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The Morpho-Syntactic Properties of Anaphors in Kisukuma

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Abstract

This paper focuses on the morphological and syntactic properties of anaphors in Kisukuma, a Bantu language spoken mainly in Shinyanga, Mwanza, Simiyu and Geita regions in the south eastern part of Lake Victoria by the people who call themselves βasukuma. The study was

guided by three modules of Government and Binding Theory namely: Binding Theory, Government Theory and Case Theory. Qualitative research approach was employed. Data were collected through sentence questionnaires and grammaticality judgments. Four respondents who are native speakers of *Kimunakiiya* dialect were selected from Isoso and Ndoleleji villages by using snowball sampling basing on their age and language proficiency. The study found that anaphors in Kisukuma exist in two forms: Verbal anaphors and Nominal anaphors. Anaphors in verbal form are expressed by a single form (morph-*i*-) that plays one role at a time. Intrinsically the form seems to be polysemic in nature, because in addition to encoding reflexive and reciprocal events, the form is also used to encode other interpretations such as anticausative, decomitative, derogatory, chained action, asymmetric reciprocal, pretense and lack of reason. Hence the form evokes some sort of ambiguities which are solved by the number of participants, the intrinsic characteristics of a verb used and the social context which help to determine the intended meaning. Anaphors in nominal form are expressed by distinct linguistic expressions such as *iyene/ng'wenekele/bhenekele* 'myself/themselves' for reflexive and *bhoyigubhoyi/iseguise* 'each other/one another' for reciprocal interpretation. Morphologically the morph-*i*- is realized as a prefix attached between the TAM and verb root by the affixation process. Overtly the morph does not show agreement with its antecedent in terms of person, gender and number though covertly it acquires all the features from the overt NP via SM. Syntactically the RFM/RCM is an internal argument of the verb to which it attaches. Also, the form is a valence-reducing element that derives a transitive verb into an intransitive one, (unaccusative verb). Moreover; anaphors in Kisukuma co-refers with the whole NP via the SM to establish binding relation.

Keywords: anaphors, forms of anaphors, Morphological properties, syntactic properties

1. Introduction

This paper focuses on the interface between morphology and syntax in describing the unique properties of anaphors in Kisukuma. Anaphors as universal concepts are presented differently cross-linguistically. As referential elements, in some languages; they are displayed as morphological elements while in other languages they are separate syntactic elements. These elements whatever in their realization function referentially with their antecedent in accordance to Binding Principle 'A' which posits that an anaphor must co-refer with its antecedent in the governing category. In Kisukuma anaphors, as it is in other Bantu languages, are realized by morpho-syntactic elements attached to the verb morphology, these elements affect the argument structure of the verb which is syntactic by either increasing or decreasing numbers of arguments. Kisukuma, as the largest ethnic group in Tanzania, morphologically is an agglutinating language and syntactically has the SVO structure.

2. Anaphors in Different Languages

Within the tradition of Generative Grammar, anaphors were introduced by Chomsky in 1981 through Government and Binding Theory. According to Chomsky, anaphor denotes what is called reflexive and reciprocal expressions such as 'myself', 'themselves' and 'one another' respectively. These anaphors are interpreted by using Binding Principle A. Anaphor has been defined differently by different scholars due to language differences. Scholars (Carnie, 2001;

Gardielle, 2012; Haegeman, 1994; Radford, 2004; Wang, 2012) discuss anaphors in English. They present that anaphors are distinct separate syntactic elements that get their meanings by referring back to the NP in the subject position. They normally occupy the object position in a syntactic construction. For example:

1. a) John$_i$ hurt himself$_i$

b) They$_i$ hurt each other$_i$

The data in 1 show that anaphors 'himself' and 'each other' in English are different syntactic elements that occupy the object position. Thus, they are independent nominal anaphors.

Discussing about Asian languages such as Chinese, Pan (1997) asserts that in Chinese anaphors (reflexive andreciprocal) are realized by distinct forms namely: *taziji* and *gongji* respectively (p. 182), as indicated in 2:

2. a) *Johnxihuantaziji*	*b) Tamenhuxianggongji*
NC1-xihu-an-taziji	*NC2-huxi-ang-RCM*
John-like-PRES-him-self	Pron- attack PST- each other
John$_i$ likes himself$_i$'	They$_i$ attacked each other$_i$

The data in 2 reveal that in Mandarin, anaphors are expressed by distinct grammatical expressions reflected for gender, number and persons with their antecedents. Hence they are assigned accusative case.

Kung and Volker (2003) assert that in Romance languages such as Italian and Spanish, anaphors are marked by single expression *si* and *se* respectively. The difference between reflexive and reciprocal interpretation in these languages is determined by the position of anaphors. Thedata in 3 from Italian and Spanish languages respectively exemplify the same;

3.a) *Maria siguardò*

NC1*maria siguard-ò*

NC1 Mary RFM what-PST

Mary$_i$ watched herself$_i$

b) *Si guardavano*

Si guard-avan-o

RCM-watch-pron-PST

They$_i$ watched each other$_i$

c) *Padres sedespidieron*

NC2*Padres$_i$ se$_i$des-pidie-ron*

NC2 Parent RCM say goodbye – PST

Parents$_i$ said goodbye to each other$_i$

The data in 3 indicate that anaphors in Italian and Spanish are expressed by the same but independent marker inflected overtly for person and number features. This observation highlights the marking of anaphors in some Bantu languages which is marked by a single form.

Bruening (2006) and Kioko (1999) assert that numerous languages from Africa form reflexive and reciprocal through verbal morphology rather than free lexical items as it is in isolating languages. Therefore, through verbal morphology, different morpho-semantic and morpho-syntactic morphemes that enrich the grammar of the language are attached. Since Kisukuma is an agglutinating language as differentiated from isolating languages, the researchers explains how reciprocity and reflexivity can be expressed through verbal morphology

Bantu languages are agglutinating. Though they differ from isolating languages, they still differ from language to language, hence making anaphors difficult to generalize in different languages. For instance, Amidu (2011) argues that reflexives and reciprocals in Kiswahili are realized as bound morphemes *-ji-* and *-an-*. Moreover, it is explained that the reflexive morpheme *-ji-*and-*an-*behave like other nominal reflexives including 'itself', 'himself', 'herself', 'themselves' and 'each other' in English. The difference is that *-ji-* and *-an-* morphemes do not exist as free morphemes. They need to be incorporated in the verb by morphological process known as affixation. This is justified by the examples in (4) from Kiswahili;

4.a) *Mtoto anajipenda*

NC1 *mtoto$_i$ a$_i$-na-ji$_i$-pend-a*

NC1 child SM-PRES-RFM-like-FV

The child$_i$ likes herself$_i$

b) *Watoto wanapendana*

NC2*mtoto$_i$wa$_i$-na-pend-an$_i$-a*

NC2 child SM-PRES-like-RCM- FV

Children$_i$ like each other$_i$

Similarly, Masinde (2016) asserts that reflexive and reciprocal (anaphors) in Lutachomi, a language spoken in Western Kenya, are realized by using distinct meaningless morphemes that acquire meaning when affixed to the verb root. Hence, in Lutachomi, reflexives and reciprocals are bound morphemes as in Kiswahili as indicated in 5 from Masinde (2016, p. 37).

5.a) *Samson valeebeka*

NC1*Samson$_i$va$_i$-le-e$_i$-bek-a*

NC1 Samson SM-FUT-RFM-shave-FV

Samson$_i$ will shave himself$_i$

b*) Khulakehsiana*

khu$_i$-la-kehsi-an$_i$-a

SM-FUT-greet-RCM-FV

We$_i$ will greet each other$_i$

The data in 4 and 5 indicate that, in Kiswahili and Lutachomi, anaphors are morphologically realized by distinct morphemes that occupy different morphological slots in the verb morphology.

In relation to Amidu and Masinde, Mchombo (2004) argues that anaphors (reflexive and reciprocal) in Chichewa, a language spoken in Malawi, are realized by distinct bound morphemes that occupy different morphological slots in the verb template as indicated by data from Chichewa by Mchombo (2004, p. 51) in6.

6.a) *Mikángo imadzikánda*

NC3*Mikángo$_i$ i$_i$-ma-dzi$_i$-kánd-a*

NC3lionS SM-HAB-RFM-Scratch-FV

Lions$_i$ scratch themselves$_i$,

b) *Alenje akutèmana*

Alenje$_i$ a$_i$-kutèm-an$_i$-a

NC2hunters -SM-PRES-cut-RCM-FV

The hunters$_i$ are cutting each other$_i$,

The data in 6 reveal that also in Chichewa anaphors (reflexive and reciprocal) are expressed by distinct morpho-syntactic elements that occupy different morphological slots in the verb template.

Msamba (2013) and Ngwasi (2016) present that some Bantu languages mark reciprocal and reflexive by using a similar morphological slot in the verb template. For instance, in Hehe, alanguage spoken in the Southern Highlands zone of Tanzania, reciprocal and reflexive markers take similar morphological slots as exemplified by the data from Hehe by Ngwasi (2016, p. 34) in 7:

7.a) *Naftali igulye ikitabu*

Naftali a- i-guli-e i-kitab-u

NC1Naftali SM-RFM-FV NC7-book

Naftali$_i$ has bought a book for herself$_i$,

b*) Naftali na Kiliani vigulye ifitabu*

Naftali conj. Kiliani va$_i$-i$_i$-gul- il- e i- fi- tabu

3SG conj. 3G SM-RCM buy-APPL-RER AUG-NC8-book

Naftali and Kiliani$_i$ have bought books for each other$_i$

Discussing the syntactic status of RFM and RCM, Kioko (1999) presents RFM and RCM as distinct syntactic elements due to their different morphological distribution in the verb structure. Unlike the RFM, which occupies the OM, the RCM is the verbal extension like other extensions that reduce the valence of verb in which it is attached. On the other hand, Matsinhe (1994) investigates the status of verbal affixes in Tsonga, a language in South Africa, and argues that reflexivization is similar to reciprocation as both are argument reducing processes. The only difference between the two morpho-syntactic processes is based on morphological distribution in which reflexive takes place pre-radically while reciprocation takes place post-radically in the verb stem. This can be revealed by data in 7 from Matsinhe (1998, p. 183).

8. a) *Tolo namana atiikhomile*

Tolo namana$_i$ a$_i$-ti-i$_i$-khom-il-e

Yesterday Mother SM-PST-RFM-touch-APPL-FV

Mother$_i$ touched by herself$_i$ yesterday

b) *Sidakwa swabanana*

si-*dakwa$_i$ swa$_i$- banan-an$_i$-a*

NC2-drunkard SM-beat-RCM-FV

The drunkards$_i$ are beating each other$_i$

The data in 8 reveal that; reflexive and reciprocal markers in Tsonga are different elements by virtue of their morphological distribution in the verb structure but syntactically have equal status. That is of reducing arguments of the verb.

With reference to Shona, Storoshenko (2009) argues that, although reflexive and reciprocal (anaphors) in English have similar syntactic characteristics, in Shona they differ both syntactically and semantically. The reflexive *-zvi-* in Shona serves as an indicator of the bound object without carrying any semantic meaning by itself but the reciprocal *-an-* serves as a valence-reduction suffix in the sense that it reduces one argument of the verb predicate. Therefore, unlike Tsonga, in Kamba and Shona RFM and RCM have different syntactic status. This is indicated in example 9 from Shona (Storoshenko 2009, p. 41).

9.a) *Mwana kakazvipisa*

NC1*mwana$_i$ka$_i$-ka-zvi$_i$-pis-a*

NC1 child SM-PST-RFM-burn-FV

The child$_i$ burned herself$_i$/himself$_i$

b) *Takanzwana*

Ta$_i$-ka-nzw-an$_i$-a

SM-PST-hear-RCM-FV

They$_i$ heard each other$_i$

Nurse and Philippson (2003) submit that RFM in many Bantu languages always occur as a prefix close to the verb root regardless of the number of the other prefixes occurring with it. So RFM in the Bantu verbal morphology is part of the verbal internal structure. On the other hand, RCM always occurs as a suffix but its position is not quite rigid although it is realized before all post-verbal TAM markers. It may occur immediately after the verb stem or with an intervening derivational affix most probably applicative and causative markers.

To support the above argument, Mchombo (2007) presents that RFM in Chichewa appears in the position of object marker (OM). Therefore, it is treated as a pronominal argument whose construal is determined by the principle of syntactic binding. Unlike the RFM, the RCM, on the other hand, is realized as a verbal suffix that derives a one-place predicate from the two-place predicate. Therefore it is a detransitivizing morpheme that derives predicates with a reciprocal interpretation as it is indicated by example 10 from Chichewa by Mchombo (2007, p. 10).

10.a) *Anyani akudzimangilila*

anyani$_i$ a$_i$-ku-dzi$_i$-mangilil-a

NC2 baboon SM-PRES-RFM-tether-FV

The baboons$_i$ are tethering themseves$_i$

b) *Alenje amagulila asodzimikondo*

NC2*alenje a-ma-gul-il-a asodz mikondo*

NC2hunter SM-HAB-buy-APPL-FV-NC4spear

The hunters buy spear for the fishermen.

c) *Alenje ndi asodzi amagulila namikondo*

NC2*alenje conj.*NC2*asodzi$_i$ a$_i$-ma-gul-il-an$_i$*-NC2 *mikondo*

NC2hunter conj.NC2fisherman SM-HAB-buy-APPL-RCM-NC4spear

NC2hunters conj.NC2fishermen$_i$ buys each other spears$_i$'

The data in 10 reveal that the differences in morphological distribution between the RFM and the RCM in the verb morphology reflect their different syntactic properties.

Contrasting the above arguments, Nurse (1979) and Schadeberg & Bostoen (2019) argue that some Bantu language in Zones F, H, K, and R have turned on the reflexive marker as a new productive means of marking reciprocal interpretation. Thus, languages in these zones manifest a high range of intersection between reflexive and reciprocal reading. The data in 11 from Luvale exemplify this.

11.a) *Vanalijifinya*

Va$_i$-na-li$_i$-jifiny-e

SM-PS-RFM-Consider-FV

They$_i$ considered themselves$_i$

b) *Tunalifwane*

Tu$_i$-na-li$_i$-fuan-e

SM- pst – RCM – resemble – FV

We$_i$ resemble each other$_i$

The data in 11 indicate that in Luvale, there is no clear distinction between reflexive and reciprocal meaning. The same form (morph-*i*-) in a) is also used to encode reciprocal events as revealed in b). Thus the morph-*i* for both RFM and RCM in Luvale is a valence reducing element.

Complementing the above argument, Ngwasi (2021) presents that in Hehe, Sukuma, Nilamba and Nyaturu languages the reconstructed reflexive prefix-*i*-, besides encoding reflexive events, has been conventionalized also as a productive marker for encoding reciprocal and middle events as shown by the data from Nilamba in12.

12.a) *Ujuma ukiyỏna*

U-juma u-ku-i-yỏn-a

AUG-Juma SM-PRES-RFM-see-FV

Juma$_i$ see himself$_i$.

b) *Aiyỏnile*

A-i-yỏn-ile

2SM-RCM-See-PFV

They$_i$ saw each other$_i$

c) *Juma wiyỏỏgile*

U-Juma u-i-yỏỏg-ile

AUG-Juma SM-MIDD-PST-wash-PFV

Juma$_i$ washed himself$_i$

The data in 12 reveal that the reconstructed reflexive prefix-*i*-, besides encoding reflexive events as it is shown in a), is also used to encode reciprocal events in a mutual relation when it refers to plural referents as it demonstrates in b). Also, the same prefix-*i*- is used to encode middle events as it is shown in c) particularly when it is used with the verb of grooming or personal hygiene such as washing, dressing, combing and shaving, among others.

The above discussion shows inconsistency in the distribution of anaphors across different languages in the world. This presents a need for the research on the forms of anaphors to see how they are displayed by identifying their morpho-syntactic properties.

Three modules of Government and Binding Theory were employed in this study, namely Biding Theory, Government Theory and Case Theory. Biding Theory as a module of grammar modulates the referential properties of noun phrases by providing an explicit expression about the relationship between NPs in A-position. It was developed by Chomsky and then advanced by Haegeman in 1994. The theory assumes that every NP has a distinct structural relationship and interpretation with other nouns in a sentence. Also the structural relationship among NPs in a sentence is determined by the binding principles labeled A, B and C. Government Theory was used based on the assumption that binding relation among NPs occurs under government through the notion of precedence and dominance of the head word which is a governor. Case Theory was employed to account for the case filter on the forms of anaphors. We employed the three modules to account for a wide range of data as all these modules are interactive in nature.

3. Research Methodology

This research is qualitative, using statements, explanations and summaries to clarify how anaphors are realized in Kisukuma. This research is also explanatory, as it provides detailed information and explanations about the forms of anaphor based on their morphological and syntactic properties. The data was collected in Shinyanga region, in the Northern part of Tanzania, specifically in Kishapu district at Kishapu and Ndoleleji wards respectively. The researchers used snowball sampling techniques to identify 4 respondents. Sentence questionnaires and grammaticality judgments were used to collect data.

4. Anaphors in Kisukuma

In Kisukuma, anaphors exist in two forms: Verbal anaphors and nominal anaphors. Anaphors in Kisukuma are realized in the internal structure of a verb as verbal affixes or as both verbal affixes and free morphemes.

4.1 Verbal Anaphors

In Kisukuma, anaphors are expressed by one linguistic form; the morph-*i*-, which is used for both reflexive and reciprocal expressions. Hence, in Kisukuma, anaphors in verbal form compose a class of anaphors known as reflexive/reciprocal anaphors (RFM/RCM). This entails that, in Kisukuma, a single linguistic form (the morph-*i*-), which plays one role at a time, is used for both reflexive and reciprocal construal as shown in example 13.

13. a) *Nyanda agiiminya*

NC1*Nyanda*$_i$ *a*$_i$*-gi- i*$_i$*- miny-a*

NC1 boy SM-PST- RFM-hurt-FV

The boy$_i$ hurt himself$_i$

b) *Bhayanda bhagiiminya*

Bha- yanda$_i$ *Bha*$_i$*-gi-i*$_i$*-miny-a*

NC2 boy SM-PSTt-RCM-hurt-FV

The boys$_i$ hurt each other$_i$'

c) *Bhaliigiisha*

Bha$_i$*-li-i*$_i$*-giish-a*

SM-PRES-RCM-greet-FV

They$_i$ are greeting each other$_i$

The data in 13 reveal that a single form (morph *-i-*) is used for both reflexive and reciprocal as shown in 13a) and b) respectively. What determines the intended meaning is the nature of the referent at the subject position, as well as the inherent properties of the verb used. In a), the form refers to the singular referent (antecedent), thus it specifies reflexivity as the action is directed on oneself. In b), the same form (morph-*i-*) refers to the plural referents, thus it encodes reciprocity, for reciprocity is associated with multiple participants as well as multiple relations. In c) the inherent properties of the verb *giisha* 'greet', which is inherently reciprocal, suggest mutual relation among participants, thus the form encodes reciprocity.

Due to its polysemic characteristics, the form seems to evoke some range of ambiguity between reflexive and reciprocal interpretation, particularly when the referent is in plural form. For example:

14. *Bhanike bhagiimanecha*

Bha-nike$_i$ *bha*$_i$*-gi-i*$_i$*-manech-a*

NC2 girl SM-PST-RCM/RFM-Introduce-FV

i. 'The girls$_i$ introduce each other$_i$'

ii. 'Some girls in group A introduced some girls in group B'

iii. 'Each of the girls$_i$ introduced herself$_i$'

From the data in 14, we observe that, when the referent is in plural, semantically, the form evokes some range of ambiguity. On the one hand, the form could encode reciprocity as in i) or evoke the interpretation as in ii). Also, the same form in the same construction could be interpreted to encode reflexivity as in iii). Hence, with the plural referent, the form is

ambiguous as there is no clear-cut boundary to distinguish the focal reading.

In addition to encoding reflexivity and reciprocity, the form also evokes other polysemic notions such as anticausative, decomitative, chained action, asymmetrical reciprocal, pretense as well as lack of reason. This observation widens the semantic function of the morph-*i*- in Kisukuma as compared to those presented by Ngwasi (2021), who presents that the reflexive prefix-*i*- in Hehe, Kisukuma, Nilamba and Nyaturu, besides of reflexivity, also encodes reciprocity and middle events. For example:

15. a) *Moto gwiibhacha*

NC3moto gu-i-bach –a

NC_3 fire SM-AUNTIC- ignate-FV

The fire is burning (Lit. The $fire_i$ has ignited $itself_i$)

b) *Ng'wana aliiyombya*

NC1*ngwana a-li-i-yomb-i-a*

NC1 child SM – PRES – DECOM – speak – CAUS –FV

The child is speaking alone (Lit. the $child_i$ is speaking by $himself_i$)

c) *Bhanafunzi bhagiitonja*

Bha-nafunzi bha- gi-i-tonj-a

NC2 Student SM-PSt-CHAIN- follow-FV

Students lined up (Lit. $Students_i$ followed each $other_i$)

d) *Bhagiitindeja*

Bha_i-gi-i_i- tind- ej-a

SM-PRES-PRENT. - Shave-FV

They pretended to fall asleep (Lit. $They_i$ caused each $other_i$ to fall asleep)

e) *Bhaliisuka*

Bha-li-i-suk-a

SM-PRES-ASREC-plait-FV

One (girl)is plaiting the other (Lit.$They_{i/j}$ are plaiting each $other_i$/$themselves_j$)

The data in 15 reveal that, in addition to expressing reflexivity and reciprocity, morph-*i*- is used to denote other notions, such as anticausative, which means lack of external agent who attributes the events as in a), decominative notion, which means doing something alone or without including someone else as in b), chained action rather than the natural reciprocal events as in c), pretense as in d) and asymmetrical reciprocal where only one reciprocator is

reciprocated to the other reciprocator as in e).

Despite the ambiguity evoked by the form, native speakers are capable of differentiating one role played by the form at a time by using productive means such as number of referents, the linguistic semantics of the verb used as well as the social context in which the utterance is uttered. For example:

16.a) *Nagiigwesa*

Na$_i$-gi-i$_i$-gues-a

SM-PST-RFM-pull-FV

I$_i$ pulled myself$_i$

b) *Bhagiigwesa*

Bha$_i$-gi-i$_i$-gues-a

SM-PRES-RCM-pull-FV

They$_i$ pulled each other$_i$

c) *Bhaliigisha*

Bha$_i$-li-i$_i$-gish-a

SM-PRES-RCM-greet-FV

They$_i$ are greeting each other$_i$

d) *Bhaliimoga*

Bha$_i$-li-i$_i$-mog-a

SM-PRES-RFM/RCM-shave-FV

They$_{i/j}$ are shaving themselves$_i$/each other$_j$

The data in 16 reveal that despite the ambiguities triggered by the form, native speakers are fully aware to differentiate the two by using either singular referent to specify reflexivity as in a), plural referent to specify reciprocity as in b). Also the use of the naturally inherent reciprocal verbs like *giisha* 'greet' to encode reciprocity as in c), and the social context in which the utterance is uttered, where both the speaker and the hearer witness the event of shaving, helps to differentiate the focal reading as in d).

Anaphors in Nominal form

In Kisukuma, anaphors in nominal form are expressed by distinct independent anaphoric pronouns*iyene/ng'wenekele/bhenekele* 'alone/myself/themselves' for reflexivity and *iseguise /bhoyigubhoyi* 'each other' for reciprocity. Despite of being separate syntactic anaphors in Kisukuma, they cannot occupy the argument position on their own rather they co – occur with the verbal anaphor (morph-*i*-) so as to emphasize reflexivity and reciprocity reading as

show in 17:

17.a) *Aliimoga iyene*

A_i-li-i_i-mog-a iyene

SM-PRES-RFM-shave-FV-self

She_i/he_j is shaving $herself_i$/ $himself_j$,

b) *Bhaliimoga bhenekele*

Bha_i- li-i_i-mog-a bhe-nekele

SM-PRES-RFM-Shave-Fv-NC2-Self

$They_i$ are shaving $themselves_i$

c) *Bhalimoga bhoyigubhoyi*

Bha_i-li- i_i-mog-a bh-oyi- gubh-oyi

SM- PRES-RCM- Shave-FV- NC2- each other

$They_i$ are shaving $each\ other_i$

As it is observed in a) the separate syntactic anaphors*iyene/ng'wenekele/bhenekele* 'alone' 'myself/themselves' and *bhoyigubhoyi* 'each other' in a), b) and c) co-occur with morph-*i*-to emphasize reflexive or reciprocal reading. Hence, they are optional anaphoric elements in Kisukuma compared to those in English.

4.2 The Morphological Properties of Anaphors in Kisukuma

Anaphors in Kisukuma are realized as both free lexical items and verbal affixes. Whatever their realization, these anaphors are similar in features with the anaphors in isolating languages.

Verbal anaphors

Since Kisukuma is an agglutinating language, its morphemes are clearly identifiable. Being the verbal bound morphemes, reflexive and reciprocal morphemes are realized by one actual morpho-*i*-, which however plays a single role at a time. The morph is characterized by the following morphological properties.

Affixation

Morphological verbal anaphor in Kisukuma is realized by the actual bound morph-*i*-. This morph is incorporated in the verb template by the morphological process known as affixation. Despite playing the role of reciprocity and reflexivity, the morph plays one role at a time. It cannot be reflective and reciprocal at the same time in the same verbal structure. Although the morph does not reflect the agreement features with the subject noun phrase binding it. The morph acquires all these features covertly from the overt NP in the subject position via the SM. For example:

18. a) **1st Person**

Na – giilola

Na$_i$ – gi-i$_i$-lol – a

SM – PST – RFM – look – FV

I$_i$ looked at myself$_i$

2nd Person

Ugiilola

U$_i$-gi-i$_i$-lol- a

SM – PST – RFM- Look –FV

You$_i$ looked at yourselves$_i$

3rd Person

Agiilola

A$_i$-gi-i$_i$-lol-a

SM – PST - RFM- look – FV

She$_i$/he$_j$ looked at her$_i$ /himself$_j$

b) **Singular**

Ugiilola

U$_i$-gi-i$_i$-lol- a

SM – PST – RFM - look –FV

You$_i$ looked at yourself$_i$

Plural

Mugiilola

Mu$_i$-gi-i$_i$-lol-a

SM-PST- RCM-look – FV

You$_i$looked at each other$_i$

From the paradigm in 18, it is revealed that overtly, morph-*i*- does not show variation with respect to the nominal features of its antecedent as it is in isolating languages. The form inherits these features covertly from the overt NP in the subject position via the SM.

The position of morph-*i*- in the verb morphology

In the morphological composition, morph -*i*- is realized as a prefix taking the position between TAM and the verb root. This position is also occupied by the other object markers when needed by the grammar. Hence the implication that:

i. both reflexive and reciprocal markers represented by morph-*i*- in the verb template are in complementary distribution with other object markers unless they are combined with other verb extensions such as causative and applicative;

ii. both reflexive and reciprocal represented by the morph-*i*- are prefixes in the verb template.

These observation challenges the assertion made by Amidu (2011), Kioko (1999) and Mchombo (2007) that reflexive and reciprocal markers are different morphemes in the sense that a reflexive marker is a prefix while a reciprocal marker is a verbal extension. Thus, they should be differentiated by virtue of their morphological distribution in the verb morphology. Also these challenges reflect the fact that forms and structure of anaphor differ from one language to another.

The co-occurrence of morph-*i*- with other object markers

Since morph-*i*- occupies the object marker slot, the possibilities to co-occur with other object markers in the same slot is constrained in the absence of causative morpheme, which creates an environment for contrastive distribution between the morph-*i*- and other object markers. On the other hand, the morph allows the co-occurrence with other overt noun phrase object as shown in 19.

19.a) **Aganiibhuta*

A-ga – n-i- bhut –a

SM-PST-OM-RFM-cut-FV

He$_i$ cut me myself$_i$

b) *Agagwibutya*

A-ga-gu-i-bhut-i-a

SM-PST-OM-RFM-cut-CAUS-FV

He$_i$ made you$_i$cutyourself$_i$

c) *Bhagiibhutamakono*

Bha$_i$-gi-i$_i$-bhut-a NC4 hand

SM-PST-RCM-cut-FV NC4 hand

They$_i$ cut each other's$_i$ hands

The data in 19 show that the occurrence of morph-*i*- in the object slot prohibits the occurrence of other object markers in the absence of causative morpheme, as displayed in a). On the other hand, the presence of causative morpheme-*i*- in b) creates an environment for contrastive distribution of the morph and the object marker *gu*- 'you'. The morph also allows the occurrences of other overt noun phrase object as shown in c). Hence this is a unique morphological property of verbal anaphors in Kisukuma.

Morph-*i*- in imperative structures

In imperative construction, morph-*i*- persists to be realized as a prefix occupying the position where other object prefixes are attached. Different from the other forms, the attachment of the morph-*i*- to the imperative structures helps to differentiate the imperative reflexive verbs from their reciprocal counterpart through the final vowel endings. The reflexive takes the final vowel *-e* to reflect its singular referent while reciprocal takes-*i* to reflect its plural referent as shown in 20:

20. a) *Ikolwage*

I-kolu-ag-e

RFM-hate-EXT-SG - REF

Hate yourself

b) *Ikolwagi*

I- kolu- ag-e

RCM-hate-EXT-PL-REF

Hate each other

The data in 20 indicate that the affixation process of the morph-*i*- and its impact in the imperative structure contributes to the meaning of the verb containing the morph.

Nominal anaphors

Nominal anaphors in Kisukuma are realized morphologically by distinct free lexical items such as *iyene/ng'wenekele/bhenekele* for self-expression as 'alone/myself/themselves' and *bhoyigubhoyi/iseguise* for each other expressions. This class of anaphors in Kisukuma reflects varied morphological forms depending on persons and number. They co-occur with the morph-*i*- to emphasize reflexivity or reciprocity as presented in 21:

21. a) *Agiilangang'wenekele*

A_i-gi-i_i-lang-a ng'we-nekele

3SM-PST-RFM-teach-FV 3SG-self

He_i/she_jtaught himself/$herself_i$

b) *Bhagiilangabhenekele*

Bha_i- gi-i_i-lang-a bhe- nekele

3SM-PST-RFM-teach-FV-3PL-self

$They_i$taughtthemselves$_i$

c) *Bhagiilangabhoyigubhoyi*

Bha_i-gi-i_i-lang-a bh- oyi-gu-bh-oyi

SM-PRES-RCM-teach-FV 3PL-each other

$They_i$ taught each other$_i$

The constructions in 20 show that free lexical anaphors in Kisukuma form some agreement in number with their antecedents. For instance, the singular prefix *ng'we* in *ng'wenekele* agrees with any person SM which is also singular, while the plural prefixing *bhe*-in *bhenekele* agrees with the noun class 2 plural antecedent SM-*bha*-. On the other hand, the reciprocal anaphor *bhoyigubhoyi* 'one another' reflects the plurality of the antecedent reflected on the subject markers.

Moreover, the syntactic anaphors in Kisukuma are determined by the presence of the verbal anaphors represented by the morph-*i*- so as to emphasize reflexive or reciprocal reading. This

result in different interpretation of nominal anaphors in Kisukuma compared to that found in isolating languages. In isolating languages such as English, nominal anaphors such as 'himself' and 'each other', among others, stand on their own and display anaphoric relation, while in Kisukuma are optional elements.

4.3 The Syntactic Properties of Anaphors in Kisukuma

The syntactic properties of anaphors in Kisukuma are characterized by the following syntactic features.

The Syntactic Disposition of RFM/RCM

The order in which RFM/RCM attaches to the verb root reflects the syntactic environment in which reciprocal and reflexive are patterned by using the morpho-syntactic elements. In Kisukuma; both reflexive and reciprocal are bound anaphoric elements marked by the same morph-*i*-. The morph-*i*- always occurs before but near the verb root regardless of the number of other prefixes occurring with it. Hence, it is part of the verb internal arguments. For example,

22.a) *Nagiigonda*

Na$_i$ – gi –i$_i$-gond –a

SM – PST – RFM – bend – FV

I$_i$ bent myself$_i$

b) *Bhagagwigondya*

Bha-ga-gu-i-gond-i-a

SM – PST-OM- RFM- bends – CAUS – FV

They$_j$ made you$_i$ bendyourself$_i$

c) *Bhadag'wingondije*

Bha –da-n – i- gon- ij-e

SM – NEG – OM –RCM- bend -CAUS – FV

They$_i$ did not make you$_i$ bend each other$_j$

The data in 22 displays that morph -*i*- occupies such a position as an internal argument of the verb to ensure the locality condition of theanaphor, and its antecedent is not violated.

RFM/ RCM with Verb sub categorization

In Kisukuma the RFM/RCM subcategorizes transitive verbs rather than the intransitive ones for it to encode reflexivity or reciprocity as shown in 23:

23.a) *Bhalemmoga*

Bha-li- m-mog- a

SM-PRES- OM-shave-FV

They are shaving you

b) *Bhaliimoga*

Bha – li-i mog – a

SM – PRES – RFM/RCM- shave – FV

They$_{i/j}$are shaving themselves$_i$/each other$_i$

c)**Bhagiisimiza*

Bha-gi-i-simiz-a

SM – PST- RCM – walk – FV

They$_i$ walked each other$_i$

d) *Bhagiigimizya*

Bha$_i$-gi-i$_i$-simiz-i -a

SM – PST – RCM – walk – CAUS – FV

They$_i$ caused each other$_i$ to walk

The datain 23a) indicate the canonical transitive verb *moga* 'shave' that has two arguments. The external argument represented by the SM *Bha-* 'they' and the internal argument represented by the object marker-*m-* 'you'. In b), morph -*i*-through reflexivization/reciprocalization process has replaced the object marker by its attachment so as to encode reflexivity/reciprocity. On the other hand, in order to encode reflexivity or reciprocity in intransitive verbs as in d), verbal extensions such as applicative or causative must be added so as to transitivize the verb. Opposite to that prerequisite, the construction remains ungrammatical as it is displayed in c.

The RFM/ RCM with Operation on Argument Structure

In Kisukuma both reflexive and reciprocal are valence-decreasing operations. This means that, when morph-*i*- is attached to the verb, it reduces transitivity features of the verbby reducing the number of syntactically active internal arguments. This observation challenges the argument by Amidu, Kioko, Matsinhe and Mchombo, who present that only the reciprocal marker-*an*-is a valence-reducing morpheme and reflexive marker is not as it is considered the object marker like other object markers. For example:

24.a) *BhalesonaBhanhu*

Bha-li-son- a Bha-nhu

2SM-PRES-Point-FV-NC2-people

They are pointing the people'

b) *Bhaliisona*

Bha$_i$-li-i$_i$-son-a

SM-PRES-RCM-point-FV

They$_i$ are pointing each other$_i$

c) *Yohanaalelugalanyango*

NC1*Yohana-a-le-lugal-a* NC3*nyango*

NC1YohanaSM-PRES-close-FV NC3 door

Yohana is closing the door.

d) *Nyangogwilugala*

NC3*Nyangogu-i-lugal-a*

NC3 door SM-'RFM-PST-Close-FV

The door$_i$ closed by itself$_i$

From the example in 24a), a verb is a default transitive verb. On the other hand b) manifests the canonical valence reducing operation in which a transitive verb in a) has been destransitivized by decreasing an internal argument *bhana* when *-i-* is attached to the verb. The reduced element could be the internal argument as in b) or the agent causative as in d) where the agent causative *Yohana* in c) has been reduced to encode anti causative reflexivity.

The RFM/ RCM with the Antecedent

The RFM /RCM anaphors represented by the morph-*i*-in Kisukuma takes the appropriate antecedent to be the whole NP which is made up of both R – expressions and the subject marker. This comes from the fact that the SM gets the nominal agreement features from the R – expression whether it is overtly or covertly manifested. Therefore, the SM takes such a position in the verb structure to fulfill the morpho-syntactic requirement of the language under study. For example,

25.a) *Ng'wana aliiyoojaiyene*

NC1*ng'wana$_i$ a$_i$-li-i$_i$-og-i-a iyene*

NC1child SM-PRES-RFM-wash CAUS-FV-self

(The) child$_{i/j}$ is washing herself$_i$/himself$_j$

b) *Bhakiimabhagiiseka*

Bha – kiima$_i$bha$_i$ –gi – i$_i$ – sek – a

NC2 Woman SM – PST – RFM/RCM laugh – FV

The women$_{i/j}$ laughed at themselves$_i$/ each other$_j$

The data in 25 indicates that the co-indexation that exists between the R-expression *Ngwana* 'child' and the SM *a-* 'S/he and *Bhakiima* 'women' and the subject marker *bha*-in a) and b) respectively reduces the long distance between R-expression and the morph-*i-* to local one. Hence introducing one condition that, the antecedent of the morph-*i-* is the whole NP made up of R-expression whose agreement features are mapped on the local SM.

RFM/RCM with Accusative Case

Verbs are inherently the assigners of accusative case while inflection assigns nominative case. In Kisukuma, reflexive and reciprocal verbs are derived from the basic verb by the attachment RFM/RCM. Therefore, the RFM/RCM is the transitivity reducing element that derives the transitive verb into an intransitive one. Intransitive verb takes only one syntactic argument: The external argument of the verb. Thus the intransitivizing attribute of the RFM/RCM when attached to the basic verb affects case assignment as it renders unaccusative verb; a verb that is incapable of assigning accusative case to the morph-*i-*. For example,

26.a) *BhanabhagabhutaMagua*

bha-ana 3PL bha-ga-bhut-a NC6 magua

NC2 child 35N-PST-cut-FV Nc6 sugar care

The children cut the sugar cane

b) *bhanabhagiibhuta*

Bha-ana$_i$bha$_i$-gi-i$_i$- bhut-a

NC2 child SM-PST-RCM / RFM-Cut-FV

The children$_{i/j}$ cut each other$_i$/themselves$_j$,

From the example in 26, the verb *bhuta* 'cut' in a) is transitive as it takes two arguments; the external argument *ng'wana* 'child' and the internal argument *igua* 'sugarcane', while the inflection assigns nominative case to the external argument *bhana* 'children'. In b), the reflexivization/reciprocivization process deprived the verbs' inherent ability to assign accusative case to the RFM/RCM as it is demonstrated by the configuration below:

[IP [NP *bhana*$_i$[SM *bha*$_i$[TMgi[NP[N RFM/RCM[*bhut* –a]]]]]]]]

Nominativecase

uncausative verb

From the configuration above, it is observed that the attachment of the morph-*i-* in the verb *bhuta* 'cut' deprived the verb's inherent ability to assign accusative case to its object due to the reduction of its internal argument *igua* 'sugarcane'.

Constraints on co-occurrence with other morphemes

The co-occurrence of the morph-*i-* with other morpho-syntactic elements is mostly restricted

to valence-increasing extensions, namely applicative and causative morphemes only. For example:

27.a) *Uliig'wenyela*

U-li-i-ng'ueny-el-a

SM- PRES-RFM-smile-Appl-FV

You$_i$ are smiling for yourself$_i$

b) *Bhagosha bhagiiyombya*

Bha-goshabha-gi-i-yomb-i- a

NC2 man SM PST- RCM-speak-CAUS-Fv

The men$_i$ made each other$_i$ to speak

The data in 27 indicate that the addition of applicative morpheme-*el*-in a) and causative morpheme *-i-* in b) in intransitive verbs *ng'wenya* 'smile' and *yomba* 'speak' in a) and b) respectively is licensed by the predicates themselves which results in the increase of internal argument in a) and external argument in b). Hence, the additional of these morphemes transitivize the verbs for the purpose of creating environment for them to encode reflexivity or reciprocity.

The RFM/RCM with Multiple Co-occurrences

The reconstructed proto-Bantu of verbal extension by Hyman 2007 is Verb – CAUS – APPL – REC – PASS. In Kisukuma the situation is revealed differently because the co-occurrence of the morph *-i-* with more than one verb extension is restricted on APPL – CAUS order and not the vice versa as shown in 28.

28.a) *Bhalisonelya*

Bha$_i$-li- i$_i$- son-el- i-a

SM-PRES-RCM-point APPL-CAUS-FV

They$_i$are making each other$_i$ to point for

b) **Bhaliisonyela*

Bha$_i$-li-i$_i$-son-i- el-a

SM-PRES-RCM-point-CAUS-APPL-FV

They$_i$ are making each other$_i$ be point for

The examples in 28 show that the co-occurrence of the morph-*i-* for RFM and RCM with multiple verbal extensions is restricted to the APPL – CAUS order only. The applicative morpheme-*el-* as in a) should precede the causative morpheme-*i-*. Opposite of that condition yields ungrammatical construction as in b), where as causative morpheme-*i-* preceded the

applicative morpheme-*el*-.

Forms of Anaphors and the Binding Relation in Sukuma

Unlike isolating languages, in Bantu languages, antecedents are represented by two competing NPs. Namely the overt NP for R-expression and the SM. This triggers a sort of formal discussion on what exactly deserves to be preselected as an antecedent between the two and the status of the remaining element. Since the defining characteristics of anaphors is to have the clause mate or local antecedent that C-commandsit through co-indexation condition. The C-command condition requires the antecedent to stand in the relation that neither the antecedent nor the anaphor dominates the other and that the node that dominates the antecedent also must dominate the anaphor. Let us consider figure 1.

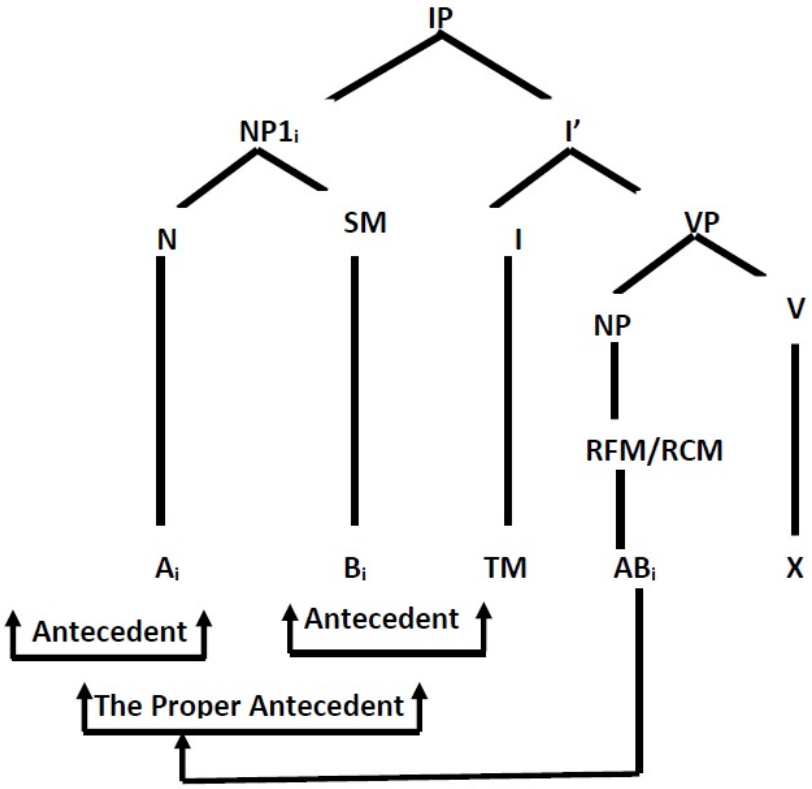

Figure 1. The appropriate antecedent

Figure 1 indicates the structural relationship between the whole noun phrase in the specified position represented by NP1 and its constituents: R-expression and the SM represented by A_i and B_i respectively. Both NPs are competing to be the antecedent of the morph-*i*- represented by AB_i. The co-indexation between A_i, B_i and AB_i displays the anaphoric relation that holds between AB_i (The morph-*i*-) and A_i (the R-expression) via the B_i (the SM) in Kisukuma.

Thus, the observation from figure 1 reveals that the SM alone represented by B_i despite its closeness to morph-*i*- represented by AB_i cannot be the antecedent of the morph-*i*-. This is

due to the reason that SM alone stands in the position that cannot C-command its dependent (The RFM/RCM). Therefore, the proper antecedent in this structure is the whole NP1. Because the node that dominates the NP1 (the IP) also dominates the node that holds the RFM/RCM. Hence the big NP1 C-commands the RFM/RCM with regard to the binding principle A and the government condition.

Therefore the structural relationship showing the binding relation between the antecedent and the anaphor in the syntactic tree diagram should hold between the whole NP and the morph-*i*-. The big NP1 with its constituents should occupy the specified position so as to be able to bind its anaphor in terms of C-command and co-indexation as presented in the figures 2, 3,4 and 5.

29. *Yohanaahigonda*

Yohana$_i$a$_i$-li-i$_i$- gond-a

Yohana SM-PRES-RFM-bend-FV

Yohana$_i$ bends himself$_i$

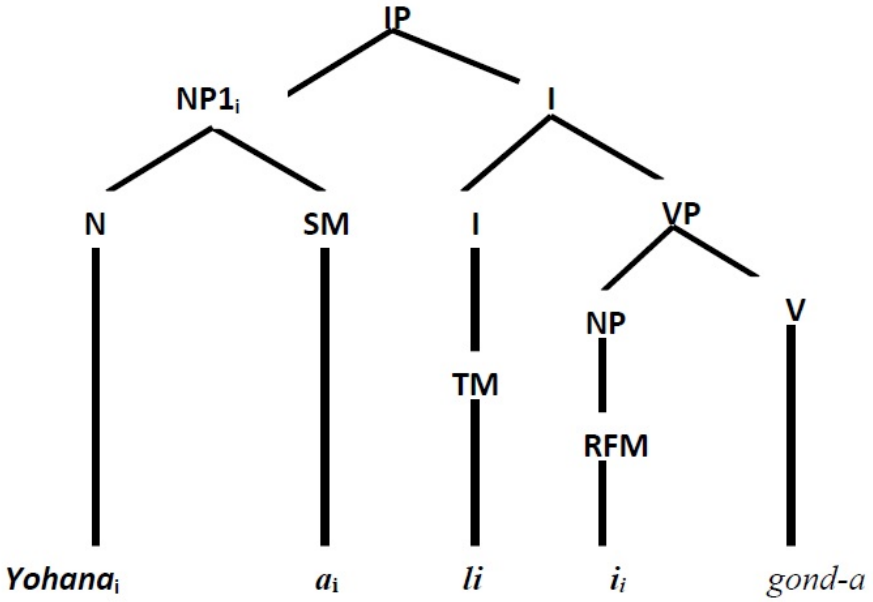

Figure 2. Reflexive binding

Source: *Field Data*

Figure 2 indicates that the proper antecedent is NP1with its constituents; the R- expression *Yohana* and the SM-*a*- in the subject position. The NP1 (antecedent) binds its anaphor in terms of co-indexation and C-command because the node that dominates it (the IP) also dominates the RFM-*i*-. In terms of precedence, NP1 precedes all other morpho-syntactic elements. Therefore, under the government condition, NP1 is the head word (the governor).

30. Mabhasa bhaliikola

Ma-bhasa$_i$bha$_i$ –li- $_i$-kol-a

NC2 twin SM – PRES – RCM – resemble – FV

Twins$_i$ resemble each other$_i$

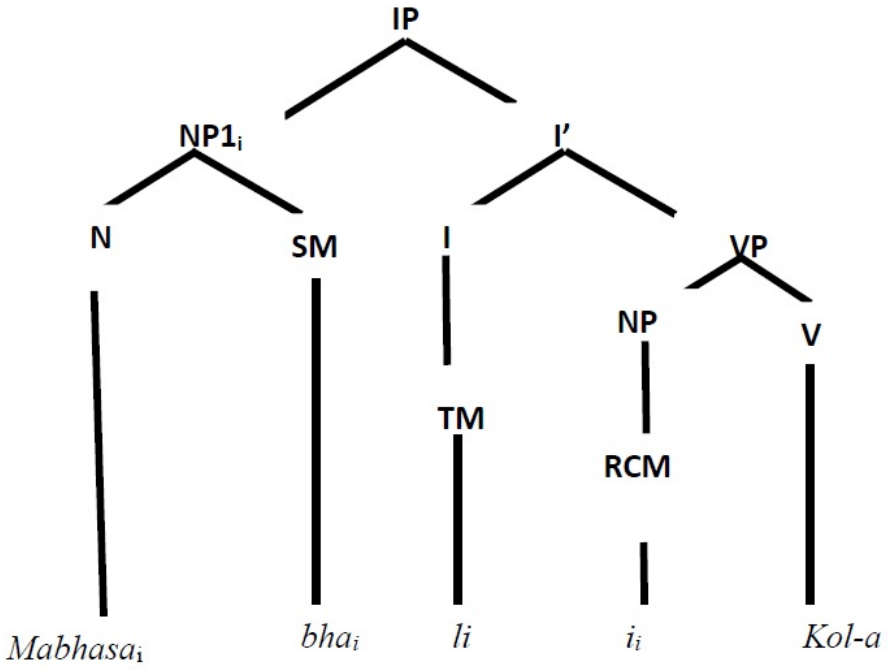

Figure 3. Reciprocal binding

Since reflexive and reciprocal in Kisukuma are marked by a same morph-*i*-, figure 3 indicates the syntactic tree diagram that looks similar to that of reflexive marker. Hence, it is worth to say that both reflexive and reciprocal markers in Kisukuma have the same syntactic and morphological properties.

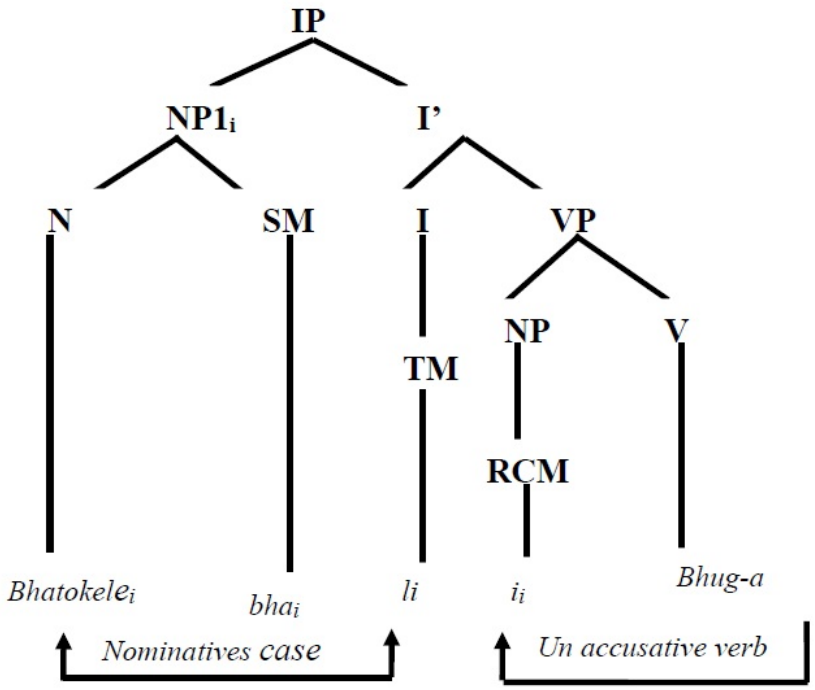

Figure 4. The RFM/RCM with accusative case

Figure 4 indicates that reflexive verb *bhuga* 'hug' in Kisukuma cannot assign accusative case to it. This is because the attachment of morph-*i*- to the intrinsically transitive verb has reduced the active internal argument. Thus, the reduction of the internal arguments deprived the verb of inherent capability to assign accusative case since what was regarded to be the internal argument has moved to the subject position playing the role of both the agents and the patients semantically

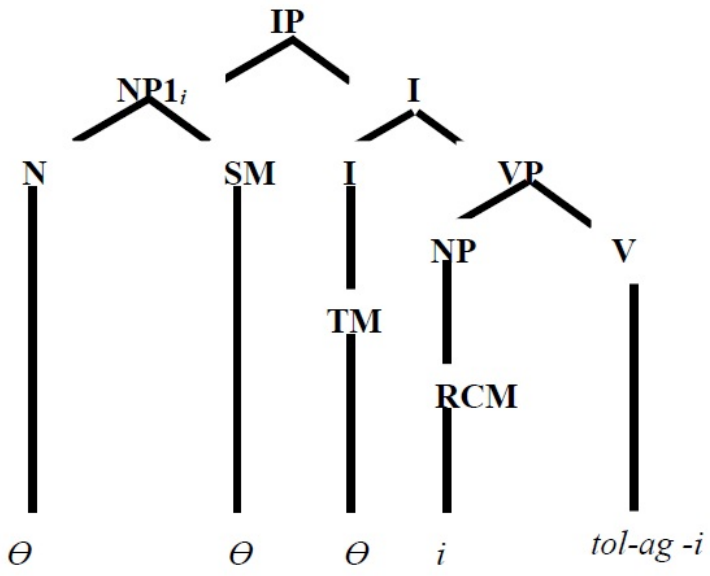

Figure 5. Binding in imperative construction

Figure 5 indicates that in imperative construction, the antecedent (both the R-expression and the SM) are not phonetically manifested overtly in the syntactic tree diagram. This implies that the binding principle "A" in imperative reflexive and reciprocal is applied indirectly to mean that the antecedent is covertly realized through the final vowel ending.

5. Conclusion

From the findings, it is observed that Kisukuma uses both nominal model and verbal affixes model to express the notion of anaphors although the verbal model seems to be the dominant over the nominal model. This makes anaphors in Kisukuma to be unique compared to those in isolating languages such as English, which use the nominal model only. While anaphors in verbal form are expressed by the single form (morph-*i*-), nominal anaphors are expressed by distinct grammatical expression that co-occur with the morph-*i*- to emphasize reflexivity or reciprocity. Verbal anaphors are used to mark a wide range of distinct but related notions that develop from the primary reflexive and reciprocal interpretation and extends to other interpretations when it combines with a wide range of other lexical verbs and extensions, such as applicatives and causatives to acquire other interpretation, such as chained action, pretense, anticausative, asymmetrical reciprocal, derogatory, decomitative and lack of reason. Morphologically, both reflexive and reciprocal in affixal form are prefixes occupying the OM marker slot by the affixation process and nominal anaphors in nominal form are free lexical items. Syntactically, anaphors in Kisukuma, both reflexive and reciprocal, exhibit valence-reduction property that in turn renders unaccusative verb; a verb that is incapable to assign accusative case to the forms of anaphors due to its reduced transitivity. In the structural relationship; anaphors in Kisukuma select the whole NP1 as its antecedent rather the SM alone.

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