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ADJUNCT ECP EFFECTS IN YORÙBÁ

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0. Introduction

In this paper I will present data on syntactic movement of subjects, adjuncts and PPs in Yorùbá, which suggest that antecedent government from COMP in this language does not hold. I will demonstrate that proper government of categories lacking D-Structure lexical governors can only proceed from INFL, and that wh-movement in Yoruba passes through an A' position in INFL. A constraint on the distribution of expletive proper governors will be proposed.

1.1 wh-movement

Syntactic wh-movement is obligatory in wh-questions in Yorùbá, and widely used for emphasis or "focus". Basic word order is SVO:

- (1) Àjíké ní ta iṣu nínú ọjà
 ASP sell yams in market
 'Ajike is selling yams in the market'

The presence of the focus particle ni following a constituent in sentence-initial position indicates that it has been extracted, as in the object wh-question in (2):

- (2) Kí ni Àjíké n̄ tà
 what FOCUS ASP sell
 'What is Ajike selling?'

The example in (3) illustrates the most likely phrasing for the answer to this question, i.e. with the object "focused":

- (3) Iṣu ni Àjíkẹ́ n̄ tà
 yams FOCUS ASP sell
 'Ajike is selling yams'

The structure I will be assuming for (2) is that in (4):

- (4)
-

If a subject is focused or questioned, a third-person singular resumptive subject pronoun is obligatory:

- (5) a. [Àjíkẹ́_i ni [ó_i n̄ ta iṣu]]
 FOCUS 3S ASP sell yams
 'Ajike is selling yams'
- b. [Ta_i ni [ó_i n̄ ta iṣu]]
 who FOCUS 3S ASP sell yams
 'Who is selling yams?'

When a PP or adjunct is extracted, a particle must be introduced following the subject, as exemplified in (6):

- (6) [Níbo_i ni [Àjíkẹ́ t̄i n̄ ta iṣu t̄i]]
 where FOCUS ? ASP sell yams
 'Where is Ajike selling yams?'

In what follows, I will attempt to explain the phenomena in (5) and (6), beginning with an account of t̄i and particles like it found in 'why' and 'how' questions.

1.2 PPs and Adjuncts

Although t̄i in (6) has no semantic content, it is obligatory both in 'where' questions, and when locative phrases are focused:

- (7) Inú ọjà_i ni [Àjíkẹ́ ti ń ta iṣu ti
 in market FOCUS ASP sell yams ti
 'Ajike is selling yams in the market'

Ti is also found in 'how' questions, or ṣe may occupy this syntactic slot:

- (8) a. [Báwo_i ni [Dúpẹ́ ti kí bàbá rẹ̀ t_i]]
 how FOCUS greet father 3S
 'How did Dupe greet her father?'
 b. [Báwo_i ni [o ṣe máa pa ẹ̀kùn nàa t_i]]
 how FOCUS 2S FUT kill leopard this
 'How will you kill this leopard?'

The same is true in manner relatives and comparatives, exemplified in (9a) and (b):

- (9) a. [Bí_i [Bọ́lá ti rí t_i]] yà mí lénú
 how look open me mouth
 'The way Bola looked surprised me'
 b. Mo ga [bí_i [Àjíkẹ́ ti ga t_i]]
 1S tall how tall
 'I am as tall as Ajike is'

In 'why' questions and reason relatives the particle fi must occur, as illustrated in (10) and (11):

- (10) [Nítòrí kí_i ni [Rẹ̀mí fi ń lọ sí ọjà t_i]]
 why FOCUS ASP go to market
 'Why is Remi going to the market?'
 (11) [Ìdi rẹ̀ [tí_i [ó fi ń lọ t_i]]] ni láti ra iṣu
 NP reason S REL S 3S ASP go is for buy yams
 'The reason she's going is to buy yams'.

Note that ti, fi and ṣe can never co-occur with a phrase of the relevant type in situ, or be used "pronominally":

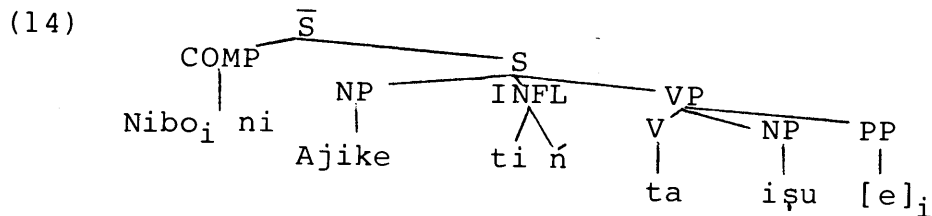
- (12) a. *Mo ti kàwé ní UCLA
 1S study PREP
 'I study at UCLA'
 b. *Mo ti kàwé
 1S study
 'I study there'

1.3 The Structure

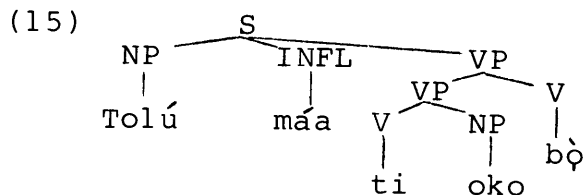
Let us now turn to the issue of determining the structure in which ti, fi and se occur. One might assume them to occupy the position of the initial verbs in the 'serial' verb constructions common in Yoruba. In fact ti, fi and se all have verbal uses (or homonyms) to which we can turn for comparison. (13a-d) provides examples of these:

- (13) a. Àwọ̀n àgbẹ̀ máa n̄ se ise púpò
 PL farmers HABIT do work much
 'Farmers do a lot of work'
- b. Ó n̄ fi ìbọ̀n pa ẹ̀kùn
 3S ASP with gun kill leopard
 'He's killing the leopard with a gun'
- c. Tolu maa ti oko bọ̀
 FUT from farm come
 'Tolu will come from the farm'

Note the position of the tense/aspect markers with respect to ti, fi and se in these examples. Their order is the reverse of that found in the movement-derived constructions (6)-(11). Unlike other verbal elements, ti, fi and se in wh-questions obligatorily precede inflectional morphemes. In these constructions I will therefore consider them to occupy a syntactic slot dominated by INFL. The structure assumed for (6) will be roughly that shown in (14):



In contrast, I will assume the structure in (15) for sentences (13b) and (c), wherein ti and fi occupy the post-aspect position of "preverbs"; have semantic content, and license preverbal NP objects:



In what follows I will relate the presence of ti, fi and se in wh-questions to the ECP, and discuss some problematic effects accompanying long distance extraction; then demonstrate how assuming wh-movement through INFL can account for these effects.

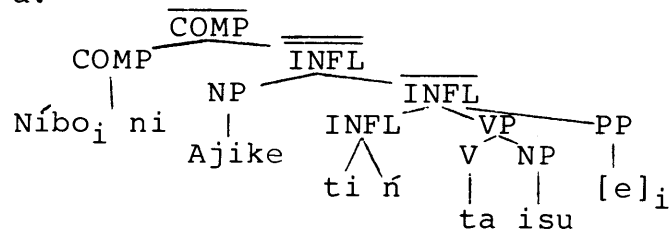
1.4 An ECP Account

Recall that subject extraction is never possible unless a 3rd person singular subject pronoun is introduced (cf (5)). Let us follow the analysis of Vata in Koopman (1984) in taking this to be evidence that proper government from COMP is not available. I will assume the following definition of proper government (cf Chomsky (1981) for (i); Lasnik & Saito (1984) for (ii)):

- (16) α properly governs β if
- (i) α is a lexical category x^0 and α governs β
 - or (ii) a. α and β are coindexed
 - b. α c-commands β
 - c. there is no γ (γ an NP or S') such that α c-commands γ and γ dominates β , unless β is the head of γ

Suppose that in the absence of antecedent government from COMP, ti, fi and se are introduced to enable wh-movement of categories ungoverned at D-Structure. If we assume the structure of S to be roughly as shown in (17a) (cf Chomsky 1981 and Stowell 1981) and if we further assume PP's and adjuncts to be sisters to INFL, then ti, fi and se will be able to lexically govern a PP or Adjunct trace at the site of extraction, given the definition of government in (17b):

(17) a.



- b. α governs β if all the maximal projections dominating α dominate β and conversely (Aoun and Sportiche 1983)

However multi-clause questions exhibit effects which this approach alone is insufficient to explain.

1.5 Long-distance phenomena

In a multi-clause question, one of these verbs may occur in any of the clauses, with interesting interpretive results. The presence of the appropriate verb in the most deeply embedded S allows a single unambiguous interpretation, such that only that clause can be the location of the variable bound by the wh-phrase in COMP. Question (18) can have only the LF which follows it:

- (18) Níbo ni o gbọ́ pe Rẹ̀mí t_i rí Àjíkẹ́
 where FOCUS 2S hear that see
 'Where did you hear that Remi saw Ajike?'

for which place x, you heard [Remi saw Ajike at x]

However if t_i occurs only in the matrix clause, the question is ambiguous. Consider the question in (19), and its possible interpretations:

- (19) Níbo ni o t_i gbọ́ pé Rẹ̀mí rí Àjíkẹ́
 where FOCUS 2S hear that see
 'Where did you hear that Remi saw Ajike?'

a. for which place x, [you heard at x] that Remi saw Ajike

b. for which place x, you heard [that Remi saw Ajike at x]

(For ease of exposition I am limiting my discussion to two-clause structures; however the same effects occur for any number of embeddings.)

Let us examine the S-Structures corresponding to the interpretations available for (18) and (19). Assuming that wh-movement proceeds successive-cyclically from COMP to COMP, the S-Structure representation for (18) must be as shown in (20):

- (20) [Níbo_i [[t_i[t_i t_i]]]]

This presents no problem for our account, if we assume that t_i's function is to lexically govern the source of níbo here as in (17). In (19) however the fact that both (a) and (b) are possible interpretations suggests that the source for níbo can be located in either the matrix or the embedded clause. The account proposed for (17) and (18) can be extended to (19) on reading (a), since here also t_i and the logical source of níbo are in the same clause. The S-Structure of (a) is represented in (21):

(21) [Nibo_i [ti t_i [[]]]]

On reading (b) however, where the logical source of nibo is in the lower clause, since ti's location is matrix it cannot lexically govern the extraction site, owing to the intervening maximal projections S and S':

(22) [Nibo_i [ti [[t_i]]]]

Suppose we therefore revise our assumption that antecedent government from COMP is failing, and imagine that ti in this configuration properly governs the intermediate trace in the embedded COMP, which in turn properly governs the trace in situ, as illustrated in (23):

(23) [Nibo_i [ti [t_i [t_i]]]]

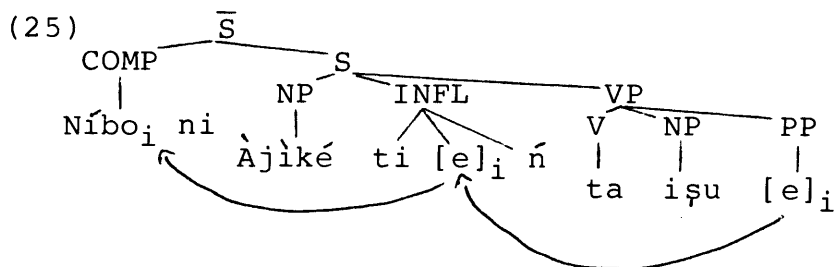
This explanation is problematic too, however, in a number of ways. Recall that ti is obligatory in a single-clause PP extraction like (6), for which the S-Structure is given below:

(24) [Nibo_i [ti t_i]]

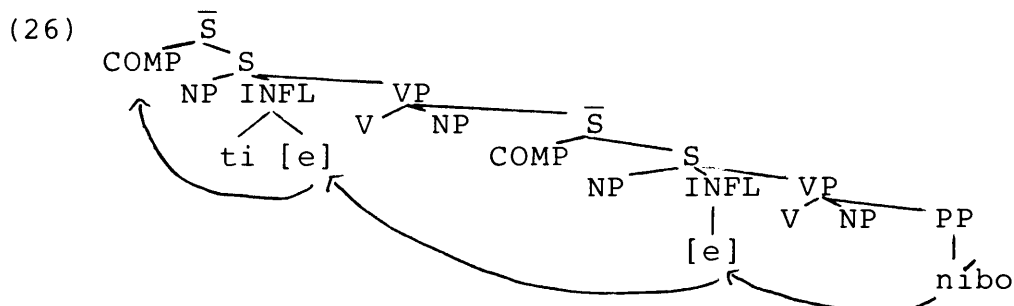
If we continue to assume that ti is required for proper government, there is no clear way to reconcile its necessity here with the idea that antecedent government is available in (23). And, if nibo itself in (24) is unable to properly govern the trace in situ, it would be surprising if the intermediate trace in COMP could do so in (23).

1.6 Movement through INFL

On the basis of these observations, coupled with the evidence from subject extraction, let us return to the assumption that antecedent government from COMP is not functioning, and consider an alternative derivation. Let us assume the existence of a secondary A-bar position in INFL. In the process of moving to the matrix COMP, a PP or adjunct passes through this position, triggering insertion of ti, fi, or se. The S-Structure in (24) will be derived as follows:



In the derivation of (23), movement proceeds INFL-to-INFL, successive-cyclically. Antecedent government is also INFL-to-INFL.



If the expletive verb is in the source clause as in (18), antecedent government is not necessary.

1.7 Subjects

Note that this account cannot be extended to subjects. Since subject questions and focus constructions obey subjacency, I assume them to be movement-derived (cf Chomsky 1977). However the resumptive \acute{o} pronoun which appears on subject extraction can only occur in the source clause. I will follow the analysis of Yoruba pronouns in Pulleyblank 1983 in assuming this pronoun to belong to a clitic set, which c-command a subject NP empty category from a position in INFL. If this is the case, then the strategy is similar, in replacing antecedent government from COMP with some form of proper government from INFL; however since the clitic is a coindexed element, and restricted to the clause of the source, the similarity is limited. Hierarchically, subjects are not positioned such that we would expect them to pass through INFL in single clause extractions. Let us assume that this forces a strategy of base-generation of the NP and clitic pair. The NP subject is base-generated in its D-Structure argument position, and moves successive-cyclically to the matrix COMP.

2. Lexical Governors

In this section I will consider the status of several [-N] lexical governors with respect to proper government in Yoruba. A quasi-preposition and some verbs which subcategorize for locative complements will be shown to properly govern them. In cases where such D-Structure proper governors exist, *ti*-insertion is systematically prohibited. A condition is proposed constraining the introduction of "dummy" proper governors, for which clitic distribution and multiple interrogation facts

provide support.

2.1 Ní Complements

Yoruba has only two basic items which might be considered prepositions. Of these the most widely used is ní. Meanings for which English has individual prepositions are in Yoruba obtained by combining ní with a number of body-part NP's. Some examples appear in (27a) and (b). The composition of the question words where and why, which include ní, is shown in (c) and (d).

- | | | | | | | |
|------------|-------|----------------|-------------|-------|----------------|-------------|
| (27) a. ní | orí | tábilì | b. ní | inú | ilé | |
| | PREP | head table | | PREP | stomach house | |
| | | 'On the table' | | | 'In the house' | |
| | c. ní | ibi | wo | d. ní | ìtorí | kíni |
| | | PREP | place which | | PREP | reason what |
| | | 'Where?' | | | | 'Why?' |

Ni can never be stranded. It is optional in COMP when its object is extracted.

- (28) (Ní) Orí tábilì ni mo ti rí ìwé rẹ
 head table FOCUS 1S see book your
 'I saw your book on the table'

2.2 Subcategorization

Although wh-movement of most ni complements triggers ti insertion, there are a few exceptions. With the verbs wà - 'be in a place', gbé - 'live somewhere', and lọ - 'go', this cannot occur:

- (29) a. Níbo ni Ọrẹ́ n gbé
 where FOCUS ASP live
 'Where does Ore live?'
- b. *Níbo ni Ore ti n gbé¹

These are verbs which would be expected to subcategorize for locative complements. In such cases, proper government would seem to be possible by the verb itself. Presumably some principle prevents the insertion of a vacuous proper governor (in this case ti) where one exists at D-Structure.

2.3 Sí Complements

A second morpheme which appears to occupy the syntactic slot of a preposition is sí. Sí must introduce

all locative complements of the verbs shown in (30):

- (30) jókòó - 'sit' lọ - 'go' sun - 'sleep'
kù - 'die' gbónjú - 'grow up'
bí - 'bear (a child)' fi - 'put'

Like ní, sí has no inherent semantic content and combines with body-part nouns. However several facts regarding si have given rise to suggestions that it is in some sense a verb. Firstly it takes objective case clitic pronouns, unlike ní. The third person singular object clitic is formed by lengthening the final vowel of the verb, and giving it a contrasting tone, as shown in the example in (31):

- (31) a. Mo kòwé sí i
 1S write 3S
 'I wrote to him'
 b.*Mo fún akẹ̀kǒ ní i
 1S give student
 'I gave it to the student'

Secondly, in structures involving wh-movement, sí cannot be pied-piped. This is exemplified in (32), where the locative object of the verb 'grow up' is extracted:

- (32) a. Níbo ni o gbónjú sí
 where FOCUS 2S grow up
 'Where did you grow up?'
 b.*Síbo ni o gbónjú

Unlike the preposition ní, sí cannot coocur with ti, as shown by the ungrammaticality of (33):

- (33) *Níbo ni o ti gbónjú sí?²

It appears then that sí is itself a proper governor. I will assume sí to constitute an extension of the verb with which it occurs, licensing an extra argument.

Just as with the verbs in (29), insertion of a vacuous proper governor is prevented with sí. We might provisionally formulate the principle responsible for this in the following way:

- (34) do not insert a vacuous proper governor

2.4 Clitics

Extraction asymmetries involving clitics provide

some additional evidence in this regard. We have noted that a clitic is required on extraction of a subject. This is also the case where a possessor is wh-moved.³

- (35) Ta ni o ka ìwé *(rẹ̀)
 who FOCUS 2S read book 3S
 *'Who did you read his book?'

Clitics would thus seem to be proper governors in Yoruba, while [N] is not. The presence of a clitic is prohibited on object extraction (cf Pulleyblank 1983):⁴

- (36) Ta ni o fẹ̀ràn (*rẹ̀)
 who FOCUS 2S like 3S
 'Who do you like?'

This result will be accounted for by the principle in (34) constraining the presence of ti, fi and se.

2.5 Ti, fi, and se in in situ questions

I noted in 1.2 that ti, fi, and se cannot occur when a phrase of the relevant type is in situ (cf (12)). This is true even in multiple interrogation, as illustrated by the ungrammaticality of the examples in (37).

- (37) a.*Ta ni ó ti ṣiṣé níbo
 who FOCUS 3S work where
 'Who worked where?'
- b.*Ta ni ó fi lọ nítorí kíni
 who FOCUS 3S go reason what
 'Who left why?'
- c.*Ta ni ó se wá báwo
 who FOCUS 3S come how
 'Who came how?'

I assume that the ECP applies to the LF output of multiple interrogation structures, so that these require proper government like the output of S-Structure movement (cf Kayne 1984). The ungrammaticality of ti, fi and se in (37) therefore suggests that "vacuousness" must be defined in terms of the level at which the expletives are introduced. If their presence were allowed in (37), it would be expected to license LF movement, and therefore they would not be vacuous at LF. This suggests the following modification of (34):

- (38) Do not insert a proper governor if it will be vacuous at S-Structure.

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It is also interesting to note in this connection that in long PP or adjunct extraction it is possible for an expletive verb to be present in every INFL above the source clause. Thus (39) is a possible S-Structure:

- (39) Níbo_i ni o ti gbó pé Rẹ̀mí ti rí Àjìkẹ́ t_i
 where FOCUS 2S hear that see
 'Where did you hear that Remi saw Ajike?'

Given that a single ti is sufficient to ensure grammaticality (cf (18) and (19)), a question arises as to why one of the tis in (39) does not count as vacuous. The existence of a trace in INFL would seem sufficient to sanction its presence. However if this is the case, it remains to be explained why ti cannot be inserted with sí, and with the verbs gbé, lọ, and wà (cf (29) and (33)), assuming movement to take place through INFL in a uniform fashion, successive-cyclically. We could suppose that the traces left in INFL by the locative complements of these items are deleted at LF, since they are not required for antecedent government (cf Lasnik & Saito 1984); however when ti-insertion takes place at S-Structure the traces would be present, so ti would not be vacuous at that level. This would seem to indicate that the expletives are precluded because they will become vacuous at LF. However Lasnik and Saito also suggest an alternative account of the status of traces in COMP of lexically governed categories; that the application of move α may not leave such traces, since they are not required by independent principles. If we adopt this approach to the above problem we can suppose that there are no traces left in INFL when the locative complements of the items in question are extracted. This provides the simplest explanation for the preclusion of ti in these cases. In contrast, each adjunct or PP trace which would be required for antecedent government may license the insertion of an additional expletive.⁵

Notes

1. This is grammatical on an irrelevant reading, where ti is interpreted as a homophonous aspect marker, so that the sentence means, 'Where has Ore been living?'
2. As above, ti is grammatical on an aspectual reading.
3. For discussion of bounding effects with respect to this construction I refer the reader to Stahlke (1974).
4. Pulleyblank discusses these cases, noting that an attempt to explain them by means of the Avoid Pronoun

Principle (or an extension of it) gives rise to some erroneous predictions. In the interests of brevity I will not present the details here.

5. It would appear that "vacuous" must be defined in either approach as "lacking a trace to govern", rather than as "lacking a necessary function", since complementary distribution between the possibility of antecedent government and the optional expletives does not seem to exist. I have nothing to say about this at present.

References

- Aoun, J., Hornstein N., and Sportiche D., (1981) "Some Aspects of Wide Scope Quantification," Journal of Linguistic Research 1, 69-95.
- Aoun, J. and Sportiche D. (1983) "On the Formal Theory of Government", The Linguistic Review vol. 2 pp. 211-236.
- Awobuluyi, O. (1967) Studies in the Syntax of the Standard Yoruba Verb, Columbia University PhD. thesis.
- Bamgbose, A. (1966) A Grammar of Yoruba, Ibadan: Cambridge Univeristy Press.
- Chomsky, N. (1977) 'On WH-Movement', in P.W. Culicover, T. Wasow and A. Akmajian (eds.) Formal Syntax, New York: Academic Press.
-(1981) Lectures on Government and Binding, Dordrecht: Foris Publications.
- Huang, C.T.J. (1982) Logical Relations in Chinese and the Theory of Grammar, MIT PhD. thesis.
- Kayne, R., (1984) Connectedness and Binary Branching, Dordrecht: Foris Publications.
- Koopman, H. (1984) The Syntax of Verbs, Dordrecht: Foris Publications.
- Lasnik, H. and Saito, M. (1983) "On the Nature of Proper Government", in Linguistic Inquiry Vol. 15, No. 2, pp.235-290.
- Pulleyblank, D. (1983) "Clitics in Yoruba", unpublished manuscript.

- Rowlands, E.C. (1969) Teach Yourself Yoruba, London:
Hodder and Stoughton Ltd.
- Stahlke, H. (1974) 'Pronouns and Islands in Yoruba', in
Studies in African Linguistics, Vol. 5, pp. 171-204.
- Stowell, T. (1981) Origins of Phrase Structure, MIT PhD.
thesis.