WH-adjuncts and long distance multiple WH-movement in Serbian

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This paper examines long distance multiple WH-movement (MWM) in Serbian. The goals are twofold: First, to present Serbian long distance MWM data that, as far as we know, have not received a formal analysis in the literature. We show restrictions on adjunct movement and ordering in long vs. short distance MWM. Second, we present an analysis that captures these restrictions without losing the benefits of previous analyses of short MWM, such as Boskovic (1998, 2003).

It has been widely noted in the literature that there is MWM in Serbian matrix questions, and as shown in (1), the Superiority Condition is violated, and any WH order is allowed.

- (1)(a) Ko je koga zašto istukao? (b) Ko je zašto koga istukao? who is whom why beaten
 - (c) Koga je ko zašto istukao? (e) Zašto je ko koga istukao?
- (d) Koga je zašto ko istukao?
 - (f) Zašto je koga ko istukao?

While ordering is free in Serbian short MWM, there are restrictions on adjunct movement and ordering in long MWM. First, there is a familiar adjunct/argument asymmetry when extracting from factive vs. non-factive complements. Factives (2a) do not allow adjunct extraction (Factive Islands), while non-factives (2b) do. It is crucial to note that in all of the following examples, the judgements given are with the adjunct Zašto 'why' construed with embedded predicate, not the matrix predicate, i.e. with 'why' (as well as the arguments) extracted from the embedded clause (the matrix adjunct readings are OK for both (2a)&(2b)).

- (a) *Zašto šta žališ [što si pročitao]? (2)why what regret-2sg that are read
 - (b) Zašto kome tvrdiš [da si dao knjigu]? why whom claim-2sg that are given a book

In addition to the restriction on adjunct extraction from factives, there are ordering restrictions on the adjuncts that are extracted from non-factive complements. As illustrated in (3), a WH-adjunct (WH-adj) must appear to the left of a WH-argument (WH-arg).

(a) *Koga zašto tvrdiš (3)[da je Marko istukao]?

whom why claim-2sg that is Marko beaten

- (b) Zašto koga tvrdiš [da je Marko istukao]?
 - why whom claim-2sg that is Marko beaten

de Cuba (in press) gives an account of factive islands that appeals to the 'Adjunction Prohibition' from McCloskey (2005), given in (4).

The Adjunction Prohibition: Adjunction to a phrase which is s-selected by a (4)lexical (open class) head is ungrammatical.

McCloskey proposes that ask/wonder type predicates select a recursive CP structure, while de Cuba gives a series of arguments that non-factives also have an extra layer of CP structure (cP) that is not present under factives, as in (5).

(5) (b) $[_{VP} regret [_{CP} \dots]]$ (a) $\left[_{VP} \text{ claim} \left[_{cP} \left[_{CP} \ldots \right] \right] \right]$ Following (4) and (5), only in the case where there is a cP buffer between VP and CP (5a) can we get adjunction. If, as de Cuba argues, arguments are extracted through Spec-CP while adjuncts are extracted through adjunction to CP, then only under non-factives (5a) is adjunct extraction possible (adjunction to CP in (5b) is ruled out by the Adjunction Prohibition). This analysis provides an explanation for the Serbian argument/adjunct asymmetry in (2), and can also explain the ordering restriction in (3); if the WH-words move to CP, then one would expect a WH-adj adjoined to CP to appear to the left of an WH-arg in Spec-CP.

So far we have a neat explanation for the restrictions on WH-adj movement and ordering. However, the data gets more complicated if we add another WH-arg for extraction. The data is given in (6) (again, assuming WH-words extracted from EC).

- (6) (a) *Ko koga zašto tvrdiš [da je istukao]? who whom why claim-2sg that is beaten
 - (b) Zašto ko koga tvrdiš [da je istukao]? why who whom claim-2sg that is beaten
 - (c) Ko zašto koga tvrdiš [da je istukao]? who why whom claim-2sg that is beaten

While (6a) and (6b) are expected (cf. (3)), in (6c) we might expect ungrammaticality, with a WH-adj appearing to the right of a WH-arg. However, the structure in (5a) provides a solution. If we assume that matrix clauses are also topped by cP, then if the top WH-arg in (6c) is in Spec-cP, then the WH-adj can be adjoined to CP, yet still linearly in 2^{nd} position.

The analysis given thus far has provided a possible explanation for the adjunct ordering restrictions in long MWM, but an obvious question remains: If MWM is indeed movement to cP/CP, then why is short MWM ordering free in Serbian? In other words, why are (1a) and (1c) grammatical with the adjunct in the 3rd WH position, an order that is bad in long distance extracted (6a)? For an answer we appeal to the Boskovic (1998) analysis of Serbian short MWM as focus movement to the TP-field, not movement to the CP-field. Boskovic presents arguments that short MWM is *A*-movement, and is not subject to Superiority. However, long MWM must proceed through the CP-field (*A*'-movement), so is subject to different restrictions than short MWM. We follow this line of analysis, though we differ from Boskovic in implementation of the movement. In addition, the Serbian native speakers we consulted provided judgements that differ from Boskovic's, causing the need to reanalyze his Superiority analysis, at least for our set of speakers. Boskovic (1998) claims that Superiority holds in (7); however, both (a) and (b) are equally acceptable to some speakers. The lack of Superiority is also shown in grammatical sentences in (8) (cf. (6b), (6c)).

- (7) (a) Ko koga tvrdiš [da je istukao]? who whom claim-2sg that is beaten
 (b) Koga ko tvrdiš [da je istukao]?
- (8) (a) Zašto koga ko tvrdiš [da je istukao]?
 why whom who claim-2sg that is beaten
 - (b) Koga zašto ko tvrdiš [da je istukao]? whom why who claim-2sg that is beaten

Given (7) and (8), Superiority does not seem to be an issue in Serbian long MWM. Instead, the structure in (5a) provides a way to capture the data. We assume that WH-movement to the CP-field is driven by a WH-feature in C (which is not present in the short MWM cases, a la Boskovic, 1998). This feature attracts all of the WH-words from their focus positions in the TP-field, but there is no set order of attraction (since there is no Superiority in short MWM). The only restriction is that the WH-adj, which moves up the tree by adjunction, must adjoin to CP (it is prohibited from adjoining to *c*P). The 2 WH-args can move to Spec-*c*P and Spec-CP respectively, in either order. If we assume that the matrix clause is also topped with *c*P/CP, then further *A*'-movement up the tree will again provide the order WH-arg > WH-adj > WH-arg, giving us (6c) and (8b). In addition since *c*P is unselected, adjunction is also possible to *c*P, giving the order WH-adj > WH-arg > WH-arg in Spec-CP. Given this, we invoke economy to rule out (3a). A single WH-arg must make the shorter move to Spec-CP.

References

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