Co-occurrence of Verb Extensions in Activity Verbs in Kisukuma

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Abstract

This paper examines the co-occurence and the semantic affects of the causative-applicative-reciprocal-passive (henceforth CARP) extensions in activity verb roots in Kisukuma (F21), a Bantu language spoken in north-western Tanzania. The data for the study were collected through acceptability judgements and spoken texts. The Templatic Approch (the CARP principle) by Hyman (2003) is used as a theoretical framework. The findings reveal that, the CARP extensions can be analysed in two ways. Firstly, some combinations adhere to the CARP template (i.e. they are fixed). Secondly, other combinations violate the CARP template (i.e. they are non-fixed). The latter exchange positions without affecting the grammaticality of sentences. This indicates that there are some semantic effects that are triggered by the change of the extension orders. Since Hyman's (2003) templatic approach can not sufficiently account for all the orders attested in Kisukuma, then, the conclusion made is that the approach is language specific rather than universal to all Bantu languages. It is therefore, recommended that the approach be modified so that it could as well account for the non-fixed orders like those found in Kisukuma.

***Key words**: CARP extensions, Kisukuma, morphology, semantics, templatic approach*

Introduction

This paper examines the co-occurrence of verb extensions in activity verbs in Kisukuma. Specificilly, the paper examines how the causative-applicative-reciprocal-passive (henceforth CARP) extensions co-occur and semantically affect the activity verb roots.

The Bantu verb is rich in terms of inflectional and derivational morphology. Verb extension is one of the main characteristics shared by most of the Bantu languages (see Batibo 1985; Hyman & Mchombo 1992; Rugemalira 1993; Hyman 2003; Muhdhar 2006; Lusekelo 2012; Charwi 2017, among others). Although most of the Bantu languages share a number of characteristics, there are

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variations of specific semantic functions of individual extensions. This is because the ordering of extensions tends to vary from one language to another (see Rugemalira 1993; Good 2005; Nurse & Philippson 2006). For instance, while some Bantu languages exhibit a fixed order of verb extensions, others display a non-fixed order. For example, in Chichewa the CAUS-APPL[1] appears in a fixed order even when the semantic interpretation demands the reverse order (Hyman 2002), as shown in example (1), while in Runyambo the APPL-RECP appears in a non-fixed order (Rugemalira 1993), as in example (2) below:

(1) a. *Alenjé a-ku-líl-íts-il-a mwaná* [Chichewa]
AUG-2.hunter SM2-PRS-cry-CAUS-APPL-FV child *ndodo* sticks
'The hunters are making the child cry with sticks.'

b. *Alenjé a-ku-tákás-its-il-a mkází mthíko*
2.hunter SM2-PRS-stir-CAUS-APPL-FV woman spoon
'The hunters are making the woman stir with a spoon'. (Hyman 2002:5)

(2) a. *ba -ka -bon-angan-ir-o munju* [Runyambo]
SM2-PST-see-RECP-APPL-FV in house

'They saw each other when in the house'.

b. *ba-ka-bon-er-an-nju*

SM2-PST-see-APPL- RECP-FV house

'They saw/found a house for each other'. (Rugemalira 1993:192)

In view of the examples in (1-2) above on the ordering of the extensions, it is not clear which is the typical order in Bantu languages, especially when extensions are attached to a specific verb

[1] The following abbreviations are used: 1, 2, 3 etc.=Noun class; APPL = Applicative; AUG= Augment; CAUS =Causative; ARP = Causative-Applicative-Reciprocal-Passive; FV Final vowel; NP =Noun phrase; OM= Object Marker; PASS = Passive; PRF = Perfect; PRS = Present; PST =Past; RECP -Reciprocal; *-Proto-Bantu marker/unacceptable form; SM = Subject Marker.

category, or whether each language is unique in terms of the ordering of these extensions. Therefore, this paper examines the orders of CARP extensions when they attach to a single activity verb in Kisukuma.

With regard to the semantic effects, Bantu languages behave differently. For example, while some Bantu languages involve the fixed ordering of the extensions where the orders of extensions do not match with the meanings (one order represents two different meanings/two orders represent one meaning), other languages involve the non-fixed ordering where the orders match with their meanings (two orders represent two meanings). For instance, in (1) above, the CAUS-APPL yields two different meanings, that is; the applicative instrument 'sticks' is used by the causer for causation (for causing the child to cry) not for crying in (1a), and the applicative instrument 'spoon' is used by the causee for stirring and not for causation. In Runyambo, two different orders; RECP-APPL/APPL-RECP result into two different meanings that is; with the RECP-APPL order in (2a) 'the applicative serves as the location where the participants perform the action upon each other' and with the APPL-RECP in (2b) 'the applicative serves the beneficiary role where the participants perform the action on behalf of one another'. This observation implies that in some languages like Chichewa, one order may represent two different meanings. By contrast, in other languages like Runyambo, two different orders imply different meanings.[2]

In view of the preceding background on verb extension, the concept of verb extension still poses a problem in Bantu linguistics. Although some studies have been done on the same in Kisukuma (See Batibo 1985; Muhdhar 2016), the co-occurrences and the semantic effects of the CARP extensions on activity verbs has not been sufficiently studied and thus it is still unclear. Moreover, despite the fact that activity verbs have been the subject of analysis in Bantu languages, in the sense that they can freely accommodate most of the tense and aspect forms (see Fleish 2000), the aspect of verb classes has not been the focus in verb extensions in Bantu languages. Additionally, it is

[2] The analysis of CARP extensions in the activity verb category is due to the fact that the aspect of verb classes has not been the focus in verb extension in Kisukuma. Activity verbs are those that describe processes whose duration is unlimited in principle. Verbs in this category share semantic features in the sense that they are productive and regular, since can freely agree with/attach to most of the tense and aspect forms (see. Lusekelo 2016; Botne 2006; Fleish 2000); Mreta 1998).

not yet established whether Kisukuma displays the same characteristics as Bantu languages like Runyambo or Chichewa. This paper then fills that gap.

Verb Extensions in Bantu Languages

Studies regarding ordering and co-occurrences of extensions have been conducted for some Bantu languages. For example Runyambo (Rugemalira 1993); Shambala (Kaoneka 2009); Kinyakyusa (Lusekelo 2012); Kuria (Charwi 2017), other studies have been done on the same in Kisukuma (Batibo 1985; Muhdhar 2016). The studies indicated that Bantu languages exhibit significant variations in the ordering and co-occurrence of extensions, particularly the causative, reciprocal, applicative, and passive. For example, in Kuria the order is non-fixed for the RECP-CAUS, and CAUS-RECP, as illustrated in (3) (Charwi 2017); while in Runyambo the order is fixed for the sequence CAUS-RECP, as exemplified in (4) (Rugemalira 1993). In addition, there is no productive RECP-CAUS sequence in Runyambo. Rather all RECP-CAUS sequences are based on frozen reciprocal:

(3) a. *Nyangi*
a-ra-hooch-an-i-a [Kuria]

AUG-1.Nyangi SM1-PRS-bring back-RECP-CAUS-FV

Mwita na *bha-ana* Mwita and 1.child

'Nyangi causes Mwita and children to bring back each other'.

b. *Nyangi na Mwita* *bha-ra- hooch-i-an-a* *bhaana*

Nyangi and Mwita SM2- PRS-bring back-CAUS-RECP-FV 2-child

'Nyangi and Mwita cause each other to bring back the children'.

(Charwi 2017: 115)

(4). *ba - ka - kom -es -an-a* *nku/omuguha* [Runyambo]

they-PST- tie -CAUS - RECP -FV firewood/rope

'They caused/helped each other to tie firewood'.

'They caused the rope to tie each other/ they tied each other with a rope'. (Rugemalira 1993:91)

The examples presented in (4-5) below show that in Runyambo only four combinations of three extensions are possible that is, CAUS-APP-REC, APP-CAUS-REC, CAUS-APP-PASS, and APP-CAUS-PASS. In addition, considering the limited number of ordering available in example (5) below, three extensions are the possible limit of any single verb root and any combination of four would have to repeat an extension:

(5) a. *son-es-ez-an-a*
sew-CAUS-APP-REC-FV

'Cause to sew for each other'

b. *son-es-ezi-bw-a* sew-CAUS-APP-PASS-FV

'Cause to be sewn for' (Rugemalira 1993:200)

Furthermore, in Kinyakyusa, there are possibilities of two to three extensions to co-occur on a single verb root (Lusekelo 2012). Seven possible combinations of two extensions were found in Kinyakyusa, that is; CAUS-APPL, CAUS-RECP, RECP-CAUS, CAUS-PASS, APPL-RECP, RECP-APP, and APP-PASS. Out of the seven combinations of extensions attested in the language, the CAUS-APPL, CAUS-RECP, CAUS-PASS, APPL-RECP, and APP-PASS combinations adhere to the CARP templatic order. In addition, the RECP-CAUS and RECP-APPL orders of extensions violate the CARP principle (they are non-fixed). See some examples in (6) below:

(6) a. *bhuj-isy-an-a*

return-CAUS-APPL-FV

'Cause each other to return

b. *and-isy-w-a* start-CAUS-PASS-FV

'Be made to start' (Lusekelo 2012:319-320)

In addition, only three combinations of three extensions are possible in Kinyakyusa; the CAUS-RECP-APPL, and APPL-RECP-CAUS, which also violate the CARP, as in (7) below:

(7) a. *a-bha-ana* *bha-ku-nang-isi-an-il-a mi-enda*

AUG-2-child *SM2-PRS-show-CAUS-RECP-APPL-FV 4-cloth*

ku-ki-umba 17-room

'The children caused each other to see the clothes in the room'.

b. *a-bha-palamani* *bha-ku-kem-el-an-isi-a* *m-bwa*

AUG-2-neighbour RECP-CAUS-FV SM2-PRS-bark-APPL-10-dog

'The neighbours caused the dogs to bark at each other'

(Lusekelo 2012:328)

Furthermore, in Citumbuka the verbs allow the combination of APPL-CAUS, CAUS-APPL, CAUS-RECP, RECP-CAUS, APPL-RECP and RECP-APPL (Chavula 2016). The APPL-CAUS, CAUS-RECP, and APPL-RECP orders obey the CARP principle, while the APPL-CAUS, RECP-CAUS and RECP-APPL orders violates the CARP because the reciprocal precedes the causative and the applicative, and the applicative precedes the causative. See examples in (8) below:

(8) a. *Ucekulu ndodo* *wu-ku-wuk-il-isk-a abuya*

14-old age stick SM14-PRS-rise-APPL-CAUS-FV 9-1-grandmother

'Old age is making grandmother use a stick when standing up'.

(Chavula 2016:204)

b. *Ŵankhungu ŵ-a-tem-an-isk-a.*

2-thief

SM1-PRF-cut-RECP-CAUS-FV

'Thieves caused to stab each other'

(Chavula 2016:204-206)

In (8a), the applicative precedes the causative and in (8b) the reciprocal precedes the causative. This observation indicates that, the APPL-CAUS and RECP-CAUS orders violate the CARP principle in Citumbuka, since the CARP restricts the causative to precede the applicative, reciprocal and the passive extensions. That is to say, there are variations in the ordering of extensions in Bantu

languages. For example, even though Runyambo (Rugemalira 1993); Shambala (Kaoneka 2009) and Kinyakyusa (Lusekelo 2012) are all Bantu languages, they still differ in the arrangement of extensions. For example, whereas the order APPL-CAUS-RECP is allowed in Shambala and in Runyambo, in Kinyakyusa the order is not possible. This observation signifies that the aspect of verb affix ordering in Bantu languages is more specific rather than universal, in the sense that some combinations may be acceptable in one language but unacceptable in another.

In Chichewa, verb extensons occur in different orders with the corresponding meaning differences, For example, in Chichewa within the CARP combination of extensions, three combinations of two extensions occur in both orders (fixed and non-fixed); APPL-RECP/RECP-APPL, CAUS-RECP/RECP-CAUS, and APPL-PASS/PASS-APPL. Moreover, one combination fails to co-occur in either order (the order is not acceptable in the language), that is, the RECP-PASS. In addition, the CAUS-APP, and CAUS-PASS can co-occur in a fixed order. See examples in (9) below:

Combinations with both orders

(9) a. *Mang-an-its-* tie-REC-CAUS-
'Cause to tie each other'

b. *mang-its-an-* tie-CAUS-REC-
'Cause each other to tie'

c. *mang-ir-idw* tie-APP-PASS-
'Be tied for/with/at'

d. *mang-idw-ir* tie-PASS-APP-
'Be tied at /for' (Hyman &Mchombo 1992:350-351)

Moreover, in Chichewa the co-occurrence of three extensions is possible. See examples in (10) below:

(10) *mang-ir-an-its* tie-APP-REC-CAUS-
'Cause to tie for each other'

(Hyman &Mchombo 1992:352-353)

The study on verb extension conducted in Kisukuma (Batibo 1985) found that, the combination of up to five extensions is permissible with the recurrence of some extensions, that is, RECP-APPL, APPL-

APPL-CAUS, RECP-APPL-CAUS, RECP-APPL-CAUS-PASS, and CAUS-REC-APP-CAUS-PASS. The combinations are not fixed in their positions which also violate the CARP principle.

Furthermore, the study conducted in Kimunakiiya [one of Kisukuma dialects] (Muhdhar 2006) revealed that out of the four combinations of two extensions attested only the APP-PASS combination adheres to the CARP principle. The rest violate the principle. In addition, only one possible combination of the three verb extensions is allowed in the dialect. That is, RECP-APPL-CAUS which also violates the CARP principle as the reciprocal precedes both the applicative and the causative. Moreover, the non-fixed sequences of RECP-APPL and APPL-CAUS are allowed which violate the CARP principle because the reciprocal precedes the applicative, and the applicative precedes the causative.

Although there are studies that focus on verb extension in Kisukuma (see Batibo, 1985 and Muhdhar, 2006), the aspect of verb classes (verb extension on a specific verb category) has not been the focus in the study of verb extensons in Kisukuma. Studies have mostly focused on verbs in general. The study by Batibo (1985) does not show the applicability of the templatic approach on the CARP extensions to find out wether the extensions adhere to or violate the CARP principle.

Additionally, the study in Kimunakiiya (Muhdhar 2006) found out a combination of three extensions as the upper limit allowed in Kimunakiiya. Therefore, it is thought that this is an important area to be investigated so as to find out the co-occurrence of the four (CAUS-APP-RECP-PASS) extensions in a specific verb category, that is, activity verbs. Also, to find out whether the combination of four extensions adheres to or violates the CARP template.

Given the variations by different scholars in the way the extensions are arranged, it is revealed that languages are more specific than universal. Based on these studies, it is clear that languages are of two categories; those that abide by the CARP principle and those that do not. Studies show that the variation of extensions result in differences in meanings, that is, when the order changes, the meaning also changes. The reason for most of the combinatons in languages like Runyambo (Rugemalira 1993); Chimwinii (Hyman 2002, 2003); and Shambala (Kaoneka 2009) to adhere to the CARP templatic approach, and for other languages like Citumbuka

(Chavula 2016); and Kuria (Charwi 20017) to violate the CARP templatic approach could have been caused by the ongoing language change across Bantu languages including Kisukuma, where one prefers to use a certain order over the other. It is on the basis of such variations that it is important to examine the co-occurences as well as the meaning effects of the CARP extensions in Kisukuma based on activity verbs. The aim is to find out whether Kisukuma verb extensions adhere to or violate the CARP principle.

Theoretical Framework

In this paper, the templatic approach has been used to account for Kisukuma verb extensions, specifically in their co-occurences and how they are bound in the framework of morphological analysis. The approach is used to show the applicability of the templatic approach to the CARP extensions when they are ordered on a single activity verb root. The templatic approach was proposed by Hyman (2003) in analyzing the order of extensions in Bantu languages. The approach involves the order of the verbal derivations into Causative-Applicative-Reciprocal-Passive (the CARP) extensions.

Hyman's (2003) approach assumes that Bantu affix ordering is driven by a Pan-Bantu templatic fixed order, where verb extensions are in a single fixed order of Causative-Applicative-Reciprocal-Passive, and any reordering of the extensions is the violation of the principle (see Hyman 2002, 2003; Good 2005; McPherson and Paster 2009). In order to account for the affix ordering, Hyman (2003) proposed the following Pan-Bantu default affix ordering template:

(11).

Causative	**Applicative**	**Reciprocal**	**Passive**
*-ic-	*-id-	-	*-an
		-	*-u

(Hyman 2003:248)

The assumption that most of the Bantu languages employ a linear fixed order is attributed to the argument that, the CARP extensions have been arranged on morphological basis that reflects the order of semantic roles (Hyman, 2003; Charwi, 2017). This means that the extension introducing the first argument which is normally the causer/agent is the one which takes the first position, and it tends to come first (causative). At the same time, the extension introducing the beneficiary/instrument takes the second position (applicative). In addition, the third and fourth positions are occupied by the suppressing arguments, that is, the reciprocal (third position), and

the passive (fourth position). This observation shows that the ordering of extensions is fixed according to the prototypical role of semantic functions of each of the affixes, and there is no way the order can change.

The study considers the Pan-Bantu Default Template adequate in explaining suffix ordering. The study applies the Hyman (2003) CARP Morphological Principle to show the applicability of this approach on the CARP extensions when they are ordered in the activity verb root, in order to find out whether the CARP extensions in Kisukuma adhere to or violate the CARP principle.

The general assumption of the templatic approach is that the order of the affixes is inversely fixed. Therefore, during the analysis, the CARP extensions were hierarchically ordered in the activity verb roots so as to find out whether the CARP extensions are fixed in their positions by default or not. In this case, during the analysis the causative extension was ordered in the first position, the applicative in the second, the reciprocal in the third and the passive in the fourth. Then, the extensions exchanged their positions to find out whether or not the flexibility of these extensions could adhere to the CARP Principle or they could yield any semantic effects.[3]

ANALYSIS AND RESULTS

The Co-occurrences of the CARP Extensions

This section gives a detailed description and analysis of the co-occurrences of the Causative-Applicative-Recprocal-Passive extensions, and their semantic effects when they attach in a single activity verb. The main objective is to show how one extension can behave in a set of extensions. For instance, when it appears in different positions together with other extensions, and how such extensions adhere to or violate the templatic (CARP) princple. The analysis examines the co-occurrences of four extensions, and their reversed orders. Besides, it should be noted that all the orders analysed in this paper are grammatically correct, and they represent different meanings in Kisukuma. The templatic approach as a theoretical framework is used to show the applicability of the templatic approach on the CARP extensions when they attach to a single activity verb. The aim is to find out how one extension in a combination can adhere to or violate the CARP templatic approach

[3] The data for this research were collected and analysed through a qualitative approach. Five native speakers of Kisukuma were purposively selected as the target population. Data were collected through acceptability judgement and spoken text methods.

when it maintains or changes its position within a combination with other extensions.

The Co-occurrence of Four Extensions

One of the characteristics that differentiate Kisukuma from other Bantu[4] languages like Runyambo (Rugemalira, 1993) and Kinyakyusa (Lusekelo, 2012) is that in Kisukuma it is possible and acceptable for a series of four extensions to be attached in a single verb stem. Each of the attached extensions occupies its position and performs a semantic function which affects the original verb root. The analysis has started by ordering the CARP extensions hierarchically following the CARP principle: the CAUS-APPL-RECP-PASS, then the extensions exchanged their positions to find out whether they still adhere to or violate the templatic approach.

Five combinations of four extensions are found to be possible in Kisukuma, which are: CAUS-APPL-RECP-PASS (CARP), APPL-CAUS-RECP-PASS (ACRP), APPL-RECP-CAUS-PASS (ARCP), RECP-APPL-CAUS-PASS (RACP), and CAUS-RECP-APPL-PASS (CRAP). In this analysis, only activity verb roots are involved.

The Causative-Applicative-Reciprocal-Passive (CARP) Order

The order CAUS-APPL-RECP-PASS is the acceptable pattern in Kisukuma which adheres to the CARP template order. The activity verbs *lya* 'eat' and *anguha* 'hurry' in (12-13) below illustrate how the CARP extensions function when they co-occur in a single activity verb stem:

(12). *U-Neema* *na* *Peji*

AUG-1. Neema and 1.Peji

bha-le-l-ish-ij-an-iw-a *mchele* *shi-jiko*

SM2-PRS-eat-CAUS-APPL-RECP-PASS-FV 4.rice 7-spoon

'Neema and Peji were made each other to eat rice with a spoon'.

[4] The researcher constructed the forms/sentences, and asked the five informants to respond to whether the forms/sentences are acceptable, or unacceptable. For the acceptable terms, the respondents were required to give their meanings. The goal was to capture all the acceptable orders of the CAUS-APPL-RECP-PASS extensions, as well as their semantic effects of these extensions in the activity verb.

(13). *U-mayo na bha- sheke*
AUG-1. mother and 1.daughter

bha-ka-anguh-y-il-an-iw-a negene

SM2-PST-hurry-CAUS-APPL-RECP-PASS-FV 1. baby

'The mother and the daughters were made each other to hurry for the baby'.

The examples in (12-13) above indicate that, the CARP is accepted in Kisukuma. The four verb extensions involved in this order fulfill the CARP[5] templatic constraints requirement which demands the CARP extensions to strictly co-occur in a linear fixed order of CAUS-APPL-RECP-PASS. Semantically, before the addition of the CARP extensions, 'Peji' was the agent in the verb *lya* 'eat' and *bhasheke* 'daughters' was the agent of the verb, *anguha* 'hurry'. Then, the addition of the causative introduces the causer 'Neema', and *mayo* 'mother' which causes the causee (previously the agent of the original verb), that is, 'Peji' and 'daugthers' to perform the action. The causative extension affects the meaning of the verb root to 'cause to perform the action'. Additionally, the addition of the applicative leads to the introduction of a new argument to the verb, that is, the instrument, *shijiko* 'a spoon' (as the entity used to perform the action), and the motive, *negene* 'baby' (as the motive for performing the action).

Moreover, the addition of the reciprocal suppresses and raises the causee that is, 'Peji', and *bhasheke* 'daughters' to the subject position to form a conjoined NP with the causer, which in turn functions as the causers and causees at the same time, that is, *Neema na Peji* 'Neema and Peji', and *mayo na bhasheke* 'mother and daughters.'

Finally, when the passive extension is added, it only upgrades the reciprocal arguments on the subject position to be the passivized arguments. This happens since the passive has no argument to suppress, because the causee has already been suppressed by the reciprocal and has been made to form a conjoined NP. The passivisation affects the verb to mean, 'the action is done on the passivised argument (the conjoined participants).'

[5] In spoken texts twsssso narratives; *namhala ngugu* 'the stingy old man', and *mongo na mbula* 'the river and the rain' were gathered during data collecton. A descriptive framework was employed, where the data collected through acceptability judgements and spoken texts were extracted and analysed based on the cos-occurrences as well as the sematic effects of the CARP extensions in activity verbs. For narratives, constructions containing verbs and extensions wersssse revealed. Verbs in these methods were fragmented to find out how they accommodate extensions.

The examples in (12-13) above show that, morphologically the shape of the activity verb after the ordering of the CARP is *l-**ish-ij-an-iw-**a*, and *anguh-**y-i-lan-iw-**a*. The order CARP affects the meaning of the activity verb by changing the original meaning of the verb to that of 'be made each other to perform the action by using a spoon /for the baby'.

As it was pointed earlier, the four verb extensions involved in this order adhere to the way extensions strictly occur in the CARP, as the causative precedes the applicative, reciprocal, and the passive.

Applicative-Reciprocal-Causative-Passive (ARCP) Order

In APPL-RECP-CAUS-PASS combination, the applicative and causative add an argument while the reciprocal and passive upgrade an argument to the subject position. Consider the verbs *anguha* 'hurry and *dima* 'catch' in examples (14-15) below:

(14) *U-n-yanda na ng'wa-nike*

AUG-1-boy and 1-girl

bha-ka-dim-il-an-ij-iw-a n-dama na n-temi

SM2-PST-catch-APPL-RECP-CAUS-PASS-FV 9-calf by 1-chielf

'The boy and the girl were made to catch the calf on behalf of one another by the chief.'

(15). *U-bhabha na Lora*

AUG-1.father and 1.Lora

bha-la-anguh-il-an-y-iw-a na mayo

SM2-PRS-hurry-APPL-RECP-CAUS-PASS-FV by 1.mother

'The father and Lora are being caused to hurry on behalf of one another by the mother'.

In (14-15) above, the applicative introduces the beneficiary; *ng'wanike* 'girl' and 'Lora.' Then, the reciprocal upgrades the beneficiary to the subject position to combine with the agent of the original verb, *nyanda* 'boy' and the patient of the original verb, *bhabha* 'father', forming a conjoined NP argument, that is; *nyanda na*

ng'wanike 'boy and girl', and *bhabha na Lora* 'father and Lora' performing both the agent and the beneficiary roles at the same time. Thereafter, the causative introduces the causer; *ntemi* 'chief', and *mayo* 'mother' which causes the causees (the conjoined arguments) to perform the action on behalf of one another. Moreover, the addition of the passive upgrades the cause (the conjoined arguments) to the subject position. Here, the conjoined participants which were the causees now become the beneficiaries. Then the causer, that is; 'chief' and 'mother' are suppressed to the post verbal position and made to be optional as it is shown in (14-15) above.

The ARCP combination affects the shape and the meaning of the activity verbs to mean 'be made to perform the action on behalf of one another by the chief/the mother. The ARCP order which is acceptable in Kisukuma violates the CARP template as the applicative and reciprocal precede the causative extension.

The Causative-Reciprocal-Applicative-Passive (CRAP) Order

The order CAUS-RECP-APPL-PASS is possible and grammatically correct in Kisukuma. See the activity verbs *pilingita* 'roll', and *yela* 'walk around' in (16-17) below:

(16) *A-bha-nike* *bha-le-pilingit-y-an-ij-iw-a*

AUG-2-girl SM2-PRS-roll-CAUS-RECP-APPL-PASS-FV

negene

1.baby

'The girls are made each other to roll because of the baby'

(17) *U-n-gosha* *na* *bhabha*

AUG-1-man and 1.father

bha-ka-y-ej-an-ej-iw-a *ng'wa-ana*

SM2-PST-walk-CAUS-RECP-APPL-PASS-FV 1-child

'The man and the father were made each other to walk around for the child.'

The examples in (16-17) above reveal that the orders CRAP do not adhere to the CARP template, since the reciprocal precedes the applicative. First, the causative introduces the causer *ng'wanike* 'girl', and *ngosha* 'man' which causes the causee (the patient of the

original verb), that is; *ng'wanike* 'girl' and *bhabha* 'father' to perform the action. The causative extension affects the meaning of the verb stem to mean; 'cause someone to perform the action'. Then, the reciprocal extension upgrades and raises the causee to the subject position to combine with the causer, forming the plural argument; *bhanike* 'girls', and the conjoined NP*; ngosha na bhabha* 'man and father' which act upon each other. Semantically, the reciprocal arguments perform both the causer and the causee roles at the same time, where the reciprocal participans cause one another to perform the action.

Moreover, the presence of the applicative introduces the argument, *negene* 'baby' as the reason for the event*,* and *ng'waana* 'child' as the motive behind for the event*.* Lastly, the passive is added. Normally, the passive suppresses the argument to the subject position, however, the reciprocal arguments; *bhanike* 'girls' and *ngosha na bhabha* 'man and father', have already been suppressed and raised to the subject position by the reciprocal. Therefore, the passive only upgrades the reciprocal arguments to be the passivized argument on the subject position.

The addition of the CRAP extensions to the activity verbs, *pilingita* 'roll' and yela 'walk around' affects the shape and the meaning of the verb to mean; 'be made each other perform the action because of the baby/for the child'.

The Reciprocal-Applicative-Causative-Passive (RACP) Order

The RECP-APPL-CAUS-PASS (RACP) is another accepted pattern of extension where two extensions (R and A) have taken each other's original positions. The activity verbs *dima* 'catch' and *sola* 'peck' in examples (18-19) below illustrate:

(18) *I-m-buli na n-dama* AUG-9-goat and 9-calf

ji-le-dim-an-il-ij-iw-a ma-swa na Peji SM10-PRS-catch-RECP-APPL-CAUS-PASS-FV 6-grass by 1.Peji

'The goat and the calf are made to catch each other because of the grasses by Peji'.

(19) *I-noni ji-ka-sol-an-el-ej-iw-a*

AUG-10.bird SM10-PST-peck-RECP-APPL-CAUS-PASS-FV

ha-kaya *na* *Lora*

16-home by 1.Lora

'The birds were made to peck one another at home by Lora'.

The activity verbs *dima* 'catch, and *sola* 'peck' have two core arguments; the agent, that is, *mbuli* 'goat' and *noni* 'bird' as well as the patient that is, *ndama* 'calf' and *noni* 'bird'. The addition of the reciprocal suppresses and raises the patient, that is, *'ndama* 'the calf in (18) and *noni* 'bird' in (19) to combine with the agent; *mbuli 'goat' and* na *noni 'bird' in the* subject position forming the conjoined NP argument, that is; *mbuli* na *ndama* 'the goat and the calf', and the plural argument *noni* 'birds' which perform both the agent and the patient roles at the same time.

Aditionally, the introduction of the applicative to the verb stem demands an argument to the verb which has the semantic effects on the derived activity verb. Such arguments are *maswa* 'grasses (the reason behind for the action) and *hakaya* 'at home' (the location where the action was performed).

Moreover, when the causative is added to the combination it leads to some semantic effects as it is seen in (18-19) where the causative introduces 'Peji' and 'Lora' as the causers which cause the reciprocal arguments to perform the action on one another because of grasses/at home. Furthermore, the presence of the passive suppresses and moves the causer to the post-verbal position and makes it an optional element. Consequently, it upgrades the causee (the reciprocal arguments) to the subject position to replace the suppressed arguments which is the causer. The addition of the RACP affects the meaning of the activity verb to that of 'being made to perform the action on one another because of the grasses /at home'.

Based on the examples presented in (18-19), the combination of RACP in Kisukuma violates the Bantu template as the reciprocal precedes the applicative and the causative. Additionally, the applicative precedes the causative in the combination. Based on the templatic approach constraints, the reciprocal is restricted to be ordered after the causative and applicative extensions and the applicaive to follow the causative.

The Applicative-Causative-Reciprocal-passive (ACRP) Order

The RECP-CAUS-RECP-PASS is another possible pattern of extension. Consider the activity verbs *tula* 'hit' and *inha* 'give' in examples (20-21) below:

(20) *U-bhageshi* *na* *sengi*

AUG-1.brother in-law and 1.aunt

bha-le-tul-il-ij-an-iw-a *Neema mami* SM2-PRS-hit-APP-CAUS-RECP-PASS-FV 1.Neema 1.uncle

'The brother in-law and the aunt are made each other to hit the uncle on behalf of Neema'.

(21) *UBhasungi* *na* *bhabha*

AUG-1. Bhasungi and 1.father

bha-ki-inh-il-ij-an-iw-a *ng'w-ifa*

SM2-PST-give-APPL-CAUS-RECP-PASS-FV 1-nephew

numbu *ha-mongo*

9.sweet potato 16-river

'Bhasungi and the father were made each other to give the nephew the sweet potato at the river'.

Based on the examples presented in (20-21) above, it is clear that the order ACRP is grammatically correct and acceptable in Kisukuma. Semantically, the co-occurrence of ACRP affects the activity verb roots. First, the applicative introduces the argument known as the beneficiary, 'Neema' which benefits from the action done by the agent *sengi* 'aunt', and the locative; *hamongo* 'at the river' (the place where the action was done). Second, the causative introduces the new argument namely, the causer, That is, *bhageshi* 'brother-in-law', and 'Bhasungi' which causes the causee (previously the agent of the applicativised verb), that is, *sengi* 'aunt', and *bhabha* 'father' to perform the action on behalf of Neema/at the river.

Third, the addition of the reciprocal combines the causee and the causer arguments to form the conjoined NP argument, that is *bhageshi na sengi* 'brother-in-law and aunt', and *Bhasungi na bhabha* 'Bhasungi and father' who 'cause each other to perform the action in the subject position on behalf of Neema/at the river'.

Semantically, the conjoined participants play both the causer and the causee roles at the ame time.

Lastly, the passive is added. Besides, it should be noted that in the examples (20-21) the passive has no argument to suppress. The reason for this is that, the causee argument has already been suppressed by the reciprocal and made to form the conjoined NP arguments with the causer. In these sentences then, the conjoined participants, that is, *bhageshi na sengi* 'brother in-law and aunt' and *'Bhasungi na bhabha* 'Bhasungi and father' are only upgraded by the passive to become the passivised arguments of the action. The ACRP combination affects the verb roots to mean 'be made each other to perform the action on behalf of Neema/at the river '.

The order ACRP which is grammatically correct and acceptable in Kisukuma violates the CARP template, as the applicative is ordered before the causative in the ACRP combination.

Unacceptable Orders

Based on the data analyzed in this study, it was found that although a single activity verb can accomodate a combination of four extensions at once in Kisukuma, it does not mean that there are no limitations or restricions in the language. Moreover, as far as this study is concerned, the upper limit of the extensions allowed in a single verb root in Kisukuma is four, any addition, would have to repeat an extension. However, with the recurrence of an extension the number can go as up as five in a combination. Therefore, the following orders are not permitted: *CAUS-APPL-PASS-RECP (CAPR), *PASS-APPL-CAUS-RECP (PACR), and *APPL-PASS-RECP-CAUS (APRC). The reason for the unacceptability of these orders is due to that, in Kisukuma the passive extension is restricted to occur in the final position within the CARP combination, any reordering or change of position of the passive results into both morphologically and semantically ill-formed construction. In addition, in all three combinations, the passive is non-fixed. Thus, the combinations are regarded as ill-formed.

Conclusion

The main problem was the question of the co-occurrences and the semantic effects of the CAUS-APPL-RECP-PASS extensions in the activity verb category. Despite the fact that activity verbs and tense and aspect have been the subject of analysis in Bantu languages, and although verb extension has already been investigated in Kisukuma,

the aspect of verb classes has not been the focus in verb extension in most Bantu languages, specifically in Kisukuma. This is because there are variations among Bantu languages in terms of the arrangement of the extensions. Therefore, since it was not yet established whether Kisukuma displays the same characteristics as other Bantu languages, the examination of the aforementioned phenomena was important.

The Templatic Approach by Hyman (2003), was used as a theoretical framework to show its applicability to the CARP extensions when they are ordered in the single activity verb root. Additionally, the Approach was used to find out whether all combinations of the CARP extensions attested in the language adhere to the CARP template. The findings revealed that the CARP extensions can be analysed in two ways: Firstly, some combinations adhere to the CARP template (they are fixed). Secondly, other combinations violate the CARP template (they are non-fixed). The latter exchange positions without affecting the grammaticality of the sentences.

The analysis presented so far has shown that co-occurence of four extensions in the single activity verb root is possible in Kisukuma, where at least some combinations adhere to the CARP template. For instance, out of the five combinations of the extensions analysed in this study, only one combination adheres to the CARP template, that is; the CAUS-APPL-RECP-PASS (CARP) combination. However, the four combinations which are gramatically correct and acceptable in Kisukuma were found to be non-fixed, thus violating the CARP template as they can exchange their positions and be made to create other patterns of the same extensions. Such combinations are; APPL-CAUS-RECP-PASS, APPL-RECP-CAUS-PASS, RECP-APPL-CAUS-PASS, and CAUS-RECP-APPL-PASS.

Moreover, it was found that the co-occurence of extensions affects the meaning of the activity verbs involved. The extension can only introduce a certain semantic role depending on the nature of that verb and the position of that extension within a combinations with other extensions. This observation mean that reordering can change the meaning of a verb based on the core, the added or the suppressed arguments which have been introduced by the preceding extension. Therefore, extensions altogether determine the morphological and semantic shape of the verb root, since the last extension relies on the first or previous extensions results.

Moreover, it was found that Kisukuma poses limitations and restrictions on the arrangements of the CARP extensions, where the upper limit of extensions allowed in a single verb root is four, and any addition would have to repeat an extension. Additionally, based on such limitations, the CAUS-APPL-PASS-RECP, *PASS-APPL-CAUS-RECP, and *APPL-PASS-RECP-CAUS combinations are not allowed in Kisukuma, because the passive extension is by default fixed, any reordering of this extension results in an ill-formed construction.This observation indicates that there are constraints on how the extensions should be arranged and the number of extensons allowed in the verb root.

Furthermore, the fact that the passive extension is fixed implies that, to some extent the Templatic Approach is applicable in Kisukuma extensions. However, Hyman's (2003) Templatic Approach fails to account for all the possible orders attested in Kisukuma. In this way, the CARP works for some languages like Runyambo (Rugemalra 1993); Chimwiini (Hyman 2002, 2003); Shambala (Kaoneka 2009) and some combinations in Kisukuma and does not work fully for other languages like Citumbuka (Chavula 2016); Kuria (Charwi 20017) and Kisukuma. The reasons for the adherence or violation of the CARP templatic approach could be as follows; (i) the ongoing language change across Bantu languages including Kisukuma, where one prefers to use a certain order over the other; (ii) the templatic approach itself failing to addess the non-fixed orders; and (iii) the intention of the speaker. What the speaker intends to express can determine the arrangement of the extensions on the verb, which inturn affect the shape and the meaning of the activity verb.

Furthermore, since the Templatic Approach fails to account for all the possible orders acceptable in Kisukuma, then, this study proposes that the approach is language specific rather than universal. It is therefore, recommended that the approach be modified so that it could as well account for the non-fixed orders like those found in Kisukuma.

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