

Left Branch Extraction in Multiple *Wh*-Questions: A Surprise for Question Interpretation

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In this paper I examine novel data involving left branch extraction of a *wh*-element (*wh*-LBE) in multiple *wh*-questions in Serbo-Croatian (SC), illustrated in (1). I show that the data present an interesting puzzle, since they seem to fall outside the regular interpretation paradigm attested in SC multiple *wh*-questions, discussed in Bošković (2003, 2007). In an attempt to account for them, I first examine their syntactic behavior, and then I examine them in terms of two influential theories of multiple question interpretation, recently discussed in relation to Slavic: Quantifier Absorption (QA) (Higginbotham and May 1981, Barss 2000, Gribanova 2009), and the Hagstrom-Bošković (H-B) approach (Hagstrom 1998, Bošković 2003, see also Citko and Grohmann 2001, Grebenyova 2006). I show that the data provide evidence for the latter approach and lead to several important conclusions about the nature of *wh*-LBE.

The multiple questions in (1) are grammatical and do not involve a syntactic superiority violation, even though a lower *wh*-element moves over a higher one. This is not surprising given the fact that short distance matrix multiple *wh*-questions in SC generally do not involve superiority violations (see Rudin (1988) or Bošković (1999, 2002)), as in (2b). However, what is surprising is that the interpretations of multiple questions with *wh*-LBE like (1) differ from those of multiple questions without LBE, like (2b). As discussed in Bošković (2003), multiple questions such as (2a), with the subject > object order, have both pair-list (PL) and single-pair (SP) readings, indicated in (3a,b). Questions such as (2b) with the object > subject order, on the other hand, have only SP readings, as in (3b). The PL reading in (2b) is lost, and this is what Bošković (2003) calls interpretative superiority. Since in examples like (1) a lower *wh*-element moves over a higher one just as in (2b), they are expected to be interpreted the same as examples like (2b). However, unlike (2b), (1) can have both PL and SP answers. The salient reading is a PL one, but a SP reading is also available, as evidenced by the fact that such examples are felicitous in a context like (4). They, therefore, do not exhibit interpretative superiority. The question is why.

Given Bošković's (2003) observation that the availability of PL and SP readings crucially correlates with the availability of *wh*-movement to SpecCP, I first examine whether the difference in interpretation of (1) and (2b) may be due to a difference in the availability of such movement in the two types of sentences. More specifically, Bošković shows that *wh*-movement to SpecCP results only in a PL reading, while having no *wh*-movement to SpecCP allows for both PL and SP readings. Thus, (2a) involves no overt *wh*-movement to SpecCP on the SP reading and can involve such movement on the PL reading. Examples like (2b), which only have SP readings, cannot involve overt *wh*-movement to SpecCP. Since *wh*-movement to SpecCP may result in a PL reading, could it be that examples like (1) allow for a derivation with *wh*-element moving to SpecCP, and could it be that the lack of such derivation in (2b) is ultimately responsible for the difference in their interpretation? Here I reject this possibility, since, otherwise, we would have no way of accounting for the contrast between grammatical examples like (1) and ungrammatical examples like (5a) and (6a). (5a) and (6a) are ungrammatical, because they involve syntactic superiority violations. As Bošković (2000, 2002) shows, syntactic superiority effects are triggered in SC examples like (5a) and (6a), because they must involve overt *wh*-movement to SpecCP. But, then, (1) cannot have overt *wh*-movement to SpecCP. Also, since (5a) and (6a) are ungrammatical, we cannot ascribe the obviation of syntactic superiority in (1) to possible D-linking of *wh*-phrases. Thus the availability of the PL reading in (1) and its lack in (2b) is not due to a difference in their syntactic behavior. Is it due to a difference in how their semantics is derived? I first pursue the QA approach to the generation of PL readings, but have to reject it, as it cannot make the right cut between the data in (1) and (2b). Pursuing the latest exposition of this approach discussed in relation to Slavic in Gribanova (to appear), I show that if it allows (1) to have PL, then it will allow (2b) to have it as well, thus making a wrong prediction. Then I turn to the H-B approach. I argue that, although at first sight the contrast between (1) and (2b) seems to be a counterexample to this approach, it actually is not, but, rather, it further supports it. The H-B approach crucially relies on the universal existence of a Q-morpheme, responsible for interrogative interpretation. The position of the Q-morpheme (together with the availability of overt *wh*-movement to

SpecCP) correlates with the availability of SP and PL readings. In a nutshell, if the Q-morpheme is merged in a high position and ends up having scope over both *wh*-phrases, as in (7a), a SP reading is obtained. Another option is to merge it with a lower *wh*-phrase, as in (7b), causing it to scope over only one *wh*-phrase, which leads to a PL reading. In (2b), the PL reading is unobtainable because, despite the fact that we can merge the Q-morpheme with a lower *wh*-phrase, the Q-morpheme still ends up scoping over both *wh*-phrases, since it is fronted together with the lower *wh*-phrase, as in (7c). Why is this then not the case with (1) that involves *wh*-LBE? I argue that if LBE involves movement of the LB *wh*-element from the NP in which it is generated and if we make a natural assumption that the Q-morpheme is stranded with the NP from which the LB *wh*-element moves, as in (7d), where it has the scope over (the copy of) the lower *wh*-phrase only, all the facts follow straightforwardly. This Q-stranding analysis is confirmed by the data in (8), where the whole *wh*-NP, and not only the LB *wh*-element, moves. Such examples can have only SP readings. Since the whole NP moves, the Q-morpheme cannot be stranded and it ends up scoping over both *wh*-NPs.

Therefore, we are forced to conclude that *wh*-LBE does not have to involve overt *wh*-movement to SpecCP, contrary to what has been claimed (Fernandez-Salgueiro 2005, see also Bošković 2007) and that the Bošković-Hagstrom analysis of multiple question interpretation can accommodate these findings. Thus, *wh*-LBE is not different from the regular *wh*-fronting in SC. Also, LBE cannot involve remnant movement (Franks and Progovac 1994, Bašić 2005), since under this analysis in examples like (1), the Q-morpheme would end up having scope over both phrases (as in (9)) and, therefore, only a SP reading would be expected. Similarly, the data argue against the copy deletion approach (Fabelow and Ćavar 2002) to *wh*-LBE.

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| (1)a. | Kakvu _i je ko [t _i ocjenu] dobio?
what is who grade gotten
'Who got what grade?' | b. | Koji _i je ko [t _i film] gledao?
which is who film seen
'Who saw which film?' |
| (2)a. | Ko koga voli?
who whom loves
'Who loves whom?' | b. | Koga ko voli?
whom who loves
'Who loves whom?' |
| (3)a. | Petar Mariju, Ivan Vesnu, Asmir Melu.
Petar Marija, Ivan Vesna, Asmir Mela
'Petar loves Marija, Ivan loves Vesna,
Asmir loves Mela, etc.' | b. | Petar Mariju
Petar Marija
'Petar loves Marija.' |
| (4) | Peter is a professor who gives one grade to one student every day and John knows this. On Tuesday John sees Peter just after a group of students has left him and asks him:
A kakvu je ko ocjenu danas dobio?
And what is who grade today gotten
'And who got what grade today?' | | Peter answers: Goran tric
Goran three
'Goran got a C.' |
| (5)a. | ?*Koji ko tvrdiš da je film gledao?
which who claim _{2sg} that is film seen
'Who do you claim saw which film?' | b. | Ko koji tvrdiš da je film gledao?
who which claim _{2sg} that is film seen
'Who do you claim saw which film?' |
| (6)a. | ?*Pavle se pita koji je ko film gledao.
Pavle SELF asks which is who film seen
'Pavle wonders who saw which film.' | b. | Pavle se pita ko je koji film gledao?
Pavle SELF asks who is which film seen
'Pavle wonders who saw which film.' |
| (7)a. | SP reading: C Q [WH ₁ WH ₂] | b. | PL reading: C [WH ₁ WH ₂ +Q] |
| c. | C WH ₂ +Q [WH ₁ t _i] | d. | C WH ₂ _i [WH ₁ [_{wh-NP} t _i N]+Q] |
| (8)a. | Kakvu ocjenu je ko dobio?
what grade is who gotten
'Who got what grade?' | b. | Koji film je ko gledao?
which film is who seen
'Who saw which film?' |
| (9) | [_{wh-NP} WH ₂ t _i] _k +Q WH ₁ NP _i t _k] | | |