Violation of Bijection Principle: More Evidence from Reflexive and Reciprocal Constructions of Selected Languages

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Abstract

This study investigates reflexivization and reciprocal constructions in the Basà, Hausa, Egbura/Igbira and Kònò languages which appear to be universally attested in languages. The assumption of reflexivization and reciprocal is that many languages do not usually repeat the subject in the object position; rather, a reflexive/reciprocal pronoun is expressed in grammatical constructions which is co-referential with the subject in the object position. Basà belongs to Western Kainji language family. It is spoken in North Central Nigeria, that is, all the Federal Capital Territory (FCT) councils, Kogi, Niger, Nasarawa and Benue states. Hausa genetically is a Chadic sub stock of Afro-Asiatic language family spoken, predominantly in northern Nigeria by not less than twenty four million people in Africa: nineteen million people in Nigeria, five million in Niger and one million in Cameroon, Togo and Benin. Egbura/Igbira is a Nupoid group of the Volta Niger of the Niger Congo language family spoken in Kogi, Nasarawa and the Federal Capital Territory (FCT). Kònò (Kwono or Konu) are situated in Saminaka. The language belongs to Kainji Eastern of Benue Congo language family. The aim and objective of this study is to show the limitation and weakness of the Bijection Principle and suggest a more universal method or approach which can account for other languages with contrastive parameters. In these languages, every pronominal subject-DP in a basic sentence displays an obligatory resumptive pronoun which functions assubject agreement [Subject Concord]. This study focuses on the syntactic position and function of Basà, Hausa, Egbura/Igbira and Kònò reflexive/ reciprocal constructions to answer the question "To what extent does the Bijection Principle valid universally?" the study discovered that the Bijection Principle is not valid universally, not even in the language where it is based. The Leipzig Glossing rule was used to interpret the data obtained. The finding from this study shows that reflexive constructions in the languages under survey violate the Bijection Principle in grammatical constructions which is supposed to be universal by examining the theoretical implications of the co-occurrence of resumptive pronoun/object agreement marker with reflexive binding. The study aligns itself with Sell (1985.5) which suggests that a syntactic theory should provide a descriptive space within which the range of variations found among other languages are precisely captured; that is, a theory should be flexible enough to allow all variations found.

Keywords: agreement, Basà, Bijection, binding, co-referential, Egbura/Igbira, Hausa, Kònò, reflexive construction and resumptive pronoun

Introduction

This study investigates reflexivization and reciprocity in the Basà, Hausa, Egbura/Igbira and Kònò languages which appear to be universally attested among languages in order to provide empirical evidence attesting to the handicap of Bijection Principle and make a suggestion of a method that is more universal. The assumption of reflexivization is that many languages do not usually repeat the subject in the object position; rather, a reflexive pronoun is expressed in grammatical construction which is co-referential with the subject in the object position.

Basà language belongs to Western Kainji of Kainji language family. It is spoken in North Central Nigeria, that is, all the Federal councils, Kogi, Nasarawa, Niger, and Benue states (Crozier and Blench 1992). Hausa genetically is a Chadic sub stock of Afro-Asiatic language family spoken predominantly in northern Nigeria by not less than twenty four million people in Africa: nineteen million people in Nigeria, five million in Niger and one million in Cameroon, Togo and Benin(Williamson, and Blench 2000). Egbura/Igbira is a Nupoid group of the Volta Niger of the Niger Congo language family spoken in Kogi, Nasarawa and the Federal Capital Territory (FCT). Kònò (Kwono or Konu) are situated in Saminaka. The language belongs to Kainji Eaten of Benue Congo language family(Crozier and Blench 1992).

Bijection principle derives from mathematics which refers to a bijective function of one-to-one correspondence, or invertible function is a function between the elements of two sets, where each element of one set is paired with exactly one element of the other set and each element of the other set is paired with exactly one element of the first set. There are no impaired elements. In Mathematics terms a bijective function XY is a one-one mapping of set X to a set Y. E.g.

X		Y
i.	⸻⟶	D
ii.	⸻⟶	B
iii.	⸻⟶	C
iv.	⸻⟶	A

Where elements of set X are in bijective function or relative with those of Y i.e. each element of X in paired with elements of Y.

i.   Each element of X is to be paired with the element of Y.

ii. No element of X should be paired with more than one element of Y.

iii.   No element of Y should be paired with more than one element of X.

In the linguistics sense of the concept, according to Lasnik and Uriagereka (1988), Bijection Principle of the Binding theory as proposed by Koopman and Sportiche (1982) requires that an operator binds exactly one variable and that a variable must be bound by only one operator. Lasnik and Uriagereka (1988:148) define the concept thus:

(3) i. Every variable must be bound by exactly one operator.

ii. Every operator must bind exactly one variable.

This principle implies that an operator binds one variable and a variable can only be bound by one operator.

Reflexivization appears to be a universal syntactic process among natural languages. This assumption is based on the fact that many languages, if not all, usually do not repeat the subject in the object position when a reflexive notion is expressed in a grammatical construction, rather, a reflexive pronoun is preferred in the object position for a pronoun that is co-referential with the object. Stockwell (1997) argues that there is no natural language known to scholarship which expresses the reflexive notion by repeating the subject in the object position.

Reflexives

Crystal (1994:330, 2008:408) describe reflexivization as a descriptive construction where the subject and the object relate or refer to the same entity. To Givon (1990:628), using the term "true reflexives," says, the subject is co-referential with the object and thus, acts upon itself (reflexively). Sanusi and Rafiu (2007:85) argue that is English, reflexive construction is achieved when the subject acts upon itself. They exemplify the process thus:

4. i. He killed *himself*

ii.   You know *yourself*

iii. I hurt *myself*

iv.   They know *themselves*

They assert that reflexivizationin (4) above is morphologically marked in *himself, yourself, myself, ourselves* and *themselves*, i.e. they are marked by the suffix *-self*. They however, argue that this morphological markedness is not a universal property of reflexivity.

In government and binding theory of generative grammar, a reflexive

pronoun is an anaphor that must be bound by its antecedent (Radford, 1981). An anaphor, on the other hand, is a type of expression whose reference depends on another referential element (Halliday, 1994) and it is presented in a pro-form, i.e. a pronoun referring to its antecedent. Okeke (2015:88) exemplifies the concept in (5) below:

5. Obi liked a car company of *himself*

Where *himself* in (5) is an anaphoric expression that is, co-referential with the subject *Obi*.

Ndimele (1999:144) argues that reflexivization 'is a process of converting a noun, pronoun, noun phrase or nominal element into a reflexive pronoun'. According to Faltz (1985), reflexive pronouns are primarily used in three different situations namely,

i.   When the subject and the object are the same. Example

6. He shaved *himself* with a razor.

ii. As the subject of a preposition when the subject and the object are the same:

7. That woman is dancing for *herself*

iii. and to emphasize the subject through an intensive pronoun, for instance:

8. They drank all the wine *themselves*

This study uses the Binding theory to examine the use of reflexive and reciprocal constructions in Basà, Hausa, Egbura and Kònò as empirical evidences to show the weakness of Bijection Principle; i.e. not being able to account for the languages under investigation and many others.

Reciprocity

There is an axiom among scholars studying different world languages and the manifestation of reciprocal constructions such as Napoli (1996), Asher (2004), Darlorymple Et al (1994) Schwerzschild (1996) and others that they show situations where participants relate to each other or one another in the same way. Okeke (2008:190) defines the concept 'reciprocal' as "an anaphor requiring an antecedent within the same sentence." To Asher, reciprocal constructions deal with participants, each of which plays both the agent and patient roles in relation to each other (2004).

Parry (1998) in his study observes that many Bantu and Turkish languages have special reciprocal morphemes attached to verbs, and that Latin uses

inter and the reflexive pronoun of the subject of the verb: *inter se* (between themselves) especially when the verb is third person. This is not characterized by English morphology; rather it uses *each other, one another,* or some other phrases to indicate reciprocity. Reinhart and Siloni (2005) report that many Indo-European languages do not have special markers for reciprocals in verbs that, reciprocal constructions are expressed through reflexivity or other mechanisms. For instance, Russian marks reciprocity in intransitive verbs with a suffix which also have reflexive and also passive interpretation (Haspelmath, 2001). Hicks (2008) identifies two types of reciprocal markers namely, (a) Nominal reciprocals and (b) Verbal reciprocals. In the light of these categories, English reciprocal markers *each other* and *one another* could be described as 'nominal reciprocals' because, according to Radford (1981), they function as noun phrases without independent references i.e. their references are dependent elsewhere.

The concept resumptive/recapitulatory pronouns and their status

The concept 'resumptive pronoun' is very important in this investigation. In each of the languages used as an evidence for this study, resumptive/recapitulatory pronouns function as subject marker, which is referred to as 'Subject-Agreement Marker' in the GB literature (AGR-S) Spencer, (1995). It is noteworthy that though they function as the shadow of the subjects with which they mark agreement, they possess the syntactic status that enables them to possibly function as argument-NPs where the inherent subject is absent. The crux of this study is the way and manner these pronouns violate the Bijection Principles in the reflexive and reciprocal constructions.

Theoretical Framework

This investigation focuses on the syntactic bases of Basà, Hausa, Egbura/Igbira and Kònò reflexive and reciprocal constructions which serve as the tools of analysis to examine the universal applicability of the Bijection Principle, a sub theory of Government and Binding (GB). The Binding theory tries to interpret different argument types in different distributions in the sentence as either co-referents i.e., picking out the same referent in a discourse or non-referent (where an argument is associated with distinct entities (Horrock, 1987:107)). Binding is a universal principle attested in languages, however, there are parametric contrasts among languages in terms of both the NP-type and the structure.

The term 'binding' is a co-referential relationship between NPs in a sentence. For an NP to be bound, it must, in formal terms have to possess the

same semantic identity with some antecedent NP (Yusuf, 1997:148). Binding, according to Haegeman (1994:203) is a module of grammar that regulates the NP's interpretation. It is responsible for assigning an appropriate interpretation to arguments (NPs) in sentences. According to Cook, the concept of Binding is defined thus:

ɑbinds β if ɑc-commands β and is co-indexed with β (1988:157)

Sanusi and Rafiu (2007) argue that c-command and co-index are necessary conditions for binding. In the view of Sell, he illustrates binding schema thus:
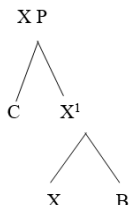

Fig. 1

(Sanusi and Rafiu (2007)1985:35)

Where C c-commands X^1 and Xc-commands$B.C$ can also be said to C-command B because the same maximal projection dominating C also dominates B.

Out of the three principles through which binding works are namely:

i. An anaphor is bound in a local domain.

ii. A pronominal is free in a local domain.

iii. A referring expression is free.

Only one principle (i) is most relevant to this work i.e., "An anaphor is bound in its local domain" (Sanusi & Rafiu, 2007:859). An anaphor is a phrasal category requiring an antecedent noun phrase. It is an argument whose reference is necessarily determined sentence-initially which cannot have independent reference (Horrocks, 1987:109).

Data Analysis

Reflexivization and reciprocity in Basà, Hausa, Ebira and Kònò

Imoh, in his study of Basàresumptive pronouns argues that resumptive/ recapitulatory pronouns are very relevant in Basà because, grammatically, they are used as "Concordial or agreement elements." Hence, he adds, "are referred to

as subject-agreement markers (Agr-s) or clitic doubling" (2010:316) (see Trask, (1993) and Spencer, (1995).

In Basà, resumptive pronouns have the same semantic meaning with their antecedent but vary in their phonetic and or phonological feature. Imoh (2010) asserts that, in this language resumptive or recapitulatory pronouns are autonomous as they have a status of the substantive or inherent sentence subject-NP where it is absent. In what follow, examples of reflexivization and reciprocal constructions in Basà, Hausa, Egbura and Kònòare presented and analyzed for the purpose of establishing the fact that the Bijection Principle is not universal using these selected languages as an empirical test.

Evidence from Selected Languages

Most of the examples expressing this linguistic process exemplified in the languages in question are not basic sentences but such that express emphasis of the action of the actor. The emphasis is to prove that an antecedent can bind more than one variable in these languages as opposed to the assumption of Bijection Principle. Examples from Basà

4. Gè   Huleji$_i$ùbwa$_i$ meme$_i$ swɔ́cɛ́

NOM name EMPH.AGR.S   REFL   drive.PST

RESUMP

'Huleji drove himself'

5. Ùwẹwẹ̀ nì   ibèle$_i$ àba$_i$ mòmò$_i$ dúbɔ́-nù

dog CONJ cat   EMPH.AGR-S REFL beat.PST-RECIP

RESUMP

'The dog and cat beat each other'

6. Gò   Nyìzò   ne Ézùmì$_i$ ó$_i$ mòmò$_i$ lubi

NOM name CONJ name AGR.S REF-love

'Nyizo and Ezumi love themselves'

7. Gè   Zèyí   ne   Rìcɛ́$_i$ ò$_i$mòmò$_i$ dúbɔ́-nù

NOM   name CONJ name AGR.S REFL love – RECIP

RESUMP

'Zeyi and Rice love each other'

In the foregoing examples, *Gè Huleji* in (4) is the sentence subject and agent

of the action *swọ́cẹ́* 'drive' *ùbwa* which is semantically similar with the subject is a third person pronoun which fuses the meanings of emphasis, subject-Agreement marker for third person singular subject and also a resumtpive or recapitulatory pronoun for the sentence subject. *màmà* on the other hand, is a reflexive appropriate for both the subject and the resumptive pronoun. In (5), *ùwẹwẹ̀ nì ibèle* makes a complex noun phrase appropriately marked by *àba* as a resumptive pronoun and subject-agreement and emphasis marker. *Mòmò* is the appropriate form compatible for the subject and its recapitulatory pronoun, *dúbó* 'beat' is affixed with the morpheme *-nù* which implies reciprocity in (5).

In (6), *ò* marks agreement with the complex subject and it is a resumptive pronoun whereas *mòmò* is a reflexive pronoun which implies a reflexive meaning. In (6), the sentence is very similar with (7), but it differs from it because the verb stem in (7) is affixed with a reciprocal suffix meaning the verb stem *lubò* with the reciprocal suffix *-nù* which means, the action is reciprocal i.e. shared by the two people who form the complex subject NP.

In (4-7) above, the subjects and the objects relate to the same entity (Crystal, 2008). In each case above, a reflexive/reciprocal pronoun obligatorily co-refers within the clause with its antecedent.

As exemplified in the foregoing examples, each subject-NP in the reflexive and or reciprocal construction has a resumptive/recapitulatory pronoun co-indexed with the subject-NP. "Consequently, the subject and the agreement marking element are potential local antecedents for the anaphor (i.e. the reflexive pronoun)" (Imoh, 2010:319), the process which satisfies the Minimum Binding Requirement (MBR) that specifies that variables must be bound by the most local potential antecedent" located within the same clause (Aoun, 1985).

In what follows, evidence from Egbura is being presented to further examine the validity of the principle.

8. Ọ̀musa$_i$ o$_i$ sì ẹnwáni$_i$

Musa RESMP.AGR.S love himself

'Musa loves himself

9. Ọ̀musa rọ̀ Ọ̀jumai$_i$ a$_i$ si enwánee$_i$

Musa CONJ Jumai RESUMP.AGR.S love RECIP.REFLEX

'Musa and Jumai love themselves/each other'

10. Ọ̀musa rọ̀ Àkwobù$_i$ á$_i$ ayè ènwánee$_i$ ìsọri

Musa CONJ Yakubu RESUMP.AGR.S feed.PST RECIP food

'Musa and Yakubu fed each other with food'

11. Ǫ̀hikwǫ́ᵢ ǫᵢ írȩtá 'nyȩ ȩ́nwániᵢ

Name RESUMP.AGR.S stone hit REFLEX

'Ǫ̀hikwǫ́ hit himself with a stone'

In data (8-11) the subject NPs/subject-DP, in each case binds both the agreement marker which equally serves as the recapitulatory or resumptive pronoun and the anaphor which violates the rules of the Bijection Principle of the Binding theory (see 3.ii). In what follows (from 12-16), Hausa examples are presented to further strengthen the ongoing argument; that in such languages, one operator binds more than one variable which violates the Bijection Principles.

12. Musa dàAuduᵢ súnᵢ sónkánsùᵢ

Musa CONJ Audu RESUMP.AGR.S love head 3PL

'Musa and Audu love themselves/each other'

13. Bala dà Usmanᵢ súnᵢ cùcé kán sùᵢ

Bala CONJ UsmanRESUMP.AGR.S cheat.PST head 3PL

'Bala and Usman cheated themselves/each other'

14. Elisha dà Simonᵢ súnᵢ dárájà kán sùᵢ

Elisha CONJ Simon RESUMP.AGR.S respect head 3PL

'Elisha and Simon respected themselves/each other'

15. Larabaᵢ táᵢ yánkìkántàᵢ

Laraba RESUMP.AGR.S cut.PST head her

'Laaba cut herself.

16. Suleᵢ yàᵢ bá kán sàᵢ

Sule RESUMP.AGR.S praise head 3SG

'Sule praised himself'

In data (12-16), the subject-NPs/subject-DP, in each case binds both the agreement marker which equally serves as the recapitulatory or resumptive pronoun and the anaphor which violates the rules of the Bijection Principle of the Binding theory (see 3.ii); in (12), the complex subject-NP *Musa dà Audu* binds the resumptive pronoun *sún* as well as the reflexive pronoun (anaphor) which is applicable to (13-16). Despite the violation, the structures are considered grammatical in these languages. Finally, Kònò data are presented as evidence

to further show that in many African languages, the violation of the principles do not result in ill-formedness of the structures.

17. Musa yènù Audu_i yàná_i násháàshìèyèn_i

MusaCONJ AuduRESUMP.AGR.S spoilt.PST head.PL3PL

Musa and Audu spoiled themselves

18. BalayènùBubu_i yàná_i dègásóáshìèyèn_i

Bala CONJBubuRESUMP.AGR.S3PL have love head.PL3PL

Bala and Buba love themselves

19. Elisha yènù Simon_i yàná_i sákályà áshì èyèn_i

Elisha CONJ SimonRESUMP.AGR.S. praise head.PL3PL

'Elisha and Simon praise themselves'

20. Micheal_i yá_i cáskàlíshì lì ì_i

Michael RESUMP.AGR.S.MASC cut.PST head own 3SG.MASC

'Michael cut himself'

21. Moses_i yá_i úná líshì lì ì_i

Moses RESUMP.AGR.S.MASC beat.PST head own 3SG.FEM

'Moses beat himself

22. Asabe_i á_i nàbà líshì lì án_i

Asabe RESUMP.AGR.S. FEM repair head own 3SG.FEM

23. Hanatu_i á_i càrà líshì lì án_i

Hanatu RESUMP.AGR.S. FEM tie.PST head own 3SG.FEM

' Hanatu tied herself'

Kònò demonstrates rich subject agreement and distinguishes between masculine and feminine gender like Hausa; hence, the gender contrast *ì* for masculine and *án* for masculine. It is characterized by subject agreement marking where a singular masculine subject is marked by *yá*, a singular feminine subject by *á* and a plural subject by *yàná* regardless of gender in plural number. The primary concern of this investigation is to furnish our argument with sufficient empirical data that demonstrate subject agreement with resumptive pronouns as can be seen in examples (17-23) where each subject is followed by a recapitulatory pronoun according to gender and number of the subject-NP followed by a reflexive pronouns *èyèn* for plural number, *ì* for singular

masculine and *án* for singular feminine to prove that the binding principles is either universal or or requires a modification in order to accommodate other languages whose parameter varies from that of English and those that are syntactically alike.

Following the definition of the bijection principle according to Lasnik and Uriagereka (1988), it can be assumed that reflexive constructions and reciprocals in the languages whose data are furnished above violate the bijection rules simply because, in each sentences in the examples drawn from Basà, Hausa Egbura and Kònò, both the subject-DP and its resumptive/recapitulatory pronouns which serve as operators simultaneously bind a single anaphor, being the reflexive pronoun within the local domain which violates rule A of the bijection principle. Despite this violation of the theory by these languages, these structure are grammatical in these languages. Given the empirical facts furnished by the data from the selected languages in relation with the Bijection theory, a modification is required of this theory so that languages with contrary syntactic characteristics can be captured. This is needful because there are many other languages whose syntactic characteristics this theory does not account for.

Bijection principle:Problem for Basà, Hausa Egbura and Kònò

Using the examples drawn from the languages under study to challenge the Bijection principles as expressed by Lasnik & Uriagereka (1988:149), it can be concluded that reflexive and reciprocal constructions in these languages as expressed in the data above violate the Bijection principle on the account that, in each sentence, the subject-NP and the following resumtpive or shadow pronoun both of which serve as operator simultaneously bind one anaphor (variable) or the antecedent (subject) binds both the resumptive pronoun and the anaphor which in each case is a violation as stated in (3 I & ii) of the Bijection restriction.

In these languages, these structures which violate the bijection principle are considered grammatical in theses languages.

Based on the foregoing argument supported by empirical facts drawn from the languages under investigation, it is plausible that the bijection principle which may be workable in some languages does not account for languages like the ones under investigation and others that are syntactically alive.

This investigation provides more empirical/facts in addition to Imoh, 2010 and further strengthens his argument calling for a modification of the bijection theory, a principle that is really universal that can account for languages that have contrastive syntactic features, otherwise, the theory may be withdrawn

as it does with account for many languages, especially African languages (see Sanusi, 2002).

A Proposed Modification

From the argument presented in the forgoing, it is obvious from the empirical facts drawn from Basà, Hausa, Egbura/Igbira and Kònò (as case study) that the Bijection Principle doesn't account for these languages and many more which are syntactically alike. Wiltschko (2002: 181) suggests the need to for 'double coindexation' which certainly will solve this theoretical problem; i.e. a non-pronominal subject-DP in these languages and those that are characterized by similar syntactic or morphosyntactic structures should bear two indices for the theoretical argument that:

  i.   "It is the major 'constituent in the construction that serves as the only referent for both the resumptive and anaphor (responsible for two different syntactic relations).

  ii. "It c-commands and is co-referential with both the resumptive pronoun and the anaphor in such construction thereby satisfying the required binding conditions" (Sanusi, 2004:83). This will enable the resumptive pronoun and the anaphor to be bound by the same operator. This proposal can be illustrated in data (23--26) below:

Basà

24. i. Gè Huleji$_i$/jùbwa$_i$ meme$_j$ swɔ́cɛ́
NOM name EMPH.AGR.S   REFL   drive.PST
RESUMP

'Huleji drove himself'

ii. Ùwęwę̀ nì   ibèle$_i$/$_j$ àba$_i$ mòmò$_j$ dúbɔ́-nù
dog CONJ cat   EMPH.AGR-S REFL beat.PST-RECIP
RESUMP

'The dog and cat beat each other'
Egbura/Igbira

25. i. Ọ̀musa$_i$/$_j$ o$_i$ sì ẹnwáni$_j$

Musa RESMP.AGR.S love himself

'Musa loves himself

Hausa

ii. . Ọ̀musa rọ̀ Ọ̀juma$_i$/$_j$ a$_i$ si enwánee$_j$

Musa CONJ Jumai RESUMP.AGR.S love RECIP.REFLEX

'Musa and Jumai love themselves/each other'

26. i. Musa dàAudu$_{i/j}$ sún$_i$ sónkánsù$_j$

Musa CONJ Audu RESUMP.AGR.S love head 3PL

'Musa and Audu love themselves/each other'

ii. Laraba$_{i/j}$ tá$_i$ yánkì kán tà$_j$

Laraba RESUMP.AGR.S cut.PST head her

'Laaba cut herself.

iii. Sule$_{i/j}$ yà$_i$ bá kán sà$_j$

Sule RESUMP.AGR.S praise head 3SG

'Sule praised himself'

Kònò

27. i. Elisha yènù Simon$_{i/j}$ yàná$_i$ sákályà áshì èyèn$_j$

Elisha CONJ SimonRESUMP.AGR.S. praise head.PL3PL

'Elisha and Simon praise themselves'

ii. Micheal$_{i/j}$ yá$_i$ cáskà líshì lì ì$_j$

Michael RESUMP.AGR.S.MASC cut.PST head own 3SG.MASC

'Michael cut himself'

iii. Moses$_{i/j}$ yá$_i$ úná líshì lì ì$_j$

Moses RESUMP.AGR.S.MASC beat.PST head own 3SG.FEM

'Moses beat himself

iv. Asabe$_{i/j}$ á$_i$ nàbà líshì lì án$_j$

Asabe RESUMP.AGR.S. FEM repair head own 3SG.FEM

It is noteworthy that the double co-indexation suggested for the languages under study and those that are syntactically alike as demonstrated in data (23-26) above show that in each example, the subject-DP bears two different indices as opposed one as prescribed by the Bijection convention. The two subscripts stand for two different syntactic relations, namely, subject agreement relation between the subject-DP and the resumptive pronoun, while the second indicates reflexive binding relation between the subject-DP and its anaphor. Sanusi (2004) contends that a major implication of assigning double indices

to the non-pronominal subject-DP in a reflexive construction is because the constituent is assumed to have received a much more dominant syntactic influence over and above its resumptive pronoun to c-command and bind its anaphor as the only major local potential antecedent within the governing category. He further asserts that, the subject-DP bearing double indices/ subscripts implies, the subject-DP has binding power over two constituents, namely, the resumptive pronoun and the anaphor simultaneously.

Conclusion

This study has investigated with empirical facts the syntactic processes of reflexive and reciprocal constructions in Basà, Hausa, Egbura/Igbira and Kònò. Emphasizingon how syntactic structures of these languages violate Bijection Principles of Government and Binding with special focus on reflexive and reciprocal constructions.

This examination supported by the empirical data generated shows that the existence of the compulsory resumptive pronoun in the reflexive and reciprocal constructions create some problem for the bijection principle which is contrary to the standard assumption of the proponents of this theory, as it concerns resumptive pronouns.

A proposal is suggested, in addition to other researchers to modify the Principle in order to resolve the problem of the apparent violation of the bijection principle for the languages studied and others with similar syntactic parametersto be able to accommodate languages that are parametrically contrastive. Double indexation seems to be a plausible method for proper co-indexing of the constituents bound by the antecedent subject-DP. This strategy enables a better explanation of the grammatical relations that exist between the subject-DP, the resumptive pronoun and the anaphor.

This study through empirical facts drawn from four languages has shown that there are many other languages violate the principle, including English where the argument is based, see Cullicover (1997) on 'weak crossover' where he provid empirical fact which demonstrate apparent violation of the Principle.

Finally, I wish to submit that, since Sell (1985;5) has argued that, the goal of a syntactic theory is provide a descriptive space within which the range of variation found among languages is precisely captured, this counsel should be considered to provide theories that are flexible enough to accommodate idiosyncrasies characterized by various languages.

REFERENCES

Aoun, J. The grammar of anaphora. Cambridge: MIT Press.

Asher R.E. [Ed.] (2004). Encyclopedia of language and linguistics 7. Oxford: Pargamon Press..

Cook, V.J. (1988). Chomsky's Universal grammar. Oxford Basil Blackwell.

Crozier, D.H. and Blench, R.M. (1992). An index of Nigeria languages. Dallas TX: Summer Institute of Linguistics

Crystal, D. (2008). Dictionary of linguistics and phonetics (6th edition). Oxford: Oxford University Press.

Crystal, D. (1994). The Cambridge factfinder. Cambridge: Cambridge University Press.

Culicover, P. W. (1997). Principles & parameters: an introductionto syntactic theory. Oxford: Oxford University Press.

Darlrimple, M. S. Mchombo & Peter, S. (1994). Semantic similarities and syntactic contrasts between Chichewa and English reciprocals. Linguistic inquiry. 25, 145-163.

Faltz, L.M. (1985). Reflexization: A study in universal syntax. New York: & London: Garland Press.

Filip, H. & Garson, G.N. (2000). Distributivity strengthens reciprocity, collectivity weakens it. Linguistic philosophy.

Givon T. (1990). Syntax: A functional typological introduction volume: ii. Amsterdam: John Benjamin.

Haegman, L. (1994) Introduction to government and binding theory.(2nd edition). Oxford: Blackwell.

Halliday, M.A.K (1994). An introduction to functional grammar, (2nd edition) London: Amold

Haspelmath, M. (2001). Non-canonical marking of subject objects. In Aikhenvald A. DoxonR. and Onishi M. [Edits] p. 53-83. Amsterdam: and Philadelphia: John Benjamin.

Hicks, G. (2008). Why the binding theory doesn't apply at LF. Syntax: A journalof theoretical experimental and interdisciplinary research. 11 (3) 255-280.

Horrock, G. (1987). Generative grammar. London & New York: Longman.

Imoh P.M. (2010). On the violation of Bijection theory: a case study of Basà. Reflexives. Journal of Linguistic Association of Nigeria, 13, (2) 315-322.

Lasnik, H. & Uriagereka J. (1988). A course in Gb syntax: Lectures on binding and empty categories. Massachusetts: MIT Press.

Napoli, D.J. (1996). Linguistics. New York: Oxford University Press.

Ndimele, O.M. (1999). Semantics and frontiers of communication (2nd edition). Port Harcourt: University of Port Harcourt Publishing House.

Okeke, C.O. (2008). Reflexivization and reciprocality in Igbo. Journal of the Linguistics Association of Nigeria, 11, 185-197.

Okeke, C.O. (2015). Reflexive and Reciprocal verbs in Igbo. Igbo language studies, 1, 87-104.

Parry, M. (1998). The reinterpretation of the reflexive in Piedmentese; Impersonal se constructions.. transactions of the phonological society, 96 (1) 63-116.

Radford, A. (1981). Transformational grammar. Cambridge: Cambridge University Press.

Radford, A. (1988). Transformational syntax: A first course (Cambridge textbooks in linguistics). Cambridge : Cambridge University Press.

Reinhart, T & Siloni T. (2005) the lexicon-syntax parameter: Reflexivization and other arity operations. Linguistic inquiry, 36, (3) 389-436.

Sanusi, I.O. (2002). A survey of subject-agreement markers in selected African languages. Alore:Ilorin journal of Humanities. 12, 55-75.

Sanusi, I.O. & Rafiu, A. (2007). Reflexive constructions in Yoruba and English: A comparison. In Ozo-Mekuri N. (Ed.) Convergence: English & Nigeria languages: A festschrift for Munzali A. Jibrin. Port Harcourt: M&J Grand Orbit Communication Ltd. & Emhai Press. 859-865.

Schwarzschild, R.S. (1996). Plurality. Dordrecht: Kluver Academic press.

Sell, P. (1985). Lectures on contemporary syntactic theories. centre for the study of language and information. USA: Leland Stanford.

Spencer, A. (1995). Morphological theory. Oxford: Blackwell.

Stockwell, R.P. (1977). Foundations of syntactic theory. New Jersey: Englewood Cliffs Inc.

Trask, R.L. (1993). A dictionary of grammatical terms in linguistics. London & New York: Rutledge.

Wiltschko, M. (2002). The syntax of pronouns: Evidence from Halkomelen Salish. Natural language and linguistic theory, 20 (1), 157-195.

Yusuf, O. (1997). Transformational Generative Grammar: An Introduction. Ijebu-Ode: Shebiotimo Publications.

Williamson K. & Blench R. (2000). Niger-Congo African languages: An introduction. In Heine B. & Nurse D. [Edits]. p11-42. Cambridge: Cambridge University Press.