Focus and Word Order in Basque*

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1. Introduction

One of the most studied properties of Basque syntax is its preverbal focus position. In this language, a *wh* or focused phrase (*wh/f*-phrase) must be left-adjacent to the verb. This is exemplified in the question-answer pair in (1). In the question, the *wh*-subject is left-adjacent to the verb, resulting in OSV word order (as opposed to the neutral SOV word order); similarly, in the answer, the focused subject, which constitutes the 'answer' to the question, is also left-adjacent to the verb.[1]

(1) Q: Jon señek ikusi rau?
Jon.A who.E seen has
Who saw Jon?

A: Jon Mirenek ikusi rau.
Jon.A Miren.E seen has
MIREN saw Jon.

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[1]In all the examples below, capitals are used in the English translations to mark the focused constituent. In this paper, I use the following abbreviations: A: absolutive; AL: allative; E: ergative; G: genitive

Previous analyses of this phenomenon argue that this preverbal position is a syntactically defined position, typically [Spec,CP], where *wh/f*-phrases must move overtly. Adjacency between the *wh/f*-phrase and the verb is obtained via T-to-C movement (see Ortiz de Urbina 1989, 1995), or is derived from certain conditions on movement of the *wh/f*-phrase (see Uriagereka 1992, 1999).

In this paper, I develop an alternative account of this phenomenon, arguing that it is the result of independently motivated prosodic conditions imposed on focused phrases.[2] More generally, I offer evidence for the view that the relation between word order and focus is mediated by prosody. In this, I follow recent works on the syntax of focus in several languages, including Zubizarreta's (1998) work on the syntax of focus in Romance and Germanic languages, and on the treatment of focus and scrambling in Dutch found in Reinhart (1995) and Neeleman and Reinhart (1998).[3]

The analysis adopts the following two hypotheses: (i) there is no syntactically defined position where *wh/f*-phrases move overtly; and (ii) *wh/f*-phrases are left-adjacent to the verb because that is the position where sentence stress is assigned. After presenting the basic data in §2, in §3 I develop an analysis of the preverbal focus position. The data on which the analysis is based are from the Western dialect of Ondarroa, and §§3.1-3.2 discuss some general properties of stress in this dialect. In §3.3, I argue that the preverbal focus

[2]Recently, it has come to my attention that a partially similar approach to focus in Basque has been independently developed in Elordieta (2001). However, there are important differences between the two analyses. Thus, she assumes that there are two different ways in which the preverbal focus position can be derived, whereas the analysis I develop here argues for a view in which the existence of this position is always the consequence of prosodic principles. Unfortunately, I have not been able to obtain a copy of this work in time to include a full discussion here.

[3]Other papers following this line of research include Costa (1998) for Portuguese, Ishihara (2000) for Japanese, and Szendröi (2001) for Hungarian.

position in Basque is derived from these prosodic properties of the language, and from the fact that *wh/f*-phrases need to have sentence stress.[4] In addition, I hypothesize that movement operations which have an effect on the focus interpretation of a sentence are not directly motivated by the need to focus some constituent.

In §§4-5, I compare the analysis proposed in §3 with previous ones in which it is assumed that *wh/f*-phrases move to [Spec,CP]. As I show there, the two analyses make different predictions about phrases appearing to the left of the preverbal constituent. I show that, as expected in the present analysis, subjects appearing to the left of the preverbal constituent are not necessarily interpreted as topics. Since the alternative analysis makes the wrong prediction in this respect, the data provide evidence for the analysis developed in §3.

In §6, I compare two different kinds of movement which, I argue, have the same type of effect on focus. Leftward movement moves phrases to a clause-initial position, and rightward movement moves phrases to a position to the right of the verb. As expected in the analysis defended here, both movements have the same effect on focus, since they both have the same type of effect on the assignment of sentence stress. However, I show that these two operations result in very different LF structures: while leftward movement does not reconstruct, rightward movement reconstructs obligatorily. This argues in favor of the view, defended in this paper, that structural conditions on *wh/f*-phrases are imposed on the overt (PF) structure of a sentence, not on its LF structure. Furthermore, the fact that the two operations have very different syntactic properties also supports the idea that movements

[4]Being based on data from the Ondarroa dialect, the analysis applies straightforwardly to this dialect and neighboring ones, and I tentatively assume that it can be extended to cover other dialects as well. Even though stress is one of the main sources of dialectal variation in this language (cf. Hualde 1991), much of this variation is orthogonal for our purposes; the analysis depends on facts about sentence stress, which, to the best of my knowledge, are basically the same in all dialects.

which have an effect on focus are not triggered directly by focus. Their syntax is independent of focus considerations; any consequence that they have for this aspect of the interpretation of a sentence is regulated by PF conditions on syntactic structures.

Finally, in §7 I discuss more complex structures involving long distance movement and *in-situ* structures, and I offer an account for them within the general analysis defended in this paper.

2. Word Order in Basque and the Preverbal Position

In neutral sentences (i.e. answers to *What happened?*), the most natural word order in Basque is SOV. In sentences in which some constituent is a *wh/f*-phrase, it must be left-adjacent to the verb. More specifically, in sentences with compound tenses, the verb and the auxiliary are always adjacent, and the *wh/f*-phrase is to the left of the main verb. This is illustrated in (2-3).

(2) a. Jonek Miren ikusi rau.
Jon.E Miren.A seen has
Jon saw MIREN.
**JON saw Miren.*
Jon saw Miren.

b. Miren Jonek ikusi rau.
Miren.A Jon.E seen has
JON saw Miren.
**Jon saw MIREN.*
**Jon saw Miren.*

(3) a. Jonek sein ikusi rau?
Jon.E who.A seen has
Who did Jon see?

b. Miren señek ikusi rau?
Miren.A who.E seen has
Who saw Miren?

c. * Sein Jonek ikusi rau?

d. * Señek Jon ikusi rau?

The basic SOV order is exemplified in (2a). As shown by the translations, since the object is left-adjacent to the verb, this sentence can also be interpreted with focus on the object

Miren, but not with focus on the subject *Jonek*. On the other hand, in (2b), which has OSV order as the result of leftward movement of the object, the subject can be focused, since it is left-adjacent to the verb. However, the sentence cannot be interpreted neutrally or with focus on the object.[5] The examples in (3) illustrate the same word order possibilities for *wh*-phrases. The *wh*-phrase (i.e. the object in 3a and the subject in 3b) must be left-adjacent to the verb. If the *wh*-phrase is not left-adjacent to the verb, the sentence is ungrammatical (cf. 3c, d).[6]

In the following section, I show how the basic patterns exemplified in (2-3) can be derived from general prosodic properties of Basque. Specifically, I argue that *wh/f*-phrases have to be preverbal because that is the position where sentence stress is assigned. In the data presented so far, the desired word orders are derived by leftward movement of non-focused phrases, and the analysis proposed in §3 shows how this movement can have the effect on focus that it has. In later sections (4-6), I discuss further properties of this movement, and compare it with rightward movement, which, I argue, has the same type of effect on focus as leftward movement. As will be argued there, a detailed study of the nature of these two movements provides evidence for the prosodic analysis of Basque focus proposed in §3.

[5]Both (2a, b) have other focus interpretation possibilities. More specifically, the focused constituent in both can be the verb together with the immediately preverbal phrase. See §3.3.

[6]It is important to note that it is possible to have focused phrases which are not left-adjacent to the verb. These phrases, like the preverbal ones, bear sentence stress. As shown in Echepare (1997), they are always understood contrastively, whereas this is not necessary for the preverbal focus position. Furthermore, answers to constituent questions, as shown above, always involve the preverbal focus position. Answers with a non-preverbal, contrastive, focus are usually felt to be non-felicitous. These focused phrases cannot receive sentence stress by the default mechanisms discussed in §3.2 below, and must involve some kind of marked assignment of sentence stress. In this paper, only the non-contrastive, preverbal focus is discussed, since this is the one that has interesting syntactic properties shared with *wh*-phrases.

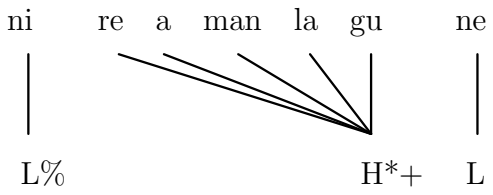
3. Sentence Stress and its Relation to Focus

In this section, I develop a new account of the preverbal focus position in Basque. I argue that what is special about the preverbal position is not that it hosts *wh/f*-phrases, but that it is the position where sentence stress is assigned. As noted in the introduction, the data presented here are from the Ondarroa dialect. Thus, before presenting the analysis in §3, in §§3.1-3.2 I discuss certain basic facts about stress in this dialect.

3.1. Stress in Ondarroa Basque

Stress in Ondarroa Basque is realized as pitch accent. Within a given (phrasal) domain, there can only be one stressed syllable. Stress is realized as a H*+L pitch accent. The H* tone of the pitch accent is linked to the stressed syllable, and the L tone is linked to all syllables after the stressed one. In domains with four or more syllables, this H is spread to all syllables preceding the stressed one except the first one in the domain. In domains with three or more syllables, the first one is linked to a boundary L% (for details, see Hualde 1991, Hualde et al. 1994, Elordieta 1997):

(4) nire aman lagúne
my mother's friend



Domains relevant for stress assignment are not words, but phrases. Typically, a phrase constitutes a stress domain if it is a major constituent within a sentence. Thus, a subject,

an object or an a adjunct usually form a single domain which cannot be broken into smaller ones for the purposes of stress assignment. Within this domain, stress is always penultimate. For instance, the phrase *nire aman lagúne* 'my mother's friend (absolutive)' forms a single domain for stress assignment, and it contains a single stressed syllable, i.e. the penultimate one. Stress on any of the preceding syllables in the phrase is not possible.[7]

3.2. Sentence Stress

In this section, I provide a description of the basic facts about sentence stress in Basque, and show how Cinque's (1993) basic algorithm for assignment of stress can derive these facts. As will be shown in §3.3, the analysis of sentence stress proposed below will be crucial in deriving the preverbal focus position.

Within a sentence, more prominence is always given to a specific stress domain, i.e. stress in this domain is realized as *sentence stress*. The rule which takes care of assigning sentence stress is standardly called the *Nuclear Stress Rule* (NSR), following Chomsky and Halle (1968). Cinque (1993) proposes that, given minimal machinery, the NSR can be derived for all languages directly from their syntactic structure. Cinque's basic idea is that sentence stress is assigned to the most embedded constituent, i.e. the object in transitive sentences. This derives the well-known generalization that, in both SVO and SOV languages, sentence

[7]In this paper, I do not offer an analysis of these basic stress facts in Basque, and I only include facts which are necessary in order to understand the analysis of the preverbal focus position developed in §3.3 below. However, it is important to note that it is not a trivial matter to define formally what the domain for the application of stress rules is. As shown above, these can be described as being the 'major constituents' of a sentence. However, it is not clear why these phrases cannot be broken down further for the purposes of stress assignment. Furthermore, there are certain lexically marked words which do allow stress to be assigned in domains smaller than those defined above. More detailed discussion of these facts, and their possible consequences for focus, will be left for future versions of this paper.

stress is on the object in transitive sentences.[8]

The predictions made by Cinque's NSR for Basque are met (*modulo* certain complicating factors having to do with verbal forms). In Basque, there are two kinds of tenses, simple and compound:

(5) a. Jonek Miren ikusi rau.
Jon.E Miren.A seen has
Jon saw Miren.

b. Jonek diru rakar.
Jon.E money.A has
Jon has money.

Consider first compound tenses, where sentence stress is on the object in neutral SOV sentences:[9]

(6) a. Jonek **Míren** ikusí rau.
Jon.E Miren.A seen has
Jon saw Miren.

b. * **Jónek** Míren ikusí rau.

(7) a. Jon **Bílboa** jún de.
Jon.A Bilbao.All gone was
Jon went to Bilbao.

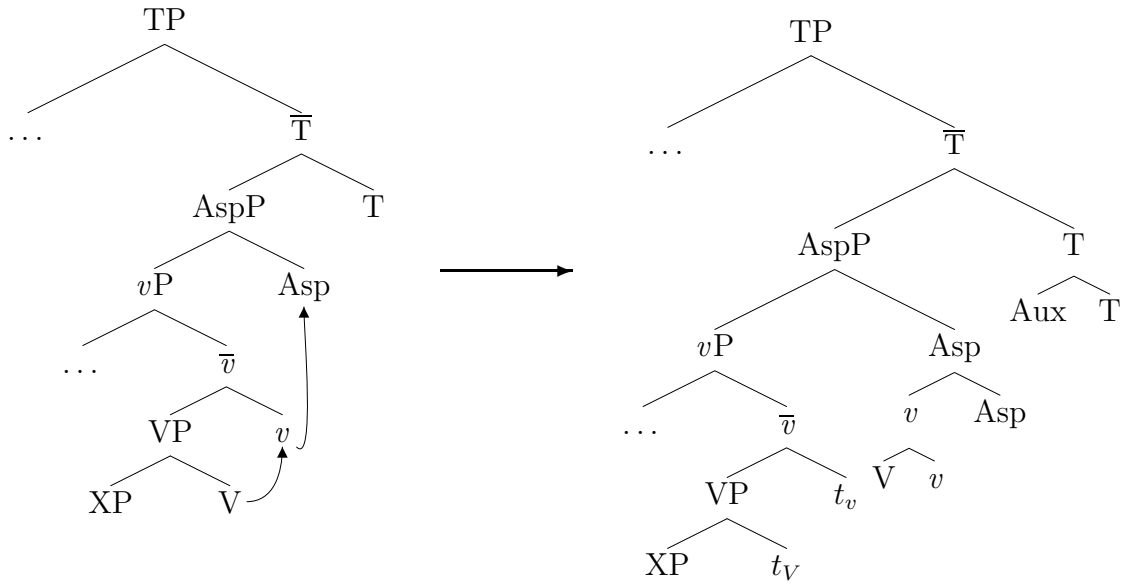
b. * **Jón** Bílboa jún de.

[8]Cinque's (1993) algorithm formalizes in a precise way what exactly 'most embedded constituent' means. However, for the purposes of this paper, the informal statement presented in the text is enough to capture the relevant facts. Cinque's algorithm is strongly based in concepts defined in terms of $\overline{\text{X}}$-Theory. Whether this analysis can be translated in a straightforward manner into Chomsky's (1995) Bare Phrase Structure is a matter which I leave for future research.

[9]In all the examples below, boldface is used to indicate the constituent which receives sentence stress. Furthermore, where relevant, stressed vowels are marked with an acute accent.

With respect to basic clausal structure, I assume that all clauses contain a v head whose complement is VP (see Chomsky 1995, 2001, Marantz 1997). In the syntax, V always moves to v. Furthermore, following Laka (1990) (see also Arregi 2000), I assume that compound tenses in Basque are derived as follows: as shown in (8), the V+v complex moves to Asp, and an auxiliary is inserted in T, in order to satisfy the requirement that T must be attached to a verb.

(8) *Compound Tenses*



In the output of the syntax, the participle (V+v+Asp) and auxiliary (Aux+ T) form different words. However, it is a fact that these two words are merged into one.[10] I assume that this happens in a morphological component mediating between syntax and phonology (see Halle and Marantz 1993). Specifically, the participle and auxiliary are joined together via *morphological merger* (see Marantz 1988):

[10]Evidence for this is given in Hualde et al. (1994), where it is shown that for the purposes of stress assignment, they form a single word.

(9) $[_{\text{TP}} \ldots [_{\text{AspP}} [_{v\text{P}} \ldots \text{XP } t_v] \text{ V}{+}v{+}\text{Asp}] \text{ Aux}{+}\text{T}] \longrightarrow$

$[_{\text{TP}} \ldots [_{\text{AspP}} [_{v\text{P}} \ldots \text{XP } t_v] \text{ V}{+}v{+}\text{Asp}{+}\text{Aux}{+}\text{T}]]$

The output of (9) is the input to the NSR. Clearly, in this structure, XP (i.e. the object) is the most embedded constituent, and thus receives sentence stress by Cinque's NSR.

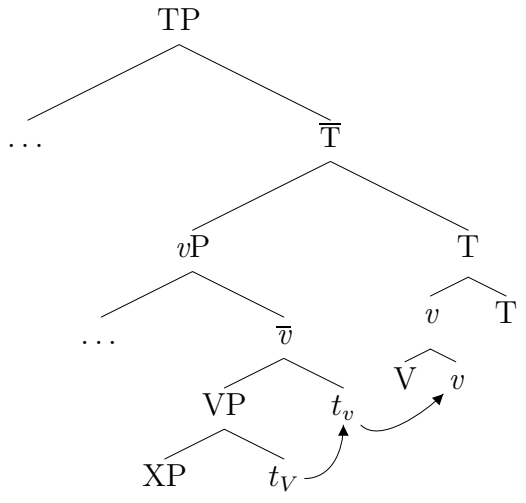
In simple tenses, sentence stress is on a phrasal domain formed by the object and the verb. Given that stress in this dialect is on the penultimate syllable of the relevant domain, stress can fall on a syllable belonging to the verb or to the object, depending on the number of syllables of the verb:

(10) a. Jonek **diru** **rákar**.
Jon.E money.A has
Jon has money.

b. Jon **Mutrikukú** **re**.
Jon.A Motriko.G is
Jon is from Motriko.

In this case, there is a single (tensed) verb. I assume that it is derived from a structure without an Asp projection where V+v moves to T (see Laka 1990, Arregi 2000):

(11)



As shown in (10), the tensed verb and the preceding constituent form a single phrase, at least for the purposes of stress assignment. I assume that the tensed verb is a phrasal clitic which attaches to the preceding phrase in the morphological component:

(12) $[_{\text{TP}} \ldots [_{v\text{P}} \ldots \text{XP } t_v] \text{ V}+v+\text{T}] \longrightarrow$

$[_{\text{TP}} \ldots [_{v\text{P}} \ldots [_{\text{XP}} \text{ XP V}+v+\text{T}] \,] \,]$

The new phrase is the most embedded constituent and thus bears sentence stress.

It is important to note that the specific details about verbal forms are not important. Independently of the analysis that one assumes for these facts, Cinque's NSR makes the correct predictions about sentence stress, and that is what is important for the analysis of focus developed in the next section.

3.3. Sentence Stress and Focus

In this section, I show how the properties of stress in Basque described above can be used to explain the preverbal focus position. The basic idea is that the distribution of *wh/f*-phrases is governed by the following PF condition (cf. Jackendoff 1972, Truckenbrodt 1995, Zubizarreta 1998, Reinhart 1995):

(13) A *wh/f*-phrase must contain main sentence stress.[11]

[11]There are two different ways in which this condition can be formalized. First, one could assume that it is a condition on phrases which have been assigned a focus feature in the syntax, as in Jackendoff (1972). A more radical approach, defended, among others, in Reinhart (1995) and Szendröi (2001), would be to assume that there is no focus feature, and that (13) is in fact part of a PF algorithm which would derive the focus interpretation of a sentence. This approach entails a revision of certain standard assumptions about the architecture of the grammar, since it assumes that PF, and not only LF, can feed semantic interpretation. Since the data discussed in this paper are compatible with either view, the analysis proposed here will remain agnostic as to which is the correct approach.

This is a condition that probably holds universally (at least for focused phrases). The main difference between Basque and languages like English, where there is no fixed position for focused phrases, is that in the latter, prominence on focused phrases can be assigned independently of the NSR (see Cinque 1993). In Basque, on the other hand, *wh/f*-phrases can only bear sentence stress via the NSR.[12]

Consider first the case of focus on the object:

(14) Jonek **Míren** ikusí rau.
Jon.E Miren.A seen has
Jon saw MIREN.
**JON saw Miren.*
Jon saw Miren.

In this sentence, which has the neutral SOV word order, the object *Míren* is the most embedded constituent, and thus bears sentence stress, as was shown in §3.2. As a consequence, the object can be understood as focused. Furthermore, VP and TP can also be interpreted as focused, since both contain sentence stress (both contain the object). TP focus corresponds to the neutral interpretation of (14) (i.e. it can be the answer to questions like *What happened?*). The fact that the sentence can also be an answer to the question *What did Jon do?* shows that it can also be interpreted with focus on VP.

In sentences with focus on the subject, the object appears to the left of the subject:

[12]This is not the case for contrastively focused phrases, which, as noted in footnote 6, are not necessarily preverbal and receive sentence stress. Thus, they involve some mechanism of sentence stress assignment independent of the NSR. In this paper, I concentrate only on preverbal *wh/f*-phrases, and leave contrastive focus for future research. Hence, for the purposes of this paper, the only relevant way in which a phrase can receive sentence stress is the NSR.

(15) Míren **Jónek** ikusí rau.
Miren.A Jon.E seen has
JON has seen Miren.
**Jon has seen MIREN.*
**Jon has seen Miren.*

I assume that in these cases, the object is adjoined to TP and the subject is in [Spec,vP]:

(16) $[_{\text{TP}}$ Miren$[_{\text{TP}}$ $[_{v\text{P}}$ **Jónek** $t]$ ikusí rau$]$ $]$

As a consequence of this movement, the subject is now the most embedded constituent, and thus bears sentence stress.[13] The result is that the subject can be understood as focused. In fact, the analysis also predicts that the constituent containing the subject and the verb (the lower TP in 16) can be understood as focused. This is indeed the case; (15) can be an answer to the question *What happened to Miren?*

However, the analysis also predicts that the whole sentence in (16) can be understood as focused, since it contains the constituent bearing sentence stress (i.e. the subject). As shown above, this is the wrong prediction, since OSV is not the neutral word order in Basque. However, as I show in §5 below, leftward movement in (16) has the result of topicalizing the moved constituent (i.e. the object). This forces an interpretation of (16) in which the object is necessarily excluded from the focus of the sentence.[14]

Slightly different predictions are made for sentences with simple tenses, since, as mentioned in §3.2, the tensed verb is cliticized to the phrase preceding it. As in compound tenses, the neutral SOV order can be understood as assigning focus to the object (cf. 17),

[13]Recall that, as discussed in §3.2, the V+v complex is outside vP in Asp, which means that the subject in [Spec,vP] is more embedded than the verb.

[14]In §§5-6, I study the properties of leftward movement in more detail, and compare it to rightward movement, which, as I argue in §6, has the same kind of effect on focus as leftward movement.

and leftward movement of the object, yielding OSV order, results in focus on the subject (cf. 18).

(17) a. Jonek **diru** **rákar**.
Jon.E money.A has
Jon has MONEY.
Jon has money.

b. $[_{\text{TP}}$ Jonek$[_{v\text{P}}$ [**diru rákar**]]]

(18) a. Diru **Jonek** **tákar**.
Jon.E money.A has
JON has the money.

b. $[_{\text{TP}}$ Diru$[_{\text{TP}}$ $[_{v\text{P}}$ **Jonek** t] takar]] $\longrightarrow$

$[_{\text{TP}}$ Diru$[_{\text{TP}}$ $[_{v\text{P}}$ [**Jonek tákar**]]]]

In both SOV and OSV orders, the preverbal constituent has the verb cliticized to it. This means that the constituent formed by the preverbal constituent and the verb form a minimal domain for stress (see §3.2). Thus, the preverbal constituent alone cannot bear sentence stress, since it does not form a domain relevant for stress assignment. Instead, sentence stress must fall on the phrase formed after cliticization. I assume that this is sufficient for understanding the preverbal constituent (i.e. the object in SOV order and the subject in OSV order) as focused.

Furthermore, as also predicted by the analysis, these sentences have other focus interpretation possibilities. Thus, (17a) can also be understood with focus on VP or on TP, and (17b) can also be understood with focus on the constituent containing the subject and the verb.

It is important to note that, in this analysis, leftward movement has an effect on focus by simply altering the structure of the sentence. Under the analysis of sentence stress assumed

here, any movement operation could in principle have this effect. Thus, it is not necessary to assume that leftward movement is directly triggered by the need to focus some constituent. Indeed, as I show in §6, there is a different movement operation in Basque which has the same effect on focus as leftward movement. Furthermore, as will be shown there, these two operations have very different syntactic properties. This will provide support to the assumption that these movements are not directly triggered by focus.

To summarize so far, the preverbal focus position does not need a special explanation, since it is derived from independently motivated properties of Basque, namely: (i) sentence stress is on the preverbal constituent; (ii) *wh/f*-phrases bear sentence stress; and (iii) leftward movement of VP internal phrases. In the next sections, I examine further the nature of leftward movement and other operations which have a similar effect on focus. As will be shown, a detailed examination of these operations provides support for the approach to Basque focus developed above.

4. Previous Analyses

Previous analyses of the preverbal position in Basque assume that there is a syntactically defined position to which *wh/f*-phrases move, i.e. [Spec,CP]. In Ortiz de Urbina's (1989, 1995) account, the 'verbal complex' (i.e. participle and auxiliary) also moves to C. This derives the adjacency between the *wh/f*-phrase and the verb:[15]

[15]In Uriagereka (1992, 1999), this adjacency is derived in a different way. However, it crucially relies on the claim that, in certain cases, there is no such adjacency. For instance, Uriagereka (1992) claims that, for some speakers, an object can intervene between a subject *wh*-phrase and the verb. However, these examples are considered ungrammatical by my informant and other speakers I have consulted (cf. 3d). Thus, the basic judgments discussed here cannot be accounted for under that type of analysis, although it might be appropriate for the data discussed in Uriagereka's work.

(19) $[_{\text{CP}}\ \text{Wh/F}_1\ \text{V+Aux}[_{\text{TP}}\ \ldots t_1\ t_V]\ ]$

Ortiz de Urbina assumes that the participle and auxiliary form one word in the syntax, i.e. the verb moves to T in both simple and compound tenses. In (19), T moves to C, carrying along the participle.

In this analysis, any phrase to the left of the focused one is moved higher up (adjoined to CP in Ortiz de Urbina 1989). Thus, in *both* $\text{SO}_\text{F}\text{V}$ and $\text{OS}_\text{F}\text{V}$ orders, the phrase preceding the focused subject or object is adjoined to CP:

(20) a. $[_{\text{CP}}\ \text{Subject}_1[_{\text{CP}}\ \text{Wh/F-Object}_2\ \text{V+Aux}[_{\text{TP}}\ t_1\ \ldots t_2\ t_V]\ ]\ ]$

b. $[_{\text{CP}}\ \text{Object}_2[_{\text{CP}}\ \text{Wh/F-Subject}_1\ \text{V+Aux}[_{\text{TP}}\ t_1\ \ldots t_2\ t_V]\ ]\ ]$

This is a crucial difference from the analysis proposed here: when the subject appears to the left of an object *wh/f*-phrase no leftward movement is necessarily involved. As I argue in the next section, this provides evidence in favor of the analysis defended in this paper.

5. Leftward Movement

As shown in the previous section, in an analysis where focused XPs move to [Spec,CP], leftward movement must be assumed for subjects which appear to the left of focused objects, as illustrated in (21a). In the analysis proposed here, on the other hand, no movement of the subject is involved in this case, as illustrated in (21b).

(21) a. $[_{\text{CP}}\ \text{Subject}_1[_{\text{CP}}\ \text{Wh/F-Object}_2\ \text{V+Aux}[_{\text{TP}}\ t_1\ \ldots t_2\ t_V]\ ]\ ]$

b. $[_{\text{TP}}\ \text{Subject}[_{\text{AspP}}\ [_{v\text{P}}\ \text{Wh/F-Object}\ t_V]\ \text{V}]\ \text{Aux}]$

(21a) predicts that whatever properties objects have in the pre-focus position, they should be shared by subjects in the pre-focus position. (21b) does not make this prediction, since the subject has not undergone leftward movement. A relevant property of leftward movement of objects is that they are interpreted as topics. Thus, when they are moved to the left, objects cannot be QPs like *seoser* 'something', or *danak* 'all'. Similarly, when the object is headed by *asko* 'many', it is necessarily understood as D-linked when it undergoes leftward movement:

(22) a. Jonek seoser irakurri ban.
Jon.E something.A read had
Jon read something.

b. * Seoser Jonek irakurri ban.

(23) a. Jonek danak irakurri ban.
Jon.E all.A read had
Jon read all of them.

b. * Danak Jonek irakurri ban.

(24) a. Jonek liburo asko irakurri ban.
Jon.E book many.A read had
Jon read many (of the) books.

b. Liburo asko Jonek irakurri ban.

JON read many of the books.

However, this is not the case for subjects appearing to the left of a focused object:

(25) a. Seoseñek auxe liburu irakurri ban.
someone.E this book.A read had
Someone read THIS BOOK.

b. Danak auxe liburu irakurri ben.
all.E this book.A read had
Everyone read THIS BOOK.

c. Mutil askorek Jon ikusi ben.
boy many.E Jon.A seen had
Many (of the) boys saw JON.

In an analysis in which *wh/f*-phrases move to [Spec,CP], we are forced to say that any phrase to their left is a topic. As shown in these examples, this makes wrong predictions for subjects, which are not necessarily topics when they are to the left of the *wh/f*-phrase. On the other hand, in the analysis defended here, this is predicted, since these subjects do not have to be analyzed as having undergone leftward movement. Thus, the data support an analysis in which focused phrases do not move to [Spec,CP].

6. Movement, Focus, and Scope

In previous sections, I have argued that Basque has a preverbal focus position because that is the position where sentence stress is assigned. Since Basque is an SOV language, the preverbal position is the most embedded one in the sentence, which is where sentence stress is assigned under Cinque's (1993) assumptions. A direct consequence of this proposal is that, given the standard assumption that there is no lowering, a given phrase XP cannot be focused by movement. Rather, other phrases more embedded than XP must move to a position higher than XP. So far, I have illustrated this with leftward movement. The effect that this has on focus is schematized in (26): by moving XP to a position higher than YP, the latter can be interpreted as focused.

(26) [XP ... [**YP** [*t*] ...] ...]

In this section, I study further properties of leftward movement, and compare it with another type of movement which has the same effect on the focus interpretation of a sentence. This movement, which displaces phrases to the right, can also result in some other phrase being focused, as schematized in (27). By moving XP rightward to a position higher than YP, the latter can be understood as focused.

(27) $[\ldots[\ \mathbf{YP}\ [\ t\ ]\ldots]\ \ldots \mathrm{XP}\ ]$

As I show below, these two movements have very different properties, even though they are homogeneous with respect to focus. Specifically, they are different with respect to their effect on semantic properties of sentences typically associated with LF structures, namely scope and binding. This will provide further evidence for the view defended here that structural conditions on focused phrases are the result of prosodic conditions.

Rightward movement is exemplified in (28), where the object *Miren* moves to the right of the verb, resulting in focus on the subject.

(28) a. **Séñek** ikusí rau Míren?
who.E seen has Miren.A
Who saw Miren?

b. **Jónek** ikusí rau Míren.
Jon.E seen has Miren.A
JON saw Miren.

In (28a), the object moves to the right of the verb, leaving the *wh*-subject *señek* in a position where it receives sentence stress. Similarly, in (28b), the result of rightward movement of the object is that the subject is in a position where it receives sentence stress, and can therefore be interpreted as focused.

Note that, under the assumptions made in this paper, it is not enough for the *wh/f*-phrases in (28) to be left-adjacent to the verb. Rather, they have to be more embedded than any other (overt) constituent in the sentence, since they need sentence stress. This means that rightward movement of the object in these examples must be to a position higher than the *wh/f*-subject. That this is indeed the case is shown in (29).

(29) a. **Míren** ikusí rau Jonek.
Miren.A seen has Jon.E
Jon saw MIREN.

b. **Ikusí rau** Míren Jonek.

c. **Ikusí rau** Jonek Míren.

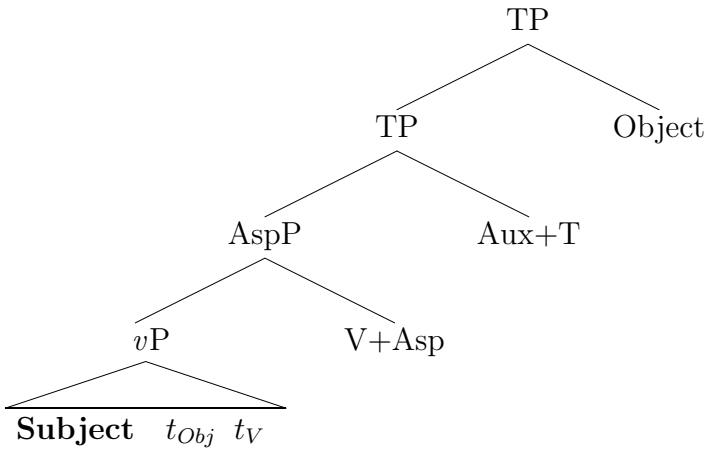
(29a) exemplifies the fact that subjects can also undergo rightward movement, and (29b) shows that both the object and the subject can be moved to the right in the same sentence.[16] The crucial example is (29c), where both subject and object are moved to the right, but the object appears to the right of the subject. Under the assumption that these examples involve rightward movement,[17] this means that rightward movement of the object can be higher than rightward movement of the subject, which in turn means that rightward movement of the object can be to a position higher than the base position of the subject. Thus, let us assume

[16]Both (29b, c), where the verb is assigned sentence stress, receive a *verum focus* interpretation, i.e. they are both felicitous when uttered in contrast to *Jon didn't see Miren*. At the moment, I can offer no satisfactory account for this relation between verb stress and *verum* focus. However, this is not crucial for the argument.

[17]This assumption, of course, is not the only possible one. Thus, these examples could involve leftward movement of the verb and auxiliary to a clause initial position, with subsequent movement of the object to the left of the subject in (29b). However, further assumptions would be needed in this case in order to account for the fact that the verb receives sentence stress. Under the assumption that these examples involve rightward movement, no further assumptions are needed: the verb receives sentence stress because it is the most embedded constituent in the sentence. Further arguments that these sentences indeed involve rightward movement are given below.

that in (28), the object is moved to the right to be adjoined to TP, and that the subject is left in its base position inside vP, resulting in the structure in (30).

(30) *Rightward Movement*



As a consequence, this movement can result in the assignment of sentence stress to the subject in (28).

To summarize so far, both leftward and rightward movement have the same effect on the focus interpretation of a sentence: by moving a phrase XP to a position higher than YP, the latter receives sentence stress, and can accordingly be interpreted as focused. This might lead us to expect that these movements also have the same effects with respect to other aspects of semantic interpretation, such as scope or binding. However, this is not the case. As I show immediately below, they are very different with respect to reconstruction: while leftward movement does not reconstruct, rightward movement reconstructs obligatorily.

Consider first the effect that these two movements have on the relative scope of quantifiers. The pair in (31) involves rightward movement.[18]

[18]Unless otherwise noted, in all the examples below, the sentences are to be pronounced with sentence stress on the constituent immediately preceding the verb.

(31) a. Mutil batek liburo bakotxe irakurri rau.
boy one.E book each.A read has
A boy read each book. $a > each$ / $* each > a$

b. Mutil batek irakurri rau liburo bakotxe.
boy one.E read has book each.A
A boy read each book. $a > each$ / $* each > a$

In (31a), where the basic SOV word order is kept, the only reading available is one in which the existential subject has scope over the universal object. In (31b), the universal object is moved rightward to a position which, as I argued above, can be higher than the existential subject. However, the relative scope of the two QPs does not change. These data can be explained if we make the following two assumptions: (i) there is no covert QR in Basque; and (ii) rightward movement reconstructs obligatorily, i.e. the moved phrase can only be interpreted in the base position.[19] The former explains why, in the basic SOV order (cf. 31a), only the surface scope is possible, and the latter explains why rightward movement does not alter the scope relations found in the basic SOV order.

Leftward movement, on the other hand, behaves very differently, as exemplified in (32).

(32) Liburo bat mutil bakotxak irakurri rau.
book one.A boy each.E read has
Each boy read a book. $a > each$ / $* each > a$

In this case, an existential object is moved to the left of a universal subject, and the only reading available is the one reflecting surface scope (i.e. existential over universal). Thus, unlike rightward movement, leftward movement does alter scope relations. This fact can be

[19] Assumption (i) is only possible if we assume that object QPs can be interpreted in their surface position when they are not moved to the right. Alternatively, we could assume that QR does exist in Basque, but that it cannot alter the relative scope of phrases, along the lines of Bruening (2001). Either assumption would be enough to account for the data studied here.

accounted for if we assume that leftward movement cannot reconstruct. If it did, we would expect non-surface scope to be possible in (32).

Note that all the examples above were constructed so that the only reading available was one in which the existential QP has scope over the universal one. One might expect similar judgments in cases in which the analysis would predict only a reading with the universal QP having scope over the existential one. However, this expectation is not well-founded. Consider (33), in which a universal object is moved to the left of an existential subject.

(33) Liburo bakotxe mutil batek irakurri rau.
book each.A boy one.E read has
A boy read each book. $a > each$ / $each > a$

The fact that non-surface scope is apparently possible in (33) does not provide evidence against the assumption that leftward movement does not reconstruct. Rather, it is a consequence of the well-known property of indefinites that they can be interpreted as if they were structurally higher than what might be expected, given standard assumptions about movement and QR (see, among others, Fodor and Sag 1982, Reinhart 1995, 1997, Kratzer 1998, and Matthewson 1999). Thus, (33) is perfectly compatible with the assumption that leftward movement does not reconstruct. The reason why I have not included examples of this sort in the text is that they are not very informative in deciding what LF structure a given sentence has.

Thus, the scope facts can be explained under the hypothesis that rightward movement reconstructs obligatorily and leftward movement cannot reconstruct. This difference between leftward and rightward movement is similar to the one between A and $\overline{\text{A}}$-scrambling found in other languages with "free" word order, such as Hindi or Japanese. As shown in Mahajan

(1990) and Saito (1992), among others, these languages have two types of scrambling, which have different effects with respect to scope. Whereas A-scrambling does not reconstruct, $\overline{\text{A}}$-scrambling reconstructs obligatorily. This difference is parallel to that found between leftward and rightward movement in Basque, as stated in (34).

(34) a. *Leftward movement* behaves like A-scrambling, i.e. it does not reconstruct.

b. *Rightward movement* behaves like $\overline{\text{A}}$-scrambling, i.e. it reconstructs obligatorily.

Note that, in order to explain the examples above, we need one further assumption, namely, that leftward movement cannot precede rightward movement. If this were possible, we would expect (31b) to allow a reading in which the universal object has scope over the existential subject. Specifically, if this example could involve the derivation represented in (35), the object would still be higher than the subject after reconstruction.

(35) $[_{\text{TP}}\ t\ [_{\text{TP}}\ [_{v\text{P}}\ \text{Subject}\ t\ ]\ \text{V Aux}\ ]\ \text{Object}\ ]$

The fact that (31b) does not allow this reading shows that a derivation like (35) is not possible in Basque. This is a property which is not shared by the languages mentioned above. At the moment, I cannot offer a full explanation for this phenomenon, and I leave it as a question in need of further research.

The hypothesis that leftward and rightward movement are different with respect to reconstruction can be tested further by examining other interpretative consequences that LF structures have. In the examples given below, I explore the effect that these movements have on the interpretation of pronouns as bound variables. (36) illustrates this for leftward movement.

(36) a. Andra bakotxak$_1$ beran$_1$ semi ekarri ban.
woman each.E her son.A brought had
Each woman$_1$ brought her$_1$ son.

b.* Beran$_1$ semi andra bakotxak$_1$ ekarri ban.
her son.A woman each.E brought had
Each woman$_1$ brought her$_1$ son.

As shown in (36a), if the basic SOV order is not altered, a subject QP can bind a pronoun inside the object. However, if the object is moved to the left of the subject, as in (36b), this is no longer possible. Similar results are obtained in (37), where the QP is in object position and the bound pronoun is inside the subject.

(37) a.* Beran$_1$ amak mutil bakotxe$_1$ ekarri ban.
his mother.E boy each.A brought had
His$_1$ mother brought each boy$_1$.

b. Mutil bakotxe$_1$ beran$_1$ amak ekarri ban.
boy each.A his son.E brought had
His$_1$ mother brought each boy$_1$.

In this case, the QP object cannot bind a pronoun inside the subject in the basic SOV order (37a). However, after leftward movement of the object, it is possible (37b). These examples provide further arguments for the hypothesis that leftward movement does not reconstruct. Under this hypothesis, only surface scope is possible after leftward movement, which means that variable binding is only possible if the QP precedes the bound pronoun after this movement occurs.

Consider now rightward movement, exemplified in (38).

(38)* Beran$_1$ amak ekarri ban mutil bakotxe$_1$.
his mother.E brought had boy eachA
His mother brought each boy.

Compare (38) with (37a) above. In both cases, the object QP cannot bind a pronoun inside the subject. This is as expected for (37a), since the base word order is kept. However, in (38), the object has undergone rightward movement, which, as was shown above, can result in the object being in a surface position which is higher than the subject. If rightward movement were like leftward movement, we would expect (38) to be grammatical. The fact that it is not shows that rightward movement cannot alter the relative scope of phrases, i.e. unlike leftward movement, rightward movement reconstructs obligatorily, so that the moved phrase in (38) is interpreted in its base position and thus cannot bind the pronoun inside the higher subject. Furthermore, this sentence also exemplifies the fact that rightward movement cannot be preceded by leftward movement. If this were possible, the object should be able to bind the pronoun inside the subject after reconstruction.[20]

Further evidence for the conclusion that rightward movement does not alter scope relations is given in (39), where both subject and object are moved to the right.

(39) a.* Ekarri ban beran$_1$ amak mutil bakotxe$_1$.
brought had his mother.E boy each.A
His$_1$ mother brought each boy$_1$.

b.* Ekarri ban mutil bakotxe$_1$ beran$_1$ amak.
brought had boy each.A his mother.E
His$_1$ mother brought each boy$_1$.

[20]Some of the data presented above could be explained if we assumed that (i) leftward movement can violate Weak Cross Over (WCO), (ii) rightward movement cannot violate WCO, and (iii) there is covert QR in Basque. Thus, (38) could be seen as a WCO violation as a consequence of rightward movement, and (37b) as showing that leftward movement can violate WCO. The assumption that covert (WCO sensitive) QR exists in Basque would also explain the ungrammaticality of (36b, 37a). This explanation, however, would not be sufficient, since it would not have anything to say about the scope facts examined above. All these data, including the scope facts, can be explained in terms of reconstruction, as shown in the text. Thus, these assumptions about WCO and QR are not necessary.

When both phrases are moved to the right, the scope relations found in the basic word order (cf. 37a) are not altered. Note that these examples also show that it must be at least possible to interpret these post-verbal phrases as having undergone rightward movement. As was noted in footnote 17, one could assume that they are postverbal because the verb and auxiliary have moved to some clause initial position. However, this would make wrong predictions for (39b), where the object precedes the subject. In this example, one would need to assume that the object is moved to the left of the subject, which would make the wrong prediction that binding should be possible. The fact that word order to the right of the verb is not important for scope shows that an analysis in terms of rightward movement is necessary.

We can draw several conclusions from the preceding discussion. First, leftward and rightward movement are not the same type of movement. While leftward movement behaves as A-scrambling and does not reconstruct, rightward movement behaves as $\overline{\text{A}}$-scrambling and reconstructs obligatorily. Second, the fact that these two operations have the same effect on the focus interpretation of a sentence shows that the requirement that a focused phrase be more embedded than non-focused phrases must be met in overt syntax. Specifically, the facts about scope in sentences with rightward moved objects show that these objects are interpreted in their base position at LF. However, with respect to focus, the object is in a position higher than the focused subject. This is true only in the overt structure, not at LF. Thus, any operation which has an effect on focus must be overt. This fact is captured nicely in the present analysis: since structural conditions on focused phrases are the result of phonological requirements, they can only be satisfied by overt structures. Any further

change in the structure resulting from LF operations, such as movement or reconstruction, is irrelevant.[21] Finally, the data discussed in this section also provide evidence for the hypothesis that the two movement operations examined here are not directly triggered by the need to focus or assign sentence stress to some constituent. If this were the case, one would expect them to have similar syntactic properties. As has been shown in the preceding discussion, this expectation is not borne out.

7. Long Distance Dependencies

In the preceding sections, I have examined the syntax of focus in Basque simple sentences, arguing that its main properties are derived from prosodic principles imposed on PF structures. In this section, I study more complex cases in which embedded clauses are involved. More specifically, I discuss different strategies that are used in this language in order to focus and assign matrix scope to embedded *wh/f*-phrases.

Given that in simple clauses *wh/f*-phrases do not need to move, one might expect that Basque does not need long distance movement for establishing long distance dependencies with *wh/f*-phrases. However, apart from the expected *in-situ* strategy, this language also uses another one which involves long distance movement, as argued for in Ortiz de Urbina (1989, 1993, 1995). In the following paragraphs, I discuss long distance movement first, and

[21] This might be seen as support for the view, defended in Reinhart (1995) and Szendröi (2001), that PF, in addition to LF, feeds semantic interpretation, at least with respect to focus. Under this view, the focus interpretation of a sentence is computed at PF, after sentence stress is assigned. However, as already noted in footnote 11, the facts discussed in this paper are also compatible with the more traditional view that the focus interpretation of a sentence is fed by LF. Under this view, we could assume that the focused phrase is assigned a focus feature in syntax: at LF this feature would be responsible for the focus interpretation of the sentence, and at PF, the requirement that a focused phrase contain sentence stress would in fact be a PF condition on phrases which have been assigned that feature.

Although, admittedly, the former view seems simpler (i.e. it does not need to assume a focus feature), none of the data discussed in this paper favors one view over the other.

then the *in-situ* strategy, arguing that both can receive a well-motivated account within the general framework assumed here.

Long distance movement is exemplified in the following sentences:

(40) a. **Séin** pentsate su Mirének ikusi rabela?
who.A you-think Miren.E seen has.COMP
Who do you think Miren saw?

b. **Jón** pentsaten dot Mirének ikusi rabela.
Jon.A I-think Miren.E seen has.COMP
I think Miren saw JON.

In both cases, the *wh/f*-phrase has sentence stress. However, since the *wh/f*-phrase is separated from the embedded clause in which it was generated, it also appears that these sentences involve extraction of the *wh/f*-phrase from the embedded clause. This might be seen as a problem for the analysis defended here, since this movement would, in principle, place the moved *wh/f*-phrase in a higher position than expected, given that it receives sentence stress.

I propose that these cases in fact involve two movements, as shown in (41, 42).

(41) $[_{\text{TP}}\ pro[_{v\text{P}}\ \textbf{Jón}\ [_{\text{CP}}\ \text{Mirének}\ t\ \text{ikusi rabela}]\ t_v]\ \text{pentzaten dot}]$

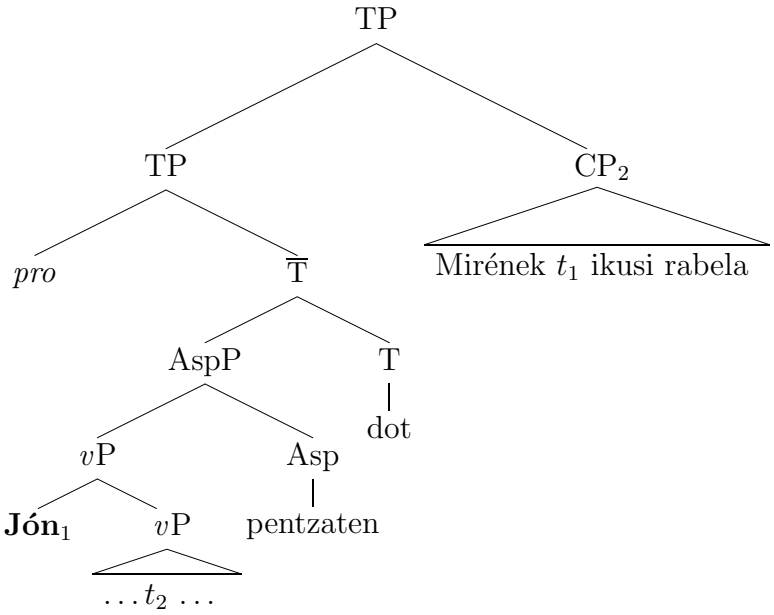
Jon.A Miren.E seen has.COMP I-think

(42) $[_{\text{TP}}\ pro[_{v\text{P}}\ \textbf{Jón}_1\ t_2\ t_v]\ \text{pentsaten dot}]\ [_{\text{CP}}\ \text{Mirének}\ t_1\ \text{ikusi rabela}]_2]$

Jon.A I-think Miren.E seen has.COMP

First, the *wh/f*-phrase is extracted and adjoined to the matrix *v*P. Second, the embedded CP (containing the trace of the moved phrase) is also extracted and adjoined to the matrix sentence. Thus, the *wh/f*-phrase is the most embedded constituent, and receives sentence stress:

(43) *Long Distance Movement*



Note that movement of the embedded clause is well-motivated in the present analysis: it must occur so that the *wh/f*-phrase is the most embedded constituent in the sentence. On the other hand, it is not clear why the *wh/f*-phrase can be extracted from the embedded clause, since, in its base position, it would be the most embedded constituent in the sentence. I will leave this as a question for future research.

Nevertheless, there is some evidence that this analysis is on the right track. In this analysis, as shown in (43), the matrix subject position is to the left of the landing site of the extracted *wh/f*-phrase. On the other hand, in the analysis discussed in §4, the extracted *wh/f*-phrase is in the matrix [Spec,CP], which means that any constituent appearing to its left, including the matrix subject, has been moved to the left. Thus, that analysis predicts that this constituent must be interpreted as a topic. In the analysis defended here, this is not the case for the matrix subject, since the matrix subject position is to the left of the extracted *wh/f*-phrase. As shown in (44) below, the matrix subject is not necessarily

interpreted as a topic in these structures, since it can be a QP such as *seosein* 'someone', which, as was shown in §5, cannot undergo leftward movement. This provides evidence in favor of the analysis proposed above.

(44) Seoseñek **Jón** pentzaten dau Mirének ikusi rabela.
someone.E Jon.A thinks Miren.E seen has.COMP
Someone thinks Miren saw JON.

Finally, I would like to discuss the other strategy involved in establishing long-distance dependencies in Basque, which is exemplified in (45).

(45) a. [$_{CP}$ Mirének **séin** ikusi rabela] pentsate su?
Miren.E who.A seen has.COMP think Aux
Who do you think Miren saw?

b. [$_{CP}$ Mirének **Jón** ikusi rabela] pentsaten dot.
Miren.E Jon.A seen has.COMP think Aux
I think Miren saw JON.

In this strategy, the requirement that a *wh/f*-phrase be left-adjacent to the verb is met in a somewhat indirect way. First, the *wh/f*-phrase is left-adjacent to the embedded verb, and, second, this embedded clause is left-adjacent to the matrix verb.[22]

In this case, it is clear that the *wh/f*-phrase is not extracted from the embedded clause. Ortiz de Urbina (1989, 1993) argues that these structures involve clausal pied-piping, i.e. they are derived as the result of two movements: (i) the *wh/f*-phrase moves to the embedded [Spec,CP] (resulting in adjacency with the embedded verb); and (ii) the embedded clause moves to the matrix [Spec,CP] (resulting in adjacency with the matrix verb). Thus, this

[22]See Ortiz de Urbina (1993) for evidence that both adjacency requirements must be met.

analysis predicts that these structures can be involved in long distance movement. As shown in (46, 47), this is indeed the case.

(46) [Mirének **séin** ikusi rabela]$_1$ [pentsate su [t_1 esan dabela Pedrok]]?
Miren.E who.A seen has.COMP you-think said has.COMP Pedro.E
Who do you think Pedro said Miren saw?

(47) [Mirének **Jón** ikusi rabela]$_1$ pentsaten dot [t_1 esan dabela Pedrok].
Miren.E Jon.A seen has.COMP I-think said has.COMP Pedro.E
I think Pedro said Miren saw JON.

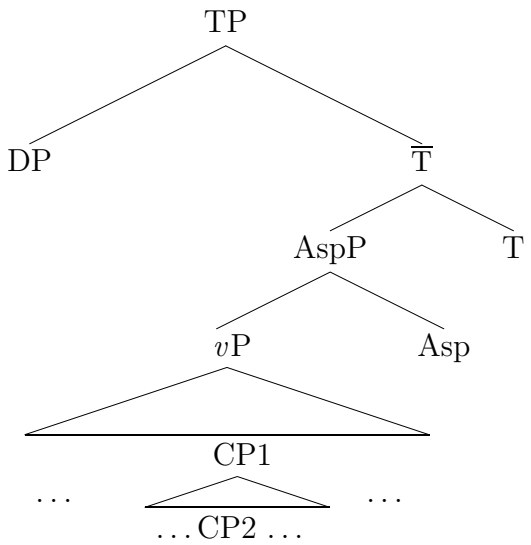
In the analysis defended here, these cases have an analysis similar to what has been proposed so far. I claim that, in fact, they involve an *in-situ* strategy. Consider first the simpler examples in (45). These cases do not posit any problem: first, the *wh/f*-phrase is in the preverbal position within the embedded clause, which means that is is in the most embedded position within this clause; second, the embedded clause is in the matrix preverbal position, which means that it is more embedded than any other constituent within the matrix clause. The result, as desired, is that the *wh/f*-phrase is the most embedded constituent in the matrix sentence, and can therefore receive sentence stress.

As in the cases of long distance movement discussed above, these examples do not involve movement to [Spec,CP] in the present analysis. However, as shown above, in Ortiz de Urbina's analysis they do. As in the cases of long distance movement, we can test this difference by checking whether a subject appearing to the left of the phrase in the preverbal position (the "pied-piped" clause in this case) behaves as a topic. As shown in (48), this is not the case, which lends support for the analysis defended here.

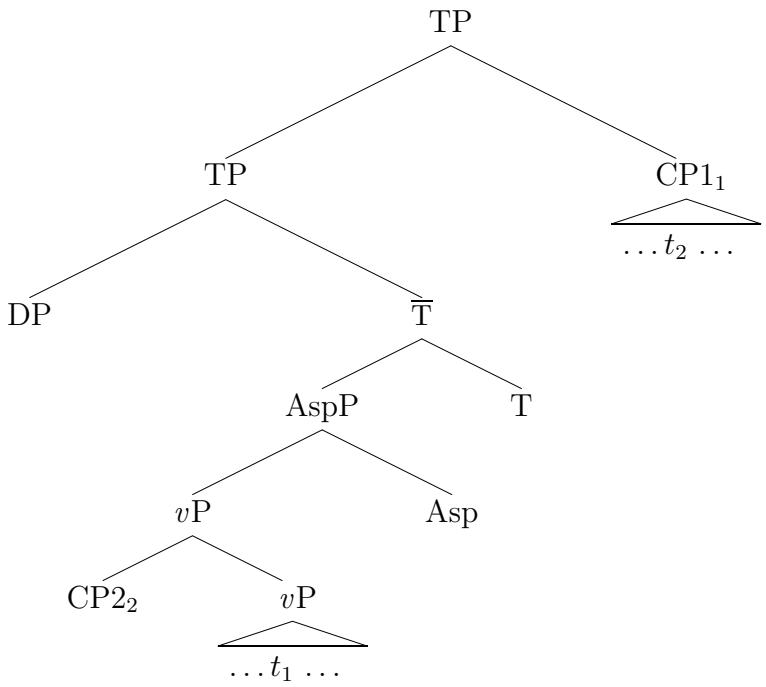
(48) Seoseñek Mirének **Jón** ikusi rabela pentzaten dau.
someone.E Miren.E Jon.A seen has.COMP thinks
Someone thinks Miren saw JON.

Finally, with respect the more complex cases in (46, 47), I would like to propose an analysis similar to the one proposed above for the long distance strategy. The basic structure of these examples before any movement occurs is as in (49). The structure after all necessary movements occur is as in (50). In (49), CP2, which contains the *wh/f*-phrase, undergoes long distance movement, which as in the other cases of long distance movement discussed above, results in adjunction to the matrix vP. Furthermore, CP1, which contains the trace of CP2, also moves, in this case adjoining to the right of the matrix TP. The resulting structure, (50), is parallel to the one proposed for the other cases of long distance movement discussed above.

(49)



(50)



In this structure, the CP2, which contains the *wh/f*-phrase, is the most embedded constituent in the matrix clause. Since the *wh/f*-phrase is also the most embedded constituent within CP2 (i.e. it is in the preverbal position in CP2), it follows that the *wh/f*-phrase is the most embedded constituent in the matrix clause, and it can therefore receive sentence stress. Although this structure might seem a little complex, it is important to note that the rightward movement of CP1 is motivated in the present analysis, due to the fact that CP2, which contains the *wh/f*-phrase, needs to be more embedded than CP1.

To conclude this section, Basque uses two different strategies for establishing long distance dependencies with *wh/f*-phrases. Apart from the expected *in-situ* strategy, more complex structures are also possible which involve long distance movement. Although the nature of this movement operation is not yet clearly understood, and its properties are still in need of further research, I have argued that the resulting structures are compatible with the analysis of focus which has been developed in previous sections.

8. Conclusion

In this paper, I have argued that the preverbal focus position in Basque is derived from other properties of the language which are independently motivated. First, sentence stress is on the preverbal constituent because that is the most embedded position in the sentence. The existence of a preverbal focus position is derived from the hypothesis that *wh/f*-phrases must contain sentence stress. In cases in which the basic SOV structure does not result in the desired configuration, two different operations, leftward and rightward movement, are used which provide the desired structure. By moving a phrase XP to a position higher than another phrase YP, the latter is left in a position in which it can receive sentence stress and thus be interpreted as focused. The consequence is that no special syntactic position for *wh/f*-phrases needs to be posited. Indeed, as I argued in §5, an analysis which identifies this position as [Spec,CP] makes wrong predictions about the syntactic and semantic properties of phrases appearing to the left of the preverbal position. This lends further support for the analysis defended here, since it makes correct predictions about these phrases.

Furthermore, evidence was provided in §6 which argued that the two movement operations involved, leftward and rightward movement, have very different syntactic properties. This was shown to provide support for two aspects of the analysis developed here. First, the fact that what unifies the two operations is their effect on overt syntax, not on LF, provides evidence for the hypothesis that structural conditions on *wh/f*-phrases must be met at PF, not at LF. Second, the fact that the two operations have different syntactic properties favors the view that they are not directly triggered by the need to focus a given phrase.

In sum, the analysis proposed here provides a natural explanation for several syntactic

and semantic phenomena having to do with the grammar of focus and *wh*-expressions in Basque. Still, there are several aspects of the analysis which need to be developed further. The properties and nature of the different movement operations discussed here need to be studied in more detail. Even though I have argued that their effect on focus is based on PF principles, what exactly triggers them in the syntax is not yet well-understood. In addition, a more detailed study of the phonology of stress in Basque is likely to shed more light on the syntactic properties of focus in this language. These are topics that will be studied in future developments of the ongoing research reported here.

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