

# PASSIVE INCORPORATION AND CLAUSE STRUCTURE

Edmond Biloa

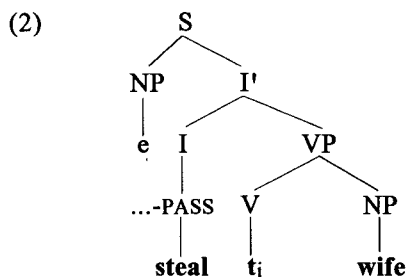
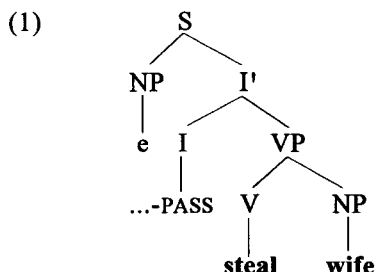
University of Yaounde 1, Cameroon

This article argues that the passive morpheme in Duala should head its own maximal projection (Extension Phrase). This reasoning is in line with the more articulated structure of the clause proposed by Pollock (1989), Chomsky (1988), and Rivero (1990).

Cet article propose que le morphème du passif en douala fonctionne comme la tête de sa propre projection maximale (syntagme Extensif). Cette proposition s'accorde avec la structure plus articulé de la phrase suggérée par Pollock (1989), Chomsky (1988), et Rivero (1990).

## 0. INTRODUCTION

Baker (1988) and Baker, Johnson, and Roberts (1989) argue that passive has at its heart a type of head movement ( $X^0$  movement) that allows it to be a part of the incorporation pattern. In order to make passive consistent with the theory of incorporation which he proposes, Baker posits that the passive morpheme actually appears in the INFL node of the clause, and the verb raises to incorporate into it, rather than the other way around (Baker 1988:308). Thus, a passive sentence is derived such that (1) becomes (2).



Adopting the more articulated structure of the sentence advocated by Pollock (1989), Chomsky (1988), and Rivero (1989), it will be argued that the passive morpheme in Bantu languages should head its own maximal projection (Extension Phrase (ExtP)). In this article, I will consider data from Duala, a Bantu language spoken in Cameroon.

## 1. PASSIVE INCORPORATION

The passive in Duala, as described by Epée (1976) is formed by suffixing **-be** to the active form of a verb. In the process the object of the transitive verb has become the subject of the sentence. The so-called by-phrase is not required in most instances as illustrated in (3) and (4).

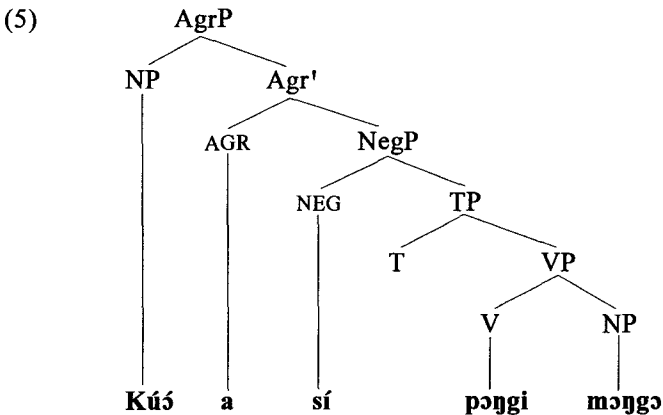
- (3) a. **na lóŋgi ɓolóŋgi**  
 I build house  
 I built a house.

- b. **bolóngi bó lóngá-be (na mbá)**  
 house SM build-PASS (by me)  
 The house was built (by me).

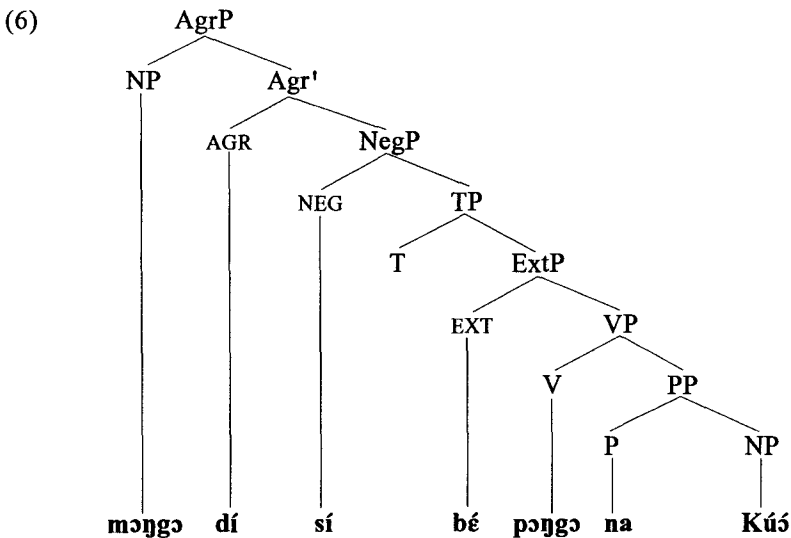
- (4) a. **Kúś a sí pəŋgi məŋgə**  
 Kuo SM NEG make bed  
 Kuo did not make the bed.

- b. **məŋgə dí sí pəŋgə-be na Kúś**  
 bed SM NEG make-PASS by Kuo  
 The bed was not made by Kuo.

The phrase marker of (4a) is represented in (5).



We will assume that in Duala the extension phrase is immediately dominated by the tense phrase (TP) and is adjacent to the VP. Thus (4b) will be represented in (6) between D-structure and S-structure.



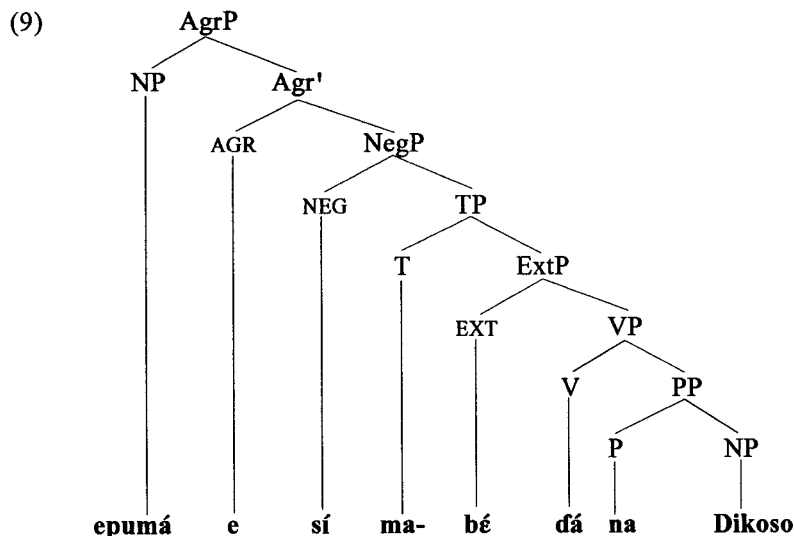
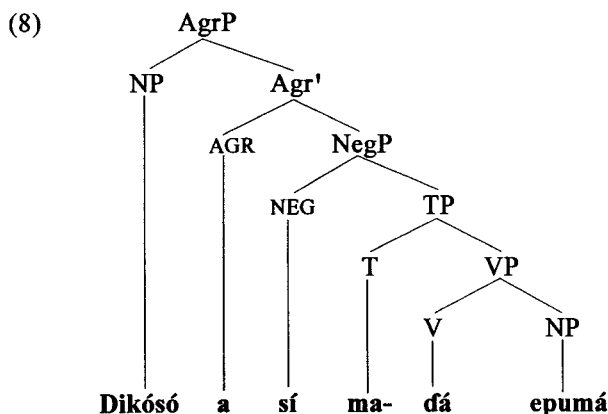
The verb moves to incorporate into the head of the ExtP yielding **pəŋgə-be**. Notice that the verb has moved to the left of the passive morpheme heading the ExtP. This is in accordance with the way head movement should proceed and it yields the correct surface word order. What happens to AGR and NEG, the respective heads of AgrP and NegP? Let us assume that the inflected verb for passive does not move to AGR through NEG (a move which would yield the undesired output \***pəŋgə-be-si-di**), and that the

morphemes heading AgrP and NegP cliticize onto the verb inflected for passive at surface structure, thus appearing on the left side of the passive verb. This accounts correctly for the morpheme order at surface structure and it is compatible with current assumptions in syntactic theory.

Evidence that the tense phrase should dominate the extension phrase is provided by the constructions in (7).

- (7) a. **Dikósó a sí ma-dá epumá**  
 SM NEG PRES-eat fruit  
 Dikoso does not eat fruit.
- b. **epumá e sí ma-dá-bé na Dikósó**  
 fruit SM NEG PRES-eat-PASS by Dikoso  
 The fruit is not eaten by Dikoso.

Consider the tree structure representations of (7a) in (8) and (7b) in (9).



In (9), the verb **dá** 'eat' incorporates into the extension morpheme; then AGR and NEG cliticize onto the verb inflected for passive at surface structure and both morphemic heads appear on the left side of the passive verb. Notice that the movement of the verb in the constructions examined in (8) and (9) is in compliance with the requirement in (10) on head movement which is a corollary of the Empty Category Principle (Chomsky 1981).

- (10) Head movement constraint (HMC) (Travis 1984)  
An  $X^0$  can only move to the  $Y^0$  that properly governs it.

Thus, thanks to the HMC, the verb **ɔ́á** can raise to the passive morpheme **be** since the latter properly governs the former.

Baker (1988) formulates the Government Transparency Corollary (GTC) which is a derivative of the Head Movement Constraint.

- (11) Government Transparency Corollary  
A lexical category which has an item incorporated into it governs everything which the incorporated item governed in its original structural position.

According to the GTC, head-to-head movement changes “the government properties” of a given configuration. In other words, “an XP becomes transparent/invisible for the purposes of government when its  $X^0$  is incorporated” (Baker 1988:65). Thus, movement of a properly governed  $X^0$  to a proper governor  $X^0$  position makes the XP from which the  $X^0$  was raised invisible with regard to government. This means that every time the verb is moved (as in (9)) to AGR through the extension morpheme, tense and negation respectively, it (the verb) governs every item inside the VP that previously hosted it.

### 1.1 PASSIVE INCORPORATION AND VERB MOVEMENT IN COMPOUND TENSE CONSTRUCTIONS

Compound tenses are very common among Bantu languages. Generally, they have the structure in (12).

- (12) [AGR [tense marker [AGR [(aspect) [verb] ] ] ] ]

In Duala, compound tenses are used to express the past. Essentially, in this language the past tense may be near or distant. The near past or the preterit shows that the action described by the verb occurred in a relatively recent past (this morning or last night). Thus, consider the near past of the verb **tɔ́ndɔ** ‘love’ in (13) and (14) (the final **ɔ** is changed into **i** in the near past tense).

- (13) Near past affirmative
- |                  |                |
|------------------|----------------|
| <b>na tɔ́ndi</b> | I loved        |
| <b>o tɔ́ndi</b>  | you loved      |
| <b>a tɔ́ndi</b>  | he/she loved   |
| <b>di tɔ́ndi</b> | we loved       |
| <b>lo tɔ́ndi</b> | you (PL) loved |
| <b>ba tɔ́ndi</b> | they loved     |
- (14) Near past negative
- |                     |                       |
|---------------------|-----------------------|
| <b>na sí tɔ́ndi</b> | I did not love        |
| <b>o sí tɔ́ndi</b>  | you did not love      |
| <b>a sí tɔ́ndi</b>  | he/she did not love   |
| <b>di sí tɔ́ndi</b> | we did not love       |
| <b>lo sí tɔ́ndi</b> | you (PL) did not love |
| <b>ba sí tɔ́ndi</b> | they did not love     |

In contrast to the near past tense, the distant past tense in Duala is a compound tense: it shows that the action denoted by the verb was performed, say, five or ten years ago. (15) and (16) give the conjunction of the verb **tɔ́ndɔ**. **tá** is the past tense marker.

- (15) Distant past affirmative
- |                       |                         |
|-----------------------|-------------------------|
| <b>na tá nā tóndo</b> | I have/had loved        |
| <b>o tá ō tóndo</b>   | you have/had loved      |
| <b>a tá ā tóndo</b>   | he/she have/had loved   |
| <b>di tá dī tóndo</b> | we have/had loved       |
| <b>lo tá lō tóndo</b> | you (PL) have/had loved |
| <b>ba tá bā tóndo</b> | they have/had loved     |
- (16) Distant past negative
- |                          |                             |
|--------------------------|-----------------------------|
| <b>na sí ta ná tóndo</b> | I have/had not loved        |
| <b>o sí ta ó tóndo</b>   | you have/had not loved      |
| <b>a sí ta á tóndo</b>   | he/she have/had not loved   |
| <b>di sí ta dí tóndo</b> | we have/had not loved       |
| <b>lo sí ta ló tóndo</b> | you (PL) have/had not loved |
| <b>ba sí ta bá tóndo</b> | they have/had not loved     |

One of the trademarks of compound tenses is that subject agreement is overtly manifested twice (cf. (12)).

- (17) a. **Dikósó a tá ā tóndó Ndóme**  
 Dikoso AGR PAST AGR love Dome  
 Dikoso loved Dome.
- b. **Dikósó a sí ta á tóndó Ndóme**  
 Dikoso AGR NEG PAST AGR love Dome  
 Dikoso did not love Dome.

Should we change the agreement prefixes as in (18), the resulting sentence would be ungrammatical.

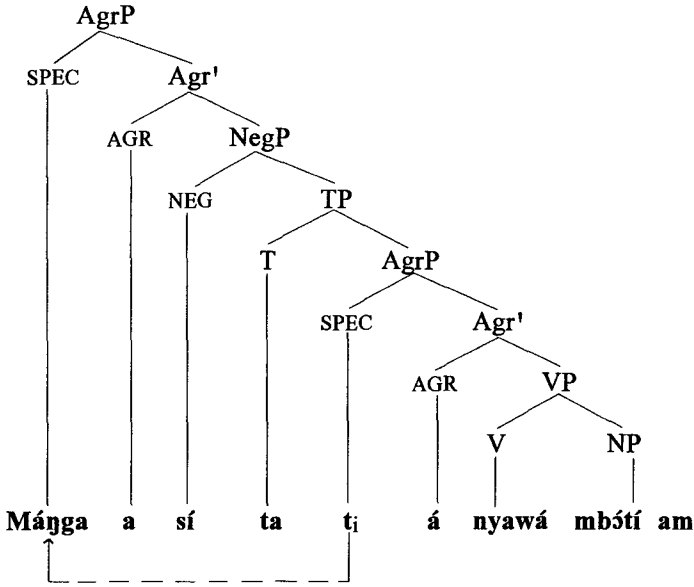
- (18) a. **múna a tá ā bwá díbondé**  
 child AGR PAST AGR break cup  
 The child broke the cup.
- b. **díbondé dí tá dí bw-éa**  
 cup AGR PAST AGR break-APPL  
 The cup broke.
- c. **\*múna a tá dí bwá díbondé**

For an analysis of compound tenses in Bantu languages see Carstens and Kinyalolo (1989) and Biloa (1990). Let us now concentrate on the interaction between passive incorporation and compound tenses. Consider the two sentences in (19) and (20).

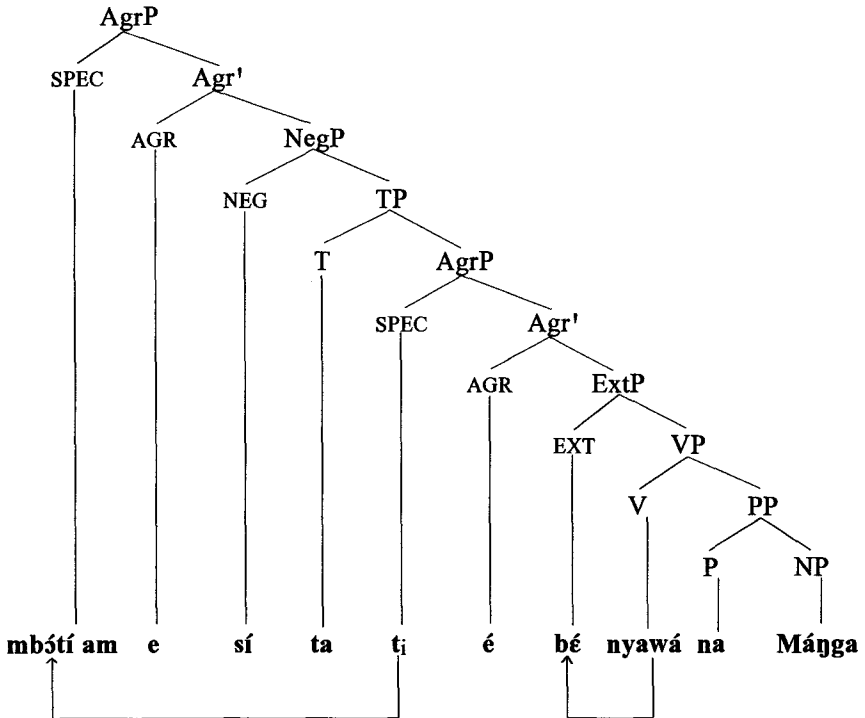
- (19) **Mánga a sí ta á nyawá mbótí am**  
 Manga SM NEG PAST SM tear clothes my  
 Manga did not tear my clothes.
- (20) **mbótí am e sí ta é nyawá-bé na Mánga**  
 clothes my SM NEG PAST SM tear-PASS by Manga  
 My clothes were not torn by Manga.

Assuming, as in Biloa (1990), that subjects originate in the SPEC position of the embedded AgrP, (19) and (20) would have the phrase markers as in (21) and (22), respectively.

(21)



(22)



In (22), the verb raises to the head of ExtP and incorporates into it. The S-structure subject of the sentence originates from the specifier position of the embedded AgrP and raises to the SPEC of the higher AgrP. Tense travels to AGR through NEG.

In light of these facts, it is fair to say that passive incorporation in compound tenses is not much different from passive incorporation in simple tenses.

To summarize, I have argued that extension morphemes in Bantu languages should head their own maximal projections (Ext(ension) P(hrase)). For illustration, we have considered the passive construction in Duala. In the process, it was claimed that

ExtP immediately dominates VP and that the verb raises to the head of ExtP and incorporates into it à la Baker (1988). We have indicated that this  $X^0$  movement obeys the Head Movement Constraint and the Government Transparency Corollary.

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