Verb Movement
and
Constituent Permutation in Basque
Promotiecommissie

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Abbreviations in glosses

Basque:

det  determiner
nom  nominalizer (nominalization morpheme)
abs  absolutive
erg  ergative
dat  dative
part partitive
ppart past participle
asp  aspectual morpheme
aux  auxiliary
pl  plural
fut  future
C  complementizer
rel  relative complementizer
relat relativizer
perf perfective participle
pres present tense
past past tense
sg  singular
gen  genitive
imp  imperfective participle
evid evidential marker
loc  locative
cl  clitic
1p  first person
2p  second person
3p  third person

Warlpiri:
Refl reflexive morpheme

Mohawk:
Punc punctual (aspect)
Ben benefactive
Poss possessive
Habit habitual (aspect)

Hungarian:
Inst instrumental
Prev preverb
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Chapter 1: Issues and Proposal

1.1. Issues and Challenges

1.1.1. Basque as a SOV language

Ever since Greenberg (1963), Basque has been characterized as a language with dominant, but not exclusive, S(bject) O(bject) V(erb) word order. Indeed, Basque conforms to some of the generalizations about (S)OV languages which have been stated in the typological literature: for instance, the fact that Basque has postpositions (instead of prepositions) (see (1a)), that the auxiliary follows the main verb (cf. De Rijk 1969) (see (1a-b)), and that the complementizer follows the subordinate clause (see (1c)):

(1) a. Mikel Praga-ra joan da
    Mikel Prague-to go aux
    "Mikel has gone to Prague"

b. Azken urte-etan lan baldintzak asko okertu dira
    last year-pl.in working conditions much worse aux
    "For the past few years working conditions have got worse and worse"

    Jon [car-det today return-fut aux-Comp promise aux
    "Jon has promised that he will return the car today"

However, in comparison with other V-final languages, Basque displays a more consistent head-final pattern, except in the functional domain, as will be discussed in later chapters (see chapter 2, section 3). Thus, for example, the determiner is attached to the rightmost element of the noun phrase, and relative clauses must precede their nominal heads (cf. De Rijk 1969). These facts have led most Basque linguists to postulate a left-branching syntactic configuration for Basque, according to which the verbal head occurs in final position, taking its complement(s) to the left (De Rijk 1969, Goenaga 1978, Eguzkitza 1986, Ortiz de Urbina 1989, Laka 1988, among many others).
The implicit assumption in the tradition of most descriptive as well as generative grammars of Basque is that SOV is the basic order in Basque, since this is the unmarked order in the language (see the references cited above). Furthermore, statistically speaking, the SOV order is also the most frequent or predominant order, both in main and in embedded clauses, according to De Rijk (1969). Thus, on the assumption that the most frequent order is the unmarked one, and that the unmarked order is the order that preserves best the order in underlying structure, De Rijk argues that “we may take this predominance as an argument for an SOV order in Deep Structure” (de Rijk 1969:325).

However, the use of relative frequency to determine which order is most basic in a particular language has been criticized by many (e.g. Lehmann 1976, Dryer 1998). Moreover, it should be emphasized that linguistic constructions in which a sentence has all its nominal arguments overtly specified are far from frequent in Basque. This fact derives from the pro-drop nature of Basque, which allows null subjects and null direct and indirect objects. Accordingly, the relative frequency of the SOV order depends heavily on conditioning factors such as the type of discourse, or the type of text, which may regulate whether nominal arguments have to be fully specified or not. In addition to this, the relative free variation in the surface order of the constituents of a sentence in Basque makes it difficult to determine which is the basic order of the language.¹

Nevertheless, the assumption that there is a basic (underlying) order from which the other possible orders are derived seems necessary in any case. In fact, unless we assume this, it is problematic for us to explain why certain constituent orders are unacceptable while others render perfectly well-formed sentences, as well as to account for the different degrees of grammaticality that arise depending upon how and which constituents appear ordered in a certain way in a given sentence. Therefore, following the tradition, I will assume that Basque has a basic word order, which is to be identified with the order found in unmarked contexts (cf. also Croft 1990, Dryer 1998). Given that the unmarked order in Basque is S(IO)OV (cf. de Rijk 1969, Ortiz de Urbina 1989, Laka 1988, Artiagoitia 1992, Fernandez 1997), the effects of the assumption that the basic order is the unmarked SIOOV order will be shown to derive the possible permutations in the constituent order in Basque. Secondly, it will be shown that a number of facts related to stress and focus effects are derived from this

¹ As a matter of fact, the presupposition of the existence of anything like a basic order has been called into question in Aske (1998). He claims instead that all alternative permutations are equally “marked”, in the sense that each of them is associated with a certain meaning and use. Hence, in his view there is no point in trying to find a basic order from which all the different orders are derived. But then he cannot account for the configurational asymmetries found among the constituents of a sentence with regard to e.g. binding and scope, which will be discussed in the following chapters.
assumption, as will be extensively discussed in the following chapters (see, especially, chapter 4).

1.1.2. Postverbal arguments as a result of leftward V-movement

Directly related to the issue of a basic word order, Kayne (1994) proposes that the directionality parameter (head-initial vs. head-final configurations) should be dispensed with in favour of a universal Specifier-Head-Complement configuration. If this hypothesis is on the right track, then all instances of head final constructions should be viewed as derived structures. This in turn means that the basic OV structure I am assuming for Basque should rather be considered as a derived structure (cf. Ormazabal, Uriagereka & Uribe-Etxebarria 1994, Albizu 1995, and G. Elordieta 1997a for an antisymmetric approach to the basic order of Basque). The background assumption of this hypothesis is that the basic head-complement (henceforth V-XP) order is transformed into the XP-V order by moving the dependents of the head to the left of the head. If we combine this with the view, put forth in Chomsky (1995), that argument displacement is related to the presence vs. absence of morphological features on functional heads which regulate the application of operations such as Merge and Move, we predict that only those phrases that have to check features move. As a consequence, all other V-XP properties should remain constant in both V-XP and XP-V structures.

However, adopting this view for Basque gives rise to a number of empirical consequences that are at odds with the Basque facts, such as the distribution of VP-internal manner adverbs (see chapter 5), the position of the auxiliary, or the order of verbal heads in restructuring constructions (cf. also Haider 1997 for similar criticisms on the basis of German data).\footnote{Furthermore, adopting a strict antisymmetric approach to Basque word order is costly, since in order to derive the generalized surface complement-head orderings, it implies more complicated derivations, often lacking a motivation for the alleged movement operations.} Consider the position of manner adverbs, for instance. The unmarked order of a Basque transitive clause with a manner adverb is S-O/PP\textsubscript{compl}-Adv-V-Aux, as exemplified in (2):

(2)  
\begin{enumerate}
  \item a. Irakasle berriak arrietak ondo azaltzen ditu  
      teacher new exams well explain aux  
      "The new teacher explains the problems well"  
  \item b. Aitak Joseba-rekin argi hitz egin du  
      father Joseba.with clearly talk aux  
      "My father has talked clearly to Joseba"
\end{enumerate}

Under a strict antisymmetric approach, the S-complement-Adv-V order is a derived
order. The preverbal position of the object is the result of moving the object to the specifier position of a functional projection to the left of the verb. This movement is arguably triggered by the need to check the Case/agreement features of the object and the verb. Suppose this analysis is correct. But then, the occurrence of PP complements in preverbal position (2b) would be left unexplained, since PPs do not have to check Case or agreement features. Not only that, we would also expect that the manner adverb should appear postverbally, since it has no features to check. If there is no reason for the adverb to move, it should stay in-situ, by economy. In fact, this is precisely the pattern we find in VO languages, that is, manner adverbs like well appear postverbally. 3

(3) a. The professor gives his lectures well
    b.*The professor well gives his lectures

For these reasons, I will not consider Kayne’s Specifier-Head-Complement hypothesis to hold universally. However, I will provide some evidence that argues in favour of one of the corollaries assumed in the antisymmetric framework: that there is no phrasal rightward movement (the arguments in support of this are provided in chapters 3 and 5). In the Antisymmetry theory, the prohibition against right-adjunction and rightward movement is a direct consequence of the Linear Correspondence Axiom (LCA). The LCA states that there is a strict correlation between word order and hierarchical syntactic structure (Kayne 1994). Accordingly, if a constituent precedes another one, the former must be structurally higher than all phrases it precedes, and vice versa. However, in typical contexts of right-adjunction, those derived from rightward movement, as well as base-generated right-adjunction, the right-adjointed phrase is structurally higher than some of the constituents to its left. This clearly violates the LCA, so right-adjunction is banned. On these grounds, the apparent effect of right-dislocation we obtain in many languages is thus explained as the result of movement of the material which precedes the allegedly dislocated phrase to the specifier of a higher category, either by a single phrasal movement, or by remnant XP-movement. In this respect, the study of postverbal constituents in Basque raises challenging issues, particularly when binding and scope considerations come into play (see chapters 3 and 5). Recall that I assume that Basque is V-Aux final. Thus, at first sight, it might seem as if the occurrence of postverbal arguments can be handled by postulating that they undergo right-dislocation. However, as I argue in chapters 3 and 5, no rightward movement is involved; instead, these constructions involve leftward movement of the complex verb [V-Aux] to a functional head position to the left of the allegedly right-adjointed phrase(s) (cf. chapter 5).

3 In chapter 5, section 5.2 I will provide an explanation of the word order patterns observed in VO and OV languages concerning the position of manner adverbs and verbal complements.
1.1.3. V-Aux raising

With respect to the issue of verb movement, there is a crucial property to which I would like to briefly refer here. We mentioned earlier that in unmarked declarative clauses the verb appears in sentence final position in Basque. This holds regardless of whether the sentence is embedded or not (differing thus from the Germanic OV languages that show a V-final pattern only in embedded contexts):

(4) a. Jon-ek Gorka-ri etxe-a saldu dio
    Jon-erg Gorka-dat house-det sell aux
    “Jon has sold the house to Gorka”

b. [Jon-ek Gorka-ri etxe-a saldu dio-la] entzun dugu
    Jon-erg Gorka-dat house-det sell aux-that hear aux
    “We heard that Jon has sold the house to Gorka”

While this is true, it is noteworthy that in interrogative and focus constructions Basque displays the behaviour of a “residual” verb-second language (cf. Rizzi 1991), in the sense that in these contexts we find a verb-second (V2) effect between the operator-like element sitting in [Spec,CP] and the complex verb (V-Aux), similar to the V2 phenomenon of Germanic languages discussed in Den Besten (1983) (cf. Ortiz de Urbina 1989). This is illustrated in (5a) and (5b), respectively (for ease of exposition, I omit traces other than the trace of the base-position of the complex V-Aux verbal head):

(5) a. Nor-i [saldu dio], Jonek etxea t,?
    Who.dat sell aux Jon.erg house.det
    “To whom has Jon sold the house?”

b. Gorka-ri [saldu dio], Jonek etxea t
    Gorka.dat sell aux Jon.erg house.det
    “Jon has sold the house to Gorka”

Given this, most accounts of word order in Basque assume that the syntax of wh-phrases and that of focused phrases is similar. However, I will point out a number of asymmetries between wh-constructions and focus constructions in the field of crossover effects, which as far as I know are pointed out here for the first time (see chapter 4, section 4.3.2, 4.4.3.2), and raise a problem for the view that the verb-second effect observed in the two contexts is of the same nature. The challenge of the present study will be to develop an analysis of focus constructions in Basque that will account for the verb second effects as well as for the differences with respect to wh-
constructions and focalizations.

An issue that is closely related to the word order phenomenon is the correlation existing between rich morphological agreement and free word order, an old idea elaborated in Jelinek (1984) and Baker (1996). The essential idea behind this hypothesis is that in certain languages lexically specified DPs can appear freely distributed within the clause because the rich morphological agreement encoded in the verbal-like element permits them to do so. Given that Basque has rich agreement morphology, and that clausal constituents display a relatively flexible word order, the possibility of considering Basque in the light of this hypothesis deserves special attention. This will be addressed in the next section.

1.2. The free word order puzzle

In this section I will briefly review the main approaches which have been propounded in the literature in relation to the issue of free word order, in particular those concerning the configurationality issue, and I will discuss this question with respect to Basque.4

1.2.1. Basic word order and free word order

When we say that Basque has 'free word order', we simply mean that, e.g. given a sentence with four constituents, all possible 24 permutations are grammatically well-formed. Of course, in actual usage, some of these orderings are remarkably rare, and they need a very specific context in order to be uttered. But, grammatically, they are all well-formed. The issue therefore may arise as to whether it can be argued that there is a 'basic word order' in the language at all. Put it differently, one may wonder whether variations in Basque word order are the result of movement, or whether Basque can be grouped together with non-configurational and polysynthetic languages, which also display freedom of word order, but for which there is no evidence for the assumption that a particular basic order is projected in the syntax. However, as we will see in this and further sections, Basque exhibits c-command asymmetries between subjects and objects, and between indirect and direct objects, a fact that may be most convincingly considered as direct evidence for a configurational phrase structure.5

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4 See the introduction in Marácz & Muysken (1989), and Marácz (1991) for a historical overview of the configurationality issue, as well as for the discussion of some proposals directly related to this topic.

5 Although nowadays a configurational approach to Basque is almost overwhelmingly adopted (cf. Eguzkitza 1986, Salaburu 1987, Ortiz de Urbina 1989, Laka 1990 and subsequent
Besides assuming a hierarchical grammatical organization of the sentence structure in Basque, I adopt the standard assumption that the S IO O V order is indeed the underlying base constituent order in Basque, which corresponds to the unmarked or neutral order, informationally speaking. In chapter 4 I argue further that the assumption of an unmarked S(IO)OV order permits us to account for stress and focus facts observed in Basque, as well as for binding and crossover effects (see chapters 3 and 5).

Thus, in assuming the existence of a neutral 'basic' word order, Basque differs from other languages also classified as extremely 'free word order' languages, such as Warlpiri (Hale 1983, Laughren 1989, Jelinek 1984, 1988), polysynthetic languages (e.g. Mohawk, extensively studied by Baker 1996), and the languages studied by Mithun (1987), namely Coos, Cayuga (from North America) and Ngandi (from Northern Australia), for which there is no conclusive evidence for a basic word order—at least not at the level of surface syntax. The term 'non-configurationality', used to label this free variation of word order in the languages aforementioned, exists in opposition to the so-called configurational languages, which display more rigid ordering constraints among the constituents of a sentence. Word order variation is of course also observed in configurational languages, but this variation, which involves some sort of movement, is constrained by restrictions that are conditioned by structural considerations.

In contrast to the word order pattern observed in the familiar configurational languages, variation in the surface linear order among the arguments and predicates of a clause in languages like Mohawk or Warlpiri is not governed by strictly grammatical principles. In effect, in studying word order arrangements in Warlpiri, Hale (1983, 1989, 1992, 1994) has argued that to date no convincing evidence has been brought in support of a movement analysis of the distinct surface orders found in Warlpiri. That is, under the standard assumption (since Ross 1967) that word order variations are due to movement in syntax (i.e. scrambling), Hale reports that the lack of c-command asymmetries in the surface phrase structure of Warlpiri strongly suggest that free word order in this language is of a different nature from that observed in languages such as German, Russian, Japanese or Basque. This seems to suggest a free base-generation analysis of the constituents of a Warlpiri sentence. The only restriction in the language is that the constituent which functions as an auxiliary - ka in the examples in (6)- must appear in second position (Hale 1992) and thus could be purely phonetic. Some literature), there have been proposals in the Basque literature arguing for a non-configurational analysis, such as Rebuschi (1984, 1989), and Abaitua (1985).

6 Hungarian is another language which has been traditionally classified as a free word order language, and has been subject to much debate concerning the question whether it is a configurational language (cf. among others, Horvath 1986, Kenesei 1984, 1986, Marácz 1991) or not (see Kiss 1981, 1987a, 1987b, 1991).
possible orderings are given below:

(6)  
   a. Karnta-ngku ka yarla karla-mi  
       woman.erg pres yam dig-nonpast  
       "The/a woman is digging yams"
   b. Yarla ka karla-mi karnta-ngku
   c. Karla-mi ka yarla karnta-ngku
   d. Karla-mi ka karnta-ngku yarla

However, one cannot say that Warlpiri is non-configurational in an absolute sense, since the study of anaphora in Warlpiri shows that the subject and the object are in an asymmetric relation to each other (see examples in (7) below). The issue, as Hale (1992) notes, is that these c-command relations, present in the level of what he calls the "lexical argument structure", are not reflected in the overt phrase structure by a particular linear order. That is, in surface syntax there is no correlation between c-command and linear ordering in Warlpiri-type languages.

Further elaborating an idea suggested in Chomsky (1981), Hale (1983, 1992) proposes that the organization of the arguments of a predicate involves two projections, the theta-projection (or lexical projection, cf. Hale & Keyser 1993), and the Case-projection (or Case-and-agreement projection). The latter corresponds to the functional structure of the sentence, whereas the former corresponds to the lexical argument structure, i.e., the lexical level at which the predicate and its arguments are structurally organized as subject and object(s), without any directionality whatsoever with respect to the head-complement relation. Hale argues that Warlpiri is configurational at the lexical level (the ‘core argument structure’ in his terms), given the existence of subject-object asymmetries within the domain of control theory (cf. Simpson & Bresnan 1983) and binding theory (Hale 1983), as was already mentioned. The following examples, taken from Hale (1983), show that in Warlpiri an anaphoric object can only be bound by an immediately superordinate subject.  

(7)  
   a. Kurdu-ngku ka-ZERO-nyanu ngarrka-Ø nya-nyi  
       child.erg pres-3sgnom-refl man-abs see-nonpast  
       "He, the child, sees himself (as) a man"
   b. Kurdu-Ø ka-ZERO-nyanu ngarrka-ngku nya-nyi  
       child-abs pres-3sgnom-refl man-erg see-nonpast  
       "He, the man, sees himself (as) a child"

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7 Chomsky (1981) labels these levels Lexical Structure, and Phrase Structure.
8 The following examples and their corresponding glosses are as given in Hale (1983). ZERO stands for the non-overt clitic marker corresponding to accusative third person, whereas Ø stands for the null Case marking associated with absolutive Case.
In the pair of examples in (7), the reflexive anaphoric object clitic -nyamu is only coindexed with the subject: both in (7a) and in (7b) the anaphoric object is bound by the ergative subject, and cannot corefer with the absolutive phrase. From this we may conclude that the data on Warlpiri anaphora clearly show that the subject and the object are in an asymmetric relation to each other at the level of lexical structure. One simple way of stating this asymmetrical relationship is by assuming that the verb and the object form a constituent in Warlpiri lexical argument structure, while excluding the subject.

However, in the projection from the lexicon to syntax, this configurational organization of arguments disappears, as the distinct orderings among the arguments —what Hale calls the 'overt phrase structure'— does not exhibit c-command asymmetries of the type observed in the core argument structure. Hale suggests that the difference in surface word order between languages like English and languages like Warlpiri lies in the projection at which nominal arguments are expressed overtly. According to this idea, in English-type of languages overt DPs are expressed as they are projected at the level of lexical structure, that is, respecting the c-command relations established there. In contrast, nominal expressions in languages like Warlpiri are overtly realized in the Case-projection, which, according to Hale, is insensitive to c-command relations and to linear ordering. As a result, free word order among the constituents of a sentence arises in Warlpiri-type of languages, as there is no formal constraint which rules out a particular surface order over another. This explains the absence of Weak Crossover (WCO) effects in (8):

(8)  Nganai ka nyanunguyangi maliki-rli wajilipi-nyi?
      who pres he-gen dog-erg chase-nonpast
      "Who, is his/ her dog chasing?"  (Hale 1994: (34))

In (8) an object wh-phrase occurring in sentence-initial position can be coreferential with the possessive pronoun contained within the subject phrase, which follows the Aux-like element. This contrasts with the WCO effects that the same construction with the relevant coindexation induces in highly configurational languages, like English or Dutch.

There are two possible ways of looking at the construction in (8): on the one hand, one may consider Hale's (1992, 1994) observation that there is little evidence to suggest that movement is involved at all in the derivations of Warlpiri overt phrase structure representations. In that case, the lack of WCO effects observed in (8) would follow without further stipulation, since no movement of the question word in (8) would be involved, to begin with (cf. Farmer, Hale & Tsujimura 1986). On the other hand, as Hale (1992, 1994) himself points out, the pre-auxiliary positioning of wh-
phrases may give us reasons to suspect that a leftward movement is involved, after all, since the sentence-initial position of wh-elements in Warlpiri contrasts with the free position of (non-wh-) constituents in the string of words which form a sentence in Warlpiri. Suppose that we admit that the wh-phrase in the Warlpiri sentence in (8) has undergone short movement to a sentence-initial position. Then the absence of WCO effects in (8) indicates that there are no subject-object asymmetries in Warlpiri (surface) syntax. This result follows from Hale’s (1992, 1994) proposal that Warlpiri syntax—or the ‘overt phrase structure’ of Warlpiri, using his terms—is non-configurational, in the sense that it does not exhibit the configurational asymmetries (crossover effects, reconstruction) found in the syntax of languages like English.\footnote{Hale (p.c.) argues that a wh-word possibly undergoes short movement to pre-auxiliary position in main clauses to create the configuration needed for interpreting questions. However, there is no evidence for long-distance movement from inside a CP. In fact, he claims (Hale 1994:204) that extraction from a finite dependent clause is not possible in Warlpiri given that such clauses are adjuncts. Instead, to question an embedded wh-word, the language makes use of a ‘proxy’ interrogative wh-word in pre-auxiliary position in the matrix clause, leaving the embedded question word in situ (cf. also the mit-strategy in Hungarian (see a.o. Marácz 1991), and the pleonastic interrogative word in Hindi, discussed in e.g. Srivastav 1991). Regardless of whether long-distance wh-movement exists in Warlpiri, what is crucial for our purposes is that the short wh-movement of the question word in (8) does not induce crossover effects.}

Compare now the Warlpiri example given in (8) with its Basque counterpart, illustrated in (9). If Basque had a non-configurational syntax, like Warlpiri, we would expect no WCO effect in (9), contrary to facts:

(9) *Nor, jarraitzen du bere, txakurr-a-k?
    who chase aux his dog-det-erg
    *"Who, does his, dog chase?"

(9) is ill-formed because it is a WCO violation, induced by wh-movement of the object across the pronoun contained in the subject phrase. At LF the wh-phrase binds both its trace and the possessive pronoun embedded within the subject DP. This results in a violation of the condition, stated in (10), that establishes that wh-traces must c-command coreferential pronouns (cf. Reinhart 1976, 1983):

(10) Quantified NPs and wh-traces can have anaphoric relations only with pronouns that they c-command

(10) accounts for the asymmetry between wh-movement of subjects and objects in Basque: a pronoun within the object can be interpreted as coindexed with a
questioned subject (see (11)), while the reverse is not possible, as we have seen in (9):

(11) Nor-kì jo du bere, txakurr-a?
Who-erg hit aux his dog-det
"Who, hit his, dog?"

This shows that Basque, as opposed to Warlpiri, does display subject-object asymmetries in the overt phrase structure representation of sentences.

1.2.2. Overt nominal expressions as adjuncts
1.2.2.1. Jelinek (1984)

Jelinek (1984) and Speas (1986) have proposed that the apparent non-configurationality of languages of the type described by Hale (1983) is a consequence of the fact that in these languages overt nominal expressions are not, *strictu sensu*, the arguments of the predicate, but rather, that they are adjuncts, linked by coindexation to the set of pronominal elements (most likely in the form of person-markers) encoded in the verb. In the light of this approach, the pronominal elements constitute the real arguments of the predicate. This captures the fact that the majority of these languages have a rich pronominal morphology in the verb. Moreover, treating pronominal clitics as the true verbal arguments, she can also explain the optionality of lexical DPs in such languages.

Consider Basque now. Basque presents two of the properties discussed in Jelinek’s work: it is a pro-drop language, as will be defined in chapter 2, section 2.2.3, and has rich agreement (cf. chapter 2, section 2.2.2 for a detailed description of the facts). Given this, we might try to apply Jelinek’s proposal to Basque, and argue that there are no such empty categories in Basque finite clauses, because the agreement morphemes are the true arguments. Nonetheless, this approach relies on the assumption that overt DPs are adjuncts, but lexical DPs in Basque are not adjuncts.10 As I will show in the next section, Basque does not share any of the six syntactic properties Baker (1991, 1996) discusses to prove the adjunct status of overt DPs in polysynthetic languages such as Mohawk.

In addition, Jelinek’s hypothesis (also Baker’s account, as will be discussed below) does not provide an explanation for the existence of null arguments in non-finite contexts, where there are no agreement morphemes. I will turn to this issue next, when I review Baker’s (1996) work.

10 However, Cheng & Demirdache (1993) propose that lexical DPs in Basque are not generated in argument position, but are rather base-generated in the specifier position of their corresponding Agreement Phrases.
1.2.2.2. Baker (1996)
1.2.2.2.1. His proposal

Baker (1996) adopts the proposal that overt noun phrases are not in argument position in non-configurational languages, but proposes a significant modification to this analysis, also pursued by Jelinek: he posits that the real arguments are not the clitic markers, as proposed in Jelinek and Speas, but rather the null pronominals in subject and object position, which get licensed by the agreement morphemes on the verb. With this hypothesis, a second property of 'free word-order' languages is directly accounted for, namely their pro-drop nature. If nominal expressions are not true arguments, but merely adjoined elements, it follows straightforwardly that lexical DPs can be omitted. Under standard assumptions, adjuncts are optional phrases, therefore, they do not need to appear in the sentence. When they are present, their function is more like appositions, providing additional information about the referential content of the pronominal arguments.

In the work of Jelinek (1984, 1988), she explicitly holds that theta-roles are directly assigned to the agreement morphemes but not to lexical DPs, since these do not occupy argument positions. Hence, within this approach there is no need for postulating null pronomininals. In contrast, in the view adopted in Baker (1996), theta-role assignment applies in its standard form to elements in subject and object positions, which happen to be phonetically empty. Nevertheless, the empty pronomininals in polysynthetic languages like Mohawk must be morphologically licensed in order to receive a theta-role. Baker refers to this licensing mechanism as the Morphological Visibility Condition (MVC):

\[(12) \text{ The Morphological Visibility Condition (or Polysynthesis Parameter)}\]

All the theta-roles of a head must be expressed morphologically within the word, either by agreement morphemes, or by incorporation of a root.

It follows from (12) that there are three elements involved in the expression of the argument of a verb in polysynthetic languages: an empty category \textit{(pro)} that is the true argument of the verb, an agreement morpheme which makes the \textit{pro} visible for theta-role assignment (as stated in (12)), and, optionally, a DP in adjunct position, coindexed with the \textit{pro} argument, which expresses most of the semantic content associated with the argument.

Baker argues that a consequence of the MVC is that it can account for the existence of free word order in polysynthetic languages. In fact, under such a morphological condition, free permutation crucially depends on the assumption that lexical DPs are generated in an adjoined position (cf. Jelinek 1984 for a similar
approach), resembling Clitic Left Dislocation (CLLD) constructions in Romance languages (cf. Cinque 1990). From this, Baker concludes that free ordering of constituents in polysynthetic languages is dependent upon the presence of morphological agreement, which in turn licenses theta-role assignment of the null arguments.\footnote{Cf. Laka & Uriagereka (1987) for the similar idea that rich verbal agreement in Basque accounts for its free word order.}

In order to argue that lexical DPs in polysynthetic languages are adjuncts, Baker presents several syntactic differences between Mohawk and English that according to him can be explained if overt DPs are base-generated in a position adjoined to the clause. The differences are the following: (a) the absence of subject/object asymmetries in typical Condition C contexts, (b) the absence of DP anaphors, (c) the absence of nonreferential quantified DPs, (d) the non-availability of wh-in situ constructions, and (e) WCO effects.

1.2.2.2. (Non) adjunct status of overt DPs

With respect to the first difference, there is good evidence that Condition C induces disjoint reference effects in Basque, as is shown in (13) (compare (13a) with (13b)):

(13) a. Jonen, arreba-k bera/proi lagundu du hospitale-ra
    Jon.gen sister-det-erg him/proi help aux hospital-to
    “Jon’s sister helped him/proi to the hospital”
    b.*Berak, /proi Jonen, arreba lagundu du hospitale-ra
    he.erg/proi Jon.gen sister help aux hospital-to
    “He/proi helped Jon’s sister to the hospital”

A pronominal subject cannot be coreferential with a DP contained within the object phrase, as the subject c-commands the object (13b), whereas a pronominal object can be coreferential with a DP embedded in the subject (13a), because the object does not c-command the subject. As reported by Baker, subject-object asymmetries of the type observed in (13) are not found in non-configurational languages like Mohawk: the Mohawk examples corresponding to (13) are both grammatical. He argues that this is explained if lexical DPs are not in argument position, but adjoined to any node in the clause. In that case, no obligatory c-command relation is established between the subject and the object, and coreference is possible. In view of this, the ungrammaticality of (13b) indicates that the subject obligatorily c-commands the object in Basque.
The second difference pointed out by Baker refers to the absence of DP anaphors like *himself* in Mohawk-type of languages. He attributes this fact to the adjunct status of overt DPs. Condition A of the Binding Theory requires that anaphors be locally bound (c-commanded and coindexed) by an antecedent within its minimal clause (Chomsky 1981, 1982). Suppose that lexical anaphors exist in polysynthetic languages. If both the antecedent and the anaphor are adjoined to the clause, as proposed by Jelinek and Baker, that means that the anaphor must be bound to either the lexical subject or to the subject *pro* associated and coindexed with the lexical subject. But at the same time the anaphor must be coindexed with the object *pro*, since it is an adjunct construed in association with that argument. This would lead to a situation in which the subject *pro* and the object *pro* are coindexed, a situation which would violate principle B of the Binding Theory. Therefore, no overt anaphors are possible in these languages.

In light of this, consider Basque. Basque has lexical anaphors, which must obey principle A, showing that anaphors are in argument position (cf. chapter 3, section 3.3.2 for more discussion on anaphor binding):

(14) a. Zure laguna-k, ekintza horregatik [bere burua], zigortzen du
    your friend.erg action that.because of himself punish aux
    “Your friend, punishes himself for that action”
    b. *[Bere burua], zure laguna, zigortzen du
    “Himself, punishes your friend,”

Thirdly, Baker points out that the view that lexical DPs are adjuncts in the polysynthetic languages predicts that nonreferential quantified DPs should be absent in such languages. The argument is drawn from Rizzi’s (1986b) observation that quantified DPs cannot be dislocated in Italian (cf. also Cinque 1986, 1990, Belleti 1990):

(15) a. *Nessuno, lo conosco in questa citta
    nobody cl know.l in this city
    “Nobody, I know him in this city”
    b. *Tutto, lo dirò alla polizia
    everything cl say.l.fut to the police
    “Everything, I will say to the police”

If overt DPs in polysynthetic languages are adjuncts, and are coindexed with a null pronoun, they pattern with the Italian examples in (15). According to Rizzi’s explanation, bare quantifiers cannot be dislocated because they fail to bind a trace variable, given that the coindexing clitic pronoun does not qualify as a potential
variable. Extending this analysis to the polysynthetic languages, it follows that true quantifiers will not be possible in such languages, since these are adjuncts, and coindexed with a null pronoun.

In this respect, Basque patterns differently from the polysynthetic languages in that quantifier phrases do exist in the language, and behave like ordinary quantifiers in nonpolysynthetic languages, as will be discussed in later chapters, especially in chapter 3 (sections 3.3.4 and 3.3.2) and chapter 5 (sections 5.6.2 and 5.7), when we deal with variable binding and scope effects. Most revealing is the following contrast:

(16) a.*Dena, polizia-ri kontatu-ko diot
    everything, police-dat tell-fut aux
    “Everything, I will tell the police”

b. Poliziari dena kontatu-ko diot
   police-dat everything tell-fut aux
   “I will tell everything to the police”

(16a) is ruled out for the reasons mentioned above, namely, because quantifier phrases cannot be dislocated. If all Basque overt DPs were adjuncts, we would expect that no overt quantifier, regardless of its actual position in the sentence, should be possible at all, since all lexical quantifiers would pattern with the Italian examples in (15). However, the grammaticality of (16b) shows that the prediction does not hold in Basque. These results follow if the quantifier in (16b) is not adjoined to the sentence.

A fourth difference concerns wh-constructions. The hypothesis that all overt DPs are in an adjoined position predicts that wh-in situ constructions will not be allowed in these languages. However, in Basque multiple interrogatives, one interrogative phrase moves to C and the other(s) remain in their argument position (although it is also possible to have multiple wh-movement (see chapter 3, section 3.3.7):

(17) Esai-da-zu nor-k erosi du-en zer
    tell-1sgdat.2erg who-erg buy aux-C what
    “Tell me who bought what”

A further difference between Mohawk-type of languages and English-type of languages which supports the adjunct status of lexical DPs in the former concerns WCO effects. Consider the following sentences (examples taken from Baker 1996:[110]):
The impossibility of coreference between the object wh-phrase and the pronoun in subject position, illustrated in (18b), does not come as a surprise, as the same judgements are observed in English. Let us assume that (18b) instantiates a WCO violation. What is surprising is that the subject phrase cannot be construed as coreferential with the object pronoun (18a). Baker argues that these results follow straightforwardly from the hypothesis that lexical DPs are not in argument position in Mohawk and similar languages, but adjoined to the clause. Consider in this light the syntactic representation of (18a). The wh-phrase moves to a clause initial position (see Baker: 66-73) for arguments in support of wh-movement in polysynthetic languages, but the trace of the subject wh-phrase fails to c-command the pronoun contained in the object phrase, which is (base)adjoined to the clause, and hence, is higher than the trace of the subject phrase. As a result, the object pronoun cannot be interpreted as a bound variable.

Again, Basque differs from languages like Mohawk in that it displays subject-object asymmetries with respect to WCO effects, as was mentioned earlier (cf. examples (9) and (11), repeated here):

(9) *Nor, jarraitzen du bere; txakurr-a-k?
who chase aux his dog-det-erg
"Who, does his dog chase?"

(11) Nor-k_i jo du bere; txakurr-a?
Who-erg hit aux his dog-det
"Who, hit his dog?"

All the syntactic tests briefly reviewed here show that lexical DPs in Basque are not adjuncts, in the sense of Jelinek (1984) or Baker (1991, 1996). Rather, they provide evidence that they occupy argument positions at least in the canonical contexts, that is, when no A'-movement is involved. However, after applying movement operations, Basque DPs may very well surface in adjoined positions, as will be argued in the following chapters.
1.2.2.2.3.  Free word order and rich agreement

It is clear that the MVC formulated in (12) above has important consequences for languages where agreement morphology is significantly abundant. Basque may serve as a testing language for this matter, given its pro-drop nature and its rich case and verbal morphology (as will be described in more detail in chapter 2, section 2.2.1, and 2.2.2). Hence, let us see whether Baker’s correlation holds in Basque.

As the sentences given in (19) and (20) below show, the predictions of Baker’s correlation seem to be confirmed. On the one hand, we see that the three arguments of the finite verb eman ‘give’ can be omitted, while they show agreement clitic markers encoded in the auxiliary verb (19) (see chapter 2, section 2.2.2 and 2.2.3 for more details). On the other hand, when overt, the three arguments of the finite (agreeing) verb in (20) can be freely permuted (for reasons of space, here I only give three possible orders):\footnote{Constituent ordering is not absolutely ‘free of charge’. Rather, pragmatic and semantic factors, such as topicalization and focalization, affect the order of clausal constituents, as will be discussed in detail in the following chapters, specially, in chapter 4.}

\begin{enumerate}
  \item pro pro pro eman d-i-o-te give pres-root-3sgdat-3pplerg
    
    “(they) have given (it) (to her/him)”
  \item a. ume-ek ama-ri baloi-a eman d-i-o-te
    child-det-erg.pl mother-dat ball-det give pres-root-3sgdat-3pplerg
    
    "The children have given the ball to mother"
  b. baloi-a ama-ri ume-ek eman d-i-o-te
    "THE CHILDREN have given the ball to mother"
  c. ama-ri eman d-i-o-te baloi-a ume-ek
    "The children have given the ball TO MOTHER”
\end{enumerate}

The data in (20) seem to support one corollary of the MVC, i.e. the connection between agreement and free word order. Nevertheless, there is empirical evidence showing that the presence of agreement is not a sine qua non condition to allow for permutation of arguments. The evidence comes from Basque nominalizations. Nominalizations are particularly interesting, since they are nonfinite constructions that lack agreement morphemes, but yet they show the possibility of permuting the order of the constituents within the clause, as is instantiated in (21b-c) (where (21a) reflects the canonical order):\footnote{In the examples below, det stands for ‘determiner’, and nom stands for the nominalization morpheme.}
(21)  a. [Ane-k lagun-a-ri baloi-a ema-teja-k harritu egin nau
   Ane-erg friend-det-dat ball-det give-nom-det-erg surprise do aux
   lit.:“Ane giving the ball to her friend has surprised me”
   “It has surprised me that Ane gives the ball to her friend”

b. [laguna-ri baloi-a Ane-k ema-teja-k harritu egin nau

c. [Ane-k baloi-a laguna-ri ema-teja-k harritu egin nau

The examples in (21) show only some of the possible combinations in which constituents can appear ordered in Basque nominalizations. It is important to note that the arguments of the nominalized verb enatua ‘the giving’ are Case-marked DPs, and not genitive PPs, as can be seen from the fact that they bear ergative (Ane-k), dative (laguna-ri) and absolutive Case (baloi). In this respect, Basque nominalizations differ from English-type of nominalizations which allow free reordering of arguments when these are expressed as (genitive or instrumental) PPs. As argued in Goenaga (1985), Artiagoitia (1992), and Zabala & Odriozola (1996), I assume that Basque nominalizations are CPs. Accordingly, the arguments occurring within a nominalization are overtly realized as Case-marked DPs, as in a regular sentence. With this in mind, given the data illustrated in (21), I conclude that free ordering of constituents is not dependent upon the presence of agreement markers criticized onto the verb, contrary to Baker’s generalization (stated in (12)). The evidence provided by Basque nominalizations shows that ‘free’ word order is possible even when no overt agreement is present.

To summarize, in this section I have argued that Basque shares its syntax with so-called non-configurational languages, such as Warlpiri, and with polysynthetic languages such as Mohawk in three important aspects: (i) it displays a relatively flexible word order, (ii) it is a pro-drop language, and (iii) it exhibits a rich verbal morphology. Despite this set of common properties, Basque presents configurational asymmetries between subjects and objects (cf. the examples in (9) and (11) discussed concerning WCO effects), and also between the two objects, as will be shown in chapter 3. This indicates that the constituents of a Basque sentence are not freely generated in different positions, but rather, that they are base-generated in a fixed position, according to their relative hierarchy. This is the view I assume throughout the dissertation.

Granting this, the distinct surface orders in which constituents can occur in both preverbal and postverbal position in Basque raise interesting issues for the theory. This is so because, under current generative approaches to syntax, i.e. the Minimalist Program (Chomsky 1995) and Antisymmetry (Kayne 1994), variation in surface order within and across languages is narrowed down considerably. The morphology driven feature-checking theory proposed by Chomsky only allows movement if it is triggered
by the need to check some morphological feature. Consider Case features, for instance. In the theoretical framework of Minimalism and Antisymmetry, word order variation between VO and OV languages is often reduced to a morphological difference in the strength of Case features (cf. among others, Zwart 1993, Kayne 1994). Along these lines, it could be argued that subject and object DPs move in Basque in order to check the strong Case features of T and V. However, Basque nominal arguments uniformly show the same Case in all possible permutations, as we will see in the examples throughout this study. Hence, Case-checking may not be what drives phrasal movement in Basque (see chapter 2, section 2.2.1 and section 2.2.3 for a discussion on Case assignment in Basque).

I will consider a third alternative, which makes crucial reference to the strong connection existing in Basque between the immediate preverbal position and the interpretation of focus,\textsuperscript{14} and between postverbal constituents and a background interpretation (cf. Altube 1929, Mitxelena 1981, Ortiz de Urbina 1989, Osa 1990). I will pursue the line of research put forth in Reinhart (1995), Zubizarreta (1998), and Costa (1998), who argue in favour of a discourse-driven approach to scrambling phenomena. This issue will be addressed in chapters 4 and 5. In the next section I present the main proposals argued for in the dissertation.

1.3. The proposal

The main goal of this dissertation is to provide an account for the ‘free’ constituent permutation found in Basque, by linking the phenomenon of displacement in Basque with discourse notions such as focus (new information) and topic (old/given information, also comprising background information). I will show that the notion of focus plays a crucial role in regulating the various arrangements of the constituents of a clause in Basque (cf. Altube 1929, Goenaga 1978, Ortiz de Urbina 1989, Osa 1990), though it is not the only factor responsible for the ‘free’ ordering. We will see that there also exist movement operations that may be characterized as ‘scrambling’, in the sense of Saito (1985), which may have an effect on the information structure of the sentence when the scrambled argument surfaces in preverbal position (as will be discussed in chapter 4, section 4.4.2), but have no apparent effect in meaning when then scrambled arguments occur in postverbal position.

As in recent work dealing with the relation between prosodic structure and syntax (Cinque 1993, Reinhart 1995, Zubizarreta 1998, Valduvi 1992, among others), I assume that the discourse notion of focus has an overt manifestation in the prosody and in the syntax, in a way that will be discussed more in detail in later chapters, in

particular in chapter 4. Under the interpretation of the notion of information focus as the part of the sentence which carries new information, it can be argued that every sentence has a constituent that is interpreted as focus. At least this is true for the element that carries the most prominent stress of a sentence, given that sentence stress (or focal accent, as in Hualde, Elordieta & Elordieta 1994) must necessarily be assigned to some constituent in the sentence.

On these grounds, the main points defended in this thesis are the following:

(a) The syntactic configurations must fit the structure appropriate for the interpretation of focus, so that the necessary syntactic operations will take place in order to achieve this goal. In this respect, free constituent permutation is not so free, after all. In fact, the order variations do not reflect optionality of movement. Rather, I argue that the rearrangement of constituent orders is highly constrained by discourse factors, though optionality is not entirely prohibited, given some apparent scrambling phenomena occurring at the right periphery of the verb, which appear to yield semantically identical sentences (see chapters 4 and 5).

(b) Contra previous analyses that treat (all instances of) focus constructions in Basque in a parallel way to wh-constructions (Ortiz de Urbina 1989), I argue that information focus in Basque is not an operator moving to [Spec,CP]. In particular, I propose that there are two mechanisms to express information focus: either by assigning focus in-situ, by a modified version of Cinque’s (1993) main stress assignment algorithm, or else by left-dislocation of the focused constituent.

The focus in-situ approach for information focus has been put forward by several authors, such as Reinhart (1995), Kiss (1998), Zubizarreta (1998), and Costa (1998). Most of these linguists adopt Cinque’s sentence stress algorithm (or a somewhat modified version of it), according to which the most embedded constituent of a sentence receives the main stress (or default stress). Assuming with Cinque that in the case of sister nodes the constituent occurring at the recursive side of the tree counts as most embedded, an immediate corollary of this algorithm is that in an SOV language like Basque, the object will receive the main stress of the sentence, given that it is the most embedded element. The prediction holds for Basque.15

(c) In addition, as will be extensively discussed in chapter 4, focused constituents often occur in sentence-initial position. For these cases, I propose a syntactic configuration in which the focused phrase is in a left-dislocated position, which is linked to its thematic position in the clause by a null operator, sitting in [Spec,CP]. By base-generating the focus phrase in a sentence-peripheral position, we can account for

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15 See chapter 4, section 4.4.2 for further discussion.
the lack of crossover effects observed in focus constructions in Basque. The following
example illustrates that a sentence-initial focus does not induce WCO effects (in
contrast to the WCO effect observed in wh-questions, discussed earlier (cf. (9)):

(22) Mikel ikusi du bere; emaztea-k neska bat-ekin
Mikel see aux his wife-erg girl a-with
"His wife has seen MIKEL, with a girl"
(intended meaning: Mikel's wife has seen Mikel with a girl)

(d) The approach to focus proposed in this dissertation provides further support
for our claim that the complex verb (i.e. V+Aux) moves to the left in Basque.

As we shall see in chapter 4, the constituent which receives a focus
interpretation must be left-adjacent to the verb. Turning it around, it follows that
whatever appears to the immediate left of the verb will be interpreted as focus (except
for elements that have that position as their canonical position, e.g. direct objects (see
chapter 4 for discussion)). Accordingly, the surface position of the complex verb has
important consequences for the interpretation of the sentence. Moreover, we will see
in chapter 5 that the distribution of VP-manner adverbs, which I assume cannot be
right-dislocated, supports a leftward movement of the complex verb across the adverb.
In this same chapter, additional evidence for the claim that the complex verb moves in
Basque will be provided from the behaviour of idioms and from binding effects (i.e.
chapter 5).

1.4. Organization of the dissertation

This dissertation consists of five chapters, including this first chapter.

After having stated the basic theoretical assumptions on the sentence structure
I adopt for Basque in chapter 2, in the following chapters I deal with the issue of
deriving possible surface word orders from the basic S IO O V order, by arguing that
the distribution of arguments in Basque is conditioned by the discourse-semantic
factors of focus and topic.

In chapter 3, I argue that S IO O V is the basic constituent order in Basque.
First I present a number of arguments that show that the indirect object in Basque is a
DP and not a PP. Asymmetries between the two objects will be presented, supporting
the claim that the indirect object asymmetrically c-commands the direct object (like in
double object constructions). In particular, I will show that the same c-command
asymmetries arise when arguments appear ordered in a non-canonical way. This
"symmetrical" pattern will be taken as evidence for a basic S IO O V order where the
hierarchical relations among the arguments of a sentence are established.

In chapter 4, I discuss how focus interacts with the distribution of arguments in
Basque. After having discussed previous approaches to the syntax of focus in Basque, I will present an analysis of focus that provides a satisfactory explanation for the asymmetries observed between wh-constructions and focalizations, as well as for the lack of quantificational force of focus in Basque. In particular, I show that an analysis of focus as an operator fails to account for the above mentioned asymmetries. Instead, I propose that Basque uses two strategies to mark focus. On the one hand, it may assign focus in-situ, following the lines pursued in Reinhart (1995) and Zubizarreta (1998) among others. On the other hand, for those contexts in which the focus phrase appears in sentence-initial position, I propose that these constructions involve left dislocation of the focused phrase. It will be shown that the analysis proposed captures the interpretation and the syntactic effects derived from focus in a simple and straightforward way.

In chapter 5, I show how, starting from an OV underlying order, we can derive other possible orderings of constituents assuming that the complex verb moves leftwards. First, I will argue that the main verb moves to Aux in the canonical order. This movement will account for the fact that in contexts of V-to-C raising V and Aux move together as a single unit. Next, I will present a number of arguments that support the claim that the verb moves in Basque. One piece of evidence comes from the relative position of VP-adverbs like ondo 'well' in relation to the verb. I assume that these adverbs have a fixed position in the sentence, to the left of the verb. Since the complex verb may appear preceding these adverbs, it will be argued that V-Aux moves past the base position of the adverbs. Secondly, the occurrence of Small Clause complements to the right of the complex verb in Basque will be analyzed as the result of V-movement to the left of the SC complement and not as a result of extraposition. Further support to the claim that the verb moves will be provided by the behaviour of Basque VP-idioms like kick the bucket, on the assumption that adjacency between the two parts of the idiom is required in order to obtain the idiomatic reading. Finally, evidence from binding and scope effects will be presented, supporting the claim that a leftward verb movement operation is at work. In particular, given that we start out from a basic OV structure, we will compare the predictions that a V-movement analysis and a right-dislocation analysis make in order to explain the scope and binding effects observed among postverbal constituents as well as those among preverbal and postverbal constituents. I will show that a right-dislocation analysis cannot account for all the facts examined, whereas a V-movement account captures and provides a satisfactory explanation for all the facts discussed throughout the chapter.
Chapter 2: Background assumptions

2.1. Theoretical framework

The present study adopts the general guidelines of the Minimalist Program, put forth by Chomsky (1993, 1995). In particular, I assume that a grammar consists of three essential components: a lexicon, an interface with the mechanisms of production and perception (PF), and an interface with the interpretational system of semantics (LF), which are related through a derivation. A derivation starts with an array of lexical items drawn from the lexicon. Then the syntactic operations of Merge and Move apply to these lexical items (as many times as necessary) in order to construct syntactic objects. Merge takes a pair of syntactic objects (SO1, SO2) and replaces them by a new object (SO3). Move takes a constituent and produces an identical copy which is merged in the set of syntactic objects already formed in a given derivation. This operation forms a chain (K, t(K)), where t(K) is the trace of K, or the copy of K, under a copy theory of movement. At the interface levels —i.e. after Spell-Out—, only one of the two copies is relevant for interpretation. Thus, at PF only one member of the chain (K, t(K)) is pronounced, whereas at LF the moved constituent is interpreted either in the target position or at the position occupied by the tail of the chain. The copy theory of movement therefore provides an account of various types of reconstruction effects, such as those compelled by binding considerations, which require putting back some or all of an A-bar moved constituent. (We will discuss some cases in chapters 3 and 5).

Note that it is possible that in a given derivation a constituent is pronounced at the head of the chain (with PF deletion of the copy in the original position) whereas at LF the material at the target position is (partially or entirely) deleted, ensuring thus that the copy at the tail of the chain is actually interpreted. In fact, this is the usual case in standard cases of A and A-bar movement, where the moved constituent is pronounced at the head of the chain, but is interpreted in its original position for reasons associated with its thematic role. In this sense, Move can be considered to be a combination of the operations Copy and Delete (Chomsky 1995), or Copy and Merge (Collins 1997). Which of the two copies is deleted is subject to the satisfaction of the condition of Full Interpretation (FI), which applies to each interface level separately. This condition requires that a linguistic expression must receive an interpretation at each one of the interface
levels. Thus, as Chomsky states, a derivation converges if it yields a representation satisfying FI at both interface levels PF and LF; if either the PF representation or the LF representation of a linguistic expression has an illicit object, and hence is uninterpretable, the derivation crashes (Chomsky 1995:219).

Under the feature checking theory pursued in Chomsky (1993, 1995), a representation at PF satisfies FI only if all the strong features have been deleted. A representation at LF satisfies FI only if all the uninterpretable features have been deleted. The intuition behind this idea is that uninterpretable features do not play a role in interpretation, and therefore they must be eliminated for convergence at LF. According to Chomsky (1995), the uninterpretable features include the Case features of N, the $\Phi$-features and Case features of V and T, as well as any strong feature.

Thus, in order to satisfy FI at PF and LF, strong features and uninterpretable features must be deleted. On general minimalist assumptions, the standard way to delete a feature is by entering into a checking relation, which is realized in specific configurations created by movement. Given that the computation to PF starts after the operation Spell-Out, this means that the movement to check strong features must take place in overt syntax. For the purpose of LF convergence, however, movement can be delayed until LF if no other morphological considerations require overt displacement (cf. Procrastinate, Last Resort (Chomsky 1993, 1995)). This is in line with the minimalist spirit that syntactic movement operations are constrained by economy conditions, which make a derivation (or a particular stage at the derivation) optimal. These economy conditions include locality of movement (along the lines of Rizzi’s 1990 Relativized Minimality), Last Resort (Chomsky and Lasnik 1993), and the Minimal Link Condition (a variant of Shortest Move (Chomsky 1995)). The latter condition will play a role in the Case-checking mechanism of nominal arguments in Basque, as I will argue that the two functional heads T and v have strong D features which trigger overt subject and object raising (cf. discussion in sections 2.3.1, 2.3.2 below).

This is essentially what derives word order variation. In the minimalist theory, word order differences across languages are attributed to differences between the features of functional heads. Thus, depending upon the strength of the V- and the D-features of both T and v, by exhausting all combinatorial possibilities of feature combinations, it would lead up to 16 possible language types. However, only a few of them have been attested so far. Even if evidence for the existence of all these language types were attested, Chomsky argues that language variation is highly limited at the level of LF, where all languages are supposed to share the same syntax.

As for the directionality of movement, I assume that feature checking involves leftward movement. Thus, as is shown further on, subjects and objects raise to the left of the VP to check their Case. However, in discussing some of the word orders that we will be concerned with in the following chapters, it may seem as if the data can be handled by postulating rightward movement of the
constituents that appear postverbally (recall that I assume that Basque is V-Aux final). Nevertheless, I argue that phrasal rightward movement should be discarded (arguments in support of this are provided in chapters 3 and 5). Instead, I propose that some of these cases involve leftward movement of the verb complex to a functional head position to the left of the allegedly right adjoined phrase(s) (cf. chapter 5). This idea is schematically represented in (1), where ZP stands for the constituent that might appear to be right adjoined to VP due to its postverbal occurrence. Under the proposal adopted here, ZP does not undergo movement:

(1)

```
FP
  ....
   F
    VP
   V
   ZP
```

To derive other cases that seem to involve rightward movement (e.g. the postverbal position of sentential adverbs), I will adopt Barbiers' (1995) approach, which accounts for apparent cases of right-adjunction without permitting right-adjunction. Barbiers proposes that instances of apparent right-adjunction of XP to YP are in fact the result of left-adjunction of XP to YP, followed by subsequent movement of YP to a position to the left of XP.

Let us illustrate this with a Dutch example. Adjunct PPs in Dutch can appear either preceding the verb or following it, as in (2):

(2)  
   a. Jan heeft [in de tuin] gewerkt  
       Jan has in the garden worked  
   b. Jan heeft gewerkt [in de tuin]

The postverbal (optional) occurrence of adjunct PPs in Dutch has traditionally been viewed as involving extraposition. Barbiers proposes to analyze this case as the result of leftward movement of VP to the specifier position of the adjunct PP (i.e. VP-Intraposition), a movement triggered by the need to interpret the PP as a modifier of VP:

(3)

```
PP
  VP
    ti
PP
VPi
P
    DP
  (spec)
  (DP)
```
This follows from the Principle of Semantic Interpretation (henceforth PSI), which is the only syntactic relation that plays a role in the semantic interpretation of a linguistic construction, according to Barbiers (see below, chapter 5, for further details). In some of the cases that will be addressed in the following chapters, an analysis along Barbiers’ proposal will be adopted, since it will allow us to account for the data, without having to resort to rightward movement, which is problematic in any case (cf. Kayne’s 1994 arguments, and our discussion of the data in chapter 3 and 5).

In section 3 I will present the clause structure of Basque I am assuming throughout the dissertation. Before doing so, I will first briefly review certain relevant features of the syntax of Basque, in as far as their description helps to better understand the discussion of the data in the following chapters.

2.2. Basic notes on Basque syntax

2.2.1. The Case system

Basque has a rich Case system. There are three Cases assigned to the DPs which function as the subject, the direct object and the indirect object of a transitive clause: ergative, absolutive and dative, respectively. In addition to these, traditional Basque grammars distinguishes about ten more Cases, all of which have the form of affixes and are attached to the last element of the DP, i.e., to the determiner (see (4)).

(4) liburu gorri lodi -a-ren azale-a-n ikusi dut
    book red thick-det-gen front-det-loc see aux
    “I have seen it in the front of the thick red book”

These so-called ‘Cases’ include the genitive (-en), the instrumental (-z ‘by’), the comitative (-ekin ‘with’), and the so-called ‘local Cases’ in the Basque traditional grammar, as they express a spatio-temporal relation. The latter Cases are the locative (-n ‘in’), the allative (-ra ‘to’), the ablative (-tik ‘from’), and the compound Cases derived from the allative. However, there is a difference between these Case-markings and the Cases borne by the arguments: the latter trigger agreement, whereas the former do not. For this reason, in the traditional literature the two types of Case-endings have been treated separately. In fact, as the reader may have noticed, except for the three Cases which appear attached to the arguments of the verb and will be discussed immediately, the remaining Case-endings correspond to what in many languages is expressed by means of

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1 All examples throughout this dissertation are given in Standard Basque, but it should be noted that they mainly describe the grammatical system of the Western and Central dialects, unless explicitly noted otherwise.
BACKGROUND ASSUMPTIONS

prepositions. The fact that in Basque they follow their complements is related to the head-final character of Basque. Therefore, I will dispense with the term Case to name these endings, analyzing them instead as adpositions, which are of the category PP.

Given these assumptions, the only true Cases are the three Cases that instantiate the grammatical relations established among the arguments of a predicate, namely: the ergative –k, the absolutive –Ø, and the dative –(r)i. The subject of transitive verbs and of unergative verbs bear ergative Case (cf. (5a,b)), while subjects of unaccusative verbs and objects of transitive verbs bear absolutive Case, which is morphologically null, like the nominative Case in accusative languages (5c).\(^2\) (For unergative verbs like (5b) I am assuming a transitive structure (Hale & Kayser 1993, Laka 1993a).) In this respect, Basque is a morphologically ergative language (cf. Anderson 1976, Dixon 1994):\(^3\)

\[
\begin{align*}
(5) & \quad a. \quad \text{Jon-ek} \quad \text{kafe-a-Ø} \quad \text{edan} \quad \text{du} \\
& \quad \text{Jon-erg} \quad \text{coffee-det-abs} \quad \text{drink} \quad \text{aux} \\
& \quad \text{"Jon has drunk coffee"} \\
& \quad b. \quad \text{Jon-ek} \quad \text{igeri} \quad \text{egin} \quad \text{du} \\
& \quad \text{Jon-erg} \quad \text{swim} \quad \text{do} \quad \text{aux} \\
& \quad \text{"Jon has swum"} \\
& \quad c. \quad \text{Jon-Ø} \quad \text{gaur} \quad \text{heldu-ko} \quad \text{da} \\
& \quad \text{Jon-abs} \quad \text{today} \quad \text{arrive-fut} \quad \text{aux} \\
& \quad \text{"Jon will arrive tomorrow"}
\end{align*}
\]

\(^2\) In polarity contexts, such as questions and negative sentences, objects of transitive verbs as well as unaccusative subjects may bear partitive Case (–(r)ik), provided that they are undetermined (cf. (i)):

\[
(i) \quad \text{Jon-ek ez du kafe-rik edan} \\
& \quad \text{Jon-erg not aux coffee-part drink} \\
& \quad \text{"Jon hasn’t drunk coffee"}
\]

Given that the distribution of this Case overlaps with absolutive Case, in what follows I will treat both Cases on a par.

\(^3\) In the glosses given in the examples throughout the text I use ‘determiner’ (det) in the broadest sense, to include articles, demonstratives, as well as the particular use of the definite article –a which appears attached to count and mass nouns (such as coffee or bread in the text), even though the specificity or definiteness of the NP is not presupposed. In relation to this, it must be noted that (except for proper names and certain minor exceptions that do not interest us here), peculiarly, nominal phrases in Basque must be headed by a determiner (det) or a quantifier, regardless of their status with regard to definiteness or specificity. Hence, the reader should bear in mind that the use of det in the present work does not always correspond to a definite determiner (see also Laka 1993a, and Artiagoitia 1997 for further discussion).
In addition, subjects of certain verbs, such as psych-predicates, bear dative Case (6a). The same Case is assigned to the indirect object (6b) (see chapter 3 for arguments in support of the DP nature of the indirect object in Basque):

(6) a. Naia-ri ogi-a-Ø gustatzen zaio
   Naia-dat bread-det-abs like aux
   "Naia likes bread"

b. Jon-ek Naia-ri ogi-a-Ø eman dio
   Jon-erg Naia-dat bread-det-abs give aux
   "Jon has given some bread to Naia"

Although Basque is morphologically ergative, no syntactic difference exists between ergative Case-marked subjects and absolutive Case-marked subjects. That is, Basque is not syntactically ergative, in Dixon’s (1972, 1979) sense, nor is ‘ergative’ in Marantz’s (1984) sense (cf. Levin 1983 for an extensive discussion on ergativity in Basque). A number of syntactic phenomena, such as control effects (see (7)) and the fact that ergative subject anaphors as well as absolutive Case-marked anaphors in subject position are not possible (see (8) below), come to support this view. In effect, these facts strongly suggest that subjects of transitives and unergatives, and subjects of unaccusatives pattern together and hence deserve the same syntactic treatment (see Ortiz de Urbina 1989 for some of these arguments). I propose that this derives from the fact that both ergative and absolutive subjects occupy the same syntactic position, namely, [Spec,TP], as will be argued later on. Consider first some data concerning control:

(7) a. Naia-k_i [e_i bibolin-a-Ø jo-tzen] ikasi du
   Naia-erg violin.det-abs play-aspect learn aux
   "Naia has learnt how to play the violin"

b. Naia-k_i ez du nahi [e_i igeri egin]
   Naia-erg not aux want swim do
   "Naia doesn’t want to swim"

c. Naia-ri_i [e_i zu-re bila joa-te]-a-Ø ahaztu zaio]
   Naia-dat you-gensearch go-nom-det-abs forget aux
   "Naia forgot to go to pick you up (lit.: in search of you)"

Control phenomena like those exemplified in (7) above have been used as tests for the accusative or ergative character of a language under the assumption that the embedded controlled argument in these contexts is the DP argument occupying the

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4 Also, notice the fact that Basque has auxiliary selection, a syntactic property that is mainly found in (syntactically) accusative languages, such as Dutch, Italian and French. In fact, according to Mahajan (1994), ergative languages only have one auxiliary, namely, BE. However, it is clear that Basque is a morphologically ergative language that does not conform to Mahajan’s generalization.
subject position, the highest argument position of the subordinate clause. The fact that the controlled empty argument in the Basque examples in (7) is the ‘subject’, regardless of whether the verb is transitive (7a), unergative (7b), or unaccusative (7c), indicates that ergative Case-marked subjects and absolutive Case-marked unaccusative subjects pattern as a single class for control purposes. This follows straightforwardly if they occupy the same syntactic position.

The same effects are observed regarding binding of reflexive anaphors: subject anaphors are not possible, regardless of their Case marking (see (8a-c)). We also observe that absolutive DPs behave differently according to whether they function as objects or as subjects. Absolutive anaphors are possible only when occurring in object position (compare (8c) with (8d)):

(8) a. *Euren burua-k nire lagunak-Ø lausoturik ikusi ditu bideoan themselves-erg my friends-abs blurred see aux video-in “Themselves saw my friends blurred in the video”
   
b. *Bere burua-k negar egin du himself/herself cry do aux “Herself/himself has cried”
   
c. *Euren burua(k)-Ø zine-ra joan ziren Mikel-en lagun-ekin themselves-abs cinema-to go aux Mikel’s friends-with “Themselves went to the movies with Mikel’s friends”
   
d. Nire lagun-ek; euren burua-Ø txarto ikusten dute argazkieta my friends-abs themselves-abs badly see aux pictures-in “My friends see themselves badly in the pictures”

As I will argue in more detail in section 2.3.2, I derive the similar syntactic behaviour of subjects of transitives and of unaccusative verbs by claiming that they occupy the same structural position, namely [Spec,TP].

Specifically, I assume that ergative Case is a “marked” structural Case in the sense of Bittner & Hale (1996), although I will not adopt their Case binding theory (the reader is referred to the above mentioned work for a presentation of this theory) (cf. also Marantz 1991 for a similar approach to ergative Case viewed as a ‘dependent’ Case). In rough terms, Bittner & Hale draw a three-way distinction between marked structural, unmarked structural Case, and inherent Case. They argue further that nominal phrases bearing marked Case are KP’s (Case Phrases), whereas those bearing unmarked structural Case are DPs or NPs, and they propose a theory of Case licensing —or Case binding, using their terminology— to account for the differences between ergative and accusative languages. Following some of their insights, I propose that the fact that ergative-marked phrases are distinctively marked from nominal phrases bearing absolutive Case is to be interpreted in the following way. Assume that ergative Case projects a KP, for it is morphologically distinctively marked. To the extent that ergative is typically associated with a particular thematic role, usually that refering to the role
of 'controller', 'agent' or 'causer', it shares this property with typical lexical cases.\footnote{Cf. Oyharçabal (1992) for a proposal that ergative is an inherent Case in Basque, and Nash (1995) for a more generalized proposal on ergative Case assignment as involving lexical case.} Nevertheless, not all DPs bearing ergative Case can be classified as being [+controller] or [+agent]. As an illustration, consider the following unergative verbs, whose subjects bear ergative Case, although no 'agenthood' or 'control' is presumably inherent to them ((9a) is used in Western Basque):

\begin{enumerate}
\item[(9) a.] Miren etxetik urten dau
\begin{itemize}
\item Miren.\text{erg} house-from go aux
\item "Miren went out from the house"
\end{itemize}
\item[(9) b.] Urak irakin du
\begin{itemize}
\item water.\text{erg} boil aux
\item "The water boiled"
\end{itemize}
\end{enumerate}

As far as I can see, there is no clear evidence to consider ergative Case as lexical. Therefore, following Murasugi (1992), Laka (1993a), (2000), and Fernandez (1997), among others, I assume that ergative Case must be licensed structurally, just like absolutive and dative Cases. On the other hand, if agreement between an argument and a verb is considered to be a property of structural Case assignment (cf. Bittner & Hale's 1996 suggestion to this effect), the fact that DPs bearing ergative Case agree with the inflected verb in Basque provides more support to the view that ergative is a structural Case.

On the assumption that structural Case assignment is established via Spec-head agreement relation, or via head-adjunction (like in the case of covert movement of formal features (Chomsky 1995)), nominal expressions bearing ergative Case enter into a feature-checking relation with the functional head bearing the ergative Case feature, i.e. Tense. This operation is realized overtly by raising the ergative DP to the specifier of TP. The precise implementation for this Case licensing mechanism will be explained in detail in section 2.3.2. For present purposes it suffices to say that the ergative argument raises to [Spec,TP] to check its Case feature, and by doing so, it also satisfies the strong EPP feature of T (cf. Chomsky 1995, 1998, Ura 1996, and Collins 1997).

As for the Case checking mechanism of objects of transitive verbs, I propose that it is checked off overtly, by raising the direct object to the specifier of the aspectual head Asp, which bears a Case feature, and which I assume to be located between two VP shells (cf. Travis 1991, Noonan 1992). I will provide a fuller picture of the sentence structure of Basque that I assume in section 2.3 below, so for the present I will only sketch the main assumptions adopted. Following ideas in Koizumi (1993), Collins & Thráinsson (1995), Collins (1997), Laka (2000), Fernandez (1997) and Albizu (1997), I take it that the lower VP projection is where the direct and the indirect object are base-generated, and that
the higher VP introduces the external argument (cf. Chomsky 1995). In ditransitive constructions, the V head of this projection (henceforth v) has a dative Case feature that is checked off against the indirect object, which raises to the outer specifier position of the higher vP. It is important to note that although the dative Case is morphologically marked (like the ergative Case), it cannot be considered a lexical case, since it is not lexically dependent on the V. Indeed, datives occur with almost any kind of verb: with both unaccusative and transitive verbs, and can cover a variety of thematic roles: benefactive, goal, experiencer, … I assume thus that dative is a structural Case assigned by v.

These assumptions are summarized in (10):

(10)  
   a. The EPP feature of T is strong  
   b. ergative Case is a structural Case  
   c. the Case feature of T is strong  
   d. the Case feature of v (dative) is strong  
   e. the Case feature of Asp (absolutive) is strong  
   f. V raises and adjoins to Asp and then to v

The clause structure of Basque I present in section 2.3 is based on these assumptions. A more complete analysis of the sentence structure is also provided there, but in order to understand how the proposed analysis works, two further essential properties of Basque syntax should be presented first: the verbal agreement system and the pro-drop phenomenon.

2.2.2. Verbal agreement

Besides marking morphological ergativity on the DP, Basque consistently shows ergative morphology on the agreement verbal system. In particular, Basque verbal inflection agrees with the arguments bearing ergative, absolutive and dative Case.6 By ‘agreement with the three arguments’ I mean that the finite inflected

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6 There are also ‘allocutive’ forms for colloquial speech which display an extra agreement marker with the addressee, even when it is not an argument of the verb. The Basque allocutive form can be compared with the ‘ethical dative’ found in the Romance languages, i.e., a dative clitic that does not correspond to a thematic argument. In western dialects the usage of allocutive forms is almost restricted to colloquial or familiar contexts, and different forms are used depending on whether the addressee is male or female. For a recent study of allocutivity in Basque, see Oyharçabal (1993), and Alberdi (1996).

However, perhaps due to sociolinguistic factors, in some varieties the usage of allocutive forms has been gradually declining, and only some forms of the entire verbal paradigm of allocutivity are used. One example of allocutive forms is given below:

(i)  
   Neu ibil-i n-a-u-k  
   "I have walked (addressing to you (masc.))"
verbal forms show distinct agreement markers for each of the participants of the event expressed by the verb. Interestingly, as can be seen in the examples below, the distinct Case marking of the subject of an unaccusative and of a transitive/unergative verb correlates with a difference in the agreement markers on the verb. Consider the sentences in (11). (The person agreement markers are highlighted in bold face in the examples in (11)). The agreement marker corresponding to the l. p. sg. (-t in (11a)), which functions as the subject of the transitive verb ekarr ‘bring’, is morphologically distinct from the agreement marker corresponding to the l.p.sg. subject of the unaccusative verb etorri ‘come’ (n-), in (11b). Thus, in this respect it can be said that Basque displays a fully ergative morphology in its grammatical system.7

(11) a. Ni-k lagunak-Ø kotxe-z ekarr-i d-it-u-t
   I-erg friend- pl.abs car-by bring-aspl pres-pl-root-1.erg
   “I have brought my friends by car”
b. Ni-Ø kotxe-z etorr-i n-a-iz
   I-abs car-by come-aspl 1.abs-pres-root
   “I have come by car”

Moreover, as was noted above, inflected verbs in Basque also agree with the argument bearing dative Case, regardless of its grammatical function. As is usual, the ‘dative’ agreement marker corresponds either to indirect objects (12a) or to subjects of psych-verbs such as gustatu ‘like’ (12b).8 Note, incidentally, that in a parallel way to what we observe in the Case system of nominals, the verbal agreement markers corresponding to subjects of unaccusatives and to objects of transitive verbs have the same morphological mark. This can be seen by comparing the subject agreement marker in (11b) with the object agreement marker in (12b), which in both cases corresponds to the 1.p.sg. ‘me’ (n). The inflected auxiliary

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7 Some observations regarding the gloss of the d(a)- and -a- morphemes in the finite auxiliary forms in the examples in the text are in order here. Up to de Rijk (1992), most analyses considered the prefix d- to be the clitic marker corresponding to an argument with the Ö-features of the third person singular (see, inter alia, Lafitte 1944, Ortiz de Urbina 1989). However, de Rijk (1992) has convincingly argued that the d(a)- morpheme should rather be considered as a tense morpheme, more in particular, as a present tense morpheme (cf. also Trask 1977, Euskaltzaindia 1987). See also Laka (1988, 1993a), and Elordui (1995) for the idea that the third person has no agreement markers.

8 There is a restriction with regard to the dative agreement marker. Although in older days this restriction used to be relaxed, in current Basque the direct object of a ditransitive finite verb must be third person. Thus, a sentence like I’ll show you to my mother cannot be expressed by using a three-person form, and require other constructions (Laka 1988). See Bonet (1994), Murasugi (1994), Albizu (1997), and Ormazabal (1999) for an explanation of this restriction in Basque and in other languages than Basque.
forms of the sentences in (12) below can serve as an illustration of the three-way verbal agreement:

(12) a. Ni-k Jon-i liburu bat-Ø eman-ø d-i-o-t
    I-erg Jon-dat book a-abs give-asg pres-root-3.dat-1.s.erg
    "I have given a book to Jon"

b. Jon-i ni-Ø asko gusta-tzen n-a-tza-i-o
    Jon-dat I-abs much like-asg 1.s.-pres-root-3.dat
    "Jon likes me very much"

The examples above involve periphrastic forms, consisting in a non-finite form followed by a finite auxiliary. Basque verbal morphology is overwhelmingly periphrastic, although there are a handful of verbs that can be inflected synthetically, as a single unit, without an auxiliary that carries the inflectional morphology. In a synthetic form both the lexical verb and the inflectional morphology merge together. Some examples are illustrated in (13):

(13) a. [pro etxera g-ind-oa-z-ela] gertatu zen hori-Ø
    home-to 1.p.pl-past-go-pl-C happen aux that-abs
    "That happened while we were going home"

b. Ardo-a-Ø gu-k da-roa-gu eta janari-a-Ø zu-k
    wine-det-abs we-erg pres-bring-1.p.pl.erg and food-det-abs you-erg
    "We’re bringing the wine, and you (are bringing) the food"

Apart from their paucity in number, synthetic verbs have some idiosyncracies, such as the fact that they are explicitly progressive or punctual in aspect, or at least imperfective. The other (non-synthetic) verbs express a progressive construction by combining the nonfinite lexical verb marked with the imperfective aspect –(z)en with the verbs ibi/i ‘walk’ or egon ‘stay’, as illustrated

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9 I will not enter into details with respect to the internal composition of the auxiliary forms, since that would lead us too far afield, and in any case, this issue is not relevant for the main purposes of this study. For a more detailed discussion of this issue, the reader may refer to Trask (1997), and Gómez & Sainz (1995). For present purposes, it is perhaps worthwhile noting that Basque has auxiliary selection. Thus, transitive and unergative constructions take a HAVE-type of auxiliary, whereas unaccusative constructions take a BE-type of auxiliary (see Levin 1983, Hualde, Elordieta & Elordieta 1994, Euskaltzaindia 1987, and the references cited above).

10 As pointed out in Laka (1990), there does not seem to be any semantic or syntactic inherent property of synthetic verbs that determines that they are subject to synthetic inflection. In fact, in earlier stages of the language, the number of verbs used synthetically was much higher than in current Basque (cf. Lafon 1944, for a survey of the verbs that were inflected synthetically some centuries ago, and Euskaltzaindia 1987 for the current use of these verb forms).
in (14a), or with the particle *ari* followed by the intransitive auxiliary *izan* ‘be’ (14b):

(14) a. Amaia erregalatu diozu-n liburu-a irakur-tzen dabil/dago
     Amaia give away aux-rel book-det read-asg walks/stays
     “Amaia is reading the book you gave her”

     b. Amaia erregalatu diozu-n liburu-a irakur-tzen ari da
     Amaia give away aux-rel book-det read-asg ari is

Where both tense and aspect are present in a periphrastic form, aspect is marked on the non-finite form (as shown in (11), (12) and (14) above), whereas tense is marked on the auxiliary form. In contrast, synthetic verbs do not show any aspect marker, but they are inflected for tense and agreement (cf. (12)).

Periphrastic and synthetic verbal forms also differ in their position with respect to negation. Synthetic verbs always appear right-adjacent to negation, as *daki* in (15a), whereas nonfinite lexical verbs may stay in-situ, as *ekarr* in (15b). In the latter case, it is the inflected auxiliary that occurs right following the negation, and not the lexical non-finite verb. This contrast is illustrated in (15a) and (15b), respectively:

(15) a. Amaia-k ez da-ki ezer
     Amaia-erg not pres-know anything
     “Amaia doesn’t know anything”

     b. Amaia-k ez d-i-t ezer ekarr-i
     Amaia-erg not pres-dat-1.p.sg.dat anything bring-asg
     “Amaia hasn’t brought me anything”

In chapter 5 I will be concerned with the issue of verb movement, where it will be argued that the main verb adjoins to the auxiliary to fulfil a lexicalization requirement imposed on the auxiliary verb (cf. Ortiz de Urbina 1994, G. Elordieta 1997a). In negative constructions, however, there is no need for the main verb to raise to Aux, since the negation head can serve as a lexicalizer for the auxiliary. Thus, in these contexts the auxiliary raises to negation and the main verb is left in-situ. This is exemplified in (15b). With regard to synthetic verbs, they are the only inflected verbs, so they raise all the way up to the negation head, as is shown in (15a). As I argue more in detail in section 3.4 below, I assume that there is a separate AuxP above the layered VPs, where auxiliary verbs are generated.\footnote{Since the type of verb involved has no particular relevance for the text discussion, for reasons of simplicity, throughout the dissertation I will only use periphrastic forms.}
2.2.3. Empty categories

A further general property of Basque that I would like to call attention to is the fact that Basque is a pro-drop language, that is, it allows null subjects, but, further, it is an extended pro-drop language, since the empty category pro is licensed in all three verbal arguments, i.e., in subject, direct object and indirect object positions (cf. Salaburu 1986, Ortiz de Urbina 1989, Laka 1988). In standard accounts of the distribution of pro in null subject languages, it is generally assumed (following an original idea proposed by Taraldsen 1980), that rich verbal agreement is tightly related to the possibility of allowing null arguments. Based on this idea, Rizzi (1986a) formulates the pro-drop parameter with the proviso of the pro module, which basically requires that pro must be both licensed and identified by an X°. Thus, the proposal is that in rich agreement languages like Italian or Spanish, a fully-fledged verbal agreement (Agr) governs the empty category in subject position, so that Agr licenses it and besides, the person-number features of Agr make it possible to recover the content of the null subject (cf. also Chomsky 1982). This is illustrated in the Spanish example provided in (16), where the subject agreement marker -mos identifies the subject of the sentence as corresponding to 1.p.pl., i.e., we:

(16) pro vamos a ir de vacaciones a Grecia
go.pres.1.p.pl. to go of holidays to Greece
"(We) are going to Greece on holidays"

In essence, the Agr-dependent account for pro-drop intends to capture the intuition that the 'O-features' or the nominal features for person, number and gender, marked as clitics on the verb, are responsible for determining the content of the missing argument. Given this, one predicts that languages showing morphological object agreement on the verb will allow null pronominals in object position. Indeed, this is what occurs in Basque finite clauses. Sentences constituted by a single verb and the inflected auxiliary are completely grammatical, as the example in (17) illustrates:

(17) pro pro pro eman-o d-i-zki-zu-t
give-perf pres-root-pl.-2sgdat-1sgerg
"(I) have given (them) (to you)"

In (17) we identify the null subject with the 1.p. singular, by means of the ergative marker -t. Similarly, we know that the null dative refers to the 2. person singular, because of the dative marker -zu-, which can only refer to the 2.p. singular. As for the identification of the empty DP in direct object position, we identify it with the third person, even though it does not show an overt person
marker (see footnote 9).\footnote{12}

Presumably, the morphological unmarkedness associated to the third person, as opposed to the markedness of the first and the second persons, makes possible the identification of the empty pronominals as corresponding to the third person. On the other hand, in addition to encoding person agreement markers, the inflected verb in Basque also carries number markers, as can be seen in (17). Due to its relative position with respect to the root (-i-) and the dative marker (-zu-), we know that the plural marker -zk(i)- refers to the direct object; that is, we can identify the null direct object with the 3.p.pl. (cf. Gomez & Sainz 1995 for a thorough study of the origin and development of Basque verbal affixes).

Despite the above, an approach which relies heavily on the presence of agreement in order to license (and identify) the occurrence of empty referential arguments proves to be problematic on the basis of internal evidence drawn from Basque.

In effect, Basque provides empirical evidence showing that Agr is not necessary to license and identify empty categories with referential interpretation. The evidence comes from the fact that null referential arguments are found in non-finite constructions, despite the fact that overt agreement is absent in these contexts (recall the discussion in chapter 1, section 1.2.2.2 referring to Basque nominalizations and the lack of agreement in relation to the issue of free word order). Moreover, in a parallel manner to what is observed in finite clauses, empty categories in non-finite sentences alternate with lexical DPs, as is illustrated in (18a-b):

(18) a. pro nahi d-u-zu [ni-k Jon-Ø etxe-ra erama-te]a?  
    want pres-root-2erg I-erg Jon-abs home-to bring-nom-det  
    ‘Do you want me to bring Jon home?’

b. pro, nahi d-u-zu [e/\k e/\k etxe-ra erama-te]a?  
    want pres-root-2erg home-to bring-nom-det  
    ‘Do you want me/him to bring you/him home?’

The examples show that any of the three arguments of a verb can be omitted in non-finite clauses, akin to what occurs in finite sentences (cf. (17) above). Thus, in (18b) both the embedded subject and object have been left out. On the other hand, notice that null subjects and null objects in non-finite clauses can freely alternate with lexical DPs. Therefore, they cannot be instances of PRO. Notwithstanding, the reference of the embedded empty categories may be coreferential to an argument of the matrix clause, as is indicated in (18b) with the possibility of coinindexing any of the embedded null arguments with the matrix subject.

\footnote{The agreement marker associated with the dative argument, is, however, morphologically specified as -\textit{o}- (see (12a-b) above).}
BACKGROUND ASSUMPTIONS

However, these empty categories can also take their reference from a different source (as indicated by the referential index \( k \) in (18b)). In fact, the reference of the null arguments exemplified in (18b) can be determined in the discourse via coreference with one (or more) salient topic(s), which itself can be overt or non-overt (the latter possibility arises only if its reference can be recovered from the discourse). Thus, for instance, if we are talking about Jon, who has got drunk, and cannot drive his car, I may offer myself to drive Jon home, by asking the question in (18b), or in (18a), indistinctly.\(^{13}\)

The possibility of having null and overt Case-marked DPs even when inflected synthetic verbs or auxiliaries are absent, as in (18a-b), supports the view adopted in the present study that morphological agreement and Case assignment involve two separate issues. Thus, I assume that Case licensing and agreement are dissociated, contrary to standard approaches to Basque Case assignment, such as Cheng & Demirdache (1993), Albizu (1995), and Fernandez (1997). Although differing in the precise implementation of the general idea, these accounts share the assumption that Basque DP arguments both check their Case and trigger agreement with an inflectional head by occupying the specifier position of an agreement phrase, AgrP, to which head the verb (in Albizu’s and Fernandez’s account) or the auxiliary (in Cheng & Demirdache’s proposal) raises on its way up to Tense.\(^{14}\)

However, the evidence provided by the lexical arguments that occur in nonfinite clauses in Basque shows that Case assignment (or Case checking) is not directly related to the presence of inflectional agreement (cf. (18a)). If that were so, we would not expect that the same range of Case-marking possibilities that hold in finite constructions which contain an inflected verb would apply when agreeing verb forms are absent. However, the results falsify the predictions. Cf. (18a) with (19) below:

(19) ni-k Jon-Ø etxe-ra eraman-go d-u-t
     I-erg Jon-abs home-to take-fut pres-root-1perg
     “I will take Jon home”

In the present study, I assume that subject and object agreement on the inflected verb results from a Φ-feature sharing relation created in a Spec-head configuration. Following Laka (1990, 1993b), I assume that the verb raises to the aspectual head Asp\(^0\), located above VP (but lower than the higher vP (see section

\(^{13}\) For a discussion on this issue, and for a proposal about the nature of empty categories in Basque nonfinite clauses, see A. Elordieta (in press).

\(^{14}\) Cheng & Demirdache’s (1993) proposal differs from the other accounts in that they assume that overt DPs in Basque are adjuncts, generated externally to VP in the specifier of their corresponding AgrPs.
2.3.1 below).\textsuperscript{15} Direct object agreement results then when the DP object moves to the specifier position of Asp, where V has previously raised. Next, the complex [V-Asp] raises to v. The external argument is in the specifier of vP, so when the V-Asp moves to v, an agreement relation is established between the V and the external argument. When the indirect object is present, it raises to the outer specifier of v (the innermost is occupied by the subject) to check Case features. In doing so, it also triggers agreement with the verb. Finally, the complex head [V-Asp-v] raises to Aux, where the agreement features are spelled out.

Note that the pattern exhibited by synthetic verbs is easily explained assuming this view of agreement. Recall that we mentioned above that synthetic verbs are 'simplex' verbs lacking an auxiliary, which are inflected for tense and agreement markers, unlike periphrastic verbs, where inflectional morphology is specified on the auxiliary verb. On the assumption that synthetic verbs are also subject to the process of V-raising (except for the final V-Asp-v to Aux raising), verbal agreement is just a reflex of the configuration created by successive V (head) movement and movement of the DP arguments to the specifier positions of the respective heads where the V raises.\textsuperscript{16}

Hence, I do not assume the existence of a separate projection for agreement, but follow instead Chomsky's (1995) and Ura's (1996) assumption that each head may, in principle, have several specifier positions (cf. also Iatridou 1990 and Murasugi 1992 for a Spec-head approach to agreement, without involving an AgrP).

2.3. Sentence structure

I will assume that the structure of a ditransitive clause in Basque (i.e. a structure with two objects) is basically as follows:


\textsuperscript{16} As S. Barbiers (p.c.) points out, this view on agreement raises the question of why agreement does not show up in non-finite clauses, given that lexical DPs license their Case in these contexts, as evidenced by the fact that DPs bearing ergative, dative and absolutive Case are allowed in infinitival clauses (see (18a)). On the assumption that the mechanism of Case-checking in finite and non-finite clauses is basically the same, this means that argument DPs are in a Spec-head relation with the V in infinitival clauses too. However, agreement is absent in these contexts. This is a common pattern found across languages, although there are languages, such as European Portuguese, which have inflected infinitivals (Raposo 1987). At an intuitive level, the overt presence of agreement seems to be dependent upon the (positively) morphological specification of T. Perhaps this is related to the nominal character of Basque non-finite constructions (cf. Ormazabal & Romero 1998 for some suggestions).
This configuration is based on the assumption that L-related projections are right-headed, whereas non-L-related projections are left-headed (see section 2.3.4 for arguments in support of this hypothesis). This view on phrase structure accounts for the fact that V and Aux are sentence-final in canonical contexts, but appear to the left of vP internal material when V raises to the functional domain in negative, interrogative and sentence-initial focus constructions for interpretative reasons. I will address this issue in the next chapters. For the purposes of this chapter the reader should bear in mind that in the constructions mentioned above the complex verb undergoes leftward movement to Neg, or C, respectively, deriving the orders found in these contexts wherein the verb appears in non-final position.

In what follows I will present more in detail the basic assumptions underlying the phrase structure represented in (20).

2.3.1. VP shells and AspP

As can be seen in (20), I assume a Larsonian VP-shell (here labelled vP and VP, instead of Larson’s VP1 and VP2), although I depart from Larson’s (1988) original structure in postulating an intervening AspP projection in between the two VPs. This idea is inspired by Koizumi’s (1993) “split VP hypothesis”, where it is argued that AgrOP is located between two VP projections. Further elaborating Johnson’s (1991) ideas, Koizumi proposes that the verb raises to AgrO in English, and that the direct object raises to [Spec,AgrOP] to check Case. Next, the verb raises to the head of the higher shell-like VP, deriving thus the apparent adjacency requirement between verbs and direct objects in English.

Collins & Thráinsson (1993, 1995) have independently reached a similar conclusion after studying double object constructions in Icelandic. They propose a VP-internal Agr projection, where the verb raises, and to which specifier the direct object moves to check Case. In addition, there is another projection above AgrOP, that they label VP-internal TP, which is only motivated to allow the indirect object
to move across the direct object without violating minimality. In their analysis, the IO ends up in a VP-external AgrP, above the VP projection where the subject is generated (see the structure below). (Next, the subject raises to the matrix [Spec,TP], deriving the order in which the subject precedes the two objects.):

(21)

\[ \text{DP}_{io} \rightarrow \text{Agr1P} \]
\[ \quad \text{Agr} \rightarrow \text{Agr1'} \]
\[ \quad \text{VP1} \rightarrow \text{DP}_{sub} \rightarrow \text{V1} \rightarrow \text{t}_{io} \]
\[ \quad \rightarrow \text{TP} \rightarrow \text{T'} \]
\[ \quad \rightarrow \text{Agr2P} \rightarrow \text{Agr2'} \]
\[ \quad \rightarrow \text{VP2} \rightarrow \text{DP}_{o2} \rightarrow \text{Agr2} \]
\[ \quad \rightarrow \text{VP2} \rightarrow \text{t}_{io} \rightarrow \text{V2'} \]
\[ \quad \rightarrow \text{V2} \rightarrow \text{t}_{do} \]

From a comparison between the sentence structures represented in (20) and (21) above it is easy to observe that both analyses share the same intuition. Both configurations assume a layered VP-shell (or "split VP", to use Koizumi’s words), and include (at least) a projection intervening between the two VP’s, the principal function of which is to check the Case of the direct object. Since I do not assume agreement projections, the analysis depicted in (21) is untenable as it stands.\(^{17}\) Instead, I replace the function that Agr2 has in Collins & Thráinsson’s system by an aspectual projection, AspP, whose existence is independently argued in the language (see, specially, Laka (1988, 1990) for Basque, and Manfredi (1988), Cheng (1989), Demirdache (1989), Iatridou (1990), Travis 1991, Noonan 1992 and Alexiadou (1994) for an AspP in other languages).\(^{18}\) The idea of relating Aspect with the movement of the object is also suggested in Diesing & Jelinek’s (1993) work on object shift in Germanic languages and in Egyptian Arabic. They point out that object pronouns in Egyptian Arabic move out of the VP when the main verb is inflected for agreement and aspect, as is shown in (22):

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\(^{17}\) Cf. Collins (1997) for an alternative clause structure without agreement projections.

\(^{18}\) The association we make in our proposal here between direct objects and Aspect receives further support by the idea, often mentioned in the literature, that an object delimits or expresses the end point of the event described by the verb, in the sense of Tenny (1987).
(22) Fariid kaan biyigma9-hum
     BE.pres gathering-them (3ms.Imperf)
     "Farid was gathering them"

Drawing on Johnson’s (1991) insights on “object shift” in English, Diesing & Jelinek propose that there is a functional-like head which main verbs move to, carrying along the object pronoun with it via head movement. Johnson labels this head as μ, but Diesing & Jelinek identify it with Aspect (Asp). In addition, they propose that the Asp head has associated with it a specifier position, to which specifier object DP’s move in English and Icelandic.19

Bear in mind that I am assuming that the Case features of Asp and v are strong. This will trigger overt raising of the arguments to the relevant configurations where Case can be checked off. If direct objects move to [Spec, AspP] to check their Case against the Case feature of Asp, where do indirect objects license their Case? In order to account for the Case checking of the indirect object, I will assume a multiple specifier analysis, following Chomsky (1995) and Ura (1996), among others. In particular, I assume, as in current minimalist work, that the external argument is generated as the specifier of the higher v head (to which the lower V raises). This head has been identified as v (light verb) by Chomsky (1995, ch.4), as Voice by Kratzer (1994), as Pred by Bowers (1993), and as Tr(ansitivity) by Murasugi (1992) and Collins (1997). I assume that v has a strong (dative) Case feature that is checked by moving the indirect object to the outer specifier of vP. On the assumption that the verb successively raises to v, the movement of the indirect object DP to [Spec, vP] does not violate Minimality, since after V-to-v raising, the indirect object and the direct object are in the same minimal domain of v. This is shown in (23), where only the relevant structure is represented:

19 They do not deal with the issue of Case checking, since their hypothesis bears on the idea that DPs move for semantic reasons related to definiteness. See Diesing & Jelinek (1993) for more details.
2.3.2. The external argument

As regards the Case of the external argument, generated in the specifier of vP, a number of facts must be taken into consideration. First, as was mentioned in section 2.2.1, the external argument in Basque transitive constructions bears ergative Case, as is shown in the transitive structure (24a), and in the unergative construction (24b) illustrated below (for which I assume a transitive structure):

(24) a. Amaia-k alaba-(a)-ri piano-a-Ø eros-i dio
    Amaia-erg daughter-det-dat piano-det-abs buy-asp aux
    "Amaia has bought a piano for her daughter"

b. Amaia-k ordubete-z igeri egin du
    Amaia-erg one hour-for swim do aux
    "Amaia has swum for an hour"

This contrasts with the Case borne by subjects of unaccusative verbs, which is morphologically null. I will delay the discussion on case licensing of unaccusative subjects until ergative Case assignment has been discussed.

As I pointed out in section 2.2.1, I propose to treat ergative Case as a morphological "marked" Case (in the sense of Marantz (1991) and Bittner & Hale (1996)) which must be structurally licensed, in order to be interpretable at the interface systems. Essentially, I adopt Chomsky's (1995) idea that Case-features must be checked in specific configurations that are created by movement. Feature-checking can occur either before Spell-Out or at LF, depending upon the strength of the features involved. If the checking process takes place in overt syntax, Case is licensed in specifier-head configurations, while if checking takes place covertly,
by raising only the formal features (FF) of the relevant category to the target head, Case is checked by head-adjunction.

I assume that ergative Case is checked in T, following Levin & Massam (1985), Marantz (1991), Bobaljik (1992), Laka (1993b), and Zabala & Odriozola (1996). For ditransitive verbs in Basque, I make the following assumptions: (i) the Case feature of T (ergative) is strong; (ii) the Case feature of Asp (absolutive) is strong; (iii) the Case feature of v (dative) is strong. According to minimalist assumptions, the three assumptions (i), (ii) and (iii) will trigger overt movement of VP-internal arguments to the corresponding specifier positions where Case features can be checked off. Thus, the DP bearing ergative Case raises to [Spec,TP] to check Case; the DP bearing absolutive Case moves to [Spec,AspP], and the DP bearing dative Case moves to [Spec,vP] to license their corresponding Cases. These results go in line with the assumptions adopted in Laka (1993b, 2000), Zabala & Odriozola (1996), Fernandez (1997), which claim that Basque arguments raise out of VP to license Case (cf. also Johnson 1991, Koizumi 1993, Collins & Thráinnsson 1993, 1995 for object raising in English).

Assumption (i) accounts for the fact that in the canonical order ergative subjects precede and are hierarchically superior to direct and indirect objects, as can be seen in (24a) (cf. also the subject-object asymmetries mentioned in chapter 1, section 1.2.1, 1.2.2.2.2). On the other hand, recall that I assume that T has a strong D (EPP) feature, which forces overt raising of a DP argument to [Spec,TP]. If my assumptions are correct, in transitive constructions ergative subjects move to [Spec,TP] to check Case. Thus, by raising to [Spec,TP], ergative DPs satisfy both the Case feature and the EPP feature of T. In constructions where no ergative DP is present, like unaccusative structures, other arguments raise to [Spec,TP] to check the EPP feature of T, as I will propose in the next section.

I noted earlier that ergative DPs precede other arguments in the canonical order. However, in non-canonical sentences, other arguments may precede the ergative subject. One example is illustrated in (25b), where the object precedes the subject:

(25)  a. [TPJon-ek baloi-a erosi du]  
    Jon.erg ball-det buy aux  
    "Jon has bought the/a ball"

  b. [TPbaloi-a [TPJonek t erosi du]]  
    ball.det Jon.erg buy aux  
    "(as for) the ball, Jon has bought (it)"

In the canonical order represented in (25a), the ergative subject Jonek is in [Spec,TP], moved there to check Case and at the same time satisfy the EPP feature

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20 The present approach, however, goes against Bittner & Hale (1996), Johns (1992), and Murasugi (1992), who correlate nominative (a T- or AgrS-related Case) with absolutive (a V- or AgrO-related Case).
of T. In (25b), the ergative subject occupies the same position, but the object has scrambled across the subject, adjoining to TP.\textsuperscript{21} The derivation of other possible linear orders which involve a focus reading on the subject or on other constituent of the sentence will be discussed in chapter 4.

2.3.3. Unaccusative subjects

In the case of subjects of unaccusative verbs, I adopt the standard view that they are generated VP-internally, that is, as sisters to the lexical verb. Contrary to Burzio's (1986) Generalization, I follow Laka (1993b, 2000) in arguing that the absolutive Case is assigned by the verb both to objects of transitive verbs and to subjects of unaccusatives. Case is also assigned in a parallel way: like direct objects, unaccusative "subjects" raise to the specifier of Asp to check Case. This explains Levin's (1983) claims about Case assignment in Basque. She argued that Burzio's Generalization does not hold in Basque, because absolutive Case (i.e. the Case of V, on her theoretical assumptions) is always assigned in Basque, and always in the same configuration, no matter whether the DP argument bearing absolutive Case functions as a subject (of intransitive verbs) or as an object. The data confirm this claim, given that in monoargumental constructions it is absolutive Case that is assigned, and in predicates involving two or more arguments, one of them always bears absolutive.

Laka (1993b) formulates a Case Parameter which is very similar in spirit to Levin's ideas, but which adopts the early minimalist framework of Chomsky (1993) and Bobaljik (1992). These linguists argue that ergative and nominative Case systems are the result of a parameter in Case Theory: assuming an Agr-based system, Bobaljik proposes the \textit{Obligatory Case Parameter}, according to which in monoargumental predicates where only one Case is required, only one of the Agr projections involved in Case licensing (either Agr1 or Agr2) is 'active'. Thus, the resulting Case system for ergative and nominative systems looks as follows:\textsuperscript{22}

\textsuperscript{21} An alternative analysis might be to consider that the Case feature of T is weak, but the EPP feature is strong (cf. Chomsky 1995, Ura 1996, Collins 1997). This would force overt raising of a DP argument to [Spec,TP], and would leave open the possibility that arguments other than the ergative subject occupy [Spec,TP], leaving the ergative subject in-situ, that is, in [Spec,vP]. At LF, ergative Case will adjoin to T, checking the Case feature by head-adjunction. This could be a potential derivation of (28b). However, such an analysis would create dependency relations sensitive to hierarchical relations holding at surface syntax, that would rank absolutive and dative objects as more prominent than ergative subjects. However, such asymmetries do not exist. Basque behaves like a morphologically ergative language, where the ergative subject outranks absolutive and dative objects for binding and control purposes, and not like West Greenlandic Inuit and Dyirbal, which Bittner & Hale (1996) consider as syntactically ergative languages (but cf. Bok-Bennema 1991 for the opposite view that Inuit is not syntactically ergative).

\textsuperscript{22} In Chomsky (1993) and Bobaljik's work, as well as in Laka's, assignment of dative Case is not considered. For an Agr-based interesting proposal on dative Case and
(26) a. Nominative system: Agr1 is active
    b. Ergative system: Agr2 is active

Laka reformulates Bobaljik’s Case Parameter with some modifications: she proposes that instead of ‘activating’ agreement projections, it is the Case features of T and V that are active or inert. This idea fits in with the general line adopted in this study, namely that Agreement projections are not projected. Given my assumptions on the clause structure of Basque outlined in (20) and (22) above, the relevant features for the Case Parameter are the Case of T, and the Case of Asp.23

(27) a. Case feature of T active: nominative Case must be checked (nominative system)
    b. Case feature of Asp active: absolutive Case must be checked (ergative system)

The implicit assumption in the formulation of the Case Parameter as stated in (27) is that in both systems, either Asp (in ergative systems) or T (in nominative systems) is inserted in the lexicon with Case features that must be checked off. When there is one single argument in the sentence, this argument checks the Case feature which is active in the relevant system; that is, nominative, in nominative Case systems, and absolutive, in ergative Case systems. On the other hand, when more than one argument is present in the structure, e.g. in transitive constructions, other functional categories ‘activate’ their Case features, which will be checked by the remaining argument(s). Marantz’s (1991) notion of ‘dependent Case’ to refer to the ergative Case relates closely to the hypothesis that this case is activated when the other case is already saturated (checked). Thus, in ergative systems, ergative DPs check the Case feature of T, whereas in nominative systems direct object DPs check accusative Case against Asp.

Assume that Basque, being an ergative language, chooses for (27b). This option captures the fact that in cases where a single argument is projected, this argument receives absolutive Case. The prediction is borne out by the data. Subjects of unaccusative verbs bear absolutive, the same Case borne by direct objects (deriving thus the fact that Burzio’s Generalization does not hold in ergative languages, as noted in Levin 1983):

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agreement in Basque, see Fernandez (1997), Albizu (1997), Zabala & Odriozola (1996), and Artiagoitia (forthcoming).

23 The Case born by v (dative) is not directly relevant for the Case Parameter, because dative Case never appears in isolation, but in combination with absolutive, and in tryadic predicates, with ergative Case.
(28)  

a. Amaia-Ø berandu irits-i da  
Amaia-abs late arrive-asp is  
"Amaia has arrived late"  
b. Jon-ek Amaia-Ø kale-an ikus-i du  
Jon-erg Amaia-abs street-in see-asp has  
"Jon has seen Amaia in the street"  

The idea is, thus, that subjects of unaccusatives raise to [Spec, Asp] to check absolutive Case. Note, however, that these subjects behave like ordinary subjects with respect to many syntactic properties such as binding and control effects (see the examples in (7) to (8) in section 2.2.1. above). To derive this, I propose that unaccusative subjects raise further up, to the specifier of T, in order to check the EPP feature of T, which, as was mentioned before, I assume to be strong (following Branigan 1993, Chomsky 1995, Ura 1996, Bittner & Hale 1996, and Collins 1997). This is represented in (29) (for ease of exposition, I omit all head movement of the verb to Asp, and subsequent further raising up to Aux). By virtue of this movement, we account for the fact that unaccusative subjects show a syntactic pattern characteristic of arguments occupying a hierarchical high position in the sentence structure:

(29)  

2.3.4. L-related vs. non-L-related projections  

One important assumption about the structure in (29) is that it has both an Aux(iliary) projection and a T(ense) projection. I posit a separate AuxP in order to capture a number of differences observed between synthetic and periphrastic verbs. First, as was mentioned in section 2.2.2 above, all verbs of a finite clause are inflected for tense and agreement morphology. However, two main groups are distinguished depending whether the inflectional morphology is manifested in the lexical verb itself or in an auxiliary verb. The first group is referred to as synthetic verbs, and the second group as periphrastic verbs. Secondly, apart from the
presence/absence of an auxiliary verb, synthetic and periphrastic verbal forms also differ with respect to negation. Recall that in negative constructions, synthetic verbs appear right-adjacent to negation (30a), whereas in periphrastic verbal forms it is the auxiliary that appears immediately following the negation (30b), leaving the main verb behind. As will be argued in chapter 5, I take it that V-to-Neg raising of synthetic verbs and Aux-to-Neg movement of periphrastic verbs is triggered by a requirement on Neg which requires Neg to be attached to a verbal head.\(^{24}\)

\[(30)\]

a. Jon ez dator gaur
   Jon not comes today
   “John is not coming today”

b. Jonek ez du zure dirua ekarr-i
   Jon.ergnot aux your money bring.asp
   “John didn’t bring your money”

Finally, I would like to consider the head directionality issue in relation with the sentence structures in (20) and (29) that I assume. I noted earlier that I do not assume Kayne’s (1994) Specifier-Head-Complement to be universal. In fact, the data that will be discussed and analyzed in the following chapters are easily accounted for if we start the derivation from an OV structure. Given that in the canonical order the verb is always final, and that the auxiliary always follows the main verb (except in the presence of negation (see chapter 5, section 5.1.1), the simplest hypothesis is to maintain that V and Aux are final in Basque, as the structures in (20) and (29) show.

On the other hand, we mentioned earlier that in non-canonical orders, the complex Verb-Auxiliary often shows up in non-final position. I argue in the subsequent chapters that the derivation of the orderings wherein the V-Aux complex occurs in sentence-internal position is due to leftward movement of the complex verb to higher functional heads; more specifically, to Neg and C. If this hypothesis is correct, that means that the landing-sites where the V-Aux moves are left-headed, since the V-Aux moves to the left of its base-position.

There is good evidence that supports this view. In the literature there have been proposals that point at the direction suggested here. Consider Ortiz de Urbina’s (1989) analysis, for instance. Although he assumes a head-final analysis for Basque, he nevertheless proposes that CP is head-initial. This is proposed to account for the V2 effects observed in Basque focalizations and wh-constructions (see the discussion in chapter 4). In more recent work, adopting the split-CP hypothesis posited in Rizzi (1997), Ortiz de Urbina also proposes a left-headed FocP for Basque, which, in his view, hosts the focus phrase and the verbal complex (Ortiz de Urbina 1995, 1999).

\(^{24}\) As will be discussed in chapter 5, Aux-to-Neg movement also satisfies the morphological condition imposed on the auxiliary which requires Aux to be attached to a lexical head (see chapter 5 for discussion).
In contrast, Laka (1990) claims that CP is right-headed in Basque, but she proposes a left-headed functional projection, Sigma P (\(\Sigma P\)), which includes the projection of negation, as well as elements that express emphasis. Finally, following a suggestion in Rebuschi (1983), Artiagoitia (1992) posits that IP is head-initial in Basque, an exception to the otherwise uniform head-final pattern that he assumes for Basque (cf. similar analyses for German (Haider 1992) and Dutch (Zwart 1993)).

Although these authors differ as to which particular head is left-headed, all proposals have in common that the alleged head-initial projections pertain to the left periphery of the clause, i.e., to the functional domain, which is outside the projections lexically related to the verb. Given our assumption that V and Aux are final, I propose to derive the head directionality dichotomy from a distinction that has been independently argued in the literature and is more systematic: I am referring to the L(exically)-related versus non-L(exically)-related distinction (cf. Chomsky & Lasnik 1993). Essentially, I propose that L-related projections are head-final (namely, VP, AspP, vP, AuxP), whereas non-L-related projections are left-headed, which includes TP, NegP, and CP. These assumptions lead to the following clause structure of Basque that I will adopt throughout the dissertation:

(31)
3.1. Introduction

As was mentioned in chapter 1, Basque displays a great amount of freedom in the ordering of the constituents of a sentence. However, this freedom is somewhat restricted, and the ordering obeys in great part the informational status of a given sentence (cf. Altube 1929, de Rijk 1978, Mitxelena 1981, Eguzkitza 1986, Ortiz de Urbina 1989, Osa 1990, among others). There is a general agreement that the pragmatic functions of topic (understood as given information) and focus (understood as new information, but also including contrastive focus) play an important role in the syntax of Basque, because they narrow down possible permutations among the constituents of a sentence. Two descriptive generalizations can be stated on this matter:

(1) a. Generally the constituent which appears immediately preceding the verb is interpreted as focus.

b. The constituent preceding the focus is understood as topic.

Even though most linguists working on Basque syntax agree on the generalizations described above, they do not all agree as to how syntax encodes the notions of topic and focus. According to some authors (de Rijk 1978, Eguzkitza 1986, Ortiz de Urbina 1989), the pragmatic notion of focus has a syntactic manifestation, by having a designated position, where arguments move to in order to be interpreted as focus. As for topics, most of the above cited works adopt some kind of ‘fronting’ rule (cf. de Rijk 1978), which locates the phrase interpreted as topic in a position above the focus-site. I would like to draw attention to the

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1 As we shall see in chapter 4, this generalization needs further refinements in the case that the constituent occurring to the immediate left of the verb is the direct object. As will be discussed at length in that chapter, given that the canonical position of the direct object is to the left of the verb, a sequence (S)OV may have, in principle, two readings: one, in which the sentence is neutral, and a second one, in which the object is the focus. See chapter 4 for an analysis and for further discussion.
implicit idea in these works that there is an underlying order from which other surface orders are derived, giving rise to the different focus interpretations of a sentence. However, as was mentioned in chapter 1, section 1.1.1, it is not immediately clear whether one can say that there is an underlying basic order in Basque. De Rijk (1969) addressed this issue for the first time (as far as I know), and concluded that there is indeed an order that should be considered as basic, namely the SOV order.

In this chapter, I will provide further confirmation for the claim that Basque has a basic constituent order, which is governed by grammatical principles, and from which other possible permutations are derived by movement. In particular, drawing on the configurational asymmetries observed between the indirect object and the direct object, I argue that the indirect object is hierarchically superior to the direct object, and claim that there is no dative alternation in Basque. This is an aspect of word order not considered carefully before, except of Fernandez (1997). I show that the indirect object argument is a DP, and this will account for the fact that triadic constructions in Basque appear in a configuration equivalent to double object constructions (DOCs). Furthermore, in discussing the neutral word order pattern, it will be argued that S(subject) I(indirect) O(bject) O(direct object) V(erb) is the basic order in Basque, as is commonly assumed, and that all other surface orderings should be analyzed as the result of head movement (e.g. verb movement), and/or of phrasal movement.

Many scholars have convincingly shown that the phrase structure of Basque exhibits a configurational organization which is sensitive to c-command (cf. Goenaga 1978, Ortiz de Urbina 1989a, 1989b, Laka 1990, among others). Binding facts, control data, negative polarity licensing, and other tests involving c-command relations show that the argument functioning as subject is hierarchically superior to the other arguments in the phrase structure. Nevertheless, to the best of my knowledge, no work has been devoted to discuss the hierarchical relations between the direct and the indirect object arguments in Basque. Yet, it is generally assumed that the indirect object argument, which bears dative Case, is somehow "higher" in the structure than the direct object (cf. inter alia, de Rijk 1969, Lafitte 1944, Laka 1988, 1993a, Ortiz de Urbina 1989, Fernandez 1997, Albizu 1997).

There are two factors that make plausible the idea that the indirect object c-commands the direct object. The first one concerns the ordering of the agreement markers encoded on an inflected verb in Basque, and the second factor refers to the linear order in which the two objects occur in the canonical order (see chapter 2, section 2.2. for an overview of the agreement system of Basque). Although these

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2 See, however, Rebuschi (1984), (1989) for a non-configurational approach to Basque.
3 When I was finishing this chapter, I came across Montoya's (1998) unpublished work on double object constructions in Basque. Importantly, the results from her work confirm the conclusions attained in the present chapter. Cf. also Artiagoitia (forthcoming).
factors by themselves do not provide direct evidence for an asymmetric hierarchy IO>O, they show that the data are compatible with that idea.

Let us start with the first point. As mentioned in chapter 2, section 2.2.2, the inflected verb in Basque agrees with all its arguments, in the form of agreement affixes corresponding to each of the arguments, which are affixed to the inflected verb. This is illustrated in the example in (2) below:\footnote{As was pointed out in chapter 2 (section 2.2.1), the absolutive Case is morphologically null in Basque. The lack of phonetic content is indicated with the symbol ‘Ø’ in the glosses.}

(2) Jon-i zu-Ø asko gustatzen z-a-tzai-zki-o
Jon-dat you-abs much like 2abs-pres-root-pl-3sgdat
"Jon likes you very much"

In this example, the verb gustatu 'like' has two arguments: an experiencer subject Joni and an object zu 'you'. Accordingly, the auxiliary (zatzaizkio) agrees with the two arguments: the affix z- cross-references the 2\textsuperscript{nd} person direct object argument —zu—, which bears absolutive Case, and -o cross-references the 3\textsuperscript{rd} person singular indirect object —Joni— marked with dative Case. Importantly, the sequence in which the agreement markers cross-referencing the direct object (z-) and the dative argument (-o) appear strictly ordered is absolutive agreement—(tense,root)-dative agreement; the sequence dative agreement...absolutive agreement is simply not found. Following the spirit of Baker's (1983) 'Mirror Principle', Laka (1988, 1993b) argues that the sequence of inflectional morphemes in Basque is derived in the syntax via successive head movement in the mapping of D-structure to S-structure. Bearing in mind that the agreement marker corresponding to the absolutive is associated with an underlying direct object, if Laka is right in that Basque obeys Baker’s Mirror Principle, then the ordering of the agreement markers corresponding to the absolutive and to the dative Case-marked DPs, which is of the form absolutive-dative, suggests that the argument which triggers dative agreement on the verb is placed in a position higher than that of the direct object —since the dative agreement marker appears to the right of the absolutive agreement marker— (see also Cheng & Demirdache 1993). Naturally, the same conclusion extends to indirect objects in ditransitive constructions, which are the prototypical arguments which show up with dative Case, as is illustrated in (3a) below. If the indirect object is hierarchically higher than the direct object, as we argue here, under the syntax-driven inflectional morphology proposed in Laka (1988, 1993) (cf. also Albizu 1997), it is expected that the agreement marker cross-referencing the indirect object appears to the right of that cross-referencing the direct object. However, as was pointed out earlier, it has been convincingly argued in Euskaltzaindia (1987), Laka (1988, 1993b), de Rijk (1992), and Elordui
(1995) among others, that the 3rd person has no overt person agreement marker (except for the dative, see (2)), so the prediction cannot be empirically tested. In principle, this problem could be circumvented by having a 1st or 2nd person as direct objects, since in contrast to the 3rd person, they have a morphologically specified person agreement affix. Nevertheless, this is not possible, due to the fact that Basque displays the Person-Case Constraint (PCC), which disallows 1st or 2nd agreement markers corresponding to the direct object to cooccur with a dative agreement marker cross-referencing the indirect object (cf. Bonet 1991, 1994, Laka 1993b, Albizu 1997, Ormazabal 1999). This is illustrated in (3b) for Basque:

(3) a. pro Jon-i bota berri-ak bidali d-i-zki-o-te etxe-ra
    Jon-dat boot new.pl send pres(3abs)-root-pl-3sgdat-3plerg house-to
    “They have sent Jon the new boots home”

b. *pro Jon-i ni bidali n-a-i-o-te
    Jon-dat Labs send 1abs-pres-root-3sgdat-3plerg
    “They have sent me to Jon”

The contrast in (3a-b) is captured by the descriptive constraint PCC, according to which the presence of dative agreement corresponding to the indirect object can only occur with a 3rd person direct object. The condition is satisfied in

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5 This view argues against the traditional idea that the affix d- (glossed as a present tense marker in the example (3a) in the text) is the agreement marker corresponding to the 3rd person bearing absolutive Case. Based on the convincing arguments provided by the authors above mentioned, I adopt the view that 3rd person DPs bearing ergative and absolutive Case have no corresponding person agreement marker encoded in the verb.


7 In (3a) the morpheme corresponding to the present tense is d-, whereas it is morphologically realized as a- in (3b). In fact, following de Rijk’s proposal, I assume that the full form of this morpheme is da-. The different realizations of the morpheme in the examples in the text is further conditioned by morphophonological factors.

8 I have glossed the -i- morpheme following the tense morpheme as the reconstructed verbal root *i, following de Rijk (1985), Euskaltzaindia (1987). However, there are other proposals, which appear to have gained ground in recent years, according to which trisyllable forms of the auxiliary, such as diskioite, represent the underlying transitive auxiliary verb root *udu with extensive phonological reduction (cf. Schuchardt 1893, Gómez & Sainz 1995 for further discussion). See also section 3.2.2.1 below.

9 Although this statement holds in the modern varieties of Basque, verb forms of the sort of (3b) are occasionally found in a few literary works, such as those by the late 16th century writer Johannes Leçiarraga, and the three forms Azkue (1925) attested to be spoken in the Western variety of Arratia. Nevertheless, it is still subject to debate among Basque
(3a), but not in (3b). Here I will not further discuss the nature of the PCC constraint. For detailed discussions on this topic, the reader is referred to the works mentioned above (see also note 6). It is however noteworthy to point out that the restrictions on the person that triggers absolutive agreement are imposed by the presence of a dative agreement marker, but it is never the case that an absolutive agreement marker constrains the dative agreement system. Albizu (1997) argues that this asymmetry is readily explained by assuming that a c-command condition governs the application of the Person-Case constraint: that is, the trigger of the PCC must c-command the target. Given that it is the dative agreement cross-referencing an indirect object that imposes restrictions on the absolutive agreement it can cooccur with, it follows that the indirect object c-commands the direct object, a conclusion that we fully adopt here.10

A further indication that the indirect object is structurally higher than the direct object comes from word order facts in unmarked contexts. Although this factor by itself may not be decisive, the fact that for every speaker of Basque the order in which the indirect object argument precedes the direct object phrase in ditransitive constructions is the neutral order is at least very indicative, and supports the idea argued for here, namely that the indirect object is structurally higher than the direct object in the phrase structure of Basque.

These two factors seem to point to the existence of a hierarchy between the two objects; however, they are not grounded on a pure syntactic basis. In what follows I will provide further empirical evidence which shows that, despite the apparent freedom with which the direct and the indirect arguments can permute between them and among other constituents in the sentence, there exists a hierarchical relationship between the two objects which explains asymmetries such as those found with respect to binding and scope relations.

3.2. Double Object Constructions in Basque

In this section, I will argue that Basque only has one dative construction, namely, one which corresponds to double object constructions (DOCs) in other

grammarians whether these forms ever existed or are a literary creation. In any case, what is interesting is to notice that in these forms, the sequence of agreement markers corresponding to each of the arguments reflects a hierarchical structure in accordance to our proposal:

(i) gommendatzen ze-rau-zki-o-te-t
    recommend 2abs-root-pl-3sgdat-pl-1sgerg
    "I recommend you (pl) to him/her" (Leiçarraga 1571)

10 See also Ormazabal (1999) for a syntactic account of the PCC in terms of the Minimal Link Condition based on an asymmetric c-command relation between the ergative, the dative and the absolutive agreement markers.
languages, and that it lacks an prepositional dative construction. Evidence will be
provided that shows that the indirect object in Basque is always a nominal
argument (DP), not a prepositional phrase (PP). Secondly, I will show that Basque
also exhibits some of the asymmetries Barss and Lasnik (1986) pointed out with
respect to the behaviour of the two objects in double object constructions (DOCs
henceforth). In particular, the phenomena examined involve anaphor binding,
variable binding by a quantifier, weak crossover effects, and reciprocal
interpretation of each ... the other (from Barss & Lasnik), quantifier scope
relations and principle C effects. The results obtained from the application of these
diagnostics will be shown to support our claim that the indirect object c-commands
the direct object.

Note that for the most part I will ignore the role of the subject, as my main
concern in the following discussion is to determine the structural relations between
the two objects.

Let us start the discussion with a brief review of double object
constructions.

3.2.1. Some notes on double object constructions

Various proposals have been advanced in the literature concerning the
structure of double object constructions (e.g. Oehrle 1976, Kayne 1981, 1984,
Pesetsky 1995, among others). The divergences lie on two main points: (a)
whether the two objects form a constituent (i.e., a S(mall) C(laus)e), as proposed in
Kayne 1984), and (b) whether there is a derivational relation between a double
object construction and a prepositional dative construction. The issue is not trivial,
and deserves a more detailed discussion than I can possibly offer here.

Below, I first provide a brief overview of the proposals concerning double
object constructions. In section 2.2, drawing from Basque data, I will present an
analysis on double object constructions that accounts for the structural
asymmetries and for the word order patterns found in ditransitive constructions in
Basque.

Consider first the following two structures which instantiate the dative
alternation in English:

(4)  a. The woman gave a sandwich to the child
    b. The woman gave the child a sandwich

The two constructions differ in two obvious respects: (i) there is a change
in the linear order of the two internal arguments, and (ii) in the dative shift variant
(4b) the preposition associated with the indirect object disappears. There are
further properties that characterize the double object construction (DOC) in many
languages, such as the ‘double’ accusative Case borne by the indirect object, that
the indirect object triggers agreement on the verb, or the fact that the indirect
object in DOCs is ‘affected’ by the action described by the verb (cf. Marantz 1984,
Baker 1988, Hale & Keyser 1993). However, it must be noted that not all these
properties are found in double object constructions across languages. In fact, we
will see in our discussion below that Basque double object constructions only
display some of these properties.

In relation to the dative alternation illustrated in (4), there has been much
debate about the syntactic relation between the two types of dative constructions,
concerning whether the DP-DP order is derived from the DP-PP order (as argued
by Larson 1988, 1990 and others) or whether it is an original order (cf. Oehrle
the data drawn from Basque that we will discuss here only reveals positive
evidence for the existence of double object constructions of the form DP-DP, I will
not further discuss the derivational relationship of the constructions exemplified in
(4) above. I will however show that the only dative structure instantiated in Basque
involves a double object construction.

Larson’s (1988) analysis of double object constructions is largely based on
the binding asymmetries reported in Barss and Lasnik (1986). They show that the
domain relations between the two complements of a ditransitive verb in English in
double object construction are the reverse of those existing in prepositional
dative constructions. Given that the same thematic relations are involved in
prepositional dative and double object constructions, Larson concludes that at D-
structure both involve the same (underlying) relative hierarchical relations.
Accordingly, he argues that one of the two forms must necessarily be derived from
the other. More concretely, he suggests that a double object construction like the
example given in (4b) derives from an underlying prepositional dative construction
(given in (4a)). To account for the binding asymmetries observed between the two
constructions, he proposes a multiple VP structure for dative constructions, which
consists of an outer VP shell with an inner VP core embedded within it, as is
illustrated in (5), and proposes a derivational approach for a DOC. 11 The structure
Larson proposes for a double object construction is given in (5):

11 In Larson’s analysis, the derivation takes place via a process of passivization which takes
place within the lower VP (which contains the two internal arguments). As in a regular
passivization derivation, the ‘subject’ of the lower VP (i.e. the direct object) undergoes
demotion, and the preposition which assigns Case to the indirect object is absorbed, forcing it
to raise to the specifier of the lower VP to get Case.
As was noted earlier, in Basque there is only evidence for the existence of a configuration equivalent to a DOC. Therefore, I will not get into a discussion regarding a derivational approach of DOCs (cf. Aoun & Li (1989), Jackendoff (1990), Williams (1994) for criticism to Larson’s proposal, and Larson’s (1990) subsequent reply, among others). For the purposes of our discussion it is sufficient to point out that most of the asymmetries discussed by Barss & Lasnik (1986) in English DOCs receive a straightforward explanation within the VP-shell configuration proposed in Larson (1988), which is given in (5). In effect, given such a structure, one expects to find an asymmetrical syntactic behaviour between the direct and the indirect object, since in that configuration the indirect object is structurally higher than the direct object.

Considering that these asymmetries are based on the notion of c-command, let me begin with the definition of c-command that I will assume throughout the present study, as stated in Reinhart (1976):

(6) A c-commands B iff:
   a. The first branching node dominating A dominates B, and
   b. A does not dominate B, and
   c. A does not equal B

In addition, I will use the notion of “asymmetric c-command” as a term to represent a syntactic relation between two elements in which only one of the elements c-commands the other —as defined in (6)—, but not viceversa, i.e., when the c-commanded argument is embedded within a syntactic node distinct from the one dominating both A and B.

As discussed in Larson (1988), the crucial property that differentiates prepositional dative and double object structures lies in that the c-command
relations between the two complements are reversed in each: the direct object behaves as hierarchically superior to the indirect object in the NP-PP construction, while it behaves as hierarchically inferior in the DOC construction. Thus, with regard to anaphor binding, in a NP-PP construction (i.e., the basic order, according to Larson), the NP object c-commands a lower PP, and hence it can bind an anaphor contained in the PP dative, but not the other way around, as is expected. This is shown in (7). Likewise, in a DOC, the dative argument, which is in the specifier of the lower VP, can bind an anaphor in object position, since it is hierarchically higher than the object phrase (see the structure in (5)). The example in (8), taken from Bars & Lasnik (1986: [2], [3]) illustrates this:

(7) a. I introduced the girls to each other
    b. *I introduced each other to the girls

(8) a. I showed John himself in the mirror
    b. *I showed himself John in the mirror

As will be shown in the following sections — specifically, in section 3.2.3 —, the same asymmetries observed in English double object constructions are found in Basque ditransitive structures. However, we find no asymmetries of the type shown in prepositional datives (7). We can conclude from this that Basque dative constructions correspond to double object constructions. In other words, I am proposing that there are no prepositional dative constructions in Basque. In the next section I provide some evidence in support of this analysis, by showing that the indirect object marked with dative Case is a nominal phrase, and not a PP.

3.2.2. The dative argument is a DP in Basque

Before I present the arguments for a nominal status of the indirect object in Basque, I would like to stress the fact that the indirect object constituent always bears dative Case in Basque, and that no preposition (or postposition) accompanies the indirect object phrase, regardless of whether it precedes (cf. (9a)) or follows the direct object (cf. (9b)). In this respect, it contrasts with languages which display a dative alternation of the type illustrated in (4) above, repeated here as (10), where, besides a change in the ordering between the two arguments, there is a difference in the presence (10b) vs. the absence of the preposition associated with the indirect object (10a):

(9) a. Ama-k ume-a-ri ogitarteko-a-Ø eman dio
     mother-erg child-det-dat sandwich-det give aux
     "Mother has given the child a sandwich"
b. Amak ogitarako-a-∅ ume-a-ri eman dio  
mother-erg sandwich-det-abs child-det-dat give aux

(10) a. The mother gave the child a sandwich  
b. The mother gave a sandwich to the child

I take this contrast to be a preliminary indication that the indirect object in Basque is a nominal phrase with Case, and not a PP.12

Most clearly, the evidence to be examined below supports the DP character of the indirect object argument in Basque. The evidence is drawn from five facts: (i) the presence of agreement markers on the verb corresponding to the indirect object, (ii) the non-occurrence of datives with the relational suffix -ko, which otherwise can be attached to any PP, (iii) the licensing behaviour of a scrambled indirect object in parasitic gap constructions, (iv) the impossibility of having double object constructions under nominalisation (cf. Kayne 1984), and (v) the possibility of A'-extracting the dative argument. All five properties point to the nominal status of the indirect object, and that a DOC is involved in all constructions. I will discuss each of these arguments in turn.

3.2.2.1. Dative agreement on the verb
3.2.2.1.1. Dative agreement in Basque

As was mentioned in chapter 1, Basque is a language with a rich morphology in its inflectional system. A finite verb in Basque (whether it is inflected synthetically or periphrastically) agrees in number and person with the three verbal arguments: ergative, dative and absolutive (see chapter 2, section 2.2.2). Moreover, this agreement is obligatory with all three constituents, at least in Western dialects.13 The example given in (11) serves as an illustration:14

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12 See Emonds (1985), (1993), Baker (1988), den Dikken (1992) for the alternative proposal that phrases marked with dative Case are empty headed PPs. As will become clear from later discussion in the text, I will argue against the view that Basque dative arguments have a prepositional status.

13 In works by Lafitte (1944), who describes the Eastern dialects of Basque, it is observed that in certain environments the dative agreement may be dropped, "... cela est particulièrement sensible chez les personnes qui lisent beaucoup de français" (Lafitte, 1944: 359). As Laka (1993) points out, without a proper understanding of the conditions in which dative agreement is made optional in these dialects, for the time being we should rather restrict our analysis to the Western dialects, for which there is ample descriptive work done.

14 See the discussion earlier in this chapter regarding the absence of agreement markers for the third person. (Cf. also footnote 7 in chapter 2).
(11) Gu-k zue-i gutun bat-Ø bidali d-i-zue-gu we-erg you(pl)-dat letter a-abs send pres-root-2pldat-1plerg
"We have sent you a letter"

In this example, the phrase marked with dative Case zuei ‘you (plural)’ triggers agreement on the auxiliary verb, as is shown by the marker -zue-. If the indirect object argument were to be analyzed as a PP, instead of as a DP, it would be mysterious why other PP complements do not trigger any additional agreement on the verb. This is shown in (12), where it can be seen that the inflected verb only agrees with the (null) subject ni ‘I’ (cf. the marker n-, corresponding to the 1.p.sg.), but shows no agreement with the PP-complement zuregana ‘towards you’:

(12) [berria jakin bezain laster], pro zu-regana abiatu n-a-iz news know as soon you-towards depart 1sg-pres-root
"As soon as I heard the news, I departed towards you"

We find the same results with certain verbs that can select a dative-marked phrase or a PP as their argument. One of these verbs is hitz egin ‘talk’. If my reasoning is correct, we expect that there will be an asymmetry in the agreement system of the verb. In effect, as can be seen in (13a), the inflected auxiliary agrees with the dative phrase niri, as shown by the agreement marker -t. In contrast, when the complement is realized as a PP, as in (13b), it doesn’t trigger agreement on the verb:15

(13) a. Jon-ek ez d-i-t ni-ri hitz egin nahi Jon-erg not pres-root-1psg I-dat talk want "Jon doesn’t want to talk to me"
b. Jon-ek ez du ni-rekin hitz egin nahi Jon-erg not pres-root I-with talk want "Jon doesn’t want to talk to me"

Under the assumption that the indirect object is a DP, the contrast in agreement between PPs and indirect objects follows straightforwardly.

3.2.2.1.2. Indirect object agreement in other languages

There is also cross-linguistic empirical evidence that supports our claim. Specifically, in languages which cross-reference the indirect object in the verb, this

15 I thank S. Barbiers (p.c.) for bringing the relevance of this type of constructions to my attention.
argument (if overtly expressed) is conveyed by means of a nominal expression (with or without dative Case). Dixon (1994) reports that in Trumai, a language isolate spoken in Brazil, the indirect object phrase is marked by dative Case, and triggers object agreement on the verb. Tibetan and Newari exhibit similar systems (Dixon:123). Likewise, he reports that in Abaza, a language of the North-west Caucasian family, "[...] as many as as four NP's may be cross-referenced on the verb in Abaza — e.g. causative agent, subject, object and indirect object—" (quoted from Dixon:43).16 Also, Nash (1995) reports that in Georgian indirect objects, which she treats as nominal phrases, bear dative Case and trigger object agreement in the verb.

Finally, I would like to bring in the case of double object constructions in Spanish. Although the existence of double object constructions in Spanish has been called into question and is still subject to much debate (cf. Demonte 1994, Branchadell 1995, Romero 1997, Torrego 1998), for present purposes I will adopt Branchadell’s (1995) and Romero’s (1997) proposal that Spanish presents structures of the double object type. To illustrate this, consider the pair of sentences given in (14) below. Romero (1997) proposes to consider these sentences as an instantiation of a dative alternation, (14a) being the counterpart of the prepositional dative construction, while (14b) would correspond to a double object construction:

(14) a. Los chavales han enseñado sus notas a los compañeros
    the boys have shown their marks to the mates
    “The boys have shown their marks to their mates”

   b. Los chavales les han enseñado sus notas [a los compañeros],
    the boys cl have shown their marks to the mates
    “The boys have shown their marks their marks”

In Romero’s analysis, it is important that (14a) and (14b) differ in the presence of the dative clitic les, which is associated with the ‘doubled’ lexical dative DP a los compañeros ‘to the mates’. If the structure in (14a) represents a prepositional dative construction, in opposition to the double object construction in (14b), as Romero proposes, this analysis predicts that clitic doubling with PPs should be impossible in Spanish. The prediction is borne out, as shown by the following example:

(15) Los chavales (*les) han hablado con los compañeros
    the boys cl have talked with the mates
    “The boys have talked to the boys”

16 The underlining is mine.
Romero analyzes the dative clitic in (14b) as a true indirect object marker. This assumption establishes a structural distinction between the two structures in (14), since in this way, the indirect object in the double object construction in (14b), expressed by the clitic, is structurally higher than the direct object, whereas in the prepositional construction it is the other way around. Under this view, the alternation in (14) mimics the inverse ordering relation between the direct and the indirect object observed in the dative alternation in other languages: e.g. *give something to somebody* (prepositional dative construction) vs. *give somebody something* (double object construction) (cf. also Barss & Lasnik's 1986 asymmetries)

Independently of the debate concerning the existence of a dative alternation in Spanish, there are various proposals in the literature that try to account for the general phenomenon of clitic doubling in Spanish and other Romance languages. One hypothesis holds that clitic doubling could be analyzed as a morphological manifestation of agreement between the verb and the 'doubled' object (see, among others, Sportiche 1992, Franco 1993, Torrego 1995). Assume that (14b) is a double object construction. Then, if this proposal is on the right track, the presence of the dative clitic in the DOC in (14b) could very well be treated as an agreement marker.

Therefore, under this view, Spanish double object constructions provide further support for the hypothesis defended here that agreement with object arguments (including the indirect object) involves agreement with nominal phrases, as opposed to prepositional phrases, that usually do not trigger agreement.

3.2.2.1.3. *Applicative constructions*

In close relation to what we just said, there is the issue of applicative constructions. Applicative constructions are found in most polysynthetic languages, as well as in some non-polysynthetic languages with rich morphology on the verb (cf. Marantz 1984, Baker 1988, 1996, and many others). The basic property of these constructions is that there is a specific morpheme encoded in the verb, labelled 'applicative', which results in the verb taking a new nominal as its surface object. As discussed in Baker (1996), this new 'applied' nominal expresses a thematic role that otherwise would have to be expressed by a prepositional construction. Hence, the applicative form of a transitive verb acts like a ditransitive verb. Some examples are illustrated in (16) for Mohawk, taken from Baker (1996): 17

(16) a. Wa-ha-natar-a-kwétar-e’
    fact-masc.sg.subj-bread-Ø-cut-punctual

17 The gloss -Ø- in the text examples stands for an epenthetical vowel which is inserted in Mohawk when it is needed to bear stress (Baker 1996:[522]).
"He cut the bread"

b. Wa-hake-natar-a-kwêtar-Λ-
fact-masc.sg.subj/1sgObj-bread-O-cut-ben-punctual
"He cut the bread for me"

The suffix Λ is the applicative morpheme in (16b), and the applied nominal is interpreted as 'me', which in this case is pro-dropped, due to the fact that Mohawk, like many polysynthetic languages, is a pro-drop language (cf. Hale 1983, Jelinek 1984, Baker 1988, 1996, and others). In most cases, the applicative morpheme occurs in combination with an agreement clitic marker which refers to the 'promoted' object, like -hake- in (16b). Interestingly, Baker notes that the applied object is interpreted as being affected by the action or state named by the verb, that is, as benefactives (or malefactuals) or goals. In light of this, consider the case of ditransitive constructions in Basque again:

(17) Lagun-ek (ni-ri) larrosa bat bidali d-(i)-i-da-te
friend.erg.pl (I-dat) rose a send pres-(root)-DAT-1sdat-3plerg
"My friends have sent me a rose"

We are particularly interested in the morpheme -i-, encoded in the auxiliary verb (highlighted in bold face). Most (if not all) verb forms in Standard Basque show this morpheme -(k)i- in front of the agreement marker which cross-references the argument showing dative Case (the pronoun niri 'me(dat)', in (17)). The etymology and function of this morpheme has been and still is subject of much debate among Basque philologists (see e.g. Azkue 1891, Schuchardt 1893, Gomez & Sainz 1995, Trask 1997), but in the line of the constructions above discussed, it is tempting to treat this morpheme as an applicative morpheme, which in Basque always cooccurs with an agreement marker referring to the affected object (i.e. the indirect object agreement marker -da- in (17)).

Despite the fact that applicative constructions are fairly productive in Mohawk, Baker argues that goals selected by a ditransitive verb cannot be incorporated. In Baker (1988), this blocking effect was analyzed as a result of the fact that goal arguments are PPs headed by a null P. Although he does not present any empirical evidence for such an assumption, he is forced to adopt it in order to account for the

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18 As mentioned in note 9, tripersonal auxiliary forms in Standard Basque show (underlyingly) a verbal root-like affix -i-, which happens to be homophonous to the dative flag marker -i- (cf. Trask 1997 for the use of this term). Conceivably, in older stages of the language, both morphemes fused into one morpheme, due to a phonological assimilation process. See also note 9 and the references therein.

19 In fact, Trask (1997) has speculated that the origin of this morpheme might be linked to the cliticization (incorporation) of the dative agreement marker in the verbal complex in Basque.
fact that goal arguments can never be incorporated into the verb, unlike direct objects, which can (and in fact must) do so. On this account, the null P would prevent the incorporation of the indirect object noun into the verb, by the Head Movement Constraint. This assumption would rule out direct incorporation of the goal argument to the verb.

However, there is an alternative derivation that could potentially solve the problem but apparently is impossible. In principle, nothing seems to prevent a derivation in which the complement noun of the null P first incorporates into P, by head-to-head movement (cf. Baker 1988), and subsequently, this complex head incorporates to the verb, as represented in (18):

\[
\begin{array}{c}
\text{VP} \\
\text{DP} \\
V' \\
V \\
P \\
[\,[N_{io-P}]_P-V] \\
P \\
\text{DP} \\
\end{array}
\]

Nevertheless, this derivation is not possible. Baker suggests that this type of incorporation could be ruled out if the null P is analyzed as a functional head. Thus, he suggests that moving a lexical category first (N) to a functional category (P), and then to a lexical category again (V) would instantiate a violation of the Proper Head Movement Generalization, which, in current terms, can be essentially described as improper movement (cf. Müller & Sternefeld 1993).

An alternative explanation for the impossible incorporation of the goal DP argument of a double object construction into the verb is suggested in Hale & Keyser's (1993) view of argument structure. On the assumption that the indirect object in DOCs is sitting in the specifier of VP, the unavailability of goal incorporation follows as such a derivation would induce an ECP violation.

Hale & Keyser rule out the existence of verbs like *church* or *house* with meanings comparable to 'give a church the money' and 'give a house a coat of paint' by arguing that these would require incorporation from the internal subject position of the inner VP to the higher V, violating thus the ECP (cf. Baker & Hale 1990). This is
so because the inner VP counts as the immediate governing domain for the DP occupying its specifier position. Thus, by minimality, the inner VP constitutes a barrier to government of the trace of this DP from the higher VP node. This (incorrect) derivation is represented below:

(19)

```
  V'
   \--- /
    VP
       \-- /
         [N_{io}, V_{s}]

   DP_{io}
     \-- /
      N
       \-- /
        t_{io}

   \-- /
    V
       \-- /
        t_{v}

   \-- /
    DP_{obj}
```

Regardless of the ultimate account that blocks noun incorporation of the goal in Mohawk-like languages, in Basque there is no evidence for a null PP at all. Firstly, there is no evidence of an object incorporation of this type in Basque triadic constructions, neither of the direct object nor of the indirect object. Secondly, we have seen that PPs in Basque never trigger agreement on the verb. Nevertheless, goals/benefactives bearing dative Case do trigger such an agreement. For these reasons, and for the crosslinguistic evidence pointed out above concerning object agreement and nominal objects, I shall adopt the null hypothesis that dative Case-marked indirect objects are DPs in Basque. In what follows I provide further arguments that support this claim.

3.2.2.2. **Incompatibility with the relational suffix -ko**

Further empirical argument in favour of the DP-status of dative constituents in Basque comes from the fact, firstly noticed by Azkue (1924-25), as reported in De Rijk (1988, 1993), that the three grammatical Cases — i.e., the absolutive, the ergative, and the dative — never occur in front of the Basque affix -ko. The so-called relational or adnominal suffix -ko is an adjectival-like affix which can take virtually any adverbal phrase (20a), or PP as its complement (20b-c), in order to create a complex adnominal modifier. As a matter of fact, in order to express [NP-PP] structures like 'the way to(wards) your house’ or ‘the answer to this question’ in Basque, the suffix -ko must be attached to the PP complement. Thus, unlike English, which can readily create nominal phrases like *the [road [to the mountain]]*, or *ties [with the enemy]*, Basque nominals cannot select oblique PP complements directly (although they may take genitive complements), and therefore the relational affix -ko must be attached to the oblique PP complement,
as shown in (20b) and (20c) (the last example is taken from de Rijk (1981) [1b], [2b]):

(20)  a. gaur-ko ibilaldi-a oso polita izan da
today-ko excursion.det very nice be aux
"Today's excursion was very nice"

b. mendi-ra-*ko bide-a lokaztuta egon da
mountain-directional-ko road-det muddy stay aux
"the road to the mountain has been muddy"

c. etsaia-rekin-*ko loturak gorde nahi ditu\(^20\)
enemy-with ko ties keep want aux
"(s)he wants to keep ties with the enemy"

However, while the suffix \(-ko\) is attached to PPs, it never takes DPs as complements (although it may take NP complements: \[gusto txarret\]-ko txistea 'a joke of bad taste'). Based on the fact that ergative, absolutive and dative Cases never occur in front of \(-ko\), de Rijk (1988) concludes that the three structural cases are not PPs in Basque. I will follow de Rijk in his claim, and show, with the following data, that \(-ko\) cannot be attached to a dative phrase. This can be seen in (21):

(21) *ni-re neba-ri-ko eskutitz-a ez da heldu oraindik
I-gen brother-dat-ko letter-det not aux arrive yet
"The letter to my brother has not arrived yet"

If the dative argument were a PP, there is no reason why \(-ko\) could not attach to it, in contrast to all other PPs, as has been illustrated in (20)\(^21\). This provides evidence against treating the dative phrase in Basque as a PP, while it supports the claim defended here that the dative is a DP.

\(^20\) For the sake of the argument, it should be mentioned that by a morphophonological process, the last consonant \(-n\) of the postposition \(-rekin\) ‘with’ undergoes deletion in front of \(-ko\), yielding the phrase etsaiarekiko. Nonetheless, this is not relevant for the discussion in the text.

\(^21\) In order to express ‘the letter to my brother’ in Basque, there are two options: either by substituting the dative phrase for a PP, equivalent to an English for-phrase, as in (i):

(i) nire nebarentzako eskutitza 'the letter for my brother'

or by using a relative clause. The genitive construction can also express this concept: nebaren eskutitza 'my brother's letter'.
3.2.2.3. Parasitic gaps

Den Dikken & Mulder (1991) argue that double object constructions in Dutch are structurally ambiguous between genuine DOCs (i.e. involving two DPs) and 'covert' prepositional dative constructions (that is, null-headed PPs). One piece of empirical evidence rests upon parasitic gap constructions with double objects wherein the two VP-internal objects undergo scrambling. The motivation behind using scrambling contexts is driven by the fact that Den Dikken & Mulder consider scrambling to be an A'-type of movement (cf. Saito & Hoji 1983, Hoekstra 1984, Bennis & Hoekstra 1984, Den Besten & Webelhuth 1987, among others). Therefore, it is predicted that a scrambled DP can license a parasitic gap. As the data they present show, given here in (22) and (23), either the indirect object (22b) or the direct object (22a) can scramble and license a parasitic gap in Dutch:

(22)  
a. dat Jan het boek\(_i\) [zonder \(pg\_i\) in te kijken] aan Marie gegeven heeft  
that Jan the book without in to look \(\text{to M. given has}\)  
"That Jan gave Marie the book without dipping into it"

b. dat Jan Marie\(_i\) [zonder \(pg\_i\) aan te kijken] het boek gegeven heeft  
that Jan M without at to look \(\text{the book given has}\)  
"That Jan gave Marie the book without looking at her"

Nonetheless, when both objects scramble, as in (23a), the sentence is ruled out. The same ungrammaticality arises when a single prepositional dative phrase is scrambled, as shown in (23b):

(23)  
a. *dat Jan Marie\(_i\) het boek [zonder \(pg\_i\) aan te kijken] gegeven heeft  
that Jan M the book without at to look \(\text{given has}\) 

b. *dat Jan aan Marie\(_i\) [zonder \(pg\_i\) aan te kijken] het boek gegeven heeft  
that Jan to Marie without at to look \(\text{the book given has}\)

Den Dikken & Mulder (DD&M) argue that the deviance of (23a) is caused by the fact that, although apparently the scrambled indirect object is a nominal phrase, just like it is in (22b), the indirect object in (23a) is underlyingly a dative PP with an empty head. This proposal provides a uniform account for the ungrammaticality of (23a) and (23b), since under this assumption, the scrambled argument is a PP in both cases. Along the general licensing restrictions on empty elements proposed by Safr (1985), they assume the obligatoriness of a strict categorial identity between a parasitic gap and its licenser. In the sentences in (22), the parasitic gap is a DP, and its licenser, i.e. the scrambled argument, is a DP as well. Accordingly, it is predicted that (22a-b) will be well-formed utterances. Likewise, if their analysis is right, we expect that (23a) and (23b) will be ruled out, because the scrambled argument is a PP, which does not qualify as a potential
binder for the parasitic gap, which is of a nominal category. The results confirm the expectations. DD&M consider these data as an argument for the presence of a covert P in the indirect object constituent in (23a).

An obvious question that arises in connection with this analysis is why the scrambled indirect object in (23a) must be necessarily of category PP. Given that licensing of parasitic gaps when only the indirect object is scrambled is possible (22b), at first sight it is not clear why (23a) does not allow the possibility of analyzing the scrambled indirect object as a nominal DP. DD&M argue that a derivation along these lines would result in a crossing path configuration, which violates the Path Containment Condition (from Pesetsky 1982):

(24)  * The Path Containment Condition
If two paths overlap, one must contain the other

This condition excludes an analysis of (23a) as involving scrambling of the two VP-internal DP arguments, as this derivation would induce crossing path effects:

(25)  *dat Jan Marie; het boek; [zonder pg i aan te kijken] t_i t_i gegeven heeft
that Jan M the book without at to look given has

Crucial to this analysis is the assumption that the underlying base order in a double object construction is indirect object-direct object. If we assume this, the paths of object movement do cross in (25), ruling the sentence out. On the other hand, if the construction in (23a) instantiates a covert prepositional dative construction, as DD&M argue, in principle no violation of the Path Containment Condition should arise, since the underlying order between the two verbal complements in prepositional dative constructions is reversed: direct object-indirect object. Therefore, after scrambling of the two complements takes place, no crossing paths are created. Hence, the ungrammaticality of (23a) is not induced by crossing path effects, but rather, by a mismatch in categorial identity between the parasitic gap and its licenser. That scrambling of the direct object and a covert dative PP is possible in the absence of parasitic gap constructions is shown in (26):

(26)  dat Jan [p_p P Marie]_i het boek_i gisteren t_i t_i gegeven heeft
that Jan Marie the book yesterday given has

Consider now Basque dative arguments in the light of DD&M’s analysis of scrambled double object constructions and parasitic gap licensing in Dutch. The issue is to determine whether the Basque indirect object is a DP, or rather, whether it can be (sometimes) analyzed as a 'covert' PP, as claimed in DD&M (1991) for Dutch double object constructions.
First of all, I would like to clarify a potential problem that might arise concerning parasitic gap constructions in Basque. Given that Basque allows empty subjects and objects in finite and in nonfinite constructions (see chapter 2, section 2.2.3.), it could be possible to analyze parasitic gaps as instances of *pro, rather than as traces, as is argued in Chomsky (1986b). However, I will show that there is evidence that the parasitic gaps involved in wh-constructions are real parasitic gaps; that is, traces that must be A'-bound by an empty operator in order to be properly interpreted.

Chomsky (1986b) shows that parasitic gap constructions involve empty operator movement, based on the fact that these constructions display all of the typical island effects. This conclusion seems justified by the contrast in (27), adopted from Lasnik & Saito (1992: 98-99), which mimics classic island paradigms:

(27) a. *who₁ did you hire t₁ [₃³ after talking to the man [₃₃ who recommended e₁]]?
   b. ?who₁ did you hire t₁ [₃³Op; after finding out [₃₃t₁ that Mary said [₃₃t₁ that Bill recommended e₁]]?]

Chomsky argues that the parasitic gap construction involves an operation of chain composition out of two chains: the real chain and the parasitic chain. He further suggests that the empty parasitic operator must be subjacent to the real trace. This accommodates the ill-formedness of examples like (27a), while it allows (27b) in. In (27a), for the empty operator to be subjacent to the wh-trace t₁, it has to move out of the adjunct relative clause, but that will create a violation of the Adjunct Condition. Therefore, the sentence is ungrammatical. In contrast, the empty operator in (27b) is subjacent to the trace t, after it undergoes successive cyclic movement through the specifiers of the lower CPs, without crossing any islands or barriers.

Bearing this in mind, let us consider parasitic gap constructions in Basque and see whether they involve "real" parasitic gaps, as is proposed here, or empty pronouns (i.e. *pro):

(28) ??*no-ri; idatzi zenion t₁ [₃₃ [₃₃ e₁ gomendatu zizu-n] gizona-rekin
   who.dat write aux [₃₃ recommend aux-rel man-with
   hitzegin ondoren]]?
   talk after
   *"who₁ did you write to after talking to the man who recommended?"

This sentence is ungrammatical. Under the analysis of parasitic gaps reviewed above, the ungrammaticality of the sentence is straightforwardly explained, but it
remains obscure under a pro analysis. In (28), the parasitic gap e is contained within a relative clause. If it were a pro, there is no reason why the sentence should yield ungrammaticality, since no movement would be involved. On the other hand, if this empty category is a trace bound by an empty operator, as in Chomsky’s (1986b) analysis, then its ungrammaticality straightforwardly derives from a violation of the Chain Condition imposed on chain composition, which requires that the empty parasitic operator be subjacent to the trace of the A’-chain that licenses it. It is clear that the subjacency condition is not fulfilled in (28), since two barriers (the lower CPs) separate the operator from t.22

However, the question arises as to what prevents pro from occurring in these constructions. Since Basque allows null subjects and null objects in finite and non-finite sentences, if these empty categories are analyzed as involving pro, as is standardly assumed, one would expect that the construction in (28) should be possible with object pro. Consider now a sentence parallel to (28) except for the fact that no wh-movement is involved:

(29) Joni; idatzi nion [[CP e; aurkeztu zida-n] gizonarekin hitzegi ondoren]
    Jon.dat write aux introduce aux-rel man-with talk after

Interestingly, this sentence is grammatical, in contrast to (28). Notice that the same barriers intervene between the gap contained within the relative clause and the referential antecedent Jon in the matrix clause. However, the lack of island effects suggests that no movement is involved in this construction. The simplest hypothesis therefore seems to be to identify the gap in the relative clause as a null pronominal.

This approach can account for the grammaticality of (29), but raises the question as to why pro is disallowed in wh-constructions involving two islands such as (28). I will put this problem aside, as I do not have anything interesting to suggest on this issue.

In any case, although the unavailability of pro in (28) requires further investigation, I will keep to the simplest case and consider the contrast between (28) and (29) as signalling that the structure in (28) involves a true parasitic gap construction, and that it is banned as a double adjunct island violation.

22 X. Artiagoitia (p.c.) points out that sentences like (i) are more acceptable, for reasons that remain unclear, even though they involve the same configuration as (28) above:

(i) ?Nori; deitu diozu ti [[PG ezagutzen du-en] irakaslearekin berba egin ondoren]?
   Who-dat call aux know aux-rel professor-with talk after
   “*Who did you call to after talking to the professor that knew?”

However, I do not find a significant contrast between the sentence in (28) and (i).
Assuming this approach is correct, we can use the diagnostic used in DD&M (1991) to disambiguate between a potential covert PP and a DP indirect object in DOCs. The data in (30) show that both direct object wh-phrases (30a) and indirect object wh-phrases can license parasitic gaps (30b):

(30)  a. Nor-Øi agurtu duzu ti [pg; ezagutu gabe]?  
    Who-abs greet aux know without  
    "Who have you greeted without knowing?"  
b. Nor-i, eman diozu ti musu bat [pg; ezagutu eta gero]?  
    Who-dat give aux kiss a meet after  
    "*Who have you given a kiss to after meeting?"

That the direct object wh-phrase nor can license the parasitic gap is expected, given that both the direct object and the parasitic gap are DPs. Importantly, if the dative phrase in Basque were a (covert) prepositional phrase, as DD&M argue to be the case in the Dutch example in (23a), we would expect it not to be a possible binder for the parasitic gap in (30b), since on this view there would be a categorial mismatch between the parasitic gap (a DP) and its licenser, a PP. Nevertheless, the grammaticality of the sentence shows that licensing is indeed possible, because the indirect object is a DP. Similarly, as S. Barbiers (p.c.) points out, for the same reason, one would expect that a dative phrase cannot license a PP-parasitic gap in Basque. The prediction is borne out, as shown in (31):  

(31)  *Nor-i, eman diozu ti musu bat [pg; pentsatu eta gero]?  
    Who-dat give aux kiss a think after  
    "*Who have you given a kiss to after thinking about?"

Therefore, the licensing of parasitic gaps presented above supports the claim that the indirect object in Basque is a DP.

3.2.2.4. Derived nominalisations

Kayne (1984) noted that it is possible to nominalize prepositional dative constructions in English, but not double object constructions (see also Fraser 1970):

(32)  a. the gift/giving of candies to little children  
b.  *the gift/giving of little children of candies

Note that this argument only holds if there are PP parasitic gaps. If they do not exist, the sentence will be ruled out regardless of whether the dative wh-phrase nori is a DP or a PP. Crucially, nothing in the discussion of the licensing of DP parasitic gaps hinges on this.
Den Dikken & Mulder (1991) observe that, apparently, in Dutch there seems to be no asymmetry concerning the possibility of nominalizing both dative constructions. Thus, (33a), which involves the nominalisation of a prepositional dative construction, is grammatical, as expected, but (33b), which shows no overt prepositional dative, is also grammatical:

(33) a. het geven van snoepjes aan kleine kinderen
    the give of candies to little children
b. het kleine kinderen geven van snoepjes
    the little children give of candies

According to Kayne, double complement constructions such as DOCs do not have a corresponding derived nominal because one of the nominal complements violates the Case filter (cf. Chomsky 1980). In (32b) the derived nominal can assign (inherent) genitive Case to its complement, but the second complement receives no Case. Therefore this sentence is ungrammatical. In contrast, the second complement of (32a) is of category PP, so no problem arises with regard to Case (cf. Kayne: [136-159] for a more fine-grained distinction among different double complement constructions and the possibility of having derived nominals). Suppose this approach is correct. Then the fact that the alleged DOC in (33b) is grammatical is striking, as according to Kayne, DOCs should not be able to nominalize.

With respect to the Dutch data in (33), Den Dikken & Mulder argue that Kayne’s generalization can be maintained because (33b) is not a DOC. They claim that the dative argument in (33b) is a covert PP (with a zero preposition). Under this analysis, both sentences in (33) have the same syntactic configuration, accounting thus for the symmetry observed in (33).

Further evidence for the covert PP analysis comes from the contrast between (33) and (36) below. DD&M note that triadic light verb constructions can only occur in the context of double object constructions, and not in the prepositional dative construction (cf. Kearns 1989). This is shown in (34) and (35) for English and Dutch (DD&M’s (50), (51)):

(34) a. John gave the child a kick
    b. *John gave a kick to the child
(35) a. Jan gaf het kind een schop
    b. *Jan gaf een schop aan het kind

Thus, this is a clear context in which the two dative constructions (viz. the prepositional construction and the DOC) are incontestably distinguished. DD&M
further note that it is impossible in Dutch to form a nominalization from a triadic light verb construction:

\[(36) \quad \text{*het kleine kinderen geven van een schop} \]
\[\text{the little children give of a kick}\]

From the contrast between (33b) and (36), they argue that (33b) cannot represent a genuine DOC, but a concealed prepositional dative construction. This would explain straightforwardly that the two sentences in (33) can undergo a nominalization process.

In view of this discussion, let us turn back to Basque. In contrast to English and Dutch, in Basque it is not possible to create derived nominals from a construction involving two objects, regardless of the relative position of the two objects (37a-b) (cf. Eguzkitza 1993). More importantly, if (37c) reflected a covert prepositional construction, we would predict it to be grammatical, contrary to facts:

\[(37) \quad \begin{align*}
\text{a. } & \text{*ume-en goxoki-en erosketa} \\
& \text{children-gen candies-gen purchase} \\
& \text{"the purchase of children of candies"} \\
\text{b. } & \text{goxokien umeen erosketa} \\
& \text{candies-gen children-gen purchase} \\
& \text{"the purchase of candies of children"} \\
\text{c. } & \text{*goxoki-en erosketa ume-ei} \\
& \text{candies-gen purchase children-dat} \\
& \text{"the purchase of candies to children"}
\end{align*}\]

These facts constitute evidence showing that Basque indirect objects are not PPs, but DPs.\(^4\) Further support for this analysis is found in the behaviour of

\[\text{Even though it is not possible to express the indirect object in a derived nominal construction, Basque has another way to form nominalizations which involve a dative argument. The natural way of expressing a nominalization in Basque is by using a nonfinite clause, formed by attaching the affix } -t(z)e \text{ to a verbal base. However, unlike the type of nominalizations described above in (32) and (33), } -t(z)e \text{ Basque nominalizations behave like clauses, in the sense that all arguments appear marked with Case, and certain adverbs may occur in them, as in regular finite clauses:}\]

\[(i) \quad \text{[amak gaur umaeri goxokiak eros-te-a]} \quad \text{idea ona izan da} \]
\[\text{mother.erg today child.dat candies.pl buy-NOM-det idea good be aux} \]
\[\text{(lit.) "It was a good idea for mother to buy sweets to the children today"} \]
\[\text{"It was a good idea that mother bought sweets to the children"}\]
the dative argument in triadic light verb constructions of the type discussed in DD& M (1991). Recall from (34) and (35) that prepositional dative constructions with triadic light verbs are ungrammatical. With this in mind, note that the sentences in (38) are all grammatical, regardless of the order in which the object (ostikada ‘a kick’) and the indirect object (umeari ‘the child(dat)’) appear. In other words, if the indirect object in Basque were structurally ambiguous between a PP and a DP, we would expect that, as in the ill-formed cases of (34b) and (35b), the construction involving a concealed prepositional dative should be ruled out in a triadic light verb construction. Nonetheless, as can be seen in (36), all permutations render well-formed sentences, no matter what the word order between the two objects is. This strongly suggests that all examples in (38) involve double object constructions:

(38) a. Jonek ume-a-ri ostikada-Ø eman zion  
   Jon-erg child-det-dat kick-abs give aux  
   “Jon gave a kick to the child”

b. Jon-ek ostikada-Ø ume-a-ri eman zion  
   Jon-erg kick-abs child-det-dat give aux

c. Jon-ek ostikada-Ø eman zion ume-a-ri  
   Jon-erg kick-abs give aux child-det-dat

d. Jonek umeari eman zion ostikada  
   Jon-erg child-det-dat give aux kick-abs  
   Jon-erg give aux kick-abs child-det-dat

e. Jon-ek eman zion ostikada ume-a-ri  
   Jon-erg give aux kick-abs child-det-dat

Again, the above data provide further evidence for the claim that the Basque indirect object is not a null-headed PP, but a nominal phrase.

The same pattern is observed in Dutch nominalizations like (ii), as observed by S. Barbiers (p.c.):

(ii) Dat voortdurend dikke boeken lezen  
    that constant thick books reading

For this reason, in order to establish a parallel contrast with the data discussed in Kayne (1984), in the examples in the text I have used the type of nominalization that undoubtedly creates derived nominals (cf. Goenaga 1985, Ortiz de Urbina 1989, Artiagoitia 1992 for more discussion).

25 For reasons of simplicity, in (38) I only give some of the possible permutations among the constituents of the sentence. In particular, we are mainly concerned with those orderings which in principle might reflect a dative alternation.
3.2.2.5.  *A*-extraction of the goal object

As is well-known, in many languages it yields bad results to wh-extract the goal object of a double object construction (cf. Stowell 1981 and Baker 1988, among others), whereas it is grammatical to extract the direct object in a NP-PP structure (39a), as well as to extract the DP complement of the prepositional dative (39b). This is illustrated by the contrast in the English examples in (39a-c):

(39)  
a. which perfume do you think I should sell t to Mary?
b. which woman do you think I should sell perfume to t?
c.*Which woman do you think I should sell t perfume?

Kayne (1984) proposes to attribute the deviance of (39c) to a violation of the Condition on Extraction Domains (Huang 1982). He assumes that the goal object of a double object construction is the complement of a null preposition, which in the dative shifted variant moves to a position higher than the direct object, carrying the null preposition with it. Extracting the NP complement from the moved PP by wh-movement will violate the Condition on Extraction Domains, rendering an ill-formed sentence (cf. also the *freezing* effects mentioned in Ross 1967, and Wexler & Culicover 1977). See also Baker (1988) for a a null-headed PP analysis of datives to account for the impossibility of *A*-movement from the indirect object position in double object constructions.

Note that this account explains the contrast between (39b) and (39c) straightforwardly. However, as Den Dikken (1992) points out, it should be possible to move the entire null-headed PP to [Spec,CP], just like it is possible to move the overt dative PP in (40):

(40) To which woman do you think I should sell perfume t?

In fact, he claims that this is the strategy used by languages that permit overt wh-extraction of indirect objects. Dutch is one of these languages. Den Dikken (1992) observes that Dutch behaves differently from English in that long extraction of indirect objects in double object constructions is possible. Compare the grammatical Dutch sentence in (41) with its English correlate\(^{26}\) ((41) is taken from Den Dikken 1992: 173 [6b]):

\(^{26}\) Hornstein & Weinberg (1981) point out that there is some variation among speakers of English as to the possibility of allowing for short wh-extraction of the goal argument in double object constructions. However, long wh-movement of the goal is unquestionably impossible, as illustrated in (39c).
(41) Wie dacht Wim dat Jan een boek gegeven had?
Who thought Wim that Jan a book given had
*Who did Wim think that Jan had given a book?"

Similarly, in Basque the indirect object may undergo overt wh-extraction, either short (42a) or long-distance extraction (42b). The grammatical sentences in (42) show that there is no restriction whatsoever concerning indirect object wh-movement in Basque:

(42) a. [zein emakume-ri] erosi beharko nioko t perfumea?
    Which woman.dat buy should aux perfume.det
    "Which woman should I buy a perfume?"

b. [[zein emakume-ri] uste duzu [erosi beharko nioko-ela t perfumea]]?
    Which woman.dat think aux buy should aux-that perfume.det
    "Which woman do you think I should buy a perfume?"

The possibility of extracting the indirect object in Basque by wh-movement may in principle have two sources: on the one hand, if we assume that the indirect object in Basque is a DP and not a null-headed PP, no problem with the Condition on Extraction Domains arises, as the indirect object is not contained within a PP; therefore it can A'-move without violating the CED. On the other hand, given the pattern observed in Dutch, it could very well be the case that (42) involves pied-piping of zero-headed dative PPs, as is argued in Den Dikken (1992).

However, when other instances of A'-movement of the indirect object in dative shift configurations are involved, a number of restrictions on the mobility of the goal argument show up in Dutch, but not in Basque. This difference is easily captured on the assumption that the indirect object in Basque is a DP. Let us discuss the Dutch facts first. Den Dikken reports that in contrast to wh-movement of indirect objects, empty operator movement of the indirect object in DOCs, such as tough-movement and infinitival relativization, renders ungrammatical results: (from Den Dikken 1992: 174 [7b-c]):

(43) a. ?? Die jongen is leuk om dat boek op te sturen
    that boy is nice Comp that book up to send
b. ?? Ik zoek een jongen om dat boek op te sturen
    I look-for a boy Comp that book up to send

With the aim of providing an account of the contrast between the possibility of wh-movement of the goal argument of a double object construction (41) and the ungrammaticality derived from tough-movement and infinitival relativization in (43a-b), he proposes that the crucial factor constraining A'-extraction of indirect objects is whether an empty operator movement is involved or not: indirect objects
may not undergo empty operator movement (Den Dikken 1992: 175). The motivation he gives for this is that the only possibility to A'-extract an indirect object in a double object construction is by pied-piping the entire PP to the target position. This idea crucially relies on two main assumptions: one, that goal arguments in double object constructions are empty-headed PPs (following Kayne 1984, and Baker 1988), and two, that the ordering goal-theme is derived as a result of moving the goal argument to a specifier position across the argument bearing the theme role. As a result of this, subsequent movement of the NP object of the null dative preposition would involve subextraction from a left branch, yielding a left branch effect.

Given the crosslinguistic variation regarding the restrictions on A'-extraction of the indirect object, he proposes that some languages allow the pied-piping strategy in cases of wh-movement, but no language permits pied-piping when an empty operator movement is at stake — for instance, in tough-movement and infinitival relativization constructions (cf. Contreras (1991) for a survey of several Null Operator constructions). He bases this claim on the assumption, adopted from Jaeggli (1981), Hendrick (1988), and Bennis & Hoekstra (1989), that empty operators are identified as PRO. Thus, since PRO cannot be governed at S-structure (cf. the PRO Theorem in Chomsky 1982), if we pied-pipe the null-headed dative PP, the empty dative preposition will govern the null operator, hence violating the PRO Theorem:

(44) *That boy is nice [[PP ∅ Op]1 to send that book t1]

Den Dikken argues that Norwegian provides further empirical support to his analysis, since in this language too, the indirect object may undergo wh-movement, but not tough-movement (the data are taken from Larson 1988):

(45) a. Hvem sa Marit at hun ga en presang?
Who said Marit that she gave a present
b. *?Slike mennesker er hyggelige a gi blomster
such men are nice to give flowers

In contrast to all the languages discussed so far, however, infinitival relativization and tough-movement of indirect objects in Basque yields grammatical results.\textsuperscript{27}

\textsuperscript{27} Regarding the example in (46a), I follow the standard assumption that it involves relativization (cf. Artiagotia 1991). For a different approach, see Oyharçabal (1998), who claims that -teko clauses are complement clauses.
DOUBLE OBJECT CONSTRUCTIONS AND NEUTRAL ORDER IN BASQUE

(46)  
a. Mikel ez da [\text{Op}_t [t; \text{liburu bat erregala-tze-ko}]] \text{pertsona}  
Mikel not is book a present-imp-for person  
"Mikel is not a person to give a book"

b. Gure aita aproposa da [\text{Op}_t [t; \text{lore sorta hori ema-te-ko}]]  
Our father suitable is flower bouquet that give-imp-for  
"Our father is suitable to give that bouquet of flowers"

If one were to assume that Basque double object constructions also involve null-headed PPs, the grammatical examples in (46) are problematic. The surprising pattern displayed by Basque ceases to be puzzling once we analyze indirect objects in Basque double object constructions as DPs. If we assume this, then no violation of the Condition on Extraction Domains (or of the Left Branch Condition) arises at all. Moreover, assuming, as will be argued later in this chapter, that the ordering \textit{indirect object-direct object} is not a derived order, the well-formedness of (46b) should be treated on a par with (47), which involves \textit{tough} -movement of the direct object:

(47)  
John is easy [\text{Op}_t [to please t]]

Hence, we can conclude that the extractability facts presented in (42) and (46) provide further evidence for the claim that the Basque indirect object is a nominal phrase (DP). In the next section I turn to examine a number of syntactic asymmetries between the two objects, which eventually show that the indirect object phrase is structurally higher than the direct object.

3.3. Double object asymmetries

3.3.1. Introduction

In the previous section I have shown that the indirect object, which bears dative Case, is a DP. Moreover, we found no evidence for the existence of a prepositional dative construction in Basque. We concluded from this that there is no dative alternation in Basque, and that the two VP-internal objects of a ditransitive structure involve a double object construction.

As was observed above, the main characteristic property of double object constructions in the Germanic languages is that the hierarchical relation between the direct object and the indirect object are reversed (as compared to the structural relation in an prepositional dative construction). Thus, whereas the direct object behaves as hierarchically superior to the indirect object in prepositional dative constructions, in double object constructions the c-command relation changes: it is the indirect object that asymmetrically c-commands the direct object. Barss &
Lasnik (1986) reached this conclusion after examining a number of phenomena that revealed the existence of an asymmetric relation between the two objects in double object constructions. In what follows I will apply the diagnostics Barss & Lasnik used to Basque, and show that the indirect object asymmetrically c-commands the direct object.

Let us begin by discussing the configurational double object asymmetries found in the S IO O V unmarked order, starting from binding of reflexive anaphors.

3.3.2. Reflexive anaphor binding

On the assumption that binding requires a c-command relation, and given Principle A of the standard Binding Theory (as stated in Chomsky 1981), according to which anaphors must be c-commanded by an antecedent within a syntactic local domain (i.e., their minimal governing category), we expect that in constructions involving binding of anaphors between the direct object and the indirect object, there will be asymmetries if one of the objects is hierarchically superior to the other: that is, the prediction is that the higher argument can bind an anaphor in a lower structural position, but not vice versa. On the other hand, if no asymmetries are found, that might suggest that the two objects are dominated by the same node, i.e., that they mutually c-command each other. Nonetheless, the licensing of reflexive anaphors in ditransitive constructions in Basque exhibits crucial asymmetries which indicate the existence of a hierarchical relationship between the two objects. More specifically, all asymmetries point to a hierarchical relation in which the indirect object c-commands the direct object.

3.3.2.1. The reflexive anaphor bere/nire/zure burua

A cautionary note concerning Basque reflexive anaphors is in order here. The reflexive anaphor in Basque is a complex anaphoric expression involving a possessive pronoun such as bere 'his/ her' and the invariable noun burua 'head'. That is, the translation corresponding to English myself would be 'my (own) head'. For the sake of simplicity, except when it is relevant for the purpose of the discussion, throughout the text I will gloss the Basque reflexive anaphor as its English counterpart X’s self. The anaphoric nature of bere burua is evidenced by the fact that it must be bound by a local c-commanding antecedent, with which it must match in Φ-features:

(48) a. *nik bere burua jo dut horma-ren kontra
   I-erg his/herself hit aux wall.gen against
   "I hit himself/herself against the wall"

b. nik, neure, burua jo dut horma-ren kontra
   I-erg myself hit aux wall.gen against
   "I hit myself against the wall"
(48a) is ill-formed because the anaphor bere burua has no appropriate antecedent with the matching person features to bind it. In (48b) the reflexive anaphor matches in \(\Phi\)-features with the subject and the anaphoric relation is successfully realized. On the other hand, (49a) below shows that a Basque reflexive anaphor must be bound within a restricted local domain, i.e. the embedded clause, which is defined by the presence of a c-commanding subject in the lower clause, regardless of whether the embedded clause is finite, as in (49a), or infinitival, as in (49b) (cf. the Specified Subject Condition of Chomsky 1973). The anaphor bere burua cannot hence be long-distance bound (cf. Rebuschi 1992, 1993):

(49)   a. Jon-ek₁ uste du [Anekₖ₁ bere *₁ₖ burua gehiegí maite due-la]
       Jon.erg think aux Ane his/herself too much love aux-that
       “Jon₁ thinks that Aneₖ₁ loves herselfₖ₁/*himself₁ too much”

b. Jon-ek₁ Anekₖ₁ [bere *₁ₖ burua zuritzen] entzun du
       Jon.erg Ane him/herself justifying hear aux
       “Jon heard Ane justifying *himself/herself”

On the other hand, the Basque reflexive anaphor is not necessarily subject-oriented, since it allows object antecedents, as illustrated in the examples in (51) below, where a direct object anaphor is bound to a c-commanding indirect object.²⁸ These two properties of Basque reflexive anaphors, namely the unavailability of long-distance binding and the lack of obligatory subject-orientation, are closely related and follow from the internal structure of the Basque anaphor, according to Pica’s (1987) hypothesis. In examining the typological properties of anaphors which may or may not be long-distance bound, Pica proposes to split anaphors in “simple” anaphors —which can be viewed as X’s— and morphologically complex anaphors —which he treats as phrasal anaphors. According to this proposal, all anaphors raise at LF, but morphologically complex anaphors (like the Basque reflexive anaphor bere burua), only adjoin to the phrase containing them, unlike (morphologically) simple anaphors, which can move to the higher INFL by head-to-head movement, accounting thus for the fact that these “simple” anaphors are subject-oriented, and can be bound (cf. Lebeaux 1983 and Chomsky 1986b for previous suggestions on the latter idea. See also Battistella 1989, Hestvik 1992, Huang & Tang 1991, Cole & Sung 1994, Katada 1991 for an interesting debate on the raising approach of anaphors). Assuming that bere burua does not raise higher than the phrase containing it, due to its internal complex structure, it follows that this anaphor can be bound to a potential c-

²⁸ As X. Artiagoitia (p.c.) points out to me, this assumption goes against Rebuschi (1992, 1993), who claims that Basque reflexive anaphors are subject-oriented.
commanding antecedent other than the subject, like, for instance, the indirect object, as shown in (51a) and (51d) below.

3.3.2.2. Binding asymmetries

Barss & Lasnik (1986) noted that in English double object constructions the goal argument can bind an anaphoric expression (contained in) the DP with a theme role, and that this relation is asymmetric (50a-b). These anaphoric binding relations exhibit the opposite results to what we find in prepositional dative constructions (50c-d):

(50)  
  a. I showed Mary, herself, in the mirror  
  b. *I showed herself, Mary, in the mirror  
  c. I showed Mary, to herself, in the mirror  
  d. *I showed herself, to Mary, in the mirror

The binding facts presented above find a straightforward answer on the assumption that they reduce to c-command asymmetries (cf. Barss & Lasnik 1986, Larson 1988, among others). Den Dikken (1992) reports that the same binding effects are observed in Dutch. Similarly, the binding asymmetries found in Basque double object constructions pattern with (50a). However, there are no c-command asymmetries of the type shown in (50c). Let us present the relevant data first:

(51)  
  a. ni-k Miren-iₐₜₜₐₜₐₜₐₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜₜ.................................................................
within the restricted local domain required for anaphor binding in Basque. In contrast, (51b) is not grammatical, showing that the anaphor is not licensed in that position. The motivation for this is that the IO anaphor fails to be c-commanded by its antecedent, the direct object Miren, violating Condition A of the Binding Theory. That the licensing of anaphors is not based on linear ordering (cf. Jackendoff 1990), but on c-command is shown by the ungrammaticality of (51c). Here the antecedent of the reflexive anaphor precedes its bindee, but nevertheless the anaphor is not licensed. Under the assumption that A-movement feeds binding, this also shows that there is no possible analysis according to which the O-IO order derives as a result of A-movement of the object (cf. section 3.3.3 below for a suggestion on the landing-site of object movement).

The ill-formedness of (51c) contrasts sharply with the acceptability of the English prepositional dative construction. I argue that the crucial factor filtering out (51b) and (51c) is that the direct object cannot serve as an antecedent to bind a reflexive in indirect object function because it does not c-command it.

In order to show that the factor responsible for the ungrammaticality of (51b) and (51c) is due to the low structural position of the antecedent, and that there is no ban of a morpho-syntactic type which prevents a reflexive anaphor from occurring as an indirect object, I introduce the example in (52), where the dative anaphor is bound by the subject:

(52)  Mireneki berei buruari arazoak sortzen ditzio
    Miren-erg herself-dat problems create aux  
    "Miren, creates herself, problems"

Hence if we assume that the unavailability of a direct object to bind a reflexive anaphor in indirect object position is due to a failure of c-command, the set of data illustrated in (51) provide a strong argument in favour of an asymmetric IO>O c-command relation.

I would like to note that the c-command requirement observed in the binding of reflexives is independent of the Case morphology borne by the arguments implied in the binding relation.29 That is, the necessary condition that a reflexive anaphor be c-commanded by an antecedent which is hierarchically higher than the anaphor must be fulfilled, but the actual case borne by the antecedent is irrelevant for the binding relation to take place, as long as it occupies a position from which it c-commands the anaphor. This accounts for the paradigm shown in (53) below (cf. Artiagoitia (forthcoming) on this type of alternations):

\[\text{\footnotesize{\textsuperscript{29} I am indebted to I. Laka (p.c.) for bringing this point to my attention.}}}\]
(53)  a. *Nik Mirenį-Ø berej buruari erakutsi diot (= (51c))
   I-erg Miren-abs herself-dat show aux
   "I showed Mirenį to herself"

   b. Mirenį-Ø berej buruari mintzatu zaio
      Miren-abs herself-dat talk aux
      "Mirenį talked to herself"

Whereas (53a) renders a Principle A violation, nevertheless (53b) is well-formed, which indicates that the anaphor is licensed there. The Case-marking of the antecedent of the reflexive in (53b) is the same as that of the ungrammatical (53a), viz., absolutive Case, which is morphologically null. However, the two arguments differ in one crucial factor: in (53a) the antecedent of the reflexive is the direct object, which is hierarchically lower than the position of the dative anaphor, whereas in (53b) the antecedent is in [Spec,TP], a position from which it can c-command the dative anaphor. Accordingly, a Principle A violation only arises in the former construction.  

3.3.3. Quantifier-Variable Binding

It is a well-known assumption that a pronoun may be interpreted as a variable bound by a quantificational antecedent if the quantified expression it is linked to c-commands the pronoun (cf. Reinhart (1976), and the literature thereafter). Barss and Lasnik (1986) observed that in English double object constructions an IO quantifier can bind into an object pronoun, but not vice versa (cf. (54b)). The same results obtain in Basque:

(54)  a. I denied eachį worker hisį paycheck

   b. *I denied itsį owner eachį paycheck

(55)  a. nik ama bakoitzarij berej umea eraman nion
   I(erg) mother each (dat) his/her child.det return aux
   "I returned eachį mother herį child"

   b. *nik berej amari ume bakoitzaj eraman nion
      I(erg) his/her mother(dat) child each return aux
      "I returned eachį child to herį mother"

In (55a) the quantifier phrase in indirect object position *ama bakoitzari 'each mother (dat)' c-commands the pronoun bere 'his' embedded in the object phrase, and hence, the bound variable interpretation is possible. In contrast, a bound reading is

unavailable in (55b). The fact that the pronoun in (55b) cannot be bound by the universal quantifier in object position is due to a failure of c-command, i.e., because the quantifier does not c-command the possessive pronoun contained in the dative phrase. Note that the data in (55a-b) do not immediately constitute evidence in favour of an asymmetric relation between the O and the IO, since these data are consistent with a licensing based on linear ordering, as pointed out in Jackendoff (1990). In principle, the example in (56a) below appears to corroborate such an analysis. The grammaticality of this sentence contrasts with the deviance of (55b). They only differ in the surface order. In (56a) the quantifier phrase has scrambled over the IO phrase containing the pronoun, and from that position, the quantifier is able to bind the pronoun. Hence surface c-command seems to play a role in variable binding (though, interestingly, not in anaphor binding (see (51c))). Nevertheless, it is important to point out that surface c-command is not enough to capture all the variable binding effects, as it is possible for a quantifier in indirect object position to bind a preceding pronoun contained within an object phrase, as can be seen in (56b):  

(56)  
\begin{align*}  
\text{a. nik} & \text{ une bakoitzaij berej amari ti eraman nion} \\
& \text{I(erg) child each his/her mother.dat return aux} \\
& \text{"I returned eachi child to heri mother"} \\
\text{b. nik} & \text{ berej umea ama bakoitzarij eraman nion} \\
& \text{I(erg) his/her child.det ama each (dat) return aux} \\
& \text{"I returned heri child to eachi mother"} \\
\end{align*}  

In (56b), despite the fact that the quantifier *ama bakoitzari* ‘each mother (dat)’ does not c-command the pronoun *bere* ‘her’ in surface syntax, the pronoun can be interpreted as a bound variable. In contrast, (55b) does not allow a bound variable reading of the pronoun. I argue that the crucial difference between the two sentences lies in the asymmetric hierarchical relation between the two objects of a double object construction. This proposal is based upon the idea that in (56a-b) the direct object has undergone scrambling, leaving a copy (or trace) in its thematic position, whereas in (55b) no process of scrambling has taken place (as the neutral S-IO-O-V order of the sentence is preserved). Let us further assume, following Aoun & Li (1989), that traces are subject to quantifier variable binding (we will examine Aoun & Li’s 1989 proposal in more detail in section 3.3.4). Bearing this in mind, we see that in (56b) the quantifier phrase does c-command the copy (or trace) of the object phrase containing the pronoun, but in (55b) at no point does the quantifier c-command the pronoun or its copy. As a result, the bound variable interpretation is impossible to obtain.

31 Cf. Artiagoitia (forthcoming) for a discussion of data similar to the ones examined in the text.
In fact, one might think of a way for the direct object quantifier to c-command
bere in (55b), namely by raising the QP across the pronoun at LF, by some sort of
Q(uantifier) R(aising), a movement operation argued for in May (1985) (and adopted
in Chomsky 1986, and much subsequent work).32 The LF derivation is represented
below:

\[(57) \quad \text{TP[ume bakoitzaz[[TP nik berei amari t\textsubscript{m} eraman nion]]]}
  \]
  \[
  \text{child each I his/her mother(dat) return aux}
  \]
  \[
  \text{"I returned her\textsubscript{i} mother each\textsubscript{i} child"}
  \]

This derivation would lead to a WCO violation, which would correctly rule out
(55b). However, I will not assume that the quantifier undergoes QR in (55b), because
that would create a LF configuration parallel to the (surface) configuration of (56a),
which unlike (55b), allows a bound variable reading of the pronoun. If the c-command
requirement on bound variable pronouns applies at LF, (55b) and (56a) should have
the same status, contrary to facts. The LF structure in (57) and (56a) only differ in
that the movement of the object QP in (56a) occurs before Spell-Out, while in (57) it
occurs after Spell-Out (if QR exists at all). The issue is that the hypothesized covert
raising in (57) would create a weak crossover configuration that renders the sentence
unacceptable. But then (56a) should be ruled out as well for the same reason, if short-
distance scrambling involves A'-movement. However, given that object scrambling in
(56a) feeds variable binding, it appears that this kind of scrambling is A-movement,
rather than A'-movement.33 In fact, it can be shown that A'-movement does not feed
variable binding, as is illustrated by the WCO effects contrasted in (58):

\[(58) \quad \text{a. Nor\textsubscript{i} eraman zenion berei amari t\textsubscript{i} ?}
  \]
  \[
  \text{Who take aux his/her mother.dat}
  \]
  \[
  \text{\"*Who, did you return to his/her\textsubscript{i} mother?\"}
  \]
  \[
  \text{b. Nor\textsubscript{i} eraman zenuen t\textsubscript{i} berei amarengana?}
  \]
  \[
  \text{Who take aux his/her mother-to}
  \]
  \[
  \text{"Who did you take to(wards) his/her mother?\"}
  \]

32 However, Reinhart (1983, 1995), and Hornstein (1995) argue against this view claiming that
QR is not necessary in the theory. The reader is referred to their work for argumentation.
Kayne (1998) has proposed that covert movement does not exist at all. Instead, he proposes
that all instances of apparent LF (covert) movement are the result of overt movement followed
by subsequent leftward movements. See in the cited work for further discussion.
33 I am indebted to L.Cheng (p.c.) and S. Barbiers (p.c.) for bringing this point to my attention
and for much discussion on this issue.
However, it is clear that the A-movement status of object scrambling is not correct and needs more consideration, given the data on anaphor binding we discussed earlier in section 3.3.2.2. It was shown there that object scrambling does not affect the binding relations between a reflexive anaphor and its antecedent (see exx. (51a-d)). The relevant contrast is repeated here for ease of exposition:

(51) b. *nik berej buruari Miren[i erakutsi nion argazkiatan
  I-erg herself-dat Miren show aux pictures-loc
  *"I showed herself[i Miren, in the pictures"

c. nik Miren[i berej buruari erakutsi nion argazkiatan
  I-erg Miren herself-dat show aux pictures-loc
  "I showed Miren to herself in the pictures"

Under the assumption that a reflexive anaphor must be locally bound (commanded) by its antecedent, we concluded that an antecedent in direct object position is not able to bind an anaphor in indirect object position because it is structurally lower than the indirect object. (51c) shows that object scrambling across the indirect object does not feed anaphor binding. This contrasts with the variable binding facts exemplified in (56a), where object scrambling does feed binding. Thus, there appears to be a conflict regarding the status of scrambling: on the one hand, the data on anaphor binding suggest that (short) scrambling is an A'-type of movement, while the variable binding data suggest that it is A-movement.

The paradox can be resolved if we take the basic distinction to be not A vs. A’-movement, but L(exically)-related vs. non-L-related movement. As Chomsky & Lasnik (1993) point out, the notions of A- and A’-positions were well defined in the LGB framework, but turned out to be problematic, especially for the scrambling facts (cf. Weibelhuth 1989, and Corver & van Riemsdijk 1994 for some interesting work on this issue). Besides the empirical problems, notice that the defining properties of A- and A’-positions become undermined, or even meaningless, once we allow for multiple specifier configurations. Chomsky & Lasnik propose to restate the distinction in terms of L-relatedness: a position is L-related if it is in the internal domain or checking domain of a head with lexical features. These share the basic properties of A-positions. Thus, for instance, [Spec,VP] or [Spec,AspP] are L-related because they are in the internal domain of V and contain a V-feature, respectively. On the other hand, [Spec,CP] is not L-related as it contains no V-feature and is outside the V-domain. Chomsky & Lasnik further subdivide L-related positions into narrowly L-related and broadly L-related positions. The former refer to non-adjoined positions, whereas the latter refer to adjoined positions.

If object scrambling of the type in (51c) and (56a) involves adjunction to, say, vP or AuxP (recall our assumption that the indirect object checks Case in [Spec,vP]), and given that vP and AuxP are L-related projections (cf. chapter 2, section 2.3.4), the
landing-site of the scrambled object is a broadly L-related position, adopting Chomsky & Lasnik's terms. That is, it has the properties of A-positions, which explains the lack of WCO effects in the variable binding data (56), but, on the other hand, by virtue of being in an adjoined (derived) position, it does not qualify as a potential binder for reflexive anaphor binding purposes. Thereof the puzzling facts observed earlier with regard to (51) and (56).

Thus, the following picture emerges. A bound variable reading is available in (55a) and (56b) because in both cases the quantifier, which is in IO position, c-commands the pronoun. This is straightforward in (55a), but is not so apparent in (56b), where the quantifier does not overtly c-command the pronoun. Adopting Aoun & Li's (1989) suggestions on the relevance of traces to calculate the scope and binding possibilities of quantifiers, I have proposed that the indirect object QP in this case does c-command a copy (or the trace) of the object phrase containing the pronoun, which undergoes overt raising (see section 3.4 below). Hence, the pronoun can be interpreted as a bound variable. In contrast, the pronoun in (55b) cannot be used as a bound variable because it fails to be c-commanded by the QP.

In sum, the results observed in the data on variable binding argue in favour of a structural configuration where the IO asymmetrically c-commands the O.

3.3.4. Scope relations

It is a common view that when two quantifier phrases (QPs) cooccur in a sentence, the interpretation of the sentence may vary in accordance to the relative scope of the QPs involved, depending upon whether the one QP is interpreted as having wide or narrow scope with respect to the second QP.\footnote{There is a third reading, which is the so-called independent reading (Liu 1990, Beghelli 1993), according to which both QPs are taken to refer to unique sets of individuals, but neither of them makes the other referentially dependent. I will not take this reading into consideration, as it is not relevant for the purposes of the discussion.} In English, for example, the sentence presented below is ambiguous: it has one reading according to which the existential QP takes scope over the universal QP, but it also has a second reading with the object QP taking scope over the subject QP. The two readings are informally given below:

(59) Someone loves everyone
   \[\begin{align*}
   \text{I. There is some } x, \text{ such that } x \text{ loves everyone} & \quad \exists x \forall y \\
   \text{II. For every person } x, \text{ there is some } y, \text{ such that } y \text{ loves } x & \quad \forall x \exists y
   \end{align*}\]

Various accounts have been proposed for scope ambiguities of this sort (see, among others, Huang 1982, May 1977, 1985, Aoun & Li 1989, 1994, Szabolcsi 1994,
Beguelli & Stowell 1997, Kayne 1998). In what follows I will study the interaction of two quantifier phrases in Basque when they occur as a direct object and as an indirect object in a double object construction. It will be shown that, given the S IO O V order, a dative QP takes wide scope over a direct object QP, but in contrast, in the same order, an object QP cannot take inverse scope easily over the dative QP (cf. (60)). We will also consider the scope possibilities when, after scrambling, the direct object QP precedes the dative QP linearly, as in (61). In this case, we will see that scopal ambiguity arises. Both wide scope of the object QP over the dative QP and wide scope of the dative QP over the object QP are indeed possible. The contrast in scope (non)ambiguity between (60) and (61) will be the basis on which I build the argumentation to claim that the indirect object position in Basque is hierarchically higher than the direct object position. Let us first introduce the relevant data:

(60) a. Maisuak [baten bati] [neska guztiak/bakoitza] aurkeztuko dizkio/dio
teacher(erg) someone(dat) girl all / each introduce aux
“The teacher will introduce to someone all / every girl”

someone(dat) > all / every girl  ⋄→ A

?? all / every girl > someone(dat)  ??→ ?

b. Maisuak [neska bakoitzari/guztiei] [baten bat] aurkeztuko dio/die
teacher(erg) girl each (dat)/ all (dat) someone introduce aux
“The teacher will introduce someone to to every / all girl”

all / every girl (dat) > someone  ∀→ ?

?? someone > all / every girl (dat)  ??→ ∀

(61) a. Maisuak [neska guztiak/bakoitza] [baten bati] aurkeztu dizkio/dio
teacher(erg) girl all / each someone (dat) introduce aux

all / every girl > someone (dat)  ∀→ ?

someone (dat) > all / every girl  ⋄→ ∀

b. Maisuak [baten bat] [neska bakoitzari/guztiei] aurkeztu dio/die
teacher(erg) someone girl each/ all (dat) introduce aux

someone > all / every girl (dat)  ∀→ ?

all / every girl > someone  ⋄→ ∀

In (60a-b) the reading in which the scope of the quantifiers matches their surface order is strongly preferred. According to many speakers, the wide scope interpretation of the object quantifier is not even possible in (60).

In contrast, in (61) both quantifiers can

\[35\] It should be noted, however, that there is a context in which an inverse scope reading in (60b) is possible: namely, when the indefinite QP (someone) that is introduced to every girl
take wide scope; even the second QP in linear order, viz. the indirect object QP, can have both wide and narrow scope, regardless of whether the QP involved is an indefinite or a universal one.

Notice that in order to test the scope possibilities of a universal QP, I use two types of universal QPs: the distributive QP bakoitza ‘each’, which normally requires a distributive construal and thus forces a wide scope interpretation (cf. Fodor & Sag 1982, Beguelli & Stowell 1997), and the QP guziak ‘all’, which usually supports a collective reading, but sometimes can also have a distributive reading, as is shown by the possibility of taking wide scope over the indefinite QP in (60b) and (61b). The reason that I use both of these quantifiers is to show that even a distributive QP like bakoitza ‘each’, which usually takes wide scope, resists inverse scope. Take (60b), for instance. According to the speakers I consulted (including my own judgements), (60b) means that the teacher will introduce someone to each of the girls, but the inverse scope reading, according to which there is one person that will be introduced to all girls is impossible (but see the previous note). Similarly, the universal QP in object position in (60a) resists a wide scope construal. This lack of ambiguity is significant, since it shows that a uniform quantifier LF raising analysis as argued for in May (1977, 1985) cannot be maintained: that is, if all QPs undergo movement from their surface positions to distinct scope positions at LF, we would expect the two sentences in (60) to be scopally ambiguous, just in the same way as the sentences in (61) are. However, the prediction is not borne out, given that (60a-b) are not ambiguous. Note, in passing, that the same scope interpretation that we are discussing here with respect to (60a-b) are observed in Hungarian (Kiss 1991, Szabolcsi 1994), English (Aoun & Li 1989, Larson 1990) and Chinese (Huang 1982, Lee 1986) double object constructions.

In view of the results shown in (60), one might propose that scope interpretation in Basque is disambiguated at surface structure (in the direction from left to right), as it has been argued e.g. for Hungarian (Kiss 1991, Szabolcsi 1994, 1997). However, the possibility of getting wide scope for the object quantifier in (61a-b) indicates that in certain contexts inverse scope is also possible, in other words, that scope can be also interpreted from right to left. The task is thus to determine under which circumstances a ‘lower’ QP can scope over a ‘higher’ QP.

Let us compare (60) and (61) in more detail. The only difference between the two pairs of sentences is that the two quantifier phrases have permuted their order. In (60a-b) the dative QP precedes the QP in direct object position, whereas in (61a-b) it is the object QP that precedes the dative QP. Assuming that scope mirrors c-command relations, the ambiguous scope data in (61) strongly suggest that, at some point in the derivation, the QP in indirect object position c-commands the direct object QP.

happens to be the same person. In this case, inverse scope is possible to obtain as a special subcase of the wide scope construal of the universal QP in (60b). I thank S. Barbiers (p.c.) and L. Cheng (p.c.) for many helpful discussions on this matter.
Likewise, the scope effects of (60) are readily derived if the object QP does not c-command the dative QP at any point of the derivation of these sentences.

We have seen that a uniform QR analysis à la May (1985) cannot capture the full range of data (e.g. the lack of ambiguity of (60)), so I will disregard this account. There are several ways of deriving the wide scope interpretation of the dative QP in (61), according to the quantifier scope analysis one adopts. In what follows I will consider the approaches to quantifier scope put forth in Aoun & Li (1989, 1993), Kayne (1998), and Beghelli & Stowell (1997). I will show that Aoun & Li’s and Kayne’s analyses can capture the scope relations presented in (60) and (61) above, providing further support to our hypothesis that the indirect object asymmetrically c-commands the direct object.

In their discussion on the distinct behaviour of quantificational elements in English and Chinese, Aoun & Li propose that the interpretation of quantificational phrases in these languages is sensitive to the chain containing the QP and the empty category with which the QP is coindexed. This is formulated in their Scope Principle:

(62) The Scope Principle

A quantifier A has scope over a quantifier B in case A c-commands a member of the chain containing B.

Building on (62), I will show that a slightly modified version of Aoun & Li’s scope-theory can straightforwardly account for the scopal facts described in (60) and (61). Aoun & Li discuss the different scope possibilities of double object constructions and prepositional dative constructions in English and Chinese, and observe that double object structures containing QPs are unambiguous in the two languages, whereas prepositional dative constructions are ambiguous (cf. the Isomorphic Principle in Huang 1982. Cf. also Lee 1986):

(63) a. Mary gave someone every book (unambiguous)
    b. Mary gave some book to everyone (ambiguous)

(64) a. Wo song sange ren meiben shu (unambiguous)
    I give three men every book
    b. Wo song sanben shu gei meigeren (ambiguous)
    I give three books to everyone

They assume that QPs are raised at LF and that the traces of LF-raised QPs must obey the ‘Minimal Binding Requirement’, according to which variables must be bound by the most local potential antecedent (A*-binder). They also assume that the prepositional dative construction is derived from the double object structure (contra Larson 1988) by a process of passivization that forces the direct object DP to raise
across the oblique dative PP in order to get Case. Having these assumptions in mind, they account for the contrast in scope ambiguity in (63) and (64) by arguing that in a prepositional dative construction (the (b) sentences) the quantified dative PP c-commands the trace generated by DP-movement of the direct object QP, and is in turn c-commanded by the raised object QP (recall that under this analysis, all QPs undergo quantifier raising). In contrast, the object QP in (63a) and (64a) cannot raise (by QR) to a position higher than the dative quantifier, because that would yield a violation of the Minimal Binding Requirement, given that after QR, the indirect object QP would be a potential A∗-binder for the trace of the object QP. This is represented in (65a) below, while (65b) represents the only possible LF derivation for (63/64a):

(65)  a. *[QP to [VP1 QP to [VP1 t to [VP2 t to]]]]
   b. [VP1 QP to [VP1 t to [VP2 QP to [VP2 t to]]]]

I do not assume QR, therefore I will not fully adopt their explanation for the lack of ambiguity in (63a) and (64a). However, the insight of their proposal will be shown to account for the Basque data given in (60) and (61). Consider the ambiguous (61) first, repeated here:

(61)  a. Maisuak [neska guztiak/bakoitza] [baten bati] aurkeztu dizkio
teacher(erg)  girl all /each someone(dat) introduce aux
"The teacher introduced all girls/each girl to someone"
   b. Maisuak [baten bat] [neska bakoitzari/guztie] aurkeztu dio/die
teacher(erg) someone girl each/all(dat) introduce aux
"The teacher introduced someone to all girls/each girl"

The scope facts are easily captured if we simply assume that the scope of quantifiers matches their surface order, and if, in addition, we assume that traces (or copies) of a moved QP are relevant for quantifier scope (cf. Aoun & Li 1989, 1994, Beguelli & Stowell 1997). Thus, on the assumption that the IO is structurally higher than the O in Basque, we predict that QPs occurring as datives will systematically take wide scope over ‘lower’ object QPs, and that an object QP can take wide scope over a dative QP only when it precedes the QP in indirect object position in surface syntax. The predictions are borne out, in view of the data illustrated in (60a-b), repeated below, which are unambiguous:

---

36 Hornstein (1995) has a similar proposal, but he constrains the possible scope positions of a QP to A-chains, which usually include the surface Case position occupied by the QP at Spell-Out and the theta-position. If short-distance scrambling in Basque involves A-movement, as we have suggested above concerning variable binding (cf. (56a)), we can extend Hornstein’s approach to these cases as well.
(60) a. Maisuak [baten bati] [neska guztiak/bakoitza] aurkeztuko dizkio/dio
teacher(erg) someone(dat) girl all/each introduce aux
“The teacher will introduce someone all/every girl” (∃>∀,??∀>∃)

b. Maisuak [neska bakoitzari/guztiei] [baten bat] aurkeztuko dio/die
teacher(erg) girl each(dat)/all(dat) someone introduce aux
“The teacher will introduce every/all girl someone” (∀>∃,??∃>∀)

Further support for our hypothesis is provided by Kayne’s (1998) analysis of
quantifier scope. Kayne (1998) argues that covert movement or movement at LF does
not exist. Instead, he proposes that all movement operations take place in the overt
syntax, and that scope ambiguities should be analyzed as involving prior movement of
the “lower” QP, at which point it c-commands the other QP, yielding thus the inverse
scope reading, followed by subsequent movement of the remnant material to the left,
which derives in the second scope interpretation. Applying this analysis to the Basque
sentences in (54), the derivation of (61a-b) would consist of first moving the dative
QP out of the VP, at which point it c-commands the object QP, and subsequently
moving the object QP to the left of the dative QP. Without entering into a discussion
of the motivation that would trigger these movements, what is interesting is that
Kayne’s account relates the existence of scope ambiguities with underlying
movements; thus, given the lack of scope ambiguity observed in (60), it follows from
his theory that no (underlying or overt) movement of the object QP takes place.
Therefore, only a wide scope reading of the dative QP is available in (60). This
conclusion matches easily with our hypothesis that the S IO O V order, exemplified by
the sentences in (53), is the unmarked order in Basque, and with the claim that the
indirect object asymmetrically c-commands the direct object.

Beghelli & Stowell (1997) propose an approach for the scope ambiguities
observed in e.g. (59), which can also account for the ambiguity of the sort illustrated
in the Basque examples in (61). Nevertheless, their analysis cannot account for the
lack of scope ambiguities exemplified in (60). Let us see why. Beguelli & Stowell
(B&S) assume that quantifier scope is determined by c-command relations holding at
the level of LF. However, they do not adopt a uniform QR analysis, but instead, they
propose, following Beghelli (1993), that some quantifiers undergo movement to
distinct scope positions at LF, while others do not (cf. Krock 1974 and Liu 1990 for
the similar idea that QPs differ in their ability to take inverse scope). They claim that
each type of quantifier has a designated LF scope position defined in the hierarchical
phrase structure of the clause, where the different QPs raise in order to get their scope
readings. The hierarchy of functional projections they propose is given in (66):
Based on this hierarchy of functional projections, B&S argue that distributive universals like every and each move to the specifier of DistP, whereas indefinites may occupy distinct scope positions, depending upon whether they are interpreted specifically or not. If they are interpreted non-specifically, indefinites stay in-situ (i.e. in their Case position), but when they are referentially independent, they usually occupy the specifier of RefP, the highest position, where they take the widest scope in their clause (even higher than universal QPs); but they may also occupy [Spec, ShareP], located just below DistP, in which case they are interpreted specifically, although under the scope of distributive/universal QPs.

If we apply Beghelli & Stowell’s analysis to the Basque examples given in (60) and (61), the scope ambiguity of (61) follows straightforwardly. The indefinite dative QP *baten bati* in (61a) can take wide scope over the universal object QP when it is interpreted specifically, since, on B&S’s approach, it raises at LF to the specifier of RefP, which is hierarchically higher than the landing site of distributive/universal QPs (see (66)). Likewise, in (61b) the universal quantifier *neska bakoitzari/guztiei ‘each/all girls’(dat)* can take wide scope over the indefinite QP *baten bat ‘someone’* when the indefinite has a non-specific reading, in which case its scope position at LF is lower than DistP. In this interpretation, the sentence means that each girl was introduced to a (different) person.

Nevertheless, although this approach to quantifier scope can account for scope ambiguities of the sort illustrated in (61), it does not provide a straightforward answer to the scope effects observed in (60). If B&S are right in their assumption that distributed universal QPs raise to [Spec, DistP] at LF, we would expect the object QP *neska bakoitia* in (60a) to be able to take broader scope over the indefinite QP. However, that reading is not available. Likewise, the impossible wide scope construal of the existential QP in (60b) remains unclear given that this construal is available in (61a).

On the other hand, if we assume that the scope of quantifiers matches their surface order, and we assume, following Aoun & Li (1989, 1994) and Hornstein
(1995), that the trace (or theta-position) of a moved QP is also a scope position, the
data examined in (60)-(61) are easily captured under our hypothesis that the indirect
object asymmetrically c-commands the direct object.

3.3.5. Weak Crossover

As is well-known since Chomsky (1976), a variable cannot be the antecedent
of a pronoun to its left. This is known as the Leftness Principle, which comprises the
weak crossover effects illustrated in (68b) below. It has been argued that the Leftness
Principle cannot be maintained as it stands, and hence other alternatives have been put
forth to capture all instances of weak crossover configurations (cf. Higginbotham
Reinhart’s (1976, 1983) formulation of WCO, mentioned earlier (cf. the condition in
(10) in chapter 1), and repeated here, that establishes that wh-traces must c-command
coreferential pronouns:

(67) Quantified NPs and wh-traces can have anaphoric relations only with pronouns
that they c-command (Reinhart 1976)

The condition in (67) captures the strong contrast existing between (68a) and
(68b):  

(68) a. no-riŋ itzuli zion polizia-k tı bereŋ txakurra?
   who-dat return aux police-erg his/her dog
   “To whom did the police bring back his/her dog?”

   b. ??zerŋ itzuli zion polizia-k bereŋ jabeari tı
       what return aux police-erg his/her owner(dat)?
       "*what did the police bring back to its owner?"

The deviance of (68b) is induced by a weak crossover violation, caused by the fact
that the trace of the moved wh-object zer ‘what’ does not c-command the
coreferential pronoun contained within the indirect object phrase bere jabeari ‘to its
owner’. In contrast, movement of the wh-indirect object nori ‘whom(dat)’ does not
exhibit weak crossover effects (68a). This strongly suggests that the (trace of the)
indirect object c-commands the coindexed pronoun contained within the direct object,
providing further evidence for a IO>O asymmetric relation between the two objects of
a triadic construction in Basque.
3.3.6. Principle C effects

One consequence of the assumption that the indirect object is generated structurally higher than the direct object is that Principle C effects should be observed when an R-expression in object position is bound by an indirect object pronoun. Recall that according to principle C, an R-expression must be free (see, e.g. Chomsky 1981:188). That is, it can be coindexed with another DP only if this DP does not c-command it. The prediction is borne out, as shown by the following example:

(69)  *nik bera-rii/proj [Jon-enš nagusi berri-a] aurkeztu nion atzo-ko jaia-n
       I-erg he-dat Jon-gen boss new-det introduce aux yesterday’s-party-in
       “I introduced Jon’s new boss to him at yesterday’s party”

This sentence shows that a coindexed relation between the null or overt pronoun in indirect object position and the R-expression Jon contained in the NP Jonen nagusi berria ‘Jon’s new boss’ is impossible to obtain. I argue that the ungrammaticality of the sentence is due to a Principle C violation. That is, on the assumption that the indirect object is structurally higher than the direct object, the R-expression Jon embedded in the object phrase in (69) is c-commanded by a coindexed pronoun in indirect position, and, hence, the sentence is ruled out as a Condition C violation. Note that the ungrammaticality also arises if instead of the overt pronoun we use the empty pronominal pro. That is, the deviance of (69) is not related to the use of the overt pronoun instead of the more common non-overt variant, as one might suspect, given that Basque is a pro-drop language (cf. chapter 2, section 2.2.3). As occurs in most pro-drop languages, the use of an overt pronoun is ‘marked’ by comparison with the more unmarked non-overt variant, unless it is used to signal emphasis or a focus (cf. the Avoid Pronoun Principle in Chomsky 1981, and Montalbetti 1984). But for Condition C effects, both pronouns pattern similarly.

Consider the scrambling constructions in (70) now:

(70)  a. ?nik [Jon-enš nagusi berri-a] bera-rii aurkeztu nion atzo-ko jaia-n
       I-erg Jon-gen boss new-det he-dat introduce aux yesterday’s party.in

b. *nik bera-Oj [Jon-enš nagusi berri-a-ri] aurkeztu nion atzo-ko jaia-n
       I-erg he-abs Jon-gen boss new.det introduce aux yesterday’s party.in

In (70a) the object has scrambled across the dative pronoun and coreference between the pronoun and the R-expression contained within the direct object phrase is possible. In (70b) it is the object pronoun that scrambles over the phrase containing the R-expression and the sentence is not good. This shows two things: (a) that object scrambling is not an A’-type of movement, since otherwise (70a) would induce WCO
effects, and (b) that (70b) is ruled out as a Condition C violation, as the R-expression is c-commanded by the scrambled object phrase. With respect to the first point, these results follow from the approach to scrambling we have suggested earlier in relation to the anaphor and variable binding facts (see section 3.3.4). Recall that we suggested there that object scrambling involves adjunction to an L-related position. This will explain the lack of WCO effects in (70a).

Thus, although the Principle C effects shown in (69) do not constitute direct evidence, they are compatible with our claim that the indirect object (in its canonical position) asymmetrically c-commands the direct object.

### 3.3.7. Superiority effects

In multiple wh-questions, languages vary as to whether more than one wh-phrase can be fronted in overt syntax, whether only one wh-phrase can be fronted, leaving the other wh-phrase(s) in-situ, or whether all wh-phrases are left in-situ. As is well-known, in many languages superiority effects arise in such contexts (though it is not a universal phenomenon). Thus, in a language with overt movement of just one wh-phrase (e.g. English), given any two wh-phrases, the structurally higher one will move (Chomsky 1973). Barss and Lasnik (1986) show that in English double object constructions only the dative wh-phrase can move, but not the direct object wh-phrase, provided that we leave the ‘echo’ reading aside (71):

1. Who did you give what?
2. *what did you give who?

Similar effects are found in Basque, although it should be noted that the judgements vary slightly from speaker to speaker (72a-b).37

1. nori eman zenion zer?
   Who(dat) give aux what
2. ??zer eman zenion nori?
   What give aux who(dat)

Some Basque speakers also allow multiple wh-fronting (73a-d) (cf. Rudin 1988). In this case, superiority effects are a bit stronger: the highest wh-phrase in the hierarchy precedes the other wh-phrases (cf. (73c)):

1. nork nori eman dio oparia?
   Who.erg who.dat give aux present

---

37 See Artiagoitia (forthcoming) for some discussion of the issue of multiple wh-constructions in Basque.
b. *nori nork eman dio oparia?
c. nori zer eman zenion?
d. *zer nori eman zenion?

The existence of a clear contrast between (72a) and (72b), on the one hand, and between (73c) and (73d), on the other hand, is relevant for our discussion. If these contrasts are attributed to the same superior effects responsible for the minimal pair in (71), then these examples lend further support to the claim that the indirect object is structurally superior to the direct object.

3.3.8. Reciprocal interpretation of each... the other

Barss and Lasnik (1986) report that constructions of the form each...the other may have a reciprocal reading only when the each-phrase c-commands the other-phrase. In applying this diagnostic to Basque, it turns out that, as predicted under our hypothesis, only when the each-phrase occurs as the indirect object is the reciprocal reading possible, whereas this interpretation is not available when each occurs in direct object position. The relevant facts are shown in (74):

(74) a. pro ume bakoitzari bestearen jostailuak eman dizkiot child each(dat) other(det.gen) toys give aux
     “I have given each child the other’s toys”

b. *pro bestearen lagunari neska bakoitza aurkeztu diot
     other(det.gen) friend(dat) girl each introduce aux
     “I have introduced the other’s friend each girl”

The grammaticality of (74a) versus the ungrammaticality of (74b) suggests that the object quantifier neska bakoitza ‘each girl’ fails to c-command bestea ‘the other’, yielding the reciprocal reading impossible, while this reading is available in (74a) because the each phrase is the indirect object. Thus, once again the data show that the indirect object c-commands the direct object, lending further support to the hypothesis defended here.

3.3.9. The distributive particle —na

Montoya (1998) points out that the occurrence of the distributive particle —na shows a further asymmetry between the two objects of a Basque double object construction. She observes that the distributive particle —na can only occur with the direct object phrase: it never occurs with the subject (75b) nor with the indirect object (75c):
(75) a. ikasle-ei liburu ba-na eman nien
       student.dat.pl book one-na give aux
       "I gave the students one book each"

b. *ikasle ba-na-k liburu bat eman zidan
       student one-na.erg book one give aux
       (intended meaning): "One student each gave me a book"

c. *ikasle ba-na-ri liburu bat eman nien
       student one-na-dat book one give aux
       (intended meaning): "I gave one student each a book"

(75a) has the same interpretation as (76), where the indirect object shows an overt distributive operator:

(76) ikasle bakoitza-ri liburu bat eman nion
       student each-dat book one give aux
       "I gave one book to each student"

Thus, it seems reasonable to assume that in (75a) there is an abstract/null distributive operator that c-commands the numeral QP in object position (bat 'one'), permitting the distributive interpretation according to which one book was given to each of the students. If this assumption is correct, it follows that the distributive particle -na cannot appear in the subject phrase, nor in the indirect object phrase. It cannot occur with the subject, because -na must be c-commanded by an operator over which it distributes. Since in (75b) it distributes over books, the distributive particle in subject position clearly is not c-commanded in (75b). Hence, the sentence is ruled out. For the same reason, in (75c) -na cannot occur with the indirect object, since it fails to be c-commanded by the null distributive operator in object position. This shows, once again, that the indirect object asymmetrically c-commands the direct object in Basque.

3.3.10. Summary

I have examined above the structural relationship between the indirect object and the direct object in Basque when they appear in the unmarked order, namely S IO O V. The binding asymmetries pointed out in Barss & Lasnik’s (1986) on structural asymmetries in English double object constructions have been shown to hold in Basque as well. In addition, we have applied other tests, such as the scope relations among two quantifier phrases occurring in indirect object and direct object position, principle B and C effects, and the distribution of the Basque distributive particle -na. The results obtained from applying all these tests strongly suggest that the two objects in Basque are hierarchically organized, and that this
hierarchy is asymmetric: the indirect object is structurally higher and thus asymmetrically c-commands the direct object, but not the other way around.

The evidence presented thus far shows that Basque has a configuration which is analogous to a double object construction. Taking into account that the order S IO O V order is the unmarked order, one can say that the unmarked order reflects the hierarchical relation established among the arguments of a clause in Basque. In this configuration, the object phrase bearing dative Case precedes and is higher than the direct object, as has been corroborated by the data discussed in this section. In the next section we shall consider a configuration which could potentially instantiate the object-PP dative construction, wherein the direct object c-commands the prepositional dative phrase (cf. Oerhle 1975, Larson 1988, Jackendoff 1990, Speas 1990, among many others). This configuration arises in the S O V IO order, which together with the S IO O V order, can have a neutral interpretation in the Biscayan dialect of Basque. However, I shall demonstrate that despite surface appearances, the same c-command asymmetries between the two object arguments arise in the S O V IO and S IO O V word orders.

3.4. Object asymmetries in the S O V IO order

3.4.1. Introduction

In the previous section we have seen that there is convincing evidence indicating that, given the S IO O V order, an asymmetrical c-command relation holds between the dative (IO) argument and the object (O). Recall that the S IO O V order is regarded as the neutral order in most grammars of Basque (cf. chapter 1, section 1), an assumption that I adopt here. In effect, this is the leading view officially adopted by Euskaltzaindia, the Academy of the Basque Language, and by most Basque linguists (cf. Lafitte 1944, de Rijk 1969, Eguzkitza 1986, Ortiz de Urbina 1989, Osa 1990, among others). On top of this, in Western Basque there is a second linear order that can be neutral as well: namely the S O V IO order. Bear in mind that when I talk about neutral order I mean it in the sense of discourse neutral, carrying the least amount of presupposition, and lacking any special semantic properties associated with it (cf. Osa 1990, Vallduvi 1992). Thus, all speakers of Basque consider the S IO O V order as the neutral unmarked order, but the speakers of the Western Basque dialect (myself included) have an additional order (S O V IO) that can also have a neutral reading. This second neutral order has attracted no attention in the literature so far, perhaps related to its dialectal use. However, I consider of interest to mention this issue here, because it bears direct relevance to the discussion we are concerned with in this chapter, namely, the structural relations between the two objects in Basque ditransitive constructions. (77) exemplifies the two orders that can have a neutral reading in Western Basque:
Suppose that we identify neutral order with an order that preserves the hierarchical relations among the arguments of a sentence, and in which arguments are licensed. This would allow for the plausible idea that in the neutral order arguments may have undergone movement to license their Case features (cf. chapter 2, section 2.2.2), but in which no additional movement operations motivated by topic and focus interpretation are involved. Then, unless we propose two different configurations for (77a) and (77b), in a parallel way to what has been argued in Oehrle (1975), Jackendoff (1990), Speas (1990), Collins & Thráinsson (1995) and others in relation to the dative alternation, one of the neutral orders in (77) must be derived from the other. Consider the latter alternative. If the two structures in (77) are derivationally related, there are two possibilities: either (77a) reflects the base order, and hence (77b) is derived from (77a), or (77b) reflects the basic word order, and therefore (77a) should be viewed as derived from (77b). Note that such a state of affairs would parallel the configurations instantiated by the dative alternation in the languages that exhibit dative shift, in which the structural relations between the two objects of a ditransitive construction are different in each case. Thus, to establish the parallelism most clearly, the order in (77a) would conform to a double object construction, while the second order (S O V IO) could (potentially) correspond to a prepositional dative construction. Of course, this is not a necessary assumption, given that we have shown above that the indirect object in Basque is a DP, not a PP. In fact, the parallelism with English-type prepositional dative constructions could still hold if SOVIO instantiates a basic order in which the direct object c-commands the DP-indirect object.

On the other hand, we expect that different structural relations between the two objects will hold depending upon which of the two orderings in (77) is considered to be the basic one. Thus, on the standard assumption that c-command relations play a central role in determining hierarchical structure, we predict that if (77a) is the underlying order, the indirect object will asymmetrically c-command the direct object, as is the case in double object constructions, whereas if (77b) is basic, we expect precisely the opposite c-command relations, namely that the direct object c-commands the indirect object (as holds in prepositional dative constructions).
Concerning the alternative proposal mentioned above, according to which the two dative constructions instantiating the dative alternation are not derivationally related, but rather are independently generated in such a way that linear order coincides with command (see references cited above), it is predicted that the structural relations between the two objects be likewise asymmetric in each type of dative construction. However, as I shall show below, in both S IO O V and S O V IO orders the structural relations between the two objects are exactly the same, namely, there is an asymmetric IO>O c-command relation.

3.4.2. Deriving the SOVIO order

We can think of three possible analyses to derive the unmarked S O V IO order in Western Basque: (i) that the indirect object in this dialect can be optionally generated as a right-adjunct in a position high enough to c-command the object —e.g. as a right-peripheral specifier of VP—, (ii) that the dative phrase moves to the right of the VP, allowing for reconstruction to its base position to the left of the direct object, and (iii) a pseudokaynean analysis, according to which, starting from a basic S IO O V, the dative-marked argument first moves out, and subsequently, the remnant TP moves across the derived position of the dative (I call it pseudokaynean because I assume that the verb is head-final in Basque, in opposition to Kayne’s 1994 postulates). Note that the alternative option of moving a constituent [OV] across the indirect object without prior movement of the IO is not possible, since it is not only the main verb that moves together with the object, but also the auxiliary. Given our assumption that the auxiliary heads its own projection, and that this projection selects the higher vP shell as its complement (cf. chapter 2, section 2.3.4), there is no way in which the sequence O-V-Aux-IO can be derived without moving the indirect object first.\(^{38}\) I do not aim to provide the ultimate account that explains this second neutral order in the dialects that have it, but nevertheless I would like to make some suggestions in the direction that future investigations might adopt.

Essentially, the consequences of adopting the first analysis would be the following: all dialects of Basque have the indirect object generated to the left of the direct object in a position that c-commands it, more in particular, in [Spec,VP] (cf. chapter 2, section 2.3), but in addition, the speakers of Western Basque have the possibility of generating the indirect object to the right of VP, as a righthand specifier of VP. This is (partially) represented in (78):

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\(^{38}\) I thank S. Barbiers (p.c.) for suggesting me this alternative derivation.
From this position (which is an A-position), the indirect object will asymmetrically c-command the direct object, deriving in this way the anaphor binding asymmetries presented below:

(79)  
a. nik [bere burua], erakutxi nion Miren;i argazkietan  
I-erg herself show aux Miren(dat) pictures(loc)  
"I showed Miren herself in the pictures"  
b. *nik Miren;i erakutxi nion [bere buruari];i argazkietan  
I.erg Miren show aux herself(dat) pictures(loc)  
"I showed Miren to herself in the pictures"

On the one hand, under this analysis the grammaticality of (79a) falls out straightforwardly, given that the object anaphor is properly A-bound by the postverbal indirect object. On the other hand, it rules (79b) out, because in that position the anaphor fails to be bound, yielding a Principle A violation. Moreover, this configuration would also yield a Principle C violation, as the R-expression Miren would be A-bound by the coindexed postverbal reflexive bere buruari. Note that the ill-formedness of (79b) contrasts sharply with the corresponding acceptable English sentence, as can be seen in the English translation of the Basque examples (for the present I am leaving aside the difference in the position of the verb, since it is irrelevant for the anaphoric binding facts we are concerned with here). The same binding facts are attested in German and Dutch (cf. Müller 1992, Den Dikken 1992,a.o.).39 This discards a potential parallelism between this order in Basque and a prepositional dative construction in languages like English or Dutch.

39 The binding facts in German are not, however, entirely parallel to the English or Dutch data. Müller (1992) reports that a dative-marked NP cannot bind an accusative-marked anaphor in German:
Likewise, the two other possible derivations of S O V I O mentioned above could also capture the facts given in (79). If (79) involves rightward movement of the indirect object, it must reconstruct for binding purposes, given the fact that the reflexive anaphor is $A$-bound by the "moved" indirect object in (79a). Thus, assuming that principle A can be satisfied at LF, after reconstruction, the IO antecedent will asymmetrically c-command and bind the object anaphor from an A-position. This will derive the grammatical sentence in (79a). Similarly, under a rightward movement approach, the derivation of (79b) is expected to be ill-formed, since from the A'-position it occupies after being (A') moved, the postverbal anaphor fails to be bound by its antecedent. If we apply reconstruction, the results do not change, since the indirect object reflexive would be still unbound in its reconstructed (base) position, given that the indirect object is underlyingly higher than the direct object, as we have shown in the preceding section. Therefore, a principle A violation arises, ruling the sentence out. Hence, it seems that a rightward movement account with reconstruction may also derive the binding effects. Nevertheless, as will be argued in chapter 5, there is evidence which argues against a rightward movement analysis to account for the postverbal position of the material appearing to the right of the verb in Basque.\(^{40}\) The evidence comes from the data on variable binding and scope dependencies in the S IO V O and S V I O O orders, which suggest that postverbal arguments in Basque are "lower" than preverbal ones (for a discussion, see chapter 5, in particular, sections 5.3.2, and 5.4). Let me show this with the example given in (80):

(80) Amaiaik bi mutili aurkeztuko dizkie hiru neska baino gehiago
Amaia.erg two boys.dat introduce aux three girl than more
"Amaia will introduce more than three girls to two boys"

This sentence does not yield scope ambiguities. The only possible interpretation is one in which the existential quantifier bi mutili "two boys(dat)" takes wide scope over the modified numeral QP hiru neska baino gehiago "more than three girls", but inverse scope is not possible, i.e. the postverbal object quantifier cannot scope over the QP in indirect object position. If scope dependencies mirror c-

\(^{40}\) See also Haider (1994) and Mahajan (1997), who show that reconstruction cannot account for the variable binding effects found in Hindi and in various other languages.
command relations (May 1977, 1985, Aoun & Li 1994, and many others), what (80) shows us is that the postverbal quantifier does not c-command a preverbal one. This result is rather unexpected if the object quantifier in (80) arises in that position as a result of rightward movement.

Instead, these data rather seem to support the view, to be argued in chapter 5, that the postverbal QP has not moved, but is in-situ. On the basis of these and other facts that will be further discussed in chapter 5, I propose that the derivation of sentences like (79) and (80) does not involve rightward movement. This conclusion fits in the antisymmetric theory of Kayne (1994), according to which rightward movement does not exist. However, Kayne excludes base-generated right-adjunction as well, a claim that I hesitate to adopt, given the frequent occurrence of sentence adverbs, locatives and other adjuncts to the right of the complex verb (recall that I assume that V is final in Basque). Although current theory permits us to think of possible analyses to derive some of these orders dispensing with right-adjunction — see, for instance, the proposal made in chapter 5 in relation to postverbal sentence adverbs—, I would like to leave the possibility of base-generated right-adjunction open for further examination of the whole range of facts.

As for the third alternative analysis, it is not entirely clear to me how an analysis à la Kayne (1998) could derive the binding facts observed in (79). Kayne (1994:69) proposes a small clause analysis to derive multiple complement configurations like in the sentence John gave a book to the child. Thus, the structure would look as follows: ‘[gave [sc a book to the child]]’. For the dative shift variant (i.e. ‘gave the child a book’) he suggests in a footnote that the indirect object raises leftwards past the object (Kayne 1994: p.147, n.1), to a specifier position from which it asymmetrically c-commands the object. Note that the landing site must be an A-position (viz. an L-related position, in our terms), given that this movement feeds anaphor binding (Bars & Lasnik 1986). Now consider the Basque facts in (79). In the absence of right-adjunction, as far as I can see, the only possibility to derive the binding effects of this structure in a (pseudo)Kaynean framework requires reconstruction. Thus, starting from a Larsonian structure of the form ‘....[a book gave to the child]’, the dative-marked argument first raises past the object, and subsequently, the remnant constituent—which contains the anaphor—moves leftward across the derived position of the dative. In order to capture the fact that the anaphor gets bound by the dative argument in (79a), reconstruction must apply. However, since the landing-site of the constituent containing the anaphor is not operator-like (witness the neutral interpretation of the S O V IO order), applying reconstruction

41 Kayne (1994) leaves open the question of whether the verb should be taken to originate as the head of the small clause, along the lines pursued in Larson (1988) or whether they are independent heads.
would run against the generalization stated in Frank, Lee and Rambow (1991) that reconstruction for binding purposes is permitted only from operator positions.

Hence, concerning the binding facts found in the structure S O V IO in (79), at best we can conclude at this point that the indirect object asymmetrically c-commands the direct object. In this sense, the S O V IO and S IO O V orders behave symmetrically. We have pointed out three potential analyses that could capture the facts, although two of them present certain problematic aspects that need further examination. It seems that the simplest hypothesis is to propose that in the dialect that interprets the S IO O V and S O V IO orders as neutral, the indirect object can be optionally generated to the right of the verb (besides having it generated to the left of the direct object in [Spec, VP], as in all dialects of Basque). Anyhow, regardless of the ultimate structure we adopt for (77), what is important to note here is the symmetric behaviour observed between the S IO O V and S O V IO orders with respect to anaphor binding. That is, the two objects display the same c-command asymmetries when the indirect object appears to the left of the direct object (i.e. in the S IO O V order), and and to the right of the V-Aux complex. Furthermore, the data drawn from variable binding and scope effects that we present in the next section provide further support to the claim that the indirect object in Basque asymmetrically c-commands the direct object.

3.4.3. Object asymmetries

3.4.3.1. Quantifier-variable Binding

Consider the following data:

(81)  
a. ??nik liburu bakoitzaz itzuli nion berej jabehari   
    I.erg book each return aux its owner(dat)   
    "I brought back eachj book to itsj owner"  

b. nik berej liburu itzuli nion jabe bakoitzarij   
    I.erg his/her book bring aux owner each(dat)   
    "I brought back hisj book to eachj owner"   

A dative-marked quantified phrase can be coindexed with a bound variable contained in the object, as (81b) shows, but a bound variable interpretation is not available in (81a) (speakers' judgements vary as to the degree of marginality of this sentence). What is relevant is that all speakers have a contrast between the two sentences in (81). This means that in (81b) the postverbal quantifier c-commands, and, consequently, binds the pronoun — even though it does not precede it linearly. On the other hand, the deviance of (81a) suggests that the object quantified expression does
not c-command the pronoun contained in the indirect object phrase, providing thus further support to the view that it is the indirect object which c-commands the object.

3.4.3.2. Scope interactions

Consider now the following sentences:

(82) a. maisuak [neska bakoitza] aurkeztuko dizkio [baten bati]
teacher(erg) girl each introduce aux someone(dat)
"The teacher will introduce every girl to someone"

\begin{align*}
every \text{ girl}> & \text{ someone(dat)} \quad \exists \forall > \exists \\
someone(dat)> & \text{ all/every girl} \quad \exists > \forall
\end{align*}

b. maisuak [baten bat] aurkeztuko die [neska bakoitzari]
teacher(erg) someone introduce aux girl each (dat)
"The teacher will introduce someone to each girl"

\begin{align*}
?? \text{ someone}> & \text{ every girl(dat)} \quad ?? \exists > \forall \\
\text{ every girl(dat)}> & \text{ someone} \quad \forall > \exists
\end{align*}

The data presented above show important similarities with the results obtained in the scope interaction of two quantified expressions given the S IO O V order (cf. (60)). It was shown there that a dative-marked quantifier can always take wide scope over an absolutive-marked quantifier. As can be seen in (82), the same results arise when the indirect object QP appears postverbally in the SOVIO order. Thus, whereas in both (82a) and (82b) the indirect object quantifier takes wide scope over the existential QP, a wide scope interpretation of the object QP shows more restrictions. If scope dependencies reflect c-command (May 1977, 1985, Aoun & Li 1994, Beghelli & Stowell 1997), the fact that the indirect object quantifier takes wide scope strongly suggests that it asymmetrically c-commands the direct object, corroborating the claim we are making in this chapter.

3.4.3.3. Principle B and C effects

The examples to follow show that as far as pronominal coreference is concerned, the S O V IO word order pattern exhibits the same Principle C effects as those observed in the S IO O V word order pattern, that were discussed in section 3.3.6. above (cf. (69) and (70)). What the ungrammaticality of (83a) and (83b) strongly suggests is that the indirect object in these examples binds the direct object:
(83) a. *nik [Jon-enj nagusi berri-a] aurkeztu nion berarij/proj atzoko jaian
   I-erg Jon-gen boss new.det introduce aux he-dat yesterday’s party-in
   “I introduced Jon’s new boss to him at yesterday’s party”

b. *nik berai/proj erakutsi nion bideoan Jonį
   I.erg he show aux video.in Jon.dat
   **“I showed him to Jon in the video”

c. nik [bere burua]j erakutsi nion bideoan Jonį
   I-erg himself show aux video.in Jon.dat
   “I showed himself to Jon in the video”

(83a) is ruled out because it yields a Principle C violation, whereas (83b) entails a Principle B violation.42 The example in (83c) has been added in order to discard a potential alternative account of the ungrammaticality of (83a-b) in terms of a direct object>indirect object asymmetric relation in the S O V IO word order pattern. Thus, the contrast between (83b) and (83c) shows that (83b) is not ruled out because the object pronoun c-commands the dative-marked DP, since that would imply an ungrammatical result for (83c) too, contrary to facts. In sum, the results shown in (83) confirm our hypothesis that in the base order the indirect object argument is higher than the object argument in Basque.

3.4.3.4. Reciprocal interpretation of each... the other....

(84) a. pro bestearen jostailuaq eman dizkiot ume bakoitzari
    other(det.gen) toys give aux child each(dat)
    “I have given the other’s toys to each child”

b. *pro neska bakoitza aurkeztu diot bestearen lagunari
   girl each introduce aux other(det.gen) child(dat)
   “I have introduced each girl to the other’s friend”

Once again, these results pattern together with the binding and scopal facts we have discussed in this section, suggesting that the surface position of the postverbal indirect object in the S O V IO order reflects an indirect object>direct object hierarchical relation.

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42 Since Principle B of the Binding Theory constrains A-binding of pronouns, the ungrammaticality of (83b) suggests that the indirect object in this example occupies an A-position.
3.5. Conclusion

In this chapter I have examined triadic constructions in Basque, focusing on the structural relationship that holds between the indirect object and the direct object. Firstly, in section 2.2 I presented robust evidence that indicates that the indirect object (marked with dative Case) in Basque is a DP and not a PP. This conclusion was shown to account, among other things, for the surprising fact that A'-extraction of the dative phrase in Basque triadic constructions is unconstrained, in contrast to the limitations imposed on A'-extraction of the goal in double object constructions in languages such as English or Dutch. If Kayne (1984), Baker (1988) and Den Dikken (1992) are right in attributing these restrictions to the presence of an empty dative preposition governing the goal DP in double object constructions, I argue that the absence of restrictions on A'-movement in Basque triadic constructions show that the indirect object is not a PP category, but a DP.

In the spirit of earlier work by Barss & Lasnik (1986) and Larson (1988), in section 3 it was shown that the binding facts found in Basque triadic constructions reveal that the indirect object is structurally higher and thus asymmetrically c-commands the direct object (which bears absolutive Case). Other diagnostics, such as Principle B and Principle C effects, the scope relations among two quantifier phrases when they occur in indirect object and in direct object position, and the distribution of the Basque distributive particle –na were shown to corroborate this claim. All these diagnostics were tested with the S IO O V word order pattern, which is the neutral or unmarked order in the language. On the basis of these facts, I argued that Basque triadic constructions must be analyzed as double object constructions. Moreover, drawing from the symmetrical results found in the S O V IO word order pattern concerning binding and scope relations, I argued that double object constructions are the only configuration present in Basque triadic constructions. In other words, I am claiming that in Basque there is no configuration which instantiates the object-prepositional dative construction found in other languages.
Chapter 4: Focus in Basque

4.1. Introduction

In this chapter I discuss the phenomenon of focus in Basque. The grammatical manifestation of focus is of much relevance to Basque syntax, because it restricts the word order possibilities found in this language. Although word order is quite flexible in Basque, as was already pointed out in earlier chapters, focus properties govern the distribution of sentential constituents in Basque to a great extent (cf. Altube 1929, de Rijk 1978, Eguzkitza 1986, Ortiz de Urbina 1989, Osa 1990 among others), though not exclusively: topicalization and scrambling processes also determine their surface order. The basic fact that makes focalization in Basque particularly relevant for constituent order is the general statement that focalized phrases must occur immediately to the left of the verb. In fact, given the flexible word order characteristic of Basque, this adjacency between the focus phrase and the complex verb has led some traditional grammarians to claim that this is the only restriction imposed on word order in Basque. Abstracting away from these considerations, in what follows I will deal with the interaction between information structure and grammatical focus marking, assuming that the neutral basic word order is S IO O VAux, as is standardly assumed (cf. de Rijk 1969, Eguzkitza 1986, Ortiz de Urbina 1989, Laka 1989, among many others).

This chapter is organized as follows. In section 2 I describe how focus is identified in Basque, by surveying the main distributional properties of focus. In section 3 I present briefly previous approaches to focus constructions in Basque, pointing out in what respect these analyses fail to account for the whole range of data. In section 4 I propose an account which captures these and other focus facts in a straightforward way. In particular, contra Ortiz de Urbina's proposal, I argue that focus does not involve movement to [Spec,CP] and that information focus is not an operator, following Kiss (1998), Zubizarreta (1998), and Costa (1998). Specifically, I argue that there are two strategies to express focus in Basque: (a) focus in-situ (cf. Cinque 1993, Reinhart 1995, Reinhart & Neeleman 1998, Costa 1998): the focus phrase gets interpreted as focus by means of the (default) sentential stress rule, and by being to the immediate left of the verb. This analysis crucially hinges on the assumption that neither the focalized phrase nor the verb move; (b) clause-initial focus: foci in Basque can also occur in clause-initial

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1 However, see Albizu (1995), Ormazabal, Uriagereka & Uribe-Etxebarria (1994), and G. Elordieta (1997a) for an alternative analysis of Basque as a basic SVO language.
position, displaying V2-like effects. I propose that this second mechanism to express focus involves movement to a left-peripheral position, but crucially, it does not involve movement of the focus phrase, but of a null operator, which is coindexed with the focus phrase base-generated in a dislocated position. On the basis of the absence of Weak Crossover effects (and certain asymmetric Strong Crossover effects), I treat Basque ‘preposed’ focus constructions as another instance of what Lasnik & Stowell (1991) call Weakest Crossover, which significantly entail null operator movement. Following Demirdache (1997), I analyze Weakest Crossover configurations under the copy theory of movement (cf. Chomsky 1993), which allows us to account for the unexpected lack of WCO effects in constructions like dislocated focus structures which clearly involve A'-movement. As an argument for the non-operator status of preposed focus in Basque, in section 5 I consider some of the arguments that have been put forth in the literature to claim that preposed focus in other languages like Hungarian is quantificational (cf. Szabolcsi 1981, Kiss 1998). I show that sentence-initial focus in Basque lacks quantificational force since it is an information focus. Furthermore, by comparing fronted focus constructions in Italian, Spanish and Basque, in section 6 I propose that the analysis entertained in the earlier sections regarding the exhaustive/non-presupposed readings on the clause-initial focus phrase in Basque can be extended to preposed foci in Spanish.

For the sake of clarity, it is important to stress that in this work I will be examining information focus, a term I borrow from Kiss (1998) (also called presentational in Rochemont 1986). That is to say, the kind of focus that expresses new information, that is marked by one pitch accent and that is used to answer a wh-question (cf. Altube 1929, Cinque 1993, Reinhart 1995, Zubizarreta 1998, among others). This leaves out of the discussion constructions involving contrastive and corrective focus, about which I will not have much to say. In any case, I do not think that the distinction between contrastive and ‘neutral’ information focus is syntactically relevant in Basque. I assume that both types of foci occupy the same (preverbal) position, and that they differ in that a contrastive focus bears heavy stress (as confirmed by the data on focus intonation examined in G. Elordieta 1997b, in press), and in that a contrastive focus is interpreted within a set of contextually given entities.\(^2\)\(^3\)

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\(^2\) For a different view, see Etxepare (1996), who claims that informational and contrastive foci occupy different positions. We will briefly discuss Etxepare's proposal in section 4.5.2.

\(^3\) Cf. also de Rijk (1996), Elordieta & Elordieta (1999) and Ortiz de Urbina (2000) for a description of the syntactic and semantic properties of post-negation focus, often characterized as having contrastive force.
4.2. Identification of focus

4.2.1. Introduction

In order to describe focalization in Basque and show its relevance to word order, let us start by considering the following English sentence:

(1) My brother has bought a new car

The translation of this sentence into Basque can have several surface forms, depending on which constituent is interpreted as focus, and the context in which the sentence occurs. Naturally, if we assume, in accordance with a long-standing tradition, that focus has a phonological manifestation in the form of prominent stress (cf. Chomsky and Halle 1968, Chomsky 1971, Jackendoff 1972, Selkirk 1986, Rochemont 1986, among others), the English sentence in (1) can have a distinct informational structure depending on the variation in the assignment of stress to either lexical item in the sentence. Thus, following common assumptions, I adopt the view that an element receiving the main stress of the sentence is identified as focus. For instance, we can pronounce (1) with relatively higher phonological prominence on the subject, in which case the subject will be interpreted as focus (I make use of capital letters to indicate the location of sentence stress):

(2) MY BROTHER has bought a new car

or assign heavier stress to the verb:

(3) My brother has BOUGHT a new car

in which case the verb will be interpreted as focus. Evidently, other alternative stress placements are also possible, and each provide a slightly different information structure. Although there is more to say about the correlation between sentence stress and focus, for the time being I will leave it as it stands, if only as a descriptive observation.

4.2.2. Identification of focus in Basque

When we take Basque into consideration, we encounter two cooccurring devices that identify a constituent as focus. On the one hand, as was noted above for English, focus is identified prosodically, by virtue of the fact that the focalized phrase receives the most prominent stress of the sentence, which I will label 'focal

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4 This statement will be slightly modified in later sections, when we deal with the possibility of having multiple foci in unmarked contexts. For those cases, I will argue that the position of the sentence stress can identify more than one constituent as focus.
accent’, following Hualde, Elordieta & Elordieta (1994).\(^5\) Major prominence on a particular syllable can be realized in different ways, depending on the dialects under consideration. In some dialects, focal accent reduces to stress accent (i.e. heavy stress); in other dialects which have a pitch accent, ‘most prominence’ is perceived as an abrupt falling of the H-L tone distinctive of an accented syllable with respect to the following syllables. Perceptually, in contexts wherein there is a phrase with lexical accent and a phrase which is interpreted as focus, the strongest accent will fall on the focalized phrase (whether lexically accented or not), while the lexical accent on the non-focus phrase becomes secondary in terms of the level of accent prominence (see the reference above cited, as well as Hualde 1991, and G. Elordieta 1997b, impress for a detailed discussion of these facts). This is illustrated in (4), where a focalized phrase cooccurs with the lexically accented word *liburua* ‘book’.

(As in the notation used in Hualde et alii (1994), a lexical accent is represented by an acute accent (’), whereas focal accent is represented by a circumflex accent (^)).

In (4a) the focus phrase that receives focal accent does not carry an (inherent) lexical accent, but receives focal accent by virtue of being the focus of the sentence. In (4b) the focalized phrase *dendariári* carries a lexical accent, which is made more prominent for the same reason:

(4) a. liburú-a  zure laguna-rí  eman diot
   book-det your friend-det-dat give aux
   “I have given the book TO YOUR FRIEND”

b. liburú-a dendari-á-ri  itzuli diot
   book-det shopkeeper-det-dat  return aux
   “I have returned the book TO THE SHOPKEEPER”

In addition to receiving prosodic prominence, the focus phrase must appear in immediate preverbal position (cf. Azkue 1891, Altube 1929, Lafitte 1944, de Rijk 1978, Goenaga 1978, and all subsequent literature). This yields the well-known focus-verb adjacency characteristic of preposed foci in a number of other languages, such as Hungarian (Horvath 1986, 1995, Brody 1990), Italian (Cinque 1990, Rizzi 1997), or Greek (Tsimpli 1995). In section 4 below we will provide an account for the V2-like effect observed in Basque focalization patterns.

For the sake of the argument, I would like to make it clear that the term focus will be understood here as the constituent contributing totally new information, or the most important piece of new information given in the utterance (cf. de Rijk 1978). Generally speaking, we can follow Altube (1929) and de Rijk

\(^5\) The term ‘focal accent’ differs from ‘lexical accent’ in that the latter refers to accentually marked morphemes, which have the property of placing an accent on a particular syllable of the word that contains them. The specific location (syllable) which will end up bearing this lexical accent is subject to dialectal variation, but in general, there is considerable agreement among the dialects of Basque with regard to which words are (lexically) accented (cf. Hualde, Elordieta & Elordieta 1994).
(1978) in saying that an information focus answers an implicit question, inferrable from the preceding discourse. It is this intuition that led Azkue (1891) to firstly use the term galdegaia, literally ‘subject of question’ (from galde ‘question’ and gaia ‘theme, object’) to refer to the focus of a sentence. However, as de Rijk (1978) and Rochemont (1986) independently observe, sometimes the speaker presents a constituent as focus simply to emphasize the element deemed most relevant from the speaker’s point of view. This allows for the possibility that the non-focused material in the sentence need not be necessarily presupposed, as is often the case in unmarked contexts (see section 4.2.3 below).

It is important to note that both the prosodic and the syntactic conditions must be met in order to identify a constituent as focus in Basque. Thus, when a constituent carries information focus, it must immediately precede the verb besides receiving the most prominent stress of the sentence. To illustrate this, consider the English sentence in (2), for example. (2) is well-formed as a response to the question in (5), given that the requested information in the question is focused in the answer (‘MY BROTHER’ in (2)), and therefore, accented:

(5) Who has bought a new car?
(2) MY BROTHER has bought a new car
(3) #My brother has BOUGHT a new car

For the same reason, (3) is ill-formed as a response to (5), because the focused and accented item BUY cannot be construed in association with (5). While the relevance of focus and accent to the interpretation of the sentence remains true, notice that the surface order of the constituents in the sentences in (1), (2) and (3) remains unchanged. This is not the case in Basque, as is evidenced by the following data. Either (6a) or (6b) are well-formed expressions when used as an answer to the question in (5), but (6c) is ill-formed with the intended interpretation:

(6) a. NIRE NEBA-K erosio du kotxe berri bat
    my brother-erg buy aux car new a
    "MY BROTHER has bought a new car"
    (SVO)
b. kotxe berri bat NIRE NEBA-K erosio du
    car new a my brother-erg buy aux
    (OSV)
c. *NIRE NEBA-K kotxe berri bat erosio du
    My brother-erg car new a buy aux
    (SOV)

(6c) is ruled out in the context introduced by the question in (5) because the focus of the sentence, the subject nire nebak, is not in immediate preverbal position: the object phrase intervenes between the focus and the verb. The adjacency relation between the focused constituent and the inflected verb (which in this particular example is composed of the main verb erosio ‘buy’ and the auxiliary verb du cannot be interrupted at any rate (see chapter 5, section 1.1. for an account
of the V-Aux adjacency)). The description of this phenomenon is firstly attributed to Alube—who takes the notion from Azkue (1891)—, and has been uniformly adopted in the Basque linguistic tradition: Lafitte (1944), de Rijk (1978), Goenaga (1978), Mitxelena (1981), Eguzkitza 1986, Ortiz de Urbina (1989), (1999), Osa (1990).

Note that even if the intended focalized phrase is pronounced with the strongest accent of the sentence, if it does not occur to the immediate left of the verb, as in (6c), it cannot get interpreted as focus. In this respect, Basque differs from languages like English or French, which have the strategy of marking an element as focus by assigning it phonological prominence. In Basque, identification of focus is realized by prosodic and by syntactic means. Accordingly, the order of constituents in a sentence must be consistent with the intended focus. This is not to say that there is a one-to-one correspondence between surface linear order and focus interpretation; in fact, as can be seen in (6a-b), two different SVO and OSV orderings are compatible with a focus reading on the subject, provided that the focalized constituent—the subject nire nebra in these examples—occurs to the immediate left of the inflected verb (to be more precise, to the left of the inflected complex verb V-Aux).

4.2.3. Multiple foci

Our discussion thus far has only dealt with sentences having a single constituent as focus. Yet, in highly specific contexts, it is possible to have more than one constituent focalized in the same sentence, for instance, as a response to a multiple wh-question (cf. de Rijk 1978, Etxepare & Ortiz de Urbina (in press), G. Elordieta (in press)). Consider the question/answer pair in (7):

(7) a. ... ez dut ezer ulertu. Nor-k utzi dio kotxe berria nor-it? 
not aux something understand who-erg lend aux car new-det who-dat
"...I didn’t understand anything. Who lent the new car to whom?"

b. NIRE NEBA-K AMAIARI utzi dio kotxe berria
My brother-erg AMAIA-dat lend aux car new-det
"MY BROTHER lent the new car TO AMAIA"

With the intended focus interpretation in (7b), the intonation pattern of that sentence is clearly distinct from the intonation pattern found when only the indirect object phrase is focalized (cf. G. Elordieta (in press)). Thus, the intonation pattern typical of the interpretation of (7b) could be described as indicated in (8), where two focal accents can be perceived on each of the focused constituents — nire

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6 For the present, I leave aside focalization in negative sentences. See section 4.5 below.
7 As mentioned earlier, multiple wh-fronting is also possible, provided that the canonical wh-ergative-wh-dative order is preserved.
nebak and Amaiari, respectively.\footnote{The reader should bear in mind that, outside contexts of multiple questions like (7a), the order S IO V O given in (7b) has a further reading according to which the subject is interpreted as topic, and only the indirect object is focalized.}

(8) Nire nebåk Amaiåri utzi dio kotxe berria

Multiple foci of this type must be ordered according to the sequence in which the constituents appear in the canonical order: S IO O V. That is, if the canonical ordering among two or more constituents is shifted, a multiple focus reading is lost. Thus, (9) cannot have the interpretation of (8), that is, it cannot be interpreted as having Amaiari and nire nebåk as focus, since the indirect object Amaiari appears preceding the subject. But in the canonical order the indirect object follows the subject argument. Hence, (9) can only be interpreted as containing a single focalized constituent: the subject nire nebåk:

(9) Amaiåri nire nebåk utzi dio kotxe berria
Amaiåri-dat my brother.org lend aux car new-det
I."MY BROTHER has lent the new car TO AMAIA"
II."To Amaia, MY BROTHER has lent her the new car"

While maintaining the focus-verb adjacency relation, the other sentential constituents may be rather freely distributed. They may appear either as topics before the focalized constituent, like the object phrase kotxe berri bat in (6b), or may occur in postverbal position, as in (6a) and (7b). Given the V-final character of Basque (cf. chapter 1), one might suppose that the object in (6a)/(7b) is right-dislocated. However, as will be argued in chapter 5, I assume that the postverbal object in (6a)/(7b) has not moved rightwards: rather, it is the V-Aux that raises leftwards. Leaving aside the discussion of this issue for the moment, in the next section I will present previous analyses which deal with the issue of focus in Basque.

4.3. Previous accounts on focalization in Basque

4.3.1. Focus-verb as a constituent

Adopting Altube’s (1929) ‘focus law’ (galdegaiairen legea), according to which the focus of a sentence in Basque must be placed in immediate preverbal position, de Rijk (1969, 1978) argues that a preverbal focus is in a derived position, as a result of movement. Although this movement could in principle be compared to wh-movement in English, given that both rules move XPs into preverbal position, he claims that the focus movement rule does not imply fronting of the focused phrase, but instead, rightward movement. He reaches this conclusion from
the assumption that V is final in Basque (de Rijk 1969). Accordingly, since the focus and the verb must be obligatorily adjacent, and since other material may precede the focus, he concludes that focalization involves rightward movement of the focalized phrase to the left of the finite verb. According to de Rijk’s (1978) analysis, the focalized constituent bears a syntactic feature [+focus] underlingly, which triggers movement of the focus phrase to a position in front of the verb. After the focus moves, the focus and the verb form a constituent, which he identifies as VP.9 This operation is represented in (10), where S stands for ‘sentence’ (the example and analysis are adopted from de Rijk’s own work (1978:200):

(10)  a. (before Focus Movement)
      \[S\ [\text{Aitak}]\ [\text{bihar}^{+\text{focus}}] \ [\text{amari}] \ [\text{gona gorria}] \ [\text{V}[^{\text{ekarriko}}]V] \ [\text{dio}]_{\text{aux}}]\]
      father-erg tomorrow mother-dat red skirt-det bring.fut aux
      “Father will bring a new red skirt for mother tomorrow”

      b. (after Focus Movement)
      \[S[Aitak] \ [\text{amari}] \ [\text{gona gorria}] \ [\text{VP} \ [\text{bihar}] \ [\text{ekarriko dio}]\]

   Nowadays there is a general consensus among Basque linguists with regard to the configurational status of Basque, so I will dismiss the configurationality issue that this analysis raises. Yet, de Rijk’s analysis of focus as involving rightward movement raises some problems. Firstly, given that he assumes that the V-Aux complex is sentence-final, and that the verb stays in-situ in focalizations, moving a subject phrase to the preverbal position would entail a lowering operation, what would induce an ECP violation (cf. Chomsky 1981, 1986b, and much subsequent literature). On the other hand, this account would predict that a string of constituents such as the one in (6a) (SVO) should not exist, because the V-Aux unit is not sentence-final, unless we say that postverbal constituents show up in that position as a result of rightward movement. If so, the derivation of a sentence like (6a) or (11) below would hence involve a series of rightward movement operations, one that moves the focus phrase into preverbal position in order to form a constituent with the V and license the [focus] feature (with the potential ECP violation that such an account would entail), and a number of movements that move non-focused constituents to the right of the verb phrase:

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9Adopting a non-configurational analysis for Basque, de Rijk (1978) argues that the VP node is not a primitive, but is created in the derivation in order to host the focus phrase and provide the sentence with the relevant semantic/pragmatic interpretation. According to this view, in the underlying structure, arguments, verbs, and other major phrases are represented by multiple-branching structures, with no ordering restrictions among them.
(11) NIRE NEBAK erosi du kotxe berri bat Mirenentzat
my brother.erg buy aux car new a Miren.fo
"MY BROTHER has bought a new car for Miren"

The weakness of this account lies in the amount of movement operations it
requires in order to derive non V-final well-formed focus constructions. Despite
this, I will argue in section 4.4.1 that de Rijk's intuition that the verb does not move
in focus constructions is basically correct when focus is assigned in-situ (cf. section
4.4 for a detailed discussion).

The idea that the focus XP in Basque is moved to a preverbal position, and
that it forms a constituent together with the verb and the auxiliary is also pursued in
Eguzkitza (1986). However, he argues that fronting is also involved. According to
Eguzkitza, after the focus adjoins to V to receive the [focus] feature inherent to V,
the string formed by the focus-V-Aux raises as a constituent to a sentence initial
position, as is represented in (12b) for the focus structure in (12a):10

(12) a. MIKEL-I bidali dio gizon-a-k liburu-a
Mikel-dat send aux man-det-erg book-det
"The man has sent the book TO MIKEL"

(12) b.

\[
\begin{array}{c}
\text{IP} \\
\text{I} \\
\text{VP} \\
\text{V'} \\
\text{t_0} \\
\text{t_0} \\
\text{V} \\
\text{Aux} \\
\text{gizonak} \\
\text{liburu} \\
\text{dio} \\
\text{Mikeli} \\
\text{bidali}
\end{array}
\]

The structure in (12b) involves more than just focus-V fronting; it implies at least
three sorts of movement: firstly, movement of the focused indirect object Mikeli to

10 Following Horvath (1981, 1986), Eguzkitza proposes that the lexical category V° in
Basque has an inherent feature [focus], which is assigned to the element occupying the
"focus position". This position is a V-adjoined position created after applying Focus
Movement to the element that is interpreted as the focus of the sentence.
the left of the main verb, leaving a trace behind; secondly, rightward movement of the VP-internal direct object to IP, and thirdly, fronting of the remnant constituent I’ containing [focus+V+Aux] to an IP-joined position. This analysis presents the same shortcomings we pointed out with regard to de Rijk’s approach, in the sense that it involves multiple movements that complicate the syntactic derivation unnecessarily. In addition, it involves ECP violations, as evidenced by the fact that the traces of the focused XP and of the dislocated object liburu a are not properly governed in the representation in (12b). Thirdly, there is the issue of extracting a non-maximal projection (I’) and subsequent adjunction of it to IP, as Eguzkitza proposes to account for the cases of sentence-initial focus constructions. However, since Chomsky (1986b), it is generally assumed that only heads and maximal projections may undergo movement.11

The drawbacks that arise from the lowering operations and ECP violations that these analyses present are further overcome in Ortiz de Urbina’s (1989) account, which formalizes the idea that the focus-verb adjacency entails fronting by treating this operation as an instance of a residual verb-second (V2) phenomenon. We will briefly discuss this analysis in the next section.

4.3.2. Focus in [Spec,CP]

Ortiz de Urbina (1989) (cf. also (1995), (1999)) treats focalization processes as syntactic operations involving movement of the focus phrase and of the verbal complex to a clause initial position. By analyzing wh-movement in Basque and comparing them with focalization structures, Ortiz de Urbina observes that focusing involves the same distributional properties as wh-constructions, and concludes that both structures involve the same syntactic derivation. Thus, both wh-words and foci appear in a fronted position, and they must be followed by the inflected verb, as shown in (13a-b). If the wh-operator/focus-V adjacency effect is not preserved, the derivation is ill-formed, as illustrated in (13c-d):

(13) a. Nor-k ekarri du liburu-a?
   Who-erg bring aux book-det
   "Who has brought the book?"

b. Jon-ek ekarri du liburu-a
   Jon-erg bring aux book-det
   "JON has brought the book"

c. *Nork liburu ekarri du?

d. *Jonek liburu ekarri du

11 Also, the adjunction of a maximal projection—the focus phrase—to a head—the verb—would lead to a violation of Emond’s (1976) Structure Preserving Hypothesis. Cf. Chomsky & Lasnik (1993) and Kayne (1994) for further arguments to rule out this type of adjunction operations.
Ortiz de Urbina accounts for the strict adjacency that focus phrases as well as wh-phrases show with respect to the inflected verb by treating focus/wh-phrases as operators. In this way, the so-described ‘V2’ effect observed in these constructions is then derived by movement of the wh/focus operator to [Spec,CP], which in turn triggers raising of the complex [V-Aux] unit to C⁰ (see chapter 5, section 1.1. for an account of the unitary behaviour of V and Aux in V-raising contexts). This approach to the V2 effect observed in Basque is thus parallel to the V-to-C⁰ analysis adopted for verb-second phenomena in the Germanic languages (cf. den Besten 1983 and much subsequent literature):

(14)  a. [CP Nor-ksub ekarri duv-aux [IP tsub liburu-a t-v-aux]]?
    b. [CP Jon-eksub ekarri duv-aux [IP tsub liburu-a t-v-aux]]

Nevertheless, despite the apparent symmetric behaviour displayed by wh/focus phrases, we find important asymmetries between the two structures that lead us to abandon the view that focus and wh-operators should be treated on a par in Basque. One difference between wh-words and foci is that while wh-questions display Weak Crossover effects (WCO), foci do not:¹²

(15)  a. *Nor, jo du bere, ama-k?
       Who hit aux his mother-erg
       "*Who, has his, mother hit?"
    b. Jon, jo du bere, ama-k
       Jon hit aux his mother-erg
       "*?His, mother has hit JON,"

If both wh-phrases and foci are to be treated as A’-moved operators, and if they both occupy the same position at [Spec,CP], they should display a symmetric behaviour with respect to crossover effects. However, while wh-structures are subject to WCO (15a), focus constructions do not exhibit any sensitivity to WCO effects (15b).

Similarly, wh-words and foci behave differently with regard to Strong Crossover effects (SCO). Extraction of an embedded wh-phrase across a coindexed matrix DP displays strong crossover effects, while fronting an embedded focus to the matrix clause does not induce crossover effects. Indeed, (16b) is a well-formed sentence.¹³ The contrast in (16) illustrates this asymmetry:¹⁴

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¹² Notice that foci in English also triggers WCO effects (cf. Chomsky 1977 and much subsequent literature).

¹³ However, some speakers consider sentences such as (16b) less than perfect, although the relative contrast between the (a) and the (b) cases is clear (cf. Etxepare 1996).

¹⁴ In the examples in the text I have included a subject pro in the matrix clause so as to show that whether the coindexed DP is a pronoun or an R-expression is irrelevant to test
(16) a. *nor-i, entzun du_i-v-aux [i^Jon-ek_i/pro_i, [CP_t, emango diote-la sari-a] t_v-aux]?  
who-dat hear aux Jon-erg/pro-erg [ give aux-C prize-det]  
"To whom did Jon/pro hear that they are going to concede a prize?"

b. Bera-ri, entzun du_i-v-aux [i^Jon-ek_i/pro_i, [CP_t, emango diote-la sari-a] t_v-aux]  
he-dat hear aux Jon-erg/pro-erg [ give-fut aux-C prize-det]  
"TO HIM has said Jon/pro, that they are going to concede a prize"

"John thinks that they will concede a prize TO HIM"

In (16a) the wh-phrase nori 'to whom' has been extracted from the embedded clause, and moves to the specifier position of the matrix clause, leaving a trace behind. Assuming that wh-phrases are operators, the trace of the moved wh-element qualifies as a variable, and thus, is subject to Condition C of the Binding Theory (Chomsky 1981). Condition C requires that R-expressions (which include variables) must be A-free, a requisite which is not fulfilled in (16a) because the matrix subject Jon, which shares the same index as t, binds the variable. Hence, (16a) is ruled out as a Condition C violation. In this light, consider (16b) now. If (16b) involved the same syntactic derivation as the wh-construction in (16a), which creates an operator-variable chain, (16b) should be as bad as (16a), contrary to fact. Why this is so is unexplained under a unitary account of wh- and focus constructions.

In section 4.4.3 below I will present an alternative analysis of focus in Basque that captures these and related facts by treating clause initial foci as left dislocated elements, base-generated at the left periphery of the clause, and associated with the gap that occupies the argument position via a null operator in Spec,CP. Hence, for the present, I will not say anything about the contrasts illustrated in (15) and (16) above. In any case, the asymmetries observed in these constructions should constitute enough evidence that indicate that wh- and focus structures do not have an identical syntactic structure.

The idea that the similarity between focus and wh-constructions in Basque is only apparent is implied in Laka & Uriagereka's (1987) analysis of wh-movement and focus, that I present in the next section, although the specific implementation of this idea is rather different from the analysis I will develop in section 4.4.

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strong crossover effects (I thank S. Barbiers and L. Cheng (p.c.) for bringing this point to my attention). (i) shows that a null pronoun also induces SCO effects:

(i) *pro, uste du [Mikel, etorri dela]
think aux Mikel come aux-that
"*(He) thinks that Mikel has come"
4.3.3. \textit{Wh}/focus-\textit{V} adjacency without \textit{V}-movement

Drawing on the adjacency relation observed between a \textit{wh}-phrase in [Spec,CP] and the inflected \textit{V} in Basque, Laka & Uriagereka (1987) argue that the relevant phenomenon does not involve V2, as Ortiz de Urbina (1989) suggests, and propose instead that the adjacency effect only occurs at PF, but that it does not reflect structural adjacency. Moreover, they suggest that \textit{wh}-phrases move to [Spec,CP], but that foci do not move. The basic intuition of Laka & Uriagereka's analysis is the following. In a language that is (largely) head-final, such as Basque, one would expect Comp to be head-final. Now, if V-to-C is involved in wh-movement in Basque, as Ortiz de Urbina argues, we would expect the \textit{wh}-phrase in [Spec,CP] and the verb in C to appear at the two opposite sites of the clause structure, contrary to fact. To account for this, instead of postulating a head-initial C (Ortiz de Urbina 1989), they exploit the \textit{pro-drop} character of Basque. Recall from chapter 2, section 2.2.3, that the three nominal arguments may be dropped in Basque. The idea is then that the apparent surface adjacency between the \textit{wh}-word and \textit{V} — and, similarly, between the focus and the verb — is masking a situation in which one or more instances of \textit{pro} intervene between the \textit{wh}-element/focus and the verb. To illustrate this, consider an object question. The representation of an object question would look as follows:

(17)

\begin{center}
\begin{tikzpicture}
  \node{CP}  [grow'=right, sibling angle=120, level distance=2cm]
    child {node{Wh$_{obj}$}
        child {node{I'}
            child {node{I}
                child {node{VP}
                    child {node{t$_{obj}$}
                        child {node{V}}}
                    child {node{Aux}}}}}}
    child {node{C'}
        child {node{IP}
            child {node{C}}}};
\end{tikzpicture}
\end{center}

Bear in mind that they assume that the verb does not move to C. Thus, in order to account for the fact that no overt DPs may intervene between the \textit{wh}-word and the verb, they assume, following Fukui & Speas (1987), that a functional category containing a lexical (morphologically realized) specifier is a barrier for extraction. This assumption explains straightforwardly why (18) is ungrammatical. In (18), the lexical subject in [Spec,IP] creates a barrier for the movement of the object \textit{wh}-phrase across IP on its way to [Spec,CP]:

...
(18) *Nor Jonek ikusi du?
   Who Jon.erg see aux
   "Who has Jon seen?"

In this account, thus, we predict that there may be intervening material between the wh-phrase and the verb if it is an instance of pro, as in (19a), or an adjunct (19b), on the assumption that adjuncts are not specifiers of any projection, but instead are adjoined to a maximal projection (the latter example is taken from Laka 1985):

(19) a. Nor-k pro$_{10}$ pro$_{10}$ eman dio ume-a-ri$_{10}$ liburu-a$_{10}$?
   Who-erg pro pro give aux child-det-dat book-det
   "Who has given the book to the child?"

b. nor bonela etorri da?
   Who thus come aux
   "Who has come this way?"

Laka (1985) and Laka & Uriagereka (1987) note that sentences like (19b) are acceptable for some speakers, but according to many speakers, including myself, that sentence is ungrammatical due to the lack of adjacency.\(^{15}\) Crucially, the same grammaticality judgements arise concerning focus constructions.

Under this approach, later on pursued by Uriagereka (1988), (1992) and (1999), overt lexical nominal phrases are either right-dislocated, or left-dislocated. Adopting Torrego’s (1992) proposal on clitic doubling in Romance, Uriagereka (1992: 438 ff.) proposes a similar structure for Basque. Thus, overt DPs occupy the specifier position of the DP headed by an agreement marker, which takes pro as its complement. This is schematized in (20):

(20)
```
       DP$_2$
        |   D'
       DP$_1$
         |   
       Jon
          |   NP
         pro   D
          |   Agr
```

Assuming the structure in (20), the doubled phrases in [Spec,DP] can be left- or right-dislocated, and as a result, in interrogative and focus contexts an apparent surface adjacency arises between a wh-word (in [Spec,CP]) and the verb, and

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\(^{15}\) They point out that a number of examples of the sort in (19b) are found in written texts, most of them belonging to older dialects of Basque (cf. Mitzelena 1981, Mitzelena & Sarasola 1987—). However, in modern dialects examples like those range from ungrammatical to marginal (according to the speakers Laka & Uriagereka consulted with).
between the focus (which presumably has not moved) and the verb.

This analysis, however, envisages some problems. As I will show in chapter 5, to postulate that argumental phrases are moved rightwards raises empirical problems that I will not discuss here (I refer the reader to that chapter). Furthermore, Laka & Uriagereka's analysis predicts that adjuncts that occupy a structural position which is lower than the surface position of a focus phrase should freely intervene between the focus and the verb. However, such sentences yield bad results, at least in the Western dialects (cf. also the discussion on (19b)). As expected, the same ungrammaticality arises concerning wh-movement:

(21)  

a. *Jonek horrela egin du
     Jon-erg like that do aux
     "JON has done (it) like that"

b. *Nork horrela egin du?
   "Who has done (it) like that?"

Admittedly, though, adjunct wh-phrases and (more marginally) focalization of adjuncts do not require such a strict adjacency with respect to the verb. A subject may intervene between a causal wh-adjunct and the verb, as is illustrated in (22a), and a manner adjunct may 'disrupt' the adjacency effect between the focused adjunct and the verb in (22b), although the variant displaying strict adjacency is still preferred:

(22)  

a. ?Zergatik uma guziak honaino etorri behar dira?
    Why child all.abs here.to come must aux
    "Why do all the children have to come here?"

b. ?/??Zu-gatik min handi-z dago ohea-n
   you-cause pain big-with stay bed-in
   "BECAUSE OF YOU (s)he is staying in bed in pain"

---

16 This account presents several empirical problems that I will not fully discuss here. For a detailed criticism to Laka & Uriagereka's analysis, the reader is referred to Uribe-Etxebarria (1989) (cf. also G. Elordieta 1997a).

17 The acceptability of (22b) improves if a pause follows the focused adjunct phrase, or if the focus is pronounced with a separate intonational contour. In this respect, it seems to me that when no strict adjacency with respect to the verb exists, the type of focus involved must have a contrastive interpretation (cf. Etxepare 1996). That is, (22b) cannot be the answer to an adjunct wh-question like (i):

(i) zergatik/norengatik dago min handiz ohea-n?
   why/because of whom is pain big-with bed-in
   "Why/because of whom is she staying in bed in pain?"

Since in this dissertation I am mainly concerned with information focus, I will not have much to say about this type of constructions.
Uriagereka (1988), (1999) argues that wh-adjuncts like zergatik ‘why’ and, more in general, causal adjuncts are IP-adjuncts. Thus, in (22a) movement of the wh-phrase to [Spec,CP] can take place simply because no barriers are crossed in the operation. As for focalization contexts, Uriagereka (1999) modifies his former view and proposes, following Brody (1990), that focalization involves movement to a category between CP and IP. This approach predicts that focus movement is subject to the same restrictions that wh-movement displays.  

However, as we discussed with regard to the data in (19b), (21a-b), and (22b), the barriers approach leaves unexplained why the adjacency between the wh-/focus phrase and the verb is needed in those examples. The barriers approach predicts that such examples should be possible, but, as I mentioned before, they are not acceptable (at least in the Western dialect).

Although I agree with the idea that the landing-site of wh-movement and of a proposed focus are not the same, in section 4.4 I will entertain an analysis of focus that assumes a V2 analysis for clause initial focalization patterns, and an in-situ analysis for focus in unmarked contexts. The existence of two strategies to mark focus is also proposed in Albizu (1995), so let me introduce it before I present my own analysis.

4.3.4. Albizu’s theory of focus (1995)

Rather than postulating a unique syntactic mechanism of focalization, Albizu (1995) proposes that there are two different focusing strategies in Basque. One involves what he calls narrow focus, and the other involves wide focus. The main difference between the two is their different ability to extend or propagate the focus interpretation that a preverbal constituent receives to higher constituents. Thus, while wide focus allows to propagate the focus reading assigned to a preverbal phrase to other constituents, narrow focus disallows its propagation and is associated with a single phrase. He gives the following examples to illustrate the two types of focus (the symbol # represents that an intonational pause or break is present):

\[\text{[22a]}\]

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18 However, even if sentences like (22) were fully accepted, this analysis should still account for the fact that a V2 effect is available (even preferred) in these constructions.

19 Moreover, he argues that when other material precedes the focused constituent, as in (23b), an intonational pause precedes the narrow focus (hence the #). However, as I will argue further below, a pause is not necessary in order to interpret a particular focus as narrow, given that non-canonical orders preclude the propagation of focus to higher constituents. Thus, the non-canonical order in the sentences in (23) is already marking a narrow focus in the three sentences. See section 4.4.2.3 for more details.
(23)  

*Wide focus*

a.  Pellok bizikleta *Miren* erosi dio  
Pello-erg bike  Miren-dat buy  aux  
"Pello has bought a bike FOR MIREN"

*Narrow focus*

b.  Pellok bizikleta # *Miren* erosi dio  
c.  *Miren* erosi dio Pellok bizikleta  
"Pello has bought a bike FOR MIREN"

According to Albizu, in (23a) either the indirect object *Miren* or both the direct object *bizikleta* and the indirect object *Miren* can introduce new information. In contrast, in (23b-c) only *Miren* can be the focus of the sentence. He argues that the difference lies in the fact that the focused constituent occupies distinct structural positions in (23a) vs. (23b-c). In (23b-c) the focus is in [Spec,CP], whereas in (23a) the focus occupies a L-related position, which can be either the specifier of RootP or the specifier of AgrP (see the diagram below). His argument is based on the specific mechanism of focus assignment that he proposes. Following Horvath (1995), he assumes that focus is a syntactic feature assigned by the verb to the immediate preverbal constituent. The focus feature is assigned under a Spec-head agreement relation established outside the VP, either in RootP (=AuxP in my analysis), which he locates between AgrP and VP, or in the AgrP corresponding to the focused argument, that he locates above RootP.20 The clause structure he proposes for Basque is the following, noting that he assumes a SVO analysis of Basque (for ease of exposition, I omit the specifier positions):

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20 Albizu does not discuss how the checking relation is established between a narrow focus (that occupies [Spec,CP] in his analysis) and the verb. Presumably, this checking relation would take place in CP, following Ortiz de Urbina’s (1989) V2 approach.
Following Ortiz de Urbina (1994, 1995), Albizu assumes that the verb raises overtly to the functional category hosting the auxiliary verb (i.e. Root) by a lexicalization requirement on the auxiliary verb (see chapter 5, section 5.1.1 for more considerations on this issue). In addition, he assumes that arguments in Basque check their Case in the specifier of the different agreement projections (cf. Chomsky 1993, Cheng & Demirdache 1993, López 1995, Zabala & Odriozola 1996, Fernandez 1997), and that they can raise there before or after Spell-Out, depending upon the focus structure of the sentence. In other words, he claims that arguments do not move in the syntax to check Case features; instead, they move to check the verbal [+focus] feature and are interpreted as focus.

Given this set of assumptions, this analysis predicts that the canonical (neutral) order should be V S O IO, contrary to fact. To account for this, Albizu proposes to derive the unmarked S IO O V order by arguing that the VP-internal arguments raise out of the VP in order to be interpreted as new information focus. By raising, they receive the focus feature either from the verb, or from the preverbal constituent by feature percolation.

Note that this approach entails two predictions: (i) that every Basque sentence has one or more constituents interpreted as focus, even in unmarked contexts, and (ii) that arguments should not raise unless this movement is triggered to be interpreted as new information.

We will see in section 4.4 below that the first prediction is intuitively correct, although technically it raises some problems. I will postpone the discussion of this issue to that section. As for the second prediction, it is clear that not all
preverbal arguments express new information, contrary to what this account would predict: thus, apart from neutral S IO O V contexts in which the focus feature percolates from the element most adjacent to the verb to higher constituents, there are certain orderings wherein two or more arguments appear preverbally and yet cannot be new information (cf. the example in (25b) below). Crucially, focus-feature percolation occurs with what Albizu labels ‘wide’ focus and is only possible when the preverbal constituents preserve the canonical order among them, that is, S-IO-O-V (see (25a)). If this order is altered, the propagation of the focus feature is blocked. This is illustrated in (25), where the square brackets indicate the domain of focus:

(25) a. [Ama-k [alaba-ri [bizikleta] agindu dio]]
   mother-erg daughter-det-dat bike promise aux
   “Mother has promised (to buy) a bike to her daughter”

b. Amak bizikleta [alabari] agindu dio

Indeed, the existence of orderings such as (25b) undermines the claim that arguments in Basque raise just for focus reasons. In (25b) the subject amak and the direct object bizikleta cannot be new information; only the indirect object alabari gets interpreted as focus. In contrast, in (25a) either the direct object, or the whole VP, or the entire clause can express new information (we will have more to say about this in section 4 below). Thus, the motivation that triggers raising of the subject and of the direct object in (25b) is left unexplained under the approach pursued by Albizu. This fact is even more striking if we take into account that postverbal arguments in Basque are not interpreted as new information (provided that we leave aside story-telling contexts, wherein it is possible to find new elements introduced in the narration in postverbal position). Therefore, assuming a SVO analysis of Basque, as Albizu does, one would expect that non-focused arguments should remain in-situ (i.e., in postverbal position), given that according to his account focus is the trigger of (overt) movement and not Case.

Albizu proposes to account for the focus interpretation of the sentences in (25) in the following way. In (25a) the verb is in AgrO and assigns the focus feature to the object, sitting in [Spec,AgrOP], by Spec-head agreement. The remaining arguments also raise overtly to the specifiers of their corresponding AgrPs, so that the focus feature can percolate up to the specifiers they occupy. In contrast, in (25b) the verb is in the head of RootP, and the indirect object is in [Spec,RootP], while the remaining arguments occupy [Spec,AgrSP] and [Spec,AgrOP], respectively. Albizu claims that the non-canonical order in (25b) cannot have the interpretation according to which the whole sentence is focus, because the derivation of that ordering requires an additional movement of the focused indirect object argument in [Spec,RootP] to [Spec,AgrIOP] at LF. In contrast, he hypothesizes that in the canonical order there is no need to move through the [Spec,RootP], hence the arguments move in a single step to their corresponding AgrPs. In this respect, the canonical unmarked order is more “economical” than the
non-canonical order, because in order to express the all-sentence-new reading it involves fewer steps than a non-canonical order does. As a result, the Principle of Economy — or the Shortest Step Requirement (Chomsky 1993) — excludes the latter derivation.

This analysis raises a number of questions that I would like to address here. In the first place, Albizu’s account does not provide a straightforward answer to the question concerning the motivation for a number of (non-focused) movements to the left periphery, as was illustrated in relation to (25b), given the assumption that arguments move for focus reasons. Secondly, there is the issue concerning the assignment of nuclear stress to the element immediately adjacent to the left of the verb in Basque. If, as Albizu claims, postverbal arguments are in-situ, in a VP-internal position, and preverbal arguments occupy a higher position (either [Spec,RootP] or [Spec,AgrP]), it is unclear why postverbal arguments do not get the main stress of the sentence, despite the fact that they would count as most embedded in the clause structure (cf. Cinque 1993). Moreover, without further assumptions, it is also unclear why postverbal arguments cannot be interpreted as new information if they remain in VP-internal position. Also, there is the issue of the existence of Agreement projections. Albizu’s analysis relies heavily on the existence of agreement phrases, especially to account for the distinct focus interpretations of (25a-b) in terms of economy violations. However, under a theory which dispenses with Agreement projections (Iatridou 1990, Chomsky 1995, among others), this view of the facts needs to be reconsidered. Perhaps the adoption of Chomsky’s (1995) and Ura’s (1996) multiple specifier analysis and a multiple Case feature checking system by v would work, but then the exact mechanism of focus feature assignment remains unclear, since, by adopting a multiple specifier analysis, the Spec-head agreement relation required for focus-feature checking in Albizu’s account should be modified in order to account for the (im)possible focus readings in non-canonical orderings.

The analysis of focus that we present in what follows captures these and related facts in a straightforward way.

4.4. Two mechanisms for marking focus in Basque

4.4.1. The proposal

In section 4.2 I showed how focus is identified in Basque. The constituent interpreted as focus always bears focal stress, which is the most prominent stress of the sentence, and must be immediately left-adjacent to the verb complex. These two conditions are sufficient to identify a constituent as focus. Once we control for this, the remaining non-focalized material may be ordered in different ways: non-focused phrases may occur in postverbal position, as is illustrated in (26a), preceding the focus, as in (26b), or some may appear in pre-focus position and others postverbally, as exemplified in (26c) (for ease of reference, the focus is marked in italics):
(26) a. Jon-ek irakurri dio ama-ri ipuina (S V-Aux IO O)
    Jon-erg read aux mother-dat story
    "JON has read mother the story"

b. Ama-ri ipuina Jon-ek irakurri dio (IO O S V-Aux)
    mother-dat story Jon-erg read aux

c. Ama-ri Jon-ek irakurri dio ipuina (IO S V-Aux O)
    mother-dat Jon-erg read aux story

Recall that the notion of focus that is relevant for us in this study is that of information focus, that is, the sentence part carrying new information. The information focus can be a constituent of any size: it can be a DP, a VP, or the entire sentence. In the examples given in (26), the focus of the sentence is a DP, namely the DP Jonek. In fact, the subject DP is the only possible focus of the sentence. In this sense, we can say that Jonek is a ‘narrow’ focus (cf. Kiss 1998, Zubizarreta 1998 for the distinction between wide and narrow focus). In contrast, any of the constituents of the sentence in (27) may be intended to be the focus, as is indicated by square brackets:

(27) [Jon-ek [ama-ri [ipuina] irakurri dio]]
    Jon-erg mother-dat story read aux

To refer to this type of focus we will use the common term ‘wide’ focus, because the focus interpretation associated with a constituent (i.e. the one receiving the main sentential stress (see section 4.4.2.1 below)) can be extended to the entire clause. Notice that a wide focus interpretation obtains whenever the constituents surface in the neutral or canonical word order (cf. (27)). When the arguments are ordered in a non-canonical linear order, as in the examples in (26), a wide focus reading is disallowed, and consequently only narrow focus is involved.

In the remainder of this section I will argue that Basque has two strategies to realize information focus which correspond with the wide/narrow focus interpretation: on the one hand, it assigns focus in-situ in utterances which keep the canonical order among the constituents, as in (27), by means of the core algorithm for the assignment of the main stress of the sentence (i.e. the Nuclear Stress Rule). This yields a wide focus interpretation. On the other hand, when the intended focus interpretation cannot obtain by the neutral main stress assignment algorithm, the language uses the marked syntactic strategy of movement, which in turn may be of two types: it may involve scrambling of the non-focused material to the left of the focused phrase, so that the intended focus receives the main stress of the sentence in-situ, or else the focused element is base-generated as a left dislocated phrase, triggering V-movement to C. In the two latter strategies, the wide focus reading is impossible, and only narrow focus arises. We will discuss each focus-marking strategy in turn.
4.4.2. **Focus in-situ**

4.4.2.1. **Main sentence stress and focus**

In Chomsky (1971) and Jackendoff (1972), focus was viewed as a property defined on PF structures. The focus was identified as any constituent containing the prominent stress of the sentence, which was assigned independently by the phonological rules. On this view, the relation between the stressed focus and the semantics of the sentence was carried out by the interface systems, which relate a particular sentence to its context, so that the function of focus — e.g. whether it is a contrastive focus, an emphatic one or new information focus — was determined by context.

Cinque (1993) reconsiders these ideas in the light of the relation between main sentence stress and focus, and proposes an algorithm which seeks to determine by structural means where the main stress of a sentence (a reformulation of the Nuclear Stress Rule (cf. Chomsky & Halle 1968, Halle & Vergnaud 1987)) falls across languages. Instead of parametrizing the nuclear stress rule, as was assumed in earlier works, Cinque proposes a universal sentence stress rule which will apply in every language provided that we know what the direction of recursion is in a language, and by using the concept of ‘most embeddedness’. Cinque’s algorithm may be informally formulated as follows:

(28) The main stress of a sentence falls on the most embedded element on the recursive side of the tree

The generalization stated in (28) as it stands is unclear about the embedding relation between a verb and its complement (OV/VO), and, more extensively, about what counts as most embedded in the case of sister nodes. In this respect, there might be a conflict in trying to decide whether the verb or the complement is most deeply embedded, given that they are sisters of the same node, and hence none of them dominates the other. Nevertheless, in both VO and OV languages it is the object which bears the main stress. To solve this potential ambiguity in sentence stress assignment, Cinque proposes that in the case of sisters, the constituent which counts as most embedded is the element occurring on the recursive side of the tree. This amounts to saying that the depth of embedding is determined by the direction of selection. Thus, in a head-initial language (VO), the complement will count as most embedded in a SVO order, since the complement is selected by the verb. Likewise, in a V-final language, the most embedded element in SOV order will also be the complement, as the language is left-branching. As a result, in both types of languages the complement receives the main sentence stress, as is confirmed by the following data from Spanish (VO) and Basque (OV) (the words in bold face indicate the constituent bearing neutral stress):
(29)  a. Hoy los niños han cantado dos canciones nuevas
today the children have sung two songs new.pl
b. Gaur umeek abesti berri bi abestu dituzte
today children.erg song new two sing aux
"Today the children sang two new songs"

The main sentence stress borne on the direct object in both sentences in (29) is typically found in sentences occurring in the neutral order. As is well-known, neutral order is pronounced with a neutral focus intonation (which we may now identify as main stress), and is typically associated with utterances in 'out of the blue' contexts. In these contexts, the whole sentence can be asserted as new information, and none of its constituents need to be pre-assumed in the context. This view is widely accepted since Chomsky (1971) and Jackendoff (1972), and has recently received more attention in Valduvi (1992), Cinque (1993), Reinhart (1995), Zubizarreta (1998), and Kidwai (1999) among many others. In light of these considerations, let us look at the Basque sentence in (29). (29b) represents the unmarked or neutral order for the constituents of a simple transitive clause in Basque, SOV (cf. chapter 1, section 1).\(^2^1\) Hence, as expected given what we just discussed, (29b) has an interpretation according to which the entire sentence expresses new information. In this respect, the whole sentence can be viewed as the focus phrase. But in addition, (29b) may also have two further interpretations: a second reading, according to which only the VP abesti berri bi abestu 'sing two songs' represents the new information of the sentence, and a third reading, in which only the object phrase abesti berri bi 'two new songs' is interpreted as the information focus of the sentence. The three readings are given below (the intended focused constituent in each reading is marked in italics):

(30)  Gaur umeek abesti berri bi abestu dituzte
today children.erg song new two sing aux
I. "Today the children sang two new songs"
II. "Today the children sang two new songs"
III. "Today the children sang two new songs"

In fact, the paradigm illustrated in (30) is the typical pattern observed in 'wide focus' utterances in many languages, as discussed in Cinque (1993) and Zubizarreta (1998), namely, that under the same neutral focus intonation, all of the constituents of a sentence can be interpreted as focus. The central point of Cinque's analysis is that the set of the possible neutral focus constituents of a sentence is determined by the same rule that assigns the main stress. He formulates this idea as follows:

\(^2^1\) Keep in mind that I use the term "unmarked" in the sense of neutral order in relation to the information structure of the sentence; in other words, when no constituent is understood to be more prominent or informative than the other constituents in the sentence.
(31) The focus of IP is any constituent containing the main stress of IP, as determined by the main stress algorithm.\footnote{Rooth (1985), Zubizarreta (1998) and Neeleman & Reinhart (1998) develop this line of the analysis of focus, and argue that the default stress rule identifies a set of potential (neutral) foci, not just a single focus, leaving the determination of the actual focus to the context in which the sentence is uttered.}

To see how (31) works, let us consider the example in (30). As was noted before, this sentence has three possible readings depending upon which constituents of the sentence convey new information. Let us start with reading III, according to which the direct object is interpreted as focus. In (30) the (default) main stress falls on the direct object. This follows straightforwardly from Cinque’s main stress assignment rule if the direct object is the most embedded element (I will return to the question of the position of the verb shortly below, in section 4.4.2.2). Given that stress is commonly used to signal the focus of the sentence (cf. Chomsky 1971), the direct object \textit{abesti berri bi} in (30) can get interpreted as information focus, as is indeed the case. Recall, however, that focus in Basque is not only identified by prosodic means, but also by being in immediate left-adjacency with regard to the verb complex. In (30) the object phrase satisfies both conditions, so it can serve as focus.

On the other hand, the VP and the IP may also be interpreted as information focus, as indicated in the II and I readings. This result is expected given the interpretation of possible neutral foci formulated in (31). The focus set as defined in (31) is \{IP, VP, DPcompl\}, since IP and VP contain the constituent which receives the neutral sentence stress, namely, the DP complement. In this way, we derive the ‘all new information’ interpretation that the sentence in (30) can have (I reading), as well as the possibility that only the VP serves as the focus (II reading). This means that the main stress assignment rule does not unambiguously identify a constituent as the only focus of the sentence. In effect, as Reinhart (1995) and Neeleman & Reinhart (1998) point out, this analysis is based on the assumption that PF and syntax do not directly identify the actual focus, but a set of the possible constituents which can serve as focus in a particular derivation. Crucially, in order to select the actual focus, we need to access discourse, so that the context can distinguish between all the possible readings. This is illustrated in (32). The sentence in (30) can be an appropriate answer to any of the three contexts given in (32), but each of these contexts only allows for one focus (which is indicated in italics):

(32) a. Zer gertatu da?
   What happen aux
   “What happened?”
Answer: Gaur umeek abesti berri bi abestu dituzte
today children.erg song new two sing aux
"Today the children sang two new songs"
b. Zer egin dute umeek gaur?
What do aux children.erg today
“What did the children do today?”
Answer: Gaur umeek abesti berri bi abestu dituzte
c. Zer abestu dute umeek gaur?
What sing aux children.erg
“What did the children sing today?”
Answer: Gaur umeek abesti berri bi abestu dituzte

The central point of this analysis is that the sentence in (30) with the main stress on the direct object cannot be used to express (33a), where the intended interpretation is that the relevant focus is only the verb-aux complex, nor to express (33b), where the only focus is the IP adjunct (I use underlining to indicate the intended focus reading, and bold face for the main stress):

(33)  
a.#Gaur umeek abesti berri bi abestu dituzte
b.# Gaur umeek abesti berri bi abestu dituzte

(33a-b) cannot have the intended neutral focus interpretations because neither of them is included as possible foci in the focus set determined by the main stress assignment rule (i.e. IP, VP, DP_compl). That is, although the IP is included in the focus set, the IP adjunct alone is not selected as a possible focus for the structure in (30), but only in conjunction with the entire IP. The same is true for (33a). The verbal complex abestu dituzte cannot serve as a possible neutral focus because the VP is included but V (alone) is not included in the focus set of (30). For these cases where we want to focus a constituent not included in the focus set of a given structure, Cinque proposes that a discourse-related focus rule applies, which assigns a prominent stress to this constituent. This is the ‘marked focus rule’ discussed in Zubizarreta (1998), Reinhart (1995), and Neelaman & Reinhart (1998). I will return to this point in section 4.4.2.3, so I leave it here for the moment.

The analysis of sentence stress assignment sketched so far also captures the neutral focus facts observed in ditransitive structures. Consider the constructions with two objects in (34) and (35). The main (neutral) stress falls on the direct object txiste barregarriak ‘funny jokes’ in the Basque construction (34a), whereas it falls on the prepositional complement a sus amigos in the Spanish sentence in (35a):

(34)  
a. Naiak lagunetxiste barregarriak kontatudizkie
Naia.erg friends.dat joke funny.det tell aux
"Naia told funny jokes to her friends"
These results fall out if the direct object in Basque is syntactically more embedded than the indirect object, and if the structural relation between the two complements is reversed in Spanish. That this idea is correct is shown by the ungrammaticality of the Basque sentence in (34b), which shows that it is impossible to assign the default main stress to the indirect object. In the same way, the Spanish example in (35b) is not felicitous under a neutral focus reading, although it can get a contrastive focus reading if it is pronounced with heavy stress on the direct object (hence the # symbol). This is another instance of the ‘marked focus’ strategy mentioned earlier, which will be examined in section 4.4.2.3. For the neutral focus contexts we are concerned with here, it is important to point out that the prosodic facts discussed with regard to (34) and (35) provide further evidence in favour of the claim, argued in chapter 3, that in a neutral word order the indirect object argument in Basque asymmetrically c-commands the direct object (see chapter 3, sections 3.3 and 3.4 for further detail).

4.4.2.2. **Main stress assignment and V-raising**

Cinque's sentence stress assignment rule, stated in (28), predicts that the neutral stress will fall on the verb when V is the most embedded constituent of the sentence. The prediction holds, as is illustrated in the unaccusative English construction in (36b), and in the unergative structure in (36c), both of which can be used in the context of (36a):

(36) a. What happened? What was that noise?
    b. Mary’s baby was **born**
    c. Mary’s baby **cried**

On the standard assumption that the surface subjects in (36b-c) occupy a structural position higher than the position of the verb, the neutral stress falls on the verb because it is the most embedded constituent. In contrast, in the same context of (36a), the main neutral stress falls on the single argument of unaccusative verbs in Basque, as illustrated in (37a), but on the object of the light verb *egiñ* ‘do’ in (37b):

(37) a. **Amaia-ren ume-a** jiao da
   Amaia-gen baby-det born aux
   "Amaia's baby was born"
b. Amaia-ren ume-a-k  **negar** egin du
   Amaia-gen baby-det-erg cry do aux
   “Amaia’s baby cried”

The stress facts of (37a) indicate that the subject of unaccusative verbs remains VP-
internal, at least at the level at which the main stress rule applies. On the other
hand, that the neutral stress falls on the object of the unergative ‘light’ verb **egin** in
(37b) is expected, as most unergative verbs in Basque have the form of transitive
structures of the type **noun+egin**, as the verb **negar egin** ‘cry’ of the example.
Nevertheless, there are a few unergative verbs which lack an explicit object, like
e.g. irakin ‘boil’. In this case, as predicted, the main stress falls on the verb, since it
is the most embedded constituent in (38):

(38)   Esne-a-k   **irakin** du
       milk-det-erg boil aux
       “The milk has boiled”

Another relevant context in which the verb would become the most
embedded element would be a sentence containing an adjunct (either an adverbial
or a postpositional phrase), but no complement in its canonical position. Such a
context is illustrated in (39a) for Dutch (noted by Gussenhooven (1984), as reported
in Neeleman 1994), and in (40) for Basque:

(39)   a. …dat ik [op een bankje] **wacht**
         that I on a bench wait
       "…that I am waiting on a bench"
   b. …dat ik [op een **bankje**] wacht
       "…that I am waiting for a bench”

(40)   ni [eserleku **baten gainean**] itxaroten ari naiz
       I bench a on wait aux

We observe two interesting asymmetries in the examples given in (39) and
(40). On the one hand, there is a contrast in the placement of the default sentence
stress in the Dutch sentences in (39a) and (39b). On the other hand, there is a
second contrast between the location of the main stress in (39a) and (40). Consider
the first asymmetry first. Given the linear order S PP V, main stress may fall on the
verb, as in (39a), or on the (complement of the) PP, as in (39b). Importantly, the
difference in stress placement correlates with a difference in meaning. When the
stress falls on the verb, the PP is interpreted as an adjunct, while it is interpreted as
a prepositional complement when the stress falls on the PP. In this respect, Dutch
behaves appropriately in accordance with Cinque’s analysis: when the PP functions
as a complement (39b), the PP is the most embedded constituent, and hence it
receives the default stress of the sentence; but when the preverbal PP is interpreted
as a locative adjunct, it is attached (merged) to a position structurally higher than V. Consequently, in such structures the verb is the most embedded constituent in (39a) and therefore, it receives the neutral stress.

This contrasts with the Basque example in (39c). Although the same construction is involved, the neutral stress does not fall on the verb, but on the PP adjunct eserleku baten gainean. In principle, this is unexpected, given that the PP is an adjunct, and not the complement of the verb. Therefore, by Cinque's algorithm, we would expect the complex verb to receive the neutral stress, as occurs in Dutch. But it does not. Note that the Basque sentence in (40) only permits to interpret the PP as an adjunct, so the ambiguity that is observed in Dutch does not arise in Basque. What is interesting is that preverbal PP adjuncts in Basque behave like PP complements and manner adverbs, which also receive the main neutral stress, as shown in (41a) and (41b), respectively:

(41) a. Mikel eta Jon zinema-ra joan ziren
  "Mikel and Jon went to the cinema"
  "Mikel and Jon went to the cinema"

b. Mikelek azterketak txarto egin zituen
  "Mikel did his exams badly"

(41a) behaves as predicted by the main stress algorithm stated in (28), since the PP complement is the most embedded constituent of the sentence and thus receives the main stress. As for (41b), the fact that the adverb receives the most prominent stress indicates that it is more deeply embedded than the verb. This claim may result quite controversial, if we assume that the manner adverb like txarto ‘badly’ is a VP modifier and that it is (left)adjoined to VP (cf. Chomsky 1995). Even if we suggested to derive the order shown in (41b) by assuming that nominal complements raise out of the VP for Case-licensing reasons (cf. van de Wyngaard 1989), as I have proposed in chapter 2, section 2.2.1, the manner adverb would not be the most embedded constituent, as the verb would still be more deeply embedded, as can be seen in the following representation:

(42) [TP Mikelek [Aux [Asp azterketak; [VP txarto [VP t i egin]]] zituen]]

A similar problem arises in the case of V-initial languages like English, where, given the above assumptions, one would expect to find well-formed sentences like (43a). However, the only grammatical order is (43b), where the main stress falls on badly, just like what occurs in Basque (41b):

(43) a. *Mikel badly did his exams
b. Mikel did his exams badly

A potential analysis to solve this problem would consist in adopting
Larson's (1985) view that adverbs like *txarto* can be analyzed as inner complements of the verb. 23 On this approach, *txarto* in (41b) and *badly* in (43b) will bear main sentence stress, as they are the most embedded constituents. Nevertheless, this analysis entails some problems when the complement of the verb is prepositional, as illustrated in the English construction in (44a). Taking *badly* to be an inner complement does not explain why (44a) is ungrammatical. 24 In fact, only (44b) is possible:

(44)  a. *Mikel read to his children well*  
      b. Mikel read well to his children

Furthermore, even if we were to adopt Larson's analysis for Basque sentences like (41b), we would be still left with the problem of PP adjuncts like the one in (40), which cannot be analyzed as inner complements, and yet they bear main stress. Thus, Larson's approach cannot capture all the facts examined here.

I would like to propose an explanation for these facts in terms of V-raising. The alleged problematic cases of PP adjuncts (40) and manner adverbs (41b) cease to be a problem as soon as we assume that the verb in Basque V-final constructions is not in-situ, but has raised to Aux, which is head-final (cf. the clause structure I adopt for Basque and the arguments for the head-final status of Aux in chapter 2, section 2.3.4). Thus, if the verb abandons the VP domain to move to Aux, all material stranded below the vp/VP domain will become more embedded than the surface position of the verb. Hence it follows that the main stress can be assigned to PP adjuncts and event adverbs, which are adjoined to VP. This is represented in (45):

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23 I thank L. Cheng (p.c.) for bringing this point to my attention. 24 (44a) is ill-formed if we assign neutral stress to the adverb. If it is assigned heavy stress, the sentence ameliorates considerably. However, this entails a 'marked focus' assignment rule, which is independent of the neutral main stress assignment we are concerned with here.
The V-raising analysis could be carried over to the English examples discussed in (43) and (44). Assuming with Pesetsky (1989), Johnson (1991), Costa (1998), and Barbiers (2000) that there is short verb movement in English, the data in (43) and (44) follow straightforwardly, on the view that nominal complements raise overtly to check Case.

In sum, Cinque's sentence stress algorithm captures the fact that in the canonical order the main stress of the sentence in Basque falls on the constituent leftmost adjacent to the verb — usually a DP/PP complement or a manner adverb, but other constituents may also bear it, as we have seen, given our assumption that V moves to Aux, which is rightmost. In addition, due to the tight relationship existing between stress and focus, the element which bears the neutral stress is also interpreted as the focus of the sentence (bear in mind that this type of focus is new information focus, not a contrastive or an exhaustive focus).

Thus far I only considered sentences which exhibit the unmarked canonical order. In what follows, I will examine other possible constituent permutations which are marked from the perspective of focus structure, as they involve additional movement operations which seek to convey a focus reading on a constituent which does not bear the most prominent stress because it is not included in the focus set.

4.4.2.3. *Marked stress and narrow focus*

In the preceding sections we have seen that Cinque's main stress assignment algorithm accounts for the wide focus interpretation of sentences occurring in the canonical order. We argued that these sentences are ambiguous as to which constituent is singled out as the focus of the sentence, as a result of the application of the neutral stress, which in turn defines a focus set of potential foci (cf. (31)). Clearly, though, there are contexts requiring a constituent not included in the focus
set defined by the neutral stress to serve as the actual focus. For these cases, some languages apply an stress shift operation that assigns a 'marked stress' on the relevant focus constituent, as is shown in (46a) for English, and in (46b), for Spanish:

(46)  
  a. John brought **some sweets** for the children  
  b. Jon les trajo **unos caramelos** a los crios

As we pointed out above, neutral stress falls on the PP complement in both cases, as it is the most embedded constituent. Thus, the focus set generated by the main stress includes IP, VP, PProject. If we want to use the DProject as the (only) focus, we will have to apply a marked extra stress to this constituent (in a way to be defined below), since it is not included in the focus set.

In Basque the stress-shifting strategy does not work. Given that in the neutral order the direct object bears main stress (cf. the discussion in (34a-b)), the indirect object (alone) is not included in the focus set. Assigning extra stress or shifting the main stress to this constituent does not render the sentence grammatical, as is shown in (47a). I argue that this is related to the adjacency requirement that must hold between the focus and the complex verb in Basque. In (47a) the intended focus and the verb are not adjacent, hence the sentence cannot have the desired interpretation. In order to derive foci not already in the focus set, Basque applies a marked syntactic device, which entails a movement operation: either scrambling (47b), or a sentence-initial focus (47c):

(47)  
  a. *Mikel-ek **ume-ei** goxoki batzuk ekarri dizkie S IO O VAux  
     Mikel.erg children.pl.dat sweet some bring aux  
     "Mikel has brought some sweets to the children"  
  b. Mikelek goxoki batzuk; **ume-ei t_e ekarri dizkie** S O IO VAux  
  c. Umeei ekarri dizkie Mikel-ek goxoki batzuk IO VAux S O

I will postpone the discussion of the focusing mechanism involving a "fronted" focus in clause-initial position until section 4.4.3. In the remainder of this section, along the lines pursued in Reinhart (1995), Zubizarreta (1998), and Costa (1998), I will show how scrambling has an effect on the focus interpretation of a particular constituent, in the same way as assigning a marked stress does in the languages that permit that strategy.

The notion of markedness which I adopt for the discussion is extensively discussed in Reinhart (1995), and Neeleman & Reinhart (1998). In essence, the concept of markedness as understood here is related to interface economy violations. Let us assume as the null hypothesis that the main stress algorithm yields economical derivations (bear in mind that it applies in neutral or unmarked utterances). In this view, applying stress shift or other type of syntactic operations to identify the focus is marked because these operations render most costly derivations, which are legitimate only if using these uneconomical operations is the
only way to convey a sentence with the intended interpretation. To illustrate this, let us look at (47b) and (47c) again. In order for the indirect object to be the focus, it must appear to the immediate left of the verb, and bear focal stress. There are two ways of achieving this: (i) by scrambling the direct object across the indirect object, as in (47b), or (ii) by displacing the focused constituent to a clause-initial position, as in (47c) (cf. Zubizarreta 1998, who treats similar data in Romance and Germanic as instances of prosodically-driven movement (e.g. scrambling of the object as defocusing)).

The effects resulting from the application of stress-shift, scrambling or dislocation of the focus usually leads to a narrow focus interpretation (cf. Cinque 1993, Zubizarreta 1998). Recall that with narrow focus I mean that the focus does not project; in other words, that only the constituent identified as focus by using a marked operation can serve as focus. To the extent that focus projection exists at all, once scrambling or sentence-initial focalization has applied, focus projection is not possible (cf. Costa 1998, who observes similar effects with respect to the unmarked order in Portuguese). That is, only one constituent can serve as focus. Thus, in (47b) the constituents preceding the focus phrase —i.e. Mikelek and gozo综合征 (gozo综合征 cannot be interpreted as focus. They are either topics, or D-linked DPs (in the sense of Pesetsky 1987). Likewise, in (47c) the postverbal constituents express given information, and only the indirect object can be the focus.

A note on the behaviour of postverbal adjuncts is in order here. There is an asymmetry between arguments and adjuncts when they appear to the right of the complex V-Aux. I showed above that postverbal arguments cannot express new information. However, adjuncts (including adverbs) can occur in postverbal position and still convey new information, when they appear in neutral contexts, as in (48a) (cf. Albizu 1995). In fact, the same adjunct can also appear in the lefthand side of the verb (48b-c). Importantly, the three orders in (48) are unmarked, and the adjunct does not bear the main stress, whereas the object does:

(48)  a. Euskaltzaindia-k liburudenda berri-a zabaldu du gaur goizean
Euskaltzaindia-erg bookstore -new-det open aux today morning-det-
in

"Euskaltzaindia has opened a new bookstore this morning"
b. Euskaltzaindiak gaur goizean liburudenda berria zabaldu du
c. gaur goizean Euskaltzaindiak liburudenda berria zabaldu du

These facts can be easily captured if we assume that the sentence adjunct gaur goizean can be adjoined to several positions in the clause, in any case not lower than the VP, e.g. to TP, to AuxP and to vP. In all cases in (48) the phrase to which the adjunct is adjoined contains the constituent with the main stress, so it follows

25 This generalization does not carry over to manner adverbs like txarto ‘badly’, discussed above, which have a fixed distribution. This type of adverb does not express new information when occurs postverbally. See chapter 5, section 5.2 for further discussion.
that the adjunct can express new information (when the entire TP is focus). There are certainly other possible analyses to deal with the adjunct issue, but for the purposes of this chapter this suffices to account for the otherwise unexpected informational status of postverbal adjuncts, shown in (48a).\footnote{Zubizarreta (1998) also addresses a number of problems with regard to adjunct stress and the assignment of main sentential stress. She observes that sometimes adjuncts seem to get main stress, arguing that the main stress assignment only yields the correct results with respect to head-complement relations.}

In principle, then, Cinque’s main stress algorithm readily accounts for the stress and focus facts observed in unmarked transitive sentences in Basque. Assuming that the verb raises to Aux, the VP-internal argument (which is in [Spec,AspP]) is the most embedded element, and thus receives the main sentential stress. That is why it gets interpreted as the focus of the sentence. This is an instance of focus assignment \textbf{in-situ}.

On the other hand, Nash (1995), Zubizarreta (1998), and Costa (1998) define prosodic prominence in terms of \textit{linear order}, instead of embedded constituency, in view of some problematic cases involving adjunct and adverbial stress in the languages they examine. The result of this definition is that the main stress falls on the \textit{rightmost} constituent to the left or to the right of the verb, depending upon the recursion pattern of a language. Thus, in the case of Basque, being an OV language, the main sentential stress will fall on the rightmost constituent to the \textit{left} of the verb. This is indeed what we find in the language. In this respect, Cinque’s algorithm should be formulated as a PF rule in combination with the directionality parameter, in the sense that the head-final nature of the verb in Basque marks a clear boundary for the assignment of the main stress of the sentence. Given these assumptions, the rule of main stress assignment only applies at the lefthand side of the verb. This also accounts for the ‘adjacency requirement’ observed between the verb and the focus in Basque. In this view, the adjacency effect follows directly from the main stress assignment rule, as it will identify as focus any constituent immediately preceding the verb.

Given this reformulation of Cinque’s algorithm, we also capture the fact that postverbal arguments cannot receive the main sentence stress. They cannot do so, firstly, because they are out of the domain of neutral stress assignment, and secondly, because they do not contain the constituent which receives the most prominent accent of the sentence.

With regard to the ‘blocking effect’ in the projection of focus characteristic of scrambled structures like (47b), repeated here as (49), I believe it is related to the fact that this operation is precisely used to alter the focus options determined by the main stress. For instance, in (49) the indirect object contains the main stress, and thus it serves as focus, but in principle, the TP and the VP are also in the focus set, since they contain the indirect object:
(49) a. Mikelek goxoki batzuk, ume-ei t, ekarri dizkie
    Mikel has brought some children,pl.dat bring aux
    "Mikel has brought some sweets to the children"
    b. Focus set: [TP, VP, IO]

Reinhart (1995) and Neeleman & Reinhart (1998) discuss similar effects concerning the narrow focus reading characteristic of sentences in which the stress-shifting operation has applied, and propose to derive it from an interface economy violation. They propose the following generalization (Neeleman & Reinhart 1998: [70]):

(50) Economy entails that stress strengthening applies only to derive foci not already in the focus set

Assuming that the generalization in (50) is on the right track, I argue that the motivation to use the scrambled order in (49) instead of the unscrambled (47a) is to mark the indirect object as the (sole) focus of the sentence. Note that the indirect object is not included in the focus set of the neutral order if not in conjunction with the entire VP or TP. In other words, in the canonical order the indirect object cannot be singled out as focus, although the entire VP (or TP) can express new information, given that they are included in the focus set. Naturally, if we intend to mark the TP or the VP as focus, it is more economical to use the unmarked order, since the intended interpretations are available just by applying the default stress rule. On this view, then, scrambling involves a more costly derivation, but is allowed in because it serves to satisfy a given interpretation that cannot obtain by maintaining the neutral stress assigned by the main stress rule.

To finish the discussion on the assignment of focus in-situ, I would like to point out that an analysis which defends the view that Basque is underlingly a SVO language (following Kayne 1994) cannot capture the facts discussed so far.

Given that the unmarked or neutral order in Basque is S IO O V, the proponents of this analysis (cf. Albizu 1995, Ormazabal, Uriagereka & Uribe-Etxebarria 1994) have to assume that arguments in Basque move leftwards in the syntax to license some features, say, Case and agreement features, or a focus feature, as proposed in Albizu (1995) (see section 4.3.4). As a result, we derive S IO O V as the unmarked or neutral order. Cinque's algorithm would then apply to this derivation, assigning main stress to the most embedded constituent. But in this derived configuration the verb is the most embedded constituent, and accordingly, the main stress should fall on this element. However, the results are quite different, as we have discussed throughout this section. In unmarked sentences it is the object the constituent receiving the most prominent stress, and not the verb. Note that even assuming a definition of the main stress assignment rule in terms of rightmost constituent to the left/right of the verb would not help, given that Kayne's Antisymmetry Hypothesis does not assume the existence of a head directionality
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parameter (i.e. the only possible configuration is Spec-head-complement). Hence, the sentence stress assignment algorithm would apply uniformly across languages, that is, on the rightmost constituent of the sentence. Therefore, unless a OV/VO distinction is assumed, the results concerning which element bears main stress in Basque constitute a problem for the SVO analysis.

4.4.3. Focus in left-dislocated position

4.4.3.1. Introduction

In the preceding section I have shown that focus is assigned in-situ in Basque. This goes in line with recent approaches that argue that information focus does not involve movement at all (cf. Vallduvi 1992, Kiss 1998, Zubizarreta 1998, Costa 1998). I have derived the fact that a focused constituent must bear the main stress of the sentence (focal stress) and that it must immediately precede the verb by combining the sentential stress assignment rule and the order of recursion (which is to the left) in Basque. A direct consequence of this algorithm is that the constituent appearing to the immediate left of the verb bears main stress and is interpreted therefore as focus. In this way, in the unmarked SOV order, the object can be interpreted as focus in-situ. Nevertheless, parallel to this mechanism of focus assignment, focus can be marked in more than one way in Basque: we find cases in which the focused constituent appears in a non-canonical linear order, like the scrambling cases discussed above (cf. (49a)), repeated here, as well as other cases wherein the focus appears in sentence-initial position, like in (51):

(49)  a. Mikelek goxoki batzuk, ume-ei 1, ekarri dizkie
      Mikel.erg sweet some children.pl.dat bring aux
      “Mikel has brought some sweets for the children”

   (51)  Umeei ekarri dizkie Mikel-ek goxoki batzuk

My claim will be that the focalization strategy represented in (51) involves base-generation of the focus constituent in a left-dislocated position, and movement of the verb-Aux complex to C. It is important to stress that this type of focus is an information focus, just like the focus that is assigned in-situ. It is not an identificational focus, a focus operator of the sort discussed in Kiss (1998a,b), which is described as an operator expressing exhaustive identification (cf. Kenesei 1986, von Stechow & Uhmann 1986, Jacobs 1986, Szabolcsi 1994 and others).27 Kiss defines an identificational focus in the following way:

(52)  An identificational focus represents a subset of the set of contextually or situationally given elements for which the predicate phrase can potentially

27 The notion of a focus operator is based on Szabolcsi’s (1983) formal work on the semantic function of focus, which will be presented in section 4.5.1 below.
hold; it is identified as the exhaustive subset of this set for which the predicate phrase actually holds.

In contrast, information focus does not express exhaustive identification on a set of entities implicit in the context or in a given situation; it simply conveys new information. In this view, the focus represented in (51) is an information focus, since it is not understood as an exhaustive answer to a question like *Who did Mikel bring some sweets for?* In fact, the sentence in (51) is still true even if Mikel also brought sweets for other people. Thus, it does not imply exclusion. In Hungarian, the distinction between information focus and identificational focus is realized in the overt syntax: information focus does not involve movement (i.e. it is assigned in-situ), whereas an identificational focus undergoes operator movement in the syntax, landing in an immediately preverbal position identified as [Spec,FocP] in (Kiss 1998), following Brody’s (1990), (1995) proposal:

\[(53)\]

a. Erzsivel találkoztam
   Elisabeth.inst met.past.1sg.
   “I met ELISABETH (=It was Elisabeth that I met)”

b. Találkoztam Erzsivel
   “I met ELISABETH (=among others)”

In Basque, however, the presence of syntactic movement (that I argue is involved in the focus construction in (51)) does not entail that the type of focus involved is identificational. I have already pointed out that the sentence-initial focus in (51) does not imply any exhaustivity or identification by exclusion. In this sense, then, it is not a focus operator. The claim that a sentence-initial focus does not necessarily express exhaustive identification is not grounded purely on intuition; as we will see in section 4.5.1, the tests of exhaustive identification proposed in Szabolcsi (1981, 1983) corroborate our claim.

Nonetheless, in the literature there have been proposals which treat Basque clause-initial foci as operators, following the syntactic pattern of preverbal foci in Hungarian (see, mainly, Ortiz de Urbina 1989, 1995, 1999, and the discussion in section 4.3.2. above). As was mentioned in section 4.3.2, the fact that foci trigger strict adjacency with respect to the verb has been taken as evidence for a Verb-Second analysis of focus constructions. Furthermore, the incompatibility of wh-phrases with foci have led the proponents of this analysis to treat focus and wh-constructions as involving one and the same movement operation: namely, movement of the focus/wh-operator to [Spec,CP], and movement of the verb to C (cf. Eguzkitza 1986, Ortiz de Urbina 1989, 1995, 1999):

\[(54)\]  

\[\text{[CP wh/focus, [V-Aux], [IP XP t, t, ]]}\]

With regard to interrogative clauses, it has become more or less standard to assume that the wh-phrase and the verb raise to [Spec,CP] and to C, respectively,
to license the [wh] feature present in C°. But what would motivate the movement to CP in focalizations? Following an idea put forth in Brody (1990), Ortiz de Urbina (1994, 1995) provides an answer to this question in the shape of a criterion, à la Rizzi (1991). Parallel to Rizzi's Wh-Criterion, Ortiz de Urbina proposes to extend the Wh-Criterion to a more general Affective Operator Criterion, a well-formedness condition that requires operators to be in a Spec-head relation with a head independently marked for the relevant feature. This Criterion may be informally formulated as follows:

(55) In focus constructions, the focus element and the inflected verb in Basque (specifically, Infl) have each a [+focus] feature which must be checked off by Spec-head agreement in a functional projection, more specifically, in FocP [or [Spec,CP]].**28**

The implicit assumption under this idea is that wh-words and foci are operators, so that at LF an operator-variable chain must be present for the derivation to be fully interpretable. This operator movement can be done at LF —as proposed by Chomsky (1976) for English focus constructions, and by Huang (1982) for wh in-situ languages like Chinese—, or in the overt syntax, as in overt wh-movement constructions, and in preposed focalization structures of the Hungarian type (Brody 1990, Kiss 1987a, 1995, among others). However, as was pointed out earlier (cf. section 4.3.2), operator movement of wh-phrases and focus movement do not behave symmetrically. Two important asymmetries arise which strongly suggest that the similar properties shared by the two constructions are only apparent. These differences involve Weak Crossover effects (WCO) and Strong Crossover effects (SCO). Assuming with Lasnik & Stowell (1991) that only quantificational phrases induce WCO effects, I will argue that the apparent fronted focus phrase is base-generated in a left-dislocated position and that it lacks quantificational force. I show then that this explains the contrasts concerning crossover effects between wh-movement and clause-initial focalizations.

4.4.3.2. Crossover effects
4.4.3.2.1. WCO effects

The first asymmetry is given by the minimal pair observed in wh- and focus constructions with respect to WCO effects: fronting of wh-phrases induces WCO effects (56a), whereas a focus in sentence-initial position does not create a WCO

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28 Brody (1990) identifies this position with [Spec,FocP] (cf. also Choe 1987, Tsimpli 1995). The main argument to dispense with [Spec,CP] as a landing-site for focus operators in these languages is the fact that complementizers precede foci. This problem does not arise in Basque, where foci and wh-operators are in complementary distribution, so, in principle, [Spec,CP] could host both elements, and no need for an extra FocP would be required.
configuration, given the possible coreference possibilities in (56b):

(56)  a. *Nori agurtu du bere, aita-k?
       who greet aux his father-erg
       "*Hei, has hisi, father greeted?"
   b. Jon, agurtu du bere, aita-k
       Joni greet aux his father-erg
       "*Hisi, father has greeted JONi"

Let us assume, for the sake of simplicity, the following definition of Weak Crossover, based on Lasnik & Stowell (1991):

(57)  In a configuration where a pronoun $p$ and a trace $t$ are both bound by a quantifier $q$, $t$ must c-command $p$.

If the descriptive generalization stated in (57) is not met in a given context, a weak crossover effect arises. This is illustrated in (56a) above, where the wh-phrase binds both the pronoun contained in subject position and its own trace, but the trace fails to c-command the pronoun. Consequently, the bound construal of the pronoun is impossible. In contrast, (56b) is well-formed, which is unexpected, if this construction involves wh-movement, like (56a). Note that focus in-situ does not show WCO effects either, an expected result if both focus in-situ and sentence-initial focus involve information focus, and not operator focus:

(58)   bere, aita-k     Joni agurtu du
        his father-erg Joni greet aux
        "*Hisi, father greeted Joni"

This contrast is even more surprising if we take into account that moved foci induce WCO effects in languages like Greek (Tsimpli 1995) and Italian (Rizzi 1997). Indeed, the fact that English (in-situ) focused elements exhibit WCO effects (cf. the translation in (56b)) has usually been taken to suggest that focused elements are operators, undergoing movement to an A’-position at LF (cf. Chomsky 1977, Culicover 1992).

Assuming, for the present, that focus constructions like (56b) imply A’-movement, we find that its insensitivity to WCO effects is not an isolated case. Lasnik & Stowell (1991) observe that there exist constructions in which A’-movement is clearly at stake, but nonetheless no WCO effects show up. These constructions have in common that they all involve a null operator. They are listed below: non-restrictive relative clauses (59a), tough-movement constructions (59b), parasitic gap constructions (59c), and topicalizations (59d):

(59)  a. The book, [which itsi, author read ti, last week], is a hit
   b. Who, ti, will be easy for us [to get [his, mother] to talk to ti]?
c. Who, did you stay with ti [before [his, wife] had spoken to ti]? 

Lasnik & Stowell (L&S henceforth) refer to the lack of WCO effects in the above constructions as instances of *Weakest Crossover*. They argue that WCO effects arise only when the A'-chain implies genuine quantification. In other words, what they propose is that some A'-relations involve true quantifier-variable binding, whereas other A'-relations involve binding of a null epithet (or a null constant, in Rizzi’s (1997) terms), by a non-quantificational A'-binder (e.g., a null operator). 29 Crucially, only the former induce WCO effects.

If L&S are right in their claim that only real quantifiers are sensitive to WCO effects, the well-formedness of (56b) indicates that focus in Basque is not a genuine quantifier, and therefore, it does not involve a quantification operation in Basque. With this conclusion in mind, let us proceed to present the second asymmetry found between wh-constructions and focalized structures.

4.4.3.2.2. *Strong Crossover*

Sentence-initial focus constructions and wh-structures exhibit an asymmetric pattern concerning Strong Crossover effects. Wh-movement induces SCO effects, regardless of the [±pronominial] character of the matrix subject, as is illustrated in (60), which instantiate long wh-extraction from the embedded clause. Note, in passing, that long wh-movement triggers V2 effects in the matrix clause as well as in the embedded clause where the wh-phrase is originated. 30 (I have included a null pronominal pro in the matrix clause so as to show that pro induces SCO as well. Cf. section 4.3.2 above, note 14):

(60) a. *Nor-i pentatsu zuen Jon-ek, [ti emango ziotela sari bat]?  
Who-dat think aux Jon-erg give-fut aux-C prize a

**“Whom, did John, think that they would give a prize to?”**

b. *Nor-i pentatsu zuen bera-k, [ti emango ziotela sari bat]?  

c. *Nor-i pentatsu zuen pro, [ti emango ziotela sari bat]?

In contrast, a focus in the same position as the wh-phrase in the examples above does not yield ungrammatical results (the possible marginality of (61b) may be related to processing problems). Thus, think of a context like the following: The

29 In an Appendix, at the end of the article, L&S mention two further constructions which also lack WCO effects: clefts and pseudocleft constructions. They differ from the other mentioned in the text in that they do not involve a null operator, but a wh-operator (following Chomsky 1977).

30 However, while V2 is obligatory in the matrix clause, the V2 effects are not always observed in the clause where the wh-phrase was originated. Cf. Torrego (1984) for a discussion of similar data in Spanish long wh-movement constructions.
Academy of Sciences annually concedes several prizes to the best essays written in different disciplines, and there are a number of potential candidates that may get one of those prizes. In this context, the following utterances are perfectly well-formed:

(61) a. Bera-ri, pentsatzen du Jon-ek, [t; emango diotela sari bat]
    he-dat think aux Jon-erg give-fut aux-C prize a
    “John, thinks that they will give the prize TO HIM,”
  b. ?Bera-ri, pentsatzen du bera-k, [t; emango diotela sari bat]
    he-dat think aux he-erg give-fut aux-C prize a
    ?“He, thinks that they will give the prize TO HIM,”
  c. Bera-ri, pentsatzen du proi [t; emango diotela sari bat]

It seems clear from the contrast between the sentences in (60) and (61) that wh-movement and clause-initial focus constructions do not involve the same structural configuration. On the other hand, however, when the apparently fronted focus phrase is a referential expression, instead of a pronoun, the results are different: in this case, SCO effects arise:

(62) a. *Jon-ii, pentsatzen du Jon-ek, [t; emango diotela sari bat]
    Jon-dat think aux Jon-erg give-fut aux-C prize a
    **“John, thinks that they will give the prize TO JON,”
  b. *Jon-ii, pentsatzen du bera-k, [t; emango diotela sari bat]
    Jon-dat think aux he-erg give-fut aux-C prize a
    **“He, thinks that they will give the prize TO JOHN,”
  c. *Jon-ii, pentsatzen du proi [t; emango diotela sari bat]

Interestingly, similar results to the ones examined in Basque are found in other languages in the context of so-called Topicalization constructions, illustrated in (63) for Dutch. Zwart (1993:260 ff.) gives the following paradigm (the example in (63c) has been provided by S. Barbiers (p.c.)):

(63) a. zichzelf; ziet Jan, niet t;
    himself sees Jan not
    “Himself, Jan, does not see”
  b. hemi wil Jan, niet dat Marie ziet t;
    him wants Jan not that Mary sees
    “Him, Jan doesn’t want Mary to see” (lit: …that Mary sees (him))”
  c. *Jan, wil hij niet dat Marie ziet t
    Jan wants he not that Mary sees
    “Jan, he does not want Mary to see” (lit: …that Mary sees (him))”

If the preverbal “topic” phrase were in a derived position as a result of A'-movement, and if variables are subject to Condition C, we would expect that SCO
effects arise in the sentences in (63a-b), in the same way as (63c) is ruled out as a Condition C violation. As Lasnik & Uriagereka (1988) point out, the same holds in English topicalization constructions, exemplified in (64):

(64)  
a. Himself, John, likes t,
b. ?Him, John, thinks Mary likes t,

Lasnik & Uriagereka suggest that these data seem to show that in (English) topicalizations the features of the gap must match the features of the topic. This idea is very similar to Barss’ (1986) Feature Match Hypothesis, which intends to capture the connectedness effects observed in structures involving null operator constructions like the English topicalization illustrated above by the matching hypothesis. Thus, the gap in (63a) and (64a) is interpreted as an anaphor, whereas the gap in (63b) and (64b) functions as a pronoun. Similarly, in the Basque sentences given in (61), the gap corresponding to the focus phrase functions as a pronoun for binding conditions, and as a referential expression in (62). Assuming the Feature Match Hypothesis, the data in (61) and (62) fall out directly: the sentences in (62) are ill-formed because they induce a Condition C violation, while no binding principle is violated in (61), as the pronoun-gap is A-free in its local domain, i.e., the embedded clause.

I would like to stress the fact that the constructions examined above imply null operator movement. I assume without further discussion that English topicalizations involve a null operator construction (cf. Chomsky 1977, Koster 1978, Weerman 1989). As for Dutch topicalizations, I follow Kosmeijer (1993) and Zwart (1993) in analyzing these structures as involving a covert d-word, which corresponds to the overt operator-like d-word present in Contrastive Dislocation structures (65a). Kosmeijer (1993) proposes the following structure for Dutch topicalization and contrastive dislocation structures:

(65)  
a. Jan, die, mag ik niet
John that like I not
b. [CP XP, [CP (d-word), V [IP sub t]]]

Drawing on these assumptions, I will argue that the Basque structures in (61) and (62) also involve a null operator construction. That is, I argue that no actual movement of the focus phrase is involved, and that the apparent fronted phrase is base-generated in its position. To account for the properties of movement that sentence-initial focus constructions show, I will argue that they derive from the movement of a null operator to [Spec,CP].

4.4.3.3. Focus as base-generated left dislocation
4.4.3.3.1. Preliminaries

The analysis of sentence-initial focus constructions that I propose in this
chapter is the following. The basic idea is to treat apparent preposed foci as *left dislocations*, that is, as phrases base-generated in a left peripheral position, adjoined to CP, and argue that the association between the focus phrase and the position (internal to the sentence) where the dislocated phrase is interpreted is not mediated through direct movement of the focus constituent, but through the movement of a null operator, which is coreferential with the focus. In this sense, one can say with Wiltschko (1997) that left dislocated constituents are ‘parasitic’ on the operator-variable chain created between the null operator and its trace.

The representation for clause-initial focalization I propose is as follows, illustrated with the sentence (66a):

(66) a. Sofá gainean utzi ditu Edurnek liburuak
    coach on leave aux Edurne-erg books
    “Edurne has left the books on the coach”

b. 

Before I present the arguments that support my proposal, I would like to discard other potential analyses that present parallelisms with the focus constructions we are discussing.

4.4.3.3.2. Potential analyses

Following Cinque’s (1977, 1990) analysis of Clitic Left Dislocation structures, one might be tempted to analyze the empty category associated with the focus phrase as a null resumptive pronoun, which in the majority of the languages having this construction is lexically realized as a clitic pronoun, and occupies the argument position of the left-dislocated phrase, as is illustrated in (67) for Italian

(67) Il tuo libro, lo ho letto
the your book, cl have read
"Your book, I have read it"

Note, however, that an exact parallelism with Clitic Left Dislocations will not give us the correct results, because in CLLDs the resumptive pronoun does not trigger an inversion effect, unlike the focus cases under discussion here, which do trigger adjacency with the finite verb (cf. (66b)).

One could suggest an alternative analysis in which the gap corresponding to the dislocated focus phrase is a null pronominal pro, which raises to [Spec,CP] in order to be licensed by establishing an agreement chain with the dislocated constituent. This is essentially the analysis for English null operator constructions posited by Browning (1987). However, on this view, it would not be clear what forces the movement of the pro operator in the case of focalizations of DP arguments. Since Basque is a pro-drop language, pro is already licensed by the rich agreement morphology on the verb. Therefore, there would be no need for pro to raise to [Spec,CP] and get identified by the dislocated DP. Additionally, this analysis presents the same shortcomings pointed out above concerning CLLD constructions, namely, that the second position that the verb necessarily occupies in Basque focus structures is left unexplained.

4.4.3.3.3. Dislocated focus

The analysis of Dutch Topicalizations and of Contrastive Dislocation structures mentioned above (see (65)) seems more plausible, given that it resembles our case-study in two ways: firstly, like Basque focalizations, it exhibits V2 effects, a term that I use here as a mnemonic to refer to the second position that V occupies with respect to the focus phrase. The second point has to do with the contrastive focus interpretation that Kosmeijer (1993) attributes to the dislocated element. Although Basque foci in initial position do not entail contrastivity, they clearly convey a (information) focus reading. I will thus adopt Kosmeijer’s (1993) analysis and assume the structure for Basque sentence-initial focalizations given in (66b), schematically repeated here:

(68) [CP Focus, [CP Op, V(-Aux), [IP.....t1.....t2]]]

According to this hypothesis, a null operator occupies the specifier position of CP in overt syntax. This ensures that no phrase can intervene between the dislocated phrase and the verb in C, and provides an account of the complementary distribution of wh-phrases and foci, largely observed in many languages, including
Basque. Thus, assuming that wh-phrases raise to [Spec,CP], the fact that a wh-
phrase cannot cooccur with a clause-initial focus falls out because the specifier of C
is already filled with the null operator, and hence, is unavailable as a landing-site for
wh-phrases.31

Given the representation in (68), the focus phrase is base-generated in its
position. However, focus constructions exhibit island and reconstruction effects,
which are typical diagnostics for movement. (69a) illustrates that a focused anaphor
reconstructs to satisfy principle A of the binding theory (Chomsky 1981), and (69b)
shows that focus constructions are sensitive to strong islands, such as adjunct
islands:

(69)  a. [Bere burua-ri], kalte egiten dio Mikelek, pentsamendu horiekin
      himself-dat harm do aux Mikel.erg thought those-with
      "With those thoughts, Mikel damages himself,"

b. *[Alkondarako botoi-a], atera zinen [e, josi aurrretik]
      shirt.of button-det leave aux sew before
      "You left before you sewed the button of your shirt"

31 As I. Laka (p.c.) points out to me, an interesting issue arises with regard to wh-
constructions embedded in a relative clause, as is illustrated in (i):

(i)  ?[[Nork  erosi du-en] liburu-a] da hori?
      Who.erg buy aux-C book-det is that
      "The book that who has bought is that?"

The standard assumption is that a null operator is involved in relative constructions. If this
is so, the wh-phrase in (i) cannot be in [Spec,CP], as standardly assumed, since the latter is
occupied by the relative null operator. One possible solution is to say that the wh-phrase is
in-situ. However, this hypothesis does not readily explain why it yields worse results to
have an object wh-question within a relative clause:

(ii)  ?[[zer idatzi du-en] idazle-a] heldu da?
      What write aux-C author-det arrived aux
      "The author who has written what has arrived?"

Whatever the factor responsible for the contrast in (i)-(ii) may be, note that it is possible to
have a focused phrase embedded within a relative clause, regardless of the syntactic
function of the focused element (cf. (iii)). This is easily captured under our hypothesis that
focus in Basque can be interpreted as focus in situ:

(iii)  a. [[Ainhoa-ri Jonek erosi zion] liburua] galdu dut
       Ainhoa-dat Jon.erg buy aux-C book.det lose aux
       "I have lost the book that Jon bought for Ainhoa"

b. [[poesia liburu bi idatzi dituen] idazle gaztea] areto honetan mintzatuko da
       poem book two write aux-C author young.det room this.in talk.fut aux
       "The young author who has written two poem books will give a talk in this
       room"
Therefore, we need to give an account for the island and reconstruction effects found in these constructions. I argue that this follows since a movement process is actually involved, namely, the movement of the null operator which obeys normal locality constraints on movement. But then, one question that immediately arises is why the movement of the null operator doesn’t exhibit weak crossover effects (cf. (56b), repeated below):

(56)  b. Jon, agurtu du bere, aita-k  
Jon greet aux his father-erg  
"*His, father has greeted JON,"

One possible approach we could entertain is the analysis Lasnik & Stowell (1991) propose to account for the absence of WCO effects in constructions which clearly involve A'-movement (topicalizations, tough constructions, parasitic gap constructions, non-restrictive relative clauses, and clefts). As mentioned above (section 4.4.3.2.1), L&S argue that the lack of WCO effects in these contexts is due to the non-quantificational status of the (null) operator involved in these constructions. Recall their assumption that WCO effects arise only when the A'-chain implies genuine quantification. This conclusion is based on the idea that only true quantifiers bind variables. If this assumption is true, what is then the status of the empty category left after the null operator moves? L&S propose a more refined distinction in the typology of empty categories (Chomsky 1982), and propose that there are two types of locally A'-bound traces: null variables, and null epithets. The former are bound by a true quantifier, while the latter are bound by non-quantificational operators like null operators, which do not range over anything; in fact, their range is fixed by an antecedent, which in our case-study is the dislocated focus phrase. The trace left after this operator moves is thus the null counterpart of an anaphoric epithet; that is, a R-expression which functions quasi-pronominally (cf. Hornstein & Weinberg 1988). Not being true variables, they are not sensitive to WCO configurations, which are only operative on quantificational A'-chains, according to Lasnik & Stowell’s assumptions.

However, Demirdache (1992, 1997) has shown that L&S’s analysis is untenable, since the null epithets which they argue are not subject to WCO do indeed trigger WCO effects when we replace the anaphoric pronoun (his) with an anaphoric epithet:

(70)  a. *John, I believe the bastard’s wife loves t,  
b. * Who, did you stay with t, [before [the bastard’s wife] had spoken to t,]?  

Therefore, she concludes that the Weakest Crossover configurations examined by L&S are sensitive to WCO effects. In order to account for the paradoxical lack/presence of WCO in Weakest Crossover configurations, Demirdache proposes the following: WCO occurs whenever there is only one LF for a given S-structure,
and this LF induces WCO. On the other hand, no WCO arises when there are two possible LFs for a given structure, and one of them does not trigger WCO.

To see how this proposal is implemented, it is essential to adopt the copy theory of movement (Chomsky 1993). As is well-known, under this approach, movement leaves copies, instead of traces, of the moved phrase. At PF, this copy is deleted, but at LF it may remain, providing the material for reconstruction. In contrast, in operator-variable structures like those created by overt wh-movement, the copy of the wh-phrase must be deleted at LF in order to derive the operator-variable configuration required to satisfy Full Interpretation (Chomsky 1993).

Demirdache’s analysis is crucially based on these assumptions, as well as on the idea that at LF we can only delete information under *semantic identity* with the head of the chain. Let me illustrate this with the following example, taken from Demirdache’s own work (1997:[46]). Consider the parasitic gap construction in (71a), and its corresponding LF possible derivations:

(71)  
\[
\begin{align*}
\text{a. } & \text{Who, did his, mother’s stories about annoy?} \\
\text{b. } & \text{Who, did [pro, [his, mother’s stories about pro,] annoy t,]} \\
\text{c. } & \text{*Who, did [pro, [his, mother’s stories about t,] annoy t,]} \\
\text{d. } & \text{Who, did [pro, [t,’s mother’s stories about pro,] annoy t,]}
\end{align*}
\]

Demirdache assumes that the null operator involved in parasitic gap constructions is a *pro*, following Browning (1987). Thus, (71b) represents the step in the derivation in which the null operator moves leaving a copy behind. If we delete the copy, as in (71c), a WCO configuration arises, which will induce WCO effects. However, Demirdache claims that there is an alternative LF which does not trigger WCO. If we delete the anaphoric pronoun *his* instead of the actual copy, as in (71d), no WCO configuration is created, and thus, the sentence is well-formed (bear in mind that we are assuming that PF and LF are independent from each other; that is, the copy which is deleted at PF does not have to correspond to the copy that is deleted at LF). The LF-deletion of the anaphoric pronoun in (71) is possible because its semantic content (i.e. its Φ-features) is recoverable from the head of the chain *pro*, which, in turn, being a null operator, must be identified by the (singular) referent of the wh-phrase *who*.

In the light of this analysis, let us consider Basque focus constructions. The LF derivation of (72a) will look as follows:

(72)  
\[
\begin{align*}
\text{a. } & \text{Jon, salatu du bere, ugazakab} \\
\text{Jon } & \text{betray aux his boss-erg} \\
\text{***"His, boss has betrayed JON,\"} \\
\text{b. } & \text{Jon, [pro, [salatu du],v-aux [bere, ugazakab pro, t,v-aux]]} \\
\text{c. } & \text{*Jon, [pro, [salatu du],v-aux [bere, ugazakab t, t,v-aux]]} \\
\text{d. } & \text{Jon, [pro, [salatu du],v-aux [t, re ugazakab pro, t,v-aux]]}
\end{align*}
\]

(72c) represents the case in which the actual copy of the moved null operator is
deleted at LF. However, this deletion will create a WCO configuration, which inevitably triggers WCO effects. If, on the other hand, we delete the pronoun bere, as in (72d), no WCO configuration is created. The semantic content of the pronoun is recoverable from the null operator, which in turn is strictly coreferent with the left-dislocated phrase Jon.

This analysis makes the correct prediction (also observed in L&S 1991) that WCO arises when the A'-chain is headed by a quantificational phrase. Consider the LF derivation of (73a):

(73)  a. *Edonor, salatuko luke bere, ugazabak  
       anyone betray aux his boss-erg  
       "His boss would betray anyone;"

b. Edonor, [pro, [salatuko luke]v-aux [bere, ugazabak pro, t-v-aux]]

c. *Edonor, [pro, [salatuko luke]v-aux [bere, ugazabak t, t-v-aux]]

d. *Edonor, [pro, [salatuko luke]v-aux [t-re ugazabak pro, t-v-aux]]

(73c) is ruled out for the same reason discussed above, that is, because the deletion of the copy of the null operator creates a WCO configuration that renders the sentence ill-formed. In contrast to (72d), however, in this case an alternative LF derivation according to which we delete the anaphoric pronoun bere is not available. This is so because deletion is only possible under strict coreference between the pronoun and the operator it is anaphorically related to. Given that the null operator takes its semantic content from the dislocated (non-referential) QP edonor ‘anyone’ (cf. Browning 1987), in (73d) no strict coreference relation is established between the pronoun and the quantifier phrase edonor: there is no one to one relation of semantic identity between a QP, which is non-referential, and an anaphoric pronoun, which must be coreferent with a singular (referential) term. Therefore, the only possible LF-derivation for (73) is the one represented in (73c), which induces WCO effects.

We see, thus, that adopting the analysis of Weakest Crossover posited by Demirdache (1992, 1997) allows us to account for the lack of WCO effects observed in Basque focus constructions. Note, however, that nothing in this analysis forces the verb to move to a ‘second position’. Nevertheless, this is the pattern we find in Basque (cf. (68) above).

In response to this, I argue that the verb raises to C in sentence-initial focalizations in order to generate the relevant focus interpretation. Recall that focus is identified in Basque by bearing the main stress of the sentence and by being to the immediate left of the verb. Based on the OV setting of the head parameter in Basque, in section 4.4.2 I argued that the rule of main stress assignment assigns main stress to the rightmost constituent to the left of the verb, which explains that the focus phrase and the verbal complex appear adjacent to each other. One simple way to capture this intuition is by adopting Horvath’s (1981, 1986, 1995) proposal that in certain languages (parametrized by a Focus Parameter (cf. Horvath 1986)), V carries a syntactic feature [+focus] which is assigned to the phrase eventually
interpreted as focus under government and adjacency. In this view, when the focus is clause-initial, the verb complex raises to C, in order to be adjacent to the focused element. As a result, the left-dislocated focus phrase is correctly interpreted as the focus of the sentence.

In sum, in this section I have argued that clause-initial focus constructions in Basque are best analyzed as base-generated left-dislocated constituents which are associated with a corresponding gap in the clause by virtue of moving a null operator to [Spec,CP]. I have shown that this movement accounts directly for the fact that focus constructions exhibit locality constraints, namely, island and reconstruction effects, which are typical diagnostics for movement. On the other hand, following Demirdache's (1997) analysis of Weakest Crossover contexts, I have argued that the non-quantificational status of focus in Basque explains the absence of WCO effects in these constructions. In section 4.5 I will provide further support that shows that sentence-initial focus is not quantificational by presenting the results obtained from the application of Szabolcsi's (1981) exhaustivity tests, as well as by virtue of making a comparison between preposed focus structures in Basque and preposed focus structures in languages like Italian, Spanish and Hungarian.

4.5. Information focus is not quantificational

The aim of this section is to show that information focus in Basque is not quantificational (cf. Rooth 1985, Krifka 1992). This goes in line with recent approaches (see Vallduvi 1992, Kiss 1998, Costa 1998, Zubizarreta 1998), which analyze information focus as the part of the sentence conveying new information, and not involving movement at all. Vallduvi (1992), in particular, claims that focus is always in-situ: it is the presupposed material which moves either to the left (topicalization) or to the right of the VP (right-dislocation), but focus does not move: it is VP-internal.

Throughout the discussion of this chapter I have argued that the type of focus involved is an information focus. In what follows I will show that information focus is not an operator. As we will see shortly below, the fact that it does not change the truth conditions of the sentence provides a piece of evidence in favor of the non-quantificational status of information focus (see also Vallduvi 1992). This can be easily illustrated by making use of the exhaustivity tests described in Szabolcsi (1981).

4.5.1. Exhaustivity tests

I mentioned earlier (section 4.4.3.1) that Hungarian presents two types of focus constructions, which correspond to two different foci: a preverbal focus, which is an operator-like identificational focus, and a VP-internal focus, which corresponds to an information focus. The quantificational force of the Hungarian
preverbal focus is made clear by applying the tests of exhaustive identification that I present below. Szabolcsi (1981, 1983) shows that exhaustivity and uniqueness are distinctive characteristics of quantificational focus, and that the preposed foci in Hungarian have quantificational force because they change the logical consequences of the sentences they appear in. She devises some tests that determine whether exhaustivity is involved in a certain focus construction or not. These tests involve a pair of sentences in which one of the sentences contains a focus consisting of two coordinate DPs and the other sentence contains only one of the coordinate DPs. Consider one test first:

(74)  a. János nem MARIT hívt meg. MARIT és ÉVÁT hívt meg
   John not Mary.acc invited prev Mary.acc and Eve.acc invited prev
   "It was not Mary that John invited. It was Mary and Eve that he invited"
   b. *János nem hívt meg Marit. Meghívta Marit és Évát
   John not invited prev Mary.acc invited Mary.acc and Eve.acc
   "John did not invite Mary. He invited Mary and Eve"

According to Szabolcsi (and Kiss 1998b), the two sentences in (74a) can be true simultaneously. This is so because each sentence contains a focus-operator —Marit and Marit és Évát, respectively— that changes its truth conditions. In contrast, (74b) is a contradictory sentence, since no quantificational focus is implied, but a mere information focus, and thus a logical contradiction arises between the two sentences.

Costa (1998) argues that a similar distinction is at stake in Portuguese, which also presents focus in-situ and focus-preposing (for the latter construction, cf. Raposo 1994, Duarte 1987). He argues that preposed focus passes the exhaustivity test, but focus in-situ does not:

(75)  a. MUITO VINHO e MUITO PORTO eu não bebi,
   "Much wine and much Port I did not drink,
   mas MUITO PORTO eu bebi
   but much Port I drank"
   b. *Não bebi [muito vinho e muito Porto], mas bebi muito Porto
   "I didn’t drink much wine and much Port, but I drank much Port"
   (Costa: [104],[106])

Consider Basque preverbal focus now:

(76)   a. *Jon-ek Miren ez zuen gontxhe. Miren eta Amaia gontxhe zuetuen
       Jon.erg  Miren not aux invite  Miren and Amaia invite aux

\[32\] Fronted focus constructions, however, are severely restricted: only quantified DPs can undergo focus-preposing, and generally have an exclamative force (Raposo 1994, Costa 1998).
b. *Miren ez zuen gonbidatu Jon. Miren eta Amaia gonbidatu zituen
   Miren not aux invite Jon.erg Miren and Amaia invite aux

The two sentences in (76a-b) render contradictory sentences in Basque. Regardless of whether the focus constituent of the first sentence appears in absolute initial position (76b) or not (76a), the second sentence contradicts the first one. This suggests that preverbal focus in Basque patterns together with Hungarian postverbal focus in-situ (74b), in that it does not involve exhaustivity nor uniqueness. Under the assumption that these are distinctive properties of quantificational focus (Szabolcsi 1981), we conclude that no quantification is associated with preverbal focus in (76).\textsuperscript{33}

Let us look at the second exhaustivity test constructed by Szabolcsi (1981). Given a pair of sentences, in which the first one contains a focused coordinate DP, and the second one contains only one of the coordinated DPs, if the latter is not interpreted as a logical consequence of the former, the focus expresses exhaustive identification. In other words, if focus is exhaustive, the two sentences are not compatible; if it is information focus, the sentences are semantically compatible. To illustrate this, compare the following pair of sentences:

(77) a. Mari EGY KALAPOT és EGY KABÁTOT nézett ki magának
    Mary a hat.acc and a coat.acc picked out herself.to
    “It was a hat and a coat that Mary picked out for herself”

b. #Mari EGY KALAPOT nézett ki magának
    “It was a hat that Mary picked out for herself”

(78) a. Mari ki nézett magának egy kalapot és egy kabátot
    Mari out picked herself.dat a hat.acc and a coat.acc
    “Mary picked out a hat and a coat for herself”

b. Mari ki nézett magának egy kalapot
    “Mary picked out a hat for herself”

Kiss (1998) argues that (77b) is not a logical consequence of (77a). In fact, it contradicts (77a), since the focus involved in (77a) implies exhaustivity. On the contrary, (78b) does not contradict (78a) because there is no exhaustivity involved in the focalized element. Thus, only a preverbal identificational focus in Hungarian passes this test of exhaustivity.

Let us perform this test on Basque focus constructions:

\textsuperscript{33} Ortiz de Urbina (p.c.) observes that the position of preverbal information focus in Basque with respect to negation can affect the scope interpretation of negation. Note that in Hungarian both informational and identificational focus follow negation. In any case, the two further tests that will be introduced shortly below involve positive sentences, so the issue concerning the scope of negation does not arise there.
(79)  
(a) \textit{Txoto bat eta soineko bat} erosi zituen Mirenek atzo  
hat a and dress a buy aux Miren.erg yesterday  
"Miren bought \textit{a hat and a dress} yesterday"  
(b) \textit{Txoto bat} erosi zuen Mirenek atzo  
hat a buy aux Miren.erg yesterday  

(80)  
(a) Mirenek \textit{txoto bat eta soineko bat} erosi zituen atzo  
Miren.erg hat a and dress a buy aux yesterday  
(b) Mirenek \textit{txoto bat} erosi zuen atzo  
Miren.erg hat a buy aux yesterday  

In the two pairs of Basque examples shown above the second sentence is a logical inference of the first one. This means that there is no exhaustiveness involved in the sentence-initial focus construction illustrated in (79a) nor in the in-situ focus construction given in (80a). These results support my claim that both clause-initial focus and focus in-situ involve information focus. Accordingly, the prediction is that the information focus exemplified in (79) and (80) pattern with Hungarian postverbal focus (in-situ). The prediction is borne out, as can be seen from a comparison between the Hungarian data in (78) and the Basque data. 

Kiss (1998:251) discusses a further exhaustivity test, suggested to her by Donka Farkas (p.c.). Imagine the following dialogue:

(81)  
(a) Mari \textit{EGY KALAPOT} nézett ki magának  
Mary a hat.acc picked out herself.dat  
"It was a hat that Mary picked for herself"  
(b) Nem, egy kabátot is ki nézett  
No a coat too out picked  
"No, she picked a coat, too"  

Given the assertion expressed in (81a), the only way to interpret the negation in (81b) and not be led to a contradiction is by interpreting the negation as the negation of exhaustivity. According to Kiss, this interpretation is available in the case of preverbal focus in Hungarian, as illustrated in (81), but it is impossible in the case of a postverbal information focus (i.e., a focus in-situ), since this type of focus is not exhaustive:

(82)  
(a) Mari ki nézett magának \textit{egy kalapot}  
"Mary picked herself \textit{a hat}"  
(b) \texttt{%Nem, egy kabátot is ki nézett}  
\%"No, she picked a coat, too"  

If we apply this test to Basque, the results are that the second sentence is incongruous:
(83)  a. Gona bat erosi zuen Mirenek bera-rentzat
     Miren.erg skirt a buy aux her.for
     "Miren bought a skirt for her"

     b. *Ez, fraka batzuk ere erosi zituen
     no pants some too buy aux
     "No, she bought pants, too"

Given the context illustrated in (83a), the negation in (83b) yields a
contradictory sentence. It cannot be interpreted as the negation of exhaustivity,
unlike what seems to occur in Hungarian preverbal focus constructions (see (81)).
This shows that preverbal focus in Basque is not exhaustive.

The conclusion we can draw from the results obtained after the application
of the exhaustivity tests devised by Szabolcsi (1981) and Farkas to Basque is that
(preverbal) information focus in Basque is not quantificational as it is not
exhaustive. Therefore, preverbal focus in Basque cannot pattern with focus-
preposing of the Hungarian type, since it lacks quantificational force and thus
cannot be treated as a semantic operator.

At this point, I would like to make a remark on the contrastive
interpretation of focus. Throughout this chapter, whenever I refer to information
focus, I am leaving aside possible utterances in which a preverbal focus is heavily
stressed and bears a special intonation. In these instances we may very well be
dealing with a contrastive focus (cf. G. Elordieta in press). However, as argued in
Erteschik-Shir (1997), Kidwai (1999), and Zubizarreta (1998), I believe that the
notion of ‘contrastivity’ plays no relevant role in the syntactic analysis of focus. A
contrastive interpretation is derived if the discourse context provides a contrast set
on the basis of which the focus is interpreted. If no contrast set is available, no
contrastive interpretation arises. Essentially, the distinction between contrastive and
non-contrastive focus (i.e. neutral information focus) does not go beyond the
presence/absence of a contrast set.

Indeed, both ‘neutral’ information focus and contrastive focus appear in the
same (preverbal) position in Basque. Thus, given a sentence where the constituents
surface in the canonical order, the preverbal focused constituent will be interpreted
as contrastive or just as neutral information focus depending upon context, and
prosodic factors. On the other hand, when the constituents appear linearly ordered
in a non-canonical fashion, e.g., as a result of scrambling, then a contrastive reading
often obtains, but this reading is not required at all. In the next section we will
examine some examples of this kind, in relation to the analysis of contrastive focus
that Etxepare (1996) proposes for Basque.

4.5.2. Information focus and existential presupposition
4.5.2.1. Self-defeating continuations

In contrast to our assumption that a contrastive focus and a neutral
information focus occupy the same syntactic position in Basque, Etxepare (1996) argues that the two types of foci correspond to two distinct syntactic positions in Basque: information focus occupies [Spec,CP] whereas contrastive focus occupies an IP-internal position (i.e., an A-position). He further assumes that the domain of focus integrates two types of foci: an information focus (which he labels *emphatic*) and a contrastive focus, which crucially differ in their presuppositional import. Thus, information focus does not presuppose the existence of the event it is related to, whereas a contrastive focus does necessarily do so. Accordingly, since information focus is not associated with an existential presupposition, it accepts self-defeating continuations. A contrastive focus, on the contrary, should disallow such continuations as it implies an exhaustive list interpretation. To illustrate this, let us consider the sentences in (84), with the addition of a self-defeating continuation:

(84) a. amak liburuak *mahai gainean* jarri zituen, inon jarri bazituen
   mother-erg books on.in put aux, anywhere put if.aux
   "Mother put the books on the table, if she put them anywhere"
   b. *mahai gainean* jarri zituen amak liburuak, inon jarri bazituen
      table on.in put aux mother.erg books anywhere put if.aux

Both sentences in (84) are well-formed sentences. Following Grice (1975), Etxepare argues that self-defeating continuations cancel existential presuppositions. Hence, it is expected that the continuations in (84a-b) will render infelicitous utterances when the focus has a contrastive reading, but grammatical sentences when the focus is non-contrastive. Given that the sentences in (84) are acceptable, it must be the case that the self-continuations in (84a) and in (84b) do not contradict the previous sentences, precisely because there is no existential presupposition implied in them. This means that the focused constituent can be in both cases non-contrastive, and hence, an information focus.

Etxepare argues that a contrastive focus reading necessarily arises when there is scrambling to the left of the focused constituent. In this case, we predict that a self-defeating continuation will render the sentence ungrammatical. This is shown in (85b):\(^\text{34}\)

(85) a. Jonek Mireni ardoa oparitu dio, ezer oparitu badio
    Jon.erg Mireni.dat wine offer aux anything offer if-aux
    "John offered wine to Miren, if he really offered anything to her"
   b. Mireni, ardoa, JONEK oparitu dio, *inork oparitu badio
      Mireni.dat wine Jon.erg offer aux anybody offer if-aux
      "It is Jon who offered wine to Miren, *if anybody really did"

\(^\text{34}\) The grammaticality judgements given in (85b), as well as the translations are Etxepare's own judgements. In fact, many speakers find sentences like (85b) acceptable, as is mentioned in the text.
The sentence in (85a) reflects the unmarked order of constituents in Basque. The self-defeating continuation is possible because no presupposition is entailed. In (85b) the subject Jonek is focused and the two objects appear topicalized. To be precise, Etxepare argues that the constituents Miren and ardoa have undergone scrambling, instead of topicalization, but this issue is not relevant for the discussion. In accordance with Etxepare’s hypothesis, the alleged ungrammaticality of (85b) derives from the fact that the focus must be interpreted contrastively, since the phenomenon of scrambling has taken place. As a consequence, the sentence should not allow self-defeating continuations of the type illustrated in (85b), since that would cancel the existential presupposition associated with this type of focus. Indeed, he judges (85b) as ungrammatical. Nevertheless, some speakers find sentences such as (85b) acceptable, given the appropriate context.35 Note that Etxepare’s proposal predicts that all instances in which scrambling has occurred require an exhaustive reading on the focused constituent. That this does not hold is shown by the grammaticality of the following sentences:

(86) a. Jonek ardoa Miren oparitu dio, inori oparitu badio
    Jon.erg wine Miren.dat offer aux anybody.dat if-aux
    “John offered wine to Miren, if he really did that to anyone”

b. ardoa Jonek Miren oparitu dio, inori oparitu badio
    wine Jon.erg Miren.dat offer aux anyone.dat offer if-aux

c. Miren Jonek ardoa oparitu dio, ezer oparitu badio
    Miren.dat Jon.erg wine offer aux anything offer if-aux
    “John offered wine to Miren, if he really offered anything to her”

In the sentences in (86) one or more constituents have been scrambled (or topicalized, see what I said in the above paragraph). However, unlike what one would expect assuming the existence of a close relationship between scrambling and contrastive focus, a contrastive reading does not necessarily arise in the sentences given above — provided that there is no context which favours a contrastive focus interpretation —, as the felicitousness of the self-defeating continuations in (86a-c) show. Therefore, we may safely conclude that all focus constructions examined in this section involve information focus.

4.5.2.2. Focus of correction and presupposition

I have assumed throughout this chapter that a focused constituent must

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35 It seems that concerning scrambling, for some speakers there are some differences in acceptability depending on the number of arguments that undergo scrambling. The generalization appears to be that the more arguments scramble, the less acceptable the self-defeating continuation becomes. This may be due to fact that the resulting focused phrases tend to be interpreted contrastively.
appear to the immediate left of the verb. Nevertheless, there is a specific context in which a focus may sometimes appear postverbally, and is interpreted as a ‘focus of correction’ (cf. Elordieta & Elordieta 1999). The appropriate context to yield a sentence with a focus of correction is one wherein the relevant focus is intended to correct an assertion that has been previously uttered in the discourse. The focus bears the most prominent stress, as usual, but the intonation frame of the sentence changes: in contrast with the pattern observed in preverbal focus constructions, where no prosodic break between the preverbal focus and the verb is possible, in these contexts a pause may intervene between the verb and the postverbal focus (87b). This type of focus may also appear preverbally, as in (87c):

(87) a. Amaia-\text{-}dat ardoa ekarri diote, ezta?
Amaia-\text{-}dat wine bring aux isn’t it
“\text{They brought wine for Amaia, isn’t it?”}

b. (ez,) ardoa ekarri diote (#) ANDONIRI, (ez Amaia-\text{iri})
no wine bring aux Andoni.dat not Amaia-\text{-}\text{-}dat
“No, they brought the wine for Andoni (not for Amaia)”

c. (ez,) ardoa ANDONIRI ekarri diote, (ez Amaia-\text{iri})
“No, they brought the wine for Andoni (not for Amaia)”

Provided the context in (87), the interpretation of the focus ANDONIRI necessarily entails the shared presupposition that there is a person for whom someone brought some wine. The expectation is, thus, that it will not allow a self-defeating continuation. The prediction is borne out:

(88) a. ardoa ekarri diote ANDONIRI, */inori ekarri badiote
wine bring aux Andoni.dat anyone.dat bring aux
“They brought the wine for Andoni, if they really bring it to anyone”

b. ardoa ANDONIRI ekarri diote, */inori ekarri badiote

This focus of correction appears more frequently in negative contexts than in affirmative sentences. In contrast to information focus, which immediately precedes the complex unit formed by the negation and the auxiliary (see (89a) below), the focus of correction or \textit{quasifocus}, as de Rijk (1996) labels it, follows negation:

(89) a. Jon \text{\textit{eta Amaia}} ez ditut ikusi
Jon and Amaia not aux see
“I haven’t seen Jon and Amaia”

b. Ez ditut Jon \text{\textit{eta Amaia}} ikusi (zure gurasoak baino)
not aux Jon and Amaia see (your parents but)
“I haven’t seen Jon and Amaia, but (I have seen) your parents”

The two positions correspond to two different interpretations (cf. de Rijk 1996,
Herburger 1997, Ortiz de Urbina 2000). A post-negation focus carries an existential presupposition associated with it, whereas a preverbal focus is not exhaustive nor entails an existential presupposition. I have shown above that the focus which appears immediately preceding negation is not interpreted exhaustively. This was demonstrated after applying the exhaustivity tests proposed by Szabolcsi and Farkas (see section 4.5.1, exx. (76), (79)-(83)). Given that in negative contexts there exists an additional position for focused elements, the question arises as to whether this particular type of focus displays exhaustivity effects or not. Compare the sentences in (90):

(90)  a. ?ez dut Joni ikusi. Joni eta Amaia ikusi ditut
        not aux Jon see Jon and Amaia see aux
   b.*Joni ez dut ikusi. Joni eta Amaia ikusi ditut

If we take for granted the validity of Szabolcsi’s tests, then the contrast in (90) suggests that the focus which occurs following the negation can be interpreted exhaustively. In fact, it seems that what triggers the contrastive reading in (90a) is not the focus itself, but the combination of negation +focus (cf. Ortiz de Urbina 2000). This explains why the second sentence in (90a) can make sense whereas (90b) leads to a contradiction. The sentence in (90a) means that it is not only Jon the person I saw, but I saw Jon and Amaia. In contrast, (90b) means that I didn’t see Jon. Thus, one cannot continue the sentence affirming that I saw Jon and Amaia, because that would contradict the first part of the sentence.

Thus, I will consider the contrast given in (90) as evidence in favour of a semantic distinction between prenegation information focus, which does not involve an exhaustive interpretation, and postnegation quasifocus, which (in conjunction with negation) is always contrasted with another phrase, in a way that may be characterized as a focus of correction.

4.5.3. Summary

I have shown that preverbal information focus in Basque lacks quantificational force, confirming the hypothesis pursued by Vallduví (1992), Zubizarreta (1998), Kiss (1998) and Costa (1998) that information focus is not quantificational. The fact that preverbal information focus does not pass the exhaustivity tests described in Szabolcsi (1981) and Farkas constitutes strong evidence against the view that preverbal focus is an operator. On the other hand, it has been shown that sometimes focus may appear postverbally (and postnegation, in negative contexts). This focus has an exhaustive interpretation that allows us to characterize it as identificational, in the sense of Kiss (1998).
4.6. Preposed focus in Italian and Spanish

In this section I will discuss some of the arguments provided by Rizzi (1986b, 1997) and Cinque (1990) for Italian, and by Olarrea (1996) and Zubizarreta (1998) for Spanish in favor of the existence of operator movement for a fronted focus in Italian and Spanish, respectively. By comparing the behaviour of preverbal focus in Basque with preposed foci in the two languages, I will show that, contrary to standard assumptions, preposed foci in Spanish seem to pattern with Basque preverbal focus in that they lack quantificational force.

4.6.1. Focalization of quantifier phrases

Rizzi (1997), drawing on Cinque's (1990) work, points out a number of differential properties between preposed foci and preposed topics in Italian, which lead him to the conclusion that Focus is quantificational in Italian, whereas Topic is not. One of those distinctive properties is that a topic can involve a resumptive clitic within the comment, whereas focalized constituents are incompatible with resumptive clitics. A second important difference is that bare quantificational elements may be focused, but not topialized (cf. Cinque 1990, Belletti 1990). The two properties are illustrated in (91) (note the prohibition for a clitic to occur in the focalized example (91b)):

(91) a. *Nessuno, lo ho visto
   noone him have-I seen
b. NESSUNO (*lo) ho visto
   noone him have-I seen

Rizzi proposes to account for the differences displayed by topics and foci in Italian as follows. Quantified expressions must bind a variable at LF, in order to assign their scope and be properly interpreted; but when they are topics, as in (91a), there is no empty category which qualifies as a variable, because there is an overt clitic in argument position —namely, the clitic lo—. Hence, the quantified expression fails to be interpreted properly, violating the Principle of Full Interpretation. On the other hand, when the quantifier is focalized (91b), the sentence is perfectly well-formed, since in focus constructions there is no clitic in argument position, but a variable, the trace left by movement of the focus QP. Hence, the quantifier phrase can bind the variable, and is thus correctly interpreted at LF.

Note that under Rizzi’s definition of syntactic variables (a non-pronominal

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36 In Rizzi’s terminology, “bare quantifiers” refer to those quantifier phrases which do not have a lexical restrictor in their domain. Thus, whereas the quantified expression molto ‘much’ is a bare quantifier, according to Rizzi, molti libri ‘many books’ is a non-bare quantifier containing a lexical restrictor.
empty category in an A-position), he predicts that we will never find a well-formed construction involving a quantifier phrase in an A'-position, which binds a resumptive pronoun, occupying an argument position. Such constructions would be ruled out, since the quantified expression would not have a variable to bind at LF. However, as Rizzi himself points out, in certain contexts topicalization of quantified expressions is allowed in Italian (cf. Cinque 1995). This occurs when the quantifier includes a lexical restriction. Consider the following contrast:

(92)  a. Molti libri, [li; ho buttati via]
       many books, I threw them away
b. *Molto; [lo; ho capito]
       much, I understood it

The contrast is interesting, because the same effects are observed in Spanish and Basque. Topicalization of bare quantifiers is not allowed ((93b),(94b)), whereas topicalization of quantified DPs is possible:

(93)  a. muchos libros, [los tiré por ahí]
       many books, them threw away
b. *mucho, [lo entendí]37
       much, it understood
(94)  a. liburu asko
tun38
       book many, outside throw away aux
       "many books, I threw them away"

---

37 The Spanish and Basque examples in (93b) and (94b) can be significantly improved, if the quantifier has a D-linked reading (in this context the Q actually behaves as a partitive). An example of such a context is given in (i):

(i)   a. aurtengo ikastaroak lan asko eskatzen du, ezta?
       this year from course.erg work much require aux, right
       "This year’s course requires much work, doesn’t it?"
   b. bai, baina asko, eskolan egiten dugu
       yes but much class.in do aux
       "yes, but much (of it), we do at school"

38 Basque does not have clitics of the Romance type. On the other hand, even if we were to analyze the agreement markers encoded in the finite verb as the counterpart of clitics in Romance (cf. Franco 1993), the fact that agreement is obligatory in both topicalizations and focalizations does not serve to distinguish between the two. Nevertheless, as we have shown in the discussion of this chapter, a focus is easily identified by its position to the immediate left of the verb, and because no prosodic break may intervene between the focus and the verb. Thus, the examples in (94) must involve topicalization.
b. ?/\*asko{3}, ulertu nuen
    much understand aux
    "Much, I understood"

The gist of the contrast between topicalization of bare and complex QPs seems to lie in the presence vs. absence of a lexical restrictor over which the QP quantifies. Bare quantifiers like molto are intrinsically non-referential. This contrasts with complex quantifiers like molti libri containing a lexical restriction (i.e., their complement) in that this lexical restrictor provides the QP with some sort of referentiality (cf. Cinque 1995. Cf. also Pesetsky 1987 for the different behaviour of bare wh- vs. complex wh-phrases). This makes possible to establish a topic-comment predication structure between a QP (in topic position) and the open predicate in the clause. The crucial point is that the referentiality issue associated with quantified topics is independent of the topic/focus distinction (see also note 36). Thus, focalization of a bare quantifier like mucho and asko in (95) also sounds awkward outside an appropriate context. In fact, unless the QPs are understood with a partitive reading (i.e. quantifying over a (discourse) set), the sentences are ill-formed:

(95)    a. (??)MUCHO entendí
        "I understood MUCH"
    b. (??)ASKO ulertu nuen
        much understand aux

Therefore I conclude that the contrast observed between topicalization and focalization of QPs is not grounded on the quantificational status of Focus vs. the non-quantificational force of Topic, but instead, on the referential status of the QPs involved (i.e. on the need for a sentence topic to be referential).

4.6.2. WCO effects

A second important property pointed out in Rizzi (1997) (and Culicover 1992 for English), is that focus constructions induce Weak Crossover effects, while topicalizations do not:

(96)    a. Gianni, sua madre lo, ha sempre apprezzato
        Gianni, his mother him has always appreciated
        "John, his, mother has always appreciated"
    b. ??GIANNI, sua madre ha sempre apprezzato ti,
        Gianni his mother has always appreciated
        ?? "His, mother has always appreciated JOHN,"

As was mentioned above (cf. section 4.4.3.2.1) Lasnik & Stowell (1991) propose that WCO effects arise only when the A'-chain implies genuine
quantification. Assuming this, Rizzi points out that the fact that topicalization is unaffected by WCO effects follows straightforwardly if Topic is not quantificational, but Focus involves a quantificational operator.

In this respect, preposed focus in Italian differs from preverbal focus in Basque. We showed earlier that focalization does not induce WCO effects in Basque (cf. (56b)). Interestingly, Weak Crossover effects are not detectable in Basque neither with topics nor with foci:

(97)  

a. *Topicalization*  
\[
\text{Jon, bere, ama-k beti estimatu izan du} \\
\text{Jon his mother-erg always appreciate aux} \\
\text{"Jon, his, mother always appreciated (him)"}
\]

b. *Focalization*  
\[
\text{JON, estimatu izan du beti bere, ama-k} \\
\text{Jon appreciate aux always his mother-erg} \\
\text{"His, mother has always appreciated JON,"}
\]

From these data we can conclude then that neither topics nor foci are genuine quantifiers, and hence, that they do not involve a quantification operation in Basque.

Consider Spanish focus constructions now. Spanish has two mechanisms to mark focus: it assigns (neutral) focus in-situ, as in (98a) (cf. Zubizarreta 1998), or by placing the constituent which is interpreted as focus in absolute preverbal position, as in (98b). The preposed focus always bears emphatic stress and cannot be the answer to a question like *what happened?* (it often carries an exclamative force, like seems to be the case with preposed focus in Portuguese (cf. Raposo 1994, Costa 1998):

(98)  

a. *Mikel se ha comprado cuatro libros*  
\[
\text{Mikel cl aux buy four books} \\
\text{"Mikel has bought four books"}
\]

b. *CUATRO LIBROS se ha comprado Mikel*  
\[
\text{four books cl aux buy Mikel} \\
\text{"Mikel has bought FOUR BOOKS"}
\]

Uriagereka (1995) and Olarrea (1996) argue that focus constructions of the type illustrated in (98b) involve movement to a specific functional projection. Specifically, Olarrea posits that the preverbal focus moves to [Spec,FocP], while Uriagereka leaves open the precise identification of the functional projection which presumably hosts all discourse-related notions such as focus, topic, emphasis, contrast, etc. He labels this functional category F, and locates it between CP and
AgrP. Two main properties seem to support an operator status for preposed focus in Spanish: the inversion effect that this construction triggers (99a), and the absence of a resumptive clitic, as pointed out in Olarrea (1996). (Compare (99b) with the clitic left dislocated phrase (99c)).

(99) 

a. *CON ESE HOMBRE Amaia quiere casarse
   with that man Amaia wants marry
   “Amaia wants to marry WITH THAT MAN”

b. ESE LIBRO quiere comprar-(*lo) Amaia
   that book wants buy-it Amaia
   “Amaia wants to buy THAT BOOK”

c. Ese libro, Amaia quiere comprar*(lo)
   “That book, Amaia wants to buy it”

In support of the idea that these focus constructions are the result of movement, Olarrea points out that they are sensitive to weak and strong islands. (100a) exemplifies a weak island violation, induced by extraction from a wh-island, whereas (100b) represents strong island effects, by violating a factive adjunct-island:

(100) 

a. *LAS VAINAS me han dicho [cómo cocinar t ]
   the green beans not know.I [who hates]
   “It is green beans that I have been told how to cook”

b. *LAS VAINAS no sé [cuándo María cocinará t]
   the green beans not know.I [when María cook-fut]
   “It is green beans that I don’t know when María will cook”

Assuming that islandhood is a solid diagnostic for movement, the data in (100) indicate that some kind of movement is involved in Spanish preposed foci constructions. However, this does not necessarily mean that the focused constituent itself moves to the specifier of a functional projection, in a parallel manner to wh-phrases, for example. Moreover, if it were an operator which undergoes A’-movement, one would expect that it display WCO effects, as we observed to hold

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39 A similar idea is put forward in Laka (1990), who proposes that preverbal emphatic constituents raise to the specifier of SigmaP, which is located above IP in Spanish (cf. also Contreras 1979 and Torrego 1984 for the idea that emphatic preposing involves movement).

40 Laka (1990) reports that the same facts are observed in Catalan, as discussed in Bonet (1989):

(i) 

a. *AL’ARMARI en Pere ha ficat les sabates
   in the closet the Pere has put the shoes

b. AL’ARMARI (*hi) ha ficat les sabates en Pere
   in the closet clitic has put the shoes the Pere
in Italian (96b). However, the expectation is not borne out. Both sentences in (101) are well-formed:

(101) a. Su_{i} madre ha castigado a Juan_{i}
     his mother has punished to Juan
b. A Juan_{i} le ha castigado su_{i} madre
     to Juan cl has punished his mother

The data above are interesting because they show that preposed focus in Spanish does not induce WCO effects. In fact, focus in-situ does not exhibit WCO effects either. This result follows straightforwardly if focus in-situ does not imply covert LF movement at all, as has been argued by Valduvi (1992), Kiss (1998), and Costa (1998), among others. On the other hand, if we analyzed preverbal foci in Spanish as operators, as Uriagereka (1995) and Olarrea (1996) do, we would expect (101b) to display WCO. Nevertheless, the sentence is well-formed.

One possible account to explain the lack of weak crossover effects in Spanish preposed focus structures could be to maintain that the focused constituent moves to an A-position (cf. Etxepare 1996).\textsuperscript{41} Indeed, it has been often argued that A-movement alleviates WCO violations (cf. among others, Mahajan 1990, Saito 1992, Corver & van Riemsdijk 1994). However, it is not clear what this position would be identified with. If we adopt the VP-internal subject hypothesis, and assume that subjects may stay in-situ, [Spec,TP] could be a potential landing-site for preposed constituents. However, the A-status of [Spec,TP] has been called into question by the proponents of this analysis (cf. Valduvi 1992, Uribe-Etxebarria 1992, Barbosa 1999, Ordóñez 1999).

An alternative analysis would consist in treating Spanish preposed focus on a par with Basque preverbal focus; that is to say, as base-generated left-dislocated focus. Although they differ in that the former is emphatic and the latter is not, nevertheless they do not differ in the quantificational status of the focus. Note that WCO is absent in both preposed foci and focus in-situ (cf. (101a-b)). As I will show shortly below, Basque foci and preposed foci in Spanish also pattern together in the lack of exhaustivity effects performed on fronted focus in Spanish.

\textsuperscript{41} Etxepare (1996) argues that contrastive focus in Basque involves movement to an A-position, whereas information focus targets an A-bar position. However, throughout the chapter we have seen that there is evidence in the opposite direction. In the first place, it was empirically shown that information focus in Basque does not exhibit quantificational properties, whereas a corrective focus shows exhaustivity effects. Secondly, there is the evidence from a whole range of languages which runs contrary to Etxepare's hypothesis, in that a distinction between information focus (in-situ) and operator focus (A'-position) is drawn (Tsimpili 1995, Kiss 1998, Zubizarreta 1998, Costa 1998).
4.6.3. Preposed focus is not exhaustive in Spanish

In section 4.5.1 above we argued that if a given focus passes the tests of exhaustive identification devised by Szabolcsi (1981), that focus can be characterized as having quantificational force. If preposed focus in Spanish is an instance of identificational focus, we expect that it displays properties of exhaustiveness, following Kiss (1998) (see (52) above, section 4.4.3.1). However, it does not, as is shown below:

(102) a. *A JUAN no le vi. A JUAN y A PEDRO vi
    Juan not cl saw. Juan and Pedro saw
    “I didn’t see JUAN. I saw JUAN and PEDRO”
b. *No vi a Juan. Vi a Juan y a Pedro
    not cl saw Juan saw Juan and Pedro

If the focus involved in (102a) were an identificational focus which forces an exhaustive list interpretation on the focused constituent, it should be able to change the logical presupposition of the sentence it occurs in. However, there is a contradiction in (101a).\footnote{Cf. footnote 33 above.} Similarly, the second sentence of (102b) contradicts the first one. This is in fact the expected pattern if the focus does not express exhaustive identification. Thus, neither information focus (represented by (101b)) nor a fronted focus pass this exhaustivity test.

Consider (103) now:

(103) a. CUATRO LIBROS Y DOS DISCOS se ha comprado Carlos
    four books and two LPs has bought Carlos
    “Carlos bought FOUR BOOKS AND TWO LP’s”
b. ¿CUATRO LIBROS se ha comprado Carlos
    “Carlos bought FOUR BOOKS”

(103b) is an implicature of the proposition in (103a). If (103a) is true, (103b) will be true as well. That is, the test shows that preposed foci do not express exhaustive identification.

Finally, let us apply the test involving negation of exhaustivity:

(104) a. CUATRO LIBROS se ha comprado Carlos
    four books has bought Carlos
b. *No, DOS DISCOS se ha comprado también
    no two LPs has bought too

If the negation in (104b) can only make sense if it is understood as the negation of exhaustivity, the ill-formedness of (104b) then shows that the focus
involved is not exhaustive.

Therefore, if Szabolcsi is right when she argues that exhaustivity and uniqueness are distinctive characteristics of quantificational focus, the fact that a preposed focus in Spanish does not display exhaustivity effects indicates that this type of focus is not quantificational.

4.7. Summary

I argue that Basque makes use of two strategies to mark information focus. In neutral contexts, wherein the V-Aux complex is sentence-final, focus is realized in-situ, assigning main stress to the constituent occurring to the immediate left of the verb. This is the direct result of a combination of the main stress assignment rule and the direction of selection in the language (i.e. to the left), which guarantees that in neutral contexts, where the constituents appear in the canonical order, the direct object receives the focal stress of the sentence and is therefore interpreted as focus. We have seen that in neutral contexts the focus interpretation can be extended (projected) to other constituents containing the constituent bearing the main stress. We accounted for this by assuming, with Cinque (1993) and Reinhart (1995), that the main stress assignment rule defines a set of potential foci that can serve as the actual focus of a sentence depending on context.

This is the unmarked or most economical pattern of focus-marking strategies, given that no particular movement is necessary in order to obtain the intended focus reading. Nevertheless, in many occurrences it happens that we want to focalize a single constituent that is not included within the focus set defined by the main stress rule. Then, we have two options: either we scramble the constituent intervening between the intended focus and the verb, so that the relevant focus can receive the main stress in-situ, by turning into the constituent which immediately precedes the verb, as is illustrated in (105a) —with the subject as the intended focus—, or else we base-generate the intended focus phrase in a left-peripheral position, and the V-Aux raises to C, in order to identify the dislocated phrase as focus (cf. (105b)):

(105) a. Liburu-a, Jonek t, irakurri du
   book-det Jon-erg read aux
   "Jon has read the book"

b. [cp-Jonek [cpOp, [irakurri du]v-aux [TPt, liburua t-v-aux]]]

Other constituents may appear preceding the left-dislocated focus, as in (106). They are topicalized:

(106) [topEtxe-a-nk [cp-Jonek [cpOp, [irakurri du]v-aux [TPt, t, liburua t-v-aux]]]]

Thus, a speaker of Basque will use the in-situ mechanism to mark a constituent as focus when this constituent appears in its canonical position, and this
position coincides with the one which receives the main sentential stress. This holds in neutral contexts, when no movement is involved —recall that in these contexts more than one constituent can serve as focus—, or when a scrambling process necessarily applies in order to obtain the intended focus reading on a particular constituent. However, if the speaker wants to mark a particular constituent as the single focus of the sentence (narrow focus), then he will normally employ the strategy of generating the focus constituent in initial position, as a left-dislocate, (with the subsequent raising of the V). By employing this mechanism, the speaker ensures that no other potential focus interpretations are available in the sentence.

In this view, then, the difference between choosing the in-situ or the ‘moved’ strategy lies, essentially, in whether we want to single out a particular constituent as the only focus of the sentence or not. But crucially, the difference does not lie in a syntactic-semantic contrast between an operator focus versus a new information focus (as is argued for Hungarian in Kiss 1998), since, as I argued earlier, all focus constructions discussed so far imply new information focus. In fact, it seems likely that the contrastive reading which is sometimes associated with preverbal foci is a mere pragmatic inference, with no manifestation whatsoever in the syntactic position it occupies (cf. Valduvi 1992).
Chapter 5: Complex Verb Movement

5.1. Introduction

In chapter 3 I have claimed that, starting out from a S IO O V basic order, we can derive other possible orderings assuming that movement operations have taken place. In this chapter, I argue that for some of these orderings there is evidence showing that the kind of movement involved is verb-complex movement (more properly, verb-auxiliary movement (see below)). In order to show that the complex verb moves in Basque, I will bring forward five pieces of evidence. In the first place, the relative position of manner adverbs in relation to the verb will be analyzed, as direct evidence for the movement of the latter. Thus, assuming that VP-adverbs like well, hard have a fixed position in the sentence (cf. Belletti 1990, Costa 1998), the fact that the finite verb complex may occur preceding those adverbs shows that the verb moves past the base position of the adverbs (cf. Belletti 1990, Cinque 1999). The ordering possibilities between two different types of adverbs will also be considered, and will turn crucial to show that there is AuxP-Intraposition in Basque. Secondly, the occurrence of small clause complements to the right of the verb are explained if we assume that the verb moves to a position to the left of the small clause complement. As a third piece of evidence, I will analyze the behaviour of idioms involving a verb and an object (e.g. kick the bucket), which provides further support for the claim that the verb-complex moves in Basque, under the assumption that an idiomatic reading requires adjacency between the (trace of the) verb and the object. Fourthly, an examination of the binding relations among the constituents of a sentence will further corroborate a V-movement analysis: it will be shown that variations in the position of the verb do not affect the results obtained with respect to anaphor binding, quantifier-variable binding, and Principle C effects. Finally, I will look carefully at the scope relations that hold between preverbal and postverbal quantifiers, as well as between two postverbal quantifiers. The results we obtain from all the tests strongly support the view that a leftward verb movement operation is at work.

5.2. Verb-Auxiliary adjacency

5.2.1. Preliminaries

In the preceding chapters I have assumed without further discussion that in Basque the main verb and the auxiliary move together in typical contexts of verb movement, and that they form a morphological unit. However, so far I have not
provided any argumentation in support of this idea. In this section I will discuss this issue more in detail.

As an illustration, consider the pair of sentences given in (1). (1a) is an affirmative sentence, where the main verb appears left adjacent to the inflected auxiliary, following the canonical word order pattern. (1b) is an interrogative sentence. The main verb and the auxiliary appear displaced, on the left edge of the sentence, and no element can intervene between the wh-phrase and the verbal elements that follow. This pattern has been used to argue that the verb has moved to C, entering in a Spec-head agreement relationship with the wh-phrase in [Spec,CP] (cf. Rizzi's (1991) Wh-Criterion). I adhere to this assumption, i.e., that the V-Aux complex has moved leftwards in (1b). It is important to emphasize that it is not only the inflected auxiliary verb that moves (as it does in English), but rather, the entire complex verbal form, formed by the non-finite main verb (errepikatu ‘repeat’ in (1b)) and the auxiliary (dio ‘has (to him/her)’):

(1) a. Gorka-k Naia-ri zu-re galdera errepika-tu dio
   Gorka-erg Naia-dat you-gen question repeat-asp aux
   “Gorka has repeated your question to Naia”

b. Nor-i errepika-tu dio Gorkak zu-re galdera?
   Who-dat repeat-asp aux Gorka.erg you.gen question
   “Whom has Gorka repeated your question to?”

As was discussed in chapter 2, section 2.2, most inflected verbs in Basque are periphrastic or analytic, that is, they are morphologically complex, in the sense that they are constituted by two independent morphological words: a main verb, which bears the semantic meaning of the verb, and an auxiliary verb, which carries all the inflectional information (e.g.: tense, mood, person and number agreement). On the other hand, there is a closed set of verbs, i.e., the so-called synthetic verbs, exemplified by the inflected verb daki in (2), which do not require an auxiliary verb to be conjugated, as they can be inflected independently:

(2) Nor-k **daki** zu-re galdera-ren erantzuna?
   who.erg knows you.gen question.gen answer
   “Who knows the answer to your question?”

Nowadays only a handful of verbs can be conjugated synthetically, about more than a dozen, although synthetic forms of three dozen verbs are officially recognized by the Academy of the Basque Language. In addition, the distribution of synthetic forms displays aspectual restrictions. Specifically, synthetic verb forms can only be used in those tenses which express imperfective aspect, including ‘punctual’ or progressive aspect (like, for instance, the (non-habitual) present tense, exemplified in the example (2)). In order to express other tenses, they cannot

---

1 Aspectual information is also encoded in the verb. However, the aspectual affix is attached to the non-finite lexical verb, as is illustrated in the example in the text. In (1a), -tu indicates perfective aspect.
be conjugated independently, and therefore they need an auxiliary verb. For this reason, and for ease of exposition, in the examples throughout the text I will mainly use periphrastic verb forms, introducing synthetic forms only when relevant for the discussion. In any event, it should be clear that whichever analysis is proposed in relation to the movement of analytic complex verbal forms applies to synthetic verbs as well.

5.2.2. Verb-auxiliary as a morphological unit

As was already noted in chapter 1, the canonical linear order between the main verb and the auxiliary in affirmative sentences in Basque is one wherein the main verb precedes the auxiliary. As a matter of fact, more than a precedence relation is involved, since no element can intervene between the main verb and the auxiliary:2,3

(3)  a. *Carlos etorri jadanik da
    “Carlos has already come”

    a’ . Carlos jadanik etorri da

b. *Carlos-ek irakurri liburua du
    “Carlos has read the book”

    b’. Carlosek liburua irakurri du

   Carlos-erg read book.det aux
   “Carlos has the book read”

This fact already indicates that in the canonical order the main verb and the auxiliary verb are strictly adjacent to each other. Going a step further, I argue that the verb moves to adjoin to Aux in these contexts, forming a complex verbal head (see further below for the trigger of V-to-Aux movement). Thus, the SOV-Aux canonical order follows directly from the assumption that Aux is final in Basque (cf. chapter 2, section 2.3).

For other observed word order patterns such as S V-Aux O, or V-Aux S O, wherein the complex verb [V-Aux] shows up in non sentence-final positions, I argue that the main verb first incorporates into the inflected auxiliary, adjoined to its left. In a second step, the complex head [V-Aux] raises higher up, to T e, and further up, leaving the complement behind. As expected given this analysis, nothing can intervene between V and Aux when they move upwards. (4) is a simplified representation of the two successive movement operations, where I have omitted specifiers, and the internal structure of VP is left unspecified (recall from chapter 2,

2 Except for certain particles called ‘modal particles’, which to my view, should be best characterized as evidential markers, as they have illocutionary force, and their meaning makes reference to the speech act. They occur in typical contexts of hear/say (cf. Cinque 1999, Rooryck 1999 for a proposal on how evidentiality is encoded in the syntax). See further below for a brief discussion on their position with regard to the verb.

3 In negative contexts the order is reversed: neg-Aux V, and the auxiliary and the main verb do not need to be contiguous. For the purposes of the argument in the text, this issue is not relevant right now. I will come back to the order in negative sentences shortly below.
section 2.3.4 that I assume that $T^o$ is head-initial, since it is a functional head, whereas Aux is final, given that it is lexical and L-related to the verb):

(4)

```
CP
  |   |
  T   AuxP
[\(V\)-Aux] vP Aux
       |     |
AspP  v   t_{[V-Aux]}
       |     |
VP    Asp t_{[V-asp]}
       |     |
DP    V   t_{[V-asp]}
       |    |
      t_{V}
```

The idea that the non-finite verb moves to $T^o$ has been pursued by a number of Basque linguists in recent years, although the implementation of this idea is somewhat different from our proposal.\(^4\) Ortiz de Urbina (1994, 1995) and G. Elordieta (1997a) assume that the auxiliary does not have an independent projection of its own, and that Aux merges with the highest INFL head. In particular, Ortiz de Urbina refers to this inflectional head as I, while Elordieta identifies it with T. In any case, the difference is merely terminological, since neither author distinguishes between T and I. In each approach, T and I represent one and the same functional head, which is taken to be a bundle of inflectional morphemes that spell out person, number, tense and Case features, all of which are contained in the inflected auxiliary. For ease of exposition, I will use T to refer to the inflectional head that hosts the auxiliary in Ortiz de Urbina's (1994, 1995) and Elordieta's (1997a) system.

It is important to note that Ortiz de Urbina and Elordieta do not consider the possibility that the auxiliary verb in Basque heads a projection of its own. However, as I argue in chapter 2 (section 2.3.4), I assume that Aux is indeed separate from T, and furthermore, that Aux projects its own phrase,

\(^4\) See Laka (1988, 1990) for a different approach. She holds that only synthetic forms raise to T, whereas nonfinite lexical verbs only raise to Asp(ect), which is located to the right of VP, just above VP and lower than TP. However, this analysis cannot capture the fact that V and Aux move together as a cluster in V2 contexts.
Auxiliary phrase, as is illustrated in the tree structure diagrammed in (4) above (for proposals which assume an AuxP in the clause structure, see Zagona 1988, Belletti 1990, Ernst 1998, and Laka 1991 and Artiagoitia 1992 for Basque). Thus, as will become clear below, Ortiz de Urbina’s and Elordieta’s V-to-T movement will be reformulated as involving V-to-Aux movement.

In trying to determine what triggers V-to-T raising (V-to-Aux in our terms), Ortiz de Urbina argues that T in Basque is a weak morphological head that needs to be lexicalized by head incorporation. Ortiz de Urbina assumes further that in the northern dialects, T can also be licensed by the presence of an element in the specifier position of [Spec,CP] when the inflected finite form raises to C (see (5a)). This can account for the fact that in these dialects, it is possible to front the inflected auxiliary alone in constructions involving an overt operator, without carrying along the main verb, as is illustrated in (5a). However, in the standard and southern dialects, inflected auxiliaries are always preceded by main verbs (5b), except when negation is present (but see the discussion in section 5.2.3):

(5) a. Nor **du** Jonet ikusi?  
Who aux Jon.erg see  
"Who has Jon seen?"  
(northern dialects)

b. Nor **ikusi** du Jonet?  
Who see aux Jon.erg  
(standard, southern dialects)

Given that in the dissertation I circumscribe the discussion of the facts to the standard variety, we will not be concerned with constructions of the type exemplified in (5a), which involve Aux-fronting, but rather with those illustrated in (5b). Following Ortiz de Urbina (1994), I will assume that Aux is morphologically weak, and that as a result of its morphological deficiency, Aux must be licensed by a lexical head, either by head movement of the nonfinite verb to Aux (instantiated by V-to-Aux raising), or by head movement to Neg in negative contexts (Aux-to-Neg raising), to be discussed below. I assume that the verb also moves to Aux in the SOV-Aux canonical order, even though this movement is string vacuous, given that both verbal elements surface at the right periphery of the clause (cf. chapter 2, section 2.2.3 for my assumptions on the clause structure of Basque):
(6) Haurr-a-k txakur berde bat ikusi du
child-det-erg dog green a see aux
"The child has seen a green dog"

Granting these assumptions, the derivation of (5b), and, more in general, the derivation of V2 constructions as regards V-Aux movement would proceed as follows: the non-finite verb first raises to Aux, in order to satisfy the lexicalization requirement on Aux, and secondly, the complex head moves further up to C, to check the [wh] interrogative feature with the wh-operator sitting in [Spec,CP]. On its way to C, the V-Aux complex passes across T, where it picks up tense information en passant.  

One way to formulate the lexicalization requirement which triggers verb raising to Aux in a minimalist framework is in terms of feature checking, as suggested by Ortiz de Urbina himself. Based on Rivero’s (1993) work on Breton, he postulates that the feature [tense], present in T⁰ (=Aux in this account), needs to be licensed overtly in its checking domain, either by incorporation of a lexical head onto it, or by having a phrase in the specifier position of the (extended) projection of T⁰. As mentioned before, this second licensing mechanism is only applicable to the northern dialects, hence, for the same reasons alluded above, I will disregard this licensing device in the present discussion. In addition, I assume that T and Aux head their own projections, so if feature checking is the driving force of verb movement to Aux, as Ortiz de Urbina proposes, it must be a feature in Aux itself that triggers the movement of the verb to Aux.

Alternatively, if we analyze the strict V-Aux adjacency requirement observed in non-negative contexts not as a feature checking requirement, but as a licensing mechanism to satisfy a lexicalization requirement on Aux, as G. Elordieta (1997a) proposes, a wide range of facts concerning the distribution of auxiliaries is easily accounted for. Firstly, it follows straightforwardly that in declarative sentences no element can intervene between the nonfinite verb and the auxiliary, regardless of whether the verbal complex appears in final position or in different positions within the clause. Secondly, it must be the morphological deficiency of auxiliaries (e.g. its clitic-like nature (Mitxelena 1957)) which prevents an inflected auxiliary from occurring in clause-initial position (7), regardless of the final position of the non-finite verb (the possible occurrences of the main verb are given in brackets in the examples below):

(7) *du (ikusi) Jonek (ikusi) zu-re etxe berria ikusi?
aux Jon.erg you.gen house new.det see
"Has Jon seen your new house?"

---

7 I assume that in the canonical order (i.e. in non V2 contexts), the V-feature of T is licensed at LF. Thus, T is empty in these contexts.
Note that there is no prohibition against having an inflected complex verb in sentence-initial position, as long as the non-finite verb precedes the inflected auxiliary (8):

(8) Ikusi du Jonek zu-re etxe berria?
    see aux Jon.erg you.gen house new.det
    "Has Jon seen your new house?"

All this indicates that the auxiliary behaves like a bound morpheme, even though it is a free morpheme. Interestingly, work on prosodic phonology comes to support the view that the nonfinite verb and the auxiliary form a single complex. Despite the fact that these two elements constitute separate morphological words, they constitute a single prosodic word as far as accent placement is concerned (cf. Hualde, Elordieta & Elordieta 1994). In addition, Elordieta (1997a) provides further phonological evidence which shows that V-Aux in Basque is a morphophonological unit. He assumes that Aux has an affixal nature (i.e. a feature [affix]), apart from the strong categorial feature [V], that triggers overt raising of the main verb to the head hosting Aux in order to license Aux morphologically (which in Elordieta’s approach is identified with T). By raising the verb to Aux (V-to-T in Elordieta’s analysis), the [affix] feature is checked off, and this checking relation is realized as a morphological word, i.e., [V-T]m-word. This morphological word is mapped onto PF as a phonological word, a potential domain where phonological processes such as Vowel Assimilation may apply. Vowel Assimilation (VA) is an optional rule of colloquial speech that applies in certain Basque dialects, such as Western Basque, by which a syllable-initial vowel assimilates in all its features to an immediately preceding syllable-final vowel. Interestingly, this process applies word-externally in nominal contexts (9a), and it only applies across word boundaries in the context of V+Aux:

(9) a. kale estu-etan
    street narrow-loc.pl
    "in/at the narrow streets"
    ---> kale estu-utan
b. ikasi eben
    learn aux
    "They learnt it"
    ---> ikasi-iben
c. erosí era(g)in neutsan
    buy make aux
    "I made her/him buy"
    ---> *erosí ira(g)in neutsan

It is important to note that this process does not apply across members of compounds, nor between a noun and an adjective, or between a verb and a following causative verb, which appears between the main verb and the auxiliary (9c). Elordieta argues that this restriction concerning the application of VA is due to the bound character of Aux in Basque, and to the fact that VA applies only within one and the same morphological word. This hypothesis thus provides phonological support to the claim that V-Aux is a morphological unit.
Before I proceed further, a brief note on the ‘modal particles’ that may intervene between the main verb and the inflected auxiliary is warranted (see note 3). I noted earlier that no element may intervene between the lexical verb and the auxiliary in non-negative contexts. However, there are certain so-called ‘modal’ particles that appear immediately preceding the inflected auxiliary, and thus, intervene between the main verb and the auxiliary. Their basic semantic function is to express epistemic attitudes of the speaker concerning the existence or non-existence of the state of affairs asserted in the sentence. However, they cannot be categorized as modal verbs (like e.g. might, may in English), since they are not verbs, they are invariant, and always occur in the same position, just in front of the inflected verb-Aux.\(^8\) Therefore, we could call these particles evidential particles or markers. There are two of these particles: ote and omen:

\[(10)\]

a. Mikel-ek hanka-Ø apurtu omen du
   Mikel-erg leg-abs break evid Aux
   “(I heard that) Mikel has broken his leg”

b. Mikel-Ø gaur etorri-ko ote da?
   Mikel-abs today come.fut evid Aux
   “I wonder whether Mikel will come today”

In addition, in yes/no questions it is possible to introduce the interrogative particle al between the main verb and the auxiliary:

\[(11)\]

a. Etorri al daMikel-Ø?
   come AL aux Mikel-abs
   “Has Mikel come?”

b. Etorri da Mikel?
   “Has Mikel come?”

The semantic function of this optional particle is simply to indicate that the sentence is a yes/no question. However, its presence is not necessary, since yes/no questions in Basque are expressed by fronting the verb and the auxiliary, and by pronouncing the sentence with the intonation typical of these questions, as in (11b). I do not have anything to say about this particle, except for the fact that the syntactic behaviour of al parallels that of the evidential particles ote and omen. In any case, what is relevant for our purposes is that none of the particles that may intervene between the non-finite verb and the auxiliary can satisfy the lexicalization requirement on Aux. As a result, even in the presence of these particles, the main verb has to raise to Aux to license Aux morphologically. This is shown by the fact that no sequence of the type evidential particle-auxiliary ..... main verb is found in typical V2 contexts like interrogative constructions:

---

\(^8\) See Euskaltzaindia (1985), Mujika (1988) for a descriptive analysis of ‘modal’ particles in Basque, and Albizu (1991) for a discussion of this topic in terms of long head movement of the verb across modal particles.
(12) *Nor ote du Jonek ikusi?
    Who evid aux Jon.erg see
    "I wonder who Jon has seen"

If the lexicalization requirement on Aux is the correct approach to take, (12) indicates that evidential particles cannot license Aux morphologically. Rather, the main verb must raise to Aux in order to support it morphologically. This can be seen in (13a), where the entire complex head [V-particle-aux] moves as one cluster, and in (13b), where the fact that no element can intervene between the sequence main verb-evidential particle-auxiliary strongly suggests that they form a cluster:

    When come.fut evid aux Mikel
    "I wonder when Mikel will come"

b. *Mikel-ek hanka-O apurtu gaur omen du
    Mikel-erg leg-args break today evid aux
    "(I heard that) Mikel has broken his leg today"

Following G. Elordieta (1997a), I assume that evidential particles are affixal, just like auxiliaries, and thus cannot support the latter morphologically. I assume that the order in (10), (11a) and (13a) is derived by adjoining the main verb to the evidential particle on its way up to Aux, as represented in (14):  

(14)  

Thus, V raises to Aux to license it morphologically. This explains why the non-finite verb and the auxiliary must be adjacent, and that nothing except for the evidential particles and the yes/no question marker al can intervene between them. However, in addition to the verb, negation can also satisfy the lexicalization requirement of the auxiliary, by attaching the auxiliary to the negation head, as will be discussed next.

---

9 In the following representation I analyze these particles as heads of a Mod(al)P, following Albizu (1991) and G. Elordieta (1997a). For an alternative analysis of the position of these modal particles, cf. Albizu (1991).
5.2.3. \( V\text{-}Aux \) in negative sentences

Most of the facts described so far fail to hold in negative sentences. On the one hand, the order between the nonfinite verb and the inflected auxiliary is reversed, and on the other, the adjacency between the two is no longer required. This is illustrated in (15), where the subject \( Jon \) intervenes between the two verbal elements:

(15) Ez dut \( Jon \) ikusi  
    not aux Jon see  
    "I haven't seen Jon"

Given the above assumptions, the lack of adjacency between the auxiliary and the main verb in negative constructions is surprising. In this case, the nonfinite main verb does not need to raise to Aux, since negation is an independent head which can license Aux morphologically. The fact that negation is a free lexical morpheme and not an affix or a clitic can be seen by the following evidence, which shows that negation is an independent morpheme:

a) Firstly, it can stand in isolation in a sentence, as a short negative answer, as pointed out in G. Elordieta (1997a):

(16) A: Joan-go zara antzerkira?  
    B: Ez  
    go.fut aux theatre-to no  
    "Are you going to the theatre?"  
    "No"

b) Secondly, in ellipsis contexts induced by coordinating a declarative sentence and a negative one, negation does not need the support of an auxiliary or a modal (as noted in Laka 1990):

(17) Jon gure-ra etorri-ko da, baina Amaia ez (*da)  
    Jon our-all come.fut aux but Amaia not (*aux)  
    "Jon will come to our place, but Amaia (will) not"

This holds regardless of whether the verb involved is periphrastic or synthetic:

(18) Edurnek badaki nor naizen, baina Jonet ez  
    Edurne.erg knows who aux-C but Jon.erg not  
    "Edurne knows who I am, but Jon (does) not"

Laka (1990) takes this fact as evidence for her claim that NegP is structurally higher than TP in Basque, whereas in English NegP is dominated by TP (Pollock 1989, Chomsky 1989). If the latter assumption is right, it is expected that in English it will not be possible to delete IP without deleting NegP with it, since IP contains NegP. The prediction is borne out by the data:
(19) That student will do the exam, and Jon *(will) not

If negation in Basque were a syntactic clitic-like head, it would have to cliticize onto some other inflectional element in order to be visible for the interface component. However, the ellipsis data and the examples in (16) to (18) demonstrate that negation is an independent morpheme, both syntactically and morphologically, and that it occupies a high position in the clause structure of Basque. In this respect, note that Belletti (1990) also proposes, on independent grounds, the same hierarchical order between NegP and TP for Italian. Concretely, she assumes the following clause structure for Italian: AgrSP>NegP>TP>AuxP>AgrPartP>VP.

However, there are proposals that claim that NegP is located below TP in Basque (cf. Ortiz de Urbina 1994 and G. Elordieta 1997a). The reasons behind these proposals are theory-internal. On the one hand, Ortiz de Urbina (1994) argues that Neg moves first to the head hosting the inflected auxiliary in order to fulfill the lexicalization requirement on Aux, and secondly, that the complex [neg-Aux] raises further to C, for the negation to take scope over the entire clause. This movement is triggered by the fact that negation is an operator which takes sentential scope and thus must raise to a functional head above TP. This derives the linear order Neg-Aux....V, as desired:

(20)

```
CP
  \|-- TP
     \|-- NegP
       \|-- T
         \|-- Neg° [tₐ-Aux]
            \|-- V
                \|-- tₐ
```

On the other hand, the reasons that lead Elordieta (1997a) to locate NegP below TP are essentially theory-internal. Under the strict antisymmetric framework that he assumes, this hierarchy of functional projections is the only way to derive the correct surface linear order among the inflectional heads in a clause. Assuming that all heads precede their complements, and that only left-adjunction is permitted in the system, he concludes that the [Neg-Aux-....V] order can be only derived if Neg° is located lower than the inflectional head hosting the auxiliary, and by adjoining the negation to the left of Aux. In this way, negation licenses Aux morphologically. On the contrary, if NegP were located higher than TP, then, under the same antisymmetric assumptions, the predicted word order would be Aux-neg, which is ungrammatical in Basque.\(^{10}\)

\(^{10}\) Laka's (1990) analysis allows for right-adjunction, so in her system there is no problem in having the inflectional complex head Aux° adjoined to the right of Neg.
(21) *duzu ez ezer esan
    aux neg anything say

    Note, however, that this objection pointed out by Elordieta is only
    problematic if one assumes the postulates of the antisymmetric framework. In
    addition, more importantly, neither Elordieta's nor Ortiz de Urbina's accounts can
    explain the ellipsis data described above (cf. (17), (18) vs. (19)). Recall that in TP
    deletion contexts, the negation surfaces as an independent morpheme, i.e., without
    an auxiliary verb. This fact strongly favours an analysis of negation along the lines
    argued by Laka (1990), according to which NegP is on top of TP. In contrast,
    having a lower NegP cannot capture the data in a straightforward fashion. In fact,
    the latter hypothesis makes an incorrect prediction: if Neg raises to T to license
    Aux, as is argued in these accounts, we would expect that in negative deletion
    contexts, negation (or, more appropriately, the complex head created by Neg-to-
    Aux movement) should cooccur with the finite auxiliary verb. However,
    cooccurrence of negation and an auxiliary verb is impossible, as illustrated in
    (17).\(^{11}\) It seems, thus, that concerning deletion facts, postulating a NegP generated
    above TP is empirically superior to having the reversed hierarchical order. This
    analysis is represented below (following Laka 1990, I assume that Neg\(^o\) is head-
    initial):

(22)

\[
\begin{array}{c}
\text{NegP} \\
\text{Neg} \\
\text{TP} \\
\text{[neg-aux-T]} \\
\text{T} \\
\text{AuxP} \\
\text{t\textsubscript{aux}} \\
\text{t\textsubscript{T}} \\
\text{VP} \\
\text{DP} \\
\text{V} \\
\text{t\textsubscript{aux}}
\end{array}
\]

    The question that this analysis raises is how Aux is licensed in ellipsis
    constructions. I argued earlier that in negative sentences Aux raises to Neg,
    deriving the sequence neg-aux....main verb. However, in ellipsis contexts involving
    negation, only negation shows up, but no auxiliary verb is present (cf. (17)). In

\(^{11}\) There might be a way out of this problem. If we allow excursion (see Roberts 1991,
Kayne 1991), one may say that the negation head, after adjoining to T, moves further up to
a higher functional head, e.g. to C\(^o\), stranding Aux behind. Then, TP is deleted, and we
thus yield the desired results. This account, however, leaves unexplained why in other
languages like English, which are also assumed to have NegP lower than TP, Neg cannot
excorporate and leave the auxiliary stranded.
order to account for this, I propose the following: let us assume that ellipsis involves LF-copying of the identical deleted part from the previous sentence, so that the second coordinate sentence is properly interpreted at LF, as is represented in (23):\footnote{The constituents that are not pronounced but are present at the level of interpretation are indicated by a strike-out.}

(23) \[TP[Jon[AuxP gure-ra etorrí-ko da]], baina Amaia ez [AuxP gure-ra etorríko-da] 
Jon our-to come.fut aux but Amaia not 
"Jon will come to our place, but Amaia (will) not"

The representation in (23) is an LF representation, but bear in mind that the copied part (i.e. AuxP) is not pronounced. Given that the morphological requirement on Aux is basically lexical, it has relevance at the PF interface, but not at LF. Thus, no problem concerning the morphological licensing of Aux arises in ellipsis contexts, since Aux is not present at PF.

Two pieces of evidence support the hypothesis that Aux raises to Neg in negative sentences: the fact that neg-aux move together in V2 contexts like wh-interrogative constructions (24a), and that in the presence of a complementizer, the order observed is neg-aux-C, which can only be derived if [neg-aux] is a unit and moves to C. This is illustrated in (24b):

(24) a. Nor-k ez du dirurik nahi? 
Who-erg not aux money want 
"Who doesn’t want money?"

b. Ama-k [ez de-la suge-en bildur] aitortu zidan 
mother.erg not aux-C snake-gen afraid confess aux 
"Mother confessed to me that she is not afraid of snakes"

From this, it follows that nothing except for the evidential particles discussed above can intervene between the negation and the auxiliary verb:

(25) a. *Ez inor da etorrí/ *ez inor etorrí da 
not anyone aux come/ not anyone come aux 
"Noone came”

b. Ez (omen) da inor etorrí 
"(Apparently), noone came”

c. *Ez da inor etorrí omen 
"Apparently, noone came”

The fact that the particle must move along with the auxiliary (25c) is probably related to requirements of the particle itself, which, also being clitic-like, must be licensed morphologically.\footnote{For instance, it cannot appear in isolation:}

(i)  a. Etorri da Jon?  

\[Ez omen\]
Thus far I have argued that Aux raises to Neg, but I have remained silent on the trigger of this movement. Synthetic verbs also raise to Neg, as can be seen from the fact that negation and the synthetic verb must obey adjacency (26), so what triggers the auxiliary to move to Neg in periphrastic constructions cannot be the lexicalization requirement on Aux per se, given that synthetics do not project Aux, as was shown in chapter 2, section 2.2.2. Some other driving force must be at stake. In other words, the morphological licensing of Aux is a side-effect, by virtue of moving it into a lexical head:

(26) Ez (*ondo) dabil Jon azken boladan
not (*well) walk Jon lately
"Jon isn’t doing well lately"

One way of interpreting these facts is to adopt Laka’s (1990) Tense C-command condition, according to which Tense must c-command all operators in the sentence. Given that negation is a semantic operator, the Tense c-command condition forces the inflected verb — i.e. the auxiliary or the synthetic verb — to first raise to T (to lexicalize it), and subsequently, the complex head moves to Neg. In this way, T c-commands negation, and the Tense c-command condition is satisfied.

Whatever the final analysis of the motivation that triggers Aux/synthetic verb raising to Neg may be, I will assume with Laka (1990), that NegP is on top of TP, and that in negative constructions Neg, being an independent morpheme, can lexicalize Aux by virtue of adjoining Aux to Neg.\footnote{A potential problem with the Aux to Neg analysis is that it can be considered countercyclic (S. Barbiers, p.c.); if Aux must be licensed morphologically by a lexical head, one would expect that V raises to Aux, and licenses it, in the same way as is proposed for affirmative sentences. That is, the main question that arises is: why doesn’t V raise to Aux in negatives if it does so in affirmative clauses? One possibility is to make use of the notion of ‘phase’ in Chomsky’s (1998) sense. A phase of a derivation is either vP or CP (a full clause), but not TP, NegP or other intermediate functional phrase. Syntactic processes apply within a phase until all its selectional requirements are satisfied, but after a phase is completed, no further operations can access it. On this assumption, both syntactic operations V-to-Aux and Aux-to-Neg occur at the end of the (same) CP phase.} 

<table>
<thead>
<tr>
<th>Come aux Jon</th>
<th>not apparently</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Has Jon come?&quot;</td>
<td>&quot;apparently not&quot;</td>
</tr>
</tbody>
</table>
made available in the same sentence. The relevant data come from a variety of Piedmontese, reported by Parry (1997), where an enclitic negative \( -nu \) must cooccur with the preverbal negative marker \( n \) and may also cooccur with \( pa \):

(27) Dy’menika u ne (\( pa \)) ‘vynu
    sunday subj.cl neg-is neg come-neg
  “He didn’t come on Sunday”

In spite of the fact that it would be attractive to consider Zanuttini’s (1997) proposal of having more than one structural position for negation, and extend it to account for the Basque data, Basque lacks empirical evidence to justify for even two different negative markers in the same clause. This contrasts with the distinct morphological types of NegP’s existing in Romance, as well as with the possible cooccurrence of two (or more) types of NegP’s attested in certain Romance varieties, as the case with the Piedmontese variety discussed in Zanuttini (chapter 3, p.78), and illustrated in (27).

To summarize, in this section I have argued that the auxiliary is like an affix, a deficient morphological head which needs to be licensed by a lexical item in order to be interpreted at the phonetic interface. Assuming that this lexicalization requirement must be satisfied prior to Spell Out, Aux gets licensed via adjunction in the overt syntax, by head-to-head movement (Travis 1984, Baker 1988). In non-negative contexts, the main verb raises to Aux, forming a complex head derived in the syntax. In the event that the verb and the auxiliary do not occur in the right periphery of the clause, but in different positions among the constituents of a sentence (i.e., in typical V2 contexts), V moves to Aux, followed by subsequent leftwards movement of the complex head [V-Aux] to higher heads in the functional domain. I will discuss leftwards movement of the complex verb in the next subsection (5.2.4).

When negation is present, the inflected auxiliary appears separated from the nonfinite verb, as we have seen above. In negative sentences the auxiliary follows negation, leaving the lexical verb stranded (see (15)).\(^{15}\) Since Aux must satisfy its lexicalization requirement by being associated with a lexical head, I concluded that Neg is the head that licenses Aux, after Aux moves to Neg to satisfy a different requirement. I suggested that the requirement could be the Tense c-command

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\(^{15}\) I am leaving aside from the discussion the orders found in embedded negative sentences. In negative relative clauses, for instance, negation and Aux appear in clause final position:

(i) [etorri ez ze-n] gizon-a
    come not aux-C man-det
  "The man who didn't come"

This order follows the general pattern in relative clauses, wherein the inflected verb, to which the complementizer is attached, must be the rightmost element of the embedded clause. A full analysis of negative sentences in Basque is beyond the scope of this dissertation, so I will put embedded negation aside.
condition (Laka 1990), which requires Tense to occupy the highest head in the clause. Thus, Aux raises first to T, prior to moving to Neg. This is illustrated in (28):

(28)  
\[\text{NegP} \rightarrow \text{Neg}^* \rightarrow \text{TP} \rightarrow \text{Neg} \rightarrow \text{[Aux-T]} \rightarrow \text{T} \rightarrow \text{AuxP} \rightarrow \text{t}_{\text{aux-T}} \rightarrow \text{VP} \rightarrow \text{Aux} \rightarrow \text{t}_{\text{aux}} \rightarrow \text{DP} \rightarrow \text{V} \rightarrow \text{t}_{\text{aux}}\]

5.2.4. Leftward movement of [V-Aux]

Let us turn to declarative sentences now. In the foregoing section I have argued that the affixal nature of Aux requires that a lexical head supports it morphologically, by overt head movement. In what follows I will argue that the various orderings in which the complex [V-Aux] can occur are a result of [V-Aux] movement. That is, when the complex verb does not occur in its canonical final position, but rather appears in a fronted (29a) or in an intermediate position (29b), I claim that the non-finite verb first merges with the auxiliary, and then the complex head proceeds moving further up, leftwards. First it moves to T, and eventually, in the typical contexts that involve ‘V2’ (i.e. wh-constructions and sentence-initial focalizations), the complex verb moves to C, subject to the same constraints as any head movement process (cf. the H(ead)M(ovement)C(onstraint) (Travis 1984, Baker 1988)):

(29)  
a. *Etorri da Jon Holanda-tik?*  
   come aux Jon Holland-from  
   “Has Jon arrived from Holland?”

b. *Holandatik etorri da Jon*  
   “Jon has arrived from Holland”

Note that the lexicalization requirement on Aux forces overt raising of the non-finite verb to Aux in all non-negative contexts in Basque, but languages may differ in the affixal nature of Aux. Thus, in languages like e.g. Dutch or German, the non-finite verb and the finite auxiliary appear adjacent to each other in V-final embedded contexts (30a), but in V2 structures, only the Aux moves, stranding the lexical verb behind:
(30) a. ...dat ik de krant gelezen heb
    that I the newspaper read have
b. Gisteren heb ik de krant gelezen
    yesterday have I the newspaper read

I assume that this difference with respect to Basque is due to the fact that Aux in these languages is an independent morpheme, and hence does not need to be lexically supported by other elements. In contrast, Aux in Basque cannot be fronted unless it carries the non-finite verb or the negation along, as has been shown above.

As an illustration, consider the focus construction exemplified in (31). As was discussed extensively in chapter 4, a constituent that appears in immediate preverbal position in Basque gets interpreted as focus, by default. The subject Jonek in (31a) is left-adjacent to the complex verb, and therefore it receives a focus interpretation. Notice that the verbal complex does not appear in its canonical (final) position. Given our analysis of focus developed in chapter 4, the S V-Aux O PP order represented in (31) is derived by leftward movement of the verbal complex to a position following the focused subject phrase. It was argued there that sentence-initial focused constituents are left-dislocated. Thus, in (31), the focused subject is generated as an adjunct to CP, and is linked to the thematic position the subject occupies in the clause via a null operator which raises to [Spec,CP]. The verbal complex [V-Aux] in turn raises to C, accounting in this way for the adjacency observed between the focused constituent and the complex verb. The syntactic derivation of (31a) is represented in (31b):

(31) a. Jonek ikusi du Amaia kalean
    Jon.erg see aux Amaia street.in
    "Jon has seen Amaia in the street"

b. [CP Sub [CP Opi V-Aux [TP t-v-aux [AuxP [VP t, DP obj t_v ] t-v-aux ]]]]]

I would like to emphasize the fact that when the complex verbal head formed by the main verb and the auxiliary moves further up, to the head of a functional projection, it moves leftwards, as shown in (31b). This idea follows directly from the assumptions on the phrase structure of Basque which were made explicit in chapter 2. In that chapter, I showed that functional non-L-related heads are left-headed, whereas L-related heads are right-headed.16

In (32) I repeat the phrase structure I am assuming for Basque:

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16 See the introductory chapter 2, section 3 for discussion. See also Ortiz de Urbina (1989) for a head-initial CP, Laka (1990) for a left-headed SigmaP, and Rebuschi (1983) and Artiagotia (1992) for a head-initial IP.
For the sake of simplicity, in the general discussion of this study I will sometimes refer to verb movement, instead of V-Aux movement, but the reader should bear in mind that, when present in the structure, leftward movement of the verb includes the auxiliary as well.

In what follows I will describe a number of phenomena for which the V-movement analysis provides the simplest explanation. Other alternative analyses, such as rightward movement or right-dislocation, are potentially compatible with the orderings that will be discussed in the next sections, but I will show that the V-movement analysis is the simplest account, and, in addition, that only this analysis can account for the idiom facts described in section 5.4.

Let us begin by considering the first syntactic phenomenon captured by the complex verb movement analysis: the distribution of adverbs.

5.3. The distribution of adverbs

The placement of adverbs in the sentence structure has long been taken as a diagnostic for the movement of other constituents (see, among others, Emonds 1978, Pollock 1989, Belletti 1990, Alexiadou 1997, Costa 1998, Cinque 1999). The fundamental assumption is that there is no general process of adverb movement in the syntax. Rather, it is assumed that adverbs, depending on their semantic requirements, can be classified as sentence adverbs, if they modify IP (or a projection within the IP-domain), or as VP-adverbs, if they modify (part of) VP (cf. Jackendoff 1972). The former are argued to mark the IP-domain, while VP
adverbs mark the VP-domain. 17 Thus, if we take, for instance, a VP-adverb like much, the idea is that all elements preceding the adverb can be argued to be (or have moved) out of the VP, and that all post-adverbia l constituents are inside VP. 18

In contrast, there are approaches which claim that adverbs do not have a single structural base position, but rather that they are base-generated in several positions in the sentence structure, or that they can move and adjoin to distinct positions, therefore accounting for the word order variation observed across languages (cf. Jackendoff 1972, Iatridou 1990, Zwart 1993, Neeleman 1994). Given that there is crosslinguistic empirical evidence showing that certain adverbs appear to be base-generated in more than one position in the sentence (cf. Ernst 1998), whereas a distinct set of adverbs have a very restricted distribution, I will examine the behaviour of the latter type of adverbs (e.g. VP-adverbs such as well, hard) as a testing-ground to demonstrate the occurrence of verb movement in Basque. On the assumption that these adverbs mark a left boundary in the VP domain (following Costa 1998), it will be argued that adverb placement with respect to the position of the inflected verb supports the claim that the complex verb moves in Basque.

5.3.1. VP-adverbs and V-movement
5.3.1.1. Manner VP-adverbs

Costa (1998) shows that in English and Portuguese monosyllabic manner adverbs like well, bad or hard can only be left-adjointed to VP, and that they do not easily surface in sentence-final position, unless they are heavily stressed (cf. Larson 1985). Compare (33a) and (33b):

(33) a. *John looked at those pictures hard
    b. John looked at those pictures HARD
    c. John looked hard at those pictures

The word order exemplified in (33c) is then derived via movement of the verb to a higher functional projection across the adverb, which marks the left edge of the VP. 19 This means that English has overt (short) verb movement, a claim

17 Certain adverbs, such as often, have been argued to occur at two different sites: either attached to VP, or to a higher functional projection (cf. Cinque 1999). Cinque argues that each position corresponds to a different scope interpretation.

18 More specifically, Cinque (1999) and Alexiadou (1997) propose that all adverbs have fixed positions in the syntactic structure, in particular, as specifiers of specific functional projections. Although I do not adopt this rigid view on the base position of adverbs, I assume that certain adverbs (e.g. manner adverbs such as ondo'well', gaizki 'badly') can only occur in one position.

19 Costa follows Belletti (1990) in assuming that the landing-site of V is parametrized and varies across languages. Thus, assuming, as in Belletti, a configuration wherein AgrSP is higher than TP, V moves to AgrS in Italian, whereas in Portuguese and in French V moves just to T. For V-to-T raising in French, see Pollock (1989).
which has been recently made by a number of linguists (cf. Pesetsky 1989, Johnson 1991, Ouhalla 1991, Barbiers 2000, among others). The behaviour of the adverb when the complement is nominal is apparently not the same, judging from the data in (34):

(34)  a. John plays the ball hard  
     b. John plays the ball HARD
     c. *John plays hard the ball

Adopting Pesetsky’s (1989), and Johnson’s (1991) ideas, Costa (1998) proposes that the only position where the adverb may occur in (34) is in final position (regardless of whether it bears heavy stress or not), because, in addition to verb movement, DP-complements in English have to raise out of the VP for Case reasons, crossing the adverb. In contrast, prepositional complements stay in-situ, since they do not have to check Case features, and hence the adverb precedes the PP-complement in (33c).

These data show that the position of manner adverbs of the type discussed in Costa (1998) prove to be a good diagnostic to trace verb movement (at least in English). Let us examine the behaviour of these adverbs in Basque as a test to argue that the complex verb moves in Basque.

5.3.1.2. Well-type of adverbs in Basque

Manner VP-adverbs in Basque, unlike other classes of adverbs, stay adjacent to the finite complex verb in the unmarked case. In such contexts, they follow nominal complements, as illustrated in the example in (35a) with the adverb txarto ‘badly’.

In the examples below I show that the ordering facts remain the same irrespective of the definite (azken azterketa ‘the last exam’) or indefinite status (azterketa bat ‘an exam’) of the nominal complement:

(35)  a. Jonek azken azterketa/azterketa bat txarto burutu du  
       Jon.erg last exam.det/exam a badly finish aux
       “Jon has made the last exam/an exam badly”
     b. ??Jonek txarto azken azterketa/azterketa bat burutu du
       Jon.erg badly last exam.det/exam a finish aux
     c. *Txarto Jonek azken azterketa/azterketa bat burutu du
       badly Jon.erg last exam.det/exam a finish aux

As (35) shows, when the complex verb appears in sentence final position, txarto type of adverbs are only permitted to the immediate left of the complex

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20 In Basque there are no monosyllabic manner adverbs; the lightest manner adverbs in syllable structure are bisyllabic. Hence for the purposes of the discussion I will use bisyllabic manner adverbs such as txarto ‘badly’, ondo ‘well’, and gogor ‘hard’.
verb. They cannot precede objects (35b), nor subjects (35c). Assuming that nominal objects move out of VP, these results seem to corroborate Costa’s proposal that manner adverbs like *badly* mark the left boundary of VP. However, as will be shown below, I will not assume that *well*-type of adverbs are adjoined to VP. On the basis of the Basque data, it will be argued that the idea of generating *txarto* as an adjunct to VP yields incorrect predictions for Basque. I will propose, following Larson (1985, 1988, 1990), that *txarto* is generated as the inner complement of the verb (see also Stroik 1990, Kayne 1994, Chomsky 1995). Before getting into the details of this proposal, let me present first the arguments that led me to discard the idea, advocated in Costa (1998), that VP-manner adverbs like *well* are left-adjointed to VP.

Consider the sentences in (35) again. If *txarto* is left-adjointed to VP, the word order asymmetries observed in (35) follow straightforwardly, on the assumption that nominal complements in Basque raise out of the VP. This would yield the well-formed order illustrated in (35a). A possible explanation for the movement of the object would be to adopt the view, widely assumed in early minimalist work (even in preminimalist work (cf. Mahajan 1990)), that nominal objects move out of VP to a functional projection to check Case and agreement features (cf. the AgrOP in Chomsky 1993, and Branigan and Collins 1993, and the µP posited in Pesetsky 1989) (cf. also Kayne 1989 for a similar proposal for object past participle agreement). However, the fact that *txarto* type of adverbs also follows PP complements, undermines the plausibility of the argument, since PP complements, unlike nominal complements, do not have morphological features to be checked. Hence, in principle, they stay in-situ, at least in unmarked contexts, like the ones given in (36) and (37). These facts contrast with the English data we discussed above, where it was shown that there is a clear asymmetry as regards to the position of *well* when the complement is nominal or prepositional. Compare the English examples in (33c), (34c) repeated here, with (36a), (37a) below:

(33)  c. John looked hard at those pictures
(34)  c. *John plays hard the ball

(36)  a. Athletic Real Madrid-en aurka (oso) gogor lehiatu da
Athletic Real Madrid-gen against (very) hard compete aux
“Athletic has played/competed hard against Real Madrid”
b. *Athletic (oso) gogor Real Madrid-en aurka lehiatu da
Athletic (very) hard Real Madrid-gen against compete aux

---

21 (35b) is very marginal under a normal intonation. It is however acceptable if a strong pause or break follows both the subject and the adverb. In that case, the elements preceding each break are necessarily topics (e.g. given information), and the nominal complement asterketa receives a focus reading.
(37) a. AmaiaK artelan guztieta-ra tinko begiratzen du \textsuperscript{22}  
Amaia.erg masterpiece all-to firmly look aux  
"Amaia looks at all masterpieces firmly" 
b. *AmaiaK tinko artelan guztieta-ra begiratzen du  
Amaia.erg firmly masterpiece all-to look aux  

If \textit{gogor} ‘hard’ and \textit{tinko} ‘firmly’ were left-adjointed to VP, we would expect the sentences in (36b) and (37b) to be well-formed, as their English counterparts.\textsuperscript{23} However, they are ungrammatical. Since I do not know of any plausible reason for postulating movement of PP complements in non-scrambling structures like those exemplified in (36) and (37) above, I assume that manner adverbs of the type represented by \textit{gogor} and \textit{tinko} are base-generated in a position \textit{lower} than PP- and nominal complements. Thus, the question arises now as to what exactly this position is. We cannot adopt the view, defended in Travis (1988), and Rivero (1990), that these adverbs are adjoined or incorporated into the verbal head because it is not clear at all that adverbials are heads. Note, in this respect, that these adverbs may be more complex, like in the example in (36b), where the adverb is modified by the degree modifier \textit{oso} ‘very’, indicating that it is a larger projection. Yet, with or without modification, the adverb exhibits the same structural position with respect to the verb and its complements. Thus, I will reject an analysis of manner adverbs as head-adjointed to V. If they are not adjoined to V nor to VP (due to the PP\textsubscript{compl}-Adv base order), but are in the VP domain, where are these adverbs generated? I would like to argue, adopting a VP-shell structure, à la Chomsky (1995), that \textit{well} type of manner adverbs in Basque are to be considered as inner complements (Larson 1988, 1990). They are generated as (lethand) sisters to the lower V, whereas complements (both DP- and PP-complements) are projected in [Spec,VP]. This is indeed proposed for English by Larson (1988, 1990), Kayne (1994), and Chomsky (1995), for those constructions wherein a manner modifier follows the direct object, as shown in (38a), for a sentence like (38b):\textsuperscript{24}

\textsuperscript{22} It has been pointed out to me that what I consider to be a PP in the text may however be regarded as a KP (Bittner & Hale 1996), i.e., as a Case-marked noun phrase, and not as a PP. This idea is based on the fact that Basque makes frequent use of the so-called "locative cases" in order to express a prepositional meaning. Nonetheless, consider the postposition \textit{aurka} 'against' in (36), which is an independent uninfllected morpheme, just like prepositions are in languages with prepositional phrases. Moreover, there is still an important asymmetry between the locative Cases and the grammatical Cases (ergative, dative and absolutive): only the latter trigger agreement on the verb, presumably, because only nominal phrases can agree with the verb.  
\textsuperscript{23} Portuguese behaves like English in this respect (Costa 1998).  
\textsuperscript{24} As S. Barbiers (p.c.) points out to me, manner adverbs in Dutch also intervene between the object and the verb, and between PP complements and the verb. Such facts can be easily accommodated if we assume that the basic order is [O-manner Adv-V] (cf. Barbiers 2000). However, definiteness effects may have to be taken into consideration, since indefinite objects with a weak reading (de Hoop 1992) usually follow adverbs (Zwart 1993).
(38) a. 

\[
\begin{array}{c}
\text{DP}_{\text{subj}} \\
\text{vP} \\
\text{DP}_{\text{obj}} \\
\text{vP} \\
\text{V} \\
\text{Adv}
\end{array}
\]

\[
\begin{array}{c}
\text{John} \\
\text{did} \\
\text{the work} \\
\text{t}_{\text{v}} \\
\text{well}
\end{array}
\]

b. John did the work well

If our analysis that manner adverbs are generated as lefthand sisters of V in Basque is correct, then we can use the position of these adverbs to detect whether the complex verb has moved to a (leftward) position higher than Aux°. Unless the verb moves to a position higher than Aux°, we will not see the consequences of such a movement, because the [V-Aux] verbal complex is rightmost in the unmarked order.

On the other hand, this analysis captures the fact that these adverbs tend to be foci (cf. Osa 1990). This follows straightforwardly, since manner adverbs are the most deeply embedded element to the left of [V-Aux]. In addition, given what we discussed so far, the lack of asymmetry in the ordering of adverbs with respect to nominal and PP-complements in Basque receives a straightforward explanation.\(^25\) Recall from chapter 2 that I do not assume the existence of AgrPs in Basque. Rather, I adopt Chomsky's (1995) proposal that Case-checking of the direct object takes place by moving the object to the specifier position of AspP. The same applies to the indirect object, given our conclusion from chapter 3 that the indirect object is a DP in Basque. However, PP complements do not need to license any features, and thus, they arguably remain in their base-position, as shown in (35) to (37). If we are right in our assumptions on the base-position of verbal complements and of manner adverbs of the ondo type, the movement of the object to the specifier of AspP will not trigger any change in the ordering with regard to the adverb, as compared to a PP-complement, since the adverb occupies a lower position than the base-position of verbal complements. In fact, under an AgrP-based theory, which posits the manner adverb adjoined to the left of VP, the

\(^{25}\) Also, under this analysis we would predict V-O-well to be the correct order in English and Portuguese (assuming that the verb undergoes movement), as is indeed correct, but we would also predict the order V-PP-well, which is not found in these languages (unless the manner adverb is heavily stressed). One possible way out to this problem, suggested to me by L. Cheng (p.c.), would be to adopt a Larsonian V'-reanalysis of the node [V-well] across the PP. Under a 'complex' predicate raising analysis, the PP remains in-situ, as expected, given what we discussed above.
symmetric behaviour of PP- and nominal complements observed in Basque could not be easily explained, for, even if we assumed that nominal complements raise to AgrOP (Chomsky 1993), we would expect PP-complements to remain in-situ (i.e., post-adverbially), since they do not have to check Case nor agreement features. An AgrP-based theory therefore predicts an asymmetry between objects and PP-complements while the analysis posited in this thesis does not.

5.3.1.3. Postverbal VP-manner adverbs

We started this section with the aim to show that the distribution of adverbs (of the relevant type) can serve as a diagnostic for the movement of the verbal complex to T and C. Next I will provide empirical evidence that shows that this analysis is indeed correct.

Departing from the SOAdvV-Aux base-order, if the complex V moves across the adverb, we expect that the SOV-AuxAdv word order should be possible, as well as the SV-AuxOAdv order. In effect, both orders are well-formed:

(39) SOV-AuxAdv
    Jonek azken azterketa burutu zuen txarto
    Jon.erg last exam.det finish aux badly

(40) S V-Aux O Adv
    Jonek burutu zuen azken azterketa txarto
    Jon.erg finish aux last exam.det badly

As discussed in previous chapters, the movement of the verb is not optional. It triggers some effects on the focus interpretation of the sentence. Thus, in (39), the object is interpreted as focus, whereas in (40) it is the subject that receives a focus interpretation. This is a side effect of the fact that a constituent that expresses new information focus must appear left-adjacent to the complex verb. Also, by raising the verb, the postverbal manner adverb in (39) and both the adverb and the object in (40) get interpreted as old/given information (see chapter 4, especially section 4.2 and 4.4, where I describe and discuss the focus facts in Basque).

So far I have not said which the landing site of the complex [V-Aux] is in the examples in (39) and (40). Assuming the conclusions we arrived at in chapter 4, the verb moves to C in both (39) and (40). This explains the adjacency observed between the focus phrase and the verbal head in focus constructions.

Note that the ordering in (39) and (40) (especially (39)) is compatible with an account according to which the adverb is right-dislocated. Nevertheless, in the following sections I will discuss possible orderings among different types of adverbs, as well as the scopal effects derived from permuting the order between a quantified object and an adverb of scope, which lead us to discard a rightward movement account for the constituents that appear postverbally. As a matter of fact, these data support the V-Aux movement analysis posited in this thesis.
5.3.2. Sentence adverbs

Unlike the manner adverbs we have examined in the foregoing section, adjunct PPs and most sentence adverbs do not have a clearcut position in the structure of the sentence in Basque.\(^\text{26}\) Thus, they may appear sentence-initially, in intermediate positions, or sentence-finally. Furthermore, in contrast with arguments and manner adverbs, when sentence adverbs appear postverbally, they can still get interpreted as new information. Compare the pair of sentences below:

\(\text{(41)}\)

a. Jonek ipuinak kontatu zituen atzo
   Jon.erg stories tell aux yesterday
   “Jon told some stories yesterday”

b. #Jonek ipuinak kontatu zituen ondo
   Jon.erg stories tell aux well
   “Jon told some stories well”

The sentence in (41a) can be uttered in a typical ‘out of the blue’ context, which means that all and each of the clausal constituents, including the sentence adverb \textit{atzo}, express new (non-presupposed) information. In contrast, (41b) cannot be uttered felicitously in an out of the blue context, since the postverbal adverb gets a background reading, while the preverbal object is focus.

The examples in (42) illustrate other possible positions of a sentence adverb like \textit{atzo} ‘yesterday’. In addition to the postverbal position we have just presented (41a), \textit{atzo} can appear in sentence-initial position, as shown in (42a), following the subject (42b), and it can occur to the immediate left of the verb, as in (42c), yielding a focus interpretation on the adverb:

\(\text{(42)}\)

a. Atzo Jonek ipuinak kontatu zituen
   yesterday Jon.erg stories tell aux

b. Jonek atzo ipuinak kontatu zituen
   Jon.erg yesterday stories tell aux

c. Jonek ipuinak atzo kontatu zituen
   Jon.erg stories yesterday tell aux

The distribution of sentence adverbs contrasts thus with that of manner adverbs. Recall from section 5.3.1.2 above that the canonical position of a manner adverb, e.g., \textit{ondo} ‘well’, is to the immediate left of the V-Aux complex. It cannot occur in other position than the immediate preverbal one, when it occurs at the left periphery of the clause:

\(\textit{\text{As Osa (1990) puts it, unlike manner adverbs in general, time-place adverbials have a freer distribution in the structure of the sentence in Basque. Thus, except for when they occur in focus position, time-place adverbials can appear in several positions, and yet yield a neutral reading on the sentence.}}\)

\(^{26}\)
(43) a. *Jonek ondo ipuinak kontatu ditu
    Jon.erg well stories tell aux

b. *ondo Jonek ipuinak kontatu ditu
    well Jon.erg stories tell aux

Nonetheless, as was shown above (41b), manner adverbs can also appear postverbally by discourse reasons (i.e., to focalize the direct object), which, assuming the analysis of focus presented in chapter 4, indicates that the verb has raised across the adverb.

The crucial difference in the distribution of the two types of adverbs lies in their base-position, which in turn is determined by the type of semantic object that they modify. As was argued earlier, VP-adverbs like txarto and ondo are generated in the VP domain, and they cannot occur outside that domain, unless when focalized in sentence-initial position, immediately followed by V-Aux, as in Ondo kontatu zituen ipuinak ‘He told the stories WELL’. On the other hand, higher sentence adverbs like atzo take the IP/TP domain as their modificie, and thus, they have a wider range of positions where they can occur. We saw above that yesterday type of adverbs in Basque can adjoin to the highest functional projection (see (42a) and (41a)), as well as to a position below the landing-site of the subject, but higher than the surface position of the object (perhaps TP or AuxP (cf. (42b)). In addition, atzo may also appear in immediate preverbal position (42c). However, I do not take this fact as an indication that the adverb is adjoined to VP. The reason for this is that the occurrence of a sentence adverb in this position has non-trivial consequences for the interpretation of the sentence. In (42c) the adverb constitutes the (only) focus of the sentence, and the other constituents get necessarily interpreted as known information. Given my analysis of focus constructions developed in chapter 4, this implies that atzo ‘yesterday’ in (42c) is adjoined to CP, and that the pre-adverbal constituents occupy a topic position.

As for the sentence-final position of the adverb in (41a), one might a priori assume that it is generated there, as a right-adjunct to TP, or CP. Indeed, (42a), (42b) and (41a) have the same interpretation as regards to the information structure of the sentence. That is, all three sentences can be uttered in an out-of-the blue context, which suggests that the three represent the unmarked order for a sentence adverb such as atzo ‘yesterday’. In this respect, sentence adverbs contrast with manner adverbs, which cannot appear postverbally and still be interpreted as new information.

Evidently, placing the adverb in sentence-final position, as a right-adjunct, enters into problems with a theory of phrase structure that does not allow for right-adjunction (Kayne 1994, Haider 1993, 1997, Barbiers 1995, 2000, a.o.). Nonetheless, as was noted earlier, I do not assume Antisymmetry in this work. In fact, in chapter 3 I have left open the possibility that in certain dialects of Basque the indirect object can be optionally generated as a right-adjunct to VP. However, I believe that there is an alternative way to account for the sentence-final position of adverbs in sentences like (41a) via leftward movement of an extended projection of VP across the sentence adverb. This alternative analysis is suggested in Costa
(1998), which is based on a proposal put forth in Barbiers (1995). Suppose we say that adverbs are XPs which can project if an element merges in their specifiers (cf. Barbiers 1995; cf. also Cinque 1999 for the idea that adverbs project their own phrase). Suppose we assume that (41a) is derived from (42a) by moving TP into the specifier of atzo, so that the adverb, which takes scope over the entire sentence, is interpreted as a sentence-modifier. Such an analysis can be readily implemented assuming Barbiers’ (1995) approach to modification relations in syntax. As we will see, this theory will allow us to solve the problem of sentence-final adverbs without having to resort to a right-adjunction configuration.

Barbiers proposes that every node in a configuration is relevant for semantic interpretation. Thus, any kind of movement must be motivated by interpretive reasons. In order to constrain and govern the generation of interpretable configurations, he formulates the Principle of Semantic Interpretation, described in (44):

(44) **Principle of Semantic Interpretation (PSI)**

(i) The node Z establishes a S(emantic)-relation between the nodes X and Y iff X immediately c-commands Z and Z immediately c-commands Y  
(ii) The node Z is a qualifier of Y iff Z establishes a S-relation between X and Y, and X and Y are coindexed

Hence, given (44), for an adverb to be interpreted as a qualifier or a modifier, it has to occur in a configuration which is determined by the PSI. To illustrate this, consider the examples in (41a) and (42a) again. In (42a), with the Adv S O V-Aux word order, the adverb is left-adjointed to TP, and is interpreted as having scope over the entire sentence. (41a) has the same interpretation, but the adverb occupies a different position in the surface structure (S O V-Aux Adv). Notwithstanding apparent positional differences, I will assume, as in Barbiers’ approach, that the sentence adverb and the TP have the same configuration in the two sentences, given that they have the same interpretation. Given (44), the relevant configuration at stake must be one in which the modifiee (i.e. the sentence) c-commands the adverb, and the adverb immediately c-commands an element coindexed with the modifiee (that is, the trace of the sentence, i.e., TP). Such a configuration is involved in (41a), and represented in (45), which is derived via leftward movement of TP into the specifier position of the adverb atzo.

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27 Here I will not offer a detailed discussion of his approach, I therefore refer the reader to Barbiers’ own work for further details.  
28 Note that this is not a lowering movement, since AdvP is a segment (an adjunct) of TP.
This movement operation yields the configuration required by the PSI for the adverb to be interpreted as a modifier of the sentence (TP). Note, though, that the fact that the same interpretation and scope effects apply to (42a) suggests that the movement of TP to the specifier of the adverb can be postponed until LF, as in the framework of Chomsky (1995). Therefore, the difference between (41a) and (42a) lies on the position in which TP is spelled-out: either in the target site (41a) (= (45)) or in its base-position (42a).

5.3.3. Ordering between adverbs

When more than one adverb cooccurs in a sentence, they do not appear ordered in an arbitrary way, but instead, they display an order which reflects a structural hierarchy, based on the relative scope of the adverbs with respect to the arguments they modify. Hence, I will adopt the standard assumption that claims that adverbs are distributed hierarchically, according to their semantic meaning, and to their possible adjunction-sites (cf. among others, Ernst 1998, Cinque 1999, Alexiadou 1997). In order to demonstrate the validity of this assumption, we will consider different orderings between sentence adverbs and manner adverbs when they occur both at the left and the right periphery of the V-Aux.

5.3.3.1. Sentence and manner adverbs in preverbal position

The unmarked order for the cooccurrence of a sentence adverb such as atzo and a VP-manner adverb like txarto is one in which the sentence adverb precedes the manner adverb, as illustrated in (46a) and (46f). In addition, the manner adverb must be adjacent to the verb (46d). If the precedence relation between the two adverbs is inverted, the sentence is ruled out:

\[
\begin{align*}
(46) & \quad \text{a. Atzo Jonek ipuin batzuk txarto kontatu zituen} \\
& \quad \text{yesterday Jon.erg story some badly tell aux} \\
& \quad \text{"Yesterday John told some stories badly"} \\
& \quad \text{b. *Txarto Jonek ipuin batzuk atzo kontatu zituen} \\
& \quad \text{badly Jon.erg story some yesterday tell aux} \\
& \quad \text{c. *Txarto atzo Jonek ipuin batzuk kontatu zituen} \\
& \quad \text{badly yesterday Jon.erg story some tell aux} \\
& \quad \text{d. *Atzo txarto Jonek ipuin batzuk kontatu zituen} \\
& \quad \text{yesterday badly Jon.erg story some tell aux}
\end{align*}
\]
e. *Jonek ipuin batzuk txarto atzo kontatu zituen
   Jon.erg story some badly yesterday tell aux

f. Jonek ipuinak atzo txarto kontatu zituen
   Jon.erg stories yesterday badly tell aux

The ungrammaticality that results from the linear order txarto-atzo ‘badly-yesterday’ is arguably due to the fact that in such a configuration the manner adverb does not immediately c-command its semantic argument, viz. the verb. Put it differently, the manner adverb is a V-modifier, and in order to modify V, the adverb has to immediately c-command it, as stated by the PSI (cf. (44i)). However, in (46b), (46c), (46d) and (46e) there is no possible configuration in which the immediate c-command requirement for txarto to be interpreted as a modifier of V could be met. Therefore, the sentences are ruled out.

5.3.3.2. Sentence adverb-VAux-manner adverb

We saw above that the sentential adverb must precede the manner adverb when both appear in preverbal position. We derived this result from the fact that the scope requirements of each type of adverb must be met. A relevant question is then whether the semantic requirements are also satisfied when the sentence adverb occurs preverbally, and the manner adverb shows up in postverbal position, as in (47):

(47) a. Atzo Jonek ipuin batzuk kontatu zituen txarto
    yesterday Jon.erg story some tell aux badly
b. Jonek atzo ipuin batzuk kontatu zituen txarto
    Jon.erg yesterday story some tell aux badly

The above sentences are ruled in, which means that the postverbal manner adverb txarto can be properly interpreted as a modifier of the event expressed by V. As I will show, the data are readily captured under a V-movement account. The argument goes as follows. Starting from the base order sentence adverb-manner adverb-VAux, the order sentence adverb-VAux-manner adverb can be derived by assuming that the verb has moved across the manner adverb. On this assumption, the grammaticality of the sentences in (47a-b) is easily accounted for, since under this analysis, after V-raising, the V-Aux c-commands the manner adverb, and this immediately c-commands the trace of its semantic argument, viz., the verb. Thus, txarto gets interpreted as a modifier of the verb, and the sentences are ruled in.

There are two possible alternative derivations of the linear order observed in (47a-b), namely by moving txarto rightwards, or by freely base-generating the adverb as a right-adject of. I will discard the base-generated right-adjunct account, given that the ordering in (47) forces a ‘background’ information reading

29 More specifically, the verb first moves to Aux, and secondly, the complex [V-Aux] moves to the left of the manner adverb.
on the adverb. If the manner adverb could be freely generated to the right of the verb, we would expect that it could also express new information when appearing in that position. However, generating the manner adverb to the right of the verb is not free of charge, so to speak, and forces a focus interpretation on the constituent most immediately adjacent to the verb, namely, the direct object. This contrasts with (46a), wherein the manner adverb appears to the immediate left of the verb, and no obligatory focus reading on the preverbal element holds. In fact, (46a) is ambiguous between a neutral unmarked sentence and a focus reading on the (in-situ) adverb.

If we consider the second alternative, namely, that the linear order in (47) is derived by moving txarto rightwards, we predict that the sentence should be ruled out. This conclusion derives from the attachment-site of the right-dislocated adverb. Bear in mind that I assume that V raises to Aux before it proceeds moving further up. Hence, given that the adverb txarto follows V-Aux, the adverb must be adjoined to some node not lower than AuxP. But from that position the adverb cannot immediately c-command its semantic argument, so the manner adverb cannot be interpreted as a V-modifier. Therefore, the expectation is that the sentences in (47) could not be properly interpreted, contrary to facts.

In contrast, as we have seen, under a leftward V-movement account the linear order and correct interpretation of these sentences are easily derived. We conclude therefore that the V-aux movement account captures the facts in a straightforward way, whereas a rightward movement approach actually predicts the opposite results.

5.3.3.3. *Postverbal sentence and manner adverbs*

More relevant for our discussion is to examine cases where both types of adverbs occur postverbally, as in (48):

(48)  
   a. ??Jonek ipuin batzuk kontatu zituen atzo txarto  
       Jon.erg story some tell aux yesterday badly
   b. ??/okJonek ipuin batzuk kontatu zituen txarto atzo  
       Jon.erg story some tell aux badly yesterday

As discussed before in relation to (47), there are (at least) two possible derivations for the postverbal occurrence of the adverbs: (i) that both adverbs have been extraposed to the right of the verb, or (ii) that the complex verb (or an extended projection of VP) has moved across the adverbs. The fact that there is a contrast between (48a) and (48b) disfavors a rightward-movement analysis, given that under such an account we would expect the same grammaticality status for both orders in the examples in (48). This follows from the well-known fact that the ordering relations between right-dislocated adjuncts is free (cf. Vallduví 1992, Villalba 1999 for some discussion of right-dislocation in Catalan). Nevertheless, while the order *V-sentence adverb-manner adverb* in (48a) renders an ill-formed sentence, the reverse order *V-manner adverb-sentence adverb* (48b) yields a well-formed sentence (for some speakers, it is a bit marginal, hence the question mark).
Notice that the facts presented in (48) are not directly explained by a V-Aux movement analysis either. If only V-Aux movement were involved, we would expect the linear order in (48a) to be possible, by moving the verb first to the left of *txarto*, then to the left of *atzo*.

Interestingly, the linear order of the postverbal adverbs in (48b) is the mirror image of the preverbal order, where the sentence adverb precedes the manner adverb (cf. (46a) and (46e) above). In principle, we can think of two possible analyses that can derive the mirror effects: (i) by claiming that each type of adverb is base-generated to the right of the V-Aux complex, attached to different projections, depending on their scope requirements, or (ii) by postulating that (49b) involves movement of an extended projection of VP across the sentence adverb. In fact, the latter analysis has been recently pursued by Barbiers (2000) to capture the mirror effects in English and Dutch.

Adopting alternative (i) implies that the manner adverb is attached to a lower projection (e.g. VP) than the attachment site of the sentence adverb (e.g. TP or CP). This would result in a configuration in which the rightmost postverbal element (e.g. the sentence adverb *atzo*) c-commands the preceding adverb. However, I will present some evidence that shows that this is not the correct approach to adopt. The argument is drawn from variable binding facts. Assuming that a pronoun can be interpreted as a bound variable if it is under the c-command domain of a quantified phrase, the following examples show that given a linear order with two postverbal PPs, the PP closest to the verb c-commands into the following PP, and not the other way around:

(49) a. *Protestatze-ra joan ginen [bere, idazlearengana] [liburu bakoitzarekin,] complain-for go aux its author-to book each-with "We went to complain to its author with each book"
   b. *Protestatzerra joan ginen [liburu bakoitzarekin,] [bere, idazlearengana] complain-for go aux book each-with its author-to

Note that the comparison with the adverbs in the pair in (48) is relevant, since the directional PP *bere idazlearengana* 'to its author' corresponds to a VP-adverb like *txarto*, whereas the PP *liburu bakoitzarekin* 'with each book' corresponds to a sentence adverb like *atzo*. The data indicate that the leftmost postverbal quantified PP can bind a pronoun contained within a following PP (49b), but the rightmost PP cannot bind a preceding PP (49a). These results are incompatible with a right-dislocation analysis of the postverbal PPs. In fact, they suggest that postverbal material remains in-situ. From this, I conclude that the sequence [*txarto-atzo*], exemplified in (48b), is not the result of right-dislocation of the two adverbs.

It is theoretically possible to propose that sentence adverbs like *atzo* may be generated as left or right adjuncts to TP or CP, as is argued in Ernst (1998), while manner adverbs like *ondo* 'well' can only be left-adjoined to V, given the restrictions on word order and the effects on the focus interpretation of the sentence that manner adverbs display, as we have discussed earlier. On this view, the postverbal occurrence of the manner adverb in (48b) would be a result of V-
movement across the manner adverb. However, as we discussed earlier with respect to (41a), there is an alternative way to account for the sentence-final position of sentence adverbs via leftward movement of an extended projection of VP across the sentence adverb, instead of postulating right-adjunction of sentence adverbs. Following Barbiers (1995, 2000), I will propose that (48b) involves VP-intraposition, more concretely, movement of TP into the specifier of the sentence-adverb atzo.

Let us consider this hypothesis more in detail. Recall that I assume that each type of adverb must c-command its semantic argument in order to be properly interpreted as a modifier. Suppose now that in the derivation of (48b) the sentence adverb atzo is left-adjointed to TP, and that the V-Aux complex first raises to the left of the manner adverb, e.g. to T, stranding the VP-adverb behind. In this configuration the scope requirement of txarto is correctly met (it immediately c-commands the trace of V), and the sentence is fine. In a second step, the entire TP moves into the specifier of the sentence adverb, yielding the linear order S O V-Aux txarto atzo, given in (48b). By means of this movement, the sentence adverb is interpreted as what it is, e.g. a modifier of the sentence, given that in this configuration it can fulfill its scope requirements: the moved TP immediately c-commands the sentence adverb, and this immediately c-commands the trace of TP.

As regards to (48a), the sentence is ungrammatical because in that order txarto fails to be interpreted as a V modifier, since it does not immediately c-command its semantic argument. Moreover, if our assumption that (48b) involves movement of TP across the sentence adverb is correct, there is no possible derivation that moves TP across the sentence adverb, stranding the manner adverb behind. If the VP or an extended projection of VP undergoes movement, manner adverbs necessarily move as well (as free-riders); they cannot be stranded in a lower position.30 From all these considerations, it follows that (48a) is not a possible order.

This explanation of the facts predicts that it should be impossible to have sentences like (50a). If the TP moves to the specifier of atzo, as suggested here, the object has to move as well. Accordingly, the object cannot be stranded, ruling (50a) out:

(50)  
   a. *Jonek kontatu zituen txarto atzo ipin batzuk
        Jon.erg tell aux badly yesterday story some
   b. Jonek kontatu zituen ipuin batzuk txario atzo
        Jon.erg tell aux story some badly yesterday

In view of the facts discussed so far, we may conclude the following: the distribution of postverbal VP manner adverbs like ondo, txarto in Basque are the result of complex V-Aux movement. Postverbal sentence adverbs are possibly the result of TP-Intraposition, that is, movement of TP, the semantic argument of the

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30 Unless the manner adverb moves before TP moves, of course. But we have already shown that ondo, txarto type of adverbs cannot be displaced (cf. (35b,c)).
sentence adverb, to the specifier of the adverb in order for the adverb to be interpreted as a modifier of TP. In addition, the asymmetric ordering of postverbal adverbs of different types suggests a pattern that involves a combination of V-Aux movement and the movement of a larger projection of VP (TP) to the specifier of the sentence adverb. What is relevant for the discussion is that the adverbial data, especially manner adverbs, strongly suggest that the fact that these adverbs may appear in postverbal position is not due to rightward movement, but rather, to the fact that the verb moves across the manner adverb. Thus, Basque has overt verb movement.

5.3.4. Scope dependencies between adverbs of scope and quantifiers

A further test to explore the interaction of verb movement with the distribution of adverbs is to compare the scope of VP-adverbs like askotan ‘often’ with respect to a quantified object when they surface in pre- and postverbal position. As is well-known, scope dominance generally reflects a hierarchical dominance. The idea, thus, is to see whether the scopal relations established between a preverbal quantificational object and a postverbal quantified adverb are the same as when both appear in preverbal position. If the scope facts are the same in both orders, then we have found further support for the V-Aux movement account. On the other hand, if the postverbal quantified adverb were analyzed as a right-dislocate, we would expect it to take scope over lower preverbal material. The predictions which each account makes are therefore distinct. The data given below show that the V-movement hypothesis yields the desired results. Let us consider the following sentences:

\[(51)\]  
a. Jonek askotan hiru egunkari irakurtzen ditu  
   \text{Jon.erg often three paper read aux}  
   \text{Often} \geq \text{O (John often reads three papers at the same time), } \* \geq \text{O} \geq \text{often}  
b. Jonek hiru egunkari askotan irakurtzen ditu  
   \text{Jon.erg three paper often read aux}  
   \text{“John often reads three newspapers”}  
   \text{O} \geq \text{often (there are 3 papers that Jon often reads)}  
   \text{?} \geq \text{often} \geq \text{O (John often reads three papers at the same time)}  
c. Jonek hiru egunkari irakurtzen ditu askotan  
   \text{Jon.erg three paper read aux often}  
   \text{O} \geq \text{often (there are 3 papers that Jon often reads), } \* \geq \text{O} \geq \text{often}  
d. Jonek askotan irakurtzen ditu hiru egunkari  
   \text{Jon.erg often read aux three paper}  
   \text{Often} \geq \text{O (John often reads three papers at the same time), } \* \geq \text{O} \geq \text{often}  

The facts illustrated above are revealing. Assuming that having wide scope implies being hierarchically dominant, we can describe the facts illustrated in (51) in the following way. In (51a) the adverb c-commands the quantified object, while in (51b) the object most preferably takes scope over the adverb. Scope is thus read off at surface structure. Crucially, the adverb askotan cannot take wide scope over
the object when it appears postverbally (51c), nor can the postverbal object take scope over the adverb in (51d). These results are unexpected if the derivation of (51c) and (51d) involves rightward movement of the adverb and the quantified object, respectively. However, the results are predicted if the order in (51c) and (51d) arise as a result of V-movement. We can therefore conclude that the scope effects observed in the set of data given in (51) are straightforwardly captured on the assumption that the complex V-Aux moves in Basque.

5.4. Postverbal Small Clause complements

This proposal receives additional support from the distribution of Small Clause (SC) complements. In other OV languages like German and Dutch, SC-complements cannot occur postverbally (52b), although other constituents, such as PP adjuncts and PP complements may occur in that position (cf. Barbiers 2000). This is illustrated with the Dutch examples in (52) (the brackets around the PP adjunct in (52c) indicate that the PP may occur in either position):

(52)  
a. Ed zal [de deur rood] verven
    Ed will the door red paint
b. *Ed zal de deur verven rood

Barbiers (1995) shows convincingly that an analysis of the VP-PP linear order involving PP extraposition (i.e. moving PP to the right of VP) is empirically inadequate. In order to account for the distribution of PPs to the right of the verb in Dutch, Barbiers proposes that a constituent XP can surface in a position following the base position of the verb as a result of VP Intraposition, that is, by moving the VP into the specifier of PP. In this way, the PP adjunct is interpreted as predating of VP: \[31\]

(53) \[
\begin{array}{c}
\text{VP} \\
\text{PP} \\
\text{VP}_i \\
\text{PP} \\
t_i \\
\end{array}
\]

This analysis explains why SC complements are disallowed to occur postverbally in Dutch (52b). Notice that a small clause complement has its own subject (viz. the DP object de deur). Thus, VP Intraposition cannot take place in this case because the specifier of the SC adjective is already filled in with its own subject.

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31 As for the optionality of VP Intraposition, reflected in the two possible linear orders of the PP adjunct in (52c), Barbiers argues that the question reduces to whether the VP is spelled out in the base position or in its landing site.
In the light of this analysis, consider Basque now. In contrast to Dutch (and German), Basque allows both SC-complements and PP adjuncts to occur postverbally (54b-c):

(54) a. Amak [atea gorriz] pintatuko du
    mother.erg door.det red paint.fut aux
    "Mother will paint the door red"

b. Amak atea pintatuko du gorriz
    mother.erg door.det paint aux red

c. Amak (igand-etan) egunkaria irakurtzen du (igandetan)
    mother.erg (sundays-in) newspaper.det read aux (sunday.in)
    "(On Sundays) mother reads the newspaper (on Sundays)"

We have seen earlier (section 5.3.3) that there is evidence for the existence of TP Intraposition in Basque. However, (54b) cannot be derived by moving TP into the specifier of the small clause complement gorriz ‘(with red)’, given the reasoning above discussed concerning the ungrammaticality of the Dutch sentence in (52b). But there is an alternative analysis that can explain the distribution of SC complements in Basque by assuming that they can surface in postverbal position as a result of V-Aux movement:

(55) Amak [XP [atea] [pintatuko du] [PPgorriz]] tv-aux

In this way, the difference between Dutch and Basque with respect to the occurrence of small clause complements at the right periphery of the clause can be attributed to the fact that Basque has verb movement, whereas Dutch only has VP movement.

In the next section further evidence will be presented that supports the claim that the complex verb moves in Basque. The evidence comes from the behaviour of idioms, specifically, of phrasal idioms like kick the bucket, which allow an idiomatic reading only when the constituents of the idiom are adjacent. It will be shown that the VO order must be derived by syntactic leftward movement of the verb, when it allows an idiomatic reading.

5.5. Idioms

It is widely assumed that idioms like the prototypical kick the bucket ‘die’ have a number of semantic and syntactic properties which characterizes them as ‘idiomatic expressions’. One of these properties is their conventionality: that is, the meaning of an idiom usually cannot be predicted from the use or meaning of its constituents when they appear in isolation from one another. This is the case of kick the bucket in English, or adarra jo in Basque, which has the literal meaning of ‘hit the horn’, but also the idiomatic meaning ‘pull someone’s leg’, ‘tease someone’. Another important property of idioms, which will constitute the main
point of our discussion, is their relatively poor syntactic flexibility. In most cases, idiomatic phrases lose their idiomatic reading when the parts of the idiom are separated syntactically.\(^{32}\) As an illustration, consider the expression *kick the bucket* again. This idiom has the syntactic structure of a normal verb phrase. However, if we passivize the sentence, the idiomatic reading disappears. In (56) only the literal interpretation of the verb phrase is available:

(56) The bucket was kicked by Pete

The absence of an idiomatic interpretation in (56) is presumably due to the fact that the idiom reading is assigned to the whole VP-phrasal construction, not only to the verb, *kick*, which, when passivized, only means ‘kick’, not ‘die’. There is simply no mechanism that can assign an idiomatic interpretation to the VP-construction in (56) since the parts of the idiom do not constitute a unit, neither at the level of Spell Out, nor at LF.

We can thus formulate the generalization that the idiomatic reading disappears whenever the adjacency between the verb and the (idiomatic) complement is disrupted (cf. also Schachter 1973 and Vergnaud 1974). This amounts to saying that the elements of an idiom must constitute a unit in order to be properly interpreted (cf. Chomsky 1993). Note, however, that there is no requirement that forces such a unit to be made fully explicit in syntax; in fact, there is evidence that suggests that the adjacency requirement needed to achieve the idiomatic interpretation applies at LF. Consider the following example, taken from Chomsky (1993):

(57) John wonders which pictures of himself Bill took

The wh-phrase *which pictures of himself* occupies the embedded [Spec,CP] position. It contains an anaphor, *himself*, which can be bound either by *John* or by *Bill*, depending on whether the fronted wh-phrase (or the non-wh part that is pied-piped along with the wh-phrase) reconstructs to its base position or not. If it does not reconstruct, the anaphor gets bound by the matrix subject, whereas if there is reconstruction, the embedded subject *Bill* binds the reflexive. Taking into account that *take pictures* can have an additional idiomatic reading, meaning ‘photograph’, Chomsky (1993) makes an interesting observation. He points out that the idiomatic reading only obtains when the antecedent of the anaphor is *Bill*. This fact finds a straightforward explanation if we assume that the parts of an idiom must be adjacent at LF, forming a unit, as mentioned before. Accordingly, if the wh-phrase reconstructs to the base-position in (57), we expect that the idiomatic interpretation will be available, and vice versa, that it will not obtain if no reconstruction takes place. The prediction is borne out, according to Chomsky (1993).

\(^{32}\) For some exceptions to this, see Nunberg, Sag and Wasow (1994). Cf. also Schenk (1993) for a discussion on the syntactic behaviour of idioms.
Similar facts that hinge on the existence of reconstruction-like effects are observed in Basque. Consider the following pair of sentences: (58a) exemplifies a sentence containing the idiomatic expression *adarra jo* ‘pull someone’s leg’ in the unmarked order, whereas (58b) is a wh-question involving the same idiomatic expression:

(58)  
a. Maisu-a-k ikasle-a-ri adarra jo dio  
teacher-det-erg student.det-dat horn hit aux  
“(literal meaning) The teacher has hit the horn for the student”  
“(intended meaning): The teacher has pulled the student’s leg”  
b. Nori jo dio maisuak adarra?  
Who-dat hit aux teacher.erg horn  
(intended meaning: whom did the teacher hit the horn to?)  
(intended meaning) “Who is it such that the teacher pulled his leg?”

The idiomatic reading of (58a) follows straightforwardly since no movement is involved and the verb and the idiomatic object are adjacent to each other. The idiomatic interpretation is also available in (58b), despite the fact that the verb and the idiomatic object appear in non-adjacent positions. Since (58b) is an interrogative sentence, I assume without further discussion that the complex verb has moved to C, leaving the idiomatic object behind. To account for the availability of the idiomatic reading in that sentence, I will adopt Chomsky’s (1993) proposal that the LF copy of a moved category can satisfy the adjacency requirement that is needed to make the idiomatic reading possible.

Chomsky (1993:34-41) posits a theory of reconstruction, based on the assumption that traces are copies of the moved category that fail to be spelled out in the phonetic representation, but are present in the LF derivation. If we apply this idea to the idiomatic construction given in (58b), this implies that the copy of the moved verb is not deleted at LF, and that it is interpreted in its base position, satisfying hence the adjacency requirement.

The following discussion will be based on these two assumptions, namely (i) that the parts that form the idiom (e.g. O and V) must be adjacent to one another in order to have an idiomatic interpretation, and (ii) that overt head movement of the complex verb does not block the idiomatic reading, because it is interpreted in its base position.

Next I will examine a number of constructions in which the object and the verbal complex which constitute the idiomatic phrase appear ordered in different ways. Some of these orders allow an idiomatic reading, while others do not. The generalization seems to be that the idiomatic object cannot move by itself, unless it carries the verb along with it. The verb alone can move, but only if it is not focused or topicalized. Otherwise, the idiomatic interpretation is lost. This is due to the fact that the interpretation forced by topicalization or focalization of an idiom chunk is incompatible with an idiom reading. Thus, the consequence of this is that an idiomatic interpretation is allowed whenever the idiomatic object is within the vP.33

33 I owe much of the discussion of this section to S. Barbiers (p.c.) and L. Cheng (p.c.).
Having this in mind, let us start by looking at the following example, where the idiomatic object appears following the complex verb, and where the indirect object is focused:

(59) Maisuak ikaslea-ri jo dio adarra
teacher.erg student-dat hit aux horn
“The teacher has pulled the student’s leg”

The idiomatic reading is available in (59). This can be explained if we assume that in the derivation of (59) the idiomatic object is in-situ, and that the V-Aux complex has moved across the object. Given the focus reading on the indirect object, and assuming the analysis of focus developed in chapter 4, this means that the V-Aux is in C. At LF, the copy of the moved verb is not deleted, so that the adjacency requirement between the two parts of the idiomatic expression is satisfied, and as a result, the idiomatic reading is available. Note that an analysis of the order in (59) in terms of rightward movement of the idiomatic object seems implausible, since, given that the idiom chunk appears following the auxiliary, that would mean that the idiomatic object is at least right-adjointed to AuxP. But then the idiom chunk would be outside the domain of VP. As a consequence, the adjacency requirement would be disrupted and we would expect the idiomatic interpretation not to be possible. In fact, the predictions are born out in Spanish (cf. (60) below), where we see that an idiom chunk cannot occur in clitic right-dislocated constructions (CLRD):34

(60) *El profesor se lo ha tomado al estudiante, el pelo
the teacher cl cl aux taken to-the student the hair
“(intended meaning): The teacher has pulled the student, his leg”

The same results are observed in Basque with clear cases of right dislocation. The idiomatic object in the example below is right-dislocated, as can be shown by the fact that it is preceded by a pause. In these cases, the idiomatic reading is not available:

(61) *Ia egunero jotzen dio Mikeli Jonen adarra
almost every day hit aux Mikel.dat Jon.en all in front horn
“(intended meaning): Jon almost always pulls Mikel’s leg in front of all (of them)”

34 See also Van Riemsdijk & Zwarts (1974), Vat (1981), where it is argued that left dislocation of idiomatic expressions and of idiom chunks is impossible in Dutch and German:

(i) *opzien, dat heeft deze filmster veel gebaard
sensation that has this filmstar much caused
“This filmstar has caused a great stir” (Vat 1981:(9))
Given the above discussion, it can be concluded from the fact that the VP phrase in (59) has an idiomatic reading that the object is in-situ, and is not right-dislocated. Rather, the complex verb moves in syntax, but at LF it is the lower copy of the V which forms a unit with the idiomatic object that is interpreted, so the idiomatic reading is possible.

A similar account applies to the S V IO O order, illustrated in (62):

(62) Maisuak jo dio ikasleari adarra
    teacher hit aux student.dat horn

Taking into account that in this sentence the subject gets interpreted as focus, this implies that the V-Aux raises to C. The idiomatic reading is available because the idiomatic object has not moved out of the VP and the verb (e.g. its copy) is interpreted in the base position, where the adjacency requirement is satisfied, making therefore possible the idiomatic reading.

The S V O IO order is also possible with an idiomatic reading (cf. (63)):

(63) maisuak jo dio adarra ikasleari
    teacher hit aux horn student.dat

In fact, it is preferred to the S V IO O order (62), although both allow an idiomatic reading of the phrasal VP. Perhaps this has to do with the fact that the adjacency requirement of idiomatic phrases has also an effect on the phonetic representation. It may be the case that in the derivation of (63), after the verb raises to Aux, the remnant VP moves to the specifier of some functional projection below CP, say, to [Spec,AuxP] (This movement should take place after the indirect object moves out of the VP first). Given that the subject is focused, as discussed in relation to (62), this means that the complex verb raises further to C, deriving the S V-Aux O IO order. The idiomatic interpretation is possible because at LF the idiomatic object and the copy of the verb are within the VP.

Consider now (64):

(64) * jo dio maisuak ikasleari adarra
    hit aux teacher.erg student.dat horn

In the V S IO O word order the idiomatic reading is lost, because the complex verb appears in initial position, and therefore is interpreted as focus. That the idiomatic reading fails to apply in (64) is not surprising, as it is known from many languages that it is not possible to focus the verb of an idiomatic expression. However, given our earlier assumption that head movement of the V-Aux complex does not block the idiomatic interpretation, one may wonder why this reading is disallowed in V-focus contexts. The explanation for this has to do with the semantics associated with focused constituents. Thus, when something is narrowly focused, like e.g. the verb in (64), what we do is to pick the event denoted by the verb from a set of potential events that can be constructed with the elements of that sentence (Rooth 1985). Accordingly, in the text example, focusing the verb
requires having a set of alternative events that can be combined with horns and students. But then the idiomatic reading disappears, since there are no alternative events that can yield the idiosyncratic interpretation of *adarra jo 'pull someone’s leg'. Therefore, the verb jo in (64) can only have a literal meaning (‘hit’).

That the unavailability of an idiomatic interpretation in (64) is not motivated by the lack of adjacency between the verb and the object, but rather, because the V is focused, is shown by the following example, which lacks an idiomatic reading too:

(65) *jo dio adarra maisuak ikasleari
    hit aux horn teacher.erg student.dat

When the complex verb is preposed in a higher constituent that includes the object, like in the O V S IO order, given in (66), the idiom reading is still available. This is expected, as the two parts of the idiomatic construction are adjacent:

(66) adarra jo dio maisuak ikaslea-ri
    horn hit aux teacher student.dat

Given that the idiomatic object appears in immediate preverbal position, we would expect it to receive a focus interpretation, as has been extensively discussed in chapter 4. However, it does not get interpreted as the actual focus of the sentence. Rather, the whole idiomatic phrase [OV] is interpreted as the focus of the sentence. Similarly, it is impossible to find ‘long focus constructions’ like (67) while maintaining an idiomatic interpretation on the object, although the sentence is grammatical under a literal reading (the sentence-initial focus is associated with the embedded clause):

(67) *[CP adarra, ute dut [CP ti, jo diola maisuak ikasleari]]
    horn think aux hit aux-C teacher student.dat
I. "I think that the teacher has pulled the student's LEG" (not available)
II. "I think that the teacher hashit THE HORN to the student" (available reading)

The impossibility of focusing an idiom chunk is therefore due to the same reason that bans focusing the verb in idiomatic contexts, as was discussed above. That is, focus on the idiomatic object would imply that adarra 'horn' is a member of a set of objects that somebody can hit for somebody else. But this set of alternative objects does not exist. However, if the whole VP-idiom is focus, what we choose is the VP denoted by the idiomatic VP from a set of alternative VPs that can be combined with teachers and students. This reading is indeed possible, and hence the preposed VP idiom in (66) is interpreted as focus.

A further prediction that we can consider is that topicalization of idiom chunks will be impossible, as this would imply that the object has moved out of the VP, and thus the adjacency requirement would not be satisfied. More importantly, topicalizing an object which is part of an idiom would involve assigning a particular
discourse role to an element that does not have a referential reading. In other words, the idiomatic object *adarra* in (68) cannot refer to a contextually determinate horn, since it only has an idiosyncratic sense when it appears within the frozen expression *adarra jo*. In fact, it does not accept the plural (69), and it cannot be modified (70), unlike regular DPs. Thus, by lacking a referential interpretation, it follows that idiom chunks cannot be topicalized.

(68)  * adarra ikasleari jo dio maisuak
      horn student.dat hit aux teacher

(69)  * maisuak ikasleari adarrak jo dizkio
      teacher student.dat horn.pl hit aux

(70)  * maisuak ikasleari [zuk eman zenion] adarra jo dio
      teacher student.dat [you.erg give aux-rel] horn hit aux
      "The teacher has hit the horn that you gave him for the student"

Summing up, in this section I provided more evidence that indicates that there is V-Aux movement in Basque. Based on the assumption that the parts of an idiomatic expression must constitute a unit (i.e. be adjacent to one another) in order to have an idiomatic reading, it was argued that the fact that an idiomatic interpretation is still available when the V-Aux occurs in a lefthand position non-adjacent to the idiomatic object can be readily explained if we assume that the object remains within the VP, and that the V-Aux has moved to the left of the idiomatic object. Following Chomsky’s (1993) theory of reconstruction, I argued that the chain created by head movement of V leaves copies of the moved category in (intermediate and in) the base position, which are in fact responsible of satisfying the adjacency requirement imposed on idiomatic expressions.

In the next section I will examine the behaviour of bound anaphora, the binding relations between quantifier phrases and pronouns, and principle C effects in relation to the surface position of the verb. I will argue that the results obtained are easily captured if we assume that V-Aux movement is involved in these contexts.

5.6. Binding

In the preceding chapters I presented some evidence that supports the claim that S IO O V Aux is the unmarked order in Basque. From a detailed examination of the binding and scope facts observed in the S IO O V Aux neutral order, in chapter 3 it was shown that the indirect object asymmetrically c-commands the direct object. On the basis of similar data drawn from anaphor binding, variable binding and condition C effects, in what follows I will demonstrate that the derivations of the orderings given in (71b-d) involve leftward V-Aux movement.

The four linear orders I will be concerned with are the following:
(71) a. S IO O V-Aux
    b. S IO V-Aux O
    c. S V-Aux IO O
    d. V-Aux S IO O

(71a) represents the unmarked order, whereas the orders in (71b) to (71d) are marked, in the sense that they are not neutral informationally speaking, and force a (narrow) focus reading on the constituent preceding the verb. Thus, in (71b) the indirect object is the focus of the sentence, (71c) implies focus on the subject, while in (71d) it is the complex verb itself that gets interpreted as focus. Despite their difference in linear order, I show below that the four orderings given in (71) display almost identical results as far as binding effects are concerned, as is shown in the examples given in (72) through (79). This follows naturally under a verb movement account.

Let us begin by looking at anaphor binding.

5.6.1. Anaphor binding

According to standard Binding Theory, anaphors must be locally c-commanded by their antecedents (Chomsky 1981). Assuming this, consider the following sentences, which represent the orders given in (71a-b):

(72) a. Jon-ek ikaslee-íj euren buruañ erakutsi die ispiluan SIOOV
    Jon-erg students-dat themselves show aux mirror-in
    “Jon showed the students themselves in the mirror”
    b. Jon-ek ikasleeñ erakutsi die euren buruañ ispiluan SIOVO
    Jon-erg students-dat show aux themselves mirror-in

In (72a) the indirect object c-commands the object anaphor in surface syntax, and the sentence is well-formed, as expected. As for (72b), one possible way to account for the surface order of the sentence is to derive it from (72a) by moving the argument that appears in postverbal position (e.g. the object anaphor) to the right. Given our assumptions that the nonfinite verb in Basque adjoins to the inflected auxiliary in order to satisfy the lexicalization requirement on Aux (cf. section 5.2 above), and that Aux is head final, it follows that a right-dislocated element must be attached to AuxP or to a higher phrase (e.g. TP, CP).

Consider (72b) under this perspective. Notice that the anaphor euren burua ‘themselves’ is in object position, and its antecedent is the indirect object ikasleeñ ‘to the students’. If the postverbal object anaphor in (72b) were right-dislocated, the prediction would be that the indirect object could not c-command the anaphor, since the postverbal anaphor would be right-joined to a position structurally higher than the landing-site of the preverbal indirect object (this holds regardless of whether the postverbal argument is adjoined to AuxP or to TP). However, the prediction is not borne out. (72b) shows that a postverbal anaphor can be bound by
a preverbal antecedent. This is easily explained if we assume that the postverbal anaphor is in-situ, and therefore, within the c-command domain of its antecedent.

Likewise, when both the indirect and the direct object appear in postverbal position, as in (73), the indirect object, which is leftmost adjacent to the verb, can bind the anaphor, which linearly follows the indirect object:

(73) Jon erakutsi die ikasleei j euren buruaj ispiluan  SVIOO
    Jon.erg show aux students-dat themselves mirror-in

This result is unexpected under a rightward movement approach. Given that the indirect object and the direct object together do not form a single constituent at the base, the simplest analysis to derive the order in (73) would be one according to which each phrase has moved rightwards successively, first the indirect object, and subsequently, the direct object, to a higher position. Given this order of movements, the prediction is that the rightmost adjoined XP c-commands a leftmost phrase. Nevertheless, (73) shows just the reverse effect: it is the leftmost XP that binds the rightmost constituent in object position. Assuming that rightward movement involves A'-movement, this reasoning implies that anaphor binding is also computed from A'-positions, which is a controversial issue. What seems to be uncontroversial is that A-positions are relevant for anaphor binding. If the verb movement hypothesis is correct, the binding facts illustrated in (73) can be straightforwardly explained if we assume that the indirect object and the direct object occupy an A-position. This follows immediately if the postverbal arguments are in their base positions and if we assume that the verb moves to the left of its arguments.

Notice that there might be a potential alternative solution to derive (73) that may solve the problems we just mentioned with regard to a rightward movement approach. Suppose that the V raises to Aux, in order to support it morphologically (cf. the discussion in section 5.2), and that subsequently the remnant vP [IO O t₁] moves across the complex V-Aux, adjoining to the right of AuxP or TP, as illustrated in (74):

(74)

\[
\begin{align*}
& \text{TP} \\
& \quad \text{AuxP} \\
& \quad \quad \text{AuxP} \\
& \quad \quad \quad \quad \text{Aux} \\
& \quad \quad \quad \quad \quad \text{vP} \\
& \quad \quad \quad \quad \quad \quad \text{IO} \\
& \quad \quad \quad \quad \quad \quad \quad \text{vP} \\
& \quad \quad \quad \quad \quad \quad \quad \quad \text{V_v} \\
& \quad \quad \quad \quad \quad \quad \quad \quad \quad \text{Aux} \\
& \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \text{t_v} \\
& \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \text{DO} \\
& \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad \text{t_v}
\end{align*}
\]
Under this analysis, the two objects move as one constituent, and therefore the c-command relation between them does not change. Nevertheless, under this account the trace of the verb would be ungoverned, resulting in a ECP violation, what would rule the sentence out, contrary to facts.

The same binding facts as those in (73) are observed when all three arguments appear postverbally, as illustrated in the example in (75):

(75) erakutsi die Jonek ikaslee bera burua ispiluan VSIOO
show aux Jon-erg students-dat themselves mirror-in

Note that just like an indirect object, a postverbal subject may function as an antecedent for a following object anaphor:

(76) aurkeztu die Jonek bere burua ikaslee
introduce aux Jon-erg himself students-dat
"Jon{ did introduce himself to the students"

As mentioned before, these facts cannot be easily captured by a rightward movement analysis, unless we apply reconstruction to this type of movement. In fact, if we allow for reconstruction of constituents which have been subject to rightward movement into their base-position, then we can create the configurations relevant for binding of anaphors. This argument is adopted by Büring & Hartmann (1997), who cast the binding effects observed in extraposed clauses in terms of reconstruction at the level of LF.

In relation to this, I would like to point out some data that indicate that it is not always the case that anaphors that have undergone A’-movement reconstruct to their original position. In certain cases, intermediate positions are relevant for the interpretation of anaphors, which shows that the surface position of anaphors does matter. The examples are given in (77) below:

(77) a. [Which pictures of himself] did Jon think [t{ that Bill lost t_{5}?]

b. [[Bata bestea-ri buruz] uste dute Patxi eta Isabelek each other.dat about think aux Patxi.erg and Isabel.erg [CPOp[pr{ t{ hitz egin dugu-la]jj talk aux-C
"Patxi and Isabel think that we have talked about each other"
(literal translation: "It is about each other that Patxi and Isabel think that we have talked")

---

35 Cf. Artiagoitia (forthcoming) for a discussion of similar data. I thank Artiagoitia for providing me with the example in (77b).
Like in the English counterpart given in (77a), (77b) is potentially ambiguous, as the reciprocal anaphor *bata besteari buruz* has two potential antecedents: the matrix subject *Patxik eta Isabelek* and the null embedded subject *guk* 'we' (recall that Basque is a *pro-drop* language). This ambiguous interpretation follows from the fact that the anaphor can be interpreted either in its base-position (in which case it gets bound by the null subject), or in the intermediate position in the [Spec,CP] of the embedded clause (in which case *Patxi eta Isabelek* serves as an antecedent for the reflexive anaphor). If anaphor binding would apply only at the level where thematic relations apply, the surface position of anaphors would be irrelevant for binding effects, since this would be always reconstructed. However, (77) shows that the surface position of bound anaphors can be relevant for their interpretation.

Thus, to conclude, on the assumption that only verb movement is involved in (72)-(76), the fact that the anaphor binding relation remains the same in the four orders needs no further machinery: the arguments remain in their Case positions (cf. chapter 2, section 2.2.1), so the structural relations among the arguments remain unchanged regardless of whether the verb moves.

### 5.6.2. Variable binding

In this section we will look at the binding relations between quantifiers and pronouns. As will be shown, the patterns turn out to be the same as the anaphor binding facts discussed in the preceding section. Taking into consideration the four orders given in (71), consider the following sentences:

(78) a. *Maisuak ume bakoitzari j berej baloia eman dio*
    
    *teacher.erg child each.dat 3poss ball give aux*
    
    "The teacher has given his ball to each child"

    SIOOV

b. *Maisuak ume bakoitzari j eman dio berej baloia*
    
    *teacher.erg child each.dat give aux 3poss ball*

    SIOVO

c. *Maisuak eman dio ume bakoitzari j berej baloia*
    
    *teacher.erg give aux child each.dat 3poss ball*

    S V IO O

d. *Eman dio maisuak ume bakoitzari j berej baloia*
    
    *give aux teacher.erg child each.dat 3poss ball*

    V S IOO

In order for a variable to be bound by a quantifier it must be c-commanded by the quantifier phrase (cf. Reinhart 1976). The data in (78) show that the quantifier *ume bakoitzari* 'each child(dat)' c-commands the bound pronoun *bere baloia* 'his ball' in all four orders. If we take surface c-command to be the relevant feature, that means that in (78a)-(78d) the IO quantifier phrase is structurally higher than the object phrase that contains the bound pronoun. Under the right-adjunction analysis, it is clear that such a configuration could not be attained,
especially in the constructions exemplified in (78c-d), where the prediction would be that the sentence final phrase will c-command the postverbal phrase that precedes it, and not vice versa, as is indeed the case.

This is further corroborated by the following examples, where the quantifier and the pronominal variable have inverted their thematic function:

(79) a. *Zaindariak bere, ugazabari txakur bakoitza, itzuli dio
guardian.det.erg his owner.dat dog each give back aux
"The guardian has given back each dog to its, owner"
b. Zaindariak txakur bakoitza, bere, ugazabari itzuli dio
guardian.det.erg dog each his owner.dat give back aux

The ungrammaticality of (79a) shows that the pronominal contained within the indirect object phrase is not c-commanded by the quantifier phrase. However, if the quantifier scrambles across the pronominal, as in (79b), the sentence turns grammatical. Adopting a distinction posited in Chomsky & Lasnik (1993), in chapter 3 I proposed that this type of scrambling involves adjunction to a (broadly) L-related position, say vP or AuxP. This explains the lack of WCO effects in (79b).

Crucially, the same results apply when both the quantifier and the pronominal variable are postverbal (80b-c), and when only the quantifier appears postverbally (80a):

(80) a. *Zaindariak bere, ugazabari itzuli dio txakur bakoitza;
guardian.det.erg his owner.dat give back aux dog each
"The guardian has given back each dog to its, owner"
b. *Zaindariak itzuli dio bere, ugazabari txakur bakoitza,
guardian.det.erg give back aux his owner.dat dog each
c. Zaindariak itzuli dio txakur bakoitza, bere, ugazabari
guardian.det.erg give back aux dog each his owner.dat

These data show that, concerning variable binding, the relevant configuration of the sentences in (79a) and (80a-b), on the one hand, and of (79b) and (80c), on the other, is basically identical, except for the fact that the verb undergoes leftward movement. These results follow naturally from the assumption that the only movement that is involved in the S IO V O and S V IO O linear orders is verb movement. On the contrary, they are incompatible with a rightward movement analysis, since under this approach we would expect that the rightmost postverbal argument would be in a position c-commanding a preceding XP.

Notice also that the fact that variable binding is possible in (78b-d) and (80b), but impossible in (79a) excludes the possibility that variable binding follows reconstruction. Actually, if these constructions involved rightward movement followed by reconstruction, the direct object quantifier should be able to reconstruct to its base-position, which is lower than the indirect object. But that would block variable binding in (80b), contrary to results. The claim that variable binding cannot take place under reconstruction is not new; it has been argued for by several scholars on the basis of evidence from a variety of languages (cf. Haider
1994, Mahajan 1997). On the other hand, an approach that treats the orders examined in (78b-d) and (80) as a result of leftward complex verb movement, can easily capture the c-command relations as well as the variable binding facts between the preverbal and postverbal elements.

5.6.3. Condition C effects

Let us now turn to Condition C effects. In (81a), the indirect object Joni may be coreferential with a pronoun contained within the object, which is a reduced relative phrase (berak egingako lan bat 'a piece of work made by him'). However, when the referential expression is itself contained within the object phrase, and the pronoun is in indirect object position, coreferentiality is not possible, as we see in (81b). This means that the indirect object pronoun c-commands the complex nominal phrase which contains the R-expression, resulting in a principle C violation:

(81)  a. Nik Joni [berak egin-da-ko lan bat] erosi diot
       L.erg Jon-dat he.erg make-ppart-rel work a buy aux
       "I have bought Joni a piece of work heij has made"

b. *Nik berari [Jonek egin-da-ko lan bat] erosi diot
       L.erg he-dat Jon.erg make-ppart-rel work a buy aux

Under a right-adjunction analysis, we would expect that Condition C effects would not arise when the phrase containing the R-expression Jon appears postverbally and is coreferential with a preverbal dative pronoun. This prediction is nevertheless incorrect, as can be seen in (82), which yields a strong condition C violation. In fact, (82) has the same ill-formed status as (81b), from which it is derived:

(82)  *Nik berari erosi diot [Jonek egin-da-ko lan bat]
       L.erg he-dat buy aux Jon.erg make-ppart-rel work a

In contrast, (83a) shows that a preverbal R-expression allows for coreference between the R-expression and the pronoun embedded within the postverbal object phrase. This follows directly if the postverbal element is under the c-command domain of the preverbal indirect object. Likewise, the contrast in grammaticality between (83b) and (83c) show that when the two coreferential expressions occur postverbally, the leftmost phrase DP c-commands the rightmost one. Compare (83c) with the grammatical sentence in (83b):36

36 The use of the strong pronoun neuk instead of nik in (83b) and (83c) (also in later examples) is related to the fact that the subject is focused in these examples. Person pronouns in Basque have a 'weak' and a 'strong' variant depending on whether they are focus or not. In the case of the third person, however, in some dialects the distinction has
Similarly, when a referential subject also appears postverbally, it may be coreferential with a following anaphoric object pronoun, as in (84a). However, a pronominal subject cannot corefer with a preceding pronoun, as we can see in (84b):

(84)  

a. lagunari hitzegin zion Jonet berari buruz  
friend.dat speak aux Jon.erg he about

b. *lagunari hitzegin zion berak Jonet buruz  
friend.dat speak aux he.erg Jon bind

Again, these results do not follow easily if we analyze postverbal arguments as the result of successive rightward movement. In contrast, a leftward movement analysis captures these facts in a straightforward manner. However, this only holds if reconstruction does not apply. If we allow for reconstruction, then the effects illustrated in (83) and (84) can be also accounted for under a rightward movement approach. The consequences of applying reconstruction to rightward movement for the purposes of Condition C effects would be then, that the two accounts, e.g., a leftward complex verb-movement account and the right-dislocation hypothesis, can capture and explain the facts in a similar way. However, we argued earlier that a rightward movement analysis could not account for the variable binding facts, whereas a leftward movement captures them naturally. Thus, if we analyze the condition C effects discussed in this section as an instance of leftward movement of the V-Aux, we can provide a unified account of the facts about condition C, anaphor binding and variable binding in a more cohesive fashion.

become blurred, and only one form (the strong form) is used. The paradigm is provided below:

(i)  

<table>
<thead>
<tr>
<th>weak</th>
<th>strong (focused)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ni</td>
<td>neu</td>
</tr>
<tr>
<td>zu</td>
<td>zeu</td>
</tr>
<tr>
<td>hura</td>
<td>bera</td>
</tr>
<tr>
<td>gu</td>
<td>geu</td>
</tr>
<tr>
<td>zuek</td>
<td>zuek</td>
</tr>
<tr>
<td>haiek</td>
<td>beraiek</td>
</tr>
</tbody>
</table>
In any event, it would be interesting to find further evidence which leads us to decide between the two analyses. In this respect, the scope facts I present next provide support for a leftward verb movement analysis.

5.7. Scope relations

As we discussed earlier in chapter 3, scope dependencies mirror c-command relations (cf. May 1977, 1985, Aoun & Li 1994, Beghelli & Stowell 1997, Szabolcsi 1997). In chapter 3 we used this test to show that the indirect object takes wide scope over the direct object because it c-commands it asymmetrically at the base position. In the following discussion I will examine scope dependencies between two quantifier phrases when they occur postverbally. I will show that the fact that a postverbal quantifier does not take scope over a preverbal one is a direct consequence of its lower position in the configurational structure. Let us start by a description of the facts illustrated below:

(85)  
a. nor edo nork mundu guztia maite du  
someone.erg everyone love aux  
"Someone loves everyone"  
SOV  
(b. mundu guztia nor edo nork maite du  
everyone someone.erg love aux  
(someone>everyone)

With respect to subject-object interaction, the canonical surface order does not yield scope ambiguities. Thus, in (85a) the universal quantifier mundu guztia ‘everyone’ in object position cannot take wide scope over the existential subject quantifier. However, if the direct object is scrambled over the subject, as in (85b), familiar scope ambiguities arise (cf. Kuroda 1970, Hoji 1985, Aoun & Li 1994, Mahajan 1997). In most accounts this ambiguity is attributed to the fact that after scrambling, the object comes to c-command the subject, and the subject c-commands the copy or trace of the moved object.

Consider now the example in (86). If the postverbal universal quantifier were analyzed as involving rightward movement (e.g. right-adjunction to AuxP, TP or CP), we would predict that the universal QP could take wide scope. Nevertheless, the prediction is not borne out: the universal QP cannot take wide scope over the existential QP in (86):  

(86)  
nor edo nork maite du mundu guztia  
someone.erg love aux everyone  
SVO  
(someone>everyone)

The incorrectness of the rightward movement analysis is further corroborated by the scope relations observed in (87):

---

37 Similar facts are found in Hindi, as pointed out in Mahajan (1997).
(87) mundu guztia maite du nor edo nork  
    everyone love aux someone.erg  
    OVS (everyone> someone  
    ?someone>everyone)

Here the object quantifier phrase has wide scope, but inverse scope is also possible, although it is less readily available. Again, if postverbal constituents were the result of rightward movement, we would expect both sentences in (86) and (87) to be scopally ambiguous. However, only (87) yields scope ambiguity.

The scope difference between (86) and (87) can be explained under the verb movement account. In this account, the postverbal quantifiers in (86) and (87) have not moved. That is, they have the scope possibilities available to them in their base position. However, the quantifiers that surface right preceding the verb are in a derived position. Assuming that an A'-movement chain is involved in the derivation of the orders in (86) and (87), as is argued for in chapter 4, the copy/trace of the fronted quantifier will count as a potential scope position. This account derives the correct results. On the one hand, we expect that in (86) only the subject QP takes wide scope, because both in its derived position and in its argumental position c-commands the object QP. In contrast, in (87) the object QP takes wide scope in its derived position, but the subject QP can also have wide scope, since it c-commands the trace/copy of the thematic object quantifier.

Similar effects obtain when we examine scope interactions between an indirect object and a direct object. Scrambling of the object quantifier across the IO quantifier yields scope ambiguity, as can be seen in (88b). However, a postverbal object quantifier cannot take wide scope (88c):

(88)  

a. Amaia.eb bi mutili hiru neska baino gehiago aurkeztuko dizkie  
    Amaia.erg two boy.dat three girl than more introduce-fut aux  
    “Amaia will introduce more than three girls to two boys”  
    (two>more than three, *more than three>two)

b. Amaia.eb hiru neska baino gehiago bi mutili aurkeztuko dizkie  
    Amaia.erg three girl than more two boy.dat introduce-fut aux  
    (more than three> two, two> more than three)

c. Amaia.eb bi mutili aurkeztuko dizkie hiru neska baino gehiago  
    Amaia.erg two boy.dat introduce-fut aux three girl than more  
    (two>more than three, *more than three>two)

Again, the non-ambiguity of (88c) is unexpected under a rightward movement analysis of postverbal arguments, since in that case a postverbal object should be able to c-command a preverbal indirect object. On the other hand, if the postverbal object has not moved, but rather is stranded there as a result of leftward complex verb movement, the scope effects follow naturally. In fact, we predict (88a) and (88c) to display the same scope relations, as is indeed the case.

Further empirical support for the leftward V-Aux movement account is provided in (89), where the two quantifiers occur in postverbal position:
(89) a. Amaiak aurkeztuko dizkie bi mutili hiru neska baino gehiago
   Amaia.erg introduce-fut aux two boy.dat three girl than more
   (two>more than three, *more than three>two)
b. Amaiak aurkeztuko dizkie hiru neska baino gehiago bi mutili
   Amaia.erg introduce-fut aux three girl than more two boy.dat
   (more than three>two, two>more than three)

Under a rightward movement analysis, we would expect there to be an ambiguity in (89a), since the rightmost phrase c-commands a preceding phrase. Nevertheless, the predictions are not borne out, once more. In contrast, under the V-movement account the expectations are that the scope relations in (89) should be the same as in (88a). In this case, the predictions are confirmed by the data.

5.8. Summary

In this chapter I have presented some evidence that demonstrates that some of the possible permutations among the constituents of a sentence in Basque involve leftward movement of the verbal complex. The evidence examined covers five main empirical fields: (i) the distribution of V-manner adverbs; (ii) the postverbal occurrence of Small Clause complements; (iii) the idiom interpretation of idiomatic VP-phrases; (iv) the binding effects involved in anaphor binding, pronominal variable binding, and condition C effects in relation to the (postverbal) position of arguments, and (v) the scope interactions established between preverbal and postverbal quantifiers, as well as between two postverbal quantifiers. The results obtained after examining the data can be easily accounted for if we assume that the complex verb (or a larger projection of VP (cf. the discussion on sentential adverbs)) moves leftwards in Basque. Under this approach, the postverbal material is stranded (e.g. in-situ), although it is also possible that scrambling operations apply prior to leftward movement of the V-Aux complex (cf. the discussion on variable binding in (80)).

I have shown that a rightward movement analysis cannot account for all the facts discussed throughout the chapter. Moreover, we have seen that such an analysis makes a number of predictions that turn out to be incorrect. In contrast, the V-Aux movement account captures and provides an immediate explanation for all the facts examined in this chapter in a straightforward way. I therefore conclude that a rightward movement analysis for the constructions discussed in this chapter should be discarded.
Summary and Conclusions

This study explores the issue of word order in Basque. Although the main language under investigation is Basque, at several points in the discussion other languages are included when their testimony is useful to clarify the ideas proposed in a certain chapter, and when they provide support for the claims argued for in this dissertation. Also, Examples taken from Dutch and English are extensively used throughout the book with another aim: to show that apart from a set of properties that seem to single out 'free word order' languages like Basque from more rigidly-ordered languages, the three languages share the same syntactic behaviour as regards subject-object asymmetries, crossover effects, the ordering between adverbs of a different type, and/or scope readings. This fact points to the view that whatever the sources for freedom of word order, they do not change the basic syntactic relations which hold across languages. In particular, I claim that despite the apparent free permutation of constituents, word order in Basque displays all sorts of restrictions. In the first place, it has a S I O O V unmarked or neutral order, which I consider to be the basic underlying order. This assumption derives in a straightforward way a number of facts related to focus and stress effects, as discussed at length in chapter 4.

The existence of a S I O O V basic order also accounts for the fact that in the context of ditransitive constructions the argument bearing dative case (which corresponds to the indirect object) systematically exhibits an asymmetric c-command relation with respect to the argument bearing absolutive case (i.e. the direct object). This asymmetric relation holds regardless of the actual surface position where the indirect object appears, as is clearly shown by the data coming from anaphor and variable binding, scope relations, and the occurrence of the distributive particle -na, which requires to be c-commanded by a (null) operator over which it distributes (see chapter 3). Due to this requirement, it was argued that the distributive particle can only occur with the direct object, but not with the indirect object, since it would fail to be c-commanded by a null distributive operator in direct object position. Furthermore, strong evidence was provided for the claim that the dative argument in Basque is a DP and that together with the absolutive argument they are in a configuration which is syntactically equivalent to a double object construction in other languages exhibiting dative shift. Moreover, the results from the examination of the structural relations between the two objects in the S O V IO order, which can also be a neutral order in Western Basque, showed that Basque lacks a prepositional dative construction, and that no configuration exists where the direct object asymmetrically c-commands the dative.
phrase. This explains the hierarchical asymmetric c-command relation systematically observed between the indirect object and the direct object in Basque.

Under the assumption that there is an underlying word order in Basque, the issue then is to capture and account for the possible permutations among the constituents of a sentence by means of the mechanisms provided by Universal Grammar. One of these devices is scrambling. I argue that scrambling exists in the language, but that it does not apply freely, since certain linear orderings involving adverbs are not possible. Moreover, scrambling cannot be a PF stylistic rule, given that it affects the interpretation of the scrambled phrase as well as that of the constituent which surfaces in immediate preverbal position after scrambling has taken place. In particular, it is argued that scrambling is often driven by the need to single out a specific element as the focus of the sentence (see the discussion in section 4.4.2. of chapter 4).

With regard to focus, in chapter 4 I claim that there are two strategies to express focus in Basque: either by leaving the focused element in-situ, or else by base-generating the focused phrase as a left-dislocate, in which case the focalized expression generally occurs in sentence initial position. Both strategies correspond to the type of focus which is known as 'information focus' (cf. among others Reinhart 1995, Kiss 1998, Zubizarreta 1998), that is, the part of the sentence that conveys new information. And in both cases the focused element must appear in immediate preverbal position. However, the two mechanisms apply in different contexts: a left-dislocated focus can only express narrow focus, whereas an in-situ focus can be interpreted as wide focus. The terms 'narrow' and 'wide' focus should be understood in the following sense: a certain phrase is interpreted as narrow focus when it is the only possible focus of the sentence. On the other hand, a wide focus interpretation obtains when the focus reading associated with a particular constituent can be extended to the entire clause. Importantly, the latter interpretation holds whenever the arguments appear in the canonical word order (i.e. S O V-Aux), like in the sentence in (1a) below. In this example, either the direct object, the VP or the entire clause can be interpreted as new information (the latter reading typically arising in out-of-the-blue contexts). However, when the arguments appear displaced, like in (1b), only a single focus is allowed: namely, a narrow focus interpretation on the element left-adjacent to the verb, i.e., the direct object:

(1) a. [Ikasleek [eskutitza bina idatzi dute]] SOV
   students.erg letter two-distr write aux
   "[The students have written [two letters each]]"

b. [Eskutitza bina idatzi dute ikasleek] OVS
   "The students have written two letters each"

The algorithm for the assignment of main sentence stress, developed in Cinque (1993), provides means to formalize the analysis of focus proposed here. According to this algorithm, the main or default stress of a sentence falls on the
most embedded element on the recursive side of the tree. This amounts to saying that the assignment of main stress is contingent upon the head directionality issue: it will fall on the most embedded element to the left of the verb in V-final languages, whereas it will fall on the most embedded element to the right of the verb in V-initial languages. As is mentioned in chapter 2, where I present the structure of the clause I assume for Basque, the Basque data analyzed in this study are easily accounted for if we start the derivation from an OV structure. This means that the direction of selection is to the left of the verb. On the other hand, it was also argued that the auxiliary heads its own projection and that it is head-final, selecting a(n extended) projection of V as its complement. Moreover, following Ortiz de Urbina (1994), I claimed that the main non-finite verb incorporates to the auxiliary verb in order to support the auxiliary morphologically (cf. chapter 5). A number of phenomena related with focalization and all sorts of verb fronting provide evidence that support this conclusion. In effect, in all cases involving V-to-C movement, such as wh-constructions, both V and Aux move together, as a cluster, and no element can intervene between them. This finds a straightforward explanation if V undergoes V-to-Aux raising before further subsequent movement operations take place. Under the assumption that V raises to Aux also in canonical contexts, Cinque's main stress algorithm predicts that in the unmarked S (IO) O V order, the direct object receives the main stress of the sentence, given that it is the most embedded element. In effect, the data in (1a) above confirm the predictions. In this example the most prominent stress falls on the direct object, as predicted by the main stress assignment rule. And given the tight relationship existing between stress and focus across languages, it follows from the algorithm of main stress assignment that the element bearing the main stress of the sentence is interpreted as focus. This explains why the object is generally interpreted as focus in unmarked contexts (cf. (1a) above). This is an instantiation of focus assignment in-situ.

Another instance of focus in-situ was provided by constructions involving scrambling. For instance, given the V-final character of Basque, and given that the focused element must immediately precede the verb, if we want to focalize the subject in a simple transitive construction, we may scramble the object across the subject, yielding the OSV order, so that the subject becomes the most embedded element to the left of [V-Aux]:

(2) eskutitz bina, ikasleek t, idatzi dute  
letter two-distr students.erg write aux 
"The students have written two letters each"

Importantly, in these cases involving scrambling the focused phrase does not move; it receives its interpretation in-situ.

In addition, I claimed that there is a second mechanism by which an element can be interpreted as focus: namely, by left-dislocation of the focused phrase. By being left-dislocated, we account for the fact that these foci appear in sentence initial position (cf. (1b) above). In the Basque literature these focalizations have
been analyzed as involving 'focus movement', i.e., a type of A'-movement akin to Wh-movement (cf. Ortiz de Urbina 1989, 1995, 1999). Nevertheless, a detailed examination of these structures suggests that the apparently fronted focus is not created by movement of the focused phrase to CP, but rather is a result of base-adjunction to CP. Sentence initial focalizations are contrasted with Wh-constructions, and it is argued that they do not behave symmetrically, since only Wh-constructions display crossover effects. Assuming with Lasnik & Stowell (1991) that only quantificational phrases induce WCO effects, I claimed that sentence initial foci are not operators since they do not have quantificational force. This conclusion was further supported by the fact that neither focus in-situ nor sentence initial focus pass the exhaustivity tests devised by Szabolcsi (1981, 1983) in order to demonstrate the quantificational nature of focus. The results obtained from the application of these tests to Basque revealed that sentence initial focus in Basque is not quantificational and hence that it is not an operator.

I argue that these constructions involve base-generation of the focused phrase in a left-dislocated position, and that this captures the lack of crossover effects. Nevertheless, sentence initial focus constructions exhibit island effects, which suggests that some kind of movement is involved. These facts are readily accounted for if these focus constructions imply null operator movement. In other words, I propose that the focused phrase occupies a left peripheral position as a result of base adjunction to CP, and that it is linked to the position internal to the sentence where the focus phrase is interpreted through the movement to [Spec,CP] of a null operator, which is coreferential with the focus (cf. the representation in (3)):

(3) \[ \text{CP} \text{Focus}_i [\text{CP} \text{Op}_i \text{V(Aux)}_k [\text{Sp} \ldots t_i, \ldots \ldots t_k ]] \]

The null operator movement is responsible for the properties of movement that sentence-initial focus constructions show. However, it does not induce crossover effects. Assuming with Lasnik & Stowell (1991) that only true quantifiers induce WCO effects, the lack of crossover effects in sentence initial focus constructions is accounted for because neither the focused element nor the empty operator are quantificational.

The difference between choosing the unmarked strategy of assigning focus in-situ (with no movement at all), or the 'moved' strategy lies, essentially, in economy reasons, and in whether we want to single out a particular constituent as the only focus of the sentence. Thus, the most economical way of marking a constituent as focus is by employing the in-situ strategy, when the constituent appears in its canonical position and receives main sentence stress (neutral contexts). Sometimes, however, scrambling applies in order to obtain the intended focus reading on a particular constituent (cf. (2)). This derivation is most costly, because it implies a movement operation, but is permitted because it yields a (focus) interpretation that otherwise would be impossible to obtain because the relevant element is not left-adjacent to the verb (cf. Reinhart 1995, Neeleman &
Reinhart 1998). In a similar vein, the left-dislocation focalization mechanism is also costly, for it involves movement of a null operator and movement of the complex verb to C (cf. (3)). Despite this, the derivation is ruled in because by employing this mechanism, the speaker marks a particular constituent as the single focus of the sentence and ensures that no other potential focus interpretations are available in the sentence.

The investigation of word order variation carried out in this research shows that left-dislocation cannot be done independently from V-movement, since the two correlate in a systematic way. The fact that the verb must be right adjacent to focus, wherever focus appears in the sentence, is a clear instance of this claim. One important assumption adopted in this study is that all shifting operations occur to the left. This goes in line with the general structural asymmetries that occur in the right periphery, but not in the left periphery. For V-movement, I claim that functional projections such as TP and CP are left-headed (cf. Artiagoitia 1992, Ortiz de Urbina 1989, respectively), so that when the complex verb moves to the functional domain, it necessarily moves leftwards (cf. chapter 2).

In addition to the V-to-Aux movement mentioned above, in chapter 5 I presented further evidence showing that the complex verb [V-Aux] moves leftwards in Basque. The distribution of VP-manner adverbs, which occupy a canonical preverbal position, right adjacent to the direct object, provided one piece of evidence for the claim that the verb moves across the adverb. It was shown that manner adverbs cannot move out of VP, so that linear orderings wherein V-Aux surfaces to the left of the manner adverb were necessarily derived by leftward movement of V-Aux (cf. Belletti 1990, Cinque 1999). Arguments and Small Clause complements can occur to the right of V-Aux. However, I argued that these cases do not involve rightward movement, but rather the postverbal elements remain in-situ and the verbal complex moves. Moreover, the results obtained from a detailed examination of anaphor and pronominal variable binding, Condition C effects, and the scope relations established between preverbal and postverbal quantifiers lead to the conclusion that postverbal elements are structurally lower than preverbal elements. These facts are straightforwardly accounted for if we adopt the general approach developed here that all movement operations involve leftward movement. Thus, to account for the distribution of postverbal constituents in a V-final language like Basque, it is argued that the verb moves across these constituents, and the 'postverbal' material remains in its base position or in its case-licensed position (cf. chapter 2 for a discussion of the clause structure of Basque). Moreover, the behaviour of syntactic VP-idioms involving a verb and an object provide further support for the claim that the verb complex moves to the left in Basque. Thus, under the assumption that an idiomatic reading requires adjacency between the two parts that constitute the idiom, it is shown that sometimes the idiomatic interpretation is available despite the fact that the verb and the idiomatic object are not adjacent to each other; specifically, when the verb appears to the left of the idiomatic object. These facts are accounted for by showing that the
trace/copy of the verb-complex satisfies the adjacency condition required for an idiomatic reading to be available.

A brief examination of the possible orderings between manner and sentence adverbs when they occur in preverbal and in postverbal position showed that a simple V-movement account cannot capture the whole range of data. Specifically, it was shown that whereas the sequence *sentence adverb- manner adverb-V* is permitted, the linear order *V-sentence adverb-manner adverb* does not yield a well-formed sentence. These facts are not accounted for under a V-movement approach, which would predict the sentence to be grammatical. On the other hand, the sequence *manner adverb-sentence adverb-V* is ill-formed, whereas *V-manner adverb sentence adverb* is certainly possible. As an explanation, it is proposed that these cases involve a combination of V-movement (which yields the *V-manner adverb* sequence) and the movement of a larger projection of VP — namely TP — to the specifier of the sentence adverb. More specifically, adopting Barbiers' (1995, 2000) analysis of extraposition, I propose that some of the possible orderings at the right periphery of the clause are the result of TP-Intraposition, driven by the need to establish a modification relation between the adverb and its modifiee (cf. chapter 5 for a detailed discussion of these and related facts).
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Samenvatting in het Nederlands

Het onderwerp van dit proefschrift is woordvolgorde in het Baskisch. Hoewel het Baskisch centraal staat, betrek ik op verschillende punten andere talen in het onderzoek om mijn beweringen over het Baskisch te verhelderen of te staven. In veel gevallen vergelijk ik het Baskisch met het Nederlands en het Engels. Het Baskisch staat bekend als een taal met vrije woordvolgorde, terwijl het Nederlands en het Engels veel beperktere woordvolgordemogelijkheden hebben. Dit is echter slechts een oppervlakkig verschil. Uit de vergelijking van deze talen blijkt dat ze een groot aantal syntactische eigenschappen gemeenschappelijk hebben, name in het domein van subject-object-asymmetriën, cross-over effecten, de relatieve volgorde van adverbia uit verschillende klassen, en het bereik van kwantoren.

Het proefschrift laat zien dat het Baskisch geen vrije permutatie van constitutien heeft, maar dat er allerlei restricties op de woordvolgorde zijn. Uit de aanneming dat er één onderliggende neutrale woordvolgorde is, namelijk de volgorde Subject – Indirect Object – Object – Werkwoord (S-IO-O-V), kunnen een aantal feiten met betrekking tot focus op een eenvoudige manier worden afgeleid, zoals wordt betoogd in hoofdstuk 4.

De aanneming van de basisvolgorde S-IO-O-V verklaart ook dat in dit transitieve constructies het argument met datief naamval (het indirect object) altijd het argument met absoluut naamval (het direct object) c-commandeert, ongeacht de lineaire positie waarin het indirect object verschijnt. Testen die gebruik maken van binding van anafora, binding van variabelen, bereikrelaties, en het distributieve partikel –na laten dit zien.

Het distributieve partikel –na moet worden ge-c-commandeerd door een (nul)-operator waarover het distribueert (hoofdstuk 3). Het kan optreden met een direct object, ge-c-commandeerd door het indirect object. Het omgekeerde is niet mogelijk want het indirect object wordt niet ge-c-commandeerd door het object.

Voorts laat ik zien dat er sterke argumenten zijn voor de stelling dat het datief argument in het Baskisch altijd een DP is en geen PP, en dat het datief argument samen met het absoluut argument een configuratie vormt die syntactisch equivalent is aan de zogenaamde dubbel-objectconstructie in talen die object-shift hebben. Onderzoek naar de volgorde S-O-V-IO, die de neutrale volgorde kan zijn in het West-Baskisch, laat zien dat het Baskisch geen prepositionele-datiefconstructie bezit en dat er geen configuratie is waarin het object het indirect object asymmetrisch c-commandeert op onderliggend niveau.
Hieruit wordt de asymmetrische c-commandeerrelatie verklaard die systematisch optreedt tussen indirect en direct object.

Als de aanname juist is dat er één onderliggende volgorde is in het Baskisch dan moeten de overige permutaties afgeleid worden, bij voorkeur met behulp van mechanismen die bekend zijn uit het onderzoek naar andere talen. Eén zo'n mechanisme is *scrambling*. Ik geef een aantal argumenten voor de stelling dat *scrambling* optreedt in het Baskisch. De operatie is echter onderhevig aan restricties: sommige lineaire ordeningen van adverbia zijn onmogelijk. Ik laat verder zien dat *scrambling* geen stijlistische regel op PF-niveau is. *Scrambling* beïnvloedt zowel de interpretatie van de gescrambledé constituent als de interpretatie van de constituent die na *scrambling* direct links van het werkwoord staat. *Scrambling* zorgt ervoor dat een bepaalde constituent als zinsfocus wordt geïnterpreteerd (hoofdstuk 4, in het bijzonder paragraaf 4.4.2).

In hoofdstuk 4 toon ik aan dat er in het Baskisch twee strategieën zijn om focus uit te drukken. De eerste is de gefocuste constituent in situ te laten, de tweede is links-dislocatie van de constituent met focus, waardoor deze constituent in zins initiële positie verschijnt. Beide strategieën leveren een type focus op dat bekend staat als informatiefocus (zie onder andere Reinhart 1995, Kiss 1998, Zubizarreta 1998). Informatiefocus is het zinsdeel dat nieuwe informatie verschaft. In beide strategieën moet het zinsdeel met focus direct voor het werkwoord staan. Welke strategie gebruikt wordt hangt af van de context. Linksdislocatie drukt narrow focus uit, terwijl in-situ focus geïnterpreteerd kan worden als wide focus.

De tegenstelling narrow focus – wide focus moet als volgt begrepen worden. Een zinsdeel wordt geïnterpreteerd als narrow focus als het de enig mogelijke focus van de zin is. Van wide focus is sprake als de focus die geassocieerd is met een bepaalde constituent kan worden uitgebreid naar de gehele zin. Dat laatste is alleen het geval als de argumenten in de canonieke (onderliggende) volgorde staan, zoals in de S-O-V-Aux volgorde in (1a). In dit voorbeeld kan het object, of de hele VP (met daarin object en werkwoord), of de hele zin als nieuwe informatie worden geïnterpreteerd. Als de argumenten in niet-canonieke volgorde staan, zoals in (1b), is er maar één focus mogelijk, namelijk een narrow-focusinterpretatie van de constituent die links-adjacent is aan het werkwoord. In (1b) is dat het direct object.

(1) a. [Ikasleek [eskutitz bina] idatz zi dute] SOV
    students.erg letter-two-distr write aux
    ‘The students have written two letters each.’

b. [Eskutitz bina] idatze dute ikasleek OVS
    letter-two-distr write aux students
    ‘The students have written TWO LETTERS EACH.’

Het algoritme voor de toekenning van zinsaccent ontwikkeld in Cinque (1993) maakt het mogelijk de hier voorgestelde analyse te formaliseren. Volgens dit algoritme valt zinsaccent in het ongemarkeerde geval op het meest ingebouwde
element aan de recursieve zijde van de boom. Dit betekent dat toekenning van zinsaccent afhangt van de waarde die een taal kiest voor de OV – VO-parameter. Zinsaccent valt op het meest ingebette element links van het werkwoord in OV-talen en op het meest ingebette element rechts van het werkwoord in VO-talen.

In hoofdstuk 2 wordt aangetoond dat de Baskische data die in dit proefschrift worden onderzocht het eenvoudigst kunnen worden verklaard uit een OV-structuur. Dit betekent dat de richting van selectie naar links is. Daarnaast wordt getoond dat het hulpwerkwoord het hoofd is van een eigen projectie en dat dit hoofd links een verbaal complement selecteert. In navolging van Ortiz de Urbina neem ik aan dat het niet-finitie hoofdwerkwoord in het hulpwerkwoord moet incorporeren omdat het hulpwerkwoord affixaal is (hoofdstuk 5). Een aantal verschijnselen die te maken hebben met focus en verschillende typen werkwoordsvooropplaatsing leveren ondersteuning voor deze aanname. In alle gevallen van verplaatsing van V naar C, zoals in Wh-constructies, verplaatsen werkwoord en hulpwerkwoord tegelijk, als één cluster. Er kan geen element tussen werkwoord en hulpwerkwoord staan. Dit volgt eenvoudig uit de aanname dat V eerst naar Aux verplaatst alvorens verder naar boven te verplaatsen.

Als we aannemen dat V-naar-Aux-verplaatsing ook optreedt in de canonieke woordvolgorde, dan is in de ongemarkeerde volgorde S-(IO)-O-V volgens Cinque’s algoritme voor zinsaccent het direct object het diepst ingebette en dus focusdragende element. Het object wordt in ongemarkeerde contexten altijd geïnterpreteerd als focus (zie voorbeeld (1a) hierboven). Dit is een geval van focus in-situ. Scrambling levert een ander geval van focus in-situ op. Dankzij het OV-karakter van het Baskisch en het feit dat een constituent direct links van het werkwoord zinsaccent krijgt, is het mogelijk het subject te focaliseren door scrambling van het object over het subject. Het resultaat is dat het subject in deze O-S-V-volgorde de diepst ingebette constituent aan recursieve zijde is:

(2) eskutitiz bina, ikasleek t, idatzi dute
    letter two-distr students.erg write aux

Merk op dat bij focus door scrambling de constituent die focus krijgt zelf niet verplaatst. Deze constituent krijgt zijn interpretatie in-situ.

is en geen operator. Deze conclusie wordt ondersteund door de observatie dat
noch focus in situ noch zinsinitiële focus in het Baskisch voldoen aan de
ehaustivity-testen die Szabolcsi (1981, 1983) heeft ontwikkeld om vast te stellen
of een focusconstituut kwantificatieve van aard is.

Uit de aannames dat de constituent met focus in linksgedisloceerde positie
wordt gegeven en volgt direct dat er geen cross-over effecten optreden. Niettemin
vinden we eilandffecten bij zinsinitiële focus, hetgeen suggereert dat er toch
sprake moet zijn van een verplaatsing. Dit kan verklaard worden als aangehomen
wordt dat er in deze constructie verplaatsing van een nul-operator optreedt. De
analyse wordt dan dat de aan CP-geadjuceerde focus constituent gecoïndiceerd is
met een nul-operator die naar SpecCP is verplaatst, zoals georgegeven in de
representatie in (3). Deze verplaatsing veroorzaakt de geobserveerde
eilandeffecten.

(3) \[ CP \text{ Focus, } [CP \text{ Op, } V(Aux)_{i} [IP \ldots t_{i} \ldots t_{k}]] \]

De nul-operator induceert geen cross-over-effecten, naar ik aannem om dat deze
niet kwantificatieve van aard is.

De keuze bij focalisatie tussen geen verplaatsing (focus in-situ) en wel
verplaatsing wordt bepaald door economische factoren en door de
informatiestructuur die moet worden uitgedrukt. De goedkoopste manier om een
constituent te markeren als focus is de in-situ strategie, waarbij de constituent in
zijn canonieke positie blijft staan en zinsaccent krijgt (in neutrale contexten). Soms
treedt scrambling op om een bepaalde constituent in focus te krijgen (voorbeeld 2
hierboven). Deze afleiding is kostbaarder, want er treedt een verplaatsing op.
Niettemin is ze toegestaan, want het resultaat is een focusinterpretatie die zonder
verplaatsing niet te verkrijgen is; de relevante constituent is in de basisvolgorde
immers niet links-adjacent aan het werkwoord (zie Reinhart 1995, Neeluman &
Reinhart 1998). De linksdislocatie-strategie is eveneens kostbaarder, want er treedt
verplaatsing van de nul-operator en verplaatsing van V naar C op (voorbeeld 3).
Desondanks is deze derivatie toegestaan, want hierdoor wordt een bepaalde
constituent als enige focus van de zingemarkeerd en worden alle overige mogelijke
focusinterpretaties geblokkeerd.

Dit onderzoek naar woordvolgordevariatie laat zien dat linksdislocatie altijd
gepaard gaan met V-verplaatsing. Voor V-verplaatsing neem ik aan dat functionele
projecties zoals TP en CP hoefdinitieel zijn (cf. Artigaotia 1992, Ortiz de Urbina
1989), zodat verplaatsing van het werkwoordcomplex naar het functionele
domein altijd linkswaartse verplaatsing is (hoofdstuk 2).

Naast de hierboven besproken V-naar-Aux-verplaatsing presenteer ik in
hoofdstuk 6 evidentie voor de stelling dat het werkwoordcomplex [V-Aux] naar
links verplaatst in het Baskisch. De distributie van adverbia van wijze levert een
argument op voor deze verplaatsing. De canonieke positie van dit type adverbia is
tussen het direct object en het werkwoord in. Aangetoond kon worden dat deze
adverbia niet uit de VP kunnen verplaatsen. Wanneer we een lineaire volgorde
aantreffen waarin het [V-Aux]-complex voorafgaat aan een adverbiun van wijze
dan moet dit het resultaat zijn van linkswaartse werkwoordsp�laatsing (zie ook
Belletti 1990 en Cinque 1999). Argumenten en Small Clause complementen
c kunnen ook rechts van [V-Aux] verschijnen. Ik betoog dat dit niet het resultaat is
van rechtswaartse verplaatsing van deze constituenten. Die blijven in-situ en het
werkwoordcomplex verplaatst linkswaarts over deze constituenten heen. Alle
beschikbare testen, zoals binding van anaforen en pronominaal variabelen, conditie
C effecten, relatieve bereik van preverbale en postverbale kwantoren, leiden tot de
conclusie dat postverbale elementen zich in een lagere structurele positie bevinden
dan preverbale elementen. Dit volgt op eenvoudige wijze uit de voorgestelde
analyse waarin verplaatsing altijd linkswaarts is. Postverbale constituenten zijn dan
altijd het resultaat van linkswaartse werkwoordsp�laatsing, waarbij de
postverbale constituenten zelf gewoon op hun plaats blijven (zie hoofdstuk 2 voor
een bespreking van de zinsstructuur van het Baskisch).

Ook de syntactische eigenschappen van VP-idiomen bestaande uit een
direct object en een werkwoord leveren een argument ter ondersteuning van de
stelling dat het werkwoordcomplex naar links verplaatst in het Baskisch. Terwijl
de idiomatische lezing normaliter slechts beschikbaar is als het direct object
linksadjacent is aan het werkwoord, zijn er gevallen waarbij het werkwoord links
van het direct object staat terwijl er toch een idiomatische lezing mogelijk is. Ik laat
zien dat in zulke gevallen aan de adjacentieconditie wordt voldaan door het spoor
of de kopie van de verplaatsde werkwoordcomplex.

Een beperkt onderzoek naar de relatieve volgorde van adverbia van wijze
en zinsadverbia leert dat de V-verplaatsingsanalyse niet toereikend is om alle data
te verantwoorden. De volgorde [zinsadverbium – adverbiun van wijze – V] is
Volgens de voorgestelde analyse zou de laatste volgorde echter moeten kunnen
worden afgeleid door verplaatsing van het werkwoordcomplex over de adverbiam
heen. Anderzijds is de volgorde [ adverbiun van wijze – zinsadverbium – V]
ongrammaticaal, terwijl de volgorde [V – adverbiun van wijze – zinsadverbium]
weer wel mogelijk is. De verklaring die ik hiervoor geef is dat in deze gevallen een
combinatie van V-verplaatsing en verplaatsing van een grotere verbale constituen
toptreedt. V-verplaatsing levert de volgorde [V – adverbiun van wijze].
Verplaatsing van een grotere verbale constituen, namelijk TP, naar de Spec van
het zinsadverbium levert de volgorde [V – adverbiun van wijze – zinsadverbium]
op. Met behulp van de analyse van extrapositie voorgesteld in Barbiers (1995,
2000) laat ik zien dat een aantal volgordes in de rechterperiferie van de zin het
resultaat zijn van TP-Intrapositie, een operatie die noodzakelijk is om een
modificatierelatie te leggen tussen het adverbiun en de constituen die het
adverbiun modificeert (hoofdstuk 5).
CURRICULUM VITAE

Arantzazu Elordieta Alcibar was born on the eighth of August of 1968 in Lekeitio, in the Basque Country, in Spain. She finished her high school education in 1986, and received her undergraduate degree in Basque Philology in 1991 from the University of the Basque Country (EHU-UPV, the Basque Country). Between January 1995 and March 1999 she was appointed as a PhD student at the Department of General Linguistics at the University of Leiden. From January 1995 to September 1998, she received a grant from the Department of Education, Universities and Research of the Basque Government to help her to develop her PhD studies, and from September 1998 to March 1999 the College van Bestuur of the University of Leiden conceded her a graduationbursary (promotiebeurs). These have made possible the research that has ended in this dissertation. She is currently teaching English Language at the University of the Basque Country.