The X-Bar Syntax of Lòkáá NP Infinitival Clausal Complement

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Abstract

Clauses without a tensed verb are called tenseless, non-finite or infinitival clauses. The finite and the non-finite clauses take different kinds of T(ense) elements. The T(ense) in tensed clauses can contain auxiliaries and modals. By contrast, the only element allowed in non-finite clauses is "to". The distinction between finite and non-finite clauses is based partly on morphological criteria: thus, a clause is finite if it contains a finite verb (i.e a verb inflected for Tense/Agreement), and non-finite if it lacks a finite verb (e.g if it is a verbless clause, or if it is a clause containing a non-finite tenseless and agreementless verb), (Radford 1988:287). In this study therefore, infinitival complement in Lòkáá is examined within the framework of the x-bar module as developed in Chomsky's Lectures on Government and Binding (GB) Theory (1981). The study observes that the presence of the prepositional complementizer [ng] "for" enables the overt NP [wé] "him" to survive in the subject position of the infinitive and that this complementizer is found only with the non-finite clauses.

Introduction

Describing the internal structure of the Noun Phrase in any language will not be complete without considering the fact that sometimes a noun can be modified by a clause. In other words, it is possible to have the form:

$NP \rightarrow N S$

where 'S' above could be a noun complement, clause or relative clause.

The focus of this paper is on the application of X-bar syntax to the Lòkáá NP infinitival clausal complement. This is necessary because any module (like the X-bar module we are working on) is expected to serve as a linchpin directing the researcher on how to sift through facts for use and others to discard. We therefore beam our research light through the path: the Lòkáá language, an overview of X-bar theory and then the X-bar syntax of Lòkáá NP infinitival clausal complement.

The orthography adopted in this study incorporates some special technical symbols which have IPA equivalents, as follows: $\mathbf{e} = \mathbf{\epsilon}$, $\mathbf{o} = \mathbf{a}$, $\mathbf{a} = \mathbf{a}$, $\mathbf{ng} = \mathbf{\eta}$. Lòkáá orthography is now widely used. It is therefore easier for me to employ it in presenting and analyzing the data.

Lòkáá language, its people and genetic classification

According to Iwara (1991:169), Lòkáá [lòká:] is the language of Yakurr [jàká] people. These people, estimated, at over 300,000, inhabit primarily five large compact towns located virtually at the geographical centre of Cross River State. The towns: Ugep, Ekori, Nko, Mkpani and Idomi, in their order of population, constitute within the Yakurr Local Government Area, an extra-ordinary concentration of people scarcely found anywhere else in the state. The major road which runs from the state capital, Calabar, in the South to Ogoja and Obudu in the North traverses the Yakurr territory of tropical forest right through the middle from around kilometer 120 North of Calabar for 30 or 50 kilometers.

A few neighbouring villages with their own different languages also speak Lòkáá as a second language. They are Assiga, Inyima, Agoi Ibami and Agoi Ekpo. A large proportion of

the native speakers of Bahumono, Adim, Nctaagune, Agbo and Mbembe also speak the language or have a working knowledge of it as a result of constant visits for commercial and other economic reasons and through interchange of permanent migrants by intermarriage.

There are five dialects of Lòkáá viz: Lòmáámáá spoken in Ugep, Lòkòrì spoken in Ekori, Lòkáákáá spoken in Nko, Lòkpamkpanì spoken in Mkpani and Lólóómì spoken in Idomi. There is a high degree of mutual intelligibility among the dialects. They are however, distinguishable because of differences in vocabulary and intonation. The difference in intonation is particularly marked.

The most recent classification of Nigerian languages places Lòkáá in the Delta-Cross sub-branch of the Cross River language family (cf. Iwara 1990:16, 1993:39). It was earlier classified under the Cross River 3 section of the Benue-Congo language sub-family by Greenberg, under the "middle Cross River Group" with Mbembe and Leggbo by F.D.D. Winston, and under the "Upper Cross" sub-group of the Cross River languages by Kay Williamson.

An Overview of Theoretical Underpinning: X-Bar Theory

X-bar theory was first proposed by Chomsky (1970:17/130) in his article entitled "Remarks on Nominalization". In his pursuit of an adequate explanation for the structure of nominals, Chomsky discusses nominals whose structures could be explained through the use of transformations and others which were not amenable to transformational rules. The first class he calls gerundive nominals and the second, derived nominals. He notes that if the latter were to come under transformational rules, the linguist might be forced to construct a very complex transformational grammar which would make language learning difficult, and perhaps make the grammar too powerful (i.e generating ungrammatical/unacceptable structures) (cf. Lamidi 2000:144).

Chomsky's paper and the reactions to it gave birth to the **lexicalist's school**. This school led and popularized by Ray Jackendoff believes that transformations are not necessary in the derivation of some nominals and, by extension, some other lexical items. The lexicalist school (Hypothesis), shows that each word projects directly from the lexicon to the deep and surface structures without the application of the transformational rules. Accordingly, Jackendoff (1977:7) avers that X-bar theory was originally incorporated into Chomsky's theory of phrase structure in order to capture Cross-categorical generalizations, which are true of the phrase structure of any natural language.

X-bar theory brings out what is common in the structure of phrases. According to the X-bar theory, all phrases are headed by a lexical head, and in the terminology of traditional linguistics, we say that all phrases are **endocentric** (cf. Haegeman 1991:95). Accordingly, Lamidi (2000:150) asserts that the primacy of the head started from the D–structure. Each head is projected from the D–structure in what is called the projection principle. This principle ensures that heads occur at the D–structure though such heads may not have a phonetic (physical) realization. In this case, the head is said to be base-generated. However, some positions may be empty from the D–structure. In this case, nothing can be projected from there to the S-structure, and if that empty slot happens to be the subject position of a sentence, a **pleonastic element** will occur at the S-structure. This is a requirement of the Extended Projection Principle. The pleonastic elements are place-holders like **'it'** and **'there'**.

The X-bar theory focuses on expressing general principles of UG, rather than the peculiarities of individual languages. It is a principal sub-system of the GB model, and as

Webelhuth (1995) notes: "all other modules in one way or the other draw on the basic structures it makes available". The proponents of X-bar theory also maintain that there must be certain **intermediate categories** between the lexical head and the maximal category (Ndimele 1992:12). This is in recognition of the fact that there exists an intermediate category, which is smaller than the phrase but larger than the lexical category. It is this intermediate category (normally represented as X[°]) that gives the name X-bar theory.

The intermediate category recognized under the X-bar theory could not be handled by the hitherto Phrase Structure Grammar (PSG), which recognize, two levels: the word level and the phrasal level; but utilize, multiplicity of rules, which complicate grammatical accounts and syntactic derivations. The three categorial levels: lexical (X'), intermediate (X') and phrasal or maximal (X'') are represented in the following schema adapted from Jackendoff (1977:17).



From the above schema, X^o is taken to be a variable representing N, V, A or P, each of which functions as the head of its own phrase. The head is primary. As a X^o , it is a lexical category and it can be post-modified by a complement and/or an adjunct. It can also be pre-modified by a specifier. The lexical head can project to the intermediate category (X') through the addition of a complement. Again, the X' (X-single bar) in conjunction with the specifier projects further to X'' (X-double bar). This shows the primacy of the head as the only obligatory category in a phrase.

The central notion of X-bar theory is that each of the major lexical categories "X or X^{o} " (i.e N, V, P, A etc) is the head of the structure dominated by the same category (such as NP, NP, PP, AP etc Ndimele 1992:12). This indicates generally that a noun must head a noun phrase; a verb must head a verb phrase and so on.

X-bar syntax is a formalization of the syntactic structure of Universal Grammar (UG). It is a parameter from which every language, depending on its predicate structure, chooses its syntactic configuration. In essence, X-bar defines possible phrase structure configuration of languages in general. It considers the word order and constituent structure of constructions as well as shows the distinctions between 'head-initial and head-final' languages.

Another merit of the X-bar module is its feature analysis of syntactic categories. Here, features are employed to capture the explanatory adequacy of grammar by accounting for the natural distributional classes of categories. Chomsky (1986) postulates that all syntactic categories be re-analysed, not as unitary elements, but as complexes of syntactic features. In the X-bar framework, the features that are often taken to constitute the lexical and the phrasal categories are $[\pm noun]$, $[\pm verb]$ etc. These lexical categories can be decomposed into their features as: Noun [+N, -V]; Verb [-N, +V]; Adjective [+N, +V]; Preposition (-N, -V] (cf. Chomsky 1986:2).

The non-lexical categories, according to Chomsky (1986:2) include complementiser and INF, the latter including Tense, Agreement elements and modals. The binarity features are meant to describe the syntactic categories distinctly, and to account for the relationships holding among constituents. One of such is the commonality existing between the [-N] constituents (i.e. verbs and prepositions). They are the categories that sub-categories for NP complement, and are identified with government, case and theta marking of their governee.

The question now is how do we use this theory in accounting for the Noun phrase infinitival clausal complement of Lòkáá?. This, of course, is what this work is set to find out.

The X-Bar Syntax of Lòkáá NP Infinitival Clausal Complement

Finite (Tensed) clauses are usually specified as having an INFL. containing the feature [+Tense] and [+AGR.]. Infinitives, on the other hand, typically lack tense marking and agreement. They are therefore (-Tense) and (-AGR.). The distinction therefore between finite and infinitival clauses is on the basis of the node INFL. with the feature specification [\pm Tense] and [\pm AGR.]. In other words, a type of clause is determined by the type of INFL. (Haegeman 1991:103-104).

Assimilating IP to the X-bar schema will imply that the category INFL. will dominate all verbal inflections, infinitival "to", aspectual auxiliaries and modals. Tense endings will end up on V auxiliaries and infinitival "to" are followed by a verb; and since V heads a VP, it seems reasonable to argue that **'I'** takes a VP as its complement to constitute the **'I'** projection.

Normally subjects of finite clauses are assigned **NOMINATIVE** case, while the NPs that are complements of prepositions or verbs as well as NPs that are subjects of infinitival clauses appear in the **ACCUSATIVE**. Following traditional accounts of case, transitive verbs and prepositions assign **ACCUSATIVE** case (especially in languages with impoverished case system) to the NP they govern. They case-mark an NP, which they govern. Thus in (1) below, the V and P will case-mark their complement NPs. In this view, heads assign case. (1a)



An infinitival clause can function as the subject of a sentence. Consider the following examples: (2a) [ńg-wé tá ò-yùú òbáá ò-ból] ná ó-tùmòbúwà kéwódén

[for-him to he-fight with chief] will it-very wrong very much "For him to fight the chief would be very wrong"

- (b) [ńg-wé tà ò-jìí bòóng áá čblá] ó-tùmòbúwà
 [for-him to he-eat thing like dog] it-very wrong "For him to eat like a dog is very wrong".
- (c) [ńg-wé tà ò-kpe mòn bòóng lewi-lewi] ó-tùm ò-yíí [for-him to he-teach us thing every day] aux. good

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"For him to teach us something everyday is very good"

(d) [ńg-wé tà óò-yààmáá mìn] ò-yííyí
 [for-him to he-come here] it-beautiful "For him to come here is very good".

Examples (2a - d) are infinitival clauses, which function as subjects of the sentence. Let us therefore place (2a) configurationally in (3) for a more adequate account. (3)



"For him to fight the chief would be very wrong"

Accounting for the **ACCUSATIVE** Case of the subject NP of the infinitival clause would be to argue that it is the preposition [ng] "for" that is responsible for case – marking the NP subject. This is unlikely in view of the following ungrammatical examples.

(4a)	* [wé tà ò-yùú òbáá ò-ból] ná ó-tùm òbúwà káání	
	him to he-fight with chief will it-very wrong much	

- (b) [á à-dá ò-fiò-ye ní ò-yùú òbáá ò-ból] máà òfó- tùmòbúwà [that he-should have he-fight with chief] Adjunct it-very wrong "That he should have fought the chief was very wrong".
- (5a)* [ò-dèyìm káání [wà tà ó-kòú ájáájíímìn] I-like very much [he to he-go now]".

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(b) ò-dèyìm káání [á à- (dá) ńg-wà ò-fí kòí ájáájíímìn]
 I-like very much [that for-he he-should go now]
 "I prefer very much [that he should go now].

In (4a) and (5a), we have infinitival subordinate clauses. In each example, the infinitive marker $[t\dot{a}]$ "to" is present but the sentence is not grammatical. (4a) and (5a) are therefore ungrammatical because $(t\dot{a})$ 'to" the non-finite I of the infinitival clause, cannot assign case to the [NP, IP]. They also violate the case filter. In contrast (4b) and (5b) contain a finite subordinate clause; the head of the clause, I assigns **NOMINATIVE** case to the subject NP.

The ungrammaticality of (4a) and (5a) can be rescued in (6a-b) by the insertion of [ng] "for" as the complementizer of the non-finite clause

- (6a) [ńg- wé tà ò-yùú òbáá ò-ból] ná ó-tùm òbúwà káání
 [for-him to he-fight with chief] will it-very wrong much "for him to fight the chief will be very wrong".
- (b) ò-dèyìm káání [ńg- wé tà ó-kòú ájáájíímìn]
 I-like very much [for-him to he-go now] "I prefer very much [for him to go now]"

Alternatively, the sentences can be rescued by the omission of the overt subject of the infinitival clause in the position (indicated with a dash).

(7a) [<u>tà</u> ò-yùú òbáá ò-ból] ná ó-tùm òbúwà káání
 [to he-fight with chief] will it-very wrong much
 "[<u>To</u> fight the chief] will be very wrong".

(b) ò-dèyìm káání [tà N-kòú ájáájíímìn]

I-like very much [to I-go now] "I prefer very much [to go now]."

It seems therefore that the presence of the element [ng] "for" under C node enables the overt NP [wé] "him" to survive. When [ng] "for" is absent, the subject pronoun [wé] "him" must also disappear as in (7) above. The implication is that, the preposition [ng] "for" occupies the head position of CP and thus, a prepositional complementizer hence an **ACCUSATIVE** assigner. The role of [ng] "for" is to case – mark the subject [wé] "him" since according to the case-filter 'every overt NP must be assigned abstract case' (Haegeman 1991:156).

Example (7) lacks an overt NP subject, and so the case-filter has nothing to say about the subject of the infinitives here. Meanwhile, the prepositional complementizer [ng] "for" in (6) case-marks the subject NP of the infinitival clause. (6) passes the case filter and is therefore grammatical. However, since case is assigned under government, the case assigner [ng] "for" governs [wé] "him", the subject of the clause, which it introduces.

The fundamental question is whether the head of CP, [ng] "for", can govern into IP, its complement in (3) above. **'I'** in the subordinate clause is itself a non-finite head and thus a non-potential governor. **'I'** will define an IP governing domain and by minimality condition, [ng] "for" should not be able to govern into that domain. The non-finite **I** [tà] "to" is **"too weak"** to pose a barrier for outside heads. [ng] "for" will therefore be able to govern into IP and assign **ACCUSATIVE** case to the subject NP of the subordinate clause. The prepositional complementizer [ng] "for" now treats the licensed NP [wé] "him" as its object.

Conclusion

This paper x-rays the X-bar syntax of Lòkáá NP infinitival clausal complement within the framework of X-bar module as developed by Chomsky's Lectures on Government and Binding

(GB) Theory (1981). The study observes that the syntactic distribution of Lòkáá NP infinitival clausal complement is functionally harnessed within the X-bar module of Chomsky's modern Government and Binding Theory. The success of the application of GB Theory to Lòkáá data demonstrates that GB theory is of high practical value in the study of human languages. GB is not meant to cater for only English language alone but can also be appropriated to develop and nurture all human languages.

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