Head in Yorùbá Derived Nouns

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1 Introduction

Studies on Yorùbá have typically ignored or undervalued the place of word structure within a generative grammar. This neglect has a far reaching effect on the study of the language first, because words are the basic units in the description of any language and second, because the Yorùbá word structure offers a microcosm of some of the descriptive problems of sentences in the language. In this paper, therefore, we shall take a critical look at the notion, head, in the Yorùbá morphology within a variant of the Generalised Phrase Structure Grammar (GPSG henceforth) developed by Cann (1986).

2 Theoretical Preliminaries

Cann (1986) rejects a bar level approach to phrase structure as exemplified, for example, in Jackendoff (1977) and proposes a two feature approach that defines phrases in terms of the primitive syntactic notions of 'constituent incompleteness' and 'lexicality' as in (1).

- (1) (a) <MAXIMAL, ->: constituent incompleteness
 - (b) <LEXICAL, +>: lexicality

In line with the categories/features in Gazdar et al (1985), the two features in (1) define the four possible categories in (2).

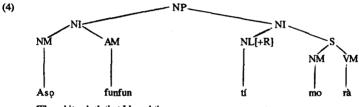
(2) (a) {} (complete, non-lexical)
(b) {<MAXIMAL, ->} (incomplete, lexical)
(c) {<LEXICAL, +>} (compete, lexical)
(d) {<MAXIMAL, ->, <LEXICAL, +>} (incomplete, lexical)

According to Cann (1986: 107), constituent incompleteness 'denotes incompleteness in terms of the structure in which an expression is found. It does not provide a ones and for all definition of the status of a particular string of words but its status within a larger string'.

Thus, we may analyse the string in (3a) as in (3b-e). Category abbreviations are given in brackets.

- (3) (a) Aşo funfun tí mo rà The white cloth that I bought': 'non-lexical, complete' (NP)
 - (b) Aso funfun 'The white cloth': 'non-lexical, incomplete' (NI)
 - (c) mo 'I': 'lexical, complete' (NM); 'rà' 'buy': lexical, complete' (VM)
 - (d) tí 'that': 'lexical, incomplete' (NL)

The structure of (3a) is shown in (4).



'The white cloth that I bought'

3 The Structure of Words

Syntactic categories, as described above, are defined according to whether they analyse complete or incomplete expressions while the domain of syntactic processes is determined by the instantiation of the feature, LEXICAL. For words, however, lexicality is fixed and defines the domain of lexical rather than syntactic processes. Here, the notion, 'word,' is taken as primitive and defined as X[+LEX] which means a lexical category that is neither a stem nor an affix. Lexical categories are also defined parallel to the syntax with the uses of two single-valued features denoting non-word (ie stem) and affix. LEX is a set of lexical features. These lexical features appear with their own lexical entries which means that they do not appear through the operation of word formation rules. (5c-f) give us the four categories that (5a-b) define.

- (5) (a) <WORD, ->
 - (b) <AFFIX. +>
 - (c) {}: Word (W)
 - (d) {<WORD, ->}: Stem (S)

- (e) {<AFF1X, +>, <WORD, +>}: Clitic (C)
- (f) $\{\langle AFFIX, +\rangle, \langle WORD, -\rangle\}$: Affix (A)
- (g) Feature Cooccurence Restriction: [F] ---> [+LEX], F ε LEX

(5c) is the category 'word', (5d), the category 'stem' (non-affixal, non-word), (5e) is a clitic (affixal, word) and (5f) is the category 'affix' (affixal, non-word). It should be noted, however, that given the definition of a stem as 'that which is left of a word when all inflectional affixes have been removed' (Hartman and Stork 1976: 219) and as there is no inflectional affixes in the language, it would not be accurate to say that the stem is a lexical category in Yorùbá. Thus, if 'àilo,' (the act of not going) is taken as a word, then, 'ài' (a derivational morpheme) (see Owólabí 1995: 108 note 3) will be an affix and 'lo,' (to go), a word. Items such as 'mo' (I), 'o' (you) which have been described as clitics by Pulleyblank (1986) do not take part in the derivation of new words in the language. Given (6), we can exemplify (5) as (7).

- (6) Mo jó ijó fújì 'I dance to fújì music'
- (7) (a) {} (W): jó 'to dance, ijó 'dance', fújì 'fújì music'
 - (b) $\{\langle AFFIX, +\rangle \langle WORD, +\rangle\}(C): \underline{mo} 'I'$
 - (c) {<AFFIX, +> <WORD, ->} (A): <u>i</u> 'the derivational morpheme in <u>ijó</u> 'to

dance'

There is also a restrictive feature instantiation principle operating within lexical structure called the Lexical Feature Principle. The principle states that the LEX feature set of a daughter must be an extension of that of the mother. For Yorùbá, as we cannot say that there is the category, stem, and as clitics do not take part in the derivation of new words, this principle will allow only the relations between mother and daughter in the lexical trees in (8).

4 The Notion 'Head' in Morphology

Recent generative work has given much space to the discussion of the head of a word in morphological processes. Lieber (1981: 55) says that

in syntax, the head of a phrase is the element in the phrase that has the same distribution and belongs to the same category as the phrase itself. The definition of morphological head is meant to be analogous. The head of a word is the element that has the same category and notion of morphological head and the Right Hand Head Rule, in fact, serves to define the allowable routes among which features can percolate up nodes of a lexical tree

Williams (1981: 13) also states that the category of the derived word is always non-distinct from the category of its head, in English, usually the rightmost constituent.

It is easy to recognise the notion head in syntax. In fact, head has been used to divide the languages of the world into two. A language is either a head first or a head last language. For instance, while Yorùbá and English are head-first languages, Japanese is a head-last language. (9) shows these clearly.

(9) (a) English

- (i) NP: <u>Students</u> of English (ii) VP: <u>bought</u> a ball (iii) PP: <u>in</u> the house Yorùbá
- (i) NP: Aso dúdú 'cloth black' (A black cloth)
- (ii) VP: n bàtà 'buy shoe' (buy shoes) (iii) PP: n ilé 'in house' (in the house) Japanese
- (i) VP: Watashi wa nihonj in dasu 'I Japanese am' (I am Japanese)
- (ii) PP: Nihon ni 'Japan in' (in Japan) (Cook 1988:8).

As mentioned above, in much current generative work, 'head' in morphology is seen as analogous to 'head' in syntax. This analogy comes from the assumption that if a (morphologically) complex word manifests a certain grammatical category, then, that category is carried onto one of its constituents (a morpheme) which is to be considered as the head of that word. The reverse is also referred to as valid, the categorial feature of the head is percolated to the whole word.

If we assume, following Aronoff (1976), that all lexical structure are binary branching, then, we can reduce word formation process to the general rule in (10) which

simply says that a lexical category may immediately dominate a lexical head (H) and some other lexical category, Y.

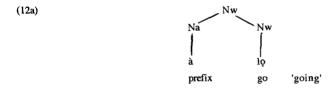
(10)
$$X\{+LEX\} ---> H, Y$$

If (10) is the Immediate Dominance Rule (IDR) for Yorùbá, the question is, what will be the Linear Precedence Statement (LPS) for the language? In other word, is the head going to be at the left hand or right hand? To answer this question, we have to look at how new words are derived in the language.

Owólabí (1995: 92) recognises two classes of Yorùbá prefixes. The first class, listed in (11a), attach to Verbs/VPs to form nouns while the class 2, listed in (11b), attach to Nouns/NPs to form nouns.

(11b) oní-, oni-

Owólabí (1995) classifies the class 1 prefixes as heads because they are category-changing prefixes as in 'à+lo' (prefix + go) ---> 'àlo' (going) which has the structure in (12a) where we abbreviate affix as 'a' and word as 'w'.



He does not recognise the class 2 prefixes as head because, according to him, they are not category changing. What he fails to realise is that even within a category, there can still be some subcategorisation and it is the head that determines such subcategorisation. For example, in English, both man and manhood are nouns but the abstractness of manhood is caused by the addition of the hood hence, hood is the head of the derived word. In the same manner, whether we recognise oni/oni as the derivational morpheme used to derived the agentive or emphatic form of the noun base (see Owólabí 1995: 108 footnote 4) or that o is the agentive morpheme (Awóbùlúyì 1978: 87) in such words as 'onílé' (the owner of a

house), the fact is that the derived word owes its new subcategorisation to the affix, hence the affix is the head. The structure of onlé (the owner of the house) could be either (12b) or (12c).

Here, we can also discuss such derived words as <u>tèmi</u> (mine) and <u>aboyún</u> (a pregnant woman) which Oyèláran (1987) says are derived from the combination of the derivational morphemes, <u>fi</u> and <u>abi</u> with the base nouns, <u>èmi</u> and <u>oyún</u> respectively. Their structures are shown in (13a) and (13b).

As in the derivation of <u>onlié</u> (the owner of the house) in (12), it is the morphemes, <u>ii</u> and <u>abi</u> that change the subcategorisation of <u>ièmi</u> (mine) and <u>aboyún</u> (a pregnant woman) respectively, hence, they are the heads.

Apart from the derivations discussed above, from Owólabí (1984 and 1985) and Oyèláran (1987), the Yorùbá derived nouns can be classified as follows.

(14) (i) Partial reduplication of Verbs/VPs as in <u>lilo</u> 'going' from <u>lo</u> 'go' and '*lìlò' as in 'òl·lò' (grinder) from 'lò' (grind) (Owólabí 1995: 109 footnote 5)

- (ii) The combination of a noun and a derived adjective as in <u>akojá</u> (a male dog) from <u>ako</u> and <u>já</u>. <u>Já</u> is derived from <u>ajá</u> through the deletion of the initial vowel, 'a'. <u>Ogbèyèkú</u> 'an Ifá verse' is also derived from <u>Ogbè</u> 'an Ifá verse' and <u>Òyékú</u> 'an Ifá verse' through the same process.
- (iii) Full reduplication of Nouns/NPs as in (a) <u>kóbò kóbò</u> (one kobò each), <u>náírànáírà</u> (one naira each) (b) <u>ilédélé</u> (from house to house), <u>òpòlópò</u> (many), <u>omokómo</u> (any child), (c) <u>bàtà oníbàtà</u> (somebody's shoes), <u>isé onísé</u> (somebody's work), (d) <u>ojoojúrnó</u> (everyday) and <u>osoosù</u> (every month)
- (iv) Sentence words such as <u>Olúwáfémi</u> (a name) and <u>Adéwölé</u> (a name)
- (v) Full reduplication of VP as in <u>jagunjagun</u> (soldier) and <u>pejapeja</u> (fisherman)
- (vi) Full or partial reduplication of conjunctions/conjunction phrase as in (a) <u>tàbí-tàbí</u> or (b) <u>tàbí-sùgbón</u> as in the sentence, 'kò sí tàbí sùgbón/kò sí tàbí tàbí' (There is no doubt about it) and (c) <u>àti òjò àti èèrùn</u> (both in rain and in sunshine, ie 'all the time').

We shall discuss (14 i-vi) one by one.

The case of the head resulting from regressive partial reduplication of the verb/VP base is straightforward. The prefix which results from the regressive partial reduplication of the verb/VP is category-changing (ie $\underline{0}$ (go) ---> $\underline{h}\underline{1}\underline{0}$ (going). It changes the verb/VP to a noun, hence, it is the head of the derived word.

(15) says that if a verb-word consists of at least a consonant and a vowel, the consonant can be reduplicated regressively and the vowel 'î/i' inserted between the resulting reduplicated

consonant and the verb. Examples are <u>filo</u> (going) from <u>lo</u> (go) and *<u>filò</u> in <u>òfilò</u> (grinder) from <u>lò</u> (grind).

The derivation of such words as <u>willo</u> (grinder) from <u>*lilo</u> and <u>wilve</u> (ie ààyè) (being alive, surviving, living) from <u>*live</u> (Owólabí 1995: 109 footnote 5) shows that, in support of Cann (1986), we are rejecting 'Aronoff's (1976) word based approach to word formation and take up a position more like that of Halle (1973) where affixes, stems and words are all stored in the lexicon and are input to word formation rules, irrespective of whether the output of these are actually attested words' (Cann 1986: 111).

Oyèláran (1987) also discusses the case of a derived noun where a derived adjective is combined with a noun. According to him, in the derivation of such words as Ogbèyèkú (an Ifá verse) and akojá (a male dog), the initial vowels of the nouns Òyèkú (an Ifá verse) and ajá (a dog) are elided and the derived adjectives, yèkú and já are combined with the nouns Ogbè (an Ifá verse) and akojá (a male) to form Ogbèyèkú and akojá respectively. The structure of Ogbèyèkú which is representative of such derivation is (16)

Owólabí (1985) recognises five types of nouns derived through full reduplication. They can be represented by (17).

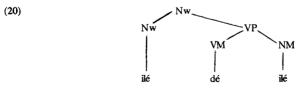
- (17) (a) oşooşù (monthly) from osù (a month)
 - (b) kóbòkóbò (one kobò each) from kóbò (one kobò)
 - (c) bàtà onibàtà (somebody's shoes) from bàtà (shoes)
 - (d) (i) ilédélé (from house to house) from <u>ké</u> (a house) (ii) γργλίρρ (many) from <u>γργ</u> (many) and (iii) γποκόπο (any child/a bad child) from <u>γπο</u> (a child).
 - (e) ilé nlá nlá (big houses) from ilé nlá (a big house)

As in compound sentences in syntax, both osoosù (monthly) derived from osù (a month) and kóbòkóbò (a kóbò each) derived from kóbò (one kobò) are double headed and their

derivation can be diagrammed as (18). We ignore the phonological processes involved in their derivation here.

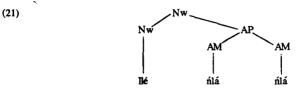
As for <u>bàtà oníbàtà</u> (somebody's shoes), <u>oníbàtà</u> (the owner of shoes) is derived first before the addition of <u>bàtà</u> (shoes) to form <u>bàtà oníbàtà</u> (somebody's shoes) with <u>bàtà</u> (shoes) as head. The structure is shown in (19).

<u>llédélé</u> (from house to house), which is representative of (17d), is derived from the combination of a verb phrase and a noun as in (20) with <u>llé</u> (a house) as head.



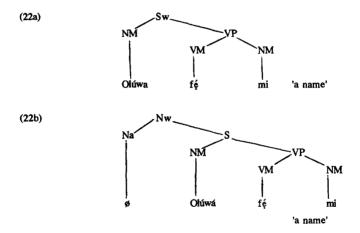
'from house to house'

<u>Ilé ńlá ńlá</u> (big houses) which Owólabí (1985) regards as a derived word can be treated as (21) with <u>ilé</u> (a house) as head.



'big houses'

We can treat <u>Olúwáfémi</u> (a name) and <u>Adéwolé</u> (a name) in (14iv) as Sentence words, in which case we may not need to account for their heads within morphology. Alternatively, we can treat then as noun words in which case their heads will be affixes which are realised as zero morphemes. The structures of both derivations are shown in (22).

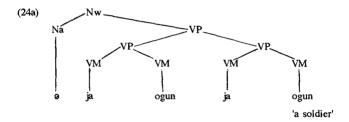


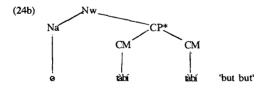
The derivation of (22b) can be compared with that of the verb, 'bomb', from the noun, 'bomb', whose derivation is often said to be unmarked but which, in actual fact, has a derivational morpheme which is realised as zero. We can explain the non-realisation of this derivational morpheme by making use of what Zwicky (1985: 432) calls the rules of allomorphy which can be stated informally as follows:

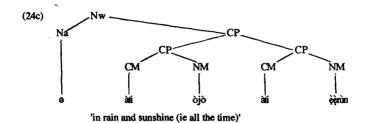
(23) (a) A given bundle of features can have several different formatives as its exponent in different contexts. An example of this is the Yorùbá

- progressive marker which is realise as $\underline{\hat{n}}$ in a statement and $\underline{m}\underline{\hat{a}a}$ in an imperative.
- (b) A given formative can serve as the exponent of several different feature bundles in different contexts This can be exemplified by the use of <u>m\u00e9a</u> as the future and habitual markers in 'Ol\u00fa m\u00e9a m\u00e9a l\u00f6' (Ol\u00fa will continue to go).
- (c) A formative serving as the exponent for bundles of morphosyntactic features may be absent. An example of this is the non-occurrence of the HTS after the subject pronoun as in 'Mo lo' (I went) when compared with 'Dàda álo' (Dàda HTS go 'Dàda went').

It is (23c) that we shall use to account for the non-realisation of the derivational morpheme in <u>Olúwáfémi</u> (a name) in (22b). We shall also use the same rule to derive (14 v-vi), the structures of which can be shown as follows:







Again, the question can be asked as to what the linear precedence rule should be for the Yorùbá derived nouns. From the analysis above, the linear precedence rule should be (25) which shows that Yorùbá still maintains its head first rule of syntax in morphology, at least in the derivation of nouns.

$$(25) H < Y$$

5 Conclusion

Although left-hand Heads are said to be exceptional in languages, our analysis have shown that, apart from compounding or full reduplication which are double headed, as in syntax, Yorùbá is a language with a left-hand Head in morphology. By this we mean that it is through the leftmost constituent that 'features are percolated up nodes of a lexical tree' (Lieber 1981: 55).

Note

* CP stands for Conjunction Phrase.

References

Aronoff, M. 1976. Word Formation in Generative Grammar. Cambridge, Mass.: MIT Press.

Awóbùlúyì, O. 1978. Essentials of Yorùbá Grammar. Ìbàdàn: Oxford University Press.

Cann, R. 1986. 'The Structure of Words', Work in Progress 19, pp 107-121. Edinburgh: Department of Linguistics, University of Edinburgh.

Brown, G. 1982. 'The Spoken Language', in *Linguistics and the Teacher*, edited by R A Carter, pp 75-87. London: Routledge and Kegan Paul.

Cook, V. J. 1988. Chomsky's Universal Grammar: An Introduction. Oxford: Basil Blackwell.

Gazdar, G. E. Klein, G. K. Pullum and I. A. Sag 1985. Generalised Phrase Structure Grammar. Oxford: Basil Blackwell.

Hartman, R. R. K. and F. C. Stork 1976. Dictionary of Language and Linguistics. London: Applied Science Publishers.

Jackendoff, R. 1977. X-Bar Syntax. Cambridge, Mass: MIT Press.

Lieber, R (1981), On the Organisation of the Lexicon. Indiana: Indiana University Press.

Owólabí, Kólá 1984. Ťsòrí Òrò-orúko tí A Şèdá nípa Lílo Àfòmó-ìbèrè àti Atóka-àfikún nínú Èdè Yorùbá', Láúrígbàsì 1: 61-101.

Owólabí, Kólá 1985. 'Àpètúnpè gégé bí Ète fún Ìṣèdá Ò̞ro̞-orúko mínú Èdè Yorùbá', Lâinghàsì 2: 69-104.

Owólabí, Kólá 1995. More on Yorùbá Prefixing Morphology', in Language in Nigeria, edited by Kólá Owólabí, pp 92-112. Ìbàdàn: Group Publishers.

Oyèláran, O. 1987. 'Ònà Kan Ò Wòjà: Mofólójî Yorùbá', Yorùbá (NS) 1: 25-44.

Pulleyblank, D (1986), 'Clitics in Yoruba', Syntax and Semantics 9: 43-64. New York: Academic Press.

William, S. 1981. 'On the Notion "Lexically Related" and "Head of Word", *Linguistic Inquiry* 12: 245-272.

Zwicky, A. M. 1985. 'Rules of Allomorphy and Phonology-Syntax Interaction', Journal of Linguistics 21: 431-436.

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