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Abstract
This paper uses the Cognitive Grammar Theory to examine the semantics of Kinyarwanda causative and applicative. The study was motivated by the fact that Kinyarwanda verb extensions, particularly the causative and applicative, have multiple sociocultural interpretations of meanings, which is a typical characteristic of Cognitive semantics. The study was couched in the interpretivism paradigm, which looks for culturally derived interpretations historically situated in the surroundings of humans. A qualitative approach was used to analyse the meanings of Kinyarwanda words used by Nyarwanda native speakers. Data was collected from focus group discussions involving six Kinyarwanda speakers. Four were monolinguals; the rest were multilingual, speaking Kiswahili, English and Kinyarwanda. The data were presented using Leipzig glossing rules, and illustrations were used to show more than one meaning in the derived verbal lexemes. Thus, data analysis was used using cognitive grammar theoretical apparatuses, which account for multiple meanings of the derived lexemes. The study found that the causative and applicative verb extensions attached to the verb root have multiple senses that line with Cognitive Grammar Theory, whose major assumption is that words have multiple conceptualisations. For instance, the derived verb *vugisha* had four meanings: speak *to*, *make or cause to talk*, *disgusting* and *switching on something* (such as in radio receiver or electricity). As the presence of different meanings in the same word causes ambiguity, further research can be carried out on Kinyarwanda ambiguity under the contemporary theory of Metaphor.

Introduction

This paper uses the cognitive grammar theory to examine the semantics of Kinyarwanda's causative and applicative morphemes. Kinyarwanda applicative and causative morphemes have multiple interpretations which align with cognitive linguistics under the conceptual meanings of the given lexemes. This can be seen in religion, agriculture, conflicts and cultural activities.

Kinyarwanda is one of the Intralacustrine Bantu languages spoken in Rwanda. The language has been classified and re-classified by different prominent scholars. Guthrie (1975, p. 12) classified it as a Bantu

language belonging to Zone D61, while De Blois (1970: 89) classified it as a Bantu language belonging to Zone J61. Nurse and Philippson (2003, p. 504) combined both classifications and labelled the language JD61. It is said that Kinyarwanda is part of the Rwanda-Rundi dialect continuum and has a high degree of mutual intelligibility with Kirundi spoken in neighbouring Burundi (Banerjee, 2019, p. 4). Kinyarwanda has more than seven dialects spoken inside and outside the borders of Rwanda (i.e. in DRC and Uganda), and there is mutual intelligibility among Kinyarwanda dialects despite minor morphological, semantic, syntactic and phonological differences (Jacques, 2010, p. 6). Banerjee (2019) argues that Kinyarwanda has rich verb morphology. Thus, its verbs are highly inflected to encode information about agreeing nominal, tense, aspect and mood and to change verb valence.

Several studies have been conducted on Kinyarwanda verb extensions. For instance, Banerjee (2018) investigated Kinyarwanda verb extension, focusing on fishing for causative–applicative–reciprocal–passive henceforth (C-A-R-P) in Kinyarwanda. Banerjee was interested in whether Kinyarwanda verb morph ordering is based on the Templatic Principle (Cf. Hyman, 2002, 2003) and Mirror Principe (Baker, 1985; Rice, 2006). It was found that some of the orderings of morphemes adhere to the two principles of causative-applicative and causative-passive (Banerjee, 2018: 2), and others do not adhere to those principles (Cf. pp 4-6). Banerjee's study informs the current study on the possibility and impossibility of some extended verbal morphemes' ordering together with their semantics. The current study used a new approach by envisioning the semantics of causative and applicative morphemes under Cognitive Linguistics and Semantic Theory. This helps to understand the way Rwandans conceptualise meaning in their metaphorical contexts.

Bostne (1983) researched the semantics of tense in the Kinyarwanda language. He described the temporal functions of those verbal prefixes concerning tense expression in Kinyarwanda. Bostne found that the verbal prefix morphemes have diverse semantic senses. Their senses change depending on the context in which they are used (Bostne, 2983, p. 261). Bostne's analysis of Kinyarwanda tense prefixes helps us to see how meaning manifests through tense and aspect in our natural languages. The current study benefits from Bostne's study as it refers to that study when analysing the semantics of the Kinyarwanda causative and applicative verbal extensions. So, the current study builds on Bostne's study and examines the semantics of Kinyarwanda applicative and causative to determine how the Kinyarwanda language exhibits various alternative meanings in its lexicon.

Banerjee (2019) investigated the Templatic morphology of valency-changing extensions of Kinyarwanda language. The focus was on the tension between Templatic Morphology and the Mirror principle in Kinyarwanda. The author argues that syntactic selection by heads accounts for valency-changing arguments in this language better than other principles, such as the Mirror Principle and Templatic Principle. It must be noted that this study was a syntactic analysis different from the morphological discussion of the same author (Cf. Banerjee, 2018). Unlike previous studies on other Bantu languages, this study concluded that Kinyarwanda has a rigid behaviour which requires both the Mirror Principle and the CARP template to be jointly satisfied; thus, if they are not satisfied, periphrasis is applied (Banerjee (2019, p. 28). Banerjee's studies did not venture into other spheres of linguistics, such as cognitive semantics, which the current study investigates.

Gabriel (2017) researched the variation of Kinyarwanda among its native speakers by using a synchronic approach. His investigation sought to show a reflection of language use in Rwandan culture. The study found that the Kinyarwanda varieties spoken in some areas, such as in the northern and western parts of the country, differ from the ones used in academic and professional settings. This

means that Kinyarwanda, like another language, socio-linguistically differs from setting to setting, as its words mean different things to different people (Gabriel, 2018: 42-44).

Jerro (2003) analysed the semantics of the applicative in Kinyarwanda. The study explored the role of semantics in argument realisation by making a lexical semantic account of the contribution of applicative morphology in the Bantu languages and Kinyarwanda in particular. Jerro argues that applicativisation is best analysed regarding the constraint on the paradigmatic relationship between applied and non-applied variants of a verb. That is to say; the applied variant requires an increase in the lexical entailments associated with an internal argument of the predicate, and verb classes have varying lexicalised strategies for satisfying this constraint. The author also described entailment-based approaches to argument realisation. He argued that applicativisation is associated with a paradigmatic contrast in the lexical entailments related to a verb's applied and non-applied variants. The author accounted for valency-changing morphology by using syntactic analysis. That is to say, argument entailments were accounted for syntactically. Thus, the current study investigates the semantics of applicative and causative verb extensions based on Semantic Cognitive Theory to discover their various alternative meanings. This contributes valuable insights to linguistic theory as far as cognitive linguistics is concerned.

Jacques (2010) investigated loanword allocation in Kinyarwanda language. The focus was on why, how, and how many loanwords from French and English have been allocated to different daily life domains and adapted to fit the nominal class system of Kinyarwanda. The study's data were analysed by focusing on morphological and semantic aspects of French and English loanwords found in Kinyarwanda. The study's findings indicated that Kinyarwanda has borrowed many French and English loan words to fill gaps in its lexicon. This attests that the coexistence of English and French with Kinyarwanda results in various sociolinguistic phenomena. Jacques' study shows us that Kinyarwanda, like other languages worldwide, is not on its own. Thus, it should be understood about other languages, especially those in direct contact with them. The current study benefits from Jacques' insights in analysing the multiple meanings of applicative and causative verb extensions.

Apart from Kinyarwanda verb extensions, some scholars have researched the topics pertinent to verb extensions in other languages. Among them is Rugemalira (1993), who investigated Runyambo Verb Extensions and Constraints on Predicate Structure. The author made a description of the productive verb extensions in Runyambo language of Tanzania by challenging the standard view that the extensions are a potential resource for increasing the number of a verb's arguments indefinitely. The study's findings showed that the Kinyarwanda verb extensions form part of a set of interrelated mechanisms used to ensure that the arguments of a verb remain distinguishable from each other. While this is true, the current study investigates the semantics of Kinyarwanda's causative and applicative verb extensions within the framework of cognitive linguistics. This gives us room to see how language structure acquires basic and literal interpretation from human experiences.

Lothi (2002) reports eleven verbal extensions in Nyamwezi and Kiswahili, namely subtractive, e.g. reduplication, static morphemes as in *ma*, *mana*, contactive morphemes as in *-ta-*, conversive morphemes such as *-ul-*, causative morphemes such in *-y-*, *-ch-*,*-j-*, applicative morphemes *-il-*, -el stative morphemes such as *-ik-*,*-ka-*, passive morphemes as in *-w-*, -wi- and -ew-, reciprocal morpheme as in *-an-* augmentative morphemes such as in *ul-*, *-il-*, *-ug-* and inceptive extension like *-pa-* in Kiswahili and *-ha-*, in Kinyamwezi. While Lothi's study focused on verb extensions in the scope of morphology and the way verb morphemes behave when attached to the verb root or stem, the present

study goes beyond examining the cognitive semantics of Kinyarwanda causative and applicative verb extensions. This might contribute to the linguistic theoretical understanding of Bantu verbal morphology.

McPherson & Paster (2009) described verb extensions and their ordering in the Luganda language spoken in Uganda. They focused on examining the evidence for the Mirror Principle and Morphological Templates in Luganda affix ordering. The study was motivated by the claim that the affix order follows principles that are out of morphology proper (Cf. semantic scope, Rice 2000) or the order of syntactic operations (Cf. Baker 1985) does not fully account for Bantu languages that have a fixed order. Before their study, no comprehensive study on the affix order of Luganda had been conducted (Gordon 2005). It is this gap which the scholars sought to fill by systematically analysing the ordering of four verbal extensions in Luganda, namely: causative, applicative, reciprocal and passive (Cf. McPherson & Paster, 2009, p. 57):

1. Name	**Shape**	**Example**	**Gloss**
Causative	/-is-/	n-a-mu-zin-is-a	'I made him dance'
Applicative	/-ir-/	a-n-zin-ir-a	'he is dancing for me'
Reciprocal	/-agan-/	ba-a-kub-agan-a	'they hit each other'
Passive3	/-ibu-/	n-a-kub-ibw-a	'I was beaten'
Transitive4	/-i-/y-	a-ba-kaab-y-a	'she made them cry'
Stative	/-ik-/	ga-nyw-ek-a	'it is drinkable'
Reversive	/-ulul-/	oku-pang-ulul-a	'to unstuck'

These extensions were analyzed on the basis of Mirror Principle (Baker 1985) and the Pan Bantu default Principle known as C-A-R-P. The former states that the order of affixes reflects the order in which the associated syntactic 'operations' apply. The latter stipulates that the canonical order of verbal extensions is causative>applicative>reciprocal>passive. Insights from Baker help the author of the current to see how other related languages behave and the basic meanings that their verb extensions represent. The current study goes beyond by examining Kinyarwanda causative and applicative verb extensions, focusing on the basic and non-basic meanings that the speakers of Kinyarwanda can convey by using them.

The study was guided by Cognitive Grammar Theory, originally presented as 'Space Grammar' (see Langacker 1982) before it became known by its current name (Chabata, 2007: 182). The theory was pioneered by Ronald Langacker, 1982 and others (Taylor, 1990, 2002, 2003; Rosch, 1978). Cognitive Semantics postulates that language is inherently a collection of symbols through which humans express meaning (Taylor, 2002). The Cognitive Semantics or Cognitive Grammar has a theoretical apparatus for conceptualising arguments and their meanings.

The first is metaphor and metonym. These are said to be a powerful tool for conceptualising abstract categories, which play an important role in making us understand abstract concepts and are common in our everyday use of language (Langacker, 2000; Barasa, 2022). This means that the meaning of the lexemes stands for conceptualisations. The second is monosemy and polysemy: the former describes a situation whereby a lexical item has a single sense or meaning. The latter is the association of two or more related senses with a single linguistic form (Taylor, 2003, p. 102). From this base, Kinyarwanda causative and applicative fits well in Cognitive Grammar Theory, so verbs and their derivation can have a basic meaning or one meaning (monosemy) and more than one meaning (polysemy). The

related senses of verb extensions are explained in polysemous concepts or/and peripheral meanings, and non-related senses can be explained in metaphor, as stated above.

The third is the Prototype Model: The model was grounded by a cognitive psychologist (Rosch, 1978) during her research. Rosch argues that the membership of categories is, in most cases, a matter of degree. Therefore, categories generally have central or best examples, which she calls prototypes, and there is some gradient from the prototypes to the less central members of a category. Initially, the Prototype Model was developed to counter the 'classical' or 'Aristotelian' view of associating every category with a set of membership criteria or defining necessary and sufficient attributes (Cruse, 1990, p.383). One of the important constructs of the Prototype Model is that what are known as categories are conceptualised and understood as having a *core* and a *periphery*. The former represents basic meaning, and the latter stands for conceptualisation (Chabata, 2007, p.199). Thus, the model is suitable for analysing the semantics of Kinyarwanda causative and causative because they represent both basic and non-basic meanings. For example, the meaning of the Kinyarwanda verb *shaka* 'find' changes once it is verbalised to become *shakwa,* which means 'be found or married'.

Fourth, the Compositionality Principle: this is another apparatus that shows that the meaning of a complex expression results from the meanings of its constituent parts (Langacker, 1987). This means that each morph extended from the base or verbal roots has its semantic scope where the combination of more than one leads to more than one meaning. Within this line of thinking, Taylor (2002, p. 98) calls this approach as 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, it is to be borne in mind that strict compositionality will be used to analyse the core meanings only because it is restricted to the one-to-one function of lexeme's sense while language is not that rigid.

Methodology

The study was underpinned by the interpretivism paradigm, which looks for culturally derived and historically situated interpretations of the social life-world (Crotty, 1998, p. 67). Gray (2014, p. 23) argues that there is no one-to-one relationship between us (subjects) and the world (objects). From this base, the world (object) is interpreted through the classification of schemas of the mind (Williams & May 1996). Gray says:

> People interpret the meaning of objects and actions in the world and then act upon those interpretations… meanings arise from the process of social interaction…meanings are handled in, and are modified by, an interactive process used by people in dealing with phenomena that are encountered… thus, meanings are not fixed or stable but are revised on the bases of experience (Gray, 2014, p. 24).

This shows that the meaning of a word, phrase, or verb is conceptualised through the schemas of human experience. This was evidenced in the Focus Group Discussion, which involved six native speakers of Kinyarwanda who were born and raised in the Rurenge ward of Ngoma district in Rwanda for forty (40) years. Four (4) native speakers were monolingual of Kinyarwanda and were selected using snowbell sampling. Two were multilinguals who spoke Kiswahili, English, and Kinyarwanda languages, which were selected purposely as they could speak and write three languages. Multilingual speakers helped the researcher translate and interpret monolingual speakers' sentences and narrated discourses. Fifty (50) Swahili verbs were prepared based on the criteria of being action and non-action verbs, number of syllables (monosyllabic, disyllabic and trisyllabic), and

finite and non-finite verbs. Before data collection, piloting was conducted with two native speakers living near Tanzania and Rwanda's border. This was done to check if the study on the semantics of Kinyarwanda causative and applicative verb extensions was doable in the Rwandan context.

The data were analysed by codifying, arranging and classifying them depending on whether the meaning was causation (causative) or application (applicative). This was followed by a certain theoretical apparatus's explanation of a specific derivation and the scope of meanings. The data were analysed qualitatively because of the nature of the phenomenon under study. Descriptions, interpretations and explanations of primary and secondary data were given as words, phrases and sentences during data analysis and discussion.

Results and Discussion

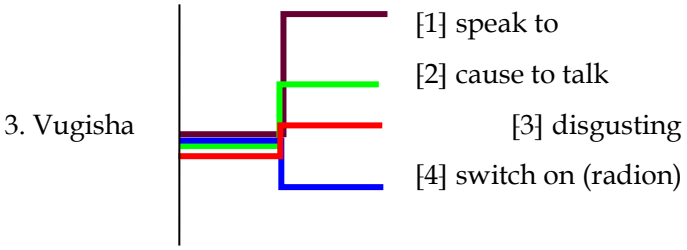
Semantics of causatives

Semantics studies the meaning of words, phrases and sentences, which can be conceptual and associative (Cf. Yule, 2006, p. 100) and direct or indirect (Cf. Dutamurty, 2013). Causatives are allomorphs (verbal extensions) that show cause or make to do something directly or indirectly (Simon, 2020, p. 96). The findings showed that causative morphemes in the Kinyarwanda language have multiple semantics. In other words, native speakers are flexible to use one derived morpheme to represent different meanings in their daily communication. Consider the data in 2 below:

2 *(a) Vug-a*
Speak-FV
"Speak'

(b) Vug-ish-a
Speak-CAUS-FV
"Cause to speak'

The Kinyarwanda data in 2 (a) show that the verb *Vuga* 'speak' has been derived in 2(b) as in *vugisha*which means 'cause to speak'. The meaning presented in 2(a-b) actualises a one-to-one sense as articulated in cognitive linguistics. That is to say, how simpler units combine to form complex expressions also makes a fixed and determinate contribution to the meaning of a complex expression. In other words, the semantic properties of the parts of a complex expression are fully maintained in the complex expression being given out in the surface structure (Taylor, 2002, p. 98). However, the derived verb "*vugisha*" has different semantic implications to users of the Kinyarwanda language apart from the basic sense indicated in 1 above. Other senses can be 'disgust' and 'switch something on' (e.g. a radio receiver, etc. Consider the following data in 3 below:



The data in 3 above shows that Rwandan speakers use the derived word *vugisha* to communicate different senses. The four colours represent different meanings of the same derived verb. The blue

colour represents 'speaking to somebody'; the purple red color represents 'causing something'; the black color represents 'disgusting' and the green color represents 'switching on something'. From this data, the implication is that the language reflects cognitive semantics theory, which articulates that the lexeme can be conceptualised in more than one sense. This is part and parcel of cognitive linguistics because a word is not restricted to a literal use only, rather it carries abstract categories (Langacker, 2000). Thus, Nyarwanda speakers use the word to express various conceptualised senses (Cf. 3). Consider the following conceptions in 4 below:

4. *(a) A-banyishulibá-vug-ish e-iradio*
SP-pupils-switch-on ASP-radio'
"Pupils have switched on the Radio"

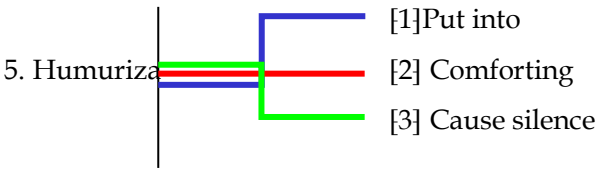
(b)A-bana bá-vugish-aU munwa Ku-vuga
SP-children SP-speak-on (Cc) SP-mouth'
"Children are speaking by using the mouth"

(c) A-bajur a-bávugisha cane U-muperezida
SP-thieves SP-disgust (Cc) SP-President
"Thieves have disgusted the President "

(d) Ku-beraici U-muvugish-a nabi?
-SP-talk (Cc)-mean-FV bad?
"Why you speak to mean is bad manner? "

In the sentences 4 (a-d) above, the verb *vugisha* expresses different senses even though it has the same derivation. In (4a), it means switching or something. In (4b), the same derivation has been used as an instrument. In sentence 4(c), the derived verb *vugisha* has been used to mean disgusting or sickening others. In 4 (d), the verb means somebody who starts or initiates a talk with another person. Hence, the way the verb has been used to mean different things attests to evidence for the argument of Cognitive Linguistic Theory or Cognitive Semantics Theory that meaning that the meaning of the lexeme is conceptual. The exemplified four meanings of the same lexeme reflect how verbalised verbs are naturally or culturally used by Nyarwanda native speakers (Tsohatzidis, 1990) to express different senses.

The other lexeme found with conceptualised meanings is *humura* "quite" which is derived into *humuriza*, meaning cause silence or quietness. Here, the causative morpheme -z- has been added to change the meaning to "make or causes something to be quiet". The same derivation has been used with different meanings by the native speakers of the language under discussion. Consider the semantics of the following semantics of verbalised word humuriza in 5 below:



The verbalised lexeme in 5 represents multiple meanings such as 'make or cause quietness', 'put something into' and 'comfort somebody'. Theoretically, the verbalised word *humura* has the basic

domain, namely 'silence or stop'; thus, the hypothesis is that if the entities belong to the same domain, they tend to form a coherent whole in our experience of the world as they co-occur repeatedly. Because they are tightly linked with experience, some entities can indicate or provide mental access to other entities within the same domain (Kövecses, 2002, p. 145). Here, the three senses result from the experiences of native Nyarwanda speakers in using such lexemes in different contexts. The three conceptualisations of the same derived lexeme shown in 5 can be exemplified in the way they can be applied in other contexts by the native speakers of the language as in 5 (a-c) below:

5(a) *Uliya Mugore ya humur-iza-ga U mwana*
SP(that) woman SP quite-CAUS-ASP SP-child.
" That woman caused the child be quiet"

(b) *Humur-iz-a I byo bigoni Murisaro*
Put-(Cc)-FV SP those maize living.room
"Put those maize at the living room."

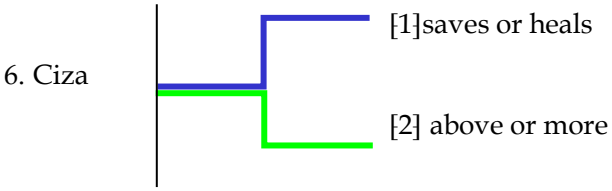
(c) U mushitsi ya muhumuriz-a ga U-mwana
SP guest SP comfort-FV ASP SP-child.
" The guest comforted the child"

The data in 5 show different semantic senses of the derived verb *humuriza*. The conceptualised sense of a causative morpheme is called conceptualised causative, henceforth (Cc). Thus, three senses are derived from the verbalised verb *humuriza*. The first sense is augmentative; in other words, the addition of causative morphemes attracts the causer, who is made to act upon the action. The second sense is to take an object and put it elsewhere. In the above example, the maize was put in the living room. The third sense is that of comforting when a person gets challenges. This shows that human beings are not confined to a one-to-one semantic interpretation. They can use the same lexeme to convey different senses by expanding its functions in different contexts based on their experiences. This is within the scope of the metaphorical function of cognitive science and linguistics, in particular, in which it is argued that metaphorical expressions are a manifestation of our thinking, which is fundamentally metaphorical. Thus, a metaphor is not a mere stylistic or rhetorical figure but "a major and indispensable part of our ordinary, conventional way of conceptualising the world" (Lakoff 1993: 204). That is why verbalisation of an applicative or causative extension is indispensable for human beings because of the need to express different meanings using the same derived verb. Thus, this confirms the relevance of Cognitive Grammar Theory in understanding the verb morph-semantics of Bantu languages.

Similar multiple interpretations can be evidenced by the Kinyarwanda word *Cira* 'heal'. See examples in 6 below:

6 *(a) Cir-a*
Heal-FV
"Heal'
(b) C-iz-a
Heal-CAUS-FV
"Cause to heal"

The data in 5(b) shows that the addition of the causative morpheme -z- has added a new argument: the person made to heal. Still, more semantic conceptualisations can be derived from the same verb, as shown below:



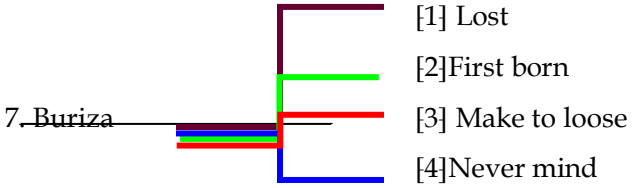
The data in 6 shows more than one meaning. The first meaning is saving or healing. The second meaning is showing comparison when one possesses many things or properties compared to others. This conceptualisation corroborates with Cognitive Linguistics Theory, which defines meaning as conceptualisation. That is to say, semantic structure is a mere "conceptualisation tailored to the specific linguistic conventions; thus, semantic analysis requires explicit characterisation of conceptual structure" (Langacker 1987, p. 99); this means that the extra meaning assigned to a word depends on the context in which such word is used. Consider the following sentences in 6(a-b):

6 (a)	*I*	*mana I*	*ra*	*Ciz-a*
	SP	God	SP	heal-FV
	" God heals"			

(b) U	*liya*	*mu-gabo*	*a*	*siza*	*abantu*	*bintu*
	SP (that)	man	SP more(Cc)		people	items
	" That man has many items compared to others"					

The 6 (a-b) sentences show that the verb *ciza* can have multiple meanings. The first meaning differs from the second meaning because each has its context of use. Within the same line of thinking, Wittgenstein (1976) argues that the meaning of a word depends on its use in the language. This means that a single word can express different senses depending on what the speaker wants to convey. The way the verb *ciza* has been used supports Rosch's (1978) Prototype Model as one among the theoretical apparatus of cognitive semantics; the model suggests that lexemes have core and peripheral meanings. Thus, the first meaning of the verb *is, 'to save,'is known as the core meaning, and the second, related to objects or a person having many things, is known as the* peripheral meaning.

The Kinyarwanda verb *Bura* means 'lost', but when derived by being attached with a causative, its meaning expands and applies in different contexts of use. This also supports the theory under discussion, which assumes that the meanings of words are conceptualisations. Consider the following meanings derived from the Kinyarwanda verb Bura in 7 below:



The data presented in 7 shows that the verbalised verb *bura* has multiple meanings. The first meaning is 'lost', the second meaning is 'first birth', and the third meaning is 'ignoring as if you never mind'. This is exemplified clearly in the following Kinyarwanda sentences in 7(a-d):

7. (a) *U wo mke shwa niwe Buriz-a bwe*
SP (that) girl SP is born(Cc)-FV her
"That girl is her first born"

(b) *U liya U mwana akamuBuriza I sente*
SP (that) SP child lost Cc money
"That child made to lost his money"

(c) U mwanaya Bu-ze
SP child SP/Tens-lost
"The child has lost" (unobservable)

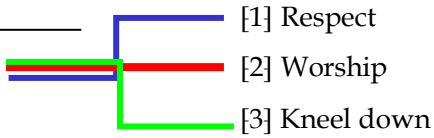
(d) U mwanaya Bur-iz-a yo
SP child SP/Tens-never ASP
"The child has never minded"

The 7 (a-d) data shows four senses associated with the same derived lexeme *bura* in Kinyarwanda. This is by Cognitive Semantics (Cognitive Grammar) Theory, which holds that language users are not limited in the use of words to satisfy their communicative needs. This implies that language is not a self-contained system of communication but a system that refers to other faculties of human cognition and behavioural aspects (Svorou, 1994, p. 3). Here, the verb *Buriza* has been conceptualised depending on native speakers of the language, and they understand each other.

The Semantics of an applicative

An applicative is a morpheme representing a location, an instrument or a benefactive role when attached to the verbal roots or stems (Simon, 2018). However, an application can have other meanings depending on the context in which the language is used. This can be evidenced by the Kinyarwanda word "Pfukama", which means '*kneel down*'. Consider the following derivative meanings derived from the word "Pfukama" in 8 below

8. Pfukamira



The data in 8 shows that the verb *Pfukamira* has multiple alternative meanings; Speakers of the Kinyarwanda language can apply this derivation in different contexts to satisfy their communicative needs. For that matter, when the meaning of an applicative is out of its basic sense, it is known as a conceptualised applicative, henceforth (CA). This reflects the argument that meaning is contextually elastic; this means the context determines what is expressed by what a speaker utters, which may be either core or peripheral sense. In this view, the practical function of cognitive grammar is proved. This aligns with the metonymical expression that communication involves "*a cognitive process in which one conceptual entity, the vehicle, provides mental access to another conceptual entity, the target, within*

the same domain ….” (Kövecses (2002: 145). This means, for example, the meaning of respect may correspond to the meaning of worship. While this is true, worshiping and/or respecting go hand in hand with kneeling down in some societies. Thus, Bantu languages have an extensive semantic elasticity. For example, the semantic opacity of the derived word *pfukamira* can be insinuated in 8 (a-c):

8. (a) *Pfukam-ir-a* *U* *mu-Cibuga*
Knell-APPL-FV SP SP-ground
" Knell down at the playing ground"

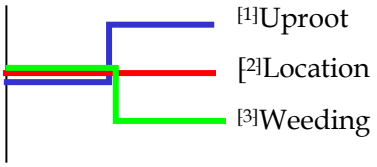
(b) *Pfukam-ir-a* *abakuntu*
Knell-respect-FV bigger
"Respect those whom above you"

(c) *Tujye* *gupfukam-ir-a* *I Mana*
Go:INF worship-(CA)-FV God
" Let us go for worshipping God"

The data in 8(a-c) shows that the derived lexeme has both basic and non-basic meanings. In (8a), the derived lexeme has been used to mean a situation whereby players kneel on the football playing ground. In (8b), the lexeme has been used quite differently as, this time, it means ‘respect’ rather than adding an argument and changing the valency. In (8c), it means *worshipping as* people do in the churches when praying to God. Therefore, the semantics of the verbalised verb *pfukamira* is well captured in the argument of Cognitive Semantics Theory that words have semantic flexibility. Thus, it supports the postulation that words refer to different concepts in different contexts, as Taylor (2002) put forth. From this view, semantic flexibility is understood in polysemy, a phenomenon whereby a single linguistic unit has two or more semantic senses in a given speech community.

Cognitive linguistics takes an experiential view of conceptualisation and meaning, postulating that many of our concepts are grounded in our experiences – cultural and physical manifestations (Lakoff, 1987). This semantic insinuation can be evidenced by the derived Kinyarwanda word *kurira*, ‘uproot’ from the verb kura, whose basic meaning is ‘grow.’ Consider the following alternative senses the verb can have when used in different contexts.

9 Kurira



The data in 9 shows that the lexeme *kurira* has multiple senses depending on the context where it is used. It can indicate the location (Cf. red colour) or activities that human beings act upon in their daily life circle (Cf. blue & green colour). Such derived senses reflect the generalisation governing inference patterns; that is, there are cases where a pattern of inferences from one conceptual domain is used in another domain (Cf. Lakoff, 1992). This means that the derived verb in 6 shows application semantic generalisations from the basic domain in other domains as per the native speakers’ knowledge built from their social experiences. This corroborates with Gibbs *et al.* (1994, p. 233), who argues that knowledge is grounded in patterns of bodily experience. These patterns, called *image schemas*, emerge

throughout sensorimotor activity as we manipulate objects, orient ourselves spatially and temporally, and direct our perceptual focus for various purposes. With this regard, more extended derivations can be exemplified in 9 (a-c) below:

9. (a) *Uyu U mwana a-za-kurir-a kwi I shuri*
This SP child SP-PT-grow PP SP school
"This child will grow when at the school"

(b) Ba gíye *kurira Ibiti u butaka*
SP go uproot tree SP soil
"They have gone to weed (soil) the trees"

(c) Ba gíye*kurira Umwata I myaka Mumulima*
SP go:uproot crops weed field
"They have gone to uproot weed the field/farm"

The data in 9 shows different meanings of the same derived verb *kurira* as Kinyarwanda native speakers use it in different contexts. The lexeme can be used to show location, as in 9 (a), to mean 'uprooting (picking) weeds to allow crops to grow better' and 'weeding crops so that they blossom well'. This proves that words are elastic in their semantics, where the speakers choose the meaning to convey depending on what they want to mean in a certain restricted situation. Conceptualisation of the term *kurira* is functional in cognitive semantics theory across domain mapping. The domain can be used to convey direct or indirect meaning. Thus, conceptualised causative implies that the causative semantics has been assigned to different semantic senses across the realm of concrete physical experience (Lakoff, 1993). From that base *kurira* is conceptualised as uprooting, location or weeding the field.

The same semantic conceptualisations can be evidenced by the verbalised verb *mena,* which means 'split'. The verb can be used differently, either within the same domain or in different domains. Consider the following narrated text from one of the Kinyarwanda native speakers:

Yaamazibayamen**er**agamudobo, ubwoyaamaziyameneragwa,
humvisweizwirivugangontukamenereindoboyange,
mukanyaakohabonetseinkokoilihafikumeneranibwobateguyenezaibidukikije
Translation:''*Some water was poured into the bucket, and while pouring water, there was a sound heard ''Do not split my bucket'' … near the bucket, there was a hen near to take out chicks. It is where they prepared good environment…*''

The narrated text above shows that the verbalised verb *menorah* has multiple senses. One of them is pouring liquid (water), the second conception is splitting, and the third is *taking out chicks*. This proves the argument of Cognitive Linguistics Theory that language is not a self-contained system of communication but a system that refers to other faculties of human cognition and behavioural endeavour (Svorou, 1994, p. 3). Thus, Kinyarwanda native speakers are free to use the verb in 10 to express different semantic senses. The text above can be explicitly simplified in 10 data:

10.Menera
[1] Splitting (of objects)
[2] Pouring (of liquid)
[3] Taking out the chicks (eggs)

The data in 10 shows that the derived lexeme *menera* has multiple meanings. The basic or literal meaning is 'splitting something', marked with a superscript ([1]). The data shows 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 (Taylor,2002:98) as per the Strict Compositionality Principle of cognitive semantics. The second meaning is pouring a liquid, and the third sense is taking out the chicks (eggs-chicks). Here, the last two meanings are not related to the basic meaning; thus, the former falls under monosemy and the latter falls under polysemy, among the tenets of Cognitive Grammar Theory.

Conclusion

The paper has analysed the semantics of Kinyarwanda's causative and applicative to attest to evidence of the language's cognitive linguistics (Cognitive grammar) theory. It has been evidenced that the same verbalised verb can be used to express different senses depending on the context and what the speakers want to express. This means that the mapping is conventional for all native speakers who use that language. Since different meanings can be conveyed using the same verb, lexical or grammatical ambiguity is highly possible. Hence, a study on Kinyarwanda ambiguity is recommended to gain new insights concerning contemporary metaphor theory.

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