What A Move(s)!
Another and yet another account on Slavic multiple WH-movement[*]

Magdalena Lohninger
University of Vienna

Abstract: This paper presents a new analysis for (Slavic) multiple WH-movement by combining aspects of former analyses with more recent approaches based on composite A'/A-movement. Multiple WH-movement languages pattern into two classes with respect to superiority, WCO and intervening adverbs. Earlier approaches account for these differences via different syntactic solutions which mainly are based on the puzzle of finding a landing-site for WH-elements below CP but above TP. I bring forward an analysis based on the recent tendency to postulate a CP-domain allowing A-features inside it. My approach consists of combined ideas from earlier and recent analyses, primarily following Richards' 1997 proposal that WH-movement can, in certain cases, be A-movement. I combine this view with the possibility of composite [A'/A]-probes, an extended left periphery, as well as the assertion that WH-movement always involves Focus-features. I present a syntactic analysis for the two types of multiple fronting languages which is based on the possibility of allowing a composite [A'/A]-probe within CP, rendering the mixed A'/A-properties of certain instances of WH-movement.

Keywords: Multiple WH-movement, Slavic languages, focus movement, composite probes, A'/A-movement

1 Multiple WH-movement

Multiple WH-movement describes a phenomenon mainly observed in Slavic languages (1), but which, even though not always obligatorily, also occurs in other languages such as Romanian (Rudin 1988), Yiddish (Diesing 2003) or Malagasy (Sabel 2003). What characterizes multiple WH-movement is the fact that several WH-elements can or must be fronted to sentence-initial position on the surface.

(1) a. **Ko** je   **što** **kome** dao?[2]
         who AUX.3.SG what whom gave
         'Who gave what when?'   Bosnian, Croatian, Serbian (Rudin 1988: 473)

     b. **Koj** **kogo** vižda?
         who whom sees
         'Who sees whom?'   Bulgarian (Rudin 1988: 449)

     c. **Kto** **co** robił?
         who what did
         'Who did what?'   Polish (Rudin 1988: 449)

[2] The 3rd person SG auxiliary *je* occurs between the fronted wh-elements due to intonational reasons; it

Since multiple WH-movement is obligatory in Slavic languages, they have been in the focus of past syntactic research. Since the data stands in sharp contrast with single WH-movement languages (such as English), it required a rethinking of the syntax of WH-movement. However, not only do multiple WH-movement languages differ from single WH-movement languages, they simultaneously exhibit non-uniform behaviour within their own class. Rudin (1988) was the first one to point out that Slavic multiple WH-fronting languages (as well as Romanian) pattern into two groups with respect to superiority of their WH-words and the possibility of splitting the WH-complex by adverbs or parentheses. Later, Richards (1997) added the absence or presence of weak cross-over (WCO) effects to these distinguishing criteria. This parts Slavic languages into two groups: one class of languages that show superiority between their WH-elements, do not allow adverbs or parentheses to intervene in the WH-cluster and exhibit WCO and another class that behaves conversely.[3]

	Class 1 Bosnian, Croatian, Serbian[4]et al.	Class 2 Bulgarian et al.
Superiority	yes	no
WCO effects	no	yes
Intervening material	yes	??

Table 1: Two classes of multiple fronting languages

1.1 Class 1 (A-languages): Bosnian, Croatian, Serbian, Polish and Czech

Class one consists of Bosnian, Croatian, Serbian, Czech and Polish and will henceforth be called A-languages. This group of languages has been a main concern for many linguists, since WH-movement here does not exhibit standardly expected A'-WH-behaviour. First, there is no hierarchy between the fronted WH-elements, i.e. no superiority effect arises.

(2) a. **Kdo kdy koho** pozval, nevim.
    who when whom invited not-know.1SG
    'Who invited whom when, I do not know.'   Czech (Rudin 1988: 475)

    b. **Kdy kdo koho** pozval, nevim.
    Koho kdy kdo pozval, nevim.

Additionally, in A-languages, clitics, adverbs and parentheses can intervene in the WH-cluster.

---

has to occur after the first stressed element at Wackernagel position. Such requirements are usually not of syntactic but of morpho-phonological nature.

[3] Rudin (1988) adds as another distinguishing criterium that Bulgarian-like languages allow WH-movement out of (WH)-islands whereas Bosnian, Croatian and Serbian-like languages do not. However, the data is widely discussed in literature and thus I do not include it here.

[4] From here on I will abbreviate these three languages as Bo, Cr, Se when all of them show the same behaviour.

(3) a. Ko je **prvi** koga udario?
        who has first whom hit
        'Who hit whom first?' Bo, Cr, Se (Rudin 1988: 467)

     b. Kto, **według** **ciebie**, komu co dał?
        who according-to you to-whom what gave
        'Who in your opinion gave what to whom?' Polish (Rudin 1988: 469)

Finally, A-languages do not show WCO effects. This is surprising since WH-movement so far has been considered *the* embodiment of A'-movement and as such is expected to trigger WCO effects. However, this is not the case in A-languages.

(4) Kogo$_i$ zawołała jego$_i$ matka?
     who$_i$ called his$_i$ mother
     'Who$_i$ did his$_i$ mother call?' Polish (Witkoś 2008: 317)

1.2 Class 2 (A'-languages): Bulgarian and Romanian

Bulgarian and Romanian form a class which will henceforth be called A'-languages. They behave rather as expected from WH-movement; first, they show superiority between the fronted WH-elements.

(5) a. **Koj kogo kăde** e vidjal?
        who whom where is seen
        'Who has seen whom where?' Bulgarian (Krapova 2002: 6)

     b. * **Kăde koj kogo** e vidjal?
        * **Kogo koj kăde** e vidjal?
        * **Kogo kăde koj** e vidjal?

Next, Rudin (1988) proposes that A'-languages do not allow intervening adverbs and parentheses. However, a lively discussion in literature centers around this question, and it appears that judgements are not completely reliable or that there exist minor dialectal differences. I align with the data presented in the literature criticising Rudin (1988) and adopt the claim that intervening material is possible in A'-languages, too. Among others, Przepiórkowski (1994), Bošković (2002) and Lambova (2001, 2003) propose that adverbs and parentheses can intervene between the first and second WH-element (6a) but not between the second and third one (6b).

(6) a. Koj, **spored tebe / prăv**, kakvo pie?
        who according-to / first you what
        'Who, (according to you,) is drinking what (first)?' Bulgarian (Lambova 2001: 8)

     b. * Koj kăde, **navjarno**, koga šte porăča tortata?
        who where perhaps when will order cake-the
        Int.: 'Who will perhaps have the cake made where and when?'
        Bulgarian (Lambova 2001: 14)

The last distinguishing property of A'-languages is their disallowance of WCO effects, a behaviour that is expected from A'-movement.[5]

(7) * Cui$_i$ am   dat   cecul   său$_i$ t?
      who.DAT$_i$ have.1.PL given check.the his$_i$ t?
      Int.: 'To whom$_i$ did we give his$_i$ cheque?' | Romanian | (Diaconescu and Rivero 2007: 42)

Two language groups emerge: A'-languages, which seem to exhibit "regular" WH-movement mechanisms, similar to what traditional A'-WH-movement looks like and A-languages, where WH-movement displays unexpected, even surprising behaviour. That multiple WH-movement languages consistently pattern into these two converse classes leads to the suspicion that the underlying syntactic mechanism of WH-movement causing them is different; i.e. that WH-movement in A'-languages is a different process than WH-movement in A-languages. The proposal that this difference is of a syntactic nature has been brought forward by various linguistic accounts, some of which I will present in the following section. Eventually, I will introduce a new analysis of WH-movement in multiple fronting languages, based on more recent literature aligned with the new trend of composite A'/A-probes.

2   A-languages and the spot in-between

Authors were and are concerned with the question of what syntactic processes underlie multiple WH-constructions in A-languages. There was a peak in the discussion in the 90's and the early 2000s, which I will try to revive and look at the topic from a current viewpoint with now different and innovative tools of generative grammar and minimalism at our disposal. Most of the earlier accounts tie the difference between A'-languages and A-languages to the landing-site of WH-elements. For A'-languages it seems to be clear that this is the CP-domain, since WH-moved elements can exhibit typical A'-properties there (s.a. WCO effects). The more puzzling facts stem from A-languages where WH-movement does not seem to exhibit typical A'-behaviour. Thus, it is rather unlikely that all WH-movement targets the CP-domain in these languages. However, on the surface, all WH-elements still appear in clause-initial position. Several of the accounts I will present in this section are concerned with the task of presenting a coherent syntactic explanation of why A-languages behave this way. They all conquer the problem through different means and all of them bring forward extremely insightful proposals. Indeed, there is one line of thought that connects all of them and seems to be the essential puzzle in the behaviour of WH-movement in A-languages: the landing-site of the fronted WH-words is not as high as CP since they do not exhibit typical CP-properties. However, they still move to a very high syntactic position which precedes all other elements in the clause. Approaches differ in how they modulate this position. Some (Richards 1997, 2001; Rudin 1988) suggest that it is the highest projection of the inflectional domain or adjoined to that. Other accounts (Citko 1997; Lambova 2003) propose an additional functional projection between CP and IP and others again propose that movement targets different heights of CP (Bošković 1997a; Tasseva-Kurktchieva 2001). What unifies these accounts is the attempt to find a landing-site

---

[5] Russian does show WCO effects but otherwise behaves like an A-language with respect to superiority (see Bošković (1998), page 25 for the relevant data). This posits a puzzle for my framework that is about to follow - however, it does too for Richards' 1997 analysis and there might be other reasons that trigger these effects.

lower than CP but higher that IP: something that is between the operator domain and the inflectional domain, that belongs to both and simultaneously to none completely.

Eventually, I will propose an account which too is motivated by the attempt to explain WH-movement in A-languages; however, I will suggest that the underlying difference between A'-languages and A-languages is not tied to diverging landing-sites but rather to what kind of movement the language allows for WH-elements. More concretely, the differences will depend on whether the (language-specific) CP-domain allows composite A'/A-probes and mixed A'/A-WH-movement. If it does, WH-movement targets CP but simultaneously includes certain qualities that have so far been unique to the IP-domain. I will not try to solve all the problems at hand or unify all the accounts presented before — I solely attempt to combine data and research from older literature with more recent syntactic theories in order to shed new light on the discussion and possibly find another solution of how WH-movement in A-languages could take place. First, however, I will shortly present the relevant accounts that will (partly) serve as the ingredients to my analysis.

2.1   Earlier approaches

Rudin (1988) was one of the first to point out the difference between the two types of multiple fronting languages. For A-languages, she proposes that the second (and third) WH-element adjoins to IP whereas the first one properly moves to CP. This means that only one WH-word is moved by a [wh]-feature, whereas all others front with independent motivation to a very high IP-position. This allows adverbs and parentheses to intervene between the WH-elements. It also accounts for superiority, since only one WH-element is properly WH-moved to SpecCP — which one does not matter, thus each ordering is grammatical. For A'-languages, she proposes that all WH-elements are attracted by C and move to CP where they form an inseparable cluster. Rudin's account faces two problems; First, the data is not complete. Contrary to what she proposes and as I already depicted in (6), it is possible for adverbs, parentheses or other clitics to intervene between the WH-elements. Another fact that Rudin's proposal cannot account for is the WCO effect difference between A-languages and A'-languages. Even in A-languages, according to her, the highest WH-element moves directly to CP. Applying this to single WH-constructions, the one WH-element has to move to CP — a position where it should exhibit WCO effects — which, contrary to the prediction, it does not (as can be seen in (4)).

Bošković (1999) (and 1997a; 1997b; 1998; 2002) proposes that WH-movement in A-languages is not triggered by [wh]-features but is an instance of focus-fronting. In A-languages, according to him, no WH-element moves to CP, instead, all of them focus-front to a functional projection below CP (respectively, a lower part of CP itself). WH-movement is not driven by [wh] but by [foc], which, according to him, is a strong feature residing in the WH-elements themselves, not in the probing head. The lack of superiority in A-languages follows from this strong feature on the moved elements: it is irrelevant which WH-element checks its strong feature first. For A'-languages, he claims that WH-movement is simultaneously triggered by [wh] and [foc]; one WH-element properly WH-moves to SpecCP (triggered by [wh]) whereas all other focus-front below it. In this case, the [wh]-probe on C is strong, triggering movement of the highest WH-element (*Attract Closest*), thereby rendering superiority. All other WH-elements in A'-languages, similar to A-languages, carry a strong [foc]-feature and through that move to a focus position below C. Hence in both language-types, all WH-elements display focus-fronting to a focus-projection right below CP (or very low inside CP), triggered by multiple agreement of the attracting head Focus[0].

The difference between them merely lies in the fact that in A'-languages, one WH-element moves further up to CP, whereas in A-languages, all of them remain in Focus-projection. Bošković's analysis is able to account for superiority effects by dividing WH-movement into two operations: [wh]-triggered movement and [foc]-triggered movement plus a differing locus of strong features (once at the probe, once at the goal). The possibility of intervening material does not follow in a similarly straightforward way, but can be modeled. Finally, similar to Rudin (1988), Bošković's account fails to explain the absence or presence of WCO effects. Focus-movement in his framework is A'-movement, thus both instances, i.e. WH-movement triggered by [wh] as well as [foc], are of pure A'-quality. This predicts that WCO effects are present in both language-types, which is not borne out.

Supporting Bošković's view is **Stjepanovic (2003)** who brings forward convincing evidence that WH-movement in A-languages has focus-quality. Bosnian, Croatian and Serbian express focus via syntactic movement. This means focused elements (overtly) move to a high position in the clause, located above TP and preceding the subject. She argues that WH-fronted elements occur in the exact same position as focused material with respect to adverbs. In (9), *wisely* is ambiguous between a subject-oriented reading (*It is wise of them to advise Jovan*) and a manner reading (*They advise Jovan in a wise manner*). With *Jovan* in focused position, both readings are possible. This shows that *Jovan* must be higher than TP, since it must be above the TP-adjoined adverb to trigger subject-oriented interpretation.

(8)   JOVANA   oni   mudro   savjetuju.
        Jovan-ACC   they   wisely   advise
        'It is wise of them to advise Jovan.'
        'They advise Jovan in a wise manner.'   Bo, Cr, Se (Stjepanovic 2003: 9)

WH-elements display the same behaviour with respect to adverb interpretation and thus, according to Stjepanovic (2003), WH-movement in A-languages involves focus-movement and must include a [foc]-feature.

(9)   Koga   ko   mudro   savjetuje?
        whom   who   wisely   advises
        ? 'Who is it wise of to advise whom?'
        'Who advises whom in a wise manner?'   Bo, Cr, Se (Stjepanovic 2003: 10)

Similar to Bošković and Stjepanovic is the account by **Tasseva-Kurktchieva (2001)** who proposes that WH-movement targets FocusP inside (a split) CP. This extends Bošković's account since now the focus projection is a part of CP and not an undefined position in the lower CP-domain or below CP. She claims that in both language-types, the second (and third) WH-element moves to FocusP and that all elements carry both, a [wh]- and a [foc]-feature. The probe on $Focus^0$ attracts multiple times and the head itself projects multiple specifiers — therefore all WH-elements move to SpecFocP first. Then, the CP projection above FocP attracts one WH-element. This account faces problems when it comes to superiority in A'-languages; multiple focus specifiers are equidistant to the higher CP-head, thus each WH-element can be raised first. This renders the right outcome for A-languages, not for A'-languages.

Citko (1997) proposes an analysis focusing on the exact question I raised above: the difficulty of finding a landing-site for WH-movement between CP and IP. Citko (1997) suggests that

the second (and third) WH-element of A-languages neither adjoins to TP/IP nor raises to CP, but instead moves to an operator phrase (OpP), a functional phrase between CP and TP. According to her, both language types project this operator phrase. A question-feature on C attracts the first WH-element and moves it to SpecCP. All other WH-phrases are attracted by an operator-feature on the Op-head. In A-languages, this head triggers movement of the remaining WH-words to SpecOpP. In contrast, A'-languages execute overt head-movement (Op to C); SpecOpP positions are not projected which results in movement of all WH-elements to CP. Nevertheless, in both language types, it is an operator-feature that is responsible for movement of the second and third WH-element, not a question/wh-feature on C.

Similar to Citko's account is the one proposed in **Lambova (2004)**. She only examines A'-languages and suggests a functional phrase $\triangle$P between CP and TP as landing-site for WH-elements. In A'-languages, all WH-movement is A'-movement but targets different projections of (a split) CP, one of them being $\triangle$P. $\triangle$P is a functional projection and hosts topic- and focus-related material. She follows Bošković (1999) in that all WH-elements focus-move whereas only one of them properly WH-moves. In her approach, and similar to Tasseva-Kurktchieva (2001), all WH-elements move through $\triangle$P, triggered by [foc]. Then one of them is raised further up to ForceP where its [wh]-feature can be interpreted. The second and third WH-element form a cluster in Spec$\triangle$P. She accounts for the observed superiority in the same way Bošković (1999) does with the location of the strong feature. The strong [foc] feature sits in the WH-elements themselves whereas the strong [wh]-feature is located in the probing head C.

Richards (1997, 2001) proposes an account similar to the ones above in terms of landing-sites but introduces a new component to the discussion: he focuses on how the WH-elements move rather than where to. He proposes — and that is where my labeling of the two language-types stems from — that one class of languages A'-move their WH-elements whereas the other one A-moves them. Richards takes WCO effects as the main distinguishing criterium between A'- and A-movement and proposes an account from which these as well as superiority differences follow logically. According to him, A'-languages move all of their WH-elements to multiple SpecCPs, attracted by a single, multiple probing C-head. This movement is A'-movement and follows the principles of *Attract Closest* and *Shortest Move* — the former of which accounts for attraction of the highest WH-element first, the latter causes tucking-in to lower SpecCPs of all other WH-elements.[6] The two principles account for superiority effects in A'-languages — the hierarchy after movement reflects the base-generated ordering. Simultaneously, it explains the observed WCO effects; If WH-movement is of pure A'-quality, it leaves the binding domain, thus rendering WCO. In A-languages, on the other hand, WH-elements undergo A-movement to a high position in IP, resembling A-scrambling. If WH-words A-move, they remain in the binding domain and thus no WCO effects arise. Superiority effects are slightly more difficult to account for in his framework; he proposes that in certain A-languages (e.g. Bosnian, Croatian and Serbian) one WH-element moves from its position in IP further up to SpecCP — which one moves does not matter since in their adjoined position to IP, they are equidistant goals for the probe on C. Thus, either WH-element could be moved further and no superiority arises. The novel insight in Richards (1997, 2001) is that his analysis not only accounts for multiple fronting languages; he proposes that it is applicable to single movement languages (such as English) too, as well as to WH-in-situ languages (such as

---

[6] Note that *Shortest move* (triggering tucking-in) is a counter-cyclic principle and has been criticised by different authors, among them recently Bailyn (2015).

Japanese). This extension allows him to part the languages he examined into A'-languages and A-languages as opposed to dividing them by how many WH-elements they move on the surface.

All of these analyses have their advantages in accounting for certain phenomena in multiple fronting languages. They all center around explaining the underlying syntactic mechanisms of A-languages, and propose different strategies and landing-sites for WH-elements therein, being similar to each other in the aim of finding a landing-site between CP and IP. In the next section, I will join this attempt and propose an analysis of my own which includes more recent minimalistic tools. I will suggest that in A-languages, WH-movement is triggered by a composite [A'/A]-probe and thus exhibits mixed A'/A-quality; an analysis which has been proposed for wh-movement other languages (Van Urk 2015, Erlewine 2018 or Coon, Baier, and Levin 2021) and, as I will show, can be extended to Slavic languages.

3 New and composed ideas

In this section, I will propose an analysis for A-language WH-movement, combining bits of former accounts with newer syntactic ideas. So far, I outlined the puzzle of an adequate landing-site for WH-elements in A-languages, located somewhere between CP and TP. My account, too, will to some extent propose a spot in between. However, it will not be tied to a certain structural landing-site (like an additional projection between CP and TP) but rather is featurally in between. The ingredients for the proposal are as follows: I adopt Richards' claim that languages differ in whether they A'- or A-move their WH-elements. It seems that this distinction is — to some extent — implicit in other approaches too. Rudin (1988) for example proposes that WH-elements adjoin to TP which should be A-movement. However, since Richards (1997) is the only one stating explicitly that WH-movement can have A-quality, I will refer mostly to his work for this part of the analysis. Next, I adopt Bošković's, Stjepanovic's and Tasseva-Kurktchieva's claim that all WH-movement has focus-quality and thus [foc]-features are involved in WH-movement. Traditionally, [foc] is an A'-feature, targeting CP. I will stick to this tradition and locate [foc] inside the CP-domain. In order to do so, I build my approach on an extended left periphery (or, shorter, split CP) along the lines of Rizzi (1997) and propose similarly to Tasseva-Kurktchieva (2001) that WH-movement is focus-movement to a lower CP-projection. The relevant CP-parts will be ForceP (a high part of CP, responsible for clause-typing and rendering interrogative or declarative interpretation) and FocusP below it (serving as landing-site for focused material).

In contrast to the approaches above, I do not primarily focus on the landing-site of WH-elements but rather on the nature of their movement (and thus the quality of the attracting probes) and tie their diverging behaviour to A'- vs. A-differences. In the latest literature on CP-phenomena a tendency towards a weakened CP-domain has arisen. Traditionally, CP is a pure A'-domain, and thus all movement targeting it is of A'-quality. Lately, (for example in Van Urk 2015), this assumption has been subject to criticism and renewal, and the view grew stronger that not the landing-site but rather the type of the movement-triggering probe define the A'-/A-difference. Van Urk (2015) suggests that the A'-/A-difference is determined solely by which features the attracting head carries. This means that A'- and A-movement are not longer purely domain- and structure-bound but rather tied to the inherent A- or A'-quality of features. Most importantly, this assumption opens the possibility of A-probes inside CP. Among others, Legate (2014), Van Urk (2015), Aldridge (2017) propose that this is possible in the form of composite probes. Composite probes are combined A'/A-probes which exhibit a mix of A'- and A-behaviour. The typical characteristics of A'- and A-movement are

A-properties	A'-properties
local, restricted to nominals	long-distance, not restricted to nominals
no reconstruction for principle C	reconstruction for principle C
no weak cross-over, new antecedents for anaphors	weak cross-over, no new antecedents for anaphors
no parasitic gap licensing	parasitic gap licensing

Table 2: A'- vs. A-movement (Van Urk 2015: 23)

listed in Table 2. Composite probes which motivate mixed A'/A-movement, exhibit behaviour from both sides of Table 2.

This leads towards dissolving the distinction between A'- and A-movement and widens the possibility of syntactic operations. What remains is the fact that probes can trigger A'-movement or A-movement. What is new is the fact that these probes can bundle together to composite probes, resulting in mixed properties of the triggered movement. It follows that the A'-/A-distinction is no longer bound to certain positions or domains but to features and their distribution.

Why are composite probes important for an account of WH-movement in multiple fronting languages? Coon et al. (2021) propose that in Mayan languages, WH-movement is triggered by a composite probe on C, consisting of an A'-feature ([wh]) and an A-feature ([D]). Something similar has been suggested for Toba Batak in Erlewine (2018), who claims that in certain cases, a feature [wh/foc] can combine with a [D]-feature, rendering a composite [A'/A]-probe and thus enabling A'/A-movement of WH-elements. In both analysis, WH-movement is A'/A-movement. Exactly this possibility will be the last ingredient to my analysis of multiple WH-movement in A-languages: the option for the WH-attracting probe to combine with an A-probe and render mixed A'/A-movement of WH-elements.

3.1 Analysis

3.1.1 A'/A-languages

I propose that in A-languages, WH-movement is triggered by a composite A'/A-probe and thus undergoes mixed A'/A-movement, whereby it exhibits A-characteristics (to some extent). As observed in Richards (1997), WH-movement in A-languages resembles A-movement in that there are no WCO effects, i.e. that WH-movement does not escape the binding domain.[7] However, WH-movement simultaneously exhibits A'-properties; it is not restricted to nominals and according to Stjepanovic (2003) and Bošković (1999), it behaves identical to focus-movement which has A'-properties. I follow Rizzi (1997) in that focus-movement targets a CP-projection, FocusP, which serves as a landing-site for all material attracted by [foc]. The extended left periphery consists of multiple functional CP-projections (the ones relevant for my concern are highlighted).

(10)   [ForceP [TopicP [FocusP [TopicP [FinP [TP...]]]]]]

ForceP is the clause-typing projection, rendering declarative or interrogative interpretation. Thus [wh] is located on Force^0. TopicP serves as a landing-site for topicalized elements. According

---

[7] Note that this analysis accounts for local WH-movement. Long-distance WH-movement differs in many A-languages and since it goes beyond the scope of this paper, is not taken into account here.

to Rizzi (1997) and depending on the language, there are two landing-sites for topics in CP: one above and one below FocusP. Lastly, FocusP offers a landing-site for focused material. I assume that CP is not always a pure A'-domain but that it can host both A'- and A-features. Features are A- or A'-features, a property which is cross-linguistically consistent. [Foc], [topic] or [wh] are A'-features, searching for [A']-goals and triggering A'-movement. [φ], [θ] or [D], on the other hand, are A-features and trigger A-movement. As already explained, A-features and A'-features can combine and form composite [A'/A]-probes, such as it is the case for WH-movement in Mayan (Coon et al. 2021), Toba Batak (Erlewine 2018) and Dinka (Van Urk 2015). I claim that this A'/A-possibility is also available in Slavic languages. I follow the proposal that all WH-elements carry a [foc]-feature ((Bošković 1999; Stjepanovic 2003; Tasseva-Kurktchieva 2001)) which serves as goal to the A'-probe on $Focus^0$, which again triggers focus-movement of the WH-element to CP. I also claim that all WH-elements additionally carry an A-feature, which together with [foc] enables them to serve as a composite [foc/A]-goal.[8] All WH-elements in A-languages serve as composite goals. At the same time, I propose that $Focus^0$ in A-languages carries a composite probe [foc/A], probing multiple times and attracting all WH-elements. Through this, all of them are A'/A-moved upwards to multiple specifiers of FocusP. Bošković (1999) proposes that all WH-elements remain in a focused projection in A-languages. I, however, follow Richards (1997) who proposes that one of the fronted WH-elements moves higher up within CP. I claim that one WH-element, in addition to its [foc/A]-features, carries a [wh]-feature, thus is attracted by [wh] on $Force^0$ and moved to SpecForceP.

(11)
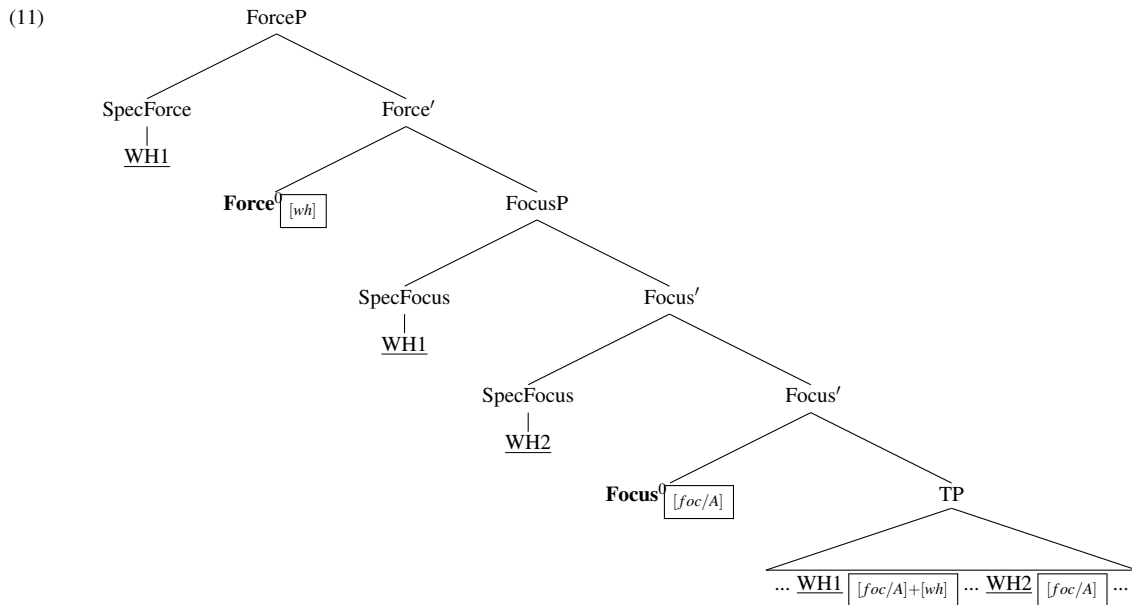
Which WH-element carries [wh] can and does vary. It is necessary that one element properly WH-moves for semantic and syntactic clause-typing: ForceP needs to be labeled as interrogative or declarative, which can only be done via a [wh]- (or Question-) feature. ForceP carries a [wh]-probe, attracts the one fitting goal (the one element with [wh], already located in SpecFocusP) and raises

---

[8] I will leave open the exact sort of A-feature since it is irrelevant for the purpose of the present discussion and extends the scope of this paper.

it to its own specifier. The latter movement is pure A'-movement, since [wh], as already mentioned, is an A'-feature and (in Slavic languages) does not compose with an A-feature.[9]

What advantages does this analysis have? First of all, the fact that one WH-element is moved higher up to ForceP whereas the rest remains in FocusP can be observed with topicalized elements. As noted above, CP usually offers two possible topic positions. In Croatian, a contrastive topic (*you* as opposed to Maria for example) can occur in two positions in a multiple WH-question: behind the last WH-element or between the first one and the rest:

(12) Koga si   (TI)   komu (TI)   predstavila?
      Who have (YOU.CT) whom (YOU.CT) introduce
      'Who did YOU introduce to whom?'   Croatian (Iva Kovač, p.c.)

These examples are predicted if the highest WH-element is located in ForceP, which is followed by a topic position, then all other WH-elements in FocusP, and finally, below that, another topic position. Additionally, A-languages allow intervening material such as adverbs and parentheses between the fronted WH-elements (see (3)). This can equally well be explained if one assumes that they do not form a cluster together in FocusP; They occupy different projections of CP and thus, there is enough space for adjoined adverbs or parentheses between them.

(13)   [$_{ForceP}$ WH **(adverb)** [$_{TopicP}$ **(TOPIC) (adverb)** [$_{FocusP}$ WH **(adverb)** [$_{TopicP}$ **(TOPIC)** ... TP ...]]]]

Next, also the lack of superiority in A-languages follows from this analysis. Only one WH-element carries a [wh]-feature. This element is attracted by Force^0 and moved to the highest CP projection. However, which element is the one carrying [wh] is not predetermined; each element can be the one specified for [wh]. Thus, one element will be moved higher up but it does not matter which one (which WH-element carries [wh] might be influenced by other mechanisms such as discourse relevance). This accounts for the lack of superiority and each sequence of fronted WH-elements turns out possible and grammatical.

Finally, A-languages lack WCO effects. This follows from the fact that an A-feature is involved in their movement, resulting in mixed A'/A-behaviour of the moved WH-phrase. Each WH-element moves to FocusP via [foc/A] first and thus exhibits certain characteristics of A-movement: among them the avoidance of WCO effects. Even though the WH-phrase then A'-moves further to ForceP, it leaves a (partial A-)trace in FocusP which is able to bind a pronoun, thus circumventing WCO effects.

3.1.2 A'-languages

In order to analyse A'-languages, such as Bulgarian or Romanian, I propose a very similar CP layout, differing from A-languages only in the featural layout of FocusP. In A'-languages, FocusP is a pure A'-projection, with Focus^0 carrying only [foc] and not a composite [foc/A]-probe. This is the main difference to A-languages. The second great difference is that all WH-elements carry a [foc]-feature *and* a [wh]-feature (in contrast to A-languages, where only one WH-phrase is equipped with

---

[9] It seems that there is a possibility that [wh] combines with an A-feature in order to form a composite probe — this could for example be the case in languages such as Hungarian (Richards 1997), Russian (Scott 2012) and has been proposed for Toba Batak (Erlewine 2018). However, this discussion exceeds the aim of this paper and is thus left open for further research.

[wh]). What happens in multiple A'-movement languages is that Focus^0 attracts all WH-elements and moves them up to FocusP. Focus^0 is a multiple attracting head here as well. Then, ForceP probes for [wh], but contrary to Focus^0, it is a single-probing head. It finds the highest WH-element in SpecFocusP and raises it to its specifier. The final landing-site of all WH-elements thus does not differ from A-languages; its featural layout, however, does. In both languages, one WH-element ends up in SpecForceP and all others remain in FocusP. Only, in A-languages, FocusP is a composite [A'/A]-projection, whereas in A'-languages, it is not. Additionally, in A'-languages all WH-phrases carry a (purely A') [wh]-feature. In A-languages, only one WH-element does.

(14)
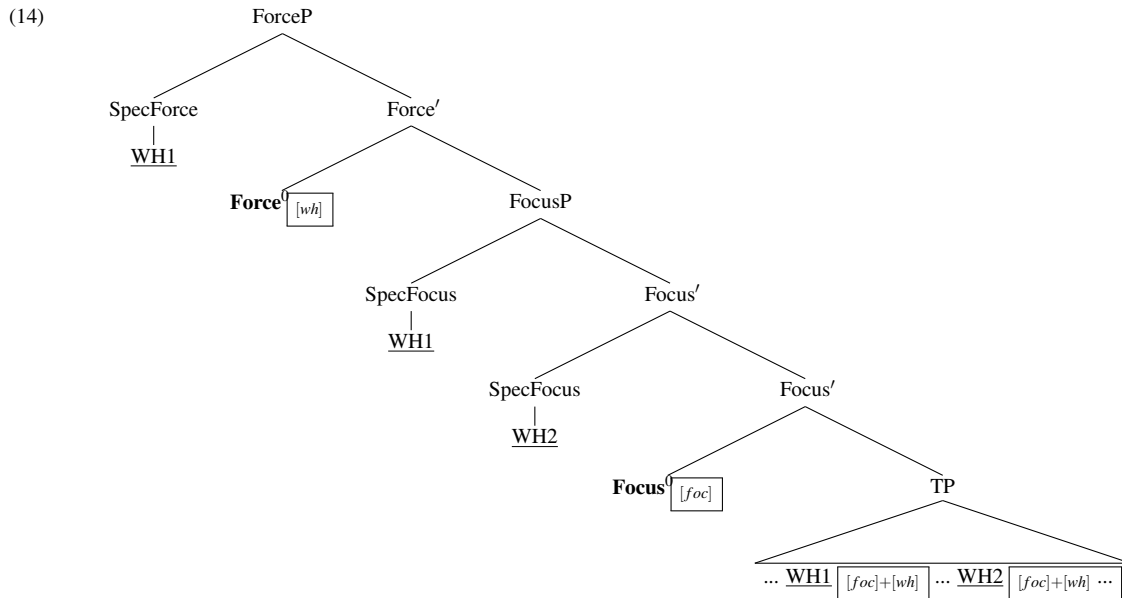
This analysis can explain the observed phenomena in A'-languages: in the first section I laid out that there has been a discussion whether in A'-languages, intervening material between the WH-elements is allowed. I continue following the proposals of Przepiórkowski (1994), Lambova (2001, 2003), Bošković (2002) who claim that intervening material *is* grammatical between the first and second WH-element (not between the second and third, though). The grammaticality of intervening material follows from the fact that the fronted WH-elements do not form a cluster together but end up in different CP-projections; identical to what happens in A-languages. In A'-languages, adverbs and parentheses can only appear between the first and second WH-phrase, not between the second and third. This follows from my approach: the second and third WH-element occupy multiple FocusP specifiers, with no adjunction site for adverbs between them left. The first WH-element, however, is in a higher CP-projection (ForceP) and thus there is adjunction space between it and the rest.[10]

(15)   [$_{ForceP}$ WH **(adverb)** [$_{SpecFocusP}$ WH [$_{SpecFocusP}$ WH ... TP ...]]]

---

[10] Topics in A'-languages, however, do not follow the same pattern as they do in A-languages. In Croatian, as shown in (12), a topicalized phrase can occur between the WH-elements as well as behind them – filling the two TopicPs in CP. However, in Bulgarian, it seems as if topics have to generally precede the WH-complex (see Lambova 2001 or Jaeger and Müller 2003 for data).

Next, superiority effects can be derived via the assumption that in A'-languages, all WH-phrases carry a [wh]-feature additional to their [foc]. I proposed that they all initially A'-move to FocusP and follow Richards (1997) in their ordering of movement: the highest WH-element is moved first since it is the closest goal for the [foc]-probe on Focus^0 (*Attract Closest*). Then, the next highest one is found and tucked-in below the specifier which hosts the first one; a mechanism that Richards calls *Shortest Move*. The WH-elements in FocusP then reflect their base word order. Force^0 then probes for [wh] and finds the highest WH-element in FocusP and raises it up to ForceP. This renders a strict WH-hierarchy, respecting superiority, which reflects the base-position ordering of the WH-phrases. Important for this account is that one has to assume that the multiple specifiers of FocusP are not equidistant from the higher projection (ForceP) but hierarchically stacked. Finally, WCO effects follow straightforwardly from my analysis: since in A'-languages, both WH-movement and focus-movement are triggered by A'-features, they exhibit pure A'-movement qualities, one of which is the occurrence of WCO effects.

4 Conclusion

In this paper I took up a discussion concerned with structural differences between multiple fronting languages. I presented different accounts that try to analyse multiple WH-fronting and explain the distinct behaviour of certain multiple fronting languages in various ways. Eventually, I proposed a new analysis which combines aspects of older accounts with a recent syntactic tool, namely the possibility of composite A'/A-probes. So far, accounts were predominantly concerned with the question of where WH-elements in A-languages move to; most literature seeks a position higher that TP but lower than CP as a landing-site. I join this attempt but following Richards (1997) and Van Urk (2015), focus on how elements move rather than where to. I propose that WH-movement in A-languages includes mixed A'/A-movement and thus WH-movement exhibits certain A-properties. In order to do so, I propose a structural split between [wh]- and [foc]-features, which in my framework are located on different heads of an extended left periphery. However, I adopt the view that WH-movement includes both, [wh]- and [foc]-features and therefore its movement passes through two landing-sites in CP. I suggest that A'- and A-languages syntactically differ in the quality of WH-movement each of them exhibits, as well as the featural make-up of their CP-domain. One group, A-languages, allows a composite probe on Focus^0 and only one WH-element carries a [wh]-probe. The other group, A'-languages, does not allow A-features within its CP-domain, thus Focus^0 is a pure A'-head. Additionally, all of its WH-elements carry a [wh]-feature.

		Features	Focus^0	Force^0	Movement path
A'/A	**WH1**	[foc/A] + [wh]	[foc/A]	[wh]	SpecFocusP > SpecForceP
	WH2	[foc/A]	[foc/A]		SpecFocusP
	(WH3)	[foc/A]	[foc/A]		SpecFocusP
A'	**WH1**	[foc] + [wh]	[foc]	[wh]	SpecFocusP > SpecForceP
	WH2	[foc] + [wh]	[foc]		SpecFocusP
	(WH3)	[foc] + [wh]	[foc]		SpecFocusP

Table 3: A'/A-movement vs. A'-movement of WH-elements

Finally, I explain the observed phenomena in which A'-languages differ from A-languages, such

as superiority and WCO effects and show that they follow from my framework. What distinguishes my proposals from others made before is that the difference between A'- and A-language WH-movement is not tied to different landing-sites but rather to the quality of their movement. This assumption goes along the lines of very recent literature and the general tendency to dissolve strict structural positions.

References

Aldridge, Edith. 2017. ϕ-feature competition: A unified approach to the Austronesian extraction restriction. In *Proceedings of the 52nd meeting of the Chicago Linguistic Society (CLS)*, ed. Jessica Kantarovich, Tran Truong, and Orest Xherija, volume 52, 1–21.

Bailyn, John Frederick. 2015. Bulgarian superiority and minimalist movement theory. In *Proceedings of Formal Approaches to Slavic Linguistics: The NYU Meeting*, ed. Yohei Oseki, Masha Esipova, and Stephanie Harves, 27–50. Ann Arbor, MI: Michigan Slavic Publications.

Bošković, Željko. 1997a. Superiority effects with multiple wh-fronting in Serbo-Croatian. *Lingua* 102:1–20.

Bošković, Željko. 1997b. *The syntax of nonfinite complementation: An economy approach*. MIT Press.

Bošković, Željko. 1998. Wh-phrases and wh-movement in Slavic. *Ms., University of Connecticut* .

Bošković, Željko. 1999. On multiple feature checking: Multiple wh-fronting and multiple head movement. In *Working Minimalism*, ed. Sam Epstein and Norbert Hornstein, 159–188. Cambridge, Mass: MIT Press.

Bošković, Željko. 2002. On multiple wh-fronting. *Linguistic Inquiry* 33:351–383.

Citko, Barbara. 1997. On multiple WH movement in Slavic. In *Proceedings of the Annual Workshop on Formal Approaches to Slavic Linguistics*, ed. Željko Bošković, Steven Franks, and William Snyder, 97–113.

Coon, Jessica, Nico Baier, and Theodore Levin. 2021. Mayan agent focus and the ergative extraction constraint: Facts and fictions revisited. *Language* 97:269–332.

Diaconescu, Constanţa Rodica, and María Luisa Rivero. 2007. An applicative analysis of double object constructions in Romanian. *Probus* 19:209–233.

Diesing, Molly. 2003. On the nature of multiple fronting in Yiddish. In *Multiple wh-fronting*, ed. Cedric Boeckx and Kleanthes K. Grohmann, 51–76. John Benjamins.

Erlewine, Michael Yoshitaka. 2018. Extraction and licensing in Toba Batak. *Language* 94:662–697.

Jaeger, T Florian, and Stefan Müller. 2003. Topics first! In- and outside of Bulgarian wh-interrogatives. In *Proceedings of the 10th International Conference on Head-Driven Phrase Structure Grammar*, ed. Stefan Müller, 181–202. Standford, CA: CSLI Publications.

Krapova, Iliyana. 2002. On D-linking and multiple wh-fronting in Bulgarian. *Presentation held at FASSBL4* .

Lambova, Mariana. 2001. On A-bar movements in Bulgarian and their interaction. *Linguistic Review* 18:327–374.

Lambova, Mariana. 2003. On the interaction of multiple (non) wh-fronting and multiple topicalization in Bulgarian. *University of Pennsylvania Working Papers in Linguistics* 8:127–142.

Lambova, Mariana. 2004. On information structure and clausal architecture: Evidence from Bulgarian. Doctoral Dissertation, University of Connecticut.

Legate, Julie Anne. 2014. *Voice and v: Lessons from Acehnese*. MIT Press.

Przepiórkowski, Adam. 1994. *Critical review of approaches to multiple wh-movement*. Centre for Cognitive Science, University of Edinburgh.

Richards, Norvin. 1997. What moves where when in which language? Doctoral Dissertation, Massachusetts Institute of Technology.

Richards, Norvin. 2001. *Movement in language: Interactions and architectures*. Oxford University Press.

Rizzi, Luigi. 1997. The fine structure of the left periphery. In *Elements of grammar*, 281–337. Springer.

Rudin, Catherine. 1988. On multiple questions and multiple WH fronting. *Natural Language & Linguistic Theory* 6:445–501.

Sabel, Joachim. 2003. Malagasy as an optional multiple wh-fronting language. In *Multiple wh-fronting*, ed. Cedric Boeckx and Kleanthes K Grohmann, 229–254. Amsterdam: John Benjamins Publishing.

Scott, Tatiana. 2012. Whoever doesn't HOP must be Superior: The Russian left-periphery and the Emergence of Superiority. Doctoral Dissertation, Stony Brook University.

Stjepanovic, Sandra. 2003. Multiple wh-fronting in Serbo-Croatian matrix questions and the matrix sluicing construction. In *Multiple wh-fronting*, ed. Cedric Boeckx and Kleanthes K Grohmann, 255–284. Amsterdam: John Benjamins Publishing.

Tasseva-Kurktchieva, Mila. 2001. Multiple wh-movement in Bulgarian: What is still not explained. *Presentation at the Formal Descriptions of Slavic Languages (FDSL)* 4.

Van Urk, Coppe. 2015. A uniform syntax for phrasal movement: A case study of Dinka Bor. Doctoral Dissertation, Massachusetts Institute of Technology.

Witkoś, Jacek. 2008. On the correlation between A-type scrambling and lack of Weak Crossover effects. *Studia Anglica Posnaniensia* 44:297–327.