THOUGHTS ON MULTIPLE WH-FRONTING IN CZECH

REBECCA WOODS

University of York

Abstract

This paper tackles the familiar issue of multiple wh-fronting in Slavic languages, particularly focusing on the case of Czech, in which Superiority effects are found in both matrix and embedded clauses. Leading on from Focus movement accounts (Bošković, 1998, 2002) and A’-movement accounts (Sturgeon 2006, 2008), I propose a reinterpretation of Rudin’s seminal (1988) account. Using extant and novel data, I postulate Superiority-free, Focus-motivated A-movement of multiple wh-phrases to the edge of vP, followed by wh-movement of the highest wh-element through Spec IP to SpecCP to check EPP and wh-features. The wh-features of second and successive wh-elements are checked at LF.

1. Introduction

Question formation in Slavic languages has been a topic of interest for around 30 years, in particular the movement and placement of second and successive (henceforth secondary) wh-words in multiple wh-constructions. General consensus on these constructions is still to be reached, although various lines of inquiry have converged over the decades.

I will review extant literature which claims to account for the phenomenon of multiple wh-fronting in Slavic languages, before focusing the discussion on Czech constructions, which have received much less attention than, for example, Serbo-Croatian. Both languages exhibit SVO word order in unmarked contexts and can front multiple wh-elements, though only one may be wh-moved in the usual sense to SpecCP. However, there are important differences between these two languages, specifically the contexts in which Superiority effects hold and the position of clitics and other material in the ‘middlefield’ between IP and vP. These differences affect how the movement of secondary wh-elements in each language can be characterised. Furthermore, I will re-examine the role of Focus in multiple wh-fronting in Czech and present some areas for future research in the field.

2. Background and previous approaches

The 1980s saw early investigation into wh-fronting in Slavic languages, particularly Polish (Cichocki, 1983), but Rudin’s (1988) comprehensive study was the first to contrast two different types of multiple wh-fronting languages and to situate this phenomenon within the iteration of X-bar theory which included CP. She argued that Bulgarian and Romanian permitted multiple wh-words in SpecCP at S-structure, classing them as Multiply Filled Specifier languages [+MFS], whereas Serbo-Croatian, Polish and Czech only permit one wh-element in SpecCP, thus presenting as [-MFS] languages (p.478). She postulated that multiply-filled SpecCPs in [+MFS] languages are possible through the adjunction of wh-words rightwards to SpecCP (an A’-position), and that Superiority effects are obtained through co-indexing and correct head-government of subject traces by the
subject wh-element in SpecCP, and object traces by V (pp.481-482). Therefore, the subject wh-element must precede the object wh-element to fulfil both requirements of the split ECP at PF and local binding requirements at LF (pp.482-483), thereby forcing Superiority effects. Conversely, in languages which do not allow multiply filled SpecCPs, one wh-element moves into SpecCP, whereas any other wh-elements are adjoined to IP. This accounts for the co-occurrence of complementizers and wh-elements, such as the Polish sentence in 1):

1) Maria myšli, že co Janek kupil?
   Maria thinks that what Janek bought?

Rudin (1988, p.486)

As for the lack of Superiority effects in simple sentences with multiple wh-fronting, Rudin suggests that government of the subject trace by Infl, which is a head and a lexical category by virtue of its co-indexation with the subject NP, permits any other wh-element to move above the subject wh-element without affecting the ECP. Rudin illustrates this with the following Serbo-Croatian example:

2) a. Ko koga vidi?
   Who whom sees
b. Koga ko vidi?
   Whom who sees
c. [SpecCPi ko]j[Compj][IP koga]j [IP tj...tj...]
d. [SpecCPj koga]j[Compj][IP ko]j [IP tj...tj...]
e. [SpecCPi [ko]j koga]j[Compj][IP tj [IP tj...tj...]]
f. [SpecCPj [koga]j]ko][Compj][IP tj [IP tj...tj...]]

Rudin (1988, p.488)

The canonical surface order seen in (69a) is explained by the PF structure in (2), in which the subject trace is head-governed by Comp and the object trace by V. In (2b) and (2d), however, the object trace is head-governed by Comp and the subject trace by Infl. The subsequent LF structure in (2) shows how the subject trace remains governed by the trace left adjoined to IP (pp.488-489), which is not possible in the languages which multiply fill SpecCP as local binding at LF is not possible in these languages (p.483).

Rudin’s work has influenced much of the subsequent study in this area, and seems to provide a clear account for the differences between the two types of multiple wh-fronting languages. However, as syntactic theory progressed and moved away from government and binding accounts towards minimalism, some of the theory on which her account is founded has become obsolete. Indeed, as I shall explain, Focus movement has become a key topic in one branch of work on multiple wh-fronting throughout the late 1990s and into the 21st century.

Bošković’s (1998) work built upon Rudin’s, focusing specifically on Bulgarian and Serbo-Croatian. He introduces the concept of Focus and uses this to distinguish between the two types of multiple wh-fronting. He noted that free word order in Serbo-Croatian is limited to short distance matrix questions, and that in all other contexts Superiority effects were found (pp.7-8). He noted that this patterned with French question formation, as Superiority effects in Serbo-Croatian were absent in contexts in which wh-movement is not obligatory in French. As such, he concluded that SpecCP was not obligatory in these contexts and that the short movement seen in Serbo-Croatian matrix clauses was not usual wh-movement to SpecCP (p.9). He concludes that this movement must be Focus movement (cf. Stjepanovic, 1995), which is not sensitive to Superiority, whereas wh-movement is (p.12). He supposes that this is due to the “Attract all” nature of the Focus attractor, which is satisfied simply by the movement of all elements with a Focus feature, regardless of order, whereas
an “Attract one” attractor such as wh-movement, would attract only the closest element bearing a wh-feature (pp.16-17).

Although Bošković’s work has formed the basis for a substantial body of subsequent work, there are a number of problems with his assertions. Firstly, the French paradigm of non-obligatory wh-movement is a weak comparison, as the wh-moving version of utterances such as (3b) are strongly preferred, with the non-moving (3a) predominantly used as an echo question (a reading which Bošković explicitly ignores, p.8n):

3) a. Tu as embrassé qui? you have kissed who
   Who did you kiss?
   b. Qui a-tu embrassé?

Bošković (1998, p.8)

As he provides no other evidence for the absence of SpecCP in Serbo-Croatian other than these questionable French parallels, this argument is hard to accept. Furthermore, there is evidence in Czech that Superiority effects do not always hold even when a complementiser is present, invalidating this approach at least in the case of Czech, as I will go on to explain. Finally, the concept of “Attract all” does not seem to have independent evidence to support it and if all wh-movements are attracted to one landing site, this poses problems for utterances in Czech in which not only clitics, but also scrambled XP elements such as temporal adverbs, may intervene between secondary wh-elements.

However, not all accounts of multiple wh-fronting in Czech resort to Focus movement to explain the movement of secondary wh-elements. Sturgeon (2006) proposes a scrambling account for the phenomenon. She analyses wh-movement as A-scrambling to Spec vP (cf. Richards’s (2001) analysis of Serbo-Croatian), allowing the wh-elements to adjoin in any order, after which the highest wh-element is moved into SpecCP to check its wh-feature and the q-feature of C° (pp.6, 9). This proposal accounts for the fact that weak crossover effects do not exhibit in either standard wh-movement or the movement of secondary wh-elements in Czech (Sturgeon, 2008, p.9). She proposes that “the features of the non-initial wh-expressions are checked by C° by Static Agree” (2006, p.9). These elements consequently intervene between the clitics in second position and the lexical verb (p.10). However, they may also be preceded by scrambled XP adjuncts. This is seen in sentences such as:

4) Kde jsi (včera večer) koho (včera večer) komu představila?
   Where aux2SG.CL (last night) whom (last night) who introduced
   ‘Where did you introduce who to whom last night?’

Sturgeon (2006, p.10)

The scrambled AP adjunct may precede or intervene between the secondary wh-elements, but the preferred option is for the adjunct to precede both wh-elements (Sturgeon 2006, p.10n).

Sturgeon not only deviates from the branch of work concerning Focus features, but also accounts for intervening material, both clitics and scrambled XP elements. However, whilst Sturgeon’s scrambling account explains some of the features of Czech wh-fronting, such as the lack of weak crossover effects, she does not explain what it is that motivates scrambling in itself, nor why a generally optional operation like scrambling accounts for the obligatory fronting seen in Czech. She also dispenses with CP in constructions she terms ‘assertions’; that is, simple matrix interrogative clauses, claiming that the first wh-element is wh-moved to SpecIP, to satisfy the EPP as well as checking q- and wh-features. I shall present evidence which supports the existence of CP in all
Czech interrogatives, necessitating an alternative explanation for satisfying the EPP in Czech interrogatives. I propose that wh-elements pass through SpecIP en route to SpecCP, leaving a trace which will satisfy the EPP. This is supported by evidence that wh-movement in Czech shows other features of A-movement, for example lack of weak crossover effects. It is therefore possible that wh-movement in Czech involves two phases; A-movement to SpecIP to satisfy the EPP, then A’-movement to SpecCP to check q- and wh-features.

I will now summarise the defining characteristics of Czech, particularly those which diverge from Serbo-Croatian and how a joint scrambling-focus account could explain these features.

3. Czech data

As both Rudin and Sturgeon have noted, the main two diagnostic features of [-MFS] languages are that they lack Superiority effects and that they are sensitive to wh-islands. Czech shows both of these characteristics, as free word order obtains in (5) and wh-islands block extraction of wh-elements as in (6) because there is only one specifier position in the CP of the lower clause:

5) a. Kdo koho kde viděl, je nejasné.
   Who whom where saw is unclear
   ‘Who saw whom where is unclear.’
   b. Koho kdo kde viděl, je nejasné.
   c. Kde koho kdo viděl, je nejasné.

6) *To je ten, kdo jsem ti řekl, co dělá.
   That is the one who I have told you what (he) does.
   ‘That is the person who I asked you what (he) does.’
   (6) from Rudin (1988, p.460)

However, the defining characteristic of Czech question formation, which distinguishes it and the other [-MFS] languages from Bulgarian and other [+MFS] languages, is that only one wh-element may be wh-moved to SpecCP. This is seen in constructions in which second position clitics intervene between the first and secondary wh-elements:

7) a. Kdo ho kde viděl?
   Who him where saw
   ‘Who saw him where?’
   b. Kde ho kdo viděl?
   Where him who saw

This construction shows that the second wh-element cannot be in SpecCP, as the clitic intervenes, and also that wh-elements do not form a constituent in the way that fronted wh-elements in Bulgarian do. Superiority effects are still absent in the presence of clitics.

The position of the clitic is generally assumed to be the highest projection below CP (Toman, 1999; Lenertová, 2004 and Kučerová, 2005; all cited in Fanselow and Lenertová, 2011, p.171; also Sturgeon, 2006, p.2), as it is also possible to form a question with both a clitic and a complementizer intervening between wh-elements, for example in echo questions:

---

I am indebted to native Czech-speaking friends of friends for volunteering to help me with their judgments, especially Michaela Hejná, Tomas Zelenka, David Antoš, Vladimír Višek, and Rozalie Horka, with help from Dimitar Kazakov.
8) *Kdo že mu co koupil?*
   (Who that CL-he what bought?)
   ‘(Did he actually say) that who bought what for him?’

---

Gruet-Skrabalova (2011, p.4, my English translation)

Where Czech starts to deviate from Serbo-Croatian, however, is that other elements may intervene between wh-elements. As seen in example (4) from Sturgeon (2006), scrambled XP elements can either precede or intervene between secondary wh-elements. Sturgeon uses the example of a temporal adverbial phrase, which marks the edge of vP in Czech (Biskup 2006, p.2n). This suggests that secondary wh-elements move to a position adjoined to vP, which is lower than the adjunction to IP first postulated by Rudin (1988). This relatively low landing site is further supported by evidence that secondary wh-elements may follow, as well as precede, auxiliary verbs:

9) *Kdo (bude) koho (bude) volit?*
   Who will whom will vote-for\text{INF}
   ‘Who will vote for whom?’

Sturgeon (2008, p.10)

In addition to this low position for fronting, the contexts in which this fronting is possible differ between Czech and Serbo-Croatian, thereby indicating the kind of movement that could produce such constructions. Firstly, unlike in Serbo-Croatian, Superiority is lacking in Czech matrix clauses (as in example 5), but also in embedded clauses:

10) a. *Koho si myslíš, že kde kdo potkal?*
    Whom CL think\text{2SG} that where who met
    ‘Whom do you think who met where?’

b. *Koho si myslíš, že kdo kde potkal?*
    Whom CL think\text{2SG} that who where met

Serbo-Croatian exhibits Superiority effects in embedded clauses, prompting Bošković’s suggestion that Superiority occurs when CP is absent. As Superiority is absent in embedded clauses and earlier examples have shown that CP must always be available for interrogative constructions, Bošković’s suggestion cannot account for lack of Superiority effects in Czech.

Furthermore, in simple matrix interrogatives, weak crossover effects are not observed in the movement of the secondary wh-element over an anaphor as new relationships are established:

11) *Kde kterého, chlapce jeho matka vyzvedla?*
    Where which boy his mother picked-up?
    ‘Where was which boy picked up by his mother?’

Sturgeon (2006, p.6)

The data above suggests certain properties of the movement of secondary wh-elements. The absence of weak crossover effects and the fact that the movement is clause-internal suggests that the movement is A-movement, which Sturgeon assumes to be A-scrambling. This is so far an adequate explanation, given the data and the relationships that moved secondary wh-elements enter into. This evidence also supports my proposal that wh-movement in Czech is composed of A-movement to SpecIP and subsequent A’-movement to SpecCP, as elements cannot undergo A-movement after having undergone A’-movement. However, A-movement tends to be motivated by the need to check Case or EPP features, which is not the case in the movement of secondary wh-elements. Furthermore, scrambling is generally considered to be an optional operation which occurs for stylistic or information-based reasons; on which basis Bošković rejected the possibility of a...
thoughts on multiple wh-fronting in Czech scrambling account for wh-fronting in Serbo-Croatian (2002, p.360). In light of these facts, how can a scrambling account be reconciled with the obligatory movement seen in Czech?

I propose that the scrambling of Czech wh-elements to the edge of vP is not straightforwardly A-scrambling. This is because it shows some hallmarks of A’-movement, including the fact that it is motivated by Focus, the feature which renders the movement obligatory. Miyagawa (1997, 2003) argues that Japanese shows signs of obligatory scrambling motivated by feature checking, in particular, the need to check Focus on scrambled elements (1997, pp.21-22), which provides a precedent for such an account.

In terms of evidence for Focus in Czech wh-elements, Stjepanovic argues that wh-questions in Slavic languages such as Serbo-Croatian are inherently focused (1999, p.1). Bošković also notes that D-linked (therefore non-focused) wh-elements in Serbo-Croatian behave differently, as they are allowed to remain in situ in certain discourse contexts (2002, pp.360, 364). Such work suggests that Focus is a major driving force in movement in Slavic languages, and the same appears to hold for Czech. Kučerová (2007) found that A-scrambling in Czech is generally restricted to D-linked, therefore non-focused phrases (cited in Fanselow and Lenertova, 2011, p.189). As such, the proposal that secondary wh-elements in Czech scramble to A’-positions for Focus reasons is analogous to other examples of A’-movement in Czech.

Moreover, the data seems to show that Focus is a defining feature of Czech multiple wh-questions and their interpretations, when compared with the formation of questions which contain given information.

Gruet-Skrabalova (2011) notes that multiple wh-constructions with no prior contextual background are interpreted as having pair-list interpretations:

12) a. Kdo koho pozval na večírek? Who whom invited to party?
   b. Petr pozval Marii, Pavel Alenu a Jan Evu.
      Peter invited Mary, Paul (invited) Elena and John (invited) Eva.
      Gruet-Skrabalova (2011, p.2)

However, single-pair interpretations are available in some multiple-wh constructions which are postulated in a specific context, such as:

13) a. Kdo koho zabil? Who whom killed?
    ‘Who killed whom?’
   b. Kain zabil Abela, (a ne Abel Kaina)
      Cain killed Abel and not Abel Cain.
      Gruet-Skrabalova (2011, p.2)

In addition to the givenness of the information contained within (13), Superiority effects also hold in this kind of contextually-linked construction (Meyer 2002, cited in Gruet-Skrabalova, 2001, p2n) and both wh-elements may front above all other constituents in the utterance, including second position clitics. This is shown in examples such as:

14) a. Kdo si koho váží víc? Who CL whom appreciated more = for every x and for every y, which x appreciated more which y?
In (14a), the wh-elements contain new information and behave as in the other examples provided throughout this essay, as the second position clitic intervenes between the wh-elements. However, in (14b), the wh-elements are given, and both front above the second position clitic, whilst observing Superiority. This suggests that Focus is an inherent part of the movement of secondary wh-elements in Czech, whilst a very different type of wh-fronting is seen in contexts in which Focus is not possible due to the discourse context.

The data in (12–14) also provide evidence for an account for the way in which wh-features are checked on the secondary wh-elements. Sturgeon proposes that they are checked by Static Agree, as they are in a c-command relation with $C^*$, the head which contains the uninterpretable wh-feature. Whilst this solution seems adequate, for the purposes of minimality I instead propose that the wh-elements are checked by movement at LF. This is because the interpretation of Czech multiple wh-questions, unlike other Slavic languages, closely mirrors that of English wh-in-situ questions. Consequently, pair-list interpretations are strongly preferred, except in specific contextual situations. This requires that both wh-elements have matrix scope over the utterance, which is possible if the secondary wh-elements front at LF, similarly to English wh-in-situ. This is unproblematic in matrix multiple wh-constructions; however, as all rules which apply at Spell-Out must also apply at LF, the secondary wh-elements within embedded clauses cannot simply front to SpecCP at LF, as this would violate Subjacency. Instead, Dayal (2002) proposes that the entire wh-complement fronts to SpecCP, as in this English example:

15) a. Which student knows where Mary bought which book?
   b. [[[where Mary bought which book], [which student], $t^j$ knows $t$]]

Dayal (2002, p.516)

As analogous Czech sentences also receive this interpretation², I propose the LF structure seen above is also possible in Czech:

² Single-pair interpretations of this sentence are also reported to be possible, though this may be due to the referential nature of the sentence ([DP jakou knihu] ‘which book’ being more referential than [DP co] ‘what’); note that [DP jakou knihu] does not front, due to its referentiality. Therefore, more information about referentiality and how context affects these interpretations is necessary to put this proposal beyond reproach.
Rudin first asserted that adjunction to SpecCP was available at LF in Czech (1988, p.494). She also tentatively suggested that the difference between English secondary wh-elements being left in situ and the need for wh-elements in [-MFS] languages to front was due to the impossibility in the latter languages to successfully move the wh-elements at LF from A-positions (cited in Dayal, 2006 p.292). This assertion has always been treated as speculative but has never been wholly refuted. However, I have shown the movement of secondary wh-elements in Czech display properties of A’-movement and, with more data to show that Czech secondary wh-elements are in fact moved to A’-positions, her proposal (and mine) could be supported.

4. Conclusion

In summary, I propose that Czech wh-elements scramble from their base-generated positions to adjoin to the edge of vP, from which position only the highest wh-element will undergo wh-movement to SpecCP. This wh-movement consists of A-movement to SpecIP to satisfy the EPP, then A’-movement to SpecCP to check q- and wh-features. Scrambling accounts for the fact that Superiority effects are lacking in Czech, as elements may adjoin in any order. This movement does not cause weak crossover effects to obtain and the movement is constrained within the clause, as is typical of A-movement, but their motivations for movement are closer to those of A’-movement, as movement is obligatory and for focus reasons. This proposal can be schematized in the following tree diagram:
I also postulate that the wh-features of the secondary wh-elements are checked at LF, as Rudin (1988) first suggested, because the interpretation of Czech and English multiple questions pattern together. This movement in matrix interrogatives can be schematized as follows: example (7) is repeated as (18a,d), with corresponding surface order representations in (18b,e) and LF representations in (18c,f):

17) a. Kdo ho kde viděl?
   Who CL-him who saw
   ‘Who saw him where?’

b. \[\text{SpecCP} / kdo, [C\cdot \emptyset], [vp t_i [\_ ho] [vp t_j [vp kde, [vp t_i ... t_j ...]]]]\]

c. \[\text{SpecCP} / [kdo, kde],[c\cdot \emptyset],[ip t_i [\_ ho] [vp t_i ... [vp t_j ...]]]\]

d. Kde ho kdo viděl?
   Where CL-him who saw?

e. \[\text{SpecCP} / kde, [C\cdot \emptyset],[ip t_j [\_ ho] [vp t_j [vp kdo, [vp t_i ... t_j ...]]]]\]

f. \[\text{SpecCP} / [kde, kdo],[c\cdot \emptyset],[ip t_j [\_ ho] [vp t_j [vp t_i ...]]]\]
With more data and judgments, particularly examples of multiple wh-questions involving wh-islands and those involving referential wh-elements, there are a number of areas of this account which would provide fertile material for further study. As well as clarifying the proposal of wh-checking at LF, I would look to determine whether the Focus in Czech wh-elements is contrastive or information Focus. I would also look for a way to definitively unify the A- and A’-features exhibited by the scrambling of secondary wh-elements, with a view to applying this kind of account to other [-MFS] languages in the future.

Acknowledgements

I would like to thank Dr. George Tsoulas for his support and help in preparing this paper for submission.
References


Rebecca Woods
Department of Language and Linguistic Science
University of York
Heslington
York
email: rlw523@york.ac.uk