On the non-configurationality of Basque and some related phenomena

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Editorial note

The following text must be regarded as an historical and bibliographical document rather than as a current research paper: it was written in 1984, and, according to its author's opinion, its main interest probably lies in the gap anyone may notice today between what is currently known in Basque syntax, and what could be guessed about it seven years ago - i.e. at a time when the first contributions to Verb Movement were being made, and when "Spec of Comp" was still an unknown concept. Howewer, insofar as this paper has often been quoted and discussed in the recent literature (see A. Eguzkitza's, I. Laka's, J. Ortiz de Urbina's or P. Salaburu's works, in the references of which it is generally referred to as "Rebuschi (1984), ms.") and given the fact that some of the problems and issues it raised have not yet been satisfactorily solved, ASJU is pleased to publish it today.*

1. In his *Lectures...* (1981: 128), N. Chomsky, building on some (unfortunately partly unpublished) work by K. Hale, acknowledged the existence of non-configurational languages (henceforth NCL's), i.e. of languages lacking a VP as one of the main constituents of the sentence: in other words, in whose grammars there is no rule such as (1a) or (1b)— although the relative order of the elements is probably irrelevant to the typological issue, I add the second variant here because it represents the surface structure of perhaps a majority of Basque sentences more closely, and has therefore been assumed to be the basic PS rule of Basque grammar by many for the past six or eight years:

(1) (a) S → NP INFL VP (b) S → NP VP INFL

In their stead, he proposed a general rule of the type (2a) for NCL's, and, using Japanese as an illustration, exemplified it by (2b):

(2) (a) X' → W* X
"where W* stands for a sequence of zero or more categories that are maximal projections [...], and X is the head of the maximal projection X';"
(b) S → NP_1 NP_2... NP_n V
"were we take S' = S = V'." [ibid.]

(*) I would like to thank A. Rouveret for his very helpful remarks on a preliminary version of Rebuschi (to appear): section 4. of this paper is a revised and much enlarged version of the latter, whereas sections 2. and 3. deal whith some phenomena which I think cannot be bypassed in any generative approach to Basque syntax. All errors in data or in reasoning remain mine, of course.

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Alongside the possession of such rules, Chomsky listed the following tentative properties of NCL grammars:

(3) (a) "the full range of syntactic configurations is lacking in various degree;
(b) "[the] order of constituents is typically fairly free, though there may be preference rules [...];
(c) "there are no empty categories, hence no transformational rules in the syntax, assuming trace theory" [ibid.]

Interestingly enough, though, the abstract notion of "subject" and related matters such as the universality of syntactic Case and grammatical functions, were not questioned at all — although it does seem likely that the non existence of VP as a separate syntactic category entails the idea that, in some NCL's at least, perhaps no NP should be distinguished or privileged comparatively to the others.

In this paper, I shall endeavour to show that, although Basque indisputably has some variant of the rule (2b) (I will use the property (3b) in section 2. to defend this hypothesis), it does not follow that either (3a) or (3c) adequately characterizes its grammar. Furthermore I will try to show that the kind of non-configurationality Basque illustrates raises other problems, all of which are connected with the issue of subjecthood - whether it is a question of morphological case marking and agreement phenomena in INFL (section 3.), or of SUBJECTs and binding (section 4).

2. Word-order.

2.1. In much the same way as in Hungarian (see Kiss 1981a, b and below), word- or constituent-order is "free" in Basque in the sense that it is not determined by grammatical functions or deep (semantic) relations or roles (I will not use the phrase "thematic relations" in this paper, so as to avoid confusion with the traditional Prague school meaning, but will nonetheless use the abbreviations θ-relations and θ-roles for the sake of brevity). Thus, according to context and communicative or pragmatic appropriateness, the following six examples are all acceptable:

(4) (a) *Pello Bilbotik etorri da*
Peter Bilbao-from come- perfective he-is
'Peter has come [back] from Bilbao'
(b) *Bilbotik Peio etorri da*
(c) *Peio etorri da Bilbotik*
(d) *Bilbotik etorri da Peio*
(e) *etorri da Peio Bilbotik*
(f) *etorri da Bilbotik Peio*

Although (4a) is generally considered to be the unmarked or neutral sentence, this is not altogether true, since its communicative value is clearly distinct from the one of e.g. (b) or (c): in (4a), *Peio* is the topic (i.e. it is either contextually given, or explicitly introduced as the new entity the speaker is going to talk about), whereas it is the focus in the next two sentences (but this does not necessarily imply contrast or exhaustive listing): (4a) could either be translated by 'it is Peter who...' or by 'Peter at least...'). Moreover, the "new information" conveyed by (4a) may either be *Bilbotik etor* (assuming that tense —*da*— and aspect — *-(r)i*— here are contextually given), or just *Bilbo(tik)* (in which case *etor(ri)* would also be given), whilst the latter

word is the focus in (4d) and the topic in (4b). Finally, both *Peio* and *Bilbo(tik)* are functionally neutral in the last two examples (e-f)[1].

2.2. So it is clear that surface word-order in Basque is both remarkably free, and significant. That it cannot be explained away by so-called stylistic rules pertaining to the "phonological" component of the grammar is illustrated by the fact that WH-expressions must be placed immediately to the left of the verb (just as they must in Hungarian):

(5) (a) *Peio nondik etorri da?*
where-from
'where has Peter come [back] from?'
(b) *nondik etorri da Peio?*
(same meaning)
(c) **nondik Peio etorri da?*
(d) **Peio etorri da nondik?*

(6) (a) *(Bilbotik) nor etorri da?*
who
'who has come [back] (from Bilbao)?'
(b) *nor etorri da Bilbotik?*
(same meaning)
(c) **nor Bilbotik etorri da?*
(d) **Bilbotik etorri da nor?*

Note furthermore that this obligatory placement of WH-words (actually *no-* and *ze-* words) in the position thus defined precludes any interpretation of the facts illustrated by (4) (a-f) in terms of a rule like (7) — a tentative adaptation of (2b):

(7) $S \rightarrow NP_i \ldots NP_j \; V \; INFL \; NP_k \ldots NP_1$.

2.3. Of course, the foregoing data does not prove that the NP *Peio* in (4) is not, at some level of representation, a sister constituent or *Bilbotik etor-:* for instance, (8) could be some sort of "convenient shorthand for a list of grammatical functions associated with [its] elements" (Chomsky, *op. cit.*, 131):

(8) $[_S [_{NP_1}$ *Peio*$]$ $[_{VP} [_{NP_2}$ *Bilbotik*$]$ $[_V$ *etor-*$]]$ $[_{INFL}$ *-ri da*$]]$[2].

However, my contention is that although something like (8) —a particular realization of (1b)— has generally been assumed to be *the* D-structure corresponding to the six examples of (4) by Bascologists, they have in fact been mistaken. More specifically, they have either systematically ignored the relevant data (4) (b) through (f) —I. Sarasola (1976)— or have just failed to integrate them into the overall generative grammar of Basque they have been propounding —P. Goenaga (1978).

Now, if it is not difficult to "derive" (4) (c)-(f) transformationally from (8), thanks to the application of an operation of extraposition (a rule which may well be independently justified)[3], it is just as easy to demonstrate that (4b) *cannot* be so derived. Indeed, since constituents cannot just "swop places" with each other, three movements would have to take place: (a) one of the NP's, *Peio* or *Bilbotik*, should first be

(1) The oldest functional approach to Basque word-order is Altube (1929). The question was taken up again in a more or less Standard Theory perspective in de Rijk (1969), Donzeaud (1972) and de Rijk (1978). The latter paper mentions the similarities between Basque and Hungarian in this respect, and so does Brettschneider (1981), but neither develops anything specific on the subject.

(2) To simplify the exposition, I assume that the suffix *-tik* of *Bilbotik* can be viewed as a (morphological) case-marker rather than a postposition.

(3) Note that the functional interpretation of (4c) would be problematic in this perspective, since *Peio* cannot be taken to be the sentence topic there.

extraposed, so as (b) to allow the other one to be moved into the place it has just vacated; (c) finally, the extraposed constituent woul have to be moved again, and made to occupy the newly emptied position. Starting from (8) and arbitrarily choosing *Bilbotik* as the first extraposed phrase, the steps would be as follows:

(9) (a) [$_S$ [$_{NP}$ *Peio*] [$_{VP}$ [$_{NP}$ *e*] [$_V$ *etor-*]] [$_{INFL}$ *-ri da*] [*Bilbotik*]]

(b) [$_S$ [$_{NP}$ *e*] [$_{VP}$ [$_{NP}$ *Peio*] [$_V$ *etor-*]] [$_{INFL}$ *-ri da*] [*Bilbotik*]]

(c) [$_S$ [$_{NP}$ *Bilbotik*] [$_{VP}$ [$_{NP}$ *Peio*] [$_V$ *etor-*]] [$_{INFL}$ *-ri da*] [*e*]]

All this is obviously absurd: "movement is always to a non-θ-position" (Chomsky, *op. cit.,* 136), so that the movements represented by the arrows in (9) (b) and (c) are both impossible.

One might object that subject NP's *can* be landing sites under certain circumstances; true enough, but this is only the case when (i) the VP assigns no θ-relation to its subject, and (ii) the V inside the VP assigns no Case to its complement(s) (*id.,* 113 & 127). In other words, all the syntactic (and semantic) information contained in (8) would have to be considered null, irrelevant or erroneous for the derivation to be licit.

2.4.1. Two more arguments can be opposed to the "derivation" (8)-(9c). Firstly, in all dialects, what are clearly PP's (POSTpositional phrases in our case) can either be new information, as in (10a), topics, as in (10b), or appear to the left of the verb and the auxiliary — (10c):

(10) (a) *Mayi soroetan gaindi iragan da*
Mary field-pl-in across pass-perf she-is[4].
'Mary has crossed the fields'

(b) *soroetan gaindi, Mayi iragan da*
'across the fields, (it's) Mary (two) has passed'

(c) *iragan da Mayi soroetan gaindi*
(same translation as (10a)).

In these examples, it is clear that *soroetan gaindi* is a PP, with the invariable P *gaindi* 'across' as its head (and consequently as the item which assigns the locative case to the governed NP *soro*-plural):

(11) [$_{PP}$ [$_{NP}$ [$_{N'}$ [$_N$ *soro-*]] *-e-tan*] *gaindi*]

(see 4.2. for some discussion of the internal structure of NP's.)

Deriving (10b) from (12) below —supposedly the deep structure common to (10) (a-c)— would consequently not only violate the principles mentioned *supra,* but would also violate all the principles on which Constituent Analysis is based: it would imply substituting an NP for a PP and *vice versa:*

(12) [$_S$ [$_{NP}$ *Mayi*] [$_{VP}$ [$_{PP}$ *soroetan gaindi*] [$_V$ *iraga-*]] [$_{INFL}$ *-n da*]]

2.4.2. The second argument follows the same line of reasoning, and is even more compelling, although it is, admittedly, restricted to the southern dialects (spoken is

(4) There is no grammatical gender in Basque, so that *da* is either 'he is', 'she is' or 'it is' according to the context; this remark can be extended to all the verbal forms that will appear later on.

Spain): it is the fact that the verb itself can be either topicalized, as in (13), or focalized, as in (14):

(13) *etorri* { *ere* / *bai* }, *Peio* { *etorri* / *egin* } *da*

'as for coming, *Peter* has (come/done)'

(14) (a) *Peio etorri egin da*
'Peter has *come*'
(b) *etorri egin da Peio*
'he has *come*, has Peter'

(*bai* 'yes'; *ere* 'as for'/'too'; *egin* 'done'; in any case, note that (14) (a-b) do *not* mean 'Peter *has* come' or 'Peter did come', and that (13) is more restricted in use than (14); see Rebuschi (1983a) for more details).

2.5.1. The date which precede all point in the same direction, namely, to a hypothesis which, again, K. E. Kiss *(op. cit.)* has convincingly argued is the best or even the only way to account for the Hungarian parallel data: the positions to the left of the verb are not A-positions, and they need not be filled (except when the material under consideration consists in a WP-phrase recall (5a) through (6d)).

Now what could be the original (A) positions of the NP's and PP's examined above? Since there is no evidence that they are dominated at D-structure by nodes which never dominate them at S-, or surface-, structure (this is the analysis proposed by de Rijk (1978) and Azkarate *et al.* (1981), but it has obvious shortcomings, because Move-NP and Move-PP would have to apply in *all* derivations, and also because there is no other justification for postulating such D-structure nodes than the intuition that (4a) is in some way unmarked, as was noted), the only solution left is to posit that they all follow the verb in deep structure.

This, of course, can be expressed by a rule like:

(15) $X \rightarrow V\ w\bar{o}^{n}$
where $w\bar{o}^{n}$ is any number of unordered maximal projections (NP, PP, AP, V* and S*, taking the latter two to be the maximal projections of V and S).

2.5.2. Although (15) is reminiscent of (2a), it differs from it in two respects; (a) the W items follow the verb rather than precede it (a parameter which must be empirically fixed, as we have seen, but which does not seem to have any theoretical significance); (b) more importantly, the exact category which X represents is *a priori* unclear. So let us consider the matter more closely.

First of all, all current work in generative grammar assumes that INFL(exion) c-commands the verb without being c-commanded by it: in the absence of evidence to the contrary, X must then be a sister-constituent of INFL within some category Y which is itself either INFL' or X' (INFL-bar or X-bar). We may therefore posit that Y is, in fact, S itself. Consequently, (15) should be preceded by either (16) (a) or (b):

(16) (a) $S \rightarrow$ INFL X (b) $S \rightarrow$ X INFL

This, however, does not tell us what X is; since a verb governs the NP's it c-commands, X is in all probability a VP, or at least some projection of V, say V'.

Let us now reconsider the Hale-Chomsky hypotheses summed up in section 1. It appears that some of them hold true as far as Basque is concerned: any constituent is in some sense (made precise by rule (15)), really free at D-structure, and so it is (in

another sense), at S-, or surface-, structure, as (4) (a-f) have illustrated[5]. However, this kind of freedom is costly: it forces us to reject the claim that a NCL like Basque has no movement rules — (a) the W items may (or must when they are a [+WH]) be moved to the left of V or V', and there is no reason to believe that these items leave no traces behind when they *are* moved (see 4.15.). Consequently, the hypothesis (3c) is erroneous.

Another consequence of our approach is that, if the spirit of rule (2b) can be maintained, its letter cannot: it is not true, in Basque at least, that S' = S = V': even disregarding the fact that Basque has complementizers (and, morpho-syntactically, sometimes, very complex ones), the mere existence or (16) precludes the identification of S and V'[6].

2.6. Let us now turn to the relative order of INFL and V' or VP (X in (16)). Considering the evidence provided by the surface structures examined so far, it is clear that if INFL is not a constituent of V', it will have to be moved either from the left of the verb to its immediate right (in accordance with hypothesis (16a)), or from the outer right of V' into the same position (assuming (16b)). What is more, new evidence supports the view that, even if it originated between V and its sister NP's or PP's, INFL should all the same have to undergo movement under certain circumstances: (1) in all dialects, as in the negative constructions (17), and (ii) in the northern dialects (those spoken in France), as in the emphatically focussing sentences of (18):

(17) (a) *Peio ez da etorri (Bilbotik)*
Peter NEG he-is come-perf (Bilbao-from).
'Peter has not come (from Bilbao)'

(b) *Peio ez da Bilbotik etorri*
'it's not from Bilbao that Peter has come'

(c) *nor ez da etorri?*
'who has not come?'

(18) (a) *Bilbotik da Peio etorri ...etorri Peio*
'it's from Bilbao that Peter has come'

(b) *Peio da Bilbotik etorri... etorri Bilbotik*
'it's Peter who has come from Bilbao'

It seems to me that postulating that INFL precedes V or V' (or again VP) at D-structure would be the simplest solution: in positive assertive (non emphatic) sentences, the all too famous Affix-Movement rule INFL $V \rightarrow V$ INFL would apply without further ado[7]; but in negative sentences, the presence of the particle *ez* 'no, not'

(5) Things are obviously different at LF-structure, but surely Chomsky did not have that level of representation in mind when he wrote his section on NCL's. So, pending further analysis, we may assume that if (8) has any meaning at all in Basque, it must be at LF.

(6) The fact that Japanese has no overt AGR constituent does not justify the bypassing of INFL in Chomsky's presentation.

(7) That this rule could apply in the syntax rather than the morphology is quite compatible with the theory (cf. Chomsky, 1981: 256-7) since, as we shall see in 3.1., Basque is a pro-drop language.

Besides, there is no evidence that the auxiliary verb is base-generated: when INFL is tensed, we have the rule: INFL → (Aspect) Tense+Mode AGR.

Most verbs are so subcategorized as to require one of three aspect affixes to be present in the D-structure to be selected, whereas a handful of others are no subcategorized in that way, and can thus be "synthetically" conjugated. So it is probable that an independent auxiliary word is introduced just in case Aspect is selected, thereby preventing Tense (+Mode) to be cliticized to the main verb — see Rebuschi (1983a or c) for more detailed analysis.

would block that movement, and so would the emphatic focalization exemplified by (18) —although the aspectual morpheme would still surface as suffixed to the main verb— but this may be due to a distinct rule belonging to PF (see footnote 7); in other words, the emphatically marked material *Bilbotik* of (18a) or *Peio* of (18b) is best considered adjoined to INFL, rather than placed in the less marked "focus" position defined as (left) adjacent to V[8].

2.7. We must now examine the nature and properties of the non-A-positions to the left of INFL (at D-structure) or to the left of V/V' at S-structure. Let us call the position filled by *Peio* in (4a) T (for topic), and F, the one occupied by *Bilbotik* in the same example (for focus, but remember that not all material under F is necessarily contrastive - a point which was already made by de Rijk (1969) for Basque, and was rediscovered by Kiss (1981a) for Hungarian. So the question really is: are T and F sister nodes, dominated by the same S node, or does T c-command F whilst F does not c-command T? Straightforward syntactic arguments are difficult to find here, but indirect evidence of another nature can help. For instance, topics may always be separated from the rest of the utterance by a pause, whereas foci may not. So, although nothing really important is at stake here from the point of view of this paper, it seems reasonable to posit the two rules (19) (a-b), COMP being dominated by a still higher projection of S:

(19) (a) S" → (T) S' (b) S' → (F) S

One might expect from what was argued in 2.6 that (19b) would be followed by (16a). Unfortunately, this will not do, because, if it were the case, it would be impossible, in negative sentences, to distinguish between the f position occupied by WH-phrases —which precede both the negative particle *ez* and the tensed auxiliary as in (17c)— and the position occupied by the items which constitute the proper scope of negation, like *Bilbotik* in (17b): let us call the latter F*. Consequently, I tentatively propose the following set of rules after (19):

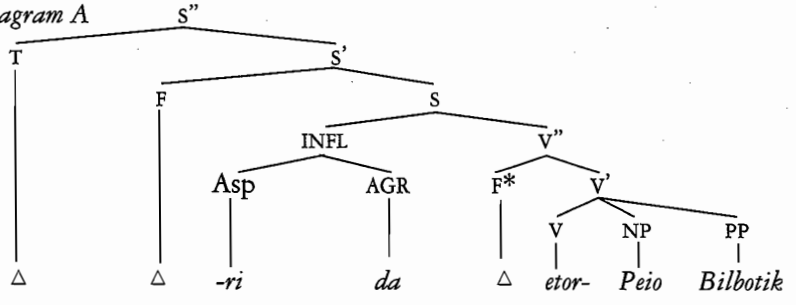
(20) S → INFL V" (22) V" → (F*) V'

(21) INFL → (Aspect) (NEG) Tense +AGR. (23) V' → V $\overset{n}{WO}$

(V" = VP, and $\overset{n}{WO}$ as in (15)).

The following diagram summarizes the different D-structures for the sentences (4) - (6) (assuming that the presence of the optional nodes T, F and F* automatically triggers an application of Move-α, (24) is not technically a D-structure tree):

(24) = *Diagram A*



(8) Despite the fact that the "emphasis" described here applies to lexical items rather than to the truth-value of the sentence, the blocking of Affix Movement in both emphatic and negative contexts does remind one of the role played by NEG and EMPH in pre-Standard generative grammar (see Chomsky 1957 for instance).

In functionally unmarked cases, the only movement involved is INFL going under V' immediately to the right of V — cf. (4) (e-f). The movements of *Peio* and *Bilbotik* to T and or F* (no longer F!) next account for (4) (a-d), F* being the real focussing position; F would then be reserved for interrogative phrases: the unmarked and usual movement of INFL under V' had concealed the fact that the landing site or WH-phrases and ordinary focussed NP's and PP's was necessarily the same, notwithstanding the fact that these two sites are non-A-positions.

2.8.1. Note that besides the contrast between (17) (b) and (c), there exist two more arguments in favour of the distinction between F and F*[9]. In the northern dialects, open (emphatic?) questions can be formed with the tensed auxiliary immediately following the WH-phrase, and thus preceding the main verb, as in:

(25) *nor da* { *etorri Bilbotik* / *Bilbotik etorri* }
'who ever has come from Bilbao?'

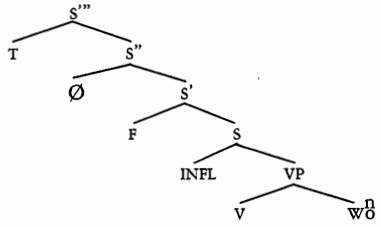
(Compare (6b), the unmarked option).

Traditionally, (25) would be interpreted as a marked case of verb auxiliary inversion, but it does seem to be just one more example of Affix Movement not being applied. (It is even probable that here *nor* 'who' has undergone a further movement from F into INFL, to the right of AGR, i.e. to a place which, when it is filled, always blocks Affix Movement).

Secondly, in all dialect, the topic of an embedded clause may, and the interrogative (WH-) word of an embedded clause must[10], be raised to the corresponding T and F positions of the matrix sentence; but this raising is not available from F* to F*:

(26) (a) (i) *orroitzen da Peio* [$_{S*}$ [$_{T}$ *ni*] [$_{S'}$ *Bilbotik etorri naizela*]]
remembering he-is Peter I B.-from come-perf that-I-am
'Peter remembers that I have come from Bilbao'
(ii) *ni, orroitzen da Peio* [[*e*] [*Bilbotik etorri naizela*]]
'as for me, Peter remembers that I have come from Bilbao'

(9) Is it a mere coincidence that K. E. Kiss (*op. cit.*) should have uncovered a "Q position" for quantified NP's, which just happens to be intermediate between T and F? It does not seem so: the fundamental difference in the basic structure of Basque and Hungarian simple sentences is only the relative placement of (my) F (=Kiss's Q) and INFL, as can be seen by comparing (24) with the following diagram (a "condensation" of trees (28) and (50) of Kiss 1981b: 314 & 320) in which F should be read as analogous to my F*:



(10) At least if the verb in the matrix sentence is declarative. Note besides that the COMP suffix *-(e)la* in moved under INFL: see 3.2.2.

(b) (i) *uste du Peiok* [$_{S'}$ [$_{F}$ *nor*] [*etorri dela Bilbotik*]]
opinion he-has-it P.-*k* who come-perf he-is-that Bilbao-from.
(ii) *nor uste du Peiok* [$_{S'}$ [$_{F}$ *e*] [*etorri dela Bilbotik*]]?
'who does Peter think has come from Bilbao?'

(27) **Bilbotik orroitzen da Peio* [$_{S*}$ [$_{V''}$ [$_{F*}$ *e*] [$_{V'}$ *etorri naizela*]]]
'it's from Bilbao that Peter remembers that I have come'
(cp. (26a) (i); for the *-k* or *Peiok* in (b) (i-ii), cf. 3.1.3.).

2.8.2. It may be worthwhile making a few comments on the ungrammaticality of (27). A first, Indo-European-biassed explanation, could be that (22) defines F* as a sort of "subject" position, hence its opacity. But, as we have seen, any case-marked NP, and non-nominal material too, can be moved under F*. So that explanation cannot be the right one. Consider rather the subjacency condition: according to EST, no constituent can be moved into another position across two boundaries corresponding to two bounding nodes. As far as English is concerned, the bounding nodes are S' (wich dominates COMP and S), S, and NP. Now we must take into account the fact that the node which dominates COMP in Basque is neither S'nor S", but still a higher projection of S - S* according to the notational convention adopted in 1.— presumably S'". So the system which holds for English could be generalized by defining the bounding nodes as NP, S and S*, however many ba the latter contains (in English, S* would thus be S', and in Basque, S'", as suggested). Now, given the fact that F* is inside S (see the rules (20)-(22)), the raising of any focussed item from a subordinate F* to a superordinate one would violate subjacency: both as S boundary and S* boundary would be crossed in a single movement[11], whereas only one such boundary, viz S*, is crossed in the cases illustrated by (26).

2.9. Of course, raising from F to F or from T to T is reminiscent of NP-movement and WH-movement; so (3a) must also be inadequate, since the rules (20) - (23) apparently offer the possibility to build all the configurations which were thought to reflect just the specific properties of configurational languages. The difference between the two language types mentioned in section 1. would therefore rather be that, in NCL's, all the nodes which c-command V' (i.e. the verb and its complements) are non-argument positions.

3. On the poly-personal conjugation of Basque

3.1.1. It now being fairly well established that Basque is, in the sense just defined, an NCL, the remainder of this paper will be devoted to an examination of yet a few more "exotic" properties of the language, all of which will appear to be interrelated with corollaries of this, and a few more (but partially dependent) parameters.

Beside its so-called "free" word-order, a frequently cited typological characteristic of Basque is its poly-personal conjugation: if the verb is transitive, the inflected verb

(11) Of course, any movement from anywhere in an embedded S(*) into an argument position of the matrix S is forbidden - compare (26) and the following ungrammatical sentences:
(i) **orroitzen da ni$_1$ Peio* [$_{S*}$ [$_{T}$ e$_1$] *Bilbotik etorri naizela* e$_1$]
(ii) **orroitzen da Bilbotik$_1$ Peio* [$_{S*}$ [$_{T}$ e$_1$] *etorri naizela (ni)* e$_1$]

form (the main verb in a few cases, the auxiliary otherwise — see note 7) possesses nominal affixes indicating the person and number of the NP's corresponding to both the English subject and object:

(28) (a) *Peiok*$_1$ *Mayi*$_2$ *jo du* [d_2-*u*-Ø$_1$]
Peter-*k* Mary hit he-has-her
'Peter has hit/beaten Mary'

(b) *ikusten zaitugu guk*$_1$ *zu*$_2$ [*zait*$_2$ -*u*-*gu*$_1$]
seeing we-have-you we-*k* you
'we see you'

3.1.2. Two remarks must be made immediately. Firstly, like many (or perhaps all?) languages which have a well-developped poly-personal conjugation, Basque is positively marked for the pro-drop parameter — but this does not only affect the "subject": any NP represented in INFL may be empty, as in[12]:

(29) (a) *jo du* 'he/she has hit him/her' [see note 4]
(b) *ikusten zaitugu* 'we see you'
(c) *nik dut ikusi* '*I* have seen him'
I-*k* I-have-him seen

3.1.3. Secondly, it will have been noticed that the "subject" or agentive NP in (28) (a-b) or (29c) is suffixed by *-k,* the so-called ergative case morpheme. It is worthwhile noting that, contrary to the situation found in many other "ergative" languages, the ergative morphology of Basque is not split for person (see Dixon (1979) and Trask (1979) for instances of that phenomenon), and that most of its verbal morphology is typically ergative too[13]. Thus, on the one hand, NP's corresponding to what we can intuitively call subjects of intransitive verbs, and objects of transitive ones, have a zero suffix in the singular, and are marked by an identical prefix on the tensed verb; on the other hand, subjects of transitive verbs have a specific suffix *-k,* and their intra-verbal marker is a suffix:

(30) (a) *ni-Ø na-iz* 'I am' [='it's me'[14]]
(b) *hi-Ø ha-iz* 'you are'[15]
(c) *hi-k ni-Ø ikusi na-u-k* 'you have seen me'
(d) *ni-k hi-Ø ikusi ha-u-t* 'I have seen you'

"Strong" ergative languages are only a handful, so any generalization about them should be considered highly tentative. It does *not* seem, however, that many of them

(12) Two other well-documented —and genetically unrelated— examples are Nahuatl or classical Aztec (probably an NCL too), and Swahili.

(13) Curiously enough, the few cases in which Basque inflected verbal forms can be analyzed as carrying "subjective" indices (i.e. pronominal affixes organized after a nominative-accusative pattern) have been taken by some to reflect its strong degree of "ergativity" (this is J. Heath's (1977) thesis, according to which these cases are typical antipassive forms), and by others to reflect its feeble degres of it (according to R. L. Trask (1977), they would rather illustrate the (proportionately) recent reanalysis of an obligatory passivization process into an active voice of a peculiar sort). It seems to me that very little light can be expected to be thrown on the question along this line of research: see Rebuschi (1983b) for a radically different approach.

(14) The agreement of the copula in person in such cases has been suggested to be a corollary of the pro-drop parameter (Chomsky 1981: 281, fn. 14).

(15) There are three forms for 'you' in Basque: *hi* is sg. familiar, *zu* is referentially sg. non-familiar, and *zuek* is referentially plural; see 3.2 and 4.14. for some remarkable phenomena connected with the familiar mode of address.

have a poly-personal conjugation. Some independent principle of grammar should consequently be called for to account for their morphology, but it certainly seems clear that, as far as Basque is concerned, the rules (20) - (23), simplified for expository purposes here as (31) and (32):

(31) S → INFL V' (32) [=(23)] V' → V $\overset{n}{W0}$

probably contribute to both the polypersonal type of its conjugation, and to its ergative-type morphology (note that Hungarian has remnants of a bi-personal conjugation too). More specifically, given (31) and (32), there seems to be no reason why only one NP should be coindexed in INFL, and why that NP should be the one assigned the agentive θ-role in case the verb has several arguments (all being its "complements" in the technical sense, as we noted earlier). Moreover, if the conjugation is poly-personal (an option which definitely seems to be less marked in NCL's than in configurational languages), there is not any reason either that the same agentive NP should be morphologically identified with the subject of an intransitive verb: functional pressures simply help to leave the intransitive subject morphologically unmarked, and to identify either the patient, or the agent, with it, so as to produce a system both economical and guaranteeing that the semantic lack of symmetry between the two θ-roles be explicit (see A. Martinet 1979).

3.2.1. The finite forms of Basque verbs may contain up to two more nominal elements: one indicates the person and number of the (superficially) dative argument, as is illustrated in (33) (a-b), and the other, called "allocutive", denotes the sex of addressee, when the latter is not the referent of an argument, and when the tone is highly familiar (i.e. when the corresponding pronoun is *hi* as in (30) (b-d) above); several instances of such allocutive forms are given in (34):

(33) (a) *Peio Mayiri etorri zaio*
Peter Mayi-to come-perf he-is-to-him/her
'Peter has joined Mari'
(b) *Mayiri eman dio Peiok dirua*
Mary-to given he-has-it-to-her Peter-*k* money-the+sg
'(it is) to Mayi (that) Peter has given the money'

(34) (a) (i) [neutral] *Mayi etorri da* 'Mary has come'
(ii) [familiar] *Mayi etorri duk* (*id.*, addressing a male)
(b) (i) [neutral] *Mayi ikusten dut* 'I see Mary'
(ii) [familiar] *Mayi ikusten dinat* (*id.*, addressing a female)
(c) (i) [n.] *etorri zaio* 'he/she has joined him/her'
(ii) [f.] *etorri zaiok/zaion* (*id.*, addressing a male/female)
(d) (i) [n.] *eman dizkiegu* 'we have given them to them'
(ii) [f.] *eman zizkie(k)agu/zizkienagu (id.)*[16]

3.2.2. I will return to this phenomenon in 4.14, and will only make two short remarks now concerning, first, the dative conjugation, and second, the allocutive

(16) The morphological details of the allocutivization of tensed forms need not concern us here; for an extensive examination of the problems raised by these forms at different levels of analysis and representation, see Rebuschi (1982, chapters 8 & 9).

forms. To begin with, the indexing of dative NP's in INFL is (no longer) compulsory in the northern dialects: the finite verb form usually carries a dative affix only either if the dative NP is empty, or if it is full, but also focussed. Syntactic correlates of the discrepancy between the absolutive (suffixed by Ø) and ergative NP's and cases, and the dative ones, will be examined in 4.6.2.

Besides, there is a very strong tendency to avoid the "allocutive" forms illustrated by the (ii) examples in (34) in embedded sentences:

(35) (a) *esan dik* [$_{S*}$ *liburu bat eman diogula/*dio(k)agula*]
said he-has-it-[+ALLOC] book one given that-we-have-it-to-him-[-ALLOC]/*[+ALLOC]
'he has said that we have given him a book'

(b) *Peiok galdegin dik* [$_{S*}$ (ea) eman diogun/*dio(k)agun *Mayiri*
P.-*k* asked he-has-it-[+ALLOC] (if) given whether-we-have-it-to-her-[-ALLOC]/*[+ALLOC] Mary-to
'Peter has asked whether we have given it to Mary'

All this shows that the nominal allocutive material does not originate in S or more specifically in INFL, but in COMP: the presence or such material and of items indicating subordination simply exclude each other.

Given that interrogative-WH movement does not adjoin constituents to COMP but places them under F (see 2.6./7.), we are now able to give simplified rules analyzing S*, the maximal projection of S:

(36) (a) S* = S''' → COMP [±ALLOC] S'' (b) COMP → ((Conj) Z) [-ALLOC]

where Conj(unction) dominates such words as *ea* in (35b), WH words in certain, very restricted, types of relative clauses[17], and where Z (which cannot be empty or null if Conj is not), dominates the prefix *bait-* and the suffixes *-(e)n* and *-(e)la* which surface as suffixes of the inflected verbal form.

Clearly, when COMP is [+ALLOC], i.e. when the relations between Speaker and Addressee are explicitly represented, embedding is blocked.

(17) In unmarked relative clauses, no WH-words are used — hence the absence of any visible WH-movement (cp. hypothesis (3c)):

(i) [$_{S*}$ *ikusi dud-(a)n*] *gizona*
seen I-have-him-that man-the

However, the very position of the ambedded S* immediately to the left of the head noun indicates that the empty element corresponding to it within the relative clause cannot be in its original, postverbal, position; nor can it be in F*, since it is possible to focus another NP, as in:

(ii) [$_{S*}$[$_{S}$[$_{F*}$ *nik*] *ikusi dudan*]] *gizona*
'the man that *I* have seen'

So, that empty element must have been moved either under F or under T:

(iii) [$_{S*}$[$_{F}$ e_1] [$_{S}$[$_{F*}$ *nik*] *ikusi dudan*]]] *gizona*$_1$

(iv) [$_{S*}$[$_{T}$ e_1] [$_{S}$[$_{V''}$ *nik ikusi dudan*]]] *gizona*

So some movement at least has occurred, even if it is not exactly the one expected: again, (3c) has found a counter-example.

The structures in which a WH-word surfaces are altogether different, because the relative clause is extraposed:

(v) [$_{N''}$ *gizon-a* [S* *(zein) ikusi dudan-a*]]
man -the which seen I-have-him-that-the

See de Rijk (1972b) for a more detailed account in a standard format.

3.3. It should be clear that the polypersonal conjugation of Basque is not merely an exotic feature with no grammatical significance: associated with the non-configurationality of the language, we can already predict that some simplex sentences have up to three SUBJECTs, namely, the absolutive, ergative and dative pronominal markers in INFL. I will return to this conclusion in 4.10., and will try to justify it independently in the following §§ (4.1.-4.9.).

4. The reflexive possessive *bere.*

4.1. Perhaps the most interesting consequence (or confirmation?) of the fact that all NP's are dominated by V' at D-structure in Basque (so that they all c-command each other), and that, as a possible corollary the equivalents of our subjects, direct objects and indirect objets (i.e. the constituents which are "properly related" to the verb — in other words, the "terms" of relational grammar) are all coindexed in INFL with AGR, is provided by the use of the 3rd. p. reflexive possessive specifier *bere(n)*[18].

The contrast betwen *bere(n)* —morphologically a genitive—, and the non reflexive genitive *haren* (a demonstrative, because Basque has no real 3 rd. p. pronouns), can be illustrated by the following examples:

(37) (a) *Peiok bere zakurra jo du*
P.-*k* his-[+R] dog-sg hit he-has-it.
'Peter$_1$ has hit his$_1$ dog'

(b) *Peiok haren zakurra jo du*
his-[-R]
'Peter$_1$ has hit his$_2$/her dog'

(38) (a) *haren zakurra hil dela esan dit Peiok*
died that-it-is said he-has-it-to-me P.-*k*
'Peter$_1$ has told me that his$_{1/2}$ dog has died'

(b) **bere zakurra hil dela esan dit Peiok*

(c) bere zakurra jo duela esan dit Peiok
that-he-has-it
'Peter$_{1/2}$ has told me that he$_1$ has hit his$_1$ dog'

The difference between (37) (a) and (b) is that, in the first sentence, the possessor of the dog is Peio (hence [+R] for "plus reflexive" associated with the translation of the possessive *bere*), whereas the reference between Peio and the dog's possessor is necessarily disjoint in the second sentence (hence the feature specification [-F]).

Besides, (38b) indicates that, at least as far as the classical language and the modern northern literary language are concerned, a [+R] item like *bere* is rejected when it cannot find its referent in its own finite clause. (38a), on the other hand, is ambiguous, because *haren,* which has no coreferent is its minimal clause, may, but need not, corefer with a nominal element in the matrix sentence. Finally, (38c) is also ambiguous, but its ambiguity has nothing to do with the possessive: *bere,* as we shall see, is, in such a context, bound by the empty NP which corresponds to Ø in the aux. *duela* (/d-u-Ø-ela/), se that the interpretative problem reduces to the pragmatic question whether this pronominal element Ø corefers or not with the NP *Peio(k)* in the superordinate clause.

(18) *Bere* if the possessor is sg., *beren* otherwise. Classical Basque, which did not make this distinction, also had reflexive possessives for 1st and 2nd p. possessors: see (45) (a-b) in 4.2., and 4.14.

4.2. The contrast between *haren* and *bere* has nothing extraordinary about it in itself: Latin *eius* and *suus,* and Polish *jego* and *swój,* apparently offer similar examples. There are, however, important differences between the Indo-European couples and the Basque one. Let us first consider the question from the point of view of the internal structure of the NP. In Latin and Polish, the non reflexive *eius* and *jego* are not determiners (they do not agree in number, gender or case with the head noun they "modify"), whereas their reflexive counterparts indisputably are determiners. In Basque, the situation is different, because neither possessive is a determiner — at least insofar as their relationship with the head noun is concerned: Basque determiners follow the head, whilst *haren* and *bere* always occur in the pre-head position of a complement (or subject) NP[19]. Assuming PS rules like (39)[20], we have nominal structures like (40) when there is no complement or subject, and like (41) when there is one:

(39) (a) $N^* = N'' \rightarrow N'$ Det

(b) $N' \rightarrow \left\{ \begin{matrix} N' \text{ (AP)} \\ \text{(N'') } N' \\ N \end{matrix} \right\}$

(40) (a) (i) *gizon zaharra* 'the old man'

(ii) $[_{N''}[_{N'}[_{N'}[_{N}$ *gizon*]] $[_{AP}$ *zahar-*]] $[_{Det}$ *-(r)a*]]
man old the

(b) (i) *zakur hura* 'that [=yonder] dog'

(ii) $[_{N''}[_{N'}[_{N}$ *zakur*]] $[_{Det}$ *hura*]]
dog that

(41) (a) (i) *gizonaren zakurra* 'the man's dog'

(ii) $[_{N''}[_{N'}[_{N''}[_{N'}[_{N}$ *gizon*]] $[_{Det}$ *-aren*[21]]] $[_{N'}[_{N}$ *zakur-*]]] $[_{Det}$ *-(r)a*]]

(b) (i) *gizon zahar haren zakur txikia*
man old that-gen. dog small-sg
'that old man's little dog'

(ii) $[_{N''}[_{N'}[_{N''}[_{N'}[_{N'}[_{N}$ *gizon*]] $[_{AP}$ *zahar*]] $[_{Det}$ *haren*]] $[_{N'}[_{N'}[_{N}$ *zakur*]]
$[_{AP}$ *txiki*]]] $[_{Det}$ *-a*]]

The structure of (42a) below could therefore be (42b), but it could just as well be (42b), since the genitive forms of the demonstrative pronouns function (superficially at least) like 1st and 2nd p. pronouns, for which no empty (preceding) head can be postulated cp. (43):

(42) (a) *haren zakurra* 'his dog/that one's dog'

(b) $[_{N''}[_{N'}[_{N''}[_{N'}$ *e*] $[_{Det}$ *haren*]] $[_{N'}[_{N}$ *zakur-*]]] $[_{Det}$ *-(r)a*]]

(c) $[_{N''}[_{N'}[_{N''}$ *haren*] $[_{N'}[_{N}$ *zakur-*]]] $[_{Det}$ *-(r)a*]]

(19) I return to the question whether the pre-head N" position is that of a complement or of a subject in 4.3.

(20) Which are not exhaustive of course; see Trask (1983) for a different approach.

(21) Morphological case suffixes are attached to the very last word in the NP only; this process is in no way restricted to the genitive ending; here is an illustration with the ergative suffix *-k: gizon txiki zahar-(r)a-k (ikusi nau)* 'the little old man (has seen mey)'. See 4.5. for an argumentation that despite this fact, morphological case endings such as *-k, -en* or *-(r)i* are *not* postpositions; cf. note 26 below too.

(43) (a) *nere/ene zakurra* 'my dog'

(b) $[_{N''}[_{N'}[_{N''}$[Pron *ne-re*]] $[_{N'}[_{N}$ *zakur-*]]] $[_{Det}$ *-(r)a*]]

Let us now back to *bere:* like *nere* (or *ene*) in (43), it cannot be preceded by an N or an N', so it must be a pronoun in the traditional sense: a pro-N"[22]:

(44) (a) *bere zakurra* 'his dog' [cf. (37a)]

(b) $[_{N''}[_{N'}[_{N''}$[Pron *ber-e*]] $[_{N'}[_{N}$ *zakur-*]] $[_{Det}$ *-(r)a*]]

Note finally that classical Basque had pairs of reflexive and nonreflexive 1st and 2nd p. possessives, which worked exactly like *bere* and *haren:*

(45) (a) *Peiok ene/*neure zakurra jo du* my-[-R]/[+R] 'Peter hit my dog'

(b) *(nik) neure/*ene zakurra jo dut* 'I hit my dog'

The linguistic import of this fact will be dealt with in 4.14.

4.3. Whether *haren* is best analyzed as in (42b) or (42c) will be investigated in 4.17. Let us rather concentrate now on a more basic issue: I assumed in 4.1. that *bere* in (38c) was bound in its tensed clause. This, of course, must be justified. More explicitly, for an item X to be bound implies that:

(46) (a) X is an argument; (b) X is governed; (c) X is an anaphor.

That *ber(e)* is an argument is clear enough:

(47) "[...] arguments fall into the following categories: (i) overt anaphors; (ii) pronominals; (iii) R-expressions; (iv) clauses. Non-arguments include other non-NP categories as well as NP's that are 'non-referential': impersonal *it,* existential *there,* perhaps idiom chunks, and analogues in other languages." (N. Chomsky, *op. cit.,* 101)

Indeed, if the analysis proposed in 4.2. is correct, *ber-* is an NP, and, what is more, a "referential" one (whatever Chomsky's own inverted commas may mean). This is confirmed by the fact that the manifold ambiguities of (48a) are preserved in (48b) (needless to say, these ambiguities are exactly those found in the English translation):

(48) (a) *Peioren argazkiak* 'Peter's pictures' (b) *bere argazkiak* 'his-[+R] pictures'

(Note that *-ak* here is absolutive plural, rather than ergative singular).

So if *Peio(ren)* is in some sense the "subject" or *argazkiak,* this must also be the case for *ber(e),* which therefore cannot be a "complement" in the usual sense[23].

(22) In spite of the etymology and semantic similarities, *bere* must be sharply distinguished from *bera* 'the same' (hence *beraren* X 'the same one's X'), which is in fact a realization of:

$[_{N''}[_{N'}[_{N'}$ *e*] $[_{AP}$ *ber-*]] $[_{D}$ *-a*]]

as is shown by such surface nominal phrases as: *gizon (zahar) bera* 'the same (old) man', *gizon (txiki) beraren zakur hura* 'the same (short) man's dog' or 'that dog of the same (sorth) man's'.

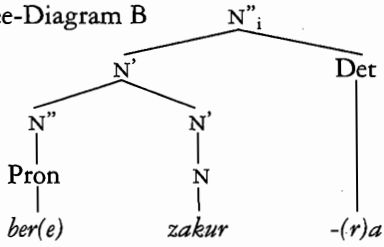
(23) Real adnominal complements are generally assigned the so-called "second genitive" in *-ko.* But many English adnominal complements can only appear as NP subjects in Basque; thus (i) and (ii) have only one possible translation, (iii), whereas (iv) has no direct equivalent: (v) is ungrammatical, and (vi) contains a reduced relative clause (in *-ko* as could be expected):

(i) pictures of each other.
(ii) each other's pictures.
(iii) *elkarren argazkiak* (*elkar* 'each other')
(iv) Peter's picture of Mary
(v) *??Peioren Mayiren argazkia/*Mayiren Peioren argazkia.*
(vi) *Peiok* { *eginikako* / *egindako* } *Mayiren argazkia*

(*eginik* and *eginda* are adverbials derived from the perfective participle *egin* 'done'); see examples (60)-(61) in 4.7. too.

That *ber-* is governed is not disputable either, since it is c-commanded by a major category, the head noun of the NP, without there intervening any maximal projection boundary between the two of them (see 4.9. for a formal definition of c-command)[24]. Note further that the genitive case (materialized by *-e* here) is probably assigned by the head noun, if we accept Manzini (1983)'s suggestion that nouns too assign case. This should be clearer on a tree-diagram like (49), which corresponds to (44b):

(49) = Tree-Diagram B



Finally, the ultimate status of *bere* as an anaphor is clear: "Intuitively, anaphors are NP's which have no capacity for 'inherent reference'." Chomsky, *op. cit.,* 188). A more technical justification will hopefully emerge as we proceed.

4.4. Let us now try to determine what the possible binders of *bere* are. As a first approximation, we can state the following principle, really a mere rewording of Lafitte's analysis (1944, 2nd ed., 1962: 92):

(50) Basque [+R] possessives must be coindexed with a (possibly empty) NP which is itself coindexed in the finite verb form of the minimal clause which contains them both.

What (50) says in substance is that *bere* may not only belong to a "non-subject" NP and be bound by the "subject" of its clause[25] (this is the usual situation in root sentences in Latin and everywhere in Polish), but may also (i) be bound by a non-subject, and (ii) both be bound by a non-subject and be a constituent of the subject. In the examples given so far, *bere* was dominated by an NP node which was not the subject NP of the sentence, and its (co)referent or binder was the subject NP — either explicit, as in (37a), or "understood", but marked as such in the auxiliary as in the embedded sentence in (38c) (cf. *neure* in (45b) too). The other situations can be exemplified by the following sentences (which, needless to say, all are grammatical):

(51) (a) *nik Peio aurkitu dut bere lagunarekin*
I-*k* P. found I-have-him his-[+[R] friend-sg-with
'I have met Peter$_1$ with his$_1$ friend'

(b) *bere amaz mintzatu dut/natzaio*
his-[+R] mother-sg-about spoken I-have-him / I-am-to-him
'I have talked to him$_1$ about his$_1$ mother'

(24) Of course, the N"1 which immediately dominates Pron in (49) is not a barrier against government, since the relation to be established (or checked) is precisely one between that N" and an external N like *zakur(ra).*

(25) For the time being, I assume an intuitive understanding of the notions "subject" and "non-subject"; whether these are operative in the domain of Basque syntax being investigated or not is a question which will be explored in the remainder of this paper.

Note that in the dialects in which *bere* has the restricted reflexive use we are investigating, the verb *mintzatu* has two semantically equivalent rections: the subject may be in the absolutive and the non-subject in the dative (hence the aux. *natzaio*), or again the arguments may be construed as if it were a regular transitive verb, with the (outer world) speaker in the ergative case, and the addressee in the absolutive. This shows that if "subjecthood" has nothing to do with the binding of *bere,* the morphological or surface cases do not play any role either.

Consider now examples in which *bere* belongs to a subject NP:

(52) (a) *bere zakurrak ausiki du Peio*
his-[+R] dog-sg-*k* bitten it-has-him Peter
'it's his$_1$ (own) dog that has bitten Peter$_1$'
(b) *bere emaztegaia etorri zaio*
fiancé-sg come-perf she-is-to-him
'his$_1$ girl-friend has joined him$_1$'

In the (51) examples, *bere* referred to a non-subject entity, but was not itself in the subject NP of the clause. In (52), on the other hand, *bere* belongs to the NP which is "intuitively" the subject. Again, it must be noted that morphological case marking does not affect the issue, the transitive subject being in the ergative case in (52a), and the intransitive one, just as regularly, in the absolutive or zero case in (52b).

The θ-relations do not play any role either here: on the one hand, the binder, which was an agent in (37a), is a patient (or "theme") in (51a) and (52a), and a beneficiary or "experiencer" in (52b), just as in:

(53) (a) *bere emaztegaia hil zaio*
died she-is-to-him
'his$_1$ girl-friend has died "on him$_1$"' / 'he$_1$ has lost his$_1$ girl-friend'
(b) *bere dirua itzuli diot*
money-sg turned I-have-it-to-him
'I have given him$_1$ back his$_1$ money'

On the other hand, the NP or PP which contains *bere* may assume just any θ-relation, as can be checked in all the examples of this 4th section.

4.5. The examples which precede, however, illustrate only one part of the intended meaning of (50), namely, that an NP can bind *bere* if that NP is coindexed in INFL. We must also show that *only* such NP's can do so in tensed sentences.

The morphological cases of Basque fall into two categories: some are complex affixes, which may be analyzed as the amalgamation of a postposition and the real case the latter assigns to the NP it governs. The sociative in *-ekin* and the prolative in *-entzat* are two cases in point: these suffixes consist of the genitif ending *-e* (as in *nere, bere*) or *-en* (as in *haren, gizonaren*) plus respectively *-kin* or *-tzat.* It is therefore possible to consider *-kin* and *-tzat* to be postpositions. Consequently, the blocking of *bere* in (54) is natural: the noun *Peio* does not c-command the NP X"-gen. *laguna(ri),* since a PP is not a (maximal) projection of an N:

(54) (a) *Peiorekin haren/*bere laguna atxeman dut (nik)*
P.-with friend-sg found I-have-him (I-*k*)
'I have met his$_1$ friend with Peter$_{1/2}$'
(b) *dirua, Peiorentzat eman diot haren/*bere lagunari*
money-sg P.-for given I-have-it-to-him his friend-sg-to
'I have given the money for Peter$_1$ to his$_{1/2}$ friend'

But some other morphological cases are just "real" cases, and not postpositions: the instrumental suffix *-z,* for instance, has all the morpho-phonological properties of the ergative suffix *-k,* but an NP in the instrumental cannot bind *bere:*

(55) (a) *haren/*bere laguna orroitzen da Peioz*
remenbering he-is P.-about
'his$_1$ friend remembers Peter$_{1/2}$'
(b) *haren/*bere lagunari mintzatu naiz (natzaio) Peioz*
spoke I-am(to-him)
'I have talked of Peter$_1$ to his$_{1/2}$ friend'

(cp. (51b).)[26]

4.6.1. We can summarize the results obtained up to now in the following manner: *bere,* being an anaphor (4.3.), must be bound to be interpretable. Moreover, it must be bound, and can only be bound, by any one of the three NP's which are coindexed in INFL — with an exception to which I return. Since a binder must c-command the element it binds, it logically follws (i) that the NP's coindexed in INFL c-command all the other NP's, and all the PP's, in their clause, and (ii) that they also c-command each other.

Thus, we have here a totally independent justification for the simplified subsystem of rules (31)-(32) of 3.1.: in Basque, as in probably all languages, "subject" NP's c-command direct and indirect objects, but (and this is what interests us), they also are c-commanded by them. Consequently, "subject" NP's must needs be constituents of V', or, to put it in another way, be sister constituents of the other NP's inside the clause. The non-configurational character of Basque is therefore remarkably confirmed.

4.6.2. Let us now consider some empirical consequences of that conclusion. If "subject" and "object" NP's c-command each other and bind *bere,* ambiguities must arise when both are 3rd p. (in the same number), and *bere* belongs to a third constituent. This is indeed the case:

(56) *Peiok Mayi ikusi du bere amarekin*
seen he-has-her *bere* mother-sg-with
'Peter$_1$ has seen Mary$_2$ with his$_1$/her$_2$ mother'

(26) It should therefore be clear that the generalization that all case suffixes (except of course the zero suffix of the absolutive) are postpositions — a statement made e.g. in de Rijk (1978) and Wilbur (1979), probably because they are attached to the last word in the NP only, as was noted in note 21 — is erroneous: if they were, neither an NP in the dative nor even an NP in the ergative could bind *bere* — or anything else for that matter.

Here, it is absolutely impossible to know whose mother is mentioned without taking into account the context and/or the situation of utterance. (Of course, if the possessive were *haren,* the mother would neither be Peter's nor Mary's).

However, such sentences provide the one exception to the generalization propounded at the beginning of this §: dative NP's do bind *bere* when no ambiguity may arise, as in (53), but they are less easily interpreted as binders for "bere" when an absolutive (and, less clearly, an ergative) NP can be taken to be the binder, as in the following examples (after Harymbat & Pons 1963: 173):

(57) (a) *Peiori Mayi etorri zaio bere amarekin*
P.-to M. come-perf she-is-to-him *bere* mother-sg-with
'Mary$_1$ has joined Peter$_2$ with her$_1$/ ?his$_2$ mother'
(b) *Mayiri bere dirua eman dio Peiok*
money-sg given he-has-it-to-her
'Peter$_1$ has given his$_1$/ ?her$_2$ money to Mary$_2$'

Native speakers' judgments are much less clear in the second case; in fact, replacing *eman* 'given' by *itzuli* 'returned' would render (b) totally acceptable: I do not know whether any purely syntactic explanation can be found to account for these facts: such "performance" factors as empathy etc., as well as the semantics of the verb itself should probably be invoked; my guess is that interpretative strategies are decisive here; for instance, there is nothing "wrong" in the following sentence (Axular 1643, reed. 1964: 131):

(58) *eztio bekhatoreari* [...] *bere bekhatuak kalterik eginen*
NEG-it-has-it-to-him sinner-sg-to *bere* sin-sg=-*k* harm-partitive[27] do-prospective.
'his$_1$ sin will not do any harm to the sinner$_1$'

because *kalte* 'harm, wrong' cannot be interpreted (extralinguistically) as a potential "possessor" of a sin.

Remember, however, that the dative case must be treated differently from the absolutive and ergative ones, since agreement between a dative NP and the finite verb form is not compulsory (3.2.2.) Nonetheless, even when the dative argument is the only possible binder for *bere,* as in (53) (a) or (b) [in the former case, because there is only one other NP coindexed in INFL, and in the latter, because one of the other NP's does not match *bere* in person], and when, consequently, no ambiguity may arise, agreement now seems compulsory: the parallel (59) sentences are fairly bad, even with a full dative NP in the surface:

(59) (a) ??/**Peiori, bere emaztegaia hil da*
P.- to *bere* fiancé-sg died she-is
(cp. (53a))
(b) *?Peiori, bere dirua itzuli dut*
money-sg returned I-have-it
'I have given his money back to Peter'

(59b) is considerably better than (59a), just as (57b) was, with the intended meaning, much better than (57a).

(27) The partitive suffix *-(r)ik* is rather a particular determiner restricted to an absolutive case environment than a real case; see de Rijk (1972a) for a "Standard Theory" account of its properties.

In any case, it is clear that coindexing in INFL is a decisive factor. But is it the only one?

4.7. So far, we have shown that the binders for *bere* were such as described in (50), (38a-b) demonstrating further that tensed clauses really are one domain of binding for it. But is there no other such domain? In order to answer this question, let us examine whether the binding domain could be defined in pre-Pisan terms.

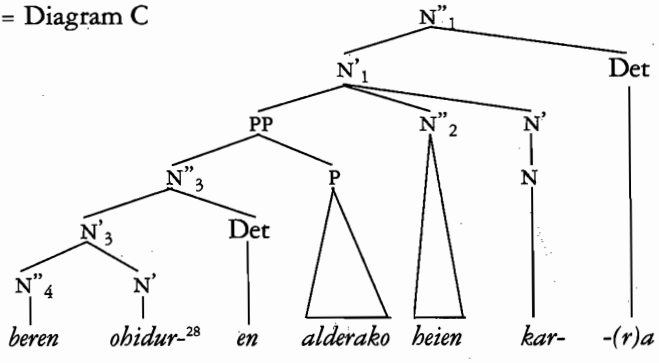
Obviously, it is impossible: according to Chomsky (*id.*, 158), EST recognized "two opaque domains [viz] the subject of a tensed sentence and the c-command domain of any category," within which an anaphor must be bound. Now, it has been amply shown above that *bere* can belong to the "subject" of a tensed sentence, and nevertheless be grammatically bound by some item outside that subject. So, the notion "subject of a tensed S" is definitely not an operative concept, even though the second opaque domain seems to hold good: (a) in a tensed sentence, the "subject" NP c-commands all the other NP's and/or PP's (even if it is not always the only one which does); (b) there is also some evidence —and here lies the answer to the question above— that the "subject" of an NP may also qualify that NP as a binding domain for [+R] possessives.

Consider for instance Lafitte's own (but unexplained) example (*op. cit.*, 92):

(60) *{beren ohiduren alderako heien karra} ikusi bazinu*
their-[+R] custom-pl-gen. towards-gen their-[-R] flame seen if-you-had-it
'if you had seen their$_1$ zeal in favour of their$_1$ [own] customs'

A simplified structure for the complex NP between square brackets is as follows (I assume here that *alderako* is an unanalyzable postposition, but this is not obvious: I return to that matter in the next §; I also leave aside the question whether the PP is not rather Chomsky-adjoined to N"$_2$):

(61) = Diagram C



The "possessor" or "subject" of *kar* 'flame, fervour' is obviously N"$_2$, *heien* (the [-R] possessive, since there would be no binder for *beren* in the clause) or, possibly, the empty nominal element determined by *heien,* if we adopt (42b) rather than (42c) for (42a) in 4.2. In any case, N"$_4$ *beren* is in the c-command domain of that subject; it must therefore be bound within it and so it is, since whatever referential index *heien* (or [e]) carries must also be *beren*'s.

(28) The genitive ending *-en* absorbs the plural suffix *-e-* and the root-final *-a* of the word it is attached to.

What is more, consider (62): the NP subject there is no longer 'they/their', but 'I/my' (*ene*); consequently, the subject or specifier of *ohiduren* 'of their customs' can no longer be *beren,* despite the fact that its referent is indexed in INFL:

(62) *heien/*beren ohiduren alderako ene karra ikusi dute*
my they-have-it
'they$_1$ have seen my zeal in favour of their$_{1/2}$ customs'

It thus appears that (50) is too restricted a characterization of the binders for [+R] possessives: they need not always be coindexed in infl, after all — a conclusion I will return to shortly.

4.8. Another way of looking at (60)-(62) would be to consider that a constraint or principle like subjacency is at work here: only one bounding category separates N"$_4$ from N"$_2$ in (60) - (61): PP, so that subjacency is respected; in (62) on the other hand, a second bounding node is present between *beren* and the empty NP which correponds to the suffix *-te* of *dute,* viz, N"$_1$: subjacency would thus be violated.

Unfortunately, this approach is incorrect. For one thing, *alderako* could well be analyzed as a second PP consisting of an N" followed and governed by *ra(ko),* a P: *alde* 'side' would be the head of that NP, and *(beren) ohiduren* would be the "subject" of *alde* in other words, one more NP boundary would be crossed in (60), subjacency would be violated, but the sentence would remain grammatical.

Indeed, indefinitely many NP's may be embedded in one another, with the presence of *bere* in the last one still being grammatical, provided either that it corefers with the "subject" of a higher NP, or that it does with some external item coindexed in INFL. For instance, (63) is perfectly acceptable:

(63) *Peiok bere lagunaren aitaren auzoa ikusi du*
P. *-k bere* friend-sg-gen father-sg-gen neighbour-sg seen he-has-him
'Peter$_1$ has seen his$_1$ friend's father's neighbour'

Since, in such cases, *bere* is always the subject of a subject of a subject..., there is no question of a cyclical approach to the coindexing of *Peio* and *bere*: the binding of [+R] possessives is unbounded.

4.9. Related to this conclusion is the fact that the notion of "(minimal) governing category" is not operative either. Let us recall the basic definitions:

(64) (a) "A is the governing category for B iff A is the minimal category containing B, and a governor of B, where A = NP or S."
(Chomsky 1981: 188).
(b) "C governs B when, given a structure like:
[$_D$ ... B ... C ... B ...]
(i) C = X^0 [i.e. is a major category, N, V, A or P];
(ii) where F is a maximal projection, if F dominates B then F dominates C;
(iii) C c-commands B" (*id.,* 165)

Consider now the over-simplified structure (65), corresponding to (63):

(65) [N"$_1$[N"$_2$[N"$_3$[N"$_4$ *bere*] [N'$_3$ *lagun*]-*aren*] [N'$_2$ *aita*]-*ren*] [N'$_1$ *auzo*] *-a*]

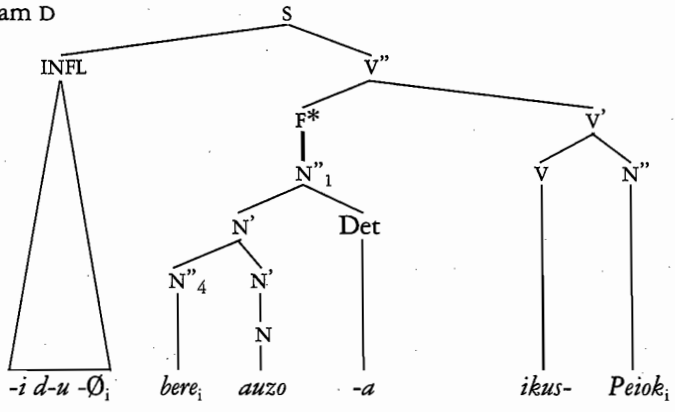
Note in particular that the three nouns *lagun, aita* and *auzo* c-command *bere.* Furthermore, under one interpretation of (64b-ii), every maximal projection N''_1-N''_3 which dominates *ber* (the "B" of (64)) also dominates the corresponding noun (the "C" 's of (64b)). Consequently, these three nouns are governors for *bere,* and N''_2 and N''_1 are governing categories for it, since each one minimally contains one of its governors. Unfortunately, *bere* is not bound in either.

Suppose now that we take (64b-ii) to mean that any single maximal projection F which dominates B must also dominate C; in this case, N''_3, an F, dominates *bere* without dominating the other c-commanding nouns *aita* and *auzo(a):* these cannot be considered governors of *bere,* and only *lagun(a)* governs it. Consequently, the governing category for *bere* must be N".

In either case, the approach is wrong: we want to bind *bere* with *Peiok* and/or *du* of (63), since the replacement of *bere* by *haren* in that sentence would imply disjoint reference for 'Peter' and 'his'.

Should we therefore try to look for a governor for *bere* outside the maximal NP N''_1? Let us consider this possibility. The verb (*ikusi*) of (63) is a major category, and c-commands *bere* (even though N''_1 has been moved under F*: we saw *supra* that F* is dominated by V", a projection of V). Further, there is a maximal projection, V" again, which dominates both *bere* and *ikusi.* So, the node S could well be the governing category for *bere,* under our first interpretation of (64b-ii):

(66) = Diagram D



(Whether INFL has already been moved under V' seems immaterial).

Attractive though it may seem, this approach is not correct either: S would also be the governing category for *beren* in (62), hereby allowing the [+R] possessive to find its binder in INFL, and thus wrongly permitting us to consider (62) with *beren* acceptable.

4.10. Precisely in order to solve some problems raised by the behaviour of anaphors, Chomsky proposed two successive revisions of the definition of the domain of binding:

(67) A is a governing category for B iff A is the minimal category containing B, a governor of B, and a SUBJECT accessible to B (*op. cit.,* 211)

(68) A is a binding category for B iff A is the minimal category containing B and a SUBJECT accessible to B (p. 220).

Associated with (68) is the following principle:

(69) A root sentence is a binding category for a governed element (*id.*)

Since *bere* is always governed by the N it "specifies" (or by *e* in such pronominalization cases as *berea* - $[_{N''}[_{N'}[_{N''}$ *ber-e*] $[_{N'}$ *e*]] [*-a*]] 'his own'), the slight difference between (67) and (68)-(69) need not bother us here. Let us rather consider what SUBJETs are, and what accessibility means. Although Chomsky gave no precise definition of the former in his *Lectures...,* we can safely infer (70) from the p. 209 of that book:

(70) (a) the SUBJECT of an untensed sentence or an NP is its subject;
(b) the SUBJECT of a tensed sentence is AGR, the nominal constituent of INFL.

Here is a comment made by Chomsky himself: "The notion SUBJECT accords with the idea that the subject is the 'most prominent nominal element' in some sense, taking INFL to be the head of S"." (same page)

As for accessibility, it can be defined as follows:

(71) A is accessible to B iff B is in the c-domain of A and assignment to B of the index of A would not violate the well-formedness condition (72) [p. 212].

(72) *$[_X$ ... Y ...] where X and Y bear the same referential index and Y is not the head of X (p. 229, note 63).

4.11.1. Let us therefore investigate the consequences of the system (67)-(72), starting with NP's as potential binding categories for [+R] possessives (the case of untensed sentences will be dealt with in 4.15.). First consider the NP (61) of (60): *beren* is governed inside it, and the NP contains a SUBJET accessible to it, namely its subject *heien:* the assignment of the index of *hein* to *bere* would not violate (72), since none of the categories which dominate *beren* (N'_3, N''_3, PP, N'_1, N''_1) would bear that same index. What is more, the only nominal element in N''_1 which c-commands *beren* and whose index, when attributed to *beren,* would not violate (72) is *heien:* the latter is consequently the only possible binder for the possessive anaphor.

Consider (62) next: the focussed NP (the only non-empty one in the sentence), must likewise be considered the binding category for the lower possessive (*heien* or *beren*) since *ene* is an accessible SUBJET. However, anaphors must be bound in their binding category, and no nominal element c-commanding *beren* in that NP may pass on its index without thereby violating (72) — except *ene* 'my', but the differences in person and number rule out the coindexation. So, as was recognized, (62) with *beren* instead of *heien* is ungrammatical.

4.11.2. Let us now turn to NP's in which *bere(n)* is the subject, as in most of the examples examined in this paper. We certainly do not wish to say that, in such cases, *bere(n)* is its own accessible SUBJET (Manzini, *op. cit.* has made the same remark): intuitively, it would not make any sense, since anaphors have no inherent index, and the very idea of it is barred, if not by the letter of (71), but at least by its spirit: any nominal element would be its own accessible SUBJET. Note too that, if, by Chomsky's

definition, items do not c-command themselves, they must nonetheless belong to their c-domain (hence the fact that 'them' is both an accessible SUBJET and a binder for 'each other' in 'for them to hate each other...'). Let us consequently rephrase (71) more carefully:

(73) A is accessible to B, $B \neq A$, iff B is in the c-domain of A, and assignment to B of the index of A would not violate (72)[29].

NP's whose subject or SUBJET is *here(n)* can now clearly no longer be its binding category. Let us therefore look at the minimal s which dominates them as in (37a), repeated here as (74a), and as in the embedded clause or (38b), transformed into the root sentence (74b):

(74) (a) $[_{N''_1}$ *Peiok*$_1$] $[_{N''_2}[_{N''_3}$ *here*$_X$] *zakurra*$_2$] *jo du* (/d_2-*u*-$Ø_1$/)
'Peter$_1$ has beaten his$_1$ dog$_2$'
(b) *$[_{N''_1}$ $[_{N''_2}$ *here*$_X$] *zakurra*$_1$] *hil da*$_1$
*'his$_1$ dog$_2$ has$_2$ died'

The grammaticality of (74a) appears as an illuminating consequence of the poly-personal conjugation of Basque (see 3.1. & 3.3.): contrarily to English or the Romance languages, AGR in Basque may consist of several distinct nominal elements; hence, a simple sentence may have several distinct SUBJECTs, each of which can be a potential SUBJECT and binder for an anaphor like *here.* In the case of (74a), the accessible SUBJECT is the ergative suffix -Ø of *du 'he* has it': the attribution of its index to *here* would not violate (72), since *here* would have index 1, whilst N"$_2$ has the index of its head, 2.

Note however that since *Peiok* is in topic or T position here, it is outside S proper: therefore, it does not belong to the binding or governing category for *here.* The latter's binder must consequently be the *trace* it left behind in V' when it was moved into the T position (since there is no reason to posit that *here* must be non-A-bound, and since the SUBJECTs in AGR are not A-positions, they cannot be binders either): this confirms that Basque does have at least one type of empty nominal element (distinct from the *e* connected with the pro-drop parameter), namely, variables.

The ungrammaticality of (74b) is even more straightforward: the only potential SUBJECT in S is the nominal element *d-* of *da* 'it-is', but it is not accessible to *here,* since the assignment of its index to the latter would result in *here* and *here zakurra* having the same index, a typical violation of (72).

4.11.3. Consider now (38b), repeated as (75), in its entirety:

(75) *$[_{S*}$ *here zakurra hil dela*] *esan dit Peiok*
here dog-sg died that-it-is said he-has-it-to-me Peter-*k*
'Peter has told me that his dog has died'

Since the *d-* of *dela* (the "completive" form of *da*) is not accessible to *here,* we should ask if any one of the three nominal elements of *dit* (/d_A-i-t_B-$Ø_C$/) is. Note

(29) This modification would also take care of other definitions of c-command, according to which that relation is reflexive (see T. Reinhart 1983 for an example).

that the absolutive prefix can be analyzed here as referring either to an empty (pro)nominal element, or to the embedded S* clause; *-t-* is 1st p. sg. dative, and Ø, once more, is 3rd p. sg. ergative: this very element, at least, should be an accessible SUBJECT for *here,* thereby rendering the sentence grammatical. But, in the dialects described here, it is not. Therefore, the requirement (69) is not strong enough, and should be replaced by:

(76) A tensed sentence is a binding category for a [+R] possessive[30]

4.12. A final exemplification of the principles developped so far is provided by (77b), a paraphrase of the regular case (77a):

(77) (a) *Peio here lagunarekin etorri da*
P. *here* friend-sg-with come-perf he-is
'Peter$_1$ has come with his$_1$ friend'
(b) *Peio eta haren/??here laguna etorri dira*
and they-are
'Peter$_1$ and his$_{1(/2)}$ friend have come'

How can we account for the quasi-ungrammaticality of *here* in the (b) sentence? Note that the auxiliary refers to only one (plural) absolutive NP (or its trace). So the structure of the nominal category N" must be (leaving irrelevant details aside):

(78) $[_{N"_1}[_{N"_2}$ *Peio*] *eta* $[_{N"_3}[_{N"_4}$ X-*en*] *laguna*]]

Suppose that X is [+R]; $N"_2$ is not the SUBJECT of $N"_1$, so we must look for a SUBJECT at the sentence level, i.e. in INFL. Now it happens that the nominal element there is 3rd p. pl., and thus *overlaps* with the referent, of $N"_3$, so that (72) is neither totally violated, nor really respected[31]; consequently, the accessibility of the only potential SUBJECT for *here* is at best doubtful.

Note that the situation is not any better if another argument is added, as in:

(79) *nik, Peio eta haren/??here laguna ikusi ditut*
I-*k* seen I-have-them
'(as for me) I have seen Peter$_1$ and his$_1$ friend'

Here, SGR consists of two nominal items, *dit-* (3rd p. pl. absolutive), and *-t* (1st p. sg. ergative). Assigning that 1st p. index to *here* would no longer violate (72). However, the only potential binder now is *Peio* again, since *here* and *ni(k)* disagree in per-

(30) Assuming that Polish *swój* and Latin *suus* are anaphors, it is worth while noting that these possessives are regularly excluded from subject NP's in root-sentences, since INFL contains only one nominal element in these languages, namely, the one which is coindexed with the subject or nominative NP: their presence in such NP's would be another violation of "i within i" (72) (see however note 33). But Latin and Polish also differ from each other, because the equivalent of (75) would be acceptable in Latin, while it would not in Polish. It is thus possible that the choice between (69) and (76) should be a matter of parametric variation: Polish, like northern or classical Basque, would make use of (76), whereas Latin would be characterized by the option (69). Note however that the use of *suus* in Latin may even be freer than is allowed by (69) —see Milner (1978)— and that this is definitely the case as far as southern Basque dialects are concerned.

(31) We have here a typical case of doubtful acceptability exemplified in English by the type 'if we look at ??me/*myself in this picture'.

son. Now, remember that in tensed sentences, the binder must be coindexed in INFL; given that *Peio* as such is not coindexed in the finite auxiliary, we have exactly the same problems of overlapping as in the (77b) case.

4.13. Let us summarize what has been uncovered up to now. *Bere* and *beren* are anaphors, and must consequently be bound in their binding category, as defined by (67) or (68)-(69), associated with (70), (72), (73) and (76). We have also established that when the binding category is an NP, the only possible binder for these anaphors is its own SUBJECT. Besides, the traditional (and empirically justified) account of which items can bind the [+R] possessives when the binding category is a tensed sentence makes reference to a morphological fact, the necessity for the binder to be coindexed in the finite verb form: again, reference to SUBJECThood must be made. More specifically:

(80) A [+R] possessive must be bound by a SUBJECT or a nominal element (possibly empty) coindexed with a SUBJECT:

SUBJECTs thus seem to play a prominent role in the area of Basque syntax whe have been examining: not only do they appear in the definition of the binding category, they also appear in the definition of the binders (I will return to this question in the conclusion by defining there the notion "SUBJECT-bound"). Remember in particular that the traditional notion of "subject" of a tensed sentence does not play any role here: Basque being non-configurational and having furthermore a poly-personal conjugation, let us repeat that there is apparently no reason to privilege the agent over the patient —if "subject" as a grammatical function may be thus defined (in quasi-Fillmorean terms) at D-structure for all languages, configurational or not.

4.14. This fact ought to have consequences in other areas of Basque grammar. I will illustrate this in the next with the binding of *bere(n)* in non-tensed clauses, but will first make a short remark concerning the allocutive personal affixes described in 3.2. It was suggested there that the addressee suffixes did not originate in INFL, but in COMP. This is confirmed in classical Basque (which, as was mentioned in 4.2., also had 1st and 2nd p. [+R] possessives) by the fact that those affixes never triggered the presence of a [+R] possessive: such ambiguous auxiliary forms as *duk* 'you-have-it' or 'it-is-[+Alloc]' were even disambiguated when a second p. possessive surfaced in an NP, as in:

(81) (a) *eure hisdura ikusten duk*
your-[+R] sadness-sg seeing *duk*
'you (can) see your (own) sadness'

(b) *hire hisdura ikusten duk*
your-[-R]
'your sadness is visible' [lit. '... is (a-) seeing']

(See Sarasola 1980 for details.) It is thus clear that the allocutive affixes are not SUBJECTs, and that they consequently cannot be considered to be "syntactic" elements in any usual sense of the word[32].

4.15. Let us turn to untensed sentences. Obviously, the first question is whether [+R] possessives are bound by some element inside such sentences, or, possibly, by an

(32) Contrary to what Wilbur (1979) explicitly stated.

external (superordinate) item (remember that the binding of *here* is unbounded —4.8.). Consider:

(82) *Peiok ni ikusi nau* [$_{S*}$ *haren/*here lagunarekin mintzatzen*]
P. *-k* I-abs seen he-has-me friend-sg-with speaking
'Peter$_1$ has seen me talk(ing) to/with his$_{1/2}$ friend'

Why should *here* be blocked when the intended referent for the possessive is *Peio(k)* in the matrix sentence? There are three possibilities:

(a) S* is a binding category for *here,* even though it is not finite, and there is an empty SUBJECT in S* (the "understood" "subject" or SUBJECT of *mintzatzen,* i.e. *ni* (1st p. sg. absolutive)) which is accessible to *here,* but cannot bind it because of the difference in person specification. Note in this respect that (83) is grammatical and unambiguous:

(83) *Peiok Mayi ikusi du* [$_{S*}$ *here lagunarekin mintzatzen*]
'Peter$_1$ has seen Mary$_2$ talk(ing) to her$_2$ friend'

(b) We may also postulate that such empty elements do not exist, and that untensed sentences are not binding categories for [+R] possessives. This is obviusly a wrong hypothesis: both *Peiok* and *(ni)* (or rather their corresponding affixes in the auxiliary *nau*) would be accessible SUBJECTs in the matrix sentence of (82), and the former, which has the same person and number specifications, would be a perfect binder for *here,* but this contradicts the ungrammaticality of (82) with *here* rather than *haren.*

(c) Finally we could imagine that S* is a binding category for *here,* even without there being any SUBJECT in it: all sentences, tensed or not, would be binding categories, and would have to be characterized as such independently of (67) or (68) — an obvious redundancy in the approach admittedly. So, in (82), *here* would also be ruled out, because it could find no binder in S*: in this particular case, descriptive adequacy would also be achieved. But it would no longer be the case with (83): if S* were a binding category with no empty SUBJECT NP, *here* should be just as ungrammatical in (83) as in (82).

So, solution (a) is the only empirically possible one; the principle (76) can accordingly be generalized to:

(84) A sentence is a binding category for a [+R] possessive.

4.16. It being clear that untensed sentences may have empty SUBJECTs, it is natural to investigate their nature. The first, and most natural, assumption is that they are PRO's. Now consider a sentence like (85), in which S*, were it tensed, would have three SUBJECTs (cf. (57b), (58) and the comments which accompany those examples):

(85) *nik Mayi ikusi dut* [$_{S*}$ [*e*] *here dirua Peiori itzultzen*]
I-erg M. seen I-have-her money-sg P.-to returning
'I have seen Mary$_1$ giving her$_1$/his$_2$ money back to Peter$_2$'

Probably owing to the semantics of *itzuli* 'return(ed)', the interpretation of *here* as coreferring with *Peio(ri)* as well as with *e* (=*Mayi*) is not problematic at all; in other

words, (85) is indeed ambiguous and, if (80) is correct, both [*e*] and *Peio(ri)* are SUBJECTs of S* — and the absolutive NP *bere dirua* must be one too. Consequently, just as tensed sentences may have (depending on the semantics of the verb) up to three SUBJECTs, so may untensed sentences too. What is more, certain NP's, whose heads are actually deverbal nouns, also have several SUBJECTs:

(86) [$_{N''}$ *gizon batek bere laguna bere emaztearekin aurkitzea*] [ADJ] *da*
man one--*k bere* friend-sg *bere* wife-sg-with finding-sg it-is
'[for a man$_1$ to find his$_1$ friend$_2$ with his$_{1/2}$ wife] is [ADJ]'

The absolutive singular *-a* ending of *aurkitzea* precludes any sentential interpretation of N"; note furthermore that, for many speakers, a genitive suffix (*-en*) on *bere laguna* would be at least as natural as the absolutive zero one. In any case, the second *bere* has two accessible SUBJECTs (*gizon bat(ek), bere laguna*), and the two of them can bind it (remember that *-ekin* NP's or PP's may never be binders, so that the *bere* of *bere laguna*, on the other hand, is not ambiguous). Consequently, what was up to now assumed to be a crucial property of tensed sentences, viz the option of having several SUBJECTs, is in fact a characteristic they share with both untensed sentences and NP's. This, of course, does not invalidate (80), but the definitions in (70) should be revised accordingly —a question to which I return in more general terms in the conclusion.

4.16.2. Besides, it should be clear that nominalized verbs and deverbal nouns (properly) govern, and assign case to, their SUBJECTs —before they are moved, taking into account the fact that all the nominal material in the S* of (85) is to the left of the verb, and that the SUBJECTs of the head-noun *aurkitzea* of (86) also are to the left of it —just as verbs in tensed sentences do.

So, if we want to retain the idea that S* in (85) contains a PRO element, we must posit that it also contains a trace of the latter (as well as a trace of the two phonetically non-null elements), since PRO *has* to be moved into a non-A position so as not to be governed:

(87) [$_{S*}$ [$_1$ PRO$_1$] [*bere dirua*$_2$] [*Peiori*$_3$] [*itzultzen* e$_1$ e$_2$ e$_3$]]

This analysis finds further support in the fact that, last but not least, *bere* may appear in some root-sentences in which there is no apparent binder for it. Compare thus (88) (a), an ordinary construction, and (b), in which the ergative affix *-Ø* on *du* 'he-has-it' necessarily has a specific (although extra sentential) referent, with (c):

(88) (a) *bakoitzak bere lana egin behar du*
each(-one)-*k bere* work-sg do(ne) need he-has-it
'everybody$_1$ must do his$_1$/their$_1$ job'
(b) *bere lana egin behar du*
'he$_1$ must do his$_1$ job'
(c) [$_{N''_1}$ *bere*$_2$ *lana*$_1$] *egin behar da*$_1$
'one must do one's (own) job'

The inflected auxiliary *da* 'he/it-is' in (c) is intransitive, and its nominal affix *d-* refers to N"$_1$: there is no possible, phonetically non-null, ergative NP to bind *bere* here, but the sentence is grammatical, although (74b) for instance was not. (Subs-

tituting *haren* for *bere* would convey something like: 'one$_1$ must do his$_2$ job'). Where does the difference between (74a) and (88c) lie then? In all probability in the fact that *hil* 'die, died' does not necessarily presuppose the existence of a second argument (wen there *is* one, the translation is, of course, 'kill, killed'), whereas *behar* does imply the existence of a being to whom the deontic modality applies. Suppose that this being is linguistically represented by PRO (with an obviative, rather than proximate, value, of course). Since PRO must not have case, it may neither be governed by *egin* 'do, done', nor be coindexed in INFL. Consequently, it must be moved into a non-A position most probably to the topic position (note that (88) (a) and (c) are very close in meaning), and the finite verb form will not carry any affix referring to it. A more complete representation for the S-structure of (88c) would thus be:

(89) [$_{S''}$ [$_T$ PRO$_1$] [$_{S'}$[$_F$ *bere*$_1$ *lana*$_2$] [$_S$ *egin behar da*$_2$ e$_1$ e$_2$]]]

It follows that, in an NCL like Basque, even tensed sentences may have PRO's, and that, given the opportunities offered by the polypersonal conjugation, the SUBJECTs of a tensed sentence must finally be defined either as the nominal affixes in INFL or as PRO[33], a matter which definitely deserves further study.

4.17. Before concluding, I must come back to the oppositin between *bere* and *haren.* I showed in 4.2 that there were, theoretically, two possible syntactic analyses for the NP's whose possessive was the latter. More specifically, the question was whether *haren* was a pronominal (hence subject to the theory of binding), as in (42c), or not, as represented by (42b). Now consider:

(90) *Mayi*$_1$ *ikusi dut* [$_{S*}$ PRO$_1$ *haren dirua*$_2$ *Peiori*$_3$ [*itzultzen* e$_1$ e$_2$ e$_3$]]
'I have seen Mary$_1$ give his$_{3/4}$ money$_2$ back to Peter$_3$'

(90) differs from (85) by the fact that *haren* has been substituted for *bere.* What is remarkable here is that *haren,* which cannot corefer with *Mayi,* may, although it need not, corefer with *Peio(ri).* This is therefore a case of overlapping between the domain within which the anaphor *bere* must be bound, and that in which the non-anaphor *haren* may be.

It seems that two different solutions should be investigated (I will only mention them, because I have no argument to prefer either the one or the other). First, as A. Rouveret (p. c.) has suggested, it is possible that the notion of accessible SUBJECT should be relevant for anaphors only, and that pronominals (among which, according to this first hypothesis, *haren* would be included) have a larger domain than the complementary domain of the binding categories. This, of course, implies a drastic revision of the Pisan theory of binding, according to which pronominals must be free in the very domain in which anaphors must be bound.

This classical theory of binding can be maintained, though, if we adopt the analysis (42b) rather than (42c) of (42a) or & 4.2.: if *haren* and other demonstratives are always determiners, they are never arguments, and may never be governed. Con-

(33) Note that in Polish too the [+R] possessive *swój* appears in such contexts: *trzeba zrobić swoja prace* — lit. "necessity make one's work" — is perfectly grammatical; here, however, *trzeba* is not inflected, and an ellipsis of *jest* 'it is / there is' may be postulated (cp. *trzeba było...* 'there was *trzeba...*' in the past).

sequently, the theory of binding (and government) is irrelevant — in fact, no theory at all should be expected to account for the referential value at all: the question now is rather what the empty element *e* or (42b), repeated her as (91), really is, and which subtheory is needed to account for its indexing or coindexing:

(91) $[_{N''}[_{N'}[_{N''}[_{N'}\ e]\ [_{D}\ haren]]]\ [_{N'}[_{N}\ zakur\text{-}]]]\ [_{D}\ \text{-}(r)]]$
e his-[-R] dog sg
'his dog'

Here, it is not certain that [*e*] is governed, since it stands for N' rather than N" (which was the case of *here*). So, again, it may be PRO, but given that the pro-drop parameter applies to the three NP's possibly coindexed in INFL, and since, consequently, the empty elements in such sentences as (29) (a-c) cannot be PRO's, [*e*] in (91) may must as well be the empty category[34]; once more, I must leave this question unanswered.

5. Conclusions and pending questions

5.1. Constituent order and the poly-personal conjugation.

5.1.1. At least one basic problem of Basque syntax has (hopefully) found a solution here: the characteristic freedom of NP and PP positioning can be accounted for by the following subset of PS rules and the transformation Move-α[35]:

(92) (a) S* = S''' → COMP [±ALLOC] S''
(b) S'' → (T) S'
(c) S' → (F) S
(d) S → (INFL) VP
(e) INFL → (Aspect) (NEG) Tense AGR
(f) VP = V'' → (F*) VV'
(g) V' → V NP^{n}_{0}, PP^{n}_{0}

(The comma between NP^{n}_{0} and PP^{n}_{0} in (g) indicates that, pending further analysis, these constituents may be deemed unordered).

5.1.2. It follows from (92) that all the positions outside V' are non-A positions (to which the NP's and PP's may be moved — F of (c) being reserved for WH-words which must be moved there), this being taken to be the criterial property defining Basque (and probably other languages) as a Non Configurational Language.

5.1.3. Basque conjugation being poly-personal, INFL may contain up to three pronominal elements or SUBJECTs, corresponding to the absolutive, dative and ergative morphological cases (but the nominal material originating in COMP if the latter is [+ALLOC] never counts as such). Moreover, the language being positively marked for the pro-drop parameter, no NP need surface at all.

(34) The example (88c) precludes an analysis of (29) in which the PRO's would be moved to the non-A positions to the left of V so as to allow the sentences to be grammatical: these empty elements cannot be PRO since INFL incorporates their indices; see also Rizzi's (1982) discussion on the nature of empty subjects in Italian.

(35) Of course, this does not mean that the very short remarks I made on the functional content of T, F and F* exhaust their analysis-either at LF or anywhere else.

5.2. The reflexive possessives and the theory of binding.

5.2.1. The rewriting rules for PP's and NP's consist in particular of the following:

(93) (a) $PP \rightarrow NP\ P$

(b) $NP = N'' \rightarrow N'\ Det$

(c) $N' \rightarrow \left\{ \begin{array}{c} (PP^{n\ddot{o}},\ (NP^{n\ddot{o}})\ N'\ (AP^{n\ddot{o}}) \\ N \end{array} \right\}$

Just like tensed sentences, NP's may have up to three SUBJECTs, to be found among the NP's to the right of the arrow in (c).

5.2.2. One of these may be realized by a possessive anaphor, which typically surfaces in the genitive as *bere*, and which must be "SUBJECT-bound" in the following sense:

(94) A is SUBJECT-bound iff it is bound by B, B either a SUBJECT, or an NP coindexed with a SUBJECT

binding being in its turn defined as in Chomsky (1981, chap. 3); note that beside (95a), Basque (like perhaps other NCL's) also requires (95b):

(95) (a) D is a binding category for A iff it is the minimal category which contains A and a SUBJECT accessible to A.

(b) a sentence is a binding category for reflexive possessives.

5.2.3. Finally, it is the definition or SUBJECTs which raises the greatest difficulties; according to our findings, the following definition may be proposed:

(96) Can be considered as SUBJECTs:

(a) PRO('s) in all sentences:

(b) in tensed sentences, the nominal material in INFL coindexed with argument NP's;

(c) in untensed sentences and NP's, the NP's in the genitive and those NP's which bear the same morphological cases as the ones represented in INFL in tensed sentences.

Note that it is impossible to reduce this definition to: "all NP's bearing the absolutive, dative, ergative or genitive cases are SUBJECTs":

(i) we saw in 4.6.2. that dative NP's as such do not constitute SUBJECTs (or possible binders for *bere*) when they belong to a tensed sentence but are not coindexed in INFL;

(ii) in passive sentences, in which the agentive complement is still usually in the ergative, but in which it is not coindexed in INFL, this NP cannot be an accessible SUBJECT or a binder for *bere*[36]; thus, the reflexive possessive is acceptable in (a) but not in (b):

(97) (a) *bere aitak zigortu du Peio*
bere father-sg-*k* punished he-has-him P.
'(it's) his_1 father (who) has punished $Peter_1$'

(b) *haren/*bere aitak zigortua da Peio*[37]
'it's by $his_{1/2}$ father that $Peter_1$
is [= has been] punished'

(36) See Rebuschi (1979a, b) for a relational approach to Basque passives.

(37) The perfective participle *zigortu* has become an adjective in the passive sentence, as is shown by the sg. suffix *-a* which exemplifies number agreement between passive subjects and the predicate.

5.3. Other issues.

Beside the plurality of SUBJECTs, the analysis developed in this paper has many far reaching consequences. In particular, the assumption that syntactic Case is a linguistic universal should be questioned, since INFL cannot assign Case to any NP, maximal projections such as VP being "absolute barriers to government" (Chomsky, *id.,* 164), and all NP's being c-commanded by V at D-structure under our interpretation: the question which really seems to deserve attention here is rather that of the relationship between θ-roles and morphological cases.

The notion of "subjecthood" and of "grammatical function(s)" raises another problem, logically connected with the preceding one: if "Nominative Case" should prove to be inoperative in Basque, what would remain or *subjects?* (The same question could have been put directly as a possible consequence of there being up to thre SUBJECTs in simple sentences). In other words, when SUBJECTs appear to be a subset of (verb) complements, as they do in Basque, subjecthood can no longer be taken for granted — something which is confirmed by the difficulty or establishing a clear control theory in Basque, as is illustrated by the following example:

(98) [*badut norbait* [e e *zaintzeko*]]
positive-part.-I-have-him someone to-keep
(i) 'I have someone to keep' / (ii) 'I have someone to keep me'[38].

In any case, it seems that whatever lies beneath the notion of subject is clearly something much more operative in poly-personal conjugation languages like Nahuatl or Swahili, which exhibit a nominative-accusative case system and/or surface syntax, than it is in a language like Basque, which has an absolutive-ergative morphology in both its nominal and its verbal systems.

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(38) See Rebuschi (1982, chapter 5) for a skeptical appraisal of much work defending the idea that Basque has as strong "subjects" as any nominative-accusative language (e.g. Heath 1972 or, after him, Anderson 1976).

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