The unique position of WH words in Slavic languages is discussed, with specific reference to Bulgarian and Serbo-Croatian. The multiple fronting characteristics of Bulgarian and Serbo-Croatian differ in terms of the following positions and behaviors: extraction from embedded questions; clitic placement and other indications of constituent status; and word order. Multiple extraction allows the movement of multiple WH words out of an embedded clause. In Bulgarian all WH words in a multiple question must move to a higher clause but only if the question is non-interrogative; in Serbo-Croatian only one WH word can be extracted from a clause. The position of clitics (i.e. object pronouns) relative to WH words must come after the whole WH word sequence in Bulgarian; in Serbo-Croatian the clitics follow the first WH word and may not come after the group. Adverbs, parentheticals, and various particles can also split the WH word order sequence in Serbo-Croatian but not in Bulgarian. WH words in Bulgarian occur in a relatively fixed order; for example, nominative case precedes accusative. In Serbo-Croatian, the order of the fronted WH words appears to be entirely free; for example, the accusative and nominative can occur in either order. The varying properties of Bulgarian and Serbo-Croatian WH words divide other Slavic languages into two major clusters; for instance, Romanian shares the relevant properties of Bulgarian, while Polish and Czech follow the Serbo-Croatian pattern. (TR)
MULTIPLE WH-FRONTING CONSTRUCTIONS

by Catherine Rudin

Paper presented at the Annual Meeting of the LSA/AAAL/ADS
Multiple WH-Fronting Constructions!

1. Multiple Fronting Languages

It is a familiar fact that languages differ in the extent to which they place WH words in a special, clause-initial position. Some languages, like English, normally place one and only one WH word in Comp, so in a multiple question like (1a) what is in Comp but to whom is in situ. Other languages, like Chinese, have all WH words in situ at S-structure, as in (1b). A third group of languages, including the Slavic languages and some others, moves all WH words to a clause-initial position at S-structure, as in the Polish example in (1c), where both kto and kogo are fronted.

1.a. What did you give to whom?

b. Ni xiang-zhiao wo wei she he mei-le shenme? (Huang)
you wonder why bought what
"What do you wonder why I bought (it)?"

c. Kto kogo budzi? (Wachowicz 1974)
who whom wakes-up
"Who wakes up whom?"

It is this third group of languages, those with multiple fronting at S-structure, that I am concerned with in this paper. Although several multiple-WH-fronting languages have been discussed in the literature over the past decade, no agreement has been reached concerning their structure. Two general types of analyses have been proposed: those in which the WH words or phrases are all in Comp, and those in which some or all of them are not in Comp but rather in some S-internal position, perhaps something like a Topic or Focus position. These two possibilities are shown schematically in (2c, d).

2. S-Structures:

Multiple Fronting Languages

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1. This is a drastically reduced version of several sections of a paper entitled Multiple WH Constructions and the Comp Parameter (C. Rudin, ms., 1986).

2. This view has been put forward for example by Comorovski (1986), for Romanian, and by Rudin (1982), (1986) for Bulgarian. In theoretical terms the view that all of the WH words in sentences like (1) are in Comp is attractive partly because it parallels the structure that has been widely assumed for the universal LF structure of multiple questions since Huang's (1982) work on LF WH Movement.

3. This view is represented e.g. by Reinhardt (1982), on universal grounds, and by Toman (1981), Cichoński (1983) arguing from the facts of Czech and Polish. Lasnik and Saito (1984) also take this position—the language they consider is Polish.
What I would like to suggest is that in fact both analyses are valid, in different languages. Some multiple fronting languages, including Bulgarian and Romanian, have all of the WH words in Comp, as in (2c), while others, including Serbo-Croatian, Polish, and Czech, have structure (2d). To save time I will give data from only two of these languages today: Bulgarian as a typical representative of type (2c) and Serbo-Croatian as a typical representative of type (2d).

2. Comparison of Bulgarian and Serbo-Croatian

Both Bulgarian and Serbo-Croatian are multiple-fronting languages; they both place all WH words at the beginning of the clause in multiple questions, as in (3), where koj kogo/ko koga are fronted.

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2.2. Multiple Extraction from Clause

One difference between the two languages is the possibility for movement of multiple WH words out of an embedded clause. In Bulgarian, all of the WH words in a multiple question must move to a higher clause if the clause in which they originate is non-interrogative (for instance, a če 'that' clause), as in (4a). Leaving one of the WH words in situ (4b,c) is ungrammatical or interpretable only as an echo, and leaving one WH in the Comp of the lower clause, as in (4d,e), is also impossible.4

4a. Kaj kogo vižde? (Bulgarin)
   who whom sees
   "Who sees whom?"
4b. Ko kogo vidi? (Serbo-Croatian)
   who whom sees
   "Who sees whom?"

But in spite of the identical word order and appearance of these simple questions, there are important differences in the position and behavior of WH words between the two languages, which appear in more complex constructions. The three major differences, in extraction from embedded questions, clitic placement and other indications of constituent status, and word order, are all attributable to the proposed difference in structure.

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4a. Kaj kuge misliš če e otišul...?
   who where think-2s that has gone
   "Who do you think (that) went where?"
4b. *Kaj mleš če e otišul kuge?
   who where think-2s that has gone who
4c. *Kuge misliš če e otišul kaj...?
   who where think-2s that has gone who
4d. *Kaj znaš kuge e otišul...?
   who know-2s who has gone
4e. *Kuge znaš kaj e otišul...?
   who know-2s who has gone

There are some restrictions on movement from an embedded clause. In particular it is not possible to front WH words which originate in different clauses to the same Comp, perhaps for reasons having to do with absorption and/or scope. Also, extraction cannot operate if it would result in interrogative and relative WH words ending up in the same Comp. Except for such exceptional cases, however, extraction of multiple WH words from a clause is grammatical in Bulgarian.
In Serbo-Croatian the facts are exactly opposite: only one WH word can be extracted from a clause. In (5a,b) either ko or šta can be extracted. The other WH words in an embedded multiple question can, and for most speakers must remain unfron ted; a second WH word can move neither to the higher clause, as in (5c,d)5 nor to the Comp position of its own clause as in (5e,f). (Examples courtesy of Steven Franks.)

5a. Ko želite [de vam šta kupi _]?
   who want-2p to you what buy-3s
   'Who do you want to buy you what?'
   Who do you want to buy you what?

b. Šta želite [de vam ko kupi _]?
   what want-2p to you who buy-3s
   'What do you want who to buy you?'

5c. *Ko šta želite [de vam kupi _]?
   who what want-2p to you buy

d. *Šta ko želite [de vam kupi _]?
   what what want-2p to you buy-3s

5e. *Ko želite [šta de vam kupi _]?
   who want-2p what to you buy

f. *Šta želite [ko de vam kupi _]?
   what want-2p who to you buy

This difference between Bulgarian and Serbo-Croatian is easily accounted for in terms of the two different structures for multiple fronting languages given in (2); under standard GB assumptions movement from clause to clause is possible only through Comp, and it is only languages of type (2c), like Bulgarian, with their multiple WH positions in Comp, that are able to extract more than one WH word out of a clause.

2.2. Clitic Position and Constituency

A second difference between the two languages is the position of clitics relative to the WH words. In Bulgarian the clitics, including object pronouns like ti and auxiliary verbs like e, underlined in (7), must come after the whole WH word sequence: Koj kakvo ti e dal is fine but Koj ti e kakvo dal is ungrammatical.

7a. Koj kakvo ti e dal? (B)
   who what you has given
   'Who gave you what?'

b. *Koj ti e kakvo dal?

In Serbo-Croatian once again just the opposite is true: the clitics (mu and je in (8)) follow the first WH word, and may not come after the group:

8a. Ko mu je Šta deo? (SC)

Some speakers do accept sentences like (6a), with multiple WH words moved out of their clause, but even these speakers also accept the same sentences with one WH left behind, as in (6b).

i.a. Ko koga misliš [de je video _]?
   who whom think-2s that has seen

b. Ko misliš [de je koga video _]? / Koga misliš [de je za video _]?

Probably the dialect simply allows Focusing as well as WH Movement across clause boundaries, perhaps by cyclic adjunction to successive S nodes, and probably only with certain "bridge" verbs. Another possibility is that speakers that accept (1a) are taking misliš 'you think' as a parenthetical phrase.
To a certain extent this difference is attributable to independent factors, namely, in Serbo-Croatian, clitics are in second position, while in Bulgarian they are proclitic to the verb. However, it is worth noting that in the Serbo-Croatian version of Wackernagel's Law, "second position" can mean either after the first word or after the first major constituent of the sentence. The existence of (8a) proves nothing about the constituent structure of the WH-word sequence, since ko could count as filling "first position" simply by virtue of the fact that it is the first word of the sentence. However, the impossibility of (8b) shows conclusively that ko koga is not a constituent in Serbo-Croatian; this is consistent with structure (2d). In Bulgarian, on the other hand, there is independent morphological evidence, having to do with definiteness marking in free relatives, that a sequence like ko kakvo is a constituent. Although each WH word may be separately marked with the definite suffix -to, which normally marks relative as opposed to interrogative WH words, one -to for the WH group, as in (9a), is sufficient. This strongly suggests that the two WH words form a unit: [[koj kakvo]-to].

9a. Koj kakvoto iska... = b. Kajtaj kakvoto iska...
who-def wants who-def wants
"Whoever wants whatever..."

Adverbs, parentheticals, and various particles can also split the WH word sequence in Serbo-Croatian but normally not in Bulgarian.

2.3. Word Order

A third area of difference is the order of fronted WH words. In Bulgarian, the WH words occur in a relatively fixed order: for instance, nominative must normally precede accusative, as in (10), and the three WH words in a question like (11) must appear in exactly this order.6

10a. Koj keps e vidjal? (B)
who whom has seen
"Who saw whom?"
b. *Ko e koj e vidjal? (B)

11. Mho osi togs e del? (* any other word order)
who to whom has given
"Who gave what to whom?"

In Serbo-Croatian, on the other hand, the order of the fronted WH words appears to be entirely free; the accusative and nominative in (12), for example, can occur in either order. There may be some difference in emphasis, and some speakers find (12a) more natural than (12b), but both are acceptable.

12a. Ko je keps video? (SC)
who has whom seen
"Who saw whom?"

6The conditions of ordering of various types are rather complex, but roughly correspond to the template: NOM > ACC > DAT > PP > ADV. For further details, see Rudin (1986), chapter 4. There is some variability across speakers in just how rigid the order of WH words is.
b. Koga je ke video?

With three WH words, as in the examples in (13), again all possible orders are acceptable in Serbo-Croatian:

13a. Ko je kome deo? (SC)
   Who has what to whom given?
b. Ko je kome deo?
c. Kome je ko kome deo?
d. Kome je ko kome deo?
e. Kome je ko kome deo?
f. Kome je ko kome deo?

"Who gave what to whom?"

The word order facts are not as clearly linked to the two posited structures as the differences in extraction and clitic placement. But it is not unreasonable to suggest that whatever accounts for strict ordering of multiple WH words (some kind of Comp indexing mechanism, perhaps) operates only when all of the WH words are in Comp.

3. Conclusion

The analysis of the various differences between Bulgarian and Serbo-Croatian as stemming from the difference between structures (2c) and (2d) is strengthened by the fact that the same properties cluster together in other languages. Romanian shares the relevant properties of Bulgarian, while Polish and Czech follow the Serbo-Croatian pattern. An obvious prediction is that other multiple fronting languages should follow one or the other of these two clusters of properties.

I would like to close with a few quick words about possible parameters underlying the range of language types in (2). One of the parameters involved may well be the level at which WH Movement applies. This is diagrammed in (14), where "syntax" means at or before S-structure.

14. Chinese               English/Serbo-Croatian         Bulgarian
    single WH      LF    syntax                   syntax
    multiple WH    LF    LF

A further parameter is obviously needed to separate the English and Serbo-Croatian types (types (2a) and (2d)): I suspect that this will hinge on the presence or absence of a requirement that WH words may or must be in A' positions at S-structure.

REFERENCES


7Examples from Steven Frank (pc). One of my consultants finds (13d,f) only marginally possible.

8In Serbo-Croatian, fronting of all WHs is optional, at least for some speakers, but in Polish and Czech it is obligatory.