MULTIPLE DEPENDENCY IN BLACKFOOT[1]

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1. Introduction

This is a brief study of Blackfoot sentences in which a single nominal bears relations to both an upstairs (matrix) and downstairs (embedded) clause. In particular, I wish to focus attention on the linear positions possible for such nominals, for they indicate the need for revision of a "law" of Arc Pair Grammar (APG) (Johnson and Postal, to appear). [2]

2. Dual-dependencies

There are two classes of sentences involving a nominal with both upstairs and downstairs dependencies: 1. those in which the nominal bears initial relations to both clauses; and 2. those in which the nominal bears an initial relation to only the downstairs clause. The latter group, of course, involve so-called ascensions.

2.1 Initial dual dependencies

Examples (1) - (4) are representative of sentences in which a single nominal bears initial and final relations in both clauses.[3]

(1) Iikstaa-yi noko's-iksi m-aahks-oyi-hsi iinai.
want(intrans)-3pl my:kid-pl 3-might-eat-sub banana(s)
'My kids want to eat banana(s).'

(2) Noko'siksi iikstaa-yi m-aahksoyihs-aawa iinai.
-3pl 3- -PRO(3pl)

(3) Noko'siksi, iikstaa-y-aawa m-aahksoyihs-aawa iinai.
-3pl-PRO(3pl) 3- -PRO(3pl)

(4) Iikstaa-yi m-aahksoyihsi noko'siksi iinai.
-3pl 3-

These examples are paraphrases, and noko'siksi 'my kids' is the initial subject (SU) of both clauses in each of (1) - (4). (Except for the first example in sets of paraphrases I will segment and gloss only agreement affixes and enclitic pronouns.) The same nominal is also final SU of both clauses in (1) and (4), accounting for the fact that both verbs are inflected to agree with this nominal. In (2) noko'siksi is final SU of the upstairs verb, but the final SU of the downstairs verb is the enclitic pronoun -aawa (Fox and Frantz 1979). The downstairs verb agrees with noko'siksi as replacee (controller) of the final SU. Both verbs of (3) have pronouns as final SU; these are replacers of noko'siksi, necessitated by the fact that this nominal bears an 'overlay' relation of focus (generally new topic). So noko'siksi is a constituent of the upstairs clause in (2), of the downstairs clause in (4), and of neither clause in (3).

It is not immediately obvious whether noko'siksi in (1) is a constituent of the upstairs clause or of the downstairs clause. I am inclined to say that this is a moot question and will not pursue it further here except to say that if constituency is determined by surface graph relations as Johnson and Postal assume, perhaps noko'siksi is surface-graph SU of both clauses. I hasten to add that this would be contrary to assumptions (manifest in the 'Internal Survivor Law') of Johnson and Postal (to appear).

Example (4) is of interest in that noko'siksi is clearly a constituent of the downstairs clause. To account for this in APG we must assume that in the surface graph noko'siksi bears no relation to the upstairs verb, i.e. that the upstairs relation has been 'erased' by the downstairs relation. And while such a situation is rare, it is legal in APG.[4]

2.2 Non-initial dual dependencies

Blackfoot exhibits a number of ascensions, but for purposes of this paper ascension from complements of iikst- 'want' will suffice. And though other than SU's may ascend from these, I will limit discussion to cases of SU ascension.[5] Consider example (5) and paraphrases (6) - (9):

(5) Nits-iikstaa m-aahks-oyi-hsi noko's-iksi iinai.
I-want(intrans) 3-might-eat-sub my:kid-pl banana(s)
'I want my kids to eat banana(s).'

(6) Nits-iikstat-a-yi noko'siks m-aahksoyihsi iinai.
I-want(trans)-direct-3pl 3-

(7) Noko'siksi nits-iikstata-yi m-aahksoyihs-aawa iinai.
I- -3pl 3- -PRO(3pl)

(8) Noko'siksi, nits-iikstata-y-aawa m-aahksoyihs-aawa iinai.
I- -3pl-PRO(3pl) 3- -PRO(3pl)

(9) Nits-iikstata-yi m-aahksoyihsi noko'siksi iinai.

Example (5) differs from paraphrases (6) - (9) in that it involves no dual dependencies. The upstairs verb is inflectionally intransitive, for the verb 'want' has no final direct object (DO). The upstairs verb of (6) - (9), however, is transitive as a result of "ascension" of the downstairs SU; i.e., the nominal which is the final downstairs SU also bears the relation of DO to the upstairs verb. Comparing (6) - (9) to (1) - (4), respectively, we find the same pattern of possible linear positioning for noko'siksi and the same distribution of enclitic pronouns. So noko'siksi is a constituent of the matrix clause in (7), of the downstairs clause in (9), of neither clause in (8), and of ambivalent constituency in (6).

3. Violation of the "Successor Erase Law"

Within the APG framework, noko'siksi as ascendee in the net-

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works for (6) - (9) is a successor of noko'siksi as downstairs SU. The 'Successor Erase Law' of Johnson and Postal (to appear) guarantees that if the 'predecessor' (in this case the downstairs SU relation) is not erased by a 'replacer' in that relation (as it is by pronoun -aawa as downstairs SU in (7) and (8)), then the successor itself must erase the predecessor. But this would guarantee that noko'siksi could bear no relation to the downstairs clause in the surface-graph, and hence could not be a constituent of the downstairs clause, contrary to what we see in (9).

4. Summary

Blackfoot treats dual dependencies involving ascensions exactly the same as dual dependencies involving exclusively initial relations, including possible linear positioning of an ascendee according to its downstairs grammatical relation. Current laws of APG predict that these should differ, at least with regard to surface status of the downstairs relation in the ascension cases.

Given current assumptions of APG that surface graphs cannot involve multiple dependencies ('overlapping structural arcs'), the minimum revision that the Blackfoot data require in the Successor Erase Law is to make it applicable only to successor-predecessor pairs in a simplex clause, i.e. to erasure of 'local' predecessors. The Internal Survivor Law then will suffice to guarantee that there are no overlapping structural arcs in cases of ascension, just as it does in the cases of initial dual dependency.

NOTES

1 I am grateful to Paul Postal for comments on my abstract of this paper, particularly for those which led me to correct my use of the term 'final.'

2 I apologize for the mixture of terminology in what follows. I have tried to make the paper somewhat understandable to persons who are unfamiliar with APG, yet make use of APG concepts where necessary to assure that my claims actually have an interpretation within Johnson and Postal's well-defined system.

3 See Frantz 1971 for details of morphology. Some of the allomorphy seen in the examples of this paper is due to the following rule: i → ∅/s_V and y_+V. Abbreviations in glosses: 1,2,3= first, second, and third person; intrans=intransitive; pl=plural; PRO=pronoun; sg=singular; sub=subordinate marker (marks verbs of the "conjunct order"); trans=transitive.

4 Rich Rhodes (unpubl. note) has presented the most convincing evidence for what has been called 'up-Equi' in a transformational framework.

5 As Frantz 1974 shows, any dependent of the downstairs predicate may ascend in Blackfoot.

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