

A COGNITIVE APPROACH TO GIKUYU POLYSEMY

By

GATHARA JANEESTHER WANJIRU

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DECLARATION

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

Signature..... Date.....

GATHARA JANEESTHER WANJIRU

This project has been submitted for examination with our approval as the university supervisors.

Signature..... Date

DR. HELGA SCHROEDER

University of Nairobi.

Signature Date

DR. PRISCAH JERONO

University of Nairobi.

DEDICATION

To

My two sons Brian Gathara and Marvin Muchina

You are my greatest source of inspiration and my greatest driving force.

To my late mother Gladys Nyambura Gathara words of wisdom will forever be imprinted in my memory. Thank you for planting an academic seed in your children.

To late 'guka' Zachariah Gathiru thank you for the financial support you gave to my sisters Wangu and Njoki in aid of their education.

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ABSTRACT

This thesis investigates polysemous common nouns in Gikuyu within the cognitive framework and more specifically in cognitive semantics. Since polysemy has multiple but related senses, finding any coherent system would seem to be very difficult. But its senses are not random. When someone looks at inferences among them, it becomes clear that there must be a systematic structure of some kind. Therefore this study will investigate how context knowledge provided for through lexical frames can explain the polysemy of words. In this investigation, The Fillmore's frame theory was used in analyzing the polysemous Gikuyu nouns. One of the outstanding conclusions of the present study on the polysemous Gikuyu nouns was that nouns form polysemy systematically and some senses of a word are related to one another more or less closely by various means. The relatedness in meaning of Gikuyu polysemous nouns can be divided into prototypical sense, radial sense and the peripheral sense. Besides the radial senses which are more concrete, physical and lying towards the prototype (centre of the category) the more abstract metaphorical senses lie towards the periphery. Radial categories share more features with the prototype than the peripheral categories. The other finding of the study was that the prototype is very important in understanding the nature of human categorization and context is very important in understanding the polysemy of nouns. Some of the sources of polysemy are metonymy, metaphor, hyponymy and meronymy. Sense demarcation is detained through autonomy mechanism and it is a useful tool for providing autonomy to a sense. Once a word attains autonomy it triggers frames which come with the encyclopedic entries (frame components) which help in the assignment of meaning.

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DEFINITION OF CONCEPTS

This section deals definition of key concepts and terms to be used in the study.

No	Terms/Concepts	Definition
1	Polysemy	Variation in the construal of a word on different occasion of use.
2	Cognitive linguistics	An approach of language study which focuses on meaning. It sees language as an instrument for organizing, processing and conveying information and meaning emerges from our interaction with the world.
3	Frame	Any system of concepts related in such a way that to understand any one of them you have to understand the whole structure in which it fits.
4	Cognitive Scene	Categories that speakers wish to bring into play when describing situations that are independent of the actual speech situation.eg the commercial transaction frame.
5	Micro senses	Distinct sense units of a word that occur in different contexts and whose default construals stand in relation of mutual incompatibility at the same hierarchal level
6	Boundaries	Point at which the meaning of a word ends and another starts.
7	Construal	The process by which a person's experience in the world is conceived in a variety of ways.
8	prototypes	Background against which the meaning of a word is defined.
9	facets	Distinguishable components of a global whole. They are contextually-induced polysemous meanings.
10	autonomy	Ability of a unit to behave independently of other units that might be construed in the same context.

CHAPTER ONE

1.0 Introduction

This chapter deals with the background to the study, the background to the language statement of the research problem, objectives and hypotheses, justification of the study, scope and limitation, definition of terms, literature review, theoretical framework, methodology, data collection and analysis, significance of the study and conclusion.

1.1 Background to the Language

Gĩkũyũ is a Bantu language spoken by the Agikuyu of Kenya who mainly occupy the central part of Kenya. It is also spoken by Gikuyu speakers settled in others part of Kenya namely; in the Rift Valley, Nairobi, and some parts of Coast Province. These speakers are believed to have migrated from Central Province.

Karega (1977: 10-11) states that the Agikuyu are divided into seven dialects namely: Ki-Mathira, Ki-Ndia, Ki-Gichugu, Ki-Mbeere, Ki-Embu, Northern dialect and the Southern dialect. Njogu (1978:2) identifies five dialects which are the Southern dialect which he also calls Gi-kabete spoken by people in Kiambu, Northern dialect also referred to as the Muranga dialect, Ki-mathira, Ki-Gichugu and Ki-Ndia.

In his classification of Bantu languages, Guthrie (1967-71:vol3:11-15) classifies the Agikuyu together with the Sengeju, Meru, Embu, Kamba and Tharaka. He assigns them code E50 as a group and assigns a different code for each language. These are Gikuyu E51, Embu E 52, Meru E53, Tharaka E54, Kamba E55 and Sengeju E56.

Ngure (2005:1) however argues that determining the exact number of the Gikuyu dialects is a debatable issue among the linguists to date. Some researchers argue that Gikuyu has five dialects while others argue they are seven. Gitau (2012:2) and Gathogo (2013:2) are in agreement with Njogu (1978:2) that Gikuyu has five dialects which are: Ki-mathira (spoken in Karatina and its environs), Northern dialect (spoken in Muranga), Southern dialect (spoken in Kiambu), Ki-ndia (spoken in southern Kirinyaga) and Ki-gichugu (spoken in Northern Kirinyaga). I too agree with them as I don't consider Ki-embu as a Gikuyu dialect but a

language on its own that has its own linguistic variations which have given rise to three distinguishable dialects.

This study is going to limit itself to the Ki-Mathira dialect which is spoken in Karatina and its environs.

1.2 Background to the Study

Gikuyu like all languages has many polysemous words. This study aims at analyzing Gikuyu polysemous common nouns found in the Gikuyu novel *Caitani Mutharaba-ini* (1980) by Ngugi wa Thiong'o using Fillmore's Frame work theory. Fillmore (1982:1) defines a frame as any system of concepts related in such a way that in order to understand any concept one has to understand the whole structure in which it fits. When one of the things in such a structure is introduced into a text or into a conversation, all the other concepts are automatically made available.

In the earlier studies linguists paid little attention to polysemy, monosemy and homonymy were regarded as the norm. However several linguists like Leech (1981), Lyons (1977, 1981, and 1995) and Lipka (1992) as quoted by Kovacs (2011:2) explored polysemy primarily focusing on the differences between polysemy and homonymy.

These linguists recognized that the various senses of polysemous words could be derived from a basic sense but did not go further than that. The traditional approach to polysemy is restricted to the study of word meaning and it failed to explain why a word was said to have multiple senses and how the senses were structured. It also failed to give explanations if there was any motivation for the lexical item to convey specific meanings and whether other areas of language other than lexical categories exhibit polysemy. Polysemy was assumed to be a property of lexical categories only.¹

¹ Kovacs (2011:4) states that the roots of the study of the complex relations between words and meanings lie in Greek philosophy.

Sibloot (1995:24) as quoted by Kovacs (2011:6) points out that Aristotle was highly critical of polysemy as he saw it as a way to enable the Sophist to mislead his learners. He referred to polysemy as words of ambiguous meanings.

According to Cruse and Croft (2004:109) the traditional polysemy involved distinct established senses that were lexicographically accepted. Cognitive linguistics goes beyond these lexicographically accepted senses. According to cognitive linguistics, polysemy is defined as variation in the construal of a word on different occasions of use. Different parts of the total meaning of a word in different circumstances are isolated through creation of a sense boundary. The cognitive linguists have tried to explain the questions that the traditional approach to polysemy could not answer. Kovacs (2011:14) posits out that with the advent of cognitive linguistics in the 1980's a new approach to polysemy was brought about. The cognitive approach does not look at the entrenched readings only but also at the nonce readings in respect of sense boundary properties.

1.3 Statement of the Problem

Cruse and Croft (2004:109) define polysemy as variation in the construal of a word on different occasions of use. The Gikuyu language has lexical items that have different but related meanings. For the interpretation of these linguistic items the immediate context is very crucial.

This study will therefore look at polysemy beyond the lexical level and the established senses that are lexicographically accepted and will investigate how context knowledge provided for through lexical frames can explain the polysemy of words. A word may acquire a special meaning depending on the contextual knowledge provided for by the frame.

1.4 Objectives of the Study

The objectives of this study are as follows:

1. To identify Gikuyu polysemous common nouns as used in the novel *Caitani Mutharaba-ini*.
2. To establish the demarcation in Gikuyu polysemous common nouns as used in *Caitani mutharaba-ini* through boundary effects.

3. To identify the various frame constituents of particular frames which are necessary in understanding Gikuyu polysemous common nouns.

1.5 Hypotheses

The hypotheses of the study are:

- 1) The polysemous nature of nouns in the novel *Caitani mutharaba-ini* arise as a result of context used.
- 2) The boundary effects that indicate the demarcation in the construal of Gikuyu polysemous nouns gives words autonomy.
- 3) The knowledge of frame constituents is essential in understanding Gikuyu polysemous nouns.

1.6 Justification of the Study

The study of polysemy is of fundamental importance for any study of language and cognition. This study on the analysis of polysemous nouns in Gikuyu using the cognitive approach will be of great help to future Gikuyu lexicographers who are involved in dictionary making. It will help them to realize that polysemy is not a property of lexical categories only but it goes beyond the lexical level as there are other areas that exhibit polysemy such as contextual knowledge provided by frames.

The findings of the research will be of great help to future researchers as it will add to the knowledge not only to the Gikuyu linguists and researchers but also to other researchers in other languages as it will bring a fresh and a new way of analyzing polysemous nouns.

1.7 Scope and Limitation

This study is on the analysis of Gikuyu polysemous nouns using the cognitive approach. This study is only limited to analyzing and discussing polysemy in Gikuyu nouns as found in the novel *Caitani mutharaba-ini* and not polysemy in any other genre. Hyponymy and meronymy which are sense relations will be discussed as they will help in the analysis of polysemy as they are rich sources of polysemy together with metaphor and metonymy. The

data to be analyzed will be polysemous nouns derived from *Caitaani mutharaba-ini* by Ngugi wa Thiong'o. The theoretical frame work of this study will be Fillmore's frame theory. Other parts of speech will not be analyzed unless found necessary in the analysis of data.

1.8 Literature Review

This section looks at the contributions made by other scholars and their relevance to the related area of study.

1.8.1 Literature on the Gikuyu Language

Gikuyu has many prolific writers who have used the Gikuyu language. Among them is Ngugi wa Thiongo who has written many Gikuyu books among them being *Murogi wa Kagogo*(2004), John Gatu (2006) *He gatu nguhe kanua*. Many scholars have carried out research in Gikuyu and most of this research has been on aspects of phonology, morphology, syntax, semantics and pragmatics. However none of the scholars has looked at the analysis of Gikuyu polysemous words using the cognitive approach.

Munga (2009) analyzed sense relations in Gikuyu using the lexical pragmatics theory as proposed by Blunter Reinhard in 1990 and developed by Carston (2002) and Wilson (2006). Among the sense relations she analyzed was polysemy. She discussed polysemy based on metaphorical extension, metonymy and shift in applications of words, register, and borrowing. This study will be of help to me in identifying polysemous words and as Cruse and Croft (2004:111) state in the cognitive approach to polysemy, polysemic units are derived from the same lexical source, being the result of processes of extension such as metaphor and metonymy.

Gitau (2012) looked at a semantic analysis of Gikuyu nouns using the semantic field theory. She argues that semantic properties or meaning properties are those aspects of a linguistic unit such as a morpheme, word or a sentence that contribute to the meaning of that unit. This study will be of help because she is in agreement with the cognitive approach to polysemy that apart from the lexicon, other areas of language like morphology and syntax exhibit polysemy.

Other scholars who have carried out studies in the Gikuyu language though not related to the area of study include : Gachomo (2005) who looked at Gikuyu morphology, Mutahi (1977) looked at sound changes, Muthui (2001) investigated the phonological process in Gikuyu nouns and adjectives derived from verbs. Ngure (2005) investigated the loss of prenasalization in the Northern and Southern varieties. Ngamau (2004) investigated the morpho-syntactic analysis of agreement in Gikuyu in the Minimalist Program.

Njagi (1997) analyzed the Gikuyu determiner phrase within the Principles and Parameters theory of Chomsky and Lasnik. Gatende (1991) did an investigation into NP and WH-movement using the Government and Binding theory. Wanjiku (1992) looked at the typology of Empty categories and how adequately the theory can predict and account for the empty categories in Gikuyu sentences. Kihara (2010) investigated if Gikuyu sentences can be accounted for by Role and Reference Grammar layered structure of the clause. Even though the above studies are not directly related to my area of study, they will help me in understanding the phonology, morphology and the grammar of Gikuyu language. From the above studies it is evident that the cognitive approach to polysemy using the frame theory which is a relatively new theory compared to the others has not been exploited.

1.8.2 Literature Related to Polysemy

To Nerlich and Clarke (1997: 349, cited in Cuyckens and Zawada, 2001: ix), the study of polysemy is “of fundamental importance for any semantic study of language”. They further state that polysemy is regarded as a categorizing phenomenon, i.e. related meanings of words form categories centering on a prototype and bearing family resemblance relations to one another.

They further state that polysemy must be distinguished from ambiguity which corresponds to two or more distinct lexemes and has two distinct entries in a conventional dictionary. A polysemous word has only a single lexical entry with a range of closely related meanings. This is beneficial to this study because the cognitive approach to polysemy appreciates the fact that words acquire new meanings depending on the contexts they are used in and the prototypicality of nouns will help in showing the relatedness in meaning. This will help in identifying the radial categories of a sense that show the relatedness of sense in a particular word that bring polysemy.

Fillmore & Atkinson (1992:79) states that the traditional view of polysemy does not distinguish between word senses founded on differences of grammatical pattern for example 'put at risk' or 'face the risk of' and different word senses resulting from metaphor and metonymy. Frame as defined by Fillmore makes it possible to reconsider the notion of polysemy.

Speakers can only be said to know the meaning of a word only by first understanding the background frames that motivate the concept that the word encodes. This means that words or word senses are not related to each other directly, word to word but only by way of their links to common background frames and indications of the manner in which their meanings highlight particular elements of such frames (Fillmore & Atkinson 1992:3). This is beneficial to my area of study as it will help me in identifying and analyzing the Gikuyu polysemous nouns by putting them in frames accompanied by their frame components that will help in assigning meaning to nouns. It will also help me in differentiating between the kind of polysemy resulting from a transfer of a semantic frame to a new domain (through metaphors and metonymy) and the kind that reflects merely the accommodation of a word to different syntactic patterns.

Cruse and Croft (2004:11) state that the traditional polysemy involved distinct established senses that were lexicographically accepted. Contrary to that, cognitive linguistics state that polysemy is understood in the interpretation of a word on different occasions of use. Different parts of the total meaning of a word in different circumstances are isolated through creation of a sense boundary. Polysemy is manifested as variation in the construal of a word on different occasions of its use. The different sense boundaries identified by Cruse and Croft will be very beneficial in this study as the demarcation of sense will help me in identifying the different but related senses of Gikuyu polysemous nouns by giving them autonomy.

Kovacs (2011:9) argues that polysemous words are considered to be semantically related and transfer of meaning can be witnessed by a metaphor or metonymy. Thus semantic relatedness is an important factor for identifying polysemous words.

1.8.3 Literature on frame theory

Shed (2011:108) citing Fillmore states that, the central idea of frame semantics is that word meanings are described in relation to semantic frames - schematic representation of the conceptual structures and patterns of beliefs, practices, institution and images that provide a foundation for a meaningful interaction in a given community.

According to Schmid (2012:180) the main idea of Fillmore's theory is that we cannot understand the meaning of a word without access to all the encyclopedic knowledge related to that word. He further states that Frame Semantics relies on the specific structures of encyclopedic knowledge, which are called frames. These frames come with their frame elements that relate to things that happen and occur together in reality.

All that the speaker knows about the real world experience denoted by the word or a construction plays a role in its meaning. Schalley (2004:50) sees frames as experience-based schematizations. The encyclopedic nature of language implies that we have to take into account not only the general definition of word but also experiences. (Evans and Pourcel 2009: 396). Evans and Pourcel's view is relevant because according to frame theory meaning of a word includes its background presuppositions or semantic frames and cannot be understood apart from its frame.

1.9 Theoretical Framework

Frame semantics is the brain child of Charles Fillmore. Petruck (1996:49) as quoted by Schalley (2004:49) states that it is a research programme in empirical semantics which emphasizes the continuities between language and experience.

The main assumption of Fillmore's frame theory is that meanings are relativized to scenes. To explain this presupposition, Fillmore used the following sentences (Fillmore 1982:121).

- 1a) I spent three hours on land this afternoon.
- 1b) I spent three hours on the ground this afternoon.

The above two sentences can be interpreted differently, hence relativising the meanings to the relevant scenes. The background scene of the first sentence is a sea voyage while the second sentence refers to an interruption of air travel. Although the two words land and ground are contrasting, they denote the same thing. It is only the background frames of the two words which differ hence making their interpretation different.

1.9.1 The meaning of frame

Frames are concepts which are closely related to one another and one cannot understand a frame element without the knowledge of the other frame elements that make up that frame (Fillmore 1982:112).

The following are a few frame elements in a Gikuyu kinship frame:

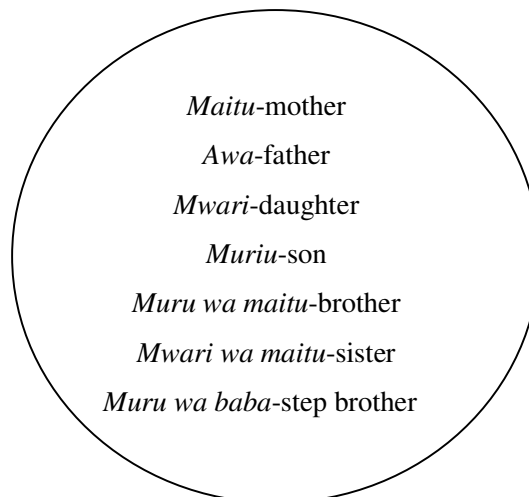


Diagram 1 Gikuyu kinship frame.

When a speaker produces any of the above terms, a hearer invokes a frame and the relevant elements of the kinship terms come to play. It would be difficult for a hearer to understand the term *maitu* (mother) without understanding *awa* (father).

To explain the above further, when a hearer hears a polysemous word like 'run' the noun phrase that follows it will help the hearer in opening the appropriate frame by use of the sense boundaries to assign meaning to it.

1.9.2 Types of frames

According to Fillmore's frame theory there are two types of framing: these are cognitive scenes and actual communication situation.

1.9.2.1 Cognitive scenes

Fillmore (1982:117) defines cognitive scenes as categories that speakers wish to bring into play when describing situations that might be independent of the actual speech situations.

To explain these cognitive scenes, Fillmore used the COMMERCIAL TRANSACTION FRAME. He applied the frame concept to verbs like *buy* with the intention to represent the relationship between syntax and semantics.

Table 1 Commercial transaction frame

Verb	Buyer	Seller	Goods	Money
Buy	Subject	From	Direct object	For
Sell	To	Subject	Direct object	For
Cost	Indirect object	Null	Subject	Direct Object
Spend	Subject	Null	for/on	Direct object

(Fillmore & Atkins 1992: 79)

The above COMMERCIAL TRANSACTION FRAME has the following elements; buyer, seller, goods and money. The semantically related verbs to this frame are buy, sell, spend, pay, charge, cost and each of these verbs evoke a different aspect of the frame.

For example the verb buy focuses on the buyer and the goods back grounding the seller and the money. The verb sell focuses on the seller and the money back grounding the buyer and the goods.

Knowing what takes place in a commercial transaction and knowing the meaning of any one verb means knowing the meaning of all of them. The words i.e. linguistic materials evoke the frame (in the mind of a speaker /hearer); the interpreter (of an utterance or a text in which the word occurs) invokes the frame (Petrucci 1996).

One frame can be embedded within another frame as illustrated by the below marriage frame adapted from Ugas (2014) class presentation on frame semantics. This means that a frame can open another frame inside it that is related in a way to the main frame. One cannot understand divorce if he does not understand marriage. It is another example of a cognitive scene.

Consider the marriage frame below.

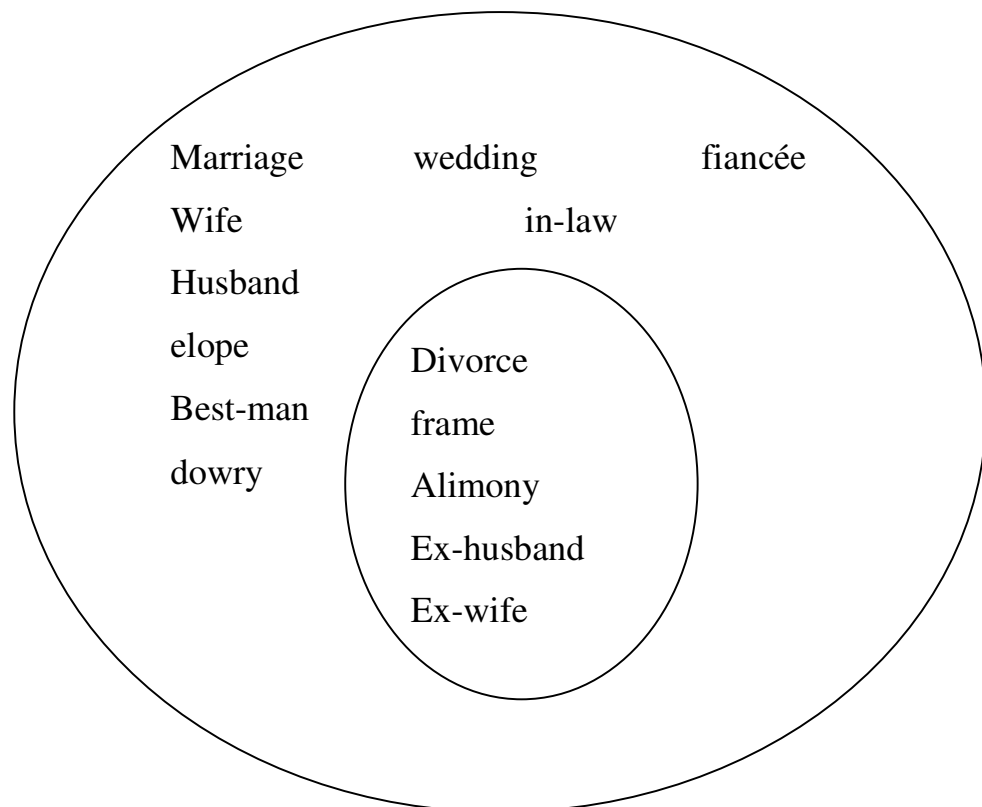


Diagram 2 Marriage frame Adapted from Ugas (2014)

1.9.2.2 Actual communication situation

This involves interactional frames of what is going on between the speaker and the hearer or the writer and the reader. To understand the meaning of a word people have to understand the details of the prototype background frame rather than the details of the word's meaning. According to Fillmore the notion of prototype is important in understanding the nature of

human categorization. Prototype is the background situation against which the meaning of a word is defined² (Fillmore 1982:118).

For example, the word ORPHAN refers to a child whose parents have passed away. The background that motivated the category of this particular word is that children depend on their parents for care and guidance and parents accept this responsibility without question. After a certain age, it will not be appropriate to refer to someone as an orphan. In the prototype situation an orphan is regarded as a child who deserves compassion, pity and concern. But this is not always the case. Does a child who has murdered both of his parents qualify to be referred to as an orphan? During the actual communication the hearer tends to get finer details from the speaker that helps him or her in the construal of meaning.

Fillmore (1975) as quoted by Petrucci (1996:1) differentiates between a scene and a frame. The frame is linguistic whereas the scene is cognitive, conceptual or experiential entity. In the later works by Fillmore he ceases to use the scene and uses the frame as the cognitive structuring device.

1.9.3 Principles of Frame Theory

Croft & Cruise (2004:10) identified the following principles of Fillmore's Frame Theory:

- 1) Words are identified directly with respect to the frame.
- 2) Frames and convention.
- 3) Meaning of reference and extrinsic entities.
- 4) Polysemy and frames.

1.9.3.1 Words are defined directly with respect to the frame.

The example of sentence below given by Fillmore illustrates this principle better.

- 2) We will soon reach the coast.

² In her study of semantic analysis of Kimeru kinship terms, Kawira (2014) states that the concept prototype is one of the most important concepts of frame semantics. Frames are prototypical descriptions of scenes.

The above sentence is said by a speaker travelling on land.

3) We will soon reach the shore.

The above sentence is uttered by a speaker who is on a sea voyage.

According to Fillmore (1982:121), the two words *coast* and *shore* evoke different frames even though on the surface they denote very similar things. He states that, “Shore is the boundary between land and water from the water’s point of view, the *coast* is the boundary between land and water from the land’s point of view.”

1.9.3.2 Frames and convention

A text evokes a frame when a linguistic form or pattern is conventionally associated with that particular frame. Consider the sentence below as given by Petruck (1996):

4) Julia will open her present after blowing out the candles and eating some cake.

Even though there is no mention of birthday party in the above sentence, people who share the same cultural background will invoke a birthday party scene/ frame. The interpreter of a text invokes a frame when assigning an interpretation to a piece of text by placing its contents in a pattern known independently of the text.

1.9.3.3 Meaning of reference and extrinsic entities

Some words cannot be understood without the knowledge of the participants in action and some background information. This means that the meaning of a word makes reference to extrinsic entities. This means that there are words whose corresponding concepts inherently refer to other concepts extrinsic to the concept denoted by the word. For example, *a widow* is a woman who was once married but her husband had died.

For example, one cannot understand *Gallop* without knowing the body of a horse, or *hungry* without knowing the physiology of living things (Croft & Cruise 2004:11).

One not familiar with these extrinsic entities cannot share the intended associations (Fillmore and Baker 2011:4).

1.9.3.4 Polysemy and frames

When a hearer hears a polysemous word, the immediate linguistic context helps him or her in opening an appropriate frame by use of sense boundaries to assign meaning to it. One cannot understand the meaning of a single word without understanding the essential knowledge that relates to that word. Words and constructions produced by a speaker evoke an understanding or more specifically a frame (Cruse & Croft 2004: 8).

1.10 Research Methodology

This section deals mainly with the methods used in data collection and analysis in order to answer the specific questions of the study.

1.10.1 Data collection

The data to be collected will be based on polysemous nouns found in *Caitaani Mutharaba-ini*; a Gikuyu novel by Ngugi wa Thiong'o who is an established author in Gikuyu books. The book contains twelve chapters. I will concentrate on the first six chapters only which I will use to identify Gikuyu polysemous nouns. The six chapters will give enough data for the analysis because polysemous nouns acquire meanings depending on the context the word has been used. The choice of the book is very appropriate for this study as it contains polysemous nouns which are required for the study.

Four native speakers of Ki-Mathira dialect (two men and two women to avoid gender bias) aged between 45-65 years will be sources of data analysis as they will help in assigning the various senses to each identified noun and to give the appropriate translations of the frame elements in Gikuyu. The choice of the four informants will be based on purposive sampling as I will purposely look for four informants who are well versed in the Gikuyu language and who are readily available when needed for consultation to ensure there is consistency. Being a native speaker of Gikuyu will make it easy to identify nouns from the Gikuyu novel and it will be easy to tell those that have more than one sense which are closely related and those whose

construals are as a result of process of extension such as metaphors and metonymy. The intuition of the researcher will be very helpful in counter checking the various senses of nouns as given by the four informants.

1.10.2 Data Analysis

After the polysemous nouns are identified by the researcher and their senses assigned by the four informants drawn from Ki-Mathira dialect and counterchecked using the researcher's intuition of a native speaker demarcation effects will be used (antagonism: attentional autonomy and the compositional autonomy which give senses autonomy) to explain the different senses of the polysemy of nouns. Lastly the polysemy of Gikuyu nouns will be explained using the Fillmore's frame theory; appropriate frames will be identified with their frame elements. Each noun will be put into radial categories which will show the relatedness (polysemy) in the meaning of the nouns in relation to a central sense of the nouns and the different frames evoked by the nouns will be explained.

1.11 Significance of the Study

The findings of the study will provide a new perspective of the study of Gikuyu and other languages especially in the area of polysemy. The findings of the research will add to the bank of knowledge to Gikuyu linguists as they will have something documented which can be used for future reference by future researchers.

1.12 Conclusion

This chapter has provided background information to the study. It started with a general introduction of the language under study(Gikuyu),background to the study ,statement of the research problem, objectives of the study and the hypotheses of the study that were tested. Other parts were: justification of the study, scope and limitations of the study, theoretical framework, literature review, methodology data analysis, significance of the study and the conclusion.

CHAPTER TWO: POLYSEMY AND OTHER SENSE RELATIONS

2.1 Introduction

Chapter two investigates polysemy and the relationship it has with other sense relations from the standpoint of the dynamic construal approach to meaning in cognitive linguistics. These sense relations include: hyponymy-hyperonymy, homonymy, and meronymy. Traditionally, these sense relations were treated as semantic relations between words but the cognitive approach looks at them as a semantic relation between particular contextual construal of words (Cruse and Croft 2004:141). Section 2.2 will discuss homonymy and polysemy, 2.3 will look at hyponymy, 2.4 meronymy, 2.5 polysemy and metonymy, 2.6 polysemy and the metaphor, and 2.7 conclusion.

2.2 Homonymy and polysemy

Homonymy emerges when two words are (etymologically) distinct but sounds the same due to historical accident. Saeed (2003:63) defines homonyms as unrelated senses of the same phonological word. Both homonym terms represent different concepts. Homonyms can be homophones (same pronunciation) and homographs (same spelling).

Polysemy on the other hand is the presence of various meanings associated with a single linguistic unit. It is manifested as a variation in the construal of a word on different occasions of use.

See the following examples of homonyms in Gikuyu.

- 5) *hinga* –shut (door/window) (verb)
- 6) *hinga* –fast /not eat food (verb)

The above words have different meanings even though they are written in the same way. They have different entries in the dictionaries. The context in which the word has been used helps in disambiguation and assigning meaning to it.

See the following examples for the disambiguation of the words as used in context.

- 7) Kamau *hinga* murango.
Kamau shut the door.

8) Andu mehinge mahoe.

People should fast and pray.

In the above sentences the context in which the word has been used helps in disambiguation and the senses of the two words 'hinga' (fast and shut) are distinct. They are not related in any way.

Homonymy is different from polysemy in that homonymy is given different readings and entries in the dictionaries whereas polysemous words are given only one entry as the senses are related;

Consider the following examples of polysemy in Gikuyu which has the below related senses.

9) *tiga* - leave (verb)

- leave temporarily

- abandon

- forsake completely

- entrust something to someone

- let stay.

The above related senses of the verb 'leave' are illustrated using the below sentences;

10) *Tiga nguwo wambe uruge.*

Leave the clothes and cook first.

11) *Kamau niaratigire muka.*

Kamau abandoned his wife.

12) *Kamau niaratigire mehia.*

Kamau forsook his sins.

13) *Ndagutigira utonga wakwa wothe.*

I have entrusted my wealth to you.

14) *Tiga ngari iyo iikare hau.*

Let that car remain there.

Below are more examples of the related senses of the noun 'eye'.

15) *riitho* -eye

-organ of sight

- a look, expression
- structure or a marking resembling an eye /bud on a potato tuber
- a small loop or hole for example at the end of a needle.

From the above examples of the related senses of the lexeme eye we can use the following examples of sentences to illustrate their usage in context.

- 16) Riitho riu ni irwaru.
That eye is sick.
- 17) Uranjikia riitho atia?
(*why are you throwing the eye to me like that?)
Why are you looking at me like that?
- 18) Uwa waru nauciirute maitho.
(Peel the potatoes and remove the *eyes.)
Peel the potatoes and remove the buds.
- 19) Njikirira uthi ritho-ini ria cindano.
(Put the thread in the* eye of the needle.)
Put the thread in the hole of the needle.

In contrast to homonymous words, polysemous words are considered to be semantically related and one can find a semantic transfer, i.e. metaphor or metonymy between them (Cruse & Croft 2004:111). For example, the lexeme hand has the following senses: ‘hand’ as: hand1 (part of body), hand2 (help), hand3 (control), hand4 (worker), hand5 (hand of clock). In these examples, the meaning of the word ‘hand’, as a part of body, is transferred and extended to other things.

In the cognitive view the main difference between polysemy and homonymy is the systematic relationships of meanings that take place in polysemy. The meanings of polysemous words are related in a systematic and natural way forming radial categories where one or more senses are more central (prototypical) while others are found in the periphery (Kovacs 2011:14). The relation between multiple meanings is not random but it is systematic in nature, i.e. the relation between multiple meanings is sometimes motivated either by metaphor or by metonymy.

Cognitive analyses go beyond words and polysemy is regarded as a cognitive organizing principle shared by other areas such as the context. Homonyms are not prototypical in nature like polysemes as they contain only one sense of each of the words and their meanings are not semantically related. In Cognitive Linguistics, polysemy is defined as a systematic relation of multiple meanings for a single word.

The words '*tiga*'-leave and '*riitho*'-body parts are the prototypes or the underlying meanings (basic meanings) and the others are found in the radial relationship to the central meaning and the very abstract like the metaphorical extensions being found in the periphery. Their meanings are related in that they all involve an act of leaving in the first set of sentences and the other set involves something that resembles an eye.

2.3 Hyponymy

Hyponymy is the inclusion of one class in another (Cruse, 1997:88). It is a sense relation in semantics that serves to relate words- concepts in a hierarchical way. It is the relationship between two words in which the meanings of the words include the meaning of the other. The upper term in this sense relation, i.e. the class name, is called the hypernym or the super ordinate, and the lower terms, the members, hyponyms. A super ordinate usually has several hyponyms; these members of the same class are co-hyponyms as illustrated in the following example.

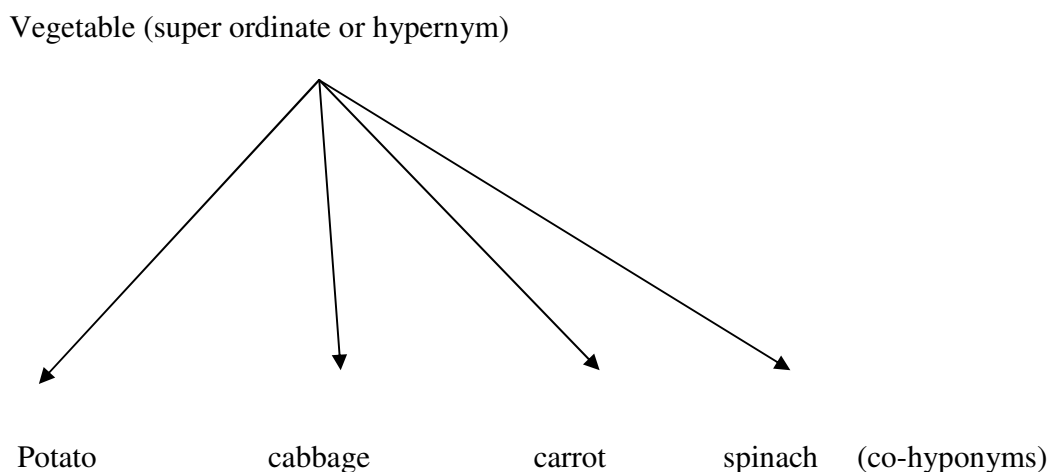


Diagram 3 hyponymy

Potato is a hyponym and vegetable is the hypernym or the super ordinate. Potato, cabbage carrot and spinach are co-hyponyms.

Consider the following examples of hyponymy in Gikuyu.

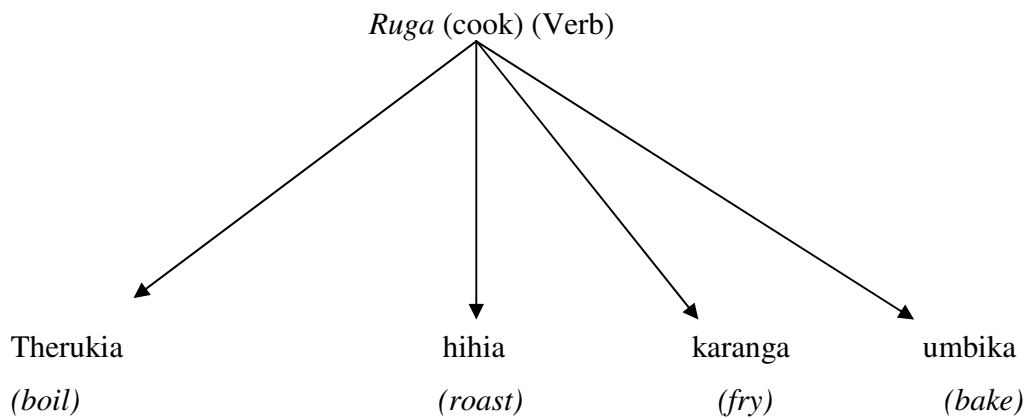


Diagram 4 hyponymys of cook

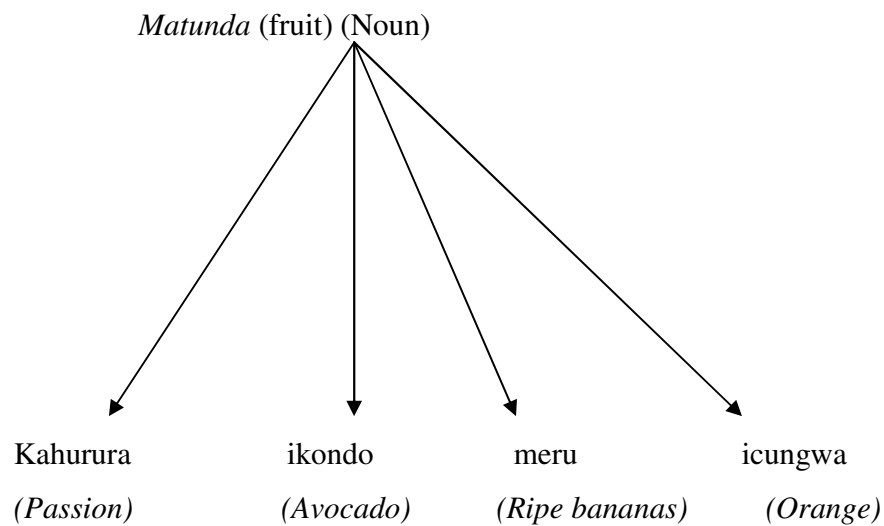


Diagram 5 hyponyms of matunda 'fruit'

Hyponymy is expressed as an asymmetric entailment. For example when we say it is an apple, it entails that it is a fruit and not vice versa. Cognitive linguistics argues that this is not always

the case. Definition of entailment states that only logically necessary context-independent relations may count as entailment.

- 20) The thing in the cage is a lion.
- 21) The thing in the cage is an animal.

In the above sentences (20) entails (21) but it is not the case that (21) also entails (20). It is an asymmetric entailment. The relation of hyponymy captures the concept of 'is a kind of' when we give the meaning of a word. For example a lion is a kind of an animal. Hyponymy is a one way relation as illustrated by the above examples.

Some hyponyms are facets as will be seen in the below examples.³ They are semantic properties of a sense. These facets are rarely given separate definitions in dictionaries since they are not meanings but pre-meanings. Both meanings and pre-meanings are both as a result of construal processes and at the same time the subject of further construal. (Cruse & Croft, 2004:116).

Consider the following examples of facets in Gikuyu hyponymy.
Different readings of the lexeme church.

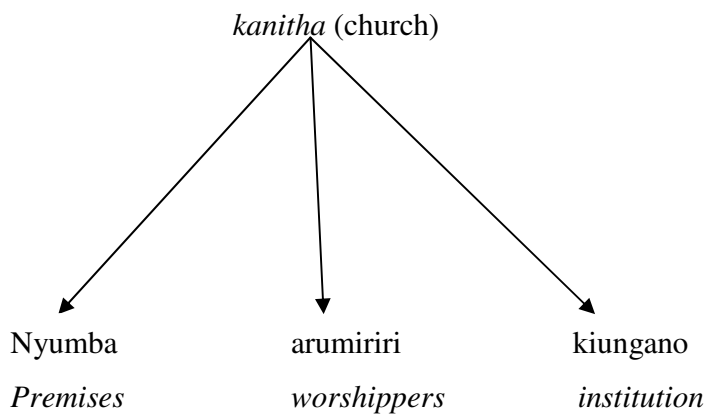


Diagram 6 facets of church

³ Facets are distinguishable components of a global whole which are not capable of being subsumed under hyperonymy.

Consider the following sentences to illustrate the above readings of the lexeme church.

22) Premises –*Kanitha niuratharirio.*

The church was demolished.

23) Worshippers -*Kanitha ucio ni muhoi Ngai.*

That church is prayful.

24) Institution - *Kanitha ucio wambiriirio ni mumbicobu 1980.*

That church was founded by the bishop in

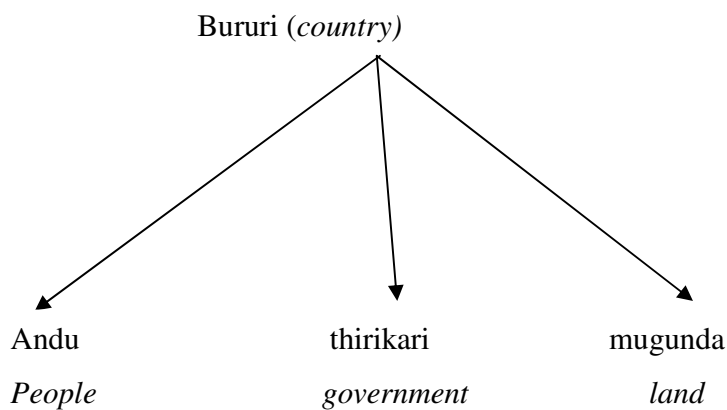


Diagram 7 facets of country

25) People –*Bururi witu wina ng’aragu.*

Our country is starving.

26) Government- *Bururi witu ugire ni ukurua na itoi cia al shabab.*

Our government has said it will fight with the al shabab.

27) Land- *Bururi witu wuihuire thahabu.*

Our land is full of gold.

The above examples of facets which fall under hyponymy cannot be subsumed under hyperonymy. When a hearer comes across the hyperonym ‘bururi’ which means ‘country’ for instance, there is need for further construal so as to get the intended meaning. The context in which the facet has been used enhances the interpretation.

Cognitive linguistics sees hyponymy as an instance of the operation of the Lakoffian container image schema (Cruse & Croft 2004:142). Hyponymy is seen as simple class of inclusion which yields insights which are more directly related to semantic concerns. Hyponymy is a transitive relation based on containment.

2.4 Meronymy

Aitchison (2003: 101) refers to it as paronymy. Traditionally it is defined as a whole part lexical relationship which is an association between lexical units representing a part and a lexical unit representing its corresponding whole. Meronymy in cognitive linguistics is a relationship between meanings, whereas the part- whole relationship links two individual entities. (Cruse & Croft 2004:151).

To characterize meronymy one can say something like:

Y has X(s). An X is a part of Y.

Example in Gikuyu

Whole	Gloss	Part	gloss
Guoko	<i>Arm</i>	Kigokora	<i>elbow</i>
		Kiara	<i>finger</i>
		Njara	<i>hand</i>

Table 2 Meronym (Body parts)

An arm has an elbow. An elbow is part of an arm. An elbow is a meronym of an arm. A finger is a meronym of hand and hand is immediate holonym of finger. The notion of meronymy is relational rather than absolute (Arnoff & Miller 2003:47). This can be illustrated by the following example;

A hand is the holonym⁴ of finger and at the same time a meronym of arm which in turn is a meronym of body. The chain of relations stops at body which can be termed as the global holonym.

⁴ A holonym is a term that denotes a whole whose part is denoted by another term, such as 'face' in relation to eye.

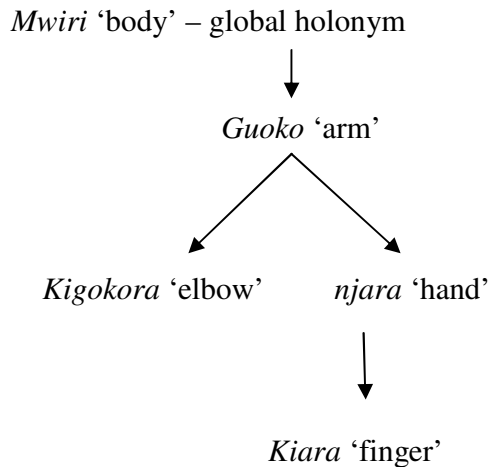


Diagram 8 Holonym

In cognitive linguistics, the part- whole relation (meronymy) is an example of a profile-based⁵ relation. (Cruse & Croft 2004:16). A concept such as STOMACH cannot be defined without reference to BODY.

The concept MURIU 'SON' presupposes the concept MUCIARI 'PARENT' and the particular type of kin relationship that holds between them. The concept-domain relation holds between the base of knowledge in which a category exists (domain) and category members (concepts). The concept-domain semantic relationship is essentially a part whole (meronomic) relationship. Meronyms differ from hyponymy in transitivity. Hyponymy is transitive in nature while meronymy may or may not be. Consider the following example of transitivity in meronymy.

A nail is a meronym of finger and finger a meronym of hand. It is true to say therefore that since a nail is a meronym of finger; and finger a meronym of hand we can therefore say a hand has nails.

The similarities between hyponymy and meronymy is that both are hierarchical in nature; hyponymy being a vertical and a horizontal relationship in a taxonomy with resulting semantic networks and meronymy reflecting a vertical hierarchical classifications in the lexicon –like taxonomies.

⁵ A profile refers to the concept symbolized by the word in question.

To profile is to show the relationship between a word form and a word meaning.eg a radius profiles a particular line segment in circle domain.

A base is the knowledge or conceptual structure that is presupposed by the profiled concept.

The two are also similar in that they contribute a lot to polysemy because some hyponymies and meronymies are polysemic in nature as illustrated by the following examples:

The lexeme *kuguru* which means 'leg' is an example of meronymy. The leg is part of the body. The lexeme leg is polysemous in nature. It has several senses which are related as illustrated by the examples below:

28) *Kuguru*- leg

- either of the two limbs in humans or animals that is used for locomotion or support.
- part of an animal especially the thigh that is used for food e.g. leg of a lamb.
- something similar to a leg in appearance or function, such as one of the four supporting members of a chair or a table.

Some hypernyms are polysemous too just like the meronyms. This can be explained clearly by the illustration below:

Matunda 'fruits' is a hypernym in which the meaning of the words includes the meaning of others (hyponyms).

The related senses in the lexeme fruit include;

29) *Matunda*-a type of food that grows on trees.

- a part of plant that contains its seeds.
- good results after hardwork.

2.5 Polysemy and metonymy

Metonymy enables us to see one part or aspect of an experience to stand for some other part (or whole) of that experience. It operates in the same cognitive domain. It is the use of a word to denote a concept other than its literal denotation. It is a conceptual projection whereby one experiential domain (the target) is partially understood in terms of another experiential domain (the source) included in the same common experiential domain. However, metonymy, unlike metaphor, is not a cross-domain mapping, but instead allows one entity to stand for another because both concepts co-exist within the same domain. Consider the following example as given by Lakoff and Johnson (2003:35).

30) The *ham sandwich* is waiting for his check.

The expression *ham sandwich* represents an instance of metonymy: two entities are associated so that one entity (the item the customer ordered) stands for the other (the customer). This example shows that metonymy is *referential* in nature. There is a direct relation between the two entities. A waitress in a restaurant can use the expression *the ham sandwich* to refer to the customer; there is a direct experiential relationship between *ham sandwich* and the customer who ordered it. In the metonym *ham sandwich* both the target (the customer) and the source (the *ham sandwich*) belong to the same RESTAURANT domain (Evans and Green, 2006: 311) as quoted by Khalid (2014:73). In metonymy, one experiential domain (the target) is partially understood in terms of another experiential domain (the source) included in the same common experiential domain. Metonymy is based on contiguity, that is two or more items are related in terms of association.

Traditionally, Khalid (2014:73) defines metonymy as a figure of speech whereby the name of one entity *E1* is used to refer to another entity *E2* which is contiguous to *E1*. This process of transferred reference is called a 'referring function'.

Consider the examples of below:

31) There are too many *mouths* to feed.

32) John has his own *wheels*.

In the example (31), the word 'mouth' is used polysemously, because it is not meant 'mouth' as a part of human body, it does not have literal meaning here but it is used to refer to persons (individuals) or people. The word 'mouth' is used metonymically as a part of the face of human beings and a part of the body as a whole that stands for that person as a whole. In the example (32), the term 'wheel' is a polysemous word which means 'car'. Although it has its literal meaning that is listed in dictionaries, but in this example it is used metonymically as a part of car and stands for the whole car.

In cognitive linguistics it is the speakers/ hearers ability to select a different contextually concept profile in a domain than the one usually symbolized by the word (Cruse & Croft 2004:48).

Unlike metaphors which involve two domains of experience, metonymy requires only one domain. Metonymy requires contiguity that is closeness of association unlike the metaphor which is based on similarity.

Cognitive approach to metonymy enriches our understanding of the concept of metonymy as a conceptual structure and as a mode of cognition. In Cognitive linguistics, polysemic units are derived from the same lexical source, being the result of processes of extension and metonymy is one of the extensions as illustrated by the example below:

33) (A conversation between two friends who have stayed for long without meeting).

Kamau: I Njoroge? Woriire ku?

(How are you Njoroge, where did you disappear to?)

Njoroge: Ndiokuo, nindirambite kumagara.

(I am still around but I had travelled a bit).

Kamau: Niwagiire mundu?

*(Have you gotten people?)

(Are you married yet?)

Njoroge: Bado.

(Not yet).

In the above conversation the term 'mundu' which literary means human being is extended to mean a wife which is closely related to a human being. The hearer uses metonymic process to comprehend that the term 'mundu' stands for a wife instead of a person. Metonymic concepts structure not just language but also thoughts, attitude and actions. Metonymy is grounded on experiences. Cognitive approach to metonymy enriches understanding of the concept of metonymy as a conceptual structure and as a mode of cognition. Metonymy has a great role in forming polysemous words by sense extension from the basic sense (core meaning).

2.6 Metaphor and polysemy

Cruse & Croft (2014:193) state that a metaphor involves an interaction between two domains which are the source domain and the target domain. A metaphor is important in that more abstract, intangible domains of experience can be conceptualized in terms of what is more

concrete and more immediate. The human mind maps elements from concrete source domains onto the more abstract target domains of emotion, causality, event structure, etc that makes a correspondence between the elements that participate in each domain. For example in the metaphor LOVE IS A JOURNEY, BY Lakoff (1993:208) as quoted by Cruse and Croft (2004:196) the metaphor involves understanding one domain of experience, love, in terms of a very different domain of experience, journeys. The metaphors are understood as mapping from a source domain (in this case, journeys) to a target domain (in this case, love). The mapping is tightly structured. The mapping is the set of correspondences, according to which entities in the domain of love (e.g., the lovers, their common goals, their difficulties, the love relationship, etc.) correspond systematically to entities in the domain of a journey (travelers, the vehicle, destination, etc.) i.e. by mapping; the knowledge about love corresponds to the knowledge about the journeys. Hence, the travelers from the domain of journey are conventionally mapped onto that of lovers in the domain of love. Metaphors contribute greatly to polysemy as they are great sources of polysemy.

2.7 Conclusion

This section has looked at polysemy and the relationship it has with other sense relations from the standpoint of the dynamic construal approach to meaning in Cognitive Linguistics. These sense relations include: hyponymy-hyperonymy, homonymy, and meronymy. Traditionally, these sense relations were treated as semantic relations between words but the cognitive approach looks at them as a semantic relation between particular contextual construal of words (Cruse and Croft 2004:141). This chapter has also discussed metonymy in relation to polysemy, metaphor in relation to polysemy and the similarities and differences between polysemy and homonymy, polysemy and hyponymy and polysemy and meronymy and their contribution to polysemy.

CHAPTER THREE: COGNITIVE ANALYSIS OF GIKUYU POLYSEMIOUS NOUNS

3.0 Introduction

This chapter is a descriptive one in which the analysis of polysemous nouns, within a cognitive framework is done. As it has been explained in the first chapter, a word is regarded as polysemous if it has several distinct but related senses. This chapter will analyze Gikuyu polysemous common nouns looking at the underlying meaning first and then those meanings that are in radial distance from the central meaning and those ones that are in the periphery that arise as a result of the relatedness to the underlying meaning. It will look into, the creation of sense boundaries and the boundary effects which give word autonomy and the frames that are triggered once a word attains autonomy and the possible frame components in each frame. The polysemous senses are organized into networks or structures based on prototypes and categories of related senses are represented in the form of radial categories, and analyzed against Fillmore's frame theory. The chapter is divided into three sections namely the basis for cognitive semantic analysis of Gikuyu polysemous nouns in section 3.1, section 3.2 looks at the heart-ngoro, 3.3 discusses riitho-eye 3.4 looks at kuguru-leg and section 3.5 is the conclusion.

3.1 Basis for Cognitive Semantic Analysis of Gikuyu polysemous Nouns

To get the actual or intended meaning of each of the polysemous nouns, there is isolation of different parts within the total meaning of each word in different circumstances. This isolation is seen as creation of sense boundary (Cruse & Croft 2004:109). The idea is that the different senses of a word are structured similar to how the different members of a category are structured, namely in terms of a central or prototypical sense, to which less central senses are related. The prototypical sense which is the basic and the source for deriving other senses is located at the geometric center. The terms prototype sense or the underlying sense will be used interchangeably to refer to the background sense against which the other senses are going to be defined.

Nouns often refer to entities, including people, things, place and abstractions (Murcia et al 1999:90). Nouns can be divided into two main subclasses: common nouns and proper nouns. Common nouns are those nouns that do not pick out particular individuals by name, place or

thing. There are many types of common nouns; however, within this section only nouns related to body part terms will be analyzed in the following section.

3.2 The Body Part Terms

All the Gikuyu body part terms have their own literal senses and some are very productive in forming polysemous words. The literal sense for each one can be regarded as the prototypical sense by which polysemous words are formed. Prototypes are models of categorization. Khalid (2014:34) states that the main idea of prototype is that within a category of objects, like those instantiating a property, certain members are judged to be more representative of the category than others and the most representative members of a category are called prototypical members. Langacker (1987: 371), as quoted by Khalid (2014:34) says that a prototype is “a typical instance of a category and other elements are assimilated to the category on the basis of their perceived resemblance to the prototype; they are degrees of membership based on degrees of similarity and the other senses are found in the periphery”.

Peripheral meanings arise from the prototype (also referred to as the center) as a result of extension by metaphors and metonymy which are the main categorization mechanisms according to cognitive linguistics. Most of the senses of the polysemous words are related in terms of *function* (what they do), *structure* (the shape they take) and *position* (where they can be found). However, there might be other ways of identifying the related senses of nouns, which will be seen in the analysis of nouns in this section. The following are the polysemous Gikuyu body part terms that will be analyzed in this section, their boundary effects, their frames and the frame components.

3.2.1 Ngoro-Heart

Cognitive linguistics appreciates that the possible readings of any word are uncountable (Cruse & Croft 2004:111). This means that a word can have many related meanings that emanate from the prototype depending on the context in which it has been used in. A prototype is defined as the best or most representative member of a given category. It is regarded as a cognitive

representation, which is generally associated with a particular word and serves as the reference point for categorization.

In regard to the above, the underlying sense or the prototypical sense of the word *ngoro* ‘heart’ ‘is the organ in ones chest that makes blood flow around the body’ as explained by example (34).

34) Arathii guthinjwo ngoro India.

He is going for heart operation in India.

In the above sentence the verb *thinjwo* ‘be operated on’ gives the hearer a clue of the intended sense. Operation is done on the organ of the human body and the rest of the senses are screened out.

The other senses are related to the underlying in various ways. Most of the other meanings that are found in radial relationship to the central meaning are realized after the word *ngoro* ‘heart’ is used in an expression. Some of these extended senses arise as a result of extension from the prototype by a metaphor which is one of the main categorization mechanisms.

In example (35) the prototypical sense is extended to mean ‘ones feelings and emotions’ which are considered to be part of one’s character. This is illustrated by the example below.

35) Sonko niari ngoro nene.

Sonko has a big heart.

In example (36) *ngoro* ‘heart’ is extended to mean ‘to feel sympathy for someone’. This is illustrated by the example below.

36) Ngoro yakwa ni iracaira arutwo a Garissa.

My heart pities the students of Garissa.

The word pity in the above sentence evokes the feeling of sympathy which is believed to reside in the heart among the Agikuyu. The extended sense in example (37) means ‘something that one desires greatly’. This is shown in the example below.

37) Ngoro yakwa iriragiria kuona Ngai.

My heart desires to see God.

Examples (35), (36) and (37) are extensions of the prototype *ngoro* ‘heart’ because feelings and emotions originate from the heart as considered in the Gikuyu culture. For example a ruthless person is said to have no heart to mean that he is unkind and has no feelings of sympathy and empathy for others. People’s hearts beat fast when in shock, in fear or when anxious therefore the heart is associated with feelings and emotions. In example (38) the meaning is an extended one which means ‘to cry ones heart out’. This is shown in the example below.

38) Mwana ucio aririte akoimwo ni ngoro.

The baby has cried his heart out.

Crying is an expression of emotions which reside in the heart. The heaving sounds that a child make after crying are seen as though they will push the heart out.

Example (39) is extended to mean ‘make someone feel sympathy for someone’ as shown by the example below.

39) Mahoya make ni mahutagia ngoro ya Ngai.

Her prayers touch the heart of God.

Example (40) is extended to mean ‘not being honest’.

40) Arata acio matiumakanitie ngoro.

Those friends are not honest with each other.

Secret feelings and emotions reside in the heart so if one does not share with others what is in the heart it’s like the heart is closed and it would be impossible to know what the other person is thinking.

Example (41) is an expression that means high blood pressure as in the sentence below.

- 41) Niarwarire murimu wa kuhura ngoro.
(*He suffers from a disease of beating heart.)
He suffers from high blood pressure.

This means that the heart is beating more than normal. This is related to the prototype as it is an abnormality touching the prototype.

Example (42) is another expression that means to be disappointed as in the example below.

- 42) Kigeranio kia morphology nikiranjuragire ngoro.
(*Morphology exam killed my heart.)
Morphology exam disappointed me.

Below is a diagram showing the radial categories of ngoro –heart

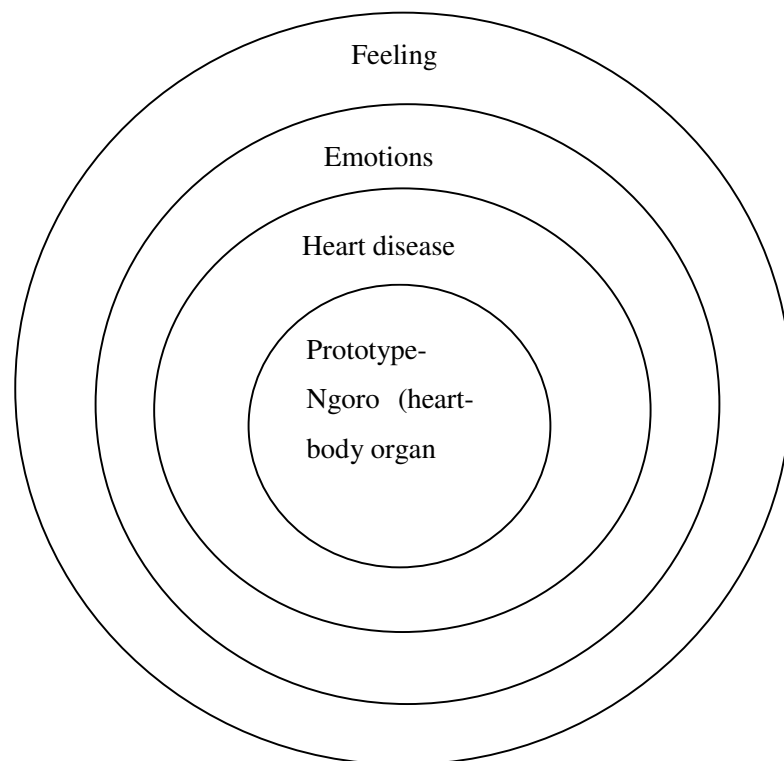


Diagram 9 Radial categories of *Ngoro* ‘the heart’

The above illustration shows the location of the prototype *ngoro* ‘heart’. Lakoff (1987:12) as quoted by Khalid (2014) uses the term centrality to convey the idea that some members of a category may be “better examples” of that category than others. This is further supported by Cruse & Croft (2004:77) who state that members that are judged to be the best examples of a category can be considered the most central in the category and refers to them as Goodness-Of – Exemplar.

From the above discussions of the meanings of the Gikuyu polysemous word *ngoro* ‘heart’, the Goodness-Of – Exemplar is the organ of the body that pumps blood to all parts of the body and it is found at the geometric center because it is the prototype. The heart disease as illustrated by example (46) as repeated here below is more central than the other extended meanings because this disease directly affects the organ that pumps blood. That is why in the above diagram it is the closest to the prototype. Consider sentence (41) as repeated below.

43) Niarwarire murimu wa kuhura ngoro.

*(*He suffers from a disease of beating heart.)*

He suffers from high blood pressure.

Lakoff (1987:418) as quoted by Kovacs (2011:12) states that cognitive linguistics argue that meanings of polysemous words are related in a systematic and natural way forming radial categories where one or more senses are more prototypical (central) while others are less prototypical. These less prototypical senses are found in the periphery. In the above discussion on the senses of *ngoro* (heart) the senses which are as a result metaphorical extensions are found on the periphery.

To illustrate this consider sentence (42) as repeated here below.

44) Kigeranio kia morphology nikiranjuragire ngoro.

*(*Morphology exam killed my heart.)*

Morphology exam disappointed me.

In the above example (44) the expression *nikiranjuragire ngoro* ‘killed my heart’ is a metaphorical extension in that killing is associated with the physical act of ending life. The source domain of the metaphor is the morphology exam which is mapped to the target domain which is the affected person who feels disappointed. When one is disappointed one feels as though one has lost hope and it is like everything around the person is dead. This metaphorical extension of the word *ngoro* ‘heart’ will be found at the periphery and is related to the prototype because disappointment is a feeling which is believed to reside in the heart.

3.2.1 Boundary effects

When a hearer comes across the word *ngoro* ‘heart’ all the senses as discussed above avail themselves in the absence of the context. The context helps in assigning meaning to words by use of sense boundaries. The sense boundary provides sense autonomy. This autonomy gives a sense the ability to behave independently of other units that can be construed in the same context (Cruse & Croft 2004:112).

One of the boundary effects is the **antagonism: attentional autonomy**. When a word has more than one but related senses like the polysemous word *ngoro* ‘heart’, all the senses are said to be the foci of attention and are seen as though they are in competition and only one is supposed to win. The context helps in assigning meaning to a word.

Consider example (34) as repeated below.

45) Arathii guthinjwo ngoro India.

He is going for a heart operation in India.

In the above example the sense of the heart as part of the body whose function is to pump blood to all parts of the body is given attention and all the other senses which are as a result of extensions are ignored hence creating a sense boundary. This sense (the organ in ones chest that makes blood flow around the body) attains autonomy and it triggers a frame which comes with encyclopedic entries that help in the assignment of meaning. The verb *thinjwo* ‘operate’ gives the hearer a clue in the selection of the sense of the organ of the body.

The other boundary effect is the **compositional autonomy** (Cruse & Croft 2004:114). This reveals itself in the composition of the sentence as illustrated by example (34) as repeated here below.

46) Arathii guthinjwo ngoro India.

He is going for a heart operation in India.

In the above sentence the issue is what sense is selected by the construction a word is in. The choice of the verb *thinja* ‘operate’ in the above sentence selects the sense of the organ of the body. This is because *ngoro* ‘heart’ as an organ of the body can get sick and undergo an operation so a sense boundary is created and the other potential meanings are screened out due to the choice of the words in the sentence. As explained above, once a word attains autonomy, it triggers a frame which comes with its frame elements or components. This is illustrated in the section below.

3.2.2 Frames and frame components of *ngoro*-heart

On hearing the word *ngoro* ‘heart’ which is polysemous the immediate context in which the word has been used in helps the hearer in opening an appropriate frame. A frame is triggered after a word has attained autonomy as discussed earlier in the creation of sense boundary. After the creation of a sense boundary the word becomes autonomous and the hearer can assign meaning to it.

Frames are evoked by the word itself as the semantic conceptual content of the word activates the frame of encyclopedic meaning that is needed for the understanding of the word. For example, when a hearer comes across the word *ngoro* ‘heart’ above, in order to understand what it means a hearer draws upon encyclopedic knowledge relating to what *ngoro* means. The hearer then constructs a meaning that is appropriate in the context of the utterance. For example in the above sentence (46) the context in which the noun *ngoro* ‘heart’ is used with the verb *thinja* ‘operate’ helps in assigning meaning.

The following are the possible frames and the frame components of the word *ngoro* 'heart':

The HUMAN BODY FRAME which has the following frame components or sub frame:

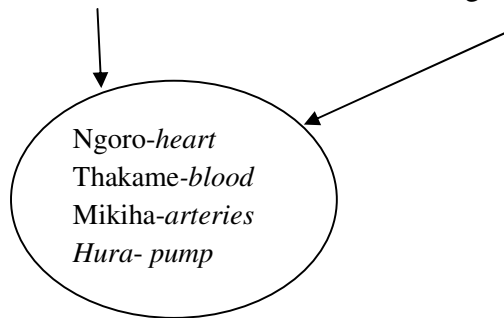


Diagram 10 the heart frame

The underlying frame of the noun *ngoro* 'heart' is the HUMAN BODY FRAME. It is the background frame against which these other related senses are going to be defined through extensions by metaphors.

The HUMAN BODY FRAME is evoked by sentence (34) as repeated here below.

47) Arathii guthinjwo ngoro India.

He is going for a heart operation in India.

When a hearer hears the above sentence, the verb *thinjwo* (be operated on) gives him a clue. This clue helps a hearer in triggering the appropriate frame which is the HUMAN BODY FRAME.

Apart from the HUMAN BODY FRAME, the word *ngoro* 'heart' opens other frames namely FEELINGS FRAME and EMOTION FRAME. All these three frames are available in the mind of a hearer. The use of the above words *thinjwo* 'operate on' evokes the HUMAN BODY FRAME and the other two are in the background.

The other frame which can be opened by *ngoro* 'heart' is the EMOTION FRAME.

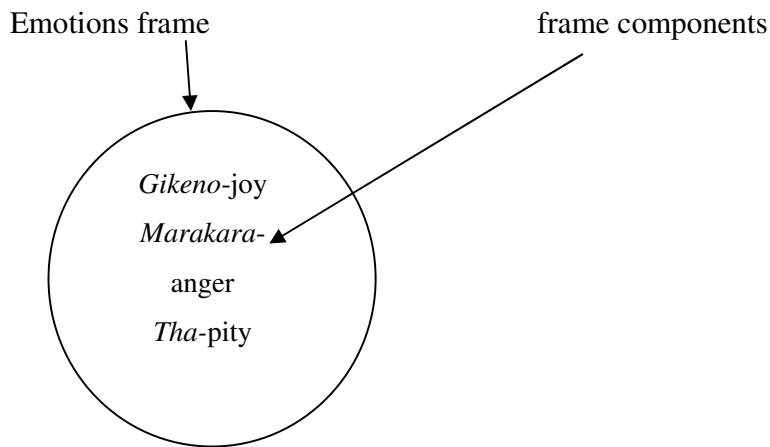


Diagram 11 Emotions frame

The above frame will be evoked by sentence (38) as repeated here below.

48) Mwana ucio aririte akoimwo ni ngoro.

The baby has cried his heart out.

In the above sentence the frame is evoked by the verb cry. When one cries his heart out emotions such as anger, disappointments are expressed.

The other frame which can be evoked is the FEELINGS FRAME as discussed here below.

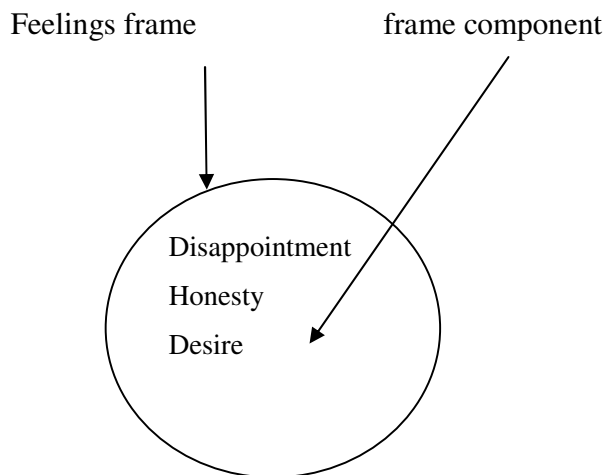


Diagram 12 Feelings frame

This frame will be evoked by sentences 35, 36 and 42 repeated here below.

49) Sonko niari ngoro nene.

Sonko has a big heart.

50) Ngoro yakwa ni iracaira arutwo a Garissa.

My heart pities the students of Garissa.

The verbs 'help' and 'pity' in the above two sentences evoke the FEELING FRAME. They evoke the feelings of sympathy, kindness and pity which can make somebody to go out of his way to help the needy.

In the example (42) as repeated below the verb disappoint evokes the FEELING FRAME too. When one is disappointed ones morale goes down and affects ones feelings and the mood. The heart feels heavy and discouraged.

51) Kigeranio kia morphology nikiranjuragire ngoro.

(*Morphology exam killed my heart.)

Morphology exam disappointed me.

In the FEELING FRAME and THE EMOTION FRAME, the frames evoked depend on the reference to hearer's knowledge and experience of the background situations which motivate the categories which have been named. The above two frames are peripheral. They arise from the prototype as a result of extension by metaphors which are one of the main categorization mechanisms. The more metaphorical senses are, the more far away they are found from the prototype. Feelings and emotions reside in the heart which is the prototype where the meaning is extended from.

3.2.3 Metaphorical extension of ngoro-heart

Consider example (35) and (42) as repeated below:

52) Sonko niari ngoro nene.

Sonko has a big heart.

53) Kigeranio kia morphology nikiranjuragire ngoro.

(*Morphology exam killed my heart.)

Morphology exam disappointed me.

The word *ngoro* ‘heart’ in the sentences above is a metaphorical extension. In example (52) the prototype (the organ in ones chest that makes blood flow around the body) is metaphorically extended to mean kindness and generosity. Kindness is a feeling that resides in the heart and when somebody is said to have a big heart his heart feels pity and sympathy for them. Just like the way the heart serves the other parts of the body by supplying blood which carries nutritious substances that are necessary for the survival of all the organs in the body this person who has a big heart is therefore likened to the heart as his actions of kindness and generosity flow to others who are needy and bring a change in their lives.

In the above discussion in example (52) the source domain is the heart which is an organ in the human body is mapped on to the target domain which is Sonko who is the person who extends acts of kindness to others. A big heart accommodates a lot of feelings which is metaphorically associated with the act of performing generous acts.

There is a metaphorical extension in example (53) too. The source domain is the morphology exam which is mapped onto the target domain which is the person affected by the morphology exam. In the above example the expression *nikiranjuragire ngoro* ‘killed my heart’ is a metaphorical extension in that killing is associated with the physical act of ending life which is mapped to the person who feels disappointed. When one is disappointed one feels as though all hope is lost and it is like everything around the person is dead. These feelings and emotions

originate from the heart and flow to the other body parts affecting the body negatively. This meaning is peripheral.

3.3 Riitho-eye

The prototypical sense of the word *riitho* 'eye' literally means 'either of the two organs on the face that you see with', as in the example (54) here below.

54) Riitho riu ni riguthinjwo.

That eye will be operated on.

It is the reference point for categorization. All the other senses are extended from the prototypical sense. The other senses are extensions with those nearer to the prototype being in a radial relationship with the prototype and the metaphorical extensions being away from the prototype.

In the extended sense in example (55) it refers to the ability to see as shown by the example below.

55) Wi maitho?

Do you have eyes?

When one asks *wi maitho?* 'Do you have eyes?' as in the above example above it is like he or she is doubting your ability to see as a result of something that you might have done. For example walking over things that are not supposed to be trampled on. This is related to the function of the eyes which is seeing.

The other extended senses in (56), (57) and (58) are related in terms of the shape of human's eyes as illustrated in the below sentences.

56) Handa waru icio maitho marorete iguru.

*(Plant those potatoes with the eyes looking up.)

Plant those potatoes with the buds looking up.

57) Ikira uthi riitho-ini ria cindano.

*(put thread eye in of needle.)

Put the thread in the hole of a needle.

58) Riitho riu ria ngari ni ihu.

*The eye of the car is burnt.

The headlights of the car have blown out.

The potato buds and the hole of the needle resemble the shape of the eye. There are metonymical extensions in the examples of (56), (57) and (58) where these senses are related in terms of the shape of human's eyes and they acquire the same name as the prototype. In example (56) it is through the "eyes" (buds) of the potatoes that germination takes place after the potato has been planted. It is through this eye that the potato tuber planted underneath the soil is first seen once it shoots to the surface of the soil.

However, in the example of (58), the sense of the word 'eye' is related to the prototype in terms of the shape and function of human's eye that it performs. One of the functions of human's eye is 'visual perception'; this sense is extended metonymically from human's eye to car's headlights. Human's eye function is similar to the headlights of a car during the night as it sheds light on the way for the driver to see clearly. This is extended from the function of the eye by which people can visualize things.

Example (59) as shown below is a metaphorical extension in that putting a finger in somebody's eye is not used in the literal sense but it refers to a situation whereby one has been pushed to the limit and can no longer tolerate. This is used to tell the offending person to back off or else face the wrath of the offended person and be ready to face the consequences of his actions. There is mapping of the source domain which is harming the eye which is a physical act to the target domain of offending which is abstract. This sense is peripheral.

59) Riu niwanjikia kaara riitho.

* Now you have put a finger in my eye.

(Back off. You have crossed the line).

Below are the radial categories of *riitho* ‘eye’

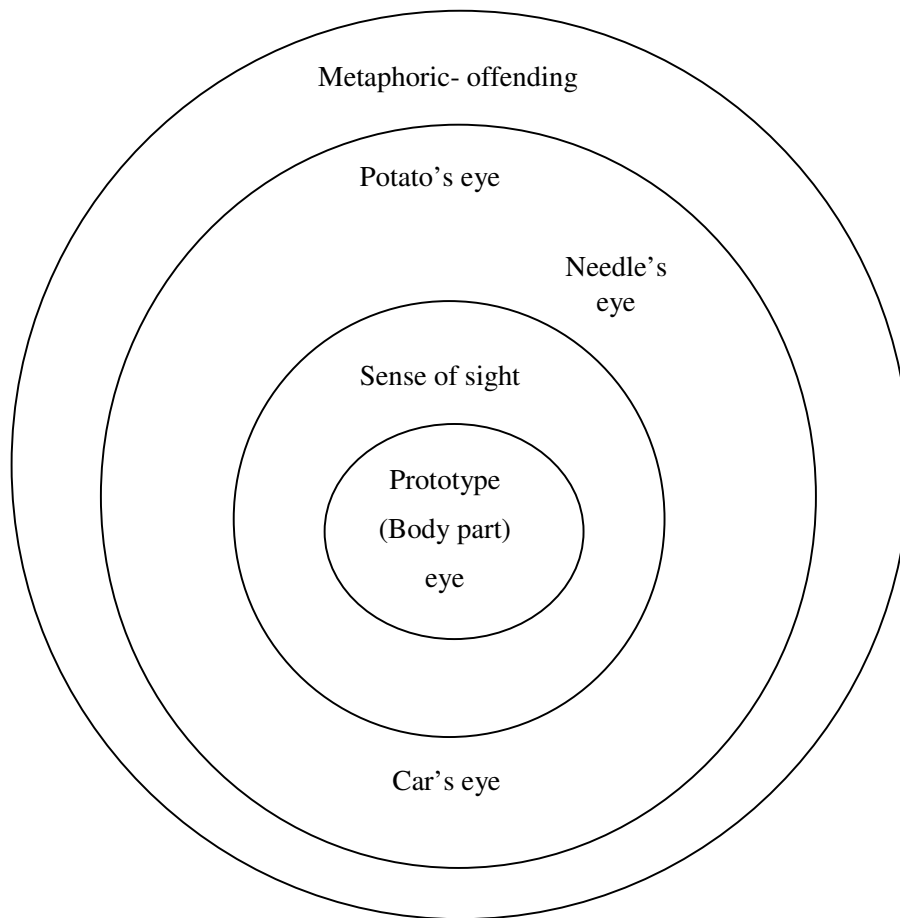


Diagram 13 radial categories of *riitho*-eye

The above illustration shows the location of the prototype *riitho* ‘eye’. As discussed earlier the term centrality is used to convey the idea that some members of a category may be “better examples” of that category than others. From the above discussions of the meanings of the Gikuyu polysemous word *riitho* ‘eye’, the Goodness-Of –Exemplar is ‘either of the two organs on the face that you see with’, as in the example (54) and it is found at the geometric center because it is the prototype. The ability to see as in the example (55) is located next to the prototype because the function of the eyes is to see. Metonymic extensions of the eye of the potato, the needle’s eye and the cars eye as in examples (56), (57) and (58) follow the ability to see. They are physical and concrete that is why they are in radial distance from the prototype. The three get the name of the prototype by virtue of their shapes and functions. In the periphery

we find the metaphorical extension. Unlike the rest of the extensions of the noun *riitho* ‘eye’ which have close relationship with the prototype the metaphorical extension is abstract and has very remote relationship and that is why the metaphorical extensions are very few and found on the periphery. For example consider the relationship between putting a finger in the eye and offending.

3.3.1 Boundary effects

All the polysemous senses of the word ‘eye’ *riitho* as discussed in section 3.2.2 are in an antagonistic relationship and they are all in the mind of the hearer. This means that they are all competing for attention and it is only one that will be selected depending on the context it has been used in. As explained in the earlier section 3.2.1.1 of *ngoro* ‘heart’ the above boundary effect is referred to as **antagonistic: attentional autonomy**.

Consider the sentence (54) as repeated here below:

60) *Riitho riu ni riguthinjwo.*

That eye will be operated on.

The sense of eye that will be selected in this sense is the organ of the body that is used for seeing and all the other senses that it is in antagonism with are ignored. Once a word attains autonomy, the choice of the prototype sense will be made. The context in which the word has been used in shows a property that can only be found in a human’s eye i.e. getting sick and getting operated on. The verb operate gives the hearer a clue. After a word attains autonomy it opens appropriate frames which will help in assigning meaning as will be seen in the section 3.2.2.2 below.

The other boundary effect is the compositional autonomy.

Consider example (57) as repeated below.

61) *Ikira uthi ritho-ini.*

Put the thread in the eye.

In the above sentence the issue is what sense is selected by the construction a word is in. The choice of the word thread in the above sentence selects the sense of a needle's eye. This is because the thread and the needle work together. As explained in the earlier section on *ngoro* 'heart' this is referred to as **compositional autonomy**.

As explained in the section of *ngoro* 'heart' above, once a word attains autonomy, it triggers a frame which comes with its frame elements or components. This is illustrated in the section below.

3.3.2 Frames and frame components of *riitho*-eye

The underlying frame of *riitho* 'eye' is the HUMAN BODY FRAME. It is the background frame against which these other extensions are going to be made. The other frames include, CAR FRAME, POTATO FRAME, and the NEEDLE FRAME as illustrated below.

POTATO FRAME

This will be opened by sentence (56) as repeated here below.

62) Handa waru icio maitho marorete iguru.

*(Plant those potatoes with the eyes looking up.)

Plant those potatoes with the buds looking up.

This is another extension of the main frame or the underlying frame. This frame will be evoked by the word potato. Its frame components are the *maitho* 'buds', *makoro* 'peels', 'chips' *waru*, *bhajia*, *kahiu* 'knife', among others. All these components are semantically related to THE POTATO FRAME. Consider the POTATO FRAME below with its frame components.

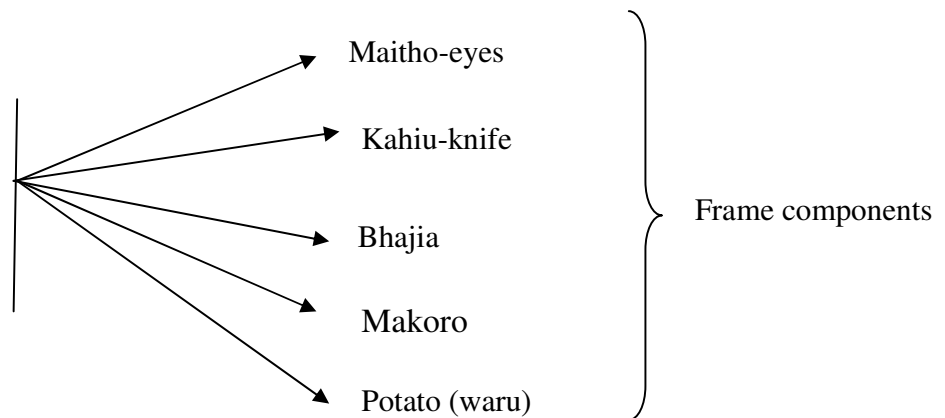


Diagram 14 potato frame

The NEEDLE FRAME will be opened by sentence (57) as repeated here below.

63) Ikira uthi riitho-ini ria cindano.

*(Put thread eye in of needle.)

Put the thread in the hole of a needle.

The word needle will evoke the NEEDLE FRAME. This frame will go with *irima* ‘eye’, *uthi* ‘thread’, *gutuma* ‘sewing’, *ndaruku* ‘torn’, *runo* ‘hem’.

The verbs that can go with the NEEDLE FRAME are sew, tear, cut, and join among others. The Knowledge of any one of the above verbs entails knowing the meaning of all of them.

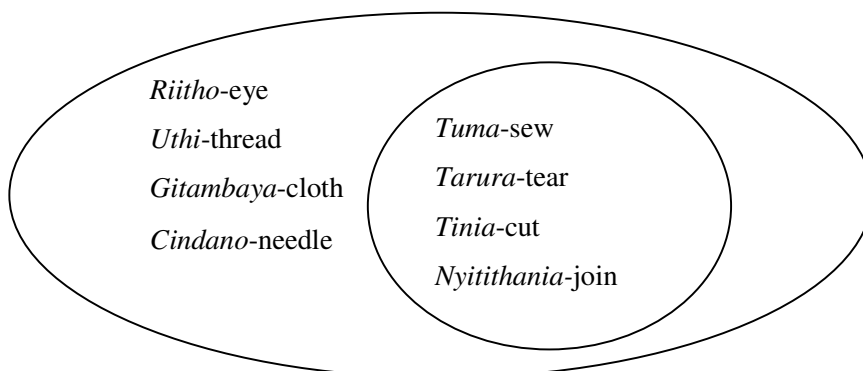


Diagram 15 needle frame

As explained in chapter one, a frame can be embedded in another frame. THE NEEDLE FRAME has opened another frame which contains verbs that go hand in hand with the needle frame. For example for the needle and the thread to be used there must be something that is torn and needs to be joined.

3.3.3 Metonymy and polysemy of the noun *riitho* ‘eye’

Polysemy can be as a result of metonymical extensions as illustrated by the below examples.

Consider the sentences in (56) and (58) as repeated below

64) *Handa waru icio maitho marorete iguru.*

*(Plant those potatoes with the eyes looking up.)

Plant those potatoes with the buds looking up.

65) *Riitho riu ria ngari ni ihu.*

*The eye of the car is burnt.

The headlights of the car have blown out.

In example (64) *riitho* ‘eye’ has been metonymically extended to refer to the buds of potatoes which resemble the eye. The buds are the openings through which germination takes place. The relationship between the prototype and the metonymical extension is as a result of the shape of the potato buds which resemble the eyes of a human being. The potato buds are given the name of the eyes.

In example (65) the name of the prototype ‘eye’ has been metonymically extended to the name of the headlight of a car which is also used for shedding light on the road enabling the driver to see clearly hence getting the same name as the prototype. From the above two examples it is evident that metonymical extension is a rich source of polysemy.

3.4 *Kuguru* –leg

The prototypical sense of the word *kuguru* ‘leg’ literally is used to refer to ‘one of the long parts that connects the feet to the rest of the body’, as in the sentence below.

66) Nindiroinikire kuguru ngithaka mubira.

I broke my leg playing football.

The other senses are related to the prototype in various ways.

The word *kuguru* 'leg', in (67) as in the sentence below, has a central sense which is used to refer to 'the leg of an animal that is cooked and eaten as food'. It is related to the prototype in that it is found at the bottom position of an animal, supports the animal and helps the animal in movement just like what the legs of a human being do. It differs from the prototype in that it is eaten as food.

67) Kuguru kuu kwina murio muno.

That leg is very tasty.

There is a metonymic extension in the below example of (68) in which the sense of *kuguru* 'leg' is regarded as a radial sense. Consider *kuguru* 'leg' in the sentence below:

68) Mubuto ucio nimutaruku kuguru.

That trousers' leg is torn.

Kuguru 'leg' is used to refer to 'the part of one's trousers that covers his/her leg'. The part of the trousers that covers the leg has acquired the name of the prototype. This sense and the prototypical sense are related to each other because of having common position; being on the lower part and covering the prototype.

In example (69) as shown by the sentence below,

69) Giti kiu nikiuniku kuguru.

The leg of that chair is broken.

Kuguru 'leg' is used to refer to 'one of the long thin parts on the bottom of table or a chair'. This sense is considered as a radial sense that is related to the prototypical sense in terms of shape, position and function. Both the leg of the chair and the leg of human being are similar in shape because they are long thin parts of the body or of the chair. Both of them are positioned to the bottom parts. Also, both of them have the same function because they join lower parts to the upper parts, and they offer support to the upper parts.

In example (70) below the meaning of leg is extended to mean the tyres of a vehicle.

70) *Kuguru kwa ngari ni kuhuhuku.*

(*Leg of vehicle is deflated.)

The tyre of the vehicle is deflated.

This extension is as result of the function of the legs i.e. support and movement. The tyres support a car and help it to move from place to place.

In example (71) below the expression *kuuna mburi kuguru* 'break somebody's daughter's leg' is used metaphorically to mean to impregnate somebody's daughter. Among the Agikuyu goats were valued so much and they were used in dowry payment. If a girl got pregnant before she got married she was referred to as a 'gichokio' and was seen as though she had lost value. Her value was likened to a goat that had its legs broken. Such a goat is bought at a throw away price. This meaning is peripheral.

71) *Kamau niaroinire mburi yene kuguru.*

*Kamau broke goat somebody's leg.

Kamau impregnated somebody's daughter.

Below are the radial categories of the word *kuguru* 'leg'.

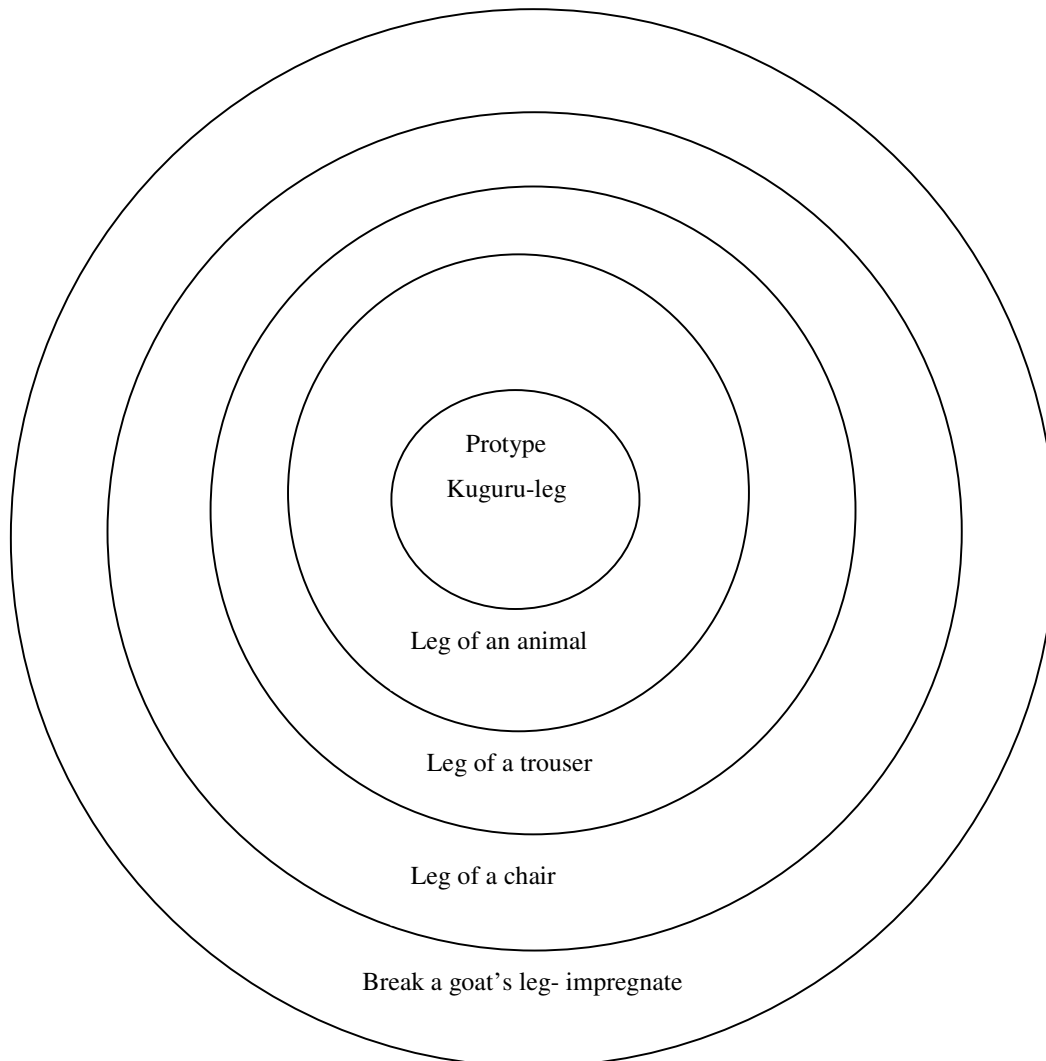


Diagram 16 Categorization of leg

In the above illustration the sense *kuguru* 'leg' (part of the animal's body used for support and is cooked and eaten as food) is close to the prototype as they share all the features apart from being eaten as food. These features are as follows: movement, support, connects the upper and the lower parts of an animal and it is on the lowest part of the body. The leg of a trouser is still nearer to the prototype because it is the part of trousers that covers the prototype. The leg of a chair is found in the more peripheral of the radial categories because they share the support

function only. The sense resulting from the metaphorical extension is found in the periphery. This meaning is not interpreted literally but metaphorically.

3.4.1 Boundary effects

Boundary effects reveal themselves in various ways. The above mentioned senses of *kuguru* 'leg' are all available in the mind of the hearer, and it is the context which helps in selecting the intended sense by the speaker and creates the boundary effects by giving words autonomy. In the noun *kuguru* 'leg' there are two boundary effects which manifest themselves, one is antagonism in form of attentional autonomy and the other one is antagonism in form of compositional autonomy.

Consider the following possible readings of *Kuguru* 'leg': part of human body, furniture, food and part of trouser.

To explain the above boundary effect consider sentence (68) as repeated here below.

72) Mubuto ucio nimutaruku Kuguru.

(**Trouser that is torn leg*).

The leg of that trouser is torn.

The context in which the word *kuguru* 'leg' has been used selects the sense of leg as part of a trouser that can only be found in clothes and so all the other readings of leg are ignored. The idea of the quality of clothes being torn helps in the drawing of a boundary effect, and to choose the meaning of leg as leg of trousers. This meaning gives the word *kuguru* autonomy because it is profiled or given more attention against the other readings of leg which are back grounded. Cruse and Croft (2004:112) refer to the above boundary effect as **antagonism of attentional autonomy**.

The other boundary effect is the compositional autonomy (Cruse & Croft 2004:114). This reveals itself in the choice of the adjectives that are used in modifying nouns or the composition of the sentence as illustrated by example (67) as repeated here below.

73) Kuguru kuu kwina murio muno.

That leg is very sweet.

The following are the possible readings of the word leg: part of human body, Part of furniture, Part of trouser food, and tyre.

The use of the adjective sweet to modify the noun leg in the above illustration screens out the other readings i.e. furniture, trouser and human body and selects the food sense. The adjective sweet can only be used with the noun that appeals to the sense of taste; part of animal that is cooked and eaten as food. This kind of boundary effect is referred to as **compositional autonomy**.

3.4.2 Different frames of kuguru-leg

As we saw earlier in chapter one, in frame semantics a word is defined in relation to its background frame. A frame being any system of concepts related in such a way that to understand any one of them you have to understand the whole structure in which it fits. When a hearer hears the noun *kuguru* 'leg', different frames will be opened and it is only context that creates the sense boundaries that now help in choosing and assigning the correct sense of the word as intended by the speaker out of selection of others senses. Once a word attains autonomy it triggers a frame. This frame comes with the encyclopedic entries which help in the assignment of meaning.

Consider the following frames which a hearer is likely to evoke on hearing the word *kuguru* 'leg'.

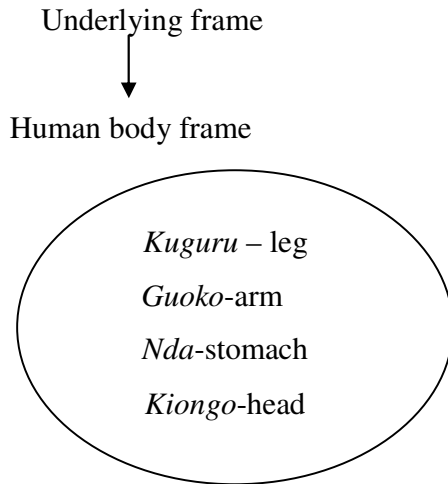


Diagram 17 human body frame

Kuguru 'leg' belongs to the HUMAN BODY FRAME which has its own frame components which include *kuguru* 'leg', *guoko* 'arm', *nda* 'stomach', *kiero* 'thigh' among others. One cannot understand *kuguru* 'leg' without understanding the other frame components that are in the HUMAN BODY FRAME. This frame will be evoked by sentence (66) as repeated here below.

74) Nindiroinikire *kuguru ngithaka mubira*.

I broke my leg playing football.

In the above sentence the words '*ngithaka mubira* 'playing football' will evoke the HUMAN BODY FRAME. Football is a game played using the feet of a human being which is a meronym of a leg. These words help in the selection of the HUMAN BODY FRAME and the other frames which are in the background are screened out.

Apart from the underlying frame of the human body, the prototype leg also has other meanings that are related to it. These meanings will open the following frames: THE FURNITURE FRAME, TROUSERS FRAME, and THE FOOD FRAME as shown in the illustrations below.

FURNITURE FRAME is evoked by sentence (69) as repeated here below.

75) *Giti kiu nikiuniku kuguru .*

The leg of that chair is broken.

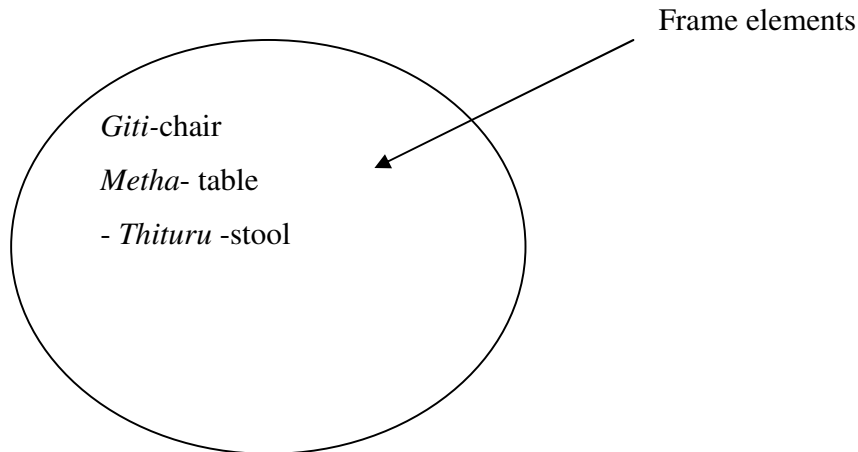


Diagram 18 Furniture frame

In the above frame the noun *giti* 'chair' will evoke the FURNITURE FRAME. The other frame is the TROUSER FRAME which will be evoked through the following example mentioned in (76):

76) *Mubuto ucio nimutaruku kuguru.*

That pair of trousers is torn in the leg.

The word *mubuto* 'trousers' will evoke the TROUSER FRAME below.

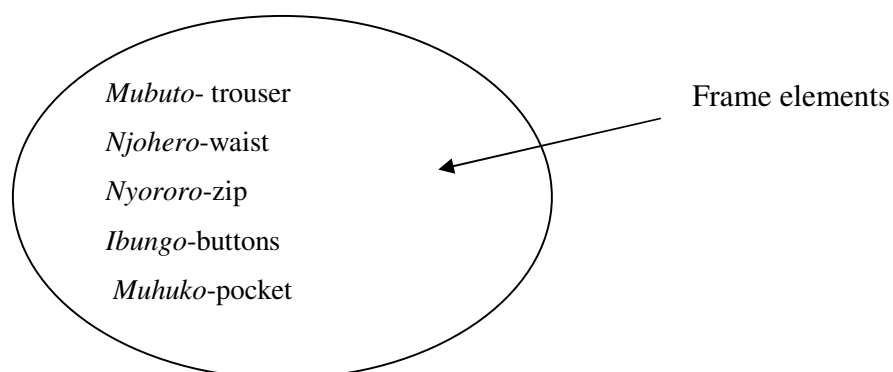


Diagram 19 Trousers frame

Another frame that is part of the overall 'leg' frame is CAR FRAME. This frame will be evoked by sentence (70) as repeated here below.

77) Kuguru kwa ngari ni kuhuhuku.

(*Leg of vehicle is deflated.)

The tyre of the vehicle is deflated.

The verb deflate evokes the CAR FRAME. The leg of a vehicle tyre is the only one that can get deflated and be inflated with pressure, the components of the CAR FRAME are:

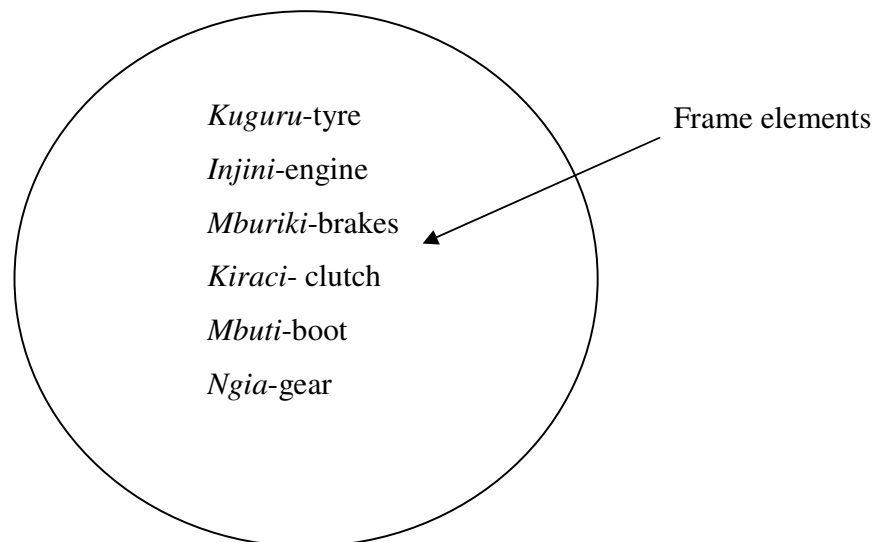


Diagram 20 Car frame

The next frame that is evoked from the examples of leg is the FOOD FRAME. The below FOOD FRAME is evoked by sentence (67) as repeated here below.

78) Kuguru kuu kwina murio muno.

That leg is very tasty.

The adjective tasty can only be used with the noun that appeals to the sense of taste; part of animal that is cooked and eaten as food. This word tasty evokes the food frame. When the leg *kuguru* opens the food frame other types of food that accompany the roasted leg or the boiled leg are made available. See the FOOD FRAME below.

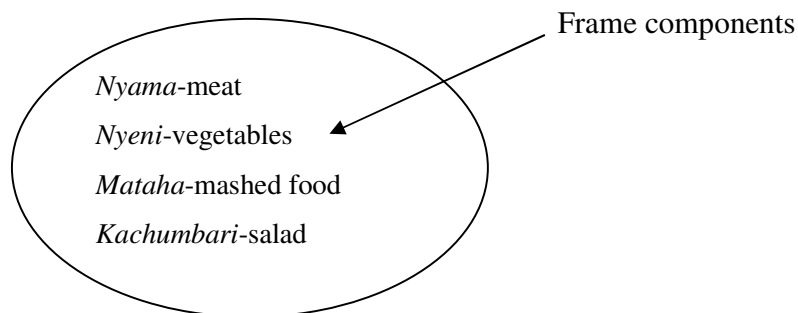


Diagram 21 food frame

The last frame is the PREGNANCY FRAME which is evoked by sentence (71) as repeated below.

79) Kamau niaroinire mburi yene kuguru.

* Kamau broke goat somebody’s leg.

Kamau impregnated somebody’s daughter.

In the above example the expression ‘kuna mburi yene kuguru’-break the leg of somebody’s goat help in evoking the PREGNANCY FRAME. This frame can only be evoked by a hearer who culturally understands the cultural aspects that motivate the concept that the above expression encodes. See the PREGNANCY FRAME below.

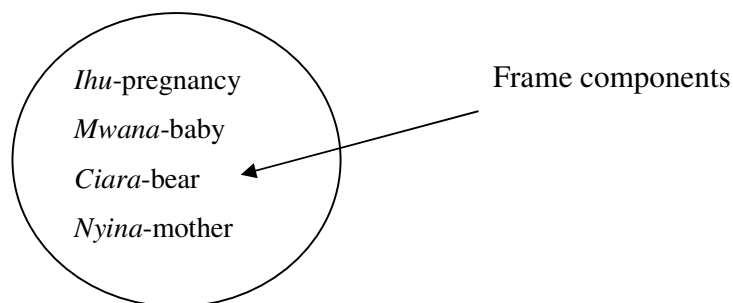


Diagram 22 Pregnancy frame

3.4.3 Polysemy and metonymy in the noun *kuguru* ‘leg’.

As discussed in chapter two metonymy enables us to see one part or aspect of an experience to stand for some other part (or whole) of that experience. It is the use of a word to denote a concept other than its literal denotation. It is a conceptual projection whereby one experiential

domain (the target) is partially understood in terms of another experiential domain (the source) included in the same common experiential domain. However, metonymy, unlike metaphor, is not a cross-domain mapping, but instead allows one entity to stand for another because both concepts co-exist within the same domain. As explained in the metaphorical extensions in the section of *ngoro* 'heart' and *riitho* 'eye' mapping is done from the source domain to the target domain.

Metonymy has a great role in forming polysemous words by sense extension from the basic sense (core meaning) which is the prototype as shall be discussed here below using Gikuyu body part noun *kuguru* 'leg'.

Consider example (68) as repeated below.

80) Mubuto ucio nimutaruku kuguru.

That trousers is torn in the leg.

In the above sentence *kuguru* 'leg' of human being trousers is used metonymically to stand for that part of a trouser which covers a human leg. The human leg and the leg of a trouser belong to the same domain which is the leg domain. This leg domain is the one that opens the different frames as seen in the above illustrations. For us to understand the target domain i.e. the leg of trousers we have to understand the source domain which is the leg of a human being. In this case the leg of a human body represents part of a trouser and gets its name from that part of the human body.

3.5 Conclusion

This chapter looked at different ways of analyzing Gikuyu polysemous body part common nouns. As observed in the data analysis this chapter is a descriptive one in which the analysis of polysemous nouns, within a cognitive framework is done. As it has been explained in the first chapter, a word is regarded as polysemous if it has several distinct but related senses. This chapter has analyzed Gikuyu polysemous body part common nouns looking at the underlying meaning first and then those meanings that are extended from the prototype as a result of the relatedness to the underlying meaning, use of sense boundaries to give autonomy to a word,

frames that are triggered after a word attains autonomy so as to assign meaning to it and the relationship between polysemy and metaphors, polysemy and metonymy. The boundary effects that have been used in the analysis are the antagonism: attentional autonomy and the compositional autonomy.

CHAPTER 4: COGNITIVE ANALYSIS OF GIKUYU POLYSEMIOUS COMMON NOUNS

4.0 Introduction

In chapter three body part polysemous nouns were analyzed; however, in this chapter other common nouns (not related to body part terms) will be analyzed. This chapter is divided into three sections namely the basis for cognitive semantic analysis of Gikuyu polysemous nouns in section 4.1. section 4.2-4.5 looks at the Gikuyu polysemous common nouns other than the body part nouns which include *muthuri* 'man' , *mbegu* 'seed', *mai* 'water' and *matunda* 'fruit'. This section looks at the relatedness in meaning of the polysemous words by use of the radial categories, the boundary effects which gives a word autonomy and the frames that are triggered once a word attains autonomy. Section 4.6 is the conclusion. Just like in chapter three this study will approach the analysis of Gikuyu polysemous common nouns using Fillmore's frame theory.

4.1 Cognitive Semantic Analysis of Gikuyu polysemous Nouns

To get the actual or intended meaning of the polysemous common nouns, there is isolation of different parts in the total meaning potential of a word in different circumstances which is needed. This isolation is seen as creation of sense boundary (Cruse & Croft 2004:109). The idea is that the different senses of a word are structured similar to how the different members of a category are structured, namely in terms of a central or prototypical sense, to which less central senses are in a radial distance from the prototype and metaphorical extensions are found on the periphery. The prototypical sense which is the basic and the source for deriving other senses is located at the geometric center.

As we saw in the previous chapter common nouns are those nouns that do not pick out particular individuals by name, place or thing. The following are the common nouns not related to body part terms.

4.2 Muthuri-man

The word *muthuri* 'man' is polysemous as it has related meanings which are an adult male as distinguished from a woman, a male adult as distinguished from a child, a husband and a church elder. The following sentence illustrates the underlying meaning of the word *muthuri* 'man' as an adult male distinguished from a woman.

81) Uyu ni muthuri ti mutimia.

This is a man not a woman.

Meaning of *muthuri* 'man' can be extended to mean a male adult as illustrated by the example below.

82) Uyu ni muthuri ti mwana.

This is a man not a child.

The other meaning that is more radial moves away from the prototype and is in radial distance now refers to *muthuri* 'husband' as in the example below.

83) Muthuri ucio niaracitie.

That man has paid bride price.

Among the Agikuyu husbands pay bride price to the parents of his wife but it can only be a male that shares human being, adult and male features with the prototype.

The noun *muthuri* 'man' can further be extended to mean a church elder as in the sentence below as a church elder in the old days could only be a male.

84) Uyu ni muthuri wa kanitha.

This is a church elder.

The different meanings of *muthuri* ‘man’ can be schematized in the following diagram that caters for the central meaning and the radial meaning changes:

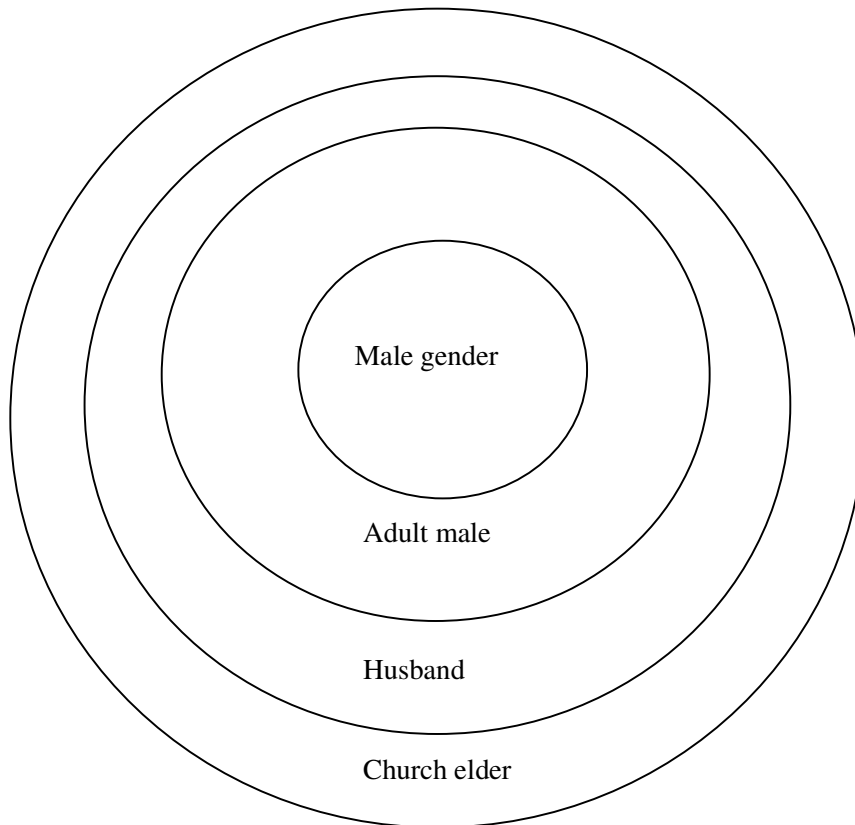


Diagram 23 Radial categories of *muthuri* ‘man’

In the above illustration the male gender usage is selected as the prototype because all the other readings emanate from it. An adult man is closer to the prototype as they share almost all the features with the prototype and gender is classified as either male or female. The features that the adult man shares with the prototype are that they are both human beings and belong to the male gender. For one to be a husband one must have reached a certain age and among the Agikuyu you must be a male and a human being for you to be called a husband. The sense of a husband is related to the prototype in that it shares these features with the prototype. The reading of the church elder is found on the periphery. This is because it shares the human being aspect and both genders are included and the female gender was not included in the prototype. Among the Agikuyu the church elders used to be men in the past and hence the noun *muthuri* ‘man’.

Nowadays a church elder whether men or women are still referred to as *muthuri* 'man'. The term has been extended to refer to both genders.

4.2.1 Boundary effects

Cruse & Croft (2004):112) state that the sense boundary sets the limit of an autonomous unit of sense. Autonomy in this sense is the ability of a word to behave independently of other units that might be construed in the same context.

The above readings of *muthuri* 'man' in the absence of context are in antagonism with one another and they compete for attention. This autonomy is referred to as **antagonism: attentional autonomy**. The context under which the word has been used helps in assigning the right meaning to the word with some additional contextual knowledge.

Consider example (83) as repeated below.

85) *Muthuri ucio niaracitie.*

That man has paid dowry.

In the above sentence the word *muthuri* will only select the sense of a husband. Among the culture of the Agikuyu a husband takes *ruracio* (dowry) to the parents of his wife. In this sentence the meaning of husband is given attention because of the clue 'bride price' and all the other potential meanings of the word are treated as though they don't exist and the 'husband' is selected with the help of context as only husbands pay dowry among the Agikuyu.

The other autonomy is the **compositional autonomy** which too helps in the creation of sense boundaries. The example below illustrates this autonomy.

86) *Uyu ni muthuri.*

This is a man.

The above sentence is ambiguous. In the absence of context the word man has the following readings: a male human being, an adult male human being, a husband, and a church elder. Frame

semantics help in dealing with the above kind of scenarios. When does man cease to be a husband and gets interpreted as the other sense?

Consider example (84) as repeated below to help in solving the above example:

87) Uyu ni muthuri wa kanitha.

(*This is man of church.)

This is a church elder.

The noun church is used in this sentence as a modifier. It modifies the noun elder. In the protestant churches especially the Presbyterian Church, the church elders are referred to as *athuri* among the Agikuyu. In the above example the modifier will help in demarcating the sense of the word *muthuri* to mean ‘church elder’ and other senses of *muthuri* ‘man’ are not selected.

4.2.2 Different frames of the noun *muthuri*-man

As discussed in chapter three once a word attains autonomy it evokes a frame which help in the interpretation of the word. For instance when a hearer hears the noun *muthuri* –man different frames are opened with their frame components or frame elements. From the above illustrations the following frames will be opened. The noun *muthuri* ‘man’ belongs to the general HUMAN FRAME with its frame components as illustrated below:

i) Human frame

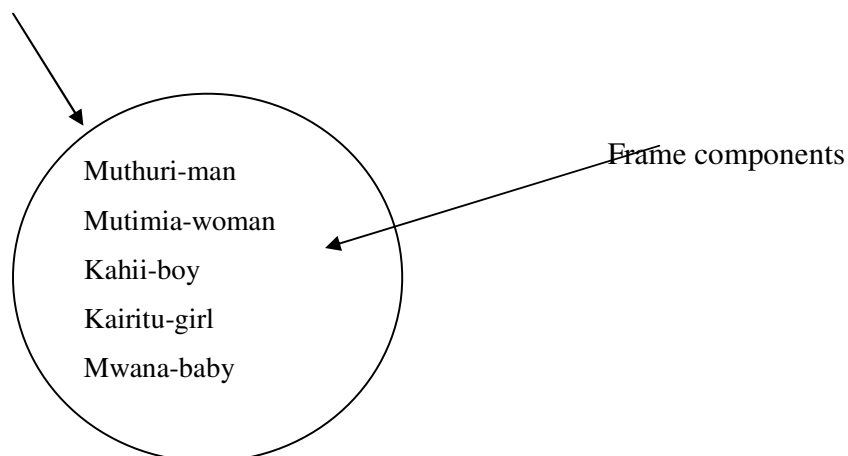


Diagram 24 Human frame

The word *muthuri* ‘man’ in sentence (81) opens the GENDER FRAME in a different context as repeated here below.

88) Uyu ni muthuri ti mutimia.

This is a man not a woman.

The gender frame would look as follows:

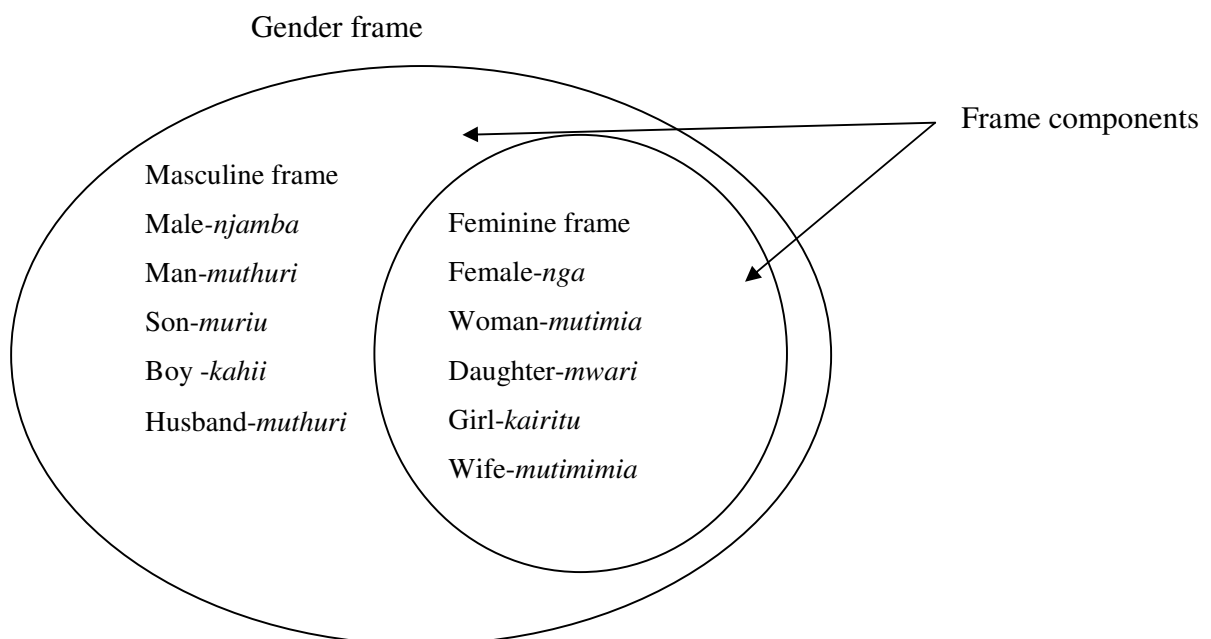


Diagram 25 Gender frame

The nouns *mutimia* ‘woman’ and *muthuri* ‘man’ evoke the GENDER FRAME. This frame is a frame that has two embedded frames because gender can be classified into two main groups: male and female. One cannot understand the frame components of THE MASCULINE FRAME without understanding the components in the FEMININE FRAME.

The other frame that *muthuri* ‘man’ will open is the ADULT FRAME. This frame is evoked in the context of example (82) as repeated below.

89) Uyu ni muthuri ti mwana.

This is a man not a child.

The words 'not a child' help in evoking the ADULT FRAME which has its own frame elements as illustrated here below:

Adult frame

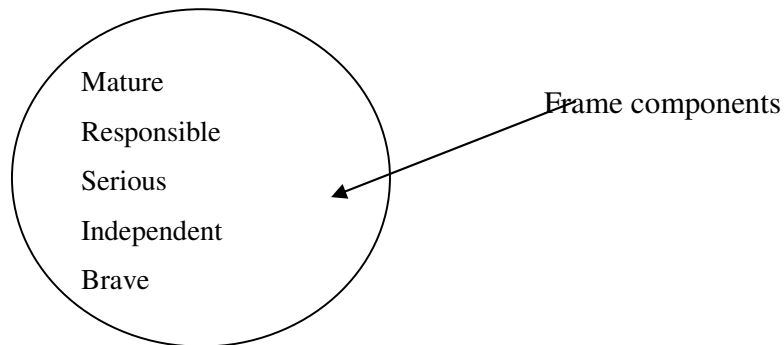


Diagram 26 Adult frame

The sentence in (83) as repeated below opens the marriage frame.

90) Muthuri ucio niaracitie.

That man has paid bride price.

The word *ruracio* 'dowry' evokes the MARRIAGE FRAME. Among the Agikuyu the *muthuri* 'husband' pays bride price to the parents of the woman he plans to marry, see below what the marriage frame entails:

Marriage frame

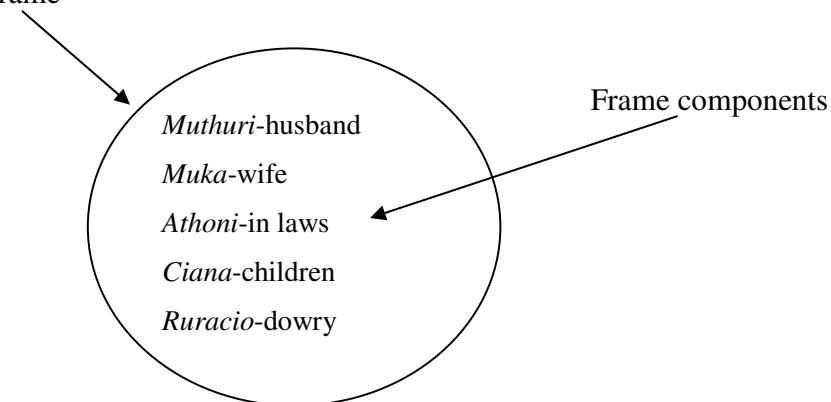


Diagram 27 Marriage frame

Sentence (84) as repeated below opens the church frame.

91) Uyu ni muthuri wa kanitha.

This is a church elder.

The noun church which has been used as modifier in the above sentence evokes the CHURCH FRAME.

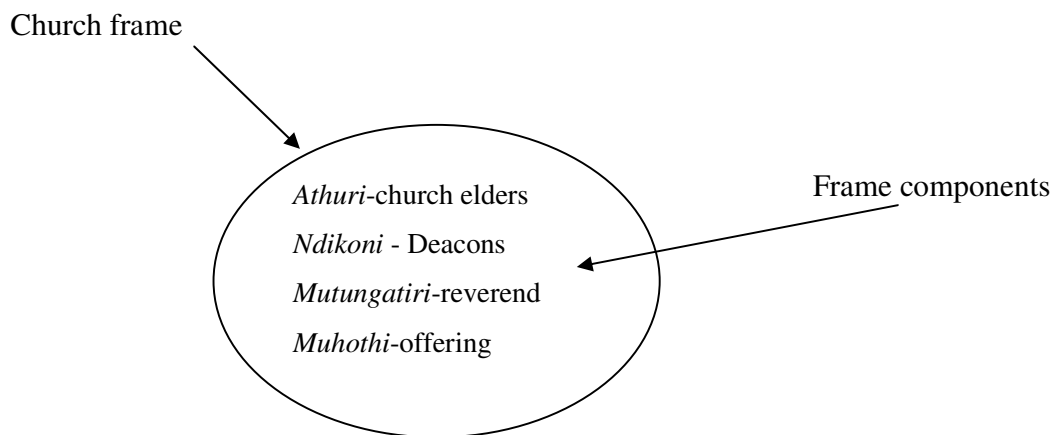


Diagram 28 Church frame

4.3 Mbegu-seed

The prototypical sense of the word is a small hard kernel produced by a plant that can grow into a plant of the same type as in the sentence below.

92) Handa mbegu icio cia mbembe.

Plant those maize seeds.

The other senses are extensions from the prototype. There is an extension in meaning in the next example as shown by the below sentence:

93) Ruciaro ruru ni mbegu ya Kamau.

This generation is Kamau's seed.

This means all the children and grandchildren of a particular man Kamau. The extension here develops as a result of the function of the prototypical sense of the word which is to bring forth life. This function is extended from the plant to the human race, so that the children and the grandchildren are seen as seeds. The extended meaning in the example below means ‘semen’. This is an extension too of an old word from the bible.

94) Ng’ombe yakwa ni iraheirwo mbegu.

(* cow mine given seed.)

My cow was given semen.

Recently there has been an extension of the word *mbegu* ‘seed’ by some notorious pastors who are asking their followers to plant seeds so as to experience miracles. The seed in this sense is extended to mean offering as in example below.

95) Mutungatiri muhenania eraga arumiriri ake mahande mbegu.

The lying pastor tells his followers to plant seeds.

Consider the radial categories of *mbegu* ‘seed’ as illustrated below.

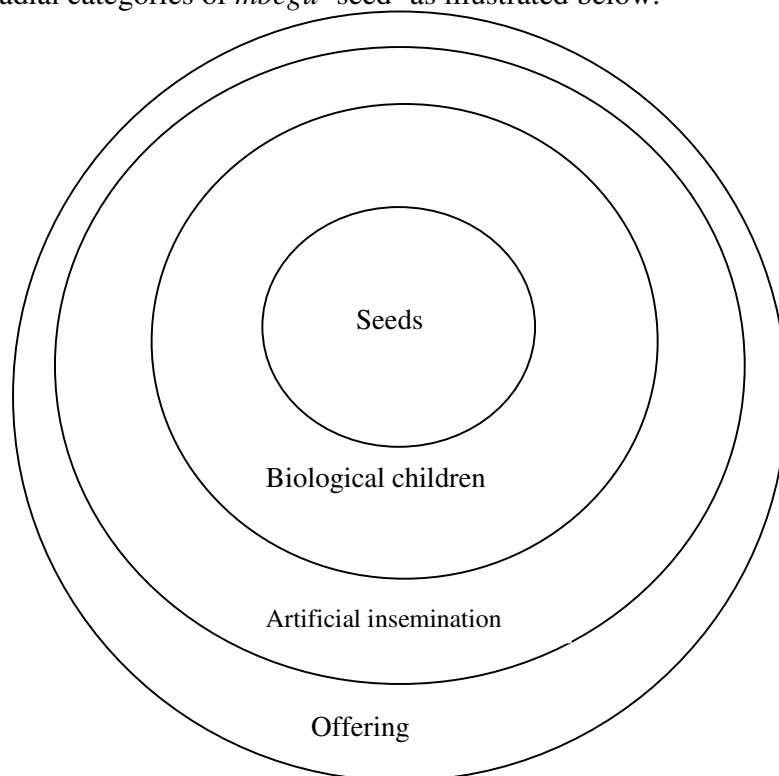


Diagram 29 Radial categories of *mbegu* ‘seed’

In the above illustration the prototype is seed i.e. small kernel produced by a plant that can grow into a new plant of the same type. Closest to the prototype is the meaning of the biological children. The children come about as a result of the fusion of the male and the female seeds. During insemination cows are said to be given seeds and a period of time give birth to a young calf. This is an extension from the prototype as just like seeds produce after they are planted the cow gives birth to a young one after insemination. Offering is found in the periphery as it is used metaphorically.

4.3.1 Boundary effects

Consider the sentence (93) as repeated below.

96) Ruciaro ruru ni mbegu ya Kamau.

This generation is Kamau's seed.

This refers to a man's child or a grandchild. Even though all the other senses of *mbegu* 'seeds' are in competition for selection, only this sense is selected. All the possible senses are said to be in competition. Depending on the context in which the word *mbegu* 'seed' is used in the above sentences one of the senses is singled out against all the other senses and it produces attentional autonomy evoked by the word generation.

Compositional autonomy is also found in the sentence below. Consider sentence (95) as repeated below.

97) Mutungatiri muhenania arerire arumiriri ake mahande mbegu.

The lying pastor told his followers to plant seeds.

The word *muhenania* 'lying' in the sentence has been used as a modifier to describe the noun pastor. Other words in the sentence like pastor will help in creating a sense boundary. This will screen out all the other readings of *mbegu* and select the metaphorical extension of offering.

4.3.2 Different frames of the noun *mbegu*-seed

On hearing the word *mbegu* ‘seed’ different frames will be evoked with the background frame being a small hard part produced by a plant that can grow into a new plant of the same type. All the other readings are found in the radial distance with the underlying and the metaphorical is found in the periphery. The frames which are capable of being opened in the mind of a hearer include: SEED FRAME, GENEALOGY FRAME, VETERINARY FRAME, and THE OFFERING FRAME.

The below SEED FRAME will be evoked by sentence (92) as repeated below.

98) *Handa mbegu icio cia mbembe.*

Plant those maize seeds.

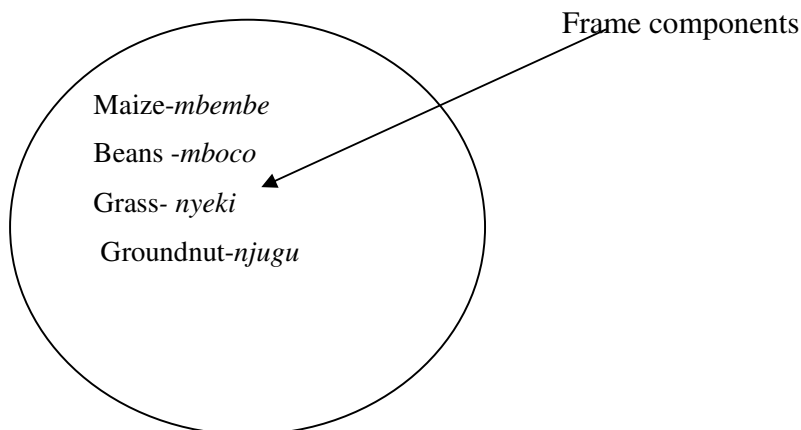


Diagram 30 Seed frame

The above SEED FRAME comes to attention with the following verbs as frame components : *handa* ‘plant’, *mera* ‘germinate’, *munya* ‘uproot’, *rimira* ‘weed’, *getha* ‘harvest’ among many others. Once one of the verbs related to the SEED FRAME is mentioned all the other are made available. The verb *handa* ‘plant’ in the above sentence evokes the SEED FRAME.

The GENEALOGY FRAME below will be evoked by sentence (93) as repeated below.

99) *Ruciaro ruru ni mbegu ya Kamau.*

This generation is Kamau’s seed.

The word *generation* ‘ruciaro’ will evoke this frame. See the components of the GENEALOGY FRAME:

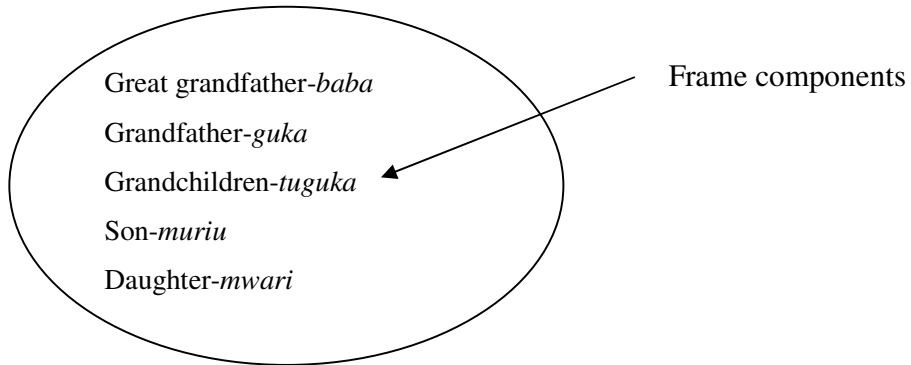


Diagram 31 Genealogy frame

The below VETERINARY FRAME will be evoked by sentence (94) as repeated below.

- 100) Ng’ombe yakwa ni iraherwo mbegu.
 (* cow mine given seed)
My cow was given semen.

The words *kuheo mbegu* ‘given seed’ evoke the VETERINARY FRAME and in particular the word cow evokes it.

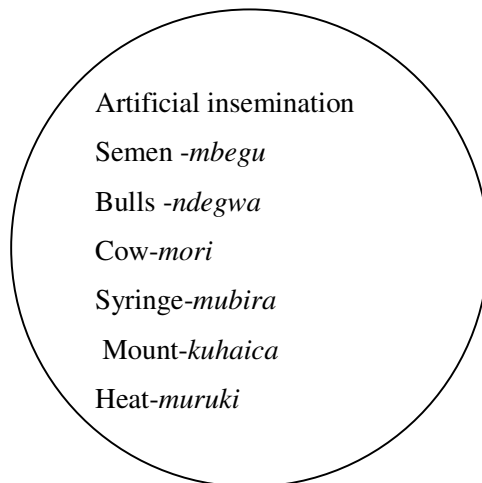


Diagram 32 Veterinary frame

The CHURCH FRAME below will be opened by sentence (95) as repeated below.

101) Mutungatiri muhenania arerire arumiriri ake mahande mbegu.

The lying pastor told his followers to plant seeds.

The nouns *mutungatiri* ‘pastor’ and *arumiriri* ‘followers’ will help in evoking the CHURCH FRAME.

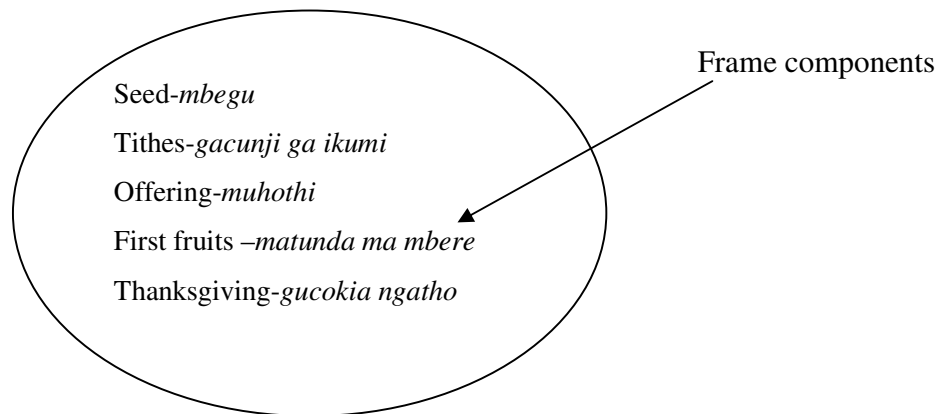


Diagram 33 Church frame

4.3.3 Polysemy and metonymy in *mbegu*-seed

Consider sentence (93) as repeated below.

102) Ruciaro ruru ni *mbegu* ya Kamau.

This generation is Kamau's seed.

The expression *mbegu ya Kamau* ‘Kamau’s seed’ is used metonymically where *mbegu* ‘seed’ stands for kamau’s biological children. It is a part –whole relationship that is described where the part Kamau’s seeds represent the whole group of Kamau’s children and grandchildren. The child and the seed (semen) are in the same GENERATION FRAME. This involves mapping in the same domain where the seeds of a plant are being mapped onto the semen of a man which gives rise to children.

4.3.4 Polysemy and metaphorical extension of mbegu-seed

Consider sentence (95) as repeated below.

103) Mutungatiri muhenania arerire arumiriri ake mahande mbegu.

The lying pastor told his followers to plant seeds.

In the above sentence the source domain is the seed and the target is the congregation that is being told to plant the seeds. When seeds are planted one expects to harvest. In the same way when one makes an offering one is expected to harvest in terms of blessings. The planting is concrete and the abstract is the blessings one gets after making the offering.

4.4 *Mai*-water

The above name has a number of related senses. The prototypical sense is the clear liquid that falls as rain and is used for things such as drinking and washing. Consider the example below.

104) Ndi munyotu nindirenda mai.

I am thirsty I need some water.

The other senses are extensions from the prototype with the more abstract metaphorical extension lying towards the periphery. Those meanings that are in the periphery share very little features with the prototype.

In example (105) *mai* means a liquid that a baby lives in inside its mother's womb as illustrated by the example below.

105) Mutimia ucio muritu niatura mai.

(* The expectant woman has broken the water.)

The expectant woman has broken the amniotic fluid.

The amniotic fluid is related to the prototype in that just as water is life to all mankind the amniotic fluid sustains the life of the unborn child in the mother's womb and that it is also liquid in form.

Example (106) as illustrated below is an extended meaning that means beer among the Agikuyu today.

106) Hwai ni twaheo mai muno.

(Last night we were given a lot of water.)

Last night we drank a lot of beer.

The above sentence is an example of metonymic extension where beer gets to be referred to using the noun water. Both water and beer are in the same domain of liquids.

See below the radial categories of *mai* ‘water’

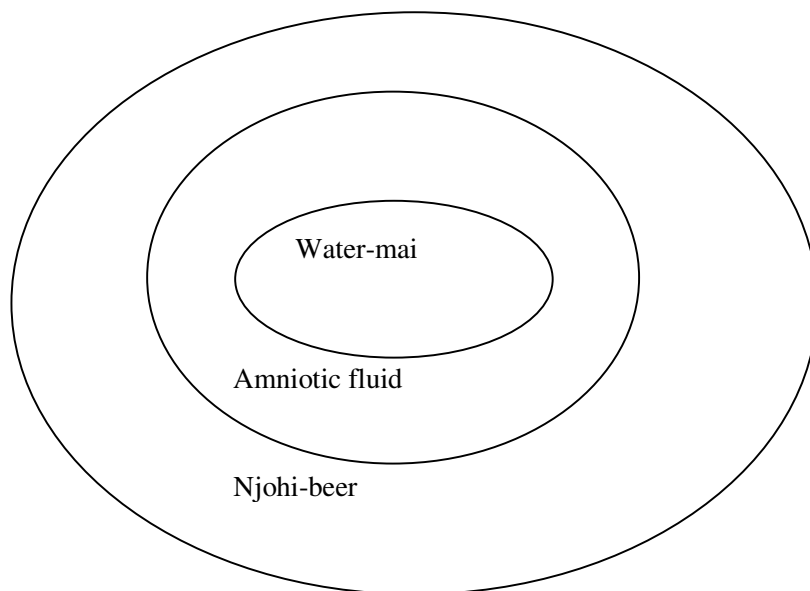


Diagram 34 Radial categories of mai ‘water’

In the above illustration the prototype *mai* ‘water’ is at the geometric center. Water sustains life and that is why the amniotic fluid is closest to the prototype as the amniotic fluid sustains the life of the unborn child in its mother’s womb. The extended sense of beer is found in the periphery.

4.4.1 Boundary effects

The context in which the word *mai* ‘water’ has been used helps in the creation of a sense boundary and to disambiguate the polysemous meanings of the word. This aids in the selection of one of the three senses depending on the context as the boundaries give a word autonomy .The

three senses of water are said to be in competition for selection and only one is selected creating a sense boundary of the attention autonomy.

See the sentence (104) as repeated below.

107) Ndi munyotu nindirenda mai.
I am thirsty I need some water.

In the above sentence the sense that will be given autonomy is the prototypical sense i.e. the clear liquid that falls as rain and is used for things such as drinking and washing. All the other senses are screened out and the word munyotu 'thirsty' evokes the prototype sense.

Consider sentence (105) repeated below.

108) Mutimia ucio muritu ni atura mai.
The expectant woman has broken her water.

In the above sentence the adjective expectant helps in selecting the sense of the amniotic fluid. This use of the adjective to help in assigning sense to a word is referred to as **compositional autonomy**.

4.4.2 Frames and frame components of *mai*-water

The water frame below will be evoked by sentence (104) as repeated below.

109) Ndi munyotu nindirenda mai.
I am thirsty I need some water.

The word thirsty will evoke the WATER FRAME as when one is thirsty, one drinks water.

Water frame

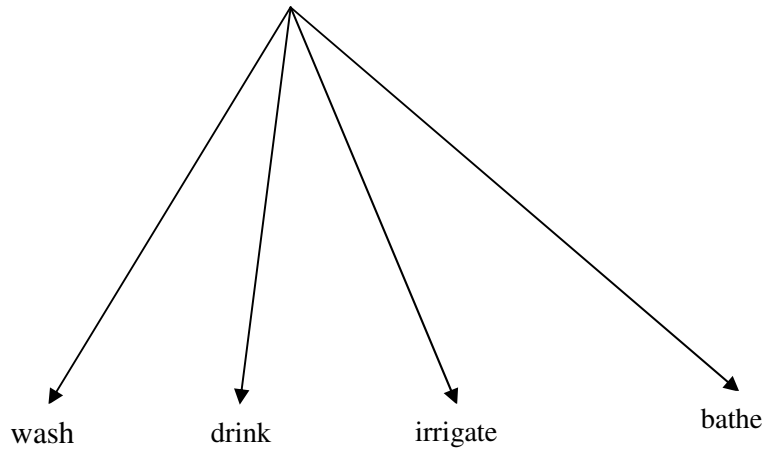


Diagram 35 Water frame

THE BIRTH FRAME below is evoked by sentence (105). Consider the example repeated below.

110) Mutimia ucio muritu niatura mai.

(* The expectant woman has broken the water.)

The expectant woman has broken the amniotic fluid.

The adjective *muritu* 'expectant' evokes the BIRTH FRAME.

See the BIRTH FRAME below.

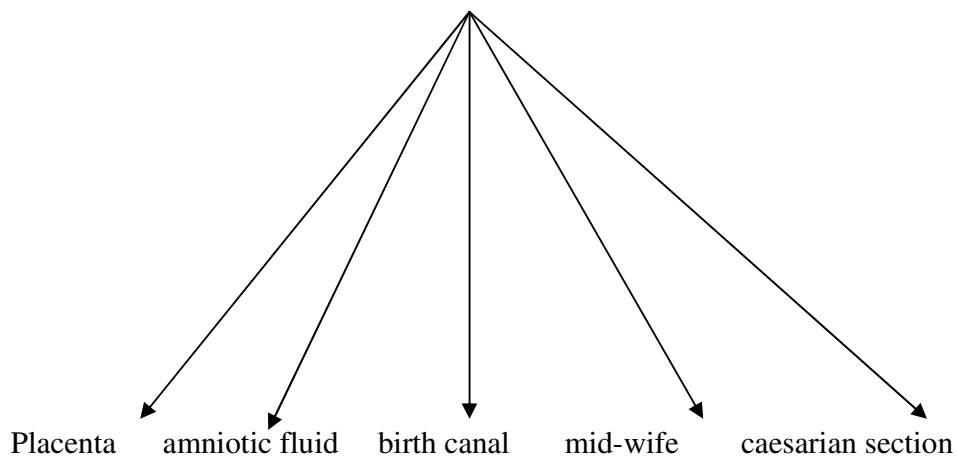


Diagram 36 Birth frame

The BEER FRAME below will be opened by sentence (106) as repeated below.

111) Hwai ni twaheo mai muno.

(Last night we were given a lot of water.)

Last night we drank a lot of beer.

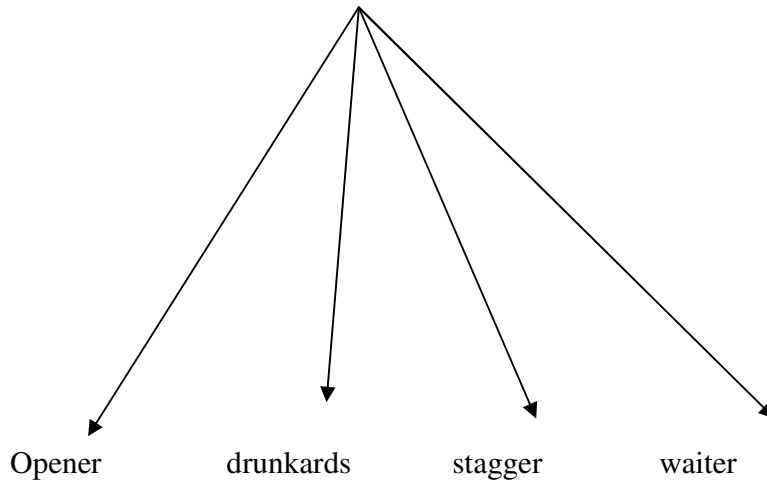


Diagram 37 Beer frame

This is mostly used in the context where drinking friends are discussing a previous drinking spree. Water is taken to stand for beer.

4.4.3 Polysemy and metonymy of the noun mai-water

Consider sentence (105) and (106) as repeated below.

112) Mutimia ucio muritu niatura mai.

(* The expectant woman has broken the water.)

The expectant woman has broken the amniotic fluid.

113) Hwai ni twaheo mai muno.

(Last night we were given a lot of water.)

Last night we drank a lot of beer.

In the above two sentences the word *mai* is used metonymically. In sentence (112) it is used to represent the amniotic fluid and in sentence (113) it represents beer. *Mai* ‘water’, amniotic fluid and the beer are all in the same domain which is the liquid domain.

4.5 Matunda-fruit

Some Gikuyu common nouns are hyponymous and polysemous. Some hypernyms, which are the super ordinates of some hyponyms, are polysemous too just like *matunda* ‘fruit’. As discussed in chapter two hyponymy is the inclusion of one class in another (Cruse, 1997:88). It is a sense relation in semantics that serves to relate words and concepts in a hierarchical way. It is the relationship between two words in which the meanings of the words include the meaning of the other. The upper term in this sense relation, i.e. the class name, is called the hypernym or the super ordinate, and the lower terms, the members, hyponyms. A super ordinate usually has several hyponyms; the members of the same class are co-hyponyms. This can be explained clearly by the illustration below:

Matunda (fruits) is a hypernym in which the meaning of the words includes the meaning of others the (hyponyms):

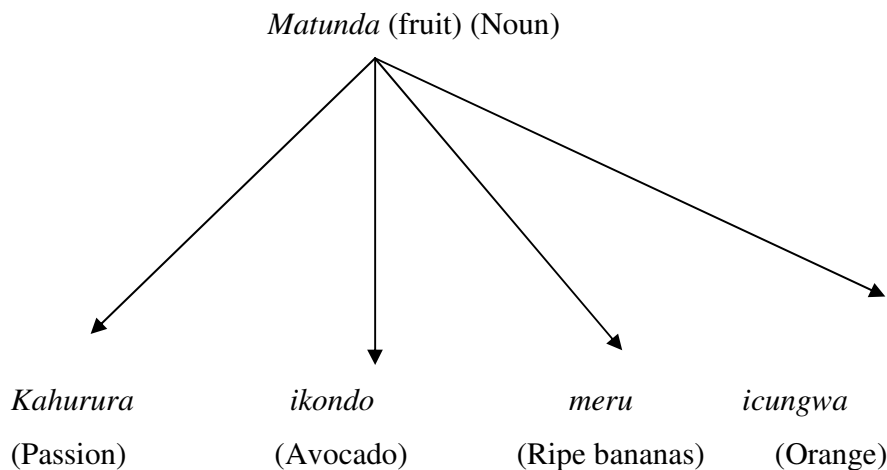


Diagram 38 hyponyms

In the above diagram, *matunda* is the hypernym or the superordinate. The passion is a hyponym of *matunda* ‘fruit’. All the above fruits are co-hyponyms and they entail the meaning that they are fruits. The meaning of the different hyponyms is included in the meaning of the hypernym.

In Gikuyu the noun *matunda* is polysemous. It has several distinct yet related senses. One of its underlying senses is the basic (prototypical) one which refers to ‘a type of food that grows on trees or plants that contains seeds’. See the example below.

114) *Nduira itunda riu ndie.*

Pick that fruit for me I eat it.

All the other senses are extended from the prototypical sense. The other related sense is good results after hard work as in sentence (115) below. The good returns one gets after exerting his effort in a certain venture and using his resources is likened to a fruit. Fruits are believed to be good for a person’s health so even the fruits of one labour bring change to a person’s life.

115) *Wira wake ni uraciarire matunda.*

His work bore fruits.

The other peripheral meaning is ‘biological children’. Just as a fruit has seeds the biological children of a person are referred to as his fruits with the wife. This is a metonymical extension where biological children are referred to as fruits. This is seen in sentence (116).

116) *Maya ni matunda ma wendo witu.*

These are the fruits of our love.

4.5.1 Boundary effects

As discussed in the earlier section **4.4.1** above all the polysemous senses of the word *matunda* (fruit) are in an antagonistic relationship. This means that they are all competing for attention and it is only one that will be selected depending on the context it has been used in. As explained in earlier sections the above boundary effect is referred to as **antagonistic: attentional autonomy**.

Consider the sentence (114) as repeated here below:

117) Nduira itunda riu ndie.

Pick that fruit for me I eat it.

The sense of *matunda* that will be selected in this sense is the type of food that grows on trees or plants that contains seeds' all the other senses that it is in antagonism with are ignored. This choice of the prototype sense will be made after the word *matunda* attains autonomy. After a word attains autonomy it opens appropriate frames which will help in assigning meaning as will be seen in the section **4.5.2** below.

Consider example (116) as repeated below.

118) Maya ni matunda ma wendo witu.

These are the fruits of our love.

In the above sentence the issue is what sense is selected by the construction a word is in. The choice of the word love in the above sentence evokes the sense of the biological children. This is because children are believed to be fruits of love though not always. As explained in earlier sections, this is referred to as **compositional autonomy**.

4.5.2 Different frames of the noun matunda

When a hearer hears the noun '*matunda* 'fruit'', different frames will be opened and it is only the context with the help of the sense boundaries which will help in choosing and assigning the correct sense of the word as intended by the speaker. As discussed earlier once a word attains autonomy it triggers frames. These frames come with the encyclopedic entries which help in the assignment of meaning. The following are the possible frames triggered by the noun *matunda*:

The TREE FRAME will be evoked by sentence (114) repeated below.

119) Nduira itunda riu ndie.

Pick that fruit for me I eat it.

This frame will be evoked by the verb *nduira* 'pick'.

Tree frame

See the TREE FRAME below

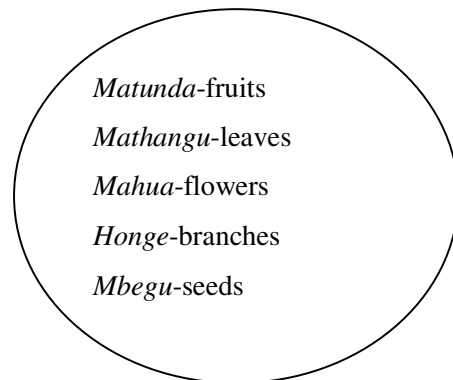


Diagram 39 Tree frame

The other frame that *matunda* ‘fruit’ will open is FAMILY FRAME. This frame will be evoked by sentence (116) as repeated below.

120) *Maya ni matunda ma wendo witu.*

These are the fruits of our love.

The expression *matunda ma wendo* ‘fruits of love’ evoke the frame. See the FAMILY FRAME below.

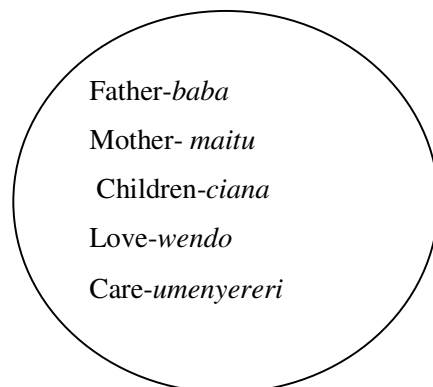


Diagram 40 Family frame

4.5.3 Polysemy and metonymy of matunda ‘fruit’

In the sentence (116) as repeated here below illustrates a metonymic extension.

(121) *Maya ni matunda ma wendo witu.*

These are the fruits of our love.

The prototype of the word fruit is a type of food that grows on trees and contains seeds. In the above sentence children are considered to be the fruits of a man and a woman. The seeds of a fruit grow to become a new plant. The children are metonymically considered as fruits. The fruits and the children are in the same domain of reproduction.

4.5.4 Polysemy and metaphorical extension of matunda-fruit

Consider sentence (116) as repeated below.

(122) *Maya ni matunda ma wendo witu.*

These are the fruits of our love.

In the above sentence the word *matunda ma wendo* ‘fruits of love’ is used both metaphorically and metonymically as discussed in the above section. Metaphorically, the fruits are the source domain which is being mapped onto the children who are the target domain. The fruits are concrete while the children who are thought to be fruits of love are abstract.

4.6 Conclusion

This chapter has looked at different ways of analyzing Gikuyu polysemous common nouns not related to body term parts. As it has been explained in the first chapter, a word is regarded as polysemous if it has several distinct but related senses. This chapter has analyzed Gikuyu polysemous common nouns not related to body parts looking at the underlying meaning first and then those meanings that are in radial relationship with the prototype and in the more abstract metaphorical senses lying towards the periphery, use of sense boundaries to give autonomy to a word, frames that are triggered after a word attains autonomy so as to assign meaning to it and the relationship between polysemy and metaphors and polysemy and metonymy. The boundary effects that have been used in the analysis of the nouns *muthuri* ‘man’, *mbegu* ‘seed’ *mai* ‘water’ and *matunda* ‘fruit’ are the antagonism: attentional autonomy and the compositional autonomy. The theory used is the Fillmore’s frame theory.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

This study was a cognitive approach to Gikuyu polysemous nouns. The study aimed at investigating how context knowledge provided through lexical frames can explain the polysemy of nouns. The study was also geared towards establishing how a word acquires special meaning depending on the context provided by the frame. The study was guided by the following objectives: To identify Gikuyu polysemous common nouns as used in the novel *Caitaani Mutharaba-ini*, to establish the demarcation in Gikuyu polysemous common nouns as used in *Caitaani mutharaba-ini* through boundary effects and lastly to identify the various frame constituents of particular frames which are necessary in understanding Gikuyu polysemous common nouns. The Fillmore's frame theory was used to analyze Gikuyu polysemous nouns.

5.2 Findings

One of the outstanding conclusions of the present study on the polysemous Gikuyu nouns is that some senses of a word are related to one another more or less closely by various means. One of the senses is prototypical and the other senses are extensions of the prototype.

The relatedness in meaning of Gikuyu polysemous nouns can be divided into prototypical sense, radial sense and the peripheral sense. Besides the radial senses which are more concrete, physical and lying towards the prototype (centre of the category) the more abstract metaphorical senses lie towards the periphery. Radial categories share more features with the prototype than the peripheral categories.

Prototype is very important in understanding the nature of human categorization. The more one moves away from the prototype to the periphery, the more features of the prototype are lost.

Although not always polysemy can be developed through metaphor and metonymy which are the two basic cognitive strategies for sense extension and forming polysemous words. The extended sense is in the metaphorical relation with its source across the domains i.e. source domain to target domain and within the same domain, the extended sense is in the metonymical relation with its source sense. Other sources of polysemy include hyponymy and meronymy which are sense relations.

Nouns are mainly metonymically motivated especially the body part nouns which are highly polysemous. In body part nouns, the prototypical sense is easily distinguished from the peripheral senses. Nouns form polysemy systematically.

Sense demarcation is a useful tool for providing autonomy to a sense. Once a word attains autonomy it triggers frames which come with the encyclopedic entries (frame components) which help in the assignment of meaning.

Context in which the word has been used in plays a very important role in assigning autonomy to a word.

The first hypothesis of this chapter stated that the polysemous nature of nouns in the novel *Caitaani mutharaba-ini* arises as a result of context. This hypothesis has been found to be true. This study has concluded that without context no readings of a word are available in the mind of the hearer. Once the context has been made available, a word is assigned meaning. Therefore the context is very crucial in the assignment of meaning.

The second hypothesis stated that the boundary effects that indicate the demarcation in the construal of Gikuyu polysemous nouns give words autonomy. This was found to be true. With all the possible readings of a word the creation of sense boundary gives a word autonomy screening out all the other potential meanings of the word.

The third hypothesis stated that the knowledge of frame constituents is crucial in understanding Gikuyu polysemous nouns. This was also found to be true as once a word attains autonomy it

evokes an appropriate frame which comes with its frame components that help in the interpretation of polysemous words.

5.3 Recommendations

This thesis was restricted to a practical analysis of polysemous nouns, within cognitive framework in Gikuyu. It is necessary to carry out research on other parts of speech like verbs and adjectives and establish whether they exhibit polysemy like the nouns.

The demarcation effects used in the analysis of the gikuyu nouns were two namely antagonism: attentional autonomy and compositional autonomy. The relational autonomy was not dealt with due to time constraints. It is an area for further research to establish whether this autonomy gives senses autonomy just like the other two autonomies mentioned above.

This study can also be done in other languages to establish whether nouns in other languages behave in the same way as the Gikuyu nouns.

REFERENCES

- Aitchison, J. (2003). *Words in the Mind: An Introduction to the Mental Lexicon*. 3rd ed. Oxford: Blackwell Publishing Ltd.
- Arnoff, M. & Miller, J. (ed.2003). *The Handbook of Linguistics*. Oxford: Blackwell publishers.
- Cruse, A. & Croft, W. (2004). *Cognitive Linguistics*. Cambridge: Cambridge University Press.
- Cruse, D.A. (1997). *Lexical Semantics*. Cambridge: Cambridge University Press.
- Cuyckens, H. & Zawada, B. (2001). *Polysemy in Cognitive Linguistics*. Amsterdam / Philadelphia: John Benjamin Publishing Company.
- Evans, V. & Pourcel, S. (Ed.) (2009). *New Directions in Cognitive Linguistics*. Amsterdam: John Benjamin Publishing Company.
- Fillmore, C. (1982). Frame Semantics. In: Linguistics Society of Korea (Eds.) *Linguistics in the Morning Calm* (pp 111-137) Seoul: Hanshin.
- Fillmore, C. Atkins, B. (1992). Towards a frame based organization of the Lexicon: The semantics of Risk and its neighbours. In Lehrer, A. & Kittay, E. (Eds.) *Frames, Fields, And Contrasts. New Essays in Semantics and Lexical Organization*. (2009) (pp 75-102) New Jersey.
- Fillmore, J. & Baker, C. (2011). A Frames Approach to Semantics. Available at <https://framenet.icsi.berkeley.edu>author> pdf accessed on 2/2/2015.
- Gachomo, H.N. (2004). *Tense, Aspect, and Mood: Morphosyntactic Verb Inflection in Gikuyu*. U.o.N. Unpublished M.A Thesis.
- Gatende, A.W. (1991). *NP and WH movement in kikuyu*. U.o.N. Unpublished M.A Thesis.
- Gathogo, R. W. (2013). *Translation of Neologisms: A Case Study of Gikuyu Radio Broadcast*. U.o.N. Unpublished M.A. Thesis.
- Gatu, G. J. (2006). *He Gatu Nguhe Kanua*. Nairobi: East Africa Educational Publishers.

- Gitau, H.N. (2012). *A Semantic Analysis of Gikuyu Nouns Using the Semantic Field Theory*. U.o.N. Unpublished M.A Thesis.
- Guthrie, M. (1967). *Comparative Bantu*. Farnborough: Gregg International Publishers.
- Karega, M. (1977). *Sound change and The Classification of the Dialect of Southern Mt. Kenya*. U.o.N. Unpublished M.A Thesis.
- Kawira, J. F. (2014). *A Semantic Analysis of Kimeru Kinship Terms*. U.o.N. Unpublished Thesis.
- Khalid, A. A. (2014). *A Cognitive Semantic Analysis of English Words*. University of Sulaimani-Sulaimani . Unpublished M.A Thesis.
- Kihara, P.C. (2010). *Role and Reference Grammar Analysis of the Morphosyntax of the Gikuyu Simple Sentence*. U.o.N Unpublished Thesis.
- Kovacs, E. (2011). Polysemy in traditional vs.cognitive linguistics in Eger journal of English studies xi (2011) 3-19 available at www.anglisztika.ektf.hu/...kovacs-2011pdf. Accessed on 8/3/2015.
- Lakoff, G. Johnson, M. (2003). *Metaphors We Live By*. Chicago: The University Of Chicago Press.
- Munga, C.M. (2009). *Sense Relations in Gikuyu: A Lexical Pragmatic Approach*. U.o.N. Unpublished M.A Thesis.
- Murcia , M. Freeman, D.(1999).*The Grammar Book*. New York: Heinle & Heinle Publishers.
- Muthui, J.W. (2001). *A Phonological Study of Derived Words in Gikuyu With Reference to Nouns and Adjectives*. U.o.N Unpublished M.A Thesis.
- Nerlic , B. Todd, Z. Herman ,V. Clark, D. (2003). *Polysemy: Flexible patterns of meaning in mind and language*. Berlin: Mouton de Gruyter.

- Ngamau, A.W. (2004). *Morpho-syntactic Analysis of Agreement in Gikuyu in the Minimalist Programme*. U.o.N Unpublished Thesis.
- Ngugi, T. (1980). *Caitani Mutharaba-ini*. Nairobi: Heinmann Educational Books Ltd.
- Ngugi, T. (2004). *Murogi wa Kagogo*. Nairobi: EAEP.
- Ngure, K. K. (2005). *The loss of Prenasalization in the Northern and Southern Varieties of Gikuyu*. U.o.N. Unpublished M.A Thesis.
- Njagi, J.W. (1997). *The Gikuyu Determiner Phrase within the Principles and Parameters Theory*. U.o.N. Unpublished M.A Thesis.
- Njogu, N. (1978). *The Kikuyu Diverbatives*. U.o.N. Unpublished M.A. Thesis.
- Petrucci, M. (1996). *Frame Semantics*. Berkley: Routledge.
- Saaed, J. (2003). *Semantics*. Oxford: Blackwell Publishing.
- Schalley, A. (2004). *Trends in Linguistics: Cognitive Modeling and Verbal Semantics*. Berlin: Mouton de Gruyter.
- Schmid, H. (Ed.) (2012). *Cognitive Pragmatics*. Berlin: De Gruyter Mouton
- Shed, S. (2011). *Radical Frame Semantics and Biblical Hebrew: Exploring Lexical Semantics*, The Netherlands: Brill .
- Ugas, A. (2014). *Filmore's Frame Theory*. U.o.N. Unpublished Term Paper.
- Wanjiku, J. M. (1992). *A Typology of Empty Categories in Gikuyu*. U.o.N. Unpublished M.A. Thesis.