Multiple wh-movement and Superiority Effects in Czech

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Abstract

This paper examines multiple wh-movement in Czech. Rudin (1988) argues that Czech is a [-Multiply Filled Spec, CP] language in which only one wh-word appears in Spec,CP while the rest are IP-adjoined. It is argued that [-MFS] languages do not exhibit Superiority; however, recent research has shown Superiority to obtain in other [-MFS] languages such as Serbo-Croatian and Russian. I apply this research to Czech data to see if Superiority can be shown to account for the ordering of the multiply fronted wh-words. I conclude by showing that multiple wh-word order in Czech cannot be accounted for solely by the syntax. Rather, it is the complex relationship between syntactic and discoursal factors that determines wh-word order in Czech.

1.0 Introduction

In many Slavic languages such as Czech, Polish, Russian and Bulgarian, all wh-words are moved to clause initial position at S-structure. In an influential 1988 paper, Rudin proposed two distinct, parameterized types based on the landing site of the multiple fronted wh-phrases: [+Multiply filled Spec, CP] and [-Multiply filled Spec, CP]. The two types exhibit systematic differences in regards to clitic placement, wh-islands, wh-extraction and ordering constraints. Czech, along with Polish and Serbo-Croatian, is classified as [-Multiply filled Spec, CP], which means that only one of the wh-words is in Spec of CP while the others are adjoined to IP. The wh-words therefore do not form a constituent. This is contrasted to [+Multiply filled Spec, CP] languages such as Bulgarian and Romanian in which all wh-phrases are in Spec, CP at S-structure. The two types of languages are diametrically opposed with regard to clitic placement, wh-islands, wh-extraction and ordering constraints, which can be accounted for by a parametrized Condition on Spec, CP adjunction prohibiting adjunction at different levels of the grammar.

Under Rudin's theory, only [+MFS] languages are thought to be subject to the Superiority Condition. However, recent research has shown that Superiority also constrains multiple wh-movement under certain conditions in the [-MFS] languages Russian and Serbo-Croatian. An obvious direction of research, then, is to investigate whether Superiority effects can be found in the remaining [-MFS]

languages such as Czech, and whether the Superiority Condition can be argued as a part of the Universal Grammar. With this in mind, this paper will investigate d(iscourse)-linking and its effects on the exhibition of the Superiority Condition in Czech.

In Section 2, I review the Multiply Filled Spec, CP Parameter and its implications for several parameterized language behaviors in multiple wh-fronting languages. Section 3 investigates the behaviors of [-Multiply Filled Spec, CP] languages in general and of Czech specifically. In Section 4 I will discuss the Multiply Filled Spec Parameter in relation to the Superiority Condition. Sections 5 and 6 deal with Bošković's (1997) arguments regarding Superiority Effects in Serbo-Croatian. In Section 7 I will compare Bošković's findings for Superiority in Serbo-Croatian with parallel data in Czech with an eye to seeing if the Superiority findings in Serbo-Croatian hold for the Czech data. Finally, Section 8 discusses d(iscourse)-linked multiple wh-movement and how it can account for the apparent absence of Superiority Effects in Czech.
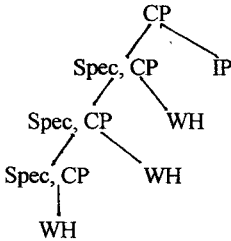
2.0 The Multiply Filled Spec, CP Parameter
According to Rudin, languages allowing multiple wh-fronting at S-structure can be neatly subdivided into two groups based on the landing sites of the multiple fronted wh-phrases. She calls this the Multiply Filled Spec, CP parameter: languages allowing multiple wh-fronting are either [-MFS] and have one wh-phrase in Spec, CP with all others adjoined to IP; or they are [+MFS] and have all wh-phrases in Spec, CP. The corresponding tree structures can be seen, respectively, in (1) and (2):

(1)   [-Multiply Filled Spec, CP] $[_{CP}[_{Spec, CP}$ WH] $[_{IP}$ WH WH....]]

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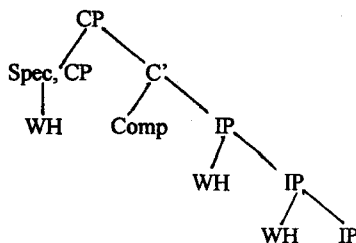
(2)   [+Multiply Filled Spec, CP] $[_{CP}[_{Spec, CP}$ WH WH WH$][_{IP}.....]$

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                    CP
                  /    `
              Spec, CP      IP
                 /  \
           Spec, CP    WH
              /   \
        Spec, CP     WH
            |
           WH
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This assumption that [-MFS] and [+MFS] languages differ in their S-structures allows Rudin to explain systematic differences in behaviors with respect to wh-violations, multiple wh-extraction from a clause, the position of clitics, adverbs and parentheticals within a sentence, and the strictness of ordering of multiple fronted wh-words. The behaviors are summarized in Table 1 below, which neatly demonstrates the clear subdivision of [-MFS] and [+MFS] languages.

Table 1

	[+ MFS] LANGUAGES		[- MFS] LANGUAGES		
	BULGARIAN	ROMANIAN	CZECH	POLISH	SERBO-CROATIAN
WH-island violations	+	+	-	-	-
Multiple WH-extraction from a clause	+	+	-	-	-
free NOM/ ACC word order	-	--	+	+	+
2nd position clitics	-	-	+	+	+
adverbs follow first WH	-	-	+	+	+

Rudin accounts for the differing behaviors of [-MFS] and [+MFS] languages by a Condition on Spec, CP Adjunction:

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(3)   *Condition on Spec, CP Adjunction*
        * [$_{Spec, CP}$ Spec, CP]
        (Nothing may be adjoined to Spec, CP at level X of the grammar)

This condition prohibits adjunction at different levels of the grammar. By positing such a condition, Rudin accounts for the parameter specific behaviors. Since [+MFS] languages permit adjunction to Spec, CP at S-structure, more than one wh-phrase can pass through this position and these languages thus permit wh-island violations and multiple wh-extraction from a clause. In these languages, the placement of clitics and adverbs following the entire wh-series indicates that the wh-words are acting as a constituent. The opposite holds true of [-MFS] languages which prohibit adjunction to Spec of CP and thereby disallow wh-island violations and multiple wh-phrase extraction. The [-MFS] languages place clitics and adverbs following the first wh-word thereby indicating that the words are not acting as a unit. In the next section we will see how Czech fits into the schema of [-MFS] languages.

3.0 Czech as a [-Multiply Filled Spec, CP] language
As noted in Table 1, Czech belongs to the [-MFS] group of languages which have a single wh-phrase in Spec, CP while the rest are adjoined to IP. This S-structure for [-MFS] languages has implications for language behaviors which I will overview in this section.

3.1 Wh-island violations
Given that [+MFS] languages have more than one wh-word in Spec, CP, it is expected that they will not be subject to wh-island constraints since a wh-word is not blocked from moving through the Spec, CP. Conversely, we would expect that [-MFS] languages would have wh-island constraints. This expectation holds true for Czech; neither questioning nor relativization is possible from inside a wh-question as in examples (4a,b):

(4) a. **Kdo** se tě ptal **co** dělá?
        Who   have.3P you asked what does
        'Who did they ask you what he does?

     b. To je ten, **kdo** jsem ti řekl, **co** dělá.
        That is the one who have.1S you told what does
        'That is the person who I asked you what he does.'

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3.2 Multiple wh-extraction from a clause

Because only one wh-phrase can move through or leave a trace in the Spec of CP, [-MFS] languages do not allow multiple wh-extraction from a clause. Czech allows extraction of only one wh-word from a clause. Long distance movement of more than one wh-word from a clause is ungrammatical as in (5b):

(5)   a.   **Kde** si mysĺíš, že budeme spat?
           Where refl   think.2SG   that   will.1PL   sleep
           '**Where** do you think that we will sleep?'

       b.   ***Kde kdy** si mysĺíš, že budeme spat?
           Where when refl think.2SG that will.1PL sleep
           '**Where** do you think we will sleep **when**?'

In sentence (5a), there is only one wh-phrase and the sentence is grammatical; example (5b) has two wh-phrases extracted from a clause and the sentence is ungrammatical. This is a result of the Condition on Spec, CP Adjunction, which disallows adjunction to Spec, CP in [-MFS] languages at S-structure.

3.3. Nominative/Accusative Word Order

Whether a multiple wh-fronting language allows free wh-word order is also related to the posited S-structure for [-MFS] and [+MFS] languages. In [+MFS] languages, the order of the fronted wh-words is relatively fixed, which is argued as a function of the Superiority Condition. In [-MFS] languages however, the word order is relatively free. All three of the Czech examples below are fully grammatical; in a [+MFS] language we would expect only a nominative/ accusative word order as in (6a) to be grammatical.

(6)   a.   **Kdo kdy koho** pozval, nevím.
           Who when whom invited   not-know.1SG
           '**Who** invited **whom when**, I don't know.'

       b.   **Kdy kdo koho** pozval, nevím.
           When who whom invited   not-know.1SG

       c.   **Koho kdy kdo** pozval, nevím
           whom when who invited   not-know.1SG

The difference in rigidity of word order can be attributed to the structural properties of [-MFS] and [+MFS] languages.

3.4 Clitic position

Clitic positions in [-MFS] and[+MFS] languages provide evidence for constituent patterns. In [+MFS] languages, a clitic is placed after the entire sequence of wh-words -- it may not break up the series. In contrast, [-MFS] languages obligatorily place the clitic after the first wh-word. This can be related to their respective S-structures, in that [+MFS] languages place all wh-words in Spec, CP to form a constituent, while in [-MFS] languages the wh-words are not a constituent with only one wh-word in Spec, CP and the others adjoined to IP. Czech is especially rigid -- clitics always follow the first major constituent of the clause:

(7)   a.   Komu   **ho** kdy dali,   nikdo   neví.
            To whom him when gave.3P   nobody knows
            'Nobody knows when they gave him to whom.'

        b.   *Komu kdy **ho** dali,   nikdo   neví.
            To whom when him gave.3P   nobody knows

That clitics obligatorily follow the first wh-word as in (7a) supports the idea that the first wh-word forms a separate constituent and is alone in Spec, CP.

4.0 The Multiply Filled Spec Parameter and Superiority

The original claim made by Rudin regarding the Multiply Filled Spec Parameter and the Superiority Condition was that only [+MFS] languages are subject to the Superiority Condition. Adjunction to Spec, CP in [+MFS] is rightwards so that ordering of fronted WH-phrases follows from Superiority. In contrast, free ordering of wh-words in [-MFS] languages appears to indicate that they are exempt from Superiority. Chomsky's 1973 formulation of the Superiority Condition states that:

(8)   *The Superiority Condition*
        (a). No rule can involve X, Y in the structure
            ... X ... [...Z ... WYV...]...
            where the rule applies ambiguously to Z and Y,
            and Z is superior to Y.

(b) the category A is 'superior' to category B if every major category dominating A dominates B as well but not conversely.

If the Superiority Condition were to hold in [-MFS] languages, then we would expect to find the first wh-phrase has moved to Spec, CP in multiple fronted wh-questions; where this does not occur the sentence should be ungrammatical. As we can see in from the Polish examples below this does not obtain:

(9)   a.   **Kogo**   **komu**   przedstawiłes?
             Who   *to whom*   *introduced.2S*
             'Who did you introduce to whom?'

       b.   **Komu**   **kogo** przedstawiłes?
             To whom   *who*   *introduced.2S*

In example (9b) the direct object wh-phrase has moved to Spec, CP before the subject wh-phrase. Under the Superiority Condition, this example would be predicted to be ungrammatical. That it is not indicates that the Superiority Condition does not apply.

Upon closer investigation of Rudin's claims, Bošković (1997) argued that wh-word order in Serbo-Croatian (a [-MFS] language) is subject to ordering constraints under certain conditions. These conditions were not examined by Rudin. Karpacheva (1997) has also indicated Superiority effects for Russian, a [-MFS] language. In the next sections, I will examine Bošković's findings for Serbo-Croatian and then compare the findings to Czech data to see if Superiority can be shown to obtain in Czech as well.

5.0 Superiority Effects in Serbo-Croatian
In his 1997 paper entitled "Superiority effects with multiple wh-fronting in Serbo-Croatian", Bošković argues that Serbo-Croatian does in fact show ordering constraints of multiple fronted wh-words in certain contexts not discussed by Rudin. He holds that these ordering constraints are due to the Superiority Condition. Bošković further argues that because the Superiority Condition follows from Principles of Economy, it should not be a candidate for cross-linguistic variation. It is therefore desirable to show that Superiority Effects do obtain in [-MFS] languages, contrary to Rudin's claims. In the following

sections, I review the data that led Bošković to argue that Superiority does apply in Serbo-Croatian. Later sections will apply the analysis to Czech.

5.1 Long-distance wh-extraction

Upon examination of the data used in Rudin (1998b), Bošković found that the arguments for Serbo-Croatian and Superiority held with respect to constructions involving multiple short distance extraction of wh-words, but not for multiple long distance extraction of wh-words. That is, Rudin examined short-distance wh-extraction and found that word ordering was free in these constructions indicating no Superiority effects. Her data did not include long distance extractions. It is in these constructions that Bošković finds restricted word order and evidence for Superiority:

(10) a. **Ko** si **koga** tvrdio da je istukao?
          Who *are* *whom* *claimed* *that* *is* *beaten*
          'Who did you claim beat **whom**?'

      b. ***Koga** si **ko** tvrdio da je istukao?

Examples (10 a,b) parallel the [+MFS] languages which have relatively restricted word order and are subject to Superiority. In (10a) the subject wh-phrase undergoes movement while the object adjoins to IP and the sentence is grammatical. In ungrammatical (10b) the reverse holds: the object wh-phrase has undergone movement and the subject has adjoined to IP. Superiority effects are exhibited.

5.2 Correlative Questions and the Superiority Condition

A second construction noted by Bošković in which superiority applies in Serbo-Croatian is in embedded questions, specifically in correlative constructions.[1] Bošković shows that the ordering of wh-words in correlative constructions is not free, thus indicating a Superiority effect as seen in the examples below:

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[1] Bošković examines correlative constructions rather than embedded questions as the latter may have an adsentential + root clause analysis and thus no definite conclusions could be drawn. For his purposes, correlative constructions have all the formal properties of questions.

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(11) a. **[Ko koga** voli], taj o njemu govori.
    Who whom loves that-one about him talks
    'Everyone talks about the person they love.'

  b. *[**Koga ko** voli], taj o njemu govori.

Again we see that in certain constructions ordering and therefore Superiority can be shown to apply in Serbo-Croatian. The question remains, however, as to why it should apply only in long distance questions and correlative questions, but not in short-distance matrix questions. The next section examines Bošković's account of the Superiority facts in Serbo-Croatian by comparison with peculiarities in French wh-movement.

6.0 Wh-movement in French and Superiority Effects in Serbo-Croatian
To account for the division in Superiority Effects in Serbo-Croatian, Bošković compared his findings to a similar phenomenon in French. He noted that where Serbo-Croatian does not show Superiority Effects, wh-movement is optional in French. Recall that in Serbo-Croatian short distance matrix questions, wh-word order is free and Superiority does not apply. In French, overt wh-movement need not take place in short distance matrix questions as we see in (12):

(12) a. Tu as vendu quoi?
    You have sold what
    'What did you sell?'

Conversely, where Superiority Effects apply in Serbo-Croatian, wh-movement in French is obligatory. Where a finite clause boundary separates the base generated wh-position from the landing site, movement must take place in French:

(13) a. *Jean et Marie croient que Pierre a embrassé qui?
    John and Mary believe that Peter has kissed who
    'Who do John and Mary believe that Peter has kissed?'

  b. Qui Jean et Marie croient-ils que Pierre a embrassé?

As in Serbo-Croatian, movement must take place in French in embedded questions for the sentence to be grammatical:

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(14) a. *Pierre a demandé tu as embrassé qui.
          Peter   has asked   you have kissed   who
          'Peter asked who you kissed.'
      b. Pierre a demandé qui tu as embrassé.

In (13) and (14), wh-movement must take place in French; these examples
parallel the contexts in Serbo-Croatian in which Superiority Effects hold.

Under Rudin's analysis, in [-MFS] languages such as Serbo-Croatian the first wh-
phrase is located in Spec, CP while the other wh-words are adjoined to IP.
Bošković argues that in short distance matrix questions in Serbo-Croatian (where
Superiority does not seem to apply), no wh-phrase moves to Spec, CP and that all
preposed wh-phrases are adjoined to IP. The difference between French and
Serbo-Croatian short distance matrix questions is that in Serbo-Croatian the wh-
phrases must still move overtly; in French they need not do so. The unusual
Superiority effects in Serbo-Croatian can be schematized as follows:

i.   long distance extraction and embedded questions exhibit Superiority effects
     because they involve wh-movement
ii. short distance extraction questions do not exhibit Superiority effects with wh-
     movement because they do not involve wh-movement

7.0 Czech and Serbo-Croatian
In light of recent research showing Superiority effects in other [-MFS] languages
such as Serbo-Croatian and Russian, it would be interesting to see if these
findings can be found for the remaining [-MFS] languages, specifically Czech.
To this end, I compared the Serbo-Croatian data used by Bošković with their
Czech counterparts. In the following sections I discuss relevant Czech data,
followed by an analysis and possible explanation.

7.1 Long distance extraction in Czech[2]
As seen in Section (3.2), in long distance wh-movement only one wh-word may
be fronted. Further, Czech differs from other [-MFS] languages in that only
Czech permits extraction from tensed clauses. Under the Superiority Condition,
we would predict that only those sentences in which the Subject is fronted to

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[2] I thank Radan Novák for providing native speaker judgements.

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Spec, CP while the object remains in-situ should be grammatical. Examples (15a,b) show that this is not so:

(15)   a.   **Kdo,** si   myslíš,   že   **na**   **koho**   čekal?
            Who   refl   think.2SG   that   for   whom   waiting.past
            'Who do you think was waiting for whom?'

       b.   **Na**   **koho** si   myslíš,   ze   **kdo**   čekal?

In example (15a) the subject wh-word is fronted to Spec, CP and the sentence is grammatical. However, in (15b), the object wh-word has fronted – thus violating Superiority – yet the sentence is grammatical. As we saw in Section 2, [-MFS] languages front one wh-word to Spec, CP and the rest are adjoined to IP.

This relatively free word order also applies between a subject and an adjunct. Under Superiority, we would predict that Subject movement should take place before adjunct movement. As we see in (16), this does not hold in Czech:

(16)   a.   **Kdo** si   myslíš,   že   odešli   **kdy**?
            Who   refl   think.2SG   that   left   when
            'Who do you think left when?'

       b.   **Kdy** si myslíš, že odešli **kdo**?

Either the subject wh-word or the adjunct wh-word may be fronted; both constructions are grammatical. In the following section I discuss Correlative questions in Czech. [3]

7.2 Correlative Questions
Recall from the Serbo-Croatian data in Section 5.2 that correlative questions in Serbo-Croatian do exhibit Superiority Effects. This does not, however, appear to be the case in Czech:

(17)   a.   **Kdo** si   **koho** bojí,   tak   o   něm mluví.
            Who refl   whom afraid.3SG that about   him speak.3SG
            'Everyone talks about the person they are afraid of.'

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[3] I analyzed correlative constructions to keep the Czech data in line with the Serbo-Croatian used by Bošković. Embedded questions could also be used for this purpose.

b.   **Koho** si **kdo** bojí, tak o něm mluví.

The examples in (17a,b) are both grammatical regardless of whether a Subject or an Object wh-word is first fronted. Czech permits free wh-word order in correlative constructions.

I conclude then, that Czech does not appear to pattern like Serbo-Croatian with respect to the Superiority Condition either in long-distance wh-extraction or correlative questions. Neither is Czech subject to Superiority constraints in the short distance matrix clauses originally analyzed by Rudin. The question remains – is Czech subject to Superiority effects in any configuration? In the following sections I discuss discourse-linked (d-linked) readings to see if they can account for the Czech facts.

8.0 Discourse-linked wh-movement

My analysis of multiple wh-movement thus far has concentrated solely on wh-word ordering as determined by the syntax. However, evidence shows that word order can be determined by non-syntactic factors as well, specifically discourse functions. In some cases, discourse may be the only factor determining word order. Wachowicz (1974) mentions studies by the linguists of the Prague school regarding apparent free word order in multiple wh-word fronting languages. She states:

(18)   A change in the word order often involves a change in the meaning of the sentence, that is, different orders are used in different contexts.

This observation concerning d-linked determination of word order has been made for multiple wh-moving languages by, among others, Wachowicz (1974), Pesetsky (1987) and Cheng (1991).

8.1 Clarifying Questions in Polish

Wachowicz discusses a phenomenon in Polish (also a [-MFS] language), which she calls clarifying, whereby only one wh-word moves to the beginning of a clause and the other remains in-situ (as opposed to the normal pattern in Polish where all wh-words are fronted). These clarifying questions cannot be interpreted as requests for information, rather, their function is to clarify a statement already present in the discourse. She gives as an example the question in (19):

(19) W koncu, **kto** **robi** **co?**
      finally, *who* *does* *what*
      'Finally, who's doing what?'   (Wachowicz 1974)

In this marked word order, the speaker is asking for clarification in a pairing situation where each person is assigned one task from several. The speaker would like to clarify exactly who will be doing which task. Syntactically it is assumed that non d-linked wh-words move to an A-bar position at S-structure. D-linked wh-words need not move.

8.2 Which phrases

According to Pesetsky (1997), *which* phrases are. inherently d-linked. Furthermore, *which* phrases do not show Superiority because no movement takes place. This is illustrated by the following examples from English:

(20) a. *Which man*$_i$ did you persuade e$_i$ to read *which book?*
      b. *Which book*$_j$ did you persuade *which man* to read e$_j$?

(21) a. Mary asked *which man*$_i$ e$_i$ read *which book.*
      b. Mary asked *which book*$_j$ *which man* read e$_j$.

In English, we would expect the (b) examples to be ungrammatical as they have fronted the object wh-phrase rather than the subject wh-phrase. In examples (20) and (21), both the (a) and (b) sentences are grammatical because they involve *which*-phrases which are not subject to Superiority. Either the subject or the object *which* phrase can move. Pesetsky argues that *which*-phrases are discourse-linked, while unmarked occurrences of *who* and *what* are not discourse linked. With *which*-phrases, the range of possible answers is restricted to a specific set that both the speaker and the hearer are aware of. In the multiple *which*-questions of (20) and (21), the range of answers is restricted to an assumed set of men and an assumed set of books previously established in the discourse. Without this context, the question is odd. This context linking is absent in *who* or *what* questions. We may ask someone *what book did you read* without having a particular set of books in mind: the wh-phrase is not d-linked. Non d-linked phrases undergo A-bar movement and are subject to the Superiority Condition.

In Czech, we find that if a question contains more than one *which* phrase it sounds better if only one of the *which* phrases has been fronted as in (22):

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(22) a.   **Která holka** koupila   **kterou knížku?**
          which girl   bought.3SGF which   book

     b.   **Kterou knížku koupila která holka?**

Either the subject or the object *which* phrase can be moved; both sentences are acceptable. Superiority does not apply. However, fronting both *which* phrases is questionable at best regardless of whether the subject or object *which*-phrase is fronted first :

(23) a.   ?**Která holka kterou knížku koupila?**
          Which girl   which book   bought.3SGF

     b.   ?**Kterou knížku která holka koupila?**

Pesetsky further argues that, if we can force a d-linked reading onto normally non d-linked wh-phrases such as *who* or *what*, we should expect Superiority effects to disappear. In support of this argument he offers the example in (24):

(24)   I know that we need to install transistor A, transistor B, and transistor C,
       and I know that these three holes are for transistors, but I'll be damned if I
       can figure out from the instructions where what goes!

In certain d-linked contexts, the adjunct phrase may move before the subject phrase and yet the sentence is fully grammatical. Superiority disappears if we force a d-linked reading on the wh-phrases. Only d-linked wh-words may move into the Topic position so that *which*-phrases can be topics, while *who* or *what* can be topics if forced by the context.[4] (Erteschik-Shir, 1998 lecture)

The claim here is that non d-linked wh-phrases are assigned scope by movement at LF, while d-linked in-situ wh-phrases are assigned scope without movement. Scope of d-linked wh-phrases is assigned by unselective binding (following Heim's system of scope assignment to indefinite NPs). Unselective binders may bind more than one variable. Pesetsky is unclear as to why there should be a link between indefinites and d-linked wh-phrases. However, in her 1991 dissertation Cheng makes a coherent, convincing argument for wh-words as indefinite NPs.

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[4] It would be interesting and informative to look at the data from Focus Structure Program perspective, however, it is beyond the scope of this paper.

In the next section I will briefly summarize her analysis; however, a detailed review is far beyond the scope of this paper.

8.3 Wh-words and indefinites

Cheng argues that bare wh-words in multiple fronting wh-languages such as Czech are similar to indefinites in that they lack inherent quantificational force. This relation is clearly illustrated by the fact that the bare wh-words in multiple wh-fronting languages are used to form indefinite NPs by attaching a particle. Below is the paradigm for Czech:

Table 2
Czech Wh-words /Indefinite NP paradigm

kdo	*who*	někdo	*someone*
kde	*where*	někde	*somewhere*
kdy	*when*	někdy	*sometime*
jaký	*what sort of*	nějaký	*some sort of*

In Czech, the prefix ně- is attached to the bare wh-word to form an indefinite NP. Cheng's analysis is that the interrogative force of the bare wh-words in these languages is determined by a null determiner $[_D\emptyset_{[+wh]}]$, which needs to be licensed by a feature matching with a [+wh] at S-structure, thus accounting for their movement. The variable introduced by the wh-words must be bound by other elements in the sentence and can thus vary with context. Following Pesetsky, Cheng argues that d-linked wh-phrases are not quantifiers; they do not therefore move to A-bar position.[5] In d-linked wh-phrases only what Cheng calls the *core* is present. This *core* lacks inherent quantificational force. When the non-quantificational *core* appears, we have a d-linked reading of the wh-word. Keeping in mind the argument that only A-bar positions are subject to Superiority effects, it then follows that d-linked wh-phrases are not subject to Superiority because they are not in A-bar positions.

If we argue that wh-words must be in Spec, CP to be d-linked (other than *which*, which is inherently d-linked), we can assume that the wh-word in Spec, CP at S-Structure is d-linked and can be any one of the multiply fronted wh-words depending on the intention of the speaker. (This was intuitively captured by my native speaker informants, who often mentioned that their choice of word order

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[5] Cheng proposes a post LF level at which d-linked wh-phrases move. I will not discuss this here.

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was determined by what they wanted to emphasize or question.) The other wh-words adjoin to IP in [-MFS] languages such as Czech as stated by Rudin. The fact that Czech can front wh-words in any order simply indicates that Superiority constrains movement to Spec, but not adjunction. In [-MFS] languages wh-movement is adjunction to IP and may bé A-movement if it is sufficiently local as in the short distance matrix questions analyzed by Rudin. Lack of Superiority Effects for short distance movement follows. Further research is need on the intricate relationship between syntactic and discoursal factors in determining wh-word order in multiple wh-fronting languages.

9.0 Conclusion

In this paper I have discussed multiple wh-fronting in Czech. The first part of my analysis was based on Rudin's division of multiply wh-fronting languages into two distinct, parameterized types based on the landing site of the multiple fronted wh-phrases, and the classification of Czech as a [-Multiply Filled Spec, CP] language. I then discussed Bošković's findings for another [-MFS] language, Serbo-Croatian, and his argument that Superiority effects are exhibited in certain constructions not examined by Rudin. From this, I analysed parallel Czech data; Superiority was not found to hold in the same constructions as Bošković argued for Serbo-Croatian. This does not, however, mean that Superiority is not a factor in Czech. If we assume that the word order can be influenced by non-syntactic factors such as discourse functions, it is found that Superiority disappears if we assume a d-linked reading on the wh-phrases. The Superiority Condition therefore applies only to non d-linked wh-words. In those constructions which are d-linked, we would not expect to find Superiority exhibited. Further research is needed on the complex relationship between syntactic and non-syntactic factors affecting wh-movement in both [+MFS] and [-MFS] languages.

References

Bošković, Z. 1997a. Superiority effects with multiple WH-fronting in
    Serbo-Croatian. Lingua 102: 1-20.
Bošković, Z. 1997b. On certain violations of the superiority condition,
    AgrO, and economy of derivation. Journal of Linguistics 33:227-254.
Cheng, L. 1991. *On the Typology of Wh-Questions*. Doctoral Dissertation,
    MIT, Cambridge, Mass.

Comorovski, I. 1986. Multiple WH-movements in Romanian. Linguistic
    Inquiry 17: 171-177.
Comrie, B and G.G Corbett, eds. 1993. The Slavonic Languages. London:
    Routledge.
Erteschik-Shir, N. 1998. Focus Structure – The Program. Paper presented at the
    University of Calgary Donut Seminars Lecture Series, Nov. 1998.
Hornstein, Norbert. 1995. Logical Form: From GB to Minimalism.
    Cambridge: Blackwell Publishers.
Lasnik, H and M. Saito. 1984.On the nature of proper government.
    Linguistic Inquiry 15: 235-289.
Karpacheva, O. 1998. On Superiority Effects in Russian. Calgary
    Working Papers in Linguistics 20: 29-48.
Melichar, J and Styblík, V. 1974. Český Jazyk. Praha: Státní Pedagogické
    Nakladatelství.
Pesetsky, D. 1987. WH in-situ: Movement and unselective binding. In
    The representation of (in)definiteness, ed. E. Reuland and A.G.B.
    ter Meulen, 98-129. Cambridge, Mass.: MIT Press.
Rudin, C. 1988a. Multiple questions in South Slavic, West Slavic, and
    Romanian. Slavic and East European Journal 32:1-24.
Rudin, C. 1988b. On Multiple questions and multiple WH-fronting.
    Natural Language and Linguistic Theory 6: 455-501.
Toman, J. 1981. Aspects of Multiple WH-movement. In Levels of
    Syntactic Representation, ed. R. May and J. Koster, 293-302.
    Dordrecht: Foris.
Wachowicz, K. 1974. Against the universality of a single WH-question
    movement. Foundations of Language 11: 155-166.

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