

Research Article

# The Anaphoric Relations in Jita: A Government and Binding Perspective

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## Abstract

This paper delves into anaphoric relations in Jita, a Bantu language spoken in the Majita area in Mara region, Tanzania. Majita is situated to the southwest of Musoma town and on the southeast bank of Lake Victoria, specifically in the Butata and Makojo villages where the study was conducted. The study drew inspiration from Universal Theory of Government and Binding, focusing on Binding theory. It employed a qualitative research approach and snowball sampling technique to select informants. Data collection methods included sentence questionnaires and grammaticality judgments, and the data were analysed descriptively using a code system and geometry tree. The findings reveal that in Jita, reflexive and reciprocal anaphors are expressed as verbal affixes (-i- and -an-) respectively, and also subject markers such as *ni-* 'I', *chi-* 'we', *a-* 'he/she', *mu-/u-* 'you' and *bha-* 'they' behave like anaphors while pronominal can be realized as both verbal affixes such as *chi-* 'us', *m-* 'me', *mu-* 'him/her' and *bha-* 'them' and personal pronouns such as *anye* 'me', *awe* 'you', *amwe* 'you' in syntactic constructions. The paper also delves into the relationships between the anaphors and their antecedents in syntactic constructions, shedding light on the intricate nature of anaphoric relations in Jita.

## Keywords

Anaphoric Relations, Noun Phrase, Binding Conditions, Domain

## 1. Introduction

The paper focuses on the investigation of anaphoric relations in Jita. The anaphoric relations involve the relation between noun phrases. These noun phrases include anaphors, pronominal and R-expressions [6]. The realizations of forms of noun phrases differ from one language to another. However, the anaphors whatever in their realization function referentially with their antecedents in accordance to binding principle A which states that, anaphor must co-refer with its antecedent in the same domain. The pronominal may but not must be bound to its antecedent and R-expressions are free

everywhere in a syntactic construction. This is in accordance with binding principle B and C respectively. In Jita, the anaphors and pronominal as in other Bantu languages are realized as affixes attached to the verb root. Many scholars investigated the forms and binding relations among noun phrases across various Bantu languages [16-20, 22, 26, 30, 31]. Jita as one among the Bantu languages in Tanzania is spoken in Mara region, Musoma rural at Majita area.

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## 2. Anaphoric NPs in Various Languages

The anaphoric NPs include anaphors, pronominal and R-expressions. Carnie defines anaphor as a noun phrase that obligatorily gets its meaning from another noun phrase [5]. They include reflexives (*themselves*, *herself*, *himself* *itself* and *ourselves*) and reciprocals (*each one*, *one another*) in English. Reflexive as a combination of pronominal element agreeing with the noun phrase in the same clause, marked by 'self' suffix which is normally inflected for person, gender and number. An anaphor must be bound in the binding domain. Carnie defines domain as a syntactic unit that is clause-like [5].

Haegeman asserts that pronominal includes words such as *him*, *them*, *her*, *us* and *me* in English. Pronouns need not be bound to its antecedent in a governing category while R-expressions are free everywhere in a syntactic construction [8].

### 2.1. The Form(s) Representing Anaphoric NPs

This section presents the forms of anaphoric NPs in various languages of the world including Bantu languages in which Jita is found. The anaphoric NPs are divided into 3 including anaphors (reflexive and reciprocal), pronominal and R-expressions.

#### 2.1.1. Reflexives and Reciprocal

In English language, the reflexives and reciprocals are free morphemes such as *herself*, *myself*, *yourself*, *itself*, *themselves*, *each other* and *one another* as shown in example 1.

1. a) Juma<sub>i</sub> loves himself<sub>i</sub>
- b) \*Rose<sub>i</sub> hurt himself<sub>i</sub>
- c) They<sub>i</sub> attacked each other<sub>i</sub>
- d) \*He<sub>i</sub> attacked each other<sub>i</sub>

Source: [8]

In example 1 a), b) c) and d), the reflexive and reciprocal in English are realised as 'himself' and 'each other', respectively. According to Chomsky, lack of agreement in terms of person, gender and number leads to ungrammaticality [6]. In case of reflexives, the sentence in 1a) is grammatical while 1b) is ungrammatical due to lack of gender agreement between antecedent *Rose* and the reflexive *himself*. Likewise, in reciprocals, a sentence in 1c) is grammatical while in 1d) is ungrammatical due to lack of number agreement between *he* and *each other*.

According to Kong & Volker, in Romance languages like Italian, reflexives and reciprocals are marked using 'si', while Spanish and Portuguese mark reflexives and reciprocals using 'se' as shown in example 2 [12].

2. a) *Maris si guarda*  
Maris<sub>i</sub> si guarda  
Ncl2 RFM-watch  
Maria<sub>i</sub> watches herself<sub>i</sub>
- b) *Gli student sisonopicchiatiuno all altro*

*Gli Studenti si<sub>i</sub> sonopicchiatiuno all altro*

The students REFL AUX hit/fight one to the other

The students<sub>i</sub> slapped each other<sub>i</sub>.

- c) *Juan se lava*

Juan<sub>i</sub> se<sub>i</sub> lava

Ncl2 RFM washed

Juan<sub>i</sub> washed himself<sub>i</sub>

Source: [12]

The examples in 2a), b) and c) from Romance languages indicate that reflexives and reciprocals are both marked by 'si' and 'se' and they appear as free morphemes in the syntactic constructions. This is similar to languages like English where reflexive and reciprocal are free morphemes like 'himself' and 'each other'.

In case of agglutinating languages, reflexives and reciprocals are realized in different forms (morphs) across different Bantu languages. Some Bantu languages use two distinctive linguistic forms to represent reflexive and reciprocals while others use a single morphological slot to represent both reflexive and reciprocals. Sikuku [28] demonstrates that Kiswahili reflexive and reciprocal are realised as bound morphemes and not free morphemes, with the reflexive morpheme being marked by *-ji-* and the reciprocal morpheme being realised as *-an-*. He adds that these reflexives act similarly to other English nominal reflexives such as *himself*, *herself*, *ourselves*, and *itself*. The distinction, as demonstrated in example 10, is that reflexive in Bantu languages like Kiswahili is inserted into the verb root through the morphological process known as affixation.

3. a) *Mtoto anajipenda*

Mtoto<sub>i</sub> a<sub>i</sub> -na-ji<sub>i</sub> -pend-a

Child SM-PRES-RFM-like-FV

'The child<sub>i</sub> loves himself<sub>i</sub>'

- b) *Anajipenda*

A-na-ji-*pend-a*

SM-PRES-RFM-love-FV

'She loves herself'

- c) *Watoto wanapendana*

Watoto<sub>i</sub> wa-na-*pend-an-*a

Children SM-PRES-love-RFM-FM

'Children<sub>i</sub> love each other<sub>i</sub>'

Source: [28]

In example 3a), b) and c), the data reveal that, reflexives and reciprocal forms in Kiswahili are of two separate verb affixes. The reflexive is *-ji-* and reciprocal is realized as *-an-* as indicated in example 3a) and b) for reflexives and 3c) for reciprocal.

Additionally, Muriungi claims that in the syntactic constructions of Ki-Imenti, a Bantu language spoken in Meru Central and North Imenti in Kenya, the findings demonstrate that reciprocal is marked by *-an-* and reflexive is realised by *-ci-*, as seen in example 4 [17].

4. a) *John naciendete*

John<sub>i</sub> na-ci<sub>i</sub> -endet-e

John-SM-FRM-love-FV

‘John<sub>i</sub> loves himself<sub>i</sub>’

b) *Aana ibakurumana*

*Aana<sub>i</sub>-ba-ku-rum-an<sub>i</sub> -a*

Children F-SM-PRES-insult-RCM-FV

‘Children<sub>i</sub> are insulting each other<sub>i</sub>’

c) *Kimathi araciuragithirie Karimi*

*Kimathi<sub>i</sub> a-ra-ci<sub>i</sub>-urag-ith-ir-i-e Karimi*

Kimathi SM-pst-RFM-kill-coerce-ic-FV Karimi

Kimathi<sub>i</sub> forced himself<sub>i</sub> to kill Karimi

Source: [17]

The constructions in 4a) b) and c) indicate that, reflexive and reciprocals are represented by two different linguistic forms *-ci-* and *-an-* in Ki-Imenti.

In several Bantu languages, reflexives and reciprocals are distinguished by a single form, in contrast to the viewpoint presented above. Schadeberg argues that most of the languages spoken in Angola, such as Luvale, mark reciprocal using reflexive object concord rather than the suffix *-an-* which is frozen [26]. However, Nurse points out that, languages in zones such as F, H, K, R and some languages in zone C show the formal overlap between the reflexive and reciprocal markers where the reciprocal is marked by the reflexive prefix as shown in example 5 [22].

5. a) *Valima nakuliveta*

*Vali<sub>i</sub>na<sub>i</sub>-ku-li<sub>i</sub>-veta*

They FUT-3pl-RCM/RFM/RCM-beat

They<sub>i</sub> are going to beat one another<sub>i</sub>/ themselves<sub>i</sub>

b) *Vyumavi nalifwane*

*Vyuma<sub>i</sub>vi<sub>i</sub>-na-li<sub>i</sub>-fwane*

Things 3PL-PERF-RCM/RFM/RCM-resemble

The things<sub>i</sub> have resembled each other<sub>i</sub>/themselves<sub>i</sub>

Source: [14]

The sentences in 5a) and b) show how the reflexive marker *-li-* has multiple functions in Luvale as it marks both reflexive and reciprocal meanings. It also takes the same position as a prefix in the verb root.

Moreover, when looking at the other functions of reflexives besides encoding reflexive meaning, Ngwasi reveals the way these two linguistic morphemes share the same morphological slot in Bantu languages like Hehe (G62), Nilamba (F31) and Nyaturu (F32) where both are marked by form *-i-* as shown in example 6 [21].

6. i) Reflexive

a) Hehe

*Juma akiwene mukilole*

*Juma a-ka-i-on-ile mu-ki-lole*

Juma 2SM-PST-RFM-see-PERF CL17-CL7-mirror

‘Juma saw himself in the mirror’

b) Nilamba

*uJuma ukiona mukioo*

*u-Juma u-ka-on-a mu-ki-oo*

Aug-Juma 1SM-PST-RFM-see-FV CL17-CL7-

mirror

‘Juma saw himself in the mirror’

c) Nyaturu

*Juma aghiona ughiyoo*

*Juma u-gha-i-on-a u-ghi-yoo*

Juma 1SM-PST-RFM-see-FV CL17-CL7-mirror

‘Juma saw himself in the mirror’

ii. Reciprocal:

a) Hehe

*Naftari na Jumava kiwene*

*Naftali naJumava-ka-i-ona-ile*

Naftali conjJuma 2SM-RFM-see-PERF

‘Naftali and Juma will see each other/themselves’

b) Nilamba

*uNaftali na Kiliani ionile*

*u-Naftali na u-Kiliani a-i-on-ile*

aug-Naftali conjaug-Kiliani 2. SM-RFM-PST-see-PERF

‘Naftali<sub>i</sub> and Kiliani<sub>i</sub> saw each other<sub>i</sub>/themselves<sub>i</sub>’

c) Nyaturu

*Naftali vina Kilianivi ghiona*

*Naftali conjKiliani vi-gha-i-on-a*

Naftali and Kiliani 2. SM-PST-RFM-see-FV

‘Naftali and Kiliani<sub>i</sub> saw each other<sub>i</sub>/themselves<sub>i</sub>’

Source: [21]

The constructions in 6 i) and ii) indicate that some Bantu languages share the same form of reflexive and reciprocal (a single linguistic morph *-i-*). The only difference is that in reflexives the referents are singular (*uJuma*) while in reciprocal they are plural (*uNaftali na uKiliani*). It seems in these languages that the reciprocal cannot have a subject in singular. This paper investigated the representation of reflexive and reciprocal in Jita among others.

The two different perspectives of representing reflexive and reciprocal in Bantu languages are of interest in the current paper of anaphoric relations in Jita to identify how these anaphors are represented in the language.

### 2.1.2. The Form(s) Representing Pronominal and R-expressions

Pronominal are the non-reflexive pronouns such as *her*, *him*, *them*, *it*, *me* and *you* in English which may, but not must, be bound in their Governing Category (GC). In Bantu languages, Pronominal are morpho-syntactically studied as reflexives and reciprocals. The form that represents the pronominal in syntactic construction is referred to as object marker (OM). R-expressions include proper nouns like *Juma*, *Asha*, *Joseph* and *Aneth*, just to mention a few, and common nouns like *student*, *woman*, and *man* which are free everywhere in any syntactic constructions. R-expression in Kiswahili, for instance, can be replaced by subject markers such as *ni-* ‘I’, *a-* ‘he’ or ‘she’ *wa-* ‘they’ *tu-* ‘we’ depending on the noun class and person in which the noun is found [15].

According to Breartha analysis of verb structures in specific languages, there are a number of arguments that may or may not be present with a particular verb or class of verbs [1]. The arguments can be expressed in a number of different

ways, such as entire nouns or nominal phrases, pronominal elements inserted into verb forms (known as clitics, concord, prefixes, or subject/object markers), separate pronouns, or zero. Grammatical agreements exist between the subject and the class-marking prefix on the verb (the subject marker) in one-place predicates.

7. a) *Kitabu kimeanguka (Kiswahili)*  
*Ki-tabuki-me-anguk-a*  
 7—book SM7-PERF-fall-FV  
 ‘A/the book has fallen’
- b) *Juma alimpiga mtoto (Kiswahili)*  
*Juma a-li-m-pig-a m-toto*  
 Juma SM-PST-OM-hit-FV Ncl1-child  
 ‘Juma hit the child’  
 Source: [1]
- c) *Wekesa apa omwaana (Bukusu)*  
*Wekesa a-p-a o-mu-aana*  
 Wekesa SM-hit-FV cl-cl1-child  
 ‘Wekesa hit the child’

Source: [13]

In 7a), b) and c) the data indicate that, *Kitabu*, *Juma* and *Wekesa* are R-expressions. This means that they are free everywhere. *Ki-*, and *a-in* a), b) and c) are subject markers in the sentences. It would be deemed improper for the verb to appear without the subject marker (SM) prefix. However, as demonstrated in example 8, the lexical subject ‘*Ki-tabu*, *Juma* and *Wekesa*’ can be omitted with just a representation of the subject marker.

8. a) *Kimeanguka*  
*ki-me-anguk-a*  
 SM7-PERF-fall-FV  
 ‘It (Book) has fallen’  
 Source: [1]
- b) *Alimpiga mtoto (Kiswahili)*  
*A-li-m-pig-a m-toto*  
 SM-PST-OM-hit-FV Ncl1-child  
 ‘He hit the child’.
- c) *Apa omwaana (Bukusu)*  
*A-p-a o-mu-aana*  
 SM-hit-FV cl-cl1-child  
 ‘He hit the child’

Source: [13]

In example 8a), b) and c) lexical subjects are omitted from the sentence and subject markers stand alone. This indicates that, SM is an obligatory element that may or not occur with lexical subject in Kiswahili and Bukusu.

As opposed to other nouns like *Kiti* which require a class 7 SM, the hearer would have to infer from the context of the natural language string that the SM *Ki-* refers to a book. The verb form takes an object marker (OM) in the majority of Bantu languages only in two circumstances: when the object designates a member (or members) of the human species, and when the object has already been established in context and requires interpretation. In some situations, the object marker in Kiswahili can be used in place of an object noun,

as seen in example 9.

9. a) *Mtoto anakisoma kitabu*  
*M-toto a-na-ki-som-a ki-tabu*  
 1-child SM-PROG-OM-read7-book  
 ‘The child is reading the book’
- b) *Mtoto anakisoma (kitabu)*  
*M-toto a-na-ki-soma (book)*  
 1-child SM-PROG-OM7-read  
 ‘The child is reading it (book)’
- c) *Mtoto anasoma Kitabu*  
*M-toto a-na-som-aki-tabu*  
 1-child SM-PROG-read FV book  
 ‘A child is reading book’

Source: [1]

The sentences in example 9a), b) and c) reveal that, in some languages such as Kiswahili, object markers can appear without an object noun and nevertheless give the sentence the same meaning. Likewise, the lexical object may appear without OM. That means, the OM and lexical object are optional that you may have one of the two or both as in 9b) and c).

In relation to this, Givon asserts that, for Bantu languages, it is beyond a reasonable doubt that agreement markers descended from pronouns since, as he notes, without the noun phrase, agreement markers fulfil the same purpose as pronouns [7]. According to Riedel, the object markers in the majority of Bantu languages are integrated pronominal that are joined to the verb stem directly, as seen in example 10 [25].

- 10 a) *Aliwaona*  
*A-li-wa-on-a*  
 1-SM-PST-2-OM-see-FV  
 ‘He saw them’
- b) *Azahamouna*  
*a-za-ha-mu-on-a*  
 SM-PERF.DJ-16.OM-1.OM-see-FV  
 ‘He saw him there’
- c) *Abaanaba arayanyoye*  
*A-ba-aanaba-a-ra-ya-nyo-ye*  
 AUG-2-child 2-SM-REM-DJ-6.OM-drink-PERF  
 ‘The children drank it’

Source: Riedel [25]

In 10 a), b) and c), the object markers –wa-, ‘them’ -mu- ‘him’ and -ya- ‘it’ in Kiswahili, Kisambaa and Kinyarwanda, respectively can occur without lexical object in the sentence and still the language become grammatical. The current study wants to see what happens in Jita when the nominal object is omitted in the sentence. The study also needs to understand which anaphoric NP is obligatory or optional between the PM (pronominal markers) and lexical object.

## 2.2. Binding Conditions

This part covers some constraints that govern the relationships between NPs in the sentence. The anaphoric relation in

any language is controlled by some conditions that regulate the interpretation of meaning. For the NP to govern or to be governed by another NP, there must be binding conditions which lead to the grammaticality of the sentence.

#### *Binding Constraints in Bantu Languages*

In contrast to an anaphor, which must acquire its meaning from another NP in the local domain i.e. a phrase or clause, a pronominal is an NP that may (but need not) get its meaning from another word in the sentence [5]. That is to say, a pronoun must be free in its local domain while a reflexive must be confined. Example 21 illustrates how to locate the nearest subject and the governor of the reflexive in order to identify the binding domain for reflexive [8].

11. a) *A<sub>i</sub> gbidye iyolna<sub>i</sub>*  
‘She/he beat himself/herself’  
b) *A<sub>i</sub> gbidye un<sub>k</sub>*  
‘She/he beat him/her’  
c) *A<sub>i</sub> gbidye ve<sub>k</sub>*  
‘She/he beat them’  
*Terna<sub>i</sub> man terseer<sub>i</sub> soo ayolave<sub>i</sub>*  
Terna and terseer love themselves  
‘Terna and terseer love each other’

Source: [11]

In example 11 a) and d), anaphors *iyolna* and *ayolave* are bound to their antecedents, ‘A’ and *Terna* while in 11 b) and c), a pronoun, “un” and “ve” is not bound to ‘A’. According to Kuna, there are three universal rules that regulate how anaphors and pronominal are distributed in Tivas shown in example 12 [11].

12. *Se tese ayolase*  
*Se<sub>i</sub> tese ayolase<sub>i</sub>*  
We taught ourselves  
‘We taught ourselves’

Source: [11]

The reflexive *ayolase* ‘ourselves’ is bound to its antecedent *se* ‘we’ in the local domain. The reflexive and its antecedent are in agreement with regard to gender but not with regard to the nominal qualities of person and number. According to Reinhart, anaphoric expression is only conceivable in sentences that provide configurations, and its usage is both grammatical and significant [24]. Principle B: states that, a pronominal is optionally bound.

13. a) *Terna henerafa un*  
*Terna<sub>i</sub> hen er a<sub>i</sub> fa un<sub>k</sub>*  
Terna thinks that she knows him  
‘Terna thanks that she knows him’  
b) *Terna hen erwankwaseshonfa un*  
Terna thinks that girl the knows him  
‘Terna thinks that the girl the knows him’  
c) *Terna hen er a fa ve*  
Terna thinks that she/he knows them  
‘Terna thinks that she/he knows them’

Source: [11]

The data in 13 show that there must be a binder in the clause before the pronominal can be bound in an A-position.

An antecedent is not necessary for a pronoun to have meaning. The NP, a- ‘she’ is available close by. The location concept is irrelevant because *un* is independent of its antecedent, *Terna*.

Principle C: states that, R-expression must be free everywhere. According to Muriungi, *Ki-Imenti* reflexive is bound in its binding domain [17]. According to Chomsky binding principle A, this is the case [6]. The reflexive in *Ki-Imenti* must find an antecedent in its local domain as shown in example 14.

14. *Mwitimi naracigurire ngari*  
*Mwitimi<sub>i</sub> na-ra-ci<sub>i</sub> -gur-ir-e ngari.*  
*Mwitimi SM-PST-RFM-bring-APPAL-FV car*  
*Mwitimi<sub>i</sub> bought himself<sub>i</sub> a car*

Source: [17]

The reflexive morpheme *-ci-* in constructions in number 14 derives its meaning from the antecedent *Mwitimi* in the same clause. As seen in 15, the reflexive in *Ki-Imenti* cannot be co-indexed with an antecedent outside its local domain.

15. *\*Arimu betikitie atimwanai baciendete*  
*\*Arimu<sub>i</sub> be-tikiti-e atimwanai-ba-ci<sub>i</sub> -endet-e*  
Teachers SM-believe-FV-that child F-SM-RFM-FV  
The teachers<sub>i</sub> believe that the child loves himself<sub>i</sub>

Source: [17]

The co-indexation in 15 is incorrect because *Arimu* cannot be the antecedent of the reflexive morpheme *-ci-* because they are not in the same clause; *Arimu* is in the matrix clause and the reflexive *-ci-* is in the lower clause. Binding principle A is violated in this situation [17]. According to the binding principle A, which mandates that anaphors be bound in their own domain, this is compliant. Burzio also makes an observation that principle A is a tautology if a syntactic anaphor is a form that demands a local antecedent. Burzio contends that the under specification of attributes, such as a person, number, gender, or case, is essential to anaphors [2-4]. This concept is shared by Reinhart & Rauland [23].

### 3. Research Methods

The paper is qualitative in nature with descriptions, comparisons, analysis, categorization and explanation of data on anaphoric relations in Jita. The data were descriptively designed as argued by Kombo & Tromp that descriptive research determines and reports the way things are [10]. The data were collected from Mara region, Musoma rural, specifically at Majita area of Butata and Makojo. The study involved four informants obtained through snowball sampling technique. Sentence questionnaires and grammaticality judgments were used to collect data whereas code system and geometry tree were data analysis procedures.

### 4. Anaphors in Jita

Anaphors are the linguistic units that refer back to close



subject of the clause. In Jita, the anaphors are classified as reflexive, reciprocal and subject marker. The three linguistic elements are realized in different forms.

#### 4.1. Anaphors as Verbal Affixes

In Jita, the data indicate that, anaphors include reflexives, reciprocal and subject markers.

Reflexives in Jita are realized through morphological affix *-i-* in the verb root. The form *-i-* is positioned between the TAM and the verb root in a syntactic construction as shown in 16.

16. a) *Abhaana bheebhisa*

*a-bha-ana a-bha-i-bhis-a*

AUG-Ncl2-children 1.SM-RFM-hide-FV

The children hide themselves

b) *Omwigisibhwa keigira*

*o-mu-igisibhwa<sub>i</sub> a-ka-i<sub>i</sub>-gir-a*

AUG-Ncl 1 student SM-PRES-RFM-learn-FV

The student<sub>ij</sub> is learning by herself/himself<sub>ij</sub>

c) *Neeyumbakira*

*Ni-a-i<sub>i</sub>-yumbakir-a*

SM-PRES-RFM-build-FV

I have built for myself

In 16 a), b), and c), the data indicate that, reflexive in Jita is marked by morph *-i-* which is placed between the TAM and the root of the verb. In addition, reflexive and pronominal markers (Object Markers) are two distinct linguistic forms. They both share the same position in the verb template. Thus, they are in complimentary distribution. They are similar syntactic categories as shown in example 17.

17. a) *Amuyane emilimu*

*A-ma-mu-yan-e e-mi-limu*

SM-PST-OM-give-FV AUG-Ncl4-work

He gave him a work

b) *Sophia ambuma*

*Sophia a-ma-m-bum-a*

Sophia SM-TAM-OM-beat-FV

Sophia beat me

c) *Neeyana emilimu*

*Ni-a-i-yan-a e-mi-limu*

SM-TAM-RFM-give AUG-Ncl4 -work

I have given myself a work

d) *Sophia ameebhuma*

*Sophia a-ma-i-bhum-a*

Sophia SM-TAM-RFM-beat-FV

Sophia beat herself

OM, *-mu-* and *-m-* in 17 a) and b) and RFM, *-i-* in c) and d) occupy the same morphological slot between the TAM and the verb root. So, RFM and OM in Jita cannot co-occur in the same clause. The context of complementarities in distribution between RFM and OM is also seen in some Bantu languages like Kamba by Kioko [9]. The differences between reflexive and pronominal markers are in the reference. The reflexive marker *-i-* refers to SM or lexical subject in the

same local domain while the pronominal marker *-mu-* and *-m-* refer to the lexical object and therefore, it is the antecedent of the pronominal marker.

On the other hand, reciprocal is realized as *-an-* in Jita. It is different from reflexive marker *-i-*. This is similar to some other Bantu languages like Bukusu and Ki-Imenti, the Bantu languages spoken in Kenya where reflexive and reciprocal markers are two distinctive linguistic forms. Reciprocal is fixed after the verb root in the verbal template. It is also governed by its antecedent in the same clause as in example 18.

18 a) *bharuubhana*

*bha<sub>i</sub>-ruubh-an<sub>i</sub>-a*

SM-follow-RCM-FV

They<sub>i</sub> follow each other<sub>i</sub>

b) *bhaikana*

*bha<sub>i</sub>-a-ik-an<sub>i</sub>-a*

SM-talk-RCM-FV

They<sub>i</sub> are talking to each other<sub>i</sub>.

c) *Abhaigisibhwa abhasusana*

*A-bha-igisibhwa a-bha-sus-an-a*

AUG-Ncl2-students AUG-SM-resemble-RCM-FV

The students resemble each other

The constructions in 18 a), b) and c) exemplify that, in Jita, the reciprocal marker is *-an-* which comes after the root regardless of any other affixes attached to it. This is different from Kisukuma in which the reflexive and reciprocal are represented by the same (morph *-i-*) which also takes the same position in the verbal template as presented by Musa [18].

The subject markers in Jita behave like anaphors such as reflexive and reciprocal especially when they occur with overt subject. These include *ni-* 'I', *chi-* 'we', *bha-* 'they' *u-* 'you', and *mu-* 'you'. The SM is prefixed in a verb root. These have different forms depending on the noun classes to which the lexical subject belongs as shown in example 19.

19 a) *Juma amachibhuma*

*Juma<sub>i</sub>-a<sub>i</sub>-ma-chi-bhum-a*

JumaCl.1SM<sub>i</sub>-PST-OM-beat-FV

'Juma beat us'

b) *Misana na Malima Bhaighuliye indolelo*

*Misana na Malima<sub>i</sub> bha<sub>i</sub>-i<sub>i</sub>-gul-ie i-ndolelo*

Misana na Malima Cl.<sub>2</sub> SM<sub>i</sub>-open-RFM<sub>i</sub>-APP-AUG-window

'Misana and Malima opened the window for themselves'

c) *Anye neeseka*

*Anye ni-a<sub>i</sub>-isek-a*

Ncl1-ISM-PRES-RFM-lough-FV

'I lough by myself'

The examples in 19 a), b), c) and d) indicate that, the subject markers in Jita, are realised by different forms such as *a-*, *he/she* *bha-* 'they' and *ni-* 'I' respectively depending on noun classes for the person (the subject of the clause) whether it is overtly or covertly realized. Thus, the subject markers in this context get their interpretation from their antecedents.

This is similar to anaphors like reflexives as seen in examples 19 b) and c) which also take their interpretation from the antecedent in the same clause.

Moreover, in the absence of subject NP, the SM is an antecedent of the clause but still, it co-refers to someone or something covertly specified antecedent (PRO) in terms of gender, person and number as in example 20.

20 a) *Bhatwalana*

*bha-twal-an-a*

SM-send-RCM-FV

'They sent each other'

b) *cheelora*

*chi-a-i-lor-a*

SM-PRES-RFM-look-FV

'We look ourselves'

c) *Bhasekana*

*Bha-sek-an-a*

SM-lough-RCM-FV

'They lough at one another'

In 20 a), b) and c), the data reveal that subject markers, *bha-* 'they' and *chi-* 'we' can stand on their own in the syntactic constructions. So, they are appropriate antecedents in the clause. However, the SM yet refers to outside lexical subject with covert features of gender, person and number. With this reason, the SM behaves like anaphors. Thus, as a researcher, I conclude that, subject marker should be regarded as both, an anaphor on one hand and R-expression on the other, because it meets the binding principle A as anaphor and C as R-expression when it stands alone as the subject of the clause.

## 4.2. Pronominal

As it is in reflexives, and reciprocal, the pronominal in Jita is also classified as verbal affix and personal pronoun. They may but not must be bound in the local domain. This is in accordance with binding principle B [6].

### 4.2.1. Pronominal as Verbal Affixes

The pronominal are presented as verbal affixes in Jita. Such verbal affixes change depending on the noun class of the lexical object to which they refer. They are realised in different forms in different personal pronouns. Such affixes are *-mu-* 'him/her', *-bha-* 'them', *-chi-* 'us', *ni-*, *-m-* and *-ny-*, 'me' as shown in example 21.

21 a) *Omusilikale amabhagwata kegoro*

*O-mu-silikale<sub>i</sub> a<sub>i</sub>-ma-bha-gwat-a kegoro*

AUG-NC11-policeman SM-PST-OM-catch-FV evening

The policeman<sub>i</sub> caught them in the evening

b) *Sophia amambuma*

*Sophia<sub>i</sub> a<sub>i</sub>-ma-m-bhum-a*

Sophia-SM-PST-OM-beat-FV

Sophia beat me

c) *Amamuyane emulimu*

*A<sub>i</sub>-ma-mu-yan-e e-mu-limu*

SM-PST-OM-give-FV AUG-NC13 -work

He<sub>i</sub> gave him a work

In data 21 a), the pronominal markers are realised as *-bha-* in NC12 that denotes human beings (plural). In 21b) the pronominal is represented by an OM *-m-* which reflects first person singular and in 21 c) the data reveals that *-mu-* 'her/him' is a pronominal marker in NC11. Moreover, the data reveal that, there is a context in which a pronominal marker must co-occur with a lexical object in a syntactic construction as shown in example 22.

22 a) *Daudi amamubhulikira Musa ligolo;*

*Daud<sub>j</sub> a<sub>j</sub>-ma-mu<sub>i</sub>-bhulikir-a Musa<sub>i</sub>ligoro*

Daud SM-PST- OM-call-- FV Musa yesterday

'Daud called Musa yesterday'

b) *\*Daudi amabhulikira Musa ligolo*

*Daudi a-ma-bhulikir-a Musa ligoro*

Daudi SM-PST- call-FV Musa yesterday

'Daudi called Musa yesterday'

c) *Daudi amamubilikira*

*Daudi a-ma-mu-bilikir-a*

Daudi SM-PST-OM-call-FV

'Daudi called him'

In 22 a) the pronominal marker *-mu-* co-occurs with lexical object *Musa* and the sentence is grammatical. This is different from other Bantu languages like Kinyarwanda and Herero of which the pronominal marker never co-occurs with lexical object. In 38b), pronominal is deleted in the syntactic construction. This proves that, pronominal marker cannot be deleted in all contexts.

### 4.2.2. Pronominal as Personal Pronouns: Anye, Awe, Amwe, Eswe

In Jita language, there are pronominal which stand as personal pronouns in the syntactic constructions such as *anye* 'me', *eswe* 'us', *awe* 'you', *amwe* 'you', *awe* 'you'. These pronominal are not obligatory because they must co-occur with pronominal marker. The free pronominal morphemes are also optional linguistic elements in syntactic constructions as shown in example 23.

23 a) *Amina amachibhuma eswe ligolo*

*Amina a- ma- chi- bhum- a eswe ligoro*

Amina SM-PST-OM-beat – FV us yesterday

Amina beat us yesterday

b) *\*Amina amabhuma eswe ligolo*

*Amina a- ma- bhum- a eswe ligoro*

Amina SM-PST- beat – FV us yesterday

Amina beat us yesterday

c) *Amina amachibhuma ligolo*

*Amina a-ma-chi-bhum-a ligoro*

Amina SM-PST- OM-beat-FV yesterday

Amina beat us yesterday

23 a) indicates that, in Jita language, pronominal marker *-chi-* 'us' co-occurs with personal pronoun *eswe* 'us' and the sentence is acceptable. In 23 b), the pronominal is left out leading to ungrammaticality. On the other hand, 23 c) shows

that leaving out the personal free pronominal, *eswe* 'us' is acceptable in Jita. Thus, pronominal marker in Jita is obligatory while lexical object is optional.

### 4.3. R-expressions in Jita

R-expressions in Jita refer to both lexical subject NPs and subject marker. R-expressions are free everywhere. They are antecedents in the syntactic constructions.

#### 4.3.1. R-expression as Subject Marker in Jita

The subject markers on the other hand replace lexical subject in the sentence. Despite the fact that SM depends on the lexical subject in the syntactic constructions, SM can stand alone as the subject of the clause as shown in example 24.

##### 24 a) *Chiolane*

*Chi<sub>i</sub>-rol-an<sub>i</sub>-e*

SM-look-RCM-FV

We<sub>i</sub>lookateach other<sub>i</sub>

##### b) *Bharolane*

*Bha-rol-an-e*

SM-look-FV

They look each other

##### c) *Murole*

*Mu-rol-e*

SM-look-FV

You look

The SM such as *chi*-, 'we', *bha*-'they' and *mu*-'you' in 24 a), b), and c) respectively are used without the lexical subjects. In addition to that, subject marker is an obligatory linguistic element because it must be attached to the verb root whether the lexical subject is omitted or not. The SM is taken as the headword of the NP because it is an obligatory linguistic element in a syntactic construction as shown in example 25.

##### 25 a) *Abhayarakaji abheeseka*

*A – bha-yalakaji a-bha-i-sek-a*

AUG-NCI2 -girl PRES-SM-RFM-laugh-FV

The girls are laughing by themselves

##### b) \**Abhayalakaji eeseka*

*A – bha-yalakaji a -i-sek-a*

AUG-NCI2 -girl PRES- RFM-laugh-FV

The girls are laughing by themselves

##### c) *Abheeseka*

*A-bha-i-sek-a*

PRES-SM-RFM-laugh-FV

They are laughing by themselves

Example 25 a) verifies that, the co-occurrence of R-expression *Abhayalakaji* 'girls' and the subject marker(SM)-*bha*-'they' in Jita language is possible. In 25b), the deletion of subject marker *-bha*-'they' leads to ungrammaticality of the sentence while the omission of R-expression in 25c) does not affect the meaning of the sentence. Thus, it can be concluded that subject marker in Jita is obligatory while R-expression is optional. Hence, the noun phrase takes SM as a

headword and lexical subject as specifier. Unlike in isolating languages, the subject marker in agglutinating languages like Jita has also the linguistic features of anaphors. The SM normally refers back to the lexical subject in the syntactic construction. When an overt lexical subject is absent, the SM functions as R- Expression as it refers to an entity outside the construction i.e. in the world.

#### 4.3.2. R-expression as Proper and Common Noun in Jita

R-expressions in Jita are free everywhere. They drive their meanings from the world. They never depend on their interpretation from another linguistic element in the same sentence. They are lexical NPs in the sentence as shown in example 26.

##### 26 a) *Malima amubhumire Sophia*

*Malima<sub>i</sub> a<sub>i</sub>-mu<sub>j</sub> -bhum-ire Sophia<sub>j</sub>*

R-E SM-OM-beat-PERF-R-expression

Malima has beaten Sofia

##### b) *Anye nakutwala awe*

*Anye<sub>i</sub>ni-ku<sub>i</sub>-twal-a awe<sub>i</sub>*

I SM-OM-send-FV you

I send you

In examples in 26 a), *Malima* and *Sofia* are R-expressions which do not co-refer to each other neither do they refer to any other NP in the same sentence or clause. They refer to entities in the real world. In 26 b) *anye* 'I' is R-expression while *awe* 'you' is pronominal. Both, *anye* 'I' and *awe* 'you' do not co-refer to each other. They are free everywhere. This means that, they never depend on any other NPs in the construction.

### 4.4. Binding Conditions in Jita

In Jita, the anaphoric relations between NPs in syntactic constructions are governed by some conditions known as binding constraints to which the speakers of the language have to adhere when using it. This section covers both the binding relations and constraints as discussed below: -

#### 4.4.1. Binding Relations in Jita

This section states the way anaphor must be bound to an antecedent in the same clause and the kind of relationship that holds between anaphors and antecedents. It further indicates the way pronominal markers and R-expressions co-occur with other linguistic elements in the sentence.

##### *The Binding Conditions for Anaphors in Jita*

In Jita, the data reveal that, anaphors are classified into three categories, including reflexives, reciprocal and subject markers. The three anaphoric NPs are always bound to their antecedents in the local domain. This is in accordance with Chomsky [6] who says, an anaphor must be bound to its governing category. Since the anaphors in Jita are morphosyntactic, the researcher found the presence of binding conditions between



the anaphoric morphemes (reflexive and reciprocal) and the arguments in the subject position (their antecedents). The morphemes *-an-* and *-i-* carry the reciprocity and reflexivity, respectively. Thus, though they are merged into the verbs causing the verbs to be unaccusative and instigating the NP movement, the affixes still need to be governed.

#### Reflexive

Reflexive in Jita is bound with antecedent in its governing category. This is in accordance with [6] in his principle A which states that anaphor must be bound to its closer antecedent. The reflexive in Jita must find its antecedent in the same clause as shown in example 27.

#### 27. a) *Abhaana bheelola*

*a-bha-ana<sub>i</sub> bha<sub>i</sub>-a-i<sub>i</sub>-lol-a*

AUG- Ncl2-child SM-PRES-RFM-look-FV

The children<sub>i</sub> look themselves<sub>i</sub>

#### b) *Omusani wa Mabula amainyora*

*O-mu-sani wa Mabula a- ma-i-nyor-a*

AUG-Ncl1-friendcl1-of Mabula SM-PST-RFM-hit-FV

'Mabula's friend hit himself'

#### c) *Yohana aisosisha ebhinu*

*Yohana a-i-sosish-a e-bhinu*

Yohana SM-RFM-pay-FV AUG-bride price

Yohana paid himself a bride price.

In data 27, the reflexive *-i-* gets its interpretation from the antecedent *Abhaana* 'children', *Omusani* 'friend' and *Yohana* which is also reflected on the SM in the same clause. The reflexive must find its antecedent in the local domain. Therefore, the reflexive in Jita must be co-indexed with the antecedent in the same governing category. This can also be illustrated in Figure 1.

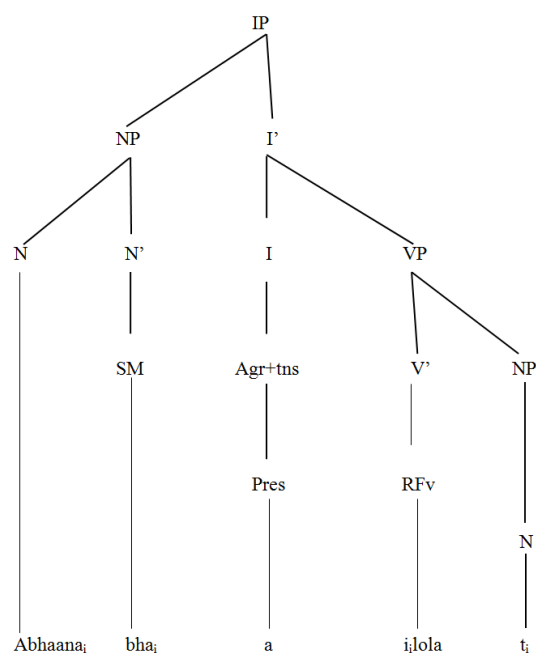


Figure 1. Reflexive binding.

In Figure 1, the reflexive marker *-i-* co-refers to its antecedent (NP *abhaana*, *bha*) in the sentence. The reflexive marker has covertly similar features of antecedent in terms of gender, person and number. The subject marker is a representative of R-expression. It governs the reflexive *-i-* in the syntactic construction. Thus, it is considered to be an appropriate antecedent in a sentence since it can stand without R-expression and retain the grammaticality as shown in example 28.

#### 28. *Abheelola*

*A - bha-a-i -lol-a*

AUG-SM-PRES-RFM-follow-FV

They look themselves

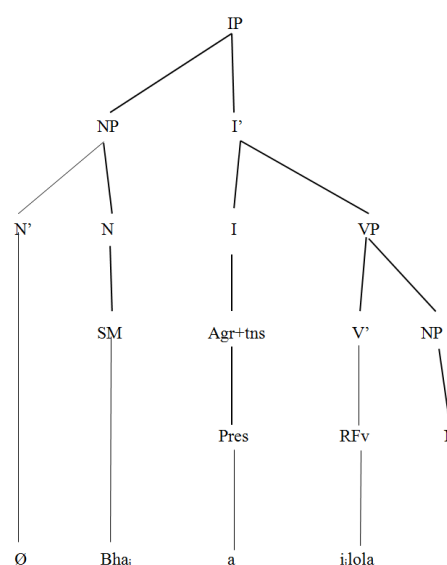


Figure 2. Reflexive binding.

In Figure 2, the data indicates that, the omission of lexical subject *Abhaana* 'children' does not affect the grammaticality of the sentence in Jita. This is because in Jita, the subject marker *-bha-* is a proper antecedent of the reflexive *-i-*.

#### Reciprocals

Reciprocal gets its meaning from its antecedent in the local domain. The reciprocal marker in Jita must find the antecedent in the same governing category. This also is in accordance with Chomsky [6] who says that the antecedent must govern the anaphor in the same clause as shown in example 29.

#### 29. a) *Malima na Misana bhamaruubhana*

*Misana na Malima<sub>i</sub> bha<sub>i</sub>-ma-ruubh-an<sub>i</sub>-a*

Malima and Misana SM-PST-follow-RCM-FV

Malima<sub>i</sub> and Misana<sub>i</sub> followed each other<sub>i</sub>.

#### b) *Abhaana abhasusana*

*A -bha-ana a- bha-sus-an-a*

AUG-Ncl2-child AUG-SM-resemble -FV

The children resemble each other

#### c) *Pili na John bhamalwana*

*Pili na John bha-ma-lw-an-a*

Pili and John SM-PST-beat-FV

Pili and John beat each other

Example 29 reveals that, the reciprocal marker *-an-* in a sentence co-refers to its antecedents, *Malima na Misana*, 'Malima and Misana' *Abhana* 'children' and *Pili na John* 'Pili and John', the subjects of the clauses. This meets the binding principle A as proposed by Carnie [5]. This is indicated in figure 3.

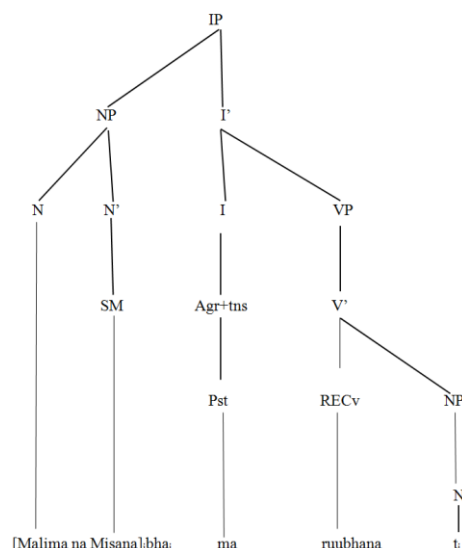


Figure 3. Reciprocal binding.

In Figure 3, like reflexive markers, a reciprocal marker is bound to its antecedent in the sentence. The reciprocal marker *-an-* is co-indexed with R-expression *Malima na Misana* in the same clause. However, the subject marker *-bha-* 'they' is an appropriate antecedent of the anaphor *-an-* as shown in example 30.

30. *bhamaruubhana*  
*Bha-ma-ruubh-an-a*  
 SM-PST-follow-RCM-FV  
 They followed each other.

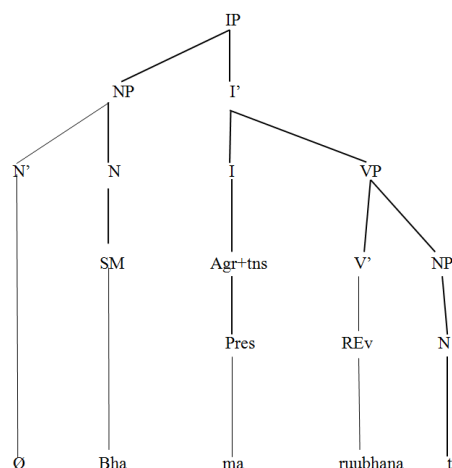


Figure 4. Reciprocal binding.

Figure 4, R-expression, *Malima na Misana*, is left out in the sentence and the subject marker *bha-* remains as the antecedent of the reciprocal *-an-* and the sentence is grammatical. The SM, *bha-* governs the reciprocal *-an-*

#### Subject Marker

As it is in reflexives and reciprocals in Jita, subject markers behave as anaphors. They also get their interpretation from the close subject in the local domain. This is especially when there is overt subject. The data indicates that, SM refers back to lexical subject in the same governing category. Thus, they must be governed by the subject of the clause as shown in example 31.

31. a) *Laata amamamila*  
*Laata\_i a\_i-ma-mamil-a*  
 FatherSM-PST-sleep-FV  
 'Father slept'  
 b) *Ana na John bheighishanyishe*  
*[Ana na John]\_i bha\_i-ighish-an-iish-e*  
 Ana and John SM-teach-RCM-APPL-FV  
 '[Ana and John]\_i taught each other\_i'  
 c) *Juma amabhabhwilie abhaana ati bheyenda*  
*Juma a- ma-bha-bhwil-ie a-bha-ana ati bha-i-end-a*  
 Juma SM-PST-OM--tell-APPL AUG-Nc 2-child that  
 SM-RFM-love-FV

Juma told the children that they loved themselves

In 31, the data indicate that, SM in Jita, behaves as anaphors. It must be bound to its antecedent in the local domain as in 31a) the SM, *a-* 'he' refers back to the subject, *Laata* 'father' in terms of number and person. In 31b), the SM, *bha-* in Nc2, refers to the subject *Ana na John* and in 31c) the clause is made up with two independent clauses where the non-class 1 SM, *a-* refers to external argument, *Juma* while *bha-* 'they' refers to external argument, *abhaana* 'children' with which they are in the same governing category. The SM, *bha-* in 31c) cannot refer to the lexical subject *Juma* and SM *a-* cannot refer to subject, *abhaana* 'children' because they are not found in the same local domain. This is in accordance with binding principle 'A' which says anaphor must be bound to its antecedent in the local domain [6].

#### 4.4.2. Pronominal

In Jita, pronominal markers (object markers) may but not must co-refer to their antecedents in the sentence. This is in accordance with the binding principle B Chomsky [6]. The pronominal markers and their binding conditions are exemplified in example 32.

32. a) *Amubhumire omwene*  
*A\_i-mu\_j-bhum-ire o-mwene\_j*  
 SM-OM-hit-PERF AUG-him/her  
 He/she\_i has hit him/her\_j  
 b) *Angelina na Kabula bhamabhabhuma abheene ligolo*  
*Angelina and Kabula\_j bha\_j-ma-bha\_i-bhum-a abheene\_i*  
*ligoro*  
 Angelina and Kabula SM-PST-OM-hit- FV them  
 yesterday

Angelina and Kabula hit them yesterday.

In the examples in 32a) and b), the pronoun *abheene* 'them' and *omwene* 'him' are there to emphasize the pronominal markers *-mu-* and *-bha-* in the sentence. They are not obligatory in the sentence as pronominal or object marker. However, both free and verbal affixes are free from governing category or close antecedents, *a-* 'he/she' and *Angelina na Kabula*, 'Angelina and Kabula' respectively.

Furthermore, pronominal marker in Jita permits the occurrence of lexical object in a syntactic construction as shown in example 33.

33 a) *Baraka amabhuma abhaana*

*Baraka a-ma-bha<sub>i</sub>-bhum-a a-bha-ana<sub>i</sub>*

Baraka SM-PST-OM-beat-FV AUG-Ncl.2-children

'Baraka beat the children'

b) *Omwigisibhwa amachisoma echitabho*

*O-mu-igisibhwa a-ma-chi<sub>i</sub>-som-a e-chi-tabho<sub>i</sub>*

AUG-Ncl.1-student SM-PST-OM-read-FV AUG-Ncl.7-book

'The student read the book'

c) *Musa aigwatile imbusi*

*Musa a-i<sub>i</sub>-gwat-il-e i-mbusi<sub>i</sub>*

Musa SM-OM-gwat-APPL-FV AUG-goat

'Musa caught the goat'

In the examples in 33, the findings indicate that, *bha*, 'them' *chi-* 'us' and *i-* 'it' are pronominal markers in noun classes 2, 7 and 9, respectively. These have relations with their lexical objects such as *abhaana* 'children', *echitabho* 'a book' and *imbusi* 'goat' in terms of noun classes, number and persons. This means that, the pronominal marker is also governed by its lexical object in the syntactic construction as shown in example 34.

34. *Baraka amabhabhuma abhaana*

*Baraka a-ma-bha<sub>i</sub>-bhum-a a-bha-ana<sub>i</sub>*

Baraka SM-PST-OM-beat-FV AUG-Ncl.2-children

Baraka beat the children

Source: Data from field.

In example 34, the object, *abhaana* 'children' is the antecedent of the pronominal marker *-bha-* in third person plural as it governs it. Thus, Jita can be classified among languages in type 1 which include Bantu languages whose pronominal permits the occurrence of lexical object in the same clause. This feature is also reflected in languages like Kiswahili, Ha and Kisambaa.

In addition, pronominal marker (PM) differs from reflexive and reciprocal in the sense that, it does not refer back to SM in the same clause rather it refers to lexical object in the local domain as its antecedent. In addition, both pronominal marker and lexical object are optional linguistic elements in some environment in the sense that one can be omitted without affecting the semantic content while in other context can be obligatory in a sentence as shown in example 35.

35. a) *Musa aigwatile imbusi*

*Musa a-i<sub>i</sub>-gwat-il-e i-mbusi<sub>i</sub>*

Musa SM-OM-gwat-APPL-FV AUG-goat

'Musa caught the goat'

b) *\*Musa aigwatile*

*Musa a-i-gwat-il-e*

Musa SM-OM-gwat-APPL-FV

'Musa caught it'

c) *Musa agwatile imbusi*

*Musa a<sub>i</sub>-gwat-il-e i-mbusi<sub>i</sub>*

Musa SM-gwat-APPL-FV AUG-goat

'Musa caught the goat'

In example 35a), the pronominal marker *-i-* co-occurs with lexical object *imbusi* 'goat'. the object, *imbusi* 'goat' in a sentence is obligatory that is, it cannot be omitted as in 35b) while pronominal marker *-i-* can be omitted in this context without affecting semantic content of the sentence as shown in 35 c)

Thus, this section describes how anaphors in Jita such as reflexive, reciprocal and subject marker co-refer to their antecedents in the same local domain. The pronominal marker also gets its interpretation from the lexical object in the same domain. Thus, the lexical object is the antecedent of the pronominal marker. Pronominal marker may but not must be bound to its subject in the same local domain. R-expression is always free everywhere.

## 4.5. Binding Constraints

In Jita language, the reflexive and reciprocal can never be bound with outside antecedent and therefore cannot be co-indexed with antecedent outside the governing category and if this happens, it leads to ungrammaticality of the sentence as shown in example 36.

36. *\*Monica amubwiliye Maria ati, eyende omwene*

*\*Monica<sub>i</sub> a<sub>i</sub>-mu-bwiliye Maria ati a-i<sub>i</sub>-end-e o-mu-ene<sub>i</sub>*

Monica -SM-OM-tell-Maria-that-SM-RFM-love - FV AUG-Ncl1-self

'Monica<sub>i</sub> told Maria that she loves herself<sub>i</sub>'

Example 36 is wrongly co-indexed because the outside antecedent Monica cannot be able to interpret the reflexive morpheme *-i-* which is not in the matrix clause. Thus, to correct this, the reflexive form *-i-* must be co-indexed by the antecedent 'Maria' which is in the same clause. This is in accordance with binding condition A whereby the anaphor must be governed by the closer antecedent. The right co-indexation would be as in example 37.

37. *Monica amubwiliye Maria ati, eyende omwene*

*Monica a-mu-bwiliye Maria ati a<sub>i</sub>-i<sub>i</sub>-end-e o-mu-ene<sub>i</sub>*

Monica -SM-OM-tell-Maria-that-SM-RFM-love - FV AUG-Ncl1-self

Monica told Maria that she<sub>i</sub> loves herself<sub>i</sub>

In 37, the data reveal that, Ncl.1 SM '*a*' is the antecedent of the anaphor *-i-*, the reflexive. The co-indexation is proper and therefore, the sentence is grammatical. Moreover, the anaphor cannot be co-indexed with the embedded subject in Jita syntactic construction as shown in example 38.

38. *Abhasubha bha Misana na Mukoma bhatekelana ebhi-*

lyo

*A-bha-subha bha Misana na Mukoma<sub>i</sub> a-bha<sub>i</sub>-tekel-an<sub>i</sub>-a ebhilyo*

AUG-Ncl2- parents of Misana and Mukoma PRES-SM-cook-RCM-FV AUG-Ncl8 food

[Misana and Mukoma's]<sub>i</sub> parents cook food for each other<sub>i</sub>

In example 38, the reciprocal *-an-* cannot be co-indexed with *Misana and Mukoma*, the embedded antecedents. The interpretation of reciprocal *-an-* in the sentence co-refers to the antecedent *Abhasubha* 'parents' as shown in example 39.

39. a) *Abhasubha bha Misana na Mukoma bhatekelana ebhilyo*

b) [*A-bha-subha bha Misana na Mukoma*]<sub>i</sub> *a-bha<sub>i</sub>-tekel-an<sub>i</sub>-a e-bhi-lyo*

c) AUG-Ncl2-parents of Misana and Mukoma PRES-SM-cook-RCM-FV AUG-Ncl8 food

[Misana and Mukoma]<sub>i</sub>'s parents<sub>i</sub> cook food for each other<sub>i</sub>

In example 39, the data indicate that the co-indexation indicated between the appropriate antecedent *Abhasubha bha Misana na Mukoma*, 'the parents of Misana and Mukoma', and reciprocal *-an-* is correct and therefore, the sentence is grammatical.

Chapter Four has provided a detailed exploration of anaphoric relations in the Jita language. It outlines the rules governing the behaviour of reflexives, reciprocals, and pronominal markers, emphasizing the importance of local domain binding. The chapter underscored the influence of Jita's noun classes, number, person, and other linguistic features on the binding relationships between elements in sentences. Additionally, it highlighted the flexibility of pronominal markers and their interaction with lexical objects in Jita, demonstrating how certain linguistic elements are optional in some contexts and obligatory in others. Generally, Chapter Four enhances our understanding of the syntactic and binding properties of Jita, contributing to the broader study of language typology and linguistic theory. It reveals the intriguing ways in which Jita adheres to binding principles and shares similarities with other Bantu languages. This insight enriches our knowledge of the structure and features of this language.

## 5. Conclusion

The findings confirmed that in Jita, reflexive markers are represented by *-i-* reciprocal markers by *-an-*, and pronominal markers by *-mu-*, *-m/-n-*, *-any-*, *-chi*, and *-bha*. Additionally, pronominal pronouns like *abeene* 'them', *omwene* 'him/her', *eswe* 'us', *anye* 'me', and *emwe* 'you' were identified in the language. R-expressions in Jita encompass common and proper nouns and subject markers such as *ni-* 'I', *chi-* 'we', *u-* 'you', *mu-* 'you', *bha-* 'they', and *a-* 'he/she'. These R-expressions often co-occur with subject noun phrases in a sentence and are considered obligatory elements within Jita's linguistic structure. Anaphors, such

as reflexives, reciprocals, and subject markers, are bound to their antecedents in the local domain. These linguistic elements refer back to their close antecedents, making them subject to government theory. Subject markers in Jita are obligatory elements in all contexts. They may be used with or without an overt subject. In contrast, R-expressions are optional elements. Subject markers also refer back to the overt subject in the same clause, aligning with binding principle A. Pronominal in Jita may or may not be bound to an antecedent in the local domain. They may also refer outside the clause. Notably, pronominal are not obligatory in all contexts and can be omitted without altering the sentence's semantic content. Lastly, the study unveils the binding conditions governing the relations between anaphoric noun phrases in Jita. These binding constraints stipulate that anaphors in Jita must be bound by their antecedents in the same clause, and the embedded subject cannot serve as the antecedent of the anaphors. Furthermore, pronominal and reflexive markers occur in complementary distribution, precluding their simultaneous attachment in the same syntactic construction.

## Abbreviations

AUG: Argument  
BT: Binding Theory  
FV: Final Vowel  
GBT: Government and Binding Theory  
NC: Noun Class  
NP: Noun Phrase  
OM: Object marker  
PERF: Perfective  
PL: Plural  
PM: Pronominal Marker  
PROG: Progress  
PST: Past Tense  
RCM: Reciprocal Marker  
RCP: Reciprocaql  
RCv: Reciprocal Verb  
RFL: Reflexive  
RFM: Reflexive Marker  
RFv: Reflexive Verb  
SM: Subject Marker  
TAM: Time, Mood and Aspect  
VR: Verb Root

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## Conflicts of Interest

The author declares no conflicts of interest.

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