

Wayles Browne
Cornell University, Ithaca

Difficulties in Testing Wh-movement

Generative syntacticians are interested in whether, and to what extent, a given language can move interrogative and relative elements (Wh-elements) from a subordinate clause to a position in a main clause. Languages differ greatly in the Wh-extractions they allow. This article tests examples of this sort on Croatian material, but at the same time points out some difficulties which arise in testing them, because Croatian (as well as Bosnian and Serbian) offers two other means for formulating equivalent content. The paper concludes with a tribute to Professor Leonardo Spalatin, late of the Department of English of Zagreb University, in the context of some speculations about ease of processing of complex syntactic structures.

0. The following paper was presented at the Seminar on Generative Grammar and the Grammar of the Slavic Languages, Dubrovnik, 7 June 1991. I am happy to publish it in a volume of *Suvremena lingvistika* dedicated to Professor Rudolf Filipović, who over the decades has made my study and research on the South Slavic languages possible. The present publication preserves much of the style of the oral presentation.

1. When I talked on Croatian relative clauses the other day, I didn't say much about Wh-element extractibility from complex constructions. (Browne 1986: iv-v; Comrie 1981: 131-157; Radford 1981: 146-310). Now, I **am** curious about extractions. But the constraints on extracting elements from subordinate clauses inside relatives are less clear than in English or other languages that linguists have studied. We find examples showing that either subject or object of an embedded clause can be fronted to the beginning of the upper clause. First, a real example from a novel (___ marks the *trace* of a Wh-word, that is, the spot in (1) from which the subject *što* has been moved):

(1) Ono što sam vjerovala da je ___ jedinstveno središte moga bića...

that what AUX-1sg believed that is __ unique center my being-GEN
 'That which I believed __ to be the unique center of my being...'

Slavenka Drakulić, *Hologrami straha*, GZH, Zagreb 1990, 46-7

And now a simple example to work with: we can extract an embedded-clause subject, and, unlike English, there is no *that*-trace effect. English, as is now well known, permits extraction of a subject from an embedded clause introduced by a zero conjunction (2E), but not from an embedded clause introduced by an overt conjunction *that* (2E'), i. e. the sequence »that __« is not possible.

(2) Čovjek koji mislim da __ vidi Mariju
 man which-NOM I-think that __ sees Mary-ACC
 'The man who I think __ sees Mary'

(2E) The man who I think Ø __ sees Mary

(2E') *The man who I think that __ sees Mary

(These should be distinguished from the type with a parenthetical inserted sentence: ... *who, I think, sees Mary / koji, mislim, vidi Mariju*. This type is possible in both languages and is indeed used occasionally in Croatian as an extra way to avoid embedding.)

Furthermore, we can extract an object:

(3) Čovjek kojeg mislim da Marija vidi __
 man which-ACC I-think that Mary-NOM sees __
 'The man who I think Mary sees __'

However judgements are somewhat difficult to obtain from speakers, because of a preferred alternative construction: the *za*-topic. If we have a verb of saying or thinking, which is the sort of verb that usually occurs in extraction examples, we can add a PP with *za* 'for' (taking accusative case) and a person or item which reappears (in any syntactic role whatsoever) in the complement.

(4) a. Govore **za Ivana** da ga Marija vidi.
 they-say **for John-ACC** that him Mary sees
 'They say »for« John that Mary sees him.'
 b. **Za Ivana** govore da ga Marija vidi.
 'ditto'

In this language, *za* is not the same as the usual preposition 'about', which is *o* with locative case. (5a) is a complete sentence; (5b) is incomplete without a complement clause.

(5) a. Govore o Ivanu.

- 'They are speaking about John.'
 b. *Govore za Ivana.

Exploiting the *za*-topic strategy gives a relative clause in which the antecedent is followed by *za kojeg* 'for which' without extraction from lower clauses:

- (6) a. Čovjek za kojeg mislim da *pro* vidi Mariju
 man for which I-think that (he) sees Mary-ACC
 'The man that I think sees Mary'
 b. Čovjek za kojeg mislim da ga Marija vidi
 man for which I-think that him Mary sees
 'The man that I think Mary sees'

In (6a), the subject of *vidi* is not extracted or moved, but is still there in the shape of a *pro*, a non-overt subject pronoun; in (6b), the object of *vidi* is still in the same clause with it in the shape of the accusative pronoun *ga*.

Za-topic is very frequent in both relative constructions and non-relatives. Here are a couple of examples from last week's newspaper (*Vjesnik*, Zagreb, 1 June 1991).

(7) relative:

- ... žena za koju se vjeruje da je __ aktivirala eksploziv
 woman for which REFL believes that AUX __ activated explosive
 'The woman who is believed to have set off the explosive'

(8) non-relative:

- Za nju se pretpostavlja da __ pripada odredima samoubojica LTTE.
 for her REFL presumes that __ belongs to-squads of-suicides LTTE
 'It is presumed that she belongs to the LTTE suicide squads.'

And I can tell you that when I showed the sentence from Ms. Drakulić's novel to Zrinka Babić from Zagreb University (a participant in the seminar), she changed it to

- (9) Ono za što sam vjerovala da *pro* je...
 that for what AUX-1sg believed that it is...

I have also tried extracting Wh-phrases from questions, such as:

- (10) Tko mislite da __ vidi Mariju?
 who-NOM you-think that __ sees Mary-ACC
 'Who do you think sees Mary?'

These appear to be, strictly speaking, grammatical, but speakers I ask come back at me with **two** alternative strategies. They may use the *za*-topic:

- (11) Za koga mislite da *pro* vidi Mariju?
 for whom you-think that he sees Mary

There is also a construction like the one in Hungarian. Each of the clauses is expressed as a separate question, with *što* 'what' as the object of the upper verb of saying or thinking:

- (12) Što mislite, tko vidi Mariju?
 what-ACC you-think, who sees Mary?

(Russian uses *kak* 'how' here instead, as in (13).)

- (13) Kak vy думаete, kto vidit Mariju?
 how you think, who sees Mary

You might believe that this is two questions: 1) What do you think? and 2) Who sees Mary? But I have pragmatic evidence of a rather interesting kind — not used in linguistics until now, as far as I know — that it is only one question. The satirical columnist Tanja Torbarina, writing in *Globus* (Zagreb, 7 June 1991), discusses the influence of X. Y., a Croatian politician, in arranging for an Italian firm to invest in the Dalmacijacement company even though Dalmacijacement had previously suffered losses in exports due to the machinations of that same Italian firm. She goes on to say:

- (14) U čemu je onda logika da *Dalmacijacement* bude ponuden onom od kog će imati manje koristi. Ovime otvaramo nagradni natječaj *Globusa*. Nagradno pitanje glasi: *Što mislite zašto je (X. Y.) odlučio da posao u Dalmacijacementu dobije firma koja je već zeznula Dalmacijacement?* Za najduhovitiji odgovor... *Globus* šalje vreću cementa. (Italics hers.)

... *what you-think why AUX X. Y. decided that business-ACC in Dalmacijacement obtains firm-NOM which AUX already double-crossed Dalmacijacement?...*

'Where then is the logic in Dalmacijacement's being offered to the one from which it will have less benefit. We hereby open a prize contest in *Globus*. The prize question (singular) runs (singular): *Why do you think X. Y. decided that the firm which has already double-crossed Dalmacijacement should get the Dalmacijacement deal?* For the wittiest answer (singular)... *Globus* will send a sack of cement.'

2. Leonardo Spalatin was a lexicographer and retired professor of English at the University of Zagreb. I saw in the newspaper that he died just this week. He was one of the early members of the same research project that brought me to Zagreb, namely Prof. Rudolf Filipović's Serbo-Croatian and English Contrastive Grammar project. Prof. Spalatin was a man of strong opinions, and one of them was about the relative merits of the English and Croatian sound systems.

English reduces its unstressed vowels, diphthongizes its stressed ones, slurs its consonants until you can never be quite sure what you have heard until you think back on it. Croatian, on the other hand, has nice clear vowels, only five of them, with a lot of empty space in between:

i u
 e o
 a

and its consonants are almost completely self-managing, unaffected by the neighboring vowel sounds. So, Prof. Spalatin insisted, Croatian really is more understandable than English. We can rephrase his claim in more up-to-date linguistic terms: English requires a lot of analysis-by-synthesis, but Croatian is parseable on-line, as the sounds arrive.

I think I can make a Spalatin-style argument that relative clauses and questions using the *za* and *što* devices are easier for the listener to handle than the English type of long-distance extractions. If I hear *Čovjek kojeg...* I start expecting a relative clause whose object *kojeg* will be. If the next word is *mislím* I have to put my first expectation on the back burner or the top shelf, and turn my attention to the *mislím* construction. Then I hear *da*, it tells me a new clause is coming, and I have to keep track of **two** items of information: 1) watch for the rest of the relative clause, 2) *kojeg* (representing *čovjek*) wants to be its object. Then I hear ... *da Marija vidi*, realize there's a gap (*vidi* is a transitive verb), and connect the *kojeg* with it.

On the other hand, when I hear *Čovjek za kojeg* I suspect: a relative clause is coming; but I don't have to store the instruction 'watch for its object'. I know there will be a **semantic** link between *čovjek* and something in the lower clause, but the lower clause is complete in itself, without gaps (apart from those which *pro*-drop of the subject can cause in any sort of clause), so it requires less syntactic memory and less processing of incomplete constructions: see (6b).

In the same way, in (12) when I hear *Što mislite*, it lets me know that a question is coming. Then the question arrives: *tko vidi Mariju?* and it is complete in itself without any clause-to-clause syntactic unfulfilled expectations. Less work for me, the hearer, than if I had to memorize fillers and find gaps while working on the structure of (10). These two strategies keep clauses nicely separate and independent, not deformed by the influence of their neighbors. Hence, in syntax as well, when Croatian (Bosnian and Serbian) is properly used, the strategies make it more intelligible than English. I believe old Professor Spalatin would have been pleased. But consider what this means for the investigating syntactician: when there's an easy way to say something, speakers may refuse to say it in a grammatical but less favored way. If a language is good for its speakers to use, its speakers may not be good for linguists to use.

Literatura

- Browne, W. 1986. *Relative Clauses in Serbo-Croatian in Comparison with English*. *New studies*, 4, ed. Rudolf Filipović. Institute of Linguistics, Faculty of Philosophy, University of Zagreb.
- Comrie, B. 1981. *Language Universals and Linguistic Typology*. Chicago: University of Chicago Press.

Radford, A. 1981. *Transformational Syntax*. Cambridge (U. K.): Cambridge University Press.

Poteškoće u pomicanju Wh-riječi

Jezici svijeta iskazuju znatne razlike u pogledu mogućnosti prebacivanja upitnih i relativnih riječi (Wh-riječi) iz jedne rečenice u drugu (njoj nadređenu) rečenicu. Te razlike već nekoliko desetljeća istražuju sintaktičari generativci. Na primjerima pokazujemo da hrvatski jezik prilično neograničeno prebacuje Wh-riječi. Međutim, istraživanje takvih primjera otežava činjenica da korisnici hrvatskog (slično i bosanskog i srpskog) jezika rado pribjegavaju čak dvama načinima da bi se takvo prebacivanje izbjeglo. Kod prvog, primjenjivog podjednako na pitanja i na odnosne rečenice, u nadređenu se rečenicu uvodi imenička grupa s prijedlogom za + akuzativ. Ta se grupa u podređenoj rečenici onda ponavlja u obliku zamjenice u željenom padežu: *Za koga* mislite da *ga* Marija vidi? Drugi način odnosi se samo na pitanja. I prva i druga rečenica u nizu ima oblik pitanja, dakle: *Što* mislite, *koga* Marija vidi? Takav sklop međutim ne funkcionira kao dva zasebna pitanja nego kao jedno, za što navodimo potvrdu iz pragmatike. U drugom dijelu rasprave podsjećamo na mišljenje pok. prof. L. Spalatina o auditivnoj prozirnosti hrvatskog u usporedbi s engleskim fonološkim sustavom, pa se pitamo, je li možda izbjegavanje prebacivanja Wh-riječi isto tako uvjetovano težnjom za lakšim raspoznavanjem svake, i nadređene i podređene, rečenice.