ON D-LINKING IN BULGARIAN MULTIPLE WH-QUESTION [*]

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1. Multiple wh-orders in Bulgarian

As is by now well-known, Bulgarian is a multiple wh-fronting language in which all wh-phrases must move overtly to the interrogative Spec,CP, as opposed to single wh-fronting languages, like English, in which only one wh-phrase fronts, while the second one stays in situ. This difference is illustrated in (1).

(1) a. Koj kakvo vidja?
       who what saw
   b. Who saw what?

Work by Rudin (1988), and later by Bošković (1997a/b, 1998a/b 1999, 2002), (cf. also Billings and Rudin 1996; Richards 1997, 2001; Lambova 2000, 2001; Penchev 1998, 1999; Tisheva 2000; Krapova & Cinque to appear, a.o.) has established that Bulgarian is special among the other Slavic multiple fronting languages (the rest of Slavic) in that it enforces a strict ordering between the fronted wh-phrases, such that wh-Subjects (*koj*) must precede all kinds of wh-Objects (*kakvo, kogo*), wh-Direct objects (*kogo*) must precede wh-Indirect objects (*na kogo*), wh-arguments must precede wh-adjuncts, etc. These ordering restrictions have been captured by the syntactic Condition of "Superiority," originally formulated by Chomsky in 1973 for English, according to which the structurally higher (i.e. the "superior") wh-phrase must move to the front of the sentence before the structurally lower (i.e. "inferior") phrase (which in English remains in situ, as seen in (1b)).

The correct orders in (2) below contrast with the reverse orders in (3), whose ungrammaticality can therefore be seen as a Superiority violation: failure to move the wh-phrase(s) in the right order leads to ungrammaticality. Superiority effects hold for English, as the comparable data in (4) show:

(2) a. Koj koga e došal?   (Penchev 1999, ex. 17)   Subject > (temporal) adverb
        who when has come   'Who has come when?'
    b. **Koga zašto** idvaš?   (Penchev 1999, ex. 18)   Temporal adv. > causal adv.
        when why come-you   lit. 'When why do you come'
    c. Ne znam **koga zašto** e tuk. (Penchev 1999, ex. 14)   Temporal adv. > causal adv
(embedded question)[1]
        not know when why is here lit. 'I don't know when why he is here'
(3) a. *Kakvo koj vidja?   Bulgarian
        what who saw
    b. *Koga koj e došal?
        when who has come
    c. *Zašto koga idvašh?
        why when come-you

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[1] Penchev (1998, 164; 1999) correctly notes that there are fewer restrictions in embedded than in matrix questions in Bulgarian.

(4) a. Who saw whom? vs. *Whom did who see?   English
    b. Who came when? vs.   *When did who come?
    c. Who kissed Mary where? vs. *Where did who kiss Mary?

Bošković (1997b, 1998a, 1999, 2000) develops a complex explanation for Multiple Wh-Fronting (MWF) languages like Bulgarian, as opposed to the other Slavic languages where no strict ordering seems to be required among the fronted wh-phrases. In Bošković's theory, Superiority effects are captured through the Minimalist notion of Attract Closest, itself a reformulation of the Economy Condition (cf. Chomsky 1995): Wh-movement is driven by the need to check the wh-feature (of the overtly inserted C) in the most economical way. This forces the highest wh-phrase to move to Spec,CP, in order to agree with the head C containing the feature [wh].[2] Thus, Attract closest which is a requirement on the attractor (i.e. C) not only ensures that the feature be checked in the most economical way, but also restricts severely the surface ordering between the wh-phrases.

2. D-linked wh-phrases in Bulgarian
In a subset of multiple wh-questions the Superiority Condition is not respected, as can be judged by the apparently free ordering of the wh-phrases among each other. Thus, alongside (5a) from Bulgarian and (6a) from English, one also finds (5b) and (6b) where the order is reversed but the sentences are nevertheless grammatical: [3]

(5) a. Koe momiče koja kniga e kupil?   Subject > Object
       which girl   which book has bought
    b. Koja kniga koe momiče e kupilo?[4]   Object > Subject
       which book which girl has bought
(6) a. Which person bought which book?   (Pesetsky 2000, 16. ex. (31))
    b. Which book did which person buy?

The idea that these apparent violations of Superiority are related to properties of discourse was first explored in Pesetsky (1987) for English. Building on Bolinger (1978), Pesetsky proposes that *which*-phrases are D(iscourse)-linked, in the sense that the range of felicitous answers to a question, containing a *which*-phrase, has to be drawn from a set of referents already established in previous discourse. According to Pesetsky, D-linked phrases (in English) do not need to move to a designated interrogative position (i.e. Spec,CP) at LF and instead are interpreted in situ via a mechanism called "unselective binding" – they get bound by an empty Q operator, which links them to discourse.[5]

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[2] After the wh feature has been checked as a result of the Spec, head agreement, the second wh-phrase moves overtly in a second step, but its movement is of a different type: focus movement (cf. Boškovic 1998b, 1999, 2002).

[3] Note that all questions in (5)/(6) have a true question reading. They can also have an echo question reading, but this will be irrelevant for our discussion here and further in the text.

[4] It seems that the choice of order is dictated by pragmatic factors such as contextual saliency and Topic prominence (cf. also Comorovski 1996:2). As discussed in Comorovski (1996, 111ff), the minimal felicity condition on questions containing a D-linked phrase is that the speaker and the hearer should be able to partition the set identically, according to some common classificatory criterion.

[5] In a more recent discussion related to the second question, Pesetsky (2000) has argued that unlike non-D-linked phrases, which move to a multiple specifier C, D-linked phrases move to a different C with a single specifier (Pesetsky 2000).

The absence of Superiority violations in a MWF language like Bulgarian poses interesting questions for any theory of multiple wh-movement. In particular, the following two questions are relevant: 1) What is responsible for the apparent cancellation of Superiority effects under D-linking?; 2) Which position do D-linked wh-phrases target?; 3) How is interpretation affected by D-linking?

Surprisingly little attention has been paid to D-linking in Bulgarian and to its interaction with wh-movement of the non-D-linked type. Although the phenomenon has been noted (cf. in particular Richards 1997, 2001, Grohmann 1998, 2002, Citko and Grohmann 2001, Jaeger 2004), a full account of D-linked questions is missing. Naturally, in this short paper we cannot give an answer to the above questions, and will only attempt to give a few indications of the relative position of D-linked phrases w.r.t other types of wh-phrases, as well as among each other. The reader is referred to the full version of the paper for a more comprehensive presentation of the relevant issues (Krapova 2002b). The overall idea, also presented in Krapova and Cinque (to appear) is that there are more than one CP position, which attract different types of wh-phrases, depending on the latter's structural make up and interpretation. D-linked phrases in Bulgarian target a CP position higher than the one targeted by non-D-linked, i.e. bare wh-phrases, as can be seen by their distribution and interpretation (question 2). Thus, lack of Superiority (question 1) follows from the simple fact that the wh-phrase does not target the position where the [wh] feature is located/checked.

3. On the relative order of D-linked and non-D-linked wh-phrases
Let us first look at the possible orders between D-linked and non-D-linked wh-phrases. Adopting the overall approach of Bošković (1997b, 1999, 2002), we take for a fact that non-D-linked, i.e. bare wh-phrases (*koj* 'who', *kogo* 'whom', *kakvo* 'what', *koga* 'when', *kăde* 'where', etc.) move to Spec,CP. This will serve as a diagnostics for establishing the relative height of the D-linked wh-phrases, given their linear orderings with respect to the bare wh-phrases.

We start by noting that Bulgarian D-linked wh-phrases can show up in two forms: a full *which*-phrase (e.g. *koj student* 'which student'; *koja kniga* 'which book'; *koe săbitie* 'which event') and a reduced (elliptical) form in which the head noun is missing but is understood implicitly from the previous context (cf. (7)). The orders in (7) appear strict: in (7a) the D-linked subject must precede the locative wh-adverb; in (7b) the D-linked object must precede the temporal adverb, and in (7c) the D-linked direct object must precede the manner wh-adverb *kak*:

(7) a. Koj (student) kăde otiva?   a.' *Kăde koe (student) otiva?
     which (student) where goes   where which (student) goes
     'Which (student) goes where?'
  b. Koja (kniga) koga si kupil?   b'. ???Koga koja (kniga) si kupil?[6]
     which (book) where have-you put   where which (book) have-you put
     'Which (book) have you bought when?'

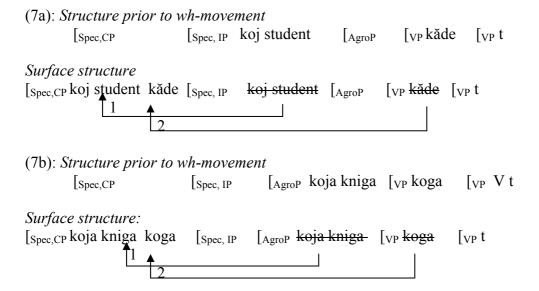[6] Some speakers find this sentence highly marginal but not entirely excluded which is why it is marked with ??? rather than with a * (complete ungrammaticality).

c. Koe (săbitie) kak ocenjavaš   c.' *Kak koe (săbitie) ocenjavaš
   which (event) how evaluate-you   how which (event) evaluate-you
   po značenie?   po značenie?
   in importance   in importance
(literally) 'Which (event) do you evaluate for [its] importance how?'

The question now is: do the orders in (7a,b,c) obey Superiority and Attract Closest? One possible answer is that they do, given the ungrammaticality of the reverse orders (7a', 7b', 7c'). Here is why. If, as assumed above, the surface position occupied by the *which* phrase is Spec,CP, we can suppose that prior to wh-movement the *which* phrase has occupied a position which was higher than the position occupied by the wh-adverb – presumably VP adjoined or lower than AgroP (cf. Boškovic 1997b). This is shown by the first structures for (7a) and (7b):

(7a): *Structure prior to wh-movement*
     [Spec,CP   [Spec, IP koj student   [AgroP   [VP kăde   [VP t

Surface structure
[Spec,CP koj student kăde [Spec, IP ~~koj student~~ [AgroP   [VP ~~kăde~~ [VP t

(7b): *Structure prior to wh-movement*
     [Spec,CP   [Spec, IP   [AgroP koja kniga [VP koga   [VP V t

Surface structure:
[Spec,CP koja kniga koga   [Spec, IP   [AgroP ~~koja kniga~~ [VP ~~koga~~ [VP t

Given that precisely the intermediate positions (rather than the Merge positions inside VP) are relevant for Superiority, we see that Spec,IP in (7a) is closer to Spec,CP, and Spec,AgroP in (7b) is closer to Spec,CP than the VP adjoined adverbs *koga* and *kăde*, respectively. Therefore, it seems that the grammatical orders in (7) are correctly accounted for by Attract Closest. Naturally, the ungrammatical orders of (7) will be ruled out as a violation of Attract Closest, and hence, as a violation of Superiority. Thus, it seems that Superiority is operative in D-linked wh-questions as well.

An account along these lines runs into problems in the face of data like (8) where a D-linked wh-object precedes a non-D-linked wh-object:

(8)a. Koe (stixotvorenie) na kogo šte posvetiš?
    which (poem) to whom will dedicate-you
    'Which poem will you dedicate to whom?'
  b. ??Na kogo koe (stixotvorenie šte posvetiš?[7]
      to whom which (poem) will dedicate-you

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[7] The sentence is not entirely ungrammatical because of the general availability of a D-linked reading for *na kogo* (i.e. the speaker has in mind a particular group of people whom he wishes to dedicate a poem). Nevertheless, the native speakers I consulted find a strong contrast between (8a) and (8b).

The linear restriction illustrated in (8) is unexpected under whatever version of Superiority. As shown convincingly by Boškovic (1997b), prior to wh-movement, the indirect object *na kogo* is located in a higher AgroP than that of the direct object *koe* (*stixotvorenie*). Given that this position is closer to Spec,CP, *na kogo* is expected to appear first in the linear order (by Attract Closest), contrary to fact. Obviously then, the correct order (D-linked > non-D-linked) shows a D-linking effect rather than a Superiority effect.

This conclusion is supported by (9a&b), which contains the phrases *kakvo* (*stixotvorenie*) instead of *koe* (*stixotvorenie*). As a result, the order of (8a) is no longer available, as seen by (9a). Instead, we find the opposite order as the only one available, cf. (9b). Another similar example is provided by (10b/b') taken from Boškovic 1997b, his ex. (20a/b):

(9) a. ?*Kakvo (stixotvorenie) na kogo šte posvetiš?
     what (peom)   to whom will dedicate-you
   b. Na kogo kakvo (stixotvorenie) šte posvetiš?
      to whom what (poem) will dedicate-you
      'Which poem will you dedicate to whom?'
(10) a. Koe kogo si pital?   b. [CP Kogo kakvo [C' e pital Ivan]]?
      which whom have-you asked   whom what   is asked Ivan
      (literally) 'Which have you asked whom?'   'Who did Ivan ask what?'
    a'. *Kogo koe si pital?   b' ?*[CP Kakvo kogo [C' e pital Ivan]]
        which whom have-you asked   what whom is asked Ivan

To summarize, direct wh-objects are split in their ordering: *kakvo* phrases[8] occur low, respecting Superioroty, *koe* phrases occur high, in apparent violation of Superiority:

(11)   *koe* (stixotvorenie) > *na kogo/kogo* > *kakvo* (stixotvorenie).

The cancellation of Superiority effects under D-linking makes plausible the assumption that D-linked phrases target a different position than Spec,CP. On the other hand, given that D-linking is not available just anywhere but only in the string initial position (cf. (7), (8a), (10a) above), it must be the case that the latter is structurally higher than CP (or corresponds to a higher CP position in the Split CP framework of Rizzi (1997)).

That these preliminary conclusions seem to be the on the right track is additionally confirmed by the data in (12) which contain the two wh-phrases *koe* and *kakvo* both of which are morphologically case-less and thus can in principle receive either a subject or an object reading:

(12) a. Koe **kakvo** pričinjava?
        which what causes
        'Which causes what'
    b. *Kakvo koe pričinjava?
        what which causes

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[8] Phrases containing *kakvo* typically have a property reading ('what type of') and may not have a set reading, i.e. they may not refer to members of a previously introduced or salient set of objects. This is probably the reason why it is difficult to D-link *kakvo*.

The possible order (12a) has a single interpretation in which *koe* is the Wh-subject and *kakvo* the Wh-object. At first sight, again, this looks like a Superiority effect. However, if this were so, we expect that in (12b) *kakvo* should be able to get a Subject interpretation, given that it is ordered first in the string. In other words, we expect (12b) to be grammatical at least under the interpretation 'what causes which'. But this is not the case: under a true question reading, (12b) is altogether ungrammatical, regardless of interpretation. Therefore, we cannot appeal to Superiority to account for (12a), whatever the ultimate explanation for the Subject > Object hierarchy.

Billings and Rudin (1996, 38) note that (13a) is acceptable by native speakers, alongside (13b). The authors also note (1996, 42) that *kakvo* is unordered with respect to wh-adverbials *kade, koga, kak*:

(13) a. Kogo   kakvo   e   udarilo?
      whom ACC what NOM CL-3sg   hit N.SG
     'What hit whom?'
   b. Kakvo   kogo   e   udarilo.   (B&R 1996, ex.12)
      what NOM whom ACC CL-3sg   hit N.SG
     'What hit whom?'

The speakers I consulted, however, find (13a) more natural than (13b) which is judged marked or even marginal. Also, *kakvo* generally follows the wh-adverbials *kăde/koga/kak*, as indicated by Penchev (1999, ex. 4), Krapova and Cinque (to appear):

(14)   a. Kăde kakvo raste?
       where what grows
    b. Kăde kakvo da   tărsja?
      where what Mod.prt look-for-I 'Where should I look for what?'

Given these data, the possibility to reverse the oder in (14) (Billings and Rudin 1996, 42, and fn.10) and have *kakvo* in first position can be interpreted as an effect of D-linking, much like the reversal of order in (13b). For example, the more marked question *Kakvo kăde da tarsja*? can be used to refer to a particular (salient or previously mentioned) set of objects and the speaker wants to know where/in which places he should be looking for them[9].

Consequently, the relatively low occurrence of *kakvo* in the unmarked orders, which is perhaps related to the fact that it is [-human] (as Billings and Rudin 1996 suppose), is a direct consequence of the fact that it is more difficult or, depending on context sometimes even impossible to D-link it, especially given that the language possesses an inherently D-linked variant - *koe* and *koj/koja/koe* N phrases (cf. also fn.7). Therefore, non-human *what* and *what*-phrases in general observe a strict order which can be overridden only under some appropriate (discourse) mechanism such as D-linking.

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[9] On the pair-list interpretation of multiple wh-questions see Penchev 1999, Bošković 2003, Grohmann 2000, Pesetsky 2000, a.o.

To summarize bare wh-phrases cannot precede (inherently) D-linked, unless they are D-linked themselves. Since however the various bare wh-phrases have a different D-linking potential, this affects the acceptability of the wh-question, producing varying degrees of grammaticality. If a wh-phrase cannot get a D-linked interpretation at all, as is the case with the wh-phrase *kolko* 'how much' (as well as *kolko* N phrases), it can never come to precede an inherently D-linked phase like *koe*.This is illustrated by the contrast in (15):[10]

(15) a. Koe (po) kolko struva?   b. *(Po) kolko koe struva?
         which (each) how much costs   (each) how much which costs

4. Two distinctions

What these observations seem to show is that the structural distinction between **bare/non-bare** wh-phrases in Bulgarian does not coincide with the (pragmatic) distinction **non-D-linked/D-linked**, but rather cuts across it. On the one hand, Bulgarian has both non-bare and bare inherently D-linked phrases (e.g. *koe momče/koja kniga* and *koe* which is the neuter singular form of *koj*, (*na*) *kogo*, etc.). On the other hand, certain non-bare wh-phrases (*kolko pari*) may not be D-linked, i.e. they are inherently non-D-linked.

At first, one could say that interpretation, rather than structural make-up, is what matters for the observed linear orderings. However, I would like to claim that internal structure is also relevant for the wh-phrase to access the respective position that it does.

So, let us suppose that there are two uses of *koj* 'who' in Bg, which can be successfully distinguished on the basis of their discourse properties. The former, call it *koj1*, is discourse-free and corresponds to a regular pronoun, a bare (syntactic) quantifier, while the latter, call it *koj2* (of which *koe* is the neuter form), is discourse-linked and corresponds to a restricted quantifier (or "strong quantifier" in the sense of Milsark 1977). The domain of quantification of restricted quantifiers ranges over a unique (and non-empty) set whose existence is presupposed. Generally, the set is denoted by the NP, to which the quantifier belongs (the restriction). Drawing on a proposal by Dobrovie-Sorin (1994) for Romanian *care* 'which', which is semantically comparable to *koj2*, I would like to suggest that the *koj2* is only apparently bare in Bg: it actually has a more complex internal structure – that of a quantified nominal projection whose specifier is occupied by *koj/koe* and whose head is empty. If the head is lexically realized, we get *which*-phrases like *koe momče/koj stol*, etc., in which

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[10] I have used the distributive marker *po* 'each' in (10), in order to show that we are dealing with a strong case of resistance to D-linking, namely that *kolko* can never refer to a subset of a set which constitutes shared knowledge (either direct or by description) between speaker and hearer. A D-linked reading can be enforced only if *kolko* is inside a partitive phrase and means 'how many' of a certain set, cf. (i). But then, the occurrence of *po* is precluded:
(i) (*Po) kolko ot tjax izpitvaš na den?
     each every of them examine-you in day
     'How many of them do you examine each per day?'
Bulgarian differs from languages like English, where, as Kiss (1993) points out, phrases containing *how many* and *how much*, can be used either as specific, or as non-specific, depending on context. Cf. Dobrovie-Sorin (1994, 208, 269-271) who shows that Romanian has both the specific and the non-specific use of *cîţi* 'how many'), based also on clitic resumption facts. Bulgarian *kolko*, nor any NP containing it, can ever be clitic resumed - another fact which points in the direction of non-specificity. See also Kiss (1993) and Comorovski (1996) for explicitly relating specificity with D-linking.

the quantifier is underspecified for the feature [human] and thus be associated with both human and non-human reference sets.

(16) [$_{DP}$ [koj/koe [$_{NP}$ stol/momče/**e**]

Let us generalize therefore that wh-phrases which have the complex structure represented in (16) above, i.e. behave as restricted quantifiers, are the only wh-phrases which are allowed to surface in a position preceding Spec,CP. It is our task now to identify this position.
In fact, I am going to claim that D-linked phrases actually dispose of two additional positions above CP – a higher and a lower one. As we will see shortly, while both positions are equally accessible to D-linked material, only the higher position can be associated with clitic resumption.

5. Multiple questions with one D-linked phrase: clitic resumption
As already noted by a number of authors (cf. e.g. Billings and Rudin 1996, Krapova 2002, Jaeger 2004), D-linked wh-phrases in Bulgarian can also appear accompanied by a resumptive clitic. Examples are given in (17):

(17) a. Koja kartina na kogo si (ja) posvetil?
       which painting to whom are-you it dedicated
   b. a. Koja kartina kăde si (ja) risuval?
       which painting where are-you it painted

Clitic resumption appears optional at first sight, but on closer inspection, it is not. This explains why the reverse orders are ungrammatical. Compare (17) with (18):

(18) a.*Na kogo koja kartina si ja posvetil?
        to whom which painting are-you it dedicated
    b. *Kăde koja kartina si ja risuval?
        where which painting are-you it painted

Therefore, clitic resumption is available in a particular position. There are a number of arguments to this effect which I cannot take up here for reasons of space. One argument comes from the fact that only a clitic resumed D-linked wh-phrase can appear before a parenthetical, i.e. in the leftmost position of the wh-string:

(19) a. Koja kartina *spored teb* na kogo *(ja) e posvetil xudožnikăt?
        which painting according to you where it is painted artist-the
    b. Koja kartina *spored teb* kăde *(ja) e risuval xudonikăt?
        which painting according to you where it is painted artist-the

In view of (19), we can conclude that in (17) there are two underlying constructions – one parallel to (19) where the clitic resumption of the initial wh-phrase is obligatory, and another one with no clitic resumption of the wh-phrase. If this is correct, it means that D-linked phrases in Bulgarian can access two positions the "left periphery" and that these positions are hierarchically ordered. The higher position (call it for now XP) is necessarily associated with clitic resumption and is targeted by whatever material can appear to the left of the parenthetical. (CL-D-linked). The lower position (call it

YP) is the position which follows the parenthetical and can be accesses by non-clitic resumed D-linked phrases. This is sketched in (20):

(20) [XP   parenthetical [YP   [CP   [IP cl$_{XP}$
    CL-D-linked wh-   D-linked wh-   non-D-linked wh-

5.1. Distinguishing XP from YP

Both XP and YP seem to have Topic properties. Earlier proposals by Richards (1997; 95, 2001), Grohmann (1998, 44; 2000, 278) suggest that D-linked phrases move by Topic movement and not by wh-movement (Topic being the Minimalist correlate for whichever feature is responsible for the effect of D-linking (unselective binding) on Superiority violations). Similarly, Jaeger (2004) suggests that all D-linked wh-phrases target a (Wh-)Topic position.[11]

However, Richards (1997, 2001) and Grohmann do not discuss the issue of clitic resumption, while Jaeger (2004) does not discuss non-resumed wh-phrases. We saw above however that D-linked phrases in Bulgarian can occupy two positions XP and YP, and that the possibility of a wh-pharse occupying either of the two seems to be related to the parameter *presence* vs *lack* of clitic resumption. Inevitably, the above proposals need to be qualified.

One possibility would be to identify XP with the Topic position of the Clitic Left Dislocation type (Cinque 1990), while YP can be thought of CP adjoined. The distinguishing structural property between the two positions is clitic resumption. The reason for this proposal is twofold. First, as shown by Boškovic's (1997a, 28) on the basis of scrambling in Japanese, among other things, adjunction (in general and not just IP adjunction) is incompatible with resumption. On the other hand, under the assumption that parentheticals and (some) topicalized adverbs split projections but not adjoined phrases, the fact that the CL-D-linked phrase can be separated by such intervening non-interrogative material (cf. (21) below) from the non-clitic-resumed D-linked phrase, shows that the former sits in the specifier of its own projection rather then being doubly adjoined to CP.

(21)a. Koja studentka spored tebe/utre koj šte ja izpita?
        which student according-to you/tomorrow who will her examine
    b. *?Koja studentka spored tebe/utre   koj šte izpita?
        which student   according-to-you/tomorrow who will examine

Alternatively, as argued in Krapova & Cinque (to appear) within a finer-grained CP structure (cf. Rizzi 1997; Benincà and Poletto 2004), the higher position XP can be identified with the Clitic Left Dislocation Topic position (TopP, as in Jaeger's 2004 proposal), while the lower position YP can be identified with a second Topic position which, unlike the CLLD Topic position, has operator properties and hosts not only non-clitic resumed D-linked wh-phrases, but generally all non-clitic resumed Topic phrases (cf. also Rudin, 1990-91, Lambova 2000, 2001, and Arnaudova 2004 who calls them 'contrastive topics'). The two types of Topics are illustrated in (22) and (23), respectively. For arguments bearing on their respective syntactic properties the reader is referred to Krapova (2002a):

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[11] In order to define the notion of topicality in wh-questions, the author adopts the following hypothesis: C[litic] D[oubling] in Bulgarian wh-question indicates that the CDed wh-phrase is
the topic of the question. (2004, sec. 6).

(22) [$_T$Kufara]   Ivan NA MARIA li   šte *(go) dade?   CLLD Topic
          suitcase-the Ivan to Mary Interr.prt will it(CL) give
          'The suitcase, is it to Mary that Ivan will give?'
(23) [$_T$Kufara]   koj šte   prenese do garata?   Operator Topic
          suitcase-the who will   carry   to railway-station-the

To summarize, we have seen that strict conditions underlie the distribution of D-linked wh-phrases in Bulgarian. We have suggested that they move to two distinct positions. Let me finish by giving one piece of evidence that these positions are located higher than CP. The evidence comes from lack of adjacency effects.

5.2. Lack of adjacency effects with D-linked wh-phrases
One immediate consequence of the proposed analysis is that it predicts lack of adjacency effects under D-linking. As is well-known, adjacency effects do obtain in Bulgarian matrix questions, if the latter involve a non-D-linked wh-phrase. Thus for example, in (24), the wh-phrase has to immediately precede the inflected verb and cannot be separated from it by any material (apart from some adverbs, cf. Izvorski 1995, Boškovic 2001).

     (24)a. *Kakvo Ana dade na Petko?   (Bošković 2001, 243)
              what Ana   gave to Petko
              'What did Ana give to Petko?'
        b. Kakvo dade Ana na Petko?
              what gave Ana to Petko

Interestingly, there are no adjacency effects with D-linked wh-phrases in wh-question with a single wh-phrase, cf. (24a) and (25). The comparison between (26a) and (26b) further shows that adjacency effects continue to hold for multiple wh-questions with bare, non-D-linked, wh-phrases, but are alleviated if the wh-phrases are D-linked:

     (25)   Koja kniga studentite trjabva da pročetat?
               which book students-the must to read
     (26) a. Na kogo kakvo dade Ivan?
               to whom what Ivan gave
          b. Na koj student koja kniga Ivan da (mu) dade?
               to which student which book Ivan to him give
               'To which student Ivan should give which book?'

If adjacency effects are indeed connected to properties of C, as argued by Bošković (2001), then once again we have evidence that D-linking is associated with position(s) which are located above the traditional CP projection.

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