A NOTE ON SUBJECT POSTPOSING

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1. Preface

In Bokamba [1971], Meeussen [1971] and Takizala [1972] an interesting movement rule which applies to object relative clauses in several Bantu languages of the Congo is described. The rule involves the postposing of the subject of the embedded sentence, thus moving it from the normal pre-verbal position to a post-verb position. For an example, consider the following Dzamba data, taken from Bokamba [1971]:

(1) Zakl a-bundaki imo-kondo
    'Jack caught the alligator'

(2) oPetelo a-nyamozi imo-kondo i-mu-bundaki Zaki
    'Peter sold the alligator rel-it-caught Jack'

The languages involved are S-V-O languages. In this paper I hope to show that there exists a natural explanation for the subject postposing rule, motivated by the universal principle of pronoun (or subordinator) attraction in relativization. Informally given, this principle is the one by which relative pronouns tend to appear directly adjacent to the head noun modified by the relative clause. In S-V-O languages, in which the order NOUN-MODIFIER is most common in the noun phrase, subject relativization involves no pronoun movement rule, while object relativization would require a rule of movement or copying over the verb (the opposite direction of the subject postposing rule) in order to abide by the pronoun attraction principle.

1For the Dzamba data I am indebted to George Bokamba, for the Swahili data to Salma Mbaye, for the Kihung'an to Alexis Takizala. The Bemba data are from my own field notes. I have benefited from discussing a preliminary draft of this paper with A. E. Meeussen, the late W. Whiteley, E. Voeltz and G. Bokamba. An earlier version of this paper appeared in Papers from the Eighth Regional Meeting, (supplement), Chicago Linguistic Society, University of Chicago.
As I hope to show, of these two morphological features, only the one pertaining to the bound morphemic status of the relative pronoun (or relative subordinator) is relevant to the subject postposing rule. The data cited from Kihung’an, above, already suggest this. The case of Swahili serves as added support.

There are three morphemic patterns for relative pronouns in Swahili. In one of those, which is historically the more recent one, the relative pronoun is not bound to the verb, but rather is carried by the supporting morpheme (formerly the verb 'say') amba-, as in:

(7) mtoto a-me-ki-ona kitabu
    child ag-perf-it-see book
    'The child has seen the book'

(8) kitabu amba-cho mtoto a-me-ki-ona
    book say-that child ag-perf-it-see
    'The book that the child has seen'

Thus, in this pattern, the rule of subject postposing is not obligatory; though it is still an option, as in (9) below, which paraphrases (8):

(9) kitabu amba-cho a-me-ki-ona mtoto
    book say-that ag-perf-see child
    'The book that the child has seen'

In the next Swahili pattern, confined to three independent tenses (-li- 'past', -na- 'present' and -ta- 'future'), the relative pronoun is bound to the verbal word, in a prefixal position following the tense morpheme. In this pattern the rule of subject postposing is obligatory:

(10) mtoto a-li-ki-ona kitabu
    child ag-past-it-see book
    'The child saw the book'
I also hope to show how the verbal morphology of the language, and in particular the bound vs. free morphemic status of the relative pronoun (or relative subordinator), plays a controlling role in determining the application of the pronoun attraction principle. Finally, I will attempt to show that the pronoun attraction principle helps explain otherwise baffling data concerning the position of the relative pronoun in some Bantu languages, and that other data cited by Meeussen [1971] fit very well with suggestions I have made (Givón [1971]) concerning diachronic developments in Bantu syntax.

2. Subject postposing and verb morphology

In Dzamba, as well as in the Lomongo-type languages cited by Meeussen [1971], two other morphological features also appear, in addition to the rule of subject postposing:

a. No subject-agreement morpheme appears in the object relative clause;
b. The object relative pronoun is bound as prefix to the verbal word.

These two added traits do not appear in all Bantu languages. In Bemba, for example, neither appears:

(3) umuana a-a-mweene icitabo
    child ag-past-see book
    'The child saw the book'

(4) icitabo icyo umuana a-a-mweene
    book that child ag-past-see
    'The book that the child saw'

In other Bantu languages, such as Kihung'an, subject agreement does occur in object relative clauses, but the object relative pronoun is still a bound prefix to the verbal word — and the subject postposing rule is obligatory:

(5) Kipes a-swiim-in kit zoon
    Kipese ag-buy-past chair yesterday
    'Kipese bought a/the chair yesterday'
stress-focus, cleft, pseudo-cleft and WH-questions in Kihung'an all involve the deep presence of a relative clause. Now, in cleft constructions in Kihung'an no overt relative pronoun appears — and no subject postposing occurs:

(16)  
\[
\text{kwe k\text{\textdiair} Kipes ka-swiim-in zoono} \\
\text{it's chair Kipese ag-buy-past yesterday} \\
\text{'It's a/the chair (that) Kipese bought yesterday'}
\]

In pseudo-cleft constructions, however, an overt object relative pronoun does appear — and is bound to the verb. And subject postposing is obligatory:

(17)  
\[
\text{(kiim) ki-a-swiim-in Kipes zoon kwe k\text{\textdiair}} \\
\text{(thing) that-ag-buy-past Kipese yesterday is chair} \\
\text{'(the thing) what Kipese bought yesterday is a/the chair'}
\]

In WH-questions in Kihung'an the underlying object relative pronoun may optionally appear. When it does not appear, no subject postposing occurs, but when it does appear, subject postposing occurs:

(18)  
\[
\text{na Kipes ka-mweene?} \\
\text{whom Kipese ag-saw} \\
\text{'Whom did Kipese see?'}
\]

(19)  
\[
\text{na wu-u-mweene Kipes?} \\
\text{whom that-ag-saw Kipese} \\
\text{'Who (is it) that Kipese saw?'}
\]

Thus, whenever the subject noun would have intervened between the relative pronoun and the head noun, it is postposed. When no relative pronoun appears, the subject of the embedded clause retains its original (pre-verb) position.

3. Subject postposing and subject agreement

As seen above, the lack of subject agreement in object relative clauses is not an obligatory feature coupled to subject postposing. It appears in Dzamba (and other Lomongo-type Bantu languages), but is absent in both Swahili and Kihung'an — when subject postposing is still present. This
(11) kitabu a-li-cho-ki-ona mtoto  
    book ag-past-that-it-see child  
    'The book that the child saw'

(12) *kitabu mtoto a-li-cho-ki-ona

Finally, Swahili also has a more archaic (see discussion later on) relativization pattern, now confined to the -a- ('present', 'habitual') tense only, where the relative pronoun is a bound suffix to the verbal word. And in this pattern too, subject postposing is obligatory:

(13) mtoto a-a-ki-ona kitabu  
    child ag-pres-it-see book  
    'The child sees a book'

(14) kitabu a-ki-ona-cho mtoto  
    book ag-it-see-that child  
    'The book that the child sees'

(15) *kitabu mtoto a-ki-ona-cho

Given the data above, it seems that the following generalization can be made: whenever the relative pronoun is free -- and thus can be positioned directly adjacent to the head noun -- the rule of subject postposing does not apply obligatorily. However, when the (object) relative pronoun is bound to the verb, as in the case of Dzamba, Kihung'an and the last two patterns of Swahili, subject postposing applies obligatorily. What is clearly involved, it seems, is the principle of pronoun attraction. In an S-V-O language, if the object relative pronoun is bound to the verb, the subject noun of the embedded sentence is sure to intervene between the pronoun and the head noun. The subject postposing rule rectifies this situation, thus rescuing the pronoun attraction principle

The relation between the relative pronoun and the rule of subject postposing may be further illustrated by the following data from Kihung'an. As seen in (5), (6) above, subject postposing is obligatory in object relativization in this language, where the relative pronoun is bound to the verbal word. Takizala [1972] has shown much evidence to suggest that
In (21) above two agreement morphemes -- although pertaining to the same noun -- appear before the verb. Obtaining two agreement morphemes prefixed one next to the other before a Bantu verb is not uncommon, see e.g. some of the Swahili and Kihung'an examples above. Swahili also allows three agreeing morphemes before the verb, as in (11) above. However, in that case the subject agreement falls to the left of the tense marker, while the object relative pronoun and the anaphoric object pronoun fall to its right. It may well be that two-in-a-row is a morphemic maximum for Dzamba or perhaps most Bantu languages. This type of constraint is not unreasonable, and may have firm grounding in the perceptual problems that may arise in attempting to find the coreferents of three agreement morphemes strung next to each other before the verb.

Bokamba [1971] has suggested an alternative formal account for the loss of subject agreement in Dzamba object relativization. Briefly, this solution involves an explicit ordering convention, by which the rule of subject postposing be ordered before the copying rule of subject-verb agreement. This would presumably require that the subject-verb agreement rule be formulated in terms of 'noun phrase left of the verb', so as to prevent copying from the right of the verb. There are several reasons why I think this type of a solution is not altogether adequate.

a. The copying rule by which the 'infix' object pronoun in Bantu is obtained involves copying from the right of the verb to a prefixal position. In Givón [1972] I have brought a considerable amount of evidence to suggest that the copying processes involved in both agreement and pronominalization in the grammar occur at the very same point in the grammar. The solution suggested above would split the two, and will further require some mechanism by which to discriminate between an NP to the right of the verb which could not give rise to copied features (the postposed subject) and an NP to the right of the verb which could (the underlying object). This is clearly an undesirable consequence of the formalism.
trait is nevertheless of some interest. Bokamba [1971 and also in private communication] has suggested that a natural explanation for the subject postposing rule of Dzamba should be sought in a different direction, namely a restriction on two NP's preceding the verb in S-V-O languages. This configuration, according to Bokamba, would have resulted in a confusion with respect to subject agreement. In this way both subject postposing and the lack of subject agreement in Dzamba are presumably explained. This explanation is inadequate in several respects. To begin with, we have seen that in Swahili and Kihung' an subject postposing exists but the subject agreement morpheme is retained. The two features are clearly unrelated. Further, English is a clear counter-example to Bokamba's alternative constraint, since two nouns may appear before the verb in object relativization:

(20) The man my sister married...
The house Jack built...
etc.

The alternative constraint is thus less universal than the pronoun attraction (adjacency) principle. It is still of interest to discover what motivates the loss of the subject agreement morpheme in object relativization in Dzamba, and I suspect the reason may hinge on some language-specific morphemic constraints. Note, first, that in Dzamba object relativization two obligatory prefixal morphemes appear -- both agreeing in gender-number with the deleted object noun (or the equi head noun). One is a prefix-initial vowel (here i- for class 3) which acts as a relative subordinating morpheme. The other is the anaphoric ('infix') object pronoun. Their separateness may be illustrated by using negative relative clauses, where the subordinator falls to the left of the negative morpheme, while the anaphoric pronoun to the right:

(21) imo-nkanda i-mu-tomaki oPetelo
    the-letter that-it-wrote Peter
    'The letter that Peter wrote'
to this universal may be found in Givón [1971a], though for the purpose of this discussion the explanation is not relevant.) Now, notice that, given the principle of pronoun attraction, one would expect to find relative pronouns (or relative subordinators) in S-O-V/REL-N languages at a verb-suffix position -- since only then would they be adjacent to the head noun:

(23)

In other words, in S-O-V/REL-N languages one would expect relative pronouns (or subordinators) to move to the right over the verb, while in S-V-O/N-REL languages one expects object relative pronouns to move to the left over the verb -- all in order to abide by the same universal principle, pronoun attractions.

5. Some concluding remarks on pronoun attraction

There are some indications that the pronoun attraction rule applies only to relative pronouns that have merged with a relative subordinating particle, or where a separate subordinating particle does not exist. Thus, the 'which', 'what', 'who', 'whom', 'where', 'when' relative pronouns in English arose as a fusion between a subordinator and an anaphoric pronoun, and in older stages of English a situation roughly paraphrased by (24) below prevailed, where the subordinator was attracted to the head noun -- but the (anaphoric) pronoun was not:

(24) the man that I saw him

(25) the man that he saw me

The attraction principle in this case applied only to the subordinator, since the pronoun was still an anaphoric pronoun.

As a similar case one may cite Hebrew, in which the relative subordinator must be adjacent to the head noun, unlike the anaphoric ('resumptive') pronoun which remains in its original syntactic position:
b. On more general grounds, I think it has become somewhat questionable (see e.g. Koutsoudas [1971], among others) whether syntactic rules are in fact strictly ordered extrinsically. It now seems that in many if not most cases, erstwhile extrinsically ordered rules turn out to be intrinsically ordered or not at all ordered (above and beyond the convention of cyclic application from the bottom up).

c. Finally, I have elsewhere attempted to show (Givón [1972]) that subject-verb agreement rules are cyclic in the sense that they apply within the domain of the unembedded sentence without reference to its embedded position or to entities outside its boundaries. A solution of the type suggested by Bokamba clashes directly with this claim, since it would apply only to the agreement of subjects of sentences embedded as object relative clauses. It thus appears that this solution is undesirable. Rather, it is formally easy to let the agreement rule apply cyclically as it may, since it is (cf. Givón [1972]) a feature-copying rule to begin with. The constraint in Dzamba may be then viewed as a morphemic constraint at the level of the second lexicon, where the copied gender-number features of the subject will simply not receive any overt spelling.

4. Pronoun attraction and diachronic change in Bantu syntax

In Givón [1971] it was suggested that of the three relativization patterns of Swahili, the one involving verb-suffix relative pronoun is the oldest, and is also the one which gave rise to the other two. Meuusen [1971] has presented tonological evidence which suggests that the relative pronouns in Bantu were at some earlier historical stage verb suffixes. In this section I would like to show that, given the universal principle of pronoun attraction, this seemingly older state of affairs with respect to Bantu relative pronouns was not only natural but also predictable. And, further, that the earlier verb-suffix position of the Bantu relative pronoun constitutes added support for my contention (see Givón [1971]) that at some earlier stage of their history, Bantu languages were S-O-V languages (rather than the current S-V-O).

Greenberg [1966] has noted that S-O-V languages usually show the syntactic order MODIFIER-NOUN in their noun phrase. (A natural explanation
antecedent close to its referring pronoun, presumably for some ease in maintaining reference relation. It seems, however, that the attraction principle pertains primarily to subordinating particles, and only incidentally to relative pronouns, when they themselves serve as subordinators. One may perhaps conclude that the attraction principle must have something to do with the perceptual clues by which the boundary between a head noun (in point of fact, head NP) and its modifying clause is signalled.

REFERENCES


One may also cite Bambara, a language which often does not embed a relative clause but rather leaves it conjoined behind the matrix sentence. In this case, an anaphoric pronoun appears in the 'embedded' (conjoined) sentence, but a subordinating particle (min) appears adjacent to the 'head' noun in the matrix sentence: 2

(27) n ye ce min ye, o ye mbumu san
I past man that see, he past knife buy
'I saw the man who bought the knife'

Finally, in Amharic, currently an S-O-V/REL-N language, it has long been a puzzle why the relative subordinator ñä- does not remain at the beginning of the relative clause but rather, if a verb exists in the clause, it migrates to the verb (for detailed discussion, see Hudson [1972]). Amharic does not have a relative pronoun per se, though 'resumptive' anaphoric pronouns normally occur in relativization. Those are verb-suffixes, arising from an earlier stage when Amharic probably exhibited the Semitic V-S-O syntactic order (for some discussion, see Givón [1971a]). Now, given the universal principle of relative pronoun/subordinator attraction, the position of the Amharic relative subordinator is not only natural but also predicted, since it gets attracted to the position closest to the head noun but still consistent with its morphemic nature as a prefix:

(28) gäbäre tänätäna ñä-sábbärä-t wämbär
farmer yesterday that-broke-it chair
'The chair that a farmer broke yesterday'

Some reasonably natural explanation must surely underlie a principle as seemingly universal as that of pronoun/subordinator attraction. If it were relevant only to relative pronouns, one might be tempted to suggest that the underlying principle has something to do with keeping the

2For the Bambara data I am indebted to Karen Courtenay.
antecedent close to its referring pronoun, presumably for some ease in maintaining reference relation. It seems, however, that the attraction principle pertains primarily to subordinating particles, and only incidentally to relative pronouns, when they themselves serve as subordinators. One may perhaps conclude that the attraction principle must have something to do with the perceptual clues by which the boundary between a head noun (in point of fact, head NP) and its modifying clause is signalled.

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