PARAMETRIC BINARITY AND LAMNSO' WH-CONSTRUCTIONS

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This paper sets out to examine one of the UG parameters as it operates in Lamnso'[1]. Given that Lamnso' typologically belongs to a language group distinct from the better studied languages of the world, an investigation into one or more of the parameters may reveal a fixed repertoire of values associated with a given parameter (Uwalaka 2002). This investigation focuses on the WH-parameter, which distinguishes languages that have syntactic WH-movement from those that do not have. The paper seeks to advance the claim that Lamnso' is a WH-in-situ language (Yuka, 1999). In doing this, the paper examines the structural properties of WH- constructions and various derivational transformations between D-structure and S-structure constructions. The paper posits that the in-situ phrase in Lamnso' must always be bound by another noun phrase at the Logical Form level (LF[2]).

Nous examinons ici l'un des paramètres de la grammaire universelle (UG) telle qu'il se manifeste dans le lamnso'. Vu que le lamnso' est typologiquement membre d'un groupe de langues qui est à l'écart des langues du monde les mieux étudiées, une investigation de l'un ou l'autre de ces paramètres pourrait révéler un répertoire fixe des valeurs associées à un paramètre donné (Uwalaka 2002). La présente investigation est centrée sur le paramètre WH- (le relatif) qui distingue les langues où l'élément WH- est pris dans un remaniement syntaxique d'une part, et celles où il ne l'est pas. Cette étude veut soutenir l'hypothèse que le lamnso' est une langue à 'WH-in-situ' (Yuka 1999). Ce faisant, nous examinons les propriétés structurelles des tournures en WH-, et diverses transformations dérivationelles entre les tournures à structure-D et celles à structure-S. Nous proposons ici que le syntagme in-situ du lamnso' doit toujours être lié à un autre syntagme nominal au niveau de la Forme Logique (LF).

[1]Lamnso' is spoken in the greater part of Bui Division, which is 150 km. from Bamenda, the capital of the North West Province of the Republic of Cameroon. It is also spoken in Nigeria, specifically in Taraba State, Sarduana Local Government Area. It is a grassfeild Bantu language, classified under the Ring group of languages. (Greenberg 1966). Like Fula (Arnott 1970), Swahili (Mkude 1995, Welmers 1973) and many other languages of the Bantu family, Lamnso' nouns and nominals fall under different classes on the basis of agreement operated by concord markers which vary from one class to another (Grebe and Grebe 1975, Eastman 1980, Yuka 1998,1999).

[2] A level of representation (of a structure of a sentence) is a derivational stage at which representations comprise only features of a single type. Two different representations exist in grammar (Chomsky, 1992) The Logical Form (LF) and the Phonetic Form (PF). At the LF level, representations include only semantic features, while at the PF level representations include only phonetic features. The grammatical structures that emanate form merger and movement operations do not constitute a separate representational level given that they contain three different sets of features (phonetic, grammatical and semantic), (Radford 1977).

0. INTRODUCTION

The theory of grammar seeks to explain how the human mind processes any natural language. Such theories are usually aimed at explaining the characterization of linguistic phenomena as well as the properties of grammars. Chomsky (1972:102) claims that language acquisition is a species-specific ability of all human beings. Following his *Innateness Hypothesis*, he states that the human language faculty is adequate enough to develop a grammar of any language to which the learner is exposed. There is therefore an inherent part of a child's language faculty that is like a blank page (so to say) upon which any language can be written. In attempting to examine this innateness hypothesis, we are at the same time seeking to understand the universal principles that account for the structure of language. These principles have been referred to as Universal Grammar (henceforth UG). UG is hypothesized to be an innate property of the human mind. It is thought of as a set of assumptions about what constructions are possible in the grammar of all languages. Each language derives its peculiarities from the choices of specific items drawn from the properties presented by UG. The principles of UG are parameterised to accommodate the idiosyncrasies of each language, (Chomsky 1981, 1992 and others). Apart from seeking to meet the explanatory adequacy criterion, any theory of UG aims at being maximally restrictive, descriptively adequate and presents a grammar that is learnable. A theory that minimizes the acquisition burden and maximizes learnability of natural languages is preferred. Thus with UG, there are universal principles that broadly outline the grammatical structure of every natural language that language learners acquire as part of learning their mother tongue.

1. THE PRINCIPLES AND PARAMETERS THEORY

The Principles and Parameters approach (P&P) to language learning reduces the plethora of variant structural complexities and properties that a language learner may be faced with in producing well-formed structures in the language. This is because UG assumes a range of structural variation across languages and also specifies two open value choices for every natural language: a natural language either has or does not have a given parameter. These two value choices have been referred to in the literature as binarity.

1.1 LAMNSO' WH-CONSTRUCTIONS

Radford (1988:82) proposes a broad division of question type constructions in English: the Yes/No questions, the Wh-questions, Echo/Non-echo questions, Direct and Indirect questions. We take premise from Radford's analysis of question formation to examine the Wh-parameter as a universal structural variation for natural languages. In so doing, we intend to take a closer look at the structural properties of WH-constructions in Lamnso'. We confine our discussion to WH-questions because of the peculiarity of their derivation in the language. In addition, the data on WH-question formation seems to provide enough evidence for us to claim that WH-phrases in the

language are in-situ in contradistinction to a large amount of data from English and other languages that require their WH-words to be moved to clause initial position[3].

The term WH- is generally used in reference to question words that begin with the letters 'wh' in English (Radford 1988:495). For convenience, we are adopting the term WH to refer to any question word in Lamnso' which does not necessarily begin with the letters WH-. Consider the following Lamnso' constructions.

(1) a. **Lòn e dzəv wàn bi'ká**
Lòn PST NON.PROG.beat child why
Why did Lòn beat the child?

b. **bvəy Kila ø beé**
goat Kila NON.PST where
Where is Kila's goat?

c. **à fiine ø ŋkaa ŋgwàsáŋ lé**
you PROG-sell NON.PST basket corn how
(For) how much are you selling a basket of corn?

d. **Kanla wùn Lukong ø dzè feé**
Kanla and Lukong NON.PST PROG.be where
Where are Kanla and Lukong?

e. **à tá' yí ká**
you PROG.wish NON.PROG.eat what
What do you wish to eat?

f. **Lukong e wiy fó Baminda wùn lá**
Lukong PST NON.PROG.come from Bamenda with who
Who did Lukong return from Bamenda with?

g. **Kila wùn Lòn e tá' yún kinikí**
Kila and Lòne PST NON.PROG.wish buy which
Which (one) did Kila and Lòn wish to buy?

Examples (1a-g) show grammatical question formation derivations in Lamnso' with the underlined **bi'ká** 'why', **beé/feé** 'where', **lé** 'how', **ká** 'what', etc; as WH-words. Observe that unlike their English counterparts, these WH-words do not move to clause

[3] WH-movement is a type of operator movement in which an expression containing a wh-word is moved to the front of a clause. Move-α on the other hand is a transformational rule that is bound by the condition of Subjacency in all languages. It is a movement operation that adjoins a constituent to some other position (landing site) in a sentence leaving 'a syntactic copy of itself' (Lasnik and Uriagereka 1988:41) at its extraction site.

initial position at S-structure. Consider the following D-structure sentences in English and their corresponding S-structure realizations in (2a-b) and (3a-b) respectively:

(2) a. [$_{CP}$ [$_{Spec,\ Cp}$ did John see who]]

b. [$_{CP}$ Who$_i$ [$_{Spec,CP}$ did John see **t$_i$**]]

(3) a. [$_{CP}$ [$_{Spec,\ CP}$ are they playing with what]]

b. [$_{CP}$ What$_i$ [$_{Spec,CP}$ are they playing with **t$_i$**]]

(2b) and (3b) have their WH-phrases moved from clause final position into [Spec, CP] at clause initial position. At the S-structure level, WH-questions are presented in quantificational schemas. Consider (2b) represented as (4) below.

(4) (Which X: X a person) (did John see X)

(4) Shows that the transformation of the WH-phrase from its extraction site to its landing site provides not only a quantificational schema suitable for presentation, but also a selectional requirement that binds variables at LF. We return to this in a moment.

If our claims for (1a-g) are correct, then Lamnso' can correctly be typologically grouped with Chinese and Japanese-type languages which do not require the extraction of the WH-phrase to clause initial position at S-structure. We proceed to analyse the D-structure and S-structure of WH-consructions in Lamnso' to reveal the nature of the transformations that generate the surface structure derivations leaving the WH-word in clause final position. Examine the data below.

(5) a. D-Structure

[CP [Spec, CP	**lá**	**a**	**dzə̀v**	**ø**	**wán**]]
	who	PST	beat	ASP	child

b. S-Structure

[$_{CP}$ **Yii**	**i**	**dzə̀v$_j$**	**ø**	**lá**	**t$_j$**	**wán**]
	PST	beat	ASP	who		child

Who beat the child?

(6) a. D-Structure

[$_{CP}$ [$_{Spec,\ CP}$	**lá**	**a**	**yí**	**ø**	**kiban**	**ké**	**wan**]
	who	PST	eat	ASP	food	of	child

b. S-Structure

[$_{CP}$ **Yii**	**i**	**yi$_j$**	**ø**	**lá**	**t$_j$**	**kibán**	**ké**	**wan**]
	PST	COMPL.eat	ASP	who		food	of	child

Who ate the child's food?

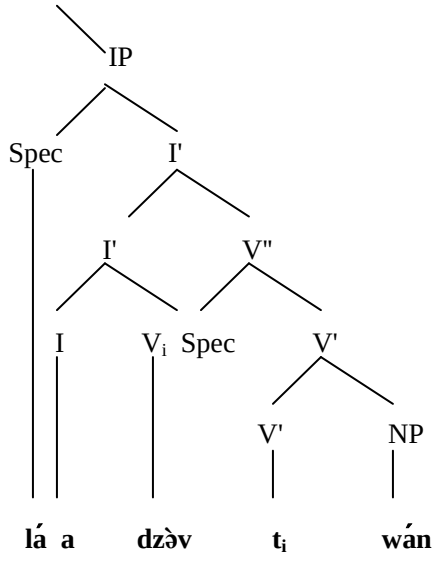
The verb **dzə̀v** 'beat', in (5) and **yí** 'eat', in (6) are transitive verbs given that each subcategorises for an object NP as follows:

(7) a. **dzə̀v**, [____ NP]

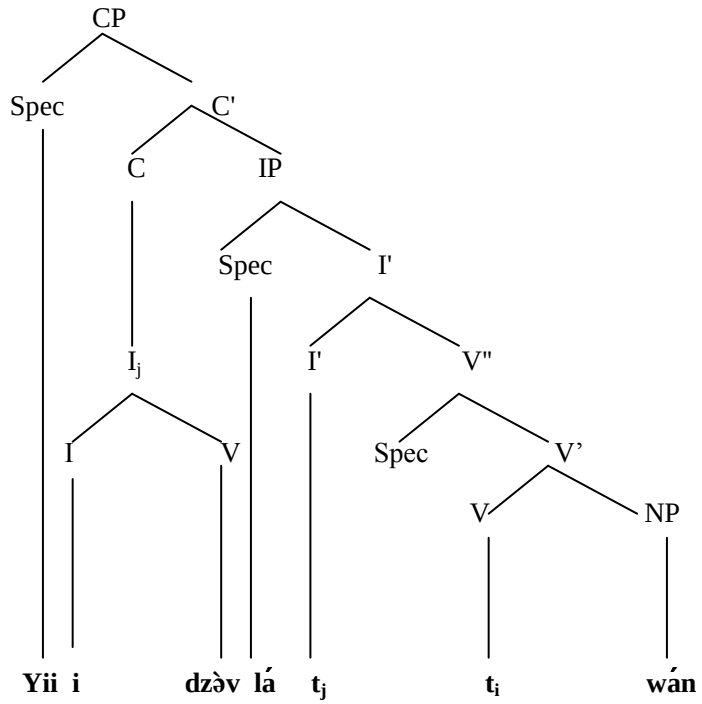
b. **yí,** [____NP]

In the transformation from (5a-b) and (6a-b), we would traditionally expect **lá** 'who', to move leftwards. Such a movement is not possible in (5) and (6) understandably because **lá** will be moving out of an A-position. To move rightwards, it must move into another A-position, but the object NP **wán** 'child' already occupies that position. Again, the movement of **lá** into [Spec, CP] will not effect any change in the syntactic arrangement of the constituents in the string. In addition, (5a) as a derivation is not legitimate in Lamnso' and thus fails to converge. We therefore propose V-movement, which saves (5a) from crashing as shown in its S-Structure in (5b). Notice however that the verb **dzə̀v** will have to move into the head of I'', to have tense features associate with it, before it finally moves into its landing site as represented in (8a-b) below.

(8) a. D-Structure



b. S-Structure



8) shows that the verb **dzàv** does not move to the head of CP (its landing site) in 'one fell swoop' (Lasnik and Uriagereka, 1988). It obeys the Minimalist Program (MP) *Economy Principle*[4] of Shortest Move (Chomsky, 1995) by moving first into the head of IP (a potential landing site) that constitutes the first position of the right kind, up from the source position. The complex head of I eventually moves into the head of CP, yielding a well-formed structure in Lamnso'. Notice that the derivation in (8b) yields a structure with the initial constituent being a pleonastic element **yii** (it), which is base generated in the subject NP position. Yuka (1997) has argued that tense in Lamnso' is morphologically dependent on the Subject NP. The morphological nature of tense in (5-6) is thus determined by the final morpheme of the pleonastic element.

[4] Economy in the sense of Chomsky (1995) does not follow from the general extra linguistic notions of 'economy'. Rather, it is the requirement that syntactic representations should contain few constituents and involve as few grammatical operations as possible

1.2 LAMNSO' AS A WH-IN-SITU LANGUAGE

Cheng (1991) claims that an idiosyncrasy of languages in which WH-words are not moved at S-structure like Lamnso' is that routinely, they exhibit a question particle at clause final position, as against English-type languages that lack such question particles. For instance, in Chinese, Yes/No questions require the final particle **ma**, while in Japanese WH-questions and disjunctive questions optionally take the particles **ne**, **ka** or **no**. Examine the following Chinese data (cf Marantz 1995:36)

(9) a. **ni Xiang mai shenme** (**ne**)?
you want buy what Q
What do you want to buy?

b. **ni Xiang mai shenme ma?**
You want buy something Q
Would you like to buy something?

In like manner, the final question particle **á** is required for all Lamnso' questions which do not exhibit a WH-word in its derivation. For example:

(10) a. **Yénlá wùn Kila a dù Yàwundè á ?**
Yénla and Kila PST NON.PROG.go Yaounde Q
Did Yénla and Kila go to Yaounde?

b. **Yénlá a dù Yàwundè wùn lá ?**
Yénla PST NON.PROG.go Yaounde with who
Whom did Yénla go with to Younde

(11) a. **Audu u kòŋ yí nyám fó ntòn á ?**
Audu PST NON.PROG.want eat meat from pot Q
Did Audu want to eat meat from the pot?

b. **Audu u kòŋ yí nyám fó ghá?**
Audu PST NON.PROG.want eat meat from what
From what did Audu want to eat meat?

Notice that in (10a) and (11a) the clauses are intrinsically WH-constructions. The question formation is indicated by the final question particle **á**. Sentences (10b) and (11b) present the same constructions as in (10a) and (11a), but with the question formation captured by the WH-word. Notice that **lá** and **ká** encode both the prepositional object **Kila** and the question particle (for (10a). Our explanation of this

phenomenon is that the question particle is always suggestive of the answer to the question. Our claim in (10) and (11) is that languages such as Lamnso' have a variation in question formation by simply base generating a question particle at clause final position.

The general assumption is that interrogative WH-phrases comprise two cardinal components: is the presupposition of the question and there is the object of *focus*[5] of that question, as shown in example (12) below.

(12) **lá** implies WH- + someone
ká implies WH- + something
feé implies WH- + a place, etc.

From (12), one can, by extension claim that each WH-word has features associated with it that make it a question word. Such features represent the object for which clarification is being sought. Put differently, WH-phrases are tagged 'existential quantifiers' because apart from accounting for question formation, they as well fix the scope of the WH-phrase as a quantifier.

The WH-word is therefore associated with the features in (13) that identify the constituent in question.

(13) WH-word

±	Concrete
±	Count
±	Human
±	Plural

Thus in (10b), the speaker presupposes that someone went with Yénla to Yaounde; the question demands for specification of who it is that Yénla went with. A clue to the expected answer is found in the features of the WH-word **lá** 'who', which are as in (14).

(14) **lá**

+	N
+	Count
+	Human
-	Plural

[5]Focus here is not used in the technical sense.

The features in (14) are identical to and neatly fit with those of the NP, which is the appropriate answer to the question word **lá**. Put differently, Lamnso' grammar requires that the object NP in (15), **Kila** which is the answer to the question in (10b) should bear identical features with **lá** in (14).

(15) **Yénla a du wùn Kila**
Yénla PST NON.PROG.go with Kila
Yénla went with Kila.

Thus the WH-in-situ phrase in Lamnso' must be in the domain of some appropriate binder at LF for the phrase to be interpreted as an interrogative phrase. Examine the constructions below.

(16) **M ø tà' yun kifa**
I NON.PST NON.PROG.wish buy something
I wish to buy something

(17) **À ø tà' yun kifa á**
you NON.PST NON.PROG.wish buy something Q
Do you wish to buy something?

(18) **À ø tà' yun ká**
you NON.PST NON.PROG.wish buy what
What do you wish to buy?

Observe that in (16) through (18), **tà'** and **yun** are transitive verbs that subcategorise for object NPs. In (18) **yun** has the WH-word as its object NP, while **tà'** lacks an overt object NP. Underlyingly, the NP for **tà'** and **yun** are identical in **ká**. Thus, the correct interpretation of the WH-word in (18) is dependent on its correct interpretation as a quantifier. Therefore the in-situ WH-phrases in Lamnso' must always be bound by another NP at LF with identical features to those of the WH-word.

Example (10a) shows that once we have a coordinate NP in subject position, the conjunction is realised as **wùn** 'and'. The same word semantically encodes a completely different meaning in another syntactic position in the sentence. Take a look at the following examples.

(19) a. **Kila wùn Ntasín ø yí sáŋ e lav**
Kila and Ntasin PRS PROG.eat rice in house
Kila and Ntassin are eating rice in the house

b. **Taàtá wùn Yaàyá ø nú nama' e kiban**
old man and old woman PRS PROG.drink tobacco in hut
The old man and the old woman are smoking tobacco in the hut

c. **Vilum wùna vikíy ø céŋ meréŋge**
Men and women PRS PROG.dance highlife
The men and woman are dancing (to) highlife

d. **Taàtá ø nú nama' wùn yaàyá e kiban**
old man PRS PROG.drink tobacco with old woman in hut
The old man is smoking tobacco with the old woman in the hut

e. **Kila ø yí sáŋ wùn Ntasín e lav**
Kila PRS PROG.eat rice with Ntasín in house
Kila is eating rice with Ntasín in the house

In (19 a-c) above, the complex subject NP (NP and NP) shows that the conjunction is morphologically identical to the preposition in example (19 d-e) which occurs post verbally. **wùn** (with) does not only show a shift in its categorial and subcategorial frame, it also exhibits a semantic shift. In its new syntactic position as a preposition, it takes an NP to indicate that the NP in subject position undertakes the action designated by the verb in the company of the NP that is the complement of the PP **wùn** . Notice however, that in (19 c) the conjunction is realised with a plural affix (**wùn -a**). Example (20) illustrates that the conjunction is sensitive to the features of the NPs adjacent to it.

(20) a. **wiy wùn lúm vikíy wùna vilúm**
woman and husband women and men

b. **wan wùn fər wone wùna afəri**
child and brother/sister children and brothers/sisters

c. ***shilú' wùn ŋgəv shilú' wùna ŋgəv**
wine and chicken wine and chicken

d. ***kibév wùn njii kibév wùna njii**
hegoat and sheep hegoat and sheep

e. ***kikún wùn ntá' kikún wùna ntá'**
bed and chair bed and chair

A careful observation of the data above reveals that the conjunction is realised as **wùn** when singular [+ Human] nominals are being coordinated. It surfaces as **wùna** when the NPs are more than one. Once [- Human] NPs are involved, the language requires that **wùna** be the form of the conjunction employed whether the NPs are in their singular or plural forms.

2. CONCLUSION

This paper set out to examine the existing repertoire of derivational properties associated with WH-constructions in Lamnso'. The paper has presented evidence to substantiate its claim that Lamnso' can rightly be grouped with Japanese and Chinese-type languages which do not permit syntactic WH-movement to COMP position at S-structure. The paper also argues that Lamnso' is a WH-in-situ language in which the WH-phrase must appear in the domain of some appropriate binder at LF if the derivation is to converge at the interface levels of sentential derivation in the language.

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