

## A Structural Pattern and Headedness in the Ibibio Determiner Phrase (DP)

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### Abstract

This work examines the different structures of the Determiner Phrase (DP) and provides a unified account to establish the direction of headedness in Ibibio, a language spoken in Akwa Ibom that belongs to the Niger Congo phylum and is a Lower Cross language. The work adheres to Abney's (1987) position, which goes against the conventional view that determiners are Noun Phrase (NP) specifiers. Thirteen respondents provided data. It adopted the Minimalist Program (MP) of Chomsky (1995) and conceptualizes on Kayne's (1994) Linear Correspondence Axiom (LCA) which assumes a universal word ordering to be Specifier-Head- Complement (S-H-C). The work discovered that the Ibibio DP structure which can operate as a bare noun, a pronoun, a noun with other modifiers, and a noun with a relative clause exhibits a mixed word order overtly. The linear order of NP-D for DP expressions with the Complement – Head sequence can involve the movement of NP to Spec-DP. Even when the word order of the Complement Head and Head Complement sequences is mixed, the work predicts that DPs will have a head initial order. The work assumes a complement raising to when the order is Complement-Head. Spec to the left of the head since asymmetric C-command means precedence. Complement element is assumed to merge internally with the D-element and moves leftward to satisfy the universal word order principle.

Keywords: Complement, Determiner phrase, Headedness, Movement, Specifier

**Abstract in Ibibio:** Utom ami adeet mme nsio-nsio ebobo fres ditamina anyan aben awot ubeñ nte iwuod ikọ ado ke usem Ibibio, eesemme ke Sted Akwa Ibom adoho usem Lowa Kros ami asinneke ke ubon usem Niger-Congo. Utom ami asine ke ndaha ifiok Abney (1987) aboho ke idogho ikọ anyin ado iwuod ke ebobo fresh ayin ke ado ikọ ditamina. Awo duob mme ita ekeno mme ikọ yak eben enam nduunọ ami. Mfaañ ami anie adan ke fremwok Minimalis Brokram ake Chomsky (1995) anyan aben akikere ato ifiok ye ndutim ubono ikọ ke usem unadod adogho: adaiso ikọ - iwuod - ye komblimen (Specifier-Head-

Complement) ami Kayne (1994) akotto Linear Correspondence Axiom. Ibọrọ nduuño ami abo ke ebogho DP ke usem ami edo ke ndagha anyiñ adagha ikpooñ, ndagha adad-itie-anyiñ, ndagha anyiñ ye mme ikọ udeet anyiñ (mọdifaia), ndagha anyiñ ye ebogo adinam udeet anyiñ. Akpesak ado ndutim ubono iwuod ikọ ke usem ami adoho ke nnasia ye ufien itie, udim fres akpedo anyiñ ye ditamina (NP-D), ana enam yak ditamina adakka isan akeda ke iso anyiñ, adoho ke ubok ufien amọ. Isan ubok fien ami ado se nduuño ami amek (D – NP) nte mbed daña ikọ akpebono ke usem Ibibio.

## Introduction

The Ibibio language is identified as a member of the Lower Cross language (LC). Genetically, Greenberg (1963) maintains that the languages of Lower Cross belong to the Niger-Congo family – one of the largest families of languages in Africa. Based on comparative reconstruction and lexico-statistical information, Akpan & Okon (2020), affirm that the Ibibio language is a proto-language for all the speech forms genetically related to the Ibibio language. Some of the related speech forms to the Ibibio language are Anaañ, Ekid, Ñkarri, Uda, and Ọrọ. Okon & John (2023) support the idea that Ibibio is an agglutinating language in the sense of its morpheme stringing. The authors further observe that the structure of the Ibibio language is characterised by its complexity, as it involves the concatenation of morphemes to convey a comprehensive concept. This phenomenon is evident in the observation that a singular verb has the capacity to accept various grammatical components for the derivation of other word classes. Most of the nominal elements in the language are derived while others are inherent. The derived ones have the verb as the root morpheme.

The language maintains a mixed word order in terms of the position of the noun and the determiner within the noun phrase or the determiner phrase. In English, the determiner precedes the noun in a logical sequence. This phenomenon is expressed in a variety of ways in the Ibibio language. This work was triggered by the fact that there are parametric nuances in the Ibibio language. The paper is a discussion on DP using different nominal phrases in the grammar of the language. It does not condemn the existence of NP in the language but discusses the nominal phrases in the language using the DP assumption. The Determiner Phrase hypothesis by Abney (1987) postulates that the DP is headed by a determiner. Traditionally,

determiners such as *the*, *a*, *this* and *those* were non-phrasal and were said to function as the specifiers of NPs. The DP hypothesis views this idea differently. Of course, it is important to mention that all languages can be analysed traditionally and also in the concept of minimalism.

This study therefore argues in favour of the DP hypothesis which is one of the tenets of the Minimalist Program (MP) that the DP is headed by a determiner and considers the noun as its complement using the different structures of Ibibio nominal expressions. The work is based on Kayne's (1994) Linear Correspondence Axiom (LCA), which assumes that Specifier-Head-Complement (S-H-C) is the universal word order between a head and its dependents. The Ibibio language is a great example of a language with an overtly mixed word order, and movement, which is a property of transformation and is understood as copy and merge, is an important factor. According to Etim & Okon (2023), a sign of normal grammatical ability and acquisition by a normal native speaker is the ability to move or process lexical items in the mind. Hence, the DP structure in Ibibio is assumed to be processed in this idea. Apart from the fact that determiners can be the head, Taiwo (2018) argues that determiners are an integral part of the nominal phrase encoding interpretive effects ranging from definiteness, specificity, referentiality to diexis. The semantic import of determiners within the determiner phrase, the implications of features, the seeming controversy on the status of determiner phrase and the novel nature of the determiner phrase also triggered the researchers' interest and curiosity. This study considers the determiner phrase as a projection of the determiner and not the noun, hence DP rather than NP. The discussion on DP therefore is a perfect expression of the activities of the language faculty that are not quantifiable and inaccessible. The study is an assumption of what goes on in the human brain in relation to speech production. It is not prescribing rules as to how language acquirers use their language instead, it seeks to describe and explain the nature and outward behaviour of the language faculty in the spoken language.

The outward behaviours will manifest rules that are inherent in any language. According to Chomsky (1973, p. 36), the innate language faculty “creates a grammar that creates sentences with formal and semantic properties” when it is stimulated by appropriate and ongoing experience. Based on this, Etim & Okon

(2023, p. 69) are quoted thus, “as the child language develops, the child acquires a particular grammatical rule in his native language to which he is exposed”. Udosen & Okon (2022) argue that any phenomenon, including the determiner phrase, should be viewed solely as an interlocking syntactic, semantic, and phonological composition rather than as an independent process operation from the presented argument.

The Ibibio language is one of the Niger-Congo languages with its peculiar nominal expressions. The language has enjoyed numerous descriptive analyses in the traditional grammarian sense. A lot has been done on the Ibibio Noun Phrase (NP). For instance, Udosen & Okon (2019) have worked on NP movement to argument position. Okon (2012) has done some work on argument movement to both argument and non-argument positions. In a related issue, Okon, Etim & Udoeyo (2024) have discussed argument preposing saying that, DPs move leftward for feature checking. Okon, Udosen, Ushuple & Ita (2025) have also worked on X-bar account on NP in the language but the discussion on the Ibibio DP structures is yet to be addressed. This work is an attempt to describe the Ibibio DP structure and also present an optimal account for headedness using one of the tenets of Minimalism - the DP Hypothesis.

This study is designed to identify determiner phrase and its structures in Ibibio. It will also account for headship and explain the movement process in DP derivation in the language. The study is important for new researchers to go beyond the traditional account of the noun phrase that regards the noun as the head by presenting a novel description of the DP structure in Ibibio in line with the UG principles.

### **Methodology**

The method adopted for the elicitation of data for this work was a class discussion with the final year students of the Ibibio programme for LNL 413: Issues in the syntax of Ibibio who were thirteen in number. The researchers’ intuitive knowledge was also employed to ascertain the grammaticality and acceptability of the data. Written data were extracted from previous works on the language (Essien, 1990), (Urua, 2000), Udosen & Okon (2022), Okon (2012), Udosen & Okon (2022), &

Okon (2023). The data collected comprised different syntactic structures of noun phrases including nominal compounds in the language. The Leipzig Glossing Rule (LGR) was employed to provide a detailed morphological and syntactic information on each word, then followed by the English translation.

### **The noun phrase (NP) and its structure**

Ndimele (2003) posits that an NP is a principal syntactic category that appears to be universally present in all languages. An NP can be a word or a group of words where the noun or pronoun functions as the head. An NP can function as the subject, direct object, indirect object or complement of a preposition. Structurally, Ndimele (2003) maintains that NP is the largest expansion or the maximal projection of the noun. The noun heads the noun phrase. Noun phrases which can also be a word are also derived from a combination of different words in a language. Udosen & Okon (2020) observe that possessive pronouns can also co-occur with a noun for the derivation of NP. This subhead reviews Ndimele (2003) NP structures to present the following traditional account for the realisations of NP in Ibibio:

I. **NP** —→ **ProperN** (a single noun, proper nouns). Examples:

1. **Okon, Etim**

II. **NP** —→ **(Det) + N**

2. My father, our house, the boy

III. **NP** —→ **(Det) + N'**

**N'** —→ **Det + adj + N**

3. the white car

4. The fat woman

It should also be noted that the grammatical rule in (III) above can also be used to produce an NP with a

prepositional phrase as example (5) shows:

**N'** —→ **N + (PP)**

5. the bottle on the table

IV. **NP** —→ **S'**

6. The child *who got the prize*

As shown in the preceding example (6), an NP can contain a relative clause.

### The determiner phrase

A determiner is defined by Radford (2009, p. 453) as “a word like *the/this/that*, which is typically used to modify a noun, but which has no descriptive content of its own. The determiner phrase (DP) is a syntactic category, a phrase that is headed by a determiner. Just like the NP, the DP could be a bare noun (proper), pronoun, a noun with other modifiers or a noun with a relative clause. Abney (1987), Bernstein (2008), and Oshindoro (2017) do not suggest that the maximal projection of NP does not exist. Instead, they claim that the determiner is the head of a higher functional projection DP headed by a functional element that takes NP as its complement. This is irrespective of whether there is an overt determiner D element in the phrase or not. A good number of generative grammarians today adopt the DP hypothesis in some form or the other. However, some traditional and formal grammarians like Essien (1990), Udosen (2005) consider nouns, not determiners, to be the heads of noun phrases in the following examples:

7. ùwák      áwò  
    many    people

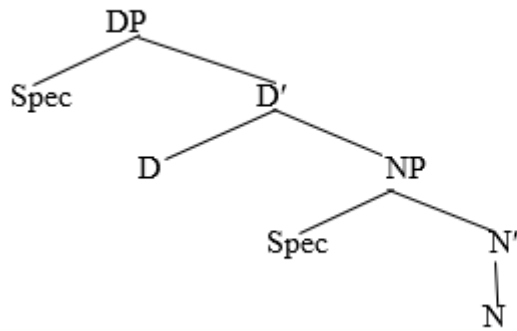
8. éníín      ítìòn  
    elephant five  
    five elephants

Essien (1990, p. 137)

Observe that Essien simply identified **ùwák** *many* in example (7) and **ítìòn** *five* in example (8) as determiners.

He only noted them as determiners playing different semantic functions. In the Universal Grammar (UG) terms, the DP is a common property of every language. This paper is based on Kayne's (1994) Linear Correspondence Axiom (LCA), which deals with universal word order parameters for languages with mixed word order, such as Ibibio. The idea that the maximal category projected by the class of determiner elements and heads the noun is the Determiner Phrase (DP) is supported theoretically and empirically by Abney (1987). The extended and maximum projection of the lexical head, the noun, is generally represented by the DP. Abney

(1987) proposal lies in the conception that functional projection for a nominal phrase is a Determiner Phrase (DP) headed by D with an NP as a complement. This idea is depicted in the schema shown in Figure (1) below:

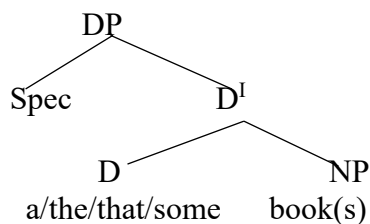


Bernstein (2001: 537)

**Figure 1: DP schema**

Using the above schema, consider example (9) below and figure (2) respectively:

9. a/the/that/some book(s)

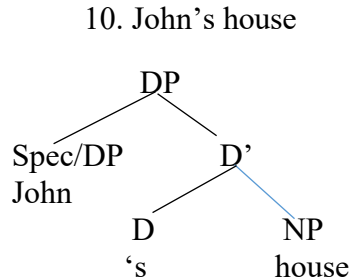


Adger (2003, p. 18)

**Figure 2: DP structure**

The figure above explains that the determiners: *a/the/that* and *some* are in the same structural position with the noun 'book(s)' as complement. English works perfectly with this structure. Kosta (2020) notes that articles reside on D, whereas other determiners such as demonstratives and possessive pronouns are in SpecDP, possibly originating lower. Under the DP hypothesis, Adger (2003) observes that the items that project are the items that select. D c-selects for NP and makes it its complement and merges internally with it before movement in some instances. Note also that the NP satisfies the c- selectional requirement of D. Therefore, DP projects to a D as illustrated

in figure (2) above: Following Abney (1987) submission, a structure involving a possessor morpheme ('s) in example (10) can be explained in figure (3) thus:



Adger (2003, p. 18)

**Figure 3: DP with possessive marker**

From figure (3) above, *John* is the specifier of DP, *house* is the complement of D. In this case, the word order principle, Spec-Head-Complement is obeyed. In figure (3), the possessive marker ('s) and the determiners (a, the, that, and some) in figure (2) above are in the same structural position. The structure in figure (3) also shows that no overt determiner such as *a*, or *the* can appear at the D position since the D position is already occupied by the genitive ('s). This is also to say that *a/the/that* and *some* and the genitive marker, ('s) are in complementary distribution – where one occurs, the other does not. This explains why the following structures in examples (11a - c) will certainly crash in the derivation process:

11. (a) \*the John's house

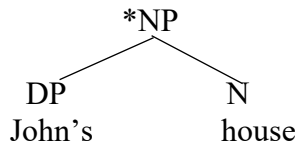
(b) \*John's the house

(c) \*John ~~the's~~ house

Adger (2003, p. 12)

For the same possessive structure in the NP convention, the analysis shows that the genitive ('s) has no location as shown in the figure (4) below:





Adger (2003, p. 18)

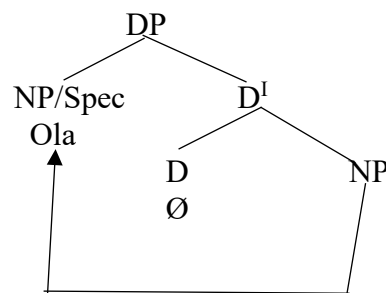
**Figure 4: An ill-formed NP with the genitive marker**

In figure (4) above, Adger (2003) observes that, *John's* which is the complement of 'house' is the sister of N. What makes the above diagram ill-formed is that the possessive location is not accounted for in the NP structural build up.

### A cross linguistic overview of determiner phrase

The syntax of determiner phrase is true of a language like English where the determiner consistently occurs before the noun. If this is the case, how then does one account for headship in languages with mixed word order? These languages attest phrases which are head first and head last in overt syntax which are commonly termed languages with 'mixed word order'. There are numerous evidence to the existence of the DP in all languages. In Yoruba, for instance, Taiwo (2018) and Oyelade (2019) remark that within the DP hypothesis, bare nominals (noun expressions which contain no overt determiner or quantifier) are generally headed by a null determiner. This means that the nominal phrase containing a bare noun (nominal phrase), for instance in example (12) below is regarded and treated as a DP including pronouns as well. Consider the example and illustration below:

12. Ola



Taiwo (2018, p. 39)

**Figure 5: NP as DP**

As shown in figure (5) above, Taiwo (2018) notes that the DP is headed by a null determiner. The movement of the bare noun *Ola* to the Spec-DP is triggered by the need

for Spec-DP to be occupied by a constituent. It is to be noted that D is phonetically empty, but syntactically present. Proper nouns may not have overt determiners but it is understood that semantically the determiners are there. *Ola* therefore undergoes a leftward movement as shown on figure (5) above.

Another cross-linguistic evidence from Taiwo (2018) shows that a language like Greek has the determiner phonetically realised as exemplified below:

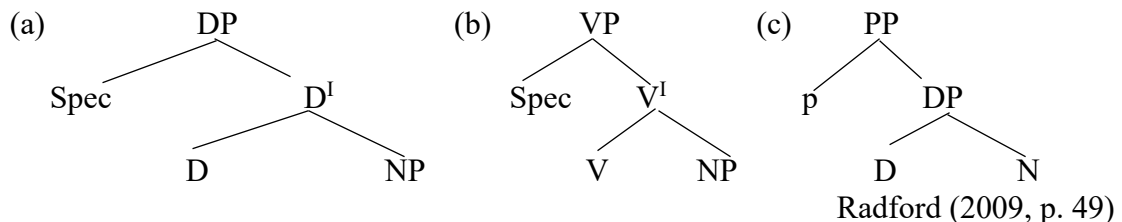
13. O    Gianis    thavmazi    tin    Maria.  
       the    John    admires    the    Mary  
       John admires Mary. Radford (2004, p. 120)

In line with universal grammar, the explanation would be that in some languages, the determiner is phonetically realised as found in example (13) above and in example (14) below, while in some others, the determiner is not phonetically spelt out as it is the case in example (15). Taiwo (2018) also maintains that a definite pronoun such as *we* in example (16) below is a pronominal D constituent or (a D-pronoun).

14. We Yoruba  
 15. Yoruba  
 16. We Taiwo (2018, p. 39)

### The motivation for headship in DP structures

In many instances, the most important semantic word is not always the semantic head. The function of determiners ranges from defining or giving definite description to nominal elements to deixis role. The intuition behind this paper rests on the principle of selection, that is, the item that selects heads the other and considers it its complement. Consider the structural similarity between the structure of the DP-hypothesis in figure (6a) and other structures in figures (6b and c) below. It is believed that structures such as VP and PP have their head words occurring initially, that is leftward. The idea will serve this work its lines of argument.



**Figure 6: Phrasal structures for headedness**

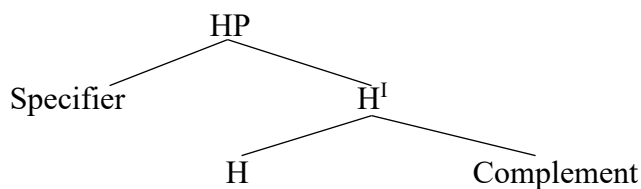
From figures (6 a - c), it is observed that the head of each structure is positioned at the left periphery of its domain. The label of each structure is determined by the lexical category of the element occurring at the left position of such a structure.

### Theoretical Framework

This paper is based on the assumption of the Kayne (1994) Linear Correspondence Axiom (LCA). Kayne (1994) claims that every syntactic object has the same word order. That is, there is a universal word order for syntactic object. Hornstein, Nunes and Grohmann (2005) support the fact that Kayne's original formulation of the LCA was based on X-theory. The X-bar theory is basically concerned with the recognition of the intermediate categories, word order and headedness. The universal word order principle which is part of UG is presented by Adger (2003, p. 12) thus:

- a. The head precedes the complement
- b. The specifier precedes the head
- c. Spec-Head-Complement

The figure below illustrates the above idea:



Radford (2009, p. 51)

**Figure 7: Word order principle**

Given the word order generalisation, and within the Minimalist operation, any constituent of a phrase HP which is directly merged with the head H is positioned to the right of H, but any other constituent of HP is positioned to the left of H. This follows that heads precede complement because heads are directly merged with their complement. It is important to note that specifiers precede heads in English.

This coincides with the assertion in Radford (2009) that English is a language with complement last and specifier first word order.

From the foregoing, this proposal was based on asymmetric c-command relations which was in accordance with the algorithm Kayne referred to as the Linear Correspondence Axiom. The LCA considers precedence relation among terminal and non-terminal nodes. Kayne's (1994) LCA algorithm is stated by Hornstein, Nunes and Grohmann (2005, p. 227) thus:

A lexical item  $\alpha$  precedes a lexical item  $\beta$  iff:

- $\alpha$  asymmetrically c-commands  $\beta$  or
- an XP dominating  $\alpha$  asymmetrically c-commands  $\beta$ .

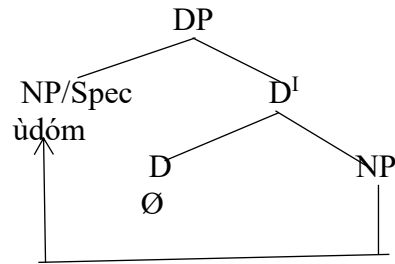
According to Olaogun (2016), the intuition behind the LCA is the view that the parametric nuances that manifest in overt syntax in languages are a matter of syntactic displacement. In consonance with the LCA proposal, Kayne (1994) claims that 'heads must always precede their associated complement position, even though in some languages the surface order may be Head-Complement (H-C) and in some others Complement-Head (C-H). Kayne proposes that the complement undergoes leftward movement to occupy the specifier position in languages with the C-H order. The LCA also provides a better understanding of universal word order especially for languages that do not conform to Specifier-Head-Complement order. Nweya (2018) observes that languages with (S-C-H) or SOV orders are only permitted if it is assumed that the complement is raised to Spec-position to the left of the head since asymmetric C-command means precedence. Kayne proposes that the complement undergoes leftward movement to occupy the specifier position in languages with the C-H order. In support of the above claim, Ishizuka (2008) offers that 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, which means that the determiner requires its specifier to be filled with a constituent that indicates the nominal predicate.

### **The Ibibio determiner phrase (DP) structural patterns**

The Ibibio DP structure is simply an extensional discussion on the NP where the head of the phrase is assumed to be the determiner and not the noun. As earlier mentioned, the Ibibio language exhibits a mixed word order of Complement-Head and Head-Complement sequences in overt syntax. Below are the possible structural patterns of DP in Ibibio:

### DP as a Bare Structure

The Ibibio bare structure entails a situation in which the DP occurs with a null determiner. Bare, literally means lacking in certain characteristics. Bare nouns as determiners mean those nominal expressions without an overt determiner. Example: Ùdóm The name, *Ùdóm* is regarded and treated as a DP. The above notion is represented in figure (8) below:

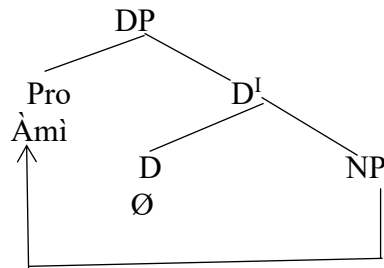


**Figure 8: DP as a proper bare noun**

As shown in figure (8) above, the DP is headed by a null functional element. The movement of the bare noun (D -complement) *Ùdóm* 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 nominals in the Ibibio language. A DP analysis of bare definite noun expressions is plausible from a semantic perspective in that a name like *Ùdóm* is a referring expression which denotes a specific or definite individual in precisely the same way as a DP such as *this/that/the* boy does.

### DP as a Pronoun (a bare NP where the pronoun is the pronominal D constituent or D pronoun)

The structure illustrates a situation where the personal pronouns undergo an internal merge with a null determiner. Here, the pronoun, *àmì* / *I* is derived as the complement of a null Determiner Phrase (DP) and it is subsequently raised to the Spec-Pro as figure (9) demonstrates:



**Figure 9: DP as pronominal element**

Other examples of Ibibio personal pronouns include:

18. *Àfò* you (singular) *ànyé* he/she/it, *nnyin* we, *ndùfò* you' (plural), *àmmò* they.

### **DP in a determiner and noun sequence**

This pattern is similar to the English language pattern where the determiner (head) precedes the complement so that the surface order becomes Determiner–Noun sequence. The Ibibio language provides strong evidence for Kayne (1994) LCA which states thus:

“Let X, Y be non-terminals, and x, y terminals such that X dominates x, and Y dominates y. Then, if X asymmetrically c-commands Y, x precedes y. Kayne (1994, p. 33).

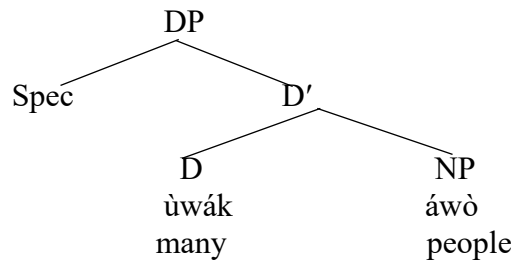
This pattern generates structures with quantifiers in Ibibio. Essien (1990) describes quantifiers as elements which indicate a certain number or quantity of a noun as examples (19 - 21) show:

19. *àfid*      *ìkpò-* *únàm*  
       All        big    animal  
       All big animals

20. *ùsàk*      *úfòk-* *ñwèd*  
       some     house book  
       some schools

21. ùwák áwò  
Many people

From the examples, it is observed that the data in examples (19 - 21) correspond with the Head-Complement structures where the heads precede the complements. Here, the determiners are internally merged with the NP complement. This head-initial sequence is observed to be the optimal order where the complement internally merges with the head. What converges in this language is a situation where the quantifiers precede the complement unlike the numerals. The figure labelled (10) illustrates the above idea:



**Figure 10: DP simple structure**

From figure (10) above, it is observed that the complement of D undergoes internal merge with D itself. If the head-initial is assumed for the Ibibio DP; then, the leftward movement of the NP complement to the left or the specifier position is suspended because the DP structure is already in the optimal D-N sequence. The language does not attest NP -D sequence for Quantifiers and Noun. The following examples (22 - 24) are ungrammatical because the NP – D sequence is attempted for quantifier and noun derivation:

22. \*áwò ùwák  
\*Person many  
N Det. (Quant.)

23. \*ídlǎ ãfid  
\*village all  
N Det. (Quant.)

24. \*úfòk- ñwèd ùsàk  
       \*house book some  
       N Det. (Quant.)

From the examples given in (22, 23, and 24), it can be posited that the grammar of the language permits the convergence of quantifiers and nouns where the quantifiers are base-generated at the determiner head at the left periphery of the phrase.

#### DP in a noun and determiner sequence

This pattern is the most common in the DP structure of the Ibibio language producing the sequence: Noun-Determiner, (N -D). In this pattern, the noun occurs first, then followed by the determiner. In line with Kanye (1994) word order principle, the result will be Complement-Head (C-H) order in overt syntax. Here, it argued that any constituent of the phrase which is directly merged with the head is positioned to the right of the head but any other constituent of DP is positioned to the left of the head. It then follows that heads precede complement because heads are directly merged with their complement.

This proposal on asymmetric c-command relations is in accordance with the algorithm Kayne referred to as the Linear Correspondence Axiom. The LCA considers precedence relation among terminal and non-terminal nodes. The DP Hypothesis assumes the Determiner constituent as the head. Therefore, other constituents undergo internal merge with the heads as their complements. Consider the following examples:

25. áwódèèn kèèd  
       man one  
       one man

26. ídèèn ibà  
       men two  
       two men

27. úbóíkpa ákò  
       ladies that  
       those ladies

From the data presented in examples (25 - 27) above, it is presumably difficult to say which lexical item influences the other. This study opines that the determiners



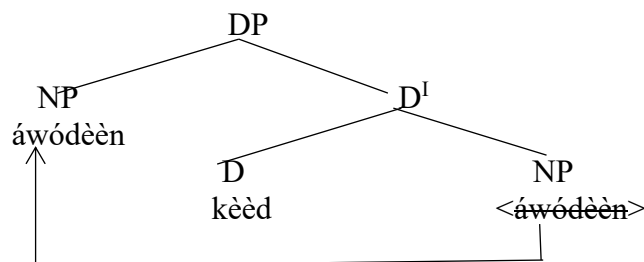
define the nouns as well as determine their morphological shapes. For instance, a number that is more than one requires its accompanying noun to inflect for its plurality. Even though examples (25 -27) occur in a noun and determiner sequence in overt syntax, it is assumed that the NPs are complements of the determiners. They move from the complement position to the Spec of the determiner. The grammatical output of this language does not permit Det + Noun sequence overtly with countable nouns for the derivation of any nominal expression. This is the reason structures such as (28 - 30) will certainly crash in their nominal derivation:

28. \*Kèèd      áwódèèn  
       \*one        man  
       Num.      (Det.) N

29. \*Ìbà        ídèèn  
       \*two        men  
       Num.      (Det.) N

30. \*Ákò        úbóíkpa  
       \*that        ladies  
       Num.      (Det.) N

From the above argument, the study supports an idea by Udosen & Okon (2022), Okon et al. (2025) that nominal expressions are left-headed driven in the Ibibio language even in spite of overt syntax variations. The ungrammaticality of examples (28 - 30) can be remedied with the movement of the nominal elements leftward. This idea is illustrated in figure (11) below using example (25) above:



**Figure 11: DP with complement movement**

As seen in the structure above, the DP in diagram (11) takes the NP **áwódèèn** *man* as its complement for its derivation. Again, the said NP which is merged with the head **kèèd** *one* enters the derivation as its complement. But the nominal EPP (edge) feature of D **kèèd** *one* triggered the NP **áwódèèn** *man* to move to the Spec-DP to satisfy the need for a constituent to fill the Spec- position of DP.

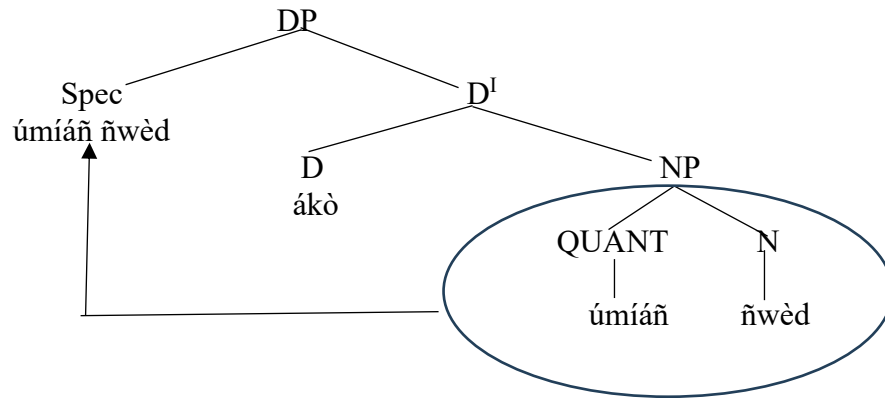
### DP with multiple modifiers

The Ibibio language also presents interesting patterns for DP expressions with quantifiers, noun, and possibly one or more determiners, and so on as sequences. Consider the following examples:

31. **úmíáñ**    **ñwèd**    **ákò**  
       many    book    that  
       many books

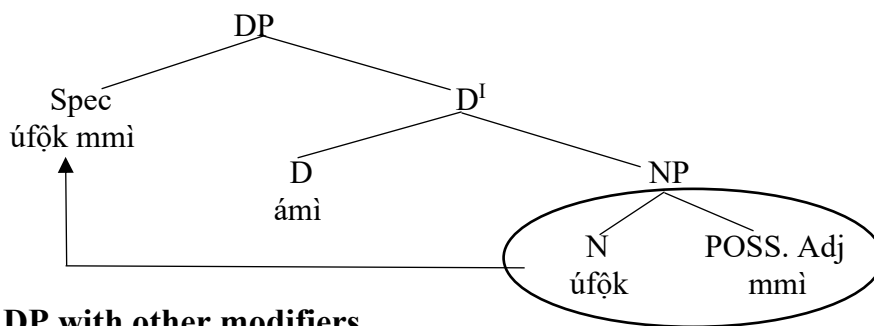
32. **úfòk** **mmì**    **ámì**  
       house my    this  
       this house of mine

Example (31) for instance entails a situation where **úmíáñ** *many* and **ákò** *that* could be considered determiners. This is not so. What happens here is the fact that **úmíáñ** *many* co-occurs with **ñwèd** *book* to derive **úmíáñ ñwèd** *many books* and enters the derivation as the complement of the head **ákò** *that* to the right of it. The item **úmíáñ** *many* describes or acts as adjective to the book. The paper assumes that **úmíáñ ñwèd** *many books* is merged internally with the head **ákò** *that* and raised leftward to Spec-DP position as figure (12) demonstrates:



**Figure 12: DP with other modifiers**

From the above figure, it is assumed that the noun complement, **ñwèd** *book* co-occurs and merges with its modifier, **úmíáñ** *many* and subsequently rolls-up or pied-pipes to form a constituent before preposing to the specifier position in overt syntax. From the NP complement position, it can be argued that the noun **ñwèd**, *book* dominates the quantifier, **úmíáñ** *many* as its intermediate category in the Ibibio language. It should be noted too that quantifiers only become heads only when they precede nouns and are the only constituents within the nominal expression as illustrated in examples (19 - 21) above. For example (31), the possessive determiner, **mmì** *my* converts its syntactic value and functions as an adjective to merge with the noun **úfòk** *house*. This functional shift supports the idea that nouns usually merge with adjectives to derive a nominal phrase. Consider the diagram in (13) below:



**Figure 13: DP with other modifiers**

It is important to observe that the possessive pronoun or possessive adjective of the NP complement is internally merged with **úfòk** *house* to the right as demonstrated in figure (13) above. The noun, **úfòk** *house* rolls up its subordinate material **mmì** *my* to the specifier position. Note that quantifiers and possessive pronouns act as subordinate materials to the noun elements as expressed in examples (31 - 32) above.

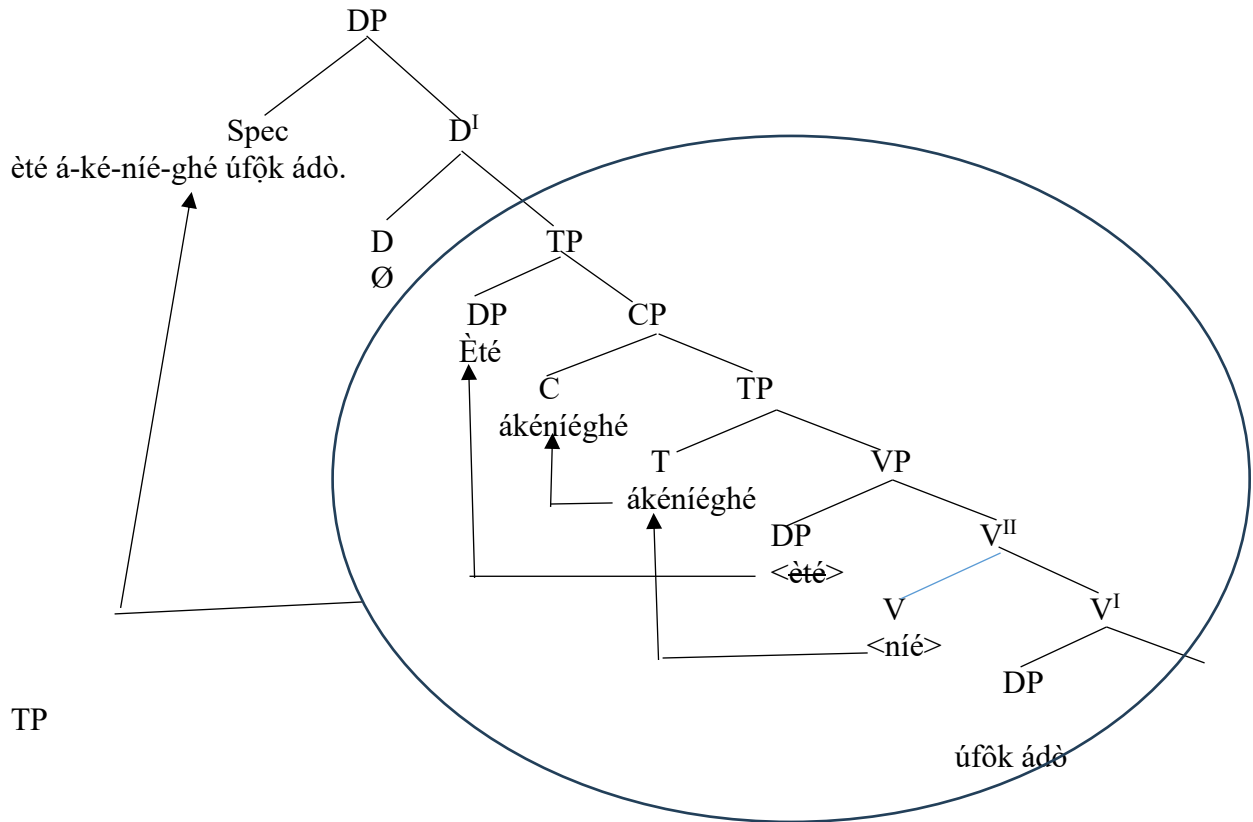
### DP as a relative clause

Since language is a recursive tool for communication, it is also possible for a clause to be contained within a DP. This is a situation in which a relative clause is formed within a DP. Consider the expressions in examples (33 - 34) below:

33. mbòn      é-      ké-      yém-      mé      ábóón  
      those    3plu   PST    want   Rel.   king  
      those who wanted the king.

34. èté      á-      ké      níé-      ghé      úfòk  
      ádò  
      man   3sg      pst    own   Rel.   house   the  
      the man who owned the house

The above constructions are a DP structures with a relative clause contained in them. It is important to note that the relative clause merges with a null determiner and becomes the complement of it and subsequently moves to Spec left periphery as illustrated in figure (14) below:



**Figure 14: Diagram with a relative clause structure**

In relation to the above figure, it can be argued that a relative clause is formed within the DP. It is assumed that the entire nominal clause moves to Spec-DP to satisfy the need for the constituent to occupy that position. As observed, the null D takes the relative clause as its complement. It is also important to mention that, a DP with a prepositional complement (PP) can be derived through using the same relativization strategy, where the mental rule is assumed to be:

**DP → D<sup>I</sup> + REL.CL + PP**

35. ékpéme á- dòrò- kè  
ké àkpókóró bottle  
3sg be on top Rel. Prep  
table  
the bottle on the table

Here, the prepositional phrase is merged internally with a null determiner.

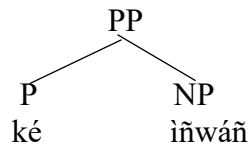
### **The directionality of headedness in Ibibio DP**

The Ibibio language exhibits a mixed word order as earlier stated. This means that heads are found in both the initial and final positions overtly. The syntactic evidence for DP Hypothesis in Ibibio lies in the fact that syntactic structures (phrases and clauses) are usually dominated by their heads as the examples (36 - 37) demonstrate:

36. ké ìñwáñ  
in/at/on farm  
in/at/on the farm
37. bré mbrê  
play play  
play (V)

In example (36), it is observed that the preposition **ké** *in/at/on* structurally heads **ìñwáñ** *farm*, hence the name, prepositional phrase (PP). Again, example (37) is a verb phrase (VP) headed by the verb **bré** *play*. This verbal expression demonstrates a situation whereby the verb is complemented by its cognate, **mbrê** *play*. The word, **mbrê** *play* (N) is its complement. Note that **m-brê** is composed of two units: the nominal marker - **m-** and the verb -**brê** ‘play’. Observe too the structural leftward headship of the phrases. In the LCA viewpoint, any constituent to the right of the head merges internally with the head as its complement. Therefore, **ìñwáñ** *farm* in example (36) above is the complement of the preposition **ké** *in/on/at*. while, **mbrê**

*play* (N) complements the verb **bré** *play*. **Mbrê** *play* merges internally with the verb **bré** *play* for VP to be derived. The headedness of the above expressions can further be shown using figure (15) below:



**Figure 15: structural evidence for leftward headship**

Observe that in examples (36 and 37) and as well as in figure (15), the position of the head of a structure is paralleled to all the structures. From this, one can claim that every leftward item is the head at some instance, while the rightward element is assumed to be the complement at another instance.

### Summary

This paper centered on the structural patterns of DP in Ibibio as well as account for the direction for headship since the language attests a mixed word order. The work was conceptualized on Kayne's (1994) Linear Corresponding Axiom (LCA) which assumes a universal word ordering between a head and its dependent, to be Specifier-Head-Complement (S-H-C). From the examples, and apart from the bare nouns as DP and DP with a relative clause, it is discovered that the Ibibio language displays a Head-Complement (H-C) and Complement-Head (C-H) order overtly. The Head-Complement sequence is assumed to be the optimal order while the Complement-Head sequence response to a movement process where the complement which merges internally to the right of the head undergoes a leftward movement to the specifier position.

This paper posits the following structural patterns and mental grammatical rules for the derivation of DPs to support its left headedness position in Ibibio.

- i. DP —————> Proper Noun (Bare Noun). Example Okon, Etim

- ii. DP —————>Pronoun (a bare NP where the pronoun is the pronominal D constituent or D pronoun).
- iii. DP —————>Det + Noun (Quantifier and Noun) **ùwák áwò** *many people*.
- iv. DP —————>SpecNP + D<sup>I</sup> + Complement. **èté ámì** *this man*, **ùfàn mmì** *my friend*, **ñwèd dùòb** *ten books*, **ídāñ àmmô** *their village*.
- v. DP —————>SpecDP + D<sup>I</sup>+ TP (PP), (the complement is the relative clause as well as a prepositional phrase).

## Conclusion

The current discussion on the Ibibio DP is a subject of serious debate in recent times. The advent of what is labeled ‘the DP’ hypothesis is the main reason for the re-examination of the various aspects of noun phrases (NPs) in virtually all the languages of the world. The Ibibio language is a Niger-Congo language with its peculiarities. In an attempt to account for headedness of the DP, the paper posits that Ibibio is a left headed driven language. Quantifiers basically occur as heads only when they occur with the nouns they modifier but function as subordinate materials to the noun if there are other determiner elements occurring after the nouns. From the language grammatical arrangement, numerals occur rightward. For this sequence, the paper assumes a leftward movement of the complement to the Spec position. In other words, the language grammar permits quantifiers which are an unspecified number of nouns to precede the nominal constituents but numerals have to undergo leftward movement since they occur after the nouns they determine.

The parametric nuances that manifest in overt syntax in the Ibibio language are a matter of syntactic displacement. The LCA provides an understanding of universal word order and this work adopts the Spec>Head>Complement word order principle where the D attracts its complement to the specifier position.

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## References

- Abney, S. (1987). The English noun phrase in its sentential aspect. Ph.D Dissertation, Massachusetts Institute of Technology Press.
- Adger, D. (2003). *Core syntax: A minimalist approach*. Oxford University Press.
- Akpan, E. (2021). Determiner phrase in Ibibio. M.A. Thesis. University of Ibadan, Nigeria.
- Bensterin, J. (2001). The determiner hypothesis: Identifying clausal properties in the nominal domain. In Baltin, M & Collins, C. (Ed.) *Handbook on syntactic contemporary theory*. (pp. 536 -561). Blackwell Publishers.
- Chomsky, N. (1973). Conditions on transformations. In Anderson, S. & P. Kiparsky (Eds.) *A festschrift for Morris Halle*. (pp. 232-286) Holt, Rinehart & Winston.
- Chomsky, N. (1986). *Barriers*. Massachusetts Institute of Technology Press.
- Essien, O. (1990). *A grammar of the Ibibio language*. Ibadan University Press.
- Etim, V. E. and Okon, E.A. (2023). Acquisition of negation in the Anaañ child language. *British Journal of English Linguistics*, 11(2), 68-78.
- Greenberg, J. (1963). *The languages of Africa*. The Hague: Mouton & co.
- Hornstein, N., Nunes, J. & Grohmann, K. (2005). *Understanding minimalism*. Cambridge University Press.
- Kayne, R. (1994). *The antisymmetry of syntax*. Massachusetts Institute of Technology Press.
- Kosta, P. (2020). *The syntax of meaning and the meaning of syntax*. CPI Books GmbH.
- Ndimele, O. (2003). *Morphology and syntax*. Emhai Printing & Press.
- Nweya, G. (2018). The Igbo clause structure and the cartography of the complementizer phrase domain. Ph.D Dissertation, University of Ibadan.
- Olaogun, S. (2016). Information structural categories of the ñjò-kóo language in Akoko North-west of Ondo State, Nigeria. Ph.D Dissertation, University of Ibadan.
- Oyelade, O. (2019). A minimalist description of Ghotuo nominal structure. M.A. Thesis, University of Ibadan.
- Okon, E. (2012). Argument Movement in Òdà Syntax. M.A. Dissertation, University of Uyo, Nigeria.
- Okon, E. A. & John, E. A. (2023). Combinatory possibilities in linear sequence in Ibibio verbal morphology. *Sapientia Journal of Philosophy*, 19, (pp.178 – 291).
- Okon, E. A (2023). Minimalist account on interrogative word movement in Ibibio. *UNIUYO Journal of Humanities*, 27 (2), (pp. 1 – 17).
- Okon, E., Etim, V., Udoeyo, U. (2024). Argument preposing in Ibibio. *Journal of the Linguistic Association of Nigeria*, 27 (1 & 2), (pp. 25 – 46).
- Okon, E. A., E. A. Udosen, L, M. Ushuple & E, A. Ita (2025). An X-Bar Account on Noun Phrase (NP) in Ibibio. *Sapientia Journal of Philosophy*, 21(1), (pp., 48 – 61).

- Okokon, A. & Okon, E. A. (2020). Lower cross languages in Akwa Ibom State: A comparison and reconstruction of proto-forms. *International Journal of Linguistics and communication* (IJOLAC) 7 (pp. 813 – 821).
- Radford, A. (2004). *An introduction to english sentence structure*. Cambridge University Press.
- Radford, A. (2009). *Analysing english sentences: A minimalist approach*. Cambridge University Press.
- Taiwo, O. (2018). Lecture notes on transformational grammar II. Department of Linguistics African Languages, University of Ibadan, Nigeria.
- Udosen, E. (2005). Pre-sentential modals in Ibibio. *Useful Journal of Languages, Linguistics and Literature*. 1, 67 -77.
- Udosen, E. & Okon, E. A. (2019). GB syntax on NP movement to argument position in ùdá syntax. *Journal of Nigerian Languages Project*, 1, (pp. 37 – 53).
- Udosen, E. & Okon, E. (2020). Reflexivity in Ibibio: A government-binding approach. *Language Documentation and Description in Nigeria: A Festschrift in Honour of Prof. Imelda Icheji Lawrence Udoh*. (pp. 275 – 288). Friuties Publications Ltd.
- Udosen, E., Okon, E. A. (2022). Complementation and headedness in Ibibio nominal compounds. In *Current issues in descriptive linguistics and digital humanities: A festschrift in honour of Professor Eno-Abasi Essien Urua* (pp.87-102). Springer Nature.
- Urua, E. (2000). *Ibibio Phonetics and Phonology*. M & J Grand Orbit Communication Ltd.

### Some Symbols and Abbreviations

$\alpha$	-	alpha
$\beta$	-	beta
$\emptyset$	-	null element
c	-	commands – constituent command
C-H	-	Complement Head
D	-	determiner
DP	-	Determiner Phrase
EPP	-	Extended Projection Principle
H-C	-	Head Complement
iff	-	if and only if
LC	-	Lower Cross
LCA	-	Linear Correspondence Axiom
LGR	-	Leipzig Glossing Rule
NP	-	Noun Phrase

Prep. -	Preposition
Rel.CL -	Relative Clause
S-H-C -	Specifier-Head-Complement
Spec -	Specifier