

Operator movement and verb second phenomena in Basque

JON ORTIZ DE URBINA
University of Deusto

This article presents an analysis of wh-formation and focalization in Basque, framed within Chomsky's 'Barriers' system. In languages like Basque and Hungarian, both foci and wh-words have to appear in a position immediately preceding the inflected verb. Rather than allowing, as a parametric option, such operators to move to a special pre-verbal FOCUS position, it is claimed that the correct parameter involved is the level of operator movement. In much the same way as wh-words may move to SPEC at LF (Chinese) or at S-structure (English, Basque), foci may also move at LF (English) or at S-structure (Basque). The fact that both types of operators have to precede the verb is interpreted as another instance of the well-known V2 (verb-second) phenomenon, whereby inflected verbs move to the COMP position when SPEC is occupied by an operator, as observed in English wh-formation. An extension of this analysis to the negative operator *ez* 'not' is also examined, attempting to explain inversion phenomena in negative clauses.

0. Introduction

In this paper, *galdegaia* phenomena (pre-verbal placement of foci and wh-words in Basque) are analyzed as a configuration of data arising from two connected but independent processes: movement of these two operator types to the SPEC position on one hand and inflected verb raising to COMP on the other. The first process accounts for the common behaviour of foci and wh-words, and the second for the immediate pre-verbal 'position' they must occur in. Both processes can be shown to be at work independently in different languages, and I claim that it is their joint effect that explains *galdegaia* phenomena in languages like Basque and Hungarian. The article is organized as follows. In section 1, I present the complementizer-phrase structure assumed within this framework, since it plays a crucial role in the following description of data. After spelling out some of the assumptions regarding COMP-elements in Basque in section 2, section 3 deals specifically with *galdegaia* facts and the analysis posited here, providing some arguments for it. Particular attention is paid to verb focalization and to

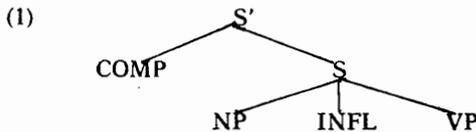
focalization in negative clauses. Finally, in section 4, some problems and possible extensions are examined.

I turn presently to discussing the structure of the complementizer phrase, since I will claim that its head and specifier positions are the two landing sites involved in *galdegaia* phenomena.

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1. Non-Lexical categories

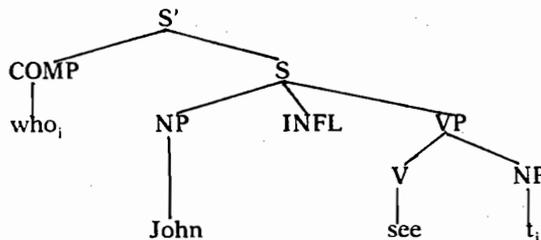
Since Bresnan's (1970) ground-breaking work on complementizers, most research within the Extended Standard Theory and, later on, within the GB (Government and Binding) framework has assumed an overall sentential structure like the one given in (1):



The COMP node/position had a dual function. In the first place, it designated the position under which lexical items of category COMP (that is, complementizers like English *that*, Spanish *que*, and so on) were to be inserted. Secondly, the COMP position served also as 'landing site' for wh-words, since it was observed that many languages show 'displaced' wh-words which occur not in the place within S which would correspond to the constituent they inquire about, but in sentence-initial position, often adjacent to the complementizer. In languages with 'syntactic', directly observable, wh-movement, Move- α would move (actually, adjoin) the wh-word to COMP at S-structure, as in the English example below:

(2) i. I don't know who John saw

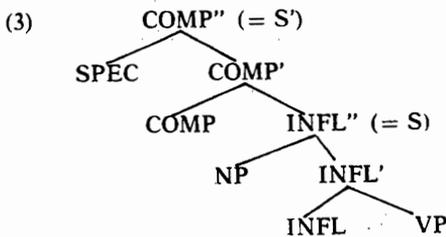
ii.



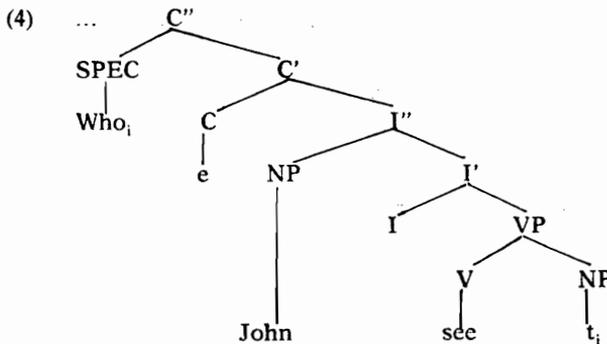
In languages like Chinese, though, wh-words appear not to be displaced. They remain in situ, at least at the directly observable level of S-structure. However, Huang (1982) showed that some logical properties of interrogative structures in Chinese require an LF (logical form) representation similar to (2ii), where the wh-word appears in a position outside S c-commanding the whole clause. Therefore, wh-movement would take

place in all languages, with parametric variation as to its level of application: S-structure in English and languages with observable displacement, and LF in Chinese and similar languages.

Some problems associated with the representation in (1) led to its revision in Chomsky (1986). First, from the point of view of X-bar theory, S' was a defective category. S seemed to have its maximal projection at the single bar level (S'), while all lexical categories had a double-bar maximal projection (X''). Secondly, it had often been suggested in the linguistic literature that INFL was the head of S. Then, following the X-bar system, S would be considered the maximal projection of INFL, hence INFL''. Again, if S=INFL'', the status of S' in (1) is at best marginal from an X-bar theoretic standpoint. Chomsky (1986) reanalyzes non-lexical categorial structure as in (3):

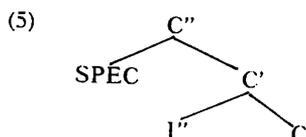


In (3), S is reinterpreted as the maximal projection of INFL (INFL'', henceforth I''). Then, following the X-bar system, the head COMP has a complement (I'') within its first projection (COMP'), and a specifier position (SPEC) within its maximal projection (COMP'', henceforth C''). One immediate consequence of this analysis is that the previous double function of COMP in (1) is assigned to two different structural positions: complementizers like *that*, *que* are inserted under the head COMP position, while wh-words move to the SPEC position. The revised representation of (2ii) would be now as in (4):



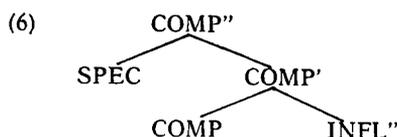
Apart from placing non-lexical categories such as INFL and COMP under the same general X-bar structural pattern of lexical categories (N, V, A, P), this analysis overcomes some empirical problems of (1).

Thus, in the Kru languages described in Koopman (1984), complementizers occur to the right, while *wh*-movement is to the left. This would not be possible if one single position is involved in the two phenomena, but it becomes a possibility within a proposal like (3) for a head-last language: COMP would simply follow its complement I', as shown in (5):



The SPEC position then precedes the clause, while COMP follows it.

The analysis in (3) also allows us to characterize verb-second phenomena, which will play a crucial role in the analysis of Basque *galdegaia* phenomena presented below. In a structure like (6), there are only two structural positions immediately preceding (linearly) the clausal constituent INFL': SPEC and COMP:



Some 'inversion' phenomena observed in interrogative structures can be described as being the result of a rule moving the inflected verb (or auxiliary) to the COMP position. Thus, compare the declarative and interrogative counterparts in (7) and (8):

- (7) i. [John saw the book at this shop]_{INFL''}
 ii. [where_idid [_{INFL''} John see the book t_i]]
- (8) i. [John is here now]
 ii. [where is [_{INFL''} John now]]

The inflected verb (*is*) or the auxiliary (*did*) have been moved to the second (COMP) position when the first (SPEC) position has been occupied by a *wh*-phrase. I will provide a similar analysis of Basque *wh*-word and focus movement phenomena below.

2. Complementizers

Before turning to the actual proposal, it is also necessary to spell out some of the assumptions I will be making regarding the status of the set of suffixes which might correspond to complementizers in English. The issue still remains rather unclear. The basic facts are as follows. Basque tensed subordinate clauses are marked by a small set of subordinating elements: the suffixes *-(e)n*, *-(e)la* and the prefix *bait-*. All of them are bound affixes attached to the inflection-bearing element, that is, the auxiliary (as in (9i)) or the synthetic verb (a small set of

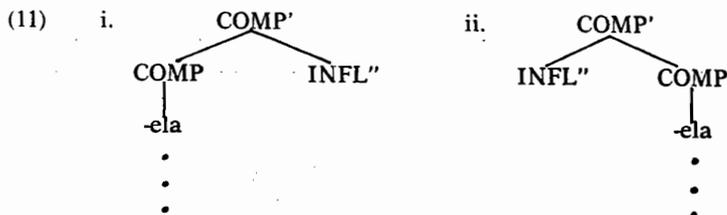
verbs with independent forms in some tenses including person, tense and other markers together with the verbal root, as in (9ii):

- (9) i. Mikel etorri d-ela esan dut
 come aux-*ela* say aux
 I have said that Mikel has come said
 ii. Mikelek darama-la esan dut
 carry-*la* say aux
 I have said that Mikel is carrying it

The first question that arises with regard to such complementizers is their position relative to other elements of the embedded clause. These elements appear in Basque attached to the inflection-bearing element and will therefore occur in any position where the verbal element may occur. Since the unmarked order in embedded clauses is verb-final, complementizers will often occur as the rightmost element of the embedded clause (*-(e)n* and *-(e)la*, see (9)) or immediately preceding it (*bait-*, as in (10)):

- (10) etxera joan zen, berandu baitzen
 house-to go aux late *bait-*aux
 He went home, since it was late

Assuming that these affixes belong to the class of elements of category COMP, and that they are the head of COMP'' in Basque, there are two logical alternative analyses allowed by the theory: either COMP precedes INFL'' or COMP follows it. The two alternatives are represented in (11):



Regardless of which alternative is selected, a rule of cliticization is required in both analyses, since at least prefixed complementizers like *bait-* would never possibly be generated in the correct surface order¹. In what follows, I will assume that COMP appears to the left in Basque, as in (11i), and is cliticized at S-structure to the tensed element. The main evidence derives from the analysis of *galdegaia* as a verb-second phenomenon discussed below. The fact that complementizers usually appear to the right does not present substantial counterevidence to this claim, since, as stated above, this is only a function of the preferred

(1) At the surface structure level, we find a triple amalgamation: the head of VP (V) amalgamates with the head of INFL (INFL, the tense and agreement markers) and with the head of COMP (COMP, the complementizer). I am assuming that the nominalizing suffix *-i(z)e* is part of INFL, so that amalgamation of V and INFL will also take place in tenseless clauses of this type. This should be born in mind to extend the analysis provided in this article to tenseless clauses.

verb-final order for embedded clauses: the complementizer can (and must) appear in any position where scrambling or other processes allow the conjugated verb to appear.

A related issue which still requires further study is the appropriate analysis of elements which sometimes occur in sentence initial position of embedded clauses in conjunction with the affixes we have identified as complementizers. Such elements are particularly prominent in pre-XXth century writers (see Villasante (1986)) and modern colloquial speech, although many of them are usually excluded in the modern standard literary practice. Some examples are supplied in (12)²:

- (12) i. *guk dugu sinisten ezen* liburu hautako hitza
 we aux believe that book these word
Jainkoaganikoa d-ela
 God-from is-*ela*
 We believe that the word from these books comes from God
- ii. *idazleak, zeinek* liburua argitaratu bait-u,...
 writer who book publish *bait*-aux
 The writer, who has published the book,...
- iii. *Galdetu dit ea aita heldu d-en*
 ask aux father arrive aux-*en*
 He has asked me whether father has arrived
- iv. *zeren bekhatorea bera disposatzen baita*,...
 because sinner himself prepare *bait*-aux
 because the sinner himself gets prepared...
- v. *nola baserritarra naiz-en*...
 since farmer am-*en*
 since I am a farmer...

Such conjunctive elements might or might not be analyzed as complementizers. I will follow the traditional assumption within Basque generative research in identifying *-(e)n*, *-(e)la*, etc. as complementizers (as in Goenaga (1985:506), Rebuschi (1982:340), etc.), which, of course, leaves the question of the identity of *ezen*, *ea*, and the remaining elements unanswered. In any event, the fact that such conjunctive elements associated with complementizers occur in clause initial position might be interpreted as a (slight) indication that the alternative selected here (11i) is not counterfactual at the descriptive level either. We will return to this problem in section 4 below.

3. Wh-movement and focus: an analysis of galdegaia phenomena

In what follows, I will present a descriptive account of Basque *galdegaia* phenomena, turning then to presenting a current GB analysis and the alternative proposal posited here.

(2) Causal clauses with *ze(ren)* 'because' and similar particles without corresponding subordinating mark on the verb are quite common in both classical and modern colloquial language. An example of the latter is

(i) *zurekin joango naiz, ze bestela galduko naiz*
 with you go aux because otherwise lose aux
 I will go with you, since otherwise I will get lost.

Wh-words (interrogative operators) occur in Basque in a pre-verbal position, the *galdegaia* position in Basque grammatical tradition, immediately preceding the verb, as in (13):

- (13) i. Noiz etorri zen Jon herri honetara?
 when come aux John town this-to
 When did John come to this town?
 ii. Zein herritan bizi zen Jon lehenago?
 which town-in live aux before
 In which town did John live before?

Only inflectional particles like negative *ez*, interrogative *al*, rethoric *ote*, etc. may appear between the wh-word and the verbal element, and the presence of any other intervening material between the two elements produces an ungrammatical sentence. Compare (13) with (14), where the only difference is that in the latter something else has been inserted between the interrogative element and the verb:

- (14) ii. *Noiz Jon etorri da herri honetara?
 when Jon has come to this village
 ii. *Zein herritan Jon bizi zen lehenago?
 in which village Jon lived before

The same restrictions on the relative order of wh-phrases and the verb hold in embedded clauses: the wh-word in an indirect question must occur immediately preceding the verb:

- (15) i. Ez dakit noiz etorri d-en herri honetara
 neg know aux-sub
 I don't know when he has come to this town
 ii. *Ez dakit noiz herri honetara etorri den

The pattern is slightly different in negative clauses. The negative particle *ez* and the inflected verb (the auxiliary of periphrastic verbs and tenses or the synthetic verb itself) are moved to the left, leaving the participle behind in the case of periphrastic verbs, as in (16):

- (16) i. Jon herri honetara aurten etorri da (Periphrastic)
 this year come aux
 John came this year to this town
 ii. Jon ez da herri honetara aurten etorri
 neg aux come
 John has not come this year to this town
 iii. Jon bide horretatik dator (Synthetic)
 way that-by comes
 John is coming that way
 iv. Jon ez dator bide horretatik
 neg comes
 John is not coming that way

In negative questions, the wh-word immediately precedes the [*ez*-

inflected verb] unit, the participle, if there is any, being left behind, as in (17i):

- (17) i. Nor ez da bide horretatik etorri?
 who neg aux come
 Who has not come that way?
- ii. Nor ez dator bide horretatik?
 who neg comes
 Who is not coming that way?
- iii. *Nor bide horretatik ez da etorri?

As (17iii) shows, nothing can still intervene between the wh-word and the inflected verb, as in the affirmative counterparts.

What is interesting about the Basque data is that exactly the same distributional properties of wh-phrases are shared by focalized elements. That is, if any element is emphasized as the focus or the new informational element of the sentence, then it must appear in a position immediately preceding the verb, as shown in (18), where *aurten* 'this year' is being focalized:

- (18) i. Jon *aurten* etorri da herri honetara
 this year come aux
 John has come this year to this town/It is this year that
 John has come to this town
- ii. *Aurten* Jon etorri da herri honetara

In (18ii) there is no way in which *aurten* may be interpreted as the focus of the utterance, since there is an intervening constituent and it does not immediately precede the verb. *Jon* itself may be the focus, although it need not be: focalized constituents are marked also phonologically by a corresponding emphasis on their intonation pattern, so that not all constituents immediately preceding the verb will automatically receive an interpretation as foci. Therefore, all focalized constituents will occur in the position immediately preceding the verb, but not all constituents immediately preceding the verb are interpreted as focalized. They will be so interpreted if they are uttered with an emphatic tone, but not otherwise.

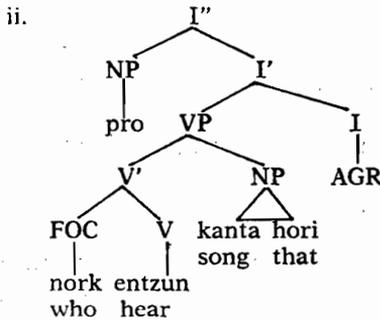
In the preceding paragraphs, I have presented a summary of the basic focalization and wh-formation facts in Basque. Although such arrangement of facts seems slightly bizarre, it is by no means confined to Basque. In particular, it is also a prominent characteristic of Hungarian and it is no coincidence that the most interesting analysis of the data within the generative framework was devised for this language in Horvath (1981). Horvath's analysis was first adapted for Basque in Azkarate et al. (1982a,b), and subsequently further motivated in Ortiz de Urbina (1983) and Eguzkitza (1986). Horvath posited the existence of a parametric choice regarding the existence of a FOCUS position. This position would be included within a projection of the

verb, as in (19), since the focalized element or wh-word and the verb seem to form a unit in these languages:



A sentence such as (20i) was analyzed in Ortiz de Urbina (1983) as involving a movement of the wh-word from its D-structure argument position to the FOCUS A-bar, non-argumental position within V':

- (20) i. Nor-k entzun du kanta hori?
 who-E hear aux song that
 Who has heard that song?



Since movement is to a focus position in V', a type of 'downward' movement, the trace left 'behind' is not c-commanded by the interrogative operator *nork* at S-structure. The structure was possible, however, because Basque is a pro-drop language which can identify as *pro* the content of the empty category left by the wh-word. In effect, the situation was similar to that of postposed subjects in Romance languages like Spanish (21):

- (21) [e] I_{VP} [v_{VP} [viene] Juan]]

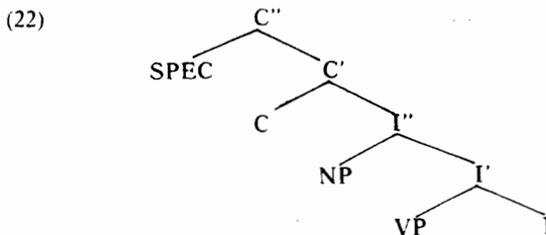
After subject postposing has applied, *Juan* does not c-command [e]. In trying to identify the gap [e] as one of the possible empty categories permitted in the theory, it is clear that it cannot be PRO, since it is governed (by I) and PRO must be ungoverned, nor trace, since it is free, and traces must be bound by an operator. But in Spanish, AGR can identify its content and [e] is then an empty pronominal *pro*, exactly as in (20ii).

While the analysis seems to be descriptively adequate on a number of grounds and does seem to explain a wide range of data, it entails some rather curious coincidences between the hypothesized FOCUS position and COMP that are left unexplained. Consider the status of CP (=C'') in Basque. With respect to its head C, I have shown in the previous section that subordinating particles like *-(e)n* and *-(e)la* are realized as clitics attached to the inflected verbal element. As for

SPEC in CP, the landing site for interrogative operators in other languages, it would seem to be functionless in a language where wh-movement takes an element to an independent FOCUS position. Then, if Basque has a CP structure at all in the focus analysis, it would be a rather degenerate one. Moreover, precisely those functions of the SPEC in other languages that are missing in Basque are the ones taken over by the FOCUS position, so that FOCUS acts much like a COMP-like position, a curious redundancy. As will be seen later, even cyclic COMP-to-COMP movement is construed in this analysis as a FOCUS-to-FOCUS movement. Then the FOCUS position seems to be functioning as COMP, while COMP remains largely functionless in Basque. What I would like to propose in this section is that what was previously identified as FOCUS is in fact COMP, or, more precisely, SPEC, the specifier of CP. I will address in turn the two basic characteristics of *galdegaia* formation: in 3.1 I will examine the identical behaviour of foci and wh-words, and in 3.2 I will interpret their pre-verbal position as just another verb-second phenomenon.

3.1. *Wh-words and focal operators*

Following the analysis sketched in section 1, assume that Basque has a non-lexical structure just like that of other, well-known languages, as in (3), repeated here as (22):



Assume also that wh-elements in Basque move to the same position that they do in other languages, and for similar reasons: that is, that operators like wh-words and focalized constituents must move to the specifier of CP in order to have scope over the clause. Scopal relations are expressed in terms of c-command domains, and the position SPEC in (22) c-commands everything within C'', so that an element in that position will have scope over the whole clausal structure. I will show later that focalized words are indeed logical operators, so that their patterning with wh-words is not unexpected. Wh-movement may take place in the syntax (as in English, Romance, etc.) or at LF (as in Chinese, Japanese, etc.). Moved wh-words (logical operators), leave behind a trace (a logical variable), so that formation of operator-variable chains occurs at S-structure in one language type and at LF in another. Movement in Basque takes place also at S-structure, but Basque differs

from English in that operator-variable pairs are formed in the syntax not only for interrogative *wh*-operators, but also for focalized operators³. Then, just like *wh*-movement is subject to parametric variation as to its level of application, focalization may also take place in the syntax or at LF. At S-structure the two types of operator structures differ in English, as in (23) and (24). However, at LF, both share the same representation with an operator in an A-bar position binding a variable in an A-position:

- (23) i. *who*_i did [John [see *t*_i]]
 ii. for which *x*, *x* person, [John [see *x*]]
- (24) i. John saw *Mary*
 ii. *Mary*=*x*, John see *x*

That focalized words behave like logical operators at LF, binding variables, is shown in sentences like (25), where the variable of the focalized element produces a Bijection Principle violation in (25ii) just like the variable of overt *wh*-movement in (25i), if the operator happens to bind any other variable (or pronoun):

- (25) i. **who*_i did his_i mother love *t*_i
 ii. *His_i mother loved *John*_i

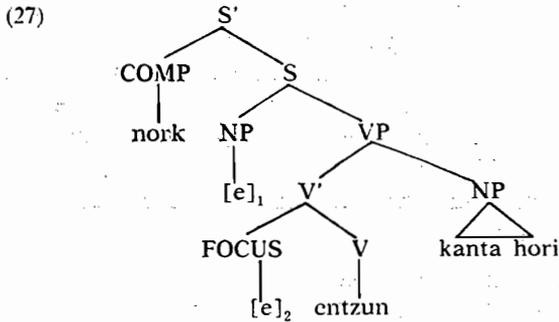
The same set of data is duplicated in the Basque examples in (26):

- (26) i. **nor*_i maite du bere_i ama-k
 who(A) love aux his mother-E
 Who does his mother love?
- ii. ??*Jon*_i maite du bere_i amak
 John(A)
 His mother loves *John*

In the FOCUS analysis, movement to FOCUS leaves a gap which is identified not as a variable, but as *pro*, as discussed above. Since the data in (26) can be explained only if we have operator-trace chains formed, the FOCUS analysis requires the *wh*-word or focus to move again from FOCUS to COMP. The operator in COMP now c-commands and binds the trace-variable left by it in FOCUS, so that this second movement at LF will create an operator-variable chain like the one formed directly in the English *wh*-movement example (25i). Then, the LF representation of (20i), repeated here, would be as in (27), where [e] represents the gaps created by movement (I maintain the pre-barriers structure assumed in the references cited):

- (20i) Nor-k entzun du kanta hori?
 who-E hear aux song that
 Who has heard that song?

(3) Focus in Basque would be an operator of the *wh*-type, rather than the type of logical operator proposed by Many for quantifier raising.



One initial problem with this structure is the status of $[e]_2$: the trace of *nork* 'who' in FOCUS position is bound not only by *nork* in COMP, but also by $[e]_1$ in its original subject position. This involves a violation of Principle C of Binding, which states that variables must be free: nothing intervening between the operator and the variable may bind the latter. But here not only the operator *nork*, but also $[e]_1$ is binding the gap in FOCUS, so that the structure would be ruled out as a Binding Theory violation. On the other hand, in the CP analysis proposed here, the wh-word moves directly from its D-position to the specifier of CP, where it binds its trace. The operator-trace pair is formed at S-structure by Move-alpha itself, no extra movement different from wh-movement is required to account for scope and the crossover phenomena in (26), and the trace is no longer bound by anything else in the domain of its operator, since one single gap is generated.

Under the analysis proposed here, the relevant parameter is not whether a FOCUS position for wh-words and foci exists in the grammar of a given language, but, rather whether foci move in the syntax to SPEC of CP or not. No extra position is required, and the landing site of operators of this type is the same as in other, well-known languages. We find then that languages vary parametrically as to the existence of syntactic (S-structure) movement of operators and also as to the extent of syntactic movement available. Languages like Chinese or Japanese differ from English and Basque in that operator-variable pairs are formed at LF, rather than at S-structure. English differs from Basque in that wh-operators move at S-structure and foci at LF, while in Basque both move at S-structure.

Since foci also form operator-variable pairs, like wh-words, their patterning together is not unexpected. Such common patterning is not restricted to languages which are accounted also by Horvath's focus analysis, like Hungarian and Basque. Thus, Koopman (1948) has shown that in the Kru languages both wh-words and foci move to a clause initial position, as in (28):

- (28) i. alO_i Kofi yE [e]_j ya la
 who saw PART WH
 Who did Kofi see?
- ii. yO-O_i mO_i Kofi yE[e]_i ye
 child-DEF him Kofi see PART
 It is the child Kofi saw

Unlike the Focus position within the V' constituent proposed in Horvath's analysis, this clause-initial position is not pre-verbal and the fact that it serves also as landing site for both wh-words and foci has to be accounted for independently. A redundancy emerges again: both the FOCUS and the COMP position have to be able to serve (cross-linguistically) as landing site for the two operator types. Such redundancy disappears in the analysis proposed here: in Kru languages, as well as in Basque and perhaps Hungarian, the same SPEC position serves as the landing site, and the fact that foci and wh-words move together follows from the same parameter.

3.2. *Verb-second phenomena*

Kru languages differ from Basque and Hungarian in that the operator occupies a pre-verbal position in the latter but not in the former. Up to now, I have dealt with one aspect of the focus facts: the existence of a single position for two different types of operators. Now I turn to the second important aspect, namely, the fact that this position (SPEC or FOCUS) immediately precedes the verb in Basque and Hungarian. In Horvath's analysis, a V' constituent comprising FOCUS and V is posited. In order to explain why FOCUS should form a constituent with V, Horvath hypothesizes that some abstract feature [+ focus] assigned or checked by the verb to adjacent elements might be involved. Such feature would be somehow similar to case features, which are assigned to adjacent complements in the canonic direction of government. However, this still does not explain why it should be the verb that assigns the focus feature. V does assign case and theta-role features to the elements it marks, but such marking is based on subcategorization properties of V. V marks its complements, but focalization is totally independent from subcategorization. The marked process of Exceptional Case Marking is precisely exceptional because the verb is marking an element which is not its complement. Then the existence of a projection of V that does not include the complement or specifier of V does not easily follow from general selectional or subcategorizational relations.

In the analysis presented here, the pre-verbal position of these operators is considered just another instance of the verb-second phenomenon described in Chomsky (1986) and also present in English and Spanish questions, where the verb (or modal or auxiliary in the case

of English) *must* be moved to the head position of CP (the 'inversion' phenomenon):

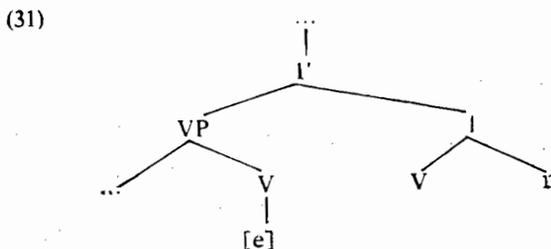
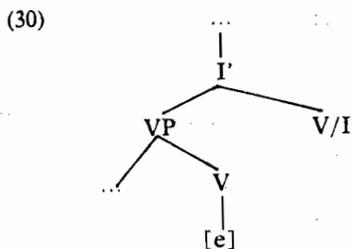
- (29) i. Jon is home now
 ii. Juan fue a casa hoy
 John went home today
 iii. Where is [John now]?
 iv. Adónde fue [Juan hoy]
 where
 Where did John go today?

In Basque, head to head movement of the verb V/I to the head position of CP is obligatory when any of the operators moves to the specifier position, that is, in both interrogatives and clauses with focalized constituents⁴. The details of inversion are subject to some variation across languages, but the basic mechanism is constrained by general principles: what is inverted (i.e., moved to C) cannot be moved directly from V, and it must be the inflected verb or an element of I such as modals.

Since verbs are morphologically inflected, and theory internal constraints require V to somehow merge with I before moving to COMP, a raising process of V to I must be assumed to create the 'inflected verb'. This process takes place in the syntax and is the direct off-spring of earlier Aux-lowering or Affix-switch at PF. With respect to the Basque data, the morphological distinction mentioned in Section 2 between synthetic and analytic verbs and tenses must be taken into account. I will assume here the mechanism proposed in Ortiz de Urbina (1986). A small set of 'synthetic' verbs can amalgamate directly with inflectional affixes in some tenses, forming the structures in (30). But the vast majority of verbs do not have conjugated forms of their own. They cannot amalgamate with I and are adjoined to it, as in (31). The affixes in I are then born by an auxiliary verb whose function is to provide a verbal support for inflectional affixes:

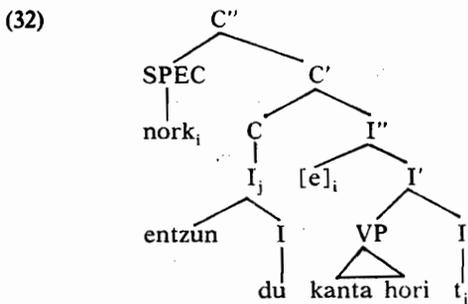
(4) Movement of for the inflected verb to C in CP was not obligatory in the language of the XVth century writer Leizarraga, judging from his *Dotrinaren Katexisnea*, where religious doctrine is presented in a dialogue form. Adjunct phrases like *zergatik* 'why', *nolatan* 'how' and even, occasionally, argument phrases with *zer* 'what, which', appear sometimes separated from the verb by some intervening material, as the following examples indicate (from G. Aresti's edition *Euskal Protestantismoa Zer Zen*, Kriselu):

- (i) Zer horrek erran nahi du?
 what that say want aux
 What does that mean?
 (ii) Zer adorazione-mota hemen kondenatzen da?
 what worship-type here condemn aux
 What type of worship is condemned here?
 (iii) Eta zergatik hik Jainkoa gure Aita deitzen duk?
 and why you God our Father call aux
 And why do you call God our Father?
 (iv) Nolatan hori egin ahal dezakegu?
 how that do can aux
 How can we do that?



The inflected V/I or I unit will then rise to C. A typical wh-movement structure like (20i) above, repeated here, would be analyzed as (32):

- (20i) Nor-k entzun du kanta hori?
 who-E hear aux song that
 Who has heard that song?



Similarly, in Spanish, 'verb raising', as shown in Torrego (1984), is obligatory in interrogative clauses because the verb must raise to C in CP. (Torrego actually analyzes 'inversion' as verb adjunction to S). It is not clear why the existence of an element in SPEC position should cause I-to-C movement, but such correlation is quite common: English, Spanish, Catalan and Basque share it. Except for English, all of these languages show this movement in both main and embedded clauses. At this point I will leave the question open, simply stipulating that I-to-C must take place in this context although this instance of movement should be derivable from existing principles. Unlike both Spanish and English, focalized constituents in Basque also move to SPEC of CP in the syntax, and the verb must raise to C in those contexts too:

- (33) [ni-k entzun dut] kanta hori
 I-E
 I have heard that song

Since both *wh*-words and foci move to SPEC, the inflected verb will also appear in the second position (COMP) in both instances. This constitutes the core of *galdegaia* facts. Some arguments for this analysis over the FOCUS position parameter analysis are presented in the following subsections.

3.3. Some arguments

3.3.1. Left position of CP

Turning now to providing evidence in favor of the analysis posited here, a different prediction is made by the fact that in the structure proposed for Basque in (22) both the specifier and the head of CP occupy a left position in the clause. Arguments based on word order are necessarily less direct in a language with great word-order freedom like Basque. Still, there are some predictions that the focus and the CP analyses make which are different and enable us to test their validity.

In the focus analysis, the FOCUS position is a left sister to V, and, the language being verb final, this V' unit occupies a right position at D-structure with respect to other arguments:

- (34) NP_{vp} [PP NP ... V'] I

This predicts that the V' unit may appear preceded by any number of arguments in the original D-structure or in scrambled positions. In the CP analysis, the prediction is that Basque sentences will be verb final in non-interrogative/focus contexts and verb-second where an operator has been moved to CP. More interestingly, it predicts that, if arguments precede the operator and the verb, they will correspond to topics, since that is the only pre-CP position available. This is not predicted in the focus analysis, where V' occupies a clause-final position.

3.3.1.1. Argument/adjunct focalization

Word-order data indicate that the CP analysis makes the correct predictions: interrogative sentences are *wh*-verb initial, and any element preceding the *wh*-word is interpreted as a topic and separated from the rest of the clause by a pause. The same applies for sentences with focalized constituents, as observed in Mitxelena (1981). There, it was observed that different orderings of a basic sentence like (35a) offered different patterns, as in (35b):

- (35) a. hau ona da
 this good is
 This is good

- | | | |
|-------|--------------|------------|
| | A | B |
| b. i. | hau / ona da | ona da hau |
| ii. | ona / hau da | hau da ona |

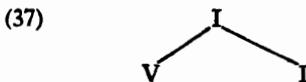
In the (i) sentences, the focalized constituent is *ona*; in (ii) *hau*. This follows directly from the CP analysis, since the B sentences show the predicted order for this sentence type and the A sentences show that pre-focalized arguments are topics separated by a pause from the rest of the clause. The contrast between (35a) and (35b,A) follows directly from the CP analysis, but not from the focus analysis: the neutral sentence without focalized constituent is predicted to be (35a) in both analyses, but the pause in (35bA) is only expected if the focus+verb unit occupies a clause initial position. Where more than one pre-CP arguments occur, as in (36),

- (36) Euskara Bilbo-n hiru urte-z ikasi zuen
 basque(A) bilbo-in three year-for study aux
 He studied Basque in Bilbo for three years

they are assigned a characteristic 'listing' intonation pattern of topicalized elements, as also noted in Eguzkitza (1986). A stylistic rule moving V' to the front of the sentence would be unenlightening and would not explain why if V' is not 'moved', arguments preceding it are treated as topics. See also Eguzkitza (1986) for the problems that arise in the focus analysis when V' fronting is not considered a PF, but a syntactic rule.

3.3.1.2. Verb focalization

Up to now I have been considering clauses where arguments or adjuncts are focalized. More evidence in favour of the SPEC analysis comes from sentences where the verb itself is focalized. The strategy is different depending on whether the verb is synthetic or not. Synthetic verbs are those that can amalgamate with inflection, incorporating agreement and tense markers along with the verbal root, as in *nindoan* 'I went', *dakarzu* 'you are bringing', *zirudien* 'it seemed', etc. Most verbs, however, do not have forms of their own and an auxiliary must be inserted to bear the affixes in I. I have assumed that all verbs raise to I, synthetic verbs amalgamating with I in some tenses, forming the inflected verbal unit V/I, and periphrastic verbs being adjoined to I, under the assumption that X level categories may adjoin to (perhaps non-lexical) X-level categories, as in (37):



A process similar to *do*-support inserts the affix bearing auxiliary verb in I in this case. There is no morphological evidence for verb raising

in periphrastic verbs and tenses, but some facts do indicate that the participle and the auxiliary make up one single constituent: a) it is the whole constituent that moves to C in positive interrogatives, as seen above and b) scrambled arguments may not intervene between the verb and the auxiliary. Since the head (V/I) must move to the head C position, there is no other verbal element to appear in SPEC of CP when the verb itself is focused, and an affirmative particle *ba* occupies it (38i). The same pattern can be seen in the interrogative (38ii):

- (38) i. *ba dakit* [ni-k t [t hori]]
 know I-E that(A)
 I do know that
- ii. *ba dakizu zu-k hori?*
 know you-E
 Do you know that?

Here *t* is the trace of *jakin* 'to know' which has been inflected as a V/I (*dakit*) and raised to the head position. The affirmative particle *ba* is inserted in the empty SPEC position. In some dialects (Bizkaiera), another possibility is open, namely, to fill the SPEC position with a participial copy of the focalized verb, as in (39):

- (39) *Etorri dator*
 come he comes
 He does come

In this case, the copy occupies the SPEC position and *ba* is not inserted, even though a synthetic form of the verb is being focalized.

For periphrastic verbs, there are two different strategies, as discussed in Euskaltzaindia (1985:46). A possible answer to (40i) could be either (ii) or (iii):

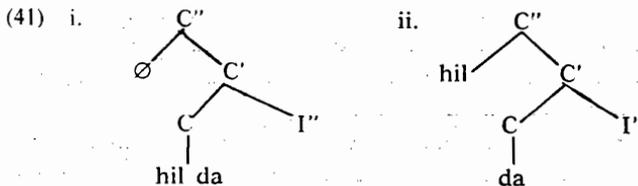
- (40) i. *Zer gertatu zaio zure aita-ri?*
 what happen aux your father-D
 What has happened to your father?
- ii. *Hil egin da gure aita*
 die do aux our father
 Our father has died
- iii. *Hil da gure aita*
 die aux
 Our father has died

In (40ii) (a strategy which is not available in all dialects), a dummy verb *egin* 'to do' is inserted and what seems to be the focalized verb immediately precedes it (see also Rebuschi (1983) for a similar view). In dialects which do not employ the *egin* strategy, the only visible effect of verb focalization is a movement of the verb to the left, exactly as in yes/no questions with periphrastic verbs⁵. Again, the 'movement

(5) Verb initial clauses are particularly common in narration, and have often been brought forth as evidence that the Altube (1929) focus analysis does not extend to all domains of the language (see

to the left' of the clause-initial position of the focalized verb is predicted by the CP analysis, but not by the alternative focus analysis.

Some aspects of verb focalization should be pointed out before turning to further arguments in support of the CP analysis. With respect to the exact CP structure present in sentences with focalized verbs, there are two alternative possibilities for a sentence like (40iii): either *hil da*, the whole verbal element with its two constituents (participle and auxiliary) has been moved to C, leaving SPEC empty, as in (41i), or SPEC is occupied by the participle and C by the auxiliary, as in (41ii):



The structure in (41i) would be somehow defective, appearing as a gap in the focusing pattern, since all the other instances of focalization involve movement of the focalized element to SPEC. Since, unlike in the case of synthetic verbs, the affirmative particle *ba* is not inserted in the empty SPEC position, the analysis entailed in (41i) would have to claim that *ba* is inserted in SPEC only if it is empty *and* C contains a synthetic verb. *Ba* would have the function of an expletive 'shielding' an inflected element from clause-initial position. Although possible, this account of *ba* insertion is more complicated than the one required by the alternative analysis (41ii), where one can still claim that *ba* is inserted in all empty SPEC positions. On the other hand, a *ba*-insertion rule under (41i) would have to require contextual information in the rule, whose application would depend on the particular element appearing in C. This conception of *ba* as an element shielding inflected elements from clause initial position also leaves unexplained precisely why this 'shield' *ba* is clearly related to the affirmative particle *bai* 'yes' and is only used in emphatic contexts. In view of these problems associated with (41i), I will adopt (41ii) as the structure involved in verb focalization: following the same pattern discussed above for focalization of other constituents, verbs (participles) are also moved to SPEC of CP, with subsequent raising of the inflected auxiliary to C.

Goenaga 1980:184), since in his analysis he recognized only the *egin* strategy as available for verb focalization. Clearly, not all sentences have a focalized element, and focalization and wh-formation is but one (although extremely important) of the processes involved in word order selection in Basque. But, still, even narrations may partly fall under the predictions of the CP analysis of focus, since we would expect the different actions to be focalized and hence the verb initial order would be preferred.

The two strategies (with and without *egin*) may actually convey different nuances of focalization, as discussed in the official grammar Euskaltzaindia (1985:47). Both may be used to express 'focalization of the action expressed by the verb', while *egin* cannot be used to express 'focalization of the assertion, affirmation of the action expressed by the verb'.

If V can move to SPEC, as in (41ii), one might analyze the *egin* strategy as involving the same movement of V to SPEC, leaving in the participle position of C a gap which is filled by the dummy participle *egin*⁶:

(42) $_{CP}$ [etorri $_{C}$ [e] da] $_{I'}$, [...

Finally, another aspect of verb focalization that should be underlined is that sentences like (40iii) are bona fide examples of verb focalization, rather than, say, verb topicalization. Apart from native speakers' intuitions, there are other reasons to consider them so. Thus, if they were cases of verb topicalization, one would have to explain why precisely in these sentences we cannot find other focalized arguments. One would also have to explain why, in the strategy with *egin* in (40ii), the participle must appear immediately preceding *egin*, like foci, whereas topics don't usually occur in that position.

Then, verb focalization shares the general properties of constituent focalization in Basque: movement of the focus to SPEC with the corresponding I-to-C movement. The existence of a verb-focalization (and yes/no question formation) pattern by which the verb is moved 'to the left' of its clause falls fully within the predictions of the CP analysis.

3.3.2. COMP-like properties of focus

As mentioned above, the FOCUS position in the focus analysis has many COMP-like properties that are explained in a straightforward way by the CP analysis, where FOCUS *is* COMP, in the revised CP structure. We have seen that wh-words and focus-operators 'move to COMP'. Another striking property of FOCUS is that, as proposed for Basque in Azkarate et al. (1982a,b) and Eguzkitza (1986), long wh-movement seems to successive-cyclicly move the wh-word from FOCUS to FOCUS, in the same way as wh-words move COMP-to-COMP in other languages⁷. Thus, wh-words and focalized constituents may appear immediately preceding the verb of an 'upper' clause, rather than the verb of their own clause:

- (43) i. Nor esan duzu [entzun duela Peruk [joango dela Parisa?
 who say aux hear aux Peter go aux to Paris
 Who did you say that Peter heard will go to Paris?
- ii. *Mireni* uste dut [pentsatzen duela Peruk
 to M. believe aux think aux Peter
 [emango diotela saria
 give aux prize
 It is to Mary that I believe Peter thinks they will
 give the prize

(6) See Ortiz de Urbina (1986) for an explanation of why V, a nonmaximal projection, may move to SPEC, while elements within NP's must pied-pipe the whole maximal projection NP to SPEC.

(7) With some intermediate steps in the barriers framework which I disregard here and which present no problem for the analysis.

Direct movement of the operator from its D-structure position to the upper pre-verbal position would violate subjacency, whatever node is considered a barrier in Basque. Moreover, Basque presents some striking evidence for a successive cyclic movement, step by step, of the operator from the lower clause through intervening clauses to its surface position immediately preceding an upper verb (see Azkarate et al. (1982a,b)). In long-movement structures, the clauses intervening between the D- and S-structure position of the moved element may not have focalized (or questioned) constituents:

- (44) ??Nor uste duzu [*Jonek* pentsatzen duela [etorriko dela?
 who aux John think aux come aux
 Who do you believe that it is John that thinks will come?

This is explained in both the focus and the CP analysis on the assumption that the moved element leaves a trace in the intervening FOCUS or SPEC position. Assuming then a version of the doubly-filled COMP filter, no operator may move to the SPEC or FOCUS position in an intervening clause, since it is already occupied by the trace of wh-movement. Again, not only is FOCUS an escape hatch for FOCUS-to-FOCUS movement, a typical 'COMP' characteristic, but a doubly-filled FOCUS filter parallel to the doubly-filled COMP filter is required in this analysis. These coincidences are immediately explained if what was identified as the FOCUS position is simply the SPEC position of CP.

There is another aspect of long wh-movement that deserves attention. It is not only the case that intervening clauses are focus-less; furthermore, the verb occupies the clause initial position, and other arguments, such as subjects, appear postposed, as in (43,i,ii) above. This, again, falls under the CP analysis, since the inflected verb has to be raised to C in all intervening clauses where SPEC has been filled. Then, the clause initial structure of intervening clauses will be as in (45):

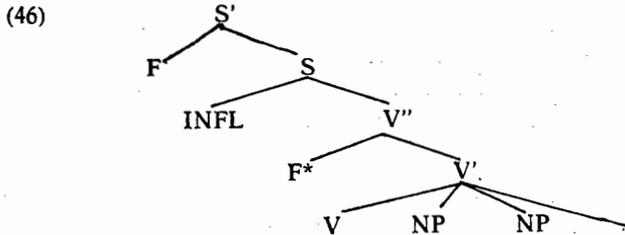
- (45) ..._{CP} [t V]₁[...]

The verb is here the first phonologically realized element in the clause.

In this section, I have sketched an analysis of questions and focus formation in Basque as an alternative to the FOCUS analysis proposed in Horvath (1981) for Hungarian and in Azkarate et al. (1982a,b) and Ortiz de Urbina (1983) for Basque⁸. This analysis is simpler in that

(8) The question is left open whether both a COMP and FOCUS positions is still required in Hungarian. The main evidence for this dichotomy of landing sites for operators derives from the existence of a relative clause formation strategy where the relative clause is introduced by a complementizer-demonstrative *a(z)* to which an interrogative pronoun like *ki* 'who' is cliticized. Notice that this relativization strategy is similar to the borrowed one in Basque classic literary language described in section 2. (see (12ii)). Interestingly enough, the use of interrogative pronouns as relatives in Hungarian is also considered a structural borrowing from Latin in early written texts, and according to M. A. Sauvageot (quoted in Lafon (1943:487ff.)), there exists a 'repugnance du hongrois parlé d'aujourd'hui à l'encontre des phrases relatives introduites par *aki*, *amely*, etc.'

it reduces the two positions COMP and FOCUS in the focus analysis to a single one. It is also simpler than other alternative analyses, like Rebuschi's (1984), who proposes the existence of two different focus positions, as in (46):



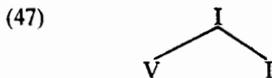
F would be the wh-focus position, and F* an unrelated focus position for focalized constituents. Some ancillary assumptions must be made to ensure that both F positions are not occupied at the same time and that the V of this non-configurational structure remains in the initial position of V' when either F or F* are filled by an element. This structure also seems to predict that the unmarked order in Basque is verb initial, contrary to the general intuition that Basque unmarked word order is SOV. The CP analysis explains why unmarked order in Basque is verb final in non-operator sentences and verb initial (if we exclude the operator and topicalized elements) in sentences with focalized constituents or in questions. Notice also that F in (46) is quite similar in both function and structural position to the COMP node, and that F and F* are both 'escape hatches' for long-movement constructions, F for wh-words and F* for focalized constituents.

Thus, the focus analysis posits two A-bar positions COMP and FOCUS, one of which is virtually functionless and the other of which (FOCUS) seems to have functions usually related to the other (COMP). Rebuschi's analysis also posits two A-bar positions, both having the same functions. I will give further evidence in the following section that wh-words and focalized constituents should appear in the same position. The CP analysis is simpler in that it accounts for the same range of phenomena with one single position, and more explanatory in that it explains the COMP-like properties of the FOCUS (or F) position. A side effect of the analysis is that it posits a rather 'normal' structure for Basque, in contrast with the type of structure in (46), claiming that, after all, Basque is not such a marked language as it may look on a first analysis.

3.4. *Galdegaia and negative: auxiliary movement*

Before turning to focus and wh-formation in negative clauses, I will briefly deal with a dialectal type of focalized structure which, apart from its inherent interest for a description of *galdegaia* pheno-

mena, also provides additional evidence for the mechanism I will claim is involved in negative focus/interrogative structures, namely, movement of INFL alone to COMP. In order to account for the morphological fact that Basque verbs are inflected in tensed clauses, whether directly as synthetic verbs or with auxiliaries to bear affixes that cannot be amalgamated with the verb itself, I have posited a rule of V to I movement. Periphrastic verbs do not have morphological forms incorporating inflectional affixes, and cannot amalgamate with I. I have assumed that in these cases, a head to head adjunction is possible, generating the structure in (47):



Here, auxiliary support provides a verbal base to bear the set of affixes in I. As we have seen, in focus-/wh-formation, I to C movement takes the whole I adjunction node, so that the element in SPEC immediately precedes V/I if V is synthetic and ${}_1[V\ I]$ if the verb is periphrastic. There is evidence, however, that in some dialects V adjunction to I is not obligatory in the case of periphrastic verbs. The following data follow directly from the CP analysis once we assume that only synthetic, amalgamating verbs must merge with I. Periphrastic verbs, those lacking conjugated forms, can never merge with I and may, but need not (in these dialects) adjoin to V. If they do, focalization proceeds as sketched above, the adjunction node in (47) moving to COMP. If V does not adjoin to I, focalization again proceeds as above, prompting I-to-COMP movement. The features in I, as stated above, will be spelled out with the help of an auxiliary verb. Then, we find sentences like those in (48) and (49):

- (48) i. Aita-k *untzia* du leiho-tik aurdiki
 father-E dish-A aux window- throw
 It is the dish that father has thrown through the window
- ii. Nor da etorri?
 who aux come
 Who has come?
- (49) Ba dut ikusi
 aux see
 I have seen it

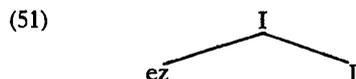
This sentence type is directly accounted for within the CP analysis under the natural assumption that in such contexts only amalgamating verbs move to I. In positive sentences such usage is only sporadic and dialectal at present (see Lafitte 1979:117), but, according to Mitxelena (1981), it was more widespread in earlier periods of the language. As shown in (48i), other constituents may intervene between the auxiliary and the participle, and, as usual, a topic may precede the CP

complex. In this sentence, a focalized operator has been moved to SPEC, and the pattern is completed by (48ii), where the operator is a *wh*-word. (49) provides an example of verb focalization in this strategy: since only the auxiliary can be moved to CP, further movement of the participle is not possible and the SPEC position is left empty. Then, the situation is identical to the one described above for synthetic verbs, where there is no lexical material available to move to SPEC and the affirmative *ba* must occupy that position.

There is another context where *aux-to-C* is standard in all varieties of modern Basque, namely, *galdegaia* in negative clauses. The negative counterpart of (50i) is (50ii), where we are considering first a neutral non-focalized interpretation:

- (50) i. Liburu hori ona da
 book that good is
 That book is good
 ii. Liburu hori ez da ona
 neg
 That book is not good

The negative particle *ez*, cliticized to the left of the inflected element, occurs in neutral contexts following the subject and preceding other elements of the clause. One could consider this movement of *ez*-inflection to be prompted by scopal properties of the negative element. I will maintain here an analysis which generates *ez* as in (51):



This D-structure position of *ez* is supported by sentences like (52): relative clauses must be verb final and no *ez*-inflection movement can take place in them. In such contexts, *ez* appears between V and the inflected element (auxiliary or synthetic verb):

- (52) inork ikusi ez duen filmea
 nobody see neg aux film
 the film that nobody has seen

In order to explain why only finite, inflected verbal elements move in negative clauses, we can assume again that V-adjunction is barred in structures like (51) where the negative element is already adjoined to I. Then, verbs that can amalgamate will form structures like (53i), but non-amalgamating verbs will *not* be able to adjoin to I as in (53ii) and must remain in their VP positions:



The remaining aspect of negation in neutral sentences which must be taken care of is the surface relative position of the *ez*-inflection element (51). For the time being, let's just mention that in neutral contexts, *ez* follows the subject and precedes VP, as in (54):

- (54) i. Jon [ez dator [etxe-ra]]
 John neg comes home-to
 John does not come home
 ii. Jon [ez da [etxera etorri-ko]]
 aux come-fut
 John won't come home

I will suggest below an alternative analysis for both 'neutral' and focalized/questioned negatives like the ones I turn now to. My immediate interest here is to account for negative sentences with focalized or questioned constituents, one of the most problematic aspects of Basque *galdegaia*. Actually, the CP analysis posited here does provide interesting insights into this question, as I hope to show presently. The predictions of the CP analysis are fully compatible with the data I will present. In the analysis, *wh*-words and foci should appear in SPEC, followed by the inflected verb. Since the negative particle is adjoined to I, only the elements in (53i) will move to COMP. That is, synthetic verbs will be moved, but periphrastic verbs will be 'left behind', the *ez*-I unit occupying COMP. This is fully born out by the data, as shown in (55i) for a periphrastic form, and in (55ii) for a synthetic form⁹:

- (55) i. [Nor ez da [zu-rekin etorri]]?
 who neg aux you-with come
 Who has not come with you?
 ii. [Nork ez daki[egia]]?
 who knows truth
 Who does not know the truth?

The murkiest area of focalization in Basque is that of constituent focalization in negative clauses. We would expect the situation to parallel that of *wh*-phrases and, in fact focalized constituents immediately precede the inflected verb moved to COMP, as in (56):

- (56) i. Inor ez zen etorri
 nobody neg aux come
 Nobody came
 ii. Aita ez da etorri
 father
 It is father that has not come

(9) On the assumption that the neutral order is (i) rather than (ii):

- (i) nor ez da zurekin etorri?
 (ii) nor ez da etorri zurekin?

and that the neutral order in operatorless negatives is (iii) rather than (iv):

- (iii) Jon ez da etxera etorri
 neg aux home come
 John hasn't come home
 (iv) Jon ez etorri etxera

With respect to (56ii), Mitxelena (1981:81) notes that it may be both the answer to the question 'Who has come?' or to 'Has father come?'. This is easily accounted for in this analysis. As an answer to the wh-question, *aita* 'father' occupies the focus position, with the following structure:

- (57) $CP[aita\ ez\ da\ I, [etorri]]$

As an answer to the yes/no question, (57) is a neutral sentence without focalized constituents, where *aita* occupies the subject position and *ez da* occupies its normal position in 'neutral' sentences, following the subject.

What is interesting, however, is that there is a second structure which is often presented as negative focalization. Thus, both Lafitte (1979) and Goenaga (1980) state that the focalized constituent occurs immediately *following* the inflected verb, rather than immediately preceding it, in negative clauses¹⁰. The following are Lafitte's intuitions:

- (58) i. Ez du aitak aurdiki
neg aux father throw
Ce n'est pas le père qui l'a jeté
- ii. Aitak ez du leihotik aurdiki
window-by
Ce n'est pas par la fenêtre que le père l'a jeté
- iii. Aitak ez du aurdiki leihotik
Le père ne l'a jeté par la fenêtre (le mot important est plutôt «jeté»)
- iv. Aitak ez du untzia leihotik aurdiki
glass
Ce n'est pas le vase que le père a jeté par la fenêtre

This apparent post-inflectional focus has in fact attracted most of the attention, while the regular (in this analysis) pre-inflectional

(10) It is in fact in order to account for these apparently post-inflectional foci that Rebuschi proposes the structure in (46). Then, a sentence like (i) would differ from (ii) in the Focus position being occupied (F^* in (ii) and F in (i)):

- (i) Peio ez da Bilbo-tik etorri
Peter neg aux Bilbo-from come
Peter has not come from Bilbo
- (ii) Nor ez da etorri?
who
Who has not come?

The pre-inflectional element would be a Topic in (i) and a Focus in (ii); wh-words will always occupy the pre-INFL Focus, while focalization will move elements to the pre-V (post-INFL) Focus reserved for interrogative elements. While this analysis accounts for the sentences in (59) below, it cannot account for some of the data presented above. It is predicted that focalized constituents will not occupy the pre-INFL Focus position, which is reserved for wh-words, leaving (56) above and (iii) unexplained:

- (iii) *Jonek ez du ikusi*
John neg aux see
It is John that has not seen it

Similarly, the analysis cannot explain why marked I movements to C where the participle is left behind occur with both wh-words and foci:

- (iv) *Nor da etorri?*
who aux come
Who has come?
- (v) *Jon da etorri*
It is John that has come

pattern shown in (56) is often disregarded. The post-INFL strategy is only possible for foci, wh-words following always a pre-INFL regular pattern. To summarize the issue, there seem to be two ways of focalizing a constituent like *aita* 'father' in a negative clause: the pre-INFL one in (59) and the post-INFL one in (60):

(59) *aita ez da etorri*
 father come
 It is father that has not come

(60) *ez da aita etorri*
 father come
 It is not father that has come

The CP analysis posited here claims that only (59) can be identified as the *galdegaia* structure described throughout this article. Whatever sort of focalization is present in (60) represents a strategy different from the syntactic process of operator movement and I-to-COMP movement analyzed here. There is actually evidence to separate the two focalization strategies in (59) and (60). First, only (59) can be considered a felicitous answer to the negative question (61):

(61) *Nor ez da etorri?*
 who neg aux come
 Who hasn't come?

In fact, (59) and (60) have different semantic interpretations. Their logical representations would be similar to the ones in (62):

- (62) i. $\text{aita} = x, \neg x \text{ etorri da}$ (=59)
 father come has
 ii. $\neg \text{aita} = x, x \text{ etorri da}$ (=60)

In (59)/(62i) the focalized constituent has scope over negation, while the opposite holds for (60)/(62ii). The type of logical representation associated with (59), that is, with the structure which the CP analysis identifies as the regular focalization strategy, is exactly parallel to the logical representation of a negative question such as (61), given below in (63):

(63) *zein x-entzako, x pertsona, \neg x etorri da*
 for which x, x person, \neg x has come

This identity of representations further supports the identification of (59) as the focalization structure analyzed here, and, hence, it also supports the CP analysis itself.

The semantic difference between (59) and (60) can also account for the fact that the former but not the latter can be coherently combined with the phrase *ama baizik* 'but, rather, mother', as shown in (64):

- (64) i. ??*aita* ez da etorri, ama baizik
 father come mother but
 It is father that hasn't come, but mother
- ii. ez da *aita* etorri, ama baizik
 father come
 It is not father that has come, but mother.

Mitxelena (1981) states that in order for *aita* to be interpreted as focus in (60) 'something else is needed to reinforce *aita*, for instance '*Ez da aita etorri, ama baizik*' (It is not father that has come, but mother)'. Thus, the semantic correspondance between the negative question (61) and (59) supports the claim of the CP analysis that (59) is the standard focalization strategy I have been describing in this article. The fact that in (59) the focalized word has scope over negation follows from the fact that the SPEC position asymmetrically c-commands the COMP position where *ez*-inflection are moved: SPEC c-commands COMP, but not viceversa, and hence anything in SPEC will have scope over anything in COMP¹¹. The 'focalization' strategy in (60) does not have the syntactic correlate analyzed here (movement to SPEC) and hence *aita* in (60) does not occupy the SPEC position and does not have scope over negation. Turning now to Mitxelena's observation, the non-structural 'focalization' in (60) would require the strongly contrastive *ama baizik* phrase or something similar to leave clear the emphatic import of a focalization strategy which differs from the structural one discussed here. What I am suggesting, then, is that there is only one single structural position for wh-/foci, namely SPEC, and that no different position is involved in sentences like (60). What is involved is a different type of 'focalization', with different semantic import, perhaps along the lines of a distinction between focus and foregrounding (J. Uriagereka, p.c.).

The claim that no distinct structural position is involved in (60) can also help account for another characteristic of this structure. While there is no hesitation as to what the focalized constituent in (59) is, native speakers are typically uncertain about the focus of negative sentences of type (60) with several constituents intervening between the auxiliary and the main verb, as also noted in Martín Callejo (1984). In structures such as (58iv), with two constituents between the auxiliary and the participle, native intuitions are erratic. Lafitte (1979) identifies the post-inflectional argument as focus, while the pre-participial element (*leihotik*) is also often considered so in other studies (Azkarate et al. (1982a), Eguzkitza (1986)...). If we add to this the above mentioned observation that contrastive stress and phrases are often used, the conclusion seems clear that a different non-structural stra-

(11) Although not in a system like May's (1985) where mutual government of operators allows interpretations where one has scope over the other. Scope relations in (62) could also be relatable to surface linear ordering, since in each case the logical interpretation of scope corresponds directly to the surface linear relation of the operators.

tegy is at work here. Therefore, the focalization pattern found in negative clauses does follow the pattern observed elsewhere, rather than being an anomalous deviation from it.

4. Some research paths

In the present analysis of *galdegaia*, the whole phenomenon is separated into two different components: first, the fact that both wh-words and foci behave alike and, second, the fact that they immediately precede the verb. The first fact is explained as a consequence of a parameter fixing the level for operator movement. The second fact is identified as just another instance of a well-known phenomenon: verb-second (V2). I have followed Chomsky's analysis of the latter, which involves (V/I) movement to COMP. The identification with V2 phenomena is interesting because it brings out parallelisms and similarities between Basque and other languages precisely in a domain where Basque seemed particularly peculiar. From another point of view, it is also interesting in that the Basque data may prove of great value to evaluate current research on this topic and viceversa, since the description of this phenomenon in Basque may take advantage of a considerable amount of current research in the field.

The V2 interpretation of this aspect of *galdegaia* phenomena is possible only if we assume that COMP is left-headed at the first projection level, as in (11i). This assumption is costly in that Basque is generally a right-headed language and this particular category would depart from that general X-bar pattern found in the language. However, occasional deviations from the X-bar scheme are actually quite common (see for example adjective order in Basque and English for a minor one) and this is therefore no 'counterevidence' to the claim, although the latter should also be supported by independent evidence.

An alternative account of the second aspect of *galdegaia* (i.e., adjacency between operator and verb) proposed by J. Uriagereka and I. Laka (p.c.) would involve postposing all material intervening between SPEC and V, rather than moving V to COMP. In this alternative account, surface linear adjacency between SPEC and V would also result from an independent process. One virtue of this analysis would be the possibility of positing a right-headed COMP structure, following the general tendency of the language. In the analysis proposed in this article, COMP is assumed to appear to the left of I", since adjacency is interpreted as a type of V2 characteristic, which is analyzed as V/I to COMP movement. An evaluation of the non-V-moving alternative will have to be based on the plausibility and generality of the explanation supplied for the need to postpose all constituents intervening between the operator and the verb.

As mentioned in section 2, the status of particles like *ezen*, *nola*,

ea, etc. requires further clarification for any analysis. The CP analysis would predict that at least some of them will be pre-topic, pre-CP conjunction-like elements, since, as pointed out in Rebuschi (to appear), particles like 'completive' *nola* 'how/that' in (65) do not normally occur following topics. In (65), *Patxi* must be identified as topic if *zaldiz* is focalized:

- (65) i. erran daut *nola* Patxi *zaldiz* jin den
 say aux how on horse come aux
 He has told me that (how) Patxi has come on horseback
 ii. ?erran daut Patxi *nola zaldiz* jin den

Similarly, indirect interrogative introducer *ea* will normally precede topics in sentences like (66), with embedded wh-questions:

- (66) i. galdetu dut *ea* Jon *norekin* joango den
 ask aux John with whom go aux
 I have asked who John will go with
 ii. galdetu dut *ea norekin* joango den Jon
 iii. ?galdetu dut Jon *ea norekin* joango den

To the extent that these particles are not identified as complementizers, their surface position is largely irrelevant for any of the analyses discussed so far. In the unlikely event that their identification as elements in COMP is warranted, however, they will create problems for both the V2 analysis and the alternative mentioned above. The V2 analysis would have to explain why the verb, which is assumed to move to COMP, is not adjacent with at least this element of category COMP. The alternative analysis would lose the generalization of positing a right-headed structure also for CP, since *nola*, *ea*, etc. precede I". The ultimate, unsolved issue is the relationship between *ea*, *nola*, etc. on one hand and *-la*, *-n* and *bait-* on the other. Picking up either group as the set of bona fide complementizers will require an explanation for the other group.

In the previous section, I have mentioned that in 'neutral' negative sentences the *ez*-inflection unit is placed following the subject and preceding VP, as in (54), repeated here as (67):

- (67) Jon [ez da [etxera etorriko]]
 John neg aux home come
 John won't come home

The surface placement of the negative particle is disturbing for a number of reasons. First, this is a nagging feature of Basque negative clauses which demands some explanation. That is, any account of Basque should try to provide an explanation for the fact that in negative sentences the auxiliary is moved along with *ez* towards the left of the clause, breaking the V-AUX adjacency found in positive clauses. Second, there is a well-known parallelism between the positive particle

ba (related, as mentioned above, to the affirmative particle *bai* 'yes') and the negative particle *ez*, as shown in (68) and (69):

- (68) i. *ba da etorri* (dialectal)
 aux come
 He *has come*
 ii. *badakit*
 I do know
- (69) i. *ez da etorri* (common)
 He has not come
 ii. *ez dakit*
 I do not know

Finally, the parallel distribution is further accompanied by a logical parallelism: *ba* occupies the operator position in some contexts, and negative *ez* is also a logical operator, which is assigned scope in the logical representation, as shown in (70):

- (70) i. John didn't see the man
 ii. \neg John saw the man

It is interesting to notice that Altube (1929) himself suggested that the negative particle *ez* is the focus (in a pre-theoretical sense at least) of a negative clause. We might then want to claim that since *ez* is an operator, and given its scopal properties, it moves to SPEC in the syntax like other operators in Basque. Then, the outstanding feature of negative clauses (so-called *ez*-attraction or auxiliary-participle inversion) observed in (67) would be automatically explained. V-amalgamation to *ez*-I would still be blocked for periphrastic verbs, but not for synthetic verbs, as discussed in 3.4. Then, *ez* would have to move to SPEC to indicate scope, occupying the same position as its counterpart *ba*, and prompting I-to-COMP movement as in all cases where SPEC is occupied. The difference between *ba* and *ez* would be the expletive nature of *ba*, which is only required in the standard language where no participle can occupy SPEC, that is, in clauses with synthetic verbs. The difference between *ez* and *ba* might also be related, as suggested by A. Eguzkitza (p.c.) to a difference in markedness: affirmative is the unmarked case and no affirmative particle is needed to indicate affirmation of a proposition, while a negative particle is required to indicate that a proposition is being negated.

This analysis is appealing in that it might explain the peculiar properties of negative clauses in Basque, and it may be worth pursuing. However, it will have to solve some problems which, nevertheless, do not seem unsurmountable. Notice that this analysis unifies all negative structures as involving a focalization process. Problems will then arise from data that we have identified before as belonging to 'neutral negatives' on one hand and to 'negatives with focalization' on the other.

Thus, this analysis would have to account for negative sentences with foci (71) and for negative questions such as (72):

- (71) *aita ez da etorri*
 fath. neg aux come
 It is father that has not come
- (72) *nor ez da etorri?*
 who
 Who hasn't come?

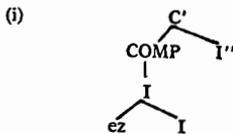
As mentioned above, there is good evidence which indicates that *aita* and *nor* are the operators occupying the SPEC position in these structures. This analysis will have to claim that *ez* is either in SPEC or in COMP, and either answer is problematic. If *ez* is in SPEC along with *aita* or *nor*, then we would have to accept an anomalous exception to the doubly-filled SPEC filter, since it would include two operators. If *ez* is in COMP (along with *da*), as assumed in the analysis of section 3.4, then the parallelism with *ba* and the identification of *ez* as an operator behaving as such is missed, and with it the main thrust of the analysis. Still, if this analysis is to be pursued, the second possibility seems preferable. One might claim that *ez* cannot move to SPEC in this case precisely because of the Doubly-filled SPEC filter. Then, *ez* would move along with the inflected verbal element to COMP, a position from which it can still take scope over I''¹². In fact, the logical representation of (71) and (72) supports this move, since the negative operator in these sentences is interpreted as being within the scope of the operators in SPEC, as if the latter actually were further 'up', as shown in (73):

- (73) i. *aita=x, ¬ x etorri da* (=71)
 father=x has come
- ii. *zein x, x pertsona, ¬ x etorri da* (=72)
 which

Then the problem presented by negative focalization could be tackled along the preceding lines.

The second problem that the *ez*-operator analysis would have to face comes from neutral negatives. I have claimed that the *ez*-inflection

- (12) *ez* in (i) does c-command I'':



The first branching node is not actually I, but C', if we follow May's (1985) definition of 'domination' according to which I does not dominate *ez*, since not all of the segments of I do so. More generally, adjunction nodes do not dominate the adjoined element, since in all cases there will be at least one segment of the node, the original one, which does not dominate the adjoined node, and in order for α to dominate β , all of the segment of α must dominate β .

unit follows the subject and precedes the VP in 'neutral negatives', i.e., negative clauses without foci or wh-words, as in (74):

- (74) $I_{\text{P}}[\text{Jon } I_{\text{P}}[\text{ez da } \text{VP}[\text{etxera etorriko}]]]$
 John neg aux home come
 John won't come home

In the analysis proposed in this article, one could assume *ez da* either to have adjoined to VP or for some inversion from $I_{\text{P}}[\text{VP } I]$ to $I_{\text{P}}[I \text{ VP}]$ to have taken place. However, in the alternative path under consideration in this section, *ez* would occupy the SPEC position, just like any other operator, so that the same linear order of constituents in (74) would have the structure shown in (75):

- (75) $\text{Jon } \text{CP}[\text{ez da } I_{\text{P}}[\text{etxera etorriko}]]$

Pre-*ez* constituents would have to be topics, so that the analysis would have to claim that subjects are usually topicalized in negative clauses, since they usually precede the *ez*-I unit in what I have been calling 'neutral negatives'. Although the topic-like character of subjects as the 'subject' of predication is well-known, such analysis would certainly require further motivation, since it introduces an unexpected complication. In fact, however, the phenomenon would be curiously parallel to a well-known one in Germanic languages. Thus, there is good evidence that Dutch is verb final, and such order is actually found in embedded clauses. However, in main clauses the finite verb (auxiliary of periphrastic tenses or the 'synthetic' form itself) follows the subject, a typical verb-second phenomenon:

- (76) Marie heeft gisteren een boek aan Jan gegeven
 Mary has yesterday a book to John given
 Mary gave a book to John yesterday
- (77) dat Marie gisteren een boek aan Jan gegeven heeft
 ...that Mary has given a book to John yesterday

Koopman (1984) reviews some arguments that show that the inflected element has moved to COMP. If this is so, then the subject of Dutch affirmative main clauses occurs in the topic position, exactly as predicted by the analysis of Basque negatives presented here.

We have seen then that, although presenting several complications, the uniform analysis of negative *ez* as an operator may lead to a more explanatory account of Basque negative clauses. If the problems outlined above can receive a natural and elegant solution, the adoption of this analysis may prove warranted. In any case, this direction of research seems to be potentially fruitful.

5. Conclusion

In this article, I have claimed that the parameter accounting for

galdegaia phenomena in Basque is not the existence or not of a FOCUS position for foci and wh-words, as claimed in Horvath (1981) for Hungarian but rather the level at which operators move to SPEC. Operator movement is a universal process, prompted by scopal properties of logical elements. The particular level at which operators move is open to parametric variation. In a language like Chinese, both wh-words and foci would move at LF, and hence remain in situ at S-structure. In English, wh-words move at S-structure and foci at LF, while in Basque both wh-words and foci (and perhaps also the negative operator) move at S-structure. In all three languages the LF representation includes an operator-variable chain, which may or may not be directly reflected in the 'syntax' of the language, that is, at its S-structure representation, depending on the setting for this parameter. The surface position of operators to the left of the inflected verb is assumed to be another instance of the well-documented V2 phenomenon, interpreted as movement of the inflected verb to COMP. Thus, an apparently exotic feature of Basque syntax is shown to follow from the same set of UG principles that apply in other languages, and to be actually quite similar to parallel constructions in superficially fairly different languages.

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