# Distribution and Interpretation of NPs in Hausa and Kambari: A Comparative Approach

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#### Abstract

The key tenet of the universal grammar's proposition is that natural languages have features that are common to them all while also having some parametric variations in the way these features are explored in various languages. It is on this paradigm that this paper sets to compare the structure of Noun Phrases in Hausa and Kambari. Using the comparative approach, areas of similarities and divergences were pointed out as well as traits specific to the NP structure of each of the languages. The general aim of the present study is to examine the distribution of NPs in Hausa and Kambari with the view to comparing and contrasting their morphosyntactic properties in the light of Binding Theory, a sub-module of GB Theory. Binding theory is the framework for the present study which is principally concerned with the distribution of NPs in a sentence. It thus determines the situation in which they can occur or must be co-indexed with other NPs. It is therefore, the module of grammar regulating NP interpretation. Although Hausa and Kambari are from different language phyla, findings revealed that the three NP types are obtainable in the two languages, hence they appear to pattern in the same way in many respect. Despite their similarities, areas of divergences do exist. The notion of precedence as it applies to the NP structure of each of the two languages varies. For instance, in the reflexive anaphors of Hausa and Kambari, the reflexion precedes the person that is being reflected.

Keywords: Comparative Approach, Noun Phrase, Precedence, Syntactic Elements

#### Introduction

The Kambari language cluster is located in the northern part of Nigeria's Middle Belt near the western boarder of Nigeria. The cluster is classified as Niger-Congo, Volta-Congo, Benue-Congo, Kainji, Western-Kainji, Kambari Group, as opined by Crozier and Blench (1992: 62). However, Hausa is a sub-group of larger Afro-Asiatic language family.

The major aim of Syntactic Theory that was popularized in the work of Chomsky 1965 *Syntactic Structures* is to bring forth a general framework for specifying what is common to languages and how they tend to vary. This effort has yielded a theory of grammar popularly known as Universal Grammar (UG). However, the Standard Theory is the model of syntax developed in the work of Chomsky (1965) in *Aspects of the Theory of Syntax*. It is the off-shoot of Generative Grammar and has been subjected to critical assessment with numerous

modifications such as the Extended Standard Theory (EST), Revised Extended Standard Theory (REST), Government and Binding Theory (GB) also known as Principles and Parameters Theory (PPT) and Minimalist Program (MP).

The general aim of the present study is to examine the distribution of NPs in Hausa and Kambari with the view to comparing and contrasting their morphosyntactic properties in the light of Binding Theory, a sub-module of GB Theory. In the current study, we try to adopt a GB framework postulated in the work of Chomsky (1981, 1986). The GB theory has set of interacting sub-theories each of which deals with some central areas of grammatical enquiries. Here, the sub-module of GB – Binding Theory – has been explored in our analysis. Each of the theories in GB comprises a principle or set of principles and each of these may be subjected to parametric variations i.e it is assumed that the grammar of languages varies in only finitely many ways with respect to domains covered by some given sub-theories. In most cases, the number of variations will be small, though the core grammar of a given language (say Hausa and Kambari) then derived automatically from the interaction of the sub-theories of Universal Grammar.

The standardization of Kambari language followed some remarkable achievements of some scholars who worked for the development of the language in persons of Stark, J.E (2011) and Stark, J.P. (2010), through the Kambari Language Project (KLP). The Kambari language is said to attend certain level of standardization because orthography has been designed through a language committee of the three dialects (KLP), and the Salka Kambari has been accepted as the standard language to be used in writing.

Kambari and Hausa are tonal like most African languages, though the burden of comprehension based on tone contrast is slight in Kambari. Thus, Salka Kambari provides a clear example of the Kambari structures that allow orthography to function without marking tone. For example:

| i.  | [ <u>a</u> t <u>awa</u> shi] LLHL           | they come not  | 'they did not come'        |
|-----|---|----------------|----------------------------|
| ii. | [ <u>aa</u> t <u>a</u> w <u>a</u> shi] LHHL | they- NCM come | e not 'they will not come' |

The second sentence has tone change and also has vowel length to distinguish the pronouns. Thus, the tone feature is redundant, since the long vowel of the pronoun signals the reader as to the tone of the verb.

Kambari, just like its Hausa counterpart, has SVO word order constituting its kernel sentence structure. Several syntactic processes apply to this basic pattern to generate various complex modified structures permissible by the internal syntax of the languages.

Although, Hausa and Kambari are not from the same ancestral background, Hausa being an Afro-Asiatic language and Kambari being a Niger-Congo family of languages; yet, they share certain things in common: Hausa and Kambari languages are synthetic and their sound pattern, to a certain degree, same. Works on comparison of languages are done in literatures, but comparing Hausa with Kambari language within the GB framework is not done in the relevant literature, this is the first of its kind. Attempts have been made in this regard, to compare

certain syntactic features of Binding Theory in Hausa and Kambari languages because Universal Grammar (UG) rules apply to all human languages.

Binding theory, which is the framework for the present study, is principally concerned with the distribution of NPs in a sentence, determining the situation in which they can occur or must be co-indexed with other NPs. It is therefore, the module of grammar regulating NP interpretation. According to Horrocks (1987), the Binding Theory is one of the most important constructs in the system. For the purposes of the Binding Theory, NPs that are arguments are assumed to fall into one of the three categories as in (1) below, which each of the two languages under discussion exhibit:

(i) Anaphors
 (ii) Pronominals
 (iii) Referring Expressions or Full Lexical NP

Following Chomsky (1981, 1986), Buring (2005), Haegeman (1994), Pollard Carl and Ivan A. Sag (1992), we assume that Binding Theory regulates the distribution and interpretation of noun phrases cross-linguistically, subcategorizing them into three distinct sub types in (1) above.

Our investigation has shown that Hausa and Kambari NP distribution exhibit similar patterns with very few areas of contrasts. Though Kambari lacks gender distinction, while Hausa is gender sensitive, yet both languages exhibit similar pronominal system, and they follow the SVO word order.

## Distribution and Interpretation of Hausa and Kambari NPs

This paper deals with the distribution and interpretation of noun phrases in Hausa and Kambari languages. The GB framework developed by Chomsky (1981, 1986), is basically about comparing languages via its sub-modules. Research into the natural language grammars has frequently focused on the distribution of NPs cross-linguistically and their pronominal and anaphoric forms. Theories and analysis of these distributions have been the driving force in the formulation of central theoretic constructs. It turns out that the distribution of NPs (say Hausa and Kambari) is each subject to a certain set of syntactic restrictions. A theory that addresses this issue is called **Binding Theory**. All binding theories are developed with a relatively simple and more or less practical aim — to account for the distribution of anaphoric pronouns in natural languages (Fedorova and Yanovich (2006)). In the same spirit, we attempted a comparative study of the two languages through investigating if the NP properties of Hausa can also be found in Kambari language. Thus, Hausa and Kambari NPs points of similarities and/or contrasts were established.

## Anaphors in Kambari and Hausa

Languages contain a class of NPs that are called anaphors. These are syntactic elements that have no independent reference, but depend on an antecedent for their interpretation. Anaphor

is an NP that obligatorily gets its meaning from another NP in the sentence. Every anaphor in natural language must have a coindexed, c-commanding antecedent NP within the same (root) sentence which becomes evident in Hausa and Kambari. It has commonly been assumed that a single generalization determines the possible antecedents of anaphors (reflexives and reciprocal expressions) in human languages. Though both languages lack reciprocals, but reflexives in the languages trigger their possible antecedents as in:

| (2) | Ui ~a<br>3Sg.Nom sla     |               | t <u>a</u><br>NCM | <b>aciyayi<sub>j</sub></b><br>her/himself | in Kambari and |
|-----|--------------------------|---------------|-------------------|---|----------------|
|     | <b>Ta</b> i<br>3Sg.Fem.N | ma<br>om slaj | ri<br>p.Pst       | <b>kanta</b> j<br>herself                 | in Hausa       |

(**U** is a 3person singular nominative in Kambari which triggered a 3person singular reflexive **aciyayi** not **\*aciyele** which is plural. **Ta** is a 3person singular feminine nominative in Hausa which triggered a 3person singular feminine reflexive **kanta** not **\*kansu** which is plural in Hausa).

But the transformations proposed by Lees & Klima (1963), the rules of interpretation formulated by Jackendoff (1972), and Principle A of Chomsky's (1981, 1986) binding theory are all attempts to provide a unified account of the binding properties of anaphors in languages.

## Reflexives

Hausa and Kambari reflexives are bimorphemic; they apparently consist of self + accusative pronoun. The pronominal part of the reflexive in Hausa must agree in person, number and gender with its antecedent, the self-part only agrees in number. However, the pronominal part in Kambari agrees in number and person, it lacks gender distinction. A reflexive must be coreferential with another NP in the same sentence cross-linguistically, as such, Hausa NPs must agree with its antecedent in person, number and gender (not case). Thus, agreement in person and number is obligatory in Kambari but it lacks gender distinction.

Aciyele, aciyava, aciyatsu, aciya]a, aciyayi are all reflexive pronouns in Kambari while Hausa has kansa, kanta, kansu, kammu, junansu, junanmu, as reflexives.

Reflexives seem to minimally differ from pronominals (Hausa and Kambari inclusive) in that they cannot be used in a sentence unless there is another coreferential NP in the sentence as in these examples:

| 3. | Esheli'ii                                      | a cig   | ga                 | t <u>a</u> | aciyele <sub>i</sub> . – Kambari |
|----|--|---------|--------------------|------------|----------------------------------|
|    | Girls the                                      | 3Pl.Nom | like/lov           | e NCM      | themselves                       |
|    | <b>'Yanmata-</b><br>Girls-the<br>'The girls li |         | son<br>like<br>es' | •          | <b>nsu – Hausa</b><br>selves     |

In this example, we have observed that the reflexives of both Kambari and Hausa cannot be used independently without a co-referential NP like *Esheli'i* and *'Yammatan* in both Kambari and Hausa. The full lexical NP in the structure makes the reflexive to co-refer to its antecedent. The reflexives have to agree in number and person because the antecedents are all plural NPs.

| 4. | U                            | ~asa     | t <u>a</u> | <b>aciyayi – Kambari</b>        |
|----|------------------------------|----------|------------|---------------------------------|
|    | 3Sg.Nom                      | slap.Pst | NCM        | him/herself                     |
|    | Ta<br>3Sg.Fem.<br>'She slapp | Nom s    | lap pst    | <b>kanta – Hausa</b><br>herself |

In an example like this, the reflexive in Kambari has to agree with its antecedent in person and number, as the language lacks gender distinction, *aciyayi* is dependent on U for its full realization. However, the Hausa reflexive, *kanta* is equally dependent on the pronominal Ta, with an agreement in person, number and gender because Hausa is gender sensitive. The pronominal Ta is feminine and as such the reflexive has to agree with it to produce *kanta* as reflexive.

| 5. | <b>Wu</b><br>3Sg.Nom                   | una<br>kill.Pst. |        | <b>aciyayi</b> . – <b>Kambari</b><br>her/himself |
|----|--|------------------|--------|--|
|    | <b>Ta</b><br>3Sg.Fem.N<br>'S/he killed | om kill.         | Pst he | <b>anta – Hausa</b><br>erself                    |

This example is similar to the one above in the sense that the reflexive element in Hausa has to agree with its antecedent not only in number and person but also in gender, as against the Kambari reflexive that has to agree with its antecedent only in number and person because it lacks gender distinction.

| 6. | <b>Vuma'a</b> <sub>i</sub> $u_i$ 'yuwan t <u>a</u><br>Man the he refuse CM  | •               |   |                  | m <u>a</u> r <u>a</u> . – <b>Kambari</b><br>er |
|----|---|-----------------|---|------------------|--|
|    | <b>Mutumi-n</b> ya-na kin<br>Man-the he-is refuse<br>'The man hates himself | himself because | 2 | shan<br>drinking | barasa – <b>Hausa</b><br>beer                  |

We should note that Full lexical NPs in Hausa and Kambari are similar in their distribution because both forms are free in the environment where they occur as example (6) above shows, '*Vuma'a'* cannot be bound by '*aciyayi'* such that *Mutumin* cannot be bound by *kansa* in this example which is in accordance to principle C of Binding Theory.

## Reciprocals

These are also anaphors in English, and thus subject to principle A, and to the agreement requirement. A reciprocal requires an antecedent that is plural as in the examples below:

7. Α cigalai ta aciyele. – Kambari 3Pl.Nom like CM themselves son kansu – Hausa Su-na 3Pl.Nom-are like themselves 'They like each other'. 8. 'yuwalai ta aciyatsu. - Kambari Tsu 1Pl.Nom hate CM one another kanmu – Hausa Mu-na }in 1Pl.Nom-are hate ourselves 'We hate one another'.

It is evident from the above data that both Hausa and Kambari lack reciprocals, but maintains reflexives to function in place of reciprocals. The reciprocals in bold italics in (7 - 8) agree with their antecedents in number and person. The antecedents (*A* and *Tsu*, *muna* and *suna*) are all plurals. *A*/*su* is 3<sup>rd</sup> person plural form, and *Tsu*/*mu* is 1<sup>st</sup> person plural form respectively.

#### **Pronominals in Kambari and Hausa**

These are NPs that can optionally get their meaning from another NP in the sentence, but may also optionally get it from somewhere else (including context or previous sentences in the discourse). Pronominal is an NP that may (but need not) get its meaning from another word in the sentence. These NPs are called pronouns or pronominals and they seem to be in nearly complementary distribution with reflexives (Lees & Klima 1963). Thus, we can account for the distribution of pronominals by requiring them to satisfy a condition opposite to that which anaphors need to satisfy. Anaphors are not the only NP type with restrictions on their syntactic position. Pronominals can also be restricted in where they may appear. Consider the constructions below:

9 Е n le. – Kambari ene t<u>a</u> n'uts<u>a</u> 3Pl.Nom see.Pst. CM friends of 3Pl.Acc Su-n ga abokan su – Hausa 3Pl.Nom-are see friends 3Pl.Acc 'They saw their friends'. yi ta ikebe. – Kambari 10. **A** ca him/her CM money 3Pl.Nom give.Pst. wasu 'yan kudade - Hausa Su-n shi ba 3Pl.Nom-are give 3Sg.Mas.Acc some money 'They gave him/her some money'. 11. U k<u>a</u>mbuw<u>a</u> mu mota. – Kambari ta 3Sg.Nom return.Pst. 3Sg.Acc CM car Ya dawo ma-ni da mota – Hausa 3Sg.Mas.Nom return with-3Sg.Neu.Acc with car 'S/he returned the car to me'.

12. U damma t<u>a</u> u kamba. – Kambari ta 3Sg.Nom say.Pst CM 3Sg.Nom will.Pst. go back koma – Hausa Та ce zaa **ta** 3Sg.Fem.Nom say.Pst will 3Sg.Fem.Acc go back 'S/he said that s/he would go back'. 13. Wu ta. - Kambari yi una 3Sg.Nom kill.Pst. her/him CM kashe ta – Hausa Ya 3Sg.Mas.Nom kill.Pst 3Sg.Fem.Acc 'S/he killed her/him'.

It has been advanced, in this study that Kambari language, unlike Hausa, lacks gender distinction, and its pronominals are quite distinct. The third person plural form in Kambari is either 'e' or 'a', this is determined by the verb the pronoun precedes. In examples (9 & 10), the difference is that of phonology, the pronoun 'e' precedes any verb that begins with a vowel sound and there is a glide in its production and/or articulation, while the pronoun 'a' precede verbs that begin with a consonant sound. But the Hausa counterpart in (9 & 10) shows that the pronominals have to agree with not only number and person, but also gender, and it depicts the fact that pronominals are free in their governing environment as principle B of the binding theory buttress.

The Kambari third person singular form behaves exactly the same way as its plural counterpart. The pronoun 'wu' in (13) comes before a verb that begins with a vowel sound and there is a glide in its production or articulation, while the pronoun 'u' in (11 & 12) comes before any verb that begins with a consonant sound. Interestingly, the data in (13 & 14) show that *ta* (3Sg form) in Hausa allows the pronominal element to occupy both nominative and accusative positions without having an ill-formed structure. Restriction of NPs in their syntactic position is a property of pronominals, as such; Hausa and Kambari are not left out, with Hausa allowing *ta* in both syntactic positions – nominative and accusative.

## **R-Expressions (Full Lexical NPs) in Kambari and Hausa**

R-expressions or Full Lexical NPs are those that get their meaning by referring to an entity in the world of discourse. R-expressions have yet another distribution. R-expressions don't seem to allow any instances of binding at all, not within the binding domain and not outside it either (Carnie 2006). R-expressions occur in a proper subset of the environments which allow pronouns, thus, Full Lexical NPs are free, independent elements. R-expressions in Chomsky (1981) are typically referentially independent, and descriptively richer than reflexives, reciprocals, or pronouns, given the fact that R-expressions receive their meaning from outside the sentence (i.e. from the context). You might think that while pronouns and anaphors might vary from one language to another, names and descriptions and other R-expressions are probably basically the same in all languages, at least with respect to their binding properties (Koopman, Dominique & Edward (n.d.)). The constraint that describes the distribution of R-expressions is called *Principle C*.

Notice that Principle C says nothing about a binding domain. Essentially R-expressions must be free everywhere. They cannot be bound at all. That is, you might think: as in Kambari and Hausa, R-expressions in the languages cannot be bound as is shown in the following structures:

14. A ]angwa ta Musa woo o'wo mogono'o. – Kambari 3Pl.Nom chose CM Musa he will become king the
An zabi Musa a matsayi-n Maigari-n – Hausa 3Pl.Nom elect Musa as position-of village head-the 'Musa was elected the village head'.

In example (14) above, we notice that the two R-expressions behave differently, the reason being that real names don't take determiners like other R-expressions; such is the case of *Musa*. However, other R-expressions apart from real names take determiners (in some instances) in Kambari and Hausa languages, such as *mogono'o 'king the'*, in Kambari and *Maigarin* in Hausa. Here, Kambari and Hausa R-expressions are morphologically similar and each is free in its environment.

15. Ulobo'oi ui damma ta Maryamj kambuwa yij ni atagada. – Kambari Boy the he say.Pst. CM Maryam return him with books
Yaro-ni yai ce Maryamj taj mayar ma-shi da littafai – Hausa Boy-the 3Sg.Mas.Nom said Maryam she return with him with books 'The boy said that Maryam should return the books to him'.

The NPs of Kambari and Hausa in this example also show a morphological similarity where 'Ulobo'o-(boy the)' in Kambari, and 'Yaro-n-(boy-the)' in Hausa seem to be free in their environment with an attached determiner, and 'Maryam' however, though free in its environment, without a determiner, similar in the two languages. Maryam is not bound to Ulobo'o or Yaron because they are all free and satisfies principle C of the Binding Theory. One interesting morphological similarity the languages exhibit is that the Ulobo'o and Yaron both precede a pronominal element U and Ya in Kambari and Hausa respectively. Maryam in the two languages equally precede yi and ta in kambari and Hausa respectively. Though, a clear difference is that in the data of Kambari, there is an intervening syntactic element that comes between Maryam and yi, while nothing comes between Maryam and ta in the Hausa data. These pronominal elements in Kambari are termed as double antecedent (Muhammad & Dantata 2015) and agreement in Hausa (Anfani 2007).

16. Esheli'i<sub>i</sub> una. – Kambari t<u>awaa</u> t<u>a</u> ni ikarabu o ui Girl the she bring.Pst. CM with maize from farm Yarinya-r<sub>i</sub> ta<sub>i</sub> kawo daga gona – Hausa masara-r she brought maize-the from farm Girl-the 'The girl brought the maize from the farm'.

In this example, because the NP is not a real name, the determiner is attached to the noun in the two languages yielding *Esheli-'i* and *Yarinya-r* respectively. The similarity in the forms is that of morphology (*Esheli'i – girl the*), and double antecedent (Muhammad & Dantata 2015) (*Esheli-'i and u*) in Kambari, and agreement (Amfani 2007) (*Yarinya-r* and *ta*) in

Hausa, referring to the same entity, rather than phonology as seen in the case of most pronouns in Kambari language.

| 17. | Ali'i <sub>i</sub> a          | i cuwa      |        | t <u>a</u> a | iciyele <sub>i</sub> . – <b>Ka</b> i | mbari                 |  |  |
|-----|-------------------------------|-------------|--------|--------------|--------------------------------------|-----------------------|--|--|
|     | Men the th                    | ey praise.I | Pst. C | CM th        | emselves                             |                       |  |  |
|     |                               |             |        |              |                                      |                       |  |  |
|     | Mazaje-n                      | su-n        | yi     | wa           | kansu                                | kirari – <b>Hausa</b> |  |  |
|     | Men-the                       | they-are    | do     | for          | themselves                           | praise                |  |  |
|     | 'The men praised themselves'. |             |        |              |                                      |                       |  |  |

This example (17) shows a distribution similar to (15 & 16); the determiner though fused to the noun is free, but it seems to be a case of 'double antecedent' (Muhammad & Dantata 2015) and 'agreement' (Amfani 2007) in the sentences where (*Ulobo 'o-boy the* and *u-he*) and (*Yaro-*n-boy-the and *ya-he*) in (15), (*Esheli'i-girl the* and *u-she*) and (*Yarinya-r - girl-the* and *ta-she*) in (16) and (*Ali'i-men the* and *a-they*) and (*Mazaje-n - Men-the* and *su-they*) in (17) both refer to the same entity in Kambari and Hausa respectively. Though the Hausa structure have to agree in number, person and gender distinct from Kambari that lacks gender. The two languages are morphologically similar but one lacks gender distinction while one is gender sensitive.

## Conclusion

The study shows that morphologically, the structure of Hausa and Kambari lack reciprocals in the sense that reflexives are used in place of reciprocals in the two languages. In particular, the morphology of both languages is synthetic in nature. The two languages are morphologically similar but Kambari lacks gender distinction while Hausa is gender sensitive. The present study has shown that Hausa and Kambari exhibit similar patterns of NP distribution with very few areas of contrasts. Both languages use head initial in their NP structure and their determiners are fused to the noun elements. Though Kambari lacks gender distinction, yet both languages exhibit similar pronominal system, and they follow the same SVO word order.

Kambari and Hausa reflexives are bimorphemic: self + accusative pronoun in the languages -aciya-yi (self+him/her), *kan-ta* (self+her): Here, *yi* is 3Sg.Acc form in Kambari while *ta* is 3Sg.F.Acc in Hausa where feminine gender was distinguished. Hausa reflexives agree with their antecedents in person, number and gender, while Kambari reflexives only agree with their antecedents in person and number because they lack gender distinction. In the reflexive anaphors of Kambari, the reflexion precedes the person that is being reflected while reverse is the case in Hausa where the person precedes the reflexion.

Kambari exhibits a form of double antecedent and the antecedents must agree in number and person, while Hausa has a form of agreement that has to agree with the linguistic element in person, number and gender. The determiner in Kambari and Hausa is fused with the root word of the noun, a typical characteristic of synthetic morphology evident in the two languages. Proper nouns and other Full NP types pattern the same way in Hausa and Kambari and most importantly, both Hausa and Kambari exhibit an SVO word order and/or structure.

There are two distinct elements of  $3^{rd}$  person singular nominative form in Kambari: *wu* and *u*, and two plural accusative form: *a* and *e*. *wu* and *e* comes before a verb that begins with a vowel sound, while *u* and *a* comes before a verb that begins with a consonant sound, which shows a contrast in phonology against the Hausa  $3^{rd}$  person pronoun *yq/ta* for masculine and feminine gender. There are three distinct elements of  $1^{st}$  person singular nominative form in Kambari: *n/me/amu*. *me/amu* comes before a verb that begins with a vowel sound while *n* comes before a verb that begins with a consonant sound. This is a clear phonological contrast between Hausa and Kambari. There are three distinct elements of  $2^{nd}$  person nominative pronoun in Kambari: *mu/avu/vu* which all comes before a verb that begins with a vowel sound, which is a contrast in phonology too, while the Hausa data has one element: *Kai/ke* for masculine and feminine gender. Interestingly, Hausa allows the pronominal element *ta* (3Sg form) to occupy both nominative and accusative positions without having an ill-formed structure.

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