

Non-Wh-Fronting in Basque*

Lara Reglero

University of Connecticut

1. Introduction

According to Bošković (1999), all wh-phrases obligatorily move to the beginning of the sentence in Serbo-Croatian.¹ Since the movement of one wh-phrase should be enough to check the strong +wh-feature of C, one can deduce that wh-phrases in Serbo-Croatian must be fronted overtly for independent reasons. Bošković (1999) argues that Serbo-Croatian wh-phrases undergo focus movement to a position below C. He also shows that the following properties of Serbo-Croatian can be accounted for in a principled way under this analysis: lack of Superiority effects (i.e. free order of Serbo-Croatian wh-phrases) and the availability of single-pair answers.

In this paper I will evaluate Bošković's (1999) proposal with respect to question formation in Basque. The present study is the first attempt to offer an account of the mechanisms underlying multiple question formation in Basque. Previous research (Ortiz de Urbina (1995, 1999a)) has found that wh-words in Basque behave very similarly to elements bearing focus. However, there are no detailed studies dealing with multiple question formation in this language. In this paper I will offer an analysis of multiple questions in Basque which will help us gain a deeper insight into the nature of "wh"-movement in this language.

The paper is organized as follows. First, I will introduce Bošković's (1999) theory. This will be crucially important since I will use the tools provided by this author in trying to analyze the Basque data. Second, I will introduce the data to be accounted for. As shown below, Basque allows two strategies to ask a question such as 'who bought what?'. One possibility is that one wh-phrase fronts and the other stays in situ. The other possibility is that both wh-phrases move overtly to the front of the sentence. We will see that, independently of the strategy employed, Superiority effects always show up in this language. Third, I will offer some background regarding "wh"-movement in Basque. As will become clear, the driving force behind wh-fronting in this language is focus. Fourth, I will give an analysis for the first strategy found in Basque. The basic idea is that, contrary to appearances, both wh-phrases move overtly in the syntax. Fifth, I will provide an analysis for the second strategy, that is, the Multiple Wh-Fronting strategy. As shown below, wh-phrases raise to a syntactic position below C. Finally, I will offer a brief discussion of multiple questions in long-distance wh-movement contexts.

2. Theoretical Background

In this section I will discuss the three main ingredients of Bošković's system: focus, Superiority and the interpretation of questions.

2.1. Focus

In a series of papers (Bošković 1997a, 1997c, 1998b, 1999, 2002), Bošković argues that wh-phrases in Serbo-Croatian undergo focus movement.² The main motivation for this approach comes from Stjepanović's (1998) work. According to her, wh-phrases in Serbo-Croatian behave like contrastively focused non-wh-phrases in many respects.³ She interprets these similarities as an indication that wh-phrases in Serbo-Croatian are inherently focused and therefore undergo overt movement for focus purposes. This idea goes back to Horvath (1986). In her system, the movement of wh-phrases in certain languages is analyzed as an instance of focus movement. This line of research establishes a connection between the movement of wh-phrases and the movement of contrastively focused non-wh-phrases. In other words, if a language allows overt movement of contrastively focused non-wh-phrases, wh-phrases in that language front for focus reasons. It is important to emphasize that the notion of contrastive focus is crucial in this analysis. As Kiss (1998) points out, there are two different types of focus: identificational focus, which expresses exhaustive identification and occupies the specifier of a functional projection in focus-movement languages, and information focus, which conveys new, nonpresupposed information and is not associated with movement. The former type is also known as narrow or contrastive focus and the latter as wide or presentational focus. We are interested in the first notion.

Bošković, building on Stjepanović's (1998) work, adopts the idea that wh-fronting in Serbo-Croatian should be analyzed as focus movement. Before doing that, he shows first that all wh-fronting in Serbo-Croatian is not wh-movement. For example, all wh-phrases in Serbo-Croatian must front. If we were dealing with wh-movement, the movement of one wh-phrase would suffice to check the +wh-feature of C. Since all wh-phrases must move overtly in Serbo-Croatian (see (1) below), there must be something else motivating the movement.

- (1) a. *Ko šta gdje kupuje?*
 who what where buys
 'Who buys what where?'
 b. **Ko kupuje šta gdje?*
 c. **Ko šta kupuje gdje?*
 d. **Ko gdje kupuje šta?*

Another piece of evidence arguing for the fact that all wh-fronting in Serbo-Croatian is not wh-movement comes from echo questions. Wh-phrases in Serbo-Croatian cannot stay in situ in echo questions (cf. (2)). Given that these types of questions do not presumably involve checking of the +wh-feature, the obligatory fronting of wh-phrases must be motivated by something other than wh-movement.⁴

- (2) *?*Jovan kupuje ŠTA?*
Jovan buys what
'Jovan buys what?'

2.2. Superiority

A curious property of focus fronting in Serbo-Croatian is that it does not exhibit Superiority effects. The grammaticality of the examples below shows that wh-phrases are freely ordered in this language:

- (3) *Ko je šta kupio?*
who is what bought
'Who bought what?'

- (4) *Šta je ko kupio?*

Bulgarian, another language Bošković (1999) analyzes in depth, differs from Serbo-Croatian in this respect. As shown in (5) and (6), Bulgarian conforms to the Superiority Condition.⁵

- (5) *Koj kakvo e kupil?*
who what is bought
'Who bought what?'

- (6) **Kakvo koj e kupil?*

Bošković (1999) accounts for the Bulgarian pattern in the following way. First, he argues that Bulgarian, in contrast to Serbo-Croatian, has wh-movement in these constructions. In order to capture this fact, Bošković (1999) adopts the Economy account of Superiority which requires that the +wh-feature of C be checked in the most economical way (i.e. through the shortest movement possible). Under this account, the Nominative wh-phrase *koj* must move to Spec CP before the Accusative wh-phrase *kakvo* since this is the most economical way to check the +wh-feature of C.⁶ (6) is ruled out since the movement of *kakvo* is less economical, that is, it results in a longer link. In this respect, Bulgarian behaves exactly like English. To put it clearer, both languages exhibit Superiority effects. From the evidence collected so far, it seems that wh-movement is sensitive to Superiority but focus movement is not (cf. Bošković 1999).

The Bulgarian data raise several questions. If Bulgarian wh-fronting is an instance of wh-movement, why must all wh-phrases obligatorily move to the front of the sentence?

- (7) **Koj e kupil kakvo?*
who is bought what
'Who bought what?'

Bošković (1999) takes this fact as evidence that focus movement is also involved in Bulgarian. More precisely, movement of one wh-phrase should suffice to check the strong +wh-feature of C. Wh-fronting of the remaining wh-phrases is an instance of focus movement. This analysis makes a prediction. If wh-movement, which is subject to the Superiority Condition, affects only one wh-phrase, then the movement of the highest wh-phrase would satisfy the requirement that the +wh-feature of C be checked in the most economical way. If focus movement, which is not subject to the Superiority Condition (cf. (3) and (4)), is responsible for the fronting of the rest of the wh-phrases, then one would expect these wh-phrases to be freely ordered. The prediction is borne out by the Bulgarian data in (10) and (11):

(8) *Kogo kakvo e pital Ivan?*
 whom what is asked Ivan
 ‘Who did Ivan ask what?’

(9) **Kakvo kogo e pital Ivan?*

(10) *Koj kogo kakvo e pital?*
 who whom what is asked
 ‘Who asked whom what?’

(11) *Koj kakvo kogo e pital?*

As the examples above make clear, the Nominative wh-phrase *koj* moves first to check the strong +wh-feature of C. The second and third wh-phrases are freely ordered since they are subject only to focus movement.

Bošković (1999) accounts for these facts by modifying Chomsky’s (1995) Attract system. More specifically, Bošković (1999) proposes that the attractor for wh-movement is an Attract-1F head (Attract-1F implies that the formal inadequacy of the attractor is overcome by attracting 1 feature F). This entails that given two potential attractees, the Attract-1F head will always attract the highest wh-phrase. Attract-1F heads give us Superiority effects. In contrast, Bošković (1999) proposes that the attractor for focus movement is an Attract-all-F head (an Attract-all-F head is a head that has a formal inadequacy that can only be overcome by attracting all features F). Superiority effects are not expected in this case since the order in which wh-phrases move to the relevant head yield equally economical derivations. To put it clearer, the derivation in which *kogo* (cf. (10)) moves first to the attracting head is equally economical as the derivation in which *kakvo* moves first (cf. (11)). Since the same number of nodes are crossed in both cases to satisfy the relevant Attract-All property, both derivations yield equally economical outputs.

The Bulgarian pattern receives the following analysis in Bošković’s (1999) system. According to Bošković (1999), C in Bulgarian has two features: Attract-1F +wh-feature and Attract-all-F +focus feature. Once C enters the derivation, the movement of the highest wh-phrase satisfies the formal inadequacies of C. After the highest wh-phrase moves, the order of

movement of the remaining wh-phrases is free since focus movement is not subject to Superiority.

To summarize, wh-movement is subject to Superiority because the relevant head has an Attract-1F feature. Focus movement does not exhibit Superiority effects because focus movement has the Attract-all-F property.

The discussion above makes a further prediction. Whenever Superiority effects show up, wh-movement is involved in the derivation. The data from Bulgarian and English support this claim. In those languages where the Superiority Condition is operative, wh-movement is taking place. Since Serbo-Croatian wh-phrases are freely ordered, wh-movement is not responsible for the overt fronting of the wh-phrases. This state of affairs becomes relevant for certain constructions in Serbo-Croatian. As Bošković (2002) shows, Serbo-Croatian exhibits Superiority effects in some contexts. More precisely, the Superiority Condition is operative in embedded, long-distance and overt C questions:

- (12) a. *[Ko koga voli], taj o njemu i govori.*
who whom loves that-one about him even talks
'Everyone talks about the person they love.'
b. *?*[Koga ko voli], taj o njemu/o njemu taj i govori.*
- (13) a. *?Ko koga tvrdiš da je istukao?*
who whom claim that is beaten
'Who do you claim beat whom?'
b. **Koga ko tvrdiš da je istukao?*
- (14) a. *Ko li koga voli?*
who C whom loves
'Who on earth loves whom?'
b. **Koga li ko voli?*

In order to account for these facts, Bošković (2002) establishes a parallelism between Serbo-Croatian and French. The core idea of this proposal is that Serbo-Croatian exhibits Superiority effects in those contexts in which French must have wh-movement, which involve embedded, long-distance and overt C questions. To put it another way, Serbo-Croatian has real wh-movement when French has it. If this is so, then we have an explanation for the facts in (12) through (14). Serbo-Croatian wh-phrases are subject to ordering constraints in these examples because wh-movement, crucially not just pure focus movement, is taking place here.⁷

2.3. Interpretation of questions

Whether wh-phrases undergo focus or wh-movement has consequences for the interpretation of questions. As Bošković (1998a, 1999, 2002) points out, the English question in (15) obligatorily requires a pair-list answer:

(15) Who bought what?

(15) cannot receive a single-pair answer. In other words, (15) cannot be felicitously uttered in the following situation: “John is in a store and off in the distance sees somebody buying an article of clothing, but does not see who it is and does not see what exactly the person is buying. He goes to the shop-assistant and asks (15).”

Curiously, the Japanese and Chinese counterparts of (15) can receive not only a pair-list answer but also a single-pair answer. To put it clearer, the Japanese question in (16) can be asked in the situation described above.

(16) *Dare-ga nani-o katta no?*
who-NOM what-ACC bought Q
‘Who bought what?’

One crucial difference between English and Japanese/Chinese is that wh-phrases in English move overtly to Spec CP. In contrast, wh-phrases in Japanese and Chinese stay in situ and consequently do not move overtly to Spec CP. Given this difference, it could be the case that filling Spec CP overtly forces the pair-list interpretation for some reason. As Bošković (1998a, 1999, 2002) shows, French confirms this conjecture. French allows the in-situ and the wh-movement strategy, as shown in (17) and (18). Crucially, single-pair answers are only allowed with the in-situ strategy (cf. (17)). This state of affairs provides strong evidence for the claim that single-pair answers are only allowed when Spec CP is not filled in the overt syntax.

(17) *Il a donné quoi à qui?*
he has given what to who
‘What did he give to who?’

(18) *Qu’a-t-il donné à qui?*

If we now turn to the interpretation of multiple questions in Bulgarian and Serbo-Croatian, we expect the following: Bulgarian, a language in which Spec CP is filled overtly, should only allow a pair-list answer. In this respect, Bulgarian would pattern with English. In contrast, Serbo-Croatian, a language in which wh-phrases do not move to Spec CP overtly, should allow single-pair answers (note that the claim that wh-phrases in Serbo-Croatian do not move to Spec CP overtly goes against Rudin’s (1988) original proposal in which the first wh-phrase in Serbo-Croatian wh-questions is located in Spec CP). Serbo-Croatian would pattern with Japanese and Chinese in the relevant respect. The predictions are borne out. As Bošković shows, the Serbo-Croatian multiple question in (3) (repeated as (19)) allows both a pair-list and a single-pair answer. In contrast, the Bulgarian counterpart in (5) (repeated as (20)) requires a pair-list answer:

(19) *Ko je šta kupio?*
who is what bought
'Who bought what?'

(20) *Koj kakvo e kupil?*
who what is bought
'Who bought what?'

This analysis makes the following prediction: when wh-movement takes place overtly in Serbo-Croatian, single-pair answers should be disallowed since Spec CP would be filled in the overt syntax. The topic construction is one such context. As Bošković (2002) shows, such constructions in Serbo-Croatian exhibit Superiority effects (cf. (21)), which we have taken to be a diagnostic that wh-movement has taken place (see Bošković (2002)) for an explanation why wh-movement takes place in this construction). If wh-movement is indeed taking place here, single-pair answers should be disallowed in (21a). The prediction is borne out. (21a) requires a pair-list answer.

(21) a. *Tom čoveku, ko je šta poklonio?*
that man who is what bestowed
'To that man, who bestowed what?'
b. ?? *Tom čoveku, šta je ko poklonio?*

In conclusion, whenever wh-movement takes place, that is, whenever Spec CP is filled overtly, single-pair answers are disallowed. If only focus movement is involved, single-pair answers are allowed since Spec of CP is not filled overtly in these cases.

In this section I have summarized the core ideas of Bošković's system. In the next section I introduce the data to be accounted for. In my attempt to offer an analysis, I will use the tools provided by Bošković and I will evaluate whether his system can capture the Basque data.

3. The Data

Basque has two different strategies to ask a question such as 'Who bought what?'. One possibility is that one wh-phrase is fronted and the other stays in situ, as in (22). The other possibility is that both wh-phrases move overtly to the beginning of the sentence, as in (23):
8,9

(22) *Nork erosi du zer?*
who-ERG buy AUX what-ABS
'Who bought what?'

(23) *Nork zer erosi du?*

Wh-phrases exhibit Superiority effects, as shown below:^{10,11}

(24) **Zer erosi du nork?*
What-ABS buy AUX who-ERG
'*What did who buy?'

(25) **Zer nork erosi du?*

4. Focus in Basque

In this section we will see that Basque wh-fronting is an instance of focus movement. In this respect, Basque exhibits the same behavior as Serbo-Croatian. Before going into the details of the account, I will present some basic facts about word order in Basque which will be crucially important for the analysis I propose in this paper.

4.1. Word order

Basque is an SOV language (de Rijk 1969, Eguzkitza 1986, Ortiz de Urbina 1989 among others) with very flexible word order. All the word orders in (26) through (31) are allowed but only (26) is pragmatically neutral.

(26) *Jonek Miren ikusi zuen.*
Jon-ERG Miren-ABS see AUX
'Jon saw Miren.'

(27) *Miren ikusi zuen Jonek.*

(28) *Jonek ikusi zuen Miren.*

(29) *Miren Jonek ikusi zuen.*

(30) *Ikusi zuen Jonek Miren.*

(31) *Ikusi zuen Miren Jonek.*

(Ortiz de Urbina 1995)

The sentence in (26) would be the most natural way to answer a question such as 'What happened?' This implies that in a sentence where everything is new information the most appropriate word order is SOV. Similarly, in sentences with two objects the pragmatically neutral word order is S IO DO V, as in (32):

- (32) *Jonek Mireni muxu bat eman zion*
 Jon-ERG Miren-DAT kiss one give AUX
 ‘Jon kissed Mary.’

In (27) and (28) the element to the left of the verb is interpreted as focus. *Miren* in (27) and *Jonek* in (28) bear contrastive stress and receive a focus interpretation. As Elordieta (2001) points out, postverbal elements in these types of sentences express given information. (29) exhibits a slightly different pattern. As in (27) and (28), the element preceding the verb, that is *Jonek*, is interpreted as focus. *Miren* in this sentence is separated from the focalized *Jonek* by a pause and receives a topic interpretation.¹² Finally, the verb itself is focalized in (30) and (31). Note that the auxiliary *zuen* cannot be initial in (26) through (32).

4.2. Focus in Basque

As mentioned above, focalized elements land in a position immediately adjacent to the verb. This observation has a long tradition which goes back at least to Altube (1929). More recently, de Rijk (1978), Eguzkitza (1986), Martin Callejo (1984) and Ortiz de Urbina (1989, 1995, 1999a) among others have investigated this phenomenon in depth (Basque grammarians call the focus position *galdegaia*, which literally means ‘the subject of question’ (*galde* ‘ask’, *gaia* ‘subject’). Ortiz de Urbina (1999a), for example, has paid special attention to the similarities between focus movement and wh-movement. These similarities, to be explained below, led him to conclude that foci and wh-words undergo the same type of movement and that both types of elements land in the same position; namely, Spec FocP (see Ortiz de Urbina 1999b for the latter conclusion).

Ortiz de Urbina (1999a) points out the following distributional similarities between foci and wh-words. To begin with, both occur in clause initial position and are immediately followed by the verb.¹³ Compare (28) with (33) below:

- (33) *Nork ikusi zuen Miren?*
 who-ERG see AUX Miren-ABS
 ‘Who saw Miren?’

The ungrammaticality of (34) and (35) shows the adjacency between foci/wh-words and the verb:¹⁴

- (34) **JONEK Miren ikusi zuen.*
 Jon-ERG Miren-ABS see AUX
 ‘It is Jon that saw Miren.’

- (35) **Nork Miren ikusi zuen?*
 who-ERG Miren-ABS see AUX
 ‘Who saw Miren?’

Second, both foci and wh-words are optionally preceded by topics. Compare (36) with (29) above:

- (36) *Miren, nork ikusi zuen?*
 Miren-ABS who-ERG see AUX
 ‘As for Miren, who saw her?’

As Ortiz de Urbina (1999b) points out, a sentence may contain multiple topics. These topics are freely permutable and receive a listing intonation.

- (37) *Atzo/Mirenekin/Jon nora/ETXERA joan zen.*
 yesterday/Miren-with/Jon where/home-to go AUX
 ‘Where did John go yesterday with Miren?’
 ‘Yesterday, with Miren, John went HOME.’

Third, foci, like wh-words, can undergo cyclic movement with bridge verbs:

- (38) *JONEK uste dut [t esan du-ela Mikelek [t idatzi du-ela eskutitza].*
 Jon-ERG think AUX say AUX-COMP Mikel-ERG write AUX-C letter
 ‘It is Jon that I think Mikel has said has written the letter.’
- (39) *Nork uste duzu [t esan du-ela Mikelek [t idatzi du-ela eskutitza]]?*
 who think AUX say AUX-COMP Mikel-ERG write AUX-COMP letter
 ‘Who do you think Mikel has said has written the letter?’

Fourth, focal operators and interrogative operators behave in the same way in pied-piping configurations. Interrogative operator features can percolate in these configurations. Similarly, focal operators can also percolate in the same types of constructions.

- (40) *[JONEN lagunek] idatzi zuten eskutitza.*
 Jon’s friends-ERG write AUX letter-ABS
 ‘JON’s friends wrote the letter.’
- (41) **[JONEN lagunek eskutitza] idatzi zuten.*
- (42) *[Noren lagunek] idatzi zuten eskutitza?*
 whose friends-ERG write AUX letter-ABS
 ‘Whose friends wrote the letter?’
- (43) **[Noren lagunek eskutitza] idatzi zuten?*

A parallel behavior is also observed with clausal pied-piping constructions:

- (44) [*JONEK idatzi du-ela liburua*] *esan du Peiok*
 Jon-ERG write AUX-COMP book-ABS say AUX Peio-ERG
 ‘Peio said that JON wrote the book.’ (‘That JON wrote the book has Peio said.’)
- (45) [*Nork idatzi du-ela liburua*] *esan du Peiok?*
 who-ERG write AUX-COMP book-ABS say AUX Peio-ERG
 ‘Who wrote the book has Peio said?’
- (46) [[*JONEK idatzi du-en*] *liburuak*] *izan ditu salmenta onak.*
 Jon-ERG write AUX-COMP books-ABS be AUX sale good
 ‘The book that JON has written sold well.’
- (47) [[*Nork idatzi du-en*] *liburuak*] *izan ditu salmenta onak?*
 who-ERG write AUX-COMP books-ABS be AUX sale good
 ‘The book that who wrote had good sales?’

The ungrammaticality of (48) suggests that focus and wh-elements compete for the same position. This pattern is observed both in matrix (cf. (48)) and in embedded sentences (cf. (49)):

- (48) a. **Nork MIREN ikusi du antzokian?*
 who-ERG Miren-ABS see AUX theater-at
 ‘Who saw MIREN at the theater?’
 b. **MIREN nork ikusi du antzokian?*
- (49) *Galdetu didate (*JONEK) zer (*JONEK) erosi duen.*
 Ask AUX Jon-ERG what-ABS Jon-ERG buy AUX-COMP
 ‘They have asked me what JOHN bought.’

From the discussion above, we can draw the following conclusions: foci and wh-words undergo the same type of movement and occupy the same structural position; namely, the position immediately adjacent to the verb. Given the parallel behavior between foci and wh-words, it seems reasonable to conclude that wh-fronting in Basque is not the outcome of wh-movement but of focus movement (Ortiz de Urbina 1999a, Eguzkitza 1986 etc).¹⁵ In this respect, wh-words in Basque exhibit a parallel behavior to those in Serbo-Croatian.

Further evidence supporting the idea that wh-words in Basque are inherently focused comes from echo questions. Similarly to Serbo-Croatian, wh-words in Basque move overtly to the beginning of the sentence even in questions where the +wh-feature is not present. Given the fact that wh-words in Basque move overtly even in questions with an echo interpretation, we can conclude that the fronting of wh-phrases in Basque is independent of the +wh-feature. (50) below is a representative example:

(50) A: *Zugandik atera dira kontu zikin guzti horiek.*
you-from come AUX stories dirty all those
'All those dirty stories have come from you.'

B: a. *Nigandik ZER atera dela?*
me-from what-ABS come AUX-COMP
'(That) what has come from me?'
b. **Nigandik atera dela ZER?*

(Etxepare & Ortiz de Urbina, in press)

Given the previous empirical evidence, I will assume in the remainder of this paper that wh-phrases in Basque move overtly to check a focus feature.

5. The Wh-in-situ Strategy

With all the background provided in sections 2 and 4, we are now ready to discuss the Basque data from section 3. I will first provide an analysis for the Basque sentences in which one wh-phrase moves to the beginning of the sentence and the other wh-phrase stays in situ. A representative example is (22), repeated as (51):

(51) *Nork erosi du zer?*
who-ERG buy AUX what-ABS
'Who bought what?'

I will argue that in sentences such as (51) the fronted wh-phrase is focalized whereas the in situ wh-element is D-linked. My last claim, that is, that in situ wh-elements are D-linked, is reminiscent of the behavior of in situ wh-phrases in Slavic. As Bošković (2002) shows, non-D-linked wh-phrases in Serbo-Croatian must be fronted obligatorily. In contrast, D-linked wh-phrases can remain in situ, as in (52):

(52) *Ko je kupio koju knjigu?*
who is bought which book
'Who bought which book?'

In this respect, Basque and Slavic exhibit a parallel behavior, as will be shown below. In order to support my claims empirically, I will consider Pesetsky's (1987) 'the hell' test. As Pesetsky (1987) points out, there are elements which are good candidates for "aggressively non-D-linked" wh-phrases. In English examples such as (54), there is a conflict between aggressively D-linked 'which' and aggressively non-D-linked 'the hell'. The conflict does not arise in (53) since the nature of 'what' is different from that of 'which':

(53) What the hell book did you read that in?

(54) *Which the hell book did you read that in?

To put it clearer, ‘the hell’ is a wh-modifier which expresses complete ignorance. As den Dikken and Giannakidou (2001, 2002) indicate, when ‘the hell’ combines with a wh-word, the speaker does not know what the value of the wh-word will be. Since the range of reference of D-linked wh-phrases is discourse-given, any attempt to attach an element which stands for ‘non-givenness’ (i.e. ‘the hell’) to an element which is inherently D-linked, will result in an ungrammatical sentence (cf. (54)). (53) is perfectly grammatical because ‘what’ is not inherently D-linked and is therefore free to combine with the “aggressively non-D-linked” ‘the hell’.

This type of test helps us differentiate between those wh-phrases which are D-linked from those which are not. Now, I will apply the same line of reasoning to some Basque examples:

(55) *Nor arraiok erosi du zer?*
who hell-ERG buy AUX what-ABS
‘Who the hell bought what?’

(56) **Nork erosi du zer arraio?*
who-ERG buy AUX what hell-ABS
‘Who bought what the hell?’

The grammaticality of (55) indicates that *nork* is not D-linked in this sentence since it is able to combine with the “aggressively non-D-linked” *arraio* (the exact translation of *arraio* is ‘lighting’. I will translate it as ‘hell’ in the text for ease of exposure). In contrast, (56) is ungrammatical suggesting that the in situ wh-phrase *zer* must be D-linked.

In summary, Pesetsky’s (1987) ‘the hell’ test indicates that the fronted wh-phrase in (51) is non-D-linked whereas the in situ wh-phrase is D-linked. As Bošković (2002) points out, only non-D-linked wh-phrases in Slavic undergo focus movement. This correlation is fairly intuitive in the sense that non-D-linked wh-phrases do not refer to previously mentioned or contextually salient referents. Focus movement implies the notion of ‘new information’, something ‘not given’. Therefore, the semantic nature of non-D-linked wh-phrases allows them to undergo focus movement. D-linked elements, on the other hand, have very different semantics from non-D-linked wh-phrases. As Pesetsky (1987) points out, when a speaker asks a question like ‘which book did you read?’ the range of felicitous answers is limited by a set of books both speaker and hearer have in mind. Therefore, the reference of D-linked wh-phrases such as ‘which man’ is discourse given. This ‘discourse givenness’ property is reminiscent of the notion ‘topic’. As mentioned in footnote 12, “the topic is said to be the introductory part of a sentence foregrounding known information” (Kiss 1981: 185). Topics refer to old, given information, something that is not new. Given the close connection between D-linking and Topicalization, I will claim that being D-linked is equivalent to being topicalized. This idea is not new. For extensive discussion of the similarities between D-linking and Topicalization, I refer the reader to Grohmann (1998).

The basic idea is that D-linking in the minimalist framework correlates with some feature. Since being D-linked implies being ‘given’ and since being a topic also implies being ‘given’, it is reasonable to conclude that the feature D-linking correlates with is a topic feature. This is Grohmann’s (1998) conclusion with respect to the behavior of multiple questions in German.

So far I have provided evidence indicating that *nork* in (51) undergoes focus movement by virtue of its non-D-linked nature. *Zer*, in contrast, is D-linked or topicalized. Since the range of reference of D-linked elements is discourse given, elements such as *zer* in (51) are not inherently focused and therefore do not undergo focus movement.

5.1. Predictions

My analysis makes the following predictions. First, if the in-situ wh-phrase *zer* is D-linked or topicalized in (51), one would expect inherently D-linked wh-phrases to appear in that position. The prediction is borne out, as in (57):

- (57) *Nork erosi zuen zein liburu?*
 who-ERG buy AUX which book-ABS
 ‘Who bought which book?’

Furthermore, if the Ergative wh-phrase *nork* in that very sentence occupies a position for focalized elements, then we should expect inherently D-linked wh-phrases to be disallowed in preverbal position. The prediction is apparently not borne out (cf. (58a)):

- (58) a. *Zein ikaslek erosi zuen zer?*
 which student-ERG buy AUX what-ABS
 ‘Which student bought what?’
 b. **Zer erosi zuen zein ikaslek?*

This problem does not only arise in multiple questions. In a simpler sentence such as (59a), the position corresponding to focalized elements is occupied by a D-linked wh-phrase:

- (59) a. *Zein liburu erosi du Jonek?*
 which book-ABS buy AUX Jon-ERG
 ‘Which book did Jon buy?’
 b. **Jonek erosi du zein liburu?*

From the evidence presented in the sentences above, it seems that inherently D-linked phrases are allowed in sentence initial position, contrary to our predictions. However, the facts are a bit more intricate than (58a) and (59a) show. Etxepare and Ortiz de Urbina (in press) notice that, in some circumstances, parentheticals can interrupt the sequence Wh-phrase Verb. A representative example is given below:

- (60) *Zein idazle, gaurko edo denbora bateko, iruditzen zaizu gidaririk*
 which writer-ABS today-from or time other seem AUX guide
zuzenena hitz kontuan?
 best word in-terms
 ‘Which writer, from today or from other times, seems to you the best guide in terms of words?’

What is curious in this example is that the wh-phrase which is separated from the verb is inherently D-linked. A question arises at this point: would we obtain the same grammaticality judgment if we substituted *zein ikasle* for a non-D-linked wh-phrase like *nor*? As (61) shows, this possibility is not allowed in Basque (note that from now on, I will assume non-D-linked contexts for non-inherently-D-linked wh-phrases):

- (61) **Nor, gaurko edo denbora bateko, iruditzen zaizu gidaririk*
 who-ABS today-from or time other seem AUX guide
zuzenena hitz kontuan?
 best word in-terms
 ‘Who, from today or from other times, seems to you the best guide in terms of words?’

This discussion partially resembles some Bulgarian facts. As Bošković (2002) shows, a parenthetical can more easily intervene between two fronted wh-phrases if the second one is D-linked. The contrast in (62) and (63) exemplifies this point.

- (62) *?*Koj, spored tebe, kakvo e kupil?*
 who according to-you what is bought
 ‘Who, according to you, bought what?’
- (63) ?*Koj, spored tebe, koja kniga e kupil?*
 who, according to-you which book is bought
 ‘Who, according to you, bought which book?’

Given this state of affairs, Bošković (2002) concludes that *kakvo* and *koja kniga* do not land in the same position. As he puts it, *koja kniga* in (63) does not undergo focus movement and lands in a position below CP.

Basque behaves like Bulgarian in the sense that fronted D-linked wh-phrases seem to land in a different position from that of non-D-linked wh-phrases. If this were not the case, there should be no reason for different grammaticality judgments between the two types of wh-phrases. I would therefore like to suggest that inherently D-linked wh-phrases in Basque do not land in the same position as non-D-linked wh-phrases. Given the contrast in grammaticality between (60) and (61), I will assume that D-linked wh-phrases are higher than the position where non-D-linked wh-phrases move to. Presumably, non-D-linked wh-phrases land in Spec FocP (cf. Ortiz de Urbina 1999b) while inherently D-linked wh-phrases

land in the Spec of a TopP, placed above FocP (cf. Rizzi (1997)). Leaving aside the precise nature of the positions where non-D-linked wh-phrases and inherently wh-phrases move to, the crucial point of my discussion is that the two types of wh-phrases land in different positions.

My analysis makes another prediction. If the in situ position in sentences such as (51) is the position where D-linked or topicalized elements are located, then we should expect those elements which are incapable of receiving a D-linked interpretation to be disallowed in the in situ position. Kiss (1993) treats wh-phrases such as ‘how’ and ‘why’ differently from wh-phrases of the form ‘which applicant’ (see Pesetsky (1987) for an earlier discussion on the behavior of ‘why’). According to her, ‘how’ and ‘why’ cannot be D-linked, or in her terminology, ‘how’ and ‘why’ are incapable of specificity. If this is correct, then we should expect ‘how’ and ‘why’ to be disallowed in the ‘in situ’ position. The prediction is borne out:

(64) **Nori esplikatu dio Jonek ariketa nola?*
 who-DAT explain AUX Jon-ERG exercise-ABS how
 ‘To whom did Jon explain the exercise how?’

(65) **Nork lapurtu ditu bitxiak zergatik?*
 who-ERG steal AUX jewels-ABS why
 ‘Who stole the jewels why?’

Notice that *nola* and *zergatik* are allowed in preverbal position. This is expected since the preverbal position is the position where focalized elements move to. If *nola* and *zergatik* cannot be D-linked, then, we should expect those two wh-phrases to be allowed in a position where D-linking is not playing a role; namely, the preverbal position:

(66) *Nola esplikatu dio ariketa Jonek nori?*
 how explain AUX exercise-ABS Jon-ERG who-DAT
 ‘How did Jon explain the exercise to whom?’

(67) ?*Zergatik lapurtu ditu bitxiak nork?*
 why steal AUX jewels-ABS who-ERG
 ‘Why did who steal the jewels?’

5.2. Landing Sites

So far I have presented evidence that the preverbal wh-phrase is focalized whereas the in situ wh-phrase is D-linked or topicalized. A question arises at this point: where are the wh-phrases located in the structure? Before offering an answer to this question, let me show some data which will become relevant in our search for the landing positions of wh-phrases.

At first sight, one would expect in situ wh-phrases to occupy the same position as their non-wh-counterparts. This conclusion is supported by sentences such as (68) and (69):

(68) *Nork erosi du zer?*
who-ERG buy AUX what-ABS
'Who bought what?'

(69) *Nork erosi du liburua?*
who-ERG buy AUX book-ABS
'Who bought the book?'

Zer in (68) seems to occupy the same position as *liburua* in (69). However, this parallelism can no longer be maintained if more data are carefully examined.

(70) *Nork eman dio muxua sutsuki Mireni?*
who-ERG give AUX kiss passionately Miren-DAT
'Who kissed Miren passionately?'

(71) a. **Nork eman dio muxua sutsuki nori*
who-ERG give AUX kiss passionately who-DAT
'Who kissed whom passionately?'
b. *Nork eman dio nori muxua sutsuki?*

The data above suggest that “wh-phrases-in-situ” are structurally higher than their non-wh counterparts. As (70) makes clear, the object *Mireni* can appear after the manner adverb *sutsuki*. In contrast, *nori* cannot appear after the adverb, as in (71a). The sentence is only grammatical when the wh-phrase appears higher in the structure (cf. (71b)) (*nori* can marginally appear after *muxua* in (71b). However, the sentence is clearly more degraded, ranging from ‘??’ to a ‘*’ depending on the speaker). Note that the same grammaticality judgment obtains if we substitute *nori* for an inherently D-linked wh-phrase such as *zein neskari* (‘to which girl’). This is expected since, under my analysis, in situ wh-phrases in Basque are D-linked.

(72) a. **Nork eman dio muxua sutsuki zein neskari?*
who-ERG give AUX kiss passionately which girl-DAT
'Who kissed passionately which girl?'
b. *Nork eman dio zein neskari muxua sutsuki?*

In order to account for this pattern, I will suggest the following: wh-phrases “in situ” have a topic feature which must be checked overtly. This idea has its origins in Grohmann’s (1998) work. As I noted above, Grohmann (1998) suggests that wh-phrases in German are D-linked. This D-linking property is syntactically encoded on the wh-phrase by means of a topic feature which must be checked overtly in a spec-head relation. He proposes that wh-phrases in German, by virtue of being D-linked, undergo overt movement to the spec of a TopP where the topic feature the wh-phrase carries can be formally checked.

(71a) is then ungrammatical because the wh-phrase *nori* has failed to be attracted and therefore its topic feature remains unchecked. Once overt movement takes place, the output we obtain is grammatical (cf. (71b)). Since non-wh-objects do not have to check a topic feature, they can remain in their base position. Note that the non-wh-object *Mireni* in (70) can also appear before the adverb, as in (73):

- (73) *Nork eman dio Mireni muxua sutsuki?*
 who-ERG give AUX Miren-DAT kiss-ABS passionately
 ‘Who kissed Miren passionately?’

The crucial difference between (73) and (71b) is that the movement of the wh-phrase in (71b) is obligatory. In contrast, *Mireni* undergoes it optionally. I will treat cases where the object moves overtly (cf. (73)) as instances of scrambling. According to Uriagereka (1999), there are no detailed analyses of scrambling in Basque. Given this state of affairs I will not discuss the exact mechanism which is prompting the movement of *Mireni* in (73). Suffice it to say that the movement of *nori* is obligatory whereas the movement of *Mireni* is optional (i.e. ‘scrambling’). Given this difference, I will assume that each movement is instantiated in a different way.

At this point we are ready to investigate the landing positions of the wh-phrases in sentences such as (51). In order to do so, I will use data with adverbs. According to Watanabe (1993) and Bošković (1997d), manner adverbs are VP adjoined and sentential adverbs are TP adjoined (see Jackendoff (1972) for an earlier version). Those adverbs which are ambiguous between the two interpretations allow both adjunction possibilities. Taking these facts into account let us investigate the position wh-phrases move to in the syntax.

Example (74), where the sentential adverb *atzo* is placed after the verb, suggests that the preverbal wh-phrase and the verb must be higher than TP.¹⁶ (75) shows that the position of the adverb in (74) is the highest position the sentential adverb can be located in.¹⁷

- (74) *Nork eman zion atzo liburua Mireni?*
 who-ERG give AUX yesterday book-ABS Miren-DAT
 ‘Who gave the book to Miren yesterday?’

- (75) **Nork atzo eman dio liburua Mireni?*

I will argue that the preverbal wh-phrase does not land in Spec CP. Following Ortiz de Urbina (1999b), I assume that the preverbal wh-phrase lands in the Spec of FocP. Further evidence for this idea comes from the interpretation of questions. As Bošković (1999, 2002) shows (see the discussion above), single-pair answers are only allowed when Spec CP is not filled overtly by a wh-phrase. In Basque the most salient reading for a question such as (51) is a pair-list reading. However, one of my informants allows a single-pair answer for this question.¹⁸ I take this to suggest that wh-phrases do not move overtly to Spec of CP in Basque. Note that Bošković (2002) points out that not filling Spec CP overtly is necessary but not sufficient for licensing single-pair answers. In other words, a language may not fill

Spec CP overtly and still only allow pair-list answers (this follows under the analysis of the phenomenon under consideration presented in Bošković (1998a)). Given this fact and given that one of my informants accepts single-pair answers, I will assume that preverbal wh-phrases in Basque do not move overtly to CP but remain in a lower position; namely Spec of FocP.

Now let me offer some data which can help us figure out the position of the postverbal wh-phrase (from now on I will refer to ‘in situ’ wh-phrases as ‘postverbal wh-phrases’. Since we have found that in situ wh-phrases are not really in situ, I will change the terminology to make it more intuitive). As the data in (70) and (71) above made clear, the postverbal wh-phrase cannot stay inside the VP. If manner adverbs are adjoined to VP and *nori* cannot appear after the manner adverb *sutsuki* then we can safely conclude that *nori* must be higher than VP. The relevant example is repeated below:

- (76) **Nork eman dio muxua sutsuki nori?* (=71a)
 who-ERG give AUX kiss passionately who-DAT
 ‘Who kissed whom passionately?’

Sentential adverbs indicate that the postverbal wh-phrase must be higher than TP. *Atzo* ‘yesterday’ in (77)-(78) is only acceptable when placed right after the postverbal wh-phrase. As (78) shows, *zer* cannot appear after the sentential adverb, indicating that *zer* cannot be lower than TP. The grammaticality of (77) gives further support to this idea.¹⁹

- (77) ?*Nork eman zion zer atzo Mireni?*
 who-ERG give AUX what-ABS yesterday Miren-DAT
 ‘Who gave what to Miren yesterday?’

- (78) ?**Nork eman zion atzo zer Mireni?*

Data with ambiguous adverbs give further support to the claim that the postverbal wh-phrase must be higher than TP. In the examples below, the manner reading of *zuhurki* is possible in (80) but not in (79), indicating that *nori* must be higher than VP. Similarly, the sentential reading of *zuhurki* is allowed in (80) but not in (79). This state of affairs suggests that the postverbal wh-phrase *nori* is located above TP:

- (79) **Nork aholkatu zion zuhurki nori?*
 Who-ERG advise AUX wisely who-DAT
 ‘Who advised wisely whom?’

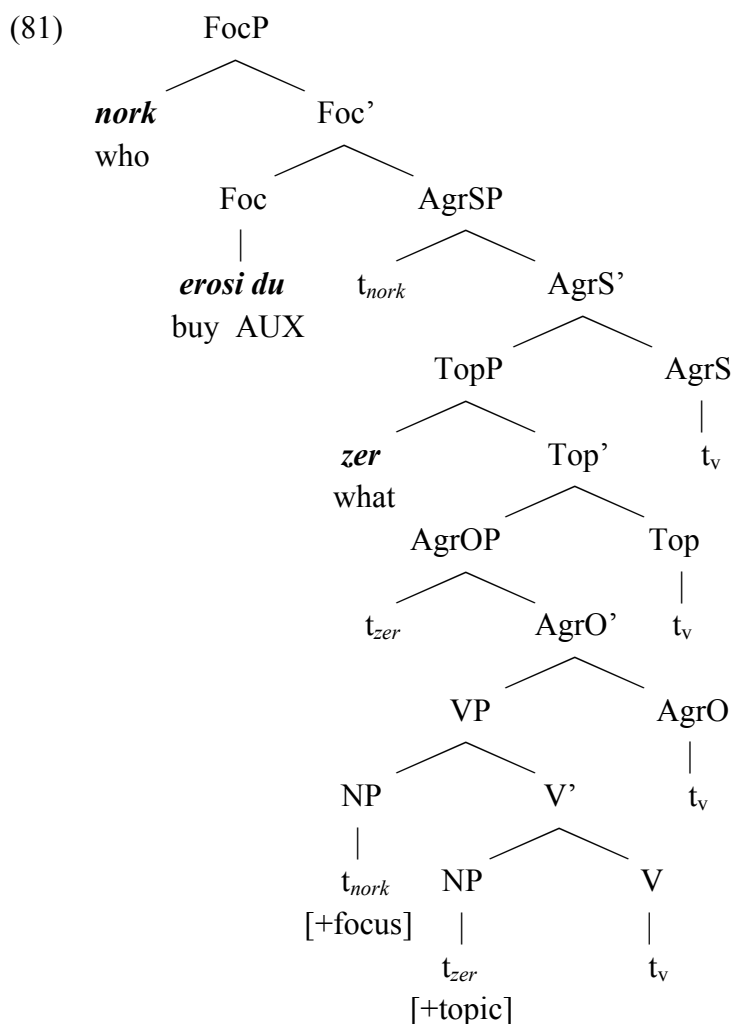
- (80) *Nork aholkatu zion nori zuhurki?*

Given the above discussion, I assume that the projection the postverbal wh-phrase lands in is TopP.²⁰

5.3. Derivation

In this section I will present the derivation for (51) and I will offer an explanation for the Superiority effects that this construction exhibits (cf. (24)).

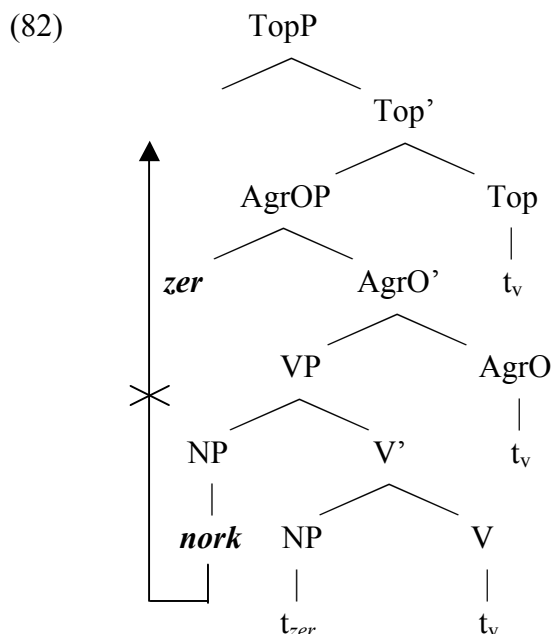
The derivation I am proposing in this paper is shown in (81):^{21,22}



As the tree above shows, the derivation starts with the Ergative wh-phrase *nork* in the Spec of VP and the object wh-phrase *zer* as the complement of the verb *erosi du*. AgrOP enters the derivation and *zer* raises overtly to check its Absolutive Case.²³ I will assume that the projection where *zer* lands is the next projection that is inserted into the tree. The label of this projection is TopP since I am assuming that wh-phrases move overtly to check a topic feature. The crucial point is that when the head of that projection enters the derivation, it attracts the highest wh-phrase. In this case *zer* is higher than *nork*. *Zer* therefore moves to Spec TopP, checking a topic feature. Then, AgrS enters the tree and *nork* moves overtly for Case-checking purposes. Finally, FocP enters the derivation and *nork*, being the closest wh-phrase, is attracted.

Superiority effects can be now easily accounted for. When the relevant attraction operation takes place, that is, when TopP enters the derivation, *zer* is higher in the structure.

If we follow the Economy account of Superiority, moving *nork* over *zer* would result in a longer link.²⁴ The relevant step is provided below:



6. Multiple Wh-Fronting

In this section I will investigate the properties of constructions where two wh-phrases have undergone movement to the beginning of the sentence. The relevant example is given in (83):

- (83) *Nork zer erosi du?* (= (23))
 who-ERG what-ABS buy AUX
 ‘Who bought what?’

I will argue that *zer* is focalized and *nork* is functioning as a topic.

The claim that *zer* is focalized in (83) is not surprising given the evidence discussed above that those elements immediately to the left of the verb are focalized in Basque. As pointed out by Ortiz de Urbina (1999a), among others, any element preceding a wh-word functions as a topic in Basque. If *liburua* in (84) is undergoing topic movement, it is reasonable to say that *nork* in (83) is undergoing the same type of movement:

- (84) *Liburua nork erosi du?*
 book-ABS who-ERG buy AUX
 ‘As for the book, who bought it?’

Moreover, *nork* behaves like a D-linked or topicalized element with respect to Pesetsky’s (1987) ‘the hell’ test:

- (85) **Nor arraiok zer erosi du?*
 who hell-ERG what-ABS buy AUX
 ‘Who the hell bought what?’

In (85) the position *nork* occupies is the position of a D-linked or topicalized element. The sentence is ungrammatical because *nork*, being in a D-linked position, cannot combine with the aggressively non-D-linked *arraio*.

We would now expect *zer* to be able to co-occur with *arraio* because *zer* is non-D-linked or focalized in my analysis. The prediction is borne out, as in (86):

- (86) *Nork zer arraio erosi du?*
 who-ERG what-ABS hell buy AUX
 ‘Who bought what the hell?’

The grammaticality of (86) shows that *zer* can combine with the aggressively non-D-linked *arraio* suggesting that *zer* is non-D-linked in this example.

6.1. Predictions

If *nork* is D-linked in (83) and *zer* is focalized, then we would expect inherently D-linked wh-phrases to be disallowed in the immediately preverbal position. In contrast, inherently D-linked elements should be allowed in the position *nork* occupies in the sentence under discussion. The predictions are borne out, as shown below:

- (87) *?*Nork zein liburu erosi zuen?*
 who-ERG which book-ABS buy AUX
 ‘Who bought which book?’
- (88) (?)*Zein ikaslek zer irakurri zuen?*
 which student-ERG what-ABS read AUX
 ‘Which student read what?’

(87) shows that inherently D-linked wh-phrases such as *zein liburu* are not allowed in the position where focalized elements land. This is expected given the incompatibility between D-linking and focus. The incompatibility does not arise in (88) because *zein ikaslek*, being inherently D-linked, can freely land in the position D-linked or topicalized elements move to.

Example (88) is relevant regarding the discussion in section 5.1. Recall that in that section I suggested that an example such as (58a) is grammatical because the preverbal inherently D-linked wh-phrase *zein ikaslek* does not land in the position corresponding to focalized elements but in a higher position in the structure, presumably in the Spec of a TopP. The ungrammaticality of (87) gives further support to this idea. In (87) there is a wh-phrase functioning as a topic and a second wh-phrase functioning as the focus of the sentence. Notice that inherently D-linked wh-phrases are allowed only in the position corresponding to

the first wh-phrase; namely, *nork* (cf. (88)). If one tries to place them in the position corresponding to focalized elements, the output is ungrammatical, as in (87). Given these facts I will conclude that *zein ikaslek* in (89) lands in a position higher than the position occupied by focalized wh-phrases.

- (89) *Zein ikaslek erosi zuen zer?* (= (58a))
 which student-ERG buy AUX what-ABS
 ‘Which student bought what?’

My second prediction is as follows: those wh-phrases that were unable to stay in situ due to their impossibility to receive a D-linked interpretation should now be allowed to appear in the position immediately adjacent to the verb. The prediction is fulfilled as shown by the contrast in grammaticality between (90) and (91) and (92) and (93), respectively.

- (90) **Nori esplikatu dio Jonek ariketa nola?*
 who-DAT explain AUX Jon-ERG exercise how
 ‘Who did Jon explain the exercise how?’

- (91) *Nori nola esplikatu dio Jonek ariketa?*

- (92) **Nork lapurtu ditu bitxiak zergatik?*
 who-ERG steal AUX jewels-ABS why
 ‘Who stole the jewels why?’

- (93) *Nork zergatik lapurtu ditu bitxiak?*

My analysis makes another prediction. Sentences such as (94)-(95) should be ruled out. In these constructions, elements which cannot receive a D-linked interpretation (i.e. *nola* ‘how’ and *zergatik* ‘why’) are placed in the position for D-linked elements. The ungrammaticality of the examples is thus expected under my analysis.²⁵

- (94) **Nola zer irakurri zuen Jonek?*
 how what-ABS read AUX Jon-ERG
 ‘How did John read what?’

- (95) **Zergatik zer irakurri zuen Jonek?*
 why what-ABS read AUX Jon-ERG
 ‘Why did Jon read what?’

6.2. Derivation

There are a number of questions that need to be answered before going into the details of the derivation of the Multiple Wh-Fronting structure in (83). The first question I would like to

raise is the following: are Topic and Focus licensed in the same projection? At first sight, it seems that they are licensed in different projections. This is so because the Topic-Subject-Verb order is possible (cf. (96)) whereas the order Focus-Subject-Verb is not, as shown in (97) (I assume that the subject is in Spec AgrSP):

(96) *Mireni, Jonek muxu bat eman zion.*
 Miren-DAT Jon-ERG kiss one give AUX
 ‘Miren, Jon kissed.’

(97) a. **MIRENI Jonek eman zion muxu bat.*
 Miren-DAT Jon-ERG give AUX kiss one
 ‘Jon has kissed MIREN.’
 b. *MIRENI eman zion Jonek muxu bat.*

However, if Topic and Focus land in different projections, why can no material intervene between the two wh-phrases in (98)?

(98) **Nork horretaz/beraz/Joni zer erranen dio?*
 who-ERG on that/ therefore/Jon-DAT what-ABS say AUX
 ‘Who will say what to John/therefore/on that?’

(Etxepare & Ortiz de Urbina, in press)

Based on the ungrammaticality of (98), I assume that *nork* and *zer* are located in the same projection, with multiple Spec structures.

At this point we are still left with some open questions: which head licenses the two features (i.e. Topic and Focus)? Why is the focused element lower in the structure? In order to answer the first question, let me offer a short digression. In examples such as (83), a single-pair answer is allowed. In Bošković’s (1999, 2002) system, the availability of single-pair answers is taken as evidence that Spec CP is not filled in the overt syntax. Since Basque allows single-pair answers in a multiple question such as (83), we can deduce that Spec CP is not filled overtly in Basque. Whatever head is licensing the Topic and Focus features, it must be below C.

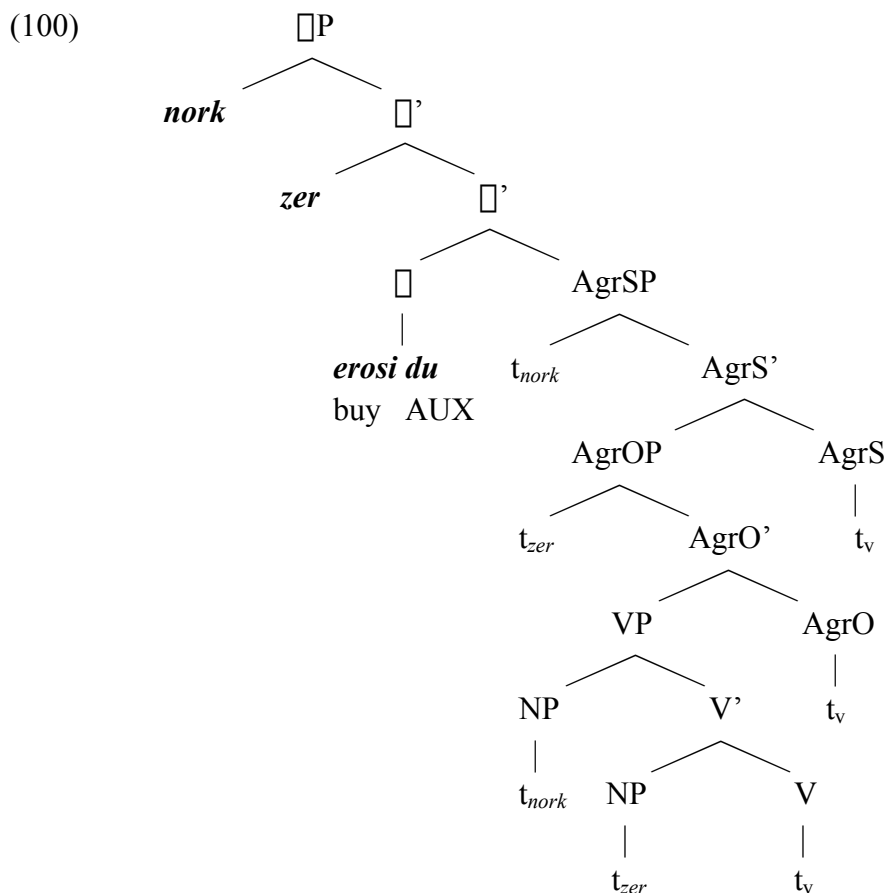
Data with sentential adverbs indicate that the head we are interested in must be at least higher than TP:

(99) *Nork zer eman zion atzo Mireni?*
 who-ERG what-ABS give AUX yesterday Miren-DAT
 ‘Who gave what to Miren yesterday?’

It seems that whatever head is simultaneously licensing Topic and Focus must be below C but above TP. Furthermore, the head under discussion licenses both features at the same time. This point is important because Topic and Focus convey opposite communicative functions (i.e. Topic=old information and Focus=new information). Uriagereka (1995), Boeckx &

Stjepanović (1999) and Lambova (2001) have already dealt with this issue. Despite the differences, the three accounts basically argue for the presence of a functional projection capable of hosting discourse-related material. If this is possible, then there is no longer a problem in assuming that Topic and Focus can be licensed by the same head. Since Topic and Focus are both discourse-related, they can be hosted in the same projection. For the sake of exposition I will assume that both topicalized and focalized elements land in the Spec of \square P (Lambova 2001). The projections suggested in Boeckx & Stjepanović (1999) and Uriagereka (1995) are virtually equivalent to Lambova's (2001) \square P.

The derivation I propose for (83) is as follows (I discuss the exact position of the verb below. At this point I place it in \square for ease of exposition):



The first steps of the derivation are similar to those in (81). We start with a VP which has *nork* as its specifier and which has *zer* as the complement of the verb *erosi du*. *Nork* is taken from the lexicon with a Topic feature. In contrast, *zer* is taken with a Focus feature. In the next two steps of the derivation, each wh-phrase raises overtly to check Case. In other words, once AgrOP enters the derivation, *zer* raises overtly to check Absolutive Case. Then, *nork* moves overtly to Spec AgrSP in order to get its Ergative Case checked. The relevant head enters the derivation now. Once \square P shows up, the highest wh-phrase, that is *nork*, moves to the highest specifier and then the next wh-phrase, *zer*, moves to the lower specifier (note that I assume that TopP, which could be located below AgrSP, is only optionally present in the

structure). If we attempt to move *zer* over *nork*, a Superiority violation would arise, as in (101):

- (101) (= (25)) **Zer* *nork* *erosi du?*
 what-ABS who-ERG buy AUX
 ‘What did who buy?’

What still needs to be explained is why we always end up with the order Topic Focus. In order to answer this question I will follow Lambova (2001), who in turn follows Bošković (2001), and suggest that the focus feature in the wh-phrase is a verbal PF affix and therefore must be adjacent to a verbal element, as shown in (97) above and (102) below.²⁶ As a result, we always end up with the Topic-Focus-Verb order:

- (102) a. **Zer* *Mirenek* *eman zion Pellori?*
 what-ABS Miren-ERG give AUX Pello-DAT
 ‘What did Miren give to Pello?’
 b. *Zer eman zion Mirenek Pellori?*

Under this proposal, the adjacency between Focus and Verb is due to phonological rather than syntactic factors. Syntax can in principle yield either the Topic-Focus-Verb or the Focus-Topic-Verb order. However, if syntax derives the unacceptable order Focus-Topic-Verb, PF will rule out this derivation since the focus feature in the wh-phrase will fail to attach to its host; namely, the verb. As an alternative to the PF account, one could argue that a purely syntactic account can also account for the data in (102). Under a syntactic account, the verb *eman zion* raises to $\bar{\alpha}$ obligatorily. (102b) above is grammatical because V-to- $\bar{\alpha}$ has taken place. (102a) is ruled out since the verb has not raised all the way to $\bar{\alpha}$.

Both the PF account and the syntactic account discussed above account for the data in (102). However, there are additional data that show that the PF account is superior. Let us examine (96) and (97) (repeated as (103) and (104)) again in more detail.

- (103) *Mireni,* *Jonek* *muxu bat eman zion.*
 Miren-DAT Jon-ERG kiss one give AUX
 ‘Miren, Jon kissed.’

- (104) a. **MIRENI* *Jonek* *eman zion muxu bat.*
 Miren-DAT Jon-ERG give AUX kiss one
 ‘Jon has kissed MIREN.’
 b. *MIRENI eman zion Jonek muxu bat.*

In (103) and (104a) the topic *Mireni* and the focus *MIRENI* are located in the same position; namely, Spec of $\bar{\alpha}$ P. Under the syntactic account, the verb *eman zion* would raise to $\bar{\alpha}$ obligatorily. Consequently, there would be no extra space between the verb and the topic/focus. If this is so, the grammaticality of (103) remains unaccounted for. In other

words, if *Mireni* is located in Spec $\bar{C}P$ and the verb is in \bar{C} , where is the extra material between the topic and verb located? It follows then that the verb is not located in the head of $\bar{C}P$, otherwise (103) would be bad. More precisely, under the syntactic V to \bar{C} account of the adjacency requirement, (103) should be bad for the same reason as (104a). The above data point to one direction: the focus-verb adjacency in Basque is not the result of V-to- \bar{C} movement. The empirical evidence suggests that the adjacency requirement between focus and verb is the result of a PF process, as I have argued above.

There is a problem with this account though. As I have explained above, it seems that contrastive focus forces V-adjacency. However, there are cases in Basque which suggest that V-adjacency forces contrastive focus. If (103) is slightly modified, as in (105), we obtain a different interpretation for the sentence. More precisely, when the verb is placed next to the subject, the subject has to be contrastively focused.

- (105) *Mireni, JONEK eman zion muxu bat.*
 Miren-DAT Jon-ERG give AUX kiss one
 ‘Miren, JON kissed.’

In order to account for this state of affairs, I will assume that \bar{C} has a weak V feature. The verb moves overtly in those cases in which a PF violation is going to take place, that is, in those cases in which the affix is going to end up non-adjacent to the verb. To put it another way, the verb moves to \bar{C} overtly only if there is a focused element in Spec $\bar{C}P$ so that it can support the PF verbal affix. Otherwise, the verb moves in LF in order not to violate Procrastinate. We thus have a mixed account between phonology and syntax. We have movement to \bar{C} , but it is not obligatory. It is only forced when there is a verbal PF affix in Spec $\bar{C}P$.

This account makes a prediction. The order Topic-Verb-Object should not be allowed, as in (106):

- (106) **Mireni eman zion liburua.*
 Miren-DAT give AUX book
 ‘Miren, (Jon) gave the book.’

The reason why the topic cannot precede the verb is because there is no PF verbal affix involved in this case. There is then no reason for V-to- \bar{C} to take place overtly. Hence the verb moves in LF in order not to violate Procrastinate.²⁷

6.3. Three *wh*-phrases

In Basque it is possible to front three *wh*-phrases, as in (109) (I am trying to avoid using an inanimate *wh*-phrase since some speakers are sensitive to animacy differences (cf. Billings and Rudin (1996)). The problem with the paradigm below is that my informants do not have Superiority effects to start with, as shown in (107) and (108). Given this state of affairs, it is

impossible to draw a definite conclusion with respect to Superiority with three wh-phrases in Basque.^{28,29}

(107) (?) *Nor nori aurkeztu zion Jonek?*
who-ABS who-DAT introduce AUX Jon-ERG
'Who did Jon introduce to whom?'

(108) (?) *Nori nor aurkeztu zion Jonek?*

(109) *Nork nori nor aurkeztu zion?*
who-ERG who-DAT who-ABS introduce AUX
'Who introduced who to whom?'

(110) *Nork nor nori aurkeztu zion?*

As I have shown, it is not clear what is going on with respect to Superiority in constructions with 3 wh-phrases. I will now examine the topic/focus status of wh-elements in constructions with 3 wh-phrases. In order to do that, I will use Pesetsky's (1987) 'the hell' test. The results of the test are as follows: the first two wh-phrases are D-linked/topicalized and the wh-phrase adjacent to the verb is focalized.

(111) **Nor arraiok nori zer esan zion?*
who hell-ERG who-DAT what-ABS say AUX
'Who the hell said what to whom?'

(112) **Nork nor arraiori zer esan zion?*
who-ERG who hell-DAT what-ABS say AUX
'Who said what to who the hell?'

(113) *Nork nori zer arraio esan zion?*
who-ERG who-DAT what hell-ABS say AUX
'Who said what the hell to whom?'

Is there a way to account for the pattern Topic-Topic-Focus in Basque? In order to account for this pattern, I propose the following: in Basque there is a head with two features; namely, Attract-all-discourse and Attract-1Topic (I am assuming, following Bošković (1999), that elements that are already located in discourse-related positions (e.g. lower Spec TopP) cannot be attracted by another discourse-related head). This system basically says that all discourse-related elements, that is, Topic and Focus, are attracted. Furthermore, the highest wh-phrase is attracted first. This analysis would give us the Bulgarian pattern where the first wh-phrase is attracted first and the second and third wh-phrase are freely ordered (cf. (10) and (11)). This is of course an idealization of judgments. I am taking the Bulgarian pattern to

be the representative one until clearer judgments emerge from the Basque data with three wh-phrases.

The analysis proposed above, that is, that there is a head in Basque with both the Attract-all-discourse and the Attract-1-Topic properties thus ensures that the highest wh-phrase is attracted first. It also ensures that there is only one focus. The last claim follows from the adjacency requirement between the verbal PF affix and the verb. For example, in a Topic Focus Focus Verb order, the adjacency requirement between the focus feature of the second Focus and the Verb cannot be satisfied, hence this order is ruled out.

7. Long-distance contexts

As discussed in section 2.2., Serbo-Croatian must have wh-movement in those contexts where C is inserted overtly in the structure. If Basque is a Serbo-Croatian type language with respect to when it must have wh-movement we would expect Basque also to obligatorily have wh-movement when overt C is present in a sentence, as in (114).³⁰

- (114) *Nork zer esan dute erosi duela?*
 who-ERG what-ABS say AUX bring AUX-COMP
 ‘Who did they say bought what?’

The data in (114) raises several questions though. To begin with, *nork* in (114) is D-linked, as shown in (115a). Furthermore, single-pair answers are allowed in (114) (recall that in Bošković’s system, single-pair answers are only allowed when wh-movement to Spec CP does not take place overtly):

- (115) a. **Nor arraiok zer esan dute erosi duela?*
 who hell-ERG what-ABS say AUX buy AUX-COMP
 ‘Who the hell did they say that bought what?’
 b. ?*Nork zer arraio esan dute erosi duela?*
 who-ERG what hell-ABS say AUX buy AUX-COMP
 ‘Who did they say that bought what the hell?’

This indicates that wh-movement is not taking place here. There are two possibilities to account for the data. It might be the case that *-(e)la* is not a C or, more likely, that Basque is like Russian.³¹ As Stepanov (1998) and Bošković (2002) have argued, wh-movement does not take place in Russian even in those cases where C is inserted overtly in the structure.³² As expected, single-pair answers are allowed in Russian even in this type of constructions. If Basque is like Russian, we have an explanation for the fact that single-pair answers are still allowed even in the presence of an overt C.

8. Concluding Remarks

In this paper I have provided an analysis which accounts for the wh-movement strategies in Basque presented in section 3. The main findings of this paper are as follows. First, in sentences such as (51) no wh-phrase remains in situ in the structure. Under my proposal, the postverbal wh-phrase raises overtly to check a topic feature. Second, I have offered an analysis for Multiple Wh-fronting structures in which the wh-phrase closer to the verb is focalized and the rest of the wh-phrases are topicalized. In order to account for this pattern, I have proposed that Basque has a head with two features: Attract-all-discourse and Attract-1Topic. Under this analysis, all wh-phrases bearing focus or topic are moved to the front of the sentence. Furthermore, the highest wh-phrase must move first. The fact that only one wh-phrase is focalized follows from the adjacency requirement of a PF verbal affix.

I have argued for a new paradigm of multiple question formation which has not been previously analyzed in the literature. I have shown that the paradigm can be successfully captured by Bošković's Attract-all-F approach to Multiple-Wh Fronting. More specifically, I have presented data from a language which can on the surface be treated as an Attract-all-Topic language. However, I have presented evidence that that is not the correct analysis for Basque. Instead, I have shown that the Basque data should be analyzed by positing a head with the Attract-all-discourse and the Attract-1Topic features. It is also worth noting that Basque is a Multiple-Wh Fronting language which crucially differs from Slavic in that there is only one Focus. So far, we have the following Multiple-Wh Fronting languages: Attract-all-Focus (Slavic) and Attract-all-Discourse (Basque). It remains to be seen whether there is a language where all and only topicalized wh-phrases are fronted to the beginning of the sentence.

Notes

* My deepest thanks go to my advisor, Željko Bošković. Without his help, this paper would have never been possible. For helpful comments and discussion, I would like to thank Sigrid Beck, Cedric Boeckx, Andrea Calabrese, Kleanthes Grohmann, Howard Lasnik, Jon Ortiz de Urbina, Chris Wilder and audiences at the V LEHIA Workshop, the 6th Hispanic Linguistics Symposium and WECOL 2002. Thanks to my informants: Xabier Artiagoitia, Arantzazu Elordieta, Gorka Elordieta, Ricardo Etxepare, Elena García, Estíbaliz Izagirre, Zurine Lekuona and Itziar San Martín. Thanks to all of them for their comments and for their patience with the judgments. Last but not least, I would like to thank Daniel Solís for his invaluable support during the writing of this paper.

This research has been funded by a scholarship from the Department of Education, Universities and Research of the Basque Government.

1. See Bošković (2002) for some exceptions to this generalization.
2. Bošković (1999) uses the term ‘non-wh-fronting’ to refer to the type of movement motivated independently of the +wh-feature. More specifically, he treats focus movement as an instance of ‘non-wh-fronting’. As the title of this paper suggests, I intend to investigate the phenomenon of non-wh-fronting in Basque. However, I am using the term ‘non-wh-fronting’ to refer not only to focus but also to topic movement of wh-phrases.
3. Her arguments come from the position that wh-words and contrastively focused phrases move to and also from the interpretation of adverbs. Since she found that both wh-phrases and contrastively focused non-wh-elements behave on equal grounds in both realms, she concluded that wh-phrases are inherently focused in Serbo-Croatian and consequently undergo the same type of movement contrastively focused non-wh-elements undergo. See Stjepanović (1998) for the relevant tests.
4. The judgment in (2) holds for echo questions used to ask for repetition of information the person asking the question has not heard. (2) improves if the echo question is used to express surprise. This contrast follows from the nature of focus movement since, in contrast to the first reading, in the second reading the value of the wh-word is known to both the speaker and hearer. Hence, the wh-phrase is subject to focus movement only on the first reading. See Bošković (2002) for details.
5. The Superiority Condition was originally formulated by Chomsky (1973). In order to account for contrasts such as (i) and (ii), Chomsky (1973) proposed the Condition in (iii):
 - (i) Who bought what?
 - (ii) *What did who buy?
 - (iii) 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. The category A is superior to the category B if every major category dominating A dominates B as well but not conversely.
6. Eventually, both wh-phrases land in Spec CP. The analysis proposed by Bošković (1999) holds either if one adopts the rightward adjunction (cf. Rudin 1988) or the multiple specifier analysis of Multiple Wh-Fronting in Bulgarian (cf. Richards 1997). Either way the first wh-phrase linearly moves first.
7. Bošković (1997c) assumes that C-insertion triggers immediate wh-movement in Serbo-Croatian. C in (3) and (4) is phonologically null. Bošković (1997c) assumes that it is merged at the root of the tree in LF. Since C does not enter the structure overtly, wh-movement does not take place overtly. In indirect questions C must be inserted overtly in order not to violate the requirement that Merger expand the tree. Example (14) above contains a phonologically realized C *li*. Given that *li* is phonologically realized, it follows that it must be introduced in overt syntax. The contexts where C must enter the structure overtly involve overt wh-movement under the assumption that C-insertion

triggers immediate wh-movement (the assumption follows from Chomsky's (1995) approach to strength). As a result, these contexts exhibit Superiority effects.

8. There are three main cases in Basque: the ergative *-k*, the absolutive \emptyset , and the dative *-(r)i*. I will use the following abbreviations: ERG = Ergative, ABS = Absolutive and DAT = Dative.

9. In (22) *nork* is focalized. *Zer* in (23) bears focus and is separated by a short break from the first wh-word. I discuss this below. Note that some speakers disallow (23).

10. It is possible to front three wh-phrases, as in (i). I have not included the relevant data in the main text due to unclear judgments (when it comes to Superiority effects) and several interfering factors. For the relevant discussion on the data with three wh-phrases, see section 6.3.

- (i) *Nork nori nor aurkeztu zion?*
who-ERG who-DAT who-ABS introduce AUX
'Who introduced who to whom?'

11. According to Etxepare and Ortiz de Urbina (in press) (24) is grammatical. However, seven out of the eight informants I consulted about this sentence found (24) considerably more degraded than (22), so I will concentrate on this judgement only.

12. Syntactic tests point to the same direction. To begin with, topics denote old information. As Kiss (1981: 185) puts it, "the topic is said to be the introductory part of a sentence foregrounding known information." In English, (ia) cannot be the answer to (ib):

- (i) a. What did Mary buy?
b. *The house, Mary bought.

Basque exhibits the same behavior, as in (ii):

- (ii) a. *Zer erosi du Mirenek?*
what-ABS buy AUX Miren-ERG
'What did Miren buy?'
b. **Etxea, Mirenek erosi du.*
house-ABS Miren-ERG buy AUX
'The house, Miren bought.'

Negative quantifiers cannot be topicalized, as in (iii):

- (iii) *Nothing, Mary bought.

The counterpart of (iii) in Basque is also ruled out, as shown in (iv):

- (iv) **?Ezer, Mirenek ez du erosi.*
Nothing/anything Miren-Erg NEG AUX buy
'Nothing, Miren bought.'

Finally, idiom chunks generally resist topicalization, as in (v):

- (v) a. John kicked the bucket.
b. *The bucket, John kicked.

An idiom chunk such as (via) cannot be topicalized in Basque, as shown in (vib):

- (vi) a. *Jonek adarra jo du.*
 Jon-ERG horn hit AUX
 ‘Jon has hit the horn.’ (meaning ‘John was kidding.’)
 b. **Adarra, Jonek jo du.*

13. Ortiz de Urbina (1993) provides an example containing a postverbal focalized element:

- (i) *Etorri da AITA*
 come AUX father
 ‘It is the father that has arrived.’

According to Elordieta (2001), postverbal focus is interpreted as ‘focus of correction’. As she makes clear, ‘focus of correction’ has a different meaning and a different intonation pattern from that of preverbal focus. Therefore, I will disregard these examples since they seem to have different properties from the ones I am interested in. For further discussion of the difference between preverbal and postverbal focus, see de Rijk (1996) and Etxepare (1997).

14. As de Rijk (1978) points out, there are a few elements which can be placed between the focus/wh-word and the verb. For instance, *ez* ‘no’, *omen* ‘reportedly’, *bide* ‘apparently’, *ote* ‘by any chance’ and *al* (yes-no question marker) can interrupt the sequence focus/wh-word Verb. An example of this phenomenon is provided below:

- (i) *Zergatik ote dago hainbeste tximeleta?*
 why are so-many butterflies
 ‘Why are there so many butterflies?’

(Etxepare & Ortiz de Urbina, in press)

What is responsible for the placement of these elements is beyond the scope of this paper. Presumably, these elements are clitics adjoined to the verb.

Uriagereka (1992, 1999) also provides examples where the adjacency requirement is not respected:

- (ii) *Nork ardoa edaten du?*
 who-ERG wine-ABS drink AUX
 ‘Who has drunk wine?’
 (iii) *Zergatik zaldunak herensugea hil zuen?*
 why knight-ERG dragon-ABS kill AUX
 ‘Why did the knight kill the dragon?’

The problem with these examples is that they are very marginal, especially the first one (Elordieta 2001). Given the exceptional character of these examples, I will disregard them for the purposes of my paper.

15. This conclusion is tentative. As I will show below, only some wh-words, that is, those wh-words adjacent to the verb, undergo focus movement in Basque. I will show that, when it comes to wh-fronting, there are other types of movements involved (i.e. topic movement), too.

16. I am taking *atzo* ‘yesterday’ as an example of a sentential adverb. I did not use the sentential adverb *seguruenera* ‘probably’, as in Watanabe (1993) and Bošković (1997d), since there are interfering factors with it. To be more precise, (77)-(78) below are both bad with the sentential adverb *seguruenera* ‘probably’.

17. The sentential adverb can also appear in sentence initial position. In this example the adverb is interpreted as a topic and is presumably adjoined to some projection (to be defined) in the Left

Periphery. I will disregard these types of examples since they do not affect the argument presented here.

18. I checked these data with three informants. Two of them only allowed pair-list answers and one allowed a single-pair answer.

19. One of my informants found (77) degraded. However, he found that (78) was worse than (77). Crucial for my argumentation is that there is a contrast in grammaticality between the two examples.

20. This idea receives further support from Stjepanović's (1999) work. According to her, topics in Serbo-Croatian are licensed either in AgrSP or in a lower projection in the structure; namely, PredP. Under her analysis, PredP (located between T and AgrOP) is able to host topics. My TopP is very similar to Stjepanović's (1999) PredP. Both projections are relatively low in the structure and are able to host topics.

21. Following Ortiz de Urbina (1999b), I will assume that FocP in Basque is left-headed despite the fact that Basque is an SOV language. See Ortiz de Urbina (1999b) for arguments in favor of this approach.

22. I have not included TP in the tree in (81) since it is not crucial for the analysis presented here. Furthermore, whether Spec TP is present in the structure varies from language to language (cf. Jonas and Bobaljik 1993). I assume that AgrSP is the locus of the EPP feature in Basque, with T raising to AgrS so that the EPP feature is checked in Spec AgrSP. Whether this is the correct analysis remains an open (but not a crucial) issue.

23. Bošković (1997b) presents evidence that all wh-phrases that move to a position higher than their Case-checking position must pass through their Case-checking position before arriving at their final landing site. On the topic of A-movement prior to Wh-movement, see also Grohmann (1997, 1998).

24. A question arises at this point: how about if *nork* is [+topic] and *zer* [+focus]? Could *nork* be attracted to Spec TopP across *zer*? The answer has to be no. It seems that the exact feature specification focus or topic does not really matter when it comes to locality. What really matters is either that focus and topic are both operator features or that focus and topic are both discourse related, hence they induce a blocking effect for each other. A similar point can be made with respect to topicalization out of wh-islands in English. As Bošković (2000) points out, (i) is degraded:

(i) ??(Peter thinks that) that book_i you wonder where_j John put t_i t_j.

The question that arises is the following: why should the [+wh] feature be relevant in attracting topics? The Basque data raise a similar question. Like the Basque data in the text, (i) can be accounted for by appealing to a more inclusive +operator feature.

25. Superiority may be an interfering factor in (94)-(95) if, due to movement to its Case-checking position, the accusative wh-phrase is higher than the adjunct (see Bošković 1997b for the relevant discussion). The Superiority problem should not arise in (i) and (ii) where we have the sequence *nola-noiz* 'how-when'. Once we have controlled for the interfering factor in (94) to (95) it is clear that my prediction still holds. (i) is ungrammatical because *nola* 'how', being non-D-linked, cannot land in the position where D-linked elements land.

(i) **Nola noiz konpondu zuen Jonek autoa?*
How when fix AUX Jon-ERG car-ABS
'How did Jon fix the car when?'

(ii) ??*Noiz nola konpondu zuen Jonek autoa?*

26. I am assuming the affix hopping analysis of affixation (cf. Chomsky 1957), in which an affix and its host must be linearly adjacent in PF. See in this respect Bobaljik (1995), Halle and Marantz (1993) and Lasnik (1995).
27. A question arises at this point. Given the badness of (106), why is (89) grammatical? Recall that I argued that the *wh*-phrase in (89) undergoes overt movement to TopP. Given the ungrammatical status of (106), I will assume that the *wh*-phrase in (91) undergoes *wh*-movement in this case with the verb moving to C. If this approach is correct, Basque would resemble Serbo-Croatian and French in having optional *wh*-movement. See Bošković (to appear) for relevant discussion of Serbo-Croatian and French.
28. One of my informants found (110) ungrammatical for an unclear reason.
29. See Reglero (2002) for fuller data with three *wh*-phrases in Basque. Unfortunately, the data presented in that paper are also inconclusive.
30. As Xabier Artiagoitia (p.c.) points out to me, some speakers reject the Multiple Wh-Fronting strategy in long-distance contexts even though they accept it in short-distance questions such as (23).
31. As Jon Ortiz de Urbina (p.c.) points out to me, in Basque there are no Complementizers with non-echo short-distance questions. This makes one wonder whether *-(e)la* in (114) is a Complementizer at all.
32. The difference between Serbo-Croatian and Russian is that Serbo-Croatian +*wh*-C has a strong +*wh*-feature, so it triggers *wh*-movement as soon as it enters the structure (more precisely, if it enters the structure overtly, it triggers overt *wh*-movement), while in Russian it is weak.

References

- Altube, S. 1929. *Erderismos*. Bilbao: Euskaltzaindia. [Reprinted in Altube, S. 1975. *Orain Sorta*, Bilbao: Indauchu Editorial.]
- Billings, L. and Rudin, C. 1996. "Optimality and Superiority: A new approach to overt multiple wh-ordering." In *Formal Approaches to Slavic Linguistics: The College Park Meeting, 1994*, J. Toman (ed), 35-60. Ann Arbor, Mich.: Michigan Slavic Publications.
- Bobaljik, J. 1995. Morphosyntax: The syntax of verbal inflection. Doctoral dissertation, Massachusetts Institute of Technology, Cambridge.
- Boeckx, C. and S. Stjepanović. 2000. "The wh-clitic connection." In *Formal Approaches to Slavic Linguistics: The Philadelphia Meeting, 1999*, T. H. King and I. Sekerina (eds), 22-40. Ann Arbor, Mich.: Michigan Slavic Publications.
- Bošković, Ž. 1997a. "Fronting wh-phrases in Serbo-Croatian." In *Formal Approaches to Slavic Linguistics: The Indiana Meeting, 1996*, M. Lindseth and S. Franks (eds), 86-107. Ann Arbor, Mich.: Michigan Slavic Publications.
- Bošković, Ž. 1997b. "On certain violations of the Superiority Condition, AgrO, and economy of derivation." *Journal of Linguistics* 33: 227-254.
- Bošković, Ž. 1997c. "Superiority effects with multiple wh-fronting in Serbo-Croatian." *Lingua* 102: 1-20.
- Bošković, Ž. 1997d. *The Syntax of Nonfinite Complementation: An Economy Approach*. Cambridge, Mass.: MIT Press.
- Bošković, Ž. 1998a. "On the interpretation of multiple questions." In *A Celebration: Essays for Noam Chomsky's 70th Birthday*, J. Fodor, S. J. Keyser and A. Brand (eds). Cambridge, Mass.: MIT Press. [Online publication — available for download at <http://cognet.mit.edu/Books/celebration/essays/Boeckx.html> (sic); revised version to appear in *Linguistic Variation Yearbook* 1.]
- Bošković, Ž. 1998b. "Multiple wh-fronting and economy of derivation." In *Proceedings of the Sixteenth West Coast Conference on Formal Linguistics*, E. Curtis, J. Lyle and G. Webster (eds), 49-63. Stanford, Calif.: CSLI.
- Bošković, Ž. 1999. "On multiple feature checking: Multiple wh-fronting and multiple head-movement." In *Working Minimalism*, S. Epstein and N. Hornstein (eds), 159-187. Cambridge, Mass.: MIT Press.
- Bošković, Ž. 2000. "Sometimes in [Spec, CP], sometimes in situ." In *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*, R. Martin, D. Michaels and J. Uriagereka (eds), 53-87. Cambridge, Mass.: MIT Press.
- Bošković, Ž. 2001. *On the Syntax-Phonology Interface: Cliticization and Related Phenomena*. Amsterdam: Elsevier.
- Bošković, Ž. 2002. "On multiple wh-fronting." *Linguistic Inquiry* 33: 351-383.
- Chomsky, N. 1957. *Syntactic Structures*. The Hague: Mouton.
- Chomsky, N. 1973. "Conditions on transformations." In *A Festschrift for Morris Halle*, S. Anderson and P. Kiparsky (eds), 232-286. New York: Holt, Rinehart and Winston.
- Chomsky, N. 1995. "Categories and transformations." In N. Chomsky, *The Minimalist Program*, 219-394. Cambridge, Mass.: MIT Press.
- den Dikken, M. and Giannakidou, A. 2001. "What the hell?!" In *Proceedings of NELS 31*, M. Kim and U. Strauss (eds), 163-182. Amherst, Mass.: GLSA (Department of Linguistics, University of Massachusetts).

- den Dikken, M. and Giannakidou, A. 2002. "From *hell* to polarity: Aggressively non-D-linked *wh*-phrases as polarity items." *Linguistic Inquiry* 33: 31-61.
- Eguzkitza, A. 1986. Topics on the syntax of Basque and Romance. Doctoral dissertation, University of California, Los Angeles.
- Elordieta, A. 2001. Verb movement and constituent permutation in Basque, Doctoral dissertation, HIL/University of Leiden.
- Etxepare, R. 1997. "Two Types of Focus in Basque." In *Proceedings of the Fifteenth West Coast Conference on Formal Linguistics*, B. Agbayani and S. Tang (eds), 113-128. Stanford, Calif.: CSLI.
- Etxepare, R. and Ortiz de Urbina, J. In press. "Focus." In *A Grammar of Basque*, J. I. Hualde and J. Ortiz de Urbina (eds). Berlin: Mouton de Gruyter.
- Grohmann, K. K. 1997. "German superiority." In *Groninger Arbeiten zur Germanistischen Linguistik* 40: 97-107.
- Grohmann, K. K. 1998. "Syntactic inquiries into discourse restrictions on multiple interrogatives." In *Groninger Arbeiten zur germanistischen Linguistik* 42: 1-60.
- Halle, M. and Marantz, A. 1993. "Distributed Morphology and the pieces of inflection." In *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, K. Hale and S. J. Keyser (eds), 111-176. Cambridge, Mass.: MIT Press.
- Horvath, J. 1986. *Focus in the Theory of Grammar and the Syntax of Hungarian*. Dordrecht: Foris.
- Jackendoff, R. 1972. *Semantic Interpretation in Generative Grammar*. Cambridge, Mass.: MIT Press.
- Jonas, D. and Bobaljik, J. D. 1993. "Specs for subjects: The role of TP in Icelandic." *MIT Working Papers in Linguistics 18: Papers on Case and Agreement I*, J. D. Bobaljik and C. Phillips (eds), 59-98. Cambridge, Mass.: MITWPL (Department of Linguistics and Philosophy, MIT).
- É. Kiss, K. 1981. "Structural relations in Hungarian, a "free" word order language." *Linguistic Inquiry* 12: 185-213.
- É. Kiss, K. 1993. "Wh-movement and specificity." *Natural Language and Linguistic Theory* 11: 85-120.
- É. Kiss, K. 1998. "Identificational focus versus information focus." *Language* 74: 245-273.
- Lambova, M. 2001. "On A-bar movements in Bulgarian and their interaction." *The Linguistic Review* 18: 327-374.
- Lasnik, H. 1995. "Verbal morphology: *Syntactic Structures* meets the Minimalist Program." In *Evolution and Revolution in Linguistic Theory: Essays in Honor of Carlos Otero*, H. Campos and P. Kempchinsky (eds), 251-275. Washington, D. C.: Georgetown University Press.
- Martin-Callejo, E. M. 1984. Some aspects of Basque morphology and syntax. Doctoral Dissertation, University of Arizona, Tucson.
- Ortiz de Urbina, J. 1989. *Parameters in the Grammar of Basque*. Dordrecht: Foris.
- Ortiz de Urbina, J. 1993. "Feature percolation and clausal pied-piping." In *Generative Studies in Basque Linguistics*, J. I. Hualde and J. Ortiz de Urbina (eds), 189-219. Amsterdam: John Benjamins.
- Ortiz de Urbina, J. 1995. "Residual verb second and verb first in Basque." In *Discourse Configurational Languages*, K. É. Kiss (ed), 99-121. Oxford: Oxford University Press.
- Ortiz de Urbina, J. 1999a. "Focus in Basque." In *The Grammar of Focus*, G. Rebuschi and L. Tuller (eds), 311-333. Amsterdam: John Benjamins.

- Ortiz de Urbina, J. 1999b. "Force phrases, focus phrases and left heads in Basque." In *Grammatical Analyses in Basque and Romance Linguistics. Papers in Honor of Mario Saltarelli*, J. Franco, A. Landa and J. Martín (eds), 179-194. Amsterdam: John Benjamins.
- Pesetsky, D. 1987. "Wh-in situ: Movement an unselective binding." In *The Representation of (In)definiteness*, E. J. Reuland and A. G. B. ter Meulen (eds), 98-129. Cambridge, Mass.: MIT Press.
- Reglero, L. 2002. "Multiple questions in Basque." Ms., University of Connecticut, Storrs.
- de Rijk, R. P. G. 1969. "Is Basque S.O.V.?" *Fontes Linguae Vasconum* 1, 319-351. [Reprinted in de Rijk, R. P. G. 1998. *De Lingua Vasconum: Selected Writings* [Supplements to ASJU XLIII], 13-38. Bilbao: EHU-UPV.]
- de Rijk, R. P. G. 1978. "Topic fronting, focus positioning and the nature of the verb phrase in Basque." In *Studies on Fronting*, F. Jansen (ed), 81-112. Lisse: The Peter de Ridder Press. [Reprinted in de Rijk, R. P. G. 1998. *De Lingua Vasconum: Selected Writings* [Supplements to ASJU XLIII], 183-202. Bilbao: EHU-UPV.]
- de Rijk, R. P. G. 1996. "Focus and quasifocus on the Basque negative statements." In *Revista Internacional de Estudios Vascos* 41: 63-76.
- Richards, N. 1997. What moves where when in which language? Doctoral dissertation, Massachusetts Institute of Technology, Cambridge.
- Rizzi, L. 1997. "The fine structure of the left periphery." In *Elements of Grammar: Handbook of Generative Syntax*, L. Haegeman (ed.), 281-337. Dordrecht: Kluwer.
- Rudin, C. 1988. "On multiple questions and multiple *wh*-fronting." *Natural Language and Linguistic Theory* 6: 445-501.
- Stepanov, A. 1998. "On *wh*-fronting in Russian." In *Proceedings of NELS 28*, P. N. Tamanji and K. Kusumoto (eds.), 453-467. Amherst, Mass.: GLSA (Department of Linguistics, University of Massachusetts).
- Stjepanović, S. 1998. "Short distance movement of *wh*-phrases in Serbo-Croatian matrix clauses." Paper presented at the *Workshop on Comparative Slavic Morphosyntax*, Spencer, Indiana. [June 1998]
- Stjepanović, S. 1999. What do second position cliticization, scrambling and multiple *Wh*-fronting have in common? Doctoral dissertation, University of Connecticut, Storrs.
- Uriagereka, J. 1992. "The syntax of movement in Basque." In *Syntactic Theory and Basque Syntax* [Supplements of ASJU XXVII], J. A. Lakarra and R. Gomez (eds), 417-446. Donostia-San Sebastián: Diputación de Gipuzkoa.
- Uriagereka, J. 1995. "Aspects of the syntax of clitic placement in Western Romance." *Linguistic Inquiry* 26: 79-123.
- Uriagereka, J. 1999. "Minimal restrictions on Basque movements." *Natural Language and Linguistic Theory* 17: 403-444.
- Watanabe, A. 1993. AGR-based Case Theory and its interaction with the A'-system. Doctoral dissertation, Massachusetts Institute of Technology, Cambridge.