

A Syntactic Study of Lexical Heads in Kuce: A Principles and Parameters Approach

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Abstract

This paper describes the noun and verb phrases of the Kuce language with the aim of examining the operation of the Head Parameter principle in the language within the framework of Principles and Parameters, a sub-theory of Universal Grammar. The Head Parameter is assigned two values: head-first and head-last, with respect to the position of a lexical head in a phrase. The principle is hinged on the proposal that once a language selects a given value, all head categories in the language are expected to consistently select their complements in the same direction. This study employed the qualitative research methodology, as the data were collected from the native speakers of Kuce with the use of a researcher-designed wordlist, West African Linguistic Society's questionnaire and unstructured oral interview. The data were then subjected to descriptive content analysis. From the investigation, the paper's major finding was that Kuce is a head-first language in that all lexical and functional heads are consistently positioned before their complements at D-structure. It was also discovered that complements in Kuce are internal modifiers of the head element and show a high degree of cohesion with their governing heads, while adjuncts are external modifiers and show a less degree of cohesion with their governing heads. On the basis of these findings, the paper concluded that the operation of the Head Parameter principle in Kuce is very strict, and that the canonical structure of the language's phrases justifies the typological findings with respect to Head Parameter cross-linguistically.

Keywords: Syntactic Analysis, Noun Phrase, Verb Phrase, Kuce, Head Parameter, Principles and Parameters Theory

1. Introduction

Grammatical analysis, over the past few decades, has been centred on the development of an approach to the study of human language whose major goal is to set the parameters of Universal Grammar (UG). A crucial innovation of the concept of phrase structure that emerged in the early 1970's was the claim that all phrases have a central element, known as a head, around which other elements of the phrase revolve and which can minimally stand for the whole phrase. For example, the VP *drew an elephant* has a head verb *drew*; the NP *the child* has a head noun *child*; a PP such as *by the manager* has a head preposition *by*; and so on. The aim behind this, as always, is to express generalizations about the phrase structure of all human languages rather than features that are idiosyncratic to one part of language or to a single language.

An important aspect of language variation concerns the location of the head in

relation to other elements of the phrase called complements. The head of the phrase can occur on the left of a complement or on its right. Cook(1988, p. 9) argues that the relative position of heads and complements are specified once for all phrases in a given language. Rather than a long list of individual rules specifying the position of the head in each phrase type, a single generalization suffices: 'heads are last in the phrase' or 'heads are first in the phrase'. The variation in the order of elements amounts to a choice between head-first and head-last. UG captures this variation between languages in terms of a limited choice between two possibilities as the Head Parameter. The Head-position (or directionality) Parameter is basically a dimension along which languages differ in terms of their grammatical structure. In the light of the above discussion, this paper carries out a descriptive study of the noun and verb phrases of the Kuce language spoken in Plateau State with



the aim of determining how the universal properties of UG are applied in the language. The Kuce language is classified in the subgroup 4 of the Plateau A group of Benue-Congo, a subfamily of Niger-Congo (Wilson, 2002, p. 55).

There are a number of dialects of Kuce, including Kikala, spoken in West Bassa Local Government Area; Igbak, spoken in South Bassa LGA; Uja, spoken in North Bassa LGA; Abaninzara, also spoken in North Bassa LGA. This study focuses on a variety of Kuce known as Asak. This dialect is spoken around the Western axis of Bassa Local Government Area of Plateau state in JebbuBassa community. An important aspect of the morphosyntax of Kuce that has been noted in the literature is the noun class system. Linguists have observed that individual language names of the Niger-Congo family are generally nouns with a prefix (Welmers, 1973, as cited in Ejiemenu, 2014, p.9). For example, the language name 'Bantu' itself is a noun with a class prefix, *ba*, and *-ntuis* the noun stem. The language, Kuce, itself is a noun that consists of a stem *ce* and a prefix *ku-*. Some linguists like Blench (2001) represent it as 'Ce' whereas some, especially the speakers of the language, prefer to refer to it as Kuce (Ejiemenu, 2014, p. 9). The Kuce-speaking people of Nigeria are geographically located in seventeen villages in Bassa Local Government Area of Plateau state, North West of Jos in Central Nigeria. Some live at the foothills while others live on the hill tops.

This paper is divided into five sections. Section one introduces the work by giving background information about the study and the language under investigation. The second section concerns itself with an overview of lexical heads in Kuce whereas the third section presents a brief review of the chosen theoretical framework – Principles and Parameters Theory. The crux of the paper, section four, has to do with data presentation and analysis. The final section concludes the entire work.

2. Lexical Heads in Kuce

According to Radford (2004, p. 23), lexical categories are grammatical categories with the largest membership, viz noun (N), verb (V), preposition (P) and adjective (Adj). The words

which belong to these five categories are traditionally said to be contentives (or content words), in that they have substantive descriptive content. A noun like *car* has obvious descriptive content in that it denotes an object which typically has four wheels and an engine. Following Ouhalla (1991, cited in Heusing, 1999, p. 44), the term 'lexical' refers to what has traditionally been known as 'open categories'. It is assumed that one of the features of lexical is their subcategorization in terms of semantic categories i.e. their semantic)- selectional properties, known as 's-selection'. S-selection is largely determined by the inherent meaning of lexical items and operates in terms of semantic categories, called theta roles (Heusing, 1999, p. 13).

The lexical categories attested in Kuce include nouns, verbs, prepositions and adjectives. It is important to state that each of these substantive lexical categories is capable of heading a phrase in the language. Thus, Kuce attests four distinct phrasal categories: Noun Phrase, Verb Phrase, Prepositional Phrase and Adjectival Phrase, respectively.

2.1 Kuce Noun Phrase

According to Crystal (2008, p. 334), constructions into which nouns most commonly enter, and of which they are the head word, are generally called Noun Phrases (NP) or nominal groups. The following are examples of noun phrases in Kuce:

- (1) a. Abayiwak ayi Kuce
student of Kuce
'a student of Kuce'
- b. Ibol i gyin
ball CM one
'one ball'
- c. Atakarda a Asubahi
book CM Asubahi
'Asubahi's book'

2.2 Kuce Verb Phrase

A verb phrase is defined as verb followed by a non-verbal particle (Crystal, 2008, p. 510). The following are examples of verb phrases in Kuce:



- (2) a. John a [_{VP}tisik atakarda katat itebul]
+John will put book on top
table
'John will put the book on the table'
- b. Ingimi niba [_{VP}rat bay atakarda ngi
children they all read book the
'the children have all read the book'

2.3 Kuce Prepositional Phrase

A preposition followed by a noun indicating the location of the noun is referred to as a prepositional phrase (Crystal, 2008, p. 383). The following are examples of prepositional phrases in Kuce:

- (3) a. Tisik guyi [_{PP}ya katat itebuli]
put it just on top table
'put it right on the table'
- b. Bumi kutara ngi
inside room the
'inside the room'

2.4 Kuce Adjectival Phrase

A group of words with an adjective as the head which specify the attributes of nouns are referred to as adjectival phrases (Crystal, 2008, p. 11). The following are examples of adjectival phrases in Kuce:

- (4) a. Āchùkànú â shilāk [_{AdjP}gàgai nà mí]
Āchùkànú he so good to me
Āchùkànúis so kind to me'
- b. Ā nâ shì [_{AdjP}gàgai nà wí bù ūmà ófís]
she did was good to him in her office
'She was kind to him in her office'

From the foregoing, it could be observed that each phrasal category in Kuce is named after its lexical head: the noun heads a noun phrase; the verb heads a verb phrase; the preposition heads a prepositional phrase; and the adjective heads an adjectival phrase.

3. Theoretical Framework

This study is conducted within the framework of Generative Grammar, with particular attention focused on the Government and Binding (GB) Theory which emerged from Chomsky's *Lectures on Government and Binding* (1981), *Knowledge of Language* (1986a),

Barriers (1986b) and *The Minimalist Program* (1995) as well as several publications by other authors. The central concept in the Government and Binding Theory, as well as other versions within the framework of Generative Grammar is Universal Grammar, which Chomsky (1976, as cited in Heusing, 1999, p. 10) defines as 'the system of principles, conditions and rules that are elements or properties of all human languages'. This concept as put forward by Chomsky holds that the speaker of a language knows a set of principles which apply to all languages, and parameters which vary within clearly defined limits from one language to another. Chomsky further argues that principles are internalized in the human brain, while parameters are set in the process of language acquisition (Cook and Newson, 2008, p. 50)

In the GB model, Chomsky claims that UG is broken into two main components which are levels of representation and a system of constraints (Chomsky, 1981, p. 17), namely, (i) the *Lexicon*, which specifies the morphological and phonological structure and syntactic features of each lexical item (word, idiom, and so on), including the grammatical category to which each lexical item belongs (noun, verb, and so on) and features indicating the context in which it can occur; (ii) the *Syntax*, which consists of a categorial component and a transformational component (Chomsky, 1981, p. 5). The categorial component meets the requirements of X-bar theory. The transformational component contains the most radical change in GB Theory in reference to the earlier models. A major difference between earlier versions of generative grammar (especially the Standard (ST) Theory and Extended Standard Theory (EST)) and GB is that whereas the ST and EST propose construction-specific rules, such as question formation, passivization, dative movement, relativization, topicalization, focus marking, raising and so on, GB accounts for all rules that involve permutation with a uniform transformational rule, Move- α , which is constrained in all languages (Weibelhuth, 1995 pp. 6 - 9).

Chomsky further proposes that in GB, there is a shift of interest from the formulation of



specific rules to universal principles. The essence of reducing the number of transformations to just one is an attempt to restrict the generative power of transformations, and to impose certain constraints on the universal principles (Ndimele, 1992, p. 19). Such a rule had to be supplemented by a list of output constraints, that is, stipulations about what structures were allowed as outputs to the rule. The base consists of the lexicon and syntax. Chomsky uses a new name, D-structure, for what the base generates, instead of the previously used term 'Deep Structure', because the concept of Deep Structure had changed considerably in meaning (Koopman, 1986, p. 13). The rule 'Move- α ' maps (converts) D-structure into S-structure, which is the syntactic representation that reflects the surface order of the sentence, leaving traces in the position from which any item has been moved (Chomsky, 1981 p. 5). Chomsky further explains that the moved item is called, in its new position, the antecedent of the trace. The trace and its antecedent are co-indexed, that is, identical subscript figures are inserted to show that the two are related (Cattell, 2006, p. 183). This phenomenon is also known as binding. For example:

- (5) a. John will invite who?
b. Who_i will John invite t_i?

Assuming a deep structure like (5a), Move- α moves *who* into COMP and leaves behind a co-indexed trace, as shown in (5b). *Who* then 'binds' the trace.

Though 'Government and Binding Theory' was the common label for this version of grammar, Chomsky himself found it misleading because it gives the wrong impression that these two modules are more important than any of the the label of Principles and Parameters (P&P) Theory has come to be seen as closer to its essence, and can still be applied to the contemporary model (Chomsky, 1995 p. 30). The Principles and Parameters model has several modules, namely: theta theory, case theory, government theory, x-bar theory, binding theory, bounding theory and control theory. Also, a number of principles and parameters are inherent in the theory namely: headedness principle, locality principle, projection principle, binarity

principle, extended projection principle; wh-parameter, pro-drop parameter, head parameter and so on. However, the focus in this study is the Head Parameter. The Head Parameter concerns the position of heads within phrases (Cook and Newson, 2008, p. 44). This assumes that a particular language consistently has the heads on the same side of the complements in all its phrases, whether head-first or head-last. English is head-first as seen in the examples below:

- (6) a. *in the bank*: Preposition head first before the complement NP in a PP.
b. *amused the man*: Verb head first before the complement NP in a VP.

4. Data Presentation and Analysis

As maintained earlier, this work focuses on a syntactic analysis of lexical heads in Kuce with a view to determining how the principle of Head Parameter is operational in the language. For the purpose of the analysis, the paper focuses only on Noun Phrase and Verb Phrase.

4.1 Noun Phrase Structure in Kuce

The Noun Phrase in Kuce has different syntactic structures. Each of them is examined as follows:

4.1.1 Head Noun and Prepositional Phrase

Prepositional phrases can function as complement or adjunct in the Kuce NP, as illustrated below:

- (7) a. àbāyiwák [àyi Kùcé]
student of Kuce
'a student of Kuce'
b. àbāyiwák [nū yén ūtútú]
student with long hair
'a student with long hair'

In the case of (7a), constituent (*àyi Kuce*) in parenthesis is in an intuitively fairly obvious sense, the complement of *àbāyiwák*, whereas the parenthesis constituent [*nūyénūtútú*] in parenthesis (7b) is an adjunct. The constituent *Kùcé* in (7a) tells us what it is that the individual concerned studies hence, the NP (*àbāyiwák Kùcé*) can be paraphrased by a clausal construction in which *Kùcé* functions as the complement of the verb *bây* in the following example:



- (8) a. \hat{A} shì kì bāy Kùcé
he is in reading Kuce
'He is studying Kuce'

But this is not at all the case in (7b). In this case, the bracketed PP *nū yén ūtūtù* does not in any sense function as the complement of *àbāyīwāk*, so that it is not permissible to have any corresponding paraphrase in which *yénūtūtù* is used as the complement of the verb *bāy* 'reading'. This is exemplified in (9) below:

- (9) * \hat{A} shì kì bāy yén ūtūtù
he is in reading long hair
'He is studying long hair'

The example in (8) above reinforces the assumption that complements are closer to their heads than adjuncts are.

4.1.2 Head Noun and Determiner

In Kuce, a determiner may occur as an optional constituent in a Noun Phrase. The determiners are free morphemes and they include *ngi*, *gyi*, *wai*, *mu*, *mut*, *mi*, *gyin* and *she*. A simple NP could contain a determiner and neither a Complement nor an Adjunct, as in the following examples:

- (10) a. $\bar{a}ic\bar{a}b\bar{a}ng\bar{i}$
rice the
'the rice'
b. $\bar{i}w\bar{u}i$ $\bar{g}yi$
dog CM this
'this dog'
c. $\bar{a}m\bar{f}\bar{u}n$ \bar{a} $\bar{w}ai$
cloths CM these
'these cloths'

The examples in (10) above imply that in Kuce, determiners are specifiers positioned after the nouns they modify in a simple NP that lacks complements and adjuncts. The concordial marker (CM) is a morphological device in Kuce that shows agreement between the noun and the determiner. In Kuce, modifiers often have features of morphological inflection (CM) that show grammatical agreement in a syntactic structure; The noun phrase constituents – demonstratives, pronouns, numerals and interrogatives bear a grammatical affix that is concordial with the affix that the noun bears. In (10a), there is no CM, while in (10b-c), the

concordial markers *i*, and *a* introduce the determiner to show agreement with the (prefix of the) noun.

4.1.3 Head Noun and Adjective

In a simple NP structure in Kuce, the adjectives always follow the head noun. These adjectives agree with their head noun in phonological identity, as seen in the examples (11) below, in which the concordial markers are indicated in bold type.

- (11) a. $\bar{a}t\bar{a}k\bar{a}r\bar{d}\bar{a}$ $\bar{a}g\bar{o}$
book big
'big book'
b. $\bar{u}nk\bar{u}$ $\bar{k}\bar{u}g\bar{e}$
bone big
'big bone'
c. $\bar{u}k\bar{a}w$ $\bar{u}g\bar{o}$
bag big
'big bag'

The examples (11a – c) represent the same adjective 'big' but differ only in their morphemic form (in the prefix a-, ku- and u-). Ejiemenu (2014, p. 25) explains that the adjective is conditioned by the morphemic form of the noun it is attributing or describing. However, this does not happen in every case, as in (12a – c) in which the adjective *cici* 'beautiful' does not share an agreement affix form with the head nouns.

- (12) a. $\bar{k}\bar{i}t\bar{u}$ $\bar{c}i\bar{c}i$
girl beautiful
'beautiful girl'
b. $\bar{k}\bar{i}k\bar{o}$ $\bar{c}i\bar{c}i$
house beautiful
'beautiful house'
c. $\bar{a}j\bar{i}j\bar{e}k$ $\bar{c}i\bar{c}i$
garden beautiful
'beautiful garden'

The following rule can be formulated for the Noun Phrases in (11) and (12) below:

- (13) NP \longrightarrow \bar{N} Adj

The Adjective in rule (13) merely serves to give additional information about the noun (i.e. the nouns happen to be beautiful, as shown in (12)). The Adjective in (12) is therefore an adjunct. It is therefore assumed that the Adjective, which is an adjunct from the analysis, consistently follows the head noun in a simple



NP structure in Kuce.

4.1.4 Head Noun and Noun

In the Kuce NP, complements of a noun must follow the head noun in a genitival construction. For example:

- (14) a. *átákárdá* *ā* *Āsùbàhí*
book CM *Āsùbàhí*
'*Āsùbàhí*'s book'
b. *âgimā* *ā* *Āsùkùtúk*
mother CM *Āsùkùtúk*
'*Āsùkùtúk*'s mother'
c. *Kītú* *ā* *Āyíkí*
head CM *Āyíkí*
'*Āyíkí*'s head'

The nouns *átákárdá*, *âgimā*, and *kītú* in (14) are heads as they assign genitive case to the nouns *Āsùbàhí*, *Āsùkùtúk*, and *Āyíkí*, respectively. The examples in (14) imply that the complement of a head noun in a genitive construction consistently follows its head in the Kuce language.

To recap briefly, it could be concluded that in the Kucelanguage, NPs in different constructions consistently exhibit head-complement structure in accordance with the general schema: (15) $XP \longrightarrow X$ Complement (Adjunct). This implies that complements of an NP are obligatory constituents and are internal modifiers of the head noun, while adjuncts are optional constituents and external modifiers of the head noun.

4.2 Verb Phrase Structure in Kuce

In Kuce, Verb Phrases (VPs) are constituents with the following structure:



where (...) stands for Complement or Adjunct. The following example illustrates the Verb Phrase in Kuce:

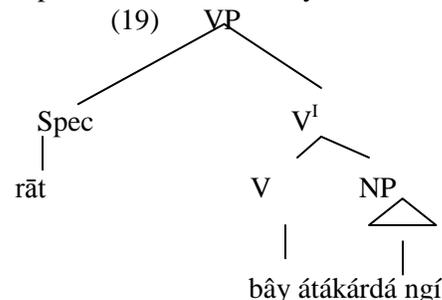
- (17) John *â* [_{VP} *tīsik* *átákárdá* *kātāt* *itèbūl*]
John will put book on top table
'John will put the book on the table'

In (17), the direct object NP, *atakarda* 'book', is a complement of the verb, *tīsik* 'put'. It is governed and C-commanded by the verb,

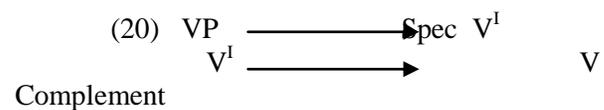
which assigns accusative case to it. The PP *kātāt itèbūl* functions as an adjunct. Adjuncts are optional elements and are also recursive in that they can be stacked. Consider the following example:

- (18) *Īngmínibā* [_{VP} *rāt* *bây* *átákárdá* *ngí*]
children they all read book the
'The children have all read the book'

In (17), the VP is similar to that of (18), but it is introduced by the quantifier *rāt* 'all'. In accordance with Haegeman (1991, p. 82), the quantifier *rāt* 'all' is part of the VP and is structurally independent from the V^I. The quantifier is not an adjunct of time or place like the post verbal PPs; it is not recursive and there can only be one quantifier in a construction. The quantifier combines with the highest V^I to form the full VP, i.e. it occupies [Spec, VP], which combines with V^I to form a V^{II} projection, the highest projection equated with VP. In light of this assumption, the example in (18) is represented schematically below as:



In example (19), the head of the projection (VP) is the V *bây* 'read'. It C-commands the complement *atakarda* and assigns accusative case to it. Schematically, Kuce VPs are formed according to the following PS-rule:



This rule illustrates that in Kuce, the complement combines with V to form V^I. The specifier combines with V^I to form the VP. The rule also reveals that within the VP, the complement follows the verb.



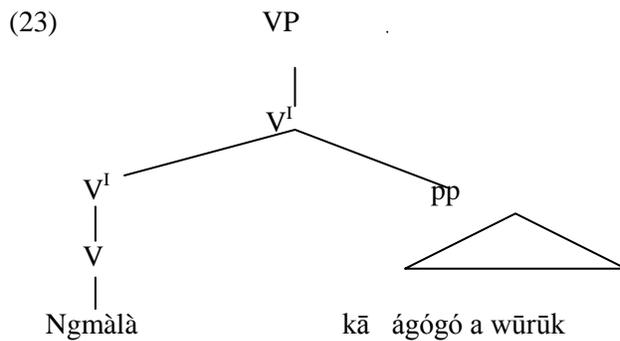
Furthermore, the Complement/Adjunct distinction drawn by Chomsky (1965, pp. 101-103), holds true for the Kuce VP, as the following examples illustrate:

- (21) \hat{A} ngmàlà [kūnīyīràs]
he laughed clown
'He laughed at the clown'

In (21) above, the PP *kuniyiras* 'clown', functions as an internal modifier of the verb *ngmala* 'laughed' i.e. it functions as a complement.

Similarly (22) has the structure (23) below:

- (22) \hat{A} ngmàlà [kāágógó a wūrūk]
he laughed at clock CM ten
'He laughed at ten O'clock'



In (23) above, the PP *ka agogo a wuruk* 'at ten o'clock', functions as an external modifier of the verb *ngmala* 'laughed', i.e. it functions as an adjunct.

The distinction captured in the structures (22) and (23) implies that verbal complements and adjuncts are generated by two different PS-rules in Kuce, as given in (59) below:

- (60) a. $V^i V^j XP \longrightarrow$ [Adjunct Rule]
b. $V^i \longrightarrow$ V XP [Complement Rule]

Thus, in Kuce VP, adjuncts are sisters and daughters of V-bar, and complements are sisters of V, and daughters of V-bar.

The analyses thus far provide empirical 's phrases justifies the typological findings with respect to Head Parameter cross-linguistically.

substantiation for the claim that complements in Kuce follow their governing heads (which assign cases to them). In other words, complements in Kuce are internal to the construction containing the head, whereas adjuncts are external to the construction containing the head.

5. Conclusion

The study has examined the Head Parameter principle of the Principles and Parameters Theory as it relates to phrases in the Kuce language. The structures of two lexical categories were described and the directionality of heads in relation to their complements was explored. All the noun and verb phrases of Kuce were shown to be head-first. The study also noted that complements in Kuce are internal modifiers of the head element and show a high degree of cohesion with their governing heads, while adjuncts are external modifiers and show a less degree of cohesion with their governing heads, with the X-bar framework accounting for the facts.

Within the Noun Phrase, the head is modified by prepositional phrases, determiners, adjectives and nouns, and all the modifiers were shown to consistently post-modify the head noun. Within the verb phrase, there are different levels of projection. The complements are internal to the construction containing the head verb, whereas adjuncts are external to the construction containing the head. All the modifiers were shown to consistently post-modify the head verb.

It has been proposed that if a language is claimed to select a given value of the head-parameter, all head categories in the language are expected to select their complement in the same direction at Deep Structure. This proposal is fulfilled by the lexical categories of nouns and verbs of Kuceas well as other categories. On this premise, it suffices to conclude that the operation of the Head Parameter principle in Kuce is very strict, as heads are consistently positioned before their complements, and that the canonical structure of the language

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