

THE STRUCTURE OF ÌBÌBÌÒ DETERMINER PHRASE

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Abstract

The Determiner Phrase (DP) is a syntactic category headed by a determiner. Its internal structure has attracted scholarly attention across languages. Although, various aspects of Ìbìbìò grammar have been examined by scholarly works, the syntax of the Determiner Phrase has not been given much attention. This study, therefore, investigates the Determiner Phrase in Ìbìbìò with a view to examining its internal constituents and hierarchical structure. Primary data for the study were elicited through interviews with the aid of the Ibadan 400-word list and syntactic checklist while secondary data were collected from existing literature. Data were analysed qualitatively based on the DP hypothesis and Chomsky's Minimalist Program. The study identified ten determiner elements in the language. They are numbers, particularisers, as well as cardinal and ordinal numerals. Some are marked for specificity or definiteness (e.g. *étó ádò*) while others are marked for indefiniteness (*étó kèèd*). The difference between the former and the latter is definiteness and indefiniteness triggered by the determiners *kèèd* 'a' and *ádò* 'the' respectively. Other determiners identified in the language are: articles, demonstratives, quantifiers, genitives, pronouns, and bare nouns. Based on the distribution of the internal constituents of the DP, the hierarchical structure of the Ìbìbìò Determiner phrase is: DP>PartP>NumP>PossP>Num'rP>DemP>NP. The study concludes that DPs take NP complements in Ìbìbìò.

Keywords: Noun Phrase, DP-Hypothesis, Ìbìbìò Determiner Phrase

Ìbìò ìkọ

Dítámíná ádò átá àkpan ìwùòd ìkò ké ìkpéghé úbòdò ìkò ké ùsèm èkòòtò Dítámíná Frès. Mmè ñkọ sé ìdòńó ké èsìd ìkpéghé ùsèm àmì ádíppe údòń mmè ñtáifìòk ké mmè ùsèm. Akpèsakádó mmè ñtáifìòk ènám ndúúńó ényàn éwèt ñkọ ébáńá ùwák ìkpéghé mbèd ùsèm Ìbìbìò ádò údòń íbááhá àdíwèd mbáńá dítámíná frès. Ké úto nták ádò, nwèd ndúúńó àmì átám ásé ñkọ abáńá mmè ìwùòd ìkò sé ìdòńó ké èsìd dítámíná frès ké ùsèm Ìbìbìò mmè úbòdò ñkọ ámmó ké ndáhá ké ndáhá. Akpá ètòb èkámáké ènám ndúúńó àmì ákétó íbòqoró mbúúmè èkéníéghé ètò únwám èbóhó ìkò mmè ìkpéghé úbòdò ìkò ké ùsèm Ibadan. Udíáná àmò nkó ákétó bàktómbré abááhá mfin àmì. Èmàétád ètòb èkébòqòhò mfón-mfón ákèèné ìwùòd ìkò íbòqoró ndúúńó èkéníéghé díán mmè aké Chomsky èkòóttó "Minimalist Program". Nwèd ndúúńó àmì ànèkké ásé ñkọ abáńá dítámíná dùòp ké ùsèm Ìbìbìò àkpan - àkpan ìkpéghé íbàd ké ñsìò- ñsìò ndáhá. Úsák mmè dítámíná àmì énié ásáná-ásáná ndáhá (*étó ádò*) ádò úsák ìníéghé (*étó kèèd*). Ndiáńńá abááhá ké úwúd ñkọ íbá ádò ákèèné mmè dítámíná àmì èsáńáké mmè ìkò éwètté ñkọ ébáńá. Ké èsìóhó dítámíná áwòttò íbàd, mmè ìkpéghé ìwùòd ìkò mfèn éwètté ñkọ ébáńá ké nwèd ndúúńó àmì èdò: átikid, ìkò ànyíń mmè ádádítie ànyíń. Ndáhá úbòdò ñkọ ìwùòd ìkò sé ìdòńó ké èsìd dítámíná frès èdò: DP>PartP>NumP>PossP>Num'rP>DemP>NP. Ndúúńó àmì áwòt ké dítámíná frès ádíáná mmè frès ìkò ànyíń ànám nno údim ìkò àníé àkpan ìwùòd èkíkéré.

Mmè átá ìkò: Frès ìkò ànyin, íbòqoró ndúúńó, Ìbìbìò Dítámíná Frès

1. Introduction

Nouns in Ìbìbìò have specific reference in the sense that they name certain person, place, thing, or idea (Essien 1990). Specific Nouns can either be singular or plural and they can be used with articles. Aboh (2010) identified two types of articles which he referred to as definite and indefinite articles. Barbara (2010) claimed that definite articles often seem to develop out of demonstrative determiners while indefinite articles often come from the word 'one'. In the view of Ajiboye (2005), when a bare noun is interpreted as generic or indefinite, it must have the structure of an NP but when a bare noun is interpreted as definite, it must have the structure of a DP. Articles are one of the determiners identified in this work and they are crucial category that exert specific force on nouns, hence, they require special consideration.

Chomsky (1986) argues in line with the X¹-theory that functional elements like complementisers and auxiliaries, project to the phrasal level just like lexical elements such as nouns and verbs. In Barriers, Chomsky never applied this revised notion of X¹-theory to the nominal domain, which continued to be represented as NP. In particular, determiner elements, such as definite articles, continued to be generated in Spec, NP which was

inconsistent with the tenets of the X¹-theory that lexical as well as functional element project to the phrasal level, and the notion that specifier position host phrasal category (e.g. wh-phrases in Spec, CP and sentential subject in Spec, IP (Bernstein 2001). This issue was addressed by Abney (1987) in his DP-hypothesis that D heads the nominal phrase and selects a NP as its complement. Although this generated some questions as to whether the DP analysis is applicable cross-linguistically and if there is an internal hierarchical structure within the DP. Some of these questions were addressed in Pereltsvaig (2007) who argues that the DP-hypothesis is a universal phenomenon since the structure of the nominal phrase is universal regardless of whether the article/determiner is overtly spelt out in a language.

The hypothesis has continued to be a subject of debate among linguists especially in some African languages where nouns often occur bare and the elements that bear determiner features mostly occur phrase final as in Igbo and Zarma (see Anurudu, 1999, Obiamalu, 2013 and Jayeola, 2016). In Ìbìbìò, however, there is paucity of studies in this regard. Previous studies such as Okon (2018), Benjamin (2016, 2017) concentrated on argument movement and identification of determiners with little attention paid to the internal structure of Ìbìbìò DP. Therefore, this study investigates the internal structure of Ìbìbìò DP with insight from the DP hypothesis which is a basic assumption of the Minimalist Program, with a view to identifying the different types of determiners, describe the internal constituents of the Ìbìbìò DP and determine the hierarchical structure of the Ìbìbìò DP. In this regard, the study seeks to provide answers to the following questions:

- i. What elements are identifiable as determiners in Ìbìbìò?
- ii. What are the internal constituents of the Ìbìbìò DP?
- iii. What is the structure of Ìbìbìò DP?

Ìbìbìò is a Lower Cross language spoken by about 4 million people in Akwa Ibom State of Nigeria according to Essien (1990) and Urua (2000). Lower Cross is a member of the New Benue-Congo branch of the Niger-Congo family of languages which is the largest family of languages spoken in Africa (Williamson 1989 cited in Urua 2000). The standard variety of the Ìbìbìò language is spoken in fourteen of the thirty-one local government areas of Akwa Ibom State namely; Uyo, Itu, Uruan, Etinan, Nsit Ibom, Nsit Atai, Nsit Ibium, Ibesikpo Asutan, Ikono, Ini, Ikot Abasi, Mkpát Enin, Ibiono Ibom and Unna. The Ìbìbìò language is head initial in terms of verb phrases. The language has two level tones- High (H) and Low (L) plus a downstepped High tone (!H). There are also two contour tones, low-high (LH) and high-low (HL). The Ìbìbìò language is agglutinating in nature and the speech sounds are divided into two broad areas namely: segmental and non segmental. The segmental section is divided into vowels and consonants while the non segmental section is divided into syllable structure, tone, length, harmony, intonation, etc (Urua 2000). Also, Ìbìbìò is an SVO language as shown in the structure below:

- (1) **àbóíkpa ádò áwòt údákíkòd kèèd**
 subject(S) verb(V) object (O)
 Girl DET. Kill snake DET. ‘The girl killed a snake’

This work will obviously contribute to the study and development of the Ìbìbìò language especially its syntax. The study apart from increasing the reader’s interest in the grammar of Ìbìbìò, will act as a reference point for further research and studies in Ìbìbìò syntax. The paper is divided into five sections. Section one provides the background to the study, section two discusses the methodology; section three reviews related literature, section four presents and analyses the data used for the study, while section five is the summary and conclusion.

2. Methodology

Primary data collection was done using the Ibadan syntactic checklist, created by Ibadan Language Study Group (IBALSG), and the Ibadan 400-word list. Oral narratives such

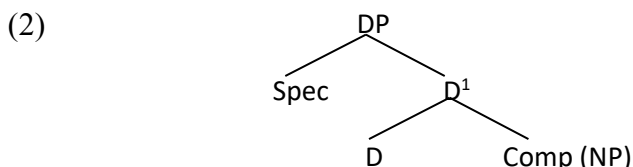
as folktales were also elicited using an audio recorder. Data collection was carried out in Uyo, the capital of Akwa Ibom State through unstructured interview. The secondary sources include journals, published works i.e. linguistic articles and written texts. Data were subjected to qualitative analysis and interlinear glossing.

3. Literature Review

There had been a controversial issue in syntactic analyses on the representation of a nominal constituent. In this regard, there are two schools of thought. One school of thought believes that a nominal constituent should be regarded as a noun phrase (NP) while the other claims that it is better represented as a determiner phrase (DP). Consequently, a handful of works have been done on noun phrase and determiner phrase across different languages. However, we shall review only the works that are relevant to this study

3.1. The DP-Hypothesis

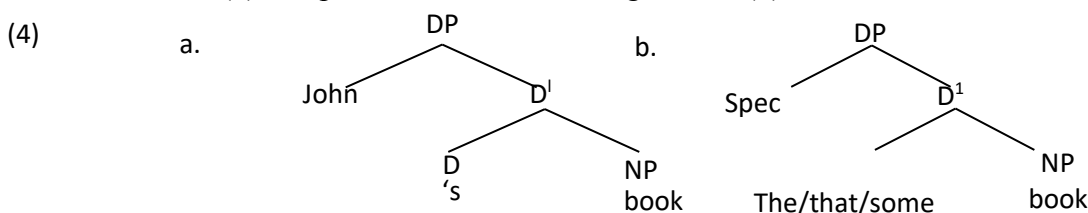
In the earlier models of Transformational Generative Grammar such as Government and binding (GB), a nominal constituent (noun phrase) is said to be headed by a noun or pronoun. However, Abney (1987) observes that the head word in a nominal constituent is the determiner, where the determiner takes a noun phrase as its complement as shown in the schema below.



This Abney (1987) submission is born out of two major arguments, one of which is the structural parallelism of possessors and determiners as shown below.

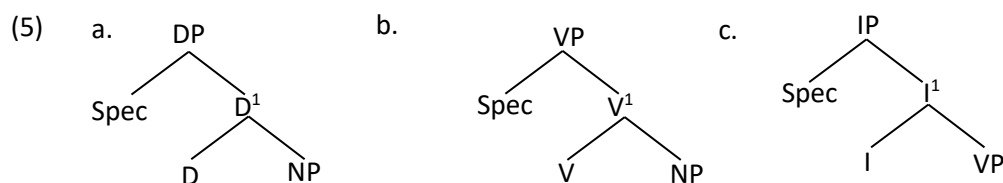


The structure in (3) is represented in the tree diagrams in (4) below



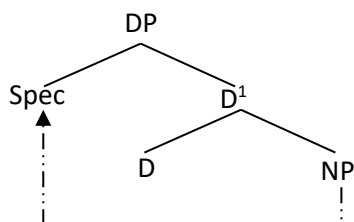
As shown in (4), the possessive marker 's and the determiners *the*, *that* and *some* are in the same structural positions. This analysis is in favour of the DP-hypothesis.

Another argument in support of the DP-hypothesis is the structural similarity between the structure of the DP and other structures. It is believed that structures such as VP and IP have their head words occurring initially. This order is similar to the DP-Schema as shown below.



Aboh's (2010) observation on Kwa languages also supports the DP-hypothesis. He claims that despite the fact that the noun head precedes modifiers and determiners at the surface level, it can still be assumed that the languages are head initial underlyingly. He opines that the order of modifiers in relation to the position of the noun and the determiners is derived from some movement operations pied piping the noun phrase to the left of its determiners as presented in the structure below.

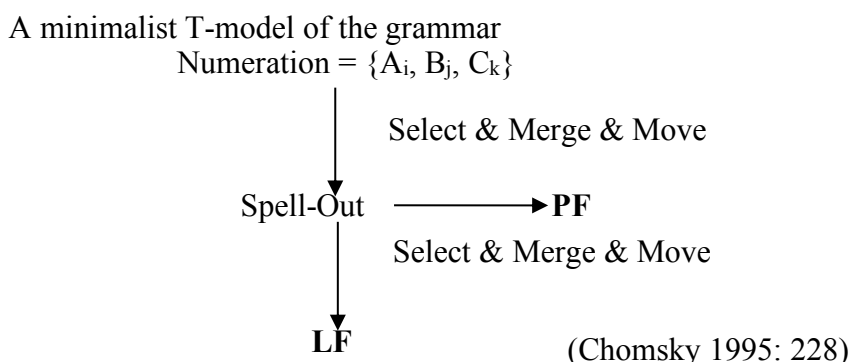
(6)



3.1.2. Theoretical Framework

The Minimalist Program is the recent model of syntactic theory in Chomsky's generative grammar. As the name implies, the Minimalist Program (MP henceforth) is designed to minimize or economize the descriptive devices used to account for the derivation of syntactic structures in human languages. In other words, "the Minimalist Program seeks to determine the least costly derivation and reduces the computational complexity" (Al-Horais 2013:82). Unlike the model of government and binding theory which has four levels of representation, D-Structure, S-Structure; Phonetic Form (PF) and Logical Form (LF), the MP employs only two levels of representation; PF and LF as shown in the schema below.

(7)



The minimalist believes that the starting point of the derivation of a syntactic structure is the numeration. The lexical items needed in a derivation are selected sequentially from the lexicon into the numeration. Then, from the numeration, the words are selected, merged, and moved to check strong features before Spell-Out, until a structure is formed and converged at LF.

3.2 Leftward unbounded movement of argument to non-argument position in Ìbìbìò

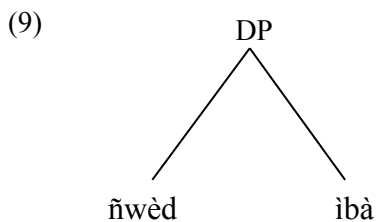
A lot has been done on the syntax of Ìbìbìò using the framework of Government and Binding. For instance, Okon (2018) examines leftward unbounded movement of argument to non argument position in Ibibio. The theoretical framework adopted for the analysis of his work was the Government and Binding (GB) with special focus on X-bar, government, case, and theta sub-theories of GB. The results of the findings reveal that, interrogative, topicalised, left-dislocated and cleft structures are syntactic operations which show evidence of leftward unbounded displacement of arguments to non-argument positions in Ìbìbìò. This present study sets out to discuss DP in Ìbìbìò using a more recent theory which is the Minimalist Program to show the internal constituents of DP in Ìbìbìò.

3.3 Determiner Phrase in Ìbìbìò

A literature relevant to this study is that of Benjamin (2016), who did a descriptive study on Determiner Phrase in Ìbìbìò. It is noteworthy that her work is purely descriptive and this present work is out to fill the gap by considering the internal constituents of DP in Ìbìbìò using the DP Hypothesis within the Minimalist Program and also introducing additional Determiners which were not considered by Benjamin (2016). For instance, she analyzed numerals thus:

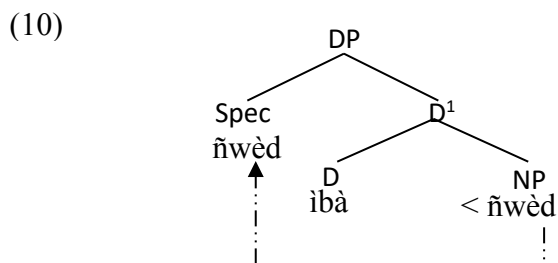
(8) **ñwèd ìbà**

book two
‘two books’



(Benjamin 2016:29)

It is expedient to state here at this point that the analysis of the determiner phrase above by Benjamin (2017) does not conform to the structure of the DP-Hypothesis proposed by Abney (1987). According to Aboh’s (2010) observation on Kwa languages that the order of modifiers in relation to the position of the noun and the determiners is derived from some movement operations pied piping the noun phrase to the left of its determiners as presented in the structure (8) above, the structure in (9) could be better analyzed as in (10) below thus:



As seen in the structure above, the NP *ñwèd* ‘book’ enters the derivation as the complement of the head D. But, the nominal EPP (edge) feature of D triggered the NP *Ñwèd* to move to the Spec-DP to satisfy the need for a constituent to fill the Spec position of DP. This means that the head D actually occur at the left periphery of the DP prior to the spell-out. This yields the correct linear order which Ibibio tolerates.

3.4 Noun Phrase movement in the Ibibio Language

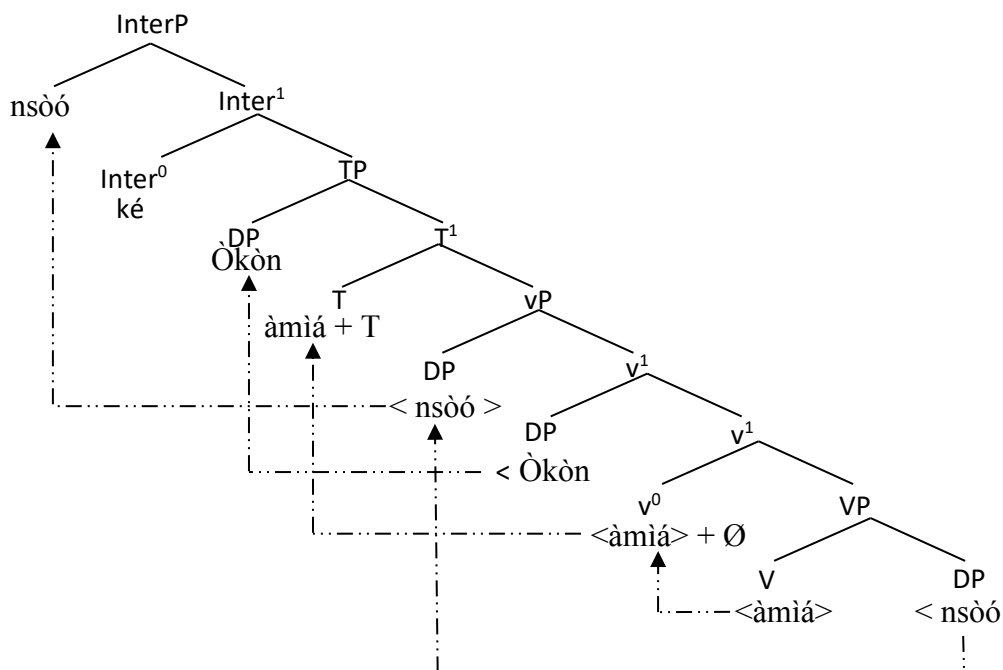
Benjamin (2017) reveals in her analysis of Noun Phrase Movement in Ìbìbìò that Wh-movement is a non-argument movement which occurs as *wh-insitu* in Ibibio language and most African languages. She added that in Ibibio, *wh*-word can move to acquire a new position or remain in the same place it was generated. She also observes that in this type of movement, an NP is moved from an argument position. She illustrates the movement using X-bar theory as in 10 below:

- (11) (a) **Òkòn àmiá bàn**
 Òkòn beat drum
 Òkòn beats (a) drum
 (b) **Òkòn àmiá nsòó**
 Òkòn beat what
 Òkòn beats what?
 (c) **nsòó_i ké Òkòn àmiá t_i**
 What does Òkòn beat
 What does Òkòn beat?

(Benjamin 2017:392) (Interlineal glossing, ours)

In Ìbibìò, the ex-situ strategy is employed to derive a Wh-question. This means that in Ìbibìò, a question word usually moves to the Spec, InterP (A-bar position) dominating the TP to question its corresponding DP within the TP. The structure in (11) above can be analysed using the Minimalist Program thus:

(12)



From the structure in (12), the question word *nsòó* ‘what’ moves through the edge of little vP where it checks its accusative case feature with the lexicalized light verb *àmiá*. Then, the strong *wh-feature* of the Inter⁰ attracts the interrogative *nsòó* ‘what’ to move from the second spec-vP to the Spec-InterP (an A-bar position). Also, the ‘T’ has EPP where ‘T’ is the probe and it has unvalued person and number feature in addition to EPP. So, it will serve as a probe to get a maximal projection that can value those features. Therefore, *Òkòn* has a valued number and person feature but unvalued case feature so, the valued number and person feature of *Òkòn* will value the unvalued number and person feature of ‘T’ while the valued case feature of ‘T’ will now value the unvalued case feature of *Òkòn* as nominative. In addition, ‘T’ also has EPP feature which requires its Spec to be filled. It should be noted that the uninterpretable *wh-feature* of the interrogative *nsòó* ‘what’ gets deleted when checked with the Inter⁰. Since the Inter⁰ does not have a case feature that can be checked by the interrogative word occupying its spec position. Hence the spec positions of the domains dominating the TP are A-bar positions in Ìbibìò.

It is pertinent to state at this point that this present study is aimed at modifying the DP-Schema to capture the structure of Ìbibìò DP and to justify that Ìbibìò NPs are better analysed

as DPs with NP complements using the DP hypothesis if it is considered that the NPs in the derivation bear null determiners.

4. Data Analysis

4.1 The Ìbìbìò Noun Phrase

A noun phrase is a word or group of words headed by a noun or a pronoun which is optionally accompanied by a modifier and a determiner. Let us consider the examples in Ìbìbìò below.

- (13) a. *Àkpán* *ádép* *ùfá* *ùfòk* *ádò*
 Àkpán buy new house DET
 ‘Àkpán bought that new house’
- b. *Àmì* *ńmá* *àńmò*
 1sg. love them
 I love them

The constituents in italics in the examples above are noun phrases. In (13a), *Àkpán* ‘a name’ is the head word (noun) and the only word functioning as a noun phrase. This means that the noun phrase is made up of only the head word *Àkpán* which is not accompanied by any modifier or determiner. But, *ùfá ùfòk ádò* ‘that new house’ is a group of words containing; the head word *ùfòk* ‘house’, the adjective *ùfá* ‘new’ and the determiner *ádò* ‘that’, functioning as an adjectival phrase. Also, the pronouns *Àmì* ‘I’ and *Àmmò* ‘them’ are the head words and the only words functioning as the subject NP and the object NP respectively in (13b). Thus, any constituent(s) that is headed by a noun or a pronoun with or without a modifier is a noun phrase in Ìbìbìò.

4.2 Functions of Noun Phrases

Noun phrase can perform three different functions. It can function as the subject of the verb or the object of the verb or preposition in a grammatical sentence as illustrated below.

- (14) a. *Èté* *ádò* *ádép* *mmòtò*
 Man DET buy car
 ‘The man bought a car’
- b. *Òkón* *àbòb* *ùfòk* *kèèd*
 Okon build house DET
 ‘Okon built a house’
- c. *Àmì* *ńmá* *àńmò*
 I 1SG love them
 I love them
- d. *Mmó* *èmíá* *àńmò*
 3pl beat 3pl
 ‘They beat them’
- e. *Ùbón* *ádép* *ùfòk* *ké* *Dékòs*
 Ùbòn buy house in Lagos
 ‘Ùbòn bought a house in Lagos’
- f. *Ìdóngésít* *ádáiyá* *ké* *ànyóñ* *mbíd* *ádò*
 Victor sleep on top mat DET
 ‘Victor slept on the mat’

In the examples above, the noun phrases; *Èté* ‘Man’, ‘a name’, *Àmì* ‘I’ and *àńmò* ‘they’ function as the subject of the verbs *ádép* ‘buy’, *àbòb* ‘build’, *ńmá* ‘love’, and *èmíá* ‘beat’ in (14a, b, c, and d) respectively while, the noun phrases; *mmòtò*, ‘car’, *ùfòk kèèd* ‘a house’, *àńmò* ‘them’ and *àńmò* ‘them’ function as the object of these verbs. But, the noun phrases,

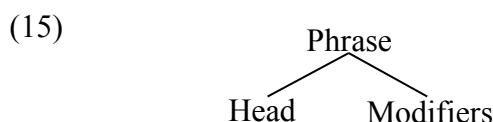
Dékòs ‘Lagos’ and *ànyòñ mbíd ádò* ‘the top of the mat’ function as the object of the preposition *ké* ‘in/on’ in (14e and f) respectively.

4.3 The Internal Structure of the Noun Phrase in Ìbìbìò

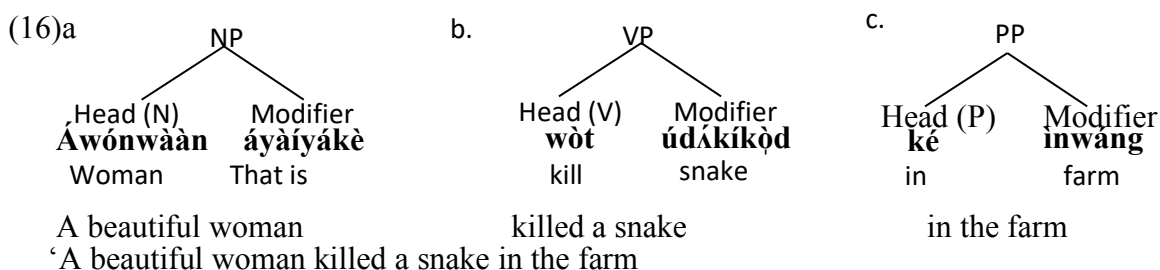
Ìbìbìò noun phrase is head first in terms of word order. In other words, the head word (noun) of the noun phrase in Ìbìbìò usually occurs first before its modifiers. This means that the modifiers post-modify the head noun as discussed below. However, when an adjective precedes a noun, the construction becomes an adjectival phrase.

4.3.1. The notion of head in Ìbìbìò

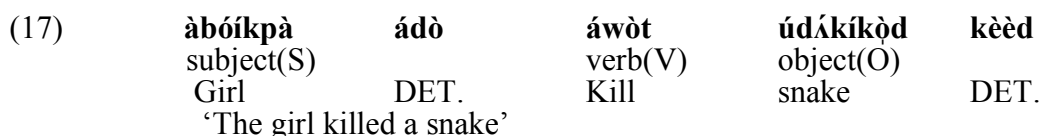
In syntactic analysis, “the head parameter is a word order parameter. It is the general property of phrases to have head or minimal projection which determines its character or the nature of the overall phrase” (Taiwo 2016:5). However, the position of the head differs from language to language. Some languages (like English) position head words immediately before their complements, whereas others (like Korean) position them immediately after their complements (Radford 2009:31).¹ In Ìbìbìò, the head words are positioned immediately before their modifiers or complements. In a nut shell, Ìbìbìò is a head-first language. Consider the schema below.



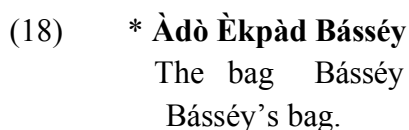
Going by the schema in (15) above, let us examine the illustrations below:



Also, Ìbìbìò is an SVO language as shown in the structure below.

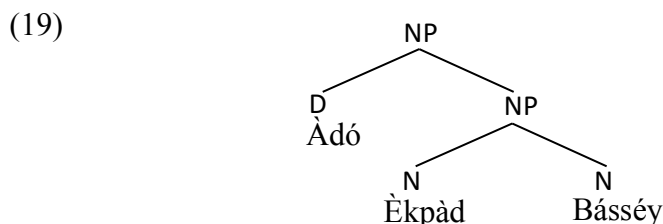


Collins (2013: 17) argues along the lines of the distribution fact for the treatment of determiner as the head of the DP. For instance, possessors and determiners are said to be in complementary distribution which explains why the construction in (18) is ungrammatical.

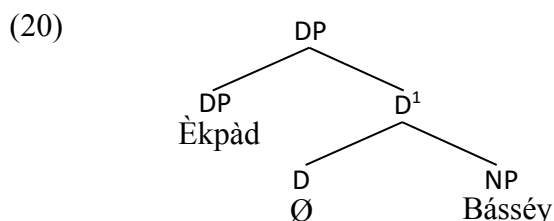


¹ See Radford (2009:31) for a discussion on the position of head in languages.

If we treat *Básséy*'s bag, which is a perfect expression as a projection of NP, we will have the structure in (19) which clearly violates the Linear Correspondent Axiom (LCA)².



However, a better treatment of the apostrophe is assumed if we take the projection of the possessor as that instantiated by a DP. This alternative proposal is shown in (20) below.



In (20), *Èkpàd* ‘bag’ is the specifier of DP and *Básséy*, ‘a name’ is the complement of D. Apart from obeying the word order principle; Spec-Head-Complement (SHC), it also accounts for why no overt determiner such as *ado* ‘the’ in (18) can appear because the D position is already occupied by a phonetically null genitive’s’.

Following from the preceding discussions, we shall devote the remaining parts of this paper to the DP assumptions drawing on relevant data from *Ibibio* to ascertain their relevance and bring out the language specific behaviour of elements that head the determiner phrase. Besides, the projections of personal pronouns, demonstratives, genitive constructions, numerals, quantifiers, other modifiers and issues relating to the surface order of modifiers in line with the DP-hypothesis and the LCA are taken up in the later sections of this chapter.

4.3.2. Determiners and Personal Pronouns

The fact that determiners are capable of projecting properties to the phrase is a strong argument in favour of taking them as heads. Also, the relation between determiners and pronouns whose distributions do not overlap appear to support the treatment of pronouns as heads in the DP. As shown below.

- (21)
- | | |
|---|--|
| <p>a. Ìwòd mmí
Head 1sg
‘My head’</p> | <p>b. Ákòk nyìn
Money 1pl
‘Our money’</p> |
| <p>c. Èkpàd mfò
Bag 2sg
‘Your bag’</p> | <p>d. Ùbéd mmúfò
Room 2pl
‘Your room’</p> |

² Prior to the emergence of MP, crosslinguistic variations are captured by parameter switch or directionality which is used to determine the position of specifiers and complements in relation to the relevant heads of phrases. For this reason, some languages are said to be head initial and others, head final. (See Carnie 2013:187, Aboh 2005:155, Hornstein, Nunnes & Grohmann, 2005:223-233).

e. **Ndídíá àmó**

Food 3sg

'His/her/its food'

f. **Nwéd mmó**

Books 3pl

'Their books'

4.3.3. Determiners

From both the syntactic and semantic view points, determiner usually suggests or predicts the coming of a noun (phrase) whose referent limits or modifies. It is a category that expresses the referential properties of nouns. What we have just said of the syntax of determiner is true of a language like English where the determiner consistently occurs before the nouns. In *Ibibìò*, determiners appear after the nouns. The term determiner as used here connotes definite and indefinite articles, demonstratives, numerals and quantifiers.

The articles in *Ibibìò* are: *ádò* 'the' and *kèèd* 'a'. Moreover, demonstratives, numerals, and quantifier also function as determiners as listed below.

21.

S/N	Determiners	Examples	Gloss
1.	Articles	<i>Adò, kèèd,</i>	'the', 'a',
2.	Demonstratives	<i>Adò, Ámí/ádám/mbõn</i>	'that/those', 'this/these'
3.	Quantifiers	<i>Afid ùsàk ùwák</i>	'all' 'few/some' 'many'
4.	All Numerals	<i>Kèèd</i>	'one'
5.	All Numbers	<i>Mmè</i>	'Plural'
6.	All Possessives	<i>ímí</i>	'mine'
7.	All Particularizers	<i>Akpán-ákpán</i>	'in particular'
8.	All Pronouns	<i>Amó</i>	'3sg'
9.	Bare nouns	<i>Akpán</i>	'name'

While **Articles** indicate or specify nouns, **Demonstratives** point out persons, objects, concepts, whether approximate or distal. Let us examine the examples below:

(22)

a. **Ébót kèèd**

Goat DET.

'A goat'

b. **Sókòrò kèèd**

Orange DET.

'An orange'

c. **mmín ádò**

Wine DET.

'The wine'

d. **Úfok ádò**

House DET.

'The house'

e. **Èté àmì**

Man DEM.

'This man'

f. **Ídèen àmì**

Men DEM.

'These men'

g. **Áwónwàan ádò**

Girl DEM.

'That girl'

h. **Ibáañ ádò**

Girls DEM.

'Those girls'

Quantifiers are a class of modifiers or functional items (i.e., they belong to closed-class sets of words that head functional projections in syntax) that give a relative or indefinite indication of quantity. A quantifier and a determiner do not occur adjacently in the DP configuration because a noun often intervenes between the two as shown in 23 below.

(23)

a. **àfid mmàñ!sáñ ádò**

QUANT. groundnut(pl) DET.

'All the groundnuts'

- b. **àfid ùfok** **ámì**
 QUANT. house(pl) DEM.
 ‘All these houses’
- c. **àfid ùbèd** **ádò**
 QUANT. Room(pl) DEM.
 ‘All those houses’

The difference between the projections of Numerals and Quantifiers is marginal as contained in the words of Matthews (2007: 329)³, any word or expression which gives a relative or indefinite indication of quantity is referred to as a quantifier distinguished from a numeral which gives a precise and absolute indication of quantity. In Ìbibìò, **numerals** can also function as determiners as shown below:

- (24) a. **Èté kèèd**
 Man one
 ‘One man’
- b. **Ídèèn ìbà**
 Boys two
 ‘Two boys’
- c. **Sókòrò itìòn**
 Oranges five
 ‘Five oranges’
- d. **ñwéd dùòp**
 Books ten
 ‘Ten books’

In Ìbibìò, we have ordinary and cardinal numerals. Examples of **cardinal numerals** include: *kèèd*, ‘one’ *dùòp*, ‘ten’ *ità*, ‘three’ etc. While **ordinal numerals** include: *àyóhòtìòn*, ‘fifth position’ *àyóhòibà*, ‘second position’ etc. Cardinal numerals are used to indicate the number of the noun head used, in contrast to the ordinal numeral which are used to show position as exemplified below.

Cardinal numerals

- (25) a. **ñwéd kèèd**
 Book one
 One book
- b. **ñwéd dùòp**
 Book ten
 Ten books
- c. **kòb àkòtì itá**
 Cup beans three
 Three cups of beans

Ordinal Numerals

- (26) a. **Àñdìkpép àyóhòtìòn**
 3PSg. Steacher fifth
 The fifth teacher

³ See Matthews (2007:329) on the discussion of the difference between projections of Numerals and Quantifiers.

b. **èkpàd àyóhòibà**

Bag second

The second bag

From the above data (25-26) all numerals are post-posed in Ìbìbìò. We can also see that the ordinal number is introduced with *àyóhò*, ‘position’.

Number, in terms of its phonological and semantic features is not the same as numeral in Ìbìbìò. It is a category that distinguishes reference to one entity from reference to that which is more than one. Simply put the distinction between singular and plural is made by number, it is therefore apt to recognise number as an opposition of singular and plural. We know that Ibibio has number because we can find correspondences like the following:

	I	II
(27)	a. Áwódèèn Man	Ídèèn Men
	b. Áwónwàn Woman	Ìbáàn Women
	c. Àyèn Child	Ndító Children

The difference in meaning between the sets in I and II in (27) actually corresponds to a difference in form where the first set is singular and the second plural. The expression of number on the noun is essentially through inflections which may have phonologically determined distribution. However, it may be base-merged with noun or appears as an affix, *mmè* as will be seen in section 4.7 of this paper.

The researcher takes *mmè* (Existential Plural) to be a manifestation of Number (Num^o). A reason for this is that *mmè* encodes [+plural] and it transfers this feature onto the noun in a nominal phrase. The noun phrase will otherwise be interpreted as singular if the existential plural was not present in the nominal expression. Consider the example in 28 below.

(28).	Ákpán-ákpán	mmè	ntùk	ibáán	ibà	ádò
	Part/Def _[+spec]	ExistPl	adj.	girlPl	Num'r	Dem.Sg
	‘those two women in particular’					

In example (28), the existential plural item *mmè* influences the noun *ibáán* to have a straight forward plural reading because of the introduction of the adjective *ntùk* (this is in the light of Aboh 2004, Bernstein 2001, Ritter 1991, and Rizzi 1997).

Possessives are formed using proper pronouns and possessives. They are used to show possession in Ìbìbìò. Ìbìbìò possessives agree with the noun both in number and person.

Examples of Ìbìbìò possessives are:

- | | | |
|---------|----------------|---|
| (29) a. | ímí - | my (1 st person singular) |
| b. | nnyín - | our (1 st person plural) |
| c. | mfò - | your (2 nd person singular) |
| d. | ímùfó - | your (2 nd person plural) |
| e. | ámò - | his/her/its (3 rd person singular) |
| f. | âmmò - | their (3 rd person plural) |

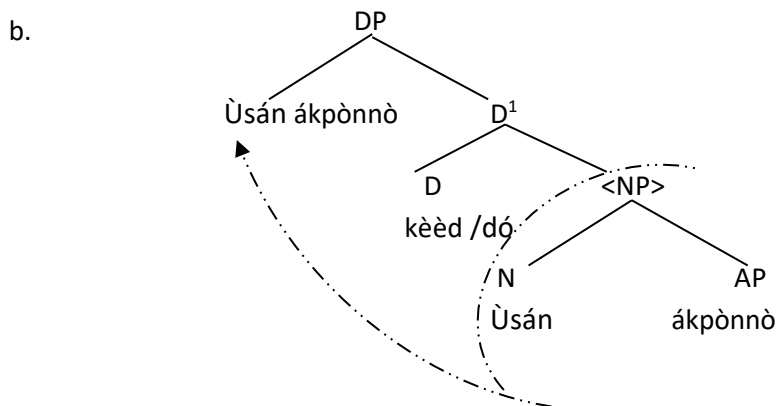
demonstratives, and quantifiers on or after the noun as well as non-use of definite adjective as shown in the asterisked examples in (32) is a further confirmation of our claim that definite determiners, numbers, numerals, demonstratives, and quantifiers do not overlap. This means that these determiners have different syntax which should be distinguished.

- (32) a. **ùsáñ kèèd ákpònnó**
 Plate Num'r big
 "One big plate"
- b. **érón ámí ánwènnè**
 sheep this black
 "This black sheep"
- c. **éwá ádòhó ábúbíd**
 dog that black
 "That black dog"
- d. ***Ídèèn éfòònnò íbà ádò**
 Boys+Def. handsome two that
- e. ***Ìbáàn éfòònnò íbà ádò**
 Girls beautiful+Def. two that

As we have earlier explained examples (32d & e) in the above expressions crash because they co-occur among the different subsets of determiner elements; no two subsets of determiners can co-occur within a single DP.

To treat the adjective as an adjunct to the noun, where the adjective is adjoined to the noun such that the entire NP i.e. adjective-noun moves to the Spec of DP, will yield the correct linear order which Ìbìbìò exhibits. This is exemplified in (33b) using example (33a).

- (33) a. **Ùsán ákpònnò kèèd/dó**
 Plate big Num'r/Dem.
 "One/that big plate"



The structure in (33b) presents the [Noun-Adjective-Numeral/Demonstrative] order which Ìbìbìò tolerates. It therefore seems that the left-adjunction approach is appropriate in Ìbìbìò DP

4.4 The DP-Hypothesis in Ìbìbìò

As presented earlier, scholars have different opinions on the status of nominal constituents in different languages. Some believe that nominal constituents are better represented as DP (headed by a determiner) while some regard nominal constituents as NP (headed by a noun). Therefore, we shall juxtapose the evidence in favour of NP against DP

and the evidence in favour DP against NP to justify whether nominal constituents are better regarded as noun phrases or determiner phrases in Ìbìbìò.

4.4.1 Evidence in favour of DP against NP in Ìbìbìò

Here, we shall present the evidence which supports that a nominal phrase is better regarded as a determiner phrase in Ìbìbìò.

4.4.2 Semantic Evidence of DP

The major evidence that justifies a nominal constituent to be regarded as a DP in Ìbìbìò is that determiners often bring about the difference in meaning between nominal constituents. In section (4.3.3), we identified; *ádò*, ‘the’ *kèèd*, ‘a’ *ámì* ‘this/these’, and *ádò* ‘that/those’ as determiners in Ìbìbìò. These determiners are semantically significant as shown below.

(34)	a. Étó	kèèd	b. Étó	ádò
	Tree	DET.	Tree	DET.
	‘A tree’		‘The tree’	
	c. Áwódèèn	ámì	d. Áwódèèn	ádò
	Boy	DEM.	Boy	DEM.
	‘This boy’		‘That boy’	

The difference between (34a) and (34b) is **indefiniteness** and **definiteness** triggered by the determiners *kèèd* ‘a’ and *ádò* ‘the’ respectively. In other words, the phrase in (34a) differs from (34b) in that (34a) is indefinite, while (34b) is definite owing to the determiners in the two phrases. Also, (34c) differs from (34d) in terms of **proximity** (closeness). The determiner *ámì* ‘this’ denotes that the entity *Áwódèèn* ‘boy’ being referred to is very close while *ádò* ‘that’ denotes that the reference is some distance away (**distal**). This means that the determiners in the nominal phrases in (34a and 34b), and (34c and 34d) bring about the differences between the phrases. Therefore, the most important words (head words) in the phrases are the determiners *kèèd* ‘a’, *ádò* ‘the’, *ámì* ‘this’ and *ádò* ‘that’ respectively and they contribute to the role of interpreting the meaning of the whole phrase. Hence, the nominal phrases in (34) are better regarded as determiner phrases with NP complement.

4.4.3 The Nature of Definite Pronouns

Definite pronouns are often in complementary distribution with determiners in Ìbìbìò. In other words, a definite pronoun cannot merge with a determiner in a nominal phrase in Ìbìbìò. For instance, there is nothing like:

(35)	a. * Nyìn	ádò	b. * Áfò	kèèd	c. * Àmmò	ami
	We	the	you	a	them	this
	Ipl	DET.	2sg	DET.	3pl	DEM.
	d. * Àmì	ádò	e. * mmùfó	kèèd	f. * Àmmò	kèèd
	I	that	you	a	them	a
	Ipl	DEM.	2pl	DET.	3pl	DET.

This is similar to the nature of determiners, in that no two determiners can co-occur in a nominal phrase in Ìbìbìò as shown below.

(36)	a. * kèèd	ádò	b. * Ámì/mbòn	ádò/mbònńdó	c. * Ámì/mbòn	kèéd
	a	the	this/these	that/those	this/these	a

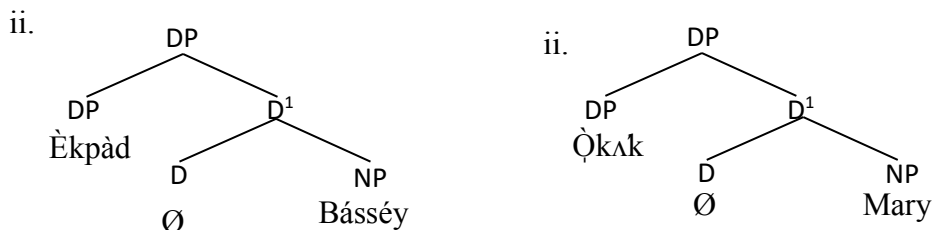
- d. * **Ámì/mbòn** e. * **ádò /mbònnító** kèèd f. * **ádò/ mbònnító** **Ádò**
 this/these the that/those a that/those the

This evidence shows that the definite pronouns cannot co-occur with the determiners because they are also determiners. Since a definite pronoun can occur in isolation in a nominal phrase, then definite pronouns are **bare determiners**. Thus, the nominal phrase that is made up of a definite pronoun (bare determiner) is better regarded as a determiner phrase as against a noun phrase in Ìbìbìò.

4.4.4 The Nature of the Possessive Marker

The nature of the possessive marker supports the fact that a nominal phrase is better regarded as a DP in Ìbìbìò. The structure of the possessive phrase is easily accounted for by the schema of the DP-hypothesis with NP complement as shown below:

- (37) a. i. **Èkpàd** **Básséy** b. i. **Òkàk** **Mary**
 Bag Básséy Money Mary
 ‘Bassey’s bag’ ‘Mary’s money’



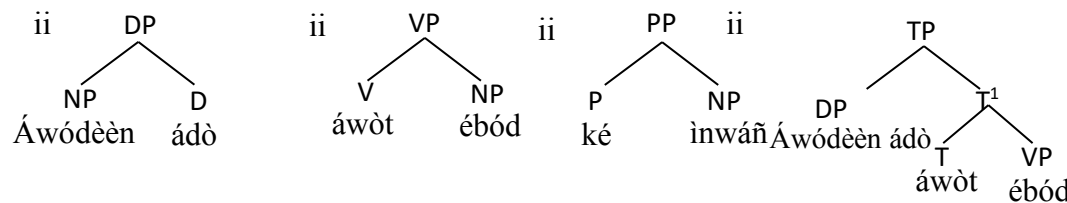
As shown in (37), the DP hypothesis easily accommodates the possessive phrase. The phonetically null possessive marker Ø heads the phrase; the DP that immediately precedes Ø occupies the specifier position; while the NP that immediately follows Ø is the complement. The NP structure does not provide for the possessive marker to head a nominal phrase since it is not a noun. Therefore, a nominal constituent is better regarded as a DP in Ìbìbìò.

4.5 Structural Evidence of DP

The fact that the head of a syntactic domain usually occur at the left periphery of such domain is a strong evidence in favour of NP against DP in Ìbìbìò. This is because there is a structural change when the DP-hypothesis is used to analyse the nominal constituent. Consider the illustration in (38) below.

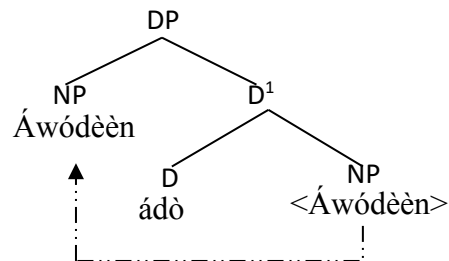
- (38) a. i. **Áwódèèn ádò** b. i. **áwòt ébód** c. i. **ké inwáñ** d. i. **Áwódèèn ádò áwòt ébód**

Boy DET Kill goat in farm Boy DET kill goat
 ‘The boy’ ‘killed a goat’ ‘in the farm’ ‘The boy killed a goat’



As shown in the illustrations above, the structure of the nominal phrase in (38a) is no more parallel to other phrases whose heads occur at the left periphery of their domains. However, this structural change can be accounted for by the DP schema. The linear order of NP-D can be understood as involving the movement of NP to Spec-DP triggered by the nominal EPP (edge) feature of the D, that is, the D requires its Specifier to be filled with a constituent that indicates the nominal predicate (Ishizuka 2008:9) as shown below.

(39)

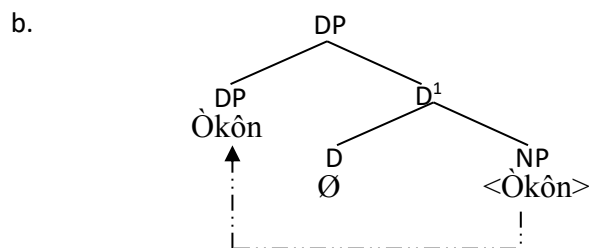


As seen in the structure above, the NP *Áwódèèṅ* ‘boy’ enters the derivation as the complement of the head D. But, the nominal EPP (edge) feature of D triggered the NP *Áwódèèṅ* to move to the Spec-DP to satisfy the need for a constituent to fill the Spec position of DP. This means that the head D actually occur at the left periphery of the DP prior to the spell-out. Therefore, the DP-analysis still provides a similar structure with other phrases in terms of head positions in *Ìbìbìò*.

4.5.1 Bare Nouns

Another evidence which strongly supports a nominal phrase being regarded as a noun phrase is the absence of a determiner in nominal phrases that contain bare nouns (Oyelade 2019). If a nominal phrase should be regarded as DPs, why is it that a bare noun cannot merge with a determiner to form a nominal phrase in *Ìbìbìò*? Well, the nominal phrase containing a bare noun can still be regarded as a DP which is headed by a null determiner. For instance, the bare noun (nominal phrase) *Òkón* in (40a) as a null head as shown in the structure in (40b) below.

(40). a. **Òkón** **áyàiyá**
 Òkón handsome
 ‘Òkón is handsome’

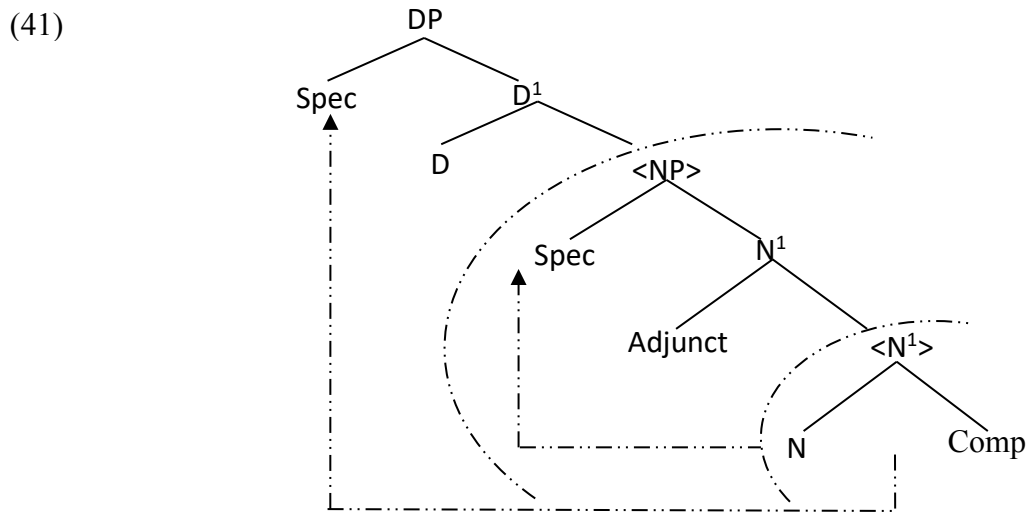


In (40), one will observe that the DP is headed by null determiner. The movement of the bare noun *Òkón* to the Spec-DP is triggered by the need for the Spec-DP to be occupied by a constituent. Thus, the DP-hypothesis can also account for bare nouns in *Ìbìbìò*. Therefore, owing to the arguments presented above, we can conclude that a nominal constituent is better referred to as a determiner phrase in *Ìbìbìò*.

4.6 The Structure of *Ìbìbìò* DP

Having presented that a nominal expression or constituent is better represented as DP instead of NP, henceforth, nominal constituents shall be regarded as Determiner Phrase (DP)

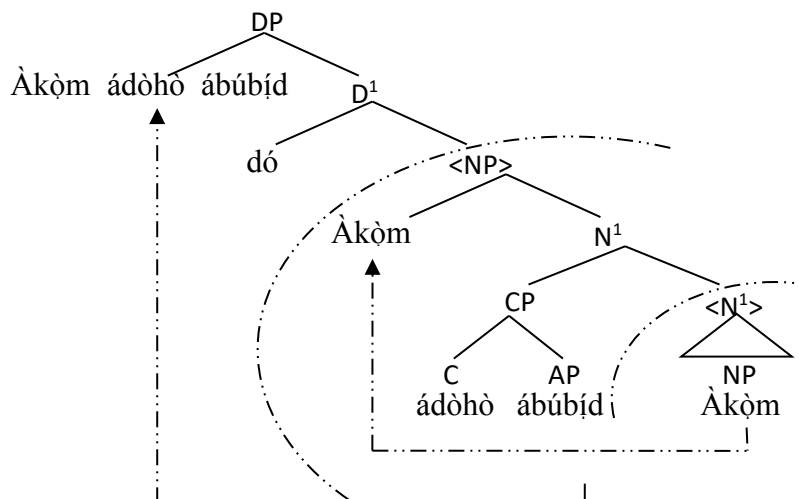
in this study. For the DP-hypothesis schema to accommodate all the modifiers in a nominal constituent in *Ìbìbìò*, we propose the structure below.



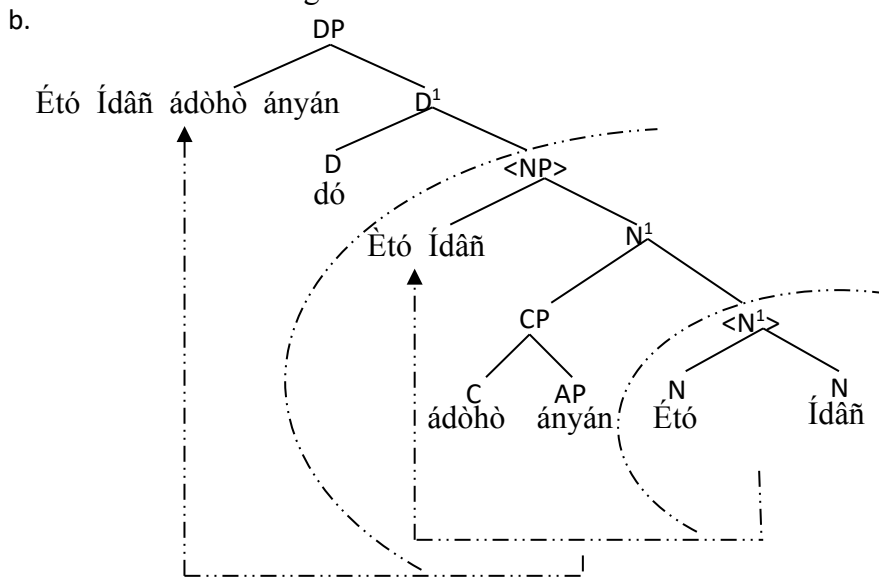
As regards the structure in (41) above, the lower N^1 pied-piping Comp (the complement) moves to lexicalise the specifier position of the maximal NP. Then, the nominal EPP (edge) feature of D triggers the whole NP pied-piping the Adjunct to move to the Spec-DP to satisfy the need for a constituent to occupy the Spec-DP. This approach has been described by Chomsky (1995) as Generalized Pied-Piping while Aboh (1999, 2004)⁵ refers to the method as „Snowball/Roll-up“ movement which allows pied-piping of a maximal projection and continues until it reaches the Spec of the highest phrase depending on the number of intervening functional heads. However, the NP does not always move to the Spec-DP. It only moves if there is no constituent occupying the Spec-DP (see example (40) above). From the data that would be presented in (42a), attributive adjectives in *Ìbìbìò* are obligatorily relativised by *àdòhò*. Therefore, the attributive adjectives will be captured as CPs whose projection is from merging the complementiser *àdòhò* with the adjective. Going by the structure in (41), consider the examples below.

- (42) a. **Àkòm àdòhò ábúbíd dó**
 Roof that dark DET.
 ‘The dark roof’

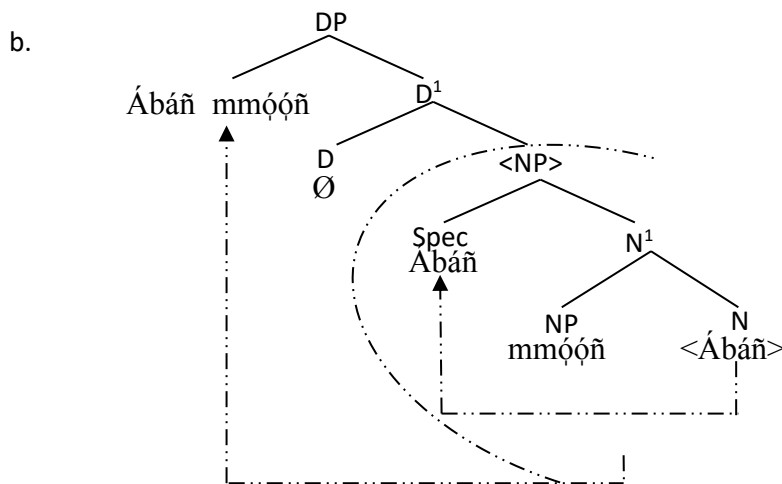
b.



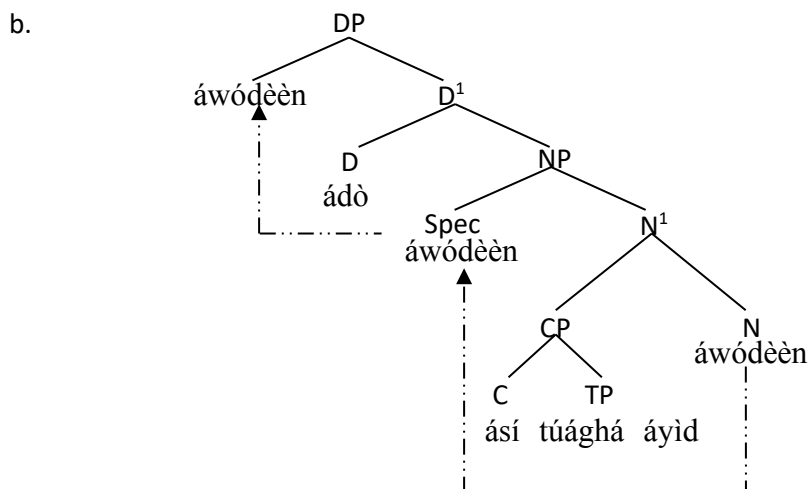
- (43) a. **Étó** **Ídâñ** **ádòhò** **ányán** **dó**
 Stick arrow that long DET.
 ‘The long bow’



- (44) a. **Ábáñ** **mmóqñ**
 Pot water
 ‘Water pot’



- (45) a. **áwódèèn** **ádò** **ásí** **túághá** **áyid**
 Man DET that cries cry
 ‘The man that cries’



In (42b), (43b) and (44b), the N¹ pied-piping the NP complement *Ákòṃ*, the N¹ pied-piping the N complement *Ídāñ* and the N *Ábáñ* move to lexicalise the Spec position of their respective NPs. Then, the nominal EPP (edge) feature of D triggered the NPs pied-piping the adjuncts; *ádòhò ábúbíd*, *ádòhò ányán* (attributive adjectives) and *mmóṣṣ* (NP) to move to the Spec-DP respectively. Similarly, in (45b), the N *áwódeèn* moves to lexicalise the Spec-NP. However, the NP did not pied-pipe the CP *ási túághá áyíd*, only the N *áwódeèn* moves to the Spec-DP leaving the CP stranded. This is because, if the whole NP moves to the Spec-DP, the derivation will crash at LF. This shows that the phrasal movement in Ìbìbìò DP attests ‘pied-piping’ (as in 42b, 43b and 44b) and ‘specifier-extraction’ (as in 45b). This buttresses Aboh (2010).

4.7 Argument on the Split-DP in Ìbìbìò

Following the lines of Rizzi (1997) and Aboh (2004, 2010), we argue that the DP of Ìbìbìò is split into different layers of systems with each encoding a unique feature. In this connection, the researcher sketches a hierarchical structure for the DP according to the syntactic behaviour of the different determiners relative to one another.

The illustrations below set the tone.

- (46) a. **Ákpán-ákpán** **mmè áwó** **ìbà** **ámì**
 Part/Def_[+spec] ExistPL person Num'r Dem.Pl
 ‘these two people in particular’
- b. **Àtà-àtáá** **mmè òkpókóró** **ìbà**
 Def_[-spec] ExistPl table Num'r
 ‘two certain tables’
- c. **Ákpán-ákpán** **mmè íyák** **ímí** **ìbà** **ámì**
 Part/Def_[+spec] ExistPl fish 1.Sg.Poss Num'r Dem.Pl
 ‘these two fishes of mine in particular’
- d. **Ákpán-ákpán** **mmè** **ntúk** **íbáán** **ìbà** **ádò**
 Part/Def_[+spec] ExistPl adj. girlPl Num'r Dem.Sg
 ‘those two girls in particular’
- e. **Ákpán-ákpán** **áfíd** **mmè íyák** **ímí** **ìbà** **ámì**
 Part/Def_[+spec] Quant. ExistPl fish 1.Sg.Poss Num'r Dem.Pl
 ‘All these two fishes of mine in particular’

Two facts deducible from the illustration above include:

(i) that D^o, realized as any of the two Definite markers *Ákpán-ákpán* and *Àtà-àtáá*, appears topmost in the DP system, and

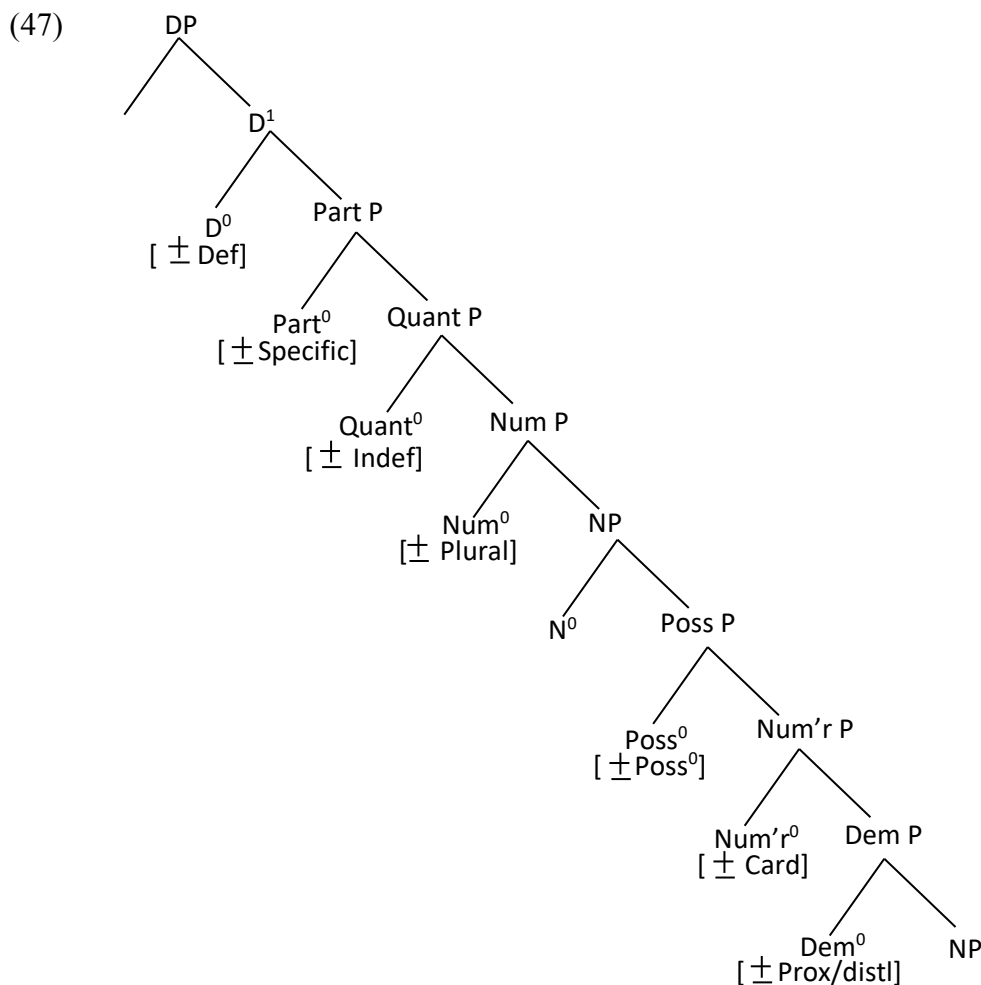
(ii) D^o is followed by, Quantifiers, Existential Plural, Nouns, Possessives, Cardinals and Demonstratives in that order. We assume that each of these categories projects its own phrase.

We take the Existential Plural to be a manifestation of Number (Num^o). A reason for this is that *mmè* encodes [+plural] and it transfers this feature onto the noun in a nominal phrase. The noun phrase will otherwise be interpreted as singular if the existential plural was not present in the nominal expression.

In examples (46a-c), the singular reading on the nouns *áwó*, *òkpókóró* and *íyák* becomes overridden by a plural one. The demonstratives also have plural reading. This is in virtue of the presence of the existential plural item *mmè*, under whose influence the noun as well as the

whole phrase get plural interpretation. In example (46d), the existential plural item influences the noun *ibáán* to have a straight forward plural reading because of the introduction of the adjective *ntùk*. In (46e) the existential plural item *m̀m̀è*, which is preceded by a quantifier influences the noun *íyák* fishes to have a straight forward plural rendering. We propose the structure below as the structural architecture of the DP in Ìbìbìò (in the light of Aboh 2004, Bernstein 2001, Ritter 1991, and Rizzi 1997).

The hierarchical architecture of the Ìbìbìò DP

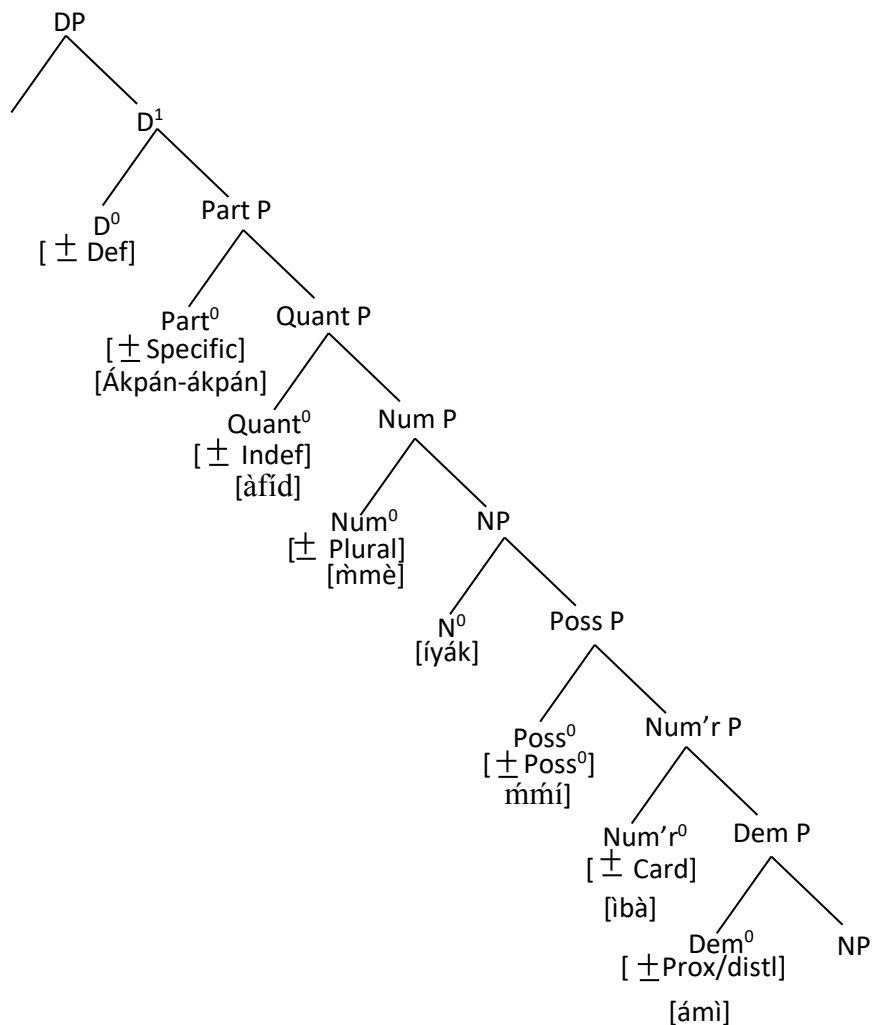


The structure in (47) above is further illustrated with Ìbìbìò data in sentence (46e) repeated here as 48 thus:

- (48) **Ákpán-ákpán àfíd m̀m̀è íyák r̀m̀í ìbà ámì**
 Part/Def_[+spec] Quant. ExistPl fish 1.Sg.Poss Num'r Dem.Pl
 ‘All these two fishes of mine in particular’

This is further illustrated in (49) to include all the determiners identified in this paper thus:

(49)



5. Summary of Findings and Conclusion

This paper captures the Determiner phrase and its internal constituents in Ibibio. With empirical evidence, the paper demonstrated that there exist NPs and DPs in Ibibio such that DPs category select NPs as complement. With regards to distribution, items that function as determiners in Ibibio often occur in complementary distribution. In addition, some determiners are marked for specificity or definiteness while others are marked for indefiniteness. Based on the behaviour of the determiners, the hierarchical structure of the Ibibio Determiner phrase is DP>PartP>QuantP>NumP>NP>PossP>Num' rP>DemP>NP. The D⁰ appears topmost in the DP system and each of these categories projects its own phrase.

Abbreviations:

Adj/A=Adjective, AdjP/AP=Adjective Phrase, C=Complement, Comp=Complementizer, CP=Complementizer Phrase, D/DET=Determiner, D⁰=Determiner head, D¹=Determiner bar, Def=Definite, Dem=Demonstrative, Dem⁰=Demonstrative head, Dem¹=Demonstrative bar, DemP=Demonstrative Phrase, DP=Determiner Phrase, ExistPL=Existential Plural, GB=Government and Binding Theory, Indef=Indefinite, I⁰=Inflection head, I¹=Inflection bar, Inter=Interrogative, Inter⁰=Interrogative head, Inter¹=Interrogative bar, InterP=Interrogative

Phrase, IP=Inflection Phrase, LCA=Linear Correspondence Axiom, LF=Logical Form, MP=Minimalist Program, N/N=Noun/Numeration, Num=Number, Num⁰=Number Head, Num¹=Number bar, NumP=Number Phrase, Num^r=Numeral, Num^{r0}=Numeral Head, Num^{rP}=Numeral Phrase, Ø=Phonetically null, Obj=Object of a Sentence, Part=Particularizer, Part⁰=Particularizer head, Part¹=Particularizer bar, PartP=Particularizer Phrase, P=Person, PF=Phonetic Form, PISH=Predicate internal Subject Hypothesis, Pl=Plural, Poss⁰=Possessive Head, PossP=Possessive Phrase, S=Subject, SG=Singular, Spec=Specifier, SpecIP=Specifier of Inflectional Phrase, SpecCP=Specifier of Complementizer Phrase, +Spec=Plus specific, SpecDP=Specifier of Determiner Phrase, TP=Tense Phrase, T¹=Tense bar, X¹=X-bar, *=Denotes an ungrammatical expression, ?=Awkward expression, 1=First Person, 2=Second Person, 3=Third Person, +=Plus, -=minus.

References

- Abney, S. P. (1987). The English noun phrase in its sentential aspect. PhD. Dissertation. MIT.
- Aboh, E. O. (1999). From the syntax of Gungbe to the grammar of Gbe. Ph.D. Thesis, University of Geneva.
- Aboh, E. O. (2004). *The morphosyntax of complement-head sequences: clause structure and word order patterns in kwa*. New York: Oxford University Press.
- Aboh, E. O. (2010). Morphosyntax of the Noun Phrase. In E.O. Aboh and J. Essegbey (Eds.) *Topics in Kwa syntax: Studies in natural language and linguistic theory*. New York: Springer.
- Ajiboye, O. (2005). Topics on Yoruba Nominal Expressions. Ph D. Thesis, University of British Columbia.
- Al-Horais, N. (2013). The Minimalist Program and its New Insight to the Concept of Universal Grammar. *Journal of Universal Linguistics* 14-2, 79-112.
- Anurudu, S. M. (1999). The Igbo Noun Phrase. M.A. Thesis, University of Ibadan, Nigeria.
- Bernstein, J. S. (2001). The DP hypothesis: Identifying clausal properties in the nominal domain. M. Baltin and C. Collins. (Eds.) *The handbook of contemporary syntactic theory* (pp. 536-561). Malden: Blackwell.
- Barbara, A. (2010). Oxford surveys in Semantics and Pragmatics. New York: Oxford University Press.
- Benjamin, R. (2016). Determiner Phrase in Ibibio. *Ibom Journal* (1), 17-31.
- Benjamin, R. (2017). Noun Phrase Movement in Ibibio language. In O. Taiwo, et al (Eds.) *Revitalization of African Languages: A Festschrift in Honour of Ozo Mekuri Ndimele* pp.390-393. Port Harcourt: LAN.
- Chomsky, N. (1986b). *Barriers*. Massachusetts: MIT Press.
- Chomsky, N. (1995). *The Minimalist Program*. Massachusetts: MIT Press.
- Collins, C. (2013). Introduction to minimalist syntax. Handout, African Linguistics School III, Nigeria. July, 2013.
- Cinque, G. (2005). Deriving Greenberg's universal 20 and its exceptions. *Linguistic Inquiry* 36. (2), 315-332.
- Essien, O. (1990). A Grammar of the Ibibio Language. Ibadan: Ibadan University Press.
- Ishizuka, T. (2008). Deriving the Order of Constituents in the Javanese DP. Department of Linguistics and African Languages, University of California (ling.auf.net/lingbuzz/00769).
- Jayeola, W. A. (2016). *A movement approach to word order variations in Zarma, a Nilo-Saharan language*. PhD Thesis. University of Ibadan.
- Matthews, P. H. (2007). *The concise Oxford dictionary of linguistics*. 2nd ed. Oxford University Press. Oxford.
- Obiamalu, G.O. (2013). Aspects of the morphosyntax of Igbo functional categories: A Minimalist approach. Ph.D Thesis, Nnamdi Azikiwe University, Awka, Nigeria.
- Okon, E. (2018). Leftward unbounded movement of argument to non-argument position in Ibibio. *USEM Journal of languages linguistics and Literature* Vol. (8), 48-74.
- Oyelade, O. (2019). A Minimalist description of Ghotuo nominal structure. M.A. Thesis, University of Ibadan, Ibadan, Nigeria
- Pereltsvaig, A. (2007). *Copular sentence in Russian*. Dordrecht: Springer.
- Radford, A. (2009a). *Analysing English sentences: A minimalist approach*. Cambridge: Cambridge University Press.
- Ritter, E. (1991). Two functional categories in noun phrases: evidence from Modern Hebrew. In S. Rothstein (ed.), *Syntax and Semantics* 26 (pp. 37–62). San Diego: Academic Press.
- Rizzi, L. (1997). The Fine Structure of the left periphery, In: L. Haegeman (Ed.), *Elements of grammar: Handbook of Generative Syntax*, Dordrecht: Kluwer, 281-337.
- Taiwo, O. (2016). Transformational Grammar II. Lecture Note, Department of Linguistics and African Languages, University of Ibadan, Ibadan, Nigeria.

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