

Evidence of Cognitive Grammar Theory in Kisukuma: A Morphosemantics Analysis

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ABSTRACT

*Lexemes in linguistics are not restricted in their semantic scopes and interpretation. This article focuses on the evidence of Cognitive Grammatical Theory in Kisukuma lexical and verb allomorphs. The theory's major aim is to handle multiple semantic scopes of a derived lexeme following the way native speakers use language in their natural settings. Two reasons motivated the current paper (1) No Kisukuma literature has been written on morphosemantics despite the existence of a plethora of literature (2) failure of many morphological elegances in handling multiple semantic exponents of both lexical and the derived verbs senses in Kisukuma, this is what motivated an investigation on accountability of Cognitive Grammar Theory in Kisukuma derivative morphs. The study was a case study design whose aim was to explore descriptions of words from a natural setting, thus two informants were sampled purposively as they were pure Sukuma natives. Three instruments of data collection were employed namely unstructured interview, Native intuition and documentary review. The findings show that cognitive grammar theory is evident in Kisukuma lexemes such as *lisha*, which means cause to feed or feed a person poison/some food containing poison. Therefore, semantically, such multiple interpretations are well configured in the Cognitive Grammar as meaning is analysed in both configurations of the domain from the mental entity of its units. Thus, the theory encodes that the meaning of complex words needs both linguistics and pragmatic embodiment to capture human experience in general*

Keywords: *Kisukuma, verbal morphs, cognitive grammar and meaning.*

1. INTRODUCTION

Kisukuma is a Bantu language which is spoken in the western part of the United Republic of Tanzania. According to Guthrie's (1971) classification, Kisukuma is classified as (F21) which belongs to group 20 of zone F. A group also includes Kinyamwezi (F22), Kisumbwa (F23). According to Batibo (1985) Kisukuma has 84 per cent lexical similarity with Kinyamwezi, 57 per cent with Kisumbwa and 57 per cent with Kinyaturu. Kisukuma has four (4) dialects namely: Gimunasukuma (Northern), Gimunagweli (western), Gimunakiiya (Eastern) and Gimunadakama (Southern) (Matondo, 2003). The current study investigates Gimunasukuma dialect of Kisukuma which is said to be a standard dialect of the language (Batibo, 1985).

This article has investigated the evidence of Cognitive Grammatical theory hence forth (CG) of Kisukuma morphosemantics. The aim is to see how CG theory handles

interpretations of the structure being formed by different lexemes in Kisukuma. The motivation behind this study is that no existing document on morphosemantics and that other morphological theory such as Lexical Mapping Theory, Generative grammar, Item-and-Arrangement Theory and the Mirror Principle seem unable to handle the semantics of derived lexemes by different allomorphs. The CG theory is the theory of grammar whose assumption is symbolic in the way that all linguistic expressions stand for conceptualizations (Taylor, 2002). That is to say, meaning is conceptual in its usage as the result of core and periphery sense. It is from this account that Kisukuma seems to have no direct conception between for example causative and applied allomorphs of the verbs.

It is incorrect to claim that the Kisukuma language is less documented. Many scholars have written on Kisukuma in different phenomena as in the bible, songs, metaphors, phonology and morphology as follows: Batibo (1976, 1985) researched on Phonology and Morphology of Kisukuma, along with other things; he presented thirteen extended verb allomorphs in Kemunasukuma, a dialect of Kisukuma. Batibo (Ibid) study did not do away with words having more than one sense or meaning of the derived lexemes even though he identified 13 extended allomorphs and their combination (Batibo, 1985).

Maganga and Schadeberg (1992) investigated the Grammar of Kinyamwezi for nine months from September 1986 to June 1987. In their document, they presented a bare outline of Kinyamwezi grammar and lexicon. Along with other topics they presented verb extension and expansion (related to the current work). Their observation did not deal with morphosemantics of lexemes particularly lexemes with multiple senses. From this base, the current paper seeks to fulfil this gap of morphosemantics analysis via cognitive grammar theory.

Muhdhar (2002) investigated Kisukuma verb morphology he particularly described five verb extended allomorphs in Kemunakiya, another dialect of Kisukuma. The extended allomorphs he investigated include Applicative morph, Causative morph, Reciprocal morph, Passive morph and Reduplicative which were derived from 47 wordlists from Masele (2001:560-600) to his informants. The author provided us with a good source of knowledge on the dialect of Kisukuma pertinent to verb morphology, though did not deal with the semantics of these allomorphs which is the objective of the current study.

Matondo (2003) investigated Tonal Transfer in the Kisukuma language under the framework of Optimality Theory. His study demonstrated phonological factors that determine the size of reduplicants. Matondo touched on many topics as verb morphology of six extended verbs such as passive, causative, applicative, inersive, reciprocal and stative. But it must be noted that all these were associated with tone and the way it changes position after the derivation of the extended verb. His discussion did not include issues concerning the lexicon.

Goldsmith (1985) whose investigation was on tone in Kisukuma language provided diachronic explanations for the current mobile H tone domain. He added that diachronically, there was a lexicalized process of H tone displacement by one bearing unit and this process was presented as a LH melody. However, even after lexicalization, the tone displacement

remained in the language resulting in the synchronic situation as in double displacement, he calls this process replication or mitosis rule. However, therefore, Goldsmith gave us the morphology of words as in /gu-bhona-nij-a to see simultaneously but with tone concentration. See other scholars who investigated Kisukuma concerning the tone system (Richardson, (1971), Roberts, (1992), Batibo, (1991), Sietsema and (1989)). The current study investigates another angle of morphosemantics within the framework of Cognitive Grammar theory, thus contributing to the body of theoretical knowledge in Kisukuma and Bantu languages in general.

Lothi (2002) researched on Verb morphology of Nyamwezi and Kiswahili, specifically on eleven verb extensions namely, subtractive, static, contactive, conversive, causative, applicative, stative, passive, reciprocal, augmentative and inceptive extension in Kinyamwezi and Kiswahili. Despite that Lothi's (Ibid, 2002:19-20) work had some mistakes as he considered reduplication as part and parcel of verb extensions; this is not relevant to the current study, because our study is not on reduplication.

Sayi (2017) investigated Noun Morphology in the Kidakama dialect of Kisukuma with regard to numbers and prefixes as well as noun extensions. He did his study under the framework of the Mirror principle (Baker, 1985, 1988) and the Lexical morphology model (Katamba, 1993). Sayi's study did not investigate multiple senses derived by either noun prefix, noun suffix or noun extension other than writing monosemy senses. This motivated the current work under the semantics theory of cognitive grammar.

Despite many scholars investigations on Kisukuma as in Batibo (1976, 1985; Muhdhar, 2006; Matondo, 2003; Richardson, 1959, 1971; Richardson & Mann, 1966; Sayi, 2017; Lothi, 2002;

Goldsmith 1985, 1990; Maganga & Schadeberg 1992; Roberts, 1992; Batibo, 1991; Sietsema and 1989) to the best of my knowledge no any study has been undertaken to reveal morphosemantics of Kisukuma derived verb exponents and their multiple semantic scopes. This monograph reveals the phenomenon of morphosemantics of both lexical and derived verbs and how Cognitive Grammar Theory (Langacker 1982, 1987, 1990) accounts for them.

1.1 Cognitive Grammar Theory

The theory of CG was developed in the mid-1970s. When it was conceived, it was originally presented as Space Grammar (see, Langacker, 1982) before it became known by its current name (Chabata, 2007, p.182). The theory was pioneered by Ronald Langacker, 1982, 1987, 1990, 1991, 2008) and others like (Taylor 2002, Rosch, 1978, Fillmore, 1982, Goldberg, 1995, 2006) to mention just but a few.

However, CG aims at checking and re-checking alternative conceptual senses for capturing both target and non-target meaning. That is to say, CGs the assumption is that language is inherently symbolic through which all linguistic expressions stand for conceptualizations (Taylor, 2002). It is believed that language provides speakers with a set of resources for representing thought.

However, cognitive grammarians agree that meaning is analysed in both configuration of the context from the mental entity, base and domain (Taylor, 2002; Kövecses, 2002). CG requires the understanding of linguistic and pragmatic forms. Thus, language is

not a self-contained system of communication but, rather, requires reference to other faculties of human cognition and behavioural endeavour (Svorou, 1994). The theory has the following theoretical apparatus.

1.2 Metaphor and Metonymy conception

Metaphor is one of the central tenets of the cognitive grammatical approach to language (Chabata, 2007). On the other hand, it is argued that metaphor is not just a matter of speaking, but it is intrinsic to abstract thought (Taylor, 2003). It is also proposed that metaphor is a powerful tool for our conceptualization of abstract categories, that it plays an important role in our understanding of abstract concepts (Langacker, 2000). These studies have also indicated that metaphor is common in our everyday use of language and is, therefore, not restricted to literary language only. This means that the concept provided should not be conceptualized in one sense but situational or contextual sense should also be considered as an extra entity of its unit.

1.3 The Prototype Model

This is one of the arguments in favour of the theoretical Cognitive Grammar approach, which is pertinent to the meaning interpretation of a given natural language. The model was grounded a research by a cognitive psychologist (Rosch, 1978). She proceeded to argue in her research that membership of categories is in most cases a matter of degree.

Therefore, categories, in general, have central or best examples which she used to call prototypes and there is some gradience from the prototypes to the less central members of a category. Initially, the prototype model was developed as a counter to the classical or Aristotelian view of associating every category with a set of membership criteria, or defining attributes that are both necessary and sufficient (Cruse, 1990:383).

It has also been said that the prototype model is a principle whereby elements are assigned to a category not because they exemplify properties that are required of each one of its members, but because they exhibit to a greater or lesser extent certain types of similarity with a particular category member that has been naturally or culturally established as the best example (or prototype) of its kind (Tsohatzidis, 1990). Additionally, one of the important issue in the prototype tenet is that what is known as categories are conceptualized and sometimes understood as having a core and a periphery. In this case, the best example or the prototype becomes the core of a category and it is against it that other members of the category (peripheral members) can best be described or understood (Chabata, 2007).

1.4 Compositionality Principle

This is one of the features of the Cognitive theoretical approach whose major entity is that, the meaning of a complex expression results from the meanings of its constituent parts (Langacker, 1987). This means that each morph being extended from the base or verbal roots has its semantic scope with which the combination of more than one also leads to more than one meaning.

Within the same line of thinking, Taylor (2002) called this approach strict compositionality, in the sense that the meanings of complex expressions are fully determined by the

meanings of their parts in conjunction with how the parts are put together. However, as it is quoted in Chabata (2007) such an approach is based on the following assumptions: That every sub-component of a complex expression has a fixed and determinate meaning within the language system. This means no additional sense to such morph is being attached That how simpler units combine to form complex expressions also makes a fixed and determinate contribution to the meaning of a complex expression That the semantic properties of the parts of a complex expression are fully maintained in the complex expression being given out as in the surface structure.

That there is no surplus meaning accruing to a complex expression that is not attributable to its parts or the manner of their combination. However, the four features above can be tangible in some languages including English language but imperfectly tangible in other languages such as Kisukuma. This is following the fact that not all components of the lexeme reflect the sum of its meaning.

2. METHODOLOGY

The study used interpretivism and pragmatism paradigms of qualitative research that believe that reality comes from a natural situational setting. However, the data for this paper come from several sources, first, institution source or method and the authors intuition knowledge since he is a native speaker of the language under discussion.

These data were confirmed by Kisukuma native speakers were used and those which were rejected by the natives, were not considered during data analysis. Second, some data come from the unstructured interviews in which four (4) Sukuma native informants were selected for consultation using snowball sampling.

Thus, they were two female and male informants aged 45-70 years old. The selection of informants was triggered by the fact that they were native Kisukuma speakers, and they also speak the Kiswahili language, Thus the researcher prepared 100 wordlists from the corpus of Language of Tanzania (LOT) which were the bases for discussion, also few data come from Kisukuma literature (Cf, Godman, 1960; Batibo, 1985) especially the derived ones and their meaning. The author read these documents and identified the targeted lexemes for latter presentation and analysis, it must be noted that lexemes from these documents were confirmed by Sukuma natives having their multiple semantic scopes and those whose senses were confusing or had one meaning technically known as denotation meaning were not considered. Thus, the total sample size was 116 who made available data for analysis;

Data analysis involves breaking down data into smaller units to reveal their characteristic elements and structure as well as interpretation, understanding and explanation for getting new insights from data (Gray 2014). In this paper, the data were codified, arranged and classified depending on whether the meaning is conceptual or non-conceptual. This was followed by a certain theoretical apparatus explanation of a specific derivation. Note that the study was analysed qualitatively because of its typological phenomena under

investigation, thus only descriptions, interpretations and explanations of primary and secondary data of derived verbs were given through forms of words, phrases and sentences during data analysis and discussion.

3. RESULTS AND DISCUSSION

This section presents the data from the field, which are pertinent to account for Cognitive Grammar theory in the Kisukuma language of Tanzania. It is from this section that the paper presents the implication of three Cognitive Grammars theoretical apparatus and shows how they are able or unable to explain Kisukuma derivative verbs.

3.1 *Cognitive Grammar Theory in derivative morphs*

This was from the objective of the study which aimed to show how derivative morphs in Kisukuma are accounted for within the Cognitive Grammar theory. In other words, this subsection presents and discusses the insinuation evidence of Cognitive Grammar Theory in the Kisukuma language. Consider the discussion below:

3.1.1 *Basic word ¹derivation ²derivation Log-a Lo-j-a Lo-ge-j-a*

In 1(a), we observe that the verb *loga* means watch in Kisukuma, which is the basic meaning of the lexeme. This lexeme is derived or causativized by changing the velar consonant [g] to affricatives [j] as the result, the structure becomes *loja* with which it houses both the core meaning and the conceptual or peripheral sense. Thus, the alternative senses derived verb *loja* is either make to see or cause to watch.

The former shows that that is to say a person is looking at something as a matter of fact he probably does not see, hence another person helps him or her to see or in another context, a persons eyes do not see well, then another person comes and opens ones eyes to see. The same semantics is observed also in Goodman (1960) in which it is observed that Jesus made a person who was unable to able to see again.

The second sense is that a person makes another individual to suffer as the result of dying. Thus, *Loja* is sometimes used to refer to make to watch. The third sense is taste, this means that this takes place when a person is cooking some food tastes if and only if salt is enough for eating, in other words, a person can either taste wine or any kind of food.

The fourth form of meaning comes from the co-occurrences -ge- morph and -j- morph. morphologically, the former is an applicative allomorph and the latter is a causative allomorph. The sum of them does not house the meaning being constituted by the two morphs for example direct (of place direction) is the fourth alternative meaning of the derived word *logeja* in this language. A structure such as *Logeja uko direct* there is an example of *logeja* alternative semantic meaning.

However, the derived lexeme *loja* in Kisukuma is evident to have meanings which are conceptual or peripheral and that its entity does not only result from the action of watch. This is nothing but the situation of tasting food when somebody is cooking or preparing example tasting if salt is enough in the vegetable. Additionally, such derived sense is observed in Chipanda (2017) as in *Logeja* which means taste for/with.

The other corner *loja* implies making somebody to watch (or to watch for) a human being and the final meaning is that of indicating the direction of a place. Such experience is also emphasized by Taylor (2002) that such extra meaning is the domain through which human beings conceptualize semantic units. Kövecses (2002) also describes a conceptual domain as any coherent organization of experience. In other

words, the domain is all the other entities or phenomena that help us understand a particular concept and its use in a particular contingency. However, the homonyms of the derived word *koja* can be schematized below:



The four mentioned senses are a form of meaning extended from the verb *loga* to *loja* and *logeja* in the Kisukuma language. It must be noted that each sense is indicated by different colours, this implies that one sense does not relate with another sense in their semantics scope. This is also emphasized in Langacker, (2000) that sometimes words alternative senses may be out of the same domain; this is nothing but metaphorical alternative meaning.

On the other hand, the verb *bhuka* wake up can also be attested in Kisukuma. See its derivation and how it can be accounted for in the Cognitive Grammar Theory:

3.12 Basic word derivation *βuk-a βu-ch-a*

The basic meaning of the lexeme *βuka* in Kisukuma is wake up when is extended it changes the velar /k/ consonant to affricates /č/ consonant, which is causative in nature, thus the structure becomes *βucha* whose basic derived meaning is make to wake up. However, such derived sense has got many senses in cultural manifestations in the Kisukuma community. The first sense is to carry or take something; this is done without any sense of causation.

The two senses differ but are related within the same domain. That is to say, *βucha* cause/make to wake up differ from *βucha* which refers to carry/take something/somebody up though seems to be in the same domain in the sense that the situation of waking up, one is like taking something or carrying something and show or that people can see.

From this base, Kövecses (2002) argues that a single domain involves several elements that can stand metonymically for each other and tend to form a coherent whole in our experience of the world as they co-occur repeatedly. Subsequently, the second sense is related to loss of life die. Sukuma speakers via their normal speeches use the term to mean, they die example *Bhashika βucha* which means after their arrival, they died. This is a purely syntactic sense of the lexeme. Thus, the senses of the derived word above can be schematized below:



As far as Cognitive Grammar theory is concerned, meaning can be extended via the prototype model Rosch (1978). The scholar introduced categories of meaning which is among the important issue in the prototype tenet. These are nothing but categories which are conceptualized and sometimes understood as having a core and a periphery. In this case, the best example or the prototype becomes the core of a category, and it is against it that other members of the category (peripheral members)

can best be described or understood (Chabata, 2007, p.199). Consider the following Kisukuma data:

313 Basic word derivation *Pond-a Pond-y-a*

In 5, we see that the mathematic or basic meaning of the verb *ponda* in Kisukuma is throw something away when is derived, its semantics change. For example, *Pondya* can either mean make to throw something (this is like the basic derived sense from its original meaning (see the same explanation also in Taylor (1990). The second peripheral sense is to press on something (or somebody when fighting) and the third is rapping. The last two peripheral senses show that the core concept and this peripheral sense do not match in their semantic categories, as it is stated that categories which are known as prototypes have less gradience from the prototypes to the members of a category Rosch (1978).

Thus, a member who does not have one property possessed by other members of the category does not necessarily disqualify it from being a member of that category (Rosch, 1978). It is from this prototype model of Cognitive Grammar, which explain adequately multiple senses in Kisukuma language compared to other theories for example LMT and the MP cannot handle such cases. For example, the former deals with the task of mapping the ordering of thematic roles within the argument structure of every predicate (Bresnan & Kanerva, 1989) and the later deals with morphological derivations to mirror or reflect the syntactic derivations and vice-versa (Baker 1985).

Thus, the two theories cannot handle such phenomena as it is provided by Langackers (1987) exclusionary fallacy, which he uses to dismiss the idea of taking one kind of analysis or explanation of a linguistic phenomenon as the only one possible and as necessarily precluding another.



The same spirit can be observed in the Nambya language spoken in Zimbabwe by Ba Nambya people, Chabata (2007) gave us the following example:

314 Basic word derivation *Kwend - Kwendes-(Chabata, 2007)*

In 7, we observe that the verbalized verb *kwendes-* has more than a literal meaning. Its meaning is cause to go. In other words, this sense implies that someone or something is made to leave the place and be located elsewhere. However, the verb has two other non-literal meanings that are related to the basic one; that is, steal and or kill (Chabata, 2007).

Both senses also entail the idea of causing something or someone to be removed from their current scene or location and put elsewhere. For instance, Chabata continues explaining that Killing entails that someone is removed from the world of the living and is meant to go to another, spiritual world, upon burial. Therefore, both steal and kill are what is known as gradience from the prototypes to the less central members of a category (Rosch, 1978 in Chabata 2007).

However, despite the Cognitive grammar theory handling a lot of derivative morphs meaning in Kisukuma language, there are few cases in which the theory fails to handle following the tenet of the compositionality principle. The compositionality principle agrees that the meaning of a word is attributed to its parts. Thus, that is to say, there is no surplus meaning accruing to a complex expression that is not attributable to its parts or the manner of their combination. This principle of compositionality can be tangible in some languages like as is evidenced in 8:

3.15 Basic word derivation Play, read player, reader

In 8, it is observed that the verb play has been combined or extended by nominalizing suffix -er, thus the meaning of this noun which is one who reads can be described in terms of the meanings of the morphemes that make it up. Under this context, to get the noun from the verb, -er- morph should be suffixed.

However, under the level of investigation strict compositionality cannot work perfectly in Kisukuma causation since meaning changes according to the context. This means that a meaning of a given complex verb is not fixed, it varies according to the situation for satisfying the needed requirements. Moreover, the issue of having words referring to different concepts in different contexts has been described in Taylor (2002) as semantic flexibility. Semantic flexibility is understood to shade into Polysemy, that is, a situation whereby a single linguistic unit has two or more semantic values.

Chabata (2007) adds that strict compositionality fails when it comes to constructions and/or notions such as noun compounds, idioms, metaphors, and other linguistic notions that are subject to pragmatic interpretations. This means that we can have a verb but when derived results in many alternatives which are pertinent to semantic representations as in 9:

3.16 Basic word derivation Kol-a Ko-j-a

In 9 data, we see that the verb kola means reach or arrive. For example, his word is used especially when fisheries are arriving at the coastal area. It is observed that the verb kola is derived from koja whose meaning has changed into the following: dunk or dip into (eating

context) or make arrival or making local beer fit to drink or make to reach (of coastal place). Thus, the structure becomes koja whose meaning has changed against the argument of compositionality principle above. That is to say, its scope becomes a different thing; for example, instead of arriving; it has changed to multiple perspectives like the eating situations.

The same spirit is encoded in Taylor (2002) and Langacker (1987) who also note that strict compositionality is further threatened by the fact that a very large number of words or expressions in a language are idiomatic or metaphorical to some degree, and are thus subject to some kind of pragmatic interpretation. Because of this observation, the view that is generally held amongst cognitive grammarians is that although the constituent parts of an expression contribute to the composite meaning, the composite meaning often has properties that go beyond, and is partially at variance with what can be worked out solely based on the meanings of the parts (Chabata, 2007).

Finally, Taylor (2002) argues that when semantic units are combined in complex expressions and are in the process of trying to accommodate each other, their values shift, hence the variance that usually results between the meaning of the composite expression and those of its parts added together. The above words sense is summarized in 10:



The meaning shown in data 10 shows that the different colours indicate different meanings of the same word, that is to say, the first red colour is different from the two related or nearby colours. This means that the meaning of the last two are related in the sense that, they include or involve liquid in their semantics representation, while the first meaning does not include or involve liquid.

4. CONCLUSION AND RECOMMENDATION

4.1 Conclusion

In this article, we have tried to review the previous literature which revealed that most Kisukuma researchers, researched on phonology and verbal morphology. Based on these studies it is shown that no existing studies in pertinent to morphosemantics analysis. Thus, it is this study which has shown Kisukuma lexical homonyms or/ and polysemous words as it is stated in the first objective. The definition of the two terms (homonyms or Polysemy) are related a slight difference, thus the meaning of the former is unrelated while the latter is related contextually.

Again the paper has shown how Kisukuma-derived morphs accounted for 80 per cent within the Cognitive Grammars theory except for 20 per cent which one among the tenets of Cognitive Grammars theory does not handle the derivatives morph and this is nothing but the compositionality principle. The argument of Cruse (2000) is that the meaning of a complex structure is constructed simply by summing up or adding up the meanings of its constituent or sub-parts, this approach to meaning is sometimes referred to as the analytical approach. Such argument is unattested in the Kisukuma language.

Conversely, metaphor and metonym, prototype model (core and peripheral sense) have well been documented in the Kisukuma derived meaning as it has been discussed above.

4.2 Recommendations

However, it can be recommended that other works pertinent to derived verbs like applicative, passive, reciprocal, stative and reversion should be done to see their tangibility and innovation consistent with the Cognitive Grammar Theory. Derivation like stative may exhaust different explanations since it does not infer many semantic options compared to causation. Thus, doing such a study may trigger another tool of analysis or modifying the existing theories (including Cognitive Grammar) for fitting the data available.

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