A-traces and semantic interpretation

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Lasnik (1999) makes the controversial proposal that A-movement does not leave a trace. His proposal is based on the assumption that there are no A-movement reconstruction effects (Chomsky (1995)). This assumption has been challenged often (Lebeaux (1995), Hornstein (1995), Sauerland (1998), Fox (2000), Boeckx (1999), Wurmbrand and Bobaljik (1999)). The facts are complicated and often poorly understood. In this paper I critically review some arguments that have been presented in support of A-movement reconstruction effects. I show that the empirical basis behind those arguments do not really support the necessity of A-traces: sometimes the facts fall under different descriptive generalizations, other times the facts can easily be accommodated under Lasnik proposal that A-movement does not leave a trace.

1st argument: Scope interactions. Fox (2000:145), drawing from May (1977), argues that some sort of A-movement reconstruction is necessary to account for the two readings in (1). The two LFs of (1) appear in (2) and the truth conditions under which they are true appear in (3).

(1)   Someone from NY is very likely to win the lottery
(2)   a.   Someone from NY is very likely ~~someone from NY~~ to win the lottery
           b.   ~~Someone from NY~~ is very likely someone from NY to win the lottery
(3)   a.   There must be a person from NY who is very likely to win the lottery (e.g. a person who bought enough tickets to make winning a likely outcome)
           b.   There [must] be enough tickets buyers from New York to make it likely that the city would yield a winner

Counter-argument: This argument is not conclusive because we can find ambiguities similar to the one in (1) in sentences where A-movement reconstruction would not yield two different scope relations, as in (4). The two interpretations of (4) are true under the conditions that appear in (5). Therefore, it seems that the two readings in (1) might not be the result of different scopal relations between *Someone* and *likely*.

(4)   Someone from NY won the lottery
(5)   a.   There is one person from NY who bought all the lottery tickets
           b.   It is the case that all ticket buyers were from NY

2nd argument: Scope and binding. Fox (2000:145ff) and Wurmbrand and Bobaljik (1999), drawing on Lebeaux (1995), argue that the inverse scope reading ($\forall > \exists$) in a sentence like (6)a cannot be obtained through raising of the universal quantifier: if raising of *every battle* were to be possible, we would expect the inverse scope reading to be possible also in (6)b, (6)c, contrary to facts. They claim that the inverse scope reading is the result of lowering/A-movement reconstruction of the existential. They argue that the lack of the inverse reading in (6)b, (6)c, indicates that the presence of the anaphor / bound pronoun freezes the existential in subject position, and prevents it from lowering/reconstructing.

(6)   a.   At least one soldier seems to Napoleon to be likely to die in every battle ($\forall > \exists$, $\exists > \forall$)
       b.   At least one soldier$_i$ seems to his$_i$ commander to be likely to die in every battle (*$\forall > \exists$, $\exists > \forall$)
       c.   At least one soldier$_i$ seems to himself$_i$ to be likely to die in every battle (*$\forall > \exists$, $\exists > \forall$)

Counter-argument: This second argument does not seem to be valid because it is based on a wrong empirical generalization. The æfreezing approachî to the contrast in (6) misses (to my knowledge) the hitherto unnoticed descriptive generalization that in a situation like (7) the inverse scope reading is not available (or at least much less available than it usually is). The sentences in (8) illustrate this generalization. (As for why (7) holds, I suggest that it might be related to the low accessibility status of inverse scope reading in general, see Pica and Snyder (1995)). Thus, the missing readings in (6)b, (6)c do not provide evidence for the æfreezing approachî since they fall under the generalization in (7).

(7)   Some N$_i$ Éevery N É{anaphor$_i$ / bound pronoun $_i$} (*$\forall > \exists$, $\exists > \forall$)
(8)   a.   Some boy talked to every girl about John ($\forall > \exists$, $\exists > \forall$)

b.   Some boy$_i$ talked to every girl about himself$_i$ (*$\forall>\exists$, $\exists>\forall$)

c.   Some boy$_i$ talked to every girl about his$_i$ girlfriend (*$\forall>\exists$, $\exists>\forall$)

3rd argument: Intensional contexts**.** Boeckx (1999) presents the non-contradictory status of (9) as evidence that raised subjects might have the option of reconstructing to the initial position.

(9)   Even though there are no unicorns, yet a unicorn seems to be approaching

Counter-argument: Boeckx's assumptions make the wrong prediction for (11). Suppose that Mary and John agree that Oswald killed JFK, and John, but not Mary, believes that Oswald was a KGB agent. This situation can be reported as in (10) but not as in (11), unexpectedly if A-movement can reconstruct.

(10)   It seems to Mary that John believes that a KGB agent killed JFK

(11)   A KGB agent seems to Mary to be believed by John to have killed JFK

4th argument: Pronoun binding. Examples like (12) are used by Lebeaux (1995) to argue that A-movement can reconstruct so the proper configuration between the quantifier and the pronoun obtains.

(12)   a.   His$_i$ mother seems to everybody$_i$ to be the best

            b.   seems to everybody$_i$ [his$_i$ mother to be the best]

Counter-argument / proposal: I would like to suggest that the pronoun binding facts in sentences like (12)a can be accounted for without A-movement reconstruction. Following Belletti and Rizzi (1988) approach to Binding Theory and Lasnik's (1999) approach to theta role assignment, I propose that the syntactic constraint on bound pronoun can be satisfied at any point the derivation, as in (13). The bound pronoun interpretation in (12)a is licensed before the subject raises to the matrix clause, namely at the stage in (12)b. I also show that the principle in (13), when coupled with Lasnik's proposal that A-movement leaves no trace, straightforwardly explains why A-movement, but not A'-movement, licenses a bound pronoun interpretation, as shown in (14). In (14)b, since there is no point in the derivation in which *his* is c-commanded by all the copies of *who*, the bound pronoun reading is not available (thus explaining away standard cases of Weak- and Strong-Cross Over).

(13)   Bound Pronoun Interpretation Rule: A quantifier Q can bind a pronoun P iff at some point in the derivation all the copies of Q c-command P.

(14)   a.   Everybody$_i$ seems to his$_i$ mother to be the best

            b.   *Who$_i$ does his$_i$ mother love ~~who$_i$~~

CONCLUSION: In this paper, I evaluate some facts that have been used to argue for A-movement reconstruction. I conclude that the arguments for A-movement reconstruction based on scope are not as sound as they seem, and that the evidence supporting the bound pronoun interpretation argument can receive an even more natural account within Lasnik proposal that A-movement does not leave a trace.

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