordinates*) presupposes a 'viewpoint' V and a figure and ground distinct from V. It thus offers a triangulation of three points and utilizes coordinates fixed on V to assign directions to figure and ground. *In the Relative FoR* the anchor is the body of the observer (often, the speaker and/or addressee). The ground is a distinct entity. The axes of the FoR are projected (i.e., in geometric terms, transposed) from those of the body of the observer onto the ground. Examples: In locative descriptions:

“The ball is left/in front of the chair”, in the observer-dependent sense of “left of” and “in front of”.

Relative FoRs are projected from the body of the observer and depend on the orientation of the observer. This frame may be said to use a coordinate system based on the observer's/speaker's perspective of the world.

An intrinsic frame of reference (*sidedness of objects*) involves an object-centred coordinate system where the coordinates are determined by the ‘inherent features’, sidedness or facets of the object to be used as the ground or relatum. The anchor is the ground, which is an entity distinct from the body of the observer. The axes of the FoR are *projected* from those of the ground (i.e. simply extended outward beyond the outer surfaces of the ground into space). Example:

“The ball is in front of the chair”, in the observer-independent sense of “in front of”.

Intrinsic FoRs are projected from the reference entity – the *ground* – of spatial descriptions and depend on the orientation of the latter.

Absolute frames of reference are environment centred frames. Objects are represented with respect to salient features of the environment, such as gravity, or prominent landmarks. In absolute FoRs the anchor is some entity or feature of the environment. One or more axes of the FoR are abstracted from this entity/feature such that the directions in which they point are exactly the same regardless of the actual location of the ground, or the observer/speaker, vis-à-vis the anchor. For example:

“*The ball is east of the chair*” in this case the direction denoted by “*east*” remains the same. Regardless of where the ground or observer is the virtual position of the sunrise or the horizon does not change. Absolute FoRs are abstracted from some environmental gradient or feature and provide bearings treated as fixed throughout the totality of space.

1.10 Definition of terms

Cognitive semantics - is the study of meaning. It is a linguistic model that describes the world as it is organized with people's conceptual spaces.

Coordinate system - a **system** which uses one or more numbers, or **co ordinates**, to uniquely determine the position of a point or other geometric element on a manifold such as Euclidean space. When an object **X** and landmark **Y** are substantially separated in space, it becomes important to think about X as in some specific direction from Y – some kind of angular specification becomes relevant to provide.

Frames of reference - A frame of reference can be defined as: ‘ a unit or organisation of units that collectively serve to identify a coordinate system with respect to which certain properties of objects, including the phenomenal self, are gauged’ (Rock 1992:404, Levinson 2003:24).

Other main terms in this thesis are ‘Figure’ and ‘Ground’ as described in Gestalt psychology. In general conceptualization, the ‘Figure’ is a moving or conceptually movable entity whose site, path, or orientation is conceived as a variable the particular value of which is the relevant issue. The ‘Ground’ is a reference entity, one that has a stationary setting relative to a reference frame, with respect to which the Figure’s site, path, or orientation is characterized (Talmy 2000:184). These are a tool to use in speaking of spatial relations. The Figure is the object of focus, which has the location described. The Ground is the object to which the Figure is related. Usually the Ground is bigger than the Figure, and less movable. Alternative names for these concepts are respectively Trajector (figure) and Landmark (ground) (Langacker 1990, Trask 2007).

1.11 Research methodology

The researcher used a qualitative method of data collection and analysis. I undertook the following methodology in effort to present this study;

The researcher sourced an authentic Kikamba text – written in the Kikamba language by a Kamba author. The material of the present study was drawn primarily from a basic corpus of a prose text with a total number of 253 running pages. This text is about the cultural practices of the Akamba right from conception through birth to initiation and marriage.

Native speaker intuition/linguistic competence to generate appropriate data in line with Horrocks (1987:11) claim that it is possible for a native speaker of the language under study to ask all the important questions regarding linguistic information and answer them by himself. Supplementary corpus was drawn from native speaker competence and a thorough check of the preposition entries done against a Kikamba Dictionary Mwau (2006).

The researcher will also used participant observation. The researcher interacted in conversation with other speakers of the language and record the data relevant to this study. Where enough data was not raised from these interactions, the researcher elicited responses or conversation that

produced the desired responses. Here the researcher took enough caution so as not to alert the participants. This ensured the desired data was obtained from natural conversation as opposed to a mechanical conversation.

CHAPTER 2: DEMONSTRATIVES USED AS SPATIAL EXPRESSIONS

2.1 Introduction

This chapter is going to present data analyzed as demonstratives in spatial perspective. This chapter presents sections 2.2 as general overview of demonstratives, 2.3 demonstratives in spatial perspective. In close link to demonstratives in spatial perspective is section 2.4 which analyses Kikamba spatial adverbial demonstratives *vaa (here)*, *vau (there)*, *vaya (there)*, *vaaya (there)* and *nak(ũ)u (there)*. Section 2.5 analyses adjectival demonstratives inflected to refer to non – human referents. Such adjectives are *ĩno/ĩ (this)*, *ĩsu (that)*, *ĩya (that)* and *ĩya (that)*. Section 2.6 presents Kikamba spatial demonstrative pronouns *ũũ/ũyũ (this one)*, *ũsu (that one)*, *ũya (that one)*, *ũũya (that one)*, and section 2.7 presents a summary of the chapter.

Chapter two presents an analysis of Kikamba demonstratives used in spatial senses and other senses. There are five demonstratives analyzed alongside their variants. These demonstratives are analyzed in respect of their deictic meanings. The analysis of demonstratives in chapter 2 is also demonstrated in figures: figure (i) is used to present Kikamba demonstratives in relation to the view point zero, figures (ii) and (iii) have been used to demonstrate their dimensions as proximal or medial or distal. These demonstratives form part of spatial deixis in the Kikamba language.

2.2. General overview of demonstratives

According to Diessel (1999:2-3), demonstratives are deictic expressions serving specific syntactic and pragmatic functions. They are primarily used to focus the hearer's attention on objects or locations in the speech situation (often in combination with a pointing gesture), but they may also function to organize the information flow in the ongoing discourse. More specifically, demonstratives are often used to keep track of prior discourse participants and to activate specific shared knowledge. The most basic function of demonstratives is, however, to orient the hearer outside of discourse in the surrounding situation. A speaker uses demonstratives to focus the hearer's/addressee's attention on a specific referent in space.

According to Levinson (2003: 69 -70) Deixis concerns the relativization of reference to properties of the speech event. Many aspects of deixis, for example tense, have nothing to do with spatial conception. But deixis is involved in the interpretation of spatial expressions in many different ways. Firstly, many statements of location and motion make overt reference to deictic parameters, as in '*It's over there*' or '*He's coming here*'. In this case, as mentioned, deixis is simply a means of providing a rather special ground or reference point, namely the location of the speech participants. Such locutions (in English at least) presuppose a division of space into an inner and outer circle around the speaker as it were, defining *here* vs. *there*, but where the exact division is contextually established. They do not tell us in which direction locations lie, and even for motions they only give a goal or a source and no fixed direction, unless combined with other specifications.

In general conceptualization, the 'figure' is a moving or conceptually movable entity whose site, path, or orientation is conceived as a variable the particular value of which is the relevant issue. The 'ground' is a reference entity, one that has a stationary setting relative to a reference frame, with respect to which the figure's site, path, or orientation is characterized (Talmy 2000:184). The figure is the object of focus, which has the location described. The ground is the object to which the Figure is related.

2.3 Demonstratives in spatial perspective

Demonstratives constitute a universal class of expressions that are of fundamental significance for communication, language, and cognition (Diessel 2007:3). Demonstratives are to be interpreted with respect to the location of the participants in the deictic context.

Figure (1) below presents a placement of Kikamba spatial adverbial demonstrative in relation to the speaker/deictic center.

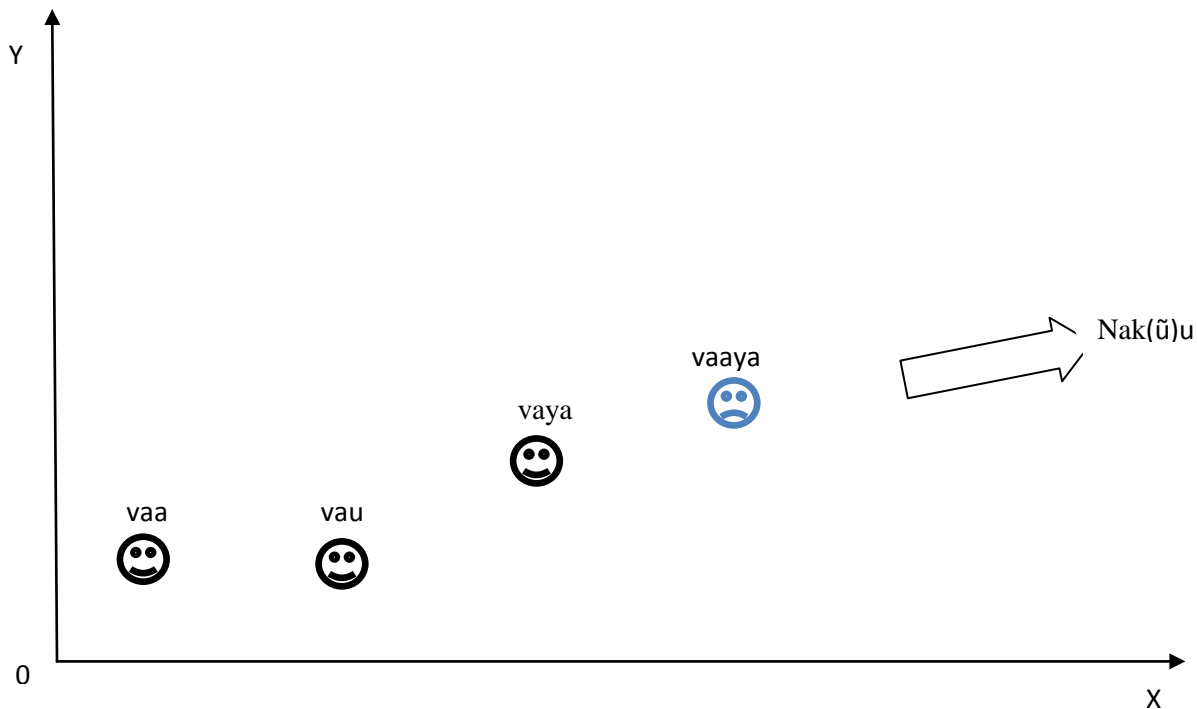


Figure 1 adverbial demonstratives from the zero-point

The zero-point (0) is the deictic center/anchor. The zero – point gives the point of view. This is the point from which the demonstrative adverb is interpreted. The adverbial demonstrative encodes the ground. The **X** axis forms the horizontal plane. It is the position of the viewer/addressee in form of distance. The **Y** axis forms the vertical plane. It is the position of the speaker in form of height in three dimensional. The **Y** axis represents the speaker’s bodily orientation.

In figure (1) the Kikamba adverbial demonstratives are placed and interpreted in respect to the deictic center which is also referred to as the zero- point. From the most proximal **vaa** to the medial **vau** to the most distal **nak(ũ)u**, Kikamba demonstratives take their orientation from the deictic center. Figure (1) demonstrates this clearly.

Demonstratives indicate a referential link between figure and ground by way of ‘pointing’. Following Diessel (cf. Bühler 1934; Lyons 1977) demonstratives do not usually encode angular specifications; rather, directional information is typically provided by nonverbal means of

reference such as gesture, eye gaze, and body posture. This study will not explore gesture, eye gaze and body posture in the analysis of spatial senses. This is area for further research.

Demonstratives are characterized by specific semantic features. All languages have at least two demonstratives locating the referent at two different points on a distance scale: a proximal demonstrative referring to an entity near the deictic centre, and a distal demonstrative denoting a referent that is located at some distance to the deictic center Diessel (1999:36). Semantically, features of demonstratives comprise features that indicate whether the referent is near, away or far away from the deictic center, whether it is visible or out of sight, at a higher or lower elevation, uphill or downhill, or moving toward or away from the deictic center. The qualitative features indicate whether the referent is an object, person or place, whether it is animate, human or non human, female or male, a single entity or a set, or conceptualized as a restricted or extended entity.

In Kikamba locative and spatial demonstratives are demonstrative adverbs, demonstrative adjectives and demonstrative pronouns. These denote spatial senses. For location reference in all of these non-angular locative descriptions the idea is to choose a ground or landmark object in close contiguity with the object to be located.

2.4 Kikamba Spatial Adverbial Demonstratives

Demonstrative adverbs in Kikamba are as displayed in figure (i). Example 8 illustrates them:

8. Masakũ nĩ vaa.

Masakũ be DEM

Masakũ is here.

Vaa denotes *here*. **Vaa** indicates space near the deictic center/speaker. The locative distance denoted by **vaa** in example (8) is proximal on the horizontal plane. **Vaa** denotes that Masaku (the figure) is proximal to the speaker/deictic centre. In this case the figure is Masaku and the ground is **vaa**. Both the figure and the ground are near the anchor.

In another sense, to a native speaker **vaa** may not necessarily be near the speaker/deictic centre. When a native speaker says ‘Masakũ no vaa’ (*Masakũ is not far*), the normal understanding is that the place known as Masakũ is near, but this may not be necessarily so. It may actually be an otherwise long distance from the deictic centre hence the joke about the Kamba native speakers and their tendency to describe long distance as just “**no vaa**”. The figure is Masaku and the ground is vaa (here). The anchor remains the deictic center only that the context projected is what supplies to the native speaker the distal meaning of this spatial sense communicated here. This particular demonstrative and its unique meaning (of a distance far away from the speaker/deictic center) may have been borne out of the socio-economic history of the Akamba. Historically the Kamba people were originally long distance traders, hunters and gatherers. This coupled with the fact that geographically they come from an arid region may have made them stoic to the hardships of covering long distances and thus a long distance does not intimidate them. In this regard where **vaa** denotes a distance away from the speaker/deictic centre, the figure and the ground are actually away from the anchor.

9 (a) Masakũ nĩ vau.

Masakũ be DEM.

Masakũ is there.

Vau denotes *there* in the sense of being near the viewer/addressee. On the horizontal plane, **vau** is locative. **Vau** denotes a space away from the speaker/deictic center but nearer the viewer/addressee. If a native Kamba speaker were giving an addressee directions to Masakũ (Machakos) town, which is some estimated 20 kilometers towards Nairobi on the Machakos Kitui road, from Masii shopping centre, the speaker may direct the addressee/viewer in a sentence like in example 9 (b) below:

9 (b) Wainga Thwake Masakũ nĩ vau.

After you cross river Thwake Masaku be DEM.

After you cross river Thwake Masakũ is there.

In example 9 (b) the figure is Masaku and the ground implied is **vau** (*there*). The figure and the ground are away from the anchor. **Vau** may also denote a referent visible to the speaker/deictic

centre especially if the speech participants are within the same surroundings as the figure and the ground.

Away from **vau**, the next distance is **vaya** as depicted in example 10 below.

10. Masakũ ñĩ vaya.

Masakũ be DEM.

Masakũ is there.

Vaya denotes *there*. **Vaya** refers to a distance away from speaker/deictic centre. **Vaya** on the horizontal plane indicates a locative distance away from both speaker/deictic center and the addressee/viewer. **Vaya** is, however, visible to both speaker/deictic centre and viewer/addressee. Masaku (the figure) and **vaya** (the implicit ground) are away from the anchor. The space next farther away from **vaya** is **vaaya** as exemplified in example 11 below.

11. Masakũ ñĩ vaaya.

Masakũ be DEM.

Masakũ is there.

Vaaya means (*there*) denoting a distance far away from the speaker/deictic centre. On the horizontal plane, **vaaya** is a demonstrative adverb indicating a definite space far away from both the speaker/deictic center and the viewer/addressee. It is within visual distance to both speaker and viewer. When a native Kamba speaker indicates a distance as **vaaya**, the distance denoted is to be understood as far thus Masaku (the figure) and **vaaya** (the implicit ground) are far away from the anchor. The farthest horizontal distance expressed by Kikamba demonstratives is **nak(ũ)u**. this demonstrative is exemplified in example 12.

12. Masakũ ñĩ nak(ũ)u.

Masakũ be DEM.

Masakũ is there.

Nak(ũ)u means (*there*) denoting distance that is very far away from the speaker/deictic centre. **Nak(ũ)u** is on the horizontal plane indicative of a distance away from the deictic center. It is indefinitely very far away from the speaker/deictic centre. When a Kamba native speaker

describes space as **nak(ũ)u**, the understanding is that the ground (implicit) is very far away and the viewer/ addressee has to conceptualize that **nak(ũ)u** poses a physical challenge to get to. In this case the figure (Masaku) and the ground (**nak(ũ)u**) are very far removed from the anchor.

From examples 8, 9, 10, 11 and 12 the Kamba language has, therefore, five adverbial demonstratives. Kikamba can be said to be a five deictic system in which the position of the viewer/addressee is only relevant in the first and second terms – **vaa** and **vau**. The third, fourth and fifth – **vaya**, **vaaya** and **nak(ũ)u** - categories relate to the speaker/deictic centre. This justifies the view by Lyons (1977:638) that the canonical situation-of-utterance is egocentric in the sense that the speaker, by virtue of being the speaker, casts himself in the role of ego and relates everything to his viewpoint. He is at the zero-point of the spatiotemporal co ordinates of what is referred to as the deictic context. Egocentricity is temporal as well as spatial, since the role of speaker is being transferred from one participant to the other as the conversation proceeds, and the participants may move around as they are conversing: the spatiotemporal zero-point (the here-and-now) is determined by the place of the speaker at the moment of the utterance.

In Kikamba, the spatial demonstrative adverbs encode three dimensions relative to the speaker/deictic center. The first demonstrative adverb – **vaa** – is proximal for encoding the ground nearest the speaker/deictic center. The second and third – **vau** and **vaya** – encode ground that is medial to the speaker/deictic center. The fourth and fifth demonstratives – **vaaya** and **nak(ũ)u** – encode ground that is distal to the speaker/deictic center. Figure (2) below demonstrates the three dimensions encoded by the Kikamba spatial demonstratives in relation to the speaker/deictic center.

PROXIMAL	CORRESPONDING MEDIAL	CORRESPONDING DISTAL
Vaa	Vau	
	Vaya	
		Vaaya
		Nak(ũ)u

Figure 2 showing kikamba spatial demonstrative adverbs in three dimensions in relation to the deictic center.

2.5 Kikamba adjectival demonstratives

Kikamba demonstrative adjectives are also spatial. In Kikamba they are inflected to reflect non human referents as demonstrated in example 13 below.

13. Ng'ombe ĩno/ĩĩ nĩ mbau.

DEM SGL cow be lost.

This cow is lost.

Ĩno/ĩĩ (*this one*) encodes an animate quality that is non human. **Ĩno/ĩĩ** in example 13 is the implicit ground and cow (ng'ombe) is the figure. **Ĩno/ĩĩ** in example 13 denotes that the cow correlated is in proximal distance to the speaker/ deictic center. It also denotes that the cow correlated is within the same speech context with the speech participants-the speaker/deictic center and the viewer/addressee. The variants of **ĩno/ĩĩ** are **ĩsu**, **ĩya** and **ĩya** as demonstrated in example 14 below.

14. Ng'ombe ĩsu nĩ mbau.

DEM SGL cow be lost.

That cow is lost.

ĩsu means *that one*. **ĩsu** demonstrates that the cow correlated is in medial distance to the speaker/deictic center. **ĩsu** denotes that the cow correlated is near the viewer/addressee and away from the speaker/deictic center. **ĩsu** is the implicit ground and cow (ng'ombe) the figure correlated. Example 15 below demonstrates **ĩya** as an adjectival demonstratives.

15. Ng'ombe ĩya nĩ mbau.

DEM SGL cow be lost.

That cow is lost.

ĩya means *that one*. **ĩya** forms the implicit ground while cow (ng'ombe) forms the figure. **ĩya** demonstrates that the cow correlated is in a space away from both the speaker/deictic center and the viewer/addressee. **ĩya** denotes that the cow correlated is within a visual distance to the speaker/deictic center. **ĩya** conceptualizes that the cow denoted is in a space that is in medial distance to the speaker/deictic center. Example 16 demonstrates the adjectival demonstratives

16. Ng'ombe ñya nĩ mbau.

DEM SGL cow be lost.

That cow is lost.

ñya means *that one*. **ñya** forms the implicit ground and cow (ng'ombe) the figure. **ñya** demonstrates that the cow correlated is away from the speaker/deictic center. The space denoted by **ñya** in relation to the cow correlated is distal to the speaker/deictic center. **ñya** is conceptualized by the Kikamba native speaker to denote a definite distance far away. The cow correlated is within space that is visual to the speaker/deictic center.

In metaphorical sense, when the demonstrative **ĩno/ĩ** or its variants are used to refer to an animate quality in a human being it is mostly connotative and insulting in meaning . Example 17 highlights this.

17. Ndia ñno/ĩ nĩ ya nakũ?

DEM SGL fool be PREP where?

(This fool is from where?)

Where is this fool from?

In example (17) the implicit ground is **ĩno/ĩ**. The figure is **ndia** (fool). The meaning of this adjectival demonstrative remains proximal to the speaker/deictic center. Semantically the fool correlated is near the speaker/deictic center but the metaphorical sense denoted is that the animate encyclopedic entry of **ĩno/ĩ** is radiated to this fool. The result is that a human referent fool is compared to an animate **ĩno/ĩ** bringing in a meaning that ‘demotes’ the human quality in a human being to an animate quality. When a Kamba native speaker uses **ĩno/ĩ** when referring to a person as in example (17), the human reasoning capacity of the fool correlated is reduced to the level of the reasoning capacity of an animal like say a cow, a fox, a hyena, a bird etc, whose reasoning capacity is below that of the human being. In example 18 below, this metaphorical sense is further advanced.

18. Ngũngũ ĩsu yĩiva?

DEM SGL barren be where?

(That barren (woman) is where?)

Where is that barren woman?

The use of **ĩsu** in example (18) has a metaphorical sense. **Ĩsu** denotes an animate semantic sense. In this example is the implicit ground and the barren woman is the figure. **Ĩsu** denotes that the animate sense is radiated to the barren (woman’s) who is human. The human sense in ngũngũ is compared figuratively to an animate sense thus the human status of the barren (woman) has been reduced from that of a human being to that of an animal like say a snake, a squirrel etc. This reveals the despising attitude the Kamba people have towards barrenness in women. The aspect in **ĩsu** which ‘demotes’ the human quality in a human being to an animate quality is what makes its meaning connotative and thus gives it a metaphorical sense.

2.6. Kikamba spatial demonstrative pronouns

Demonstrative pronouns are inflected to reflect human referents, although not entirely distinct, as demonstrated in example 19.

19. Ũũ/ũyũ nĩ Mũũkamba wa w’o.

DEM SGL be Kamba PREP true

(This is a Kamba of true)

This is a true Kamba.

Ũũ /ũyũ means *this one*. **Ũũ /ũyũ** in example (19) is the implicit ground. The figure is Muukamba. **Ũũ/ũyũ** is a demonstrative pronoun indicating a distance proximal to the deictic center/speaker and viewer/addressee. Its variants are **ũsu**, **ũya** and **ũũya**. **Ũsu** is demonstrated in example 20 below.

20. Ũsũ nĩ mũũkamba wa w'o.

DEM SGL be Kamba PREP of true.

(That is a Kamba of true)

That is a true Kamba.

ũsũ means *that one*. **ũsu** in example (20) is the implicit ground. Muukamba forms the ground. **Ũsu** as a demonstrative is used to indicate a definite distance away from the deictic center and near the viewer. Example 21 below is used to demonstrate the next demonstrative pronoun, **ũya**, farther away from **ũsu** on the horizontal plane.

21. Ũya nĩ Mũũkamba wa w'o.

DEM SGL be Kamba PREP true.

(That is a Kamba of true)

That is a true Kamba.

Ũya means *that one*. The implicit ground is **ũya** in example 21. The figure is muukamba. The demonstrative pronoun **ũya** is used to indicate a definite distance away from speaker/deictic center and the viewer/addressee. **Ũũya** in example 22 is the Kikamba demonstrative pronoun that indicates the farthest distance from the speaker/ deictic center.

22. Ũũya nĩ Mũũkamba wa w'o.

DEM SGL be Kamba PREP true.

(That is a Kamba of true)

That is a true Kamba.

Ūŭya means *that one*. **Ūŭya** in example (22) is the demonstrative indicating that the figure (muukamba) and the implicit ground (**ũũya**) are away from the anchor. **Ūŭya** denotes that the Mũũkamba correlated is within a definite distance away from the speaker/deictic center. The distance denoted by **ũũya** is visual to the speaker/deictic center.

The co ordinates in these Kikamba demonstratives displayed in examples (8) to example (22) are generally anchored by the speaker's body, i.e. the speaker's bodily orientation provides the origin or anchor of the co ordinate system. In examples 8, 9, 10 and 11 *vaa, vau, vaya* and *vaaya* orientates the speech participants in a binary relation between a lexically encoded figure and the deictic center. In the same quoted examples replicating a face-to-face conversation, the demonstratives are interpreted from the speaker's body at the time of the utterance, which also represents the viewer, origin, and ground. Of course, the deictic center can be transposed from the speaker to the addressee or some other person. The co ordinate system is anchored by the speaker's body. In the Kamba language, the aspect of distance is encoded in the demonstrative.

Demonstrative adverbs in the Kamba language are used to indicate a spatial contrast among referents near the deictic center (proximal) (*vaa, ũno/ũ* and *ũũ/ũyũ*), referents that are medial relative to the deictic centre (medial) (*vau,vaya, ũsu, ũya, ũsu* and *ũya*) and referents outside the domain conceptualized as the deictic center(distal) (*vaaya, nak(ũ)u, ũya, and ũyũya*). In all these cases of demonstratives the ground is implicit There is no way of separating the demonstrative from the aspect of distance without affecting the semantic function of it. Figure (3) below shows the five Kamba demonstrative adverbs in their contrastive distribution:

PROXIMAL	CORRESPONDING MEDIAL	CORRESPONDING DISTAL
Vaa	Vau	
	Vaya	
		Vaaya
		Nak(ũ)u
ĩno/ĩ	Ĩsu	
	Ĩya	
		Ĩya
ũũ/ũyũ	Ũsu	
	Ũya	
		Ũya

Figure 3 showing the distribution of Kikamba demonstratives in their contrastive distribution.

These demonstratives do not combine an explicit figure with an explicit ground but indicate the location of the figure relative to an implicit ground, i.e. the deictic center, which is ‘entailed’ by the demonstrative.

Diessel (2014:13) demonstratives constitute a unique class of expressions serving one of the most basic functions in language. In face-to-face conversation, they are used to establish a joint focus of attention, which is a complex phenomenon that has been studied intensively in interdisciplinary research involving developmental psychology, cognitive primatology, and philosophy of mind. The notion of joint attention is used to characterize triadic situations in which speaker and addressee share their attention on a particular referent. Joint attention is a prerequisite for both communication and social cognition. In order to communicate, speaker and hearer must share their attention, i.e. they must be focused on the same entity or situation, which presupposes the ability to understand other people as ‘mental’ or ‘intentional agents’. Speaker and hearer must recognize that the communicative partner is looking at the current speech situation (and other aspects of the communicative event) from a particular perspective and that

social interactions and information transfer will only be successful if the communicative partners take the other person's perspective and mental states into account.

Demonstratives are characterized (and other deictics) as 'vectors' that speakers use to direct the communicative partner in a 'co ordinate system of subjective orientation'. The particular communicative function of demonstratives is reflected in their linguistic properties (Diessel 2006). Two aspects are especially important: the first aspect that characterizes demonstratives as a unique class of linguistic expressions is their history. In contrast to other spatial terms, demonstratives are very old and form the basic vocabulary of language.

The second aspect is that demonstratives, in contrast to most other function morphemes, is that demonstratives are universal and easily identified. A unique morphological feature that distinguishes them from other function morphemes is the encoding of deictic distance specifications. The following (already named above) five Kamba demonstrative adverbs specifically encode distance from the deictic centre:

Vaa means *here* and gives a distance proximal to the speaker or deictic centre.

Vau means *there* and indicates a distances away from the speaker/deictic centre but proximal to the hearer/addressee. The distance encoded by this demonstrative is medial in relation to the speaker/deictic center.

Vaya means *there* and indicates a distance away from both the speaker and hearer. This distance is, however, still within the view of the speaker/deictic centre and the viewer/addressee. It encodes a distance that is medial to the speaker/deictic center.

Vaaya means *there* and indicates a definite distance away from both the speaker/deictic centre and the viewer/addressee. This distance is, however, out of the view of both the speaker/deictic centre and the viewer/addressee and distal in relation to the speaker/deictic center.

Nak(ũ)u means *there* and indicates an indefinite distance far away from both the speaker/deictic centre and the viewer/addressee. This demonstrative encodes a distal relationship to the speaker/deictic center.

2.7 Conclusion

From the data analyzed in this chapter this study can state that the Kamba language has five adverbial demonstratives. This is a five deictic system in which the position of the viewer/addressee is only relevant in the first and second terms. The third, fourth and fifth categories relate to the speaker/deictic centre. Taking examples 8 to 22 into account, this study can state that the underlying co ordinate system in Kikamba demonstratives constitutes the relative frame of reference, which is deictic in nature. The deictic or relative frame of reference is generally anchored by the speaker's body, i.e. the speaker's bodily orientation provides the origin or anchor of the co ordinate system. The figure relates to the ground from the point of view of the speaker. Kikamba adverbial demonstratives thus use a bodily co ordinate system.

CHAPTER 3: SPATIAL ORIENTATION IN RELATION TO OBJECTS.

3.1 Introduction

Chapter three presents data analyzed as spatial prepositions in sentences and in figures. In section 3.1 this chapter presents an introduction, section 3.2 a general overview of prepositions. Section 3.3 presents figure and ground in prepositions, section 3.4 presents Kikamba spatial prepositions. Section 3.4.1 presents the analysis of *ĩlũ wa-* which translates to *on top of* or *above* or *up*, section 3.4.2 presents the preposition *thea na-* which translates to *down*, section 3.4.3 presents *-lingi* – which translates to *around* or *round* and section 3.4.4 analyses *ng’oko* which translates to *over*, *mũingo* which translates to *across* (of a water body or body related to holding water) and *mũkĩlo* which translates to *across* (of a relatively level area). This chapter also displays data in some four figures to illustrate these prepositions. Figure (iv) illustrates the preposition *-lingĩ* - (*a/round*), figure (v) illustrates the preposition *ng’oko* (*over*), figure (vi) illustrates preposition *mũingo* (*across*) and figure (vii) illustrates the preposition *mũkĩlo* (*across*). Section 3.5 is a summary of the chapter.

3.2 General overview of spatial prepositions

A preposition is a term used in grammatical classification of words referring to the set of items which typically precede or precede noun phrases (often single nouns or pronouns), to form a single constituent or structure (Crystal 1997:30).

When describing spatial relations in natural language, we often use spatial prepositions such as *in, behind, or above etc.* Spatial prepositions such as these, which are used in order to describe the location of one object in relation to another, are called relational prepositions (Clark 1973). Some of these prepositions, such as *in, at, and near*, only refer to topological relations between the objects. Others, such as *in front of, behind, left of, right of, beside, above, and below*, also convey information about the direction in which one object is located with respect to the other (Gadula 1988). Spatial are those expressions which express ‘spatial relations’ (Lakoff 1987). This semantic category assumes the semantic primitives trajector (or ‘Figure’) and landmark (or ‘Ground’), whereby the location or motion of the first is characterized in terms of its relationship to the second.

According to Levinson (2003: 67) ‘Topology’ in the literature on spatial language refers to the sort of domain covered by the English prepositions *in, at, on, near, between* and so forth – that is to notions of coincidence, contact, containment, contiguity and proximity (the notion is thus wider than mathematical topology, see below). This domain can be conceived of as essentially about spatial coincidence or its approximation (*as in near*), with the subsequent subdivisions of types of coincidence (as in *in vs. on*).

3.3 Figure and ground in prepositions

The object that is locating or moving around is the *figure* and the object in relation to which the figure is located is the *ground*. In order to use spatial prepositions, the speaker has to establish a reference frame (that is, an orientation) that determines the direction in which the figure is located in relation to the ground. The figure and the ground are the two arguments that establish a reference frame. An important contextual factor that can impose an orientation on the reference object is the point of view from which the reference object is viewed (either in actual fact or mentally through an act of imagination). In particular, the speaker's location can serve as the point of view. The hearer's location might also serve as the point of view but is used less frequently Bürkle et al (1986). According to Hays (1987), the *point of view* forms third argument.

The strategy in this study is to establish the specifications of spatial coincidence or contiguity is by using a coordinate system. The strategy is to choose a prominent ground object at some remove from the figure or object to be located ,and then to specify a search domain from the ground by specifying an angle from that landmark.

3.4 Kikamba Spatial Prepositions

This section will present Kikamba prepositions as follows:

3.4.1 **ĩũũ wa** – (on top of/ above/ up)

Kikamba spatial prepositions link nouns, pronouns and phrases to other words in a sentence. For example sentence 23 illustrates the spatial preposition **ĩũũ wa-** which translates to *on top of* or *above* or *up*.

23. Yĩembe yĩ ĩũũ we ĩkũmbĩ.

Hoe SGL be PREP the granary.

The hoe is on top of/above the granary.

Example 23 presents *yĩembe* (hoe) as the figure and *ĩkũmbĩ* (granary) as the ground. In example **23** above, **ĩũũ we-** relates the hoe to the granary. **ĩũũ we-** thus shows the position of the hoe that is on top of the granary in the sense that it is in contact with the surface of the granary. **ĩũũ we-** could also encode that the hoe is located in the space above the granary. **Ĩũũ we-** is a Kikamba complex preposition relating the figure (the hoe) to the ground (the granary). The orientation encoded is on the vertical axis from the view point of the speaker. Example 24 below further illustrates the meaning of **ĩũũ wa-** (on top of or above).

24. Kavyũ ke ĩũũ wa mesa.

Knife SGL be top PREP table.

The knife is on top of/above the table.

Similar to the semantic senses in example 23, **ĩũũ wa-** in example (24) relates **kavyũ** (knife), the figure, to the ground, **mesa** (the table). The position of the knife is projected from the view point on the vertical axis as on top of the table in the sense that it is in contact with the top surface of the table. **Ĩũũ wa-** also denotes that the knife could be in the space above the table not necessarily in contact with the table. In this case the figure is on a level above the surface or area of the ground correlated. The figure correlated is apprehended as holding or acquiring a position which is on top of or on the outside of, a surface denoted by the ground. The spatial senses encoded by **ĩũũ we-** and **ĩũũ wa-** in examples (23) and (24) respectively project a relativistic relationship between the figure and the ground. This is in agreement with the view held by Talmy (1988b:170) that conceptualized space as topological in nature, that is, conceptualized space ‘involves relativistic relationships rather than absolute fixed quantities’.

Example 25 below brings out the meaning of **ĩũũ** in a case where it is used to refer to the celestial - sky or heaven.

25. E ĩũũ ĩtunĩ.

He be PREP: heaven

He is up in heaven.

Example (25) is another example of a complex Kikamba preposition **ĩũũ ĩ-**. The spatial sense denoted by **ĩũũ ĩ-** in example (25) is on the vertical axis from the view point in an ascending extension or direction. The locality of the ground denoted ĩtunĩ is motion in progression all-the-way to a terminal point. **E** (He) is the figure and **ĩtunĩ** the ground. The space denoted is indefinite and far away from the speaker. This means that the figure takes orientation from ĩtunĩ in a coordinate system that uses sidedness of objects. ĩũũ wa- has other senses. Example (26) below is another one of them.

26. Ũsu nĩ ĩũũ waku.

That be PREP you

That is upon you.

The sense denoted in example (26) is that ‘it is upon you’. This means that **waku** (you) take the blame or the responsibility of something. It also means ‘it is up to you’ or ‘it is on you’. Iulu waku projects the sense that something is placed on another, thus metaphorically the responsibility is placed on waku (you).

27. Nĩ ĩulu wa kyaũ?

PREP it is?

(It is about what?)

What is it about?

In example (27) **ĩũũ wa-** means *about*. **Ĩũũ wa-** communicates the metaphorical sense of placing something on top of another. The act of placing ‘on top of’ is compared to placing a

question on something, say an idea. In example 27, ‘it’ is supposedly placed on the concept ‘what’ thus *iulu wa* - seeks to establish the subject of the query or question. It seeks to establish the matter in question.

In another metaphorical sense, the simple preposition **ĩũlũ** (*up*) when used to refer to people means the Kenyan people from the Western and Nyanza regions. If a Kamba native speaker says;

28. Aa nandũ ma ĩũlũ.

These be people from PREP.

These are people from up.

The kamba native speaker means that in Kikamba spatial orientation - in terms of cardinal orientation - **ĩũlũ** denotes the west or western direction. When **ĩũlũ** is used to refer to the western region of Kenya, it associates the western orientation to the direction of the setting of the sun. This direction is the West in terms of cardinal orientation. **Ĩũlũ** in example 28 thus refers to people from the larger Nyanza and Western provinces of Kenya specifically members of the Lugha and the Luo communities in metonymy.

3.4.2 – **ea na** (down)

-**ea na** (down) is another spatial preposition as demonstrated in example 29:

29. Ng’ombe syathe-**ea na** ũsĩ.

Cow.PL:PERF go PREP the river.

(Cows have gone down with the river)

The cows have gone down the river.

In example **29** above –**ea na** – relates the cows to the river. –**ea na**- thus shows the direction of the river the cows have walked which is down from the view point of the speaker. The orientation is on the horizontal axis. The cows form the figure and the river the ground. –**ea na**- is a complex spatial preposition in that it is translocative. –**ea na**- encodes motion in example 29. It implies that the motion, extension or direction of the object correlated runs on the horizontal axis (or mainly or approximately so) along a length. There is implication that the motion of the cows is directed away from a point thought of as the starting point or source to the opposite

direction. Mainly the motion is apprehended as proceeding along a path only of the locality or ground denoted. The course of the river provides the limits of the ground. The sense communicated here is that the figure is in contact with the ground. –**ea na-** in example 29 denotes two length senses; (i) that the cows have moved along within the course of the river or (ii) that the cows have moved at the side in a direction parallel to the length of the river. It should be noted that motion description is a major branch in the spatial domain.

Levinson (2003:68) like most locative descriptions, nearly all descriptions of motion also involves reference to ground locations. Two crucial grounds for motion descriptions are ‘goal’ (the landmark towards which motion is directed) also referred to as ‘ground’ and ‘source’ (or the landmark from which it originates). Notice that specification of either source or goal alone does not determine a direction – it merely determines a progression towards or away from a ground. Specification of both determines a unique vector – so, unlike in locative description, one can specify a direction without employing frames of reference. Often, though, frames of reference will be employed either exclusively (as in *In the summer the geese fly north*) or as part of, or in addition to, goal or source specification (as in *He ran off behind the building*). Deictic verbs of motion (as in *He came late*) may lexically specify a goal, namely the place of speaking, and verbs of motion may also build in ‘attainment of goal’ as in reach, arrive, or ‘departure from source’ as in leave. Verbs of motion may also package other semantic material, like manner of motion. It is static description that will be most commonly discussed in this chapter. Motion description can involve, for example, deixis (as in *Come here!*), frames of reference (as in *Move to the left!*) and even topology (as in *Put it inside the bowl!*)

3.4.3 – **lĩngĩ** - (*a/round*)

The Kikamba spatial preposition -**lĩngĩ** - (a/round) is derived from the noun **kilinge** which means *circle* or *circular* or *round* or *sphere* or *spherical*. – **lĩngĩ** - communicates movement. The sense communicated by –**lĩngĩ** - is that of motion: something extends, or performs a motion thought of extending over a surface or expanse. The orientation is on the horizontal axis from the view point of the speaker. It is stated or understood by implication, that the ground forms a surface over

which the motion of the figure correlated extends either in contact with the underlying ground which is passed by it on or along its surface or, sometimes, without contact with the underlying ground, which is then passed by it. From the view point V, -lĩngĩ - orientates on the horizontal axis in a circuitous manner. Figure (4) below demonstrates the Kikamba spatial preposition – lĩngĩ -:

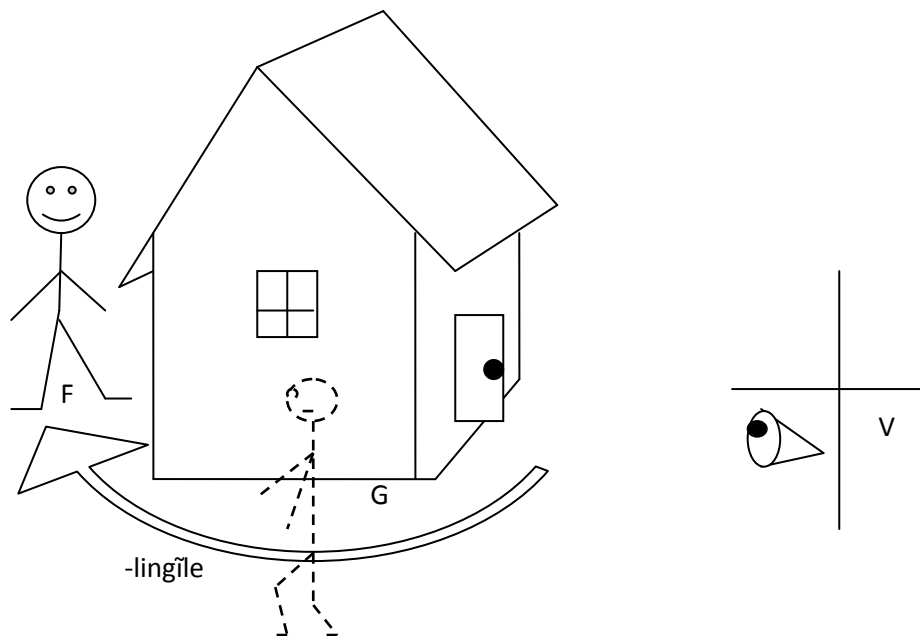


Figure 4 showing the meaning of –lĩngĩ - (a/round).

Figure (4) shows the conceptualization of –**lĩngĩ** - (a/round). Although the denoted motion is circuitous, the ground is not circular. The ground (house) is cubicle in dimension but that notwithstanding, the movement captures a circular course. The actual motion may not even be circular or a complete circle but –**lĩngĩ** - implies that the motion is a/round the ground. –**lĩngĩ** - is also used in the sense of **a/round to** most likely to the back or rear of some object like a house as illustrated in figure (4). A good example is sentence 30 below.

30. Mũtũa ĩlĩngĩle ũete malenge.

Mutua go PREP and bring pumpkins.

Mutua go a/round and bring pumpkins.

- **lingĩ** - in example 30 denotes a motion extending in a circuitous course within a given space, area or surface, to the back or rear of an implied ground which is a physical structure most likely a house or a hut. Mutua is the figure and the implied house or hut the ground. The sense communicated here is that Mutua is not in contact with the ground. Mutua uses the outer side of the ground and encircles it in a manner that he forms a kind of a ring round a part of the ground implied. Neither the figure nor the ground implied need have a truly circular form, nor is it necessary for the figure to extend fully round the ground implied and form a closed circle. Example 31 below demonstrates this;

31. Mūtūa eelingĩla king'ang'ani.

Mutua PERF: go PREP market.

Mutua has gone a/round the market.

In example 31 the motion denoted by **-lingĩ** - is not of such a kind as to rotate with the direction with the speaker as the centre or axis, but instead it follows a winding course in space from the speaker's point of view. Although the motion is a circuitous one, it does not describe a true circle; instead it generally passes by a curving, tortuous course with twists, bends, or turns. The figure, mutua, moves in an implied kind of a circular motion. The ground is the market. The ground being an expanse of space, the sense communicated is that Mutua (the figure) is not in contact with the ground.

32. Mūtūa elingĩle kyũũ.

Mutua MDL go PREP kraal.

Mutua should go a/round the kraal.

In example 32 Mutua (the figure) performs a motion that is circuitous in terms of orientation. The speaker and viewer are at a proximity related to the surroundings. They are in joint attention with Mutua (the figure) and kraal (the ground). The figure (mutual) skirts the surface of the ground, a direction which to the observer may be outwards. The mind of the Kamba native speaker apprehends the orientation of **-lingĩ** - in example 32 as motion that wholly or partially encircles, encompasses, or encloses the surface of the ground (the kraal). The surface of the ground here is generally the outer side or the free side of the kraal. The kraal may, but need not,

have a circular or spherical shape. – *lingi* - presents the figure path as involving a horizontal deviation from straightforward horizontal motion. This orientation uses sidedness of an object (the kraal) as co ordinates. This amounts to a relative frame of reference.

In metaphorical sense, - **lingī** - (*a/round*), as in hang around a place, often has a connotative/metaphorical sense such as ‘loiter’ or ‘loaf’ about a place. The sense communicated is that of Mutua going a/ round in circles which amounts to aimlessly. In example 33 below, the presence or appearance of Mutua (the figure) correlated is extended to more points than one in the market (the ground). These points are thought of as frequented or visited alternately. There is often a suggestion of the figure prowling around, idling, loitering or loafing about the ground as in example 33 below;

33. Mūtūa atindaa ayilingīla kīng’ang’anī.

Mutua SPT keep going PREP the market.

Mutua keeps going a/round the market.

The motion of Mutua (the figure) in example 33 in relation to the market (the ground) is not a circular one but proceeds in different directions as suggested in the expression suggesting repeated action of moving in circles aimlessly **atindaa ayilingila** – (keeps going a/round). This motion, not necessarily being a circular one, extends in any direction over a geographical or similar expanse denoted by the speaker. The native Kamba speaker conceptualizes this motion as either one that proceeds at random, or here and there, with no fixed course or focus and often in a leisurely way: or it is one intended to take the figure correlated from one place to another of the ground as denoted by the speaker, or it is undertaken for the purpose of examining the various parts of the market, or doing work. The orientation here is that of relative frames.

34. Mūtūa elingīlaa kūū kwonthe auīte mbu.

Mutua SPTgo PREP here everywhere screaming.

(mutua goes a/round here everywhere screaming)

Mutua goes a/round everywhere screaming.

-**lingīlaa** with reference to Mutua (the figure) in example 34 gives a sense which advances from point to point or from person to person within a given expanse, everywhere (the ground). The

conceptualization is that Mutua (the figure) proceeds in a circuitous course, or repetitiously, or to and fro or up and down and thereby distributes an activity-in this case screaming- or the effects of it, over various places of the ground. It is implied that the screaming is aimed at reaching different objects or members, within a group, for example one after the other in turn or succession in an unpleasant manner and for an unpleasant effect. What is done (screaming) may be accomplished by the act of traversing the ground or by acts of successive inclusion of members of a group. Thus it is denoted that a route is customarily traversed.

The spatial preposition – **lingĩ-** (*a/round*) as demonstrated in examples 23 to 34 occurs in a context implying that the figure is to be found just within the periphery of a space or area. The figure performs a motion that takes it round this marginal portion of the place or area. This is a case of sidedness of objects as the underlying co ordinate system. It is a relative frame of reference in that – **lingĩ-** presents a view point V and a figure (mutua) and ground distinct from V. It thus offers a triangulation of three points and utilizes coordinates fixed on V to assign directions to figure and ground. In this case the anchor is the body of the observer (often, the speaker and/or addressee). The ground is a distinct entity- house in example 30, market in example 31, kraal in example 32). The axes from those of the body of the observer onto the ground and depend on the orientation of the observer. Examples 30 to 32 may be said to use a coordinate system based on the observer’s/speaker’s perspective of the world.

3.4.4 Kikamba Prepositions ng’oko (over), mūingo (across) and mūkilo (across)

Ng’oko is a Kikamba spatial preposition that translates to *over*. From the view point **V**, **ng’oko** is a translocative preposition that denotes that the figure is over some raised ground or area. **Ng’oko** means that the figure will go up first and later down to get to the destination which is on the other side out of visual distance to both the speaker and the viewer. **Ng’oko** denotes motion which offers resistance to locomotion because of its raised state. There is contact with the surface of the object offering resistance. Example 35 below demonstrates this.

35. Mwaitũ e ng’oko wa kīīma.

SGL mother be PREP hill.

Mother is over the hill.

In example 35 (a), the figure is **mwaitū** and the ground is **hill**. The native Kamba speaker conceptualizes that **hill** is a raised area. For **mwaitū** to be over the hill from the view point V, she has to do some ascending first then some descending later. **Ng’oko** (*over*) communicates the sense that there is locomotion by figure to ground going up and down some raised ground. It is conceptualized that if **Mwaitū** is in the ground described as **ng’oko**, then she is out of visual distance because the raised area named as the hill cuts off the view of the speaker. The coordinate orientation is on both the horizontal and the vertical axes. This preposition is further demonstrated in example 35 below.

36. Mūtūa e ng’oko ãya ãngĩ.

(Mutua is PREP that other)

Mutua is over the other side.

The conceptualization of **ng’oko** in example 36 is that from the view point V, Mutua (the figure) has first ascended some raised ground, which is not named, and later descended to the other side (the ground). Mutua is in contact with the figure in some arc – like trajectory. In this example the other side (the ground) is an indefinite space with no limits. **Ng’oko** means that Mutua (the figure) is out of visual distance because the unnamed raised ground has cut off the speaker’s view. See below example 37 with the same preposition:

37. Mūtūa e ng’oko wa mūnda.

Mutua be PREP of the garden.

Mutua is over the garden.

Example 37 uses **ng’oko** in some seemingly peculiar sense because the object traversed **Mūnda** (*garden*) is not itself usually a raised feature. However, the spatial sense communicated in example 37 is that from the view point V, the garden correlated is on some raised object or area. Instead of using the unnamed raised object itself, the example uses the garden which is on the raised object or area thus treated as a raised object. In this case, **mūnda** forms the object to be traversed for one to get to the figure (Mutua) which is on the ground **ng’oko**. The orientation of the figure (Mutua) is taken from the object named as **mūnda** (the garden).

In figure (5) the spatial sense communicated by **ng'oko** (over) is movement first up and later down a raised obstacle like a hill or mountain. **Ng'oko** (the ground) is located on the other side of the obstacle cutting it off the view of the speaker. The figure obtains orientation from the raised obstacle.

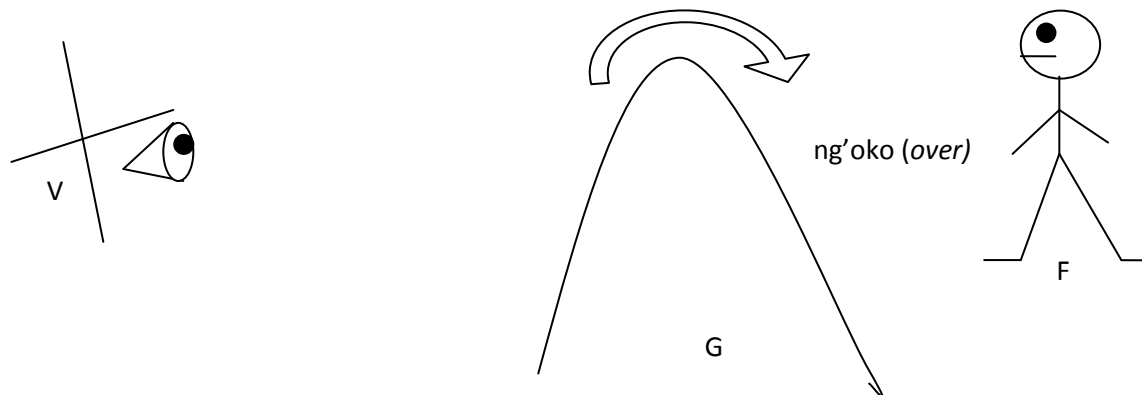


Figure 5 showing the spatial orientation of *ng'oko* (over).

In figure (5) V forms the view point of the speaker. It is from V that the axes are projected onto the ground G to give orientation to the figure F.

Mūingo as a Kikamba spatial preposition means *across* from the view point **V**. **Mūingo** means that the figure correlated will reach the ground by crossing a water body or a feature that is associated with water like a stream, river, valley, lake, an ocean etc. The motion offers resistance to locomotion because of its state. Example 38 demonstrates the meaning of **mūingo**:

38. Mwalimū e mūingo wa Thwake.

SGL teacher be PREP of Thwake

(Teacher is across of Thwake)

The teacher is across the river Thwake.

The spatial sense communicated in example 38 is that the ground (**mūingo**) is across a feature which is a water body or a feature which is associated with water. In the case of example 38 Thwake is a tributary of river Athi. The water body or feature may have limits like a stream, a

river, a valley etc or it is across a feature that is extended like a lake, the sea or ocean. When a native Kamba uses **muingo** in this example, he conceptualizes that the water body is of a relatively lower level. The figure correlated thus traverses a lower level feature to reach the ground. The feature traversed by Mwalimu poses a considerable challenge to cross and thus it forms an obstacle. In example 38 **mwanimũ** (teacher) forms the figure and **mũingo** (across) the ground. From the point of view of the speaker, the figure has traversed a relatively lower level feature, in this example river Thwake, to cross (**mũingo**) the ground. **Mũingo** in example 38 may conceptualize contact between figure and ground as one is expected to use some mode of locomotion that enables contact with the ground like a water vessel which goes over the obstacle to the ground. The motion denoted is that of going down or lower first and then up or higher later. The figure takes orientation from river Thwake. The co ordinates orientation is on both the horizontal and vertical axes. The underlying co ordinate system in example 38 is thus sidedness of the object known as river Thwake in the intrinsic frame of reference

39. Mũsyĩ nĩ mũingo wa ũkanga.

Home be PREP Ocean.

(Home is across of the Ocean.)

Home is across the Ocean.

Example 39 makes **mũsyĩ** (*home*) the figure and **mũingo** (across) the ground. **Mũingo** in this example denotes motion that traverses a water body (ocean) by some form of locomotion like a water vessel or plane. If one has to go home he has to traverse a lower level, go down first and later up, to reach the ground. There is implied contact with the space traversed if the means used is one other than an air plane. The obstacle to overcome for one to reach **mũsyĩ** (the figure) is the ocean. From the view point V, the direction of **mũsyĩ** (the figure) is to be taken from the object known as the Ocean. The co ordinates for mũingo orientate on both the horizontal and the vertical axes. The co ordinates for musyi are provided by the sidedness of the object known as the ocean.

In many instances when **mũingo** (across) is used in a familiar spatial sense, the Kamba native speaker will use it without necessarily adding the object predicate as demonstrated in example 40 below:

40. Mūsyĩ nĩ mūingo.

Home be PREP.

Home is across (the river).

Example 40 denotes familiarity of the ground to both the speaker and the viewer. **Mūingo** (*across*) in this example conceptualizes that the viewer already understands that for one to locate the figure (**mūsyĩ**), one has to traverse some familiar lower level feature, go down first and later go up. It is in this case not necessary to name the object traversed because it is internalized by the Kamba native speaker and implied. From the point of view of the speaker, mūingo is within visual distance.

In another spatial metaphorical sense, example 40 may mean that home *is overseas*. In such a case for one to get to the figure **mūsyĩ** (home) one has to use some vessel for locomotion like a ship, or an airplane to overcome the obstacle which is a water mass. It is only after one goes over the obstacle that one reaches the figure which is located on the ground (**mūingo**) which is overseas. In this case the figure is removed from visual distance from the point of view of the speaker.

In the motion sense, the spatial orientation **ng'oko** (*over*) and **mūingo** (*across*) are converse. **Ng'oko** (*over*) orientates in an arc – like trajectory first up and then down while **mūingo** (*across*) orientates in an arc – like trajectory first down and then up. The path for across is horizontal.

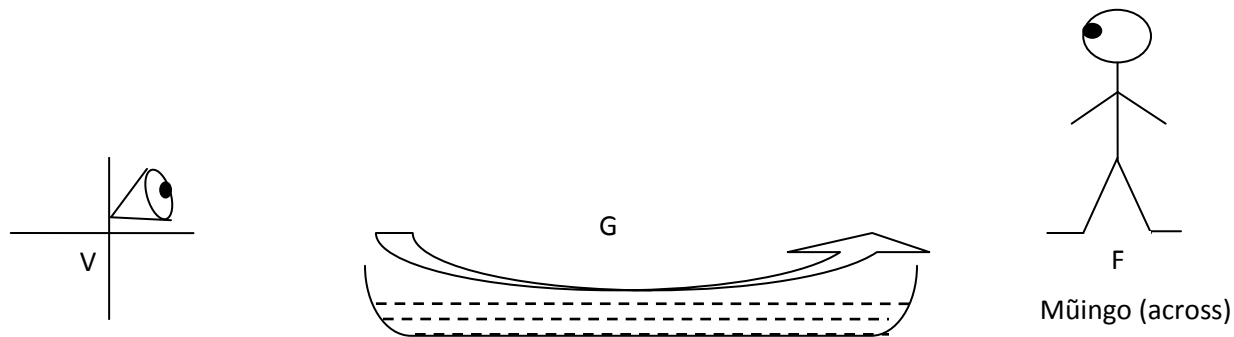


Figure 6 showing the spatial orientation of mūingo (across).

In figure (6) **mūingo** (*across*) is the ground. **Mūingo** communicates the sense that there is movement first down and then later up a lower level obstacle mainly a water body like a lake, a river, a stream, a sea etc. The figure gets orientation from this lower level obstacle.

Mūkīlo (*across*) is another Kikamba spatial preposition. Mūkīlo denotes motion extending in a non-circular manner over a surface or area. Mūkīlo stresses a side-to-side extension. Example 41 below demonstrates **mūkīlo**.

41. Mūtũa e mūkīlo wa lelũ.

Mutua be PREP of the road.

Mutua is across the road.

Mūkīlo (*across*) denotes crossing a variety of obstacles different from that of **mũingo** (*across*). **Mūkīlo** (*across*) denotes a less challenging obstacle like a simple boundary, a road, a path, a shallow gully, a strip of land, a line etc. The sense denoted in **mūkīlo** (*across*) is that of a simple crossing. From the view point, **mūkīlo** is within visual distance and orientates on the horizontal axis. The obstacle denoted is ‘the across’ to the other side on a horizontal plane. Figure (7) below is a demonstration of **mūkīlo**.

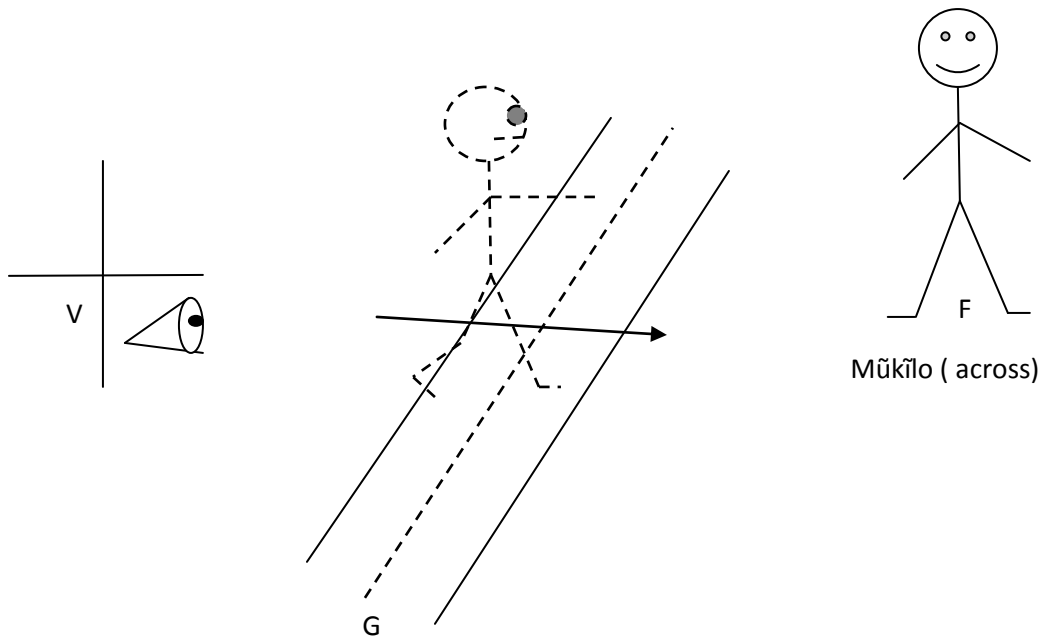


Figure 7 showing across (mūkīlo) the road.

Figure (7) shows the ground is the road and the figure is mutua. Mũingo conceptualizes that from the point of view of the speaker, for one to reach mutua, one has to take his orientation from the road correlated. The ground is also an obstacle which is relatively level and, therefore,

the challenge considerably simpler than that of mūingo. The figure and the ground are within visual distance from the view point **V**.

3.5 Conclusion

The spatial prepositions in examples 23 to 36 all depend on object sidedness for orientation. For orientation, *ĩlũ wa* (*on top of or above or up*) – denotes that the figure relies on the object on whose surface the figure is held, *-ea na* (*down*) - denotes that the figure is projected on the length of the ground on the horizontal plane, *ng'oko* (*over*) denotes that the figure orientates from a raised area, *mūingo* (*across*) denotes that the figure's orientation relies on a lower level area that is associated with a water mass, and *mũkĩlo* (*across*) gets orientation from a relatively level obstacle. Object sidedness, therefore, provides the underlying co ordinate system for the Kikamba spatial prepositions analyzed in chapter three. This is in the intrinsic frames of reference

CHAPTER 4: BODY SIDEDNESS ORIENTATION FOR FIGURE AND GROUND

4.1 Introduction

This chapter presents in section 4.2 an overview of body sidedness as a co ordinate system, in section 4.3 kwoko kwa aka/ kimotho (*the left hand*), in section 4.4 kwoko kwa aume/ kwokoni (*the right hand*), in section 4.5 mbee wa – (*before/ ahead of/ in front of*), in section 4.6 ãtina wa- (*after/ behind/ in the back of*). Section 4.7 presents absolute frames of reference, section 4.7.1 analyses the preposition mũniino wa ũsĩ (*along the river bank*), section 4.7.2. analyses –ma syĩmanĩ (*of the hills*), section 4.7.3 analyzes umĩlonĩ wa sua (*where the sun rises*) and ũthũĩlonĩ wa sua (*where the sun sets*), section 4.7.4 analyses the prepositions ãlũ yũ (*west/ westwards*) and ãtheo yũ (*east/ eastwards*) and section 4.8 gives a conclusion of the chapter.

4.2 An overview of body sidedness as a co ordinate system

According to Lyons (1977:690) we live and move, normally, on the surface of the earth; and we do so, again normally, in an upright position. This gives us the means of identifying one of the dimensions in a three-dimensional space; it also gives us a fixed zero- point at ground level. Furthermore, directionality in the vertical dimension- i.e. the difference between upwards and downwards – is established by our experience of the effects of the force of gravity, by the fact that, normally, the sky is above us and the ground beneath us and by the asymmetry of the human body in the vertical dimension. For these and other reasons, verticality is physically and psychologically the most salient of the spatial dimensions: linguistically, it is the primary dimension.

There are two horizontal dimensions. Man is asymmetrical in one of the horizontal dimensions and symmetrical in the other; he has a front and a back, and two symmetrical sides. He has his principal organs of perception directed towards the region in front of him; he normally moves in the direction in which he is facing. The asymmetrical front-back dimension is less salient than the vertical dimension, but more salient than the symmetrical right-left dimension. Linguistically, the front-back dimension, then, is the secondary dimension. Levinson (1996, 2003) characterizes

a frame of reference as a co ordinate system involving (at least) the following conceptual constituents:

The *figure*, which is the entity that the speaker seeks to locate in the coordinate system.

The *ground*, which is the entity with regard to which the figure is located.

The *origin*, which is the centre of the frame of reference, i.e. the point where the axes of the underlying co ordinate system meet.

The *viewer*, which provides a perspective from which the whole scene is seen.

And the *angular specification*, which indicate an angle or direction between figure and ground (or figure, ground, and anchor/viewer).

The ‘Figure’ is a moving or conceptually movable entity whose site, path, or orientation is conceived as a variable the particular value of which is the relevant issue. The ‘Ground’ is a reference entity, one that has a stationary setting relative to a reference frame, with respect to which the Figure’s site, path, or orientation is characterized (Talmy 2000:184). The Figure is the object of focus, which has the location described. The Ground is the object to which the Figure is related. This is in a case of absolute frame of reference.

4.3 Kwoko kwa aka (the left hand)

In Kikamba bodily co ordinates are very clear. The symmetrical **kwoko kwa aume** also known as **kwokoni** (the right hand) is considered preferred and convenient. The symmetrical **kwoko kwa aka** also known as **kimotho** (the left hand) is considered inconvenient to work with. Example 42 below demonstrates kwoko kwa aka/ kimotho (left hand)

(42) Wavika mūsyĩ, mūūnda ũsu wĩ kwoko kwa aka.

(When you get home, that garden is to the hand of women.)

When you get home, that garden be PREP: BP.

When you get home, that garden is to the left.

Kwoko kwa aka (*to the left*) in Kikamba literally translates to the hand of women – women are considered physically weaker than men and thus the left hand is weak like a woman. The left is inconvenient to work with especially if one is right handed because it lacks dexterity. Kwoko kwa aka in example 42 projects orientation from the speaker’s point of view. This orientation presupposes a view point V indicating the location of the speaker and a figure (mũũnda) and a ground (mũsyĩ) distinct from the view point. This arrangement of the surroundings forms a triangulation of three points – the view point of the speaker, the figure and the ground. The coordinates fixed on V (the view point) are then used to assign directions to figure (mũũnda) and ground (mũsyĩ). The coordinate system in example 42 is centred on the human body and anchored by one of the body parts (kwoko kwa aka- *the left hand*). Figure (8) below demonstrates the orientation of the Kikamba kwoko kwa aka (*to the left*)

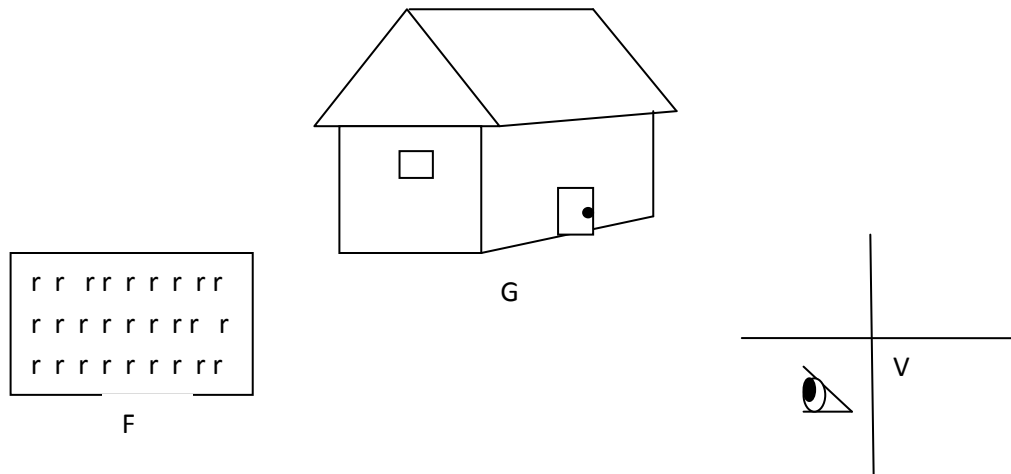


Figure 8 the garden F is to the left of the home G from the view point V.

There are other senses of the same preposition. Kwoko kwa aka/ kimotho (*the left*) can be used in a metaphorical sense to communicate the off sidedness and inconvenience to access as in example 43 below:

43. mũũnda ũsu wĩ kĩmothonĩ.

(That garden is on the left handed side)

That garden be on BP.

That garden is off side.

To the Kamba native speaker, **kīmothonī** in example 43 radiates the inconvenience sense of kimotho (the left hand) to the garden meaning the garden is located at a place that is offside, probably off course, and thus not easily reachable. It takes one extra effort to reach the garden correlated. This means for one to reach or access the garden correlated it is quite an inconvenience, just like working with the left hand while one is right handed. One may not prefer to go to such a garden because it is located at the wrong place.

In the metaphorical sense **kwoko kwa aka/ kīmotho** (*left hand*) means slow. If a Kamba native speaker says as in example 44:

44. Mūtūa e kīmotho.

(Mutua has a left hand)

Mutua is left handed.

The figurative sense of kimotho (the left hand) radiated in example 44 is slowness. Slowness is an encyclopedic entry of the Kikamba left hand. In example 44 Mutua's speed is assigned the slowness attribute of the left hand. Mutua's speed is compared to the left hand meaning that the speed at which Mutua works or moves is undesirably slow and, therefore, inconveniencing and irritating. The inconvenience caused by Mutua's speed is like that caused by one using the left hand whereas he is right handed.

4.4 Kwoko kwa aume (*the right hand*)

In **Kikamba kwoko kwa aume** (*the right hand*) is considered the opposite in meaning to the left hand. Right could, of course, be distinguished from left on the basis of the predominance of right-handedness in any population; and it is noticeable that it is the phenomenon of dexterity that has provided the word for the right- hand side in many languages. The right hand is the one that is used characteristically to do things that require some kind of dexterity: it is the hand with which one eats, writes, grooms oneself, and so on Lyons (1977:690). Example 45 projects the meaning of kwoko kwa aume (*the right hand*) in Kikamba:

45. Wavika mūsyī, mūūnda ūsu wī kwokonī kwa aume.

(When you get home, the garden is to the hand of men)

When you get home, that garden be to BP

When you get home, that garden is to the right.

Kwoko kwa aume (*the right*) is considered the stronger hand just like a man. Kwoko kwa aume like the kwoko kwa aka (*the left*), presupposes a view point V which is the location of the speaker. This view point offers a triangulation of three points – the view point of the speaker, the figure (mũũnda) and the ground (mũsyĩ). This orientation then uses co ordinates fixed on V to assign directions to figure and ground. This system of co ordinates is centered on the human body and is anchored by the body part known as kwoko kwa aume (*the right hand*). Figure (9) below demonstrates a projection of Kikamba kwoko kwa aũme (*to the right*):

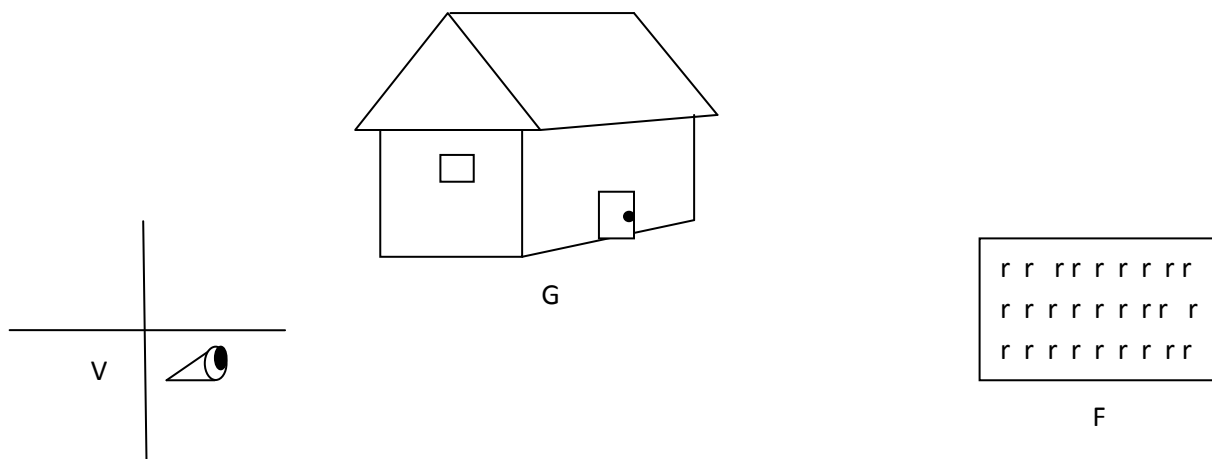


Figure 9 the garden F is to the right of the home G from the view point V

Figure (9) shows the co ordinates of the figure (mũũnda) from the ground home (mũsyĩ). The orientation presented by figure (9) is not distance specific. The area referred to as garden to the right may be an expanse that is in some unspecified distance from the ground. Example 46 further illustrates kwoko kwa aume/kwokoni:

46. Mũũnda ũsu wĩ kwokonĩ.

(That garden is at the right handed side)

That garden be at the BP.

That garden is on course/strategically located.

In a metaphorical sense relation, and contrary to the conceptualization of **kĩmothoni** (*the left*) in example 43, **kwokonĩ** in example 46 means that the garden correlated is conveniently located

and thus easily reachable or accessible. Metaphorically speaking, one of the encyclopedic entries of the Kikamba right hand is convenience. This attribute is radiated to the garden correlated and this means that one prefers to go to such a garden because it takes him little effort to reach it. The radiated sense of the right hand is that of convenience to work with especially for a right handed person. The garden is located at the right or a strategic place.

Kwoko(ni) (right hand) in Kikamba means hard working, progressive, prosperous, flourishing and generally of fruitful effort. The senses of the right hand radiated in example 47 below are those of fast speed and dexterity.

47. Mūtūa e kwoko.

(Mutua has a hand)

Mutua has a BP

Mutua is hard working.

In example 47 kwoko communicates that Mutua is hard working, his efforts are fruitful and that his effort is never in vain. One encyclopedic entry of the Kikamba right hand is dexterity and positive effort. This attribute in example 47 is radiated to Mutua making it figurative. Mutua is compared to the right hand. In this case the meaning projected is that Mutua is hardworking, skilled and efficient and thus what he does comes off successfully and progressively.

Example 48 below projects another metaphorical sense of the Kikamba kwokonĩ.(*the right*) in this case used with the negative adverb *not*:

48. Esile kwokonĩ kute kwake.

(He is moving by a hand that is not his)

He is moving on the wrong BP

He is moving on the wrong side.

The sense relation projected here is that there is a demarcation of places where movement is allowed e.g. lanes on a road. Example 48 above communicates that he is moving on the “ wrong hand” which is the wrong side of the demarcation e.g. the wrong lane on a road.

4.5 Mbee wa – (*before/ ahead of/ in front of*)

The Kikamba preposition **mbee wa-** translates to *before or in front of or ahead of*. **Mbee wa -** implies the figure (the object correlated) holds a fore – position in relation to the ground. The relative position here communicates a conception of direction placing the figure correlated and that of the ground in a specific order on the horizontal axis as in example 49 below:

49. Nyũmba yĩ mbee wa Mũtũa.

The house be PREP Mutua

The house is in front of Mutua.

In example 49 the figure is nyumba (*house*) and the ground is Mutua. The preposition **mbee wa-** in example 49 projects the house (figure) as holding a fore – position in relation to Mutua (ground). Figure (10) below demonstrates the Kikamba preposition **mbee wa-**

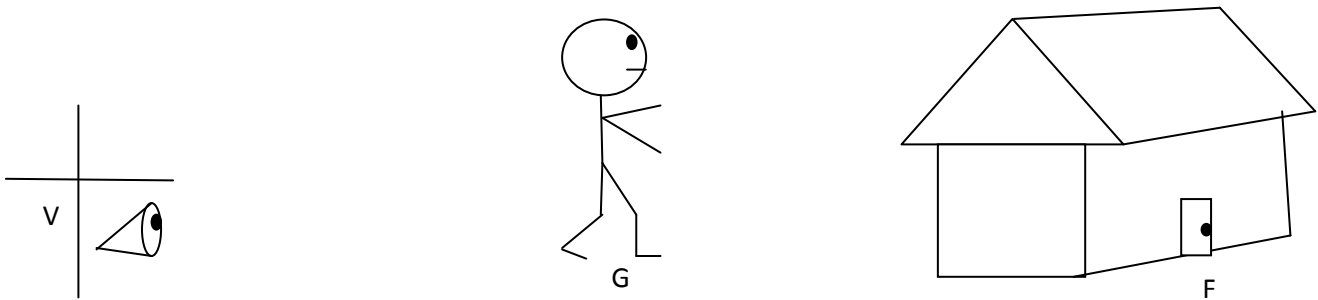


Figure 10 showing the Kikamba preposition mbee wa-

Figure (10) projects a figure and ground that have definite front and back. The front of Mutua faces the house. The spatial orientation from the view point V connects Mutua to the house on the horizontal axis. The co ordinates of the house orientate from the ground (Mutua) correlated. Mbee wa – here refers to a figure in a position located directly in front of or before the ground. In this case the preposition mbee wa – serves primarily the function of denoting direction. To the conception of direction is remotely added a suggestion of proximity. The front side of Mutua supplies the co ordinates for the house from the view point of the speaker.

Mbee wa- projects order and sequence of the figure in relation to the ground correlated as in example 50 below:

50. Mūtūa e mbee wakwa.

Mutua be PREP me

Mutua is in front of/ before me.

The spatial orientation of Mutua in example 50 is taken from the ground *me*. This orientation brings Mutua and *me* into spatial connection. The figure correlated and the locality denoted by *me* present the point of orientation on the horizontal axis. *Me* apprehends the position or locality of the figure Mutua as ahead of or into the sense of directly facing *me* with a suggestion of symmetrical position. Reference here is made to what just precedes *me* in a spatial series. Mutua then is in a static position.

The same sentence in example 50 may communicate the sense that the figure correlated is either static or moving ahead of *me*. In an instance when the sense apprehended is motion the distance between *me* and Mutua may remain unchanged or it may be altered if either the figure or the ground is moving faster than the other. Mutua may be directly before or in front of *me* or relatively ahead of *me*. The motion of the figure correlated here is apprehended as departing from the ground *me*. It is implied that the moving figure gets ahead or in front of a static or moving ground. In both of the cases about example 50 the co ordinates of Mutua orientate from *me*.

The Kikamba preposition Mbee wa – has no semantic distinction for animate and inanimate things. The semantic distinction between the animate and the inanimate is only supplied by the nature of the noun object correlated in a given context. In instances in which both the figure and the ground correlated denote or refer to living beings, or to actions involving living beings. The implication is usually ‘in the presence of’ as in example 51 below:

51. Mūtūa e mbee wa mwalimū.

Mutua be PREP the teacher

Mutua is in front of/before the teacher.

Mbee wa – in example 51 means that Mutua (the figure) is in the presence of the teacher (the ground). In this instance Mutua (figure) orientates from the fore – position of the teacher correlated. Mbee wa- is used in instances in which the ground refers to a living being and the figure correlated refers to an inanimate object as in example 52 below:

52. Mūtūa asyaitye kīma kī mbee wake.

Mutua is looking at a hill PREP him

Mutua is looking at a hill in front of/ before/ ahead of him.

In an instance as in example 52 the figure correlated (kiima) is projected as farther forward of the ground (Mutua). Mbee wa – is also used in instances in which the figure is an inanimate object and the ground is a living thing as in example 53:

53. Mūtūa e mbee wa kīma.

Mutua is PREP of the hill

Mutua is in front of/ before/ ahead of the hill.

Mutua is a living being while the hill is inanimate yet both are in a spatial relationship. The preposition mbee wa – is used in instances of spatial relations where the figure and the ground are both inanimate as in example 54 below:

54. Kīvīla kī mbee wa nyūmba.

The chair be PREP the house

The chair is in front of/ before the house.

Both the house and the chair are inanimate and in a spatial relationship. Kikamba uses mbee wa – to express *before* or *ahead of* or *in front of*. There is no semantic distinction in this preposition to express the distance implied. One way to indicate distance is by adding a demonstrative like vaa (here) as in example 55 below:

55. Mūtūa e vaa mbee wakwa.

Mutua be DEM:PREP me

(Mutua is here in front of me)

Mutua is in front of me.

Example 55 above means that the distance denoted is proximal to the ground *me*. This is only made possible by the use of the spatial demonstrative *vaa* before the preposition.

To refer to a fore – position that is distal to the ground a demonstrative like nak(ũ)u (there – distal) is used as in example 56 below:

56. Mūtūa e nak(ũ)u mbee wakwa.

Mutua be DEM: PREP me.

(Mutua is there ahead of me)

Mutua is ahead of me.

Example 56 above means that the distance denoted is far away from the ground. This sense is made possible to communicate by the use of the distal spatial demonstrative *nak(ũ)u*. Mbee wa – thus communicates the combined implication of distance, proximity, order and direction. The Kamba native speaker has to rely on the context to supply the spatial sense communicated, especially the use of the spatial demonstratives alongside the preposition correlated. Mbee wa – may be used to indicate that something is situated farther in the direction of observation. In such an instance the figure and the ground form two static positions as in example 57 below:

57. Mūtūa aũngamĩte mbee wakwa.

Mutua be PRGV: PREP me.

Mutua is standing ahead of/ in front of/ before me.

In this instance as in example 57 above, the position or direction of Mutua is orientated from *me*. The co ordinates of Mutua are supplied by *me* the ground correlated.

In a metaphorical sense, Mbee wa – denotes before to express a sense of order of ideas in discourse to indicate one idea is placed before the other as in example 58 below:

58. Mbee wa maũndũ onthe tũvoye.

PREP all things, we pray

(Before of all things we pray)

Before everything else, let us pray.

The sense of mbee wa- radiated is that which comes or arrives before another. In example 58 praying precedes all other matters that deserve attention. Mbee wa - also denotes the past, something that happened before another in a succession as in example 59:

59. Muthembi Egan ookie mbee wa muthembi Francis.

Fr. Egan came PREP Fr. Francis

Fr. Egan came before Fr. Francis.

Example 59 communicates a sense of preceding; that Fr. Egan preceded Fr. Francis in arrival. In this case mbee wa – expresses precedence in a succession or arrangement, among a number of persons or things which are either in a static position or in motion.

4.6 Ītina wa – (*behind/ at the back of/ after*)

The Kikamba spatial preposition, ĩtina wa- translates to *behind or at the back of or after*. Ītina wa - communicates an area that is at the back of or the rear of the ground correlated as in example 60 and figure (11) below:

60. Kĩvĩla kī ĩtina wa Mũtũa.

The chair be PREP Mutua

The chair is behind Mutua.

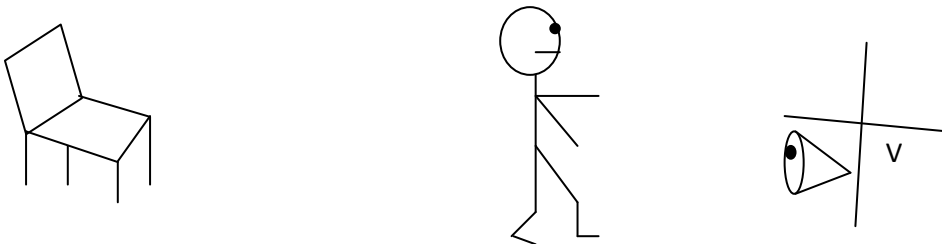


Figure 11 demonstrating Kikamba ĩtina wa – (*behind*)

Ītina wa – projects the figure correlated as holding a behind – position in relation to the ground. In figure (11) the chair is the figure and Mutua the ground. Mutua is animate and has a recognized backside. In instances like this, the chair occupies the position referred to as the hind – position of Mutua. From the view point the chair takes orientation from the ground’s correlated (Mutua’s) back. The chair will be found in a region projected from the back of Mutua. Mutua’s back provides the bodily co ordinates that orientate the chair. Consider example 61 below:

61. Mutua e ĩtina wa nyũmba.

Mutua is PREP house.

Mutua is behind / at the rear of the house.

In example 61 above, the house is between the view point and Mutua. Mutua is the figure and the ground is the house. The co ordinates map onto the ground (nyũmba) from which then the figure gets orientation. The co ordinates are orientated on the horizontal axis. The space denoted by the Kikamba ĩtina wa- as in example 61 is not distance specific-it is thus a relative position. It may mean at *the back of* or *at the rear* or *behind* or *after*. It conceptualizes position, direction, order and proximity. The semantic aspects of the distance implied by mbee wa – are not distinct. For the Kamba native speaker, the use of spatial demonstratives along the spatial preposition supplies the dimension of distance as in example 62:

62. Mũtũa e vau ĩtina wakwa.

Mutua be DEM: PREP me.

(Mutua is there behind me)

Mutua is behind me.

In example 62 the position of Mutua is orientated from *me*. The demonstrative vau (*there – medial*) expresses Mutua as the figure located and *me* the ground correlated. In this case *me* is the speaker. ĩtina wa – here suggests direction, that Mutua is located in the hind position of *me*. ĩtina wa – may also conceptualize proximity in the sense that Mutua is some medial distance farther at my rear. ĩtina wa – is also used to denote order or sequence as in example 63:

63. Mutua ailye ĩtina wakwa.

Mutua be PGR: PREP me.

Mutua is sitting behind me.

Example 63 suggests order of sequence in the sense that Mutua holds a position that is farther to the back of *me*. Given that the ground correlated is animate and both figure and ground have a recognized back side, the implication may be that I had my back turned towards Mutua. Mutua is thus at rest behind me. Example 63 may also conceptualize that Mutua is in a posterior position from me, that I had a position ahead of him. The orientation of Mutua in this example is taken from me towards my rear. The spatial relationship here is binary. The co ordinates of Mutua orientate from my body part known as the back.

Example 63 may also conceptualize that the figure is correlated is in motion in the same direction as the ground which is in front. The distance denoted may express separation in time

and space. Reference is made to a figure that is so placed that it trails behind in a kind of extended line on the horizontal plane.

Itina wa – expressed in a metaphorical sense expresses ‘after’ in order of say ideas, points e.t.c. in discourse. This is in the temporal conceptualization. It denotes the future, something that happens after another in a sequence or succession. For example in sentence 64:

64. Muthembi Francis ookie itina wa muthembi Egan.

Fr. Francis came PREP Fr. Egan

Fr. Francis came after Fr. Egan.

The sense of itina wa- radiated in example 64 is that of one thing coming behind or following another that came before it. Example 64 thus means that Fr. Egan arrived before Fr. Francis so Fr. Francis arrived later after Fr. Egan had arrived.

4.7 Absolute frames of reference

Levinson (2003: 91) observes that absolute systems yield elegant spatial descriptions of all sorts and scales of spatial arrangements. It has the logical superiority that the validity of such inferences is not relative to a fixed viewpoint, as it is with ‘left’ or ‘right’ (or ‘in front’/‘behind’). In fact it is by far the most elegant solution to the problem of angular descriptions on the horizontal axis.

Absolute coordinates involve “a system of coordinates anchored to fixed bearings” according to Levinson (2003:48). This system is a conceptual “slope” S. Slope is a system of fixed bearings imposed on a scene. A search domain is projected off the relatum/ground on the basis of asymmetry given to the scene by S. Anchor point A is within slope S. For Levinson, this makes absolute FoR a binary relation. He argues it involves only two arguments: referent F, and relatum G. The FoR assigns an asymmetry to the scene. Anchor point A is within S. A search domain is projected off a facet of G assigned to it by S. To construct or interpret an absolute spatial reference it is not necessary to know anything about the internal spatial disposition of the relatum. It is necessary to know both the location of the relatum and the bearings of the slope.

For Levinson, absolute FoR operates by assigning an asymmetry to the scene in which the relatum occurs on the basis of a system of arbitrary fixed bearings: Levinson (2003:47-50).

For example in the sentence ‘*The cat is north of the house*’, S assigns to G (the house) a facet north. A search domain is projected off that facet, north.

Such a system does not capture egocentric constancies. To use such a system, speakers and addressees must be constantly and correctly oriented to the local fixed bearings that the absolute coordinate system uses.

Kikamba uses salient geographical features or environmental features and landmarks like rivers especially Rivers Aathi (Athi), Thwake, and hills especially Mbooni hills, Iveti hills, Kiima Kimwe hills Kiima kiu hills and Mutitu hills to project an absolute coordinate system. The Yatta plateau traverses Ukambani marking the division between Kitui county on the one side and Machakos and Makueni counties on the other side. Mūtaũnĩ (the yatta canal), as it is locally known, also contributes to this system of FoR. (The yatta canal is a man- made feature which was constructed by locals in the 1950s through forced labour by the British colonial government). The Kikamba prepositions that demonstrate absolute frames are as follows:

4.7.1 Mūniino wa ũsĩ (along the river bank)

The Kikamba Muniino wa ũsĩ - designates the land or area along a river or a stream. Example 65 illustrates this:

65. Matwĩe muniino wa ũsĩ.

They live PREP river

They live along the river bank.

Muniino wa ũsĩ (*along the river bank*) in example 65 above is a common way in which the Kamba spatially describe the locality along the rivers or streams. The land or area along a river or stream is just abstracted as muniino wa ũsĩ -. This abstraction remains consistent and unvaried from whatever direction. As Levinson observes once the community has fixed a direction, it remains that direction regardless of fluctuations in local landfall, drainage, wind source, equinox, and so on(Levinson 1996:163). Where the system is abstracted out of landscape features, the

relevant expressions (e.g. ‘uphill’) may refer to places indicated by relevant local features (e.g. local hill) or to the abstracted fixed bearings, where these do not coincide. (Levinson 2003:49). The Kamba native speaker will use *mũniino wa ũsĩ* whether referring to R. Athi or a small local stream like *Mwĩta syano* in Kitui which may not be known in the rest of Ukambani outside Kitui. In example 66 the figure is *they* and the ground is *muniino wa usi* – (*along the bank of the river*). The slope *S* is projected off *muniino wa usi* – (*along the bank of the river*). The anchor point *A* is within *muniino wa usi* – (*along the bank of the river*). The two arguments projected are thus *they* and *muniino wa usi* (*along the bank of the river*). These two supply the binary spatial relationship in sentence example 65.

Absolute directions give us external bearings on an array, but without viewpoints. Local landmarks can give us some of the same properties but do not have the same abstract properties as notions like ‘north’. (Levinson 2003:90) In the absolute frame of reference, the environment in which the ground object is located provides a field which is organised in such a way that it can be used to determine a search space; the environment here constitutes the origin of the coordinate system. Familiar examples are the cardinal points north, west, south, and east. The utterance in Kenya, *Garrisa is north of Nairobi* is comprehensible because the cardinal directions provide a grid running across Kenya (and through Nairobi, the referential ground).

Example 66 below further illustrates *muniino wa usi*:

66. *Mutua eĩma mũniino wa Thwake.*

Mutua be PGR cultivate PREP of Thwake

Mutua is cultivating along the bank of R. Thwake.

In example 66 above, the figure is *Mutua* and the ground is *along the bank of R. Thwake*. *Along the bank of R.Thwake* projects the slope from which the co ordinates of *Mutua* (figure) are abstracted. The anchor point *A* for *Mutua* is projected from the *along the bank of R. Thwake*. Example 66 does not have a view point thus *Mutua* and *along the bank of R.Thwake* are in a binary spatial relationship. The coordinate system projected is an absolute one.

4.7.2 The Kikamba Preposition - ma syīmanī (of the hills).

Landmarks that offer distinguishable facets by the local intrinsic criteria form clear examples of the absolute coordinate system. . Absolute coordinate systems hook up to visual experience in a very direct way. Kikamba makes use of extensive use of fixed bearings or absolute coordinates like east and west. In Kikamba *Andū ma iīmani* (*People of the hills*) is a fixed bearing description for people who live up the hills. Ukambani has a number of hills some of which are Mbooni hills, Iveti hills, Kiima Kimwe hills Kiima kiu hills and Mutitu hills. The relation denoted here is that of figure taking orientation from the hills. The view point is not an argument in this FoR. The figure *andu* (*people*) is defined in relation to arbitrary fixed bearings of the location *the hills*. Absolute directions are invariant under individual rotation of the speaker, the observer or the ground object. What is to my north is also to your north, independent of our relative position and orientation. Absolute directions are therefore mostly used in geographic setting, where both distance relations are given and rotation of the configuration is not possible. The invariance rotation of the individual objects and the (relative) invariance to the small changes in the positions of ground may explain why rural people pragmatically prefer absolute frames.

Example 67 explains the Kikamba use of a feature – hill- with a fixed facet. The form of preposition used in example 68 is the singular form – wa syiimani(of the hills)

67. Mutua nī mūdū wa syīmanī.

Mutua is a person PREP

(Mutua is a person of the hills)

Mutua is from the hills.

Example 67 presents the ‘hills’ as the ground. The ‘hills’ as a ground has a fixed facet from where the slope is projected. The figure’s (*mutua*) coordinates are projected from the slope which project the anchor A. Mutua and the hills are thus in a spatial relationship created by this binary relationship of figure and ground without a view point.

4.7.3 Umiloni Wa Sua – (East) And Uthuiloni Wa Sua (West)

Within the conceptual framework of the Kikamba language system the cardinal directions of east and west are also referred to as ũthũilonĩ wa sua – (*where the sun sets*) and umĩlonĩ wa sua (*where the sun rises*). These point consistently in the same direction of east(rn) and west(rn) respectively. These Kikamba directions are fixed in the sense that they apply in an invariant and consistent manner. The sun ranks among the most productive sources for orientation terms particularly for those denoting East and West and even the temporal orientation. These two directions are referred to by expressions like rise, ascend, go up, stands up, noon (sua yaungama) overhead, descend, go down, set. The most obvious cue to fixing a bearing is this solar compass. The sun moves constantly in two dimensions, upwards and across the horizon. The sun's rising and setting directly determine fixed bearings in Kikamba. One of these solar fixed bearings is umĩlonĩ wa sua (*where the sun rises*) denoting the cardinal east. This is as in example 70 below;

70. Nyũnyi syauma umĩlonĩ wa sua.

Birds PERF come PREP where the sun rises.

(Birds have come from where the sun rises)

Birds have come from the east.

Umiloni wa sua (*east(rn)*)– is the ground abstracted. It projects the slope from which the anchor is projected. Nyunyi (birds) forms the figure correlated. In this example, the figure and ground relation is projected by the slope abstracted from the rising sun and anchor A projected from this slope. The birds and east are in a binary spatial relationship in this absolute co ordinate system.

Pederson et al (1998:572) observe that absolute FoR uses information external to both the speech participants and the figure-ground scene. East in example 71 is completely external to the speech participants. It does not get orientated from either the speaker or the addressee. It exists independent of these. It is also external to the figure – ground scene.

Another Kikamba spatial fixed bearings description abstracted from the solar is ũthũilonĩ wa sua (*where the sun sets*) denoting the cardinal west. Example 71 below illustrates ũthũilonĩ wa sua (west):

71. Malondu meekekela ūthũlonĩ wa sua.

(Thesheep are headed to where the sun sets)

The sheep be PPT: PREP where the sun sets

The sheep are headed west (ward).

The rising of the sun and its setting constitute the most conventional manner of developing terms for cardinal directions/ co ordinates in the absolute Frame of Reference in Kikamba. Although Kikamba has the fixed bearings east and west, the researcher did not find any references to the cardinal north and the cardinal south. Temporal orientation has also been mentioned in this section but this research will not explore it. Temporal orientation in Kikamba is subject of further research.

In metaphorical extensions kuthua sua-, (the setting of the sun) denotes the end of something undesirable as in;

72. Kake nikathua.

His sun has set.

He has come to an undesirable end.

The sense of setting of the sun has an encyclopedic entry of end of day. This attribute of end of day is radiated to the life of a human being. The end of the road for someone with undesirable behavior or the end of life in the sense of death is compared to the setting of the sun/ end of day. This means someone with undesirable attributes like stealing, robbery, Murder, witchcraft etc has come to their end as a consequence of their actions. This end may be by being apprehended or it may be of the tragic nature which means the person has died. The setting of the sun in this case means the end of undesirable behavior or the end of life/ death.

4.7.4 Kikamba Preposition ĩũlũ yũ – (west/westwards) and ĩtheo yũ – (east/ eastwards)

A grammatical category exists, which shows up in different lexical and morphological sets. Such expressions are likely to have in addition to nouns denoting the directions, motion verbs meaning like ‘ĩũlũ yũ ya ilovi’ (*that up of Nairobi*) or “yĩũlũ yũ ya kavilondo” meaning (*that up of the Luo people*), or ‘ĩtheo yũ ya Mwambasa’ (*that down of Mombasa*). The demonstrative ‘ĩũlũ yũ -’ (that up) is internalized by the Kamba native speaker as the *west(rn)/ westwards* direction of the cardinal directions and the demonstrative ‘ĩtheo yũ –’ is internalized as the *east(rn)/ eastwards*

of the cardinal directions. The demonstrative *yũ* (*that*) brings in the speaker's point of view, thus adding a relative frame to the idea of absolute frame, the absolute frames east and west are expressed in relative concepts through the demonstrative. Example 68 below demonstrates this spatial expression:

68. Mutua ambatia ãũũ yũ ya ilovi.

Mutua has gone PREP Nairobi

(Mutua has gone that up of Nairobi)

Mutua has gone westwards to Nairobi.

A description such as ãũũ yũ ya ilovi - (*west/ westwards*) example 68 projects a cardinal direction in the absolute FoR. ãũũ yũ ya- does not rely on a figure-ground relation. Instead of the relation to the ground, the abstract spatial vector is specified on the horizontal plane. Mutua (the figure) is to be located by this spatial vector projected from the fixed facet of the cardinal direction west.

Example 69 below demonstrates the Kikamba ãtheo yũ ya - (*east(rn)/ eastwards*) which does not rely on a figure-ground relation:

69. Mutua e ãtheo yũ ya Mwambasa.

Mutua is PREP Mombasa

(Mutua is that down of Mombasa)

Mutua is eastwards in Mombasa.

The spatial relationship between Mutua (figure) and Mombasa (ground) does not rely on a figure-ground relation; instead of the relation to the ground an abstract spatial vector is specified on the horizontal plane. In addition to this abstract quality, this spatial vector system requires the native Kamba speaker to constantly and correctly reckon their orientation with respect to these fixed bearings.

In examples 68 and 69 a path or search domain is projected off the ãũũ yũ - (*west/westwards*) and ãtheo yũ - (*east/eastwards*) on the basis of an anchoring phenomenon in the wider world. There are no observable environmental cues that motivate and anchor the weste(rn) and the East(rn) axis in Kikamba in the instances of examples 68 and 69.

4.8 Conclusion

The Kikamba *kwoko kwa aume* (*the right hand*) and *kwoko kwa aka* (the left) use coordinates fixed on a view point V to assign directions to figure and ground. This system of coordinates is centered on the human body and is anchored by a body part *kwoko kwa aume* (*the right hand*) or *kwoko kwa aka/ kimotho* (*the left hand*) respectively. The metaphorical senses of *kwoko kwa aume/ kwokonĩ* (*the right*), which translates to the ‘hand of men’ and therefore strong like the men, are convenience, accessibility, hard work and fruitful effort. The meaning of *kwoko kwa aka/ kimotho* (*the left hand*) translates to the ‘hand of women’ and therefore it is considered weak like the women. It is therefore inconvenient, slow, sluggish and undesirable.

Mbee wa – communicates a fore – position. Mbee wa – in Kikamba does not semantically encode distance of the figure from the ground. This spatial information is encoded in other accompanying class forms like demonstratives. Mbee wa - communicates different spatial senses e.g. direction, proximity, order and position. It denotes farther forward than that behind in instances when used to project figure and ground in that are both static. Mbee wa – denotes order or sequence where the figure is considered ahead of the ground or either the figure or ground is distinctly in advance of the other. In instances where either the figure or the ground or both are in motion the distance may remain the same or get altered if one object moves faster than the other. In instances where the figure is viewed in observation by the ground, the action is apprehended as departing from the ground. In instances where both ground and figure are static, it is conceptualized that one is situated farther in the direction of observation. Mbee wa - projects coordinates anchored by the asymmetrical front of the body part known as the front.

ĩtina wa – projects sense that refers to order of sequence in which it is used to lexically encode spatial senses of direction, position, proximity, order and sequence. ĩtina wa – denotes order or sequence where the figure is considered behind/ at the back of the ground.

ĩtina wa- communicates a hind – position. It also communicates the senses behind/ at the back of/ at the rear of or after. ĩtina wa – does not encode the semantic distinction to express the distance implied. ĩtina wa – translates to *behind/ at the back of/ after*. ĩtina wa – projects coordinates anchored by the asymmetrical back of the body part known as the back.

Absolute FoR involves bearings that are abstract, arbitrary and fixed. Absolute relations are binary, not ternary. They are independent of the speech participants. They project a spatial relationship between figure and ground which is independent of the view point of the speaker.

Kikamba has two ways of expressing the cardinal directions east and west. East in Kikamba can be expressed as *ĩtheo* – or *umĩlonĩ wa sua*. West can be expressed as *ĩũlũ* or *ũthũĩlonĩ wa sua*. Other ways in which absolute FoR are expressed in Kikamba are by using features like rivers/ streams as in *mũniino wa-(along the river bank)* or hills as in *–ma syĩmanĩ (of the hills)*.

CHAPTER 5: SUMMARY, CONCLUSION, FINDINGS AND RECOMMENDATIONS

5.1 Summary

As mentioned at the beginning in chapter one, spatial thinking seems to play a special role in human thinking. Further evidence of this comes from a pervasive phenomenon associated with speaking, namely gesture in form of pointing or eye gaze in the instances of use of spatial Kikamba demonstratives. Although the functions of gesture and eye gaze are not fully explored in this study, it is clear that gesture and eye gaze co-occur especially with talk about space, and although part of the motivation is communicational (especially in the case of pointing), part is conceptual – gesture seems to help the formulation of spatial messages (McNeill 2000).

Kikamba locative and spatial demonstratives are demonstrative adverbs, demonstrative adjectives and demonstrative pronouns. These denote spatial senses in a non – angular way since they are all orientated on the horizontal axis. For location reference in all of these non-angular locative descriptions the idea is to choose a ground or landmark object in close contiguity with the object or figure to be located. Kikamba demonstratives project a relative FoR.

Kikamba spatial prepositions denote object sidedness. Prepositions like *ĩlũ wa* (*on top of or above or up*), *-ea na* (*down*), *-lingi-* (*a/round*), *ng’oko* (*over*), *mũingo* (*across*) and *mũkĩlo* (*across*) have been analysed to demonstrate this. Kikamba spatial prepositions denote body sidedness. The prepositions presented in this semantic sense are *kwoko kwa aume* (*the right hand*), *kwoko kwa aka* (*the left hand*), *mbee wa* – (*before/ahead of/in front of*), *itina wa* – (*after/behind of/at the back of*). The data analysed for absolute FoR includes Kikamba spatial prepositions; *mũniino wa ũsĩ* (*along the river bank*), *–ma syĩmanĩ* (*of the hills*), *umĩlonĩ wa sua* (*where the sun rises*) and *ũthũilonĩ wa sua* (*where the sun sets*), *ĩlũ yĩu* (*west/ westwards*) and *ĩtheo yĩu* (*east/ eastwards*).

5.2 Conclusion and findings

The Kamba native speaker has no special preference for any one single FoR or coordinate system. There is a lack of a default FoR type in the Kikamba language. Speakers of the language

keep switching from one FoR to another frequently as need arises. They switch between different types of FoRs in the same discourse context. Speakers regularly combine multiple FoRs in single spatial descriptions, apparently capitalizing on this multiplicity of perspectives to “zero in” on the spatial representations they intend to convey.

Kikamba has the relative FoR. This FoR is projected by body sidedness. The relative FoR uses a ternary relationship where Figure and Ground are specified with respect to the speaker’s viewpoint. This is projected by the use demonstratives as in chapter two of this study and spatial prepositions *kwoko kwa aume* (*the right hand*), *kwoko kwa aka* (*the left hand*), *mbee wa* –(*before/ahead of/in front of*), *itina wa* –(*after/behind of/at the back of*) as presented in chapter four of this study.

Kikamba has intrinsic FoR. This is projected in object sidedness in prepositions like *ĩũlũ wa* (*on top of or above or up*), *-ea na* (*down*), *ng’oko* (*over*), *mũingo* (*across*) and *mũkĩlo* (*across*). Object sidedness, therefore, provides the underlying co ordinate system for the Kikamba spatial prepositions analyzed in chapter three.

Kikamba has absolute FoR. The absolute FoR uses external environmental coordinates to encode spatial communication. The data presented here shows, with different but complementary methods, that the linguistic patterns of the environment centered based lexicalization of absolute spatial FoR in Kikamba are profoundly rooted in a broader space view shared by the speakers of this language. This space view orientates the native Kikamba speaker to the totality of space canonically oriented variously like toward the direction where the sun rises, the direction where the sun sets, down, up, the location of man- made features like the yatta canal, geographical features like rivers and streams, hills e.t.c. The resulting encoding is facilitated by the formal Figure/Ground binary properties in absolute FoR. The lexemes *umĩloni wa sua* (*where the sun rises*) and *ũthũĩlonĩ wa sua* – (*where the sun sets*) are recruited for encoding the absolute cardinal directions east and west respectively.

This study agrees with Levinson (2003: 90) that absolute direction systems give us external bearings on an array, but without employing viewpoints. They are ‘allocentric’ systems. Local landmarks can give us some of the same properties, especially within a restricted territory, but

they do not have the same abstract properties as notions like ‘north. Pederson et al (1998:572) observe that absolute FoR uses information external to both the speech participants and the figure-ground scene.

5.3 Recommendations for further research

Motion descriptions are as natural in these systems as are location specifications.

Absolute directions need not depend on a predictable conventionalised bearing: (Palmer 2003). Such systems are of special interest when they occur without a corresponding relative system of ‘left’, ‘right’, ‘front’, ‘back’ terms. Then descriptions of most spatial arrays, even in small-scale space, must use absolute terminology. Such descriptions classify spatial arrays in a very different way. Motion is naturally more complex than location, because it involves the extra temporal dimension. This naturally brings with it not only change of location, but also manner of motion, medium, instrument and other attributes. In fact, spatial information is typically distributed throughout a sentence and in many different word classes. Further research could be done on spatial relations in other word classes in Kikamba e.g. motion in verbs.

The functions of gesture, eye gaze and body posture are not explored in this study, they are only mentioned in passing in the analysis of demonstratives as spatial expressions. It is apparent that gesture, eye gaze and body posture co-occur especially with talk about space. Further research and study of gesture, eye gaze and body posture in Kikamba in respect of their contribution towards spatial communication would further clarify spatial semantics in the Kikamba language.

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